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

Date of Report: **June 26, 2002**

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[ ] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[**X**] 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: **Copco**

B. Fire Number: **CA-ANF-1949**

C. State: **California**

D. County: **Los Angeles**

E. Region: **Pacific Southwest**

F. Forest: **Angeles**

G. District: **Santa Clara-Mojave Rivers**

H. Date Fire Started: **June 18, 2002 1430**

I. Date Fire Contained: **June 21, 2002 1800**

J. Suppression Cost: **$ 1,200,000.00**

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): **11 miles 47.7 acres**
2. Fireline seeded (miles): **0**
3. Other (identify):

L. Watershed Number:

M. Total Acres Burned: **1460** NFS Acres(**1307**) Other Federal (**0**) State (**34**) Private/County (**119**)

N. Vegetation Types: **Buckwheat, Yucca, Pinyon Pine, Ceanothus, Annual Grasses, Mountain Mohagany, Chamise.**

O. Dominant Soils**: Trigo and Calleguas Families and Haploxeralfs**.

P. Geologic Types: **Pliocene non masine sedimentary rocks sandstone, shale & siltstone**.

Q. Miles of Stream Channels by Order: **3.29 miles of order one**

R. Transportation System

Trails: __ miles Roads: 4 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): **584** (low) **803** (moderate) **73** (high)

B. Water-Repellent Soil (acres): **949**

C. Soil Erosion Hazard Rating (acres):
0 (low) **175** (moderate) **1285** (high)

D. Erosion Potential: **120** tons/acre

E. Sediment Potential: 17,500 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent): 70

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

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 1.80

F. Design Flow, (cubic feet / second/ square mile): **13.0**

G. Estimated Reduction in Infiltration, (percent): 47.5

H. Adjusted Design Flow, (cfs per square mile): **22**

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

On June18, 2002 at approximately 1430 hours, a fire ignited from a spark from a suspicious source on private land. The fire was in an area where Los Angeles County had direct fire suppression responsibilities. The fire was in heavy to medium fuels (chamise dominate chaparral community), consisting of decadent brush and pinyon pine estimated to be more than forty (40) years old. It grew to over one hundred (100) acres in size and in one hour it was burning onto National Forest System lands (Angeles National Forest). Approximately 1000 acres were burned within 21/2 hours. The area within the fire line on June 20, 2002 was 1,460 acres.

A Burned Emergency Area Team Leader was assigned to the incident on June 20, 2002 at 0930 hours. The members of the BAER Team were ordered on June 20 and June 21, 2002.

The Fire burned a small un-name watershed and the headwaters of Apple Canyon, consuming a total of 1,307 acres on Forest. Most of the fire area had not burned in approximately 200 years. The Fire burned across soils of the Trigo group on steep slopes, which have high erosion hazard. The Fire could increase the high erosion hazard through the formation or water repellent soil layers at the surface or just slightly below the surface.

Values at Risk Emergency -

The Copco Fire burned mainly within unnamed Canyon which has a rich in history in Native American campsites. All heritage resource sites occurs outside the burn perimeter; and one site occurs within the burn area and exists in an area not at risk from sediment and water flow.

There are 4 miles of roads (with native surface) located within the burn area that are used by a variety of forest users, permittees, and Forest Administrative staff. There is adequate drainage to handle the expected increase in flow at these road and channel crossings.

It should be noted that there is a forecast for a low to moderate El Nino effect to manifest itself by the end of the year. The assumption is that the average precipitation data that will be used is based on a time frame of ten years duration which would include the occurrence of El Nino events.

Utility infrastructures which exist within the Copco Fire that are of extreme importance to the Los Angeles urban area. Underground oil and gas pipelines runs through the burn area which finally goes to facilities in the Los Angeles area. The western branch of the California Aqueduct and Penstock also runs along the edge of the burn area also Major Power Transmission Lines for Southern California Edison that run through the burn area. All infrastructures exit in an area not at risk from sediment movement and water flow.

Approximately 3 miles of Forest boundary marks were burned over by the Copco Fire. It is estimated that over 15 corner monuments and controlling monuments were burned over and potentially damaged or destroyed. The lack of a marked boundary could result in the encroachment onto the Forest of activities and developments associated with a highly urbanized area which could impede the natural recovery of the deteriorated watershed.

B. Emergency Treatment Objectives:

The base analysis used for the formulation of Emergency Treatment Objectives for the Copco Fire was the review of Emergency Treatment Objectives developed for BAER analyses for previous wildfires in the general area, local resource “corporate” knowledge, a preliminary assessment of the Copco Fire burn area, and the following goals for emergency rehabilitation of watersheds following wildfires:

1. Loss of Soil Productivity
2. Deterioration of Water Quality
3. Loss of Water Control
4. Threats to Human Life and Property

* All treatment measures within occupied and key habitat for TEPS species must be consistent with the conditions of the SCCS Settlement, the appropriate species recovery plans (if existing), and conform to the guidelines presently listed in the Forest Plan Revision.

* Identify and reduce, through the development of treatment measures, to the extent possible:

- The loss of soil productivity (ability of the soil to support plant cover) from soil erosion processes (sheet, rill and gully).
- Damage to heritage resource sites.
- Damage to physical investments within the burn area:
  - West Branch California Aqueduct
  - Quail Canal infrastructure
  - Pacific Pipeline infrastructure
  - Guzzler, Wildlife drinking structure
  - SCE Transmission Line Infrastructure
  - LACo Dept. of Public Works Infrastructure (Copco and Quail Roads)
  - Private Property
  - Forest Service Road 8N01, Three non-system, native surface
- The loss of downstream property values east of I-5 and Copco Road.

* Recommend measures to insure Forest User safety during events of increased flow and sedimentation.

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

Land __ % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads			
Other			

E. Cost of No-Action (Including Loss): **$ A cost compariosn was not completed for this analysis as no treatments were identified during the burn area assessment process.**

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

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: **Joe Gonzales**

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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:

Natural Vegetative Recovery – This cost-free treatment consists of alowing on-site vegetative material to sprout or germinate to provide cover over most of the burned area. This has been a successful treatment for past fires in Chaparral vegetation zones. For this treatment to be effective, disturbance by off-route vehicle traffic must be prevented for a period of time that will allow for the vegetation growth to cover the burned area.

Heritage Resource Values – There is one site that treatment measures are not being proposed for as a result of the Fire. An onsite gate closing to unauthorized traffic is proposed to protect Heritage Resource Site FS#05-01-53-231. See Heritage Report.

Channel Treatments:

No action treatments are recommended.

Roads and Trail Treatments:

No action treatments are recommended.

Structures:

Boundary Management - There are over 15 potentially damaged or destroyed survey markers/monuments that could cause a lack of a marked boundary. The ambiguous boundary could result in the encroachment onto the Forest of activities and developments associated with a highly urbanized area which could impede the natural recovery of the deteriorated watershed. The treatment proposes to repost the boundary lines in the fire to standard, reestablishing 3.5 miles of Forest boundary affected within the fire area.

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.)

A Monitoring Plan will be submitted later.

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											
Natural Recovery				$0				$0		$0	$0
				$0				$0			$0
Subtotal Land Treatments				$0				$0		$0	$0
B. Channel Treatments											
				$0				$0		$0	$0
Subtotal Channel Treat.				$0				$0		$0	$0
C. Road and Trails											
				$0				$0		$0	$0
Subtotal Road & Trails				$0				$0		$0	$0
D. Structures											
Boundary Mgmt	mi	6167	3	$18,501				$0		$0	$18,501
Subtotal Structures				$18,501				$0		$0	$18,501
E. BAER Evaluation											
Team Leader	day	300	7	$2,100				$0		$0	$2,100
Team	day	1400	9	$12,600							$12,600
Consultants (1)	day	500	2	$1,000				$0		$0	$1,000
Gov't Vehicle	day	15	15	$225							$225
F. Monitoring				$0				$0		$0	$0
G. Totals				**$34,426**				**$0**		**$0**	**$34,426**

PART VII - APPROVALS

1. /s/Jody Cook_____ 6/26/02_____
   Forest Supervisor (signature) Date

2. /s/ Kent Connaughton (for)_____ 6/28/2002_____
   Regional Forester (signature) Date