

Date of Report: 02/7/2014

**BURNED-AREA REPORT**  
(Reference FSH 2509.13)

**PART I - TYPE OF REQUEST**

**A. Type of Report**

- ☒ 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)  
☐ 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: Colby  
B. Fire Number: CA-ANF-000231  
C. State: CA  
D. County: Los Angeles  
E. Region: 05  
F. Forest: Angeles National Forest  
G. District: 51  
H. Fire Incident Job Code: P5H1C7  
I. Date Fire Started: 01/16/2014  
J. Date Fire Contained: 01/31/2014  
K. Suppression Cost: \$ 7,200,000 (approximate cost)  
L. Fire Suppression Damages Repaired with Suppression Funds  
    1. Fireline waterbarred (miles): 10 dozerline, 5 handline  
    2. Fireline seeded (miles): 0  
    3. Other (identify): 0  
M. Watershed Number: 180701060601 Big Dalton Wash, 180701060606 Santa Fe Flood Control Basin/San Gabriel River  
N. Total Acres Burned: 1952  
    [328] NFS Acres   [0] Other Federal [74] State [1550] Private

30 min	0.30 in
1 hr	0.50 in
3 hr	1.00 in
6 hr	1.40 in
12 hr	1.90 in

**E. Design Storm Magnitude, (inches):** Refer to IV.D Table above.

**F. Design Flow, (cfs per square mile):** 3

**G. Estimated Reduction in Infiltration, (percent):** 67%

**H. Adjusted Design Flow, (cfs per square mile):** 52

Highway 39, Old San Gabriel Road and Access Bridge to Mountain Cove Subdivision-

Probability of damage or loss: Likely. Usually, rock roll-out and dry ravel occur as the fire passes over the area and shortly afterwards. Evidence of this movement can currently be seen adjacent to Highway 39 and Old San Gabriel Canyon Road. It is likely during future storm events that movement of rocks into the roadbeds may lead to the blockage of both Highway 39, access bridge to the Mountain Cove subdivision, infrastructure/private properties located directly below the burned slopes.

Magnitude of consequences: Major. Rocks or debris flows in the roadbed can easily cause human injury or mortality if unavoidable or unrecognized or threaten human safety if the road is blocked in an emergency medical situation.

Risk Level: High. The BAER team recommends coordination with Caltrans to discuss potential rock fall and debris hazards that may impact Highway 39.

Threats to Soil Quality/Ecosystem Stability-

An emergency exists with respect to soil quality and ecosystem stability of watershed processes and functions as a result of the fire. Impacts to soil quality are primarily through two mechanisms: 1) increased erosion moving the exposed soil and nutrient rich ash off-site; and 2) increasing spread of noxious weeds and invasive plant species. Increased accelerated soil erosion, overland flow, and sedimentation, probably with a measurable increase in peak-stream flows, are expected at decreasing rates for the next two to five years after the fire, until vegetation has sufficiently recovered to restore the surface soil-hydrologic function and processes of the watersheds that experience a high percentage of moderate and high soil burn severity (SBS).

Soils in the burned area are derived primarily from granitic and metamorphic parent materials and have inherently moderate-to-moderately high surface erosion characteristics. In the moderate and high SBS areas, the fire completely consumed the vegetation canopy and the effective ground cover that dissipates rainfall energy. Even with average precipitation, erosion rates will be accelerated in combination with higher surface runoff efficiencies. A 2- or 5-year rainstorm event occurring during the first two years following the fire will increase the potential for movement of ash and surface topsoil, reducing the soil quality of these sites. The potential soil loss due to thunderstorm runoff jeopardizes the natural long-term native vegetation recovery.

Decreases to soil quality over the long term are also likely from the potential increase in rate of spread of noxious weeds and invasive species. Existing populations within and adjacent to the burned area include ripgut brome, cheat grass, mustards, thistles and smilo grass. There is potential to increase the distribution of these species and other invasive plants, particularly in areas of high or extensive moderate SBS that are at greater susceptibility for the introduction of seeds by fire suppression operations and unmanaged recreation.

Risk Assessment – Soil Productivity

Probability of Damage or Loss: Possible. This determination is due to the change in soil-watershed response causing sheet and rill erosion of topsoil. ERMiT modeling shows that large, intense rain events in the first year after the fire could cause significant loss of soil from excessive erosion, with the likelihood of occurrence is <50%.

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

Land XXX% Channel XXX% Roads/Trails XXX% Protection/Safety XXX%

**D. Probability of Treatment Success**

	Years after Treatment		
	1	3	5
Land	XXX	XXX	XXX
Channel	XXX	XXX	XXX
Roads/Trails	XXX	XXX	XXX
Protection/Safety	XXX	XXX	XXX

**E. Cost of No-Action (Including Loss):** XXX

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

**G. Skills Represented on Burned-Area Survey Team:**

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input type="checkbox"/> Range
<input type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany	<input checked="" type="checkbox"/> Archaeology
<input type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input checked="" type="checkbox"/> 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: Currenly no other land treatment is proposed other than noxious weed rapid response are being proposed on USFS lands. Additonal land treatments may be

**Protection/Safety Treatments:**

*Interagency Coordination*

Interagency coordination started during the fire and continued throughout the BAER Assessment and is a critical component to the BAER process. Continuing this coordination by providing the BAER Assessment Report, specialist reports and attending public meetings is anticipated. Public meetings are scheduled for the near future.

**Interagency Team Cost**

Item	Unit	Unit Cost	# of Units	Cost
Resource Officer	Days	\$400	6	\$2,000
Hydrologist/Soils	Days	\$500	6	\$2,500
GIS Specialist	Days	\$400	3	\$1,200
Botanist	Days	\$400	2	\$800
Vehicle mileage	Miles	\$0.55	2500	\$1,375
<b>Total Cost</b>				<b>\$6,875</b>

PART VII - APPROVALS

1.   
Forest Supervisor (signature)

2/7/2014  
Date

2.   
Regional Forester (signature)

2/12/14  
Date