

Date of Report: April 8, 2007

Executive Summary

The James Fire burnt approximately 1350 acres east of the town of Kernville. Approximately 30 acres is on private land with the remaining 1320 acres on National Forest System lands administered by the Sequoia National Forest. The fire resulted in low burn severity in areas that have mostly 75% rock outcrop and 25% soil. The area with the soils had vegetation and litter that was partially consumed leaving residual dry matter on the ground. Ground cover is in excess of 74% and the fire area meets Regional Soil Quality Standards and Guidelines. Water discharge is expected to increase from 12.58 cfs/mi² to 17.13 cfs/mi². Accelerated erosion and increased sedimentation are not expected to occur because of adequate soil cover. There are no values at risk within or downstream of the fire. There are no treatments or monitoring proposed.

/s/ Alan J. Gallegos
BAER Team Leader
Geologist – Southern Sierra Province

Date of Report: April 8, 2007

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: James Fire
- B. Fire Number: CA-SQF-00818
- C. State: CA
- D. County: Kern County
- E. Region: Pacific South West (05)
- F. Forest: Sequoia NF
- G. District: Kern River RD
- H. Fire Incident Job Code: P5DD39
- I. Date Fire Started: April 29, 2007
- J. Date Fire Contained: May 3, 2007
- K. Suppression Cost: \$1,500,000.00
- L. Fire Suppression Damages Repaired with Suppression Funds
 - 1. Fireline waterbarred (miles): -0-
 - 2. Fireline seeded (miles): -0-
 - 3. Other (identify):
- M. Watershed Number: 1803000104-10604
- N. Total Acres Burned: 1,350
NFS Acres(1,320) Other Federal () State () Private (30)
- O. Vegetation Types: Foothill pine, Live Oak, Juniper, Buck Wheat, Ceonothus, Yerba santa, Yucca, Fescue, Red Brome, Bromus (Cheat grass), Wild oats

P. Dominant Soils: Rock out crop (75%) and Cieneba (20%) – coarse sandy loamy, thermic, shallow (4-20") Typic Xerothents

Q. Geologic Types: Granitic (Granodiorite)

R. Miles of Stream Channels by Order or Class:

Stream Order	Miles
1	4.26
2	.49
3	.52
4	.46

S. Transportation System

Trails: -0- miles system trails; ~ 2.0 miles non-system trails Roads: -0- miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 893 (66%) (unburned) 457 (34%) (low) ___ (moderate) ___ (high)

B. Water-Repellent Soil (acres): -0-

C. Soil Erosion Hazard Rating (acres):
1350 (low) ___ (moderate) ___ (high)

D. Erosion Potential: .40 tons/acre

E. Sediment Potential: 256 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent): 99

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

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches):

F. Design Flow, (cubic feet / second/ square mile): 17.13

G. Estimated Reduction in Infiltration, (percent): 5

H. Adjusted Design Flow, (cfs per square mile): 4.55

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats: STATE WHETHER OR NOT VALUES AT RISK WERE IDENTIFIED AND IF SO, WHAT THEY ARE.

There are no values at risk from post-fire conditions.

B. Emergency Treatment Objectives: STATE WHETHER OR NOT VALUES AT RISK WERE IDENTIFIED AND IF SO, WHAT THEY ARE.

The fire burned approximately 1350 acres east of the town of Kernville. The fire area is located directly east of Kernville and is bounded on the south by Caldwell Creek, on the north by Tunnel Springs, and Potatoe Patch is 2 miles to the east. Critical values near the fire include the town of Kernville and the Pasco Ranch. The Pasco Ranch is located near the south west corner of the fire in Caldwell Creek. The main ranch house and several out buildings and corrals are located outside of the floodplain of Caldwell Creek. A fence separating the Pasco Ranch from National Forest System lands has one damaged post. A native surfaced road crosses Caldwell Creek within the Pasco Ranch. The crossing is a low water crossing without any improvements. No other roads access the fire area. A water tank behind the James Store that serves the elementary school is located on the private land on the west end of the fire. A cinder block building that measures 10 ft X 10 ft is also located on the private land behind the James Store. Noxious weeds are not a concern from the fire. The only fire suppression related disturbances are handlines. Dozer lines were not constructed for this fire. The only reported noxious weeds in the fire area are cheat grass, which is wide spread and well established in the area. Heritage resources are not a concern from the fire. Several heritage resources are located within the fire that includes a historical telephone line and a bedrock mortar site. A lithic scatter is located outside of the fire near the bedrock mortar. The bedrock mortar and lithic scatter are uninventoried heritage resource sites. Two telephone poles were damaged from the fire and are laying on the ground. Galvanized wire suspended and attached to the telephone poles were observed along the telephone line. The two areas where the poles were on the ground had galvanized line on the ground. This line could be a hazard to wildlife. Two springs under special use permits are located outside of the fire perimeter on the west side of the fire. One of these springs is located near Ken Carvers Ranch and the other spring is located in a channel in the northeast corner of the fire.

Soils in the area are mostly 75% Rock Outcrop and 20% Cieneba. Cieneba family soils are shallow, coarse sandy loams, thermic, Typic Xerothents. Vegetation in the area consists of Foothill pine, Live Oak, Juniper, Buck Wheat, Ceonothus, Yerba santa, Yucca, Fescue, Red Brome, Bromus (Cheat grass), and Wild oats. Several wildflowers and cactus were observed blooming in the fire area. The wild fire resulted in 457 acres or 34% of the fire in low burn severity conditions with no observed hydrophobic conditions. The fire had 893 acres or 66% of the fire in unburned conditions. Most of these acres were rock outcrop. The fire resulted in partial consumption of the residual dry matter and soil cover exceeded 74% in areas that were burned. Estimated erosion rates were modeled using WEPP and vary from .10 to .40 tons/acre. Sediment was estimated at 256 yds³/mi². Soil conditions in the fire area meet Regional Soil Quality Standards and Guidelines in that soil cover is at least 50%.

The fire is located in the Cannel-Caldwell HUC 6 watershed (1803000104-10604). Several order 1 channels that drain directly into the Kern River are located near the town of Kernville. These watersheds will collectively be referred to as the James Watershed. There is very little riparian vegetation along the channels in the James Creek Watershed with the fire area. Two small watersheds join together near the southwest corner of T. 25 S., Range 33E Section 13 and drain into Caldwell Creek. Caldwell Creek is a perennial, bedrock controlled, order 4 channel. Caldwell Creek is not fish bearing and provides minimum habitat for aquatic species. The Caldwell Creek watershed is approximately 14 mi², but only 1.34 mi² or 9.5% of the watershed was affected by the fire. The James Creek watershed is approximately 2.7 mi² with only 0.76 mi² or 27% affected by the fire. The riparian vegetation in Caldwell Creek is well established and less then 1% was burnt in the fire. The Caldwell watershed has a projected water yield increase from 13.65 cfs to 20.76 cfs or 52% from pre-fire conditons in a normal rain fall year. The James watershed has a projected water yield increase from 9.38 cfs to 13.61 cfs or 45% from pre-fire conditions in a normal rain fall year.

A Blue heron was observed in the area. The only observed wildlife damage was a skink and a snake.

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

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

D. Probability of Treatment Success

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

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

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

Steve Anderson, Summit District Resource Staff Officer served as the Resource Advisor and Suppression Rehabilitation Advisor.

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

Team Leader: Alan J. Gallegos

Email: ajgallegos@fs.fed.us Phone: 559-297-0706 ext. 4862 FAX: 559-294-4809

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:

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.)

A NO TREATMENT MAY BE CONTROVERSIAL AND MONITORING MAY BE JUSTIFIED TO DETERMINE IF TREATMENT IS STILL NECESSARY. IF FUNDING FOR MONITORING IS REQUESTED DESCRIBE HERE.

No monitoring funds are requested.

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands			All Total \$
			# of Units	BAER \$		# of units	Fed \$	# of Units Non Fed \$	
A. Land Treatments									
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<i>Subtotal Land Treatments</i>				\$0	\$0		\$0	\$0	\$0
B. Channel Treatments									
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<i>Subtotal Channel Treat.</i>				\$0	\$0		\$0	\$0	\$0
C. Road and Trails									
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<i>Subtotal Road & Trails</i>				\$0	\$0		\$0	\$0	\$0
D. Protection/Safety									
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<i>Subtotal Structures</i>				\$0	\$0		\$0	\$0	\$0
E. BAER Evaluation									
				\$3,000			\$0	\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0	\$0	\$0
<i>Subtotal Evaluation</i>				---	\$0		\$0	\$0	\$0
F. Monitoring									
				\$0	\$0		\$0	\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0	\$0	\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0	\$0	\$0
G. Totals				\$3,000	\$0		\$0	\$0	\$0
Previously approved									
Total for this request				\$3,000					

NO TREATMENT DECISION AND/OR FIRE UNDER 300 ACRES

Forest Coordinator or Team Leader (signature) /s/Alan J. Gallegos

Date: 5/8/2007

PART VII - APPROVALS

 1. _____
 Forest Supervisor (signature)

 Date

 2. _____
 Regional Forester (signature)

 Date