USDA-FOREST SERVICE FS-2500-8 (6/06)

Edited J.Bruggink 11/14/2006 Date of Report: October 28, 2006

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: Trout Creek Fire

B. Fire Number: 39

C. State: Idaho

D. County: Idaho

E. Region: R4

F. Forest: Payette NF

G. District: Krassel

H. Fire Incident Job Code: P4C3HY

I. Date Fire Started: Aug. 8

J. Date Fire Contained: snow

K. Suppression Cost: $750,000

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 1.1
2. Fireline seeded (miles): 0
3. Other (identify): Duff and organic litter pulled back onto fireline.

M. Watershed Number: 1706020707

N. Total Acres Burned: 4031
NFS Acres(3952) Other Federal ( ) State ( ) Private (79)

O. Vegetation Types: Ponderosa pine, Douglas-fir, grand fir. Bunch grass, ninebark, bitterbrush, pinegrass.

P. Dominant Soils: Typic Xeroorthents, Typic Cryopsamments,

Q. Geologic Types: Decomposed Batholith Granitics

R. Miles of Stream Channels by Order or Class: Aprropriately of 7 miles Order 1 and 2 tributaries. Two miles of Main Salmon River.

S. Transportation System

Trails: 10.2 miles Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 3526 (low) 478 (moderate) 27 (high) (BARC)

B. Water-Repellent Soil (acres): 27

C. Soil Erosion Hazard Rating (acres):
3526 (low) 478 (moderate) 27 (high)

D. Erosion Potential: 4 tons/acre

E. Sediment Potential: 240 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 1-3

B. Design Chance of Success, (percent): 90

C. Equivalent Design Recurrence Interval, (years): 10

D. Design Storm Duration, (hours): 6 hr 2 hr

E. Design Storm Magnitude, (inches): 1.8 in 1.2 in

F. Design Flow, (cubic feet / second/ square mile): 24.2

G. Estimated Reduction in Infiltration, (percent): 10

H. Adjusted Design Flow, (cfs per square mile): 26.6

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Threat to life and private property

No private residences or private facilities threatened. Campbell Ferry Ranch is located within the fire perimeter. The four main structures where protected from the fire by suppression crews. The Ranch is located on the Main Salmon River terrace. Terrace Lands designate are deposits of flat to gently sloping lands which were deposited by the major drainages which have since been entrenched. There is minimal danger associated with any role-out from the slopes above. The ranch is situated between two tributaries to the Main Salmon River and not located on an alluvial fan. The airstrip is located between the toe of the steep 122 Land Type - River Breaks and the Ranch. Fire intensity above the private property was primarily moderate to low severity.

Threats from Noxious Weeds

The noxious weeds, spotted knapweed (*Centaurea maculosa),* rush skeletonweed *(Chondrilla juncea),* yellow toadflax (*Linaria vulgaris)*, and canada thistle (*Cirsium arvense)* currently infest about 20 acres within the Trout Creek Fire. Two invasive species, cheatgrass (*Bromus tectorum)* and sulfur cinquefoil (*Potentilla recta)* have also invaded disturbed sites. Significant threats to ecosystem integrity exist from the potential invasion of noxious weeds and invasive non-native plants at low elevations within the fire perimeter, especially along the Main Salmon River.

Noxious weed invasion is expected in areas within burn areas because of the known sources along the Main salmon River. Infestations which have the highest likelihood of spreading to surrounding lands include: Private ranch, Campbells Ferry Airstrip, Chamberlain Trail., beaches and campsites along the Main Salmon River.

Threats to Trails

Approximately 10.2 miles of the "Chamberlain" #001 trail between the Campbell Ferry bridge (elevation 2,330 feet) and the top of the River Breaks (elevation 6,220 feet) was impacted by the Trout Creek Fire. The fire has created conditions that potentially threaten the stability and integrity of the trail. This section of trail was constructed in the 1960s with high level of engineering on a ~5% sustained climbing grade with numerous switchbacks. There is a steel stringer bridge crossing Trout Creek.

The Trout Creek Fire burned on Land Types 120C and 122. Land Type 120c described as "Strongly Dissected Mountain Slope Land" and Land Type 122 is described as "River Breaks Land". Both of these land types are among the most geologically unstable lands in the Idaho Batholith. They have the highest natural geological erosion rates and inherent erosion hazard and mass stability hazards are rated high.

Assessments revealed significant hazards to users along the Chamberlain Trail. Some sections of trail were simply blocked by downfall. Other sections of trail experienced damage to the tread. This tread damage is related to sluffing associated with loss of downslope vegetation, rock slides, burned out ~~of~~ stumps or other woody material in the tread berm or downslope of the tread. The result is a narrower, uneven and rough tread of the trail prism.

In some case water diversion structures (water bars) were burned which will also increase potential for erosion damage to the trail. It is anticipated that problems with gully and erosion channels will worsen with the impaired watershed and trail condition as a result~~s~~ of the fire. It is clear that further damage to the trail system due to runoff erosion will be inevitable, although there may be opportunities to limit it to some extent with fall and early spring work.

The Chamberlain provides the only trail access to the Chamberlain Guard Station from the Main Salmon River and the Campbell Ferry Airstrip. Campbell Ferry Bridge is one a handful of bridges that~~e~~ cross the Main Salmon River within the FCRNR Wilderness.

B. Emergency Treatment Objectives:

Noxious Weeds

1. **Treat noxious weed infestations with herbicides or mechanically** within the burn perimeter for three years following the fire. Treatment would occur on 20 acres in the Trout Creek Fire. Treatment will be done with backpack sprayers using chemicals and guidelines approved in the wilderness weed treatment EIS (USDA, 1999). Treatment near waterways will require hand removal of infestations to prevent water contamination.

2. **Monitor** for noxious weed invasion and the effectiveness of treatments. Monitoring would be done periodically to assess BAER weed treatments and recovery of the burned sites. It would evaluate the success or failure of treatment, recommend adjustments to treatment or re-treatment and report the findings to management..

~~3.**Inventory susceptible lands** within the burn perimeter for noxious weeds. Inventories of areas adjacent to the fire adjacent to the fire and along corridors that pass through infested sites to burned areas will help identify new treatment areas and contain infestations.~~

Formatted: Bullets and Numbering

Trails

Objectives: Provide clear and safe passage to emergency treatment sites (Campbell Ferry Airstrip, Campbell Ferry Bridge, and Chamberlain Trail) for both crews and stock support. Remove imminent safety hazards. Reestablish proper drainage and water management structures to prevent further loss to the Wilderness transportation infrastructure.

Emergency trail work will be accomplished next spring and early summer prior to mid and late summer thunderstorms.

a) Provide clear and safe passage for crews and stock along the Chamberlain and other trails to the ~~BAER~~ trail treatment sites. Clear trails impacted by fire of trees and rocks, repair drainage, and reconstruct tread where needed to access emergency treatment sites.
b) Reduce imminent hazards by felling burnt snags, removing hazardous downfall and rocks, and filling holes, along trails that receive high administrative and public use.
c) Replace and install water diversions structures to accommodate runoff and reduce potential for trail washouts prior to the spring runoff.
d) Remove debris slides where potential exists to wash out more trail.
e) Monitor effectiveness of emergency treatments after each damage-producing storm events and during the first snowmelt runoff.

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

Land **80** % Channel ___ % Roads/Trails **80** % Protection/Safety ___ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	80	90	95
Channel			
Roads/Trails	80	90	95
Protection/Safety			

E. Cost of No-Action (Including Loss): $160,000

F. Cost of Selected Alternative (Including Loss): $ 62,000

TOTAL = [(C + D) * A] + [(C + E) * B]
A = 80%, probability of success of primary treatment;
B = 20%, probability of failure of primary treatment;
C = $22,000, primary treatment cost;
D = $0, potential resource value loss if primary treatment succeeds; and
E = $200,000.00, potential resource value loss if primary treatment fails.
Selected Alternative = [(22,000+0.) * .80] + [(22,000 + 200,000) * .20] = $62,000
No Action Alternative = [(0+0.) * .20] + [(0)+ ,200,000) * .80]= $160,000

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: David Kennell, PNF

Email: dkennellfs.fed.us Phone: 208-634-8435 FAX: 208-634-744

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 (Noxious Weed Treatment):

Treat approximately 20 acres of noxious weed infestations with herbicides or mechanically within the burn perimeter and adjacent to the fires along well established road and trail. Treatment will be done with backpack sprayers using chemicals and guidelines approved in the "FCRNR Wilderness Weed Treatment EIS" (USDA, 1999). Treatment near waterways will require hand removal of infestations to prevent water contamination. The purpose of the treatment is to maintain ecosystem integrity by treating known weed infested sites to prevent invasion into the burned area. By reducing the amount of weed seed in the area and treating new populations, native plant communities can have time to recover with less competition from non-native invasive plants. There is a favorable cost/benefit ratio for treating known weed sites in order to prevent expansion into the burned-area.

Trail Treatments:

Emergency trail work will be accomplished next spring and early summer prior to the convective summer thunderstorm season. Emergency trail work will accomplish the following:

1. Provide clear and safe passage along "Chamberlain" Trail #001 to emergency BAER treatment sites and to critical NFS administration sites such as Chamberlain Basin Guard Station. Reduce the risk of additional loss and damage to the NFS trail infrastructure ~~within the~~ by repairing damaged water management features such as burned log waterbars.

2. Remove downed logs, rock fall, and debris ~~that may cause additional erosion t~~on the trial system that are barriers to access to treatment sites ~~as a result of increased runoff~~.
3. Provide additional waterbars and drainage features where increased runoff and erosion may threaten the NFS trail system.
4. The Forest will post a Fire Hazard Warning Sign on all trailhead informational kiosks.
5. Line has determined the ChamberlainTrail #001 is critical for public access to FCRNR Wilderness and that no closure orders will be issued this fall. This trail provides the main access from the north side of the Main Salmon River into the heart of the FCRNR Wilderness. The District will evaluate the need for specific trail closure orders next spring when full trail assessments are completed.

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.)

1. Noxious Weeds

Monitor and inventory for noxious weed invasion and the effectiveness of treatments. Monitoring would be done to assess BAER weed treatments and recovery of the burned sites. It would evaluate the success or failure of treatment, recommend adjustments to treatment and report the findings to management. Monitoring will involve primarily inventory of susceptible lands within the burn perimeter for noxious weeds. Monitoring will be required on the 20 acres of treatment sites and within the Trout Creek Fire.

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

			NFS Lands				Other Lands				All
		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER $	$	units	$	Units	$	$
A. Land Treatments										
Noxious Weed	acres	350	20	$7,000	$0		$0		$0	$7,000
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$7,000	$0		$0		$0	$7,000
B. Channel Treatments										
				$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		$0		$0	$0
C. Road and Trails										
Trail	miles	1500	10	$15,000	$0		$0		$0	$15,000
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$15,000	$0		$0		$0	$15,000
D. Protection/Safety										
				$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 Structures				$0	$0		$0		$0	$0
E. BAER Evaluation										
BAER Survey	days	600	4	$0	$2,400		$0		$0	$2,400
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$2,400		$0		$0	$2,400
F. Monitoring										
Noxious Weeds	days	600	4	$2,400	$0		$0		$0	$2,400
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$2,400	$0		$0		$0	$2,400
G. Totals				$24,400	$2,400		**$0**		**$0**	**$26,800**
Previously approved										
Total for this request				**$24,400**						

Formatted: Font: (Default) Arial, 11 pt

PART VII - APPROVALS

1. */s/ Suzanne C. Rainville* 11/01/2006
   Forest Supervisor (signature) Date

2. /s/ William P. LeVere for 11/16/2006
   Regional Forester (signature) Date