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

Date of Report: Sept 3, 20002

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

[X] 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

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

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Bobcat

B. Fire Number: CNF-1879

C. State: CA

D. County: San Diego

E. Region: 05

F. Forest: Cleveland

G. District: Descanso

H. Date Fire Started: 8/24/2002

I. Date Fire Contained: 8/27/2002

J. Suppression Cost: undetermined at this time

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

L. Watershed Number: 1807030501 – Cottonwood, Pine Valley

M. Total Acres Burned: 735
NFS Acres(371) Other Federal ( ) State (364) Private ( )

N. Vegetation Types: Montane Mixed Chaparral

O. Dominant Soils: La Posta – rocky loamy course sand, Mottsville – loamy course sand

P. Geologic Types: Mesozoic- granodiorite

Q. Miles of Stream Channels by Order or Class: No perennial streams
Order 1. (1.0 mile)

R. Transportation System

Trails: 0.2 miles Roads: 1.0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 43 (low) 223 (moderate) 105 (high)

B. Water-Repellent Soil (acres): 95

C. Soil Erosion Hazard Rating (acres):
45 (low) 120 (moderate) 206 (high)

D. Erosion Potential: 98 tons/acre

E. Sediment Potential: 24,750 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 4

B. Design Chance of Success, (percent): 90

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

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 3.0

F. Design Flow, (cubic feet / second/ square mile): 110

G. Estimated Reduction in Infiltration, (percent): 50

H. Adjusted Design Flow, (cfs per square mile): 247

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

Values at risk considered in this report are direct and indirect damage to archaeological sites exposed by the fire, increase in sedimentation to the adjacent municipal water supply reservoir and loss of soil productivity due to retardation of natural vegetation recovery due to OHV traffic.

The Bobcat fire burned a headwaters area of the San Diego Municipal Water District's reservoir system. Approximately 371 acres of National Forest Lands and 364 acres of adjoining Morena Reservoir Park land were burned.

The burned areas is next to the Corral Canyon Off-Highway Vehicle Area, approximately 30 miles east of the metropolitan San Diego area. Corral Canyon OHV area is the larger of two OHV areas on the Forest and covers approximately 1,800 acres. The other Forest OHV area is much smaller and is located over 75 miles north in Riverside County. Corral Canyon OHV area is serviced by Skye Valley Road, which leads to several private working ranches as well as other in-holdings and also provides access to the north side of the dam for Morena reservoir. The Corral Canyon OHV area has several well-established trailheads distributed around its periphery. Skye Valley Road also serves as the only road to access points for the Hauser Wilderness.

Prior to the Bobcat Fire, dense chaparral extended from Bobcat Meadow Campground along the eastern side of Skye Valley Road (16S17). The fire burned with high severity over 30% of the area. One of these high severity areas occurs along Skye Valley Road adjacent to the eastern boundary of the OHV area. This same area also serves as headwaters of a small tributary to the San Diego Municipal Water District's Morena reservoir. Following the fire, approximately 0.5 mile of Skye Valley Road (which serves as part of the OHV trail system) is no longer physically separated from the Morena municipal reservoir. The fire removed the dense chaparral and native oak vegetation that had provided a natural barrier between the Corral OHV area and the Morena Reservoir watershed. This same area also includes five known and one newly discovered archaeological sites, which are now exposed and subject to direct damage from OHV traffic use and indirect damage from vandalism. Increased OHV activity in the burned area will retard natural vegetation recovery, resulting in increased rutting, erosion, and lost soil productivity, with a corresponding increase in sediment yield to the municipal reservoir.

B. Emergency Treatment Objectives:

Prohibit OHV access to the burned area allowing for natural vegetative recovery and prevent OHV and vandal damage to archeological sites.

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

Land **100** % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	90	95	100
Channel			
Roads			
Other			

E. Cost of No-Action (Including Loss): **$1,617,195**

F. Cost of Selected Alternative (Including Loss): **$67,692**

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Mike McCorison

Email: mmccorison@fs.fed.us Phone : (626) 574-5286 FAX: (626) 574 5233

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:

Only one treatment is being proposed to protect the known archaeological sites and promote natural recovery of the burned area by limiting motorized access. 2,640 feet of fencing consistent with Forest Plan direction is proposed for installation along the portion of Skye Valley Road that borders the burn. The fire burned up to and stopped along the eastern side of the road with only a single small slop-over into the OHV area. No treatment is proposed for the slop-over area of approximately 3 acres. The proposed fence is considered temporary in nature and will remain in place only until the burn area has satisfactorily recovered, estimated 3 to 5 years in duration. Monitoring for OHV trespass is proposed as a method for determining when the fencing can be removed.

The following alternatives to fencing were considered:

Site closure was considered impractical because of the multiple access points into the OHV area. Also of significance is the fact that a large portion of the present OHV users would continue to use either this area illegally or adjacent public and private lands. The OHV demand is not expected to shift to the other Forest OHV area, because of the distance to the site from San Diego and its smaller size.

Road closure into the OHV and burned area was considered as being impractical because of private land, wilderness and safe reservoir operation issues. Skye Valley Road provides access to number of in-holdings including a National Guard staging and training area, working ranches, County Park and campgrounds, access to the Hauser Wilderness and emergency operations access to the dam for the Morena reservoir.

Road closure by isolating with gates the ½ mile burned segment of Skye Valley Road was also considered and dismissed as too expensive. Administrative access would be provided using this approach. Four large gates with wing fences would be needed to preclude OHV traffic from driving around these gates. The estimated cost of this alternative is approximately $50,000. Two gates would be needed to close Skye Valley Road and two gates would be needed to close off the two OHV roads/trails that intersect with this segment of Skye Valley road.

Channel Treatments:

None recommended

Roads and Trail Treatments:

Temporary fence along road; see Land Treatments above.

Structures:

None recommended

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.)

Monitoring Plan for Bobcat Fire

Treatment Effectiveness, Motorized Access:

Objective: monitor the effectiveness of actions prescribed in the BAER plan for the Bobcat fire for preventing damage to archeological sites and sensitive soils within the burned area from OHV intrusions. Inspect and repair the proposed half mile OHV barrier fence on the east side of Skye Valley Road which is the east perimeter road for the Corral Canyon OHV area.

Cost of monitoring and repairing OHV barrier:

Recreation Technician salary 10 days @ $210/day		$2100
Mileage, equipment, supplies		$1000
Archeology staff salary and misc. expenses (see below)		$4530
	Total	$7630

Treatment Effectiveness, Archeological Site Protection:

Within the fire perimeter, there was at least one National Register-eligible site that was covered by retardant and at least one previously unrecorded site that was burned over. These sites were reviewed by Susan Roder, Archeology Technician, and Gale Bustillos, Wildlife Biologist, on August 28, 2002. Site CA-SDI-9762 was described as an artifact scatter. Location was outside of burn area and was not affected by Bobcat fire. CA-SDI-9454 was described as "temporary camp" with "six bedrock mortars, pottery sherds, chert flakes and chips". This site was located in an unburned area south of Bobcat Campground. No surface artifacts were noted due to heavy ground cover. Bedrock outcrops containing features were covered with fire retardant. According to Fire Management this retardant will remain visible for at least two years and possibly as many as twenty years. The only way to remove the iron-oxide based retardant is with abrasion which is not appropriate in this case. These sites are at risk from off-road vehicles and unlimited public access.

A physical barrier (fence) will be constructed to restrict public access to culturally-sensitive areas. Monitoring will occur to determine on-going impacts to the sites within the burn area.

Cost of fence: see above treatment proposal

Cost of monitoring:

Field visits:

1 field visit next week
1 field visit after first rains
1 field visit Spring 2003
6 estimated field visits for breaches of physical barriers (fences).
Total 9 field visits

Salary:

Archeologist $270/day
Technician $160/day
Total daily salary cost $430
Total field visits salary cost $3870

Mileage:

65 miles per field visit at .36/mile $23
Total field visits mileage cost $207

Supplies:

Film $10 per visit
Developing charges $40 per visit
Total supplies per field visit $50
Total field visits supplies cost $450

Total cost of monitoring: $4530 for archaeological site protection

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

			NFS Lands				Other Lands			All
		Unit	# of	WFSU	Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT $	$	units	$	Units	$	$
A. Land Treatments										
Temporary fencing	Feet	1.9	2,640	$5,016			$0		$0	$5,016
				$0			$0			
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Land Treatments				$5,016			$0		$0	$5,016
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										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Road & Trails				$0			$0		$0	$0
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										
				$8,984			$0		$0	$8,984
				$0			$0		$0	$0
F. Monitoring				$7,630			$0		$0	$7,630
G. Totals				**$21,630**			**$0**		**$0**	**$21,630**

PART VII - APPROVALS

1. /s/ Anne Fege — 8/29/02
   Forest Supervisor (signature) — Date

2. _____ _____
   Regional Forester (signature) — Date