United States Department of Agriculture | Forest Service | Boise National Forest | 1249 South Vinnell Way, Suite 200 Boise, ID 83709

File Code: 2520-3 **Date:** August 2, 2000
Route To:

Subject: Burned Area Emergency Rehabilitation - Horn Creek Fire

To: Regional Forester, R-4

Enclosed is the FS-2500-8 BAER report for the Horn Creek fire near Garden Valley, Idaho. I made a recommendation of no treatment because of the mosaic burn pattern of severity.

The majority of the burned area burned at a lower severity and will probably result in accelerated brush response because of the presence of red-stem ceanothus. The portions that burned at a moderate or higher severity on the ground have set up hydrophobic soils, however, do not exist in contiguous blocks greater than 40 acres.

Included is a request for minor funding of roadwork to aid the District in the event the road (opened for fire suppression) fails with the first rain event. This road stabilized after the 1997 rain-on-snow event, but still had some sensitive areas within drainages that are now reopened.

Please review for approval and signature. If you have questions, please call T.J. Clifford at 208-373-4311.

/s/ Alison Beck Haas for
DAVID D. RITTENHOUSE
Forest Supervisor

Enclosure

TJClifford:al

USDA-FOREST SERVICE FS-2500-8 (5/00)
Date of Report: 07/28/00

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[ ] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[X] 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 and design analysis
[ ]Status of accomplishments to date

[ ] 3. Final report - following completion of work

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Horn Creek

B. Fire Number: ID-BOF-P41595

C. State: Idaho

D. County: Boise

E. Region: R4

F. Forest: Boise

G. District: Emmett

H. Date Fire Started: 07/22/00

I. Date Fire Controlled: 07/29 Contained 07/26

J. Suppression Cost: ~ $1,000,000

K. Fire Suppression Damages Repaired with -PF12 Funds:
1. Fireline waterbarred (miles): 6
2. Fireline seeded (miles): 0
3. Other (identify): Road waterbarred and closed: 2.2 miles

L. Watershed Number:

M. NFS Acres Burned: ~895

Total Acres Burned: ~1035

Other ownership type: ( ) State ( ) BLM (140) PVT

N. Vegetation Types: PIPO; PSME; brushlands

O. Dominant Soils: Koppes and Coski series in upper watersheds, Complex principal soils include Quartzburg, Scriver, and Koppes in the drainage mouths.

P. Geologic Types: Idaho Granitic Batholith; granitic, decomposed granitics, rock outcrop

Q. Miles of Stream Channels by Order or Class: 1st order: 3 2nd order 1 3rd order: 2.2

R. Transportation Systems:

Trails: 1 miles Roads: 4.5 miles

PART III - WATERSHED CONDITION

A. Fire Intensity (acres): 400 (39%) (low) 200 (19%) Moderate) 175 (17%) (high)

B. Water-Repellent Soil (acres): 100

C. Soil Erosion Hazard Rating (acres):
__ (low) 170 (17%) (moderate) 965 (83%) (high)

D. Erosion Potential: 40 tons/acre

E. Sediment Potential: 8000 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period: 3-5 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 per second per square mile

G. Estimated Reduction in Infiltration: ___ percent

H. Adjusted Design Flow: ___ cubic feet per second per square mile

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

The Horn Creek fire was approximately 1,035 acres after containment in steep mountainous terrain within the Idaho Batholith granitics on the Emmett Ranger District. The fire was just northeast of Garden Valley, Idaho. The fire encompassed most of Horn Creek and Bunch Creek and the east-facing sideslope of Reservoir Creek. These drainages are all tributaries of the South Fork Payette River. Near the mouth of all these drainages is a strip of land, mainly private that is accessed by one county maintained road.

On the upper one-third of the fire area, it burned into an area previously burned in 1986 and earlier. The past Mineral Mountain wildfire in 1986 had not recovered with tree cover and consisted mainly of redstem ceanothus. The fire did not carry through this area very well and was contained. The rest of the fire area, even that with more dense tree and shrub cover, burned in a more mosaic or patchy pattern. The largest block of burned area under a high severity condition was about 20 acres, while the largest moderate severity condition was about 40 acres. These areas were usually separated by lower severity condition and often very low severity condition to no burn below and in the same drainage.

Hydrophobic soils ranged from about 0.5 inche to 1.5 inches deep in the moderate to high severity, respectively. There were contiguous areas greater than 60 acres with an intermixture of moderate and high severities in the lower end of Bunch Creek.

However, the threat to life or property below all tributary drainages consisted mainly of the county road, with minor potential for other private property damage below Bunch Creek. All other property, even though existing below all tributaries, was outside floodplain area.

B. Emergency Treatment Objectives:

LAND:

No treatments intended.

CHANNEL:

No treatments intended.

ROADS AND TRAILS:

Objective of road treatments is to reduce road failures including-loss of fill and surface material- and dissipate to a greater degree concentrated runoff from the road prism and associated damage.

STRUCTURE:

No treatments intended.

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

Land **100** % Channel **100** % Roads **100** % Other ___ %

D. Probability of Treatment Success:

E. Cost of No-Action (Including Loss): $15,000

F. Cost of Selected Alternative (Including Loss): $17,600

G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology	[ ] Soils	[ ] Geology	[ ] Range	[ ] Water Chem./Muni. Water
[ ] Forestry	[ ] Wildlife	[ ] Fire Mgmt.	[ ] Engineering	[ ]
[ ] Contracting	[ ] Ecology	[ ] Research	[ ] Archaeology	[ ]

Team Leader: T.J. Clifford and Wayne Patton

Phone: 208 373-4311 Email: tjclifford@fs.fed.us; wpatton@fs.fed.us

Contacts:

H. Treatment Narrative:

General:
Recommended Treatment:
Seeding Mixture:

TREATMENT NARRATIVES:

1) Road Drainage Improvements

- Method: Maintain existing drainage structures to ensure proper function. Add additional waterbars to reduce distance water travels on road. In small ephemeral draws with gentle slopes, pull culverts that appear inadequate to handle significant water/sediment flows; replace with hardened low-water ford with sufficient cross-sectional area to pass significant water/sediment flows. Where drainage area is too large or slope too steep, develop low "overflow" channel so that if culvert plugs, excess water and sediment cross road at hardened low spot and prevent washing out of road and/or water from running down road surface.

  Specifics: FDR 652 lower end: This road was damaged and not accessible prior to the fire due to a rain-on-snow event in January 1997. It was opened for fire suppression needs and will be closed before dozers are released. The road crosses at least four intermittent drainages that had extensive sour due to the 1997 event. Therefore, it is our goal to ensure that any work done for fire suppression is monitored for potential mudflow/scour events to occur as a result of disturbing some of these recovering drainages.

- Purpose: Reduce the effects of roads and potential for increased damage associated with the road system.

Limitations: None.

Wildlife Resources:

PART VI - EMERGENCY REHABILITATION TREATMENTS AND SOURCE OF FUNDS BY LANDOWNERSHIP

			NFS Lands		Other Lands			All
Line Items	Units	Unit Cost $	Number of Units	WFSU-SULT $	Number of Units	Fed $	Non-Fed $	Total $
A. Land Treatments								
B. Channel Treatments								
C. Roads and Trails								
Drainage improvement	Miles	500	2	1,000				
Low water crossings	Each	400	4	1,600				
D. Structures								
Water Impoundment Structures	Each							
E. BAER Evaluation/Adminstrative Support								

			NFS Lands		Other Lands			All
Line Items	Units	Unit Cost $	Number of Units	WFSU-SULT $	Number of Units	Fed $	Non-Fed $	Total $
Other								
Implementation team								
Total								
Monitoring treatments								
Year1								
Year2								
Year3								
Total								

F. Subtotals								
Treatments								
Baer assessment team								
Baer implementation team								
Monitoring								
TOTAL				2,600				

PART VII - APPROVALS

1.	/s/ Alison Beck Haas	08/02/00
	Forest Supervisor (signature)	Date
2.		
	Regional Forester (signature)	Date