

Date of Report: 9/17/2002

**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 DESCRIPTION**A. Fire Name: Buck HollowB. Fire Number: ID STF 070C. State: UTD. County: Box ElderE. Region: 04F. Forest: SawtoothG. District: 01 – Burley/Twin Falls – Raft River DivisionH. Date Fire Started: 8/29/02I. Date Fire Contained: 9/01/02J. Suppression Cost: \$244,000

K. Fire Suppression Damages Repaired with Suppression Funds

- 1. Fireline waterbarred (miles): 0
- 2. Fireline seeded (miles): 0
- 3. Other (identify): None

L. Watershed Number: 1704021000702 Upper South Fork Junction Creek (Raft River Subbasin)M. Total Acres Burned: 1278

NFS Acres(1200) Other Federal ( ) State ( ) Private (78)

N. Vegetation Types: Primarily open sagebrush/mountain brush communities (*Artemisia tridentata*) with Bitterbrush (*Purshia tridentata*), Serviceberry (*Amelanchier alnifolia*), and twisted leaf rabbitbrush (*Chrysothamnus viscidiflorus*) with native grasses including bluebunch wheatgrass (*Agropyron spicatum*), Indian Ricegrass (*Oryzopsis hymenoides*), Lemon's Needlegrass (*Stipa lemmonii*) and Great

**Basin wildrye (*Elymus cinereus*). A small portion of the area is Pinyon/juniper Forests (less than 20% of burned area) and dry sagebrush dominated riparian areas with small pockets of willow/sedge vegetation.**

O. Dominant Soils: **A detailed soil survey or land type inventory was not available for this fire. A general soil inventory for the state of Utah and field observations were used. The drier south and west facing aspects contain shallow to moderately deep (0-40 inches) xerolls that are gravelly to cobbly loams. The permeability is medium and runoff potential is high. The organic matter content in the soil is low compared to the east and north aspects. Low amounts of surface cover and soil moisture limit production on these areas. There were several areas with high surface rock content. The rock acts as effective ground cover to reduce raindrop impact and overland flow. There were also several areas with exposed bedrock. The bedrock areas were along very steep slopes leading down into Rocky Canyon drainage. The soils adjacent to the bedrock were very shallow coarse textured loams. The permeability is rapid and runoff is moderate. The north and east facing aspects contain cryolls at the uppermost portions of the fire. Upper soil textures are loam to gravelly loam. These soils are moderately deep to deep and contain high amount of organic matter in the soil surface. The permeability is medium and runoff potential is moderate.**

P. Geologic Types: **A detailed geologic survey was not conducted for the fire area. Most of the fire area contains quartzite materials. The soils in the fire area were developed from residual and colluvial materials along the side slopes and ridges. The drainages contain mixed deep alluvial materials.**

Q. Miles of Stream Channels by Order or Class: **1<sup>st</sup> order – 0.8 mile**  
**2<sup>nd</sup> order – 1.6 miles (all intermittent)**

R. Transportation System

Trails: **0** miles      Roads: **2.6** miles

### **PART III - WATERSHED CONDITION**

A. Burn Severity (acres): **1130** (low) **140** (moderate) **0** (high)

B. Water-Repellent Soil (acres): **0**

C. Soil Erosion Hazard Rating (acres):  
**1000** (low) **278** (moderate) **0** (high)

D. Erosion Potential: **0.24** tons/acre

E. Sediment Potential:  cubic yards / square mile

### **PART IV - HYDROLOGIC DESIGN FACTORS**

A. Estimated Vegetative Recovery Period, (years): **2 growing seasons**

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:**

This is a lightning-caused fire that does not appear to have created any significant threats to human life or property. No significant increases in sedimentation are anticipated. A majority of the burn was determined to be of low fire intensity by the BAER Team.

### **Threats to Long-term Soil Productivity and Ecosystem Integrity**

The main concerns are to provide complete rest from grazing for a minimum of two years to allow vegetative recovery, plus protection from encroachment from noxious weeds and invasive plants. A primary objective is to ensure that neither the burn nor any of the suppression efforts will allow encroachment of noxious weeds. Ground surveys indicate that the fire did not burn in heavily infested noxious weed areas although invasive species are known to occur within the area, and high weed densities occur around the nearby Clark's Basin mineral quarries and proposed expansion areas. The potential effects of livestock and other vectors spreading these weeds into the burned area must be closely monitored to ensure control.

Field reviews by the BAER Team indicate that the burned established grass communities did not suffer from below ground mortality and will recover without additional seeding. There appeared to be limited soil heating throughout the fire.

### **Threats to Sage Grouse**

Sage grouse (*Centrocercus urophasianus*) have been petitioned for listing under the Endangered Species Act. The main threat identified in each of the listing packages is loss of sagebrush habitat either through agricultural conversion or as a result of wildfire. There are two historic, active sagegrouse leks located on BLM lands about 2.5 miles northwest of the Forest boundary from Rocky Canyon. There is very little nesting or brood rearing habitat within the burned area, but the grouse and other species use sagebrush stands in the drainages and on ridges for foraging habitat.

### **B. Emergency Treatment Objectives:**

**No treatment is planned.**

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

**N/A**

### **D. Probability of Treatment Success **N/A****

### **E. Cost of No-Action (Including Loss): **N/A****

### **F. Cost of Selected Alternative (Including Loss): **N/A****

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

Team Leader: **Valdon Hancock**

Email: [vhancock@fs.fed.us](mailto:vhancock@fs.fed.us)

Phone: **208-737-3215**

FAX: **208-737- 3236**

H. **Treatment Narrative:**

Land Treatments:

No vegetative treatments are recommended at this time. It will be necessary to rest the burned area from grazing for a period of two consecutive growing seasons to allow for plant communities to reestablish to preburn conditions.

The Buck Hollow burn area should have complete rest from grazing for a minimum of two years. Both sheep and cattle use this area, but not concurrently. It is recommended that the area receive complete rest from cattle grazing for the entire two years. If sheep are allowed to graze other portions of the allotment during the two year rest, the burned area should be protected by the most effective range management methods available.

Channel Treatments:

No channel treatments are recommended at this time. Monitoring will occur should any storms or rain events occur within the next 60 days. Should sedimentation or headcut problems arise then additional funds will be requested at the time to treat the problem if needed.

Roads and Trail Treatments:

No channel treatments are recommended at this time. Monitoring will occur should any storms or rain events occur within the next 60 days. Should sedimentation or headcut problems arise then additional funds will be requested at the time to treat the problem.

Structures:

No structural treatments are recommended at this time.

Noxious Weed Treatments:

No noxious weed treatment is felt necessary at this time. Any invasion of noxious weeds as a result of the fire will be targeted for immediate eradication using appropriate application techniques. This treatment will take place in accordance with the Forest Noxious Weed Management Plan and Environmental Analysis under the direction of the Burley/Twin Falls District Ranger. The amount of treatment will be based on monitoring the burned area and associated access routes.

I. **Monitoring Narrative:**

Riparian Vegetation – Rocky Canyon: Complete a cursory examination for riparian vegetation reestablishment in areas that were previously inhabited with riparian vegetation. Determine if adequate natural resprouting and establishment of these species is occurring to meet hydrologic protection and riparian recovery.

Monitor the area during the next 60 days should any storms or rain events occur to determine if sedimentation or headcutting is occurring. Activities that warrant additional funding will be requested through BAER.

The burned area should be monitored for two growing seasons (2003-2004) to ensure that livestock grazing does not occur. Funding for this monitoring will come from sources other than BAER.

#### Weed Monitoring and Treatment Plan:

- Monitor for noxious weeds and invasive species on all fireline, roads, staging areas and landing sites for three consecutive years. The most effective treatment method will be used if determined to be necessary. Monitor for noxious weeds and invasive species in the area using existing information. This evaluation will include known infestations and management activities to treat these plants prior to the wildfire.
- Describe briefly any fire related suppression activities that were aimed at preventing the spread of non-native invasive species to or from the fire.
  - Consider: \* Contract requirements for cleaning equipment prior to use on the fire.
  - \* Establishment of equipment cleaning areas used during suppression activities or at demobilization.
- Provide a description or map quantifying disturbed areas including fire lines, fire camps, helispots, access roads or other sites disturbed by suppression and/or support activities. Map will be prepared prior to initiation of treatment.
- Evaluate the potential for the spread of existing non-native invasive species or introduction of new species through the burned area, suppression site or adjacent areas as a result of suppression or wildfire activity.
- Monitor the dozer lines and Forest roads used for access for a period of three growing seasons, In the spring and again in the fall.
- Monitoring will be conducted following established R4 Monitoring methods. If any new noxious weed infestations are located along dozer lines, within the burn area or within any pure native grass stands, local Forest Service personnel will request additional dollars for approved treatment.

A specific monitoring plan for invasive plants is attached to this Burned Area Report.

**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 \$
<b>A. Land Treatments</b>										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				<i>\$0</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
<b>B. Channel Treatments</b>										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treat.</i>				<i>\$0</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
<b>C. Road and Trails</b>										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road &amp; Trails</i>				<i>\$0</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
<b>D. Structures</b>										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Structures</i>				<i>\$0</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
<b>E. BAER Evaluation</b>										
<b>Salary</b>				\$2,800	\$0		\$0		\$0	\$2,800
<b>Travel</b>				\$300	\$0		\$0		\$0	\$300
<i>Subtotal Evaluation</i>				<i>\$3,100</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$3,100</i>
<b>F. Monitoring</b>										
	days	250	5	\$1,250	\$0		\$0		\$0	\$1,250
<i>Subtotal Monitoring</i>				<i>\$1,250</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$1,250</i>
<b>G. Totals</b>				<b>\$4,350</b>	<b>\$0</b>		<b>\$0</b>		<b>\$0</b>	<b>\$4,350</b>

**PART VII - APPROVALS**

1. \_\_\_\_\_  
Forest Supervisor (signature) \_\_\_\_\_  
Date
2. /s/ William P. Levere for \_\_\_\_\_ September 24, 2002  
Regional Forester (signature) \_\_\_\_\_  
Date

# Monitoring Plan for Invasive Plants in the Buck Hollow Fire 2002

**Program:** BAER MONITORING

**Project Name:** Buck Hollow Fire Invasive plant species monitoring

**Objectives:**

- To detect whether there is an increase in the noxious and/or invasive species: Black Henbane (*Hyocymaus niger*), Western sticktight (*Lappula occidentalis*), Marshelder (*Iva xanthifolia*), Canada thistle (*Cirsium arvense*), Bull thistle (*Cirsium vulgare*), Cheatgrass (*Bromus tectorum*) and Field bindweed (*Convolvulus arvense*) within the fire perimeter.
- Determine if herbicide application and grubbing at infested sites are needed to reduce the invasive species with the burned area and surrounding zones of possible infestation.
- If aggressive treatment is needed (based upon monitoring results), determine if herbicide and grubbing treatments are effective.

**Data Collected:** The data collected (number of populations, area of distribution, relative abundance) may suggest species trend (stable, increasing) at the site.

- a. GPS infested sites
- b. Establish vegetation transects
- c. Establish photo-points
- d. Collect site variables: elevation, slope steepness, exposure, soil type, percent cover.

**Location:** Clark's Basin Creek, Rocky Canyon, and Rocky Canyon Spring

**Parameters:** Distribution and abundance of noxious weeds invasive species and native plant species.

**Methodology:** Conduct systematic ground surveys on fire suppression sites and in burned areas adjacent to infested sites. Conduct qualitative estimates each of the invasive species mentioned above. Collect quantitative vegetation data using line intercepts subjectively placed within representative stands of invasive associations.

**Frequency:** Annually

**Duration:** 3 years

**Data Storage:** Computer Data Base, Field Form. Photos, Monitoring Report

**Analysis:** Cover and abundance of the invasive populations will be compared from the three years data to determine if population densities are falling. Species composition and cover between the first burn year and 3<sup>rd</sup> year will be compared to determine increases or other changes in native cover and composition.

**Reports:** Yearly summaries of populations. Final report. GIS maps of known populations and transect locations.

**Personnel:** Two GS-5 range technician or range conservationist

**Cost:** \$250.00 (includes salaries, equipment, and supplies) per day for 5 days = \$1250.00/ year

\$3750.00 for 3 years of monitoring and treatment if necessary

**Responsible Individual:** Scott Nannenga, District Ranger, Sawtooth National Forest

**Prepared by:** Kim Pierson, Forest Botanist, September 7, 2002