Date of Report: February 1, 2008

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[x] 1. Funding request for estimated emergency stabilization funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

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

[X] 2. Interim Report # 1
[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: Pine Fire

B. Fire Number: CA-CNF-2463

C. State: Caifornia

D. County: San Diego

E. Region: 05

F. Forest: Cleveland NF

G. District: Descanso Ranger District

H. Fire Incident Job Code: P5D0JA

I. Date Fire Started: 9/12/2007

J. Date Fire Contained: 09/16/2007

K. Suppression Cost: 3,200,000 (as of 9/16/2007)

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): approximately 10 mi.
2. Fireline seeded (miles):
3. Other (identify):

M. Watershed Number: Pine Valley watershed =1807030502 (790acres)
Upper Cottonwood 1807030501 (1312acres)

N. Total Acres Burned: 2156
NFS Acres (1,643) Other Federal ( ) State ( ) Private (513)

O. Vegetation Types: Scrub oak chaparral, Coast Live oak woodland(includes Engelman oak) Chamise chaparral and Redshank chaparral.

P. Dominant Soils: Acid igneous, Bancas stony loam, La Posta, Shephead rocky sandy loam

Q. Geologic Types: Mesozoic granitic and Cuyamaca Gabbro

R. Miles of Stream Channels by Order or Class: Order 1= 2.7 mi, Order 2= 2.8 mi, Order 3=.3 mi.

S. Transportation System

Trails: 0 miles Roads: 4.47 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 395 (low) 1715 (moderate) ___ (high)

B. Water-Repellent Soil (acres): 0

C. Soil Erosion Hazard Rating (acres):
___ (low) 125 (moderate) 2031 (high)

D. Erosion Potential: 8-30 tons/acre

E. Sediment Potential: 3930 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 5

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

C. Equivalent Design Recurrence Interval, (years): 2

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 1.6

F. Design Flow, (cubic feet / second/ square mile): 7.4

G. Estimated Reduction in Infiltration, (percent): 10%

H. Adjusted Design Flow, (cfs per square mile): 14.2 (Rowe, Countryman, Storey)

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats: The Pine fire burned 2156 acres of chaparral and oak woodlands at a moderate burn severity. The BAER team identified all potential values at risk to determine if the fire had created an emergency relative to life and safety, property, and natural or cultural reosurces. Findings show that the wildfire created an emergency relative to both natural and cultural resources including the potential for noxious weeds to establish.

Potential Values at Risk	Findings	Emergency Determination
Post-fire conditions place critical heritage resources at risk from looting, and degradation from vehicle access at sites within the next year.	Field review shows increased assessibility to sites from removal of vegetative cover. In locations with gentle topography, lack of vegetation, and remnant decommissioned roads provide access to critical heritage resources. Potential degradation to the site could occur from looting, or driving in the area and diminishing the integrity of the site's design, setting, and materials.*	Yes, unacceptable degradation is highly likely to occur within one year.
OHV recreation use of area may impede recovery	OHV area adjacent to burn area. Previously decommissined road was reopened and vegetation removed. Some unclassified routes lead into the fire. Prior to the burn the area was harder to assess and old unclassified road prisms were difficult to see. Now with the consumption of brush the old road prisms are more evident.	Yes, may slow or prevent natural recovery and increase erosion.
Potential adverse impact to existing vegetation from noxious and invasive plants.	Opportunities exist for spread of noxious and invasive plants along dozer lines, drop points, safety zones, and road intersecting the fire perimeter. Recommend private lands consult with NRCS on weed detection needs.	Yes, detection survey required.
Soil quality and function	Moderate soil burn severity will increase erosion on both NFS lands and private lands. Soil structure is good, roots unburned, and no indications of water repellency. Anticipate erosion may increase from 1-2 tons per acre to up to 8-30 tons per acre depending on slope, vegetative recovery, and storm duration and intensity. Review of other fires in the area shows vigorous regrowth after a fire.	No, within the historic fire regime.
Infastructure (roads and trails)	No forest service system roads exist within the burn perimeter since a land exchange consolidated private lands. Roads within the fire perimeter may be come conduits for increased runoff and culvert plugging may occur from increased erosion and sediment. Improve drainage with diversion prevention dips and culvert removal are common techniques to reduce adverse impacts. Keep culverts open between storm events.	No. Discussed with private landowner and contacted NRCS.
Water quality deterioration	Oak Valley pond on private land may have increased sediment delivery from adjacent burned areas. Private landowner may want to consult with NRCS on erosion control measures to trap sediment. Forest Service lands upstream of pond were inspected for potential contribution of sediment. Hydrology report identifies estimated 8 t/p/a may be delivered. Steep, windy, rocky slopes make treatments ineffective.	Yes, potential for water quality degradation at private land pond.
Life and Safety	No threat to life and safety was identified within or downstream of the fire.	No threat identified.

*Decommissioned road was administratively removed from system. No prism scarifcation was conducted due to cultural resources within the area.

B. Emergency Treatment Objectives:

Stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of the fire. The BAER team analyzed each emergency identified above for cost-effective treatments to reduce or minimize the risk to each resource area.

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

Land **90** % Channel **N/A** % Roads/Trails **N/A** % Protection/Safety **90** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	85	100	100
Channel	NA	NA	NA
Roads/Trails	NA	NA	NA
Protection/Safety	85	100	NA

E. Cost of No-Action (Including Loss): **$**4,516,000 (BAER cost-risk analysis)

F. Cost of Selected Alternative (Including Loss): **$** 296,450 (BAER cost-risk analysis)

G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology [**x**] Soils [x] Geology [x] Range
[ ] Forestry [x] Wildlife [ ] Fire Mgmt. [x] Engineering
[ ] Contracting [ ] Ecology [**x**] 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:

Noxious weed detection surveys: There is an emergency in the form of increased risk of invasion by noxous weeds. The risk is greatest in the meadow and grassland area, but also exists in the chaparral which could be partly type-converted to non-native grassland. Within the meadow at Bear Valley, there is a known population of an endangered plant species, San Bernardino Bluegrass (*Poa atropurpurea*) that requires effort to ensure that this species is not adversely affect by noxious weed invasions. Additional detection surveys along roads, fire lines, and drop points help detect any new noxious weed populations invading the area.

Restore segments of fence to foster natural vegetative recovery. Aproximately 4 miles of range fence was burned in the Pine fire. To allow for natural vegetative response it is important to keep cattle out of sensitive areas especially the Bear Valley meadow area. Field review indicates that approximately 1 mile of fence should be repaired to ensure cattle are kept out of this area. Temporary range fence was considered but costs estimates show it is more effective to repair segments of the existing fence Specific locations will be determined on the ground with the Range conservationists and the permittee with emphasis on potential access points into Bear Valley.

Channel Treatments:

No channel treatments were prescribed due to the ineffectiveness of these treatments.

Roads and Trail Treatments:

No Forest Service system roads exist within the burn area and roads below the burn are not within forest service jurisdiction.

Protection/Safety Treatments:

1. Forest Order Closure and Outreach (news releases upon posting and removing forest order restrictions) to close the burned area pursuant to 36 CFR 261.50(a). The vegetation burned in the Pine Fire was dominated by chaparral. Left undisturbed the trees and shrubs will regenerate rapidly by sprouting or from seed. The perennial grasses in the meadow will regenerate by sprouting and annual grasses in the meadows will regenerate from seed. Natural revegetation is expected to reduce erosion and overland runoff in moderate burn severity as long as it is allowed to recover. A forest order closure allows for natural recovery of the burned area. Cost estimates are based on a GS-9 ($290 per day) to draft an area closure for approval and to assist in district outreach to user groups thru meetings, news events, and other media.

2. Closure effectiveness inspections:
To ensure vegetative recovery of the entire burned area, including sensitive meadow species and unique and critical heritage resources, an area closure of the entire fire area is recommended. To be an effective treatment routine inspections of the closure and unique heritage resources should be conducted several times a week. Closure effectiveness inspections would include spot checking heritage resource sites to identify if looting may have occurred, if access within the burned area is occurring, as well as the recovery of sensitive plant species in the Bear Valley meadow area. Key areas to inspect are along the east side of the fire from Buckman to Long Valley Peak. The burned area is accessible year round with most use occurring during the weekends. Initial efforts to use a closure with effectiveness inspections enables the forest to ensure that natural recovery is unimpeded. If the closure is not effective the forest may identify additional land treatments to protect the resources.

3. **Signs for closure:** Signs for the forest closure will be located in areas to provide recreational users both information on the potential duration of the closure, rules of the closure, and their role in maintaining an effective closure. Four locations have been identified on the Bear Valley Road. Due to the amount of traffic received on the road and potential vandalism, replacemement signs will also be ordered for a total of 16 signs.

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.)

Interim #1 Update:
As discussed in #2 above, the District conducted effectiveness monitoring and found incursions into the burned area by unauthorized OHV activity. In the table below, savings are redirected to fund the barriers, fencing and gate needed to address the breaches into the burned area. Most of the funds would be redirected from effectiveness monitoring. Presumably once the barrier project is completed, motorized incursions into the burned area should be significantly reduced and less intensive monitoring would be needed. Accomplishment is underway for most items; the Forest closure order was accomplished but other funds were used.

Part VI – Emergency Stabilization Treatments and Source of Funds Interim

A. Land Treatments										
Noxious weed detection survey	days	350	20	$7,000	$0		$0		$0	$7,000
Fencing	miles	13,920	1	$13,920	$0		$0		$0	$13,920
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$20,920	$0		$0		$0	$20,920
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										
Barriers	feet	900	30	$27,000	$0		$0		$0	$27,000
Fencing	each	2500	1	$2,500	$0		$0		$0	$2,500
Gate	each	4500	1	$4,500	$0		$0		$0	$4,500
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$34,000	$0		$0		$0	$34,000
D. Protection/Safety										
Forest Order Closure including preparation, posting, public notification	days	290	0	$0	$0		$0		$0	$0
Closure Effectiveness inspections	days	300	13	$3,900	$0		$0		$0	$3,900
Signing	each	500	3	$1,500	$0		$0		$0	$1,500
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$5,400			$0		$0	$5,400
E. BAER Evaluation										$0
Initial assessment	days	500	36	$18,000			$0		$0	$18,000
Report/documentation	days	460	3	$1,380						$1,380
Implementation Mgr.	days	250	0	$0						$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$19,380			$0		$0	$19,380
F. Monitoring										$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$0	$0		$0		$0	$0
G. Totals				**$79,700**	$0		**$0**		**$0**	**$79,700**
Previously approved										
Total for this request				**$79,700**						

PART VII - APPROVALS

1. /s/ William Metz — 2/4/08
   WILLIAM METZ — Date
   Forest Supervisor (signature)

2. /s/ George Kulick (for) — 2/7/08
   Regional Forester (signature) — Date