United States Department of Agriculture **Forest Service** **Plumas National Forest**

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File Code: 2520-3 **Date:** December 9, 2003
Route To:

Subject: Storrie Fire, Final Accomplishment Report

To: Regional Forester

Enclosed is the Final BAER Accomplishment for the Storrie Fire (Part I, II, V and Table VI of Form FS_2500-8). Expenditures to date total 94,445 out of the authorized 141,560 (Interim Report 10/02/01). All of the BAER treatments have been completed.

Please contact Barbara Drake, Forest Earth Scientist, at (530) 283-7822, if you need further information.

/s/ James M. Peña
JAMES M. PEÑA
Forest Supervisor

cc: Brent Roath

USDA-FORESTSERVICE
FS-2500-8 (7/00)

Date of Report: 12/01/03

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[ ] 1. Funding request for estimated WFSU-SULT funds
[x] 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

[x] 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Storrie Incident

B. Fire Number: CA-PNF-848

C. State: California

D. County: Plumas

E. Region: 05

F. Forest: Plumas and Lassen

G. District: Mount Hough (PNF) and Almanor (LNF)

H. Date Fire Started: 08/17/00

I. Date Fire Contained: 09/09/00

J. Suppression Cost: $24,000,000

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 110
2. Fireline seeded (miles): 0
3. Other (identify): 0

L. Watershed Number: 1802012104 (1802012102; 1802012206)

M. Total Acres Burned: 56,060
NFS Acres (52,035) Other Federal (**0**) State (**0**) Private (4,026)

N. Vegetation Types: Ponderosa pine-mixed conifer/Bolander's bedstraw-milkwort; Douglas fir-mixed conifer/serviceberry/starflower; White fir-mixed conifer/false soloman's seal-Hooker's fairy bells/Ross sedge/creeping snowberry/kellogia.

O. Dominant Soils: Waca-Wapi-Deadwood-Kistern

P. Geologic Types: Shale and schist with andesitic tuff breccia and granodiorite on steep side slopes.

Q. Miles of Stream Channels by Order or Class:

Ephemeral: 253 mi. Intermittent: 90 mi. Perennial: 91 mi. Total: 433 mi.

R. Transportation System

Trails: 55 miles Roads: 93 miles

PART V - SUMMARY OF EMERGENCY TREATMENT ACTIONS

A. **Emergency Treatment Objectives:**

To reduce the impacts of debris torrents and sediment deposition along Highway 70, the railroad, and at the mouth of Indian Creek. To reduce localized impacts to rare plant populations and heritage resources in the highly impacted areas of the Yellow Creek watershed.

B. **Planned Treatment Narrative:**

Land Treatments: One heritage site is expected to experience surface erosion, potentially damaging the make-up and position of the artifacts. The proposed treatment would apply rice straw mulch to the sites.

It is expected an intrusion of noxious weeds that could compete with the rare plant site recovery will occur. The proposed treatment would allow for manual removal of noxious weeds.

Channel Treatments: Three heritage sites are located next to stream banks expected to experience accelerated erosion due to increased runoff and sedimentation from upstream source areas. Treatment would consist of armoring channel banks associated with each site.

Roads and Trail Treatments: Three crossings are located immediately downstream from an area that was intensively burned and is expected to deliver increased amounts of water, sediment, and woody debris. Treatment would consist of (1) adding culvert pipe risers and associated trash racks and (2) constructing dips and overside-drains to provide controlled drainage if the pipes still plug. The pipes and their risers would be monitored and cleaned when accessible during the wet season.

There are several miles of roads and trails where burned trees are expected to drop unexpectedly, during windy conditions, causing a safety concern. Treatment would consist of identifying and dropping these trees. Many trees have fallen across the trails that are expected to redirect and concentrate surface water flows. These trees have the potential to cause

erosion of trails and gullying to nearby streams. These trees would be cut and relocated to alleviate these problems.

Structures: A wood bridge located along the Pacific Crest Trail and crossing (Little) Indian Creek was damaged by the fire, causing it to collapse into the channel and form a barrier that is expected to collect debris and, possibly, suddenly release the stored water, sediment, and other debris, increasing the magnitude of a flood event. The bridge is located approximately 1500 feet upstream from a small domestic water diversion dam and two homes. In addition, the bridge was pressure treated with pentachlorophenol, a wood preservative and hazardous chemical. Treatment would consist of cutting the bridge into pieces small enough to pack out (removal by helicopter was ruled out because of the danger of removing such unstable material). All wood pieces and sawdust would be captured and removed as well. All material would be disposed of in an appropriate hazardous waste facility.

C. **Treatments Implemented Narrative:**

Land Treatments:
The Arch-site erosion control treatment was implemented as planned.

The plant-site weed control treatment for noxious weeds did not occur using BAER funding. Nap weed was located and pulled using NFVW dollars. BAER funding was redistributed to cover National Fire shortage.

Channel Treatments:

These treatments were not implemented as discussed under Planned Treatment Narrative. According to Dan Elliott BAER team archeologist the recommendation was for avoidance of these sites during implementation of the BAER activities.

Roads and Trail Treatments:

The crossing treatments were implemented as planned.

Roadside hazard trees were removed during fire suppression mitigating the need to expend the 10,000 requested.

The winter patrol and culvert cleanout were not necessary because 2001 and 2002 were dry years. Therefore, 7,500 of the requested funds were not spent.

Structures:

Treatments were implemented as planned.

D. **Planned Monitoring Narrative:**

Land Treatments: The three heritage sites mulched to minimize surface erosion will be inspected for success the first year following treatment.

Approximately 50 acres will be monitored along Road 26N26 for occurrence and intrusion of noxious weeds that could compete with the rare plant site recovery. The rare plant site was completely consumed during the fire, as was the nearby road area. Monitoring would consist of surveying the rare plant site for recovery for 3 to 5 years and the adjacent road for occurrences

of noxious weed, primarily star thistle. The weeds would be grubbed out and monitored for the 3 to 5 year period.

Channel Treatments: The armoring treatment adjacent to three heritage sites would be monitored for success for three years following treatment.

Roads and Trail Treatments: As described above, the function of the three culvert risers would be monitored when accessible, to determine how well they're working, the amount of material stored and whether or not they need to be cleaned to maintain their capacities and functions. These are the upper most culverts in a system of culverts and switchback road segments. It is expected that at least one cleaning will be required the first season.

The roads and trails would be monitored for additional unsafe tree and tread hazards caused by the fire.

E. **Implemented Monitoring Narrative:**

Land Treatments:

The monitoring of heritage site treatments for effectiveness did not occur on the treatment implemented.

The monitoring for noxious weeds did not occur out of BAER funding. This accomplishment was funded out of NFVW funding. Monitoring of the site showed the Nap weed was eradicated.

Channel Treatments:

The monitoring of channel treatments to protect heritage sites did not occur because the treatments were not implemented.

Roads and Trail Treatments:

Monitoring occurred; salaries were reported under implementation and monitoring because they could not be differentiated.

PART VI - SUMMARY OF EMERGENCY RHABILITATION TREATMENTS PLANNED AND IMMPLEMENTED

Table 1. Emergency Rehabilitation Treatments and Source of Funds Comparing Planned and Implemented Costs

		Planned					Implemented			
		Unit	# of	WFSU	Other		Unit	# of	WFSU	Other
Line Items	**Units**	**Cost**	**Units**	**SULT $**	**$**	**Line Items**	**Units**	**Cost**	**Units**	**SULT $**	**$**
A. Land Treatments						**A. Land Treatments**					
Arch Site Erosion Ctl	site	350	3	$1,050		Arch Site Erosion Ctl	site	350	3	$350	
Plant Site Weed Ctl	acres	120	50	$6,000		Plant Site Weed Ctl	acres	120	50	$0	
Subtotal Land Treatments				**$7,050**		*Subtotal Land Treatments*				$350	
B. Channel Treatments						**B. Channel Treatments**					
Arch. Site Protection	site	3000	3	$9,000		Arch. Site Protection	site	3000	3	$0	
PC Trail Bridge	each	23,000	1	$23,000		PC Trail Bridge	each	23,000	1	$18,093	
Subtotal Channel Treat.				**$32,000**		*Subtotal Channel Treat.*				**$18,093**	
C. Road and Trails						**C. Road and Trails**					
Trail Tread Hazard	miles	400	23	$9,200		Trail Tread Hazard	miles	400	23	$17,419	
Trail HazTree Removal	miles	480	23	$11,040		Trail HazTree Removal	miles	480	23	$ reflected above	
Hazard Trail Signs	each	120	6	$720		Hazard Trail Signs	each	120	6	$0	
Dip + Drain	each	4500	3	$13,500		Dip + Drain	each	4500	3	$23,500	
Culvert Risers	each	5000	3	$15,000		Culvert Risers	each	5000	3	$ reflected above	
Rd HazTree Removal	miles	250	40	$10,000		Rd HazTree Removal	miles	250	40	$0	
Floodpatrol/Maintain	visits	1500	3	$4,500		Floodpatrol/Maintain	visits	1500	3	$0	
Culvert Inlet Cleanout	each	1000	3	$3,000		Culvert Inlet Cleanout	each	1000	3	$0	
						Mics WCF	each		3	$466	
Subtotal Road & Trails				**$66,960**		*Subtotal Road & Trails*				**$41,386**	
E. BAER Evaluation						**E. BAER Evaluation**					
Salary, Travel, Etc.	Days	2150	72	$17,750		Salary, Travel, Etc.	Days	2480	5	$17,562	
GIS Contract	hours	100	120	$12,000		GIS Contract	hours	100	120	$12,257	
Subtotal BAER Evaluation		2250	192	**$29,750**		*Subtotal BAER Evaluation*				**$29,819**	
F. Monitoring						**F. Monitoring**					
TES Plant Weed	days	500	4	$2,000		TES Plant Weed	days	500	4	$0	
Rd/Trail HazTree	days	300	6	$1,800		Rd/Trail HazTree	days	300	6	$0	
Culvert Inlet Succes	days	250	3	$750		Culvert Inlet Succes	days	250	3	$ reported in salary	
Arch Site Success	days	500	4	$2,000		Arch Site Success	days	500	4	$0	
Subtotal Monitoring				**$6,550**		*Subtotal Monitoring*				**$0**	
Salary Impliment & Monitorin	days	unk	26	$0		Salary Impliment & Monitor	days	unk	unk	$4,797	
G. Totals				**$142,310**		**G. Totals**				**$94,445**	