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

Date of Report: 11 Sept 14

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: South Fork

B. Fire Number OR-PDR-000649

C. State: Oregon

D. County: Grant County

E. Region: 06 (PNW)

F. Forest: 04 - Malheur National Forest

G. District: Blue Mountain (MAL) & Paulina (OCH) H. Fire Incident Job Code: PDH96A (0604)

I. Date Fire Started: August 1st, 2014

J. Date Fire Contained. Sept 15, 2014

K. Suppression Cost: 17.1 million on 09/05/2014

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 69 miles
2. Fireline seeded (miles): 69 miles
3. Other (identify):

M. Watershed Number: 17070201

N. Total Acres Burned: 65,847
NFS Acres- 26,552 acres Other Federal- 23,783 acres State – 12,236 Private - 3,270 acres

O. Vegetation Types: Grassland, Sagebrush, Juniper, Ponderosa Pine, Mixed Conifer

P. Dominant Soils: Lithic haploxerolls, Lithic Ultic Haploxerolls, Vitrandic Argierolls, Alfic Univitrands

Q. Geologic Types Basalt (80%) Fanglomerate, Gravel Sand & Clay (15%)

R. Miles of Stream Channels by Order or Class:

	Class 1 (mi)	Class 2 (mi)	Class 3 (mi)	Class 4 (mi)
Malheur NF	22.9	13.7		63.1
Other Lands	29.1	3.4		66.9
Total	**52.0**	**17.1**		**130.0**

S. Transportation System

Trails: 2 miles Roads: Malheur - 36 miles Ochoco - 8 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres):

	Low	Moderate	High	Total
Malheur NF	18,613	4,771	1,573	24,957
Ochoco NF	1,592	9	0	1,601
State & Private Lands	10,914	3,775	817	15,506
BLM (Prineville)	18,606	4,462	715	23,783
Total	**49,724**	**13,017**	**3,106**	**65,847**

B. Water-Repellent Soil (acres): Only identified weakly hydrophobic conditions

Maleur NF	Ochoco NF	ODF&W Lands	BLM (Prineville)	Private	Total
663	0	233	142	20	**1,058**

C. Soil Erosion Hazard Rating (acres):

	Low	Moderate	High	Total
Malheur NF	1,579	7,748	15,629	24,956
Ochoco NF	400	933	269	1,602
State & Private Lands	549	9,902	5,055	15,506
BLM (Prineville)	575	14,167	9,039	23,780
Total	**3,103**	**32,749**	**29,992**	**65,844**

D. Erosion Potential: 0.16 tons/acre

E. Sediment Potential: 6.4 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 10

B. Design Chance of Success, (percent): 85

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

D. Design Storm Duration, (hours): 0.5 & 6 hours

E. Design Storm Magnitude, (inches): 0.6 and 1.2

F. Design Flow, (cubic feet / second/ square mile): Oliver Cr.– 0.9, 13 Round Cr.– 09, 10

G. Estimated Reduction in Infiltration, (percent): 1.6

H. Adjusted Design Flow, (cfs per square mile): Oliver Cr.– 22, 44 Round Cr.– 12, 28

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The South Fork Fire ignited from a lighting strike on August 1st and burned 65,847 acres in mixed ownership (see item N above), 8 miles south of Dayville, OR. The South Fork Fire occurred within the Upper John Day subbasin (17070201). Three watersheds were affected by the South Fork Fire including, Middle South Fork John Day River (1707020102), Murderer's Creek (1707020103), and the Lower South Fork John Day River (1707020104
Within these drainages is habitat for the Threatened Mid-Columbia Steelhead, including critical habitat for that species and areas where they spawn annually. Management of the burn within the watershed are a variety of management, federal (FS & BLM), State (ODF&W) and private ownership.

Transportation Infrastructure: The perimeter roads and the burned over FS road 24; provide access to forest users, local residences, in addition to administrative access needs. Safe access for employees and members of the public is limited due to hazard trees, rock fall and drainage issues which need to be addressed before the first larger rainfall event.

T & E Species: This watershed Upper John Day subbasin has listed threatened species identified within burn area. Murders Creek and Deer Creek are designated critical habitat for Mid-Columbia River Steelhead, Deer Creek drainage bissects the fire area; with High Severity Soil Burn effects draining toward the listed Deer Creek. Debris accumulation and movement may cause scour and movement within Deer Creek, that could diminish the habitat for this threatened species.

Heritage Resources: Most of the FS sites were burned with a low or moderate Soil Burn Severity based on the BARC map and onsite visits. Three (3) of the sites visited exhibit increased visibility due to the effects of the wildland fire and are located in areas of high public use (hunting camps). The sites have a high potential to yield information and are either concurred eligible or are to be treated as eligible. In their current state they are vulnerable and there is a high potential for looting related activities to occur.

B. Emergency Treatment Objectives:

Provide for health and safety of the public and employees/ Transportation Infrastructure. - Hazard tree falling and providing for proper road drainage would reduce the risk to the public and employees. The use of hazard trees for in-stream Large woody materail , could be beneficial to both reducing hazards and placement to return wood to the stream. The 24 road is an interior fire road which may also be unsafe due to rock fall contitions within the fire perimeter.

T & E Species Habitat Protection: - Protect habitat of threatened Mid-Columbia Steelhead in the fire area. Use hazard tree felling to also offer structure and complexity to the Deer Creek which may reduce any potential sediment or cobble movement that could adversly impact the habitat for this species.

Heritage Resources: Reduce the visiblity and accessability to heritage sites, caused by the burn effects in areas of high public use (hunting camps). The sites have a high potential to yield information and are either concurred eligible or are to be treated as eligible. In their current state they are vulnerable and there is a high potential for looting related activities to occur.

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

Land __ % Channel **90** % Roads/Trails **90%** Protection/Safety **90** %

D. Probability of Treatment Success

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

E. Cost of No-Action (Including Loss): $250,000 known costs plus increased risk to public and employee safety, impacts to T&E species and infrastructure (gaging station).

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Jim Archuleta, Umatilal NF Forest Soil Scientist

Email: jgarchuleta@fs.fed.us Phone: 541-278-3817 FAX: 541-278-3730

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:

Vegetation Recovery

Purpose: Limit access to two locations, one with sensitive plants another needing to naturally establish ground cover. Sensitive plants (Phacelia minutisiima) are located within an area known as Cabbage Patch at the north end of the fire (along FS road 2150). The other location is to allow natural vegetative recovery along road 2170-030, without disturbance from wheeled traffic.

Treatment 1: FS 2150 (Cabbage Patch)

This site is near a dispersed camping site. Rock barriers are proposed to be placed on the unmanaged trail leading into Cabbage Patch. The rock placement will not totally limit access, so it is further requested that signs be placed along FS Road 2150, stating this area is closed and will be monitored for vegetative recovery. The sensitive plant in the area should have minimal disturbance as it's surrounding habitat is allowed to recover.

Treatment 2: FS 2170-030
Rock barriers or gate (see Eco-Gate 24 road closure proposal) are proposed to be placed on the road 2170, which is already seasonally closed. This year long closure will allow recovery of vegetative ground cover where fire effects have exposed cultural resources to the risk of loss.

Channel Treatments:
None

Roads and Trail Treatments:

Storm Patrol

Purpose: To patrol and identify hazards which have resulted from the burned watershed condition such as, accumulation of debris behind recently completed stream restoration passage projects and other road drainage structures.

Treatment: A team of two employees will be designated to patrol the area during high precipitation or runoff events and during spring snowmelt.

Ditch Cleanout FS Road 2490 and FS Road 24

Purpose: Debris Removal may be necessary following the 1 year closure of FS road 24 or during the Storm Patrols of the 2490 rd.

Treatment: Project may occur along 6.26 miles of Forest Service roads along the southeastern side of the South Fork Fire. This work will also be used to clear any fallen debris or blocked road side water passage associated with the 24 road following its 1 year closure or the 2490 road.

Protection/Safety:

Purpose: Burn effects will influence the potential of rock fall on roads 24 and the South Fork Road. The FS 24 and the South Fork Roads are common commuter routes to nearby areas. The threat of hazard trees can be mitigated along the FS 24 Road; with the felling proposed. Despite that fact that this is a high use road it requires very slow driving, due to the condition of the road. This measure of slow driving and the potential exposure to rock fall are reasons to close this road for a season to allow rocks loosened by the fire to be removed from freeze/thaw action. Due to the inability to effectively mitigate the rock fall risk, it is proposed that the 24 road should be closed for a year. A road closure will allow loose rocks fall from the hillside through freeze/thaw action during that year. This project will also include some measure of ditch cleanout to ensure transport system is in properly functioning to prevent other road failures.

The South Fork Road is on the western side of the fire; this road is similarly a commuter route to Dayville, OR. As the FS 24 road, it also may have an issue with rock fall. This risk was first identified during the fire suppression; a parked fire engine was struck and damaged by a falling boulder (no injuries). Despite this elevated risk the exposure within the road, since driving conditions do not limit travel times and elevate exposure to the vehicles traveling the road; this road will not be closed. If traffic is not stopped beneath the cliffs risk or driving slowly; there should be no more risk than traveling on a state highway signed for a zone with falling rock. Additionally the Ochoco NF has some managed acres that are access via this route. It is also proposed that signs will be placed along the ~6 miles of this road.

Treatment: Placement of a gate on FS road 24, at the FS entrance to the burn area or appropriate location, the gate will limit access to the burned area by members of the public and FS employees without a specific assignment within the burned area. The other end of the road is BLM access from the South Fork Road and will be close in concert with their BAER plan. Placement of a gate will occur at 44o 11.903'N, 119o 27.857'W. This gate can be a temporary Eco-gate (designed for PP&L by Weekly Bro. Construction). If this Eco-Gate is used, the BAER team Archeologist assumes that minimal evaluation will be needed for placement, so no additional assessment costs. If a traditional gate is

installed the Archeologist will need to evaluate disturbance; but only if post excavation and placement are outside of road prism. It is assumed that the BLM will be placing a gate on the 24 road from access point off of the South Fork Road.

Treatment: Hazard tree felling along 0.76 miles. One tree is currently creating a risk to a Stream Gaging station and a wooden bridge along Deer Creek. Along the 0.76 miles of road is the nearby Deer Creek. Due to stream proximity some trees will be felled into the creek where deemed appropriate.

Treatment: The Ochoco NF manages acres that are access via the South Fork Road; it is proposed that signs will be placed along ~6 miles of this road under cliffs burned within the fire area. To ensure the traveling public does not park of extend the potential exposure to falling rock; signs will be placed every ½ mile, or a distance deemed appropriate by the managing forest.

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.)

None

Part VI – Emergency Stabilization Treatments and Source of Funds Interim

	NFS Lands					Other Lands				All
Line Items	Units	Unit Co	# of Units	BAER $	Other $	# of units	Fed $	# of units	Non Fed $	Total $
A. Land Treatments										
				0	0		0		0	0
Insert new items above this line!				0	0		0		0	0
Subtotal Land Treatments				0	0		0		0	0
B. Channel Treatments										
				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										
Storm Patrol (2490rd)	ea	750	2	1,500	0		0		0	1,500
Ditch Cleaning	mi	800	6	5,008	0		0		0	5,008
				0	0		0		0	0
Insert new items above this line!				0	0		0		0	0
Subtotal Road & Trails				6,508	0		0		0	6,508
D. Protection/Safety										
Hazard Tree Falling	mi	6,000	1	4,560	0		0		0	4,560
Gates	ea	2,100	2	4,200	0		0		0	4,200
Hazard Signing	ea	30	350	10,500	0		0		0	10,500
Insert new items above this line!				0	0		0		0	0
Subtotal Structures				19,260	0		0		0	19,260
E. BAER Evaluation										
Personnel Cost (Sal & Trav)	ea	25,948	1	25,948	0		0		0	0
Insert new items above this line!				0	0		0		0	0
Subtotal Evaluation				25,948	0		0		0	0
F. Monitoring										
Large Wood (in-stream)	mi	1	500	380	0		0		0	380
Insert new items above this line!				0	0		0		0	0
Subtotal Monitoring				380	0		0		0	380
G. Totals				26,148	0		0		0	26,148
Previously approved										
Total for this request				26,148						

~~PART VII - APPROVALS~~

1. Amy Ulthaat FOR Terresa Raaf — 09/24/2014 ~~09/15/2014~~

2. Regional Forester (signature) — 9.29.14 Date