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

Date of Report: June 23,2004

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

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

B. Type of Action

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

[ ] 2. Interim Report
[ ] Updating the initial funding request based on more accurate site data or design analysis
[ ] Status of accomplishments to date

[x] 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Hauser

B. Fire Number: CA-LAC-150988

C. State: California

D. County: Los Angeles

E. Region: 5

F. Forest: Angeles

G. District: Santa Clara/Mojave (53)

H. Date Fire Started: 07-24-03

I. Date Fire Contained: 07-27-03

J. Suppression Cost: Approx $ 2,400,000.

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): approx 24.0
2. Fireline seeded (miles): 0
3. Other (identify):

L. Watershed Number: 1809020607(Amargosa), 1807010203 (Bouquet) 1807010202 (Soledad) ,

M. Total Acres Burned: 2,038
NFS Acres(1373) Other Federal ( ) State ( ) Private (665)

N. Vegetation Types: Chaparrel, Grass-sage, Oak Woodland

O. Dominant Soils: Lodo – Modesto families , Hanford family

P. Geologic Types: Mesozoic Pelona Schist

Q. Miles of Stream Channels by Order or Class: Order 1 = 5.7 miles

R. Transportation System

Trails: 1.2 miles impacted Roads: 2.1 miles FS roads

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 150 (Islands) 1,600 (low) 285 (moderate) 0 (high)

B. Water-Repellent Soil (acres): 208

C. Soil Erosion Hazard Rating (acres):
120 (low) 388 (moderate) 1530. (high)

D. Erosion Potential: 70 tons/acre

E. Sediment Potential: 10,750 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 7

B. Design Chance of Success, (percent): 80%

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

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 6.0

F. Design Flow, (cubic feet / second/ square mile): 29.

G. Estimated Reduction in Infiltration, (percent): 70

H. Adjusted Design Flow, (cfs per square mile): 43

PART V - SUMMARY OF ANALYSIS

Background

The fire started on a private ranch within the Forest administrative boundary. The cause of ignition was a large pile of horse manure mixed with straw and wood chips. The fire, fanned by a southwest winds, ran upslope onto the Forest and burned to a ridge. When the fire crossed over the ridge (north side) it burned into a scrub oak woodland. Enough moisture was present in the oak woodland vegetation to slow the fire and leave many islands of unburned vegetation. The ridge is drainage divide for three 5^{th} field watersheds. As result all drainages that were burned are first order drainages and only a small part of each 5^{th} field watershed was burned. Majority of the land off FS is owned by the City of Palmdale.

Both the FS land and the City of Palmdale's land are used for recreational activities. Also on the City of Palmdale's land are a number of communication sites along the ridge. There are numerous roads that access these communication sites. On forest there is only one main road, Pelona Ridge Road, connecting the Palmdale area to the FS Rowher Flat OHV area. For the most part the road travels along the top of ridge, but in a few areas it leaves the ridge top to go on to the side slopes. Large areas on the ridge were covered with brush which kept the OHVs mainly to the road.

On FS lands within the burned area is found the Short-Joint Beavertail Cactus and the Coast Horned Lizard, both are FS sensitive species. The California Legless Lizard, a FS sensitive species, was not found but occupies habitat similar to the Coast Horned Lizard.

About 8/10 miles of the Pacific Crest Trail (PCT) is found next to or within the burned area. The trail is along the west boundary of the fire. Before the fire motorcyclist had a hard time getting up the trail due to the brush and built in barriers.

Describe the Watershed Emergency:

OHV users will continue to have access to the lands east of the FS lands. This is due to the many roads that go to the communication sites and very open nature of the property. The OHV users run the ridge road between the lands to the east and the FS Rowher OHV area to the west. The fire cleared the brush along the FS road which allows OHV users to go cross-country on FS lands. Traveling cross-county will increase soil erosion and disturb and/or crush FS sensitive specie(s) such as the Short-Joint Beavertail Cactus and Coast Horned Lizard.

The PCT is closed to motor vehicles. Before the fire OHV motorcyclist had a hard time going up the PCT trail due to brush on either side of the trail and special gates. The gates are about 4 feet wide with a 1.5 foot high rail along the bottom of the opening over which hikes and horses can step over but motorcyclist must get off and lift the bike through the gate. With the fire the OHV users can now get around the old gates and get up onto the PCT which leads to the top of the ridge. On the ridge they can travel the cross-county through the burned area.

At one location the Pelona Ridge road drops down into a small swale where a small drainage crosses the road. The loss of water control will likely cause the small drainage to wash out the road. Presently the road is in-sloped and collects water from wider area and delivers it to a small drainage beyond its natural capacity. Even with fixing the road tread by out sloping it will not completely solve the problem. The drainage gully that has already formed along with the loss of water control due to the burn will make road impassable.

B. Emergency Treatment Objectives:

1. Prevent soil damage and loss, reduce or prevent the killing and/or harassment of FS sensitive species.
2. Keep OHV's off the PCT.
3. Protect the Pelona ridge road form washing out in winter rains.

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

Land __ % Channel __ % Roads **95** % Other __ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel	80	90	95
Roads	80	90	95
Structre			

E. Cost of No-Action (Including Loss): est $ 250,000 (sensitive species, soil loss and road.)

F. Cost of Selected Alternative (Including Loss): $92,700

G. Skills Represented on Burned-Area Survey Team:

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

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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:

Channel Treatments:

Roads and Trail Treatments:

1. We propose to close off the burned area to OHV traffic for several years. The intent is to try to prevent soil damage from OHV users going cross-country through the burned area. Also by keeping the OHV out of the area until vegetation growth has occurred will help protect two known FS sensitive species, Short-Joint Beavertail Cactus and the Coast Horned Lizard, found in the area along with a possible third species, California Legless Lizard.

We plan to close the Pelona Ridge road with 2 gates one will be at the east boundary of the FS land with the neighboring lands to the east. The present barbed wire fence and farm style gate can no longer keep OHV's out. A second gate is proposed for the road to the west of the burned area. To close Rowher Flat OHV area is not be an option because it would displace users to other areas and increase illegal trespass all over the district. The western gate will need wing fences that will lead out into the brush to prevent OHV's from getting around it.

Cost of the farm gate at the eastern boundary is	$ 2,000
The cost of the materials and labor to repair the eastern boundary fence is	$ 5,000
Administrative costs	$ 1,000
Total cost of repair of east boundary gate and fence is.	$ 8,000

The land to the east is owned by a conservancy. They temporally closed their land to public access due to the fire, as result there was no need to close off the east boundary.

The cost of new gate west of the burned area is	$ 5,500
The cost of installing the new gate.	$ 5,000
Wire wing fences	$ 4,000
Archeological, biological surveys and administration	$ 4,000
Total cost of new west gate.	$18,500

A new gate was installed on the Pelona Ridge road to the west of the burned area. The gate is keeping OHV users off the area. The physical gate used to close the burned area came from a gate recovered from another area of the Forest. Reusing an old gate reduced the direct cost for the BAER project. A location was found that required only small wing fences. As a result this project was completed at below estimate.

2. We need to close off the PCT to OHV's at 2 new places. The presently the trail can be easily accessed from the burned area. We are proposing to install two new step through gates on the PCT.
The building and installation is expected to cost $1,000 each $2,000

The district in close cooperation with the private landowners off forest and the Los Angeles County Sheriffs department were able to significantly reduce trespass from motorcycles on private land and on the PCT. As a result the step through gates are not needed.

3. Due to the loss of water control along the Pelona Ridge Road it is likely to be washed out. We would like to re-grade the road at two locations returning a portion of the water to its original drainages. To prevent erosion of the channel we are proposing to line a small portion of the channel with rock. To prevent further down cutting and trap sediments we are proposing 4 rock check dams to be placed in the channel. The lining of the channel and the building of the check dams would be accomplished by using fire or local work crews. The rock for the project would come from a local quarry.

Cost of grading the road to out slope it in two areas..

Dozer one day	$ 500.
Mobilize dozer	$ 300.

Rocking channel and check dams

Quarry Rock	$ 600.
Dump Truck 2 days	$ 1,000.
Small Backhoe	$ 500.
Mobilize Backhoe	$ 300.
Crew (fire) 3 days	$ 10,000.
Supervision and administration	$ 1,000
Total cost of protecting road	$ 14,200.

Rock check dams were built in the channel and they have filled with sediment. These check dams slowed head cutting of the channel into the road, preventing the Pelona Ridge Road from washing out. A the fire crew was able to fine enough local rock ripped up and left on the surface by the dozers building fire line, we did not need to buy and transport rock.

Structures:

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.)

Other items reviewed and determined to be not at risk.

Archeological Site

Above the ranch where the fire started are several springs. Between the springs and the ranch property is a one of the largest native American sites on Angeles NF lands. This site is listed, in the national registry (# LAN-540) and FS # 05015300066).

A channel draining a burned watershed is located fairly near the archeological site. The site was reviewed to determine if the site could be damage from debris and water. The channel is 15- 20 feet below the archeological site and the channel bottom and sides are covered with 3-4 foot high brush. It was determined that the channel was deep enough to hold the water and debris expected to come from the watershed above.

Ranch safety

The ranch where the fire started is below two burned drainages. The western burned drainage empties out into an open pasture on the ranch. The lower reaches of the second, the eastern drainage flows past the archeological site on FS lands and then on to private land where it flows past barn/stables, house and swimming pool. These structures are very close to the channel.

The channel above the ranch structures and swimming pool has over 2,000 feet of unburned channel length covered with thick brush growing within the channel and on its banks. Immediately above the structures the ranch owner has built a 5 foot high earthen berm to control water flow and prevent water from flowing through his structures. The long vegetated channel is expected to capture all the debries and most sediment coming from the burned watershed while the owners berm will keep the water from damaging any structures.

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

			NFS Lands		Actual		Other Lands			All
		Unit	# of	WFSU	Costs	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT $	$	units	$	Units	$	$
A. Land Treatments										
				$0			$0		$0	$0
				$0			$0			
				$0			$0		$0	$0
Subtotal Land Treatments				$0			$0		$0	$0
B. Channel Treatments										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Channel Treat.				$0			$0		$0	$0
C. Road and Trails										
East gate & Fence				$8,000	0		$0		$0	$8,000
West Gate				$18,500	8,010		$0		$0	$18,500
PCT step gates				$2,000	0		$0		$0	$2,000
Pelona road protection				$14,200	10400		$0		$0	$14,200
				$0			$0		$0	$0
Subtotal Road & Trails				$42,700	$18,410		$0		$0	$42,700
D. Structures										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Structures				$0			$0		$0	$0
E. BAER Evaluation										
FS Salaries				$7,312	7300		$0		$0	$7,312
Vehicals				$400	390		$0		$0	$400
F. Monitoring				$0			$0		$0	$0
G. Totals				**$50,412**	**$26,100**		**$0**		**$0**	**$50,412**

PART VII - APPROVALS

1. _____ _____
Forest Supervisor (signature) Date

2. _____ _____
Regional Forester (signature) Date