**USDA-FOREST SERVICE** 

at lower

Date of Report: 08/16/2006

# **BURNED-AREA REPORT**

(Reference FSH 2509.13)

## **PART I - TYPE OF REQUEST**

A.	Type of Report								
	<ul><li>[] 1. Funding request for estimated emergency stabilization funds</li><li>[] 2. Accomplishment Report</li><li>[x] 3. No Treatment Recommendation</li></ul>								
В.	Type of Action								
	[x] 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)								
	<ul> <li>[] 2. Interim Report #</li> <li>[] Updating the initial funding request based on more accurate site data or design analysis</li> <li>[] Status of accomplishments to date</li> </ul>								
	[] 3. Final Report (Following completion of work)								
	PART II - BURNED-AREA DESCRIPTION								
A.	Fire Name: Rush (Uncles Complex)	B. Fire Number: CA-KNF-003497							
C.	State: CA	D. County: Siskiyou							
E.	Region: 5	F. Forest: Klamath							
G.	District: Salmon River (54)	H. Fire Incident Job Code: P5C04X							
I. [	Date Fire Started: July 23, 2006	J. Date Fire Contained: August 13, 2006							
K.	Suppression Cost: \$8,225,969								
<ul> <li>L. Fire Suppression Damages Repaired with Suppression Funds</li> <li>1. Fireline waterbarred (miles): 31 miles</li> <li>2. Fireline seeded (miles): 0</li> <li>3. Other (identify): 0.5 miles of slash pull back and respread on dozer line</li> </ul>									
M.	Watershed Number: 180102110101								
N.	Total Acres Burned: 4,843 acres NFS Acres(x) Other Federal () State ()	Private (3)							
O. ele	Vegetation Types: White fir mixed conifer evations with small area of ponderosa pine and	at higher elevations and Douglas fir mixed conifer white oak at bottom of fire area.							

- P. Dominant Soils: Chaix, Dome, Chawanakee, Rogue, Neuns, Deadwood, Kindig
- Q. Geologic Types: Granitic and metasedimentary

- R. Miles of Stream Channels by Order or Class: Order 1: 7.6 miles; Order 2: 2.3 miles; Order 3: 2.5 miles
- S. Transportation System

Trails: 14 miles Roads: 0 miles

### **PART III - WATERSHED CONDITION**

- A. Burn Severity (acres): 1348 (unburned+very low) 2483 (low) 810 (moderate) 203 (high)
- B. Water-Repellent Soil (acres): 661
- C. Soil Erosion Hazard Rating (acres):

<u>1356</u> (low) <u>2479</u> (moderate) <u>345</u> (high) <u>661</u> (very high)

- D. Erosion Potential: 2.1 tons/acre
- E. Sediment Potential: 197 cubic yards / square mile

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

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

25 for post-fire runoff

B. Design Chance of Success, (percent):

NA

C. Equivalent Design Recurrence Interval, (years): 25 yr.

D. Design Storm Duration, (hours): 1 hr

E. Design Storm Magnitude, (inches): 5 inches

F. Design Flow, (cubic feet / second/ square mile): Rush Ck: 1800 cfs

Garden Gulch: 780 cfs

G. Estimated Reduction in Infiltration, (percent): Rush: 3%; Garden:9%

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

Rush: 1860 cfs; Garden: 850 cfs

#### PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

On July 23, 2006 a lightening caused fire started in Rush Creek in the upper third of the slope, within the Trinity Alps Wilderness. The initial attack personnel were not able to contain the lightening fire. The fire spread to Garden Gulch and was eventually contained on the wilderness boundary and the bottom of Rush Creek. Garden Gulch and Rush Creek drain into the South Fork of the Salmon River which has a high value anadromous fisheries including a spring chinook salmon run.

**Threat to watershed values:** Intense rainfall events are not uncommon in this part of the Forest. Flashy runoff peaks due to the higher runoff efficiency associated with cover loss and increased hydrophobicity in the high and moderate burn severity areas have the potential to increase rill and shallow debris torrent erosion.

This material, plus any generated by potential fire induced debris slides, would be delivered fairly efficiently to Garden Gulch and Rush Creek. On the afternoon of August 7<sup>th</sup>, an intense thunderstorm hit the fire area and caused significant sheet and rill erosion. Debris torrents, from high severity burn areas dumped into Garden Gulch and Rush Creek and into the Salmon River. One draw in Rush Creek watershed had scour marks 3 feet high above the channel bottom due to intense runoff. The Salmon River ran very turbid for 2 days.

**Threat to Private property:** There are no threats to private property or roads. There is a small potential for sediment to enter the stream that provides irrigation and domestic water to several private residences.

Threat to Fishery values: The South Fork Salmon River is within the Salmon River watershed -- a Key Watershed on the Klamath National Forest. The South Fork Salmon River and its tributaries provide approximately 88.5 miles of habitat for 1) Two Forest Service-designated "Sensitive Species": Chinook salmon and steelhead trout, 2) the ESA-listed Threatened coho salmon and its federally designated critical habitat; and 3) Essential Fish Habitat for Chinook and coho salmon. More specifically, the South Fork Salmon River is important refugia for the last remaining wild-run spring Chinook salmon in the Klamath River Basin. It is also an important migration, holding and spawning area for summer-run steelhead. Surveys conducted in the spring and fall (1980-2002) have documented Chinook salmon and steelhead as far upstream as Little South Fork, approximately 28 miles upstream of the confluence of the South and North Forks of the Salmon River. Few surveys have documented the distribution of coho salmon in the South Fork Salmon River and its tributaries. In 2005, monitoring results showed the lowest number of spring Chinook in the Salmon River since 1986. From 1986 to 1999, the number of redds ranged from 61 to 1458 in 29.61 miles of the South Fork Salmon River.

It is expected that impacts from increased ash and fine sediment from the Rush Fire will be within the natural variability from historic (natural) low intensity wildfire to which the various fish species within the Salmon River are adapted. Stream temperatures are not expected to be significantly affected due to the low amounts of high and moderate severity burn along the stream network. Most streamside canopy is retained.

Threat to ecosystem integrity: The threat of non-native invasive weed species is a concern. A very small population of star thistle was observed on a road that was probably not used for crew vehicles to access the Rush Creek trail. Since the fire is in wilderness, there has been no vehicle traffic within the burn area except for a dozer line on a portion of the northern most containment line. A few crew vehicles accessed the fire area by driving a short distance on this dozer line. An excavator was brought in to rehabilitate the dozer line. There is a small potential for this limited motorized access to the fire area to introduce noxious weeds.

#### B. Emergency Treatment Objectives:

Due to no treats to life and property and with a small threat to fisheries, wilderness management objectives override the need for emergency treatments. If not for the overriding wilderness management objectives, potential treatments would have been straw mulching, wattles, contour falling, and wood and stone check dams in small intermittent channels in order to reduce sediment reaching the South Fork of the Salmon River.

C. Probability of Completing Treatment Prior to Damaging Storm or Event:								
	Land _	_ %	Channel _	%	Roads/Trails	%	Protection/Safety	%

#### D. Probability of Treatment Success

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

- E. Cost of No-Action (Including Loss):
- F. Cost of Selected Alternative (Including Loss):
- G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology	[x] Soils	[x] Geology	[] Range	[x]	Trails
[] Forestry	[] Wildlife	[] Fire Mgmt.	[] Engineering	[]	
[] Contracting	[] Ecology	[] Botany	[] Archaeology	<sup>'</sup> []	
[x] Fisheries	[] Research	[] Landscape Arch	[x] GIS		

Team Leader: Tom Laurent

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#### 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: No treatments proposed

Channel Treatments: No treatments proposed.

<u>Roads and Trail Treatments:</u> No treatments proposed. There are no FS roads within fire perimeter or within downslope affectd area. Fire suppression repaired trail damage.

<u>Protection/Safety Treatments</u>: No treatments proposed. There are no threats to property and public safety. It was determined that public safety on trails was not elevated due to fire.

#### 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.)

No monitoring is proposed.

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

			NFS Lands			X		Other L	ands		All
		Unit	# of		Other	X	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$	8	units	\$	Units	\$	\$
						X					
A. Land Treatments						X.					
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Subtotal Land Treatments				\$0	\$0	Š.		\$0		\$0	\$
B. Channel Treatmen	ts					Š.					
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Subtotal Channel Treat.				\$0	\$0	⋘		\$0		\$0	\$(
C. Road and Trails						8	,				
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Insert new items above this line!				\$0	\$0	8		\$0		\$0	\$(
Subtotal Road & Trails				\$0	\$0	8		\$0		\$0	\$(
D. Protection/Safety						8					
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				\$0	\$0	8		\$0		\$0	\$
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Subtotal Structures				\$0	\$0			\$0		\$0	\$
E. BAER Evaluation						X					•
Salary					\$5,000	X		\$0		\$0	\$5,00
Vehicle (mileage)					\$500			, ,		1	,
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Subtotal Evaluation					\$5,500	į		\$0		\$0	\$5,50
F. Monitoring					. ,	X		, ,		'-	,
				\$0	\$0	X		\$0		\$0	\$
Insert new items above this line!				\$0	\$0	Ž		\$0		\$0	\$
Subtotal Monitoring				\$0	\$0			\$0		\$0	\$
Castolai Montolling				ΨΟ	ΨΟ	X		ΨΟ		Ψ	Ψ
G. Totals					\$5,500	X		\$0		\$0	\$5,50
Previously approved						Š				<del>                                     </del>	. , -

# **PART VII - APPROVALS**

_/s/Margaret J. Boland	_August 18, 2006_				
Forest Supervisor (signature)	Date				
Regional Forester (signature)					