

Date of Report: 9-11-06

Edited J.Bruggink 09/12/2006

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: Brown's Canyon FireB. Fire Number: ID-STF-001615C. State: UtahD. County: Box Elder CountyE. Region: 04 - IntermountainF. Forest: 14 SawtoothG. District: 01 Minidoka - Raft River DivisionH. Date Fire Started: August 30, 2006I. Date Fire Contained: September 4, 2006J. Suppression Cost: \$878,000. (est.)

K. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): 2 miles on Forest Service lands (est)
2. Fireline seeded (miles):
3. Other (identify):

L. Watershed Number: 170402100609M. Total Acres Burned: 345NFS Acres(345) Other Federal () State () Private ()N. Vegetation Types: Fir, sagebrush/grasslandsO. Dominant Soils: Lithic Cryoborolis, loamy skeletal (upper slopes and ridges); Typic Cryoborolls, loamy skeletal (middle to lower slopes); and Aquic Haplaborolls, loamy skeletal (depressions, seeps, and valley bottoms).

P. Geologic Types: **Bedrock geology is primarily metamorphic quartzite and sedimentary limestone and shales.**

Q. Miles of Stream Channels by Order or Class: **0.75 mi perennial, 0.5 mi intermittent/ephemeral**

R. Transportation System

Trails: 0 miles Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 110 (low) 146 (moderate) 73 (high)

B. Water-Repellent Soil (acres): 128

C. Soil Erosion Hazard Rating (acres):
0 (low) 292 (moderate) 73 (high)

D. Erosion Potential: 3 tons/acre

E. Sediment Potential: 2323 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent):

C. Equivalent Design Recurrence Interval, (years): 10

D. Design Storm Duration, (hours): 1.0

E. Design Storm Magnitude, (inches): 0.75

F. Design Flow, (cubic feet / second/ square mile): **prefire 8cfs/sq mi**

G. Estimated Reduction in Infiltration, (percent): **20%**

H. Adjusted Design Flow, (cfs per square mile): **post fire 28 cfs/sq mi**

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

Background. The Brown's Canyon Fire burned 346 acres between August 30 and September 5, 2006. Lightning caused the fire. The fire was located just south of the Utah state line in George Creek in the Raft River division of the Minidoka Ranger District. The fire was a mixed severity mosaic burn. Some areas were not burned at all and other were burned at a high intensity and high severity. The high severity burn areas were generally the aspen that had a conifer understory. The fire burned approximately 4% of the George Creek watershed.

Summary of Issues.

- 1) Human Life and Safety. The fire has exposed mining debris and an adit. Visible hazards to human life and safety can be mitigated through clean-up activities; however, unidentified and unknown hazards may exist.
- 2) Critical Natural Resources.
 - ▶ The fire occurred in George Creek a tributary to Raft River. George and S.F. Little Valley Creek support one of the few pure strain Yellowstone cutthroat trout population on the Minidoka Ranger Districts. The headwaters portion of George Creek is the only portion that maintains year round water and supports fish. Most fish habitat occurs on National Forest lands. Fish species present during the 2001 surveys conducted by Utah Department of Natural Resources were Yellowstone cutthroat, hybrids, and rainbow trout. The lower and middle portions of the stream are mainly composed of hybrid Yellowstone cutthroat and rainbow trout. Only pure Yellowstone cutthroat occur in the headwaters.
 - Documented noxious weed populations (Canada thistle, Black Henbane) and invasive species (hounds tongue) occur within and immediately adjacent to the burned area on access routes, in riparian corridors, and along major road ways. A wash station was implemented and likely reduced the introduction of non-native vegetation. Some probability that invasive plant materials or seeds were transported into the areas via fire fighters, equipment, and vehicles that were used in within the burned area may exist. The burned area, now lacking desired vegetation that can normally out-compete noxious weeds, supports favorable conditions for expansion of nearby populations of noxious weeds and other invasive species.

B. Emergency Treatment Objectives:

- Where possible, attempt to improve conditions within the burned area to reduce threats to personal injury and/or human life of visitors to the Raft River Division of the Minidoka Ranger District.
- Establish a direct treatment and preventive program to control the spread of noxious weeds and other non-desirable, invasive plant species in the burned area.
- Prevent the spread of invasive plant species into new locations.
- Allow vegetative recovery along stream channels and hillslope vegetation, and reduce the introduction or spread of known noxious weeds by monitoring the administrative closure on the Little Valley pasture of the One Mile Yost allotment.

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

Land ___ % Channel ___ % Roads ___ % Other ___ % - **NA**

D. Probability of Treatment Success - **NA**

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads			
Other			

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

F. Cost of Selected Alternative (Including Loss): **NA**

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: John Chatel, Forest Fisheries Biologist – Sawtooth National Forest

Email: jchatel@fs.fed.us Phone: 208-737-3318 FAX: 208-737-3236

Team Members:

Kim Pierson, Botanist, Sawtooth National Forest
Jill Kuenzi, Resource Information Manager (GIS), Sawtooth National Forest
Terry Hardy, Soil Scientist, Boise National Forest
Bill Goodman, Hydrologist, Dixie National Forest
Jason Wright, Archelogist, Minidoka Ranger District

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:

Noxious Weed Treatment

Forest personnel will treat existing infestations of noxious weeds that have resprouted in the burned area. This allows for the immediate treatment and eradication (i.e. hand pulling, herbicide application, biological agent control) of known infestations. **Treating the small areas of existing populations of noxious plants is deemed more cost efficient and effective than treating the number of new plants and acres expected due to the fire.**

Location (Suitable) Sites: Existing known weed infestations within and directly adjacent to the Brown's Canyon burned area on Forest (specifically within riparian corridors including George Creek and South Fork Little Valley Creek).

Design/Construction Specifications:

- 1) Select herbicide, application rate, and application timing based on specific weed being treated, and access to the location of the infestation.
- 2) Consideration for TES (listed species) habitat and sensitivity when selecting appropriate herbicide.

Purpose of Treatment: Prevent establishment of new infestations, prevent spread of existing infestations, and prevent increase in weed density in existing infestations.

Treatment areas are identified as:

- Treated areas of noxious weeds within Brown's Canyon Burned area
- Riparian corridors within the Brown's Canyon Burned Area

Channel Treatments: None

Roads and Trail Treatments: None

Structures:

Mine Adit Barrier Logs

Purpose of Treatment: The fire exposed a mining adit in the headwaters of Little Valley Creek. Although there are no trails nearby, cross country travelers may want to enter the mining structure. The structure and mine are not considered safe. Objective of treatment is to prevent access into the mine and reduce threats to public health.

General Description: Several trees or logs will be placed at the mine's entrance to prevent access and reduce threats to public health. Logs must be transported from stands within the burn by ATV and placed by winch or pulley.

Location (Suitable) Sites: Mine adit

Design/Construction Specifications: Logs should be large enough to effectively barricade the mines entrance and prevent removal.

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.)

Noxious Weed Monitoring

The purpose of Noxious Weed Monitoring is early detection of noxious weed introduction in the burned area and suppression sites as a result of suppression or wildfire activity. Early detection of noxious weed infestations will minimize the spread and initiate rapid treatment to new infestations associated with fire suppression/fire effects. Noxious weed species and invasives found during the monitoring will be treated at time of identification.

Authorized individuals will conduct all monitoring to insure compliance with specific, detailed requirements (intensity, frequency, funding, timing, length of time, locations, etc). Monitoring will be conducted following established R4 Monitoring methods.

Monitoring will be done at intensity and frequency to identify spread or occurrence of weed infestations following the fire event and recovery. Monitoring will be accomplished by a two person crew or contract crew over a three day period. Initial monitoring will take place after the fire. Additional monitoring may be requested in the future following implementation of BAER and suppression/rehabilitation treatments.

Monitoring areas are identified as:

- Documented infestations along FS roads #60004 and #60005
- Dozer line created along ind division Z along South Fork Little Valley Creek
- Drop point 1 along George Creek

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										
Noxious weeds	acres	125	5	\$625	\$0		\$0		\$0	\$625
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$625	\$0		\$0		\$0	\$625
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
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
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$0	\$0		\$0		\$0	\$0
D. Structures										
Mine Closure	each	1500	1	\$1,500	\$0		\$0		\$0	\$1,500
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$1,500	\$0		\$0		\$0	\$1,500
E. BAER Evaluation										
	each	8497	1	\$0	\$8,497		\$0		\$0	\$8,497
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Evaluation				\$0	\$8,497		\$0		\$0	\$8,497
F. Monitoring										
Noxious Weeds	acres	132	10	\$1,320	\$0					\$1,320
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$1,320	\$0		\$0		\$0	\$0
G. Totals										
				\$3,445	\$8,497		\$0		\$0	\$11,942

PART VII - APPROVALS

1. /s/Douglas E. Gochnour 09/11/2006
Forest Supervisor (signature) Date
2. /s/ William P. LeVere for 09/13/2006
Regional Forester (signature) Date