

Date of Report: 10/8/2008

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

- ☒ 1. Funding request for estimated emergency stabilization funds
☐ 2. Accomplishment Report
☐ 3. No Treatment Recommendation

B. Type of Action

- ☒ 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: Kitson

B. Fire Number: OR-WIF-000315

C. State: OR

D. County: Lane

E. Region: 06

F. Forest: 18

G. District: 10

H. Fire Incident Job Code: P6EL0N

I. Date Fire Started: 09/24/2008

J. Date Fire Contained: 10/3/2008

K. Suppression Cost: \$ 3,953,000

L. Fire Suppression Damages Repaired with Suppression Funds

1. **Fireline waterbarred (miles):** 6.4
2. **Fireline seeded (miles):** 0.0
3. **Other (identify):** There were 23.8 miles of road repaired, 10.1 miles within the fire perimeter.
4. **Dozer line waterbarred (miles):** 0.55 miles (including 0.25 miles contingency line)

M. Watershed Number: 1709000102 (primary) and 1709000103 (minor)

N. Total Acres Burned: 808

[x] NFS Acres

[] Other Federal

[] State

[] Private

- O. Vegetation Types:** Mainly Douglas Fir PSME/HODI-BENE plant association. Reproduction stands were planted with Douglas fir and ponderosa pine. The area was planted with non native forage grasses after the Shady Beach Fire and these species persisted in the fire area.
- P. Dominant Soils:** Landtype complexes 331, 335, 353, and 610. Soils (331, 335, and 353) of the sideslopes and benches are generally moderately deep to deep, clay to clay loam textures, formed from greenish breccias and tuffs. Soils (610) on the ridge top (Kitson Ridge and Cougar Mt) are shallow derived from basaltic/andesitic residuum and colluvium, gravelly to very gravelly loams.
- Q. Geologic Types:** Western Cascades - Little Butte Formation (eroded older tuffs, breccias, and a ridge top resistant intrusion of a basaltic/andesitic flow)
- R. Miles of Stream Channels by Order or Class:** 0.47 perennial and 0.16 intermittent
- S. Transportation System**
- Trails:** 0.0 miles **Roads:** 10.1 miles

PART III - WATERSHED CONDITION

- A. Burn Severity (acres):** 300 (**low**) 408 (**moderate**) 100(**high**)
High severity area is located primarily on very steep slopes above the FS100 spur road, with patches of high severity area located in the Gate Creek drainage and other small areas throughout the fire area.
- B. Water-Repellent Soil (acres):** 110
- C. Soil Erosion Hazard Rating (acres):** 0 (**low**) 55 (**moderate**) 45 (**high**)
- D. Erosion Potential:** 75 tons/acre
- E. Sediment Potential:** 43,000 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

- A. Estimated Vegetative Recovery Period, (years):** 5
- B. Design Chance of Success, (percent):** 80
- C. Equivalent Design Recurrence Interval, (years):** 25
- D. Design Storm Duration, (hours):** 0.5
- E. Design Storm Magnitude, (inches):** 0.9
- F. Design Flow, (cubic feet / second/ square mile):** 112

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

H. Adjusted Design Flow, (cfs per square mile): 123

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats (narrative): Water quality in the Hills Creek watershed could be negatively affected by an increase in soil erosion and subsequent increase in the sediment delivery rate to the stream network. Gate Creek and other minor tributaries flow through the burned portion of the affected watershed and enter Hills Creek approximately 0.7 miles downstream. Hills Creek provides habitat for Chinook salmon, ESA listed as threatened and is designated as critical habitat.

Recreational uses of the area, especially the 5864-110 road, are threatened by rock fall from the unstable slopes caused by high intensity fire.

Wildlife habitat and native plant populations are threatened by the pre-existing populations of noxious weeds that now have an available burnt area to colonize.

B. Emergency Treatment Objectives (narrative): Reduce the rate of soil erosion into Gate Creek to minimize the potential negative impact to Chinook salmon in Hills Creek. To reduce safety risk to recreationists from exposure to the hazardous rock fall conditions created by loosened rocks on hillside. Reduce the probability that noxious weeds will colonize and become established within the fire area.

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

Land 85% Channel 85% Roads/Trails 85% Protection/Safety 95%

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	70	90	90
Channel	70	90	90
Roads/Trails	NA	NA	NA
Protection/Safety	90	90	95

E. Cost of No-Action (Including Loss): \$1,767,000

F. Cost of Selected Alternative (Including Loss): \$450,946

G. Skills Represented on Burned-Area Survey Team:

☒ Hydrology ☒ Soils ☒ Geology ☐ Range

<input type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Fire Mgmt.	<input checked="" type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany	<input checked="" type="checkbox"/> Archaeology
<input checked="" type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input checked="" type="checkbox"/> GIS

Team Leader: David Murdough/Dave Kretzing/Molly Juillerat (trainee)

Email: dbmurdough@fs.fed.us **Phone:** 541-782-5205 **FAX:** 541-782-5306

H. Treatment Narrative:

We will use locally collected, genetically appropriate, native seed (Blue Wildrye (*Elymus glaucus*)) applied at 30lbs to the acre. If native seed is not available in the quantities we need we will supplement with an annual non persistent cereal grain. The use of local, native seed is in accordance with the FS 2008 2070 Vegetation Ecology ammendment (Feb 2008) objectives to restore and rehabilitate landscapes.

(http://www.fs.fed.us/wildflowers/nativeplantmaterials/documents/FSM_2070.pdf)

We will mulch with Wood Straw (<http://www.woodstraw.com/>) a weed free product. Selection of a weed free product insures that the treatment will not add to the problem. Mulch will be appied at 150 bales/acre to provide approximately 50% cover.

Land Treatments:

Noxious Weed Prevention: Seed and mulch roadsides (as needed on either side of road where existing populations have the ability to spread). Amount seeded will equal approximately 50 acres and mulching on approximately 12 acres.

Channel Treatments: **Gate Creek:** Seed and mulch (with weed-free wood straw) the burnt and exposed riparian areas adjacent to Gate Creek. Treat the area upslope from the stream 100 feet on both sides. Amount treated will equal approximately 12 acres.

Roads and Trail Treatments: **Roads:** Roadside ditches and culverts will be monitored in Fall 2008 and Winter/Spring 2008-2009 to ensure that erosion from the burned area has not filled them with material, causing blockages and drainage problems.

Safety: Assess Road 5864-110 in the spring and fall/winter of 2009 to determine if safety hazards from falling rocks still exist. Depending on the assessment, keep the road closed another year or re-open.

Protection/Safety Treatments: **Road 5864-110:** Temporarily close road 5864-110 with a gate to stop public access to a hazardous (increased rock fall hazard created from severe burned area above the road) road system.

I. Monitoring Narrative:

Noxious weeds: Monitor noxious weed colonization and establishment in the burn area to assess the need for manual and/or herbicide treatment. Monitoring will be done by walking and driving all roads in the fire area in the early summer 2009.

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											
Seed	Acres	691	50	\$34,550	\$0			\$0		\$0	\$34,550
Mulch	Acres	1971	12	\$23,652	\$0			\$0		\$0	\$23,652
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Land Treatments				\$58,202	\$0			\$0		\$0	\$58,202
B. Channel Treatments											
Seed	Acres	691	12	\$8,292	\$0			\$0		\$0	\$8,292
Mulch	Acres	1971	12	\$23,652	\$0			\$0		\$0	\$23,652
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Channel Treat.				\$31,944	\$0			\$0		\$0	\$31,944
C. Road and Trails											
Storm Patrol	Days	350	8	\$2,800	\$0			\$0		\$0	\$2,800
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Road & Trails				\$2,800	\$0			\$0		\$0	\$2,800
D. Protection/Safety											
Gate and Installation	Each	4000	1	\$4,000	\$0			\$0		\$0	\$4,000
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Structures				\$4,000	\$0			\$0		\$0	\$4,000
E. BAER Evaluation	Days	315	15		4725						
				---				\$0		\$0	\$0
Insert new items above this line!				---	\$0			\$0		\$0	\$0
Subtotal Evaluation				---	\$4,725			\$0		\$0	\$0
F. Monitoring											
Weed Monitoring	Days	250	4	\$1,000	\$0			\$0		\$0	\$1,000
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Monitoring				\$1,000	\$0			\$0		\$0	\$1,000
G. Totals				\$97,946	\$4,725			\$0		\$0	\$97,946
Previously approved											
Total for this request				\$97,946							

PART VII - APPROVALS

1. /s/ Kathryn E Bulchis (acting for) 10/9/08
Forest Supervisor (signature) Date

2. /s/ Calvin N. Joyner (for) 10/28/08
Regional Forester (signature) Date