



**United States  
Department of  
Agriculture**

**Forest  
Service**

**Los Padres  
National Forest**

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**File Code:** 2520-3

**Date:** July 26, 2002

**Route To:**

**Subject:** Piney BAER Report – Initial Request

**To:** Regional Forester

Enclosed is the initial Burned Area Emergency Rehabilitation Report (Form FS-2500-8) for the Piney Fire, located on the Monterey Ranger District. This report is the initial request for funding needed to complete the eligible rehabilitation of roads and trails.

The initial cost to implement emergency rehabilitation/protection measures for the Piney Fire is \$8700. This request covers funding for treatments to roads and trails, and BAER team costs.

If you have any questions, please contact Kevin Cooper, Piney BAER Team Leader at (805) 925-9530 x 216, or Linda Riddle, Forest BAER Team Coordinator at (805) 961-5735.

/s/ Jeanine A. Derby  
JEANINE A. DERBY  
Forest Supervisor

cc: Gary Schmitt, John Bradford, Linda Riddle, Kevin C Cooper



Date of Report: 07/26/2002

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

**PART I - TYPE OF REQUEST**

A. Type of Report

- ☒ 1. Funding request for estimated WFSU-SULT funds
- ☐ 2. Accomplishment Report
- ☐ 3. No Treatment Recommendation

B. Type of Action

- ☒ 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation 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: Piney
- B. Fire Number: LPF985
- C. State: CA
- D. County: Monterey
- E. Region: 5
- F. Forest: Los Padres
- G. District: Monterey
- H. Date Fire Started: 6/19/02
- I. Date Fire Contained: 6/21/02
- J. Suppression Cost: not calculated
- K. Fire Suppression Damages Repaired with Suppression Funds
  - 1. Fireline waterbarred (miles): 2.0
  - 2. Fireline seeded (miles): 0
  - 3. Other (identify): re-contouring of 2 miles of dozer lines
- L. Watershed Number: 1806000510
- M. Total Acres Burned: 308

NFS Acres (200)    Other Federal ( )    State ( )    Private ( 108 )

N. Vegetation Types: Grassland = 100ac, oak savannah = 58 ac, chamise chaparral = 150 ac.

O. Dominant Soils: Chamise shaley loam = 250 ac, Santa Lucia Reliz association = 50 ac.

P. Geologic Types: Sedimentary – Miocene Monterey formation

Q. Miles of Stream Channels by Order or Class: 1 mile of 3<sup>rd</sup> order

R. Transportation System

Trails: 0 miles

Roads: 1.5 miles

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

A. Burn Severity (acres): 280 (low)    23   (moderate)    5   (high)

B. Water-Repellent Soil (acres): 10

C. Soil Erosion Hazard Rating (acres):  
         (low)       (moderate)    308 (high)

D. Erosion Potential: 52 tons/acre

E. Sediment Potential: 5250 cubic yards / square mile

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

A. Estimated Vegetative Recovery Period, (years): 7

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

C. Equivalent Design Recurrence Interval, (years): 10

D. Design Storm Duration, (hours): 12

E. Design Storm Magnitude, (inches): 4.5

F. Design Flow, (cubic feet / second/ square mile): 156

G. Estimated Reduction in Infiltration, (percent): 30

H. Adjusted Design Flow, (cfs per square mile): 282

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

### **A. Describe Watershed Emergency:**

- Loss of water control onto the USFS road, which will lead to severe road damage and significant sediment loading (unacceptable degradation of water quality) into Piney Cr., an endangered steelhead stream.

Note: One residence is located at the mouth of Piney Cr., and sits on an inturn just above bankfull level. This residence has been here for approximately 50 years, and has survived several large fires and ensuing El Nino winters. However, it has had some flood damage. In 1983, the El Nino event flooded the house. After this, a 10' high by 40' long levee was built to divert floodwaters around the house. It does not appear that this structure has been eroded to any extent by high waters since 1983, including the El Nino event of 1998, so it appears that this structure is sound and in working order. Kevin Cooper, BAER Team Leader, spoke to the owner, Mark Lauren, after examining the fire. Kevin's initial impression was that sediment loading would increase at the house the first year, but the amount of increase in water flow would not be significant. This was based on the initial survey, which showed that only 308 acres out of a 10,159-acre watershed burned at low or moderate intensity. There are no burned slopes directly above the residence, which could cause rilling or soil erosion directly onto the property. On June 10 Kevin brought hydrologist Vic Andreson to the fire. After examining it and calculating water flows, his analysis showed that the increase in water flow would be approximately 3%. In summary, the increased risk of flooding to this residence from the Piney fire effects is insignificant.

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

To trap sediment moving down onto the road by placing straw wattles on the insloped side of the road within the burn. Dry ravel and accelerated sedimentation during winter rains will, if unchecked, fill in the road at an area where the slope breaks, causing the water to divert off of the upper road onto the lower road below. Normally the water would flow along the ditch on the insloped side of the upper road continuing until it drained off at the switchback. If the area along the slope break on the upper road were to fill in with sediment and water began to drain off of the road here, it would cause significant gulying, road damage, and sedimentation into a steelhead stream. The straw wattles will hold the sediment in areas above the slope break so that it does not fill in with and divert water to the steep slope and road below.

To direct water flow off of the road at the switchback and into a big mac culvert. This will insure that the water will not divert down the road, causing unacceptable erosion on the road. This will be done by placing large straw wattles along the road, and cleaning out the drainage above the switchback. These activities will prevent increased sedimentation and water flow associated with the fire from building up and diverting down the road.

To prevent gulying in the unprotected soils below the switchback by 1.) Placing a big mac culvert downslope to the floodplain of the creek, and 2.) Dissipating the energy of the water as it is released onto the floodplain with straw wattles. Straw wattles placed above the big mac will also prevent it from becoming plugged with increased sediment, and diverting down the road.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Land na % Channel na % Roads 90 % Other     %

D. Probability of Treatment Success

Years after Treatment			
	1	3	5
Land			
Channel			
Roads	70	80	90
Other			

E. Cost of No-Action (Including Loss): \$25,000.

F. Cost of Selected Alternative (Including Loss): \$8,700

G. Skills Represented on Burned-Area Survey Team:

<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 checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input checked="" type="checkbox"/> Engineering	<input type="checkbox"/>
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany	<input type="checkbox"/> Archaeology	<input type="checkbox"/>
<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](mailto:kccooper@fs.fed.us)

Phone: (805) 925-9538 x216 FAX: 805-961-5781

BAER Team Members:

Kevin Cooper  
Vic Andreason  
Patrick Bailey

Leader, Biologist  
Hydrologist, Soils, Geology  
Engineering, Wildlife, Fisheries

#### **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: None recommended

Channel Treatments: None recommended

Roads and Trail Treatments:

1. Place eight 12" diameter X 14' length, straw wattles across the road to trap sediment, and pin these in with rebar.
2. Construct a big mac drainpipe at the switchback with a 200' runout.
3. Place six large straw wattles on the floodplain at the bottom of the big mac.

Structures: None recommended

#### **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.)

None

**Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership**

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands				All Total \$
			# of Units	WFSU SULT \$		# of units	Fed \$	# of Units	Non Fed \$	
<b>A. Land Treatments</b>										
				\$0			\$0		\$0	\$0
				\$0			\$0			
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				<i>\$0</i>			<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
<b>B. Channel Treatments</b>										
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
<i>Subtotal Channel Treat.</i>				<i>\$0</i>			<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
<b>C. Road and Trails</b>										
14' x 12" wattles	20	85	20	\$1,700			\$0		\$0	\$1,700
1 big mac culvert	1	5000	1	\$5,000			\$0		\$0	\$5,000
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
<i>Subtotal Road &amp; Trails</i>				<i>\$6,700</i>			<i>\$0</i>		<i>\$0</i>	<i>\$6,700</i>
<b>D. Structures</b>										
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
				\$0			\$0		\$0	\$0
<i>Subtotal Structures</i>				<i>\$0</i>			<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
<b>E. BAER Evaluation</b>										
				\$2,000			\$0		\$0	\$2,000
				\$0			\$0		\$0	\$0
<b>F. Monitoring</b>				\$0			\$0		\$0	\$0
<b>G. Totals</b>				<b>\$8,700</b>			<b>\$0</b>		<b>\$0</b>	<b>\$8,700</b>

**PART VII - APPROVALS**

1. /s/ Jeanine A. Derby  
Forest Supervisor (signature)

07-26-02  
Date

2. \_\_\_\_\_  
Regional Forester (signature)

\_\_\_\_\_  
Date