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

Date of Report: 10/11/05

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: Wooley

B. Fire Number: CA-KNF-004452

C. State: CA

D. County: Siskiyou

E. Region: 5

F. Forest: Klamath

G. District: Scott River/Ukonom

H. Date Fire Started: Sept. 20, 2005

I. Date Fire Contained: Not contained at this time

J. Suppression Cost: $439,000

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 0.50
2. Fireline seeded (miles): none
3. Other (identify):

L. Watershed Number: 1801021104

M. Total Acres Burned: 3,131 as of 10/3/05
NFS Acres(**3,131**) Other Federal ( ) State ( ) Private ( )

N. Vegetation Types: Douglas fir/canyon live oak; Douglas fir/black oak

O. Dominant Soils: Deadwood, Neuns, Kindig, Chaix, Chawanakee

P. Geologic Types: Metasedimentary (94%) and granitic (6%)

Q. Miles of Stream Channels by Order or Class: Order 1 = 6.5 miles; Order 2 = 2.75 miles; Order 3 = 2.5 miles; Order 4 = 4.5 miles

R. Transportation System

Trails: 5 miles Roads: none miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 2,073 (low) 200 (moderate) 75 (high) 783 (unburned)

B. Water-Repellent Soil (acres): 200 (moderately repellent)

C. Soil Erosion Hazard Rating (acres):
100 (low) 300 (moderate) 2,731 (high)

D. Erosion Potential: 1.0 tons/acre

E. Sediment Potential: 134 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 3-5

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): 3.0

F. Design Flow, (cubic feet / second/ square mile): 149

G. Estimated Reduction in Infiltration, (percent): 25%

H. Adjusted Design Flow, (cfs per square mile): 186

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

On September 20, 2005 a fire was discovered in near the confluence of Wooley and North Fork Wooley Creeks within the Marble Mountain Wilderness. It was declared a wildfire when lightening could not be substantiated as the cause. A large percentage of the fire is located on south facing aspects. Elevation of the fire ranges from 2,000 to 5,000 feet. There are numerous intermittent channels within the fire area. Wooley Creek and the North Fork Wooley Creek are high value anadromous fish streams. Wooley Creek is a tributary of the mainstem of the Salmon River. The Wooley Creek trail parallels Wooley Creek at the base of the fire. The trail is 100 to 200 feet from the creek. Large portions of the trail are located on old terraces and other portions are located on steep (60%+) slopes which extend down to the creek and/or its floodplain. There were only 2 waterbars observed along this section of trail within the fire area. The fire area has received 1 inch of rain and no obvious erosion was observed. The only areas where potential fire and trail erosion could be

deposited into Wooley Creek or on its floodplain are along sections of the trail that have 60%+ sidelopes. Due to the predominately low burn severity of this wildfire, there is no watershed or fisheries emergencies. The emergency consists of protecting the public from the many dangerous fire caused hazards on the trail.

Threat to Life

The fire area is located 18 miles from both the Wooley Creek and Lover's Camp trailheads. Hiker safety is very important due to the remoteness of the fire area. It is estimated that 2,000 hikers use this trail during the summer months. Hazards consisting of falling trees above the trail, large diameter logs blocking the trail, areas where burned out roots have left hollow cavities beneath the trail, where burned out stumps have resulted in portions of the trail sluffing downslope with loss of the trail tread, and areas where the trail is buried beneath dry ravel have been observed and measured.

Threats to Aquatic Resources

Watershed

Aerial burn severity mapping identified that approximately 92% of the fire area burned with a low severity (unburned areas included in the low burn severity class), 6% as moderate and 2% as high. Due to the high amount of low burn severity, unburned area and new needle cast soil cover, soil erosion is calculated to be very low (1 ton/acre). Because of these reasons, no watershed emergency was identified. The only real threat to watershed values is from hikers creating many short secondary trails by traveling around downed logs.

Fisheries

Summary

Wooley Creek contains coho salmon, fall Chinook, spring Chinook, summer and fall/winter steelhead. Coho salmon is listed as a threatened species under the federal and state Endangered Species Act (ESA). Wooley Creek annually contains about 10-30% of the spring Chinook population in the Salmon River. In 2005 Wooley Creek contained only 9 spring Chinook (springers); the entire Salmon River contained only about 80 springers. Coho salmon are estimated to spawn and rear in the lower 1-2 miles of Wooley Creek. It is expected that impacts from increased ash and fine sediment from the Wooley Fire will be within the natural variability from historic (natural) low intensity wildfire to which the various fish species within Wooley Creek (and the Salmon River) are adapted. Stream temperatures are not expected to be significantly affected due to the low amounts of high and moderate severity burn (most streamside canopy is retained).

B. Emergency Treatment Objectives:

The primary objective of the emergency treatments is to maintain public safety by reducing the threat to hikers on the trail over the next few years. The trail is currently closed to the public due hazardous conditions from the fire and willremainclosed until the fire is declared out which should be by the end of October. This closure affects 30 miles of trail.

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

Land **NA** % Channel **NA** % Roads **NA** % Trail **NA** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Signing	100	NA	NA

Fallback Treatments

Since the recommended action is to close the trail until spring when trail work can commence, there is no need for fall back treatments.

E. Cost of No-Action (Including Loss): $450,000 (5 miles of trail) and $1,250,000 (entire 30 miles of trail)

F. Cost of Selected Alternative (Including Loss): $5,000

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Tom Laurent

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H. Treatment Narrative:

Trail Treatments:

Trailhead signs: Signs will be posted at the major trailheads (Wooley Creek, Lovers Camp) in order to inform hikers of the potential hazards. These signs will inform the hikers to not linger in the fire area because of hazardous conditions such as falling trees and rolling debris.

I. Monitoring Narrative:

Noxious weed detection survey will be done in 2006 at Bear Skull Camp which was used as a small spike camp and supply storage area for the suppression effort. The survey will focus on yellow starthistle and Dryer's woad because these weeds are present in Scott Valley and that is where the helicopter sling loads originated from. This survey will consist of 3 days each year for 3 years. Each trip consists of 1 day for hiking in (18 miles), 1 day for surveying of the spike camp and along the trail within the fire area and the third day for hiking out. A helicopter may be used if available. Suvrey costs are for a 2 person team. If noxious weeds are detected early in 2006, an interim report will be submitted promptly to request funding for treatment. If noxious weed treatments are carried out within one year of the fire containment date, then additional funding for BAER treatment effectiveness monitoring and any further treatment, if necessary, can be requested in future years. A noxious weed detection survey report will be submitted in 2006 to verify the absence or need for noxious weed control.

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

A. Land Treatments											
None											
B. Channel Treatments											
None											
C. Road and Trails											
				$0				$0		$0	$0
Signs	each	150	3	$450				$0		$0	$450
				$0				$0		$0	$0
Subtotal Road & Trails				$450				$0		$0	$450
D. Structures											
None				$0				$0		$0	$0
Subtotal Structures				$0				$0		$0	$0
E. BAER Evaluation											
Team	team	2550	1	$2,550				$0		$0	$2,550
Subtotal Evaluation				$2,550				$0		$0	$2,550
								$0		$0	
F. Monitoring				$0				$0		$0	$0
Noxious weeds	invent.	2000	1	$2,000				$0		$0	$2,000
Subtotal Monitoring				$2,000				$0		$0	$2,000
G. Totals				**$5,000**				**$0**		**$0**	**$5,000**

PART VII - APPROVALS

1. /s/ Margaret J. Boland — 10/14/05
   Forest Supervisor (signature) — Date

2. /s/ Thomas L. Tidwell (for) — 11/14/05
   Regional Forester (signature) — Date