

Date of Report: 9/6/2002

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 DESCRIPTIONA. Fire Name: ProspectB. Fire Number: ID STF 066C. State: IDD. County: Box ElderE. Region: 04F. Forest: SawtoothG. District: 01 – Burley/Twin Falls – Raft River DivisionH. Date Fire Started: 8/25/02I. Date Fire Contained: 8/27/02J. Suppression Cost: \$200,000

K. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): apx. 1.5 miles
2. Fireline seeded (miles): 0
3. Other (identify): Wire fence repaired on all fireline crossings

L. Watershed Number: 170402100613 Wildcat Creek (Raft River Subbasin)M. Total Acres Burned: 928NFS Acres(☒) Other Federal () State () Private ()

N. Vegetation Types:

Pinon/juniper; Artemisia tridentata/Agropyron spicatum; Indian ricegrass; aspen; willow/birch; Poa pratensis; Carex/juncus

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. Upper elevations contain moderately deep (20-40 inches) xerolls that are gravelly to cobbly loams. Lower elevations are very shallow with high rock content. The soils are aridic in many places and have a low organic content. The riparian soils are moderately deep alluvial material that is generally high in organic matter content. Textures are gravelly sandy loam to loamy sands and gravels. The floodplain are cryolls with low runoff potential and rapid permeability.

P. Geologic Types: A detailed geologic survey was not conducted for the fire area. Most of the lower elevation fire area contains sedimentary bedrock near the surface in the form of limestone, shales and sandstone. Some quartzite materials were observed at the high elevations of the burn as well as other metamorphic rocks from the higher elevations.

Q. Miles of Stream Channels by Order or Class: 1st order – 1 mile
2nd order – 1.5 miles
3rd order – 1.75 miles

R. Transportation System

Trails: 0 miles Roads: 4.0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 500 (low) 100 (moderate) 80 (high)

B. Water-Repellent Soil (acres): 0

C. Soil Erosion Hazard Rating (acres):
500 (low) 100 (moderate) 80 (high)

D. Erosion Potential: 1 tons/acre

E. Sediment Potential: _____ cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 3 growing seasons in riparian area
2 growing seasons in remaining burn

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:

Threats to Human Life

Field reviews conducted by Forest Service personnel indicate that there is no human habitations within floodprone areas which will be affected by the Prospect Fire. No significant increases in sedimentation are anticipated. A majority of the burn was determined to be of low fire intensity by the Prospect Fire BAER Team.

Threats to Long-term Soil Productivity and Ecosystem Integrity

The main concern is to protect the lower stretch of Wildcat Creek from grazing for a period of three growing seasons and 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 infested noxious weed areas although a few invasive species are known to occur within the area. The Team feels that the susceptibility of the Wildcat drainage and adjacent areas to noxious weed invasion is low to moderate because no known weed populations currently exist within this corridor. Field reviews by the BAER Team indicate that those 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 area with the exception of the dense willow clumps found in lower Wildcat Creek. Here the fire appeared to burn very hot within individual willow and water birch. With the high soil moisture content in this area the amount of heat penetrating into the soil would be low and the effects to the soil resource should be minimal. Some of the willow component burned very hot while some only top burned or were scorched. While those willows that were scorched are expected to regenerate it is unknown at this time how much resprouting will occur from those heavily burned willows. Some Water birch was also consumed but will likely resprout from below ground material. It is recommended that the fire area be monitored within the next 3-4 week period to determine the survival and regrowth of the riparian vegetation in the lower portions of Wildcat Creek. If those individual willows which were heavily burned fail to resprout then willow cuttings should be used in spring of 2003. Existing road structures were assessed and found to be adequate to handle possible increased runoff due to the absence of vegetation at this time.

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 is an historic, active sagegrouse lek located on BLM lands about a mile north of the Forest boundary below Wildcat Creek. The lower portions of the Wildcat drainage are utilized as nesting and brood rearing habitat. While the upper portions of the drainage are used for foraging habitat. It is felt that resting the Wildcat Creek Riparian Pasture from grazing for three growing seasons will allow for the reestablishment of native grass and shrub components critical to sage grouse rearing habitat.

Threats to Yellowstone Cutthroat Trout Habitat and the Western Toad

Wildcat Creek has been identified as having Yellowstone Cutthroat populations, particularly the upper portions. The upper portions of the Prospect Fire burned at very low intensities and much of the upper end of Wildcat Creek was either left unburned or at worse scorched. It is felt that resting the lower portions of Wildcat Creek (Riparian Pasture) from grazing for three growing seasons and the upper portions of Wildcat Creek (West Wildcat Unit) for two growing seasons will allow for the reestablishment of the riparian component species critical to both species.

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

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FAX: **208-737- 3308**

H. **Treatment Narrative:**

Land Treatments:

No vegetative treatments are recommended at this time. It will be necessary to rest the lower portions of Wildcat Creek (Wildcat Riparian Unit) from grazing for a period of three consecutive growing seasons. It is felt that at least 3 consecutive years of leader growth are necessary to assure that willows are at a size class sufficient to withstand the effects of browsing. Also, it will be necessary to rest the burned upper portions of Wildcat Creek (West Wildcat Unit) from grazing for a period of two consecutive growing seasons to allow for plant communities to reestablish to preburn conditions.

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.

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 Prospect 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 – Lower Wildcat Creek:

Monitor this stretch of riparian area within the next 30 days to determine plant survival and if adequate resprouting is occurring on willow and birch species. If resprouting is not occurring then cuttings should be planted in early spring of 2003 and additional funding requested through BAER.

The area should be monitored for three growing seasons (2003-2005) to ensure that livestock grazing does not occur in the area. Funding for this monitoring will come from sources other than BAER.

Upland Vegetation – Upper Wildcat Creek:

Monitor this 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 area should be monitored for two growing seasons (2003-2004) to ensure that livestock grazing does not occur within this area. 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 \$
A. Land Treatments										
				\$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. Channel Treatments										
				\$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>
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road & Trails</i>				<i>\$0</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$0</i>
D. Structures										
				\$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>
E. BAER Evaluation										
Salary				\$3,900	\$0		\$0		\$0	\$3,900
Travel				\$300	\$0		\$0		\$0	\$300
<i>Subtotal Evaluation</i>				<i>\$4,200</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$4,200</i>
F. Monitoring										
	days	224	17	\$3,808	\$0		\$0		\$0	\$3,808
<i>Subtotal Monitoring</i>				<i>\$3,808</i>	<i>\$0</i>		<i>\$0</i>		<i>\$0</i>	<i>\$3,808</i>
G. Totals				\$8,008	\$0		\$0		\$0	\$8,008

PART VII - APPROVALS

1. /s/ Ruth M. Monahan
Forest Supervisor (signature)

9-6-02
Date

2. _____
Regional Forester (signature)

Date

Monitoring Plan for Invasive Plants in the Prospect Fire 2002

Program: BAER MONITORING

Project Name: Prospect Fire Invasive plant species monitoring

Objectives:

- **To detect whether there is an increase in the invasive species: Canada thistle, Crested wheatgrass and cheatgrass in the Prospect fire over the next 3 years.**
- **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: Wildcat Creek and associated tributaries

Parameters: Distribution and abundance of 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 3rd 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: One GS-5 (and GS-3) biological technician or range conservationist

Cost: \$2304.00 (3 years)

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

Prepared by: Kim Pierson, Forest Botanist, August 29, 2002