

## BURNED-AREA REPORT

(Reference FSH 2509.13)

- ☐ 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)

A. Fire Name: Pfeiffer

B. Fire Number: CA-LPF-003810

C. State: California

D. County: Monterey

E. Region: Region 5

F. Forest: Los Padres

G. District: Monterey Ranger District

H. Fire Incident Job Code: P5H0ZX 0507

I. Date Fire Started: December 16, 2013

J. Date Fire Contained: December 20, 2013

K. Suppression Cost: 2.2 million +

L. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): 6 miles handline, 0.75 miles dozer line

2. Fireline seeded (miles): 0

3. Other (identify):

M. Watershed Number: Sycamore Canyon, Big Sur River

N. Total Acres Burned: 917

NFS Acres(80 ) Other Federal (0 ) State (200 ) Private ( 637 )

O. Vegetation Types: Soft chaparral, live oak, riparian, mixed conifer

P. Dominant Soils:

Q. Geologic Types:

R. Miles of Stream Channels by Order or Class:

S. Transportation System

Trails: 1 miles      Roads: 2.5 FS maintained, 5 + private miles

### **PART III - WATERSHED CONDITION**

A. Burn Severity (acres): 422 (low) 479 (moderate) 16 (high)

B. Water-Repellent Soil (acres):

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

D. Erosion Potential: \_\_\_\_\_ tons/acre

E. Sediment Potential: \_\_\_\_\_ cubic yards / square mile

### **PART IV - HYDROLOGIC DESIGN FACTORS**

A. Estimated Vegetative Recovery Period, (years): 3

B. Design Chance of Success, (percent): 80

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

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 1.5 inch

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

G. Estimated Reduction in Infiltration, (percent): \_\_\_\_\_

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

### **PART V - SUMMARY OF ANALYSIS**

A. Describe Critical Values/Resources and Threats:

The Big Sur coast has received less than one inch of precipitation since June 2013. Normal rainfall is over 8 inches for this time of year, and the previous rainy season total was about half of normal, leaving brush extremely dry for late December. This fire started along the Big Sur Drainage in the early morning hours of December 16 and quickly burned up to Pfeiffer Ridge, where 22 homes were destroyed within 6 hours. Most of the fire spread stopped by December 19, at which time a team from Cal Fire, Monterey County Roads, California State Parks, and Forest BAER team leader Kevin Cooper met at Big Sur and toured the fire area to collectively assess post fire BAER issues both on and off of FS land. Los Padres BAER team leader Kevin Cooper contacted local NRCS representatives who informed him that they attended a community meeting to discuss their role in helping residences. This report only discusses the risks and treatments to areas of responsibility taken care of by the Los Padres National Forest.

Kevin Cooper contacted RSAC in Salt Lake City to request BARC imagery that was obtained on December 21 and on-the-ground soil examination and aerial photography taken immediately post-fire. The BARC imagery delineations of soil burn severity were accepted as-is for the final soil burn severity map.

The Los Padres National Forest took the lead on suppression of this fire because it is in our direct protection area, even though only 80 acres out of 917 are managed by the Los Padres. The Sycamore Canyon road travels along Sycamore Creek from Hwy 1 two and one-half miles to Pfeiffer Beach Day Use Area that is managed by the Los Padres National Forest. The Los Padres Forest acquired easements on this road for public access to the Pfeiffer Beach recreational area, thus the government has an ownership interest in the Sycamore Canyon road which enables shared maintenance responsibility with other ownership interests.

The critical value under Forest Service purview is the Sycamore Canyon Road, which leads 2.5 miles to the Pfeiffer Beach Day Use Area and to three private roads and a community of several dozen homes. Steep slopes above the road burned under moderate to high soil burn severity for 1.5 miles and there is dry ravel accumulating on the road immediately after the fire. Moderate rain will dislodge rock, gravel, and other debris directly onto this section of road. There are also two culverts in this stretch that are 12 inches in diameter and 18 inches in diameter, both of which are significantly undersized to contain increased flows and will plug and overflow during a moderate rain event. Downstream of the burned area there is a concrete ford and a low water crossing that will be impacted by sediment buildup.

The threat is to residences and recreationists driving this road. They could encounter debris flows, mud, and water crossing the road that could make it unsafe or impassable.

There is a threat that sediment increases from private lands burned in the fire could impact California red-legged frog and steelhead habitat at the mouth of Sycamore Creek (also on private property), but these species are adapted to intermittent influxes of sediment. There is no effective way to prevent sediment movement into this area from the fire, and other more intrusive measures such as capturing and harboring individuals is not warranted or likely to succeed.

B. Emergency Treatment Objectives: On the Sycamore Canyon Road; To prevent loss of life or injury from road accidents, to maintain the integrity of the road surface, and to maintain access to private homes along this road.

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

Land \_\_\_ % Channel \_\_\_ % Roads/Trails 100 % Protection/Safety \_\_\_ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads/Trails	90	100	
Protection/Safety			

E. Cost of No-Action (Including Loss): **1 million dollars potential in road repair due to storm damage to culverts, retaining walls, and the paved road surface.**

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input type="checkbox"/> Range
<input checked="" type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Fire Mgmt.	<input checked="" type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany	<input type="checkbox"/> Archaeology
<input checked="" type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input type="checkbox"/> GIS

Team Leader: Kevin Cooper

Email: kccooper@fs.fed.us Phone: 805-570-7455 FAX: 805-961-5781

**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:

Channel Treatments:

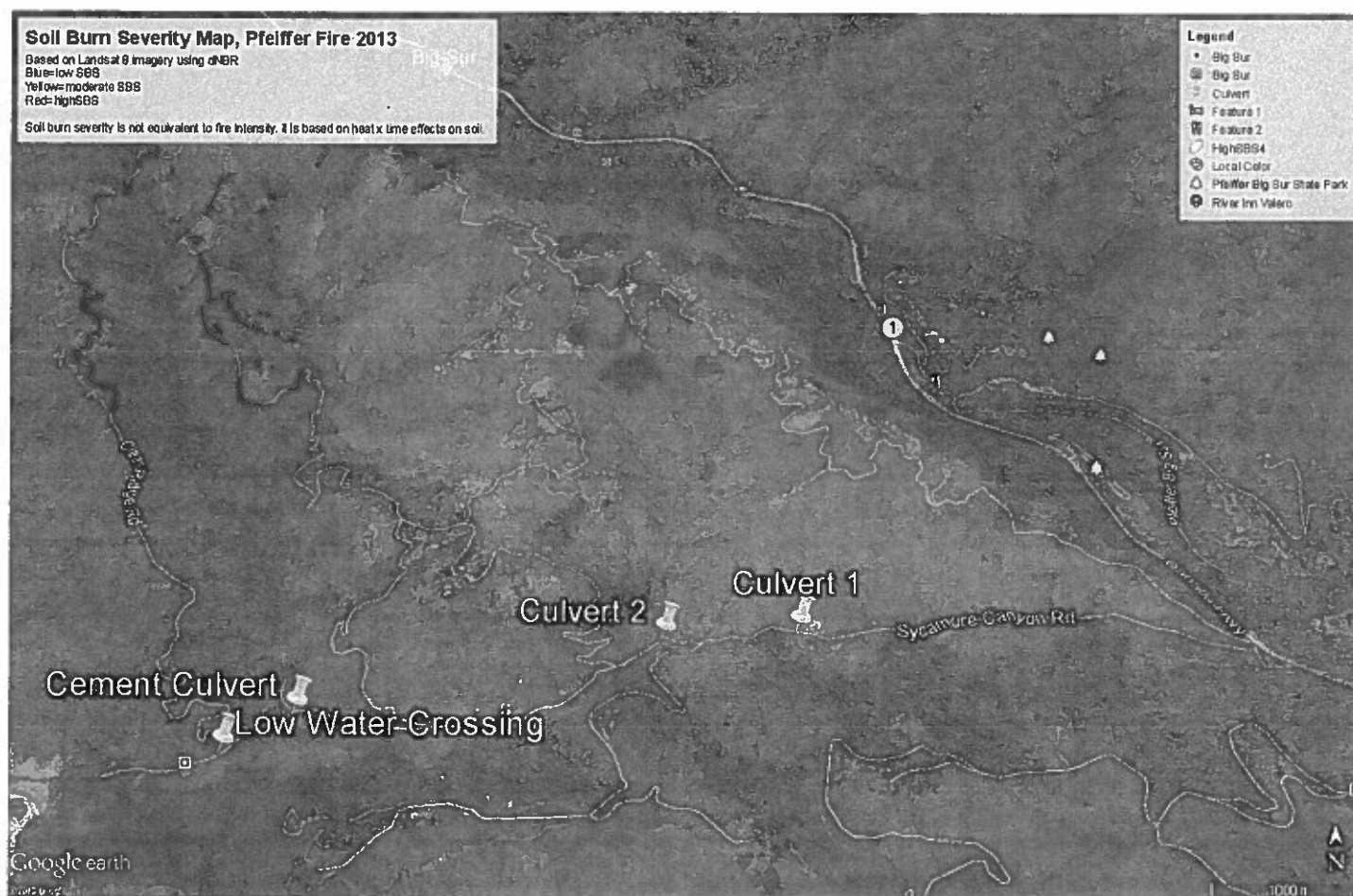
Roads and Trail Treatments: Because the fire occurred in late December, heavy rains could occur at any time and create dangerous driving conditions on this road. Temporary closures to recreational use of the road will be established prior to rain events predicted to be over 0.5 inches. Existing culverts will be cleaned out to the extent possible, and a temporary rolling dip will be created across the road just past the first and second culvert to keep overflow moving across the road rather than down the road. These will be made from cold mix as a temporary water control device or a temporary rubber speed bump bolted to the road surface. Heavy equipment and fire crews will be on standby to clean up sediment and woody debris deposited on the road from slope erosion and overflowing culverts, and to clean off the surface of the low water crossing just above Pfeiffer Beach after each storm. The cement culvert just upstream of the low water crossing will be monitored for sediment loading. These treatments will be carried out continuously throughout the 2013-2014 rainy season.

If this work is not done to keep the road clear, driving conditions will be very unsafe, up to 80 homeowners will not have access to their property, and the road will likely sustain damage that requires very extensive repairs.

Only 80 acres of Forest Service land burned in the Pfeiffer fire, and there is one hiking trail that crosses this parcel that is administered by California State Parks, who is responsible for the stabilization of this trail.



Photo showing moderate to high soil burn severity on the slopes above the Sycamore Canyon road.



Google image of fire perimeter

### Protection/Safety Treatments:

#### **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.)

**Part VI – Emergency Stabilization Treatments and Source of Funds**

Interim #

			NFS Lands			Other Lands			All	
		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$	units	\$	Units	\$	\$
A. Land 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 Land Treatments				\$0	\$0		\$0		\$0	\$0
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										
				\$73,120	\$0		\$0		\$0	\$73,120
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$73,120	\$0		\$0		\$0	\$73,120
D. Protection/Safety										
				\$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 Structures				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
				\$1,500			\$0		\$0	\$0
Insert new items above this line!				---	\$0		\$0		\$0	\$0
Subtotal Evaluation				--	\$0		\$0		\$0	\$0
F. Monitoring										
				\$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										
				\$73,120	\$0		\$0		\$0	\$73,120
Previously approved										
Total for this request				\$73,120						

**PART VII - APPROVALS**

-   
 Forest Supervisor (signature)
-   
 Regional Forester (signature)

 1/9/14  
 Date

 1/10/14  
 Date