USDA-FOREST SERVICE FS-2500-8 (7/00)

Date of Report:

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[x] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

[ ] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)

[X] 2. Interim Report
[X] 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: Robbers

B. Fire Number: NV-HTF-000025

C. State: NV

D. County: Clark

E. Region: Intermountain (4)

F. Forest: Humbolt-Toiyabe

G. District: Spring Mountains NRA

H. Date Fire Started: July 26,2004

I. Date Fire Contained: July 31,2004

J. Suppression Cost: $1.6 million as of 7/30

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 0.25
2. Fireline seeded (miles): 0
3. Other (identify): N/A

L. Watershed Number:

M. Total Acres Burned: 296
NFS Acres(x) Other Federal ( ) State ( ) Private ( )

N. Vegetation Types: Pinyon-Juniper-Shrub (fuel model 6)

O. Dominant Soils: Alluvial Footslopes: Calidic Argiustolls, Ustic Haplocalcids, Residual mid and upperslopes: Lithic Haplustolls, Lithic Ustorthents.

P. Geologic Types: Limestone and Dolostone

Q. Miles of Stream Channels by Order or Class: 1st order: 1.5 miles

R. Transportation System

Trails: miles Roads: .76 miles (Highway 158)

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 148 (low) 148 (moderate) 0 (high)

B. Water-Repellent Soil (acres): 0

C. Soil Erosion Hazard Rating (acres):
___ (low) 100 (moderate) 196 (high)

D. Erosion Potential: 30 tons/acre

E. Sediment Potential: 14760 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 15

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

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

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 2.0

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

G. Estimated Reduction in Infiltration, (percent): n/a

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

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency: The watershed emergency consists of threats to the user public on Highway 158 from water/debris flowing onto the highway from the burned area above. Ten culverts cross Highway 158 from the burned area. Currently, there is evidence of high soil/sediment movement from the burned area (a pre-fire condition). Two culverts are totally plugged and five partially plugged. All are vulnerable to being overtopped onto the highway with moderate or greater rain events. All are 24 inch diameter culverts. Fire intensity was low to moderate, surface rock cover is approximently 50 to 60% predominiately composed of medium to large gravels and cobbles, and much of the litter layer is still partially intact from the relatively fast moving fire. Despite this, on-site soil loss is naturally high due to the steep slopes (20 to 60+%), lack of herbaceous ground cover and the erosive nature of the soils on the burn area.

To a lesser extent, there is a concern for the threat to on-site productivity due to the potential loss of soil.

A known biodiversity hotspot area is located in the cliffs just to the south of the fire. The fire did not directly impact that site. No other known sites were impacted by the fire.

The fire area is characterized by 1st order ephemeral drainages. There are no springs or other water sources in the immediate vicinity. Both Firetrol and Phoscheck retardent were used on the fire. The area of use was mainly on the northwest side of the fire. The chance of any of this material reaching perennial water sources are very low due to the distance to perennial water.

B. Emergency Treatment Objectives: The objective is to retain the soil on site to diminish the safety threat to the user public on Highway 158 and to a lesser extent, maintain site productivity. Any treatment implemented must accommodate the uniqueness of the flora.

Cooperation with Nevada Depatment of Transportation is essential to reestablishing the drainage network on highway draining the burned area.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Land **80** % Channel **n/a** % Roads **80** % Other **n/a** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	80	80	80
Channel	N/A	N/A	N/A
Roads	80	n/a	n/a
Other	n/ax		

E. Cost of No-Action (Including Loss): **$200,000**

F. Cost of Selected Alternative (Including Loss):$125,000

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Pete Stewart

Email: nmstew@zianet.com Phone: 505-469-4607 (C) 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: Proposal is to hand broadcast seed 100 acres of the moderately burned areas. Areas to be seeded will be limited to the lower footslopes where slopes average 25% gradient. These areas are the most productive areas of the fire and exhibit the highest risk of loss of soil productivity. We willl seed with a sterile exotic annual, since there is no available native seed source . The seed we selected to use is sterile triticale hybrid, known commercially as QuickGuard. It will germinate quickly, provide a larger rooting mass and overall, provides the best opportunity to stabilize the soil until the manzanita, Gamble oak, mountain mahogany, and other shrubs have a chance to reestablish.

QuickGuard contains 13,000 seeds per pound. At 35 pounds per acre this equates to about 10 seeds per square foot. Due to the large amount of surface rock, the relatively course seed and hand broadcast application this rate of application will produce the desired cover and subsequent stabilization..

The General Management Plan for the Spring Mountains National Recreation area has recommended the following priority for seeding quidelines: 1. Native plant seed; 2. No seeding (only if erosion is not a serious concern and there is no cheatgrass invasion); 3. Non-persistent (sterile) exotics; 4. Persistent exotics (GMP 0.16). Tthe General Management plan goes on to allow reseeding wildfire, prescribed fire, or other management activities in Pinyon-Juniper. Size parameters are >100 acres, any slope, or ≤100 acres, 25% slope (GMP 0.24, 0.25). This is in line with the Clark County Conservation Agreement. While the Agreement emphasizes the use of native seed and natural processes in the rehabilitation and restoration of disturbed areas, it recognizes the importance of maintaining the productivity of the soil resource in maintaining ecologically healthy ecosystems in the Spring Mountains NRA. In this context, since there is no native seed available, and there is a risk of loss of soil productivity, the use of a sterile exotic is our only viable alternative.

Channel Treatments: None proposed.

Roads and Trail Treatments:
State Hwy 158 is the lone road accessing the burn. It borders the downhill, eastern side of the fire. Recommended treatments to Nevada Department of Transportation (NDOT) include culvert cleaning, road warning signs, jersey barriers, (or other means of preventing soil from coming onto the road) clean up of crash debris and deisel contaminated soil, and storm patrols. All costs for work conducted on the state Hwy 158 will be absorbed by Nevada Department of Transportation (NDOT). A meeting with NDOT on August 3, 2004 resulted in them suggesting cup trenching the tops of the cutbanks instead of jersey barriers due to the lack of room on the highway for placement of the barriers, in addition to hindering snow removal in the winter. In addition they discussed the construction of sediment catchment basins. This will need to be analyzed since this highway is designated as a State Scenic Byway.

Structures: None proposed

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.)

There is a need to monitor Highway 158 in the fire area during and after each rain event for the next 6 months. NDOT has agreed to do this.

There will be a need to monitor the success rates of the seeding. Photo points will need to be established.

Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

Line Items	Units	Unit Cost	# of Units	WFSU SULT $	Other $	# of units	Fed $	# of Units	Non Fed $	Total $
A. Land Treatments										
Seed + shipping	lbs	$1.40	3500	$4,900	$0		$0		$0	$4,900
Handseeders + shipping	each	97.98	5	$490	$0		$0		$0	$490
Crews	1	5000	1	$5,000	$0		$0		$0	$5,000
FS salary/overhead	days	300	12	$3,600						$3,600
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$13,990	$0		$0		$0	$13,990
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										
accident/hazmat cleanup					$10,000		$0		$0	$10,000
culvert cleanup	each	1000	10		$6,000		$0		$0	$6,000
catchbasins	each	1000	5		$5,000		$0		$0	$5,000
warning signs	each	100	2		$200					$200
storm patrol	hours	40	35		$1,400					$1,400
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$0	$22,600		$0		$0	$22,600
D. Structures										
				$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										
Salary and travel	days	300	15	$4,500	$0		$0		$0	$4,500
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$4,500	$0		$0		$0	$4,500
F. Monitoring										
photo points	days	252	3	$756	$0		$0		$0	$756
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$756	$0		$0		$0	$756
G. Totals				**$19,246**	**$22,600**		**$0**		**$0**	**$41,846**

PART VII - APPROVALS

1. /s/ Stephanie Phillips — 8/11/04
   Deputy Forest Supervisor (signature) — Date

2. /s/ William P. LeVere for — 08/12/2004
   Regional Forester (signature) — Date