

Prescribed Fire Plan

Raynolds Pass Aspen Enhancement Prescribe Burn Project

Ashton/Island Park



Caribou/Targhee



Final Preparer:

Date:

Name & Qualification

Additional Preparer:

Date:

Name & Qualification

Additional Review:

Date:

Name & Qualification

Technical Review :

Date:

The approved Prescribed Fire Plan constitutes the delegation of authority to burn. No one has the authority to burn without an approved plan or in a manner not in compliance with the approved plan. Actions taken in compliance with the approved Prescribed Fire Plan will be fully supported. Personnel will be held accountable for actions taken which are not in compliance with elements of the approved plan regarding execution of the objectives in a safe and cost-effective manner.

COMPLEXITY RATING

 High

 Moderate

 Low

Type of Burn

NEPA Document

Project Number

Estimated Cost Per Acre

Benefiting Activity(s)

Approved By: (Line Officer)

Certification of Burn Plan*

Date	FMO	Field Manager	Burn Boss

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*The Certification of Burn Plan table should be used to recertify that conditions and the plan are still valid for out years/seasons following approval of the original burn plan for multi-year or if plan is not implemented as scheduled.

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Prescribed Fire Plan

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Prescribed Fire Plan Technical Peer Review

District Office:	Ashton/Island Park	NEPA Document:	CE RAYNOLDS RX
Project Name:	Raynolds Pass	Project Number:	N/A

Plan Element	Page #	Technical Peer Reviewer
Prescribed Fire Management Summary and Risk Analysis		
Complexity Elements Summary		
Proposed Total Cost		
Burn Area Description		
Project Objectives		
Weather and Fuel Parameters		
Fire Behavior Narrative		
Test Fire Provisions		
Ignition and Holding		
Workforce and Equipment Needs		
Air Operations Organization/Plan		
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Medical Plan		
Smoke Management		
Mop Up and Patrol Plan		
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Notifications		
Go/No-Go Checklist		
Organization Chart		
Briefing Checklist		
Communication Plan		
Job Hazard Analysis for Prescribed Burning		
Fire Behavior Calculations (BEHAVE runs)		
Maps		

Comments:

Signature: _____ Date: _____

Title: _____ Office: _____

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Management Summary and Risk Analysis

Management Summary:

This project is located in Fremont County. The Raynolds Burn Unit is one-half miles NW of Timber Creek Estates, private property, and other private homes. To the north and east of the burn unit across the Montana /Idaho State boarder lies add ional private property some with homes that are occupied seasonally. Previous treatment on this project included felling of selected conifers to improve fire rate of spread through areas of sparse fuel loadings. The Staley Unit is located off the Henry's Lake road west of Henrys Lake. This unit also has private land along the Southeast boundary. The Upper Staley Unit is along the Idaho/Montana boarder southwest of the Staley Unit along the Continental Divide Trail.

Total project area consists of 1180 acres.

The Raynolds Unit is located T 16N R 42E s23.

The Upper Staley Unit is located T 15N R42E s2, and in T 16N R42E s36.

The Staley Unit is in T 15N R42E s1, 2.

The primary objective of this burn is to enhance wildlife habitat by increasing the age class distribution of the mountain brush species and the clonally size of aspen and reduce the existing wildland fire hazard, thus reducing potential negative effects from future wildland fire to both FS and adjacent private lands while restoring fire-adaptive ecosystems.

The desire to make changes with elements associated with these burns can only be made by the Prescribed Fire Burn Boss when justified as safe and cost effective. Changes permitted include minor changes in the amount or type of holding and ignition resources required, or changes in the ignition pattern(s), techniques, and/or sequences and minor changes in the weather and fuels parameters. Such changes will be noted in the Unit Log and on the prescribed fire plan with the Prescribed Fire Burn Boss's initial and date. On-site changes to the prescribed fire plan will not include changes to the objectives or the fire behavior prescriptions.

Values at Risk:

Damage or loss of private property.

Risk to Public Safety:

Health issues and reduced visibity related to smoke. Vehicles entering and leaving private residents.

Risk to Firefighter Safety:

Reduced visibility from smoke and dust. Traffic from private individuals and project traffic. Aerial ignition operations. Inadequate escape routs and safety zones.

Other Risks Identified:

No other risks have been identified at this time.

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Complexity Elements Summary

Prescribed Burn Project/Unit:	Raynolds Pass Aspen Enhancement Prescribe Burn/ Raynolds, Staley, and Upper Staley Units
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Element	Risk		Potential Consequences		Technical Difficulty	
	Spring	Fall	Spring	Fall	Spring	Fall
Potential for Escape						
The Number & Dependency of Activities						
Off-Site Values						
On-Site Values						
Fire Behavior						
Management Organization						
Public and Political Interest						
Fire Treatment Objectives						
Constraints						
Safety						
Ignition Procedures/Methods						
Interagency Coordination						
Project Logistics						
Smoke Management						
Summary Ratings by Column						

Overall Project Summary Rating	
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RATIONALE

Use the NWCG Prescribed Fire Complexity Rating System Guide (January 2004) and the Complexity Rating Worksheet found at the end of this document to complete the above summary. The [Complexity Rating Worksheet](#) is required to document the decision process that was used for the complexity ratings documented above. This worksheet is included at end of burn plan template.

Place short narrative on general rationale used in developing complexity analysis. All elements with a “High” rating and those elements that are higher than the summary rating in the complexity analysis will be discussed and will identify potential consequences and mitigating measures. If Complexity Rating Worksheets develop a lower complexity then selected, explain reason for going with higher complexity.

Allowed by: _____
Line Officer

_____ Date

Proposed Total Cost

COST PER BENEFITTING FUNCTION*							
Phases	Wildlife	Range	Timber	Fuels	Recreation	Other	Subtotal
Planning	10000						
Clearances							
Burn Plan Preparation				200			
Site Preparation				1000			
Ignition & Holding				50000			
Mop-up & Patrol				11000			
Monitoring	3000						
Subtotal	13000			62200			
GRAND TOTAL:							79200

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Project Objectives

Resource Objectives	Fuels Treatment Objectives
Wildlife: Stimulate sprouting and regrowth of Aspen and mountain shrubs to approximately 5000 to 100000 stems per acre. Reduce conifer encroachment on 70% of the burn unit acres.	Reduce 1000hr fuels to 3 tons per acre and reduce fine fuels from 7 to 3 tons per acre.

Objectives Are S.M.A.R.T.

**Specific
Measurable
Attainable
Reasonable,
Time Related**

<p>Tolerable deviation from objectives:</p>
<p>Tolerable deviation of the fuels objectives are: +/- 2 tons/acre for the 1000hr and fine fuels.</p> <p>Tolerable deviation of wildlife objectives are: +/- 5000 stems/acre regeneration of aspen and shrubs and +/- 20% removal of conifer encroachment.</p> <p>T</p>

Burn Area Description

Legal description:	T: 16N	R: 42E	S: 23,35
	T: 15N	R: 42E	S: 2,3
UTM Easting:		UTM Northing:	
Latitude:		Longitude:	
Acres:	1180	County:	Fremont
Low elevation:	6800	Drainage:	Henrys Lake
High elevation:	7400	Avg. aspect:	E-SW
		Avg. slope:	25

General Narrative Description of the Burn Area

The project area consists of grass, forbs, and shrubs at the lower elevations transitioning to shrubs and aspen at the lower to mid-elevations to mostly conifers in the upper elevations. Topography is generally rolling foot hills. This is the general legal description of the burn units.

Fuels Description

On-Site Fuels Data			Adjacent Fuels Data	
FBPS Fuel Model(s):	2/8		FBPS Fuel Model(s):	2/8
NFDRS Fuel Model(s):	G/H		NFDRS Fuel Model(s):	G/H
Fire Regime(s)	III		Fire Regime(s)	III
Fire Condition Class(es)	2		Fire Condition Class(es)	2
Fuel Loading	1 hour tlf	.24	General Description of Adjacent Fuels Fuels outside the project area are similar to those in the burn unit. Grass/shrub in the lower elevations with Aspen/grass/shrub in the transition zone to the conifers in the upper elevations. Fuel loadings average 3-10 t/a, heavier loadings in the jackpot areas.	
	10 hour tlf	.78		
	100 hour tlf	1.23		
	1000 hour tlf	2.9		
	Litter depth:			
	Duff depth: in	1.14		
	Live woody:	.25		
	Live herbaceous:	.5		
	Total fuel loading:	5.9		
<p>Comments: This is the average fuel description and loading for the Raynolds Pass Aspen Enhancement Project. Fuels and fuel loading outside the project area are similar to those inside the project area. Fuels loadings were determined through field inventories and walk through visual estimations. Live fuel moistures were determined through NFES 1574.</p>				

Fire Behavior Prescription

Spring Prescription	Acceptable Fire Behavior Range			Outside area at critical holding points
	Low Fire Intensity	Desired Fire Intensity	High Fire Intensity	
Fuel model(s)	2/8	2/8	2/8	8
Rate of spread - chains/hour	1	7	49	2.6
Flame length (in feet)	.5	2-4	8	8
Scorch height (in feet)	N/A	N/A	N/A	
Probability of ignition - %	N/A	N/A	N/A	N/A
Spotting distance (in miles)	N/A	N/A	N/A	N/A

Fall Prescription	Acceptable Fire Behavior Range			Outside area at critical holding points
	Low Fire Intensity	Desired Fire Intensity	High Fire Intensity	
Fuel model(s)	2/8	2/8	2/8	8
Rate of spread - chains/hour	0.3	10	23	.4
Flame length (in feet)	1	2-4	8	.5
Scorch height (in feet)	N/A	N/A	N/A	
Probability of ignition - %	N/A	N/A	N/A	N/A
Spotting distance (in miles)	N/A	N/A	N/A	N/A

Attach Behave Worksheets

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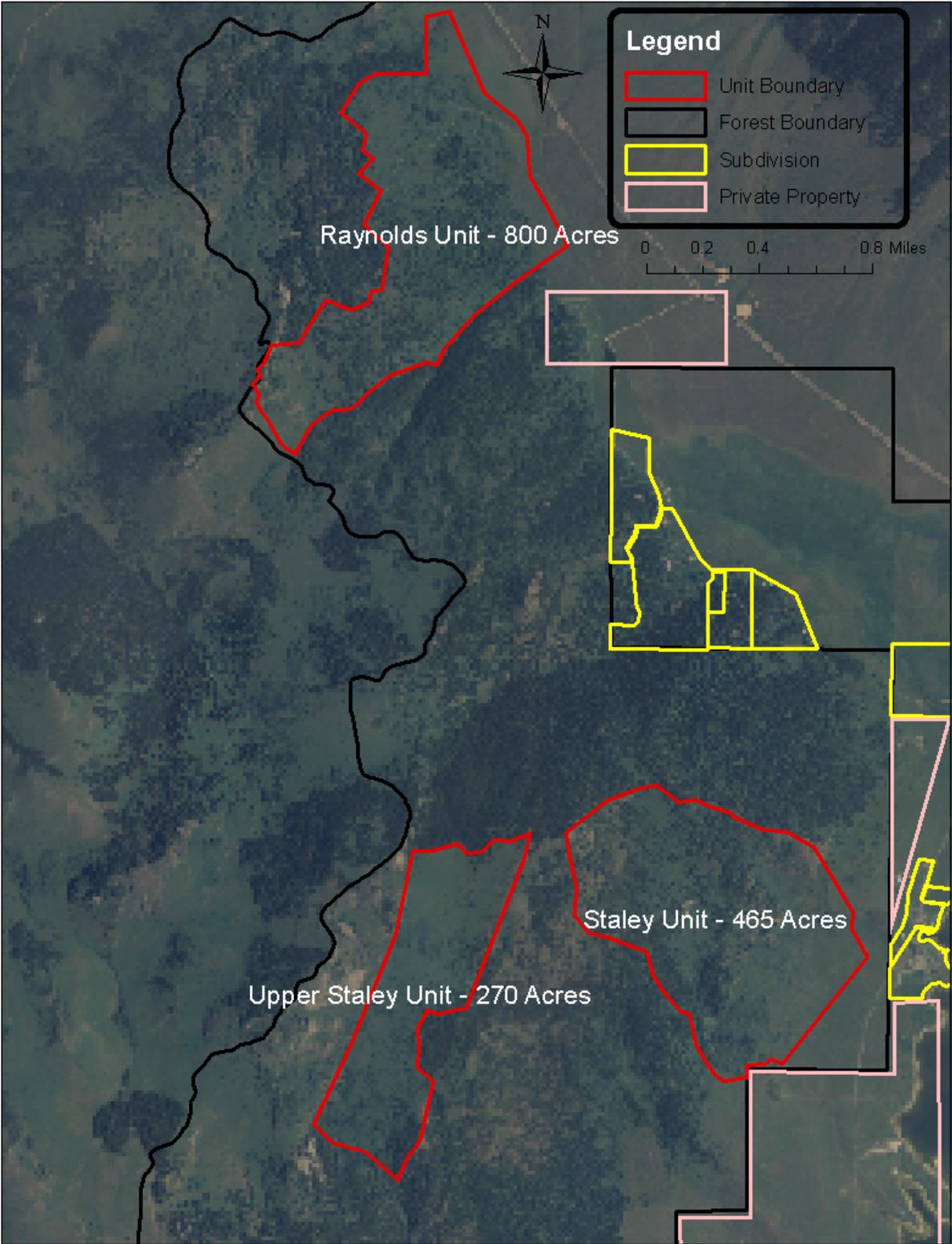
Fire Behavior Narrative:

A low to moderate intensity burn is desire to kill a portion of the Aspen overstory and the mountain shrubs. Expect some single and group tree torching among the conifers especially those with lower limbs reaching the ground and with ladder fuels reaching into the crowns. Take advantage of slope and favorable wind conditions to create desire fire behavior and to achieve project objectives.

Raynolds Pass Aspen Enhancement Project map

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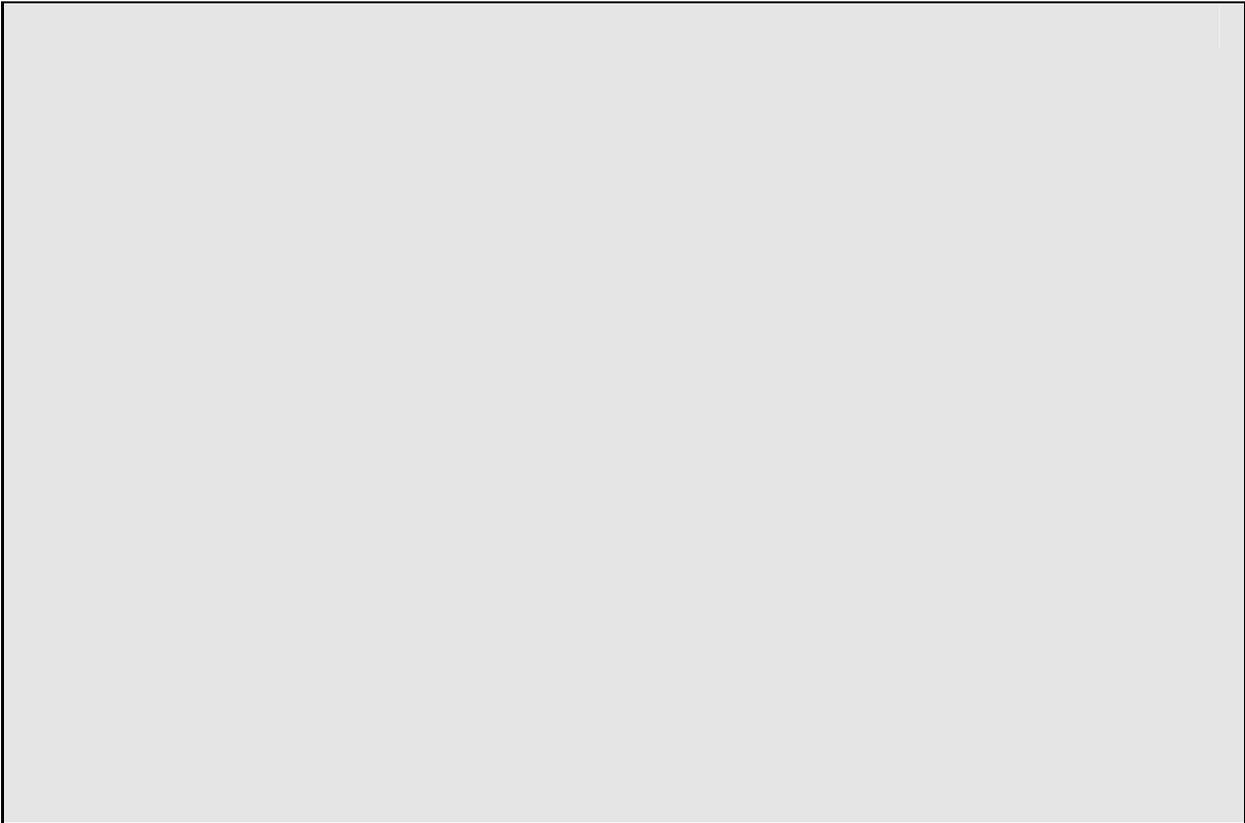
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Weather and Fuel Guidance Parameters

	Acceptable Prescription Range			Outside area at critical holding point minimum acceptable moisture
	Low Fire Intensity	Desired Fire Intensity	High Fire Intensity	
Temperature (°F)	45	70	85	
Relative humidity (%)	55	25	15	
Mid-flame wind speed	3	5	10	
Wind direction (azimuth°)	90-270	90-270	90-270	
1-hr fuel moisture (%)	10	8	5	8
10-hr fuel moisture (%)	12	10	7	10
100-hr fuel moisture (%)	15	12	10	12
1000-hr fuel moisture (%)	35	25	15	25
Live fuel moisture (%)	125	100	95	100
Duff moisture (%)	n/a			
Soil moisture (%)	n/a			

Proximity to nearest RAWS	A temporary site was set up on the ne boundary of the Staley unit. Island Park Station RAWS is approximately 15 miles south of the project area.		
Need for on-site RAWS	<input type="checkbox"/>	Yes	<input type="checkbox"/>
Additional Information			



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Scheduling

Preferred season:

Fall is the preferred, but spring burning is expectable.

Limitation on season or on day(s) of week for burning:

There are no limitations on days of the week

Length of back-line phase (estimated days or hours):

Est.1-3 days per unit to complete black lining.

Length of ignition phase (estimated days or hours):

Est.1-2 days per unit to complete ignition phase or until objectives are met.

Constraints or special considerations:

Fall burning is preferred to accomplish project objectives. Spring burning is acceptable when conditions are acceptable to achieve project objectives.

Ignition & Holding Plan

PREBURN WORK:

Preburn work on Raynolds Unit: Fall some of the existing conifers in the Aspen stands. Build a 4 to 8 foot hand/mechanical line along the north, west and southeast portion of the unit.

Preburn work on Staley Unit: Build a 4 to 8 foot hand/mechanical line along the north, west and south portion of the unit

Pework on Upper Staley Unit: Build a 4 to 8 foot hand/mechanical line along the north, east, and south portion of the unit.

Blackening lining will proceed along the prepared fire lines using natural barriers where they are present.

Holding lines will be the black lines natural and existing barriers.

TEST FIRE PROVISIONS

A test fire is required at the start of each ignition operation. The test burn will be in a location that is easily extinguishable and representative of the fuels in the unit as a whole. Documentation of the test fire conditions and results will be made on Test Fire Provisions Worksheet and observations recorded on the Weather/Fuels/Fire Behavior Observations sheet in Appendix A and will be signed by the Prescribed Fire Boss and retained as part of the project file.

IGNITION PLAN:

The Ignition Specialist and Holding Specialist are expected to work closely together to see that the ignition pattern and sequence do not present concern for control of the burn. The wind 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 found below and on the attached map are suggested and can be modified to better suit the current conditions experienced on the day of the burn.

Ideally, on the Raynolds Unit the test fire would be ignited along the north line. Following the test fire, ignition can continue along north line. Once a sufficient black line is established as an anchor, flanking fire can be taken initially down the east fire line. This would then be followed with igniting off the west flank of the compartment. As the flanks become secure, fire should be backed down the interior of the unit. Aerial ignition, strip head firing or dot firing will be utilized to bring fire down through the interior of 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.

On the Staley Unit the test fire would be ignited along the east line. Following the test fire, ignition can continue along east and north line. Once a sufficient black line is established as an anchor, flanking fire can be taken initially down the southeast fire line and northwest fire line. This would then be followed with igniting off the southwest flank of the compartment. As the flanks become secure, fire should be backed down the interior of the unit. Aerial ignition, strip head firing or dot firing will be utilized to bring fire down through the interior of 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.

On the Upper Staley Unit the test fire would be ignited along the north line. Following the test fire, ignition can continue along north and east line. Once a sufficient black line is established as an anchor, flanking fire can be taken initially down the west fire line. This would then be followed with igniting off the south flank of the compartment. As the flanks become secure, fire should be backed down the interior of the unit. Aerial ignition, strip head firing or dot firing will be utilized to bring fire down through the interior of 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.

POTENTIAL HOLDING PROBLEMS:

Minimal holding problems are expected in the spring do to the presence of snow.

Potential holding problems in the fall:

Raynolds Unit: Northwest portion of unit which is inaccessible to engines.

Staley Unit: Along the Northwest corner which is inaccessible to engines.

Upper Staley Unit: Along East portion of unit which is inaccessible to engines.

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LOCATION OF HOLDING FORCES AND INSTRUCTIONS:

Holding forces will be placed around the outer perimeter of the target burn unit.

Holding instructions: Patrol control lines and watch for spots outside the lines, inform Burn Boss of any slopovers. Know where safety zones and escape routes are and reevaluate as progress proceeds through burn.

WATER SOURCES:

Water sources will include fold-a-tanks on each unit and at the road intersection going into Timber Creek Estates and the private land. Henrys Lake will also be a water source for the project area.

Prescribed Fire Burn Area (Attach Maps):

See attach maps and burn area description.

MOP-UP AND PATROL:

Mop-up will occur where needed to ensure that there is no escape and patrol will occur daily until fire is declared out. Fire management personnel will conduct post fire monitoring until fire is determined to be out.

Intermountain Region Mop Up Standards **Category 2** will be applied. Apply Category 2 mop up standards when potential escapes would not result in significant adverse social, political, environmental or economic consequences.

1. Perimeter mop up to the extent appropriate considering:

- a. Season and predicted weather.
- b. Fuel bed characteristics.
- c. Re-burn potential.

2. Patrol and infrared monitoring as appropriate until weather conditions eliminate the need or the burn is declared out.

3. Complete (100%) mop up of all spots and slop-over.

Depending on implementation success (amount of acres burned), at least one or as many as three type 6 engines will be assigned to mop up and patrol duty. The Burn Boss will be responsible for mop up, patrol and modifications of the mop up and patrol plan as circumstances dictate. After mop up is complete, regular patrols will occur until the burn is declared out.

AIR OPERATIONS ORGANIZATION/PLAN:

Aerial Ignition operations for this project require additional organization and an air operations plan in accordance with the Interagency Aerial Ignition Guide and will be completed and approved for all aerial ignition operations.

OTHER CONSIDERATIONS:

N/A

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Minimum Workforce & Equipment Needs to Conduct Burn LOW PRESCRIPTION RANGE				
Personnel				
POSITION	ICS CODE	TOTAL AMOUNT NEEDED	LINE BUILDING RATE	
			EACH (Ch/Hr)	TOTAL (Ch/Hr)
Prescribed Fire Burn Boss	RXBX	1		
Ignition Specialist	RXIX	1		
Holding Specialist Function	FFT1	1		
Fire Effects Monitor	FEMO	1		
Lookout	FFT1.	1		
Engine Boss, Operator, and Crew	ENGB/ENOP	4		
Ignition Crew	FFT2	4		0
Holding Crew	FFT2	6		0
				0
				0
Equipment				
DESCRIPTION	UNIT OF MEASURE	TOTAL AMOUNT NEEDED	LINE BUILDING RATE	
			EACH (Ch/Hr)	TOTAL (Ch/Hr)
Engine (Type) T6	1	4		0
Engine (Type)				0
Dozer (Type)				0
Drip Troches		4		
Chain Saws		4		
Hand Tools		20		
Fuel	gal	55		
Portable Water Tanks	1000gal	2		
Line Building Capability Summary				
Total line building production for low prescription (Chains/Hour):				0
Expected line building production needed during initial escape at critical holding area for low prescription (Chains/Hour):				
The line building production rate of ON-SITE resources will exceed perimeter increase during initial escape if the mid-flame wind speed is (mph) or less:				
If line building production rates of ON-SITE resources do not exceed perimeter increase (i.e. light flashy fuels), justification of actions need to be identified below.				

Minimum Workforce & Equipment Needs to Conduct Burn DESIRED PRESCRIPTION RANGE				
Personnel				
POSITION	ICS CODE	TOTAL AMOUNT NEEDED	LINE BUILDING RATE	
			EACH (Ch/Hr)	TOTAL (Ch/Hr)
Prescribed Fire Burn Boss	RXBX1	1		
Ignition Specialist	RXIX	1		
Holding Specialist Function	FFTI	1		
Fire Effects Monitor	FEMO	1		
Lookout	FFT1	1		
Engine Boss, Operator, and Crew	ENGB/ENOP	6		
Ignition Crew	FFT2	6		0
Holding Crew	FFT2	20		0
		1		0
				0
Equipment				
DESCRIPTION	UNIT OF MEASURE	TOTAL AMOUNT NEEDED	LINE BUILDING RATE	
			EACH (Ch/Hr)	TOTAL (Ch/Hr)
Engine (Type) T6		6		0
Engine (Type)WT2		1		0
Dozer (Type)T2	D-6	1		0
Drip Troches		4-8		
Chain Saws		4		
Hand Tools		50		
Fuel	gal	50		
Portable Water Tanks		1		
Helicopter Type3		1		
Line Building Capability Summary				
Total line building production for desired prescription (Chains/Hour):				0
Expected line building production needed during initial escape at critical holding area for desired prescription (Chains/Hour):				
The line building production rate of ON-SITE resources will exceed perimeter increase during initial escape if the mid-flame wind speed is (mph) or less:				
If line building production rates of ON-SITE resources do not exceed perimeter increase (i.e. light flashy fuels), justification of actions need to be identified below.				

Minimum Workforce & Equipment Needs to Conduct Burn HIGH PRESCRIPTION RANGE				
Personnel				
POSITION	ICS CODE	TOTAL AMOUNT NEEDED	LINE BUILDING RATE	
			EACH (Ch/Hr)	TOTAL (Ch/Hr)
Prescribed Fire Burn Boss	RXBX1	1		
Ignition Specialist	RXIX	1		
Holding Specialist Function	FFT1	1		
Fire Effects Monitor	FEMO	1		
Lookout	FFT1	1		
Engine Boss, Operator, and Crew	ENGB/ENOP	6		
Ignition Crew	FFT2	4-6		0
Holding Crew	FFT2	25		0
				0
				0
Equipment				
DESCRIPTION	UNIT OF MEASURE	TOTAL AMOUNT NEEDED	LINE BUILDING RATE	
			EACH (Ch/Hr)	TOTAL (Ch/Hr)
Engine (Type) T6		8		0
Engine (Type)WT2		2		0
Dozer (Type)T2		1		0
Drip Troches		4-8		
Chain Saws		4		
Hand Tools		50		
Fuel		55		
Portable Water Tanks		2		
HelicopterType3		1		
Line Building Capability Summary				
Total line building production for high prescription (Chains/Hour):				0
Expected line building production needed during initial escape at critical holding area for high prescription (Chains/Hour):				
The line building production rate of ON-SITE resources will exceed perimeter increase during initial escape if the mid-flame wind speed is (mph) or less:				
If line building production rates of ON-SITE resources do not exceed perimeter increase (i.e. light flashy fuels), justification of actions need to be identified below.				

CONTINGENCY AND ESCAPE FIRE PLAN

1. Decision And Criteria

1. The Prescribed Fire Burn Boss will have the authority to declare the prescribed burn a wildfire. A prescribed fire shall be declared a wildfire when the assigned Burn Boss determines that one or more of the following conditions or events has occurred or is likely to occur, and if these conditions cannot be mitigated within 48 hours by implementing the contingency actions in the prescribed fire plan by on site holding forces and listed contingency resources staged during these operational period:
 - a. The Prescribed Fire leaves the planned unit boundary,
 - b. The fire behavior exceeds limits described in the prescribed fire plan and/or the fire is threatening to leave the planned Prescribed Fire Area boundary.
 - c. The fire effects are unacceptable.
 - d. Smoke production must be immediately reduced because of adverse air quality impacts.

2. After wildfire declaration, a project cannot be returned to prescribe fire status.

2. Organization

Should an escape be declared, the Prescribed Fire Burn Boss will become the Incident Commander until relieved or replaced. The IC will organize all resources on-site for a safe and aggressive response. Personnel within the prescribed fire organization will transition into ICS wildfire positions they are qualified to carry out. The IC will order additional suppression resources identified below as well as any other required resources necessary to support the suppression effort.

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

3. Containment Strategy

The FMO and/or IC, Resource Advisor, and Agency Administrator may develop a WFSA which will determine the appropriate management response to the escaped fire. Full suppression strategy will be used in order to flank the fire with engines 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. Aerial resources will be employed upon direction of the Incident Commander.

4. Containment Opportunities

Utilize existing roads in the vicinity of the burn unit, moist drainages, and changes in fuels (transition from brush field into timber fuel models).

5. Notifications

Identify the notifications to be made and who will make them.
 The Prescribed Fire Burn Boss/IC will notify EIIFC at 524-7600 and the unit FMO at 558-7301 of the escape and identify himself as the IC. EIIFC will notify the Ashton/Island Park Line officer at 558-7301. EIIFC will notify contacts listed on the notification plan of the escape and the current situation.

6. Resource Ordering				
East Idaho Interagency Fire Center (EIIFC) 524-7600				
7. Additional Resources				
Resource	Agency & Location	Response Time	Conformation of Availability*	
			Yes/No	Date
2 Type2 Hand Crews	EIIFC	1.5		
Water Tender T2	EIIFC	2		
Engines T6	EIIFC	2		
Dozer T2	EIIFC	2		
* To be completed within one day of the burn and adjusted during course of extended burning conditions.				
8. Other				
Other resources may include add itional engines from the IPVFD.				

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Medical Plan								
MEDICAL AID STATIONS / PERSONNEL								
NAME	LOCATION	MEDICAL QUALIFICATIONS						
		First Responder	EMT-Basic	EMT-I	Paramedic			
Island Park Emergency Services	Island Park ID	X		X				
TRUAMA AND BURN KIT ON-SITE								
EMERGENCY TRANSPORTATION								
NAME	TELEPHONE	LOCATION	PARAMEDICS					
			YES	NO				
Island Park Ambulance	911	Macks Inn Island Park						
Air Idaho	911	Idaho Falls						
HELISPOT CLOSEST TO PROJECT	On site pending approval	LAT.		LONG				
HOSPITALS								
NAME	ADDRESS AND LATITUDE AND LONGITUDE	TRAVEL TIME (MIN)		PHONE	HELIPAD		BURN CENTER	
		AIR	GROUND		YES	NO	YES	NO
Eastern Idaho Regional Medical Center	651 Memorial Dr Idaho Falls 42 51.9 112 25.6	45min	2hr	911 529-6000	X			X
University of Utah Medical Center	50 North Medical Drive Salt Lake City, Utah 40°46.34 N x 111°50.24			Front Desk 801-581-2121 ER Desk 801-581-2292 Freq 123.25	X		X	
Madison Memorial	450 E Main Rexburg ID	N/A	1.5hr	911 356-3691		X	X	
Mountain View Hospital	2325 Coronado St Idaho Falls		2hr	911 557-2700				
Island Park Medical Clinic	US HW 20 Ponds Lodge		45min	911 558-		X		X
West Yellowstone Medical Clinic	236 Yellowstone Ave. West Yellowstone Mt.		45min	911 406-646-7668		X		X

Medical Emergency Procedures	
In the event of serious accidents or injuries, the burn boss shall be notified immediately. The burn boss will initiate on-site response (if not already in progress) and coordinate additional response needs (listed below) through:	
East Idaho Interagency Dispatch	
The first option is to transport the injured person(s) via on-site vehicles to (describe directions to emergency facilities):	
Transport injured person to the closest open medical facility.	
The second option is to transport the injured person(s) to meet an ambulance at (describe a location known to both project personnel and emergency services):	
<p style="text-align: center;">For injuries on the Raynolds Unit, meet with responding emergency personal at the intersection of state hw 87 and Forest Road (FS) 57, or the intersection of state hw 87 and the road going in to the Timber Creek Estates.</p> <p style="text-align: center;">Injuries on the Staley Unit transport the injured to the Henrys Lake road and meet responding emergency personal at Staley Springs Resort.</p> <p style="text-align: center;">Injuries on the Upper Staley Unit transport injured person to the intersection of FS 57 and hw 87.</p>	
The third option is to transport the injured person(s) to the nearest helispot to be evacuated via air ambulance. The helispot location is (describe the location relative to the project area and for the air ambulance; include a Lat/Long; list helitack qualified personnel (if any) on site):	
Location of onsite helispots has not been determined yet.	
The fourth option is to care for and protect the injured person(s) while emergency services responds on-site to extract and transport the injured. Send personnel to meet and lead emergency services to the site. The project area location is (describe directions for responding emergency services and include a Lat/Long).	
<p style="text-align: center;">Location of the Raynolds Unit is: 44 42.2 111 28.0 Location of the Staley Unit is: 44 39.26 111 26.6 Location of the Upper Staley is: 44 39.1 111 28.7</p> <p style="text-align: center;">Project personal will meet emergency personal at one of the locations in option 2</p>	

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Smoke Management

Smoke management #:		Identify any non-attainment or Class I airsheds within 15 miles:	No class one airsheds are within 15 miles of the Project		
SMOKE SENSITIVE AREAS POTENTIALLY IMPACTED					
Receptor	Direction	Distance	Receptor	Direction	Distance
Transport wind and stability conditions needed for burning:					
<p>Unstable conditions are desired, preferred winds are from E to W. Winds from any direction are acceptable.</p>					
Visibility hazards, actions to reduce hazards, and contingencies if hazards impacted:					
<p>Smoke may affect visibility along state highway 87 and along Henrys Lake RD. Idaho DOT will be notified prior to ignition and signs will be posted with prescribe burning during ignition operations and longer as conditions warrant it.</p>					
Residual smoke issues and mitigation actions:					
<p>The proposed treatment should not produce long durations of heavy smoke. Coordination with the Montana/Idaho State Air Shed Group and monitoring by Idaho Department of Environmental Quality will help reduce smoke impacts. To further reduce residual smoke, the heavy concentration of fuels will be mopped-up.</p>					
Special constraints / considerations:					
N/A					
State Division of Air Quality Documentation:					
<p><u>Montana/Idaho State Airshed Group at www.smoke mu.org</u> <u>Wyoming Smoke Mgmt at http://deq.state.wy.us/adq/smokemanagement.asp</u></p>					

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Monitoring Plan

The minimum monitoring requirements established for individual prescribed fire projects include weather during the fire, observed fire behavior and whether fire treatment objectives have been met.

Pre-Burn:

Prior to ignition, site-specific reconnaissance will be conducted. In addition, weather and fuel conditions will also be observed and documented. Day before burn weather will be taken, and spot weather forecast will be requested for burn day conditions. During ignition, hourly weather operations would be taken and documented by the Prescription Monitor.

Burn Day:

Weather, fire behavior, degree of achievement of project objectives, and fuel moistures will be collected during the burn operation. The burn boss will be responsible for collection of this data.

Post- Burn:

The monitoring for this project will include a walkthrough and photo points after the first and second full growing seasons following the prescribe burn. General observation of the average outcome of the treated areas will be done. The Burn Boss will estimate actual acres burned, size of patches created, and record the experienced conditions and outcomes of the burn plan. If the vegetation objectives are not reached within the spring burn window, then the burn should be implemented this fall.

The Project area will be monitored for three years following implementation for any new weed infestation or any increase in acres of known infestation areas. Any increase in acres or infestations of noxious weeds will be treated.



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Public Information and Safety Plan

Public information will be through local newspapers and public service announcements prior to ignition.

Notification Plan

Who	When*	Phone Number and/or e-mail	Responsibility	Date	Initial
EIIFC	D	524-7600	Burn Boss		
Great Basin	D		EIIFC		
Fremont County Sheriff	D	624-4482	EIIFC		
Madison Co. Sheriff MT.	D		EIIFC		
IDEQ	B	236-6160	EIIFC		
BDF	D	406-683-3975	EIIFC		
GNF	D	406-646-7369	EIIFC		
Island Park News	B	558-0267	EIIFC		
Post Register	B	522-0490	PAO		
IF&G	B	525-7290	EIIFC		
Idaho DOT	B	558-7350	EIIFC		
Montana DOT	B	406-646-7268	EIIFC		
IPVFD/Ken Stranburg chief	B	624-4482	EIIFC		
Morrison, George/Timber Cr Est	B	558-9797	IP Ranger Station		
* 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.				

Go-No-Go Checklist

	Yes	No
A. Are the contingency resources identified, committed and in place. If No, Stop.		
B. Has the burn unit experienced unusual drought conditions or contain above normal fuel loading, which were not considered in the prescription and development? If NO, go to item 1. If YES, go to item B.		
C. If YES, have appropriate changes been made to the Ignition and Holding Plan and the Mop Up and Patrol Plans? If YES, go to item 1. If NO, STOP.		

A “NO” response to any item below means STOP!

Checklist Items	YES	NO
1. Are ALL fire prescription specifications met?		
2. Are ALL smoke management prescription specifications met and/or has smoke management clearance been given for the project?		
3. Has an area or spot fire weather forecast been obtained? Is it favorable?		
4. Are ALL personnel required in the Prescribed Fire Plan onsite?		
5. Is ALL equipment required in the Prescribed Fire Plan in place and functional?		
6. Have ALL personnel been briefed on the project objectives and their assignments?		
7. Has ALL pre-burn preparation work been completed?		
8. Have ALL personnel been briefed on safety hazards, escape routes, safety zones and communications?		
9. Have ALL required notifications been made?		
10. Are the onsite resources adequate for containment under expected conditions?		
11. In your opinion, can the burn be carried out according to plan and will it meet the planned objectives?		

If ALL answers are YES, proceed with the test fire. Document the conditions, location and results on the Test Fire Provision Worksheet and Unit Log. Concurrence is documented by the signatures below. The Go-No-Go Checklist will be completed each day of active ignition.

Concurrence: _____
 Prescribed Fire Ignition Specialist

Date: _____

Concurrence: _____
 Prescribed Fire Holding Specialist

Date: _____

Signed: _____

Date: _____

Prescribed Fire Burn Boss

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Organization Chart

Date: To be determined at a later date

Shift: _____

Line Officer

Fire Management Officer/Prescribed Fire Manager

Burn Boss

Fire Effects Monitor

Ignition Specialist

Holding Specialist

Ignition Specialist

Holding Specialist

Prescribed Fire Crew Briefing Checklist

Operational Briefing (Responsibility: Burn Boss)

- Introduction of Personnel by Position
- Hand Out Maps and Assignment Sheets
- Review Objectives and Constraints
- Review Spot Weather Forecast and Possible Changes that Could Affect Burn
- Make Crew and Equipment Assignments
- Review Ignition Plan Objectives and Possible Problems
- Review Holding Plan Objectives and Possible Problems
- Review Predicted Fire Behavior
- Review Burn Prescription and Critical Weather that Will Terminate Burn
- Review Contingency and Escaped Fire Plan
 - Identify High Value and Special Concern Areas
 - Assure Understanding of Mitigation Measures, Procedures, MMA, Etc.
- Discuss Weather Data Collection Procedures
 - Make Weather Observer Assignment and Set Collection Schedule
- Review Safety Plan, JHA and Medical Evacuation Plan
- Review LCES and Identify Lookout Assignments
- Discuss Communication Plan
- Air Operations Plan and Organization

Crew Briefing (Responsibility: Ignition Specialist and Holding Specialist to conduct briefing. Responsibility: Burn Boss will ensure that briefing is conducted before prescribed fire operations start.)

- 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 Escape Contingency Plan, Procedures, and Mitigation
- Review Everyone's Personal Protective Equipment
- Discuss Probable Starting and Ending Times
- Assure Everyone Knows Position, Responsibility, And Procedures

Signed: _____

Date: _____

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After Action Review

What was planned?

Review the primary objectives and expected action plan.

What actually happened?

Review the day's actions:

- Identify and discuss effective and non-effective performance.
- Identify barriers that were encountered and how they were handled.
- Discuss all actions that were not standard operating procedure, or those that presented safety problems.

Why did it happen?

Discuss the reasons for ineffective or unsafe performance. Concentrate on WHAT, not WHO, is right.

What can we do next time?

Determine lessons learned and how to apply them in the future.

Communications Plan

SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY	BAND WIDTH	ASSIGNMENT	REMARKS
	2	Targhee Repeat Sawtel Repeater	TX: 170.525 RX:169.175 Tone: 146.2	N	Command	
	4	Tac 2	TX: 168.175 RX: 168.175 Tone:	N	Tac	Project communicati ons
	3	Air to Ground	TX:172.325 RX:172.325 Tone:	N	Aerial Ignition	
			TX: RX: Tone:			
			TX: RX: Tone:			

Remarks:

* If aerial ignition is used, assign a specific radio frequency for use between aircraft and Prescribed Fire Burn Boss and/or Ignition Specialist.
Communication with cooperators will be established before ignition begins.

Job Hazard Analysis for Prescribed Burning

ACTIVITY	HAZARDS	ACTION TO ELIMINATE HAZARD
1. Driving to work site	A. General operations and public traffic.	A. Defensive driving techniques.
	B. Steep, narrow roads; dusty narrow roads.	B. Drive cautiously so that you can stop in less than ½ of your usual distance. Lights on.
	C. Unsecured loads.	C. Check loads for secure ness before departing – use tie downs.
	D. Hauling flammable or explosive substances.	D. Use appropriate containers. Keep potentially explosive substances well separated. Consider hauling gasoline and glycol in separate vehicles.
	E. Transporting sharp tools.	E. Use guards, cages, boxes, or tool mounts.
	F. Loading vehicles.	F. Use proper lifting techniques.
2. Driving at or near work site	A. Backing or turning around in small areas	A. Use spotters. Face the hazard while turning around. Avoid tight turn around if possible
	B. Heavy truck traffic between units and water source(s).	B. Maintain radio communications and alert other drivers in the area. Lights on
	C. Smoke, poor visibility.	C. Place a guide on foot ahead of the vehicle. Wait until smoke is less dense. Lights on. Use light bars and/or warning lights
	D. Parking near a prescribed burn.	D. Use parking brake. Leave keys in ignition, avoid leaving exposed flammable or explosive materials in bed of vehicle. All windows closed.
	E. ATV's	E. Operated by trained and licensed drivers only. Lights on. Avoid steep slopes.
	F. Public Safety.	F. Post signs and/or use roadblocks if needed.
	G. Driving around helicopters.	G. Follow all instructions from Parking Tender or Helicopter Manager. Never drive behind or within 50 feet of helicopter with rotors turning.
	H. Entrapment on narrow un-maintained roads.	H. When possible, ensure that 2 routes out are available. Post lookouts. Leave area “early” if fire appears to threaten escape route.
3. Handling flammable material	A. Exposure to sparks.	A. Use proper containers, move away from hot areas, no smoking.
	B. Eye or skin contamination from fuel.	B. Gloves, goggles, or other eye protection, leather lace-up boots.
	C. Leaking containers or torches.	C. Empty and tag in field, have repairs made before next use.
	D. Improper gas/diesel ratios for drip torch fuel.	D. Use labels on containers, field test small amounts before use.
	E. Slippery surfaces from spilled fuel.	E. Make every effort to avoid spilling fuel, where feasible. Install non-slip material on fuel truck beds. Clean up spills as soon as possible.
4. Equipment set-up	A. Muscle or back strain lifting heavy objects.	A. Use of proper lifting techniques. Get help if too heavy.

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ACTIVITY	HAZARDS	ACTION TO ELIMINATE HAZARD
	B. Operating pumps and mechanized equipment exhaust burns, loose clothing.	B. Tuck in shirttails; remove scars and jewelry. Proper clothing, gloves, and boots.
	C. Application of slippery retardant, poor footing.	C. Eight-inch lug sole, lace-up boots. Avoid slick areas if possible
	D. Crew people working up hill from each other (rolling debris).	D. Post lookout. Shout warnings.
	E. Operating high-pressure nozzles.	E. Maintain visual contact with pump operator and other crewmembers. Use backup person behind nozzle person. Use eye protection.
	F. Traversing rocky terrain.	F. Eight-inch lug boots, slow cautious movement.
	G. Noise from pumps and saws.	G. Use hearing protection (ear plugs or muffs).
	H. Foam concentrate on skin, foam in eyes	H. Follow manufacturer=s first aid recommendations. Wear eye protection when working around foam and foam concentrate. Change clothing if heavily contaminated by foam concentrate.
5.1 Hand ignition	A. Rolling debris.	A. Use hand held radios, close supervision, lookouts. Consider aerial ignition.
	B. Close proximity to intense heat and erratic fire behavior.	B. Same action as in A. Use PPE and LCES.
	C. Smoke, sparks, and cinders.	C. Avoid very dense smoke. Wear PPE, Alter firing patterns. Rotate personnel out of worst areas.
	D. Poor footing, steep slopes, heavy fuels.	D. Constant awareness, learn to identify hazard area. Slow down.
	E. Noise of fire obscures verbal warnings.	E. Hand held radios for all lighting personnel.
	F. Burning fuel dripping from torches. Burns from drip torches.	F. Lighters stay alert to location of torch head; do not point directly at another person. Close air vent when not actually lighting. Proper PPE.
	G. Lighting wrong area; lighting fire down slope and ahead of others.	G. Know location of others. Radios for all lighting personnel, if possible; for every other person at minimum. Close supervision.
5.2.1 Fusee	A. Firing projectiles or flares.	A. Basic firearm safety rules followed, separation of ammo by type and size, access to launchers limited to trained personnel or authorized trainees.
	B. Inadvertent firing over/under shot resulting in activity outside project boundaries.	B. Post lookouts. Notify ignition specialist and holding specialist. Halt ignition until holding crews extinguish spot.
5.2.2 Propane torches	A. Burns from wands.	A. Stay alert to location of wand tip, do not point directly at self or another person. Avoid crossing within 10 feet of firing wand. Wear leather gloves when handling hot wands.
	B. Cold injuries from tanks	B. Wear leather gloves when handling frosted tanks.

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ACTIVITY	HAZARDS	ACTION TO ELIMINATE HAZARD
	C. Explosion or fire.	C. Always use pressure gauged line when filling tanks, do not overfill. No smoking. Store refill and extra tanks out of direct sun.
5.2.3 Mechanical (ATV)	A. Vehicle Maintenance.	A. Thorough inspection of vehicles and ignition equipment.
	B. Close proximity to fire, intense heat, and erratic fire behavior.	B. Same as in 5.1B. Know escape routes.
	C. Rough terrain, heavy ground fuels, side hills and slopes.	C. Scout and locate accessible routes, make a dry run, use experienced operators or supervised trainees. Consider hand ignition.
	D. Noise of ATV and fire obscures verbal warnings.	D. Hand held radios required of all ignition personnel. Hard hats instead of helmets to facilitate communications.
	E. Inadvertent ignitions.	E. Preplan ignition on/off points, check wand apparatus on regular basis. Notify holding crew.
	F. Accidentally ignite vehicle.	F. Ensure that fuel does not drip or leak onto vehicle. Stay particularly alert when side-hilling on steeper slopes.
5.2.4 Mounted (Terra torch)	A. Intrinsic danger of using terra torch (vehicle mounted).	A. Terra torch is to be operated under supervision of the ignition specialist. Use only with trained operator (i.e. driver, operator, and engine support).
	B. Vehicle maintenance.	B. Thorough inspection of vehicle and ignition equipment. Electrical connections and grounds all in working order.
	C. Close proximity to fire, intense heat, and erratic behavior.	C. Same as 5.1B, know escape routes.
	D. Rough terrain/roads, ground fuels, side hills and slopes.	D. Terra torch use restricted to roads or two tracks, pre-scouted paths or routes only.
	E. Chemical exposure, mixing/transferring.	E. Trained personnel only. Well-ventilated area. Use PPE. All containers grounded.
	F. Flammable vapors, liquids, and solids.	F. Terra torch mixing group will wear 100% cotton clothing. All containers grounded. Clean up all spills.
5.2.5 Helitorch/PSD	A. Hazards of aircraft use combined with ignition systems.	A. Aviation operations to be coordinated by certified personnel. HEMG on project site. Trained and experienced personnel operating ignition equipment. Separate operating plan and JHA developed.
	B. Flight routes, project area and flight following coordination (MOA's, TFR's etc.).	B. Follow guidelines and restrictions as stated in IHOG, file special use safety plan, coordinate w/Aviation Management Specialist and Dispatch Centers.
	C. Apparatus viability.	C. Aerial ignition apparatus thoroughly maintained, inspected, tested before installing into aircraft, pilot has ultimate GO/NO GO authority.

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ACTIVITY	HAZARDS	ACTION TO ELIMINATE HAZARD
	A. Carrying sharp tools.	A. Keep tool guards on while traveling. Remove only while in use.
	B. Tool use.	B. Proper crew training, with close supervision by crew boss.
6. Holding (includes all of item 4) continued	C. Snag falling.	C. Falling and bucking to be done only by trained personnel.
	D. Burned off snags or widow-makers.	D. Avoid entering burned over areas. Post lookout. Flag. Obtain professional faller if needed.
	E. Burns from radiant heat and hot embers.	E. Nomex clothing, hard hats and gloves required.
	F. Rolling debris.	F. Post lookouts, brief crew as to potential hazard areas.
	G. Erratic fire behavior	G. To be covered by burn boss in pre-burn briefing, escape routes shall be known by everyone.
7. Mop-up: Includes all hazards in items 4, 5, 6, and the following	A. Slippery, wet surfaces.	A. All PPE required.
	B. Smoke inhalation.	B. Crews will be rotated in and out of dense smoke. Wear dust mask or other breathing protection.
	C. Fatigue, long hours of work.	C. Shifts of duty shall not exceed 12 hours, except in emergencies. Crews will work no longer than 7 days on with 1 day off or 14 on with 2 off. Work in pairs and have rested drivers available. Minimize amount of mop-up needed.
8. Working under hot, dry conditions	A. Dehydration	A. Carry sufficient water, minimum of 1 gallon per person. Provide for additional drinking water on all projects, such as a 5-gallon container in each vehicle. Preferably container should be insulated and filled with ice before leaving for field.
	B. Dense dust or smoke	B. Carry dust mask or other device designed to filter out fine particulates. Bandanas do not provide sufficient filtering. Drive with windows rolled up and air conditioning on. Drive air-conditioned vehicle whenever possible. Monitor for signs of respiratory distress. Rotate personnel out of dense smoke or dust.

Complexity Rating Worksheet

Project Name: Raynolds Pass Aspen Enhancement Prescribe Burn Project

Complexity elements:

1. Potential for Escape

Risk	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Moderate slopes wind driven, moderate spotting potential from scattered Sub-Alpine Fir late season burn. Access to fire line along North flank and South is limited for suppression vehicles
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low Moderate <u>High</u></i>	An escape is likely to effect residences that boarder the project area to the North and South on the Raynolds Pass Unit and to the East of the Staley Unit. Some social and political concerns could be expected do to the close proximity of private residences to the burn and the visibility of the project area from Henrys Lake and nearby residences. Burning may occur during the hunting season limiting access for hunters to the project area.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i><u>Low</u> Moderate High</i>	Well defined 2 track roads access to the project area.
Final Rating: <i>Low Moderate High</i>	

2. The Number and Dependency of Activities

Risk	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Burning with the helitorch will require a moderate level of coordination between the ignition specialist and the holding crews to maintain safety and hold fire along the flanks. The Burn Boss should be stationed at a lookout point within the unit in order to see the unit well enough to direct operations.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Coordination failure(s) could result in a high risk of escape, failure to complete the project, failure to meet the project objectives, or serious safety issues for Implementation personnel or the public. A significant delay in Implementation would be expected. Burn Boss will need to assure all Communication equipment is ready and operational prior to ignition.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Continuous or nearly continuous communication between the Burn Boss, Ignition Specialist, and Holding Bosses is needed to manage the risk of escape And firefighter safety.
Final Rating: <i>Low Moderate High</i>	

3. Off-Site Values

Risk	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Several residences are adjacent or near the project area. Two are located upslope from the Raynolds Burn Unit. Most of these homes are upper scale seasonal residences.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low Moderate High</i>	If fire were to damage any of the private homes maximum claims can be expected for various types of fire damage.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Protection of the private parcels should require no special management, Equipment or skills. The closest residences are accessible by engines.

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Final Rating: <i>Low Moderate High</i>	
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4. On-Site Values

Risk	Rationale
Preliminary Rating: <i>Low Moderate High</i>	There are no special features present in the project area.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low Moderate High</i>	On site resources will not be adversely affected as long as the project stays within the prescribe fire behavior.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Resource values within the units are easy to protect
Final Rating: <i>Low Moderate High</i>	

5. Fire Behavior

Risk	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Fuel loadings vary from 3 tons/acre in the Staley units to 7 tons/acre in the Raynolds unit. There are some higher concentration of fuels in the older aspen stands from blow down and in the older mixed conifer stands with bug kill. Terrain varies from flat to moderate with the average slope of 25%. The burn areas are best represented by Fuel Models 2 and 8. Some isolated torching can be expected in the conifers.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low Moderate High</i>	Fuels outside the burn units is similar to those in the burn units, fire behavior is expected to be the same as inside the burn units.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale

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Preliminary Rating: <u>Low</u> Moderate High	Care must be taken to ensure that the Burn Boss and lighters in the interior of the units are adequately protected during aerial ignition operations. The number and size of slopovers should not require additional suppression resources as long as conditions remain within prescription. The Divide road (FS 056) and the Staley Springs road provide access to all burn units and provide containment opportunities and most main ridge lines are sparsely fueled with rocky areas. Direct attack tactics should be successful on most spot fires and slopovers.
Final Rating: <u>Low</u> Moderate High	No Change

6. Management Organization

Risk	Rationale
Preliminary Rating: Low <u>Moderate</u> High	A majority of the prescribed fire positions must be staffed with fully qualified personnel with separate personnel filling the positions of Burn Boss, Ignition Specialist, and Holding Boss. If media personnel are present, they will be positioned outside the unit. Some outside resources may be nessecary to fill a position such PAO and structure protection resources.
Final Rating: Low Moderate High	
Potential Consequences	Rationale
Preliminary Rating: Low <u>Moderate</u> High	Communications are critical between local and outside resources. Any problems related to communications may result in safety violations and a greater risk of an escape fire. Communications need to be check frequently.
Final Rating: Low Moderate High	
Technical Difficulty	Rationale
Preliminary Rating: Low <u>Moderate</u> High	The Burn Boss and a least one other primary position maybe a local resource. Communication between Holding Boss and structure protection group is critical in the event of an escape fire.
Final Rating: Low Moderate High	

7. Public and Political Interest

Risk	Rationale
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Preliminary Rating: <i>Low Moderate <u>High</u></i>	Smoke will be visible from Henrys Lake and the surrounding communities. North –Northwest winds will have a negative impact on those residences to the south of the project area. Limit prescription winds to the SE-SW.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low Moderate <u>High</u></i>	Unexpected and adverse events will draw significant public, political, and media attention. Investigations into the unexpected or adverse event are expected from the public and politicians.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Project is visible to require a PAO to organize public information and public meetings. Residents of the adjacent subdivisions have been contacted and invited to a public meeting.
Final Rating: <i>Low Moderate High</i>	

8. Fire Treatment Objectives

Risk	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	The prescribe fire objectives will require moderately intense fire behavior to achieve. Weather and fire behavior are easily monitor and conducted.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i><u>Low</u> Moderate High</i>	The project consists of 3 separate units independent of one another. The project is scheduled for completion over a three year time period. Failure to burn one or unit will have minimal effect on the overall success of the project
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i><u>Low</u> Moderate High</i>	Measures to achieve the project objects are both easy to complete with few restrictions on the techniques. What restrictions exist are designed to mitigate any threats to the adjacent and nearby private lands. Pre-burn monitoring is needed to determine if the unit appears to be in prescription. Some during burn monitoring of fire behavior is needed to assure objectives are being met.
Final Rating: <i>Low Moderate High</i>	

9. Constraints

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Risk	Rationale
Preliminary Rating: <u>Low</u> <i>Moderate</i> <i>High</i>	The use of heavy equipment in certain areas maybe restricted do to environmental concerns and Forest Plan direction. Other that weather-related, no constraints exist on access, use of water sources, specific tactics, or aircraft use. Ignition is not expected to be restricted during any portion of the burn window or to minimize impacts to any special events or seasonal activities.
Final Rating: <i>Low</i> <i>Moderate</i> <i>High</i>	
Potential Consequences	Rationale
Preliminary Rating: <u>Low</u> <i>Moderate</i> <i>High</i>	Project can be implemented whenever it is in prescription with exception of the period April 12-18. The only limitations on tactics is that use of heavy equipment to construct fireline is prohibited on slopes greater than 25%.
Final Rating: <i>Low</i> <i>Moderate</i> <i>High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <u>Low</u> <i>Moderate</i> <i>High</i>	The limitations on use of heavy equipment should have no impact on project difficulty.
Final Rating: <i>Low</i> <i>Moderate</i> <i>High</i>	

10. Safety

Risk	Rationale
Preliminary Rating: <i>Low</i> <u>Moderate</u> <i>High</i>	Firefighter and public safety are top priority. Keeping lines of communications between burning operations and the private residences adjacent to the is paramount to the success of the project. Stage some resources top insure communications is on site. Communications between the Burn Boss, Ignition Specialist, and the Helitorch. Holding crews need to validate Safety Zones and Escape routes as the burn progress.
Final Rating: <i>Low</i> <i>Moderate</i> <i>High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low</i> <i>Moderate</i> <u>High</u>	Break down in communications may result in injury to firefighters or public.
Final Rating: <i>Low</i> <i>Moderate</i> <i>High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i>Low</i> <u>Moderate</u> <i>High</i>	Radio checks through out the burn with resources on the project and structure protection to insure communications.

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Final Rating: <i>Low Moderate High</i>	
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11. Ignition Procedures/Methods

Risk	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	The firing sequence and timing are somewhat critical to meet project objectives and manage safety risks. The Burn Boss can see most of the project area from the The Ignition Specialist or the Holding Boss can usually be positioned to see those portions of the unit that the Burn Boss cannot and still perform those duties.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Firing methods and procedures must be coordinated across the unit to provide for adequate safety and meet project objectives. In the event of problems, firing could be halted.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Coordinate between Burn Boss, Ignition Specialist, and Holding Specialist during Helitorch operations to maintain safety. Standard strip-firing techniques will be used from top of elevation down.
Final Rating: <i>Low Moderate High</i>	

12. Interagency Coordination

Risk	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Although the project is all on Forest Service administered lands some coordination maybe needed from surrounding Forest for the availability of additional resources.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	No interagency issues but the project may require a short term agreement between the Forest Service and the Island Park Volunteer Fire department for the use of additional contingency resources.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale

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Preliminary Rating: <i>Low Moderate High</i>	Restrictions on use of Volunteer resources and agreements could delay the implementation of the project.
Final Rating: <i>Low Moderate High</i>	

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13. Project Logistics

Risk	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Some logistical support is anticipated. Supplies are readily available and no special transportation or storage needs exist. Ignition is expected to be completed over several days.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Delivery of special equipment for Helitorch operations could delay implementation of project.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Helitorch equipment and operations require additional safety procedures.
Final Rating: <i>Low Moderate High</i>	

14. Smoke Management

Risk	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Smoke concerns are moderate and some concerns require special mitigation. The project will produce smoke visible to the public over several days. Smoke exposures or amounts may cause some health or safety concerns over a short period of time. Members of the public have expressed some concerns about smoke.
Final Rating: <i>Low Moderate High</i>	
Potential Consequences	Rationale
Preliminary Rating: <i>Low <u>Moderate</u> High</i>	Smoke could settle in the valleys decreasing some visibility. Some firefighters and local residents may be exposed to short term dense smoke.
Final Rating: <i>Low Moderate High</i>	
Technical Difficulty	Rationale

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<p>Preliminary Rating: <i>Low Moderate High</i></p>	<p>Some considerations are needed in the prescription OR ignition portions of the plan. Burn window/opportunities are reduced by the required weather/dispersion conditions. Normal coordination with air quality officials is required. Some mitigation measures or additional smoke modeling may be needed to address potential concerns with smoke impacts. Specific smoke monitoring may be required to determine smoke plume heights and directions. Rotating project personnel out of dense smoke is necessary but easy to accomplish.</p>
<p>Final Rating: <i>Low Moderate High</i></p>	

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Test Fire Provision Worksheet

Location:

Date and Time:

Fuels:

Weather	
Cloud Cover %	
Temperature:	
Relative Humidity:	
Fine Dead Fuel Moisture:	
Wind Speed:	
Fuels:	

Results of Test Fire	
Flame Length	
Rate of Spread	

The test fire meets the prescription parameters	Yes		No	
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Burn Boss		Date	
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Daily HOLDING Shift Plan

Burn Date: _____ Shift Plan Date: _____

Predicted Weather next 24 Hours		
	Minimum	Maximum
Temperature		
Relative Humidity		
Wind Speed (20 ft.)		
Wind Direction		

Weather Trend Narrative:	
Shift Plan Objective:	
Special Considerations and Hazards:	

Holding Boss: _____

PERSONNEL		
POSITION	ICS CODE	TOTAL AMOUNT NEEDED

EQUIPMENT		
DESCRIPTION	UNIT OF MEASURE	TOTAL AMOUNT NEEDED

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Prescribed Fire Post Burn Evaluation				
Burn Unit	Date(s) Burned	Acres Burned	Ignition Start Time	
WEATHER AND FUEL CONDITIONS				
	Time of Ignition	Low	High	
Temperature				
Relative Humidity				
1-hr Fuel Moisture				
10-hr Fuel Moisture	100-hr Fuel Moisture	1000-hr Fuel Moisture	Days Since Significant Precipitation	
Wind Direction (Average)	Wind Speed (Average)	Percent of Fuel Consumed	Ignition Duration (min.)	
ACCOMPLISHMENT OF FUELS TREATMENT OBJECTIVES				
Overall Objectives Achieved:		Yes		No
Short Term Results (include changes in fuel profile and fire regime condition class)				
COST EVALUATION				
Burn Plan Preparation	Site Preparation	Burn Operation	Total Burn Costs	Cost/Acre
\$	\$	\$	\$	\$
NARRATIVE – PRESCRIBED FIRE BURN BOSS COMMENTS				
i.e. operations, safety, fire behavior, personnel & equipment performance, logistics, smoke management				

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Prescribed Fire Burn Boss		Date	
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Weather / Fuels/ Fire Behavior Observations

Project:	Observer Name:	Date:

Weather and Fuels

OBSERVATION TIME (24 Hr)									
SLOPE (%)									
ASPECT									
ELEVATION (FEET)									
FUEL MODEL (1-13)									
SHADING (<50% OR >50%)									
DRY BULB TEMPERATURE (°F)									
WET BULB TEMPERATURE (°F)									
RELATIVE HUMIDITY (%)									
EYE LEVEL WIND SPEED (MPH)									
WIND DIRECTION									
CLOUD COVER (%)									
1-HR FUEL MOISTURE (%)									
10-HR FUEL MOISTURE (%)									
100-HR FUEL MOISTURE (%)									
1000-HR FUEL MOISTURE (%)									

Fire Behavior

FIRE TYPE (HEAD, FLANK, BACKING)									
AVERAGE FLAME LENGTH (Feet)									
MAXIMUM FLAME LENGTH (Feet)									
TORCHING / CROWNING (Y OR N)									
FIRE WHIRLS (Y OR N)									
SPOTTING OCCURRENCE (Y OR N)									
SPOTTING DISTANCE (Feet)									
RATE OF SPREAD (Ch/Hr OR Ft/Min)									
SMOKE DIRECTION									
SMOKE RISE									

Notes:

Raynolds Pass Prescribed Fire Project

ACTION PLAN BEFORE BURNING

Due Date	Activity	Audience/Purpose	Who Responsible	Completed
Continuously	External website	Internal/external	Joanna	
July 2006	Post cards – let public know project was approved	All mailbox holders in area	Joanna/Lynn	
July 2006	Posters	Put out in kiosks and other key locations	Joanna	
Two weeks before burning	Press Release – going to start burning.	Out to all media outlets in area (ID, MT, WY)	Joanna/Lynn	
Two weeks before burn	Flyers – generic message “burning during month of XXX”	Put in grocery stores, gas stations, etc.	Joanna/Lynn/XXXX	
Week of burn	Mailbox flagging	Homeowners in area will get flagging on mailboxes to know we are burning that week		
Week of burn	IDOT reader boards – burning message out to area publics	Message on board “prescribed burn in progress”		
While burning	Replace old flyers and with new message on burn			
While burning	Information Boards – message to all in area	Placed in main locations with map, PR, facts	XXX/Joanna/Lynn	
While burning	Information Booth at District Office	A booth with fire information officers to get message out and answer questions	Joanna/Lynn	
Week after burn	Take down all information			

Unit Log (ICS 21)

Conditions for Leaving the Prescribed Fire Unattended

The following conditions must be met in order to leaving the prescribed fire unattended over night or for multiple days prior to being declared out.

Fire weather and Fire Behavior for the unstaffed period

The following weather and associated fire behavior conditions would ensure that the burn objectives would continue to be met, the burn would remain within the burn unit, and smoke production would remain within planned and permitted parameters.

Unstaffed over night conditions - For the spring prescription, relative humidity is greater than 40% and mid-flame wind speed is less than 5 mph. For the fall prescriptions, relative humidity is greater than 35% and mid-flame wind speed is less than 5 mph. Fire behavior should be minimal with no measurable rate of spread, and no active flame within 2 chains of the burn unit perimeter.

Unstaffed for multiple days' conditions – The predicted weather forecast is within the spring and fall prescription range and no major wind events are predicted. No visible smoke within 4 chains of the burn unit perimeter.

Methods the Burn Boss should use to predict the fire weather forecast and fire behavior

The method for predicting the fire weather and associated potential fire behavior would be accomplished by reviewing the general forecast and acquiring a spot weather forecast.

Frequency of reviews and analyses of weather observations and forecasts

A **daily** spot weather forecast will be acquired for **two** burn periods (days) following the ignition phase. After this point and unit the burn is declared out a spot weather forecast will be acquired that predicts fire weather for an interval of three days. During the interval the Burn Boss should monitor the general forecast to assure the accuracy of the spot weather.

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