FS-2500-8 (6/06) Date of Report: October 4, 2010

## **BURNED-AREA REPORT**

(Reference FSH 2509.13)

### PART I - TYPE OF REQUEST

## A. Type of Report

- [X] 1. Funding request for estimated emergency stabilization funds
- [] 2. Accomplishment Report
- [] 3. No Treatment Recommendation
- B. Type of Action
- [X] 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: Little Beaver Fire (Boise NF) B. Fire Number: ID-BOF-000499
- C. State: Idaho D. County: Valley
- E. Region: 04 Intermountain F. Forest: Boise
- G. District: Cascade H. Fire Incident Job Code: P4FN2Z
- I. Date Fire Started: July 28, 2010 J. Date Fire Contained: 80% contained, in

"monitor" status until significant weather event.

- K. Suppression Cost: \$2,507,000 (from September 23, 2010 ICS-209)
- L. Fire Suppression Damages Repaired with Suppression Funds
  - 1. Fireline waterbarred (miles): 2.0
  - 2. Fireline seeded (miles): None.
  - 3. Other (identify): Rehabilitate 1 incident base camp (including helibase), 1 helispot, 5 drop points, 1 equipment washing site, and blade/smooth ruts or washboard conditions resulting from fire suppression activities and traffic on about 15 miles of roads.
- M. Watershed Number: 170602050901 Lower Elk;

170602050902 – Bearskin; 170602050903 – Upper Elk.

N. Total Acres Burned: 1,559 - Boise NF portion (6,247 total acres)

NFS (6,247) Other Federal (NA) State (NA) Private (NA)

- O. Vegetation Types: 44% Cool, Dry Douglas-fir; 37% Warm, Dry Subalpine Fir; and 15% Persistent Lodgepole Pine.
  P. Dominant Soils: Typic Cryumbrepts, fine loamy mixed and Typic Cryochrepts, loamy skeletal mixed.
  Q. Geologic Types: Idaho batholith (calcareous-alkaline intrusive granitics).
- R. Miles of Stream Channels by Order or Class (from NHD):
  Perennial: 1.6 Intermittent: 1.1

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S. Transportation System (miles)
Roads: 0.0 Trails: 0.0 miles

## **PART III - WATERSHED CONDITION**

A. Burn Severity (acres): 565 low 461 moderate 49 high (484 unburned)

B. Water-Repellent Soil (acres): NA

C. Soil Erosion Hazard Rating (acres): NA

D. Erosion Potential: NA

E. Sediment Potential: NA

## **PART IV - HYDROLOGIC DESIGN FACTORS**

A. Estimated Vegetative Recovery Period (years): 2-3

B. Design Chance of Success (percent): NA

C. Equivalent Design Recurrence Interval (years): NA

D. Design Storm Duration (hours): NA

E. Design Storm Magnitude (inches): NA

F. Design Flow (cubic feet / second/ square mile): NA

G. Estimated Reduction in Infiltration (percent): NA

H. Adjusted Design Flow (cfs per square mile): NA

## PART V - SUMMARY OF ANALYSIS

Background: The Little Beaver Fire has burned roughly 6,300 acres of NFS lands. The fire burned predominantly in a forested setting (Douglas-fir/mixed subalpine forest with Whitebark

pine), mostly at moderate to low intensity with low to moderate soil burn severity (SBS). The fire behavior can be characterized as single tree or group torching with spotting, resulting in an incomplete burn and numerous, large unburned islands within the fire perimeter. Higher SBS was observed where some preheating and reburning of fuels increased fire residence time, and in locations with increased concentrations of downed woody debris. The fire intensity and burn severity did not result in emergency watershed conditions with increased risks to human life and safety, property, or important cultural resources. With respect to natural resources, there are no eminent threats to soil and water resources or federally listed TES species. Infestations of noxious weeds have been successfully controlled in the area surrounding the fire and are not known to exist within the burned area – although individual plants may infrequently occur at locations where forest visitors access recreation facilities. Invasive species do occur on NFS lands adjacent to the fire, primarily at the recreation sites and sporadically along designated travel routes that were used in support of fire suppression operations.

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

(edited to incorporate "Critical Values" from ID 2520-2120-1, effective August 25, 2010)

- 1. Human Life and Safety: No threats.
- 2. Property: No threats.
- 3. Natural Resources: No threats to water supply/water use, soil productivity/hydrologic function, or federally listed TES species. There are potential threats to native communities on NFS lands where invasive species or noxious weeds are absent or present in only minor amounts.

There are minimal improved travel routes into the burned area, public access is primarily cross-country foot travel for big game hunting. Because of limited access and no recent land management activities, noxious weeds are either absent or exist as single plants scattered along the authorized travel routes. Infestations of Spotted knapweed and Canada thistle have been successfully treated on NFS lands in the vicinity of the burned area. A weed washing station was used by the Incident Management Team (IMT), but there was the 2 day period during extended initial attack where fire suppression resources were not cleaned. There is a high probability that noxious weed seeds - either from the immediate vicinity or from some other location - were transported into the area via firefighters, equipment, and support vehicles that were used for fire suppression operations. Priority areas of concern include fire suppression control lines adjacent to moderate or high SBS and specific locations (i.e. drop points) heavily impacted by fire suppression activities that are now lacking desired vegetation that would normally out-compete noxious weeds. The level of undesirable impact makes these locations (approximately 124 acres) more susceptible for invasion of noxious weeds. It is the Forest's expectation there is a "Likely" (50-90 percent) chance for noxious weeds to invade areas where they did not previously exist; and "Moderate" consequences to the existing native vegetation if early detection and rapid response (EDRR) efforts are not pursued. This would equate to a "High" level risk based on the interim BAER direction.

- 4. Cultural and Heritage Resources: No threats.
- B. Emergency Treatment Objectives:
  - Prevent the spread of noxious plant species into previously unoccupied locations.

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

Land NA % Channel NA % Roads/Trails NA % Protection/Safety NA %

## D. Probability of Treatment Success

Treatment	Years after Treatment						
Treatment	1	3	5				
Land							
Channel							
	D.	Doos Not Apply					
Roads/Trails	Does Not Apply						
Protection/Safety		Ι					

E. Cost of No-Action (Including Loss): \$19,380

The values at risk under No-Action includes potential loss of native communities and degraded ecological conditions that cause further departure from natural disturbance regimes, including continued loss of soil productivity over the long term. No action was 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. If the invasive 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 124 acres identified, plus additional treatment of approximately 35-40 acres if the initial potential invasion is not successfully eradicated. The average cost to treat noxious plants that have become established is \$120/acre. The total cost for control of newly established noxious weed infestations is estimated to be \$19,380.

### F. Cost of Selected Alternative (Including Loss): \$14,880

Degraded ecological status from the loss of native plant communities contributes to departure from natural disturbance regimes. These conditions cause long-term loss of soil productivity as erosion rates are increased from sites dominated by noxious weeds and invasive species.

- The proposed Early Detection Rapid Response (EDRR) approach is predicted to be 80 percent effective in treating the invasion of noxious weeds at disturbed sites, promoting recovery of native plant species and maintaining more natural erosion rates from the burned and disturbed areas in the short and long term. The EDRR would require less time and material costs in the initial emergency period compared to the costs for treating established noxious weed infestations. The estimated cost for the EDRR under the BAER authority is \$4,960 (124 acres @ \$40/acre; \$20/acre is the estimated cost per visit, the cost is pro-rated up from \$16/acres to account for the remote location and need for 2 site visits per season).
- Additional EDRR treatments will be needed in year 2 and 3 to increase the likelihood of achieving treatment objectives at a similar cost of \$4,960 per year. These treatments would be implemented using non-BAER funds.

G. Skills Represented on Burned-Area Survey Team: No "Team" was assembled, resource specialists from the following disciplines were consulted during preparation of this report.

[X] Hydrology	[X] Soils	[] Geology	[X] Range	[]
[] Forestry	[] Wildlife	[] Fire Mgmt.	[] Engineering	[]
[] Contracting	[] Ecology	[] Botany	[] Archaeology	[]
[] Fisheries	[] Research	[]GIS	[] Landscape Arch	

Team Leader: Terry Hardy

Email: thardy@fs.fed.us Phone: 208-373-4235 FAX: 208-373-4111

## Consultations:

Kari Grover-Wier, Hydrologist, Lowman Ranger District, Boise National Forest (Lead Resource Advisor assigned to the incident).

John Thornton, Forest Hydrologist, Boise National Forest. Monte Miller, Rangeland Specialist, Boise National Forest.

### H. Treatment Narrative:

(Describe the emergency treatments, where and how they will be applied, and what they are intended to do. This information helps to determine qualifying treatments for the appropriate funding authorities. For seeding treatments, include species, application rates and species selection rationale.)

Land Treatments: None recommended.

<u>Channel Treatments</u>: None recommended.

Road and Trail Treatments: None recommended.

Protection/Safety Treatments: None recommended.

## I. Monitoring Narrative:

(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)

## Noxious Weeds – Early Detection and Rapid Response (EDRR)

<u>Purpose of Treatment</u>: Reduce the potential for noxious weeds to become introduced into burned and other detrimentally disturbed areas using EDRR. Consultations with the Resource Advisor indicate there is a high risk for noxious weed invasion. The threat is for noxious weeds to become established in the vicinity of highly susceptible disturbed and burned areas from seeds brought into the area by uncleaned fire suppression equipment from suppression operations (including incident camps, drop points, and water drafting sites).

<u>General Description</u>: The district will monitor and treat, as needed, approximately 124 acres susceptible to noxious weeds within and adjacent to the Little Beaver Fire that were directly impacted as a result of moderate to high burn severity or from suppression activities (camps, fire suppression control lines, travel corridors, and drop points). Monitoring utilizing Early

Detection Rapid Response (EDRR) approach is proposed. Any noxious weed found as a result of monitoring will be immediately treated for eradication using appropriate application techniques and approved herbicides. All treatments will take place in accordance with the Forest Noxious Weed Management Plan. Treatment of noxious weeds will be based upon what is found during monitoring within 1 year after the fire. At a minimum, two reconnaissance visits would be needed to appropriately treat weeds given the variable life history characteristics of the noxious weeds that have been successfully treated in the past. The EDRR approach allows for the immediate treatment of known infestations at the appropriate life stage, which is considered to be the most effective eradication method.

<u>Location (Suitable) Sites</u>: At least two species of noxious weeds have been successfully treated on lands immediately adjacent to the burned area, with isolated plants occurring along the nearby travel routes. Some treatment locations do not have motorized access and will require extra time for travel.

Treatment locations on NFS lands disturbed by suppression operations:

- incident base camp and helibase.
- 5 drop points.
- 9 miles of NFS road 579 used to access drop points and the fire area from the incident base camp.
- 2.0 miles of constructed handline.
- 6.0 miles of secondary roads used for access into burned area.
- 1 equipment wash station.
- 1 temporary RAWS (weather) site.

<u>Design/Construction Specifications</u>: Select herbicide, application rate, and time of application based upon specific weeds being treated, and access to the location of the potential invasion.

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

									[]	nterim #
			NFS Lan	ds			Other La	nds		All
		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER\$	\$	units	\$	Units	\$	\$
A. Land Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this I	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$0	\$0		\$0		\$0	\$0
B. Channel Treatments									•	
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this I	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treatments	S			\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this I	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 I	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Protection/Safety				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
Initial Assessment	Report	\$1,500			\$0		\$0		\$0	\$0
Insert new items above this I	line!				\$0		\$0		\$0	\$0
Subtotal Evaluation					\$0		\$0		\$0	\$0
F. Monitoring		1								
Noxious Weed EDRR	acres	\$40	124	\$4,960	\$0		\$0		\$0	\$4,960
Implementation Plan/Map	days	\$400	2	\$800	\$0		\$0		\$0	\$800
Insert new items above this I	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring		1	ı	\$5,760	\$0		\$0		\$0	\$5,760
G. Totals				\$5,760	\$0		\$0		\$0	\$5,760
Previously approved				<b>.</b>						
Total for this request				\$5,760						

# **PART VII - APPROVALS**

1.	/s/ Cecilia R. Seesnoitz	10/7/2010			
	Forest Supervisor (signature)	Date			
2.	Brian Ferebee (for)	10/15/2010			
	Regional Forester (signature)	Date			