FS-2500-8 (6/06) Date of Report: September 28, 2006

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

PARII - II	PE OF REQUEST				
A. Type of Report					
[X] 1. Funding request for estimated emergen [] 2. Accomplishment Report [] 3. No Treatment Recommendation	ncy stabilization funds				
B. Type of Action					
[X] 1. Initial Request (Best estimate of funds r	needed to complete eligible stabilization measures)				
[] 2. Interim Report # [] Updating the initial funding request ba [] Status of accomplishments to date	ased on more accurate site data or design analysis				
[] 3. Final Report (Following completion of wo	ork)				
PART II - BURNED-AREA DESCRIPTION					
A. Fire Name: East Roaring	B. Fire Number: ID-BOF-000202				
C. State: Idaho	D. County: Elmore				
E. Region: R4-Intermountain	F. Forest: Boise				
G. District: Mountain Home	H. Fire Incident Job Code: P4C5ZY				
I. Date Fire Started: September 4, 2006	J. Date Fire Contained: October 15, 2006 (estimate)				
K. Suppression Cost: \$3,135,176 (as of September 22, 2006)					
 L. Fire Suppression Damages Repaired with Suppression Funds Fireline waterbarred (miles): 8.5 Fireline seeded (miles): 2.1 Other (identify): Scarify and seed about 10 acres (Incident Base Camp and Helibase); scarify and seed about 2 acres of temporary roads used to access drop points and helispots. 					

- M. Watershed Number: HU 170501110603 Roaring River
- N. Total Acres Burned (acres):

NFS (3,185) Other Federal (0) State (0) Private (0)

- O. Vegetation Types: subalpine fir, Douglas-fir, pinegrass, elk sedge
- P. Dominant Soils: Typic cryorthents, loamy-skeletal mixed with a gravelly sandy loam surface horizon

- Q. Geologic Types: Mixed, landform expression and soils indicate a shallow layer of Snake River basalt overlying and mixing with granitic Idaho batholith.
- R. Miles of Stream Channels by Order or Class:

1st Order: 3.0 miles 2nd Order: 3.9 miles 3rd Order: 1.1 miles

S. Transportation System

Trails: 2.2 miles Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 475 low 1,001 moderate 209 high (1,500 unburned)

B. Water-Repellent Soil (acres): 433

C. Soil Erosion Hazard Rating (acres):

150 low 2,255 moderate 779 high

D. Erosion Potential: 1.4 tons / acre

E. Sediment Potential: 929 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success (percent): 70

C. Equivalent Design Recurrence Interval (years): 10

D. Design Storm Duration (hours): 1

E. Design Storm Magnitude (inches): 0.71

F. Design Flow (cubic feet /second/square mile): 32

G. Estimated Reduction in Infiltration (percent): 4

H. Adjusted Design Flow (cfs per square mile): 39

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Identification of Critical Resources and Values:

<u>Human Life and Safety</u>: The Roaring River Trail (045) dissects the burned area and is used for recreation and hunting during the summer and fall months. Fire can alter the soil-hydrologic functions and increase the potential for flash flooding and debris flows in the valley bottoms and canyon areas. Additionally, visitors using the trail will be exposed to a high potential for falling snags and broken trees within the trail corridor.

Aquatic Resources: The Roaring River drainage supports Federally listed species (bull trout) and other species (redband/rainbow trout and westslope cutthroat trout). No designated critical habitat for bull trout has been identified within or below the East Roaring Wildfire. Bull trout are well documented in Roaring River although spawning and rearing habitat is limited to approximately 4.5 miles from the confluence of the East Fork and Middle Fork Roaring Rivers downstream to 5,000 feet msl and in main Roaring River from 8,200 feet to 5,000 feet msl. In 2004, surveys documented long reaches of high gradient cascades, which limit migration of bull trout in the subwatershed. The Roaring River subwatershed has been identified as Aquatic Conservation Strategy subwatershed with a high priority for restoration and recovery of water quality and fisheries habitat.

<u>Water Quality</u>: Increased overland flow with transport and deposition of eroded material into the streams; channel scouring (streambed and streambank erosion) from increased peak flows.

<u>Soil Productivity and Vegetation Diversity</u>: Soils in the Roaring River watershed are derived primarily from granitic parent material and have inherently low productivity and moderate-to-high surface erosion characteristics. In high severity burn areas where fire has completely consumed the vegetation canopy and the effective ground cover that dissipates rainfall and regulates snowmelt runoff, there is potential for the plant litter and duff that replenish the soil nutrient pool to be eroded offsite.

Soil productivity can be impacted as the burned area is more susceptible to spread of noxious weeds from the introduction of noxious weeds and invasive species transported as a result of fire suppression efforts. Additionally, drop points and roads that were extended as part of the fire suppression activities may result in short- and long-term impacts to soil productivity.

Assessment of Potential Threats:

Vegetation in the burned area is Douglas-fir, isolated patches of aspen, and open grassy slopes. The wildfire burned in a mosaic pattern with large unburned areas. The grassy areas either did not burn or burned at low severity. Most of the areas that burned at a moderate to high severity appeared to have heavy concentrations of ground fuels, possibly from a bug infestation and previous wildfire.

The majority of areas that burned at a moderate to high severity were on slopes less than 10 percent and have many downed logs (1,000 hour fuels). The valley bottom slopes immediately adjacent to the streams and below these low gradient moraine-like terraces are mostly unburned. The low gradient slopes combined with hillslope obstructions and valley bottom buffers reduce the impacts normally expected from overland flow runoff, erosion, and sediment delivery resulting from wildfire. The potential for flash floods and debris flows is low.

Isolated areas of the fire may contribute to temporary water quality impacts during the first snowmelt runoff as some accelerated overland will occur due to the loss of live vegetation and ground cover. Over most of the fire (2,000+ acres) it is anticipated that the aspen and low shrubs will resprout and provide raindrop interception and low groundcover to pre-fire conditions within 2 years. With the expectation that the vegetation will rapidly vigorously reestablish the modeled increase in runoff and streamflows will likely not be realized over the long term. The temporary and short-term fluctuations should be considered as being within the normal range of variability for disturbance regimes in this geographic setting.

It is probable that noxious weed, invasive plant species materials, or seeds were transported into the areas via firefighters, equipment, and vehicles used as part of the fire suppression efforts. The burned area, now lacking desired vegetation that can normally out-compete noxious weeds, supports favorable conditions for the introduction of noxious weeds and other invasive species. The risk for introducing noxious weed and invasive plant species results in threats to soil productivity.

The fire is located in an area of the forest where motorized recreation use is common. Additional threats to soil productivity exist from unauthorized travel by off highway vehicles (OHVs), especially in locations where old roads or undesignated routes were used as "temporary" roads to access drop points or helispots.

Conclusions:

The burned area assessment points to a very low potential for flash floods and/or debris flows, and any event would be caused by a high intensity thunderstorm occurring directly over the headwaters of East Fork or Middle Fork Roaring River. Should a triggering storm event occur, the risk to human lives and safety would be greatest where the Roaring River trail that crosses through the fire area is located in drainage bottoms.

There is a moderate to high potential for snags and broken trees falling onto the trail, especially where 1.4 miles of the trail crosses through moderate or high severity burn areas.

Based on the low potential for flash floods, debris flows, erosion, and sedimentation threats to native fisheries is low.

There is a high potential for the introduction of noxious weeds into severely burned areas and locations heavily disturbed by fire suppression activities.

Potential impacts to soil productivity may occur from unauthorized OHV travel off of designated routes.

- B. Emergency Treatment Objectives:
 - Reduce threats to personal injury and/or human life of visitors.
 - Communicate the potential hazards (falling snags) to forest visitors using the trail.
 - Implement a monitoring program for early detection and correction of impacts (noxious weeds, invasive plant species, and unauthorized travel off of designated routes) that would result in the loss of soil productivity.

C.	Probability	of Co	mpleting I reat	men	t Prior to Damaging	Storm	or Event:	
	Land _	%	Channel _	_%	Roads/Trails	%	Protection/Safety	<u>90</u> %

D. Probability of Treatment Success

	Years after Treatment					
	1 3 5					
Land	NA	NA	NA			
Channel	NA	NA	NA			
Roads/Trails	NA	NA	NA			
Protection/Safety	90	90	90			

E. Cost of No-Action (Including Loss): \$477,750

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:								
	[X] Hydrology [] Forestry [] Contracting [X] Fisheries	[X] Soils [] Wildlife [] Ecology [] Research	[] Geology [] Fire Mgmt. [] Botany [X] GIS	[] Range [] [] Engineering [] [] Archaeology [] [] Landscape Arch				
Team	Leader: Terry Hard	dy, Forest Soil Scie	entist – Boise Natio	nal Forest				
E-mai	l: thardy@fs.fed.us	Phone	: 208-373-4235	FAX: 208-373-4111				
Bil	Team Members: Bill Goodman, Zone Hydrologist – Dixie National Forest Clayton Nalder, Fisheries Biologist – Mountain Home Ranger District, 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:								
NA								
<u>Cł</u>	Channel Treatments:							
N/	NA							
Ro	Roads and Trail Treatments:							
NA								
<u>Pr</u>	Protection/Safety Treatments:							

Hazard Tree Removal

Remove trees adjacent to the Roaring River trail or within a tree height of the trail within the burned area. Most of the downed trees have been removed to provide safe operations during fire suppression efforts. This is intended as a "survey and treat" activity to identify and remove any remaining hazards.

Specific trees would be flagged as hazard trees by a certified silviculturist and/or faller utilizing established guidelines for hazard tree identification along recreational trails. Guidelines identify a hazard tree as a tree that poses an immediate hazard and is within range of falling on the target of concern (trail or trailhead). Only trees meeting the hazard tree guidelines would be felled. A certified sawyer will fall hazard trees that are within 75 feet (or appropriate tree height) either side of the trail.

The purpose of this treatment is to improve safety to public and employees utilizing trail systems. Implementing this activity does not completely eliminate the hazard tree potential.

Hazard Signs

Signs alerting people that snags and broken trees may fall onto the trail during high intensity thunderstorms or windy conditions will be posted at two trailhead locations and at the 122-045 trail junction.

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 Weed Monitoring

Implement a monitoring program for early detection and treatment of noxious weeds and invasive plant species to minimize the introduction and establishment of new populations in the burned area and locations disturbed through fire suppression activities. Early detection will allow rapid treatment to minimize the spread of noxious weeds and invasive plants into susceptible areas. It is intended that noxious weeds and invasive plants found during monitoring will be treated at time of identification.

Authorized individuals will conduct all monitoring to insure compliance with specific, detailed requirements (intensity, frequency, funding, timing, length of time, locations, etc). Monitoring will be conducted following established R4 Monitoring methods and the Boise Basin CWMA.

Initial monitoring is planned for the 2007 field season to be accomplished by a two-person crew or contract crew over a 4-day period. Monitoring will be conducted at specific locations, at the appropriate intensity and frequency to identify spread or occurrence of noxious weeds and invasive species. Additional funding for monitoring may be requested in the future depending on the recovery of natural vegetation.

Monitoring areas are identified as (see Incident Map):

ICP (including the Helibase)

Trinity Spike Camp

Wolf Spike Camp

Temporary road opened to access Helispot 1, Drop Point 4, and dozer line

Helispot 1, Drop Point 4, dozer line, Drop Point 2, and Drop Point 5

Roaring River Trailhead near Trinity Campground (vicinity of DP2)

Unauthorized OHV Travel Off Designated Routes

Access to support fire suppression activities resulted in the use and extension of a previously closed road off of FDR 129 (T4N, R9E, sec 16-17). Dozer line was also constructed at the end of this "temporary" road. Although closed as part of suppression rehabilitation, OHVs may continue to access this undesignated route. OHV use may ultimately result in further extension of this "temporary" road and dozer line.

Monitoring is recommended to identify if OHVs are accessing the area and to identify if additional rehabilitation is needed to restrict unauthorized travel. A recreation or prevention patrol would monitor the area one or two times a month (May through August) as part of routine duties to confirm the initial rehabilitation was effective at prohibiting access. Monitoring frequency may increase accordingly during periods of expected increases in OHV use (e.g., hunting season – September and October).

Part VI – Emergency Stabilization Treatments and Source of Funds Interim #

			NFS La	nds		X		Other L	ands		All
		Unit	# of		Other	$\overset{\times}{\times}$	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$	8	units	\$	Units	\$	\$
						8					
A. Land Treatments						8					
none				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Land Treatments				\$0	\$0	X		\$0		\$0	\$0
B. Channel Treatmen	ts					X					
none				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Channel Treat.				\$0	\$0	8		\$0		\$0	\$0
C. Road and Trails						8					
none				\$0	\$0			\$0		\$0	\$0
				\$0	\$0	8		\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Road & Trails				\$0	\$0	8		\$0		\$0	\$0
D. Protection/Safety						Ş.					
Hazard Tree Removal	miles	800	2.1	\$1,680	\$0			\$0		\$0	\$1,680
Warning Signs (large)		240	2	\$480	\$0			\$0		\$0	\$480
Warning Signs (small)	each	190	1	\$190	\$0	X		\$0		\$0	\$190
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Structures				\$2,350	\$0			\$0		\$0	\$2,350
E. BAER Evaluation						$\times \times$					
assessment	each	1	8,437			X		\$0		\$0	\$0
Insert new items above this line!					\$0	Š		\$0		\$0	\$0
Subtotal Evaluation					\$0	8		\$0		\$0	\$0
F. Monitoring						8					
Noxious Weed	days	550	4	\$2,200	\$0			\$0		\$0	\$2,200
OHV Trail Extensions	days	185	12	\$2,220	\$0			\$0		\$0	\$2,220
Subtotal Monitoring				\$4,420	\$0	8		\$0		\$0	\$4,420
						8					
G. Totals				\$6,770	\$0	8		\$0		\$0	\$6,770
Previously approved						∞					
Total for this request				\$6,770		X					

PART VII - APPROVALS

Ί.	/s/ Richard M. Christensen (for)	
	Forest Supervisor (signature)	Date
2.	/s/ Cathy Beaty for	10/5/06
	Regional Forester (signature)	Date