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

Date of Report: July 31, 2007

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: Kimball

B. Fire Number: UT-SLD-000478

C. State: UT

D. County: Tooele

E. Region: R4

F. Forest: Wasatch Cache

G. District: Salt Lake

H. Fire Incident Job Code: PDDR3T

I. Date Fire Started: 07/17/2007

J. Date Fire Contained: 07/25/2007

K. Suppression Cost: $ 552,385

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 6.5
2. Fireline seeded (miles): 0
3. Other (identify):

M. Watershed Number: 160203040505 (Warm Springs Slough)

N. Total Acres Burned: 14292
NFS Acres(**857**) Other Federal (**5055**) State (1553) Private (6827)

O. Vegetation Types: Pinyon-Juniper, Sagebrush-grass

P. Dominant Soils: NRCS 5 (Birdow Series), NRCS 38 (Lodar-Lundy Families, NRCS 14a (Dateman Family)

Q. Geologic Types: Tintic Quartzite

R. Miles of Stream Channels by Order or Class: Order 1: 2.8 miles, Order2: 0.3 miles

S. Transportation System

Trails: 1 miles Roads: miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 657 (low) 160 (moderate) 40 (high)

B. Water-Repellent Soil (acres): none

C. Soil Erosion Hazard Rating (acres):
705 (low) ___ (moderate) 150 (high)

D. Erosion Potential: 7.3 tons/acre *

E. Sediment Potential: 4500 cubic yards / square mile*

* FSWEPP – Disturbed WEPP – Birdow sandy loam – High Severity fire

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent): 75

C. Equivalent Design Recurrence Interval, (years): 5

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 1.4

F. Design Flow, (cubic feet / second/ square mile): 52

G. Estimated Reduction in Infiltration, (percent): 48%

H. Adjusted Design Flow, (cfs per square mile): 108

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats: Acclerated erosion damage to the trail surface of the Stansbury Front Trail due to increased runoff from adjacent burned NF lands. Associated gully damage from concentrated runoff flows downslope of the trail.

B. Emergency Treatment Objectives: Install supplemental drainage waterbars at key locations along the trail , particularly in the vicinity of the dozer constructed fireline.

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

Land __ % Channel ___ % Roads/Trails **100** % Protection/Safety ___ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads/Trails	100		
Protection/Safety			

E. Cost of No-Action (Including Loss): **$10,000**

F. Cost of Selected Alternative (Including Loss): **$2500**

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Paul Flood

Email: pflod@fs,fed,us Phone: 801-236-3440 FAX:

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: **None proposed**. Based upon the moderate and low level of burn intensity on NF lands, the lack of pre-existing cheatgrass populations in the burned areas, and the expectation of rapid recovery of native and non-native bunchgrasses this growing season, we have chosen not to pursue any land treatments. Also, the lack of widespread accelerated erosion following recent (post fire) high intensity rain storms indicates stem felling or mulching treatments to be unnecessary.

Channel Treatments: **None proposed**. Although recent (post fire) rainstorms have generated small debris flows in West and Dry canyons, the majority of sediment has come from channel bank scour. The fire affected canyons are far enough away from (3) private residences that the debris flows have diminished and spread out along the undeveloped portions of the alluival fans before they could reach the residences with any damaging amount of water or debris. The residences can be better protected from future flood events by sandbagging and small berms around the properties themselves.

Roads and Trail Treatments:

Install approximately 2 dozen waterbars along sections of the Stansbury Front motorized use trail in the vicinity of the bulldozer constructed fireline, using a SWECO type trail cat or small bulldozer. The waterbars are intended to divert increased runoff from the surrounding burned areas from the trail surface. Also, large drainage berms shall be constructed above and below the trail within the fireline area to prevent trail runoff from entering the fireline and vice versa. Access to this section must occur via the fireline, some damage to the recently installed drainage waterbars on the fireline is anticipated. Damaged waterbars will be repaired by the cat as it is leaving the trail treatment project.

Protection/Safety Treatments: **None proposed**. Although recent (postfire) rainstorms have flooded homes and damaged the Grantsville-Tooele Highway with debris flow events, none of these events originated on National Forest lands affected by the Kimball Fire. Although flash floods are certainly a hazard to recreationists using the canyons affected by the Kimball Fire, a similar hazard exists for all canyons along the Stansbury Front when heavy summer thunderstorms occur. The low to moderate intensity burning that occurred on NF lands during the Kimball fire has not measurably increased this hazard in West and Dry Canyons, over what could be expected in adjacent unburned canyons.

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.)

Because of extensive prefire soil quality and range condition monitoring done in the burn area in 2006, we feel confident that the no treatment option, along with rapid natural revegetation of native and non native bunchgrass communities, will be successful in containing post fire cheatgrass infestations. Monitoring of the no treatment option will not be necessary. Because the trail waterbar treatments are a well established best management practice, no monitoring of their effectiveness will be necessary.

Part VI – Emergency Stabilization Treatments and Source of Funds **Interim # 1**

			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										
				$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		$0		$0	$0
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										
Sweco trail cat use	hour	100	10	$1,000	$0		$0		$0	$1,000
trail crew	day	750	2	$1,500	$0		$0		$0	$1,500
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$2,500	$0		$0		$0	$2,500
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										
				---			$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$0		$0		$0	$0
F. Monitoring										
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$0	$0		$0		$0	$0
G. Totals				$2,500	$0		**$0**		**$0**	**$2,500**
Previously approved										
Total for this request				**$2,500**						

PART VII - APPROVALS

1. /s/ Larry C. Lucas (for):Faye L. Krueger — August 1, 2007
   Forest Supervisor (signature) — Date

2. /s/ Mary Wagner for — 8/13/2007
   Regional Forester (signature) — Date