
Rogue River – Siskiyou National Forest Prescribed Fire Plan Template September 2022 Version

This template meets the requirements established in the *Interagency Prescribed Fire Planning and Implementation Procedures Guide* (PMS 484, July 2017 edition). With edits made from the *USDA Forest Service National Prescribed Fire Program Review* published September 2022.

General direction from the Procedures Guide is provided within the template. For detailed direction on each element, refer to the Reference Guide.

Within the template, grey boxes identify areas requiring input into the Prescribed Fire Plan. Wording in **red** are instructions or reminders to the preparer for each element. Upon completion of the plan the preparer should delete all items that appear in **red** and **should not be included in the final document**. Items that appear in **green** are suggested text and should be used to assist in the development of the specifics for the prescribed fire plan, then converted to black if utilized in the final burn plan. Text in **black** is to remain as part of the plan.

Previous versions of this template are obsolete and are not to be used for new burn plans.

PRESCRIBED FIRE PLAN

RANGER DISTRICT

Siskiyou Mountains

**PRESCRIBED FIRE NAME /
PRESCRIBED FIRE UNIT**

UAR Flumet



PREPARED BY: *

Name (print)

Qualification / Currency

RXB2

Signature

Date

ADDITIONAL PREPARER:

Name (print)

Qualification / Currency

Signature

Date

TECHNICAL REVIEW BY: *

Name (print)

Qualification / Currency

RXB2

Signature

Date

FIRE MANAGEMENT OFFICER:

Name (print)

Qualification / Currency

RXB2

Signature

Date

COMPLEXITY RATING

Moderate

**MINIMUM BURN
BOSS QUALIFICATION**

RXB2

APPROVED BY (AGENCY ADMINISTRATOR): *

Name (print)

Title

Signature

Date

* Denotes required signatures

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Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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AGENCY ADMINISTRATOR IGNITION AUTHORIZATION (Prescribed Fire Plan, Element 2A)

Instructions: The Agency Administrator Ignition Authorization must be completed before a prescribed fire can be implemented. If ignition of the prescribed fire is not initiated prior to expiration date determined by the agency administrator, a new authorization will be required.

Prior to signature the agency administrator should discuss the following key items with the fire management officer (FMO), duty officer responsible for coordinating contingency and wildfire response, and the burn boss. Attach any additional instructions or discussion documentation (optional) to this document.

DROUGHT AWARENESS: Current drought conditions according to _____ is _____ and the trend over the last several months is *select one*: Worsening Improving Stable

Key Discussion Items

<p>A. Has anything changed since the Prescribed Fire Plan was approved or revalidated?</p> <p><i>Such as drought or other climate indicators of increased risk, insect activity, new subdivisions/structures, smoke requirements, Complexity Analysis Rating.</i></p>
<p>B. Have compliance requirements and pre-burn considerations been completed?</p> <p><i>Such as preparation work, NEPA mitigation requirements, cultural, threatened and endangered species, smoke permits, state burn permits/authorizations.</i></p>
<p>C. Can all of the elements and conditions specified in Prescribed Fire Plan be met?</p> <p><i>Such as weather, scheduling, smoke management conditions, suitable prescription window, correct season, staffing and organization, safety considerations, etc.</i></p>
<p>D. Are processes in place to ensure all internal and external notifications and media releases will be completed?</p>
<p>E. Have key agency staffs been fully briefed about the implementation of this prescribed fire?</p>
<p>F. Are there circumstances that could affect the successful implementation of the plan?</p> <p><i>Such as preparedness level restrictions, resource availability, other prescribed fire or wildfire activity</i></p>
<p>G. Have you communicated your expectations to the Burn Boss and FMO regarding if and when you are to be notified that contingency actions are being taken?</p>
<p>H. Have you communicated your expectations to the Burn Boss and FMO regarding decisions to declare the prescribed fire a wildfire?</p>

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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Implementation Recommended by:

FMO or Prescribed Fire Burn Boss: Signature: _____ Date: _____

Implementation Recommended by:

FMO or Unit Duty Officer: Signature: _____ Date: _____

I am authorizing initial or continued ignition of this prescribed fire for the Operational Period (24 hours) starting _____, and a new 2A Authorization will be required for any subsequent or continued ignitions. It is my expectation that the project will be implemented within this time frame and as discussed and documented and attached to this plan. If the conditions we discussed change during this time frame, it is my expectation you will brief me on the circumstances and an updated authorization will be negotiated if necessary.

Additional Instructions or Discussion Documentation attached (Optional): Yes No

Ignition Authorized by:

Agency Administrator Signature and Title: _____ Date: _____

Local Unit Line Officer Concurrence (if not the qualified approver above):

Line Officer Signature and Title: _____ Date: _____

PRESCRIBED FIRE GO/NO-GO CHECKLIST (Prescribed Fire Plan, Element 2B)

Preliminary Questions	Circle YES or NO
A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? If NO proceed with the Go/NO-GO Checklist below, if YES go to item B.	YES NO
B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary? If YES , go to item C. If NO , STOP: Implementation is not allowed. An amendment is needed.	YES NO
C. Has the experience, qualifications, internal/external pressures, and fatigue levels of the implementation team has been evaluated, and identified concerns have been satisfactorily mitigated? (Note: use USFS Risk Calculator Mobile Application, IRPG Risk Management Process, Tailgate Safety Sheet, or similar tool for assessment.) If YES , proceed with checklist below If NO , STOP: Confer with AA and do not proceed with implementation until concerns are addressed.	YES NO
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	YES NO
Have ALL the required notifications been made?	YES NO
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	YES NO
Have ALL required current and projected fire weather forecast been obtained and are they favorable through ignition, holding and mop-up/control phases of the project?	YES NO
Are ALL prescription parameters met?	YES NO
Are ALL smoke management specifications met?	YES NO
Are ALL planned operations personnel and equipment on-site, available and operational?	YES NO
Has the availability of contingency resources applicable to today's implementation been checked and are they available? If Moderate or High complexity, are those contingency resources required to respond within 30 minutes available and in position to meet that timeframe?	YES NO
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	YES NO
If all the questions were answered "YES" proceed with a test fire. Document the current conditions, location, and results. If any questions were answered "NO", DO NOT proceed with the test fire: Implementation is not allowed.	
After evaluating the test fire, in your judgement can the prescribed fire be carried out according to the prescribed fire plan and will it mee the planned objectives? Circle: YES or NO	

Burn Boss Signature: _____ Date: _____

Element 3 – Complexity Analysis Summary

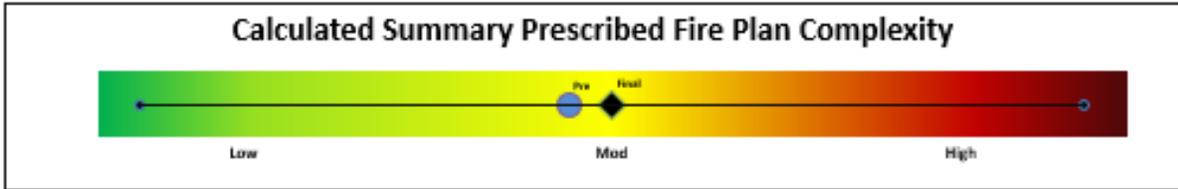


NWCG Prescribed Fire Summary and Final Complexity Worksheet, PMS 424-1

This worksheet is supplemental to the *Prescribed Fire Complexity Rating System Guide*, PMS 424. It is designed to enable effective risk management. The *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484, provides further explanation. This becomes Element 3 of the Prescribed Fire Plan.

Flumet		Quantity	Significance
Value	On-Site	Multiple	Med
	Off-Site	Multiple	High
	Public/Political Interest	Multiple	Med

Element	Preliminary Risk	Part-Plan Risk	Technical Difficulty	Calculated Rating
Safety	Med	Med	Med	Med
Fire Behavior	Med	Med	Med	Med
Resistance to Containment	Med	Med	Med	Med
Ignition Procedures and Methods	Med	Med	Med	Med
Prescribed Fire Duration	Med	Med	Med	Med
Smoke Management	Med	Med	Med	Med
Number and Dependence of Activities	Med	Med	Med	Med
Management Organization	Med	Med	Med	Med
Treatment/Burn Objective	Med	Med	Med	Med
Constraints	Med	Med	High	High
Project Legitimacy	Low	Low	Low	Low



Final Complexity	Final Complexity Determination Rationale
Mod	<p>These units will be burned in the Spring, winter or Fall if conditions are favorable to meet all burn plan objectives; The sites will be ignited individually or together when favorable conditions will be present for the duration of heat being present. Effects of smoke will be mitigated through monitoring of smoke and wind direction and before the units are burned, timing and speed of ignition, and assurance of favorable weather conditions.</p> <p>The potential consequences remain "high" for potential escape due to the project location and difficult access should a burn escape the unit boundary. More diligence must be placed on map-up for furthest uphill units to limit escape potential. Burning furthest uphill units first will create an anchor point/ "black" to burn from diminishing potential consequences as the project proceeds. Potential consequences to off-site values will not change due to project and unit locations. Proximity to owl cove and Roadless areas will not change. Map-up/patrol and conditions under which the units are burned can reduce the probability of an escaped fire but the consequences of such an event will remain the same.</p>

Signatures	Resource Plan Preparer's Name: _____ X _____ Date: _____ Preparer Technical Reviewer's Name: _____ X _____ Date: _____ Technical Reviewer Agency Administrator's Name: _____ X _____ Date: _____ Agency Administrator
Signatures	

Element 4: Description of Prescribed Fire Area

A. Physical Description

1. Location:

Legal description:	T	40 S	R	3W	S	
Latitude	42 6.960' N		Longitude		-123 5.353' W	
County & State	Jackson, Oregon		Distance & Direction to DA		18 miles SW	

This project is covered under 2 separate NEPA documents, The Upper Applegate Road Hazardous Fuel Reduction Project (UAR) and a more recent Upper Applegate Watershed Restoration Project that covers the entire watershed (UAWRP).

The Upper Applegate Watershed Restoration Project (UAWRP) is a watershed restoration project. The UAWRP planning area totals approximately 52,000 acres of both Forest and BLM administered lands located in Townships 39 S 3W, 39S 4W, 40S 2W, 40S 3W, and 40S 4W. The UAWRP overlaps the earlier UAR environmental assessment.

The Upper Applegate Road Hazardous Fuel Reduction Project (UAR) is located in Township 40s, Range 4w sections: 13, 24, 25 and 26. 40s, 3w sections: 4, 5, 6, 7, 8, 9, 17, 18, 19, 20, 29, 30 and 31. 39s, 3w sections: 10, 22, 28 and 32 (see attached vicinity map). The entire project area covers 4,150 acres. The project area is within the Applegate wildland-urban interface surrounding at-risk communities where over 520 residences are located along County Road 859 (Upper Applegate Rd.) Units to be burned for this project:

The Flumet prescribed fire is broken into 4 burn units that can be split up or burn separately. The best access is 788 road (Palmer Creek) The junction is approximately 6.5 miles south of Ruch off of the 859 (Applegate Lake road), then the north end of the unit begins on the west side of the road approximately ½ mile south of the junction. The east side boundary is the road until it hits private land and then it will be handline that skirts around the private and ties into Palmer Creek 1095 rd, which is also the south side boundary. The west and north boundaries will be handline that follows the ridgeline. There is road access near the knob on the top of the ridge on the northwest side from the 500 road which takes off to the north from the 1095 road.

2. Size:

Project Acres	4150 UAR 52,000 UAW	Primary Unit Acres	518
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3. Topography:

Low elevation	1700	Average aspect	E
High elevation	3300	Average slope	40%
Drainage	Applegate River		

The slope is variable with an average of 40%. Every aspect is represented in the project area, although east is the primary aspect.

UAR Flumet A (Palmer Cr) – The majority of this unit is a south aspect with some east and west slopes along the drainages.

UAR Flumet B (Gin Lin) – East aspect with some NE and SE aspects

UAR Flumet C (NE of Flumet Campground) - The upper end of this unit is 60% slope with the average of the rest of the unit being greater than 35%. The majority of this unit is east facing with a higher percentage being southeast with smaller northeast aspects. The lower boundary of this unit is the road above and west of Flumet Campground and the north and south boundaries following ridgelines up to a high knob on the west end of the unit.

UAR Flumet D (Flumet Campground) – This unit includes the Flumet campground. Flatter slope with the NE section having a little more SE aspect with a higher slope.

4. Project area:

Area History:

Fuels within the units C and D were generated from a commercial mechanical thinning which was then piled in 2018. The piles in these units were burned between 2018-2021.

The west (holding) ridgeline for Flumet A unit has piles and some scattered brush that has not been burned. There are also some older piles more interior in the unit and should be ok to be burned during the broadcast burn but should be inspected before ignitions begin.

Under burning is the next fuels treatment needed to meet the desired condition set forth in the Upper Applegate Road Hazardous Fuel Reduction Project and the Upper Applegate Watershed Restoration Project.

5. Ignition Units:

UAR Flumet A (Palmer Cr) 46 acres - T40S R3W sections 7

UAR Flumet B (Gin Lin) 268 acres - T40S R3W sections 5, 6, 7, & 8

UAR Flumet C (NE of Flumet Campground) 181 acres - T40S 3W sections 5 & 6

UAR Flumet D (Flumet Campground) 23 acres - T40S R3W section 5

B. Vegetation/Fuels Description

1. On-Site Fuels Data:				2. Adjacent Fuels Data:	
FBPS Fuel Model(s)		TU3 (70%)	GS3 (30%)	FBPS Fuel Model(s) TU2	
Fuel Loading	1 hour tlf	1.10	.3	General Description of Adjacent Fuels	
	10 hour tlf	.15	.25	Adjacent fuels are best described as a TU2, timber with a light grass/shrub understory. South of Palmer Creek is the Burnt Peak fire scar which has more grass component and a little less shrub than on site fuels. To the north and west is more timber litter and understory with slightly less shrub component than on site.	
	100 hour tlf	.25	0		
	Litter depth	1.3	1.8		
	Duff depth	1.4"-4.33 t/ac	1.2"-2.22 t/ac		
	Live woody	1.10	1.25		
	Live herbaceous	.65	1.45		
	Total fuel loading	8.55	5.05		
3. Percentage of vegetation type and fuels model(s) and comments:					
<p>Fuel loading was determined with photo series using Ashland Forest All-Lands Restoration supplement to the 2005 Scott and Burgan standard fuel model photo guide. These photo series were most closely modeled by fuel model TU3 (70%) and GS3 (30%). Fuel tonnage estimates were determined by the Standard Fire Behavior Fuel Models (Scott and Burgan, 2005) fuel model parameters.</p> <p>The fuels within this unit are primarily scattered Ponderosa Pine, Pacific Madrone, Douglas-fir, and Manzanita as well as smaller desired California Black Oak and Sugar Pine. There are some areas of discontinuous grass, conifer needles and hardwood leaves throughout the treatment area. Larger down fuels (10-hr to 1000-hr) are spotty in occurrence.</p> <p>The overstory primarily consists of the mixture Ponderosa Pine and Douglas-fir. In addition to these conifers, there are also hardwood trees including Pacific Madrone, and California black oak. The understory is dominated by young Pacific Madrone with some pockets of conifer regeneration, as well as Poison Oak, Manzanita, and Canyon Live Oak. There are pockets of thicker concentrations of understory and a component of dead and dying bug killed-stressed trees. On the southern aspects within the burn unit, stands are more open scattered pine and a denser grass/shrub component with older growth Manzanita and Buckbrush.</p> <p>These areas of light fuels can generate significant fire behavior (flame lengths and rates of spread) and potential leave tree mortality if ignitions strips are not closely monitored and appropriately adjusted to reduce expected fire behavior.</p>					

C. Description of Unique Features, Natural Resources, Values:

Listed Species (*Fritillaria gentneri*):

Overhead canopy shall be maintained within a 50 foot radius of *Fritillaria gentneri* plants.

The use of heavy equipment is not permitted within a 100-foot radius protection buffer surrounding *Fritillaria gentneri* sites, regardless of season. However, pick-up trucks, ATVs, UTVs, and similar soft-wheeled vehicles may be permitted on a plant site on a limited basis in dry conditions in the dormant season, if authorized by an agency botanist.

A leave area (skip or buffer) would be delineated around the population of *Fritillaria gentneri* that was found within the prescribed fire unit along Beaver Creek Road. The buffer (to protect the population) would be determined by the District and Forest Botanist during layout of the burn unit. The leave area would consider topography, aspect, canopy cover and other site specific variables such as understory shrub density and cover. It is particularly important to maintain shrubs and other vegetation directly adjacent to flowering *F. gentneri* because they provide a shield from browsing ungulates. The overall objective of this project design criteria is to avoid direct or indirect impacts to individual flowering plants and populations.

The burn unit is located in a *Fritillaria* Management Areas (FMA's) which are being designated as part of a partnership with the US Fish & Wildlife Service. Prescriptions within habitat would follow guidelines set forth in the FMA plan currently in development. The FMA plan will set forth parameters and guidelines for how to conduct fuels management work in habitat for *F. gentneri*. A fall burn with light fire effects is needed around all sensitive plant sites.

There is also a populations of the sensitive species *Rhamnus ilicifolia*. Fall burn is required to avoid growing season for the *Rhamnus*.

The Burn unit has patches star thistle and Himalayan blackberry in the interior. Crews and equipment should stay out of invasive and sensitive plant sites (see maps in Appendix A).

It is necessary that the agency botanist be advised which units are scheduled for treatment by February 4 of the calendar year prior to planned implementation, so that necessary surveys may be carried out at the proper time. This is pulled from the UAWRP EA under Botanical surveys pg 49 and may need to be addressed outside of this burn plan.

Flumet campound is in Unit D, coordinate with recreation prior to burning to establish particular needs and campground infrastructure and vegetation burn parameters.

Notify forest archaeologist of any heritage resources discovered during implementation or operations. If a cultural resource is found, cease construction activities at the location until site evaluation and determination of effect have been completed.

D. Maps – Attach in Appendix A

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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1. Vicinity (Required)
2. Project / Ignition Unit(s) (Required)
3. Values (Required)
4. Significant or Sensitive Features (Optional): Included Not Included
5. Fuels or Fuel Model(s) (Optional): Included Not Included
6. Smoke Impact Areas (Optional): Included Not Included

Element 5: Objectives

A. Resource Objectives:

Goals:

Currently as modeled by the Forest Service Wildfire Hazard Potential project, 62% of the watershed is mapped at being high risk for a wildland fire that would have the relative potential of being difficult for suppression resources to contain. Proposed vegetation management treatments will further increase resiliency throughout the Upper Applegate watershed by improving vegetation conditions and structure by reducing density, increasing canopy base height, removing encroaching conifers and reducing surface and ladder fuel loading.

Resource Objectives:

- Protect communities at risk from wildland fire.
- Increase forage for big game.
- Reduce re-sprout of hardwoods and brush.
- To increase the probability of a wildland fire occurrence with slow rates of spread, lower flame lengths, and with only occasional flare-ups.
- Reduce fire hazards to life, natural resources and amenities.
- Promote forest stand densities, structures, and species composition.
- Manage coarse woody material (CWM) and snags to supply organic material for soils, habitat for diverse organisms.

B. Prescribed Fire Objectives:

- Burn (blacken) 60-100% of ground surface with varied burn intensity
- Retain 80-100% of the existing hardwood and conifer over-story.
- Reduce litter and surface fuels (1 to 100 hr) by 30-80%.
- Retain 60-100% of 1000 hour fuel loading
- Limit scorch height to less than 30 feet for 80% of the unit.
- Top-kill 30-75% of brush
- Limit soil exposure to areas less than 100 square feet and less than 30% total for the unit.
- Prevent smoke from being carried to or accumulating in SSRA's or other areas sensitive to smoke. Verify smoke management guidelines for the day of the burn.

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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Element 6: Funding

A. Cost	\$500/acre
B. Funding Source	WFERX/NFHF10
C. Tracking Costs	Burn Boss will track costs in coordination with the district FMO and fuels staff.

Element 7: Prescription

A. Prescription Narrative:

1. Describe how fire behavior will meet objectives:

The prescribed fire prescription is a description of the fire behavior needed to obtain the prescribed fire and resource objectives. The weather and fuels parameters such as temperature and wind speed are used only to determine the fire behavior. The fire behavior range was developed based upon fire effects and impacts to the residual stand of timber whereas the minimal acceptable levels established for “outside area at critical holding points” uses control considerations for establishment of the guidance parameters. (See Behave runs) Fire behavior in some areas may be more intense due to heavier fuel load, slope, etc. Other areas may see less fire intensity due to lighter fuel load, higher fuel moisture, etc. This will create the desired mosaic burn pattern while accomplishing fuels reduction. Various burn patterns, fuel moistures, time of day, time of season, and other factors will influence the mosaic pattern.

The identified parameters are project implementation ‘averages’ that are expected to achieve such. However, during implementation, various portions of the treatment units might exhibit short duration fire behavior (flame lengths, rates of spread, etc.) that are outside of this range of ‘Acceptable Fire Behavior’ because of a combination of concentrations of heavier fuels, wind, slope, and fuel moisture/continuity but such situations should be of limited duration and extent. Short duration fire behavior does not constitute a violation of this burn plan.

B. Prescription Parameters:

1. Environmental Prescription	Acceptable Prescription Range			Outside area at critical holding point minimum acceptable moisture
	Low Fire Intensity	Desired Fire Intensity	High Fire Intensity	
Temperature (°F)	<65	65-79	80-89	
Relative humidity (%)	>35	34-25	24-20	
Mid-flame wind speed	0-4	5-6	7-8	
Wind direction (azimuth°)	All but SW	All but SW	All but SW	
1-hr fuel moisture (%)	>11	10-8	7-4	4
10-hr fuel moisture (%)	>14	13-9	<8	8
100-hr fuel moisture (%)	>16	15-12	<10	10
1000-hr fuel moisture (%)	>25	24-18	17-15	15
Live fuel moisture (%)	greater than or equal to 100	greater than or equal to 100	greater than or equal to 100	100

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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Additional Information

The west (holding) ridgeline for Flumet A unit has piles and some scattered brush that has not been burned. Before broadcast ignitions, Burn Boss needs to determine if these piles need to be burned before or can be burned concurrently with broadcast ignitions. There are also some older piles more interior in the unit and should be ok to be burned during the broadcast burn but should be inspected before ignitions begin. The burn areas are located on predominantly east/southeast facing slopes with good road access to the bottom and of the units. A significant portion of the burn unit is handline with no engine access, but the road systems will help to provide access for engines and hand crews to the bottom of the units. Applegate River is located at the bottom of the units and will be easy access for a water source for the burn and mop-up. The slope is variable with an average of 40%.

Projected weather over several days following the prescribed fire needs to be considered to ensure that the potential for escape is minimized. Projected weather will also help in determining mop-up and patrol needs.

1. Fire Behavior Parameters	Acceptable Fire Behavior Range			Outside area at critical holding points
	Low Fire Intensity	Desired Fire Intensity	High Fire Intensity	
Fuel Model(s): TU3 and GS3				
Rate of Spread (chains/hour)	1-4	4-8	8-12	20-30
Flame Length (in feet)	1-2	2-3	3-5	5-6
Scorch Height (in feet)	0-8	8-15	15-25	25-30
Probability of Ignition (%)	20-40	40-50	50-80	80 or greater
Spotting Distance (in miles)	0-.2	.2-.4	.4-.5	.6
<p>Prescription is defined as the measurable criteria that define a range of conditions during which a prescribed fire may be ignited and held as a prescribed fire. Parameters are quantitative variables expressed as a range that result in acceptable fire behavior and smoke management.</p>				
<p>Fire Behavior Narrative</p> <p>Inside unit calculations above were derived from the Behave Plus 6 program. Outputs for fuel models TU3 (70%) and GS3 (30%) were calculated using a backing fire. The fuel models used within the unit are being used to represent the majority of the fuel loading, however there may be pockets of higher or lower fuel loading within the unit.</p> <p>Outside unit calculations used fuel model TU2 were used with weather parameters at all the acceptable levels to determine potential worst case scenario fire behavior. Flame heights may be higher than predicted in pockets of heavier fuel. The outside behave runs were determined using a head fire. Flame heights will change with the aspect, changing fuel models, flanking, and backing fire.</p>				

2. Fire Modeling or empirical documentation:

Attached in Appendix E.

Element 8: Scheduling

A. Implementation Schedule 1. Ignition Time Frames/Season(s):	Fall /Winter - Late morning to afternoon
B. Projected Duration:	October 1 Through March 1
C. Constraints:	
<p>Wind direction for smoke clearance. Any direction but SW.</p> <p>Can only be burned in the fall/winter or outside of the growing season for the sensitive plant <i>Rhamnus ilicifolia</i> and <i>Fritillaria gentneri</i>. For more information, see Element 4 C, Description of Unique Features, Natural Resources, and Values</p> <p>Unit needs to have a FMA plan done before burn and check with Botanist before burning to determine if any plants need to be protected</p> <p>There are no known wildlife constraints within the unit. Consult with wildlife biologist final determination of species present in the area and any associated constraints.</p>	

Element 9: Pre-burn Considerations and Weather

A. Considerations:

1. On Site
<p>Fuel and weather conditions must be monitored closely before anticipated ignition date and time. Attempt should be made to gather onsite weather observations leading up the ignition time to identify any weather anomalies that may not be predicted for the general zone forecast. Consider placing a portable RAWS near the project area. Prescription parameters must be adhered to in order to ensure design criteria of Upper Applegate Road Hazardous Fuel Reduction Project are met. Design criteria of the project are addressed in the goals and objectives.</p> <p>Line construction on all units needs to be completed prior to ignition. Hoselays, pumps and fold-a-tanks are recommended if burning near the high end of the prescription. Every effort will be made to protect snags by adjusting firing techniques and pulling back heavier fuel loads for base of snags. Snags that threaten control lines, have a high level of decomposition, and/or are a safety concern can be felled.</p>
2. Off Site

Smoke clearance must be granted prior to ignition and registered with the state of Oregon. Ensure notifications are made. Ensure unit and resource information is entered into REBOL. Obtain a spot weather forecast for the day of ignition. Ensure resource needs for ignition, holding and contingency at a minimum meet the requirements in the plan. Ensure enough fuel and other equipment is available and adequate for completing projected accomplishments. Smoke signs may be in place prior to ignition. Signs should be placed far enough from units to ensure notice is given well before encountering potential visibility issues.

B. Method and Frequency for Obtaining Weather and Smoke Management Forecast(s):

Proximity to nearest RAWs	Squaw Peak, 5 miles to the Southeast			
Need for on-site RAWs		Yes	X	No
Additional Information				
<p>A spot weather forecast is required prior to ignition and will be obtained from the National Weather Service in Medford (541-776-4332). Weather observations should be taken at the site however, if this is not possible, use the closest representative site (Squaw Peak RAWs). The burn boss or designee will obtain a copy of the spot forecast each day prior to ignition on all days of ignition and any days the fire is actively spreading. A copy of the forecast(s) will be included in the project file.</p> <p>Current weather observations will be recorded on the forecast form on the morning of the scheduled burn. The Burn Boss or designee will closely monitor and record weather conditions and include them in the project file.</p> <p>The Burn Boss or designee will also contact Oregon Smoke management forecaster at (503) 945-7401 the day before the burn and the day of the burn.</p> <p>Forecasted weather beyond the ignition operation and need for additional spot weather forecasts should be taken into account in order to minimize the risk of a later escape. Local weather phenomena to monitor that may contribute to an escape are:</p> <ul style="list-style-type: none"> • Long unexpected drying period after ignition <p>An east or high wind event</p>				

C. Notifications:

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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The Burn Boss or designee shall ensure that all notifications have been completed by the implementing party prior to ignition.

Local homeowners will be notified prior to ignition. Residents in close proximity will be contacted by personnel going door to door. Those further from the burn area will be notified by email from Sandy Schafer, whom the burn Boss will contact. The district will also engage in extensive outreach prior to the burn to build a more comprehensive email list for burn notification purposes.

A press release will be issued prior to the burn. Contact the PIO 1 day prior to ignitions.

On the day of the burn, roads to the units and the surrounding area will be checked to ensure that visitors are informed of the event. The Burn Boss or designee shall be the primary contact for on-site information distribution. All access gates may be locked during the burning operations.

In the event of an unexpected emergency situation involving the public as a result of the project, the Burn Boss or designee will contact RVICC to initiate action by the appropriate authorities (Fire/Rescue, Law Enforcement, etc.). The Burn Boss or designee will be the primary Forest Service representative for public information and safety issues.

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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Who	When ¹	Phone Number and/or e-mail	Responsibility	Date	Contact Type ²
RVICC	B,D	(541) 618-2510	Burn Boss		PC
Emergency Communications of Southern Oregon (ECSO)	B	(541) 776-7206 Non-emergencies 911- Emergencies	Burn Boss		PM
Applegate Fire District #9	B	(541) 899-1050	Burn Boss		PM
ODF Smoke Mgt. Forecaster	B,D	(503) 945-7401	Burn Boss		PC
Virginia Gibbons- Forest PIO	Prior to season	vgibbons@fs.fed.us	Burn Boss or FMO		EM
Star Office Front Desk	B,D	(541) 899-3800	Burn Boss		PC
Sandy Schafer	B	(541) 899-9541 sassyone@starband.net	Burn Boss		EM
Siskiyou Mountain RD employees	B,D	pdl r6 rrs siskiyoumountains@fs.fed.us	Burn Boss		EM
Supervisors Office Front Desk	B,D	(541) 618-2200	Burn Boss		PC
Jen Sanborn – District Ranger	B,D	(541) 899-3810 (w)	Burn Boss		PC
Rob Budge – Forest Fuels Officer	B	(541) 618-2102 (541) 255-6364	Burn Boss		PM
Dan Quinones – Forest FMO	B	daniel.e.quinones@usda.gov	Burn Boss		EM
Adjacent homeowners	B	Door to door	Burn Boss		DC
Local homeowners	B		Burn Boss contact S.Schafer		EM
¹ When to Notify	Before (B) : The day prior to burn day. Day of (D) : Prior to ignition on burn day. After (A) : After burn is completed.		² Contact Type	Phone Contact (PC) Phone Message (PM) Direct Contact (DC) E-mail (EM)	

Element 10: Briefing

A. Briefing Checklist, including, but not limited to: (additional items may be added)

- Burn Organization and Assignments
- Prescribed Fire Objectives and Prescription
- Description of Prescribed Fire Project Area
 - Special considerations and sensitive features
- Provide Maps
- Expected Weather and Fire Behavior
 - Review SPOT weather forecast
- Weather Data Collection Procedures
 - Make Weather Observer Assignment and Set Collection Schedule
- Review Burn Prescription and Critical Weather that Will Terminate Burn
- Ignition Plan and Possible Problems
- Holding Plan and Possible Problems
- Contingency Plan & Assignments
 - Identify High Value and Areas of Special Concern
 - Identify Mitigation Measures, Procedures, Project Boundary, Etc.
- Wildfire Declaration
- Safety and Medical Plan
 - Identify On-Site Personnel with Medical and Helitack Qualifications
- Job Hazard Analysis (JHA)
- Review LCES and Identify Lookout Assignments
- Communication Plan
- Aerial Ignition Briefing - Project Aviation & Safety Plan (PASP) (if applicable)

Crew Briefing (Responsibility - Ignition Specialist and Holding Specialist Functions)

- Make Crew Assignments, Record Names, and Review Chain of Command
- Make Equipment Assignments and Physically Test Equipment Prior to Ignition
- Assign Radio Frequencies and Physically Test All Radios Prior to Ignition
- Review Contingency Plan, Wildfire Declaration, Procedures, and Mitigation
- Review Everyone's Personal Protective Equipment
- Discuss Probable Starting and Ending Times
- Assure Everyone Knows Position, Responsibility, and Procedures
- Double check that all personnel have reviewed & signed the JHA
- Review Incident within an Incident Procedures

SIGNED

DATE

Prescribed Fire Burn Boss

Element 11: Organization and Equipment

Minimum Workforce & Equipment Needed to Conduct Burn LOW PRESCRIPTION RANGE					
A. Positions					
Position	ICS Code or Unit of Measure	Total Amount Needed	Line Building Rate (Ch/Hr)	Amount Supplied By:	
				Agency	Contractor/Purchaser
Prescribed Fire Burn Boss	RXB2	1			
Firing Boss	FIRB	1			
Holding Specialist Function	ENGB or Higher	1			
Fire Effects Monitor	FEMO				
Lookout	FFT1				
Engine Boss, Operator, and Crew	ENGB/ENOP	1			
Ignition Crew	FFT2	3	3		
Holding Crew	FFT2	5	5		
B. Equipment					
Engine (Any Type) staffed w/3 (minimum)		1	12		
Dozer (Type)					
Helicopter					
Helitorch					
C. Supplies					
Drip Troches (minimum)		5			
Chain Saws (minimum)		1			
Hand Tools (minimum)		8			
Fuel gallons (minimum)		25			
Portable Water Tanks					
Road Signs					
Total Line Production Rate			20		
Remarks:					
Behave runs indicate having a line production rate of 20 ch./hr. at the low prescription range to contain a spot outside of the unit. Production rates in a timber (litter & understory) fuel model were used.					

**Minimum Workforce & Equipment
Needed to Conduct Burn
DESIRED PRESCRIPTION RANGE**

A. Positions

Position	ICS Code or Unit of Measure	Total Amount Needed	Line Building Rate (Ch/Hr)	Amount Supplied By:	
				Agency	Contractor/Purchaser
Prescribed Fire Burn Boss	RXB2	1			
Firing Boss	FIRB	1			
Holding Specialist Function	ENGB or Higher	1			
Fire Effects Monitor	FEMO				
Lookout	Specify Qual.				
Engine Boss, Operator, and Crew	ENGB/ENOP	1			
Ignition Crew	FFT2	3	3		
Holding Crew	FFT2	8	8		

B. Equipment

Engine (Any Type) staffed w/3 (minimum)		2	24		
Dozer (Type)					
Helicopter					
Helitorch					

C. Supplies

Drip Troches					
Chain Saws					
Hand Tools					
Fuel					
Portable Water Tanks					

Total Line Production Rate **35**

Remarks:

Behave runs indicate having a line production rate of 35 ch./hr. at the desired prescription range to contain a spot outside of the unit. Production rates in a timber (litter & understory) fuel model were used.

Minimum Workforce & Equipment Needed to Conduct Burn HIGH PRESCRIPTION RANGE					
A. Positions					
Position	ICS Code or Unit of Measure	Total Amount Needed	Line Building Rate (Ch/Hr)	Amount Supplied By:	
				Agency	Contractor/Purchaser
Prescribed Fire Burn Boss	RXB2	1			
Firing Boss	FIRB	1			
Holding Specialist Function	ENGB or Higher	1			
Fire Effects Monitor	FEMO				
Lookout	Specify Qual.				
Engine Boss, Operator, and Crew	ENGB/ENOP	1			
Ignition Crew	FFT2	6	6		
Holding Crew	FFT2	20	30		
B. Equipment					
Engine (Type)	EA	3	36		
Engine (Type)					
Dozer (Type)					
Helicopter					
Helitorch					
C. Supplies					
Drip Troches					
Chain Saws					
Hand Tools					
Fuel					
Portable Water Tanks					
Total Line Production Rate			66		
Remarks:					
Behave runs indicate having a line production rate of 60 ch./hr. at the high prescription range in order to contain a spot outside of the unit. Production rates in a timber/grass understory fuel model were used.					

Element 12: Communication

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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A. Radio Frequencies:

Channel	Function	Frequency	Band Width	Assignment	Remarks
1. COMMAND frequency(ies):					
FS	Dutchman Repeater	TX: RX:	164.9375 TX 169.9750 RX	Narrow	118.8 TX 67.0 RX Command (Primary)
FS	Whisky Repeater	TX: RX:	164.9375 TX 169.9750 RX	Narrow	173.8 TX 67.0 RX Command (Secondary)
1. TACTICAL frequency(ies):					
FS	PROJECT 1	TX: RX:	169.1750(T/R)	Narrow	67.0 (T/R) TAC (Primary)
FS	PROJECT 2	TX: RX:	168.3500(T/R)	Narrow	67.0(T/R) TAC (Secondary)
2. AIR OPERATIONS frequency(ies)					
FS	Air to Ground 51	TX: RX:	168.31250(T/R)	Narrow	NONE
REMARKS					
<p>All frequencies are narrow band. All radios on site must be narrow band capable.</p> <p>FS Project 1 or 2 will be the primary operational frequency. (Will be decided during briefing and will be known by all personnel on burn and verified prior to ignition of unit).</p> <p>Rogue Valley Interagency Communications Center will be required to remain staffed if Prescribed Fire Operations are taking place.</p> <p>Tactical channels will be used to communicate project information and instructions between Rx Fire personnel. Command channel will be used to relay information to dispatch and in the event the project is declared an escape, the tactical channels will be used to conduct fire operations.</p> <p>Star Ranger Station - (541) 899-3800 RVICC - (541) 618-2510 Need to verify repeaters to make sure no change.</p>					

B. Telephone Numbers:

Contact Name	Title	Primary Phone	Alternate
Jen Sanborn	District Ranger	541-864-0900	
Rob Marshall	District FMO	541-200-4188	
Todd Zumhofe	District AFMO	541-944-3580	
Eli Berman	Fuels Technician	458-212-1665	
Kit Colbenson	District Fuels AFMO	541-218-3175	
Brad Hardesty	Captain 312	541-373-0087	
AJ Panks	Patrol 11	541-531-7266	
RVICC Dispatch	Dispatch	541-618-2510	
Merv George	Forest Supervisor	707-373-4151	541-618-2030
Applegate District #9	Main office	541-899-1050	
Medford NWS	Fire desk	541-776-4332	
ODF – Lee Winslow	Assistant District Forester	541-621-4110	

Element 13: Public and Personnel Safety, Medical

A. Safety Hazards:

<p>Firefighter</p> <p>Inherent risks exist due to the nature of the work. LCES will be strictly adhered to during the entire operation. Safety zones will be identified before the burn and discussed during the briefing.</p> <p>Standard hazards exist in the units which include snags, steep terrain, snakes, bees, rolling material and exposure to smoke. These hazards will be covered in the briefing.</p> <p>Minimize exposure to smoke. Personnel will be rotated for holding and lighting as needed to limit the exposure to residual smoke.</p>
<p>Public</p> <p>Major road systems that maybe affected by smoke will have signs placed on them. Gravel roads with or without gates on them maybe locked or blocked off for public safety. The Gin Lin trail and Flumet campground will be clear of public prior to burning operations.</p> <p>Lingering residual smoke may be a problem for a short period of time. Smoke may cause minor eye and respiratory irritation to individuals that are in direct contact with smoke. Weather conditions such as rain, light breeze, high mixing heights and /or snow will dissipate smoke at a higher rate.</p>

B. Mitigation Measures Taken to Reduce the Hazards:

<p>The Go/No Go checklist will be completed and approved prior to ignition operations taking place.</p> <p>Units are located within close proximity to communities of – Medford as well as Grants Pass, Oregon -which are Smoke Sensitive Receptor Areas (S.S.R.A) for smoke management. Ignition will take place when winds are favorable so that smoke is not blown into the receptor areas. Smoke exposure may cause some localized health or safety concerns over a short period of time. Members of the public have expressed some concerns about smoke in the past.</p> <p>The Job Hazard Analysis (JHA) located in Appendix D will be discussed prior to ignition on unit.(The JHA will be reviewed with all personnel on the unit)</p> <p>LCES will be strictly adhered to during the entire operation. Safety zones will be identified before the burn and discussed during the briefing. All personnel who are within the active burn area are required to wear personal protective equipment (PPE).</p>

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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C. Emergency Medical Procedures:

In the event of serious accidents or injuries, the burn boss shall be notified immediately. Individuals with medical (i.e. First Responder, EMT, Paramedic) and helitack qualifications should be identified at the pre-burn briefing. The burn boss will initiate on-site response (if not already in progress) and coordinate additional response needs.

Medically qualified personnel on the burn will evaluate the extent of the injury, render first aid, and determine further actions to be taken. Rogue Valley Interagency Communications Center will be notified and advised as to actions to be taken and additional assistance required.

The attached Medical Incident Report (MIR) will be used for all incidents requiring medical transport. MIR information will then be relayed to RVICC to facilitate transport.

D. Emergency Evacuation Methods:

For minor injuries, individuals who are ambulatory will be transported by vehicle to the nearest medical facility. For more serious injuries, transportation will be by ground or air ambulance. The medical facility will be contacted as soon as practical and advised of injuries and eta for transport of injured individual.

Refer to project map (attached)

The following lat/long for a helicopter medic is located at 4207.528 N by 123 4.700 W is the intersection of the 859 Applegate Lake road and the 788 road that goes to Palmer Creek and is located northeast of the burn unit.

Directions to the units from Ruch. Travel south approximately 6.5 miles on County Road 859 (Applegate Lake) to the 788 road (Palmer Creek) junction (**medivac location**). The north end of the unit begins on the west side of the road approximately ½ mile south of the junction on 788 road.

E. Emergency Facilities:

Element 14: Test Fire

A. Planned Location:

A test fire is required at the start of each ignition operation. The test burn should be in a location that is easily extinguishable and representative of the fuels in the unit as a whole. The purpose of the test fire is to verify that the prescribed fire behavior characteristics will meet management objectives and to verify predicted smoke dispersion. On multiple-day projects, evaluation of current active fire behavior, in lieu of a test fire, may provide a comparative basis for continuing and must be documented. If in doubt however, initiate a separate test fire and evaluate results.

Documentation of the test fire conditions and results will be made on a Unit Log and observations recorded on the Weather/Fuels/Fire Behavior Observations sheet.

B. Test Fire Documentation:

Location:

Date and Time:

1. Weather/Fuels Conditions On Site	
Cloud Cover %	
Temperature	
Relative Humidity	
Fine Dead Fuel Moisture	
Wind Speed	
Fuels	

2. Test Fire Results					
Flame Length					
Rate of Spread					
Smoke Dispersion					
Other					
The test fire meets the prescription parameters	<table border="1" style="width: 100%;"> <tr> <td style="width: 25%; text-align: center;">Yes</td> <td style="width: 25%;"></td> <td style="width: 25%; text-align: center;">No</td> <td style="width: 25%;"></td> </tr> </table>	Yes		No	
Yes		No			

SIGNED _____ **DATE** _____
 Prescribed Fire Burn Boss

Element 15: Ignition Plan

A. Firing Methods:

Hand ignition plan will be used to utilize strip-head firing, flanking, backing and chevron technique to produce desired results.

Firing methods may vary from those suggested above based on the weather parameters that occur the day of the burn as long as objectives are being met.

1. Ignition Techniques, Sequences and Patterns

Ignition will typically begin on the downwind side or top of units. Ignition will progress from the downwind side to the windward side of unit (e.g. into the wind) or from the top of the unit to the bottom of the unit. Depending on fuel and weather conditions, this will require multiple individual burn strips to complete the entire unit being fired. A backing fire may be used for most weather fuel conditions with an exception being during low prescription conditions and low wind speed. The wind direction will determine which side of each unit is ignited first.

Ignitions will not occur within 25 feet of any drainage. Fire will be allowed to “back” in these areas.

Areas with less surface fuel may be used as intermediate control boundaries if multiple day ignitions are planned. There are no roads and minimal natural barriers within the units.

The Firing Boss and Holding Specialist are expected to work closely together to see that the ignition pattern and sequence do not present concern for control of the burn or fail to achieve resource objectives. The Burn Boss and Ignition Specialist will work together to determine the best firing pattern on day of burn and this may vary on different ignition days depending upon existing or expected conditions during burn. They will determine such things as when/where ignition will start considering such things as weather conditions and prediction, wind direction/speed, smoke management, fuel loading, fuel moisture, fuel continuity, topography, aspect, presence of sensitive or protected sites, availability of personnel/resources, etc.

The ignition pattern will influence fire behavior. The planned ignition pattern, methods, etc. should be reviewed by burn personnel on a burn map on the day(s) of ignition to reflect the plan for that day. This should show general ignition starting points, routes, etc.

Once a sufficient blackline (headstrip) is established along the top of the unit as an anchor, flanking fire can precede down a portion of each flank of the day’s burn area commensurate with ignition of the interior of the burn area and recognizing the potential for a flanking fire become a head fire with a wind shift towards the interior of the unit. This would then be followed with igniting off the (location) flank of the compartment.

The ignition pattern and sequence are suggested and may be modified to better suit the

current conditions experienced on the day of the burn. The fuel loading, slope, aspect and wind direction within each unit should be the dominant influence for fire behavior and the primary factor in establishing the ignition pattern and sequence for the unit. The type of ignition pattern and the rate used will influence fire behavior.

If weather is forecasted to exceed prescription parameters, ignitions will cease in time to secure the burn area before going out of prescription.

B. Firing Devices:

Hand lighting with drip-torches, fusees, and flares.

C. Minimum Ignition Staffing:

Refer to Element 11 to view the organization to be utilized. Ground ignition will require close coordination of Burn Boss, Firing Boss, and Holding Boss.

Lighters may be used as holders and will be interchangeable as conditions change.

Element 16: Holding Plan

A. General Procedures for Holding:

Holding crews will be stationed along the fireline portion of the unit. Some may be stationed at the bottom of the unit along both the bottom hand fireline and County Road 859 to monitor for potential spotting or slop-overs.

All slop-over and spot fires will be lined as soon as practical. The Burn Boss will be immediately notified of any fire that occurs outside of the unit. These fires will be mopped up 100% and marked on a map. The most likely area for holding problems is along the ridgetop (spot fires) or flanks of the unit where some spotting or rollers could occur.

Lighters may be used as holders and will be interchangeable as conditions change. If the Burn Boss makes a decision to discontinue ignition, all crew members will go into a holding and, or mop-up phase unless the Burn Boss decides otherwise.

Predicted weather over several days following the prescribed fire needs to be taken into account in order to ensure that the potential for escape is minimized. Predicted weather will also help in determining mop-up and patrol needs.

There is access to water along the river. Draft site at Palmer Creek intersection of 859 and 1095. Can put a pump anywhere in the Applegate River.

B. Critical Holding Points and Actions:

The most likely areas for holding problems will be along the control lines that are either “over-slung” or “under-slung” resulting in a higher potential for rolling material to cross control lines, or higher flame lengths increasing the potential for slop-overs. Holding personnel will be stationed along the control lines to monitor for potential spotting. Hose-lays will be utilized when burning under the high prescription parameters.

Critical holding lines will be next to the private land to the southeast and the north end of the unit, as well as the ridgetop handlines.

All fire should be kept within the burn unit but it **MUST** be kept within the project area. Any fire outside of the burn unit should be closely monitored by the Burn Boss until it is contained/controlled/mopped up **OR** managed such that resource impacts are acceptable and fire stays or is expected to stay within the project area. The Burn Boss must consider whether resource objectives and constraints are being achieved or whether there is an unacceptable risk of the burn escaping the fire burn unit and potentially damaging other public or private lands or infrastructure.

C. Minimum Organization or Capabilities Needed:

Minimum capabilities needed for holding are identified under Element 11 - Organization and Equipment. The Holding boss qualifications will be based on complexity of burn and holding operation. On burn day and subsequent days of the prescribed burn, a mix of the number and kinds of hand crews and engines may be modified as long as stated production capabilities are not compromised. As the prescribed burn progresses from ignition to holding to mop up and patrol, specified capabilities and/or types of resources may be adjusted.

Lighters may be used as holders will be interchangeable as conditions change.

D. Mop-up and Patrol:

Resources will be assigned or requested by the Burn Boss for at least two shifts immediately after the completion of ignition to patrol the burn. The burn will be patrolled regularly thereafter until declared out. Specific instructions/objectives will be provided to the mop-up and patrol resources by the Burn Boss, with the perimeter and potential problem areas being the priority. Mop-up standards specified by the burn boss will greatly reduce the probability of an escaped burn under the projected 7-10 day weather outlook. Careful consideration will be given to firefighter risk and exposure in developing/implementing mop-up and patrol standards. This documentation will be added to the record of the final burn plan package. Documentation needs to be completed on a daily basis until the burns are declared out and shall be included in the final project file. Once burn is determined secure by the Burn Boss responsibility of burn may be transferred to District FMO or Duty Officer. Transfer will be recorded in burn notes as well as communicated to Resources on burn and Dispatch.

The burn will be declared out when there is an absence of visible smoke for three consecutive days. The burns may need to be checked again if hot and dry weather and/or windy conditions occur after the completion of a burn.

E. Conditions for Leaving Burn Unattended:

The Burn Boss can release the crew at the end of the day if all spot fire or slop-overs are lined and/or satisfactorily mopped up such that the Burn Boss is convinced that these areas will not cause further problems or concerns until the crew returns the next day **AND** at least one of the following items:

1. Area adjacent to line (or within 50 feet) is black or without visible flame
2. Area within 33 feet is 100% mopped up (no visible flame or visible smoke)
3. Current and expected weather conditions, current and expected fire activity and potentially ignitable fuels are such that the Burn Boss is confident there will be no problems until crew returns the next day.

Element 17: Contingency Plan

A. Management Action Points or Limits: (Optional MAP Table Format)

Ignition Phase:

1. Management Action Point – Documentation Element	Management Action Point Narrative:
Designator and Description:	Fire effects
Condition:	Fire behavior, resource impacts, vegetation mortality, etc. are exceeding objectives or constraints and on-site resources are insufficient to change this situation.
Management Intent:	Keep fire effects within acceptable range
Recommended Action(s) to Consider:	Consider stopping (if practical), slowing down, or changing ignition patterns.
Recommended Resources:	Use available lighters as holders. Order 1 handcrew/engine any type
Time Frame:	.5 hours
Describe the Consequences of not taking the recommended action(s) (Optional):	Mortality in excess of objectives, unacceptable resource impacts
Responsibility:	Burn boss
Date Each Action is Initiated (Optional):	

2. Management Action Point – Documentation Element	Management Action Point Narrative:
Designator and Description:	Fire behavior
Condition:	Multiple spot fires or slop overs threaten to exceed the capability of on-site resources and/or fire threatens to leave the project area
Management Intent:	Keep fire within the project area and off of private lands
Recommended Action(s) to Consider:	1. Consider stopping (if practical), slowing down, or changing ignition patterns. Use available lighters as holders. 2. Contact and work with Applegate Fire District if structures are potentially threatened.
Recommended Resources:	Use available lighters as holders. 1. Order 1 handcrew/engine any type 2. FMO and Fire Chief
Time Frame:	1. 1.5 hours 2. Immediately if structures are threatened.
Describe the Consequences of not taking the recommended action(s) (Optional):	1. Fire leaving the project area and converted into wildfire. 2. Fire consuming private property.
Responsibility:	Burn boss
Date Each Action is Initiated (Optional):	

3. Management Action Point – Documentation Element	Management Action Point Narrative:
Designator and Description:	Incident within incident
Condition:	Accident with a serious injury occurs during implementation or holding of the burn and is a significant distraction to the Burn Boss or assigned resources
Management Intent:	Keep all personnel safe and keep fire within the project area and off of private lands
Recommended Action(s) to Consider:	1. Consider stopping (if practical) or slowing down ignition. Use available resources to manage the incident within incident. 2. Implement necessary measures to “take care of our own.”
Recommended Resources:	Use available lighters as holders. 1. Order 1 handcrew/engine any type 2. FMO and Fire Chief
Time Frame:	.5 hours
Describe the Consequences of not taking the recommended action(s) (Optional):	1. Fire leaving the project area and declared a wildfire. Fire impacting private property. 2. Firefighters left without adequate support.
Responsibility:	Burn boss
Date Each Action is Initiated (Optional):	

4. Management Action Point – Documentation Element	Management Action Point Narrative:
Designator and Description:	Smoke
Condition:	Smoke impacts or threatens to impact Smoke Sensitive Receptor Areas or areas with significant population (sensitive areas)
Management Intent:	Keep smoke from exceeding critical levels
Recommended Action(s) to Consider:	Consider stopping (if practical) and beginning mop-up. Contact ODF smoke management.
Recommended Resources:	Use available lighters as holders. Order 1 handcrew/engine any type
Time Frame:	1.5 hours
Describe the Consequences of not taking the recommended action(s) (Optional):	Air quality violation
Responsibility:	Burn boss
Date Each Action is Initiated (Optional):	

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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Patrol Phase:

1. Management Action Point – Documentation Element	Management Action Point Narrative:
Designator and Description:	Post ignition patrol
Condition:	<ol style="list-style-type: none"> 1. Weather conditions and fuels favorable for initiating spot fires or slopovers. 2. Forecasted wind event. 3. Residual smoke concerns.
Management Intent:	<ol style="list-style-type: none"> 1. Keep fire within the project area and off of private lands. 2. Minimize smoke complaints from public.
Recommended Action(s) to Consider:	Monitor weather and forecasts. Patrol unit. Mop up as conditions dictate.
Recommended Resources:	<ol style="list-style-type: none"> 1. Burn Boss 2. 1 engine (type 3-6) or patrol
Time Frame:	<ol style="list-style-type: none"> 1. Burn Boss - Monitor weather daily. 2. Patrol weekly at minimum. 1 engine or patrol vehicle available within 2 hours
Describe the Consequences of not taking the recommended action(s) (Optional):	<ol style="list-style-type: none"> 1. Escape 2. Smoke complaints
Responsibility:	Burn boss
Date Each Action is Initiated (Optional):	

Responsibility:	Burn Boss
Date Each Action is Initiated (Optional):	

B. Actions Needed

If a condition or ‘trigger point’ has been reached and contingency actions are being taken, the District Ranger (**Vacant, need to check phone number**) and District FMO (Rob Marshall @ (541) 200-4188) will be contacted.

If the contingency actions are successful at bringing the project back within the scope of the Prescribed Fire Plan, the project may continue. If contingency actions are not successful by the end of the next burning period, then the prescribed fire will be declared a wildfire.

The strategy/contingency action for controlling an escaped fire/wildfire will include flanking the fire until the forward rate of spread is stopped or by burning out from roads, fuel breaks, trails and/or natural barriers.

C. Minimum Contingency Resources and Maximum Response Time(s):

Resource	Agency & Location	Maximum Response Time	Confirmation of Availability*	
			Yes/No	Date
1 10 person crew	Any, TBD	30 Min		
1 wildland fire engine	Any, TBD	30 Min		

* To be completed within one day of the burn and adjusted during course of extended burning conditions

Element 18: Wildfire Declaration

A. Wildfire Declared By:

The Prescribed Fire Burn Boss will get confirmation from District or Forest FMO to declare the burn a wildfire.

If any of the following situations occur, the burn will be declared a wildfire, initial attack will occur, and appropriate management response will take place.

1. Contingency actions have failed or are likely to fail and cannot be mitigated.
2. Fire outside of the project area. And cannot be readily contained.
3. Smoke impacts necessitate conversion to wildfire.

After wildfire declaration, a project burn cannot be returned to a prescribed fire.

B. IC Assignment:

Should a wildfire be declared, the Prescribed Fire Burn Boss will become the Incident Commander, in the event a contract burn escapes the COR/PI will assume the role of IC and the contract crew shall take immediate action to control, suppress and mop up the escape fire, the contractor shall work under the direct supervision of the government and continue working until relieved, released or replaced by the government. The IC will organize all on-site resources for a safe and aggressive response. Personnel within the prescribed fire organization will transition into ICS wildfire positions they are qualified to carry out. The IC will order additional suppression resources identified in the Contingency Plan as well as any other required resources necessary to support the suppression effort.

Upon a wildfire conversion occurring, all overhead personnel will begin to document actions taken on a Unit Log. After the incident is contained, the Prescribed Fire Burn Boss will submit a post fire report documenting weather, resources on site, ignition operations, holding actions, and other pertinent data.

C. Notifications:

The Prescribed Fire Burn Boss/IC will notify RVICC and the Siskiyou Mountains District Fire Management Officer (FMO) of the escape and identify himself/herself as the IC. FMO will then notify the District Ranger and the Rogue River-Siskiyou Fire Staff Officer. The FMO will notify contacts listed on the notification plan of the escape and the current situation.

Burn Boss is responsible, via the district FMO and Forest Duty Officer, to insure notification of the regional fire management officer is made within 24 hours of an escape, threat of an escape, or activation of contingency resources identified in the plan, or any prescribed fire that requires additional resources or operational time not planned or accounted for.

D. Extended Attack Actions and Opportunities to Aid in Fire Suppression (Optional):

The appropriate management response will be used in order to flank the fire with engines or hand crews until the forward rate of spread is stopped. The containment strategy will be to utilize safe anchor points and create direct fire line where feasible and indirect fire line, including burning out, depending upon location of natural barriers and roads. The FMO and/or IC, Resource Advisor, and Agency Administrator may develop a WFDSS which will determine the appropriate management response to the escaped fire. The Wildland Fire Decision Support System (WFDSS) process is required when a wildfire escapes initial attack.

Opportunities to aid in fire suppression include: utilize existing roads in the vicinity of the burn unit, moist drainages, and changes in fuels (i.e. transition from brush field into timber fuel models).

Element 19: Smoke Management and Air Quality

A. Compliance:					
Guidelines in the Oregon Smoke Management Plan will be followed with smoke clearance provided by Oregon Department of Forestry / SALEM FORESTRY WEATHER CENTER (Salem).					
B. Permits to be Obtained:					
Smoke Management Number:					
Unit will be registered with ODF smoke management prior to ignition.					
C. Smoke Sensitive Receptors:					
Identify any non-attainment or Class I airsheds within 15 miles:		No Class 1 airsheds within 15 miles.			
Designated Area (DA)	Distance & Direction to DA		Designated Area (DA)	Distance & Direction to DA	
	Distance	Azimuth		Distance	Azimuth
Grants Pass	25.5	331	Central Point	20	24
Medford	18	34	Eagle Point	28.5	30
Phoenix	17	50	Jacksonville	15	23
Talent	17.25	58	White City	25.5	30
Ashland	19.5	73.5			
D. Potential Impacted Areas:					
Ruch Elementary School, Local residents and roads could be impacted by residual smoke if a strong inversion occurs in the evening hours. Ignition timing will incorporate this possibility. Smoke mixing and dispersion will be forecasted by the local weather forecast. Smoke warning may be utilized.					
E. Mitigation Strategies and Techniques to Reduce Smoke Impacts:					
There is some concern for night time inversions and cold air drainage down into local residential areas. If weather forecasts indicate that smoke issues may develop due to inversions or minimal lifting of the air mass, the size of area to be burned will be evaluated. Overall impacts to the local area should be minimal and of short duration. In the event that smoke becomes a problem following completion of the ignition phase, rapid mop-up will occur to lessen the impact.					

Element 20: Monitoring

<p>A. Fuels Information Required and Procedures:</p> <p>During the ignition phase, 1-hour and 10-hour fuel moistures will be calculated from the weather observations at a minimum of once per hour. 10-hour fuels may be measured on site.</p> <p>Prescribed fire monitoring is the collection and analysis of repeated observations or measurements to evaluate changes in condition and progress toward meeting a management objective. For the prescribed fire, at a minimum, the weather (forecast and observed), fire behavior, fuels information, and smoke dispersal will be monitored. The burn boss or a qualified delegate will monitor and document items identified above to ensure objectives of the burn are being met. In some cases several months may be needed to accurately assess the effectiveness of the burn in achieving the objectives.</p>
<p>B. Weather Monitoring (Forecasted and Observed) Required and Procedures:</p> <p>Prior to ignition, a spot weather forecast will be requested and verified. General and fire weather forecasts will be monitored.</p> <p>During the ignition phase, weather observations should be measured and recorded on an hourly basis. Observations should be recorded on the Weather / Fuels / Fire Behavior / Smoke Observations form found in Appendix I of this plan or form OF-251, Mobile Fire Weather's Observer's Record found in the belt weather kit.</p>
<p>C. Fire Behavior Monitoring Required and Procedures:</p> <p>Fire behavior observations should be measured and recorded on an hourly basis on the Weather / Fuels / Fire Behavior / Smoke Observations form found in Appendix I.</p>
<p>D. Monitoring Required to Ensure Prescribed Fire Plan Objectives are Met:</p> <p>Post burn evaluations will occur using the established UAR photo plots. Periodic estimates of consumption and burn coverage will be made. Post burn monitoring will be completed to determine if prescribed objectives were met. This may be several months later when mortality can more accurately be assessed.</p>
<p>E. Smoke Dispersal Monitoring Required and Procedures:</p> <p>A spot weather forecast will be obtained from the National Weather Service in Medford (541-776-4303). Weather information will be attached to this plan.</p> <p>Current weather information will be recorded hourly during the ignition period of the scheduled burn. The Burn Boss will closely monitor weather conditions, including any possible change in wind direction.</p> <p>Ensure smoke report monitoring is completed through ODF protocols.</p>

Element 21: Post-burn Activities

A. Post-Burn Activities that Must be Completed:

Given the wide range of conditions in which the burns may take place, specific resources will be assigned or requested by the Burn Boss for at least two shifts immediately after the completion of ignition. Specific instructions/objectives will be provided to the mop-up and patrol resources by the Burn Boss. Mop-up standards specified by the burn boss will greatly reduce the probability of an escaped burn under the projected 7-10 day weather outlook. Careful consideration will be given to firefighter risk and exposure in developing/implementing mop-up and patrol standards. This documentation will be added to the record of the final burn plan package.

Documentation needs to be completed on a daily basis until the burns are declared out and shall be included in the final project file.

Acres completed must be relayed to dispatch and updated in FASTRAX. Handlines need to be covered, burn boss will specify after burn has been declared out. Any resultant hazard trees along road systems and/or trails needed to be identified and mitigated. All equipment, including signage must be removed from the fire, burn boss will specify. The data needs to be entered into FACTS to show the burn was completed.

Prescribed Fire Name:	UAR Flumet	Ignition Unit Name:		District:	Siskiyou Mtns
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Prescribed Fire Plan Appendices

Appendix A: Maps: Vicinity, Project or Ignition Units (or both), Values
Optional: Significant or Sensitive Features, Fuels or Fuels Model,
Smoke Impact Areas

Appendix B: Technical Reviewer Checklist

Appendix C: Complexity Analysis

Appendix D: Job Hazard Analysis (JHA)

Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation

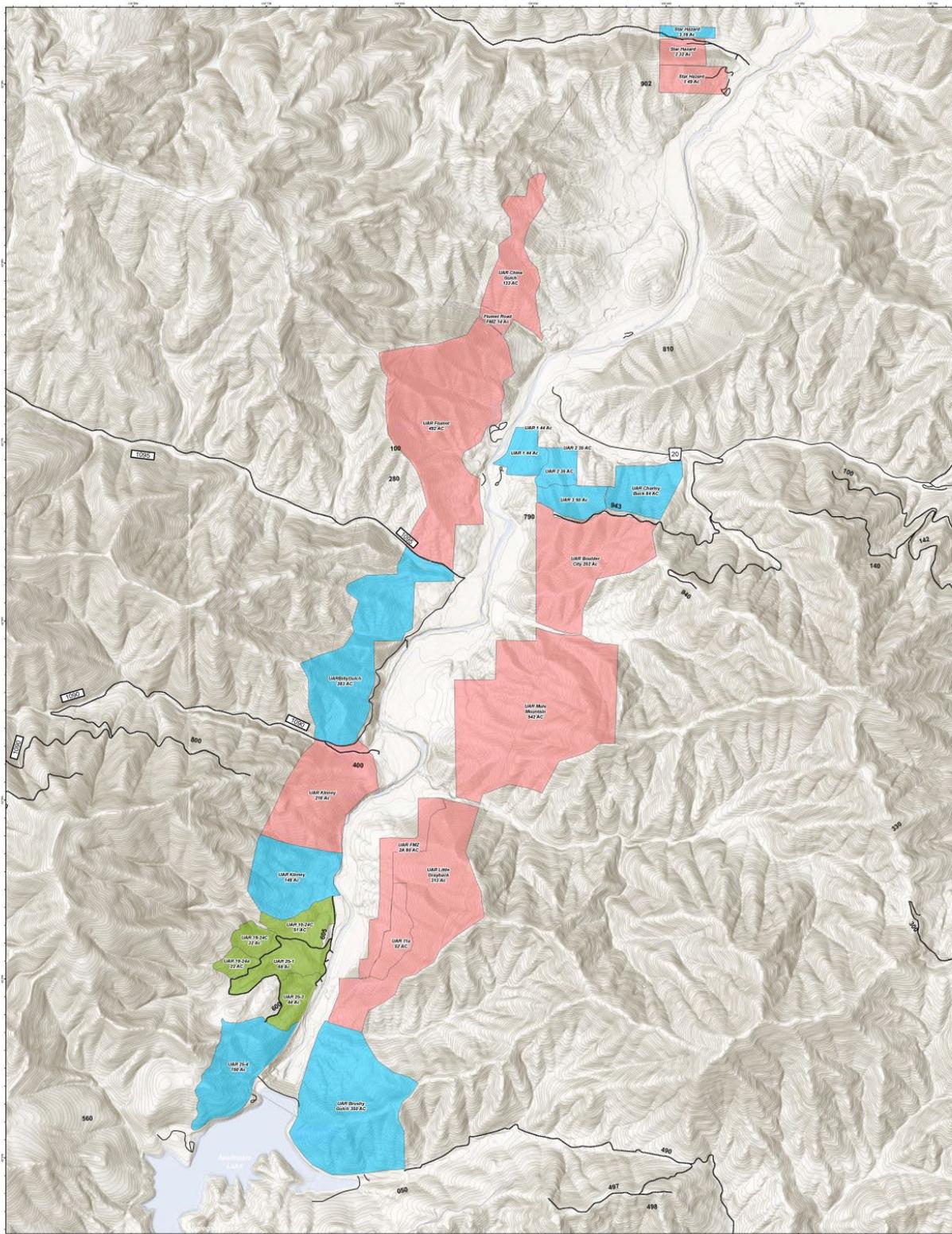
Appendix F: Smoke Management Plan and Smoke Modeling Documentation (Optional)

Appendix G: Project Aviation & Safety Plan (PASP) (if applicable)

Appendix H: Prescribed Fire Post Burn Evaluation

Appendix I: Weather / Fuels / Fire Behavior / Smoke Observations

Appendix A: Vicinity Map



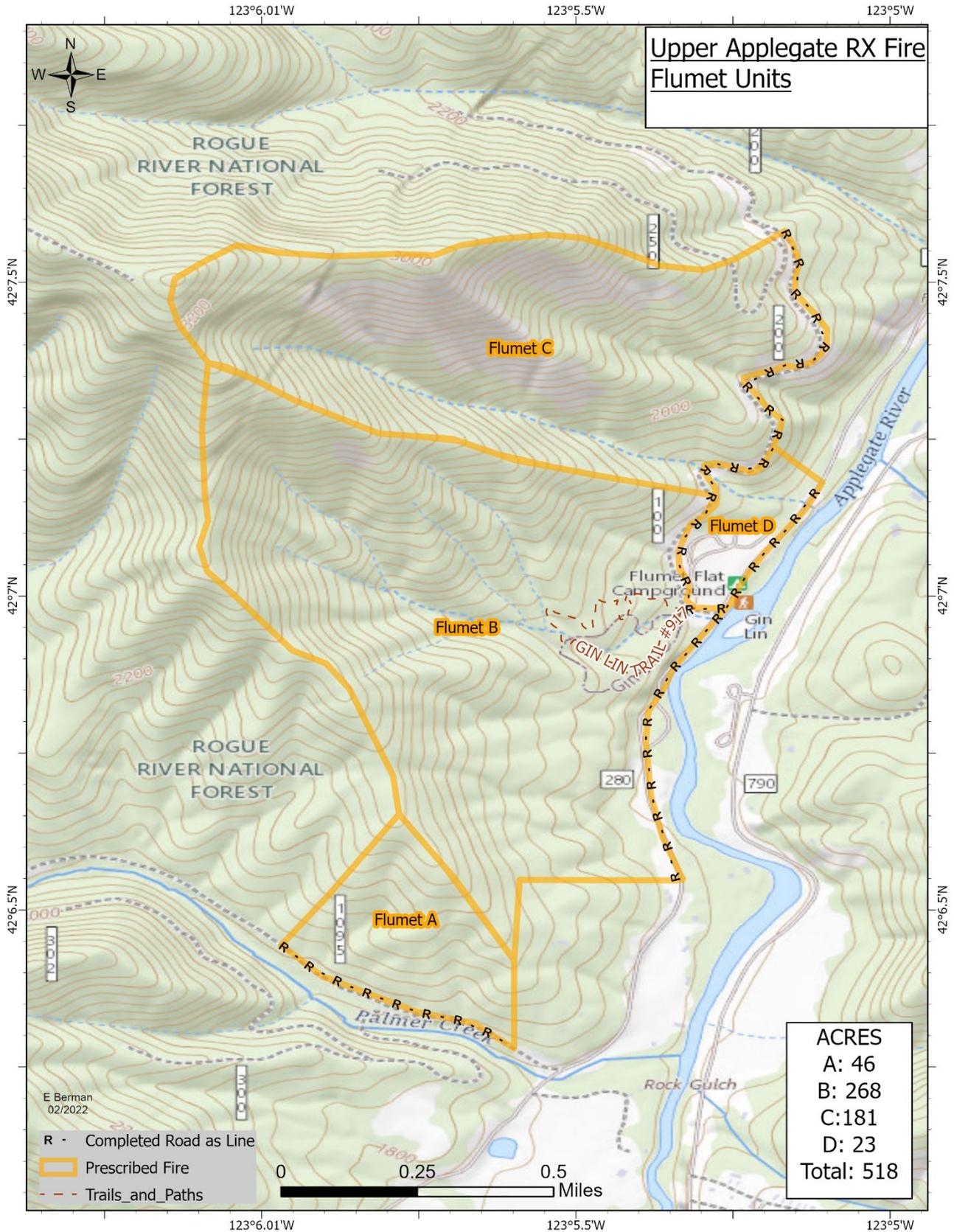
Rogue River-Siskiyou National Forest
Siskiyou Mountains Ranger District
Upper Applegate River
All Units



- Roads
- 1 - BASIC CUSTOMER CARE CLOSED
 - 2 - HIGH CLEARANCE VEHICLES
 - 3 - SUITABLE FOR PASSENGER CARS
 - 4 - ADEQUATE WIDTH OF USER CONCEPT
- Burn Plan Status
- 1 - Burn Complete
 - 2 - Burn Plan Written
 - 3 - No Burn Plan Written

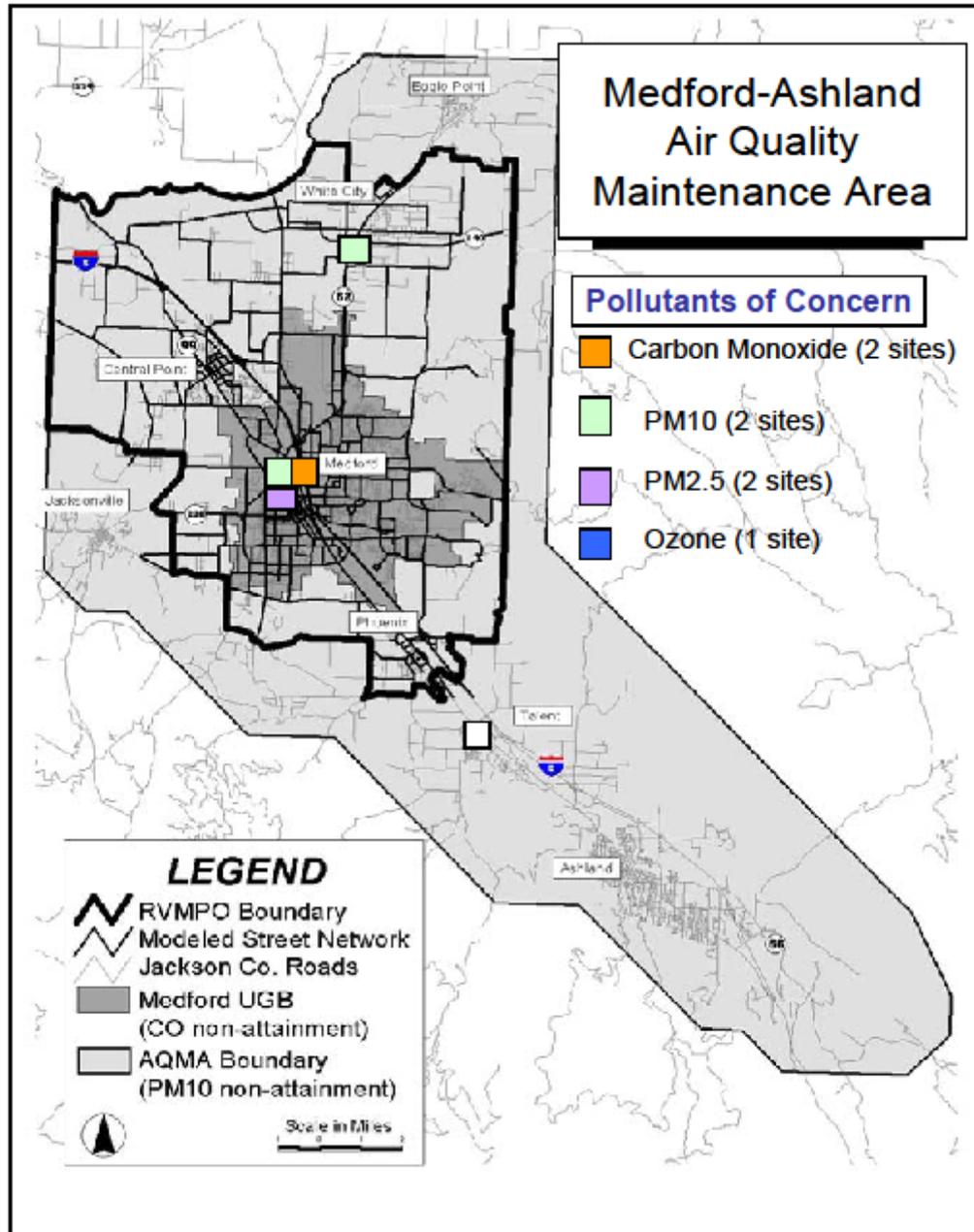


Appendix A: Project (Ignition Units) Maps



Appendix A: Smoke Impact Areas: (Optional) Maps

Figure 8: Map of Medford-Ashland AQMA



Appendix B: Technical Reviewer Checklist

Fill out this checklist based on the guidance provided in the Technical Review section in the *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484.

Rate each element in the following table with an “S” for Satisfactory or “U” for Unsatisfactory. Use Comment field as needed to support the element rating.

PRESCRIBED FIRE PLAN ELEMENTS	RATING	COMMENTS
1. Signature page		
2. A. Agency Administrator Ignition Authorization, PMS 485		
2. B. Prescribed Fire GO/NO-GO Checklist, PMS 486		
3. Complexity Analysis Summary		
4. Description of Prescribed Fire Area		
5. Objectives		
6. Funding		
7. Prescription: Prescription Narrative and Prescription Parameters		
8. Scheduling		
9. Pre-Burn Considerations and Weather		
10. Briefing		
11. Organization and Equipment		
12. Communication		
13. Public and Personnel Safety, Medical		
14. Test Fire		
15. Ignition Plan		
16. Holding Plan		
17. Contingency Plan		
18. Wildfire Declaration		
19. Smoke Management and Air Quality		
20. Monitoring		
21. Post-Burn Activities		
Appendix A: Maps		
Appendix C: Complexity Analysis		
Appendix D: Agency-Specific Job Hazard Analysis or Risk Assessment		
Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation		
Appendix F: Smoke Management Plan and Smoke Modeling Documentation (Optional)		
Appendix G: Project Aviation Safety Plan (if applicable)		

- Approval is recommended** subject to the completion of all requirements listed in the comments section, or on the Prescribed Fire Plan.
- Recommendation for approval is not granted.** Prescribed fire plan should be re-submitted for technical review subject to the completion of all requirements listed in the comments section, or on the Prescribed Fire Plan.

Technical Reviewer Signature: _____ Qualification and Currency: _____

Date Signed: _____

Appendix C – Complexity Analysis

<https://usfs.box.com/s/k8zok0v7xsmpjn5s7fob44szp74ri5jc>

Appendix D: Job Hazard Analysis (JHA)

<https://usfs.box.com/s/hkmomnqn7izendpv9p0d403josmh3ejm>

Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation

Refer to Element 7: Prescription, in the *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484, to fill out this appendix.

See attached BEHAVE runs:

<https://usfs.box.com/s/itzszvq3dwcqtpmubzwwp62nuc1n7lfq>

Behave runs are html format. They may need to be downloaded and then opened.

Appendix H – Prescribed Fire Post Burn Evaluation				
Burn Unit	Date(s) Burned		Acres Burned	Ignition Start Time
Weather and Fuel Conditions				
	Time of Ignition	Low	High	
Temperature				
Relative Humidity				
1-hr Fuel Moisture				
10-hr Fuel Moisture	100-hr Fuel Moisture	1000-hr Fuel Moisture	Days Since Significant Precipitation	
Wind Direction (Average)	Wind Speed (Average)	Percent of Fuel Consumed	Ignition Duration (min.)	
Accomplishment of Fuels Treatment Objectives				
Overall Objectives Achieved:		Yes		No
Short Term Results (include changes in fuel profile and fire regime condition class)				
Cost Evaluation				
Burn Plan Preparation	Site Preparation	Burn Operation	Total Burn Costs	Cost/Acre
\$	\$	\$	\$	\$
Narrative – Prescribed Fire Burn Boss Comments				
i.e. operations, safety, fire behavior, personnel & equipment performance, logistics, smoke management				
Prescribed Fire Burn Boss			Date	

Appendix I – Weather / Fuels / Fire Behavior / Smoke Observations									
Weather and Fuels									
OBSERVATION TIME (24 HR)									
SLOPE (%)									
ASPECT									
ELEVATION (FEET)									
FUEL MODEL (1-13)									
SHADING (<50% or >50%)									
DRY BULB TEMPERATURE (°F)									
WET BULB TEMPERATURE (°F)									
RELATIVE HUMIDITY (%)									
EYE LEVEL WIND SPEED (MPH)									
WIND DIRECTION									
CLOUD COVER (%)									
1-HR FUEL MOISTURE (%)									
Fire Behavior									
FIRE (HEAD, FLANK, BACKING)									
AVERAGE FLAME LENGTH (FT)									
MAX. FLAME LENGTH (FT)									
RATE OF SPREAD (CH/HR)									
TORCHING/CROWNING (Y or N)									
FIRE WHIRLS (Y or N)									
SPOTTING (Y or N)									
SMOKE DIRECTION									
SMOKE RISE									
Notes									
OBSERVER NAME:						DATE			