

Whitewater Fire WIF 170123 Fire Long Term Assessment

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The Whitewater Fire started was reported on July 23th in the Whitewater Basin area on the northwest side of Mount Jefferson and west side of the Cascades. The fire was confined in its entirety to the Mt. Jefferson Wilderness until two large growth days on Aug 2 and 3. The fire is now approximately 5000 acres and has had ongoing suppression action. The majority of the perimeter is within the Wilderness and has been deemed high risk and relatively inaccessible for fire personnel for direct attack operation. Focus has been limiting spread through use of aerial resources operations as prep occurs on holding lines utilizing to the fullest extent possible existing roads and features. The fire area is within very steep and rugged country that presents line construction challenges. The initial decision was made to protect values with modified containment strategies where fire fighter safety and access was feasible. This analysis considers the decisions for management of the Whitewater Fire by addressing fuels conditions, historical climatology, and long term fire projections keeping in mind difficult access and wilderness values. **No suppression action is accounted for currently.**

Current and Predicted Fuels:

The majority of the area is in a mountain hemlock and mixed fir stand with low shrubs such as heather and huckleberry in the understory. The lichen component allows fire to move easily through the crowns and tends to burn even if live fuel moisture levels are high.

From the day of ignition until the 31st the weather has been warm and dry with highs in 70's and 80's with RH values hovering in the 30% range. Nighttime recoveries have been good. From field observations, fuels have been receptive to burning with dead and down consuming and transfer from surface to isolated and group torching occurring relatively easy. **The spotty burning sometimes associated with this fuel type at this time of the season has given way to fuller consumption of available fuels.**

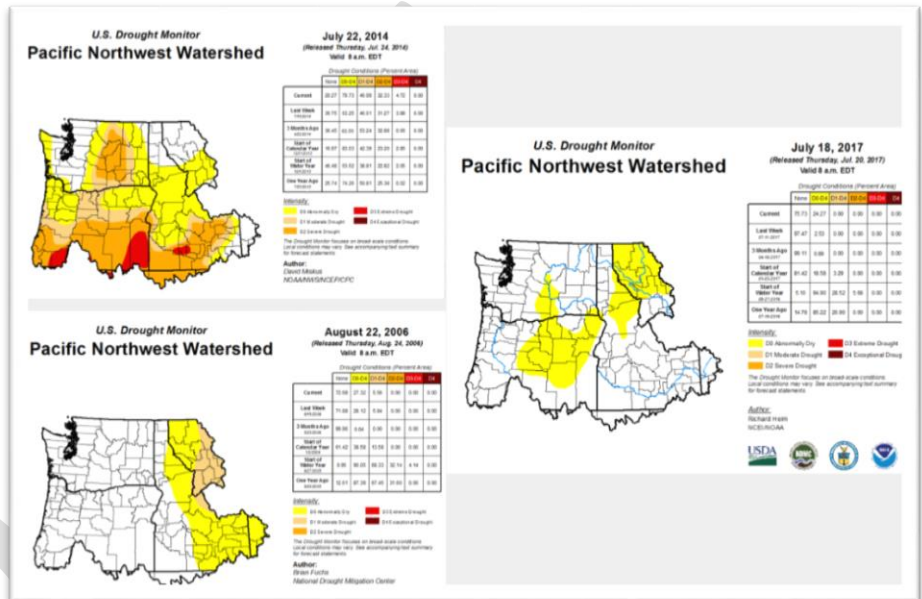


Figure 1: Current 1000hr fuel trend

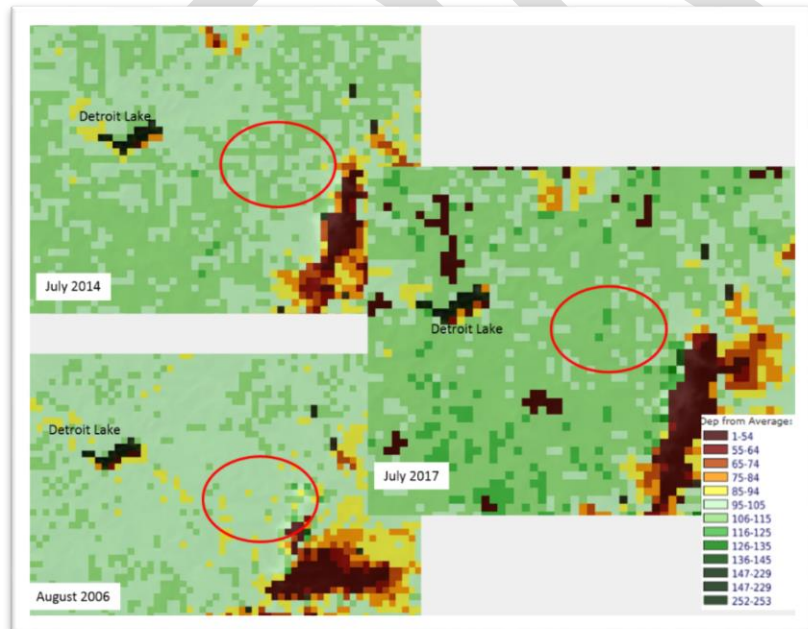


Figure 2: Relative Greenness Departure, current and analog

Drought influences are negligible over the fire area (figure 1) particular when compared to analog fire year 2014 (Lizard and Bingham Fires). However, analog fire year 2006 (Puzzle) had similar drought conditions as 2017. Forward drought predictions do not show conditions intensifying into the Fall 2017 however early summer rains have almost universally been below normal.

In terms of live fuels, the relative greenness (Figure 2) in the fire area remains a few percentage points

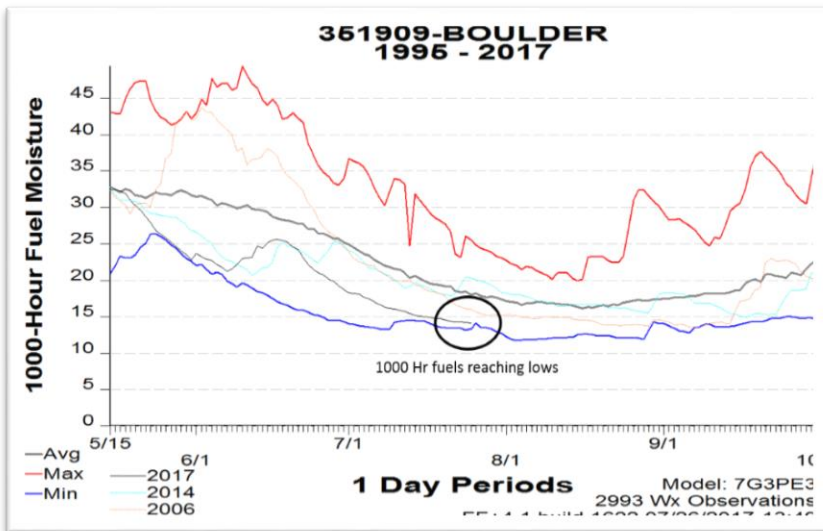


Figure 3: Current 1000hr fuel trend

above average. Current conditions as indicated by July 2017 images are considerably greener than August 2006 (Puzzle) and moderately greener than July 2014 (Bingham).

Of note is while baseline drought and relative greenness values are improved as compared to analog years, current ERC and dead fuel moistures suggest continued high fire danger when using past fires as a reference (see discussion below).

The persistent hot and dry weather has allowed for fuel moistures to enter below the large fire threshold. Fuel moistures associated with the PSA of interest are approaching seasonal lows (figure 3 and 4) and tracking at or below analog fire years.

Larger fuels will remain available for full

consumption for the duration without a significant change in fire weather conditions.

Fire Danger Indicators:

The energy release component (ERC) is an indicator of the controllability of the fire and trends similar to the drought conditions in the area. Current and forecasted ERC values follow a trend indicative of the recent warm and dry conditions throughout the PNW. Steadily climbing from mid-June, values are at or above 97th percentile conditions and historical maximums (Figure 5). This trend is expected to continue within the forecast period (Figure 6 and 7) and with no significant changes carry fire season well into August and early September.

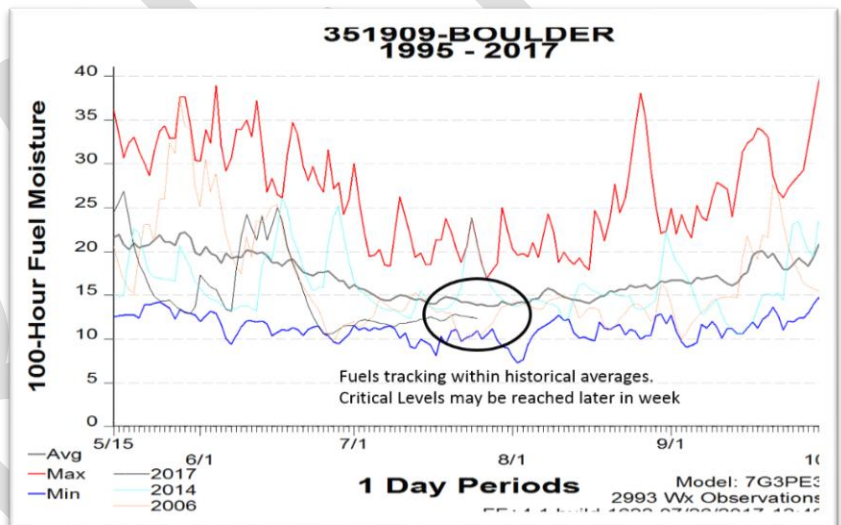


Figure 4: Current 100hr fuel trend

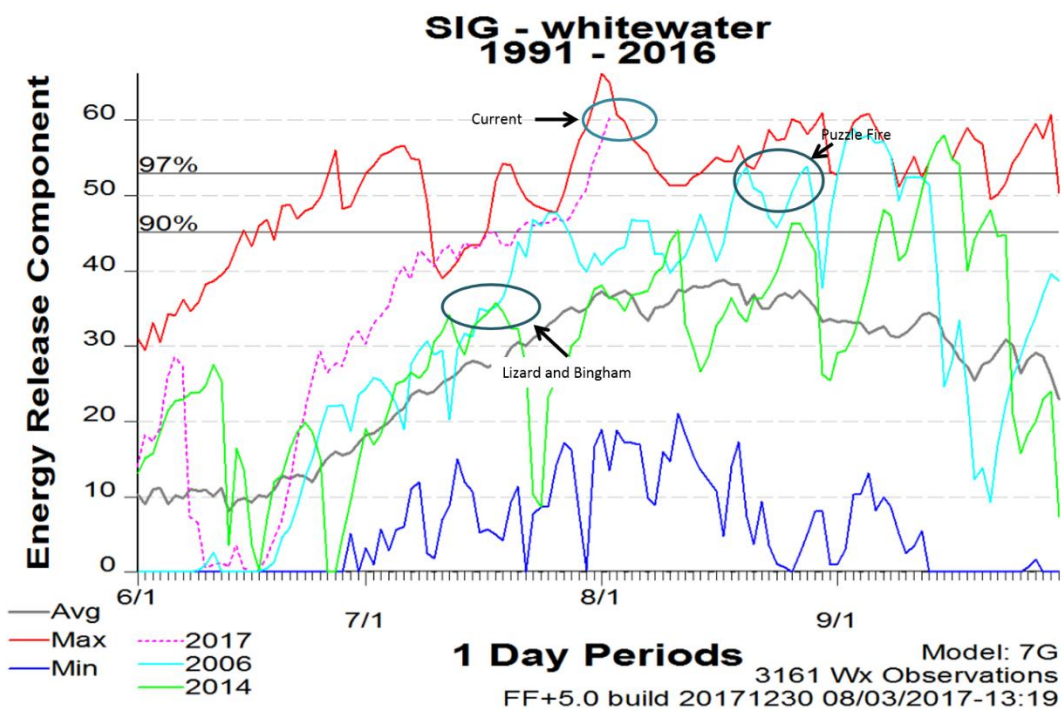
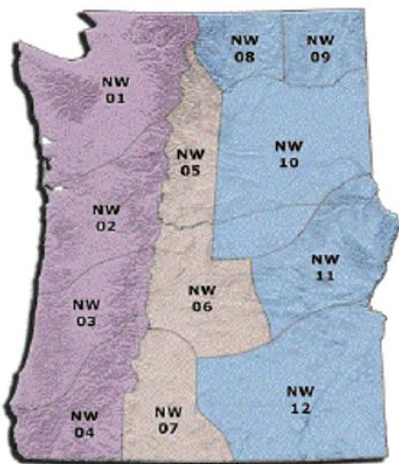


Figure 5: Current ERC trends. Boulder RAWS.



these estimates of ERC and F100 are based on regression developed here at NWCC. The equations use gridded data from weather models as predictors

the historical percentile values are from a data sample from mid June thru September 2000 thru 2011

10 Day Predicted ERC and F100 (Fuel Model G)

Tuesday, August 08, 2017
10-day estimates of ERC & F100 by PSA based on expected weather

	Obs	Forecast										Fire Season Percentiles		
		yd	td	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	8/8 mean	85th 95th
PSA NW01	ERC	46	47	49	50	51	48	39	37	37	38	38	#N/A	31 38
	F100	9	9	8	7	7	8	11	12	13	12	12	#N/A	13 10
PSA NW02	ERC	49	49	50	51	50	46	38	35	35	36	37	#N/A	38 45
	F100	10	9	9	8	8	9	13	13	13	13	13	#N/A	13 10
PSA NW03	ERC	53	53	53	53	53	47	43	43	44	44	45	#N/A	44 49
	F100	9	8	8	8	8	9	11	12	12	11	11	#N/A	11 10
PSA NW04	ERC	83	84	84	84	82	80	78	77	77	77	77	#N/A	77 84
	F100	7	7	7	7	7	8	9	9	9	9	8	#N/A	9 8
PSA NW05	ERC	80	80	81	83	84	81	74	73	73	73	73	#N/A	68 74
	F100	5	5	4	4	3	4	6	6	6	6	6	#N/A	7 6
PSA NW06	ERC	85	84	83	83	82	81	80	79	79	79	80	#N/A	73 77
	F100	5	4	4	4	4	4	5	5	5	5	5	#N/A	7 6
PSA NW07	ERC	74	74	74	75	75	74	74	74	74	74	74	#N/A	74 74
	F100	6	6	6	6	6	6	6	6	6	6	6	#N/A	6 6
PSA NW08	ERC	84	84	84	85	85	84	84	84	84	84	84	#N/A	84 84
	F100	6	7	7	8	8	9	10	10	11	11	11	#N/A	6 6
PSA NW09	ERC	79	79	79	79	79	80	77	75	74	74	75	#N/A	69 75
	F100	6	5	5	5	4	4	5	6	6	6	6	#N/A	7 6
PSA NW10	ERC	86	87	88	89	90	90	86	84	83	84	84	#N/A	78 82
	F100	5	5	5	4	4	4	4	5	5	5	5	#N/A	6 6
PSA NW11	ERC	84	84	84	83	83	82	81	79	78	78	79	#N/A	75 82
	F100	5	5	4	4	4	4	4	5	5	5	5	#N/A	6 5
PSA NW12	ERC	89	87	86	85	85	85	86	85	85	86	87	#N/A	88 93
	F100	4	4	4	4	5	4	4	4	4	4	4	#N/A	5 4

ERC drop based on cooling Low

Figure 6: Forecasted ERC and 100hr fuel moisture trends with applicable PSA (red highlight)

Extended Weather Forecast

(Climate Based):

Climate Prediction Center’s forecast charts (figure 7) suggest the 6-10 forecast will bring below normal temperatures accompanied by near or slightly above normal precipitation. For the month of August in its entirety (figure 8) shows above average temperatures and near normal to slightly below precipitation for what is an already hot and dry month. *Of significance is the potential for a cooling and maybe wetting trend that is becoming more pronounced in the near term weather forecast.*

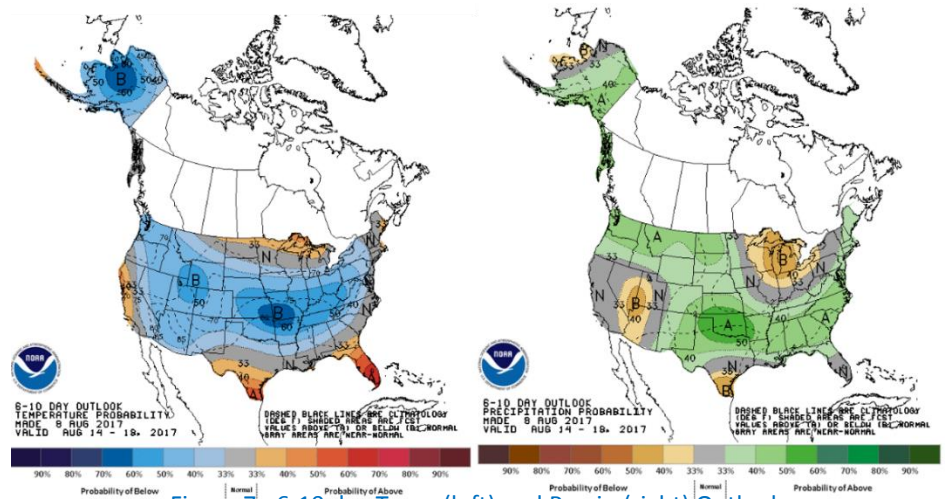


Figure 7: 6-10 day Temp (left) and Precip (right) Outlook

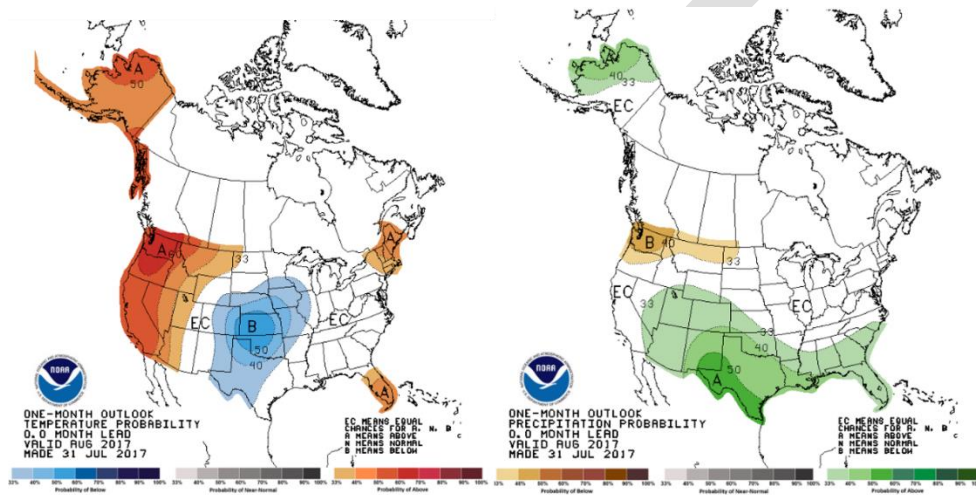


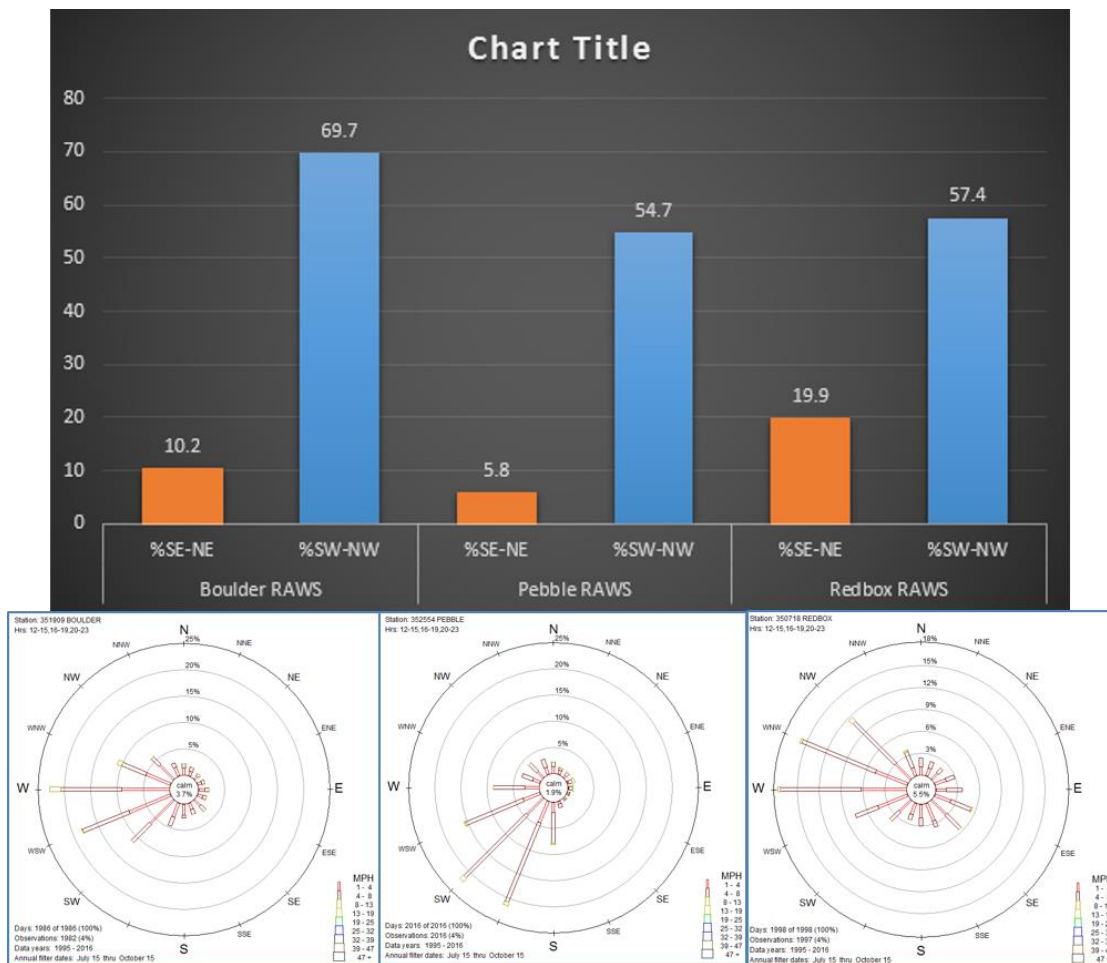
Figure 8: August Temp (left) and Precip (right) Outlook

The following table displays the average precipitation for the fire perimeter area. The data is based on 37 years of data from the Marion Forks Fish Hatchery. This site is only 6.5 air miles southwest of the fire perimeters. *It is important to note that while the 2017 winter and spring were considered wet, July 2017 has well below average rainfall for the historical data.*

Historical Accumulated Precipitation

Jun	July	Jul-17	Aug	Sept
2.91	0.82	0.1	0.92	2.30

Wind climatology during July–September (daily obs) is referenced by the wind roses below. Three RAWS stations (Redbox, Pebble, and Boulder) were compared in order to analyze for East wind events and associated wind shadowing effects that may influence the fire area. Wind direction from all stations is dominated by westerly flow. Boulder RAWS average wind speeds range from 2 to 4 mph and 4 to 8 mph likely observed during the afternoon hours. Upslope/up-drainage effects should dominate the current fire area. *East wind events are of particular concern but are rare with winds above 8 mph with an easterly component less than 1% of analysis record. When accounting for gusts this percentage increases yet remains a relatively low probability event.*



Fire Spread Probability:

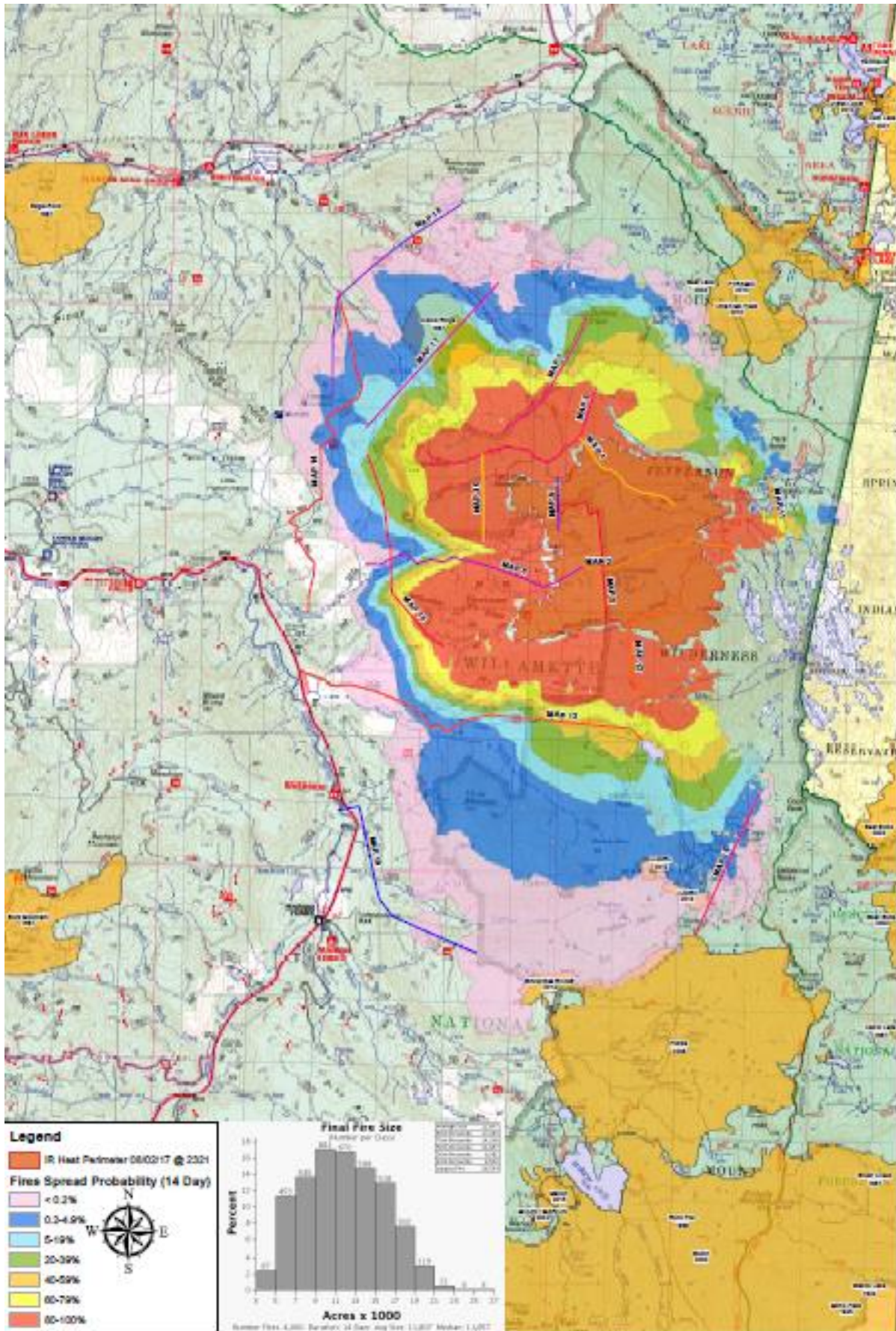
After a significant growth day (driven by thermal trough and high instability) a Fire Spread Probability (FSPro) analysis was used to model potential fire spread using climatological weather information over a 14 day period starting 8/3/17 and ending 8/16/17 (see next page). **The model assumes that no suppression actions are being taken to slow the spread of the fire**, FSPro utilizes 10 minute average winds and gusts along with expected fuel moisture conditions to project fire growth probability over the 14 day period. Redbox RAWS was utilized for winds in order to pick up potential East wind events. However, sheltering from Mt Jefferson in the fire area suggests such an event is likely reduced. Fire size outputs from the FSPro model show an average fire size of 11,807 acres by The largest subset of simulated fires were between 9000-11000 acres with the largest modeled growth of 26,500 acres. *Of note, long range forecasts do indicate the building of a trough of low pressure from the Gulf of Alaska that will bring cooler and potentially moist conditions to the fire area.*

The FSPro analysis shows (with no suppression actions) that Infrastructure HVRAs (Marion Forks, Breitenbush, Hwy 22 identified in the incident objectives and long term strategic plan are not impacted over the next 14 days. Based on current conditions, Eastern most private timber lands along woodpecker ridge are threatened and private timber lands off the 305 Rd (while lower probability of being impacted) warrant protection strategies. Certain low probability high consequence fire growth factors, such as Haines 5 and 6, thermal troughing, and east wind events have been both seen on this fire and are viable events (historically) in August. Such events can be forecasted and must be considered watchout situations. *It is realized that there is approximately 2/3 of the fire season remaining therefore this analysis should be completed again in 7 days, when there is greater than 500 acres of growth on the fire, a significant change in weather occurs, or significant direct suppression actions are taken.*

Limitations of the model:

1. The fire behavior models in this analysis have limitations that should be considered when used as the basis for decisions. The models do not accurately predict the fire spread due to roll out or extreme weather events that produce conditions exceeding the model's capability to accurately predict spread.
2. The results of this run are invalid if the fire spreads to areas not covered by the output.
3. FSPro assumes no suppression action is taken on the fire.
4. This analysis should be updated every 7 days, no longer than 14 days.

DRAFT



Worst Case Fire Behavior:

Worst Case:

Activity immediately increases and dominate east winds and thermal trough affect the fire area. An event of this nature could cause the fire to quickly expand testing primary and contingency lines. At this time the extended weather predictions do not indicate easterly winds or thermal troughing and normal climatological conditions easterly winds of significance are not frequent but can spread fire as much as two miles or more to the west in one day.

OR

Over time the fire becomes established in lower 3rd of Breitenbush canyon and a thermal low establishes itself off shore which will bring east winds to the fire area and dry out fuels. This low can then shift over the fire area bringing an unstable atmosphere and low RHs over the already dry fuels promoting large fire growth and potential need for evacuations in the Breitenbush area.

Likely scenario:

There is persistent growth on the fire due to summer burning conditions which allow the fire to spread within the wilderness through a series of slow spread days followed by more dramatic spread days as the fire becomes aligned with wind and slope. This combination of slow spread with occasional high spread days and a delay in the season ending event will eventually cause the fire to test established MAPs and trigger suppression action where appropriate.

Indications for re-analysis of fire behavior/spread and notification of the assigned resources:

- Fire growth of 500 acres or a 7 day period has passed since last analysis.
- Elevated East winds are forecasted.
- Thermal Trough forecast and timing solidifies.
- Caution to crews when the sustained wind speeds are predicted > 10 mph (any direction) and RH < 30%.

Analog Fire Weather Considerations:

Analog fires were analyzed to determine large fire growth indicators in relation to weather and fire danger indices on Whitewater (current), Scott Mtn Fire (2010) and Puzzle Fire (2006). Temperature, minimum relative humidity (RH) and Haines were found to be consistent predictors. Easterly wind events also appear to directly correlate with large fire movement, however forecasts do not indicate the setting up of a pattern typical of a strong East wind event.

Growth Thresholds:

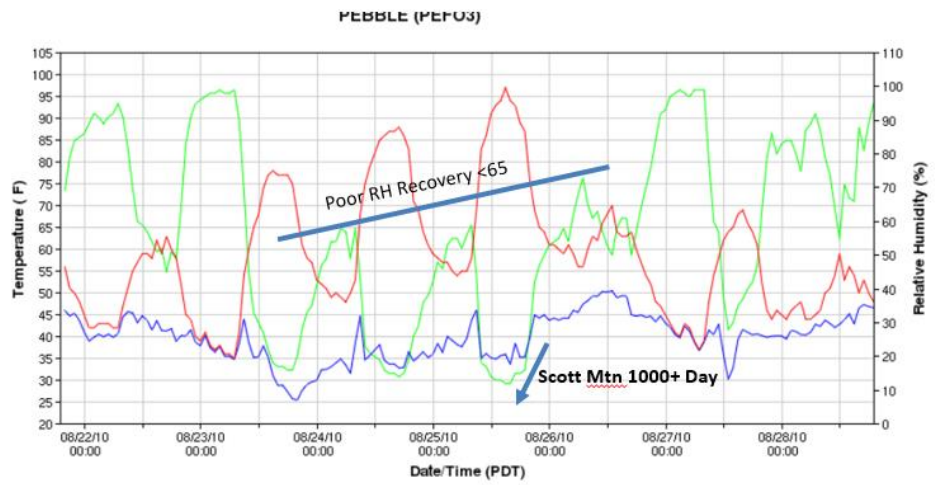
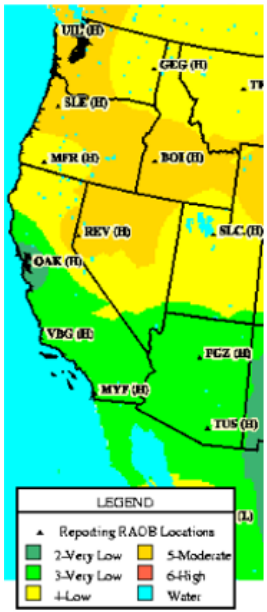
Moderate to Large Growth Days: (500-1,500 acres; fires were relatively small on these days but made large runs relative to size with extreme fire behavior; runs of about 1 mile)

Growth Indicators: Minimum RH <23, RH recovery <65 and Maximum Temperature >84 (usually between the 90th and 97th percentile ERC)

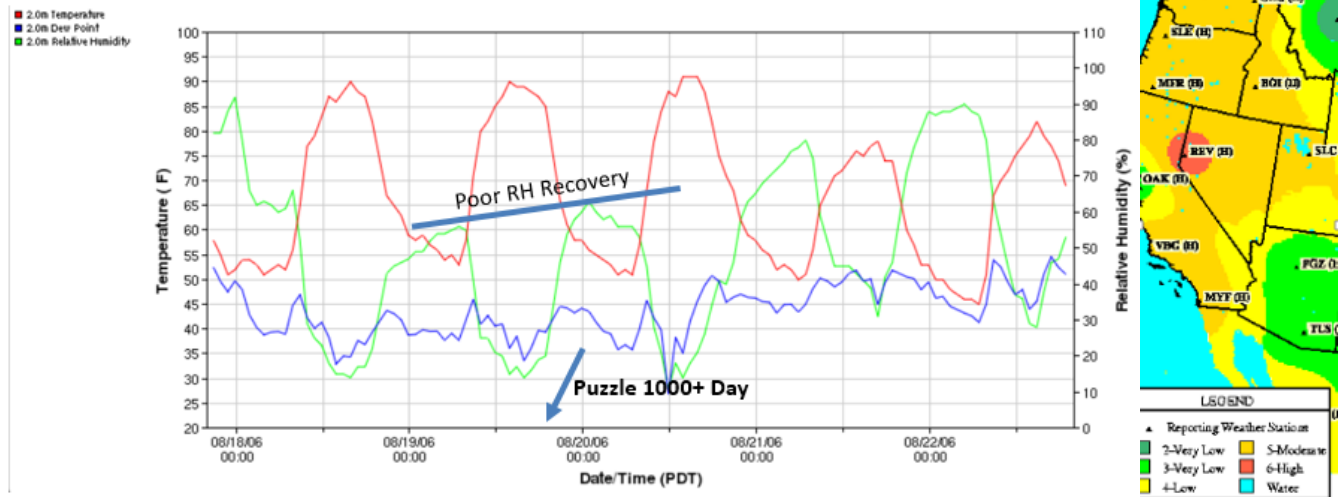
Large-Extreme Growth Days: (> 1,000 acres growth; fires made runs between 2 and 3 miles and were plume dominated)

Growth Indicators: Minimum RH <13, RH recovery <65 and Maximum Temperature >91 (generally at or above the 97th percentile ERC)

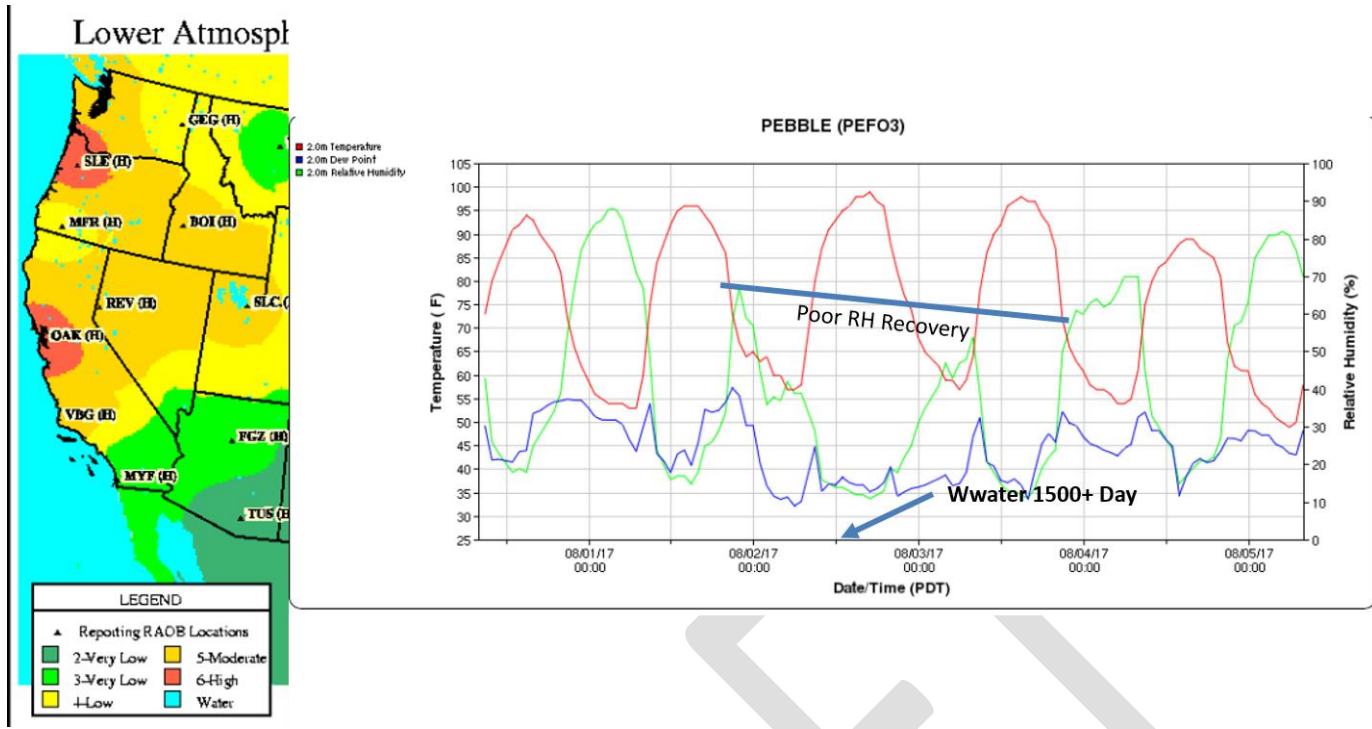
The Haines Index – watch for high Haines Index days (5&6).



Scott Mtn trace RAWs 8/22/10-8/28/10 and Haines 5 (8/25/2010)



Puzzle Fire trace RAWs 8/18/06-8/22/06 and Haines 5 (8/19/2006)



Whitwater Fire trace RAWs 8/01/17-8/05/17 and Haines 5 (8/02/2017)

Whitwater Fire Long Term Management Strategies:

The following information describes the strategies the Line Officers and IMT considered. These were options based on the assessment of values at risk, exposure to firefighters, ineffectiveness of direct control line, the exposure/expense of aircraft, the drawdown of regional/national resources, the time of season, fire weather and fuels characteristics and the probability of the fire exceeding the wilderness boundary.

Due to limited safety zones, potential for rapid fire spread, and firefighter exposure; modified confinement/containment suppression strategies were considered to protect values at risk:

1. Confine/contain spread of the Whitwater Fire to the Mt Jefferson wilderness while using direct and indirect strategies to suppress fire outside the wilderness to protect private timber lands and highly valued communities at risk. Utilize aircraft support to check fire spread within and outside the wilderness on identified natural features. When taking advantage of favorable terrain and fuels is determined opportunistic to limit exposure to unfavorable terrain and fuels in the long term, direct attack could be used within the wilderness utilizing MIST tactics when assessment suggests opportunities to reduce long term exposure can occur in light of short duration exposure. At the same time, such opportunities could reduce resource impacts over the long run. This option limits firefighter exposure to the fuels, steep slopes, limited safety zones, and long escape routes and maintains equal weight for aviation exposure when compared to option 2. Firefighter, public, and aviation exposure may be increased long term as the fire progresses within the wilderness and threatens management action points and contingency plans. Indirect firing operations may increase firefighter exposure in the short term when actively engaged in operations, however mitigations can be taken to minimize exposure through operational planning and logistical support.
2. Utilize a confine/contain strategy by going direct on the fire with the intent of limiting further spread for the remainder of the fire season. The fire will likely not be fully controlled or put out during this operation due to the fuels, steep slopes, limited safety zones and long escape routes. This option significantly increases exposure to firefighters and aircraft short

term on the fire; it also increases exposure short term when safety zones are cut in the wilderness for crew safety. This option also has impacts wilderness characteristics

Risk Decision:

The risk process led to selection of strategy #1 based on limiting firefighter exposure. This exposure includes; limited safety zones, potential for rapid fire spread, access and egress travel distances, aviation support, steep terrain, and snags. This selected strategy is in alignment with risk management practices and the unit's land and resource management plan considers threats to values, mitigating exposure and risk, minimizing costs, and releasing scarce resources to other firefighting efforts. This decision also allows for natural processes in the wilderness as identified in the unit's land and resource management plan.

Course of Action:

Primary:

Objective is to a combination of direct and indirect tactics to suppress fire in General Forest and confine fire to wilderness. Suppression action outside of wilderness will include line construction, road preparation, and firing operations in areas with a high probability of success for containing the fire. The intent is to minimize fire spread onto private timber lands and avoid suppression impacts to the communities of Breitenbush and Marion Forks. The primary strategy in wilderness will use aviation resources to reduce fire spread and utilize natural features to help check/moderate fire spread to allow time for resources to prepare containment lines.

Current Management Action:

- Utilize South Fork Breitenbush River as a natural fuel break to "check" delay fire spread to the north.
- Use natural features such as lakes, creeks, glaciers and rock outcropping to limit spread to the east.
- Utilize natural barriers along FS Trail 3439 to Pamela Lake to hold fire north of Pamela Creek. Utilize Milk Creek to keep fire north and contained to wilderness.
- Improve FS road 2246 to hold fire north of Pamela Creek drainage from Highway 22 east to Pamela Lake Trailhead.
- Evaluate opportunities to utilize road system north from FS road 2246 to 040 as close to fire perimeter as feasible.
- Continue to seek viable opportunities to go direct as fire environment allows.
- Utilize road systems between Wild Cheat Meadow and Woodpecker Hill and aviation resources to delay or suppress fire spread to the northwest towards Triangulation Peak and private timber lands.

Alternate:

This plan attempts to be as viable as the primary plan yet avoids creating a secondary version of the original plan. Opportunities considered are to utilize roads and to the best extent possible, advantageous topography to establish control lines that will provide greater probability of success. Natural features such as rock scree, flowing creeks, glaciers and discontinuous fuel patches will be utilized to contain the fire within the Mt. Jefferson Wilderness.

Management Action:

- Utilize natural barriers on the ridge beginning from Park Butte towards Bear Point and the wilderness boundary.
- Improve FS road 310 to north and west to Breitenbush River, north of Roaring Creek.
- Use lakes, creeks, glaciers and rock outcropping to limit spread to the east.
- Construct combination of mechanical and hand line from FS road 040 near fire edge south to FS road 650 to 2246.
- Improve FS roads 2243, 302, 305 and 636 from Whitewater Creek north to Triangulation Peak Trailhead.

Contingency:

The contingency strategy includes identification of natural and landscape features that offer a opportunity for success in stopping or modifying the spread of fire if the initial plan does not entirely succeed. This plan also accounts for current and expected fire behavior and timing to meet suppression objectives.

Management Action:

- Utilize Mount Jefferson as a natural barrier to limit fire spread to the east.
- Utilize historic fire footprints to slow fire spread to the north and south. (2006 Puzzle Fire, 2010 Pyramid and Dinah-Mo)

- Anchor from the FS road 2246 south of Pamela Creek to tie into preexisting road system FS roads 125, 2253 and contingency fire line for the Bingham Ridge Fire (2014) to Minto Creek.
- Evaluate feasibility to anchor from FS road 2253 and/or Minto Creek to use road system going south and east to Bingham Ridge Trailhead.
- Assess road prep needs for FS road 2255 east from the Community of Marion Forks to wilderness boundary.
- Identify improvement needs of Hwy 22 between FS 2246 Rd. and FS 2243 Rd. Implement improvements as necessary.
- Improve ancillary roads and topographical features to increase probability of success for holding fire on road system from Whitewater Creek north to Outerson Mtn and west to Little Pigeon Prairie.
- Continue to evaluate opportunities to connect road systems north from Little Pigeon Prairie toward Breitenbush.

Emergency:

Emergency actions will be conducted where and when necessary for the direct protection of human life and property. Emergency planning is being conducted to establish tactics and control points to address potential threats. Emergency tactics may include evacuation plans and point protection of structures or other values at risk.

Management Action:

- Evaluate structure protection needs and implement structure protection plan for the Breitenbush area.
- Assess Marion Forks area for structure protection needs.
- Evaluate and recommend road, trail, campground and area closures as necessary

Management Action Points: (see map at the end of the document)

MAP 1 – Breitenbush Head Status: Activated	Ridgeline above fire before steep broken ground above Breitenbush Canyon
Condition:	
<ul style="list-style-type: none"> • Fire has become well established in steep country above Breitenbush Canyon and aerial operations cannot suppress. 	
Action:	
<ul style="list-style-type: none"> • Begin Assessment of holding features off FS 4685 Rd. • Establish communications with Breitenbush Hotsprings. 	
Resources:	
<ul style="list-style-type: none"> ▪ DIV or FOBS ▪ 1 READ ▪ Line Officer – notifications, retardant use approvals 	

MAP 2 - Russell Creek Status: Activated	East/West line of Russel Creek within Boundary
Condition:	
<ul style="list-style-type: none"> • Fire has become well established across Russell Creek and aerial operations cannot suppress. 	
Action:	
<ul style="list-style-type: none"> • Update fire behavior analysis to determine threats of fire escaping the wilderness area and threatening MAP 5. • If assessment indicates probable fire spread out of the wilderness assess actions to establish primary line from 440 to 040 road to connect into Pamela contingency. • Assess current conditions and opportunities to initiate holding actions (or portion of) associated with MAP 5 	

MAP 5 - Whitewater Wilderness Status: Activated	Travels the Wilderness boundary from Whitewater Trailhead to Woodpecker Ridge.
Condition: <ul style="list-style-type: none"> • Fire modeled spread is determined to be 1 or less days from breaching wilderness boundary in Whitewater/Russell Creek drainage. 	
Action: <ul style="list-style-type: none"> • Initiate holding/suppression actions along Primary line from Whitewater Trailhead (WWTH) to 440 • Notify ODF and private landowners west of fire. • Evaluate aviation needs and availability. • Evaluate use of retardant within wilderness from WWTH North to prominent ridgeline. 	

MAP 6 – Triangulation Ridge Status: Activated	East West ridgeline from Triangulation Peak to south ridge above Breitenbush Valley
Condition: <ul style="list-style-type: none"> • Fire advances north into inaccessible ground above Breitenbush Valley or fire advances to ridge above Devils Creek 	
Action: <ul style="list-style-type: none"> • Assess fire spread potential to help determine timing and most probable location of threat to PACE. • Initiate assessment and/or construction of off the FS 4685 Rd in Breitenbush Valley. • If above Devils Creek initiate assessment and/or construction of holding opportunities identified in Devils Creek based on timing assessment by fire behavior analyst. • Establish communications with Breitenbush Hotsprings. • Develop (finalize) structure protection plan for Breitenbush Hotsprings. 	

MAP 7 - Breitenbush Wilderness Status: Not Activated	Along wilderness boundary in Breitenbush Valley up to Quitters point
Condition: <ul style="list-style-type: none"> • Fire is approaching or has crossed wilderness boundary in Breitenbush Valley. 	
Action: <ul style="list-style-type: none"> • Assess fire spread potential to help determine timing and most probable location of threat to PACE lines if any. • Finalize operational plans for implementation of developed holding actions in Breitenbush Valley, see MAP 6 and PACE Strategic Plan. • Order identified resources to implement determined strategy. • Finalize structure protection and evacuation plan for Breitenbush Hotsprings. • Notify Breitenbush Hotsprings. • Determine if additional Public Information Officers are necessary. • Notify appropriate Law Enforcement surrounding potential evacuation needs. • Based on spread potential, order fire resources needed to prepare and staff actions identified in Breitenbush structure plan. <p>Operational Actions:</p> <ul style="list-style-type: none"> • If projected fire growth is likely to move beyond Breitenbush Wilderness MAP and reach the PACE lines, an IMT must be in place to implement actions above. 	

MAP 8 – 440 Rd Status: Not Activated	MAP runs east to west along the USFS 440 RD above Russell Creek.
Condition: <ul style="list-style-type: none"> • Fire burns south of MAP and crests Woodpecker Ridge to west of Whitewater drainage wilderness boundary. 	
Action: <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the south and west. • Assess fire growth probability to the south and west. • Initiate Pamela contingency line preparations. • Order fire resources needed to prepare and hold Pamela Contingency Line. • Begin assessment and development of structure protection plan for Marion Forks. • Develop Hwy 22 closure plan. 	
MAP 9 – Sentinel Ridge Status: Partial Activation	North from open section of primary holding line out of Whitewater drainage and above 2243 Rd.
Condition: <ul style="list-style-type: none"> • Primary holding lines have been successful in Whitewater drainage. Fire continues to burn west unchecked above Whitewater trailhead within wilderness. If Primary holding lines below (south/southeast) this MAP have failed forced initiation of MAP 10 	
Action: <ul style="list-style-type: none"> • Assess fire spread potential and determine the timing of fire arrival/potential to FS Rd 305 Triangulation Peak TH alternate line 2243 road and implement firing operations as warranted to hold fire north of road and within the Mt. Jefferson Wilderness to the extent possible. • Based on predicted fire arrival time to primary line, order necessary resources to complete containment line preparations. • Prepare identified Alternate lines in Div Hilo and Div K • Check fire spread if needed with aerial resources 	
MAP 10 - Wild Cheat Meadow Status: Partial Activation	MAP progresses over sentinel ridge to Cheat Meadow up to Triangulation ridge.
Condition: <ul style="list-style-type: none"> • Fire progresses west along Sentinel Ridge within the wilderness. 	
Action: <ul style="list-style-type: none"> • Assess fire spread potential and projected arrival time to western alternate line in Div H (305 Rd ,302 Rd, 2233 Rd) • Initiate construction of unimproved portions of west Alternate line in Div K and H, see PACE. • Use helicopter operations to minimize fire growth until secure line can be constructed. • If projected fire growth is determined to be likely to influence Alternater line an IMT must be in place to implement actions and prepare for containment operations. • Contact ODOT and develop Hwy 22 closure plan. 	
MAP 11 - Jefferson Park Status: Not Activated	MAP runs north to south along western boundary of Jefferson Park between Park Lake and Scout Lake.

<p>Condition:</p> <ul style="list-style-type: none"> • Fire burns east of MAP into Jefferson Park with little to no success of containing fire in Jefferson Park.
<p>Action:</p> <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the east. • Assess fire growth probability to the east and out of Mount Jefferson Wilderness. • Notify Warm Springs Agency (WSA) of potential for fire to impact their lands to the east, develop and initiate a delegation of authority to include Warm Springs lands.

<p>MAP 12 - Jeff Creek PCT Status: Activated</p>	<p>MAP runs north to south along Pacific Crest Trail between Jeff Creek to Milk Creek</p>
<p>Condition:</p> <ul style="list-style-type: none"> • Fire burns west of MAP toward Mount Jefferson Wilderness boundary. 	
<p>Action:</p> <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the west. • Assess fire growth probability to the west and out of Jefferson Wilderness. • Initiate Pamela contingency line preparations. • Order fire resources needed to prepare and hold Pamela Contingency Line. • Begin assessment of Bingham Ridge and Lizard fire contingency lines south of Pamela Rd. for needed prep. 	

<p>MAP 13 - Pamela Contingency Line Status: Not Activated</p>	<p>MAP runs the length of Pamela contingency line.</p>
<p>Condition:</p> <ul style="list-style-type: none"> • Fire threatens to breach Pamela contingency line. 	
<p>Action:</p> <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the south and west. • Finalize structure protection plan for Marion Forks. • Notify Marion Forks. • Notify appropriate Law Enforcement surrounding potential evacuation needs. • Based on spread potential, order fire resources needed to prepare and staff actions identified in Marion Forks structure and evacuation plan. • Based on fires location , Activate Hwy 22 closure plan • If Pamela contingency east of 750Rd and/or trailhead is considered unviable Bingham Contingency will be initiated. 	

<p>MAP 14 - McCoy Line Status: Partial Activation</p>	<p>MAP travels south to north from 2243 road over Outerson Mountain and down to Devils Creek.</p>
<p>Condition:</p> <ul style="list-style-type: none"> • Holding along 302 and 305 Alternate lines is likely unsuccessful. 	
<p>Action:</p> <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the south and west. • Based upon fires location Activate Hwy 22 closure plan. • Based upon fire location and anticipated growth initiate closure of Whispering Falls Campground, Upper and Lower McCoy Snowparks. McCoy Shelter. • Finalize preparation and staffing for holding operations in Pigeon Prairie to Upper McCoy to Boulder Ridge (630Rd, 2233Rd, and 2231Rd). • Initiate Area Closure in the vicinity of Gale Hill and Pigeon Prairie. • Develop structure protection and evacuation plan for Idanha. 	

- Notify pertinent parties in Idanha

MAP 15 - Cheat Creek Status: Partial Activation	MAP north to south from Triangulation peak to Woodpecker Ridge.
Condition: <ul style="list-style-type: none"> • Fire becomes well established on east aspect below MAP in Cheat Creek Drainage or, to the south, becomes well established along Woodpecker Ridge. 	
Action: Cheat Creek <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the south and west. • Notify appropriate personnel of potential activation of Hwy 22 closure plan. • If deemed effective order aerial retardant to slow fire spread and protect private lands. • Based upon fire spread potential initiate holding actions along 302/305 Alternate line. • Begin preparations on Contingency lines in Pigeon Prairie, Upper McCoy, Boulder Ridge Action: Woodpecker Ridge <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the south and west. • Notify appropriate personnel of potential activation of Hwy 22 closure plan. • If deemed effective order aerial retardant to slow fire spread and protect private lands. • Based upon fire spread potential initiate holding actions along Pamela holding line. 	

MAP 16 - Hanks Lake Status: Not Activated	MAP runs north to south from Mt Jefferson to Puzzle fire along border with Deschutes Willamette Boundary.
Condition: <ul style="list-style-type: none"> • Fire burns east of MAP into Hanks Lake area with little to no success of containing fire. 	
Action: <ul style="list-style-type: none"> • Use appropriate suppression response with available resources to limit growth to the east. • Assess fire growth probability to the east onto Deschutes National Forest lands. • Notify Deschutes National Forest of potential for fire to impact their lands to the east, develop and initiate a delegation of authority to include Deschutes National Forest. 	

MAP 17 - Devil's Ridge Status: Not Activated	MAP runs southwest to northeast from toe of Outerson Mtn across Breitenbush Valley to ridge above Lake Creek.
Condition: <ul style="list-style-type: none"> • Fire has crossed MAP 17 and is established west of the MAP. Suppression efforts are being taken to suppress western growth of the fire in Breitenbush Canyon. 	
Action: <ul style="list-style-type: none"> • Analyze fire growth potential and suppression effectiveness to determine timing of all necessary actions to protect values in Breitenbush area. • Finalize Breitenbush Structure Plan. • Order structure protect resources needed for Breitenbush Structure Protection Plan. • Work with local officials to set evacuation level for Breitenbush area. 	

MAP 18 - Devil's Peak Status: Not Activated	MAP runs southwest to northeast from Outerson Mtn down Cascadia creek across to Devils Peak into roaring creek.
Condition: <ul style="list-style-type: none"> • Fire has crossed MAP 18 and is established west of the MAP. Suppression efforts are being taken to suppress western growth of the fire in Breitenbush Canyon. 	
Action: <ul style="list-style-type: none"> • Analyze fire growth potential and suppression effectiveness to determine timing of all necessary actions to protect values in Breitenbush area. • Finalize Breitenbush Structure Plan. • Initiate structure protection procedures. • Work with local officials to evacuate Breitenbush area. 	

MAP 19 - Bingham Ridge – Marion Fork Status: Not Activated	MAP runs from Riverside Campground along Bingham Ridge Road.
Condition: <ul style="list-style-type: none"> • Fire has crossed the MAP and become established west/southwest of the MAP. Suppression efforts are being taken to stop fire spread to the west/southwest. 	
Action: <ul style="list-style-type: none"> • Analyze fire growth potential and suppression effectiveness to determine timing of all necessary actions to protect values in Marion Forks area. • Initiate structure protection procedures. • Work with local officials to evacuate Marion Forks area. 	

MAP 20 - Bear Point Ridge Contingency Status: Not Activated	MAP runs along established contingency line along prominent ridge through Bear Point down to Roaring Creek
Condition: <ul style="list-style-type: none"> • Fire has crossed MAP 19 and suppression success is deemed unviable. Analysis suggests continued spread to the north east is probable. 	
Action: <ul style="list-style-type: none"> • Consult with Mt Hood NF surrounding closures in the Olallie Lake area. • Develop evacuation and closure plan for the 4220 Rd and Olallie Lake vicinity • Develop trigger points based on season timing as to when initiation of closures should occur. 	