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

Date of Report 8/18/03

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: Maverick

B. Fire Number: P27552-0215

C. State: Colorado

D. County: Mesa

E. Region: 02

F. Forest: Uncompahgre

G. District: Grand Valley

H. Date Fire Started: 7/22/03

I. Date Fire Contained: 7/28/02

J. Suppression Cost: (as of 7/27/03) $527,852

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 600 ft on FS lands
2. Fireline seeded (miles): 600ft on FS lands
3. Other (identify):

L. Watershed Number: 140 3000 442 0201 Calamity Cr.

M. Total Acres Burned: 1161
NFS Acres(390) Other Federal BLM (771) State ( ) Private ( )

Resource Information and Proposed Treatments are for FS Lands

N. Vegetation Types: Pinion Pine/Juniper/Oak/Sage (mostly PJ on BLM area)

O. Dominant Soils: 40% Arabrab-Dahlhart Families Complex, 3 to 15% Slopes
60% Ustorthents-Ustochrepts-Rock Outcrop Complex, 40-150% Slopes

P. Geologic Types: Kayenta Formation….Various Sandstones

PART III - WATERSHED CONDITION

A. Burn Severity (acres): ___ (low) *esti.* 234acres ___ (moderate) *esti.* 156 acres ___ (high)

B. Water-Repellent Soil (acres): *esti. 20-30 acres*

C. Soil Erosion Hazard Rating (acres):
156 acres (low) ___ (moderate) 234 acres (high)

D. Erosion Potential: 3.4-7 tons/acre, (based on USLE calculations found in the Uncompahgre Soil Survey Report).

E. Sediment Potential: 150-200 cubic yards / square mile(Based on Bucktail Fire Baer Analysis in similar terrain and vegetation, and climatic situations).

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent): 60-80%

PART V - SUMMARY OF ANALYSIS

A. Describe the Burn situation:
It has been determined that as a result of this fire and its location, there is an extreme risk that cheat grass will expand into the area that has burned. This presents a potential for the loss of ecological integrity of this plant community if this non-native invasive species expands into these areas. Adjacent BLM land that had hydro-axe treatments and prescribed fires have been invaded by a high density stand of cheat grass. (see map # 1, faxed to Jerry Freeouf on 8/15/2003) It is our concern that unless native vegetation is quickly re-established, the invasion of cheat grass in this area will significantly alter the fire regime and eliminate native perennial species. This would have the potential to fragment critical wildlife habitat and the ecological integrity of the native plant community on the northwest portion of the Uncomphagre Plateau.

B. Emergency Treatment Objectives: To establish native perennial vegetation as soon as possible to prevent a large invasion of cheat grass into this burn area. This will also prevent erosion and protect soil productivity.

C. Probability of Completing Treatment before cheat grass invades site:

Land **80** % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	80%	85%	95%
Channel			
Roads			
Other			

E. Cost of No-Action (Including Loss): BAER Evaluation+ resource values that will be lost for an estimated 20 years===$51,360

F. Cost of Selected Alternative (Including Loss): $25,997

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Terry J. Hughes

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-Treatments Proposed-

We propose to aerially seed the burned area with a mixture of native perennial grass species and possibly a non-persistent annual cover crop then scarify the soil and cover the seed by dragging a smooth anchor chain between two D-9 Caterpillar tractors for one pass. Numerous studies have shown that broadcast seed must be covered in order to stand a reasonable chance of seeding success in these vegetation types due to lower precipitation levels. A study done in Juab County, Utah showed that seedling establishment improved 98 percent where aerial broadcast seed was single chained as compared to aerial seeding alone. Fire killed trees would be knocked down by the chain only to create a suitable seedbed for germination and establishment of the seeded species. The majority of burned trees would be left standing due to being located in areas too steep and rocky

to use the tractors and chain. Approximately 200 acres of the 390 would be treated by chaining, with the remainder being aerially seeded alone. This work will be in cooperation and in conjunction with Restoration activities conducted on the BLM portion of this fire. The use of the same equipment and operators is planned.

Proposed native seed mix;
Western Wheatgrass----4# of pls/acre
Slender Wheatgrass----- 3# of pls /acre
Indian Ricegrass----------3# of pls /acre
Total 10#/acre

I. Monitoring Narrative:

Ocular macroplot monitoring will occur a few times a year for the next 2-3 years (following prodicalls described in R-2's Range Analysis Handbook), to determine seedling success or failure and monitor any increase in cheat grass populations.

References:

Monson, Stephen B.; Stevens, Richard, comps. 1999. Proceedingd: ecology and management of pinyon-juniper communities within the interior west; 1997 September 15-18; Provo, UT. Proc. RMRS-p-9. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 411 p.

USDA Forest Service, 2001. White paper from BAER website. Noxious and Invasive Weed Treatment.

Smith, David N.; USFWS. Invasive Plants , Weeds/Seeding. Presentation notes from BAER training June,2002., Reno Nevada

USDI,BLM; 1996, Fire rehabilitation Program, Fire Rehabilitation Primer. Found on web site: http://www.ut.blm.gov/firerehab/rehabpri.html

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										
Seed	acre	34.75	390	$13,553	$0		$0		$0	$13,553
application	acre	7	390	$2,730	$0		$0		$0	$2,730
site prep				$5,500						$5,500
Arch. Clearance				$2,000						$2,000
Misc.& supplies				$1,000						$1,000
seed testing				$1,000	$0		$0		$0	$1,000
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$25,783	$0		$0		$0	$25,783
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										
Baer prep	plan	1,500		$1,500	$0		$0		$0	$1,500
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$1,500	$0		$0		$0	$1,500
F. Monitoring										
monitoring	acres	3.85		$1,500	$0		$0		$0	$1,500
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$1,500	$0		$0		$0	$1,500
G. Totals				**$28,783**	**$0**		**$0**		**$0**	**$28,783**

PART VII - APPROVALS

1. /s/ Steve L. Marquardt (for) — 18 August 2003
   Forest Supervisor (signature) — Date

2. **/s/Greg Griffith (for)** — **Aug 27, 2003**
   Rick D. Cables — Date
   Regional Forester (signature)