



**United States
Department of
Agriculture**

**Forest
Service**

Nez Perce National Forest

**Route 2, Box 475
Grangeville, ID 83530
208 983-1950**

File Code: 2520-3

Date: September 9, 2003

Route To:

Subject: Burned Area Report - Moose Creek Suppression Fires

To: Regional Forester

Enclosed is the initial Burned Area Report funding request for estimated WFSU-SULT funds for five suppression fires on the Moose Creek District within the Selway Bitterroot Wilderness: the Pinchot, Pettibone Creek, Bear, Bronc, and Pack Creek fires. Trail erosion, localized weed threats on the Pettibone and Pinchot fires, and potential effects to an important heritage site on the Pettibone fire are the basis for this emergency funding request. The total request is for \$91,004. An amended request may follow based on additional reconnaissance of trails and the heritage site.

Please contact Pat Green, Forest Ecologist, if you have any questions or concerns regarding this matter. She can be reached at (208) 983-1950 and will gladly assist you.

/s/ Terry A. Chute (for)
BRUCE E. BERNHARDT
Forest Supervisor

cc: Bruce D Sims, Pat Green



Date of Report: 9 Sept 2003

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
☐ 3. No Treatment Recommendation

B. Type of Action

- ☒ 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 DESCRIPTIONA. Fire Name: Wilderness complexB. Fire Number: ID-NPNF-006 (Pinchot),
ID-NPF-163 (Bear)
ID-NPF-208 (Bronc)
ID-NPF-213 (Pettibone Cr)
ID-NPF-226 (Pack Creek)C. State: IdahoD. County: IdahoE. Region: Northern (R1)F. Forest: Nez Perce NF (17)G. District: Moose Creek (06)H. Date Fire Started: June 19-August 19, 2003 I. Date Fire Contained: No estimated datesJ. Suppression Cost: \$ \$3,950,000

K. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles):
2. Fireline seeded (miles):
3. Other (identify):

L. Watershed Number: Pinchot: 170603020338, 170603020336
Bear: 170603010313, 170603010301
Bronc: 170603020504, 170603020516, 170603020503
Pettibone: 170603010313, 170603010203, 170603010206, 170603010204
Pack: 170603020312

M. Total Acres Burned: 12,148
NFS Acres(**12,148**) Other Federal () State () Private ()

N. Vegetation Types: Lodgepole Pine, Grand fir, Douglas fir, Subalpine Fir (ABLA), shrubland, grassland

O. Dominant Soils: Dystric Cryochrepts, Andic Cryochrepts, Typic Dystrochrepts, Typic Vitrandepts

P. Geologic Types: Quartz diorite (tonalite), granodiorite

Q. Miles of Stream Channels by Order or Class:

Pinchot: 1st order - 4.7 miles, 2nd - 1.

Bear: 1st order - 2.5 miles

Bronc: 1st order - .6 miles

Pettibone Cr: 1st order 20.4 miles, 2nd order - 4.5 miles 3rd order - .3 miles, 4th order 4.4 miles,
6th order .8 miles

Pack Cr.: 1st order - .2 miles

R. Transportation System

Trails: Pinchot: 1.7 miles

Bear: 1.4 miles

Bronc: 1.0 mile

Pettibone: 12.2 miles

Pack Creek: 2.0 miles

Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (percent): 70% low 20% moderate 10% high across most fires

B. Water-Repellent Soil (percent): 50 percent of the burned area is likely to have a moderate to high degree of water repellency based on similar 2003 burn intensities, vegetation, and soils

C. Soil Erosion Hazard Rating (percent):
10% low 70% moderate 20% high

D. Erosion Potential: 2.3 tons/mi² of Pettibone watershed first year

E. Sediment Potential: 1.5 tons/mi² of Pettibone watershed first year

PART IV - HYDROLOGIC DESIGN FACTORS

Flood flows have not yet been calculated

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: Describe Watershed Emergency:

Threat to life and private property: None at this time. A moderate to high potential exists for localized high water flows and debris torrents in steep ephemeral and first stream channels in most of the burned areas.

Threat to federal property: Trails are at risk due to increased erosion with consequent loss of drainage structures and crossings. The threats are from failure of trail drainage systems because log waterbars were burned or remaining drainage systems are inadequate to handle increased post-fire runoff. This may cause soil erosion on the trail, and the trail may divert runoff to streams, increasing stream sediment loads. Stream diversion onto trails may also result in loss of trail by rilling, gullying, or mass wasting.

Threat of water quality deterioration: Slight in most watersheds, but locally significant. Sediment events in response to fire should be small and within natural ranges except where trails may concentrate flows and exacerbate sediment delivery. Large wood is abundant in most areas and provides good erosion barriers. Watershed condition is otherwise good to excellent.

Threats to ecosystem integrity: Local threats exist. The expansion of invasive non-native plants into fire-disturbed areas from populations within or near the burned areas is a significant threat to the integrity of lands within the Pinchot and Pettibone fires, which are in highly susceptible habitat and contain known knapweed populations.

Threats to heritage resources:

There is some potential for effects. The Pettibone fire has impinged on known heritage sites in the Bear Creek drainage. Further evaluation (~3 days) is needed to determine the need for protection measures.

Threats to threatened and endangered plants and animals:

No emergency exists for threatened or endangered wildlife species. The severity and burn mosaic of the fire may result in short term displacement of some species, and benefit others that require early seral or snag habitat. The fire severity and extent are well within natural ranges, and large areas of similar unburned habitat occur nearby.

B. Emergency Treatment Objectives:

Primary objectives of the treatments are to sustain ecological integrity in the wilderness areas, minimizing water quality effects from trails, and minimizing spread of noxious weeds. Additional treatments for rehabilitation of heritage resources may be pending contingent on survey findings.

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

Land 80 % Channel % Roads % Other 80 % trails

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	80	80	95
Channel			
Roads			
Trails	80	80	95
Heritage sites	80	85	90

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

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

<input type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input type="checkbox"/> Range	<input checked="" type="checkbox"/> Trails/wilderness
<input type="checkbox"/> Forestry	<input type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering	<input type="checkbox"/>
<input type="checkbox"/> Contracting	<input checked="" type="checkbox"/> Ecology	<input checked="" type="checkbox"/> Botany/weeds	<input checked="" type="checkbox"/> Archaeology	<input type="checkbox"/>
<input type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input checked="" type="checkbox"/> GIS	

Team Leader: Pat Green, forest ecologistEmail: pgreen@fs.fed.us

Phone: 208 983-1950_

FAX: 208 983-4099

Pal Christensen – wilderness and trails
 Leonard Lake – weeds and botany
 Steve Lucas – archaeology consultation
 Pat Green – ecology and soils

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:Objective

The purpose of this treatment is to maintain ecosystem integrity by treating selected sites where burned susceptible habitats have been invaded by knapweed as well as the nearby infestations serving as source areas to the invasions. By reducing the amount of weed seed in the area, and treating new populations, native plant communities can have time to recover with less competition from non-native invasive plants.

Methods

Treat burned areas within or adjacent to source weed populations in the Pinchot and Pettibone fires, including with 16 releases of biological control agents summer 2004 using the organisms shown below (4 in Pinchot and 12 in Pettibone). Effects of bio-control agents are addressed in the USDA Weed EIS (1988).

SCIENTIFIC_NAME	COMMON_NAME
<i>Bangasternus fausti</i>	Broad-nosed knapweed seed head weevil
<i>Cyphocleonus achates</i>	Knapweed root weevil
<i>Larinus minutus</i>	Lesser knapweed flower weevil
<i>Larinus obtusus</i>	Blunt knapweed flower weevil
<i>Pelochrista medullana</i>	Brown-winged root moth
<i>Sphenoptera jugoslavica</i>	Bronze knapweed root-borer

Channel Treatments: None

Trail Treatments:**Objective:**

Reduce sediment from trails and stabilize trails for protection of federal investments.

Methods

Reinforce, replace and augment trail drainage structures, including log and rock waterbars, dips, and crossings on 20 miles of trail within and immediately down-slope of burned areas. Costs are projected to be higher than the national norm because of the back country location and the necessity of using wilderness technology (hand labor). Treatments include installation of water bars, installing grade dips, cleaning ditches, drains and culverts of rock and debris, or reconstruction of ditches, drains and culverts, and spot stabilization and outslowing trail to provide for better drainage.

Roads: None

Structures: None

Heritage Resources:Objectives

Protection of heritage resources and data capture where sites are damaged or new information is revealed, due to fire effects. Design and implement heritage protection measures.

Methods

Survey and document changes to known heritage sites within the burn perimeter of Pettibone Creek fire. Funds to stabilize sites or capture information from damaged sites will be sought in an amendment request as necessary.

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.) **None**

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

A. Land Treatments										
Weed treatments	acres	200	80	\$16,000	\$0		\$0		\$0	\$16,000
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				\$16,000	\$0		\$0		\$0	\$16,000
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treat.</i>				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
Trail drainage controls	miles	4000	18	\$72,000	\$0		\$0		\$0	\$72,000
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road & Trails</i>				\$72,000	\$0		\$0		\$0	\$72,000
D. Structures										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Structures</i>				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
salary	days	250	6	\$1,500	\$0		\$0		\$0	\$1,500
helicopter	hours	700	1	\$700			\$0		\$0	\$700
per diem	days	18	3	\$54			\$0		\$0	\$54
heritage surveys	days	250	3	\$750	\$0		\$0		\$0	\$750
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Evaluation</i>				\$3,004	\$0		\$0		\$0	\$3,004
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0		\$0	\$0
G. Totals										
				\$91,004	\$0		\$0		\$0	\$91,004

PART VII - APPROVALS

1. _____
Forest Supervisor (signature)

Date

2. _____
Regional Forester (signature)

Date