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

Date of Report: 8-9-04

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: Kibbie Complex

B. Fire Number: CA-YNP2085

C. State: CA

D. County: Tuolumne

E. Region: 05

F. Forest: STN

G. District: Groveland

H. Date Fire Started: 9-25-03

I. Date Fire Contained: 10-1-03

J. Suppression Cost: 3.9 million suppression and fire use

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 2.2 miles
2. Fireline seeded (miles): 0
3. Other (identify):

L. Watershed Number: 1804000902

M. Total Acres Burned: 772
NFS Acres(590) Other Federal (182) State ( ) Private ( )

N. Vegetation Types: Mixed Conifer, Pondersosa Pine, Ponderosa Pine-Interior Live Oak

O. Dominant Soils: Fiddletown Family; also deep and mod. deep, coarse text., weakly developed, very cobbly Xerumbrepts of glacial origin

P. Geologic Types: granite and granitic glacial till deposits

Q. Miles of Stream Channels by Order or Class: 2.1 intermittent 6.6 ephemeral

R. Transportation System

Trails: 1 miles Roads: 3.7miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 579 (low) 147 (moderate) 46 (high)

B. Water-Repellent Soil (acres): 14

C. Soil Erosion Hazard Rating (acres):
591 (low) 135 (moderate) 46 (high)

D. Erosion Potential: 1.5 tons/acre

E. Sediment Potential: 288 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent): 90

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

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 2.8

F. Design Flow, (cubic feet / second/ square mile): 60

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

H. Adjusted Design Flow, (cfs per square mile): 66

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

The Setting: Wildfire burned 772 acres of mountain slopes above Cherry Lake. The water in the lake is used by the City and County of San Francisco to generate power. The lake is generally not used as a municipal water supply. The burned area is characterized by benchy topography, sandy glacial soils with high infiltration rates, a mosaic burn pattern, with much of the burn occurring in the upper one third of the watershed. Intermittent and ephimeral channels drain to the footslopes of Cherry Lake. There are no perennial channels in the burn area. Six percent of the burn area is mapped as high severity. Nineteen percent of the burn area is moderate severity. Extensive needle cast is expected under the canopy of moderately burned trees.

No Emergency: There is no emergency related to soil loss, sediment delivery, flooding, roads, fences, or heritage resources. Soil loss is expected to be low (1.5 tons per acre for the burn area, 0.5 tons in low/unburned, 3 tons in moderate burn, and 10 tons per acre in high severity burn). Loss of soil productivity is not likely. Likewise, sediment delivery is expected to be low, particularly given the mosaic nature of the burn, with much of the burn occurring in the upper one third of the slope.

Roads are built on benches and have a low gradient. Culvert crossings were inspected and found to be free of sediment and debris. Culverts are well sized for the expected flows. The road surface was freshly graded and well watered to minimize loss of fines. The road system is in good shape relative to fire-related erosion and runoff concerns. No further treatment is recommended on roads.

A section of fence located on the boundary of YNP and NFS lands is burned. The area is within an allotment, however cows stay out of the burn area. District personal state that cows remain west of the dam on Cherry Lake. We are not proposing any fence construction or repair to protect treated areas from livestock.

The District Archaeologist visited sites in the burn on October 7, 2003. He documented post-fire conditions and potential for erosion damage. The Kibbie Fire caused minimal damage to the cultural components of the archaeological sites. All of the sites were in portions of the fire that burned with a low intensity. The duff layer was converted to ash, sometimes very patchy, and the fire did not reach the canopy of trees or even completely remove the ladder fuels (brush and ground vegetation). Any exposed ground can be expected to be covered with needle and leaf cast in the first wind or storm. No archaeological values were identified as at risk from potential erosion or soil movement in the Kibbie Fire. No prescriptions related to heritage resource concerns are required at this time.

Emergency: There is an emergency finding related to (1) the safety hazard created by burned trees that may fall along a hiking trail; (2) the loss of water control on the trail, and (3) the risk of noxious weed invasion and loss of sensitive plant populations.

B. Emergency Treatment Objectives:

1) Prevent loss of life and risk to human safety.
2) Reduce threat to property on trail
3) Reduce risk of noxious weed invasion and loss of sensitive plants.

Sensitive Plants: The objective of the treatment for Sensitive Plants is to provide any survivors with a chance of making it until the vegetation recovers enough to provide shading.

Noxious Weeds: The objective of the treatment for noxious weeds is to determine if weeds were introduced to the burn area by the suppression efforts and to remove those discovered.

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

Land **NA** % Channel **NA** % Trails **90** % Other __ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	NA	NA	NA
Channel	NA		
Roads	NA		
Trails	90	90	90
Other	NA		
Noxious Weeds	90	90	90

E. Cost of No-Action (Including Loss): 45,000

F. Cost of Selected Alternative (Including Loss): 18,550

G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology [x] Soils [ ] Geology [ ] Range [ ]
[ ] Forestry [ ] Wildlife [ ] Fire Mgmt. [x] Engineering [ ]
[ ] Contracting [ ] Ecology [x] Botany [x] Archaeology [ ]
[ ] Fisheries [ ] Research [ ] Landscape Arch [ ] GIS

Team Leader: Alex J. Janicki

Email: ajanicki@fs.fed.us Phone: 209-532-3671 x273 FAX: 209-533-1890

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: NA

Channel Treatments: NA

Roads and Trail Treatments: Treatment is recommended on approximately one mile of trail within the wildfire portion of the burn. The work will involve replacing burned out wooden water bar structures, berm removal where necessary to create proper water drainage, clean-out of rock waterbar structures, or installation of earthen swales where no suitable building materials are present (basicly restore function to drainage structures to control runoff and reduce erosion along the trail).

The recommended work was completed on approximately one mile of trail.

Hazard trees will be evaluated and dropped as needed to provide for crew and future public safety. The prescription will be to drop trees that are likely to fall within the next year. This is a high use trail that provides access to the Emigrant Wilderness and YNP.

Hazard trees were evaluated and dropped as needed.

Appropriate signing is recommended to warn the public of hazards created by the wildfire. Three signs are proposed. Recommended placements are at the entry into the burn and at two parking/trailhead locations.

Signs are made and will be placed this month.

Structures: NA

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.)

Noxious Weeds:

1) In June or early July 2004, and in August 2004, conduct monitoring for noxious weeds in the areas where dozers cleared the roads and the grader graded the road. The early visit is needed to ensure that the weeds are caught before going to seed. The later visit is needed to ensure that weeds which germinate later are discovered.

2) Any noxious weeds discovered in these areas would be hand pulled or dug, double bagged and disposed of.

Ladyslipper

1) In early June, 2004, conduct a field visit to the known occurrence locations to determine if the plants survived the fire. If no survival is detected, no further treatment is warranted in 2004. However, monitoring of these sites should be conducted by the District in subsequent years to ensure that the plants didn't simply stay dormant for a growing season or two, as they are known to do sometimes under normal circumstances.

Sensitive Plants:

2) If plants are found to have survived in 2004, assess the need for a temporary shade structure. Construct this if deemed necessary. A shade structure could be a simple "A-frame" or teepee structure, constructed from shade cloth or burlap suspended from a wooden frame (see diagram in Appendix). Local, on-site materials could be used to the extent possible. This shade structure would need to be maintained by the District until such a time as the vegetation in the area recovers enough to provide shading for the plants.

3) In August, 2004, monitor the shade structures for effectiveness in protecting the ladyslipper orchids from the hot sun. Make adjustments to the structures if needed. Document findings.

Monitoring and eradication treatment for noxious weeds will be completed this summer.

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										
				$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										
Fix Trail Drainage	mile	6,000		$6,000	$0		$0		$0	$6,000
Fall Hazard Trees	LS	1,000		$1,000	$0		$0		$0	$1,000
Warning Signs	ea	500		$1,500	$0		$0		$0	$1,500
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$8,500	$0		$0		$0	$8,500
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										
Survey	LS	8,100		$8,100	$0		$0		$0	$8,100
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$8,100	$0		$0		$0	$8,100
F. Monitoring										
Noxious Weeds	LS	1,100		$1,100	$0		$0		$0	$1,100
Lady Slipper	LS	850		$850	$0		$0		$0	$850
Subtotal Monitoring				$1,950	$0		$0		$0	$1,950
G. Totals				**$18,550**	**$0**		**$0**		**$0**	**$18,550**

W

PART VII - APPROVALS

1. _____ _____
Forest Supervisor (signature) Date

2. /s/ Sonia Tamez (for) 10/15/2003
Regional Forester (signature) Date

Accomplishment Report

a.janicki, 7/2004

Narrative of Treatments and Costs

Land Treatments - None

Channel Treatments – None

Road and Trail Treatments

Drainage function was restored to approximately one mile of trail within the wildfire portion of the burn. Hazard trees close to the trail were dropped. Warning signs are made and are expected to be placed this month. Total cost for trail and warning sign treatments is $8,370. Planned cost was $8,500.

Structures – None

BAER Evaluation Costs

Planned cost was $8,100. Actual cost is $6,960.

Noxious Weed Monitoring and Eradication Costs

The weed monitoring and eradication will occur this summer. A monitoring report will be forwarded upon completion of the noxious weed treatment this year. Actual cost is expected to be the planned amount of $1,950.