Rogue River – Siskiyou National Forest Prescribed Fire Plan Template October 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	FOREST SERVICE	ROGUE RIVER - SISKIP
PRESCRIBED FIRE NAME	A.F.R. Unit	: 10 and 65a	<u>/</u> U ₽ S∖	
			THENT OF AGRICUS	
PREPARED BY: *			• Ovelifiention	DVD2
Name (print)			/ Currency	KAB2
Signature			Date	
ADDITIONAL PREPAR	RER:			
Name (print)			Qualification / Currency	
Signature			Date	•
TECHNICAL REVIEW	BY: *			
Name (print)			Qualification / Currency	
Signature			Date)
FIRE MANAGEMENT	OFFICER:			
Name (print)			Qualification / Currency	RXB2
Signature			Date)
DISTRICT / SO SPECI	ALIST:			
Name (print)			Title)
Signature			Date	e
DISTRICT / SO SPECI	ALIST:			
Name (print)			Title	•
Signature			Date	•
	COMPLEXITY RATING	Moderate		
	MINIMUM BURN BOSS QUALIFICATION	RXB2		
APPROVED BY (AG	GENCY ADMINISTRATO	२): *		
Name (print)			Title	
Signature			Date	
	* Denote	s required signatures		

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

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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

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

Prescribed Fire Name:		Ignition Unit Name:		District:
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Implementation Recom FMO or Prescribed Fire	mended by: e Burn Boss: Signature:		Date	:
Implementation Recom	mended by:			
FMO or Unit Duty Offi	icer: Signature:		Date	:
, and a expectation that the pr attached to this plan. If me on the circumstance	a new 2A Authorization will to oject will be implemented w f the conditions we discussed es and an updated authoriza	be required for any sub ithin this time frame a I change during this tir tion will be negotiated	osequent or continued nd as discussed and d ne frame, it is my expo l if necessary.	l ignitions. It is my ocumented and ectation you will brief
Additional Instructions	or Discussion Documentatio	n attached (Optional):	Yes □ No□	
Ignition Authorized by: Agency Administrator	Signature and Title:		Date:	
Local Unit Line Officer	r Concurrence (if not the qua	lified approver above):		
Line Officer Signature	and Title <u>:</u>		Date:	

Prescribed Fire Name:	Ignition Unit Name:	District:	
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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 <u>NO</u> proceed with the Go/NO-GO Checklist below, if <u>YES</u> 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 <u>YES</u>, go to item C. If <u>NO</u>, 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 <u>YES</u>, proceed with checklist below If <u>NO</u>, 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 concresults. If any questions were answered " NO ", DO NOT proceed with the test fire: Implement	litions, location, and ntation is not allowed.
After evaluating the test fire, in your judgement can the prescribed fire be carried out accordin plan and will it mee the planned objectives? Circle: YE	g to the prescribed fire S or NO

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Burn Boss Signature:

Date: Element 3 –

Complexity Analysis Summary

	AFR 10 & 65a	Quantity	Significance
	On-Site	Few	Mod
Values	Off-Site	Multiple	High
	Public/Political Interest	Multiple	High

Element	Preliminary Risk	Post-Plan Risk	Technical Difficulty	Calculated Rating
Safety	Low	Low	Low	Low
Fire Behavior	Low	Low	Low	Low
Resistance to Containment	Mod	Mod	Mod	Mod
Ignition Procedures and Methods	Mod	Mod	Low	Mod
Prescribed Fire Duration	Mod	Mod	Low	Mod
Smoke Management	High	High	High	High
Number and Dependence of Activities	Mod	Mod	Mod	Mod
Management Organization	Mod	Mod	Mod	Mod
Treatment/Resource Objectives	Mod	Mod	Mod	Mod
Constraints	Mod	Mod	Low	Mod
Project Logistics	Low	Low	Low	Low

Calculated Summary Prescribed Fire Plan Complexity				
•		Pipal		-•
	Low	Mod	High	

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Final Complexity Determination	Final Complexity Determination Rationale
Mod	Overall the units are fairly simple in complexity, having limited escape potential as long as prescription parameters are being met. There are plenty of options, such as roads, trails and previous treatments in the area that can be used as control points if needed. Safety concerns can be easily mitigated. Logistical support is minimal and all available locally. What increases the complexity is the multiple agencies/partners that are involved when a burn takes place in AFR. This has been mitigated through the years with increased communication efforts, going out of the way to work as a team and understanding roles played by each partner. The close proximity to the SSRA adds complexity as well, however working with the ODF Smoke Managers the partners have developed a matrix that can be used to provide a guideline for clearance. Continued communication with ODF has helped build trust and cooperation that tends to open clearance windows even further. Smoke will continue to be a constraint to project burning into the future but recognizing opportunities has improved significantly. Public perception has been an ongoing concern, the watershed is used heavily for recreation. Partner outreach continues to build public support/understanding. By keeping Public informed and impacting as little as possible with smoke/activities support will continue to grow. Although there is not a lot of infrastructure in immediate proximity to the units, an escape could expose city water and structures to a fire risk. This is very unlikely given the time of burn and leastion on tarrain unclone of City of Ashland.

	Rx Burn Plan Preparer's Name:	_X Preparer	Date:
Signatures	Technical Reviewer's Name:	_X Technical Reviewer	_Date:
	Agency Administrator's Name:	_X Agency Administrator	_Date:

	w 4.4 wr 4. wr		
Prescribed Fire Name:	Ignition Unit Name:	District:	
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Element 4: Description of Prescribed Fire Area

A. Physical Description

1. Location:

County & State: Jackson, Oregon

Unit	Legal Description	Latitude/Longitude	Distance & Direction to DA
10	39S 1E S21, 27, 28	-122.694601 / 42.154517	2.5 miles North
65a	39S 1E S34	-122.688831 / 42.135904	2.65 miles North

This is a Stewardship project with the U.S. Forest Service, City of Ashland, Lomakatsi Restoration and The Nature Conservancy. Project is located within the boundaries of the Siskiyou Mountains Ranger District of the Rogue-Siskiyou National Forest and borders City of Ashland and private property. Project area is just over 7600 acres, located within the Ashland Watershed of Jackson County, Oregon. The Unit 10 boundary is partially comprised of the Ashland Loop Rd and the Catwalk and Toothpick hiking trails. Private property borders Unit 10 to the north. The Unit 65a boundary is mostly comprised of FS 2060 Rd.

2. Size:

Project area is just over 7600 acres. Total acreage covered by this plan for Unit 10 (152 acres) and Unit 65a (112 acres) is 248 acres.

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3. Topography:

UNIT 10								
Low elevation	3280'	Average aspect	Ν					
High elevation	3860'	Average slope	50%					
Drainage	Bear Creek							

Unit 10 is primarily a northerly aspect with a section of easterly aspect on the west side of the unit. The unit is moderately steep throughout ranging from a 5-65% slope. The bottom of the unit runs into a streambed; the top ends at midslope. There are numerous steep draws/Landslide Hazard Zones that cut through the unit running downhill to the streambed at the bottom. The slope within those draws ranges from 50-80%.

UNIT 65a							
Low elevation	4400'	Average aspect	NE & W				
High elevation	4920'	Average slope	40%				
Drainage	Bear Creek						
Jnit 65a is primarily ridgetop with half the unit facing NE and the other half facing primarily W. The unit is moderately steep throughout ranging from 30-60% slope.							

4. Project area:

The watershed fire history from the early 1900's to present is well documented with several large wildfires that covered most of the project area. Prior, reconstruction of the historic fire history show a pattern of frequent, low intensity fire on the average of every 7-12 years with a fire every year somewhere in the Ashland Watershed through anthropogenic and lightning sources. The influence of frequent fire has been lost over the past 150 years leading to dense infill, proliferation of shade and fire tolerant species, and homogenization of the landscape pattern of closed and open forests in the Ashland Watershed.

The current project (AFR) has evolved from multiple hazard fuel projects from the 1980's, 1990's and most recently the Ashland Watershed Protection Project (AWPP) between 2003 and 2007. Today current NEPA and Record of Decision (ROD) are signed as the Ashland Forest Resiliency Project.

Recent treatments were primarily density management of merchantable size classes (starting in 2012-13) and some non-commercial surface and ladder fuel reduction implemented at the time of piling of helicopter thinning of activity fuels. Piles were burned starting in 2013.

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5. Ignition Units:

UNIT 10: Douglas-fir in the 8-20" dbh size class dominates most of the stand. Towards the uphill boundary, similar sized white fir becomes codominant. Ponderosa pine in the same relative size and age class, although often somewhat older, are also intermixed, occurring more on the easterly aspects and gentler slopes of the unit. Some scattered legacy pines occur among the unit at the 24-30" dbh range. Hardwood stocking, primarily Pacific madrone, is light, occurring mostly as small understory seedlings, saplings and small trees up to 8-12" dbh. It also increases in abundance in openings and on drier less productive sites. Understory is fairly sparse and mostly open, consisting of mainly Oregon grape and bunchgrasses. Conifer and madrone seedlings and saplings also occur throughout the understory, sometimes occurring in denser retention areas. Previous thinning and prescribed handpile burning in the area have resulted in a generally reduced ladder fuel component in these stands. There are numerous Landslide Hazard Zones throughout the unit where no treatment was done that are considerably steeper, denser, and wetter than the rest and will act to slow or impede fire spread. Currently, post treatment canopy cover averages 40-65% but has some variability.

UNIT 65a: Douglas-fir, red fir, and white fir in the 8-20' dbh class intermix for codominance in this stand. Ponderosa pine and sugar pine in the same relative size and age class, although often somewhat older, are also intermixed, occurring predominately on lateral ridgelines and on more southerly to westerly aspects (average duff depth 6-8" ranging anywhere from 1-12"). These stands have numerous legacy pines scattered throughout the unit with a size class of 24-36" dbh not being uncommon. Hardwood stocking, primarily Pacific madrone, is light, occurring mostly as small understory seedlings, saplings and small trees up to 8-12" dbh. It also increases in abundance in openings and on drier less productive sites. Understory is fairly sparse and mostly open, consisting of mainly Oregon grape and bunchgrasses with manzanita and on the more southerly, drier aspects. Conifer and madrone seedlings and saplings also occur throughout the understory, sometimes occurring in denser retention areas. Previous thinning and prescribed handpile burning in the area have resulted in a generally reduced ladder fuel component in these stands. There are numerous Landslide Hazard Zones throughout the unit where no treatment was done that are considerably steeper, denser, and wetter than the rest and will act to slow or impede fire spread. Some LHZ's have significantly greater fuel loading and down wood and/or understory regen. Currently, post treatment canopy cover averages 60-80% but has some variability.

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B. Vegetation/Fuels Description

	1. On-Site Fu	els Data	1	2. Adjacent Fuels Data:			
FB	PS Fuel Model(s)	TI3	TI4	FBPS Fuel Model(s)	TL3	TL4	
	1 hour tlf	0.6	1.0	General Description of Adja	acent Fue	ls	
	10 hour tlf	1.3	2.7	Adjacent fuels are similar to the b	ourn units	,	
	100 hour tlf	4.4	4.2	represented with fuel models of T	L3 (mode	erate	
	1000 hour tlf	5.7	6.8	Fuels surrounding have been rea	aown iog	s). nod	
	Litter depth in.	1	1.25	 and treated with similar prescriptions. Each ha small to moderate madrone pockets, some brus component dominated by a peedle understory 			
p	Duff depth in.	1	.75				
adir	Live woody	N/A	N/A	component dominated by a needle understory. These units do not seem as exposed due to			
Lo	Live herbaceous	N/A	N/A	 I hese units do not seem as exposed due to location below the ridge and more shading and 			
Fuel	Total fuel loading	28.2	36.3	therefore may retard or slow fire g Fire behavior is expected to be co slightly reduced in adjacent fuels based on time of year to complete burn and similarity.	growth slip omparable to the buil e the pres	ghtly. e or rn unit scribed	
				Small pockets of torching may be fuel clusters, small pockets of lad topography.	e expected der fuels	due to and	
3. P	3. Percentage of vegetation type and fuels model(s) and comments:						
On-s OSL Paci 4 fue prim	site fuel loading was I Fuel Load Calcula fic Madrone with sc el models represent arily affected by slo	determin tor. The s attered br all the co pe, aspec	ed from a stands are ush unde vered bur t/sun exp	n average measurement of 3 trans e mixed conifer, ponderosa pine, De rstory. Although some variability e n units within this plan. Fire behavi osure and dispersal/size of madror	ects using ouglas fir, xists, TL3 or will be ne pockets	g the and and TL s	

slowing fire growth.

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

There is a large amount of recreation use, primarily hikers/runners and bicycles. Many user created trails pass through the project area that serve as holding points and personnel access points.

The Forest/District Wildlife Biologist must be consulted yearly to ensure nesting sites of Fisher or owls are not impacted, this could include a buffer or delay to burning in critical areas.

Avoid actively igniting fire within riparian areas and Landslide Hazard Zones (LHZ).

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D. Maps – Attach in Appendix A

- 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

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Element 5: Objectives

A. Resource Objectives:

- Restore forest stands to conditions that promote functional processes that more closely resemble the historical occurrence of more frequent but lower to moderate severity disturbance
- 2. Protect core public and private values at risk from wildland fire, particularly those associated with:
 - a. safeguarding human life,
 - b. protecting property,
 - c. protecting socio-economic and municipal watershed values,
 - d. conservation of late-successional biological and structural diversity
 - e. enhancing wildlife habitat
- 3. Reduce hazardous fuels and obtain conditions that are more resilient to wildland fires
- 4. Minimize mortality of legacy trees (large, old trees with complex form, large branches, open structure, wide bark plates, and providing important habitat features and aesthetic value)

B. Prescribed Fire Objectives:

- 1. Reduce litter and light surface fuels (1 to 100-hr) by 30 80%
- 2. Retain >30% of shrubs and understory trees (< 5" DBH)
- 3. Limit mortality of intermediate trees (5-12" DBH) to < 40%
- 4. Retain > 90% dominant/codominant trees (> 12" DBH)
- 5. Retain >97% of conifers >30" DBH and hardwoods >20" DBH
- 6. Retain overall effective ground cover for the unit based on soil erosion hazard class:
 - moderate (< 35% gradient), > 60% year-1, > 70% year-2;
 - severe or higher (> 35% gradient), > 70% year-1, > 85% year-2
- 7. Retain approximately 90% large down logs or snags (>20" diameter)
- 8. Minimize fire intensity in leave areas, with crown scorch of canopy trees <20%
- 9. Retain an unburned strip of duff 25'-50' wide and coarse woody material within 50' of perennial streams.

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Element 6: Funding

A. Cost	Stewardship Burn: Burning is funded through the Ashland Forest Resiliency Stewardship Agreement. Under this agreement, Partners will provide all qualified crewmember personnel and equipment needed to conduct ignition operations. Forest Service funding needs are for the Burn Boss, and overhead to manage the operations. Forest Service engines may also be used for training and support.
B. Funding Source	WFSEHF (Federal Employees)
C. Tracking Costs	Burn boss is responsible to track cost of the unit. Lomakatsi will provide partner and contractor cost.

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Element 7: Prescription

A. Prescription Narrative:

1. Describe how fire behavior will meet objectives:

The fire prescription describes fuel and weather condition parameters used to model fire behavior that will meet resource objectives. The data above is used as input to produce models in Behave Plus 6.0.0 modeling program. Smoke emission output is modeled with FOFEM.

Once Go-no-Go is approved and test fire is conducted; the Burn Boss may implement the burn if prescription parameters and objectives will be met during ignitions. If prescription parameters and/or objectives are not being met action will be taken to either stop the spread of fire or adjust lighting pattern to moderate fire intensity. Rationale and line officer approval must be documented for continuing ignitions if prescription parameters are exceeded.

	Accepta	Outside area		
1. Environmental Prescription	Low Fire Intensity	Desired Fire Intensity	High Fire Intensity	at critical holding point
Temperature (°F)	45-55	56-75	76-86	minimum
Relative humidity (%)	45-35	34-25	24-20	acceptable
Mid-flame wind speed	0-3	4-7	8-12	moisture
Wind direction (azimuth°)	N,W,S,E	N,W,S,E	N,W,S,E	
1-hr fuel moisture (%)	15-13	12-10	9-7	7
10-hr fuel moisture (%)	17-15	14-12	11-9	9
100-hr fuel moisture (%)	19-17	16-14	13-11	11
1000-hr fuel moisture (%)	>20	19-17	16-14	14
Live fuel moisture (%)	N/A	N/A	N/A	N/A
Duff moisture (%)	N/A	N/A	N/A	N/A

B. Prescription Parameters:

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Additional Information

The fire prescription describes fuel and weather condition parameters used to model fire behavior that will meet resource objectives. The data above is used as input to produce models in BehavePlus 6.0.0 modeling program. Smoke emission output is modeled with FOFEM. Parameters are guidelines but are not strict. In some occurrences (i.e. Spring Burning) hotter and dryer weather may be needed to reach objectives. Burning outside parameters can be done without amendment after conversation with Agency Administrator.

Once Go-no-Go is approved and test fire is conducted the burn boss may implement the burn to meet objectives. If burn parameters are reached during ignitions the burn boss may continue to light as discretion to complete burn for safety and objectives. If determined not to continue lighting then personnel will manage the burn as needed to completion.

Prescribed fire can occur at any time of the year when conditions are acceptable. Often these conditions occur from early fall to late spring and early summer.

Brush fields in drainages have been modified with mechanical treatment to reduce fuel loading. There may be existing piles in these areas that can be burned during ignition.

Weather data will be collected on-site and from local weather stations (RAWS) to assist managers in knowing when weather and fuel conditions are within prescription.

Outside area critical holding points are based off a Fuel Model TL 3. Inputs are predicted for worst case/minimum acceptable range that would be detected in spring underburn conditions. Exceeding these parameters are management action points that may allow for activation of contingency resources outlined in the plan under Element 17.

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1. Fire Behavior	Acceptab	Outside area at		
Parameters	Low Fire Intensity	Desired Fire Intensity	High Fire Intensity	critical holding points
Fuel Model(s): TL3 & TL4				
Rate of Spread (chains/hour)	<1.5	1.5-2	2-2.6	2.6
Flame Length (in feet)	<1	1-1.2	1.2-1.5	1.5
Scorch Height (in feet)	1	1	2	
Probability of Ignition (%)	16	30	49	49
Spotting Distance (in miles)	.2	.2	.2	.2

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.

Fire Behavior Narrative

<u>Fuel Model TL 3 & TL 4</u>: The primary carrier of fire is dead and down woody fuel. Live fuel, if present, has very little effect on fire behavior. Unit 10 has a primary fuel model of TL 3 with the primary carrier of fire being a moderate load conifer litter, light load of coarse fuels. Spread rate is low, flame length is low. Unit 65a has a primary fuel model of TL4 with the primary carrier being a moderate load of fine litter and coarse fuels, including small diameter downed logs. Spread rate is low; flame length low. Scattered pockets of Madrone located within the units are not expected to adversely affect fire behavior due to lack of surface fuels and arrangement. Expect fire rate of spread through the surface fuels comparable to a fuel model 8 with similar flame height. Expect some fire behavior change with aspect, elevation and slope change. Calculations above were derived from the BehavePlus 6.0.0 program. Outputs for fuel model TL 3 & TL 4 (inside and outside units) were calculated using a strip head fire for modeling purposes. Producing a head fire with up-slope wind may increase flame lengths to 3 - 5 feet based on weather parameters. Actual hand ignitions will alter this behavior and produce more of a low intensity, low flame length backing fire to meet objectives.

Expect fire rate of spread through the surface fuels comparable to a fuel model 8 and have similar flame height. Expect some fire behavior change with aspect, elevation and slope change. An average slope of 40% was used to calculate fire behavior, expect an increase in fire spread when slope exceeds this threshold. Critical Holding point behave runs reflect conditions that could challenge meeting objectives, increase ROS, and may trigger the need to activate contingency resources. Runs completed with Behave show a contain status with resources on-site using flanking or rear attack. Additional resources would be on the unit to manage the prescribed burn and a possible emerging incident.

In many cases, burning under the extremes of all prescriptive parameters would not meet or may possibly exceed the desired prescribed fire behavior characteristics and therefore may be out of prescription.

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Even though BEHAVE modeling indicates a spotting distance of up to .2 of a mile with the given parameters, any spotting would be expected to be short range adjacent to the burn due to controlled lighting patterns. Spotting from torching trees should be used as an indicator of increasing fire behavior. The Burn Boss must determine if objectives are still being meet, and that holding resources are adequate to continue ignitions.

2. Fire Modeling or empirical documentation:

Attached in Appendix E.

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Element 8: Scheduling

A. Implementation Schedule 1. Ignition Time Frames/Season(s):	Day or Night/ Spring or Fall like conditions (anticipated to occur between October – May)
B. Projected Duration:	1-2 days ignitions, 3 days for mop-up, 10 days patrol per each individual subunit.

C. Constraints:

Smoke clearance due to stagnant air and/or unfavorable winds (constraints from wind are all with a southerly component).

Fuel conditions not favorable (too dry/too wet)

Pre-planned events for the City of Ashland that may impact and/or preclude burning on a given day and create a negative effect towards prescribed fire. Some examples include but are not limited to:

- Siskiyou Challenge (Spring, April)
- Spring Thaw (Spring, May)
- Ashland Mountain Challenge (Fall, October)

Fireline intensities designed to maintain adequate effective ground cover may minimize accomplishment of other objectives, particularly fuel hazard reduction. Existing duff levels are low and post-burn surface erosion can be easily increased, particularly on steeper slopes.

Old snags may complicate prescribed under-burning and constitute a safety hazard requiring mitigation measures.

Protection of older legacy trees, both conifer and hardwood, will require special lighting techniques to minimize bole and crown scorch. If possible quick mop up around legacy trees can be employed to help survival rate.

The southern boundary of Unit 10 borders private property. Extra care should be given to these common boundaries to eliminate fire spread to adjoining land ownerships.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 9: Pre-burn Considerations and Weather

A. Considerations:

1.	Or) Site
	-	Monitoring of on-site fuel and weather data 2-3 days before burn at a minimum, portable fire RAWS makes it possible to monitor long term trends locally throughout burn duration.
	-	Consider posting prescribed fire signs and ensure public is clear of unit at least one day prior to, during and post ignition.
	-	Work with law enforcement if necessary on-site to establish a safe area free of public.
	-	Issue temporary closure for trails within and adjacent to burn units.
	-	Consider temporary area closure during the ignition and mop up phase.
2.	Of	f Site
No Ch	otific naml	ations to media outlets and public by the burn boss and the City of Ashland (Chris pers. Sarah Jones) prior to ignitions.

Smoke signs will need to be in place on major road systems adjacent to burn unit prior to ignition, and be visible to the public. Signs should remain in place until the burn boss determines them no longer needed.

Notify adjacent land owners (City of Ashland responsibility). See Notification list attached.

City of Ashland Fire & Rescue will be contacted and is responsible for City of Ashland public notifications.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

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

Proximity to nearest RAWS 13 Miles SE Buckhorn Springs (permanent RAWS)								
Need for on-site RAWS		Yes	Х	No				
Additional Information								
Siskiyou Mountains Portable RAWS has been placed within the Ashland Watershed (Winburn Ridge) and collecting data since Fall of 2015. This RAWS is located on Windburn Ridge, providing the best data for both forecasters and prescribed fire managers. Occasional down time can be expected as RAWS are shipped back for maintenance.								
Prior to ignitions approval to burn Management in Salem, OR. Plan mangers.	will be ol ned unit	btained fro will be ente	m Orego ered into	on Dept. of Forestry, Smoke Fastrax or equivalent by fire				
Current weather information and s Weather Service in Medford. We	spot weat ather fore	ther foreca ecasters ar	st will be e availa	e obtained from the National ble at: 541-776-4303.				
A daily incident action plan (IAP)	will be pro	epared to l	orief per	sonnel.				
Spot Weather forecasts are required prior to ignition, on all ignition days. The burn boss is required to obtain a spot forecast on any days the fire is actively spreading to determine holding, mop up or patrol staffing needs. A copy of the forecast will be included in the project file.								
Projected 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 and considerations include possible prolonged periods of drying and east wind events in early spring and fall.								

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

C. Notifications:

Who	When ¹	Phone Number and/or e-mail	Responsibility	Date	Contact Type ²
Rogue Valley Interagency Communications Center	Before & Day of	(541) 618-2510	Burn Boss		EM
Dan Quinones RSF Fire Staff	Day of	(541) 618-2100	Burn Boss		EM
District Ranger – Jen Sanborn	Before & Day of	(541) 324-1318	Burn Boss		PC/EM
ODF Smoke Mgt. Forecaster	Before & Day of	(503) 945-7401	Burn Boss		PC
Virginia Gibbons- Forest PIO	Before & Day of	(541) 618-2200	Burn Boss		EM
Star Office Front Desk	Before & Day of	(541) 899-3800	Burn Boss		EM
Rob Budge RSF Deputy Fire Staff- Fuels	Day of	(541) 618-2101	Burn Boss		PC
Ashland City Fire (Chris Chambers)	Before & Day of	(541) 890-8816	Burn Boss		PC/EM/D C
Siskiyou Mountain RD employees	Before & Day of	pdl r6 rrs siskiyoumountains@fs.f ed.us	Burn Boss		EM
Dave Clayton-Forest Wildlife Biologist	Before & Day of	(541) 941-9130	Burn Boss		PC
FS Supervisors Office Front Desk	Before & Day of	(541) 858-2200	Burn Boss		PC
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)		

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

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
 - o 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
 - o Identify Mitigation Measures, Procedures, Project Boundary, Etc.
- Wildfire Declaration
- Safety and Medical Plan
 - o 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

Prescribed Fire Burn Boss

DATE

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 11: Organization and Equipment

Minimum Workforce & Equipment								
Needed to Conduct Burn								
A. Positions								
	ICS Code or	Total	Line	Amount S	upplied By:			
Position	Unit of Measure	Amount Needed	Rate (Ch/Hr)	Agency	Contractor/ Purchaser			
Prescribed Fire Burn Boss	RXB2	1		Х				
Ignition Specialist Function	FIRB	1		X	X			
Holding Specialist	Single	1		X	X			
Function	Resource	•						
Fire Effects Monitor	FEMO							
Lookout								
Engine Boss, Operator, and Crew	CRWB	1		X	X			
Ignition Crew	FFT2	3	3	Х	Х			
Holding Crew	FFT2	10	10	Х	Х			
B. Equipment								
Engine (Type VI)	ENG Type VI	1	12	Х	Х			
Engine (Type)								
Dozer (Type)								
Helicopter								
Helitorch								
C. Supplies								
Drip Troches		6						
Chain Saws		2						
Hand Tools		17						
Fuel		50 gals.						
Portable Water Tanks								
Total Line Production	Rate		25					
Remarks: The above pla	n is based on li	ne productio	n/fire suppress	ion ability to	contain a			
fire within 1-hour The tyr	pes of resources	s on-site will	meet the minin	num total line	production			
rate based on fire modeli	ng outputs as d	etermined in	Behave progra	am A chanc	e to the			
resource types listed above	e is not an ame	endment to t	he plan Behav	e runs indica	te having a			
line production rate of 4 c	h /hr at the low	/ prescription	n range in orde	r to contain a	snot			
outside of the unit Produc	ction rates in a f	uel model Ti	4 were used	Additional ne	rsonnel			
were added beyond mode	eled outputs for	line producti	on due to provi	imity to home	es and			
nrivate property. The mini	mum organizati	on requires	a low number of	of resources	hased on a			
low predicted rate spread	the line produc	stion conchili	ity of recourses	in that fuel t	vne and			
ignitions possibly assure	, the line produc		hurn boss desi		ype, and			
in one hum period addition		uays. II the l	d to provide a	les lo comple				
	nal resources w		eu lo provide ac		ing and			
ignition resources. The hu	inder of resour	ces needed	will ultimately b	e determine	a by the			
burn boss, the number of	days ignitions v	vili occur, an	a the current c	onaltions.				

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

	Minimum Wo Needed	orkforce & to Conduc	Equipment t Burn		
	DESIRED PR	ESCRIPTI	ON RANGE		
A. Positions	1 1				
Desitien	ICS Code or	Total	Line Building	Amount S	upplied By:
Position	Unit of Measure	Amount Needed	Rate (Ch/Hr)	Agency	Contractor/ Purchaser
Prescribed Fire Burn Boss	RXB2	1	, ,	Х	
Ignition Specialist Function	FIRB	1		Х	Х
Holding Specialist Function	Single Resource	1		X	Х
Fire Effects Monitor	FEMO				
Lookout					
Engine Boss, Operator, and Crew	CRWB	1		X	Х
Ignition Crew	FFT2	4	4	X	Х
Holding Crew	FFT2	15	15	X	Х
D. Fauliana at					
B. Equipment			24	V	
	ENGITPEVI	۷	24	X	A
Dozer (Type)					
Helicopter					
Helitorch					
C. Supplies					3
Drip Troches		8			
Chain Saws		2			
Hand Tools		20			
Fuel		50 gals.			
Portable Water Tanks		1			
Total Line Production	Rate		43		

The above plan is based on line production/fire suppression ability to contain a fire within 1hour. The types of resources on-site will meet the minimum total line production rate, based on fire modeling outputs as determined in Behave program. A change to the resource types listed above is not an amendment to the plan.

Behave runs indicate having a line production rate of 8 ch. /hr. at the desired prescription range in order to contain a spot outside of the unit. Production rates in a fuel model TL4 were used. Additional personnel were added beyond modeled outputs for line production due to proximity to homes and private property.

The minimum organization requires a low number of resources based on a low predicted rate spread, the line production capability of resources in that fuel type, and ignitions possibly occurring over multiple days. If the burn boss decides to complete ignitions in one burn period additional resources will be required to provide adequate holding and ignition resources. The number of resources needed will ultimately be determined by the burn boss, the number of days ignitions will occur, and the current conditions.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Minimum Workforce & Equipment								
Needed to Conduct Burn								
HIGH PRESCRIPTION RANGE								
A. Positions								
	ICS Code or	Total	Line	Amount S	upplied By:			
Position	Unit of Measure	Amount Needed	Building Rate (Ch/Hr)	Agency	Contractor/ Purchaser			
Prescribed Fire Burn Boss	RXB2	1		Х				
Ignition Specialist Function	FIRB	1		Х	Х			
Holding Specialist	Single	1		Х	Х			
Function	Resource	I						
Fire Effects Monitor	FEMO							
Lookout								
Engine Boss, Operator, and Crew	CRWB	1		Х	X			
Ignition Crew	FFT2	4		Х	Х			
Holding Crew	FFT2	15		Х	Х			
B. Equipment								
Engine (Type VI)	ENG Type VI	3	26	Х	Х			
Engine (Type)								
Dozer (Type)								
Helicopter								
Helitorch								
C. Supplies								
Drip Troches		8						
Chain Saws		3						
Hand Tools		20						
Fuel		50 gals.						
Portable Water Tanks		2						
Total Line Production	Rate		55					
Remarks:								
Remarks: The above plan is based on line production/fire suppression ability to contain a								
fire within 1-hour. The types of resources on-site will meet the minimum total line production								
rate based on fire modeling outputs as determined in Behave program. A change to the								
resource types listed abo	ve is not an ame	endment to t	he plan	ann 7 condrig				
Behave runs indicate hav	ing a line produ	ction rate of	11 ch /hr at th	e high press	rintion range			
in order to contain a spot	in order to contain a spot outside of the unit. Production rates in a fuel model TL4 were used							

Additional personnel were added beyond modeled outputs for line production due to proximity to homes and private property.

The minimum organization requires a low number of resources based on a low predicted rate spread, the line production capability of resources in that fuel type, and ignitions possibly occurring over multiple days. If the burn boss decides to complete ignitions in one burn period additional resources will be required to provide adequate holding and ignition resources. The number of resources needed will ultimately be determined by the burn boss, the number of days ignitions will occur, and the current conditions.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

A. Radio I	Frequencies:			-		
Channel	Function	Fre	equency	Tone	Assignment	Remarks
1. CC	DMMAND freque	ncy(ies):				
3	Mt. Ashland RPTR	TX: RX:	164.9375 169.9750	97.4 67.0		
4	South direct	TX: RX:	169.9750 169.9750	103.5 103.5		
2. TA	CTICAL frequen	cy(ies):	·			
	RSF TAC 2	TX: RX:	167.42500 167.42500	67.0 67.0	Primary	
	RSF Project 1	TX: RX:	169.9750 169.9750	67.0 67.0	Secondary	
		TX: RX:				
3. Al	R OPERATIONS	frequen	cy(ies)			
	A/G 51	TX: RX:	168.3125 168.3125		Primary	
	A/G 62	TX: RX:	169.3625 169.3625		Secondary	
OTHER						
		TX: RX:				
		TX: RX:				

Element 12: Communication

REMARKS

At a minimum, the burn boss will relay the following information either directly or through dispatch to inform unit fire management and agency administrators on project status:

1. Element 2B Go/No-Go is complete and intent to proceed with test fire or take other actions

2. Results of the test fire and intent to proceed with ignitions or take other course of action

3. Any time Contingency Resources are mobilized or engaged in contingency actions

4. Any time Element 18: Wildfire Declaration procedures are proposed or being taken as described in the plan

5. Ignition operations completed for the project or shift

6. Release or extension of assigned resources, project status at the end of shift (Uncontained, Contained, Controlled, Out), and outlook for next operational period

7. Update on mop-up or patrol activities including project status (Contained, Controlled, Out) and name of the assigned burn boss, incident commander, or duty officer responsible for the day's actions

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

B. Telephone Numbers:

Contact Name	Title	Work Phone	Cell Phone
Jen Sanborn	District Ranger	541-899-3810	541-324-1318
Robert Marshall	FMO	541-899-3865	541-580-5915
Todd Zumhofe	AFMO	541-899-3884	541-944-3580
Kit Colbenson	AFMO(Fuels)	541-899-3876	541-218-3175
Chris Chambers	Ashland F &R	541-552-2066	541-890-8816
Marko Boy	Lomakatsi		541.941.6874
	Lomakatsi		541-541-6674
John Cymore	Lomakatsi	541-488-0208	541-622-5940
Bryan Wheelock	Grayback		406-531-9967
Grayback Forestry		541-830-3100	
Dan Quinones	Fire Staff	541-618-2100	541-816-0453
Rob Budge	Asst. Fire Staff	541-618-2102	541-255-6364
Brad Hardesty	Captain E-312	541-899-3814	541-373-0087
Lloyd Cruz	Captain E-311	541-899-3821	530-410-1644

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 13: Public and Personnel Safety, Medical

A. Safety Hazards:

Firefighter

LCES will be identified prior to ignition and discussed during the briefing.

Known hazards include: snags, steep terrain, bee/yellow jackets, rolling material and smoke.

All personnel who are within the active burn area are required to wear personal protective equipment (PPE).

Refer to the Job Hazard Analysis (JHA) located in Appendix D for specific hazards and mitigation measures.

Public

The unit and roads to the unit will be cleared of public before ignition starts. Major road systems (2060) may be impacted by smoke and will have signs placed to inform the public. Gravel roads with or without gates on them maybe locked or blocked off for public safety. Smoke may cause minor eye and respiratory irritation to individuals that are in direct contact with smoke. Residual smoke maybe a problem for a period of time.

Recommend temporary closure of all internal and adjacent trails for public safety.

B. Mitigation Measures Taken to Reduce the Hazards:

Public notifications will be made prior to ignitions through multiple media outlets. Public scoping, forums and events have been held to discuss smoke in Ashland and its effects. Signs to inform the public will be posted. Personnel will patrol the area prior to ignitions, during ignitions and during the mop-up phase of the burn to keep the public safe. Hazardous snags will be identified and mitigated along trails, high use areas and critical control points. Fire personnel will brief thoroughly utilizing the briefing checklist and Job Hazard Analysis.

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.

For this burn, see AFR established medical plan (Appendix G). AFR medical plan is current and used by all personnel operating within the AFR project partnership. AFR Medical plan will be issued in a daily Incident Action Plan and is current for federal and contract employees.

D. Emergency Evacuation Methods:

For this burn, see AFR established medical plan (Appendix G). AFR medical plan is current and used by all personnel operating within the AFR project partnership.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

E. Emergency Facilities:

		FOR GO	ME /EF		L PLAN NT EMPI	LC	YEES				
		MEDICA	L AIC	D STAT	IONS / PERS	10	INEL				
					1.00					PARAM	EDICS?
	NAME				LOC	AII	ON			YES	NO
TRUAMA AN	D BURN KIT ON	N-SITE									
		EMER	GEN	ICY TR	ANSPORTA	τιο	N				
										PARAM	IEDICS?
NAME		TELEPHON	IE		L	.0C	ATION			YES	NO
HELISPOT CLOSEST TO PROJECT				LAT. LONG.							
				HOSP	ITALS						
				TRAVI	EL TIME /IIN)			HELI	PAD?	BURN CENTER	
NAME	ADDF	RESS		AIR	GROUND		PHONE	YES	NO	YES	NO
Remarks:											

For this burn, see AFR established medical plan (Appendix G). AFR medical plan is current and used by all personnel operating within the AFR project partnership.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 14: Test Fire

A. Planned Location:

Provisions for a test fire are required. The test fire should be ignited in a representative location and results must be documented. Burn boss will decide location on unit that best meets condition of test fire. 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. In many applications, analysis of the initial ignitions may provide adequate test fire results. Each individual unit will need an appropriate test fire with documentation. Ideally, the test fire would be ignited adjacent to top control lines where it can easily be controlled if not meeting objectives and ideally would become part of the anchor. Following a successful test fire, ignition can continue along upper control lines. Once a sufficient blackline is established as an anchor, fire can be taken down the flanks of the unit. This would then be followed with igniting off the flanks. As the flanks become secure, fire should be backed down the interior of the unit.

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 Resu	lts			
Flame Length				
Rate of Spread				
Smoke Dispersion				
Other				
The test fire meets the pr	escription parameters	Yes	No	

DATE

SIGNED

Prescribed Fire Burn Boss

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 15: Ignition Plan

A. Firing Methods:

Ignition will start at the top of the unit/subunit with a hand ignition head-strip firing pattern with drip torches. Black line will be established along perimeter as progression continues down slope. Width of strips will be adjusted throughout unit to achieve desired results (flame length and scorch height). Strips may be widened in areas of under-story growth to allow thinning by fire. Adjustments will be made based on fire behavior observations. Fire behavior outputs will be influenced by the type of ignition pattern and the rate used. Erratic fire behavior may be experienced at the high end of the prescription. Ignition technique will compensate for fuel moisture conditions. A backing fire may have to be used if burned under the high prescription. Avoid actively igniting fire within riparian and Landslide Hazard Zones.

1. Ignition Techniques, Sequences and Patterns

Overall, strip head firing or dot firing will be utilized to bring fire down through the unit. This may need to be in a general backing fashion to minimize impacts to the residual stand. Flame length and intensity will dictate ignition technique and strip width. Protection of older legacy trees (conifer and hardwood) will require special lighting techniques to minimize bole and crown scorch. Likewise, reserve piles should not be intentionally lit, efforts should be taken to leave intact if possible. Ignition pattern can be modified on site should need arise to meet objectives; this should be discussed and agreed to by both the firing boss and burn boss, and relayed to all personnel on the unit.

The Ignition Specialist and Holding Specialist functions are expected to work closely together to ensure that the ignition pattern and sequence do not present concern for control of the burn. The (wind or slope and aspect) should be the dominant influence for fire behavior and the primary factor in establishing the ignition pattern and sequence for the unit. The ignition pattern and sequence are suggested and can be modified to better suit the current conditions experienced on the day of the burn.

B. Firing Devices:

In most cases standard drip torches will be the preferred method of lighting. A diesel/gasoline mix will be used as the accelerant, mix will be adjusted as needed for fuel and weather conditions. Slash fuel will be transported in an approved tank with spill containment available in fueling areas. Slash fuel may be moved around the unit in 5 gallon fuel containers, these should be appropriately marked to avoid confusion on container contents.

In some cases alternative lighting sources may be used, examples include but are not limited to fusee or quick fire devices.

C. Minimum Ignition Staffing:

Refer to Element 11 to view the organization to be utilized. Specific instructions and briefings will occur prior to ignition to cover ignition and holding concerns.

The minimum organization requires a low number of resources based on a low predicted rate spread, the line production capability of resources in that fuel type, and ignitions possibly occurring over multiple days. If the burn boss decides to complete ignitions in one burn period additional resources will be required to provide adequate holding and ignition resources. The number of resources needed will ultimately be determined by the burn boss, the number of days ignitions will occur, and the current and expected conditions.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 16: Holding Plan

A. General Procedures for Holding:

Holding crews will be stationed along control lines to monitor for potential spotting. All slop-over and spot fires will be lined as soon as practical. These fires will be mopped up 100% and marked on a map as soon as practical. The Burn Boss will be immediately notified of any fire that occurs outside of the units. When possible take effort to protect reserve piles that provide critical habitat for multiple species of wildlife. Due to seasonal (fall/winter/spring) conditions (shortness of day, elevated moisture levels, persistent shadows) holding problems are expected to be minimal. In most cases holding and contingency resources will be provided by Lomakatsi, exceptions may occur for forest provided resources and special events like learning "TREX".

B. Critical Holding Points and Actions:

- The southern boundary of Unit 10 occurs where the Forest Boundary borders private property. Additional holding resources may be utilized in this area to ensure slope overs and spot fire do not occur on private property. Aggressive mop-up will follow ignitions in this area to ensure an escape does not occur.
- Avoid actively igniting fire within riparian and Landslide Hazard Zones.

C. Minimum Organization or Capabilities Needed:

Minimum capabilities needed for holding are identified under Element 11 - Organization and Equipment. The Holding Specialist function will be held at the Single Resource (ICS position) level based on complexity of burn and holding operation. Different organizations may be identified for different phases of implementation (i.e. holding vs. mop-up and patrol, different ignition operations, different ignition patterns, different prescriptions).

The minimum organization requires a low number of resources based on a low predicted rate spread, the line production capability of resources in that fuel type, and ignitions possibly occurring over multiple days. If the burn boss decides to complete ignitions in one burn period additional resources will be required to provide adequate holding and ignition resources. The number of resources needed will ultimately be determined by the burn boss, the number of days ignitions will occur, and the current conditions.

D. Mop-up and Patrol:

Mop-up will be completed to the extent necessary to secure the burn as directed by the Burn Boss. During and after ignition, frequent and thorough patrols will be implemented at the discretion of the Burn Boss. 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. Frequent patrols will continue post burn until the burn area is declared out by the responsible party. If several days (2+) of undesirable weather is expected (high temps, high winds (10+mph), storm fronts, etc.) aggressive mop-up will be considered throughout the entire unit with the perimeter and problem areas being priority.

E. Conditions for Leaving Burn Unattended:

Weather conditions and/or mop-up that reduce probability of escape fire spread and safety concerns to the public must be met prior to leaving a burn unattended.

- Mop-up will be completed to the extent necessary to secure the burn as directed by the Burn Boss.
- A burn will not be declared out until smoke is no longer visible within the unit

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 17: Contingency Plan

A. Management Action Points or Limits:

Management Action Point – Documentation Element	Management Action Point Narrative:
Designator and Description:	
Condition:	
Management Intent:	
Recommended Action(s) to Consider:	
Recommended Resources:	
Time Frame:	
Describe the Consequences of not taking the	
recommended action(s) (Optional):	
Responsibility:	
Date Each Action is Initiated (Optional):	

B. Actions Needed

Management action points are established to be used as aids in assisting managers in determining if the contingency plan needs to be activated due to unexpected events or undesirable results. Management points include:

-fire outside of project boundaries (AFR project boundary, or fire outside of specific Unit boundary)

-smoke management concerns to City of Ashland

-required personnel not available

-other prescribed fire plan elements not being met.

Management Action Points in the contingency plan do not dictate declaring the prescribed burn to a wildfire or mean the fire has escaped.

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 converted to a wildfire.

In the event management action points are met that put in jeopardy the objectives of the burn, actions may be taken by the burn boss to change or mitigate burning operations. The Burn Boss may use strategies to suppress or maintain the burn based on conditions and results. Fire compromising unit boundaries may trigger suppression actions to stop the spread.

Contingency resources should be ordered by the burn boss through Lomakatsi not RVICC. Keep RVICC informed that the request has been made and when additional resources arrive.

C. Minimum Contingency Resources and Maximum Response Time(s):						
Agency & Location	Maximum Response	Confirmation of Availability*				
	Time	Yes/No	Date			
TBD	30					
TBD	30					
	y Resources and Maximum Agency & Location TBD TBD	y Resources and Maximum Response Agency & Location Maximum Response Time TBD 30 TBD 30 Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Image: Comparison of the system Ima	y Resources and Maximum Response Time(s): Agency & Location Maximum Response Time(s): Agency & Location Response Time TBD 30 TBD 30 TBD 30 Image: Stress of the second s			

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

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 18: Wildfire Declaration

A. Wildfire Declared By:

The Prescribed Fire Burn Boss, in conjunction with District/Forest FMO/Agency Administrator, will make the decision when to declare the prescribed fire a wildfire. A prescribed fire, or a portion or segment of a prescribed fire, must be declared a wildfire when either or both of the following criteria are met:

- Prescription parameters are exceeded and holding and contingency actions cannot secure the fire by the end of the next burning period, or,
- The fire has spread outside the project area or is likely to do so, and the associated contingency actions have failed or are likely to fail and cannot be contained by the end of the next burning period.

A prescribed fire can be declared a wildfire for reasons other than those identified above, if events cannot be mitigated as determined by the burn boss and agency administrator.

A wildfire will be declared by the Burn Boss without delay if there is an immediate threat to human life or the potential for significant damage to resources, private property, or infrastructure in the near future (structures immediately threatened or on fire, crown fire running toward private property, airtankers are needed to contain the fire, etc.). The intent is to not delay declaring a wildfire if time is of the essence.

However, if there is time, the Burn Boss is to confer with the Agency Administrator, FMO and Forest Duty Officer/Fire Staff before declaring a wildfire. This is to allow an opportunity to exhaust all possible funding and containment options before a wildfire declaration is made. The intent is to take a reasonable amount of time to make an informed decision based on the predicted weather, values at risk, chances of containing the fire, availability of additional resources, funding available, and other factors before declaring a wildfire. If a wildfire is declared all resource orders will be placed through RVICC instead of Lomakatsi at that time.

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

B. IC Assignment:

Should a wildfire be declared, the Burn Boss will become the Incident Commander until relieved or replaced. 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 (through Lomakatsi) identified in the Contingency Plan as well as any other required resources necessary to support the suppression effort. Additional resources will be ordered through RVICC once contingency resources are exhausted.

Upon a wildfire declaration occurring, all overhead personnel will begin to document actions taken on a Unit Log, notebook, or similar format. 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.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

C. Notifications:

The Prescribed Fire Burn Boss/IC will notify the Rogue Valley Interagency Communications Center (RVICC) and the Siskiyou Mountains Fire Management Officer (FMO) of the escape and identify the IC. The FMO will then notify the District Ranger and Forest Fire Staff. RVICC will notify contacts listed on the notification plan of the escape and the current situation.

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.

Containment opportunities exist using roads and trails within the Ashland Watershed. Areas of additional fuels treatment can be tied into to slow fire growth. For Unit 10 burned areas to the north in AFR burn units 12 & 14 exist. Additionally, burned areas and roads throughout the bordering private property to the north are available.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 19: Smoke Management and Air Quality

A. Compliance:					
Burn units will be registered Approval to burn will be obta Office. The contact number	in the FAS ained from for ODF S	STRAX or e the Oregor Smoke Man	quivalent computer system p n Department of Forestry's Sn agement is: 503-945-7401.	rior to burn noke Mana	day. gement
B. Permits to be Obtain	ed:				
Smoke Management Number:	A	ssigned fro	m FASTRAX (Or similar)		
C. Smoke Sensitive Rec	eptors:				
Identify any non-attainmer Class I airsheds within 15 miles:	nt or vi	osest class ildernesses	1 airsheds are the Kalmiopsis over 30 miles away.	and Mount	ain Lakes
	Distance	0 Dias atta	Designated Area (DA)		
Designated Area (DA)	Distance	DIrection	Designated Area (DA)	Distance & to l	Direction
Designated Area (DA)	Distance to Distance	A Direction DA Azimuth	Designated Area (DA)	Distance & to I Distance	A Direction DA Azimuth
Designated Area (DA) Rogue Valley SSRA	Distance to Distance 2.5	Azimuth	Designated Area (DA)	Distance & to I Distance	A Direction DA Azimuth
Designated Area (DA) Rogue Valley SSRA	Distance to Distance 2.5	A Direction DA Azimuth N-NE	Designated Area (DA)	Distance 8 to I Distance	A Direction DA Azimuth
Designated Area (DA) Rogue Valley SSRA D. Potential Impacted A	Distance to Distance 2.5 reas:	Azimuth	Designated Area (DA)	Distance 8 to I Distance	Azimuth
Designated Area (DA) Rogue Valley SSRA D. Potential Impacted A Local roads could be impact Ashland watershed may hav businesses' in the area may	Distance to Distance 2.5 reas: reas: reas: reas: reas: reas: reas: reas: reas: reas:	Azimuth Azimuth N-NE dual smoke of smoke th ce pooling o	Designated Area (DA)	Distance 8 to 1 Distance	Azimuth Azimuth ng hours. nces and S.
Designated Area (DA) Rogue Valley SSRA D. Potential Impacted A Local roads could be impact Ashland watershed may have businesses' in the area may E. Mitigation Strategies	Distance to Distance 2.5 reas:	dual smoke of smoke the bridge of smoke the ce pooling of	Designated Area (DA) if a strong inversion occurs in nat impacts recreation activitie f smoke due to smoldering af o Reduce Smoke Impacts	Distance 8 to 1 Distance	Azimuth Azimuth ng hours. nces and S.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Element 20: Monitoring

A. Fuels Information Required and Procedures:

Fuels and stand data have been extensively collected. That data will be collected post treatment to evaluate for treatment effectiveness by cooperators and/or the FS. Observed fire behavior and weather parameters will be documented during the ignition phase and included in the project file.

B. Weather Monitoring (Forecasted and Observed) Required and Procedures:

Weather observations should be measured and recorded on an hourly basis 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. A SPOT weather forecast from the National Weather Service will be obtained before ignitions begin.

C. Fire Behavior Monitoring Required and Procedures:

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.

D. Monitoring Required to Ensure Prescribed Fire Plan Objectives are Met:

AFR Stewardship personnel will continue to monitor fuels and stand exams to measure treatment effectiveness and to measure how well objectives were met.

E. Smoke Dispersal Monitoring Required and Procedures:

Managers will monitor weather prior to ignitions within the unit. ODF smoke forecasters will be contacted for approval and permits. Personnel will be assigned to document smoke produced by burning and monitor dispersal and mixing height.

Element 21: Post-burn Activities

A. Post-Burn Activities that Must be Completed:

Post burn activities include mop-up to meet standards as set by the Burn Boss. Unit will be monitored and mopped as described in Element 16.

Monitoring for public safety is important as post burn unit may have extreme hazards to recreationalists. Documenting weather conditions post-ignitions and long term forecasts to aid in predicting weather concerns that may affect the unit.

- Rescind trail or area closures.
- Remove any RX signage that was placed on or near the unit.
- Complete necessary line and trail rehab, ensure that any trail hazards are identified and mitigated.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

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

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	



Appendix A: Vicinity Map

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	



Appendix A: Project (Ignition Units) Maps

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	



Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	





Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	



Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

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:

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Appendix C – Complexity Analysis

Summary and Final Complexity

		AFR 10	& 65a		Quantity	Significance	
		On-Site			Few	Mod	
	Values	Off-Site			Multiple	High	
		Public/Political In	terest		Multiple	High	
Eler	ment		Preliminary Risk	Po	st-Plan Risk	Technical Difficulty	Calculated Rating
Safety			Low		Low	Low	Low
Fire Behavior			Low		Low	Low	Low
Resistance to Contai	inment		Mod		Mod	Mod	Mod
Ignition Procedures	and M	ethods	Mod		Mod	Low	Mod
Prescribed Fire Dura	ation		Mod		Mod	Low	Mod
Smoke Managemen	t		High		High	High	High
Number and Depen	dence	of Activities	Mod		Mod	Mod	Mod
Management Organ	ization		Mod		Mod	Mod	Mod
Treatment/Resource	e Obje	ctives	Mod		Mod	Mod	Mod
Constraints			Mod		Mod	Low	Mod
Project Logistics			Low		Low	Low	Low
Final Complexity Det	erminat	tion Final Com	plexity Determinat	ion F	Rationale		
Mod		overall the u prescription previous trea easily mitigat is the multipl mitigated thr team and un complexity a matrix that c helped build continue to b improved sig heavily for re keeping Publ to grow. Alth could expose location on t	Overall the units are fairly simple in complexity, having limited escape potential as long as prescription parameters are being met. There are plenty of options, such as roads, trails and previous treatments in the area that can be used as control points if needed. Safety concerns can be easily mitigated. Logistical support is minimal and all available locally. What increases the complexity is the multiple agencies/partners that are involved when a burn takes place in AFR. This has been mitigated through the years with increased communication efforts, going out of the way to work as a team and understanding roles played by each partner. The close proximity to the SSRA adds complexity as well, however working with the ODF Smoke Managers the partners have developed a matrix that can be used to provide a guideline for clearance. Continued communication with ODF has helped build trust and cooperation that tends to open clearance windows even further. Smoke will continue to be a constraint to project burning into the future but recognizing opportunities has improved significantly. Public perception has been an ongoing concern, the watershed is used heavily for recreation. Partner outreach continues to build public support/understanding. By keeping Public informed and impacting as little as possible with smoke/activities support will continue to grow. Although there is not a lot of infrastructure in immediate proximaty to the units, an escape could expose city water and structures to a fire risk. This is very unlikely given the time of burn and location on terrain upslope of City of Ashland.				
Signatures		Rx Burn Plan Pr Technical Revie Agency Admini	eparer's Name:ewer's Name:		XX Prepare XX Technic X Agency	er [Date:

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Values

	AFR 10 & 65a			
		Quantity	Significance	Values Description: Describe the identified off-site, on-site and political values
	On-Site	Few	Mod	On site values revolve around habitat and environmental concerns. Risk to cohort 1 trees and effective ground cover. Small riparian feed the headwaters of the Ashland water supply. Adjacent to owl core and is habitat for Pacific fisher, creating the need to work with local Wildlife Biologist's. Several recreation trails run near/through the units. Northern boudary of unit 10 is private property.
Values	Off-Site	Multiple	High	Off site values are very similar to the on-site reflecting the same concerns to wildlife, water and legacy trees. In addition there is Reeder Reservoir downhill and to the west of the units about 1 mile away. The City of Ashland lies downslope approxiametly 1-2 miles away from burn units. To the north of Unit 10 is the private lands with structures and power infrastructure. There is however multiple roads and trails to use as potential control points in the event of escaped fire.
	Public/Political Interest	Multiple	High	Area is heavily recreated and visible from the City of Ashland, activities in the Ashland watershed can be controversial. There would be significant public interest and negative social impacts from an escape fire or damaged infrastructure. Local Media attention could be significant.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Complexity Elements

1. Safety

Prelimin	ary Risk
Low	 Safety issues and hazards are easily identifiable, addressed in briefings, and managed. Minimal organization produces little exposure of personnel to hazards. Adverse impacts to public health and safety are unlikely. Activities are high frequency/low risk. Fatigue and exposure to hazards are limited. Image: Landard safety briefings and attention to Lookouts, Communications, Escape Routes, and Safety Zones (LCES) are sufficient. Area is heavily recreated by the public, safety of public and driving is included in briefing materials.
Post-Pla	n Risk
Low	 Safety issues and hazards are easily identifiable, addressed in briefings, and managed. Minimal organization produces little exposure of personnel to hazards. Adverse impacts to public health and safety are unlikely. Activities are high frequency/low risk. Fatigue and exposure to hazards are limited. tandard safety briefings and attention to Lookouts, Communications, Escape Routes, and Safety Zones (LCES) are sufficient.
Post Pla	n Technical Difficulty
Low	 No special actions are required to mitigate potential minor accidents or injuries identified in the risk assessment/Job Hazard Analysis (JHA). Safety concerns can be easily mitigated through LCES. No preparation work or special project design features are required.

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

2. Fire Behavior

Prelimin	ary Risk
Low	 Terrain is mostly flat or the slope and aspect are uniform, leading to a relatively unvarying fire. Winds, fuel moisture, microclimate, and other fire conditions are relatively uniform and are not conducive to active fire spread. Fire behavior is highly predictable. respread beyond the immediate ignition area(s) is not likely to occur or contribute to any control problems. AFR units can dry quickly due to granitic soils and chance of east winds setting up, therefore burning at the drier end of the prescription may push behavior more towards the Medium level. Burning under these conditions would be rare.
Post-Pla	n Risk
	• Terrain is mostly flat or the slope and aspect are uniform, leading to a relatively unvarying fire.
	 Winds, fuel moisture, microclimate, and other fire conditions are relatively uniform and are not conducive to active fire spread. Fire behavior is highly predictable. Ire spread beyond the immediate ignition area(s) is not likely to occur or contribute to any control problems.
Low	
Post Pla	n Technical Difficulty
Low	 Standard fire safety precautions are adequate to ensure personnel safety. No fire behavior variations are expected and numerous barriers to fire spread exist. The number, size or likelihood of spot fires and slopovers is minimal and do not require additional suppression resources. Fire behavior is such that holding forces can easily control possible spot fires and slopovers using direct attack tactics. jo on-site operational fire behavior specialists are required.

3. Resistance to Containment

Preliminary Risk

Prescribed Fir	e Name:		Ignition Unit Name:		District:]	
AFR			10 & 65a		SMRD			
Mod	 Potential Some fuel Expected The probation Some dep Local drout Units can do these have 	for multiple wildfire mechanisms concentrations or ladder fuels e fire intensities in the primary fue ibility of ignition in fuels outside endency on natural fuel breaks t ight and or fire indices are expec ry quickly and have potential for been treated with prescribed fire	such as spot fires or slopov xist near critical holding poi l type create little potential of control lines is low to mo o hold the prescribed fire. ted to be moderate to high winds to effect fire, these co while others have slash an	vers that can propagate at ints. I to challenge standard fir oderate. onditions may alter fuel c d handpiles intermixed.	: moderate ra e lines. onditions sev	tes of spread but ca reral days after initia	n be held by prompt holding actions. al burn. Additional units are in the are	ea, some of
Post-Plan	Risk							
Mod	 Poten by prom Some Expect The pr Some Local of 	tial for multiple wildfire m opt holding actions. fuel concentrations or lac ted fire intensities in the p robability of ignition in fue dependency on natural fu drought and or fire indices	nechanisms such as sp Ider fuels exist near cr primary fuel type crea els outside of control nel breaks to hold the s are expected to be n	oot fires or slopovers ritical holding points te little potential to lines is low to mode prescribed fire. noderate to high.	that can p challenge rate.	oropagate at mo	oderate rates of spread but ca nes.	n be held

Post Plan Technical Difficulty

4. Ignition Procedures and Methods Preliminary Risk

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Mod	 Multiple firing sequences patterns and timing must be coordinated to meet project objectives and reduce the risk of an unexpected or adverse event. Specific fire intensities or ROS are somewhat critical for meeting resource objectives but are readily attained by placing local skill sets in firing boss positions. Partnerships require several agencies to come together for burning operations that may be unfamiliar with each other. Fire intensity will be important factor to prevent scorch and meet retention objectives.
Post-Plan l	Risk
Mod	 Multiple firing sequences patterns and timing must be coordinated to meet project objectives and reduce the risk of an unexpected or adverse event. Specific fire intensities or ROS are somewhat critical for meeting resource objectives but are readily attained by placing local skill sets in the boss positions.

Post Plan Technical Difficulty

5. Prescribed Fire Duration

Preliminary Risk

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

	 Active ignition, fire spread, and patrol is expected to occur for several operational periods. Some residual burning (heavy fuel smoldering, stump holes, etc.) is expected to occur for several days after the primary burn out of the unit. Mop-up and patrol is typical with minimal resource and equipment needs. Primary holding phase is expected to be completed within reasonably predictable local weather forecasts. The prescribed fire depends on accurate forecasts through three days
Mod	Image: Second day of lighting in some cases.
Deat Dia	n Diak

Post Plan Technical Difficulty

6. Smoke Management Preliminary Risk

	Conspicuous smoke will be produced creating significant public concern.
	 The possibility of health and safety issues due to smoke exposure exists.
	 Strong, widespread social/political concern about smoke is common in the affected area.
	 High possibility for a NAAQS exceedance violation.
	• Smoke impacts affect several prescribed fire plan elements.
High	
	Close proximity to the SSRA makes windows for burning somewhat limited, these units are close to town and may be challenging to obtain smoke clearance.

Post-Plan Risk

Post Plan Technical Difficulty

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

7. Number and Dependence of Activities

Preliminary Risk

	J · ····
	 Several activities depend on achievement of previous or concurrent actions.
	Several activities are interactive.
	 Communication is routine for coordination of activities and project success.
	• The project involves another land management agency, ownership or jurisdiction but project completion is not dependent on coordinated implementation.
	 Adjacent ownership supports the implementation of the prescribed fire.
Mod	×.
inou i	Activities are fairly independent of each other, however involves a partnership with multiple entities (USFS, TNC, City of Ashland, Lomakatsi, and Grayback Foresty). Each partner
	provides a piece of the burn organization requiring good communication and common purpose.

Post-Plan Risk

Post Plan Technical Difficulty

8. Management Organization

Preliminary Risk

	J
	 Two levels of supervision are needed (i.e. Burn Boss, Ignition Specialist, and/or Holding Specialist, plus lighters and holders). Special skills or supervision required for one function (RXB2 is suggested).
Mod	Units require different levels of supervision, including different agencies. Required overhead is RXB2, FIRB, and a holding specialist, along with proper crew supervision.

Post-Plan Risk

Post Plan Technical Difficulty

9. Treatment/Resource Objectives

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Preliminary Risk

	Issues are present that hamper or may prevent meeting treatment resource objectives.
	• Failure to meet objectives could have short-term adverse impacts.
	 Associated resources could be damaged if the prescribed fire did not meet resource objectives.
	• Few critical holding points.
Mod	Damage to critical habitat, legacy trees, water and ground cover all could occur if fire doesn't meet resource objectives.

Post-Plan Risk

Post Plan Technical Difficulty

11. Constrains

Preliminary Risk

	onstraints exist with some constraints imposing limits on implementing the prescribed fire or achieving objectives.			
	Many constraints are mitigated by time of year for burning. Fuel and weather conditions minimize mop-up. Project may be in prescription but not meet smoke parameters.			
	Settling of smoke in the valley may have an adverse impact on the public. There is a need to align burn days to not conflict with special events in the City.			
Mod				

Post-Plan Risk

Post Plan Technical Difficulty

12. Project Logistics Preliminary Risk

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

	Minimal logistical support is needed to safely meet prescribed fire objectives.
	💌 o special equipment, support or communications needs are required.
	All logistical needs are readily available locally.
Low	

Post-Plan Risk

Post Plan Technical Difficulty

Prescribed Fire Name:	Ignition Unit Name:	District:	
AFR	10 & 65a	SMRD	

Appendix E: Job Hazard Analysis

https://usfs.box.com/s/3931Ingax2gp6kuvr0dlfsk8tamttcn2

Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation

BehavePlus 6.0	0.0 (Build 626 Beta 3)	
H Wed, Apr 2	Unit 10 Iead Fire 5, 2018 at 07:43:03	
Input Worksheet		
Inputs: SURFACE, CONTAIN, SPOT, SCORCI	H, IGNITE	
Input Variables	Units	Input Value(s)
Fuel/Vegetation, Surface/Understory		
Fuel Model		tl3
Fuel/Vegetation, Overstory		
Downwind Canopy Height	ft	100
Downwind Canopy Cover		Closed
Torching Tree Height	ft	100
Spot Tree Species		PIPO
D.B.H.	in	18
Fuel Moisture		
1-h Fuel Moisture	%	7,9,10,12,13,15
10-h Fuel Moisture	%	9
100-h Fuel Moisture	%	11
Live Herbaceous Fuel Moisture	%	
Live Woody Fuel Moisture	%	
Weather		
20-ft Wind Speed (upslope)	mi/h	15
Wind Adjustment Factor		.3
Air Temperature	oF	85
Fuel Shading from the Sun	%	50
Terrain		
Slope Steepness	%	40
Ridge-to-Valley Elevation Difference	ft	500
Ridge-to-Valley Horizontal Distance	mi	.5
Spotting Source Location		RT
Fire		
Number of Torching Trees		1
Fire Size at Report	ac	.1
Suppression		
Suppression Tactic		Rear
last modified 9/21/2022 57		

Line Construction Offset	ch 0	ch 0
Resource Line Production Rate	ch/h 10	ch/h 10
Resource Arrival Time	h .1	h .1
Resource Duration	h 8	h 8
Notes		

Run Option Notes

Maximum effective wind speed limit IS imposed [SURFACE].

Fire spread is in the HEADING direction only [SURFACE].

Wind is blowing upslope [SURFACE].

Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Suppression input is for a single resource [CONTAIN]; multiple values can be entered for any input variable.

Head Fire

Results

1-h Fuel Moisture	Surface Fire Rate of Spread	Surface Flame Length	Contain Status	Time from Report	Contained Area	Fireline Constructed	Torching Tree Spot Dist	Scorch Height	Firebrand Ignition
%	ch/h	ft		h	ac	ch	mi	ft	%
7	1.9	1.1	Contained	0.8	0.3	7.3	0.2	1	49
9	1.7	1.0	Contained	0.8	0.2	6.9	0.2	1	36
10	1.7	1.0	Contained	0.8	0.2	6.8	0.2	1	31
12	1.5	1.0	Contained	0.7	0.2	6.5	0.2	1	23
13	1.5	0.9	Contained	0.7	0.2	6.3	0.2	1	20
15	1.3	0.9	Contained	0.7	0.2	6.0	0.2	1	14

End

BehavePlus 6.0.0 (Build 626 Beta 3) Unit 65 Head Fire Wed, Apr 25, 2018 at 07:48:47

Units Input Value(s)
tl4

Fuel/Vegetation, Overstory

Downwind Canopy Height	ft	100
Downwind Canopy Cover		Closed
Torching Tree Height	ft	100
Spot Tree Species		PIPO
D.B.H.	in	18
Fuel Moisture		
1-h Fuel Moisture	%	7,9,10,12,13,15
10-h Fuel Moisture	%	9
100-h Fuel Moisture	%	11
Live Herbaceous Fuel Moisture	%	
Live Woody Fuel Moisture	%	
Weather		
20-ft Wind Speed (upslope)	mi/h	15
Wind Adjustment Factor		.3
Air Temperature	oF	85
Fuel Shading from the Sun	%	50
Terrain		
Slope Steepness	%	40
Ridge-to-Valley Elevation Difference	ft	500
Ridge-to-Valley Horizontal Distance	mi	.5
Spotting Source Location		RT
Fire		
Number of Torching Trees		1
Fire Size at Report	ac	.1
Suppression		
Suppression Tactic		Rear
Line Construction Offset	ch	0
Resource Line Production Rate	ch/h	10
Resource Arrival Time	h	.1
Resource Duration	h	8
Notes		

Run Option Notes

Maximum effective wind speed limit IS imposed [SURFACE]. Fire spread is in the HEADING direction only [SURFACE]. Wind is blowing upslope [SURFACE]. Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Suppression input is for a single resource [CONTAIN]; multiple values can be entered for any input variable.

Head Fire

Results

1-h Fuel Moisture	Surface Fire Rate of Spread	Surface Flame Length	Contain Status	Time from Report	Contained Area	Fireline Constructed	Torching Tree Spot Dist	Scorch Height	Firebrand Ignition
%	ch/h	ft		h	ac	ch	mi	ft	%
7	2.6	1.4	Contained	1.1	0.5	10.1	0.2	2	49
9	2.4	1.3	Contained	1.0	0.4	9.0	0.2	2	36
10	2.3	1.2	Contained	1.0	0.4	8.6	0.2	2	31
12	2.1	1.2	Contained	0.9	0.3	8.1	0.2	1	23
13	2.1	1.2	Contained	0.9	0.3	7.8	0.2	1	20
15	1.9	1.1	Contained	0.8	0.3	7.4	0.2	1	14

End

Appendix F: Smoke Management Plan and Smoke Modeling Documentation

(OPTIONAL)

Refer to the *Smoke Management Guide for Prescribed and Wildland Fire* (National Wildfire Coordinating Group, 2001) and Appendix B. Basic Smoke Management Practices in the *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484, to fill out this appendix.

Appendix G: Project Safety Plan MEDICAL PLAN (ICS 206 WF) Controlled Unclassified Information//Basic

		Me	edical Incident R	eport	
FOR A	NON-EMERGEN	CY INCIDENT, WORK THE PER	ROUGH CHAIN O SONNEL AS NEG	F COMMAND TO R CESSARY.	EPORT AND TRANSPORT INJURED
FOR A M	EDICAL EMERG	ENCY: IDENTIFY ON-SCE EMERGENCY" TO INITIA	ENE INCIDENT C ATE RESPONSE	OMMANDER BY NA FROM IMT COMMU	ME AND POSITION AND ANNOUNCE
U	lse the follo	wing items to comm	nunicate sit	uation to comm	nunications/dispatch.
1. CONTACT CO	DMMUNICATIONS /	DISPATCH (Verify correct freq	uency prior to startin	g report)	
Ex: "Commur 2. INCIDENT ST	nications, Div. Alpha. Si FATUS: Provide incide	tand-by for Emergency Traffic." ant summary (including number of p	patients) and command	l structure.	
Ex: "Commun Meadow Medical, I	ications, I have a Red p C is TFLD Jones. EMT	priority patient, unconscious, struck Smith is providing medical care."	by a falling tree. Requ	lesting air ambulance to Fe	prest Road 1 at (Lat./Long.) This will be the Trout
Severity of Eme Pr	rgency / Transport iority	 RED / PRIORITY 1 Life or Ex: Unconscious, difficulty bre YELLOW / PRIORITY 2 Se Ex: Significant trauma, unable GREEN / PRIORITY 3 Min Ex: Sprains, strains, minor hee 	limb threatening i eathing, bleeding sever erious Injury or illn to walk, 2° – 3° burns or Injury or illness at-related illness.	njury or illness. Evac rely, 2° – 3° burns more the ess. Evacuation may not more than 1-3 palm siz . Non-Emergency tra	uation need is IMMEDIATE In 4 palm sizes, heat stroke, disoriented. be DELAYED if necessary. res. Isport
Nature of Ir	njury or Illness				
Mechanis	& sm of Injury				Brief Summary of Injury or Illness (Ex: Unconscious, Struck by Falling Tree)
Evacuati	on Request				Air Ambulance / Short Haul/Hoist Ground Ambulance / Other
Patient	Location				Descriptive Location & Lat. / Long. (WGS84)
Incide	nt Name				Geographic Name + Medical (Ex: Trout Meadow Medical)
On-Scene Incident Commander					Name of on-scene IC of Incident within an Incident (Ex: TFLD Jones)
Patie	nt Care				Name of Care Provider (Ex: EMT Smith)
3. INITIAL PATI	ENT ASSESSMENT	Complete this section for each patie	ent as applicable (start w	ith the most severe patient)	
Patient Assess	ment: See IRPG PA	GE 106			
Treatment:					
4. EVACUATION Evacuation Loca	I PLAN: tion (<i>if different</i>): (De	escriptive Location (drop point,	intersection, etc.) o	r Lat. / Long.) Patient's	ETA to Evacuation Location:
Helispot / Extract	tion Site Size and Ha	azards:			
	RESOURCES / FOL				
Example: Paramec	lic/EMT, crews, immob	ilization devices, AED, oxygen, trat	uma bag, IV/fluid(s), sp	lints, rope rescue, wheeled	l litter, HAZMAT, extrication
6. COMMUNICA	TIONS: Identify Sta	ate Air/Ground EMS Frequend	cies and Hospital (Contacts as applicabl	e • • • • • • • • • • • • • • • • • • •
Function	Channel Name/Num	iber Receive (RX)	Tone/NAC *	Transmit (TX)	Tone/NAC *
TACTICAL					
7. CONTINGENO	CY: <u>Considerations:</u>	l If primary options fail, what actio	Ins can be implement	l ed in conjunction with p	I imary evacuation method? Be thinking ahead
8. ADDITIONAL	INFORMATION: Up	dates/Changes, etc.			
REMEMBER:	Confirm ETAs of re	sources ordered. Act accord	ding to your level o	f training. Be Alert. K	ceep Calm. Think Clearly. Act Decisively.

ICS-206 WF (03/18)

Controlled Unclassified Information//Basic

I. MEDICAL PLAN:

A. Procedures

In the event of serious injury or illness, the crew boss shall be notified immediately. The crew boss will initiate on-site response (if not already in progress) and coordinate emergency response. NEVER move an injured person until an assessment of injuries has been completed. **If injuries to the head, neck or back are suspected – do not move the person.**

CRITICAL INJURY OR ILLNESS

Ground Ambulance Transport: Call for Emergency Response and provide first aid. Do not move the patient until an assessment has been completed and incoming responders agree. Then transport the person(s) to meet an ambulance. Otherwise – provide first aid and wait for the responders to reach the patient and treat, then assist in transporting the person to the nearest appropriate location. Give clear concise directions to the meeting location.

Air Transport: Call for Emergency Response and provide first aid. Do not move the patient until an assessment has been completed and incoming responders agree. Then transport the person(s) to the nearest helispot. Otherwise provide first aid and wait for responders to treat, then assist in transporting person(s) to the nearest helispot. Decision to use air transport over ground should be made in consultation with responding paramedic. Decision to extract versus pack the person should also be made by incoming responders. Information concerning the access, slope and conditions are critical in assisting responders in making evacuation decisions.

See attached map for the closest location. Describe the location relative to the project area and include a Lat/Long. Be prepared to help direct Emergency Responders to the project site whether using air or ground transport.

NON-URGENT RESPONSE

Private Ground Transport: Provide an assessment and first aid on scene – then transport the injured person(s) via on-site vehicle to Ashland Community Hospital. An injured or ill person should be accompanied by the First Responder on site – First Responder should not be the driver unless the injury is minor. The hospital is near the north end of Ashland, on Maple Street. It is located between Scenic Drive and Coolidge and on the left side of the road when traveling north. See attached maps for more details.

A. Medical Personnel

FILL IN INFORMATION FOR EACH PARTNER

NAME	LEVEL OF TRAINING	LOCATION OF FIRST AID/TRAUMA KIT
(Highest trained personnel)	(Level of training / organization)	

B. HOSPITALS

NAME	ADDRESS	TRAVEL TIME (MIN)		PHONE	HELIPAD?		BURN CENTER
	ADDICESS	AIR	GROUND	THOME	YES	NO	
Rogue Valley Medical Center	2825 East Barnett Rd. Medford Oregon	15 minutes	1 hour	(541) 608-4900	XX		
Providence Medical Center	1111 Crater Lake Avenue Medford Oregon	15 minutes	1 hour	(541) 732-5000	XX		
Ashland Community Hospital	280 Maple Ashland Oregon	5 minutes	30 minutes	(541) 482-2441		XX	
Legacy Emanuel Hospital	2801 Gantenbein Avenue Portland Oregon	90 minutes	6 hours	(541) 413-2200	XX		XX

C. EMERGENCY TRANSPORTATION

NAME	CONTACT	LOCATION
Ashland Fire Rescue (equipped w/ watershed keys & low angle rescue)	911	Ashland, Oregon
Mercy Flights - Ground	911	Medford, Oregon
Mercy Flights – Air	911	Medford, Oregon
Jackson County - Air Rescue (equipped with Short Haul)	911	Ashland, Oregon

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			re	1000-hr Fuel Moisture			Days Since Significant Precipitation		
Wind Direction (Average)		Wind Speed (Av			age)	Percent of Fuel Consumed			lgn (mi	ition Duration n.)	
									•	·	
	Ac	complis	shmer	nt of	f Fue	s Treatn	nent C	Dbjectiv	es		
Overall Objectives Achieved:			Yes			No					
Short Term Results	(incl	ude chai	nges in	fue	profil	e and fire	regime	e conditio	on cl	ass)	
Cost Evaluation											
Burn Plan Preparation	Site	Prepara	Burn Ope		eration	Total Burn Cost		sts	Cost/Acre		
\$	\$			\$			\$			\$	
	Nar	rative –	Presc	rib	ed Fi	re Burn I	Boss	Comme	ents		
i.e. operations, safety, fire behavior, personnel & equipment performance, logistics, smoke management											
Prescribed Fire Burn											
Boss								Duit			

Appendix I – Weather /	Fuels	/ Fire B	ehavio	or / Smo	oke Ob	servati	ons		
		Wea	ther ar	nd Fuel	s				
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 (%)									
		Fi	re Beh	avior		-	-	-	-
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			