



Burnt Peak Incident Decision

Published
07/29/21 09:39

Table of Contents

1. Decision	2
1.1. Decision Summary.....	2
1.2. Incident Information.....	3
1.3. Weather.....	6
1.4. Modeling.....	10
1.5. Risk	14
1.6. Objectives	26
1.7. Course of Action	31
1.8. Cost	43
1.9. Rationale	44

1. Decision

1.1. Decision Summary

Decision Information

NAME	VALUE
Published	07/29/2021 09:39 CDT
Estimated Cost	\$25,000,000
Incident Owner(s)	Sean Hill, Todd Rankin
Editor(s)	Chad Benson, Nathan Gassmann
Reviewer(s)	Dan Rose
Approver(s)	Chad Benson, Nathan Gassmann
Natl Preparedness Level	5

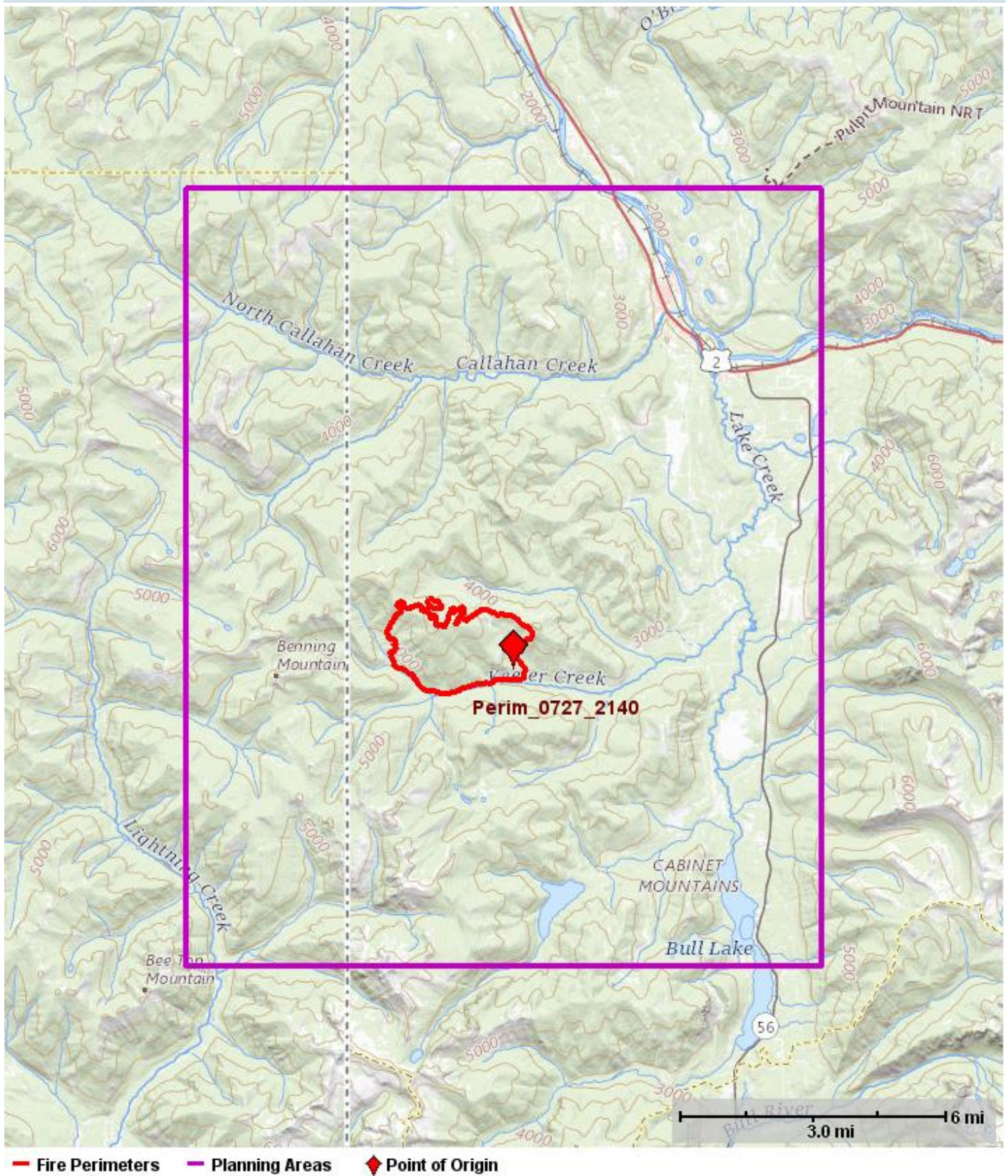
Decision History

Editor Name	Action	Date (CDT)	Comment
Gassmann, Nathan	Published	07/29/2021 09:39	
Gassmann, Nathan	Approved	07/29/2021 09:39	
Benson, Chad	Approved	07/28/2021 18:25	
Rankin, Todd	Review Requested	07/28/2021 18:19	
Rankin, Todd	Review Requested	07/28/2021 18:17	
Rankin, Todd	Created	07/23/2021 11:17	

1.2. Incident Information

Incident Information

NAME	VALUE
Incident Name	Burnt Peak
Unique Fire Identifier	2021-MTKNF-000167
Responsible Unit Name	Kootenai National Forest
FireCode	N5EB
P-Code	
Point of Origin	48.33991N / 115.9675 W
Incident Size	2,880acres
Latest WFDSS Perimeter Size	3,002acres
Incident Cause	Natural
Incident Type	Wildfire
Incident Discovery	07/07/2021 10:30
Contained	
Controlled	
Out	
Jurisdictional Unit	MTKNF - Kootenai National Forest
Jurisdictional Agency(s)	USFS, State
Geographic Area (prep level)	Northern Rockies (5)
Owner Name(s)	Sean Hill, Todd Rankin



Executive Summary

The Burnt Peak Fire was discovered July 7 after a lightning storm came through the area. The area was experiencing abnormally warm, dry conditions with persistent drought. ERCs values were at record highs while dead fuel moisture were at record lows. These conditions lead to active fire behavior and rapid fire spread which challenged initial attack efforts. Steep, inaccessible terrain also hampered containment as the fire spread quickly down and across the southern aspects.. A type 3 team was organized to management the fire until it transitioned to a type 2 IMT (Great Basin Team 4) on July 15. While opportunities to suppress the fire using direct tactics are being sought, the potential for a long duration incident exists, especially on the western flank. The IMT2

Executive Summary

recognized that long term planning was needed to set up for success for the possibility of a long duration incident. Long term planning support was provided by the NRGD Decision Support Center with a SOPL and LTAN to assist the forest and IMT with an updated WFDSS decision.

Burnt Peak west flank fire behavior 7 23 2021



The fire activity increased on July 23 when the an upslope run on the west flank spread fire to into the saddle of Burnt Peak and caused spotting into the upper stretches of the N. Fork Keeler Creek drainage. This movement increased the potential for the fire to spread north and east into areas that provide alignment opportunities for the fire to move rapidly to the east during dry cold front events. This decision expands the long term planning to account for these potential events. This fire situation and components within this decision will need to be continuously monitored and fire modeling used to anticipate actions to protect life and property. The fire continues to be managed by a type 2 IMT with a transition to Great Basin Team 6 occurring on July 29.

1.3. Weather

Fire Weather Zone Forecast

000
FNUS55 KMSO 282045
FWFMSO
Fire Weather Planning Forecast for Wrn Montana and N Cntrl Idaho
National Weather Service Missoula MT
245 PM MDT Wed Jul 28 2021
.DISCUSSION...
Idaho: Relative humidity this afternoon will stay elevated as the Northern Rockies remain under the influence of a Pacific moisture plume. Moisture will contribute to a chance for thunderstorms this afternoon and evening across the Nez Perce and southern Clearwater National Forests. Relative humidity recovery will be much better tonight than earlier this week. On Thursday, moisture begins to exit the region, and minimum relative humidity will fall once again. Daytime high temperatures will become hot, reaching 100-105 degrees in the lower valleys. Another round of thunderstorms will be possible, again the focus will be the Nez Perce and southern Clearwater NFs. Relative humidity recovery will become poor again on Thursday night. By Saturday, a surface low over eastern Washington will result in an easterly wind shift. After a dry start to the weekend, confidence is increasing for north-central Idaho to see wetting rains on Sunday into Monday.
Montana: Relative humidity this afternoon will stay elevated as the Northern Rockies remain under the influence of a Pacific moisture plume. Moisture will contribute to a chance for thunderstorms this afternoon and evening across the east Lolo, Bitterroot, and Beaverhead/Deerlodge NFs. Areas along the Continental Divide and southern Flathead NF can also expect some storm activity. Relative humidity recovery will be much better tonight than earlier this week. On Thursday, moisture begins to exit the region, and minimum relative humidity will fall once again. Another round of thunderstorms will be possible in the same geographic areas as today. Relative humidity recovery will become poor again on Thursday night. By later on Friday, a surface low over eastern Washington will result in an easterly wind shift. After a dry start to the weekend, confidence is increasing for western Montana to see wetting rains later in the day on Sunday into Monday.
MTZ104-105-292045-
Kootenai-Flathead/Glacier Park-
245 PM MDT Wed Jul 28 2021
.TONIGHT...
* Sky/Weather.....Partly cloudy then becoming mostly cloudy then becoming partly cloudy. Slight chance of rain showers and thunderstorms in the evening. Areas of smoke.
* Min Temperature.....55-65.
* Max Humidity.....78-88 percent valleys and 50-60 percent ridges.
* 20-Foot Winds.....
* Lower Elevation.....Downslope/downvalley 1-3 mph.
* Ridge Top.....West 5-10 mph becoming southwest after midnight.
* LAL.....1 in the Kootenai...and 2 in the Flathead/Glacier Park.
* CWR (> 0.10 Inch)...0 percent.
.THURSDAY...
* Sky/Weather.....Partly cloudy. Areas of smoke.
* Max Temperature.....90-100 valleys and 75-85 ridges.
* Min Humidity.....10-20 percent valleys and 20-30 percent ridges.
* 20-Foot Winds.....
* Lower Elevation.....Becoming upslope/upvalley 4-8 mph in the afternoon.
* Ridge Top.....West 5-10 mph.
* Haines Index.....3 very low.
* LAL.....1
* CWR (> 0.10 Inch)...0 percent.
.THURSDAY NIGHT...
* Sky/Weather.....Mostly clear. Areas of smoke.
* Min Temperature.....55-65.
* Max Humidity.....69-79 percent valleys and 45-55 percent ridges.
* 20-Foot Winds.....
* Lower Elevation.....Downslope/downvalley 2-5 mph.
* Ridge Top.....Northwest 5-10 mph becoming northeast early in the morning.
* LAL.....1.
* CWR (> 0.10 Inch)...0 percent.
.FRIDAY...
* Sky/Weather.....Mostly sunny. Areas of smoke.
* Max Temperature.....93-103 valleys and 78-88 ridges.
* Min Humidity.....10-20 percent valleys and 21-31 percent ridges.
* 20-Foot Winds.....

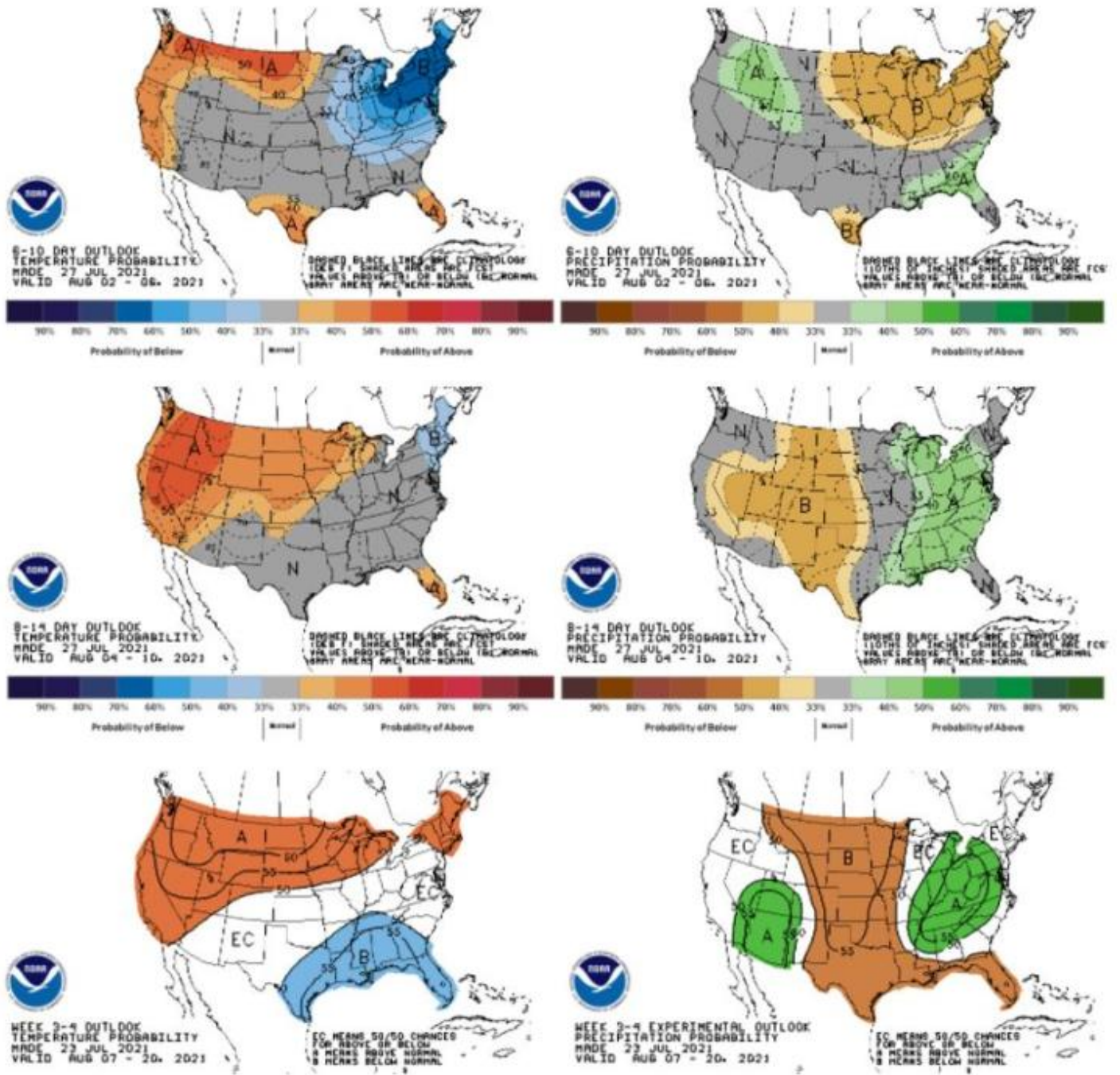
Fire Weather Zone Forecast

* Lower Elevation.....Becoming upslope/upvalley 4-8 mph in the afternoon.
* Ridge Top.....Northeast 5-10 mph.
* Haines Index.....4 low.
* LAL.....1.
* CWR (> 0.10 Inch)...0 percent.
.SATURDAY...Mostly clear. Lows 60-70. Highs 85-95. Northeast winds 5-10 mph.
.SUNDAY...Partly cloudy. Lows 65-75. Highs 85-95. East winds 10-15 mph.
.MONDAY...Not as warm. Mostly cloudy with chance of rain showers and slight chance of thunderstorms. Lows 60-70. Highs 75-85. Southwest winds 5-10 mph.
.TUESDAY...Partly cloudy. Chance of rain showers and slight chance of thunderstorms. Lows 60-70. Highs 75-85.
.WEDNESDAY...Partly cloudy. Lows 55-65. Highs 75-85.
\$\$

Mid-term temperature and precipitation outlooks

Mid-term outlooks are indicating that temperature will stay above average while precipitation may trend to above normal precipitation in the 6-10 day period before returning to normal or below normal precipitation in mid-August. It should be pointed out that any precipitation will result in short term fire slowing events at best given the critically dry conditions.

[Mid term temp and precip outlooks](#)



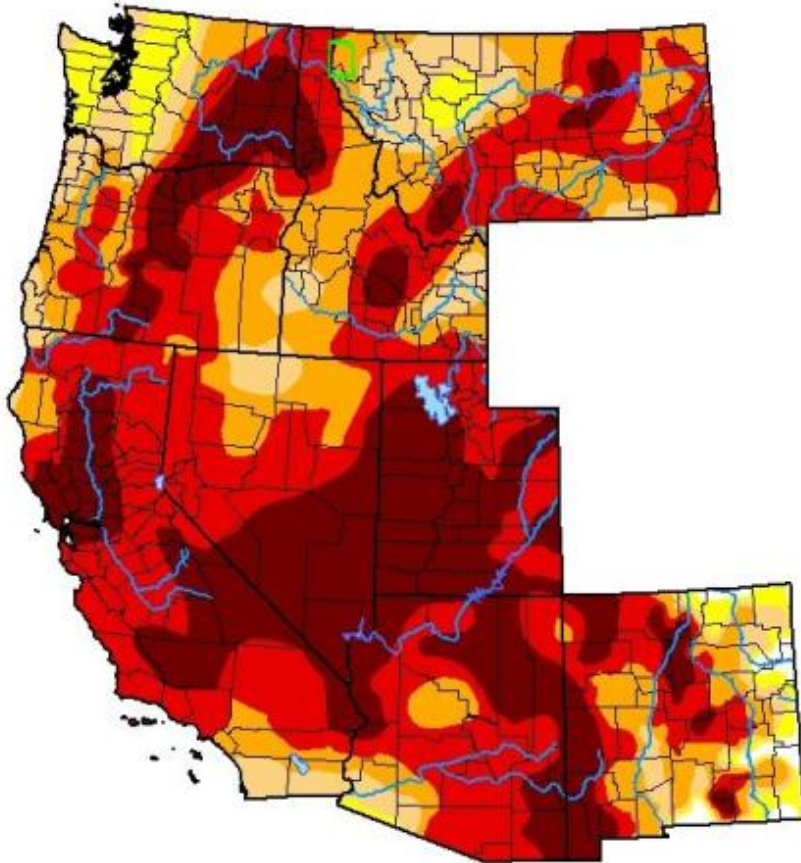
US Drought Monitor 7.20.2021

The most current drought monitor has the fire area in a severe drought. The drought outlook indicates drought conditions persisting in the fall. A new drought monitor product will be released on July 29.

[US Drought Monitor July 20 2021](#)

U.S. Drought Monitor West

July 20, 2021
(Released Thursday, Jul. 22, 2021)
Valid 8 a.m. EDT



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brad Rippey
U. S. Department of Agriculture



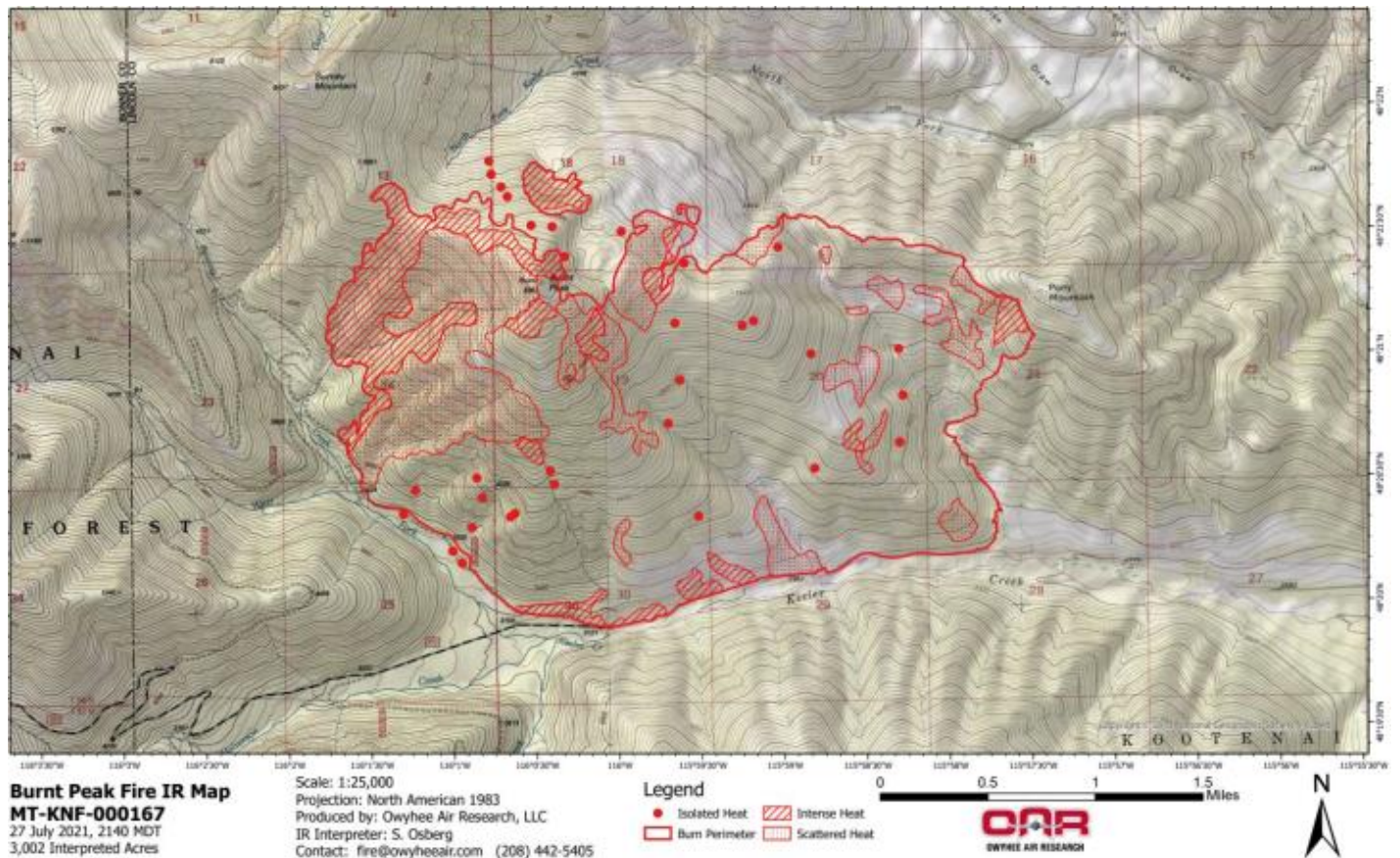
droughtmonitor.unl.edu

1.4. Modeling

Fuels and Fire Behavior

Fire behavior increased on July 25 when upslope runs occurred on the west side of the fire that spread the fire into the saddle west of Burnt Peak. Short range spotting also occurred that established fire in the upper stretches of the N. Fork Keeler Creek drainage. Fire behavior within the local area is showing that critically dry fuels are contributing to significant fire runs that are primarily fuels driven, as seen on the nearby South Yaak fire on July 27. FBANs and LTANs should be aware of this and review the Fuels and Fire Behavior Advisory that is currently issued for the region.

[July 27 2140hr IR perimeter map](#)

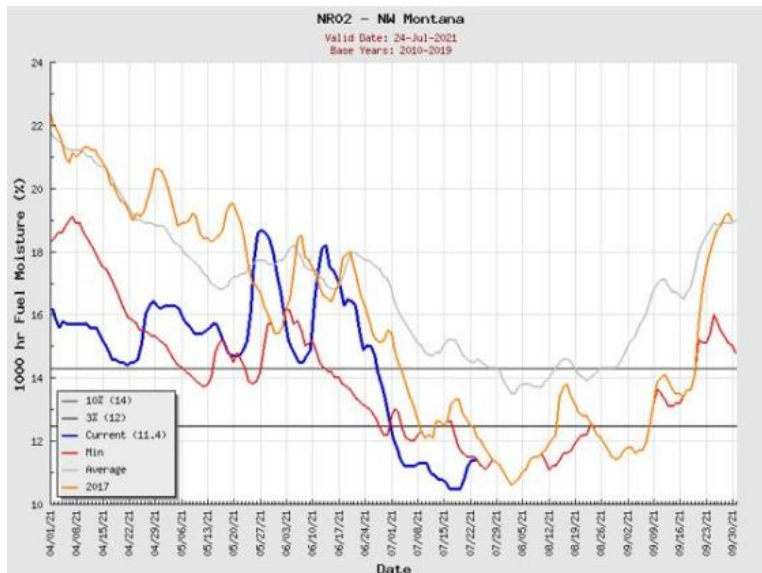
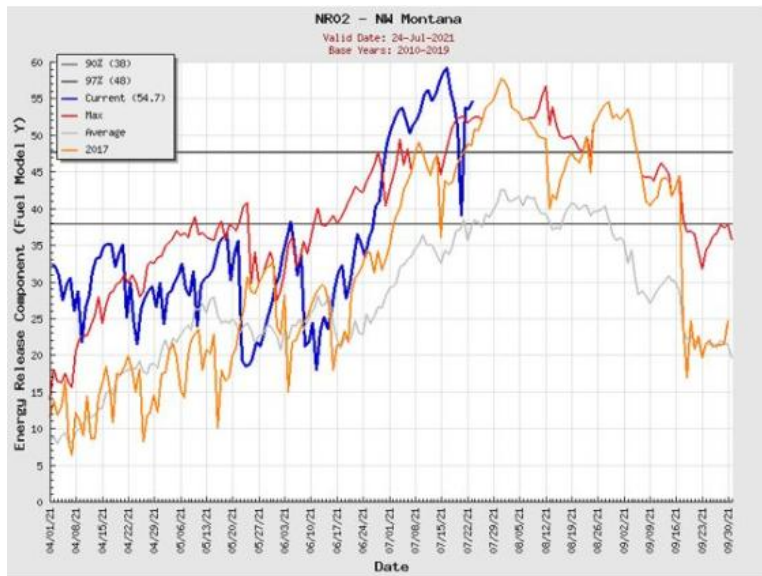


The latest IR data shows the west and northwest portions of the fire holding the most intense heat. These areas have been used for updated modeling and pose the most potential for active fire spread in continuous fuels to the west, north and potentially eastern direction. This potential has been incorporated into operational planning and MAPs in order to identify actions required if/when the fire established in the Goat and Callahan drainages. This condition will need to be monitored closely as it will allow the fire to be in alignment with east/west drainages that will be susceptible to winds associated with dry colds fronts.

[NR02 ERC and 1000 hr fuel moisture](#)

The ERC and 1000 hour fuels for the NW02 PSA are indicating a the continuance of record high indices and record low fuel moisture values. A brief dip in ERCs occurred on July 22 given some light precipitation however the ERCs rebounded quickly with the resultant increase in fire behavior and spread. All indications are that ERC and 1000 hour fuel moisture values will continue on these trends for the foreseeable future.

[NR2 ERC and 1000 hour fuel moisture](#)



Near Term (0727_5Day_8HR_NTFB_JO2 - Started on 07/27/21 12:00 ended on 07/31/21 20:00)

Near Term Fire Behavior Analysis Information

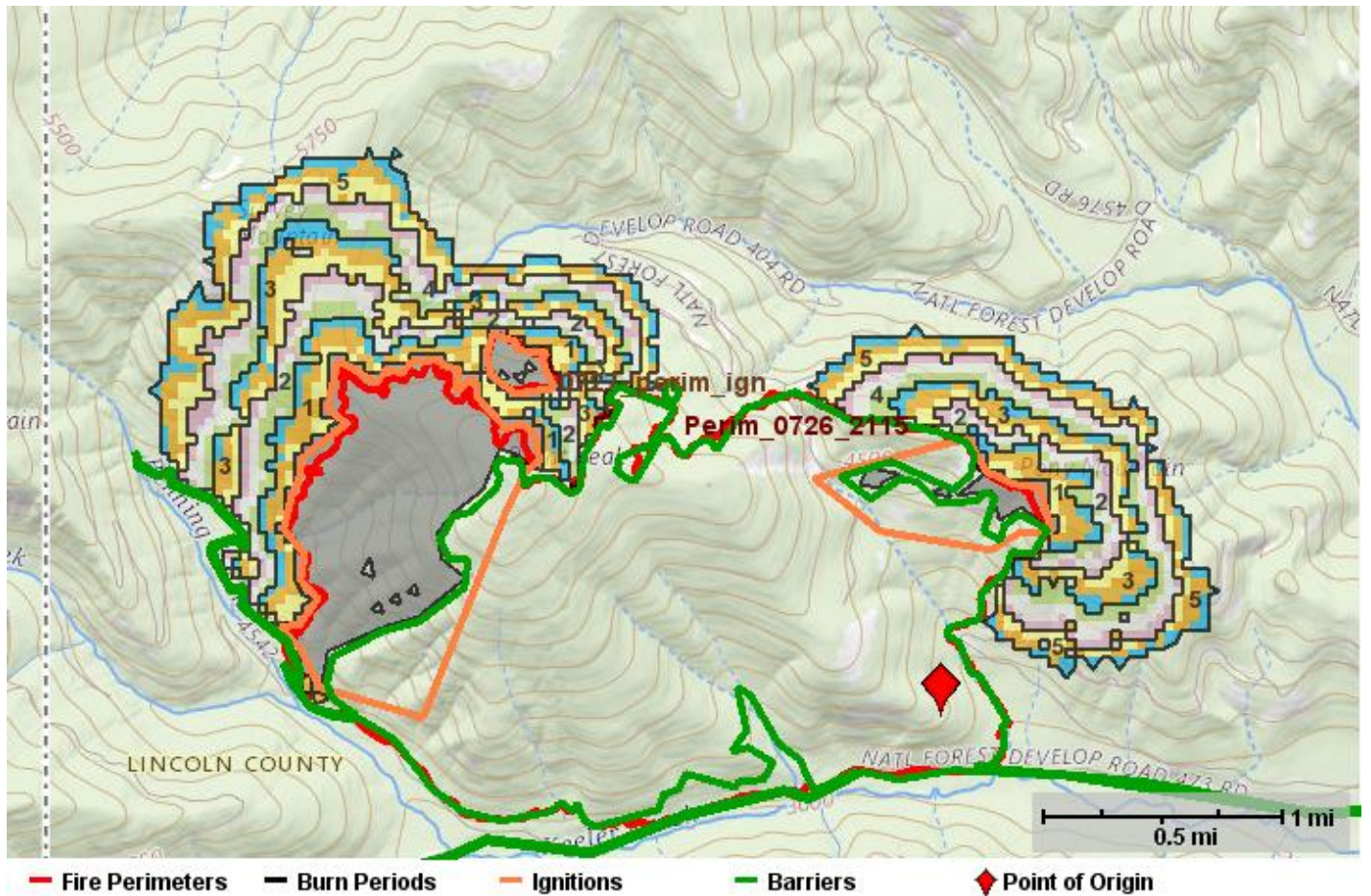
NAME	VALUE
Analysis Name	0727_5Day_8HR_NTFB_JO2

Burn Periods

Date	Start Hour	End Hour	Acres
07/27/2021	12	20	249.8
07/28/2021	12	20	269.2
07/29/2021	12	20	347.5
07/30/2021	12	20	453.7
07/31/2021	12	20	448.4

Time (CDT)	User	Note
07/27/2021 15:28	O'Connor, Josh	These results show 5 day fire growth potential for the Burnt Peak Fire starting for the period of 7/27-7/31. This simulation doesn't capture suppression efforts. Current fire location prohibits significant growth barring roll out or spotting. - Josh O'Connor LTAN-T 07/27/21

Near Term Analysis '0727_5Day_8HR_NTFB_JO2'



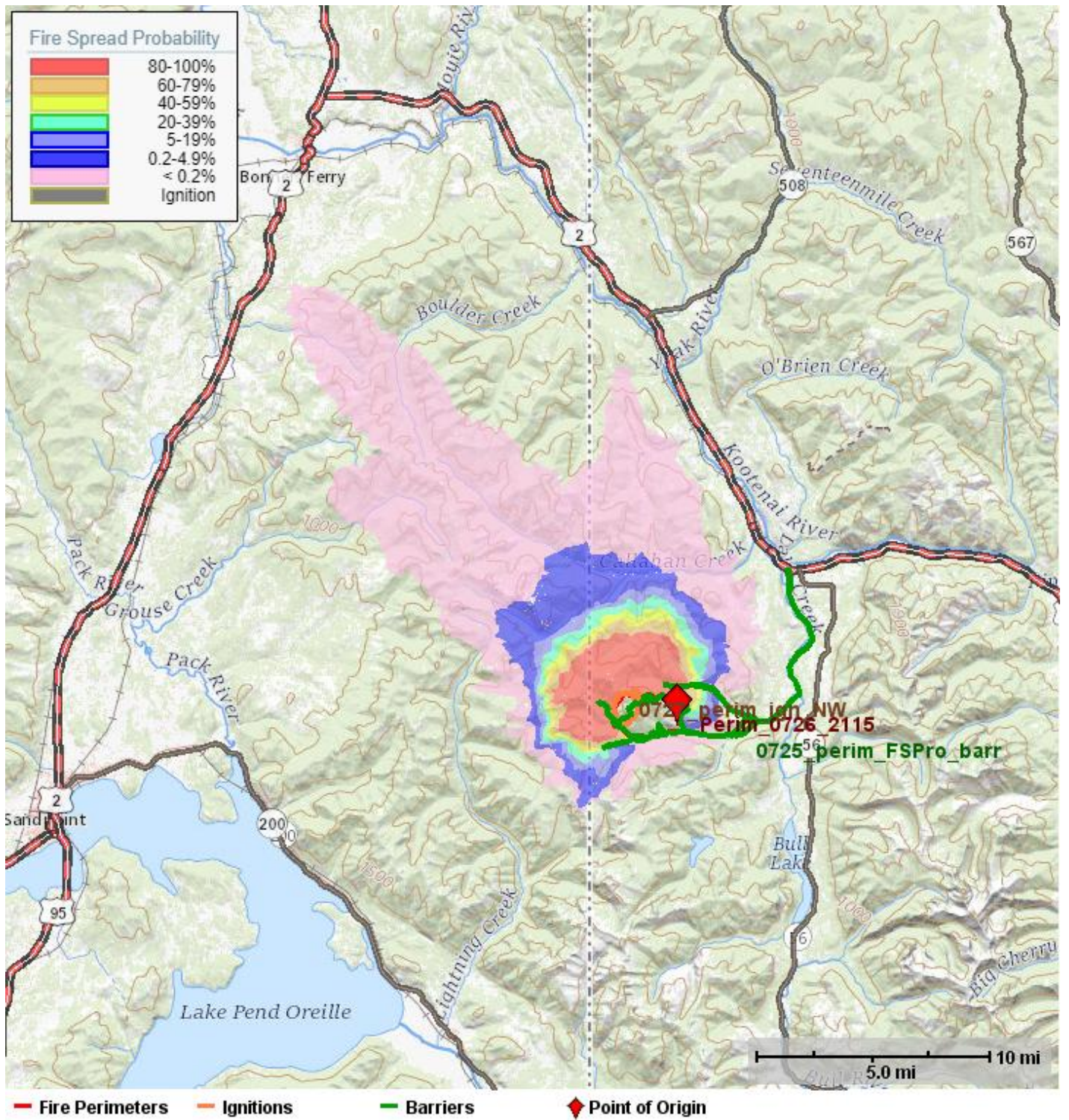
FSPPro (FSPPro_0727_14Day_FinneyCrwn_JO3 - Started on 07-27-2021)

FSPPro General Information

NAME	VALUE
Analysis Name	FSPPro_0727_14Day_FinneyCrwn_JO3
Analysis Start	07/27/2021
Duration	14 days
Simulations	2000 fires

Time (CDT)	User	Note
07/27/2021 19:11	O'Connor, Josh	These results are a 14 Day Fire Spread Probability analysis that show the given probability of any area in proximity to the Burnt Peak Fire burning in the next 14 days. The model was run for a 14 day period starting 7/27 with 2000 simulations to determine probability. Simulation results are only valid under the assumptions used. As conditions change & fire behavior increases this FSPPro run should be assessed and updated. This simulation assumes no suppression actions were taken.

FSPPro Analysis 'FSPPro_0727_14Day_FinneyCrwn_JO3'



1.5. Risk

Relative Risk

NAME	VALUE
Relative Risk	High
Duration	High
Saved By	Rankin, Todd
Completed	07/27/2021 17:29 CDT

Relative Risk Notes

The fire is in steep terrain and extremely dry fuels. Indices are at critical levels with ERCs above the 97th percentile and setting record highs for the NR02 PSA. A Fuels and Fire Behavior Advisory was issued for the region on July 18 due to critical burning conditions. The fire season started about three weeks earlier than normal with the peak of the traditional fire season occurring in mid to late August, hence much of the fire season remains. Currently at PL5 nationally and regionally with minimal resource availability and heavy competition for aircraft and IMTs. The area is in severe drought with warm, dry weather forecast for the foreseeable future. Fire behavior is active surface fire with single and group tree torching and short range spotting. The fire has exhibited high resistance to control. Given the time of season and weather outlooks, the conditions are expected to worsen before they improve.

Values Notes

The closest values are in N. Keeler Creek drainage approximately two miles east of the fire. There are several structures and private property in that area. Forest values include timber and Bull trout habitat. North of the fire and in the South Fork Callahan Creek drainage is the pending Goat Rope TS (Starry Goat ROD). The fire presents the potential for long term area closures and impacts to recreational areas. The fire is expected to be a long duration event with smoke and fire personnel in the local area for several months. If the fire continues to move north and into the Goat and Callahan drainages, there is likely to be increased social concerns.

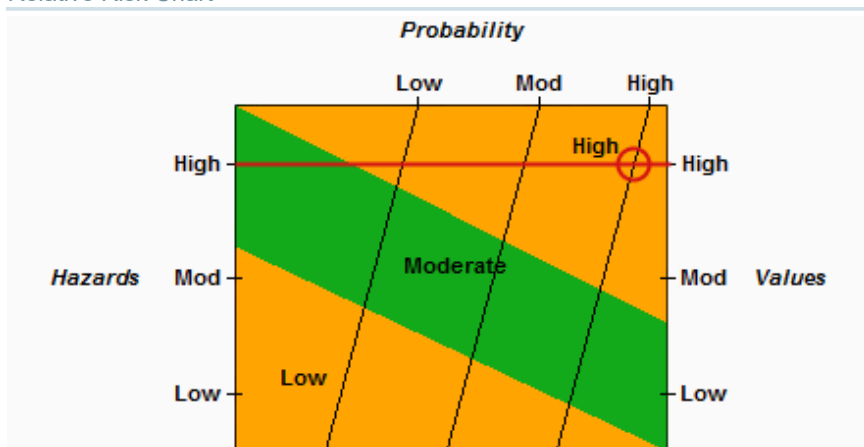
Hazards Notes

1000 hour fuels are at record low values and ERC are near or above record highs. Live fuels are still partially green and may be hampering some fire spread but expected to transition to fully cured within the next few weeks. Fire behavior has been moderate with backing and flanking fire. In areas of wind slope alignment, single and group torching is occurring with short range spotting. The potential for fire growth is considered high due to hot, dry, windy conditions in the near term and extended forecast for continued warm, dry weather for the next several weeks. The are continuous fuels to the west, northwest, and north of the current active fire perimeter.

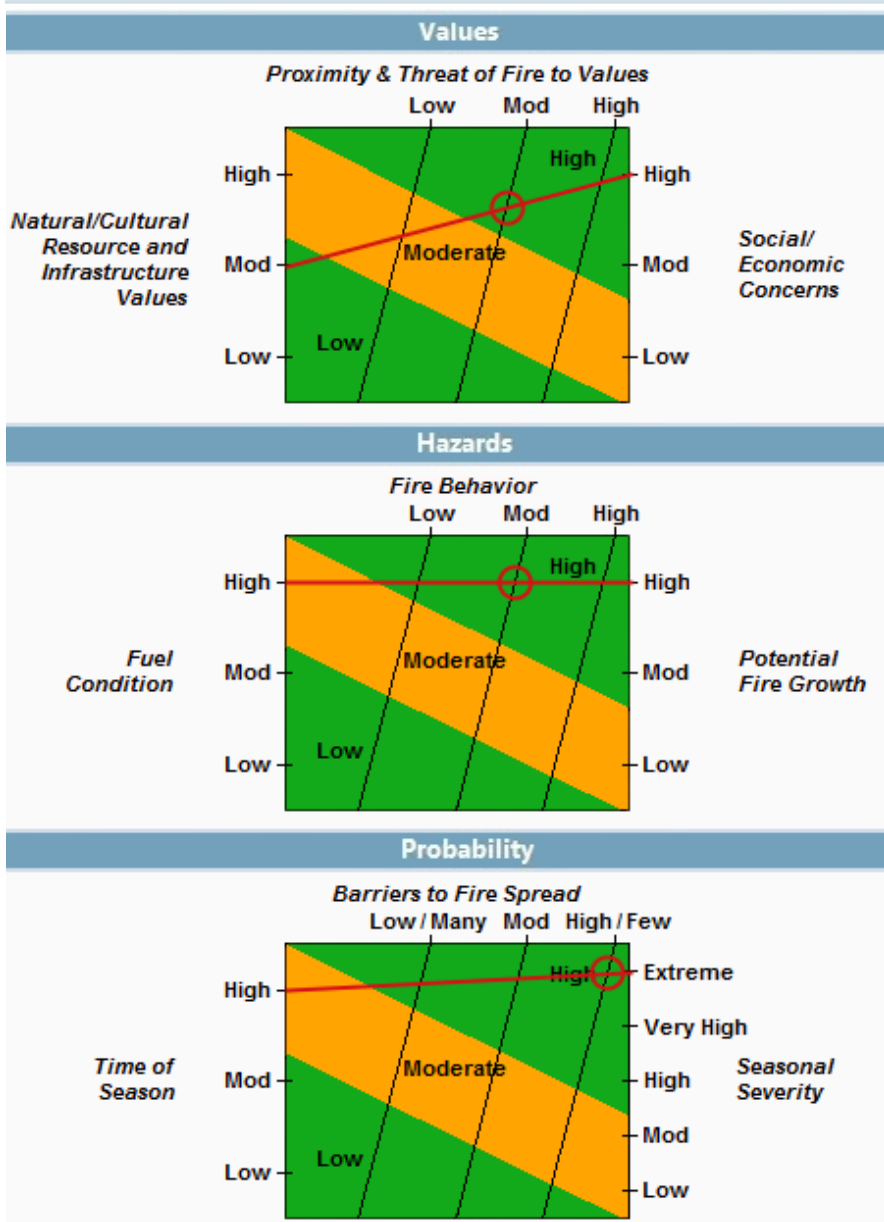
Probability Notes

Fire season started three weeks earlier than normal resulting in a few more months of fire seasons ahead. There are limited barriers on the landscape but those present include roads, rivers/creeks, green meadows, and recently harvested units (timber sales) in a few areas. The are minimal barriers to fire spread to the north and north west. Seasonal severity is considered extreme due to ongoing drought conditions. extremely low fuel moisture, and record high indices.

Relative Risk Chart



Relative Risk Inputs



Organization Assessment

NAME	VALUE
Unit Recommended Org	Type 2
Saved By	Rankin, Todd
Completed	07/27/2021 17:56 CDT

Organization Assessment Notes

The fire is currently being managed by Type 2 IMT that is also managing the South Yaak Fire. A team transition is planned on July 29 to another Type 2 IMT based on the current and expected fire behavior/spread along with the complexities involved with managing two large fires that are expected to be long duration events.

Relative Risk Notes

The fire is in steep terrain and extremely dry fuels. Indices are at critical levels with ERCs above the 97th percentile and setting record highs for the NR02 PSA. A Fuels and Fire Behavior Advisory was issued for the region on July 18 due to critical burning conditions. The fire season started about three weeks earlier than normal with the peak of the traditional fire season occurring in mid to late August, hence much of the fire season remains. Currently at PL5 nationally and regionally with minimal resource availability and heavy competition for aircraft and IMTs. The area is in severe drought with warm, dry weather forecast for the foreseeable future. Fire behavior is active surface fire with single and group tree torching and short range spotting. The fire has exhibited high resistance to control. Given the time of season and weather outlooks, the conditions are expected to worsen before they improve.

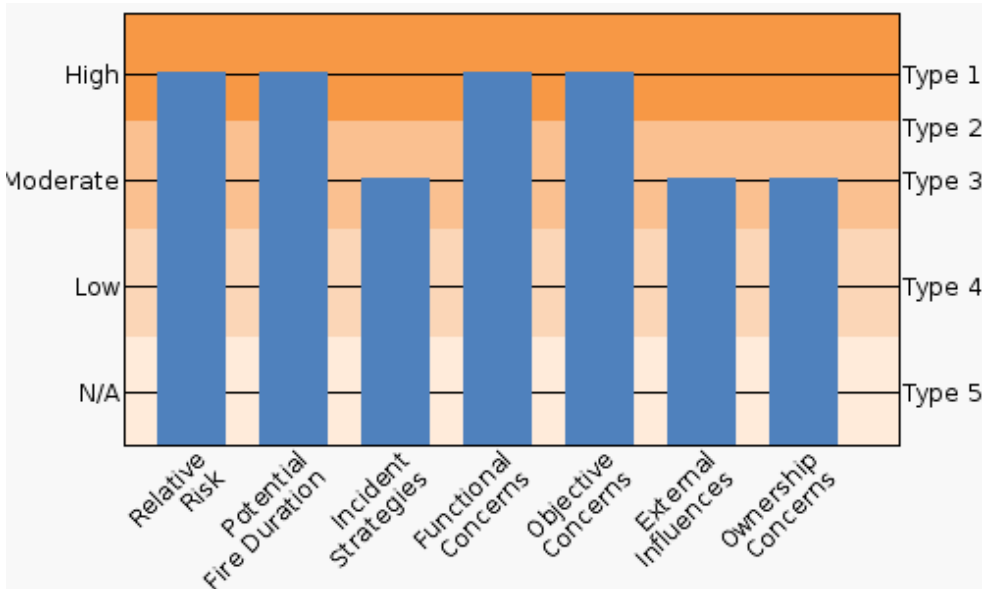
Implementation Difficulty Notes

The fire has potential to burn for the next few months. Fire is currently in steep, challenging terrain, especially on the west flank where the fire is moving away from road systems. Incident strategies (COA) provide alternatives for suppression strategies ranging from direct to indirect strategies based on terrain, existing barriers, fire behavior, and resource availability. Incident objectives and requirements are clear, but tactical options are limited due to fire behavior, fuel type, and steep, inaccessible terrain. All actions are based in risk management and seek areas that provide the highest probability of success while minimizing exposure to firefighters. Functional concerns are high due to PL 5 and limited resource and IMT availability.

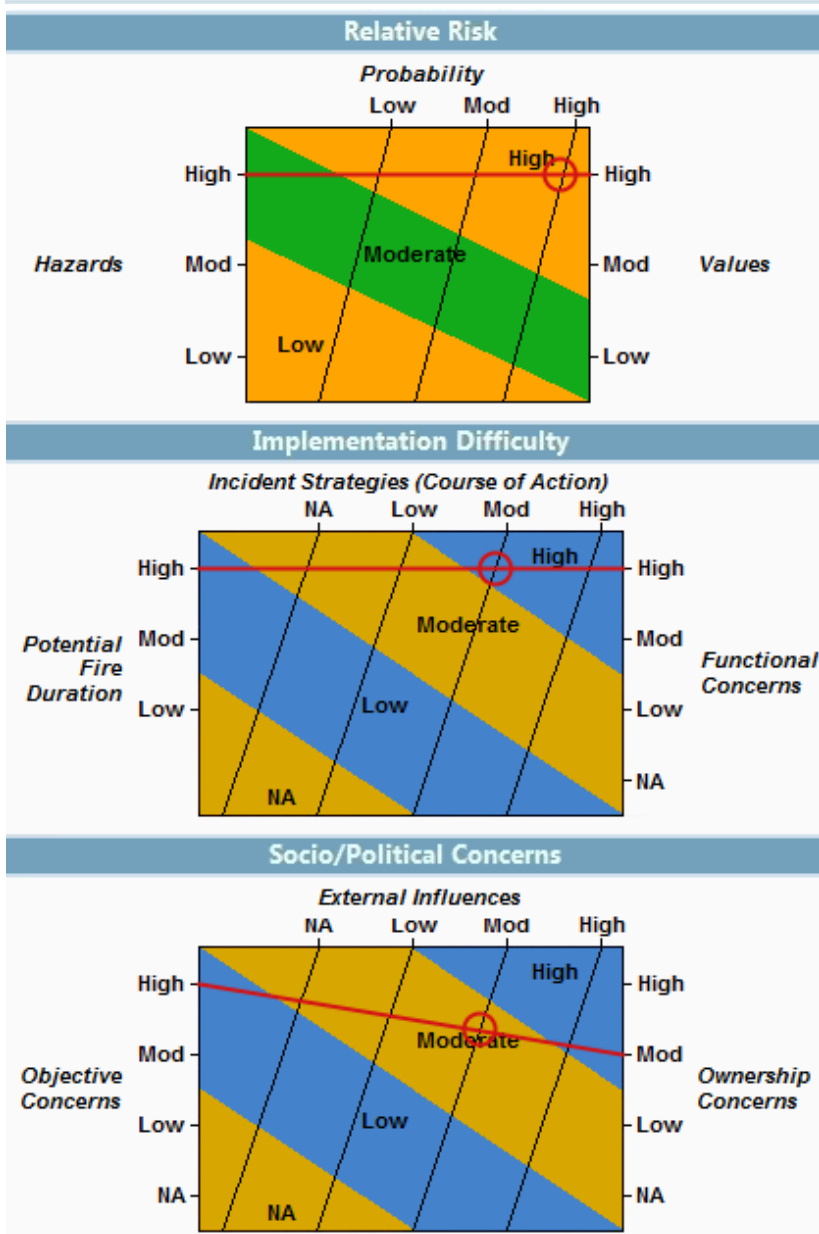
Socio/Political Concerns Notes

There is a shortage of available resources across the region and nationally that may limit the ability to achieve objectives. PL5 situation with numerous large fires burning within the region pose concerns with air quality and public concerns with potential fire closures and evacuations. The fire is currently mostly on FS land but has potential to spread onto other ownerships over time.

Organization Assessment Chart



Unit Recommended Org: Type 2



Planning Area Values Inventory Generated at 07/12/2021 16:57

NAME	VALUE
Planning Area Name	07/14/2021 19:11
Incident Name	Burnt Peak
Planning Area Size	160,957 acres

Category	Value	Data Source	Currency	Coverage
Building Clusters: Bonner, ID	no data	Various	Various	Available counties
Building Clusters: Lincoln, MT	1,348	Various	Various	Available counties
Campgrounds	17	BLM/USFS	2020	National (BLM and USFS only)
Communication Towers	21	HIFLD	02/20/2020	National
County: Bonner, ID	40,579 acres	US Census Bureau - TIGER	02/02/2021	National
County: Lincoln, MT	120,380 acres	US Census Bureau - TIGER	02/02/2021	National

Category	Value	Data Source	Currency	Coverage
Electric Sub Stations	8	Homeland Security Open Data	07/08/2020	CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands
Electric Transmission Lines	24.1 miles	Homeland Security Open Data	07/08/2020	CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands
Est Ground Evac Time: 1-2 Hrs	31,396 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 2-4 Hrs	47,015 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 4-6 Hrs	30,889 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 6+ Hrs	6,652 acres	National Park Service NIFC	11/01/2012	CONUS
Estimated Population	2,356	LandScan USA	2018	CONUS, AK, HI, PR
Habitat: Bull Trout	629 acres	US Fish and Wildlife Service	02/10/2021	National
Habitat: Bull Trout	61.1 miles	US Fish and Wildlife Service	02/10/2021	National
Habitat: Canada Lynx	194 acres	US Fish and Wildlife Service	02/10/2021	National
IRA: Beetop IRA	31 acres	PAD-US 2.1	09/15/2020	National
IRA: Buckhorn Ridge IRA	5,985 acres	PAD-US 2.1	09/15/2020	National
IRA: Cabinet Face West #670 IRA	2,265 acres	PAD-US 2.1	09/15/2020	National
IRA: Mt. Willard-Lake Estelle IRA	13,712 acres	PAD-US 2.1	09/15/2020	National
IRA: Roberts #691 IRA	3,444 acres	PAD-US 2.1	09/15/2020	National
IRA: Roberts IRA	6,224 acres	PAD-US 2.1	09/15/2020	National
IRA: Scotchman Peaks IRA	16,876 acres	PAD-US 2.1	09/15/2020	National
IRA: Willard Estelle #173 IRA	3,646 acres	PAD-US 2.1	09/15/2020	National
Landowner Category: Private	34,498 acres	PAD-US 2.0, AICC, BIA/ WFDSS, Census	10/09/2020	National
Landowner Category: State	3,747 acres	PAD-US 2.0, AICC, BIA/ WFDSS, Census	10/09/2020	National
Landowner Category: USFS	122,690 acres	PAD-US 2.0, AICC, BIA/ WFDSS, Census	10/09/2020	National
Mines	1	HIFLD	06/12/2017	National
Other Areas: Lightning Creek	32 acres	PAD-US 2.1	09/15/2020	National
Other Areas: Spar Lake Recreation Area	40 acres	PAD-US 2.1	09/15/2020	National
Protecting Unit: C&L	280 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN
Protecting Unit: USFS	154,761 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN
Roads	22.4 miles	NAVTEQ	11/2012	National
USFS Buildings	35	USFS (EDW)	2020	National
USFS Trails	82.3 miles	USFS (EDW)	10/27/2020	CONUS, AK, HI, PR

Coverage of Values Queried that Produced No Results

BLM Buildings (National), BLM Horse and Burro (National), BLM Oil / Gas Leases (National), BLM Range Allotments (National), Class 1 Airsheds (National), Electric Power Plants (CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands), NPS Buildings (National), NRA (National), Natl Historic Trails (National), Natl Recreation Trails (National), Natl Scenic Byways (National), Natl Scenic Trails (National), Natl Wild Scenic Rivers (National), Oil and Gas Pipelines (National), Ozone Non-Attainment

Coverage of Values Queried that Produced No Results

(National), Particulates Non-Attainment (National), Sage Grouse Habitat (National), TNC Lands (National), USFWS Trails (CONUS, AK, HI, PR), WSA (National), Wilderness (National)

Spatial Fire Planning Inventory

Category	Value	Data Source	Currency	Coverage
Aqua Retardant Avoidance	637 acres	National - FS Land Only	04/01/2020	National (USFS Units only)
Retardant Avoidance	54 acres	USDA FS Enterprise Data Warehouse	04/01/2020	National (USFS Units only)

Point of Origin Values Inventory

Category	Value	Data Source	Currency	Coverage
Building Clusters: Lincoln, MT	0	Various	Various	Available counties
Campgrounds	1	BLM/USFS	2020	National (BLM and USFS only)
County: Lincoln, MT	2,011 acres	US Census Bureau - TIGER	02/02/2021	National
Est Ground Evac Time: 1-2 Hrs	590 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 2-4 Hrs	1,060 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 4-6 Hrs	3 acres	National Park Service NIFC	11/01/2012	CONUS
Habitat: Bull Trout	0.6 miles	US Fish and Wildlife Service	02/10/2021	National
IRA: Buckhorn Ridge IRA	9 acres	PAD-US 2.1	09/15/2020	National
IRA: Willard Estelle #173 IRA	116 acres	PAD-US 2.1	09/15/2020	National
Landowner Category: USFS	2,011 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Protecting Unit: USFS	2,011 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN
USFS Trails	1.9 miles	USFS (EDW)	10/27/2020	CONUS, AK, HI, PR

Spatial Fire Planning Inventory

Category	Value	Data Source	Currency	Coverage
Aqua Retardant Avoidance	523 acres	National - FS Land Only	04/01/2020	National (USFS Units only)
Retardant Avoidance	11 acres	USDA FS Enterprise Data Warehouse	04/01/2020	National (USFS Units only)

Fire Perimeter Values Inventory Generated at 07/28/2021 11:16

Category	Value	Data Source	Currency	Coverage
Building Clusters: Lincoln, MT	0	Various	Various	Available counties
County: Lincoln, MT	3,002 acres	US Census Bureau - TIGER	02/02/2021	National
Est Ground Evac Time: 1-2 Hrs	620 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 2-4 Hrs	1,972 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 4-6 Hrs	245 acres	National Park Service NIFC	11/01/2012	CONUS
IRA: Buckhorn Ridge IRA	1,441 acres	PAD-US 2.1	09/15/2020	National
IRA: Willard Estelle #173 IRA	310 acres	PAD-US 2.1	09/15/2020	National
Landowner Category: USFS	3,002 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Protecting Unit: USFS	3,002 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN
USFS Trails	1.3 miles	USFS (EDW)	10/27/2020	CONUS, AK, HI, PR

Coverage of Values Queried that Produced No Results

BLM Buildings (National), BLM Horse and Burro (National), BLM Oil / Gas Leases (National), BLM Range Allotments (National), Campgrounds (National (BLM and USFS only)), Class 1 Airsheds (National), Communication Towers (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), Estimated Population (CONUS, AK, HI, PR), Habitat (National), Mines (National), NPS Buildings (National), NRA (National), Natl Historic Trails (National), Natl Recreation Trails (National), Natl Scenic Byways (National), Natl Scenic Trails (National), Natl Wild Scenic Rivers (National), Oil and Gas Pipelines (National), Other Areas (National), Ozone

Coverage of Values Queried that Produced No Results

Non-Attainment (National), Particulates Non-Attainment (National), Roads (National), Sage Grouse Habitat (National), TNC Lands (National), USFS Buildings (National), USFWS Trails (CONUS, AK, HI, PR), WSA (National), Wilderness (National)

Values at Risk (FSPro_0727_14Day_FinneyCrwn_JO3 - Started on 07-27-2021)

NAME	VALUE
Incident Name	Burnt Peak
Analysis Name	FSPro_0727_14Day_FinneyCrwn_JO3
Author	Multiple
Analyst	O'Connor, Josh
Latitude	48.33991
Longitude	115.9675
Geographical Area	Northern Rockies
Values Generated Time	07/27/2021 17:29

Values List

Category	80-100%	60-79%	40-59%	20-39%	5-19%	0.2-4.9%	< 0.2%	Expected Value
Aqua Retardant Avoidance	2,611 acres	698 acres	619 acres	963 acres	1,078 acres	4,493 acres	19,917 acres	3,708 acres
Building Clusters: Bonner, ID	no data	no data	no data	no data	no data	no data	no data	no data
Building Clusters: Boundary, ID	0	0	0	0	0	0	2	0.00
Building Clusters: Lincoln, MT	0	0	0	0	0	0	17	0.02
Campgrounds	0	0	0	0	2	2	12	0.31
Communication Towers	0	0	0	0	0	1	0	0.03
County: Bonner, ID	2,810 acres	1,025 acres	1,064 acres	1,581 acres	1,642 acres	8,758 acres	38,870 acres	4,725 acres
County: Boundary, ID	0 acres	0 acres	0 acres	0 acres	0 acres	0 acres	23,620 acres	23.6 acres
County: Lincoln, MT	7,667 acres	1,961 acres	1,820 acres	2,398 acres	2,507 acres	6,774 acres	27,984 acres	10,420 acres
Est Ground Evac Time: 1-2 Hrs	1,328 acres	410 acres	222 acres	643 acres	751 acres	3,305 acres	22,269 acres	1,988 acres
Est Ground Evac Time: 2-4 Hrs	2,967 acres	656 acres	984 acres	1,659 acres	2,138 acres	6,004 acres	38,198 acres	4,581 acres
Est Ground Evac Time: 4-6 Hrs	3,184 acres	1,107 acres	1,082 acres	1,269 acres	882 acres	4,112 acres	18,569 acres	4,798 acres
Est Ground Evac Time: 6+ Hrs	2,259 acres	572 acres	388 acres	221 acres	132 acres	364 acres	985 acres	2,721 acres
Estimated Population	0	0	0	0	0	0	28	0.03
Habitat: Bull Trout	0.0 miles	0.0 miles	0.0 miles	0.0 miles	1.7 miles	11.6 miles	16.5 miles	0.53 miles
IDIPF Mgmt Req: MA1a_1b_1c_1e	0 acres	0 acres	0 acres	0 acres	0 acres	50 acres	95 acres	1.4 acres
IDIPF Mgmt Req: MA4a_4b	0 acres	0 acres	0 acres	0 acres	0 acres	0 acres	808 acres	0.81 acres
IDIPF Mgmt Req: MA5	0 acres	0 acres	1 acres	26 acres	127 acres	588 acres	20,563 acres	60.0 acres
IRA: Buckhorn Ridge IRA	2,690 acres	419 acres	431 acres	375 acres	266 acres	245 acres	0 acres	3,082 acres
IRA: Mt. Willard-Lake Estelle IRA	2,120 acres	635 acres	545 acres	503 acres	604 acres	4,957 acres	32,668 acres	3,013 acres
IRA: Roberts #691 IRA	0 acres	0 acres	0 acres	0 acres	0 acres	662 acres	2,773 acres	20.0 acres
IRA: Roberts IRA	0 acres	0 acres	0 acres	0 acres	0 acres	392 acres	6,632 acres	16.8 acres
IRA: Scotchman Peaks IRA	0 acres	0 acres	0 acres	77 acres	470 acres	934 acres	1,015 acres	107 acres

Values List

Category	80-100%	60-79%	40-59%	20-39%	5-19%	0.2-4.9%	< 0.2%	Expected Value
IRA: Willard Estelle #173	1,014	186 acres	129 acres	351 acres	682 acres	949 acres	24 acres	1,323 acres
IRA	acres							
Landowner Category: Private	0 acres	0 acres	0 acres	0 acres	37 acres	111 acres	9,832 acres	17.3 acres
Landowner Category: State	0 acres	0 acres	0 acres	0 acres	0 acres	0 acres	2,171 acres	2.17 acres
Landowner Category: USFS	10,477 acres	2,986 acres	2,885 acres	3,979 acres	4,111 acres	15,421 acres	78,472 acres	15,149 acres
Other Areas: Hunt Girl Creek	0 acres	0 acres	0 acres	0 acres	0 acres	0 acres	808 acres	0.81 acres
Protecting Unit: State	0 acres	0 acres	0 acres	0 acres	0 acres	0 acres	5,206 acres	5.21 acres
Protecting Unit: USFS	10,477 acres	2,985 acres	2,885 acres	3,979 acres	4,148 acres	15,520 acres	85,213 acres	15,162 acres
Retardant Avoidance	0 acres	0 acres	0 acres	0 acres	0 acres	428 acres	94 acres	11.2 acres
USFS Buildings	0	0	0	0	0	2	0	0.05
USFS Trails	0.9 miles	1.4 miles	2.5 miles	2.7 miles	2.4 miles	9.8 miles	73.4 miles	4.48 miles

Currency/Coverage of Values Reported

Category	Data Source	Currency	Coverage
Aqua Retardant Avoidance	National - FS Land Only	04/01/2020	National (USFS Units only)
Building Clusters	Various	Various	Available counties - No data available for Bonner, ID
Campgrounds	BLM/USFS	2020	National (BLM and USFS only)
Communication Towers	HIFLD	02/20/2020	National
County	US Census Bureau - TIGER	02/02/2021	National
Est Ground Evac Time	National Park Service NIFC	11/01/2012	CONUS
Estimated Population	LandScan USA	2018	CONUS, AK, HI, PR
Habitat	US Fish and Wildlife Service	02/10/2021	National
IRA	PAD-US 2.1	09/15/2020	National
Landowner Category	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Mgmt Req		Current	Unit Level
Other Areas	PAD-US 2.1	09/15/2020	National
Protecting Unit	Various	01/01/2020	AK, CA, ID, MT, NM, MN
Retardant Avoidance	USDA FS Enterprise Data Warehouse	04/01/2020	National (USFS Units only)
USFS Buildings	USFS (EDW)	2020	National
USFS Trails	USFS (EDW)	10/27/2020	CONUS, AK, HI, PR

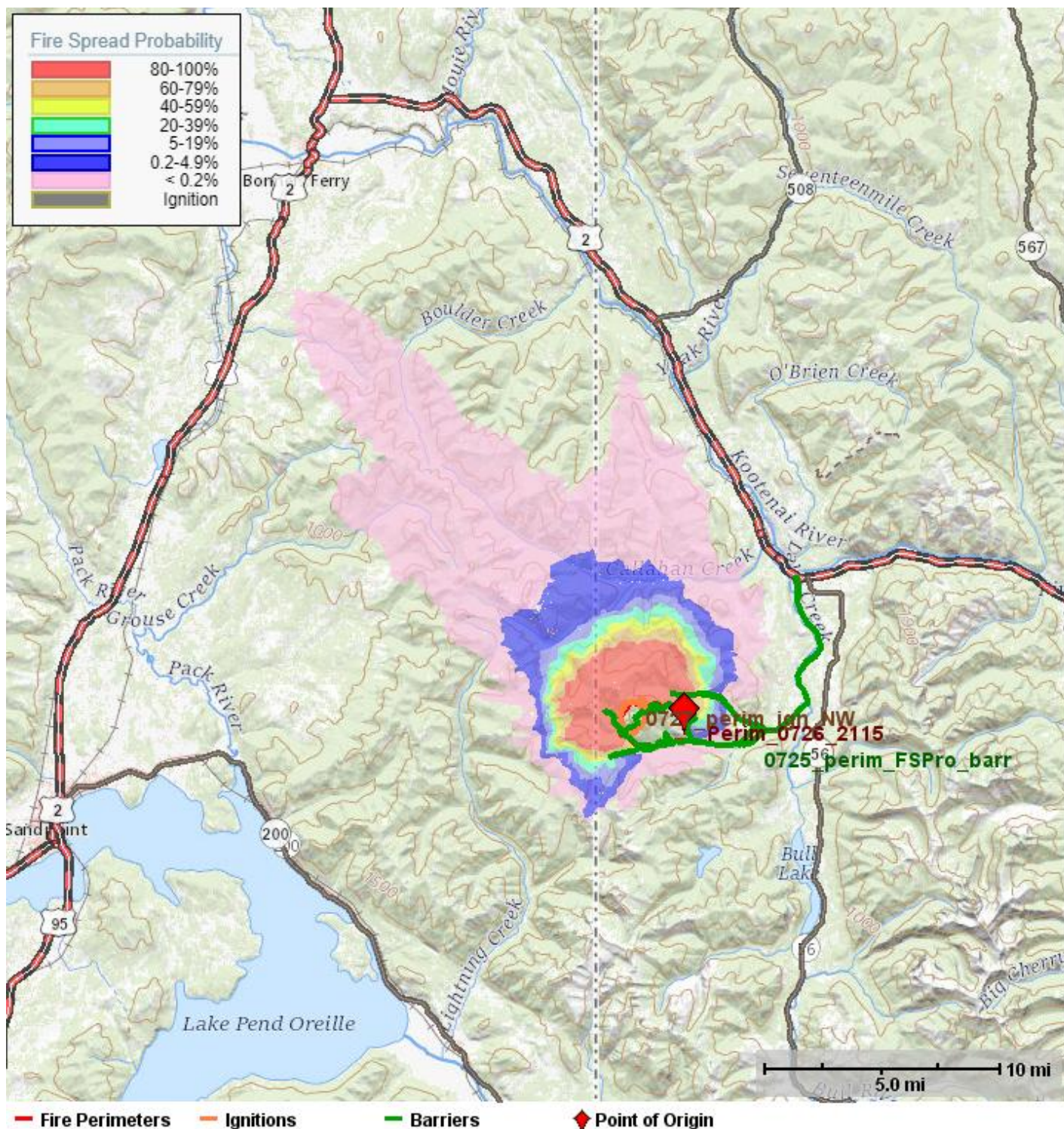
Coverage of Values Queried that Produced No Results

AK Fire Mgmt Options (Alaska Only), BLM Buildings (National), BLM Horse and Burro (National), BLM Mgmt Requirements (National (BLM Land Only)), BLM Oil / Gas Leases (National), BLM Range Allotments (National), Canada / Mexico (National), Class 1 Airsheds (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), Habitat (National), Mines (National), NPS Buildings (National), NRA (National), Natl Historic Trails (National), Natl Recreation Trails (National), Natl Scenic Byways (National), Natl Scenic Trails (National), Natl Wild Scenic Rivers (National), Oil and Gas Pipelines (National), Ozone Non-Attainment (National), Particulates Non-Attainment (National), Roads (National), Sage Grouse Habitat (National), TNC Lands (National), USFWS Trails (CONUS, AK, HI, PR), WSA (National), Wilderness (National)

Time (CDT)	User	Note
07/27/2021 19:11	O'Connor, Josh	These results are a 14 Day Fire Spread Probability analysis that show the given probability of any area in proximity to the Burnt Peak Fire burning in the next 14 days. The model was run for a 14 day period starting 7/27 with 2000 simulations to determine probability. Simulation results are only valid under the

Time (CDT)	User	Note
		assumptions used. As conditions change & fire behavior increases this FSPro run should be assessed and updated. This simulation assumes no suppression actions were taken.

FSPro Analysis 'FSPro_0727_14Day_FinneyCrwn_JO3'



Risk Management Analysis

RMA products can aid the strategic planning process by presenting an overview of the fire environment from a larger perspective. The products included in this plan, Suppression Difficulty Index (SDI), Potential Control lines (PCL) and Snag Hazard Index can aid fire managers in locating efficient and safe fire control features and help assess the difficulty and safety of suppression actions. The

Risk Management Analysis

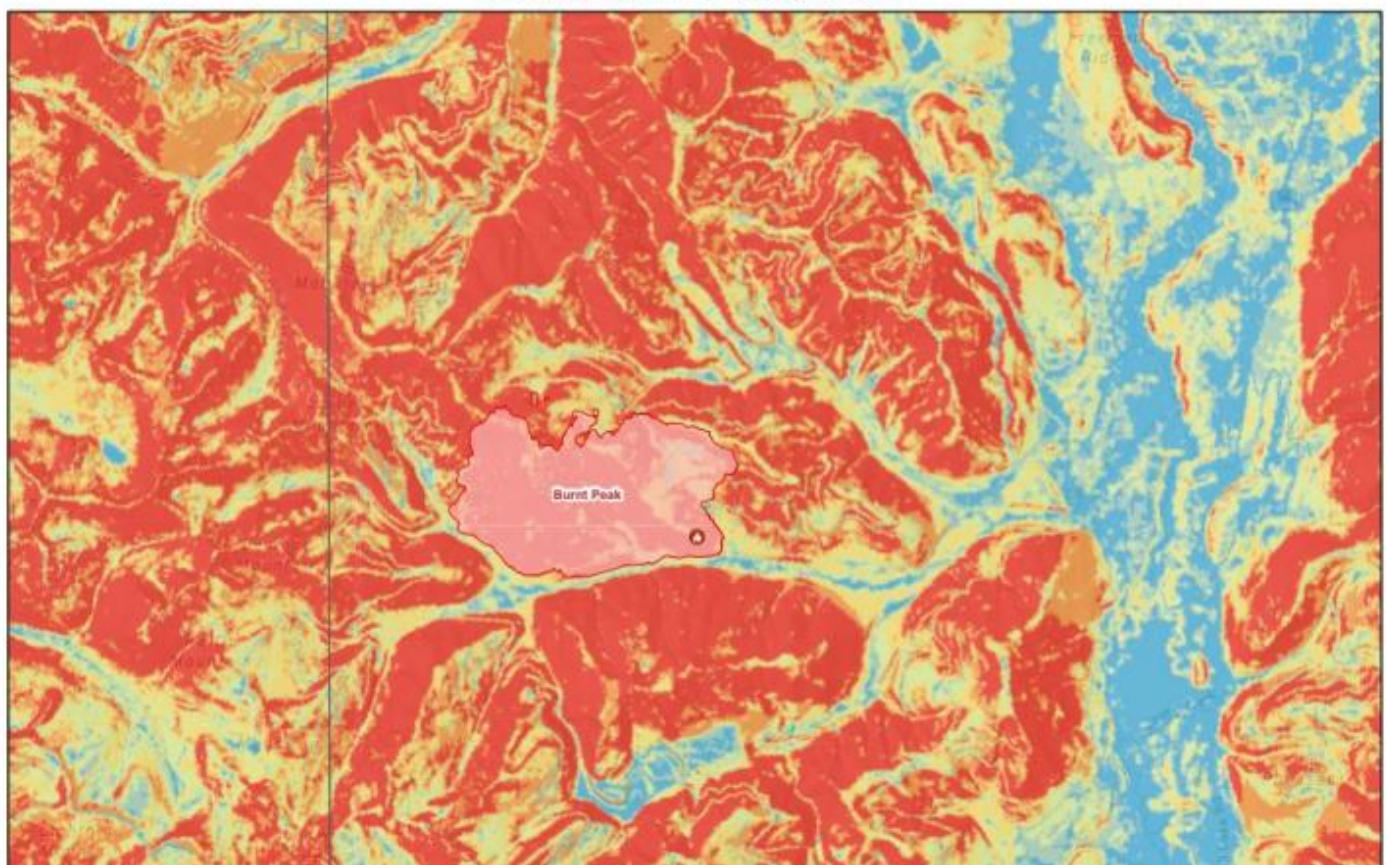
products can be used to locate potential Primary, Alternate, and Contingency lines (PACE) of fire management actions, or Management Action Points that can present the trigger points for certain actions. Larger, printable versions of these graphics are available on the Risk Management Assistance Analytics (RMA) dashboard. For this decision, the SDI, PCL, and EVAC are included to help inform the locations of contingency planning and long term operational planning. Additional products can be added at a later time if deemed necessary and useful for future decisions.

Suppression Difficulty Index

The Suppression Difficulty Index is a rating of the relative difficulty in performing fire control work. It is based on topographic conditions, fuels, expected fire behavior under prevailing conditions, firefighter line production rates in various fuel types, and accessibility (distance from roads/trails). Colors denote different levels of difficulty. Red zones are "watch out" situations where control efforts are likely encounter greater difficulty. Blue zones indicate areas of higher likelihood of success due to low fire behavior as a result of gentle terrain, low to moderate fuel conditions, and better access. SDI does not account for standing snags or other non-fire hazards to firefighters, so it is not a firefighter hazard map. It is only showing in relative terms where it is harder or easier to perform work. High SDI indicates extreme difficulty, and low SDI indicates more reasonable conditions. From this information, decision-makers can factor in least difficult locations for establishing firelines. Larger, printable versions of these graphics are available on the Risk Management Assistance Analytics (RMA) dashboard.

Suppression Difficulty Index 7 26 2021

Suppression Difficulty Index



7/26/2021, 4:56:07 PM

Suppression Difficulty Index 97th Percentile
0.2 - 0.4
0.4 - 0.7
0.7 - 1.0
Highest Difficulty (>1.0)
States
2021 Fire Points

1:144,448
0 0.75 1.5 3 mi
0 1.25 2.5 5 km
USFS Rocky Mountain Research Station, Kit O'Conner

Esri, NASA, NGA, USGS | Esri Canada, Esri, HERE, Garmin, SafeGraph, METINASA, USGS, Bureau of Land Management, EPA, NPS, USDA | WFM RDA | The USDA Forest Service makes no warranty, expressed or implied, including the warranties of

For the SDI, the 97th percentile conditions were used due to the extremity of the fire season and critical fuel moisture values currently observed in the fire area.

Potential Control Locations

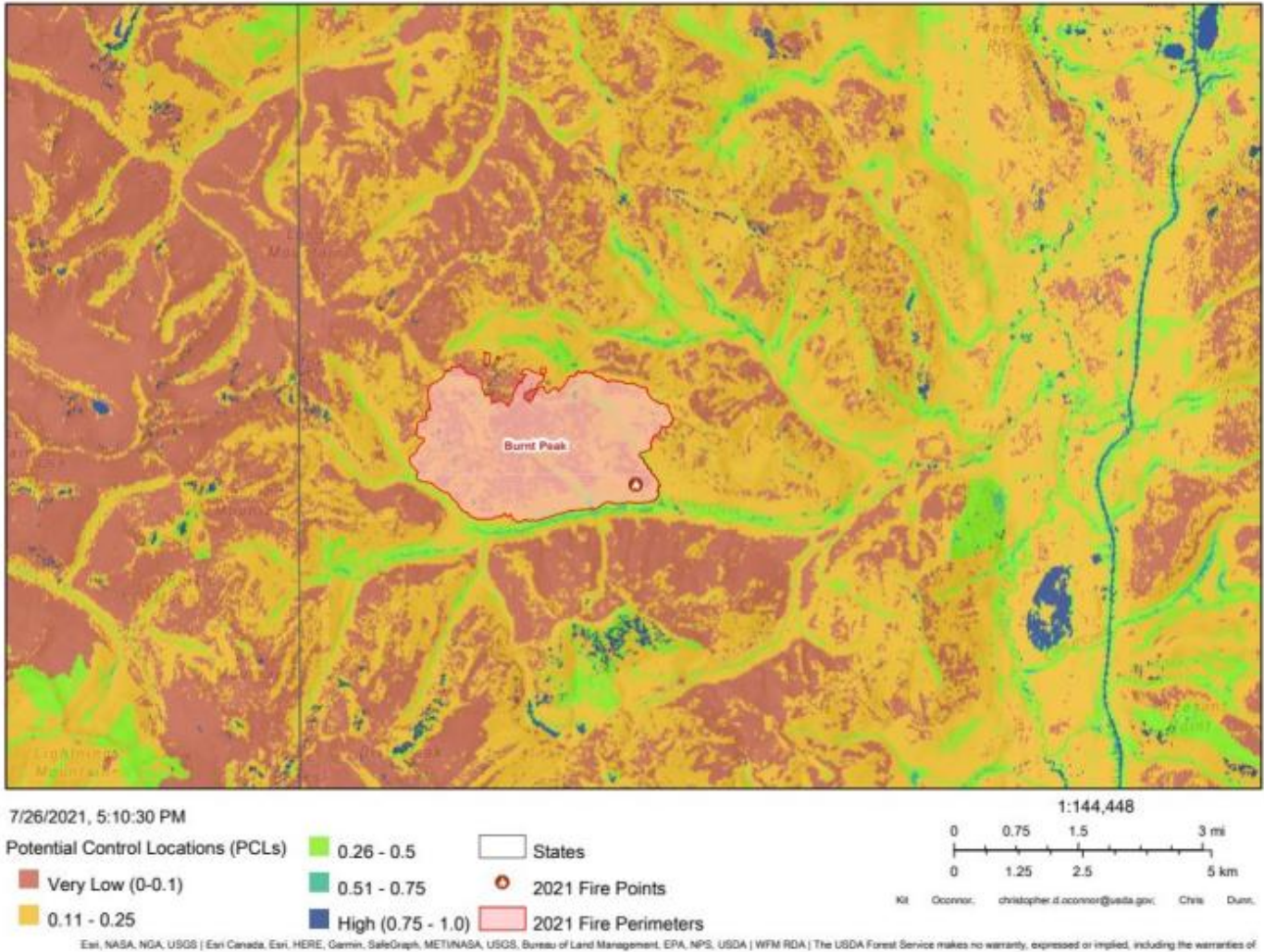
Potential Control Locations information provides a synopsis of the historical fire containment probability. PCL is a number scaled from 0-100%, corresponding to conditions with low to high probability of containing a fire based on the past 20 years of fire behavior and fire management activity on a specific landscape. While it is not a map of actual containment probability (each fire occurs under a unique set of conditions), it provides a reasonable assessment of where suppression actions can leverage the natural conditions that have successfully slowed or stopped fires in the past. It does this by comparing historic fires with various characteristics of the landscape

Potential Control Locations

such as expected fire behavior, fuels transitions, roads and trails, topographic features, and suppression difficulty. Red zones represent areas where fires tend to spread into the entire zone. Blue zones are areas where fire spread often stalls on the landscape due to local site conditions. PCL ratings are: higher % = best likelihood for forming a fire perimeter, lower % = not likely according to the model that a fire perimeter would be established there. Larger, printable versions of these graphics are available on the RMA dashboard.

[Potential Control Location 7 26 2021](#)

Potential Control Locations - Burnt Peak



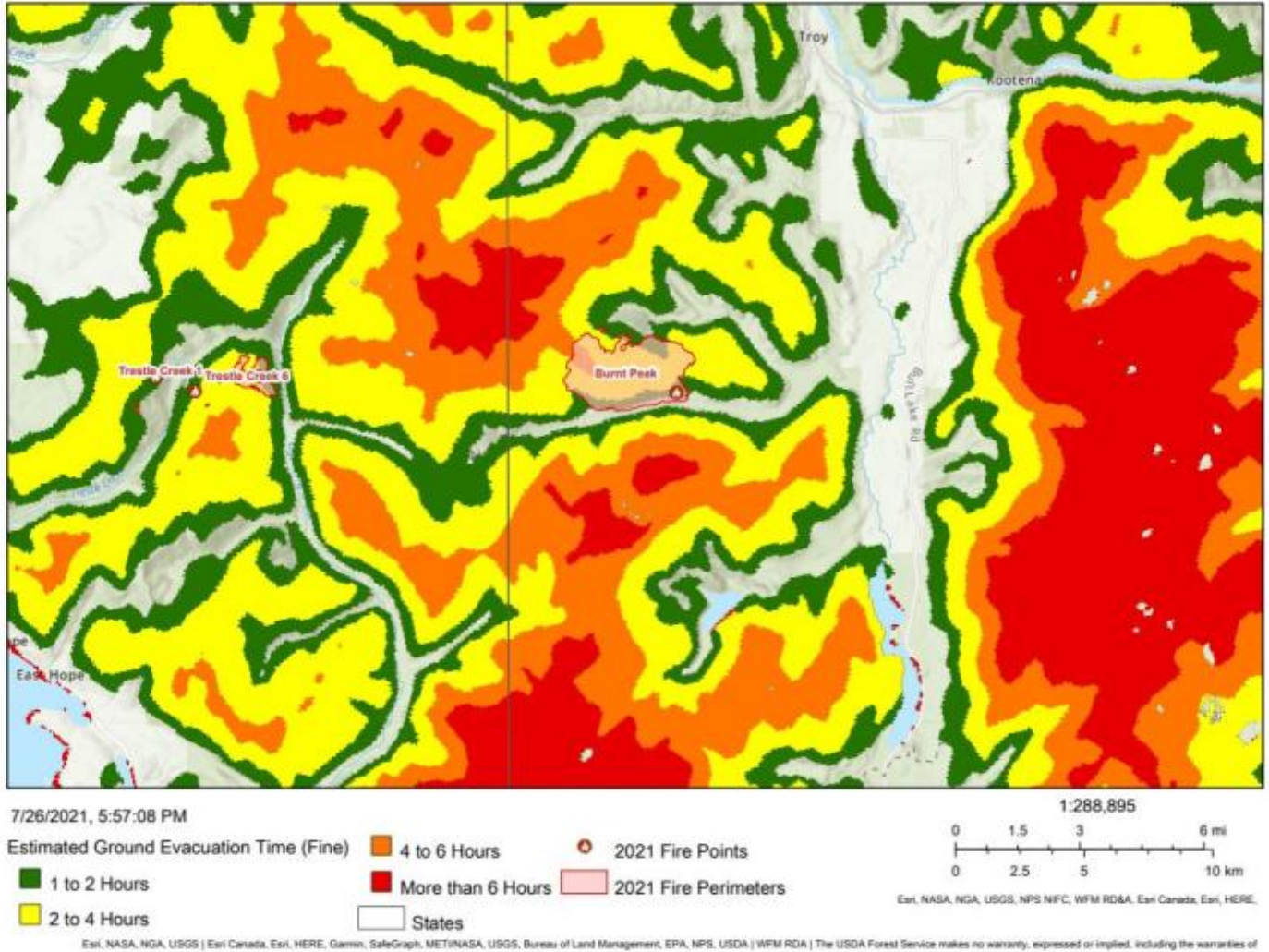
Ideally, the areas to engage a fire that have the highest probability of success with the lowest exposure to firefighters is where the SDI values are low and the PCT values are high. The SDI and PCL maps for the fire area indicate that the best locations to engage the fire is in lower elevations along the Keeler Creek Road and along the contingency line locations in North Fork Keeler, the Goat Mt Ridge, and the east contingency area (See Contingency map in Coarse of Action section).

Estimated Ground Evacuation Time

The Estimated Ground Evacuation Map has been designed for strategic decision making and should not be used for tactical or operational decisions. The ground evacuation layer can assist in identifying estimated ground transport time from different locations on a fire to a care facility. The time estimates include walking speeds when traveling off-road adjusted for slope and vegetation type, and driving speeds based upon estimated speeds for the roads traveled. The intent of this layer is to encourage thoughtful decisions about the risks being transferred to firefighters and how to mitigate those risks.

[Ground Evacuation Map](#)

Ground Evacuation Time - Burnt Peak



This map shows that the areas northwest of the current fire perimeter have the highest ground evacuation times. This should be considered prior to committing ground resources in those areas in the event of a critical medical incident.

1.6. Objectives

Incident FMU/Strategic Objective Code List

Unit	FMU/Strat Obj Code	Acres
IDIPF	MA 1b - Recommended Wilderness	6,776
IDIPF	MA 5 - Backcountry	7,791
IDIPF	MA 6 - General Forest	4,574
MTKNF	MA 1b - Recommended Wilderness	302
MTKNF	MA 2 - Eligible Wild & Scenic Rivers	2,492
MTKNF	MA 3 - Special Areas (SA)-Botanical, Geological, Historical, Recreational, Scenic, or Zoological Areas	1,358
MTKNF	MA 5a - Backcountry-Non-motorized Year-round	26,539
MTKNF	MA 5c - Backcountry-Motorized Winter; Non-motorized Summer	12,401
MTKNF	MA 6 - General Forest	60,787
MTMFD	FMZ 1	0.2

Spatial Fire Planning Inventory

Category	Value	Data Source	Currency	Coverage
Aqua Retardant Avoidance	30,177 acres	National - FS Land Only	04/01/2020	National (USFS Units only)
Mgmt Req: MA1a_1b_1c_1e	6,787 acres	IDIPF	Current	Unit Level
Mgmt Req: MA5	7,791 acres	IDIPF	Current	Unit Level
Retardant Avoidance	1,349 acres	USDA FS Enterprise Data Warehouse	04/01/2020	National (USFS Units only)

Incident Objective List

Activated	Incident Objective
07/29/2021	Firefighter and public safety will be the highest priority throughout all phases of the incident. Manage the risk to fire fighters and the public by utilizing a risk-based approach to decision making. Ensure quality tradeoff conversations occur with Agency Administrators, partners, and stakeholders.
07/29/2021	Utilize appropriate fire strategies to minimize fire impacts on residences, commercial properties, and critical community infrastructure to reduce the potential for adverse health, social, financial, and economic hardships. These include: <ul style="list-style-type: none"> • Communities within or in proximity to the planning area including but not limited to North Keeler Creek residences, private property and structures with the Fifield and Keeler Zones, and other structures in the Goat and Callahan drainages. • Powerlines • Natural, cultural, and historical resources • Timber land • National Forest infrastructure (campgrounds, recreational facilities, trails and trailheads, Lookouts)
07/29/2021	Utilize long term operational planning including contingency and structure protection plans that have been developed for this incident. Continue to validate and update plans and be prepared to implement as conditions warrant.
07/29/2021	Consider operational strategies that minimize the impact of smoke to smoke sensitive areas and receptors by adjusting tactics, monitoring smoke impacts, and following guidance in state smoke management plans and coordinating with state and local Air Quality Control Commission.
07/29/2021	Follow COVID-19 CDC and established local, state, and national guidance to ensure a healthy work environment.

Incident Requirement List

Activated	Incident Requirement
07/29/2021	Utilize COVID-19 guidance/mitigations in day-to-day operations to include Northern Rockies Geographic Area, State, and local guidance, plans and orders. Discuss any implementation deviations with Agency Administrators. Notify AA's as soon as possible of any exposures or isolation and ensure roles and responsibilities are very clear regarding local unit and IMT roles and responsibilities.
07/29/2021	Maximize protection of soils, water and riparian resources and provide protection to heritage, wildlife, range, forage, and scenic resources and communicate and coordinate any fire suppression repair work with Resource Advisors. Primary Agency resource advisor for this incident will be identified and contact information provided to incident personnel.

Incident Requirement List

Activated	Incident Requirement
07/29/2021	<p>Work with Fire Information Specialists to help provide timely public information, notification, and communications. We ask that you work with all partners to help ensure consistent and accurate messaging from all parties involved. Additional contacts are available on the incident contact list.</p> <ul style="list-style-type: none"> • KNF contact person for Forest Service Fire Information, TBD. • Lincoln County, Office of Emergency Management contact person is Brent Teske, 406-334-7194. • Lincoln County Sheriff Office is Darren Short, 406-2831062 • Stimson Lumber, James Mackey, 208-660-8921 • Montana DNRC, Dave Marsh, 406-283-3535
07/29/2021	Due to aquatic invasive concerns seek approval prior to dipping locations, avoid dipping in unapproved locations except in the case of Life Safety or Critical Infrastructure threats. All drafting from water sources will use approved filter/screening devices to protect aquatic resources. Coordinate with Resource Advisors.
07/29/2021	Make use of Risk Management Assistance Analytics products as you develop short- and long-term plans for the overall management of this incident.
07/29/2021	Cost will be contained through implementing suppression strategies and tactics that have a high probability of success while in alignment with values at risk.
07/29/2021	Agency Administrator will notify the Forest Supervisor for any plans involving equipment needs/usage within the Inventoried Roadless Area.
07/29/2021	Implement equipment washing and AIS mitigation for drafting. Protect historic, wild and scenic river, or other values if and where identified and feasible.

Strategic Objective List

Unit	Shape/ FMU	Activated	Strategic Objective
IDIPF	<Unit>	06/27/2015	FW-DC-FIRE-01. Public and firefighter safety is always recognized as the first priority for all fire management activities.
IDIPF	<Unit>	06/27/2015	FW-OBJ-FIRE-02. Over the life of the Plan, manage natural, unplanned ignitions to meet resource objectives on at least 10 percent of the ignitions.
IDIPF	<Unit>	06/27/2015	FW-DC-VEG-04. Tree densities and the number of canopy layers within stands are generally decreased.
IDIPF	<Unit>	06/27/2015	FW-STD-VEG-01. Within old growth stands, timber harvest or other vegetation management activities shall not be authorized if the activities would likely modify the characteristics of the stand to the extent that the stand would no longer meet the definition of old growth (see glossary for old growth definition). FW-STD-VEG-02. Within the ancient cedar groves, timber harvest or other vegetation management activities shall not be authorized (exceptions may occur for the treatment of non-native invasive plants, activities needed to address human health and safety issues such as the removal of hazard trees adjacent to a recreation site, or in the circumstance where a natural, unplanned ignition is allowed to burn into a grove under a low intensity).
IDIPF	<Unit>	06/27/2015	FW-DC-FIRE-03. The use of wildland fire (both planned and unplanned ignitions) increases in many areas across the Forest. Fire plays an increased role in helping to trend the vegetation towards the desired conditions while serving other important ecosystem functions. However, when necessary to protect life, property and key resources, many wildfires are still suppressed. (pg 21-22).
IDIPF	MA 5	06/27/2015	MA 5: Backcountry. Approximately 92 percent of this MA is within inventoried roadless areas. This MA is comprised by relatively large areas, generally without roads, and provides a variety of motorized and non-motorized recreation opportunities. MA5-DC-VEG-01. Natural ecological processes (e.g., plant succession) and disturbances (e.g., fire, insects, and disease) are the primary forces affecting the composition, structure, and pattern of vegetation. MA5-DC-FIRE-01. The use of fire serves as the primary tool for trending the vegetation toward the desired conditions as well as serving other important ecosystem functions. MA5-GDL-FIRE-01. Natural, unplanned ignitions, as well as planned ignitions, may be used to meet resource objectives.
IDIPF	MA 6	06/27/2015	MA 6: General Forest. Most of this MA consists of large areas with roads, trails and structures, as well as signs of past and ongoing activities designed to actively manage the forest vegetation. Although natural ecological processes and disturbances are still present, they are influenced more by human activity in this MA than others. Natural, unplanned fire ignitions may be used to meet resource objectives (Table 16, IPNF LMP)
MTKNF	<Unit>	08/13/2015	FW-DC-FIRE-01 Public and firefighter safety is always recognized as the first priority for all fire management activities.
MTKNF	MA 2	08/23/2015	

Strategic Objective List

Unit	Shape/ FMU	Activated	Strategic Objective
MTKNF	MA 3	08/23/2015	"Natural, unplanned ignitions, as well as planned ignitions, may be managed to meet resource objectives in eligible scenic and recreational river segments." (KNF LRMP pg. 54)
MTKNF	MA 5a	08/23/2015	"The use of natural, unplanned ignitions is generally not allowed in these areas unless the values and unique characteristics for which the area was designated can be maintained or enhanced by the use of fire, and the risk of harm from an unplanned ignition is small. The Northwest Peaks and Ten Lakes Scenic Areas are two exceptions, because the use of natural, unplanned ignitions in those areas is generally appropriate." (KNF LRMP pg. 59)
MTKNF	MA 5c	08/23/2015	"Natural, unplanned ignitions may be managed to meet resource objectives." (KNF LRMP pg. 69)
MTKNF	MA 6	08/23/2015	"Natural, unplanned ignitions may be managed to meet resource objectives." (KNF LRMP pg. 69)
MTMFD	<Unit>	07/16/2021	FV-OBJ-4. Manage wildland fires based on the objectives for the relevant fire management zone. (Missoula ROD/ARMP, January 2021 - page II-14)
MTMFD	<Unit>	07/16/2021	WL-OBJ-17. Fuels treatment projects within the within the 1-mile wildland urban interface (WUI) buffer (approximately 7,648 acres) and Fire Management Zone I not meeting lynx conservation measures (due to protecting life, increasing the safety of firefighters, and protecting property, improvements, and infrastructure) may occur. (Missoula ROD/ARMP, January 2021 - page II-26)
MTMFD	<Unit>	07/16/2021	WF-G-1. Emphasize firefighter and public safety as the first priority in every wildland fire and fuels management activity. (Missoula ROD/ARMP, January 2021 - page II-29)
MTMFD	<Unit>	07/16/2021	WF-G-5. Minimize the adverse effects of wildland fire and wildfire suppression activities on resources. (Missoula ROD/ARMP, January 2021 - page II-29)
MTMFD	<Unit>	07/16/2021	WF-OBJ-1. Use FMZs and WUI to guide and prioritize wildland fire and fuels management activities. FMZ1 and the WUI would be the highest priority, while FMZ3 the lowest. Treatments include wildland fire, mechanical, manual, biological, and chemical. (Missoula ROD/ARMP, January 2021 - page II-30)
MTMFD	<Unit>	07/16/2021	WF-OBJ-4. Use rehabilitation to mitigate the adverse effects of wildland fire to soil, vegetation, and water resources in a cost-effective manner. (Missoula ROD/ARMP, January 2021 - page II-30)

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
IDIPF	<Unit>	06/27/2015	FW-GDL-RIP-03. When conducting wildland fire operations, minimum impact suppression tactics should be used within RHCA's.
IDIPF	<Unit>	06/27/2015	FW-GDL-AQ-01. The Forest should cooperate with the federal, state, tribal, and local air quality agencies as appropriate in meeting applicable air quality requirements.
IDIPF	<Unit>	06/27/2015	FW-DC-WL-15. A diversity of patch sizes of fire-killed trees (either natural or prescribed burned and where not a safety concern) exists to provide primary habitat for population

Management Requirement List

Unit	Shape/FMU	Activated	Management Requirement
IDIPF	<Unit>	06/27/2015	expansions for species whose habitat requirements include this structural component (refers to FW-DC-VEG-05, FW-DC-TBR-01, FW-DC-FIRE-03). FW-DC-CR-02. Cultural resources are safeguarded from vandalism, looting, and environmental damage through monitoring, condition assessment, protection, and law enforcement measures. Interpretation and adaptive use of cultural resources provide public benefits and enhance understanding and appreciation of IPNF prehistory and history. Cultural resource studies provide relevant knowledge and perspectives to IPNF land management. Artifacts and records are stored in appropriate curation facilities and are available for academic research, interpretation, and public education.
IDIPF	MA1a_1b_1c_1e	06/27/2015	MA 1a, 1b, 1c, 1e: Wilderness, Recommended Wilderness, Wilderness Study Areas and Primitive Lands. These MA's comprise a total of 188,700 acres within the IPNF and are managed to preserve wilderness and primitive character. Mechanized and motorized allowed uses vary somewhat between these MA's, but vegetation desired condition is consistent. Natural ecological process and disturbances are the primary forces affecting the composition, structure and pattern of vegetation. MA1a,b,c,e-DC-VEG-01. Natural ecological processes (e.g., plant succession) and disturbances (e.g., fire, insects, and disease) are the primary forces affecting the composition, structure, and pattern of vegetation. MA1a,b,c,e-DC-FIRE-01. Fire plays an increased role as a natural disturbance agent. MA1a,b,c,e-GDL-FIRE-01. Natural, unplanned ignitions may be managed to meet resource objectives. Use of mechanized equipment must be approved by the Agency Administrator.
IDIPF	MA5	07/18/2018	MA5-DC-FIRE-01. The use of fire serves as the primary tool for trending the vegetation toward the desired conditions as well as serving other important ecosystem functions. MA5-GDL-FIRE-01. Natural, unplanned ignitions, as well as planned ignitions, may be used to meet resource objectives
MTMFD	<Unit>	07/16/2021	AC-MA-3. Use BMPs to reduce dust from unpaved road surfaces during extended management operations, such as timber sales and wildfires (Appendix P). (<i>Missoula ROD/ARMP, January 2021 - page II-12</i>)
MTMFD	<Unit>	07/16/2021	Vegetation and Wildland Fire Management AQ-MA-14. Vegetation management activities (fuel treatments, wildland fire suppression, harvest, fuelwood cutting, salvage, etc.) within the riparian habitat conservation areas (RHCAs) will not prevent attainment of riparian management objectives (RMOs) and will be designed to minimize disturbance of riparian ground cover vegetation. (TM-1b) (<i>Missoula ROD/ARMP, January 2021 - page II-14</i>)
MTMFD	<Unit>	07/16/2021	AQ-MA-15. Immediately establish an emergency or BAER team and develop a rehabilitation treatment plan to attain RMOs whenever RHCAs have been substantially damaged by a wildfire. (FM-5) (<i>Missoula ROD/ARMP, January 2021 - page II-14</i>)
MTMFD	<Unit>	07/16/2021	WF-MA-2. Minimum impact suppression tactics would be used for wildland fire management in Wales BCA, Hoodoos BCA, WSAs and, if WSAs released, in the Wales Creek ACEC, expanded Hoodoos BCA, and Wales BCA. Wildland fire management in WSAs will follow BLM Manual 6330-Management of BLM Wilderness Study Areas. (<i>Missoula ROD/ARMP, January 2021 - page II-31</i>)
MTMFD	<Unit>	07/16/2021	WF-MA-3. The use of heavy equipment for wildland fire management would not be allowed in WSAs, Hoodoos BCA, Wales BCA, Wales Creek ACEC, and historic or cultural sites eligible for the National Register of Historic Places unless approved by line officer. (<i>Missoula ROD/ARMP, January 2021 - page II-31</i>)
MTMFD	<Unit>	07/16/2021	WF-MA-7. Locate incident bases, camps, helibases, staging areas, and other incident management activities outside of riparian areas. Exemptions will require line officer approval. Avoid using retardant in WSAs, protected lands with wilderness characteristics, and ACECs. Exemptions will require line officer approval. (<i>Missoula ROD/ARMP, January 2021 - page II-31</i>)
MTMFD	<Unit>	07/16/2021	WF-MA-8. Select fire suppression methods to minimize or eliminate the impact on significant historic properties, ACEC values, and riparian areas. (<i>Missoula ROD/ARMP, January 2021 - page II-31</i>)
MTMFD	<Unit>	07/16/2021	Wildland Fire - Minimum impact suppression tactics would be use for wildland fire management. However, the use of heavy equipment would be allowed on a case-by-case basis. (<i>Missoula ROD/ARMP, January 2021 - page III-96</i>)
MTMFD	<Unit>	07/16/2021	<i>Implementation of Design Features:WSA's</i> . DF-2 Avoid using retardant in WSAs, protected lands with wilderness characteristics, Exemptions will require line officer approval. (<i>Missoula ROD/ARMP, January 2021 - page III-108</i>)
MTMFD	<Unit>	07/16/2021	Implementation of Design Features - Historic Sites : DF-3. The use of heavy equipment for wildland fire management would not be allowed in historic properties eligible for the National Register of Historic Places unless approved by line officer due to extraordinary

Management Requirement List

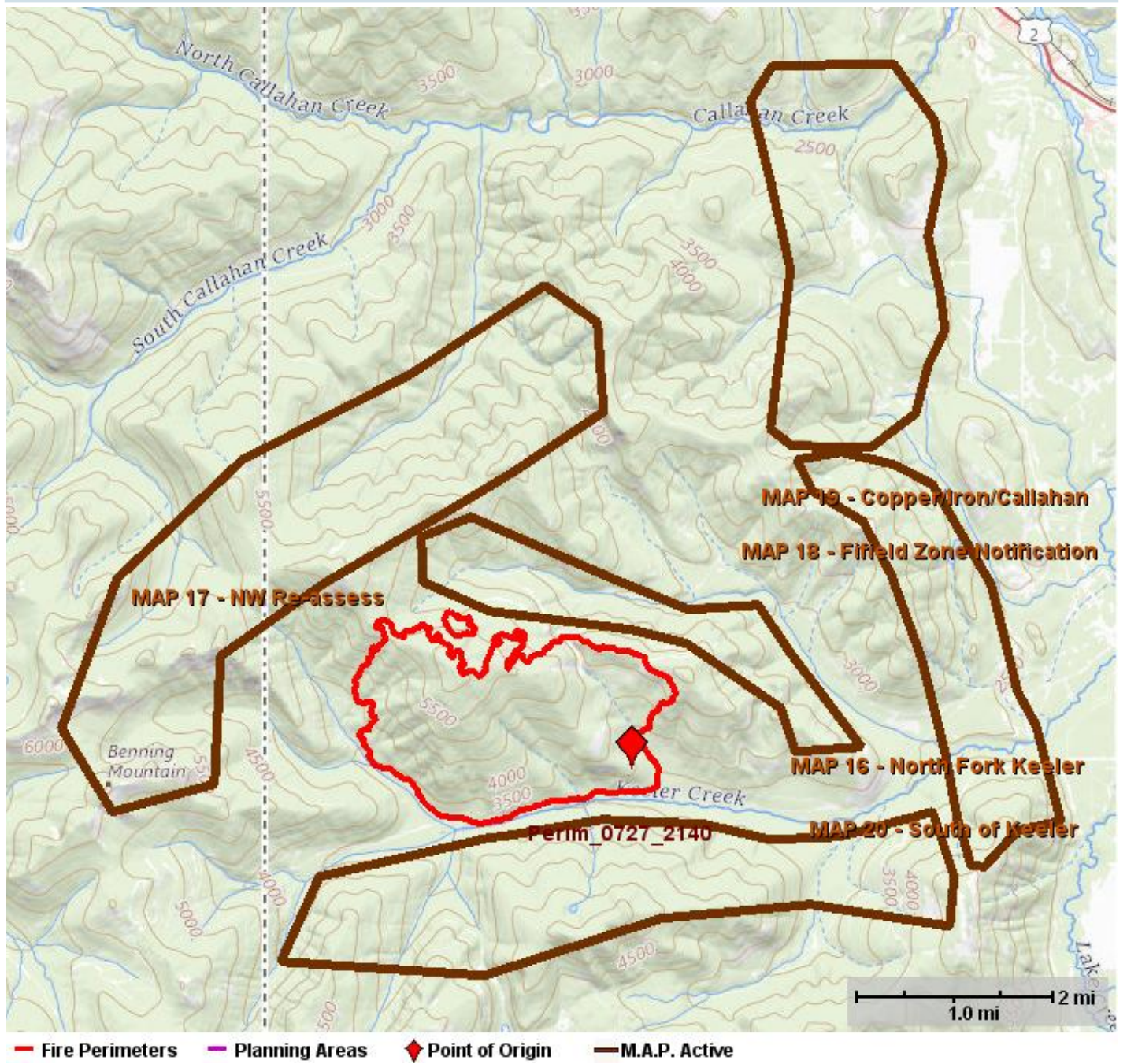
Unit	Shape/FMU	Activated	Management Requirement
MTMFD	<Unit>	07/16/2021	circumstances (e.g. wildfire imminent in Garnet Ghost Town or Coloma). DF-4. Select fire suppression methods to minimize or eliminate the impact on historical site values. <i>(Missoula ROD/ARMP, January 2021 - page III-108)</i>
MTMFD	<Unit>	07/16/2021	Implementation of Design Features - ACECs : DF-6. Select fire suppression methods to minimize or eliminate the impact on ACEC values. <i>(Missoula ROD/ARMP, January 2021 - page III-108)</i>
MTMFD	<Unit>	07/16/2021	Special Status Species, Aquatics & Riparian - Fire : DF-24. Design prescribed burns to contribute to the attainment of RMOs. (FM-4) DF-24. Avoid placing wildland fire operations within the RHCAs to the extent practicable. Exceptions may be granted following a review and recommendation by a resource advisor, and the line officer will prescribe the location, use conditions, and rehabilitation requirements with avoidance of adverse effects to native fish and sensitive aquatic species as a primary goal. (FM1, FM-2) <i>(Missoula ROD/ARMP, January 2021 - page III-111)</i>
MTMFD	<Unit>	07/16/2021	Special Status Species, Aquatics & Riparian - Fire : DF-25. Avoid delivery of chemical retardant, foam, or additives to surface waters. If an exception is granted by resource advisor or fishery biologist or a misapplication occurs, monitor water quality and aquatic resources as soon as possible. (FM-3) <i>(Missoula ROD/ARMP, January 2021 - page III-111)</i>
MTMFD	<Unit>	07/16/2021	Special Status Species, Aquatics & Riparian - Fire DF-26. Immediately establish an emergency or BAER team and develop a rehabilitation treatment plan to attain RMOs whenever RHCAs have been significantly damaged by a wildfire. (FM-5) <i>(Missoula ROD/ARMP, January 2021 - page III-111)</i>
MTMFD	<Unit>	07/16/2021	BMP : When Minimum Impacts Suppression Tactics (MIST) are used during wildfire suppression operations, follow guidance on pages 97-98 in the 2018 Incident Response Pocket Guide (IRPG) (PMS 461/NFES 001077) or most current version of the IRPG. <i>(Missoula ROD/ARMP, January 2021 - page III-120)</i>
MTMFD	FMZ 1	07/16/2021	WF-MA-1 . In general, manage wildfires according to Fire Management Zone classification. Although the FMZ determination does not dictate exactly how every wildfire is to be managed, it will be used to guide and prioritize wildfire response and fuels management. Taking actions to limit fire growth is always an option for any wildfire in any FMZ. The strategy for any wildfire depends on many factors including the FMZ, current vegetation conditions, time of year, condition of fuels, risk management, resource availability, safety, protection agency, geographical area and national wildland fire activity, and smoke impacts. A. FMZ1 : High values at risk, or areas at high risk of catastrophic fire due to current vegetation conditions, where an unplanned wildland fire is likely to cause negative effects. These lands would generally be under a full suppression strategy. These lands are adjacent to and close proximity to the WUI, intermingled with private and state lands, and contain important cultural, recreational, economic, or biological resources. Fuels treatments including mechanical and prescribed fire will play a major role in these areas. <i>(Missoula ROD/ARMP, January 2021 - page II-30)</i>

1.7. Course of Action

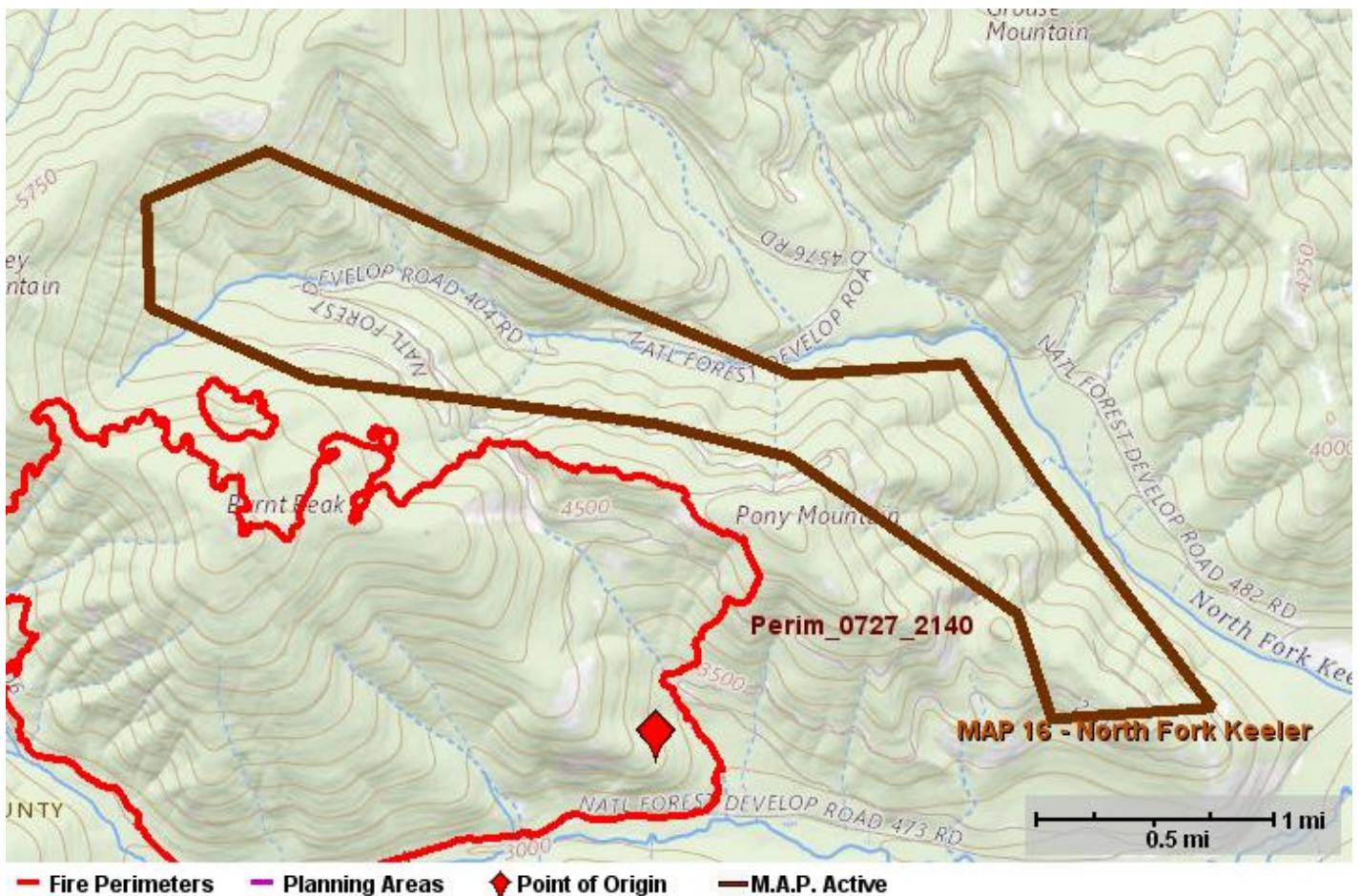
Course of Action

Active	Inactive	Action Item
07/29/2021		<p>Implement an effective suppression strategy utilizing direct attack where and when appropriate. When fire behavior prohibits direct attack utilize other suppression tactics such as indirect and point protection as appropriate. Take advantage of natural features such as breaks in fuels, topographic features, or changes in weather. Strategies and tactics must be made with sound risk management strategies. To protect local communities, private lands, and infrastructure, it is desired to keep the fire within these general areas:</p> <ul style="list-style-type: none"> • North of the Keeler Creek • West of a line from Keeler Mt to Copper Mt to an area just west of McConnell Mt. • South of the mainstem of the Callahan Creek drainage
07/29/2021		Proactively develop Management Action Points (M.A.P) to plan, communicate and validate potential actions as well as identify stakeholder and partners values and actions. Generate new or revise existing structure protection plans for areas that could be impacted as part of the MAP process.
07/29/2021		Ensure timely and accurate information is distributed to interested parties. Keep the Agency Administrator informed of public meetings and media contacts. Maintain contact with the local Public Affairs Officer and build on our existing relationships, contacts, and key messages.
07/29/2021		If fire is expected to impact a community notify and coordinate with the appropriate Sheriff to plan evacuations. Involve partners in planning process for structure protection and communication methods.
07/29/2021		Be prepared to implement and/or update contingency plans as conditions dictate or as the situation changes and opportunities to achieve objectives present themselves. Work with local and regional fire managers to acquire resources (surge) to adequately implement firng, holding, and strucuture protection.
07/29/2021		Closely coordinate with federal, state, and county emergency response cooperators and health services to reduce and mitigate risks to public safety from operational and environmental hazards associated with the South Yaak wildfire and the potential for COVID-19 exposure and transmission to and from the local communities.

M.A.P.s Image



Management Action Point 16



NAME	VALUE
Incident Name	Burnt Peak
Cost	
Shape	North Fork Keeler
Activated	07/29/2021
Deactivated	
Status	Active

Condition

MAP Description: North Fork Keeler Creek drainage from head waters to road intersection at Keeler Creek Road.

Intent: Trigger local coordination and communication with partners and entities for structure protection and evacuation planning for structures and properties in the N. Fork Keeler Creek area.

Values at Risk: Several structures in the lower portions of the drainage. Identified on operational maps.

Trigger Condition: Fire has crossed or is projected to get established in N. Fork Keeler Creek within 24 hours and is expected to continue sustained growth to down drainage. This area is vulnerable to winds associated with dry cold fronts and should be monitored closely when colds fronts are forecast. The fire spotted into the upper reaching of the N. Fork Keeler on July 25 and operational personnel are assessing opportunities for containment.

Probability: High

Actions

Notifications: Kootenai National Forest Agency Administrators and Fire Staff; Lincoln County Sheriff (Darren Short), Lincoln County Emergency Manager (Brent Teske)

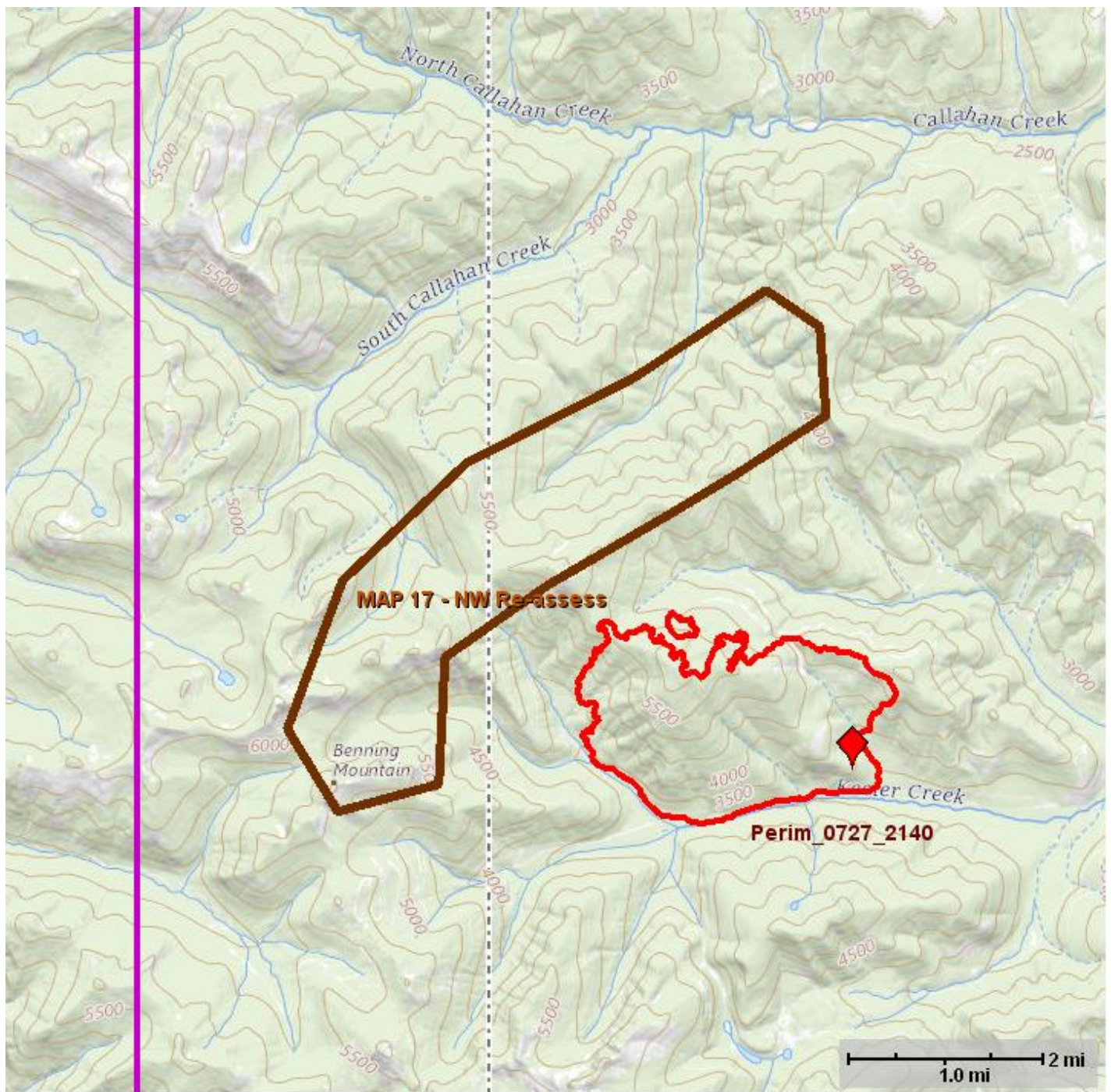
Recommended Management Action: Execute reassessment strategy, pre-evacuation or evacuation to protect life, property, and other values at risk.

Mitigation Actions: Activate reassessment measures and/or coordinate with Emergency Manager and County Sheriff to implement structure protection and/or evacuation plans. The N. Fork Keeler road has received mechanical treatments to improve containment opportunities. The road has been identified as a contingency line should the fire move off the ridge and into that drainage area. See contingency map in COA.

Resources

Additional resources required will be determined by operational personnel after consideration of current fire behavior and availability of resources at the time of MAP activation.

Management Action Point 17



— Fire Perimeters
 — Planning Areas
 ◆ Point of Origin
 — M.A.P. Active

NAME	VALUE
Incident Name	Burnt Peak
Cost	
Shape	NW Re-assess
Activated	07/29/2021
Deactivated	
Status	Active

Condition

MAP Description: Area from Benning Mt to Suryey Mt to Goat Mt.
Intent: Indicates a high probability of the fire getting established in Goat and Callahan drainages.

Values at Risk: Structures in Troy, Keeler, and Fifield structure protection zones; scattered structures and infrastructure within the Goat, Callahan, and Iron creek areas.

Trigger Condition: Fire gets established in areas east and northeast of Kilbrennan Lake Road and is expected to continue sustained growth in that direction.

Probability: Moderate to high

Actions

Notifications: Kootenai National Forest Agency Administrators and Fire Staff; Lincoln County Sheriff (Darren Short), Lincoln County Emergency Manager (Brent Teske), DNRC, and/or private landowners.

Recommended Management Action: Execute reassessment strategy, pre-evacuation or evacuation to protect life, property, and other values at risk.

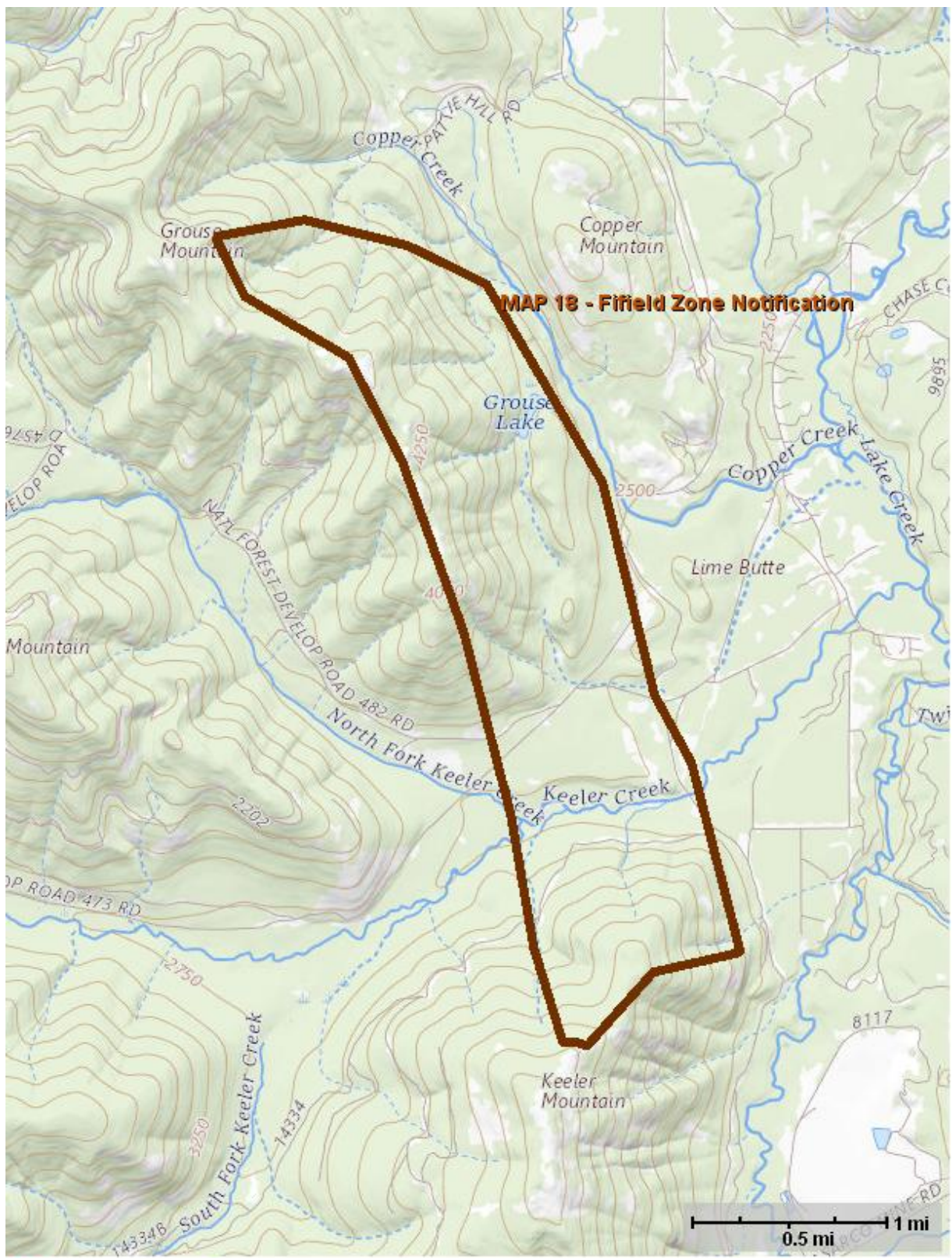
Mitigation Actions:

- Contingency planning and long term operational planning to identify potential control locations and point protection needs.
- Identify hazard fuels mitigation to completed for containment and/or structure protection.
- Point protection and/or coordinate with Emergency Manager and County Sheriff to implement structure protection and/or evacuation plans.

Resources

Additional resources required will be determined by operational personnel after consideration of current fire behavior and availability of resources at the time of MAP activation.

Management Action Point 18



— Fire Perimeters
 — Planning Areas
 — M.A.P. Active

NAME	VALUE
Incident Name	Burnt Peak
Cost	
Shape	Fifield Zone Notification
Activated	07/29/2021

Deactivated
Status Active

Condition

MAP Description: East of Goat Mt ridge south to Keeler Mt area

Intent: Trigger local coordination and communication with partners and entities for structure protection and evacuation planning.

Values at Risk: Private property and structures within the Fifield structure protection zone.

Trigger Condition: Fire progresses east of Goat Mt to Keeler Mt area.

Probability: Low

Actions

Notifications: Kootenai National Forest Agency Administrators and Fire Staff; Lincoln County Sheriff (Darren Short), Lincoln County Emergency Manager (Brent Teske), DNRC, and/or private landowners.

Recommended Management Action: Execute reassessment strategy, pre-evacuation or evacuation to protect life, property, and other values at risk.

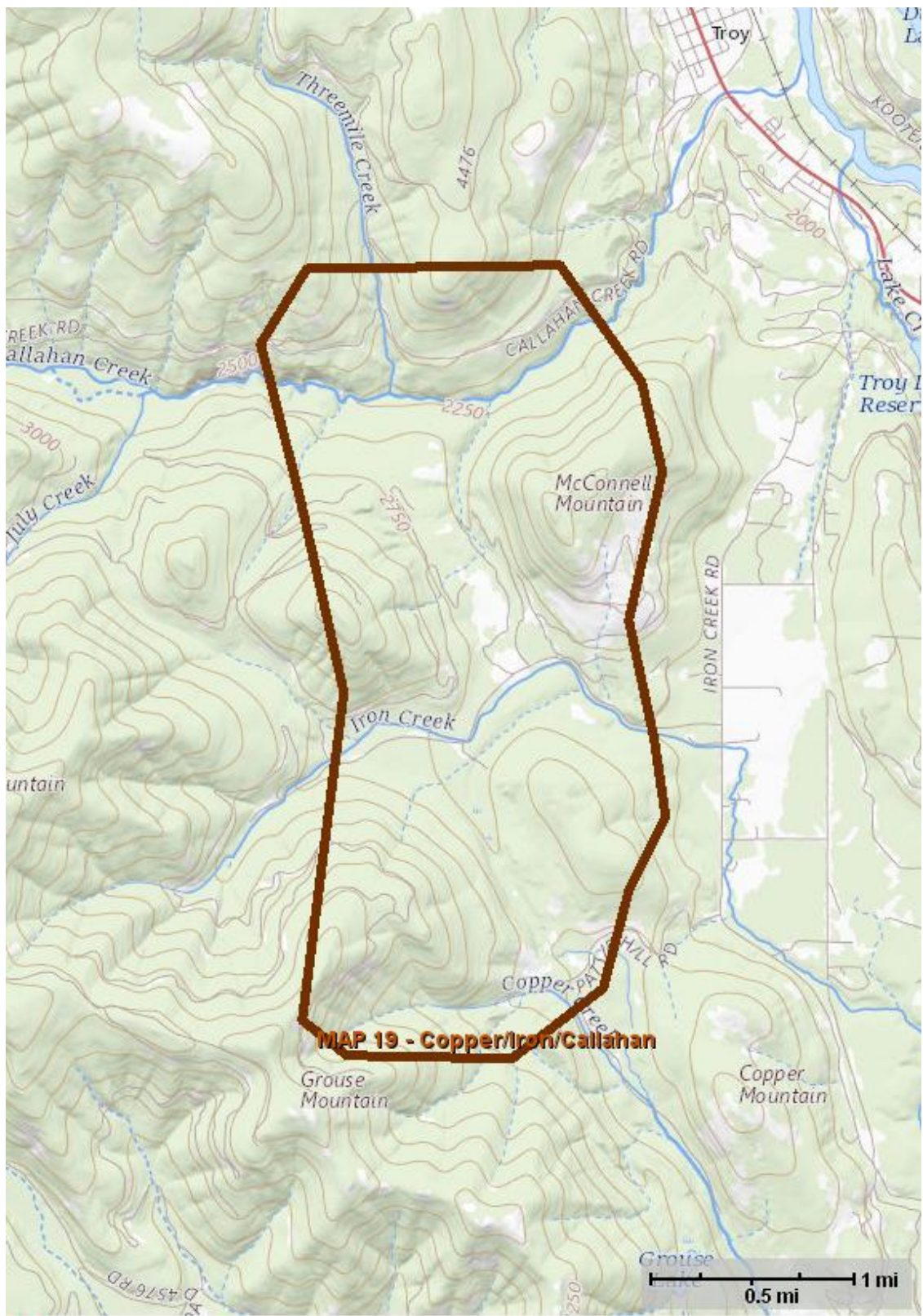
Mitigation Actions:

- Contingency line along ridge south of Goat Mt has been prepped and ready to implement holding operations as necessary.
- Point protection and/or coordinate with Emergency Manager and County Sheriff to implement structure protection and/or evacuation plans.

Resources

Additional resources required will be determined by operational personnel after consideration of current fire behavior and availability of resources at the time of MAP activation.

Management Action Point 19



— Fire Perimeters
 — Planning Areas
 — M.A.P. Active

NAME	VALUE
Incident Name	Burnt Peak
Cost	
Shape	Copper/Iron/Callahan
Activated	07/29/2021

Deactivated

Status Active

Condition

MAP Description: Area covering the mid to lower portions of the Copper, Iron, and Callahan drainages.

Intent: Trigger local coordination and communication with partners and entities for structure protection and evacuation planning.

Values at Risk: Private property and structures within the Troy and Keeler structure fire protection zones.

Trigger Condition: Fire gets established in Copper, Iron, and/or Callahan drainages and fire spread is expected to down drainage to the the east. This area is vulnerable to dry cold front passages and should be triggered if these conditions are forecast.

Probability: Moderate

Actions

Notifications: Kootenai National Forest Agency Administrators and Fire Staff; Lincoln County Sheriff (Darren Short), Lincoln County Emergency Manager (Brent Teske), DNRC, Stimson Lumber, and/or private landowners.

Recommended Management Action: Execute reassessment strategy, pre-evacuation or evacuation to protect life, property, and other values at risk.

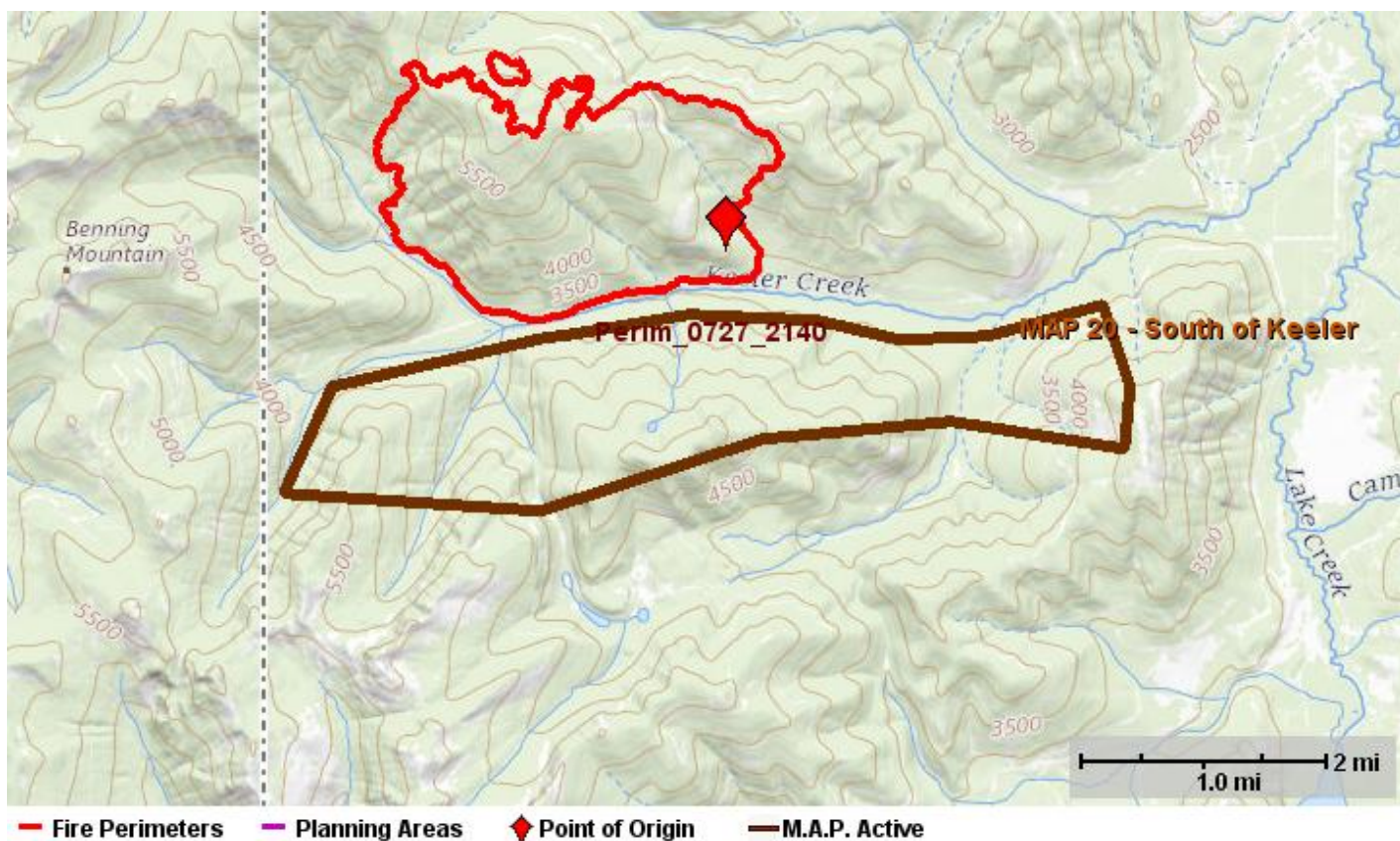
Mitigation Actions:

- Contingency planning and long term operational planning on going.
- Identifying hazard fuels mitigation for containment opportunities and/or point protection needs.
- Point protection and/or coordinate with Emergency Manager and County Sheriff to implement structure protection and/or evacuation plans.

Resources

Additional resources required will be determined by operational personnel after consideration of current fire behavior and availability of resources at the time of MAP activation.

Management Action Point 20



NAME	VALUE
Incident Name	Burnt Peak
Cost	
Shape	South of Keeler
Activated	07/29/2021
Deactivated	
Status	Active

Condition

MAP Description: Area south of Keeler Creek Rd.

Intent: Re-assess situation and evaluate potential protection needs for Bull Lake Zone.

Values at Risk: Bull Lake structure fire protection zone.

Trigger Condition: Fire progresses south of Keeler Creek road and establishes/actively spreads on the northern slopes of Spruce Mt.

Probability: Low

Actions

Notifications: Kootenai National Forest Agency Administrators and Fire Staff

Recommended Management Action: Execute reassessment strategy, pre-evacuation or evacuation to protect life, property, and other values at risk.

Mitigation Actions: Point protection and/or coordinate with Emergency Manager and County Sheriff to implement structure protection and/or evacuation plans.

Resources

Additional resources required will be determined by operational personnel after consideration of current fire behavior and availability of resources at the time of MAP activation.

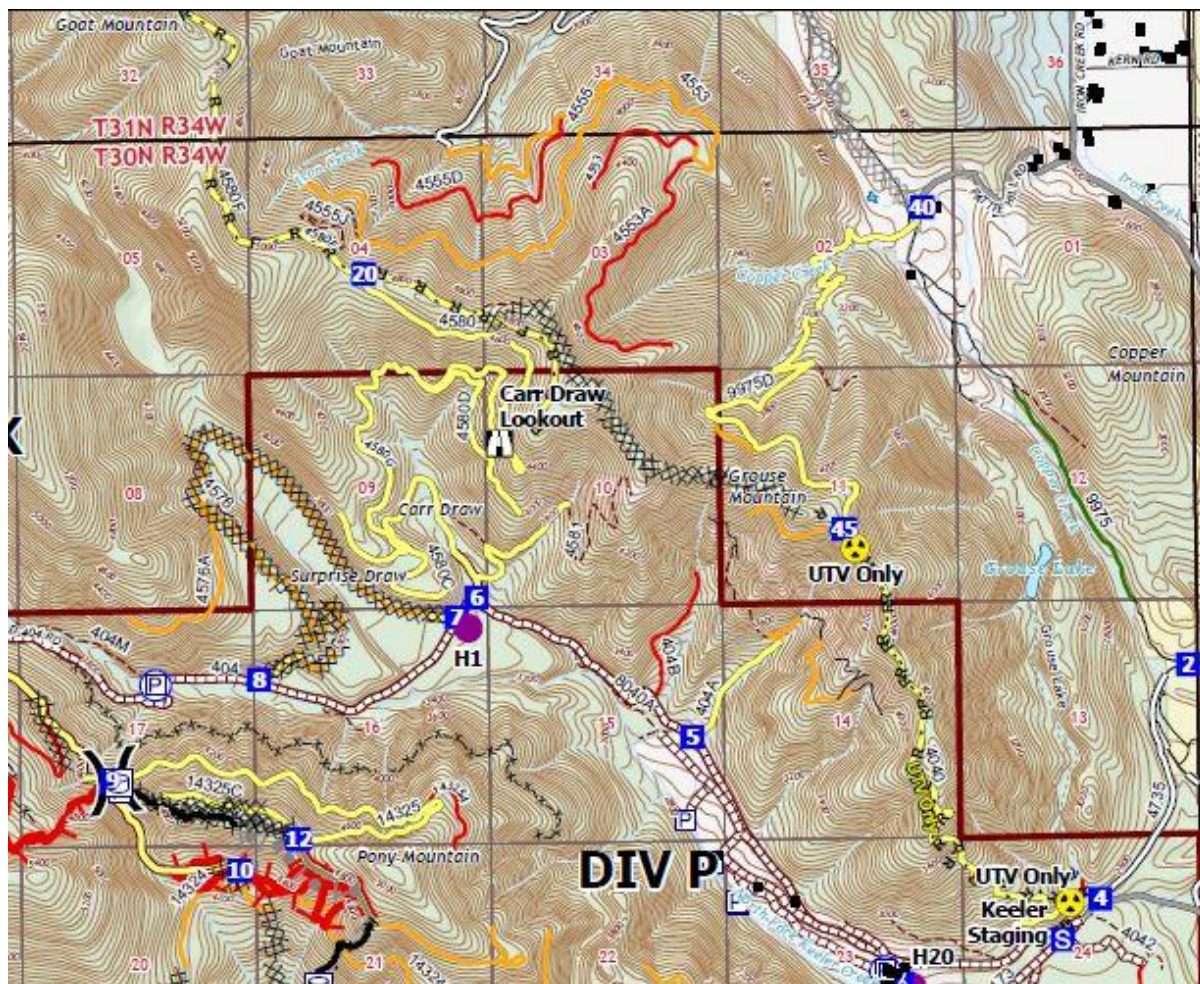
Contingency Planning

The operational plan developed by Great Basin Team 4 identified contingency lines that are in alignment with locations identified in the SDI and PCL products. The primary is taking opportunities to engage the fire as direct as possible on the north, east, and south areas of the fire using roads, dozer line and handline for containment. These areas have been successful so far. The North Fork Keeler road has been improved and is an alternate contingency line should the fire move east off Burnt Peak and Pony Mt. The ridge to the east of N. Fork Keeler that spans from the Keeler Creek area north to Goat Mt has been improved and identified as a contingency line to

Contingency Planning

mitigate fire spread to the east if it passes N. Fork Keeler Creek. The eastern most contingency line ties roads and fire lines from the Keeler Creek area up to Callahan Creek. These contingencies are located on to operations map and contingency map below.

Contingency Map 7 28 2021



Additional contingency planning is needed for northern areas in the Goat and Callahan drainage areas. RMA products may be helpful to identify locations that might provide the highest probability of success. Long term planning elements should be updated and included in the decision document as needs. These plans will primarily be developed by operational personnel and in coordination with local fire staff with local area knowledge. All long term operational plans will be added to the decision document either as MAPs and/or identified in the comments during periodic assessments.

Operational maps area will be available from the situation unit while the fire is being managed at the type 2 IMT level.

1.8. Cost

Estimated Final Cost

NAME	VALUE
Estimated Final Cost	\$25,000,000
Method(s) Used	Historic Costs, Other

Comments

Reassessed given to-date expenditure and length of season.

1.9. Rationale

Risk Assessment and Risk Decision

Risk Assessment

1. What are the critical values at risk?

Firefighters and public will be the highest priority throughout all phases of the incident. Manage the risk to fire fighters and the public by utilizing a risk-based approach to decision making. Ensure quality tradeoff conversations occur with Agency Administrators, partners, and stakeholders.

Utilize appropriate fire strategies to minimize fire impacts on residences, commercial properties, critical community infrastructure to reduce the potential for adverse health, social, financial, and economic hardships. These include:

- Communities within the planning area including but not limited to the community of Troy and the outlying residential areas in proximity of Troy and the Highway 2 corridor.

- Powerlines
- Natural, cultural, and historical resources
- Ranches, timber land, and other private properties
- Communication towers
- National Forest infrastructure (campgrounds, recreational facilities, trails and trailheads, Lookouts)

2. What is the chance the critical values will be impacted and, if so, what are the consequences?

The fire is in steep terrain and extremely dry fuels. Indices are at critical levels with ERCs above the 97th percentile and setting record highs for the NR02 PSA. The fire season started about three weeks earlier than normal with the peak of the traditional fire season occurring in mid to late August, hence much of the fire season remains. Currently at PL5 nationally and regionally with minimal resources and heavy competition for aircraft and IMTs. The area is in severe drought with warm, dry weather forecast for the foreseeable future. Fire behavior is active surface fire with single and group tree torching and short-range spotting. There is high resistance to control. Given the time of season and weather outlooks, the conditions are expected to worsen before they improve. These factors all lead to a moderate to high chance of impacts to values at risk, with consequences potentially impacting public and firefighter safety, as well as impacts to private residences, state highway corridor, utility corridors, and forest infrastructure are the most critical values and risk remains high.

3. What are the opportunities to manage the fire to meet land management objectives?

The fire is currently in steep, challenging terrain. Some road systems on the east and south sides of the fire are being used to contain the fire in those area. Incident strategies (COA) provide a alternatives for suppression strategies ranging from direct to indirect strategies based on terrain, existing barriers, fire behavior, and resource availability. Incident objectives and requirements are clear, but tactical options are limited due to fire behavior and resource shortages. All actions are based in risk management and seek areas that provide the highest probability of success while minimizing exposure to firefighters. Functional concerns are high due to PL 5, remaining fire season duration, limited resources and IMT availability. Due to the severity of the season and external influences, there are not currently opportunities to manage the fire to meet land management objectives.

4. What are the possible low probability/high consequence events?

Firefighters being trapped or injured while traveling road systems, forest trails, or state highways. Firefighter entrapment due to erratic and unprecedented fire behavior.

Fire damage or loss of any of the above-mentioned values before mitigation measures are in place - refer to the MAP's and the WFDSS maps for values identified.

Aviation accidents due to high exposure in mountainous terrain, low altitude flying, other firefighting aircraft flying in area, and windy, hot weather conditions.

Fire cutting off ingress/egress for incident responders.

Firefighting personnel injured by the use of heavy equipment for suppression efforts, or significant damage to machinery or driving accidents.

Public being trapped or injured within the fire planning area.

5. Who are the stakeholders that should be consulted (coordinated with and informed) prior to making a decision?

Kootenai National Forest Agency Administrators and Fire Staff; Lincoln County Sheriff; Lincoln County Emergency Manager; City of Troy, MT; Stimson Lumber; Dept of Homeland Security; Kootenai Tribe of Idaho; private landowners.

Risk Decision

1. What alternatives (objectives, strategies, and tactics) are being considered?

Objectives:

1) Firefighter and public safety will be the highest priority throughout all phases of the incident. Manage the risk to fire fighters and the public by utilizing a risk-based approach to decision making. Ensure quality tradeoff conversations occur with Agency Administrators, partners, and stakeholders.

2) Utilize appropriate fire strategies to minimize fire impacts on residences, commercial properties, and critical community infrastructure to reduce the potential for adverse health, social, financial, and economic hardships. These include:

- Communities within or in proximity to the planning area including but not limited to North Keeler Creek residences, private property and structures with the Fifield and Keeler Zones, and other structures in the Goat and Callahan drainages.

- Powerlines
- Natural, cultural, and historical resources
- Timber land

- National Forest infrastructure (campgrounds, recreational facilities, trails and trailheads, Lookouts)

3) Utilize long term operational planning including contingency and structure protection plans that have been developed for this incident. Continue to validate and update plans and be prepared to implement as conditions warrant.

4) Consider operational strategies that minimize the impact of smoke to smoke sensitive areas and receptors by adjusting tactics, monitoring smoke impacts, and following guidance in state smoke management plans and coordinating with state and local Air Quality Control Commission.

5) Follow COVID-19 CDC and established local, state, and national guidance to ensure a healthy work environment.

This incident is likely to be a season-long event and the long-term fire suppression strategy will be one that reduces the complexity

and allows the incident to be managed with the fewest resources possible. All strategies and tactics will be utilized to best manage risk and exposure to fire fighters while achieving the objectives.

2. What is the exposure to responders for the alternatives being considered?

Modified suppression -Exposure to firefighters and aviation resources implementing holding and delaying tactics is high. There is a potential for safety risks to be transferred from ground resources to the use of aerial resources given the conditions (fuels, weather, topography, lack of resources) and terrain. Full suppression actions will occur to reduce impacts to communities or where fires have the potential to threaten values at risk, if they can be safely and effectively implemented and are the most effective and efficient actions to take. Modified suppression tactics will be implemented to tie the fire into various fuel breaks or roads when and where applicable.

Point Protection Strategy - as with most long duration fires there is more exposure to responders. Because values at risk will likely be impacted it is estimated that various on-the-ground firefighters will be needed to implement protection to values at risk. It is also likely aviation resources will be used for recons to assist in implementing tactics necessary for point protection and containment operations to slow/delay fire spread.

3. What is the relative probability of success associated with the alternatives being considered?

Modified Suppression objectives - Moderate probability due to location, unprecedented burning conditions, and limited accessibility by road. Resource availability may limit alternatives that can be successfully implemented. All actions are being focused in areas with high probability of success and in order to protect the values at risk.

4. What alternative provides for the best balance between the desired outcome and exposure to responders?

Utilization of a Type 2 incident management team to manage the current situation with trigger points (Management Action Points - M.A.P.s) to help prioritize priority areas or protect values at risk with the considerations of fire fighter exposure, overall risk, resource availability and cost. Point protection and modified suppression strategies strikes the best balance to protect the values at risk within the planning area and manage risk and exposure to fire fighters. This is fully a month ahead of our normal fire season and this will be a long-duration event. Thus, values at risk identified within the planning area in addition to those not assessed within the planning area could potentially be impacted. Currently we are at Preparedness Level 5 in the Northern Rockies Area. Due to the number of large fires currently in the Region, resources will become less available.

5. What are the critical thresholds that will trigger reconsideration of the proposed alternative and how will they be monitored?

The M.A.P.'s will be monitored continually by the incident management organizations and actions/decisions will be implemented to meet the objectives of protection of lives, property, structures and other values at risk. Critical thresholds include:

Fire moving out of or threatening to move out of the current planning area.

Lack of resources which would significantly affect the implementation of key strategies and tactics in a timely manner.

New starts within the planning area that have a high potential to burn over the planning area boundary or impact identified values outside of the planning area.

Assessment of the new starts that have potential to significantly impact the overall complexity of the fires.