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

Date of Report:

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

[ ] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)

[X] 2. Interim Report
[X] 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: Plum Complex

B. Fire Number: ENF018738

C. State: CA

D. County: El Dorado

E. Region: 5

F. Forest: Eldorado

G. District: Placerville

H. Date Fire Started: 11/26/02

I. Date Fire Contained: 11/30/02

J. Suppression Cost: 1.2 million

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

L. Watershed Number: 1802012903

M. Total Acres Burned: 1771
NFS Acres(987) Other Federal ( ) State ( ) Private (784)

N. Vegetation Types: Mixed Conifer, Oak-Brush

O. Dominant Soils: Volcanic+

P. Geologic Types: Volcanic

Q. Miles of Stream Channels by Order or Class:

Sum of stream miles		Stream ORDER				
SHEDNAME	SEVERITY	1	2	3	4	Grand Total
MILL CR	green	1.0	0.2	0.1	2.8	4.1
	low	1.3	0.0			1.3
	mod	0.1	0.1			0.2
MILL CR Total		2.4	0.3	0.1	2.8	5.7
PLUM CR	green	0.3	0.2	0.1		0.5
	low	6.0	2.3	2.0	0.1	10.5
	mod	0.4	0.1			0.4
PLUM CR Total		6.6	2.6	2.0	0.1	11.4
RIVERTON	green	0.2	0.0			0.2
	low	0.7	0.3			1.0
	mod	0.2	0.1			0.3
RIVERTON Total		1.1	0.4			1.5
Grand Total		10.5	3.2	2.2	2.9	18.9

R. Transportation System

Trails: 0 miles Roads: 13 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 1123.323 (low) 150.11 (moderate) 19 (high)

B. Water-Repellent Soil (acres): 160

C. Soil Erosion Hazard Rating (acres):
3 (low) 132 (moderate) 1629 (high)

D. Erosion Potential: ____ tons/acre

E. Sediment Potential: ____ cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

No treatments requiring hydrologic design factors are proposed

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

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

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

D. Design Storm Duration, (hours): ____

E. Design Storm Magnitude, (inches):

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

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

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

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

Threat to terrestrial ecosystem: The introduction and spread of existing noxious weeds to recovering native ecosystems in the Plum Complex Fire area will impose a threat on the natural recovery of native plant species, thereby causing a long term threat to the terrestrial ecosystem integrity. Current inventory of noxious weeds in and around the Plum Fire include Scotch broom, yellow starthistle, cheatgrass, goatgrass, and skeletonweed, in addition to numerous other invasive exotics such as bull thistle, Klamath weed, and wooly mullein. Known occurences of up to 35 acres of yellow starthistle and cheat grass are present in the fire area. Occurences of Scotch broom and skeletonweed are located along the roads leading to the fire area. It is expected that the exisitng populations will grow rapidly with new opportunities provided by the fire.

There is no watershed emergency defined. The area burned was mostly low severity, with little effect to runoff properties. The first major rainfall event of this water year occurred a few weeks prior to this fire, with as much as 7inches of precipitation falling within the burned area. Soil moisture content prior to the fire was fairly high. The area burned was surrounding large, up to 40acre clear-cuts. (Wind blown embers from burn piles within the clear cuts were the source of the fire.) The eastern edge of the fire was also previously partially burned during the Cleveland fire in 1992. Since 1992, this area experienced the1997 precipitation that lead to the Jan.3 flood of record event, and additional high magnitude precipitation events in subsequent years. Erosion potential after the Cleveland fire would have been very high, leaving a shallow soil profile available for erosion from this new fire. Fuels burned were grasses, sparse brush, large pine trees, and pine trees that were 8-10yr. old. Fire consumed vegetation completely in only a few areas. A number of bushes and pine trees retained their leaves and needles,

so there is some material available for recruitment for cover. Hydrophobic soils were found only in moderate-high severity burned areas that were mostly dispersed in patches through out the upper portions of the burn. Of the 169 acres of moderate to high severity, 126 acres were on soils with high to very high erosion hazard potential. The burned area is directly above Highway 50. There is a wide buffer of brush and hillslope with vegetation still intact along the highway, which should act as a buffer should any sedimentation occur.

B. Emergency Treatment Objectives:

Provide management actions and recommendations to assist in protection from noxious and invasive exotic weed introduction/spread.

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

Not applicable. Treatment is time critical and will occur next spring/early summer.

Land __ % Channel __ % Roads __ % Other __ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	75	85	99
Channel			
Roads			
Other			

E. Cost of No-Action (Including Loss): **$5250**

F. Cost of Selected Alternative (Including Loss): **$2300**

G. Skills Represented on Burned-Area Survey Team:

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

Land Treatments: There is an existing Environmental Analysis (ENF's Yellow Starthistle Control EA 2001) which addresses the need and a proposed action to treat the known populations of starthistle within the burned area. It is anticipated that the prodicted postfire expansion of the population will be up to 25% of additional population area. The proposed treatment would treat these additional up to 8.75 acres. To be effective, it is anticipated that the population will need to be treated with herbicides for three years. All other costs related to noxious weeds within the Plum fire would be paid for by the home unit.

Channel Treatments:

Roads and Trail Treatments:

Structures:

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 Weed Monitoring will be implemented on all firelines and roads to determine whether fire supresion activities have resulted in the introduction and spread of noxious

weeds into the fire area. Monitoing areas utilized for fire suppression activities will be key in prevention of these weeds becoming a serious pest in those areas and adjacent areas in the burn. These areas include dozer and hand lines, roads, known occurences, staging ares and adjacent burned areas to determine presence or absence of noxious weeds.

Monitoring Plan

MONITORING AND SURVEYS OF CURRENTLY UNINFESTED AREAS

Monitoring those areas that were utilized during fire suppression activities will be key in prevention of noxious weeds becoming serious pests in those areas of the burn.

Who – monitoring surveys will be performed by GS-7 bio-technicians.

Where – monitoring areas include dozer and hand lines, drive roads, staging areas and adjacent burned areas. Approximately 15 miles of road (10 mile perimeter and 5 interior that were opened up by dozers) and used as fire lines and approximately 5 miles of hand and dozer lines that were created by the suppression effort.

Why - to determine presence or absence of noxious weeds.

What – surveys and hand weed pulling along the fire lines and other potential introduction areas.

When – summer season of 2003, 2004 and 2005.

Cost – it is estimated that the surveys/hand treatments will take two GS-404-07 bio- techs five 10-hour days to complete. This would allow for travel, surveys, and any needed reporting time. The estimated cost of survey/monitor/hand treatments for (small) new weed infestations is:

$1,500 per year for three years = total cost $4,500.

This addresses the long-term potential for weed spread (long-lived seed bank, new disturbances caused by restoration or reforestation, etc.). Longer-term monitoring, beyond the scope of BAER, is also advisable.

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

			NFS Lands				Other Lands			All
		Unit	# of	WFSU	Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT $	$	units	$	Units	$	$
A. Land Treatments										
Noxious weeds yr.1	ea./ac	150	8.75	$1,313			$0		$0	$1,313
Noxious weeds yr.2	ea./ac	150	4.37	$650			$0			$650
Noxious weeds yr.3	ea./ac	150	2.18	$327			$0		$0	$327
				$0			$0		$0	$0
Subtotal Land Treatments				$2,290			$0		$0	$2,290
B. Channel Treatments										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Channel Treat.				$0			$0		$0	$0
C. Road and Trails										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Road & Trails				$0			$0		$0	$0
D. Structures										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Structures				$0			$0		$0	$0
E. BAER Evaluation										
BAER Team				$3,700			$0		$0	$3,700
				$0			$0		$0	$0
F. Monitoring									$0	
Noxious Weeds	total/yr	350	3	$1,050			$0		$0	$1,050
G. Totals				**$7,040**			**$0**		**$0**	**$7,040**

* Requested Funding (RED)

PART VII - APPROVALS

1. s// John Berry — 4/22/04

   Forest Supervisor (signature) — Date

2. _____ — _____

   Regional Forester (signature) — Date