Date of Report: September 18, 2007

# **BURNED-AREA REPORT**

(Reference FSH 2509.13)

## **PART I - TYPE OF REQUEST**

A.	Type of Report		
	[x] 1. Funding request for estimated eme [] 2. Accomplishment Report [] 3. No Treatment Recommendation	ergency stabilization funds	
В.	Type of Action		
	[x] 1. Initial Request (Best estimate stabilization measures)	of funds needed to complete eligible	
	[] 2. Interim Report # [] Updating the initial funding or design analysis [] Status of accomplishments	request based on more accurate site data to date	
	[] 3. Final Report (Following completion of work)		
PART II - BURNED-AREA DESCRIPTION			
A.	Fire Name: North Fire	B. Fire Number: CA-ANF-00361	
C.	State: California	D. County: Los Angeles	
E.	Region: 05	F. Forest: Angeles	
G.	District: Santa Clara / Mojave	H. Fire Incident Job Code: P5DY84	
I.	Date Fire Started: 09/02/2007	J. Date Fire Contained: 09/08/2007	
K.	Suppression Cost: \$ 5,200,000		
L.	Fire Suppression Damages Repaired with S  1. Fireline waterbarred (miles): 18.18 ml.  2. Fireline seeded (miles): None  3. Other (identify): None	Suppression Funds	
М.	Watershed Number: 1807010201		
N.	Total Acres Burned: 2,067 acres [1,406] NFS Acres [] Other Federal	[] State [661] Private	

- O. Vegetation Types: Big Cone Douglas Fir, Coulter Pines, Live Oaks, semi-desert Chaparral
- P. Dominant Soils: Pismo Family
- Q. Geologic Types: Pre cambium Anorthosite
- R. Miles of Stream Channels by Order or Class:

Order # 1= 5.75 miles Order # 2 = 2.00 miles Order # 3 = 1.50 miles

S. Transportation System

Trails: 3.79 miles Roads: None

### PART III - WATERSHED CONDITION

A. Burn Severity (acres): 20% (low) 50% (moderate) 30% (high)

B. Water-Repellent Soil (acres): XXX

C. Soil Erosion Hazard Rating (acres): XXX (low) XXX (moderate) XXX (high)

D. Erosion Potential: XXX tons/acre

E. Sediment Potential: XXX cubic yards / square mile

Due to the large volume of natural storage available for sediment and debris on the braided channel plain in the lower Mattox/Mill creek drainages, and the low values at risk, full calculations were not made for the BAER report (see Hydrology Report).

## PART IV - HYDROLOGIC DESIGN FACTORS

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

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

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

D. Design Storm Duration, (hours): XXX

E. Design Storm Magnitude, (inches): XXX

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

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

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

Due to the large volume of natural storage available for sediment and debris on the braided channel plain in the lower Mattox/Mill creek drainages, and the low values at risk, full calculations were not made for the BAER report (see Hydrology Report).

## PART V - SUMMARY OF ANALYSIS

### **Pre existing conditions:**

The North Fire area is bounded by the Santa Clara Divide road to the south, the Indian Truck Trail road to the west, Soledad road to the north and Mill Canyon to the east. The burned area extended from an elevation of 4,600 feet at its south boundary (Santa Clara Divide road) down to an elevation of 2,400 feet at its north boundary (Soledad Canyon road). For the most case, the area includes north facing slopes. The south and high elevation area includes very steep slopes of 60-85%, while the low elevation area is a flat alluvial plain. Within the burnt area are two major drainages, which include the Mattox Canyon drainage and a small portion of the Mill Canyon drainage. These two main drainages drain into Soledad Canyon in an alluvial plain.

Along Soledad Canyon road, in the north part of the burned area are private properties. These private properties include houses, outbuildings and a filming site.

Vegetation within the lower elevations of the burned area is composed of semi desert chaparral and a few Live Oaks in the low to mid slopes. Some of the riparian areas include cottonwoods, Sycamore and Oaks and on the high north facing slopes Big Cone Douglas Fir and Coulter Pines can be found. The last time the vegetation in this area burned was approximately 80-100 years ago. The fuel loading was high before the fire. The low vegetation moisture level due to the winter drought in conjunction with high fuel loading and extreme weather conditions produced a fire, which burned moderate to high intensity in the chaparral communities. On the high slopes, in stands of natural Big Cone Douglas Fir the fire burned at low to moderate intensity.

Potential heritage values in the vicinity of the North Fire revolve around prehistoric habitation and resource procurement along the Santa Clara Divide and North Fork area. In addition historical use of both Santa Clara Divide for fire suppression/forestry/recreation and Cold War military, and Soledad Canyon for transportation (pioneer/railroad), mining, and homesteading has been in place.

A total of eight heritage resource sites and one artifact isolate are identified within a mile of the North Fire burned area perimeter. The sites consist of six prehistoric sites, including a ritual/vision quest site, a multi-use habitation site, a seasonal camp, and four sparse lithic scatters, and the two historical sites are Forest Service roads. The artifact isolate is a prehistoric ground stone artifact. As part of the burned area emergency rehabilitation (BAER) analysis, these heritage resource sites were subjected to field inspection to determine potential for effects

from post fire watershed response. Nearly all of the sites are located outside the fire perimeter and generally upslope, and are not considered potentially subject to effects from the deteriorated watershed. As such, no Heritage Values are considered "at risk" from watershed effects.

The Pacific Crest Trail (PCT) in this area drops off from the North Fork Ranger Station into and crosses the burned area. 3.79 miles of trail is in burned area. The trail leaves the burned area about a mile from Indian Canyon trailhead. The PCT then crosses Soledad Canyon road and continues up north towards Vasquez Rocks County Park.

This area is currently heavily used by Off Highway Vehicles (OHV), going up and along Indian Truck Trail road, Santa Clara Divide road and forest road 4N32. The district has had problems in the past with OHV uses getting off the road system and onto pre existing dozer lines.

#### A. Describe Critical Values/Resources and Threats:

The North Fire was ignited by a lighting strike on Sunday, September 2, 2007 at about noontime. This occurred in the high north facing slopes near North Fork Ranger Station, Angeles National Forest, Los Angeles County. A unified command structure with the Los Angeles County Fire was established to suppress the fire. The fire was contained in the area between the Santa Clara Divide road to the south, Indian Truck Trail road to the west, Soledad Canyon road to the north and a dozer line dropping from the Santa Clara Divide road to the Soledad Canyon road, crossing Mill Canyon to the east. The final area of the fire was 2,067 acres, out of which 1,406 acres where on National Forest Land and 661 acres where on private land (along Soledad Canyon road).

A Burned Area Emergency Response (BAER) Leader was assigned to the incident on September 6, 2007 to conduct a preliminary assessment of the burned area and identify values at risk, determine what resources would be needed for the BAER team and to provide advice to the Incident Commander on burned area suppression rehabilitation needs. The BAER team was implemented on September 10, 2007. The burned area assessment was completed and presented to the Forest Supervisor and responsible District Ranger on September 18, 2007.

Resources that were examined as part of this BAER report include:

- 1. Per-historic archeological sites, mostly in the high country along the Santa Clara Divide, and along dozer lines
- 2. The Pacific Crest Trail (PCT), which crosses the burned area
- 3. Down stream in the Soledad Canyon are two species of concern
  - a. Arroyo Toad
  - b. Three Spine Stickle Back
- 4. Access to archeological sites and erosion along dozer lines open to OHV
- 5. Possible increase in weed infestations due to suppression activities
- 6. Private homes and structures located on private land in the northeast portion of the fire bellow private land burned draineges

After examination of Values at Risk above and the threats to them, the following determinations were made:

There is an emergency in regard to several archaeological sites that were exposed by the loss of vegetation from the fire and now there is a risk of futher disturbance or vandalism due to increased access created by suppression activities. During suppression activities dozers were used along the Santa Clara road. These dozers damaged several archeological sites and cleared brush from and near several other sites. These sites are now exposed and are subject to OHV traffic along the dozer lines.

There is a human/safety risk to hikers from expected erosion that will narrow the Pacific Crest Trail (PCT) tred creating hazardous conditions for hikers. Where the PCT crosses the burned area on the steep slide slopes the trail already has some dry ravel from the fire. It is expected that soil erosion will cover and bury portions of the trail during the winter. This will be a safety hazard for travelers on the PCT.

There is an emergency in regard to unauthorized OHV activity and consequent damage to archaeological sites that were exposed by the loss of vegetation from the fire and now there is a risk of futher disturbance or vandalism due to increased access created by suppression activities. In addition increased erosion, and delay of natural vegetative recovery on dozer lines and on burned hillslopes are part of the emergency. During fire suppression activities, 18.2 miles of dozer lines were cut along ridge tops and into portions of the burned area. From past experience these dozer lines will become travel ways for OHV riders. They could increase damage to archeological sites, increase erosion and delay the natural recovery of vegetation on the dozer lines.

There is an emergency in regard to potential spread and expansion of noxious weed populations. Weed infestations are a common problem within the fire area and along dozer lines. Some weeds may have been locally present along the Santa Clara Divide road. The fire and suppression activities potentially spread these weeds anywhere along the 18.2 miles of dozer lines. Noxious weed detection survey is needed to evaluate any potential spread and need for future treatment.

No emergency was found related to the two species of concern, since they are not within the burned area, but are located four miles down stream of the mouth of the burned drainages. In the Soledad Canyon the burned area is a small percentage of the total Soledad drainage.

### **B.** Emergency Treatment Objectives:

Emergency treatment objectives for the North Fire Incident are based on the burned area analysis, local resource "corporate" knowledge and the following goals for emergency rehabilitation of watersheds following wildfires:

#### Objectives:

- 1. Several archeological sites were damaged by suppression activities and others were exposed. Objective, reduce future damage to sites from unauthorized OHV activity.
- 2. Make travelers on the PCT aware of the risks due to the fire and remove sediment from the trail.
- 3. Reduce or stop OHV traffic on dozer lines, which would reduce damage to Archeological sites and reduce erosion.
- 4. Monitor for weed infestation and if necessary treat and remove.
- 5. Protection of private homeowners from flooding and debris through coordination with the Natural Resources Conservation Service (NRCS), which is responsible for providing home owners with advice and help.

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

Land NA Channel NA Roads/Trails 100% Others 100%

## D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	NA	NA	NA
Channel	NA	NA	NA
Roads/Trails	70	80	90
Others	70	80	90

- E. Cost of No-Action (Including Loss): 2,250,000.
- F. Cost of Selected Alternative (Including Loss): 65,000
- G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Jonathan Yonni Schwartz

Email: jonathanschwartz@fs.fed.us Phone: 661-296-9710 FAX: 661-296-5847

#### 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:**

No treatments recommended under this category.

Closing of the dozer lines will provide protection to the archeological sites. This treatment will be addressed under Road and Trail Treatments.

Regarding Cultural Resource protection - "No Action" BAER prescriptions are recommended at the eight sites and one isolate due to: (1) low probability of effects from the deteriorated watershed, or (2) because the sites do not represent Class I properties (eligible to the National Register of Historic Places [NRHP]). Although there are issues related to fire suppression activities, there are no identified needs for BAER treatments for Heritage Resources in relation to the North Fire.

Old growth conifer stands will be examined in the spring and if action is required a request for NFN3 funds will be made.

### **Channel Treatments:**

No channel treatments are recommended.

The District Biologist in discussion with the Hydrologist and the BAER team leader decided that sediment and debris coming out of Mattox and Mill canyons will be temporarily stored on the braided channel at the mouth of Mattox and Mill Canyons. The sediment and debris will not come out in one big flow to Soledad Canyon. The increased sediment flow at the location of the endangered species (four miles down stream) will be within the normal range of variability.

## **Roads and Trail Treatments:**

We are requesting funds to close the dozer lines to OHV travel, which will protect archeological sites, reduce erosion along the dozer lines and speed recovery of ground cover. We are planning to install 765 feet of post and cable barriers on dozer lines where they cross open roads. The engineering has estimated that it will cost \$55.00 per foot for the post and cable barriers. To that contract mobilization, contract preperation, and administration is added. Near the barriers brush will be pulled across the dozer lines to act as a visual barrier and signs will also be installed at the barriers stating the area is closed. These signs are expected to cost \$400.

We are requesting funds to install signs at two locations on the PCT warning travelers of the dangers caused by rolling rocks and debris that might occur on the trail. The signs are expected to cost \$200.

An archeological review is required at locations where the posts and signs are to be installed. This review costs are shown under Roads and Trail treatments below.

## **Protection/Safety Treatments**:

No treatments are recommended under the BAER program. The fire burned on private property in the northeast area of the total burned area (Note --No sediment or debris from FS lands will drain toward this area). There are several small drainages burned (all on private land), and at the mouths of these drainages are homes, out building and other personal belonging. Three members of the BAER team went out on September 10, 2007 with a representative from the Natural Resource Conservation Service (NRCS) to examine the area and meet with several owners. NRCS will work with the landowners to develop treatments for their property.

### 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.)

#### Invasive species

Funding for noxious weed detection is requested. Local, federal, and state bulldozers worked this fire from initial attack through suppression rehabilitation efforts. An equipment washing station was not established prior to initial attack and there is concern that yellow star thistle and possibly other exotic weeds may have been brought into the area by initial attach equipment. Yellow star thistle is not known to occur in the North Fire

area. Introduction of this and other exotic weeds would create a serious management problem and be detrimental to the ecology of the area.

The best chance of controlling weed infestations is to detect and implement treatment actions as quickly as possible. We are requesting funds to send two observers out once a month starting in early spring and continuing through mid July of 2008 to evaluate weed infestations on recently exposed fuel breaks. Observers (probably botanists) will drive/walk along the fuel break and identify and map any infestations of exotic weeds they detect. If practicable, they will remove these plants by pulling and/or grubbing using hand tools. All plants that are uprooted will be bagged and hauled to an appropriate disposal site. Should large infestations be detected, a weed abatement plan will be developed, and an interim report requesting funds to implement the plan will be sent to the regional office. Information specific to this request is as follows:

Survey Dates: March 15-16, April 14-15, May 16-17, June 13-14 and July 14-15, 2008

#### Personnel:

Two surveyors (GS11) for 10 days each survey time =	\$4000.	
Report time for surveyors for 2 days =		400
Vehicle mileage=		700
Coordination time for a GS11=		500
	Total =	\$5,600

G. Totals

Previously approved

\$0

\$0

Part VI - Emergency Stabilization Treatments and Source of Funds Interim # NFS Lands Other Lands Unit # of Other Fed # of # of Non Fed units Line Items Units Cost Units BAER \$ Units \$ \$ \$ A. Land Treatments \$0 \$0 🞗 \$0 \$0 \$0 \$0 \$0 \$0 Insert new items above this line! \$0 \$0 \$0 \$0 Subtotal Land Treatments B. Channel Treatments \$0 \$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 Subtotal Channel Treat. C. Road and Trails 765 \$42,075 \$0 Close Dozer Lines feet \$0 \$0 20 \$0 \$0 Dozer line closure sign 20 \$400 \$0 sign Signs for the PCT 100 \$0 \$0 \$0 sign \$200 10 250 \$2,500 Arch review days Contract Mobilization \$4,207 Contract Prep. & Admin \$6,311 \$0 \$0 🞗 \$0 \$0 Insert new items above this line! Subtotal Road & Trails \$55,693 \$0 \$0 \$0 D. Protection/Safety \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 Insert new items above this line! \$0 **X** Subtotal Structures \$0 \$0 \$0 E. BAER Evaluation 355 9 \$3,200 \$0 \$0 BAER Team days **Hydrologist Contract** \$2,500 \$0 \$08 \$0 Insert new items above this line! Subtotal Evaluation \$0 \$0 \$0 F. Monitoring **Exotic Plant Monitoring** \$5.600 \$0 \$0 \$0 Insert new items above this line! \$0 \$0 \$0 Subtotal Monitoring \$5,600 \$0\$ \$0 \$0

## **PART VII - APPROVALS**

\$61,293

\$0

1. /s/ Susan R. Swinson (for):	<u>September 18, 2007</u>
Forest Supervisor (signature)	Date
, ,	
2. /s/ Beth G. Pendleton (for)	_9/21/07
Regional Forester (signature)	Date