USDA-FOREST SERVICE FS-2500-8 (7/00)
Date of Report: 9/2/2001

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: Worthington

B. Fire Number: ID-STF-029

C. State: 16 Idaho

D. County: 031 Cassia

E. Region: 04

F. Forest: 14 Sawtooth

G. District: 01 Burley-Twin Falls

H. Date Fire Started: 7/15/2001

I. Date Fire Contained: 7/16/2001
Date Fire Controlled: 7/17/2001

J. Suppression Cost: $100,000 (est.)

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): No fireline – rain put out fire before crews arrived.
2. Fireline seeded (miles): 00
3. Other (identify): 00

L. Watershed Number: 170402110309 Beaverdam Creek (Goose Creek subbasin)

M. Total Acres Burned: 660
NFS Acres(555) Other Federal (0) State (0) Private (105)

N. Vegetation Types: Sagebrush-grass, Juniper

O. Dominant Soils: Typic Vitrandepts coarse loamy mixed frigid; Lithic Haplochrepts coarse loamy /loamy skeletal mixed frigid

P. Geologic Types: welded volcanic ash and basalt

Q. Miles of Stream Channels by Order or Class:
3 miles of 1st and 2nd order ephemeral stream only. Channels are discontinuous.

R. Transportation System

Trails: 0 miles Roads: 3 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 150 (low) 265 (moderate) 215 (high) 30 acres unburned

B. Water-Repellent Soil (acres): 200

C. Soil Erosion Hazard Rating (acres): estimated
100 (low) 200 (moderate) 360 (high)

D. Erosion Potential: ____ tons/acre

E. Sediment Potential: ____ cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

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

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

D. Design Storm Duration, (hours): NA

E. Design Storm Magnitude, (inches): NA

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

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

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

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

This is a lightning-caused fire that does not appear to have created any significant threats to human life or property. It spread rapidly, estimated that in less than two hours the fire was 500 acres. Significant rainfall then put out the fire before suppression crews could arrive.

Most of the soil is a highly erosive volcanic ash that has had significant on-site movement by wind and water in the short time since the fire. The burned area has a substantial amount of juniper and juniper invasion into the sagebrush-grass community. The grass will generally recover well, in spite of the sagebrush dominance that was severely impacted. However, much of the juniper had achieved a dominance without significant other vegetation. The burned juniper without much grass among it will need seeding in order to establish some ground cover and limit erosion. Significant erosion is expected to wash through the ephemeral drainages and gullies to Beaverdam Creek and on to Goose Creek, both of which are on the 1998 303(d) list of water quality impaired streams.

The main concern is to protect the burned area from grazing for a full three growing seasons, to limit erosion by providing adequate road drainage and by seeding where no regrowth or seed source is expected, and to be sure that the burn will not allow more encroachment of noxious weeds. Weeds now in the area are Whitetop and Leafy Spurge. Monitoring and protection of sensitive species, Idaho penstemon and Goose Creek milkvetch, is also important. The area is also well-roaded by low-standard roads that need waterbars and other drainage to prevent excessive rutting and cutting by increased flows from the burned area.

Three sides of the burned area are enclosed by an unburned unit fence and by private land that will require fence by landowners if they intend to graze. The east side of the burn will require a temporary fence to allow the unit to be grazed, as expected, because of needs resulting from other parts of the allotment also having experienced substantial burns last year.

B. Emergency Treatment Objectives:

The goal of the burned area emergency rehabilitation is to:

- Protect the existing perennial plant communities from grazing for a minimum of three growing seasons.
- Protect site productivity and water quality.
- Prevent encroachment by noxious weeds into the plant communities.
- Establish native vegetation where existing plants were all killed by the fire.
- Improve drainage on the roads to accommodate increased flow off the burned area.

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

Land 80 % Channel ___ % Roads 90 % Other ___ %

D. Probability of Treatment Success – 100% - control of grazing

E. Cost of No-Action (Including Loss): $120,000

F. Cost of Selected Alternative (Including Loss): $56,000

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Valdon Hancock

Email: vhancock@fs.fed.us Phone: 208.737.3215 FAX: 208.737.3236

H. **Treatment Narrative:**

Livestock need to be removed as soon as possible, to protect beginning sprouts of grass, etc. in the burned area.

Land Treatments: Seed 200 acres of burned land with little or no grass, previously mostly a monoculture of juniper, with 3 native grass species: 40% bluebunch wheatgrass, 40% slender wheatgrass, and 10% basin wildrye, plus 10% forbs, at 12 pounds live seed/acre (about 38 seeds/square foot) certified noxious weed free, to be seeded by helicopter. Half of this seed is available, but includes 5% alfalfa; this contributed seed will be used in Section 22, away from the populations of sensitive plants near the area. The remainder of the seed is all native species.

Channel Treatments: None. Channels are discontinuous and ephemeral.

Roads and Trail Treatments: One mile of low standard roads over the 2 ½ miles need water bars and other drainage. This is a remote area and will require extra expense to access. This needs to be done soon to limit erosion associated with the roads.

Structures: Two miles of temporary fence will be installed to protect the burned area from grazing for three growing seasons. The fence will only cost about $3000 per mile to last 3 years because of the favorable location. After 3 years, the fence will be removed, but the value of salvageable materials should cover the cost of removal.

Noxious Weed Treatments: The spread of existing noxious weeds (whitetop, leafy spurge, black henbane, and cheat grass) can be expected as a result of the fire. Any invasion of noxious weeds as identified by the State of Idaho, the "All States Noxious Weeds List", or the Federal Noxious Weeds List will be targeted for immediate irradication using appropriate herbicides and application techniques. This treatment will take place under the direction of the Burley/Twin Falls District Ranger in accordance with the Forest Noxious Weed Management Plan and Environmental Analysis. These actions will be coordinated with local State and County agencies. The amount of treatment will be based on monitoring the burned area and access routes for weed invasion and spread. It is reasonable to expect the spread over about 210 acres as a result of this fire. This project provides for erradication treatments for up to 70 acres annually for the period following the fire through the year 2004 at an application cost of $100 per acre ($7000 annually).

I. **Monitoring Narrative:**

Weed Monitoring and Treatment Plan

Monitoring is critical to the ecological recovery of this area and protection from weeds. The following methods will be followed during this phase of the monitoring plan:

- Evaluate the weed infestations in the area using existing information. This evaluation will include known locations and management activities to treat the noxious weeds prior to the wildfire.
- Fire suppression was not a significant factor in this fire
- Evaluate the potential for spread of existing non-native invasive species or introduction of new species through the burned area, suppression sites or adjacent areas as a result of the wildfire event or suppression actions. Cheat grass is known to occur on Nevada BLM lands to the south and east.
- Monitor the roads used for access, and the remainder of the burn area for a period of three growing seasons (2002, 2003, and 2004) and a minimum of 8 days per year during each of these years. This includes 3 days of monitoring for sensitive plant monitoring for protection of the existing population. Three seasons are necessary in order for sufficient growth to occur to provide staff with positive identification of any noxious weed. Monitoring will be conducted per Region 4 Range Monitoring standards using existing transects. Percent ground cover, grass and forb diversity, and vigor will be measured. Stands of pure native grass species will also be monitored, using a belt transect method to detect any species change or noxious weed infestation. If any new noxious weed infestations occur along the roads, within the burn area, or within pure native grass stands, local Forest Service staff will request additional dollars to purchase herbicide and seed. Establish photo points within each native grass stand monitored, to measure the above parameters
- About 7 days additional time is needed to obtain GPS location data and to update and maintain the GIS data base for weed populations, treatment, and seeding.

Additional funding for noxious weed monitoring and control will be requested in the next two years, based on the amount of weed spread and invasion is found during the first year.

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

Line Items	Units	Unit Cost	# of Units	WFSU SULT $	Other $	# of units	Fed $	# of Units	Non Fed $	Total $
A. Land Treatments										
Noxious Weed Control	acres	$100	70	$7,000			$0		$0	$7,000
Native Seed/helicopt.	acres	$55	200	$11,000			$0		$0	$11,000
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Land Treatments				$18,000			$0		$0	$18,000
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										
Road Drainage	miles	2400	2.5	$6,000			$0		$0	$6,000
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Road & Trails				$6,000			$0		$0	$6,000
D. Structures										
Temporary Fence	miles	3000	2	$6,000			$0		$0	$6,000
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Structures				$6,000			$0		$0	$6,000
E. BAER Evaluation										
Salary				$3,500			$0		$0	$3,500
Travel				$500			$0		$0	$500
G. Monitoring Cost	days	280	15	$4,200			$0		$0	$4,200
H. Totals				**$38,200**			**$0**		**$0**	**$38,200**

PART VII - APPROVALS

1. /s/Bill Levere — *11/05/01*
   Forest Supervisor (signature) — Date

2. _____ _____
   Regional Forester (signature) — Date