

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST**A. Type of Report**

- ☒ 1. Funding request for estimated emergency stabilization funds
☐ 2. Accomplishment Report
☐ 3. No Treatment Recommendation

B. Type of Action

- ☒ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)
☐ 2. Interim Report # _____
 ☐ Updating the initial funding request based on more accurate site data or design analysis
 ☐ Status of accomplishments to date
☐ 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION**A. Fire Name:** Powerline**B. Fire Number:** ID-FHA-000158**C. State:** Idaho**D. County:** Power**E. Region:** Intermountain (R4)**F. Forest:** Caribou-Targhee NF**G. District:** Westside**H. Fire Incident Job Code:** PAK81F (1502)**I. Date Fire Started:** 8/4/2017**J. Date Fire Contained:** 8/12/2017 @ 2000**K. Suppression Cost:** Approximately \$4,500,000**L. Fire Suppression Damages Repaired with Suppression Funds (NFS lands only)**

1. Fireline waterbarred (miles): 0 mile
2. Fireline seeded (miles): About 2.6 miles of dozer line on NFS lands will be seeded in October.
3. Other (identify): ~0.25 miles of dozer line was obliterated. The remaining dozerline was along open roads and was repaired to pre-fire conditions. Those disturbances will be seeded in October.

M. Watershed Numbers: 170402060902 (Lower Rattlesnake Creek), 170402060903 (Starlight Creek-Bannock Creek), and 170402060905 (Eagletail Rock-Bannock Creek)**N. Total Acres Burned:** 55,529 total → 37,701 Fort Hall Indian Reservation; 15,679 BIA Trust Lands; 2,773 BLM; 1,127 USFS: C-T NF; 123 State; 3,166 Private

O. Vegetation Types: The area is dominated by various sagebrush species with interspersed areas of grass and open rocky slopes. Within the fire perimeter, pockets of juniper on south and west facing slopes and aspen are present primarily in drainage bottoms and side slopes with deeper soils. The sagebrush areas were observed as having a low soil burn severity, while the junipers exhibited a moderate to high soil burn severity. The aspen stands were largely unburned.

P. Dominant Soils: The soils are characterized by very gravelly/cobbly surfaces with shallow to moderately deep profiles occurring on slopes exceeding 45% and being derived from colluvium and residuum. Soil components are approximated as follows: 80%-Middlehill, Hymas, Chokecherry & Ridgecrest extremely

stony surface; Hydrologic Soil Group C/D. 20%-Moonlight, Wahtigup & Camelback; gravelly silt loam/loam surface; Hydrologic Soil Group B.

- Q. Geologic Types: Limestone (Hymas, Wahtigup, Ridgecrest, Ricrest) & Quartzite (Camelback, Middlehill, Chokecherry)
- R. Miles of Stream Channels by Order or Class: There are 0.4 miles of perennial & 2.8 miles of intermittent streams within the burn perimeter. The fire also burned immediately adjacent to approximately 0.9 miles of the north slope above Midnight Creek, which is perennial.
- S. Transportation System: Roads: 1.0 miles Non-motorized Trails: 0.9 miles Motorized Trails: 0 miles

PART III - WATERSHED CONDITION

- A. Burn Severity: Unburned: 225 acres (20%); Low: 733 acres (65%); Moderate: 113 acres (10%); High: 56 acres (5%). Soil burn severity is based on field reconnaissance.
- B. Water-Repellent Soil (NFS acres only): Water repellancy was observed to occur at shallow depths for long durations throughout the burned area.
- C. Soil Erosion Hazard Rating (Burned NFS acres only):
Low: 0 acres or 0% Moderate: 117 acres or 10% High: 1,010 acres or 90%
- D. Erosion Potential (tons/acre): Not calculated. No watershed treatments proposed.
- E. Sediment Potential (cubic yards/square mile): Not calculated. No watershed treatments proposed.

PART IV - HYDROLOGIC DESIGN FACTORS

No hydrologic-related treatments are proposed due to low soil burn severity and the lack of hydrologic-related critical values at risk.

- | | |
|---|---|
| A. Estimated Vegetative Recovery Period, (years): | <u>1-3 for grass and 20-25 for shrubs & aspen</u> |
| B. Design Chance of Success, (percent): | <u>N/A – no hydrologic related treatments prescribed.</u> |
| C. Equivalent Design Recurrence Interval, (years): | <u>N/A – no hydrologic related treatments prescribed.</u> |
| D. Design Storm Duration, (hours): | <u>N/A – no hydrologic related treatments prescribed.</u> |
| E. Design Storm Magnitude, (inches): | <u>N/A – no hydrologic related treatments prescribed.</u> |
| F. Design Flow, (cubic feet / second/ square mile): | <u>N/A – no hydrologic related treatments prescribed.</u> |
| G. Estimated Reduction in Infiltration, (percent): | <u>N/A – no hydrologic related treatments prescribed.</u> |
| H. Adjusted Design Flow, (cfs per square mile): | <u>N/A – no hydrologic related treatments prescribed.</u> |

PART V - SUMMARY OF ANALYSIS

- A. Describe Critical Values/Resources and Threats:

The table below summarizes the risks associated with each critical value. The risks were evaluated based on Interim Directive No. 2520-2017-1 guidance. The Forest recommends an emergency treatment to mitigate the high risk that invasive species and noxious weeds pose to native/naturalized communities.

Table: Risk assessment table displaying results of critical values risk evaluation

Critical Value	Critical Value Type	Probability of Damage/Loss	Magnitude of Consequences	Risk	Comments
Public Safety	Human Life and Safety	Unlikely	Major	Intermediate	The area is remote & recreational use is low.
Roads & Trails on NFS lands	Property	Possible	Moderate	Intermediate	The roads & trails are low standard with infrequent use.
Powerline	Property	Unlikely	Major	Intermediate	Powerline appears stable. It would not likely be affected by the anticipated erosion.
Water	Natural Resources	Possible	Moderate	Intermediate	Agricultural uses of water
Soil Productivity & Hydrologic Function		Likely	Minor	Low	Any damage to resources would be localized.
Critical or Suitable Habitat for T&E species		N/A	N/A	N/A	No critical or suitable habitat in burned area.
Invasive species & noxious weeds		Likely	Moderate	High	There are few weeds in the burn, but populations exist nearby that threaten native/naturalized communities. Treatment is proposed.
Cultural & Heritage Resources: NFS lands	Cultural & Heritage	Unlikely	Minor	Very Low	There are no known listed or eligible NRHP sites.

Native Ecosystems - Invasive species and noxious weeds: Invasive species and noxious weeds are present only in minor amounts, but populations do exist around the fire perimeter. Early detection rapid response (EDRR) monitoring and treatments are needed to protect native ecosystems.

There were 2.6 miles of dozer line constructed on Forest Service Lands during suppression. All dozer lines were rehabbed after suppression. The dozer lines will be native seeded this fall during optimal seasonal conditions. Due to this disturbance and exposed soil, the burned area will be susceptible to invasive and noxious weeds. There were no noxious weeds observed during field visit along the Birch Creek and Midnight Creek ridges. However, adjacent to the fire it was noted to have Canada thistle, bull thistle, and hounds tongue. Forest Roads #277 and #290 and Trail #019 provide access to the fire perimeter so the potential for spread is extremely possible. New infestations could develop along these travel routes within the first year of the fire, and easily spread throughout the rest of the burn area within 2-3 years.



Dozer line rehab with seeding need this fall 2017.

8/12/2017

B. Emergency Treatment Objectives:

EDRR for Invasives Species & Noxious Weeds – Prevent the spread of invasive and noxious plant species into previously unoccupied locations. Reduce the risk from expansion of existing weed seed beds into the burned area and to allow burned plant communities to recover more rapidly.

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

Invasive & noxious weeds **90%** (prior to seed); Channel **N/A%**; Trails **N/A%**; Protection/Safety(signs) **N/A %**

D. Probability of Treatment Success

Table: Probability of Treatment Success

	Years after Treatment		
	1	3	5
EDRR: Invasives & Noxious Weeds	90	75	N/A
Channel	N/A	N/A	N/A
Trails	N/A	N/A	N/A
Protection/Safety	N/A	N/A	N/A

E. Cost of No-Action (Including Loss): \$15,000

Weeds: The values-at-risk with no action include potential loss of native communities and degraded ecological conditions that cause further departure from natural disturbance regimes, including loss of soil productivity over the long term. The effects of no action were determined by assuming fire suppression activities would contribute to the invasion of noxious weed species into highly susceptible burned areas where they were absent or in minor amount prior to the fire. This is a reasonable assumption after observing the conditions of portions of the adjacent area.

If the invasive species and noxious weeds are not immediately controlled, these undesirable species could become established within 1 year. At least 2 years of additional treatments would be needed on the initial 100 acres identified, plus the potential for spread may infect an additional 100 acres if the initial invasion is not successfully controlled. The average cost to treat noxious plants that have become established is \$150/acre. Assuming the treatments are 80% effective, the total cost for control of newly established noxious weed infestations, including loss, is estimated to be \$15,000.

F. Cost of Selected Alternative (Including Loss): EDRR = \$2,200

Cost estimate for EDRR – invasive plants and noxious weeds.

	Units	Unit Cost	# Units	BAER \$
Detection/mapping/rapid response	Days	\$300	2	\$600
Treatment: Labor & equipment	Days	\$300	2	\$600
Treatment: Chemical and supplies	Acres	\$100	10	\$1,000
Total =				\$2,200

G. Skills Represented on Burned-Area Survey Team:

☒ Hydrology ☒ Soils ☐ Geology ☒ Range ☐ Forestry ☐ Wildlife ☐ Fire Mgmt
☐ Engineering ☐ Contracting ☐ Ecology ☐ Botany ☐ Archaeology ☐ Fisheries
☐ Research ☐ Landscape Arch ☐ GIS ☒ Invasive Species/Noxious Weeds ☐ Trails

Team Leader: Brad Higginson, Hydrologist, Caribou-Targhee NF. bhigginson@fs.fed.us. 208-557-5786

Other Core Team Members:

- David Marr, Soils Scientist, Caribou-Targhee NF.
- Hans Bastian – Rangeland Resources, Invasive Species, and Noxious Weeds, Westside Ranger District

H. **Treatment Narrative:**

EDRR for Invasive Species and Noxious Weeds: First year weed monitoring should include 50 feet on each side of the Birch Creek/ Midnight Creek motorized roads and trail within the fire area and roads used to access the fire area. This would amount to roughly 40 acres of road and trail corridors. Weed Crews would also monitor within the burn area itself, especially the high &

moderate severity areas for new infestations. Monitored acres along travel corridors and within burn area are estimated at 100 acres, of which it is anticipated that actual treatment would occur on 10 acres (10% of the monitored acres).

Treating invasive plants and noxious weeds prevents the serious threat these plants have on ecosystems. The BAER team surveyed the burned area and identified four invasive species nearby. All three species were on the Federal and/or Idaho State Noxious Weed List. These three species were prioritized depending on the plant type and its response to fire.

1. Bull thistle
2. Canada thistle
3. Hounds tongue

The District Weed Crews have implemented an Integrated Management System using all appropriate available methods or a combination of methods that are economical and effective. The affected area and treatments covered by the Caribou National Forest Environmental Assessment for Noxious Weeds and Poisonous Plants. This plan will be followed to implement the proposed EDRR treatment.

1. Prevent the introduction, reproduction and spread of designated noxious weeds and invasive plants into and within the Powerline Fire.

Objectives:

- A. Develop & maintain an integrated inventory of noxious weeds & invasive plants
- B. Prevent the establishment of Potential Invaders through EDRR.
- C. Eradicate New Invaders (EDRR).
- D. Promote & support the use of certified weed free seed, and/or weed free feeds.

2. Reduce the extent and density of established noxious weeds.

Objectives:

- A. Establish control priorities for the noxious weed list.
- B. Coordinate the use of resources and manpower to treat designated weed infestations
- C. Treat transportation corridors and areas of concentrated activities, such as roads, dozer lines, fire lines, trails, spike camps, trailheads parking lots. Control satellite infestations of Established Invaders.
- D. Treat stream corridors to limit spread of new and established invaders in riparian habitats.
- E. Contain and slow the spread of widespread established invaders.

3. Monitoring (Short and Long Term Monitoring)

A. Monitoring and Evaluation will focus on four general questions:

- Is the plan being implemented?
- Are the objectives and priorities realistic and achievable?
- Are the treatments effective in meeting the planned objectives?
- Are the weeds continuing to spread beyond our control actions?

I. Monitoring Narrative:

Implementation monitoring is proposed and will occur as the treatments are installed or applied. District staff (range and recreation) will monitor all treatments to ensure proper implementation.

The cost of the implementation monitoring is included in the treatment costs.

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands				All Total \$
			# of Units	BAER \$		# of units	Fed \$	# of Units	Non Fed \$	
A. Land Treatments										
EDRR - Weeds	Each	\$2,200	1	\$2,200	\$0		\$0		\$0	\$2,200
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				\$2,200	\$0		\$0		\$0	\$2,200
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treat.</i>				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road & Trails</i>				\$0	\$0		\$0		\$0	\$0
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Structures</i>				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation	Each	\$3,000	1							
				---			\$0		\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
<i>Subtotal Evaluation</i>				---	\$0		\$0		\$0	\$0
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0		\$0	\$0
G. Totals				\$2,200	\$0		\$0		\$0	\$2,200
Previously approved										
Total for this request				\$2,200						

PART VII - APPROVALS

1. _____
Forest Supervisor (signature)

Date

2. /s/ David Jenkins (for)
Regional Forester (signature)

8/28/17
Date

Final Fire Perimeter Map

