USDA-FOREST SERVICE FS-2500-8 (7/00)

Date of Report: 10/01/02

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[x] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

[x] 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: Piute

B. Fire Number: P51789

C. State: CA

D. County: Inyo

E. Region: 05

F. Forest: 04

G. District: Mt. Whitney

H. Date Fire Started: 09/24/02

I. Date Fire Contained: 09/28/02

J. Suppression Cost: $200,000

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): n/a
2. Fireline seeded (miles):n/a
3. Other (identify):n/a

L. Watershed Number: Fish Slough 1809010205

M. Total Acres Burned: 391
NFS Acres(391) Other Federal ( ) State ( ) Private ( )

N. Vegetation Types: willow, cottonwood, bristlecone pine, sagebrush

O. Dominant Soils: Bregar and Slinger families (N.F. slopes) R.0.- Rubblelands (S.F.Slopes)

P. Geologic Types: Paleozoic metasedimentary rocks

Q. Miles of Stream Channels by Order or Class:
Ephemeral – 1.7miles, Intermittent -0.4miles, Perennial - 0.5 miles

R. Transportation System

Trails: n/a miles Roads: n/a miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 358 (low) 13 (moderate) 20 (high)

B. Water-Repellent Soil (acres): 10

C. Soil Erosion Hazard Rating (acres):
__ (low) 20 (moderate) 371 (high)

D. Erosion Potential: 1.42 tons/acre

E. Sediment Potential: 350 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 1 – year riparian, 10-20 years upland vegetation

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

C. Equivalent Design Recurrence Interval, (years): 25

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 2.0

F. Design Flow, (cubic feet / second/ square mile): 2.2

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

H. Adjusted Design Flow, (cfs per square mile): 6.8

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:
Based on the BAER teams' aerial survey and background data compliation, the following emergencies exist on federal lands.

Threats to Human life and property:

- Hi-Head Hydro intake and settling pond (Hydroelectric facility) - The Piute fire burned mostly at low severity. The majority of the hillslopes are very rocky with scattered shrubs located within the talus slopes. The upper elevations on north facing slopes contain Bristlecone pines. These areas burned at moderate intensity. The riparian area, consisting mostly of willow and cottonwoods burned at a high severity. There is a risk of ash and sediments mobilizing during a thunderstorm or spring snow melt. Approximately 9.5% of the Piute Creek watershed burned with 0.5% burning at high severity. The

majority of ash and fine sediments should be captured by the unburned riparian vegetation. There is a small risk that ash and sediment will reach the settling pond and intake for the Hydroelectric facility.

Threat to Water Quality

- Piute Creek – It is likely that ash and sediment will enter Piute Creek causing temporary degadation of water quality. It is also likely that ash and sediment will reach the HI-Head Hydro intake pipe and catchment basin temporarily degrading water quality to the Hydroelectric plant and reducing storage in the catchment basin.

B. Emergency Treatment Objectives:

- Minimize impacts to downstream properties.

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

Land **95** % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	95	100	100
Channel			
Roads			
Other			

E. Cost of No-Action (Including Loss): **$3,250**

F. Cost of Selected Alternative (Including Loss): **$1,352**

G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology	[x] Soils	[x] Geology	[ ] Range	[ ]
[ ] Forestry	[ ] Wildlife	[ ] Fire Mgmt.	[ ] Engineering	[ ]
[ ] Contracting	[ ] Ecology	[x] Botany	[ ] 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.)

The following is proposed emergency treatment for the Piute Fire. This treatment was developed based on BAER objectives, team recommendations of proven, effective treatments, line officer/agency administrator input, as well as BAER Team effort and discussion. The control treatment is targeted at areas downstream from high and moderate severity areas, as well as at specific high value at risk sites. Treatments with low probability of success were eliminated by use of a preliminary least cost plus risk analysis to refine treatments.

Land Treatments:

1. *Natural Vegetative Recovery*

   Objective
   This no cost treatment consists of allowing the on-site vegetative material to sprout or germinate to reduce emergency conditions throughout the fire area.

   Methods
   Observe natural vegetative recovery during the first growing season.

2. *Advisory Letter*

   Objective
   The objective is to advise downstream users of the presences of a burned watershed and associated safety and flooding issues.

   Methods
   A letters will be written to the owner of HI-Head Hydroelectric to disclose hazards and associated values at risk associated with ash and sediment generated from the Piute Fire. This is an effective, low cost treatment.

Channel Treatments:
N/A
Roads and Trail Treatments:
N/A
Structures:
N/A

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.)

- The Forest will monitor the effects of the fire on Bristlecone Pine regeneration. This will consist of a site visit once or twice per year. Fires are infrequent in this vegetative type. The visual monitoring will lead to better understanding of fire in this vegetative type.

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

Line Items	Units	Unit Cost	# of Units	WFSU SULT $	Other $	# of units	Fed $	# of Units	Non Fed $	Total $
A. Land Treatments										
Advisory letter	1	250	1	$250	$0		$0		$0	$250
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$250	$0		$0		$0	$250
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										
				$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 Road & Trails				$0	$0		$0		$0	$0
D. Structures										
				$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										
wages				$2,500	$0		$0		$0	$2,500
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$2,500	$0		$0		$0	$2,500
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				**$2,750**	**$0**		**$0**		**$0**	**$2,750**

PART VII - APPROVALS

1. /s/Ronald F. Keil — 10/3/02
   Forest Supervisor (signature) — Date

2. _____ _____
   Regional Forester (signature) — Date