**File Code:** 2520-3

Date:

Mary Farnsworth Regional Forester Intermountain Region 324 25th St Ogden, UT 84401

Dear Ms. Farnsworth,

Enclosed is a Burned Area Emergency Rehabilitation Authorization request for the East and Goldrun Fires on the Boise National Forest. These fires have burned approximately 4,115.5 acres, about 3,758 of which are on National Forest System lands.

The East and Goldrun Fires burned primarily in 5, 12<sup>th</sup> HUC drainages, including Dash Creek-Middle Fork Payette River, Upper Clear Creek, Ligget Creek-Middle Fork Payette River, Kennedy Creek-Squaw Creek, and Lower Little Squaw Creek. Values at risk include native vegetation communities near areas infested with noxious weeds and public health and safety.

This initial BAER request would provide for hazard notification for public users at trailheads and on roadways, Early Detection Rapid Response treatments, and treatments to protect road infrastructure.

The total cost of the proposed treatments is \$28,301 for the Boise National Forest.

If there are any questions, please contact Matt Robinson, BEAR Team Coordinator, Boise National Forest.

Sincerely,

/s/ Brant Petersen Forest Supervisor

cc: Jeff Bruggink





Date of Report: 09/14/2023

#### **BURNED-AREA REPORT**

### **PART I - TYPE OF REQUEST**

# A. Type of Report

- oximes 1. Funding request for estimated emergency stabilization funds
- ☐ 2. No Treatment Recommendation

# B. Type of Action

- ☑ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)
- ☐ 2. Interim Request #

☐ Updating the initial funding request based on more accurate site data or design analysis

# **PART II - BURNED-AREA DESCRIPTION**

A. Fire Name: Goldrun Fire B. Fire Number: ID-BOF-

C. State: ID D. County: Gem

E. Region: Intermountain F. Forest: Boise

G. District: Emmett H. Fire Incident Job Code:

I. Date Fire Started: 07/XX J. Date Fire Contained: in monitoring status

K. Suppression Cost: \$3,000,000

L. Fire Suppression Damages Repaired with Suppression Funds (estimates):

Fireline repaired (miles): 1.54 miles
 Other (identify): dozer line: 4.11 miles
 Road as line: 0.53 miles

Road as lifte. 0.55 fillie

Other: 0.8 miles

#### M. Watershed Numbers:

Table 1: Acres Burned by Watershed

Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
Kennedy Creek – Squaw Creek	26040	521	2
Lower Little Squaw Creek	15965	279	2

#### N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES
USFS	461
OTHER FEDERAL (LIST	0
AGENCY AND ACRES)	
STATE	0
PRIVATE	339
TOTAL	800

# O. Vegetation Types:

The slopes of this land type are mostly warm, dry, and non-timbered. Brush/grass communities, not identified as to habitat type, are a major cover type. Moderately stocked stands of trees are on semi-protected areas and have the following habitat types represented: ponderosa pine/chokecherry, douglas-fir/ninebark, and ponderosa pine/Idaho fescue. Vegetative ground cover for the land type ranges from 40 to 80 percent. Forest crown density has a 20 to 60 percent range and a brush crown density of 15 to 50 percent (Soil-Hydrologic Reconnaissance Survey -Emmet Ranger District, Boise NF, 1973).

#### P. Dominant Soils:

The dominant soils on the land type (JECB-2) are shallow and have no organic layer on the surface. The surface soil is a very dark grayish brown, gravelly loamy coarse sand, with 15 to 27 percent fine gravel. The subsoil is a dark brown to dark grayish brown gravelly loamy coarse sand, with 25 percent fine gravel and 15 percent rock. These soils are found on the more exposed mid and upper slopes and ridge tops and are 50 percent of all units. The other soils are similar to the dominant soils with the following exceptions: (GEBA-2) are deep, have 1/2 to 1 inch of organic layer, have a very dark brown surface soil and are found on the more protected lower slopes; GDEO-4, HDFG-4 are moderately deep, have 0 to 1 inch of organic layer, have sandy loam to clay loam soil textures and are found on mid and upper slopes above Squaw Creek (Soil-Hydrologic Reconnaissance Survey -Emmet Ranger District, Boise NF, 1973).

### Q. Geologic Types:

The major geologic formation of the Goldrun fire is cretaceous tonalite, granodiorite and quartz diorite.

# R. Miles of Stream Channels by Order or Class:

STREAM TYPE	MILES OF STREAM
PERENNIAL	
INTERMITTENT	1.68
<b>EPHEMERAL</b>	
OTHER	
(DEFINE)	

### S. Transportation System:

**Trails:** National Forest (miles): Other (miles): Roads: National Forest (miles): 2.57 Other (miles):

# **PART III - WATERSHED CONDITION**

# A. Burn Severity (acres):

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	USFS	Other Federal (List Agency)	State	Private	Total	% within the Fire Perimeter
Unburned	51	0	0	33	78	10
Low	264	0	0	280	544	68
Moderate	145	0	0	26	171	21.9
High	1	0	0	0	1	0.1
Total	461	0		339	800	100

- **B. Water-Repellent Soil (acres):** Water-repellent soils are typically observed 1-2 years post fire in moderate and high burn severity soils. There were 171 acres of moderate and high burn severity within the fire. However, given the recent high precipitation in the area a decrease in hydrophobicity of the affected soils is expected at the time of the BAER assessment.
- **C. Soil Erosion Hazard Rating:** Background erosion hazard rating in the area is high. No increase is expected due to most of the soils being of low and moderate soil burn severity.
- **D. Erosion Potential:** 0.06 tons/acre in high burn severity soils is expected. 0 tons/acre in low and moderate burn severity soils. A total of 0.06 tons is expected due to only 1 acre of high burn severity being present.
- **E. Sediment Potential:** With the lack of high soil burn severity and the distance to larger waterways minimal sediment is expected due to the fire.
- F. Estimated Vegetative Recovery Period (years): 1-3 years is expected for grass recovery.

**Hydrologic Response (brief description):** Annual precipitation averages 24 inches, primarily arriving between November and May although summer thundershowers do occur in summer months. The majority of the assessment area is within the lower band of the rain-snow transition zone (5,000-6,000 feet). Elevation maximus are located on the southeastern periphery of the fire footprint. Elevations are at the lower band of the rain-snow transition zone therefore snowpacks are dependent on seasonal climatic phenomena. Seasonal snow accumulations may melt and reaccumulate numerous times throughout the winter season. Snow accumulation versus rainfall effects the magnitude of post-fire watershed response, slowing runoff and favoring infiltration. It is important to note, however, that rain-on-snow events are possible within the elevation zone and have the potential to result in accelerated watershed response and associated volume of post-fire runoff. Topography is mountain valley formation where elevations within the assessment area range between 3,800 and 5.100 feet.

Fire causes impacts to several hydrologic processes including reduction in interception, transpiration, and infiltration, and increased runoff (due to lack of litter and decreased surface roughness). Removal of vegetation and changes to soil such as increases in hydrophobicity, changes in soil structure, and removal of duff, organic matter, and roots alters these processes and ultimately lead to increases in runoff, peak flows and erosion. These alterations are typical of soils classified as having incurred moderate to high soil burn severity. Given the large percentage of unburned areas and low percentages of moderate and high soil burn severity, watershed response will be low.

# PART V - SUMMARY OF ANALYSIS

## Introduction/Background

A. Describe Critical Values/Resources and Threats (narrative):

Table 5: Critical Value Matrix

asio o. Ontiour value matrix							
Probability of	Magnitude of Consequences						
Damage or Loss	Major Moderate Minor						
	RISK						
Very Likely	Very High	Very High	Low				
Likely	Very High	High	Low				
Possible	High	Intermediate	Low				
Unlikely	Intermediate	Low	Very Low				

# 1. Human Life and Safety (HLS):

# 2. Property (P):Natural Resources (NR): Native Plants

The probability of damage or loss of **native plant communities** from non-native and noxious plant species within fire areas is **very likely** in areas that were in close proximity to existing invasive non-native species in areas where native vegetation was disturbed by fire suppression activities. The magnitude of consequence is **moderate**; therefore, the **risk is very high** that native plant communities could be adversely impacted.

**Soil Productivity** The probability of damage or loss is unlikely due to the affected area mostly being low burn severity. The magnitude of consequences is minor due to minimal potential for property damage and low risk for cultural sites. After consultation of the critical value risk matrix a magnitude of consequence of very low has been assigned for soil productivity on the Goldrun fire. No treatment options for soil productivity are being recommended due to this rating.

4. Cultural and Heritage Resources: Probability of loss or damage to cultural and heritage resources is unlikely with a minor magnitude of consequence. Following the above risk matrix, this results in a very low risk to cultural and heritage resources. See details provided in the heritage report for assessment of sites within the fire perimeter.

# **B.** Emergency Treatment Objectives:

Invasives – Weeds and native vegetation recovery; Reduce the risk from expansion of existing weed seed beds into burned areas and to allow burned plant communities to recover more rapidly.

# C. Probability of Completing Treatment Prior to Damaging Storm or Event:

**Land**: 90 % (prior to seeding)

Channel: Roads/Trails: Protection/Safety:

## D. Probability of Treatment Success

Table 6: Probability of Treatment Success

	1 year after treatment	3 years after treatment	5 years after treatment
Land	90%	75%	NA
Channel			
Roads/Trails			
Protection/Safety			

### E. Cost of No-Action (Including Loss):

There is currently a high amount of noxious/invasive weeds in the area. Not acting quickly to maintain control of the existing infestations, would be a significant loss of future plant communities.

# F. Cost of Selected Alternative (Including Loss):

Refer to Table 6 – Treatment Cost Summary

G	Skills	Represented	on Burned-A	Area Survey Tea	am'

Soils			⊠ GIS	
	☐ Recreation	☐ Fisheries	☐ Wildlife	

oximes Soils oximes Hydrology oximes Engineering oximes GIS oximes Archaeology

☐ Other:

Team Leader: Trevlyn Clark

Email: trevlyn.clark@usda.gov Phone(s) 307-248-3960

Forest BAER Coordinator: Matt Robinson

**Email:** matthew.robinson@usda.gov **Phone(s):** 986-200-8256

Team Members: Table 7: BAER Team Members by Skill

Skill	Team Member Name
Team Lead(s)	Trevlyn Clark
Soils	Austin Wrem, Reed Williams (T)
Hydrology	Jessie Merrifield, Hannah Adams (T)
Engineering	Rick Stone
GIS	Suki Wilder
Archaeology	Jessica Goodwin, Madeleine Phillips (T)
Weeds	Delaney Lane, Carol Petricevic
Recreation	
Other	

#### H. Treatment Narrative:

Land Treatments: The Emergency Response Strategy for native plant communities is early detection and rapid response (EDRR) treatment of invasive species prior to populations becoming established or expanded, which is a key point in restoring desired native vegetation within the burn area and reducing long-term cost of containment, control, and eradication. An aggressive monitoring and treatment program is needed to deal with noxious and non-native invasive plants. This effort is expected to be a short, mid, and long-term process.

The Forests may consider use of herbicide treatments as part of the EDRR strategy where the forests completed project-level NEPA and signed decisions for herbicide use to control invasive plants as part of an Integrated Pest Management strategy. The Boise National Forest has invested a substantial amount of time and money to eradicate invasive weeds; immediate action is critical to support the effort already invested in invasive species removal.

#### **Channel Treatments:**

**Roads and Trail Treatments:** 

**Protection/Safety Treatments:** 

## I. Monitoring Narrative:

**Land Treatments:** Conducting the EDRR surveys will satisfy the monitoring requirements. Surveys are aimed at detecting new infestations and spread of prior infestations. Changes are recorded in the USDA Forest Service Natural Resource Manager (NRM) Threatened, Endangered, Sensitive Plant—Invasive Species database.

Herbicide treatments and application monitoring are recorded in the same database.

# PART VI - EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER\$	\$	units	\$	Units	\$	\$
A Land Treatments										
EDRR for suppression		246	23.47	\$5,764	\$0		\$0		\$0	\$5,764
					\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$5,764	\$0		\$0		\$0	\$5,764
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treatment	S			<b>\$</b> 0	<b>\$</b> 0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Road and Trails				\$0	\$0		\$0		\$0	\$0
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Protection/Safety				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
Initial Assessment	Report			\$4,805	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!				\$0		\$0		\$0	\$0
Subtotal Evaluation				\$4,805	\$0		\$0		\$0	\$0
F. Monitoring										
_				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				<b>\$</b> 0	\$0		\$0		\$0	\$0
_										
G. Totals				\$5,764	\$0	8	\$0		\$0	\$5,764
Previously approved										
Total for this request			İ	\$5,764	Š					

# **PART VII - APPROVALS**

1	
Forest Supervisor	Date

**Date of Report: 9/25/2023** 

#### **BURNED-AREA REPORT**

# **PART I - TYPE OF REQUEST**

# A. Type of Report

- ☐ 2. No Treatment Recommendation

# B. Type of Action

- ☑ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)
- ☐ 2. Interim Request #

☐ Updating the initial funding request based on more accurate site data or design analysis

# **PART II - BURNED-AREA DESCRIPTION**

A. Fire Name: East Fire B. Fire Number: ID-BOF-000935

C. State: ID D. County: Valley

E. Region: Intermountain F. Forest: Boise

G. District: Cascade H. Fire Incident Job Code:

I. Date Fire Started: 8/16/2023 J. Date Fire Contained: Estimated at 9/30/23

K. Suppression Cost: \$9,500,000

L. Fire Suppression Damages Repaired with Suppression Funds (estimates):

1. Fireline repaired (miles): 13.51 miles

2. Other (identify):

#### M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC#	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
	Dash Creek-Middle Fork Payette River	16997	575	3
	Upper Clear Creek	16724	1543	9
	Ligget Creek-Middle Fork Payette River	15909	1197	8

# N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership

rabio 2: rotar riordo Barrioa by Cirriordinp					
OWNERSHIP	ACRES				
NFS	3297				
OTHER FEDERAL (LIST					
AGENCY AND ACRES)					
STATE	17				
PRIVATE	1.5				
TOTAL	3315.5				

- O. **Vegetation Types:** Vegetation types in the fire perimeter are dominated by coniferous forest consisting of Ponderosa pine and Douglas fir at lower elevations, transitioning to, lodgepole pine, subalpine fir, and whitebark pine at higher elevations. Aspen also occurs in the area but is not a dominant vegetation type. Non-forested habitats are intermixed throughout the burn area and consist of sagebrush dominated system, meadows, and scablands. A wide variety of native shrubs and grasses exist throughout the fire perimeter. Whitebark pine (*Pinus albicaulis*) is an ESA listed species and a Regional Forester's Endangered Species.
- **P. Dominant Soils:** Soils are predominantly granodiorite derived sandy-loam to loam with sandy loams more dominant in the upper hillslope profile. The fire burned along a ridgeline, with steeper slope breaks midslope. There is a minimal amount of Mount Mazama ash influence within the fire perimeter.
- **Q. Geologic Types:** The entirety of the East Fire footprint consists of Cretaceous granodiorite and two-mica granite.
- R. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
PERENNIAL	5.73
INTERMITTENT	3.30
EPHEMERAL	
OTHER	
(DEFINE)	

S. Transportation System:

**Trails:** National Forest (miles): 5.61 Other (miles): **Roads:** National Forest (miles): 1.0 Other (miles):

### **PART III - WATERSHED CONDITION**

### A. Burn Severity (acres):

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	NFS	Other Federal (List Agency)	State	Private	Total	% within the Fire Perimeter
Unburned	382				382	20.5
Low	1263		3		1266	38.2
Moderate	1252.5		12	1.5	1183	35.7
High	182		2		184	5.6
Total	3297		17	1.5	3315.5	

**B. Water-Repellent Soil (acres):** Soil hydrophobicity is generally expected to increase post-fire in moderate and high SBS categories and settle out within 1-2 years with precipitation events and freeze/thaw cycles. However, increased hydrophobic conditions were not observed within this fire perimeter. This is likely due to increased soil moisture from recent precipitation events and ash transport during the large precipitation event that occurred while the East fire was burning.

**C. Soil Erosion Hazard Rating:** Background Erosion hazard ratings for the East fire were pulled from the 1969 Soil-Hydrologic Reconnaissance maps. 43% of the fire area is rated as moderate and 57% high. This is expected to increase slightly due to loss of cover from the fire, but not significantly due to low amounts of high soil burn severity.

- **D. Erosion Potential:** ERMiT models show an increased erosion amount to 0.76 tons/acre for high SBS and 0.1 for moderate SBS within the fire perimeter. This averages out to 0.08 tons/acre across the fire area in the first year. All ERMiT models show no additional erosion by 3 years post fire.
- **E. Sediment Potential:** Due to low erosion potential numbers, low percentage of high SBS acres, and large portions of unburned area downstream from the fire perimeter, sediment movement is expected to stay localized and not have significant impacts on downstream waterways.
- **F. Estimated Vegetative Recovery Period (years):** Vegetative recovery of grass/shrublands is expected to occur within 1-3 years, restabilizing slopes from increased soil erosion. High SBS soils can take longer to recover, but only account for 5.5% of the fire area.
- **G. Estimated Hydrologic Response (brief description):** Annual precipitation ranges between 30 to 34 inches, primarily arriving between November and May although summer thundershowers do occur in summer months. The majority of the assessment area is above the rain-snow transition zone (5,000-6,000 feet) where 90% of the fire area is above the zone of transition. Elevation maximums are located on the southwest periphery of the fire footprint near East Mountain along the North Fork Range within the Salmon River Mountains. Average elevations lie within or above maximum elevations of rain-snow transition and therefore permanence of snowpacks are somewhat stable but may fluctuate depending on seasonal climatic phenomena. Seasonal snow accumulations may melt and reaccumulate numerous times throughout the winter season at lower bands of elevation within the fire perimeter. Snow accumulation versus rainfall effects the magnitude of post-fire watershed response, slowing runoff and favoring infiltration. It is important to note, however, that rain-on-snow events occur within the elevation zone and can result in significant damage. Topography is mountain valley formation where elevations within the assessment area range between 5,439 and 7,736 feet.

Fire causes impacts to several hydrologic processes including reduction in interception, transpiration, and infiltration, and increased runoff (due to lack of litter and decreased surface roughness). Removal of vegetation and changes to soil such as increases in hydrophobicity, changes in soil structure, and removal of duff, organic matter, and roots alters these processes and ultimately lead to increases in runoff, peak flows, and erosion. These alterations are typical of soils classified as having incurred moderate to high soil burn severity. One trend across the East fire is diminished needle cast potential to provide cover in burned areas where approximately 50% of areas classified as having burned at moderate soil burn severity saw diminished needle cast potential. Needle cast potential is usually observed in areas with moderate and low soil burn severity. With no groundcover or interception, moderate soil burn severity areas may respond to storm events like areas with high soil burn severity. Given the large percentage of unburned/very low and low soil burn severity and downstream unburned buffer distance from the fire perimeter to identified values at risk, overall watershed response will be low. In catchments with higher percentages of moderate and high soil burn severities and reduced unburned buffer distances watershed response will be moderate.

#### PART V - SUMMARY OF ANALYSIS

# Introduction/Background

### A. Describe Critical Values/Resources and Threats (narrative):

Table 5: Critical Value Matrix

Probability of	Magnitude of Consequences						
Damage or Loss	Major Moderate Minor						
	RISK						
Very Likely	Very High	Very High	Low				
Likely	Very High	High	Low				
Possible	High	Intermediate	Low				

Probability of	Magnitude of Consequences					
Damage or Loss	Major Moderate Minor					
	RISK					
Unlikely	Intermediate	Low	Very Low			

# 1. Human Life and Safety (HLS):

Probability of damage or loss to Forest Personnel or the Public within the East Fire is rated as **possible** with the threat of falling rock or trees along with the increased risk of debris flows in the moderate to high burn areas. The magnitude of consequences would be **major** given the intersection of this fire and popular recreation area that can concentrate public use in this area. Following the above risk matrix, this results in a **high** risk to human life and safety.

- 2. Property (P):FSR 405D: Probability of damage or loss of FSR 405D within the East Fire is rated as likely given the location of the road within the moderate to high burn areas of the fire and observed sedimentation and damage already occuring from a post-fire rain event. The magnitude of consequences would be **moderate** given that this road is not a major traffic roadway but provides access to a planned timber sale and for Forest Personnel to implement suppression activities and work within the area.
- 3. Natural Resources (NR): Native Plants: The probability of damage or loss of native plant communities from non-native and noxious plant species within fire areas is very likely in areas that were in close proximity to existing invasive non-native species, used during fire suppression activities, where native vegetation was removed, and where ground disturbances occurred. The magnitude of consequence is major; therefore, the risk is very high that native plant communities could be adversely impacted.

**Soil Productivity**: Probability of damage or loss for soil productivity in the East fire is rated as **likely**, due to 41% of the fire area showing moderate and high SBS and will likely see some impairment in these areas. However, magnitude of consequences is rated **minor** due to a mosaic of burn severities, with only 5.5% of the area rated high and scattered throughout the fire area, as opposed to large, continuous areas. Large areas of unburned within and below the fire area help to ensure soil loss and reduction in productivity will stay localized. Following the above risk matrix, this results in a **low** risk to soil productivity. At this time, no response actions are proposed for soil productivity.

4. Cultural and Heritage Resources: Probability of loss or damage to cultural and heritage resources is unlikely with a minor magnitude of consequence. Following the above risk matrix, this results in a very low risk to cultural and heritage resources. See details provided in the heritage report for assessment of sites within the fire perimeter.

# **B.** Emergency Treatment Objectives:

# **Land Treatments:**

Treatment for potential invasives due to suppression activities. Weeds and native vegetation recovery; Reduce the risk from expansion of existing weed seed beds into burned areas and to allow burned plant communities to recover more rapidly.

### **Roads and Trail Treatments:**

Decrease the potential for low to moderate intensity, short to moderate duration precipitation/snow melt events to result in damage or loss of high value infrastructure (FS Road 405D).

# **Protection/Safety Treatments:**

Installation of signs to inform the public of the dangers present within the burned area to reduce the risk of injury or death resulting from an increase in hazard trees, falling rock, and debris flows throughout the area. Removal of hazard trees at work area where the FS Trail 099 bridge will be replaced along with the removal of hazard trees at the FS Trails 099 and 100 trailhead.

### C. Probability of Completing Treatment Prior to Damaging Storm or Event:

Land: 90% (prior to seeding)

Channel:

Roads/Trails: 90% (storm patrol and rolling dips on FSR 405D)

Protection/Safety: 90% (installation of signs and hazard tree removal)

## D. Probability of Treatment Success

Table 6: Probability of Treatment Success

	1 year after treatment	3 years after treatment	5 years after treatment
Land	90%	75%	NA
Channel			
Roads/Trails	80%	80%	70%
Protection/Safety	75%	50%	NA

## E. Cost of No-Action (Including Loss):

Cost of No–Action Alternative assumes that a low to moderate intensity, short to moderate duration precipitation/snow melt event occurring over the areas proposed for treatment would result in the loss of the FS Road 405D and Trails 099 and 100. There is currently a relatively low amount of noxious/invasive weeds in the area. Not acting quickly to maintain control of the existing infestations, would be a significant loss of future plant communities. The potential injury or loss of life from hazards within the burn perimeter resulting from inadequate signage notifying public users and not implementing temporary closures would far exceed any request for sign funding.

# F. Cost of Selected Alternative (Including Loss):

Refer to Table 6 – Treatment Cost Summary

G.	Skills Re	epresented on	<b>Burned-Area</b>	Survey	Team:
----	-----------	---------------	--------------------	--------	-------

⊠ Soils			⊠ GIS	
⊠ Weeds	⊠ Recreation	☐ Fisheries	☐ Wildlife	

☐ Other:

**Team Leader:** Trevlyn Clark

Email: trevlyn.robertson@usda.gov Phone(s) 307-248-3960

Forest BAER Coordinator: Matt Robinson

Email: matthew.robinson@usda.gov Phone(s): 986-200-8256

Team Members: Table 7: BAER Team Members by Skill

Skill	Team Member Name
Team Lead(s)	Trevlyn Clark
Soils	Austin Wrem, Reed Williams (T)
Hydrology	Jessie Merrifield, Hannah Adams (T)
Engineering	Rick Stone
GIS	Suki Wilder
Archaeology	Jessica Goodwin, Madeleine Phillips (T)
Weeds	Delaney Lane, Carol Petricevic
Recreation	Everardo Santillan
Other	

#### H. Treatment Narrative:

Land Treatments: The Emergency Response Strategy for native plant communities is early detection and rapid response (EDRR) treatment of invasive species prior to populations becoming established or expanded, which is a key point in restoring desired native vegetation within the burn area and reducing long-term cost of containment, control, and eradication. An aggressive monitoring and treatment

program is needed to deal with noxious and non-native invasive plants that may have been established during the suppression effort. This effort is expected to be a short, mid, and long-term process.

The Forests may consider use of herbicide treatments as part of the EDRR strategy where the forests completed project-level NEPA and signed decisions for herbicide use to control invasive plants as part of an Integrated Pest Management strategy. The Boise National Forest has invested a substantial amount of time and money to eradicate invasive weeds; immediate action is critical to support the effort already invested in invasive species removal.

#### **Channel Treatments:**

#### **Road Treatments:**

**FSR 405D** – Protect road sections from additional post fire rain event damage. In areas where stream bank erosion may occur and where low water crossings have a chance of washing out, use rip-rap armoring to protect road surface and toe of fill slopes at the edge of stream channels. Excavate cut slopes that have slid or may slide onto the road down to native ground. Lay back slopes where possible to avoid future slope failures.

Install waterbars, rolling dips and low water crossings where they will be most efficient and necessary. Rolling dips should be installed on the down slope side of culverts and in locations where culvert failure is possible or likely. These rolling dips will assist to remove water from the roadbed that has become trapped on the road surface causing erosion and travel hazards. Low water crossings can be used when existing culverts need to be removed because of damage or being undersized. Low water crossings can also be used when large drainages cross the road and no engineering control is in place.

### **Protection/Safety Treatments:**

Post warning signs at road and trail portals to notify public of increased hazards as a result of post wildfire conditions.

Remove hazard trees at the 099 and 100 trailhead and at the bridge replacement site on FS Trail 099. These are areas where the public congregate and the bridge will be replaced and a safe work area needs to be provided for the crew installing the new bridge.

### I. Monitoring Narrative:

Land Treatments: Conducting the EDRR surveys will satisfy the monitoring requirements. Surveys are aimed at detecting new infestations and spread of prior infestations. Changes are recorded in the USDA Forest Service Natural Resource Manager (NRM) Threatened, Endangered, Sensitive Plant—Invasive Species database. Herbicide treatments and application monitoring are recorded in the same database.

**Road Treatments:** During or right after a localized storm event, monitor the condition of FS Road 405D for any additional erosional concerns related to post-fire effects along with monitoring the effectiveness of the installation of the road dips.

**Protection/Safety Treatments:** Ensure that the signs remain in place for notification of the potential hazards. Replace if necessary.

# PART VI - EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

A. Land Treatments  EDRR (suppression related)  Insert new items above this line!  Subtotal Land Treatments  B. Channel Treatments	1 1	246	33.57	<b>BAER \$</b> \$8,245	\$		units	\$	Units	\$	\$
EDRR (suppression related)  Insert new items above this line!  Subtotal Land Treatments	1	246	33.57	+-, -							
EDRR (suppression related)  Insert new items above this line!  Subtotal Land Treatments	1	246	33.57	+-, -							
Insert new items above this line! Subtotal Land Treatments	1	246	33.57	+-, -							
Subtotal Land Treatments					\$0			\$0		\$0	\$8,245
Subtotal Land Treatments				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
B. Channel Treatments		-		\$8,245	\$0			\$0		\$0	\$8,245
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Channel Treatments				\$0	\$0			\$0		\$0	\$0
C. Road and Trails											
FS Road 405D	1	2,930	1	\$2,930	\$0			\$0		\$0	\$2,930
				<b>#</b> 0	Φ0			00		<b>.</b>	Φ0
land a sur its and a bound this limit				<b>\$0</b>	\$0	200,000		\$0		\$0 \$0	\$0 \$0
Insert new items above this line!				\$0	\$0			\$0		\$0	
Subtotal Road and Trails				\$2,930	\$0			\$0		\$0	\$2,930
D. Protection/Safety	41	000	4	4000	00			0.0		0.0	***
Hazard Signs	1	200	1	\$200	\$0			\$0		\$0	\$200
hazard tree removal at FS											
099 and 100 Trailhead and at											
bridge replacement site	1 1	1,162	1	\$11,162	\$0			\$0		\$0	\$11,162
Insert new items above this line!		, -		\$0	\$0			\$0		\$0	\$0
Subtotal Protection/Safety				\$11,362	\$0	NEW MOOR		\$0		\$0	\$11,362
E. BAER Evaluation											. ,
Initial Assessment Rep	ort			\$9,829	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!					\$0			\$0		\$0	\$0
Subtotal Evaluation				\$9,829	\$0			\$0		\$0	\$0
F. Monitoring											·
j				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0			\$0		\$0	\$0
G. Totals				\$22,537	\$0			\$0		\$0	\$22,537
Previously approved											
Total for this request				\$22,537							

# **PART VII - APPROVALS**

1. <u> </u>	
Forest Supervisor	Date