

Edited J.Bruggink August 29,2002

Date of Report: 16 August 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: Nizhoni

B. Fire Number: UT-MLF-2064

C. State: Utah

D. County: San Juan

E. Region: 4

F. Forest: Manti-La Sal

G. District: Monticello

H. Date Fire Started: 1 June 2002

I. Date Fire Contained: 8 June 2002

J. Suppression Cost: \$1.4 million

K. Fire Suppression Damages Repaired with Suppression Funds

- 1. Fireline waterbarred (miles): 2.5 (dozer), 2.8 (hand) completed 9 June 2002
- 2. Fireline seeded (miles): seeding is planned for late fall 2002
- 3. Other (identify) - repair of unclassified roads used by suppression: in planning stage to be accomplished by June 30. Work will include reestablishing cross-drainage; scarifying road surface where possible; spreading slash on at least the portion visible from open classified roads, slashing entire length if possible; seeding entire length. Seeding will be deferred until late fall.

L. Watershed Number: Johnson Creek 1408020105010; Dry Wash 1408020106010

M. Total Acres Burned: 2354 (100 acres Dry Wash, 2254 acres Johnson Creek)
NFS Acres (2354) Other Federal () State () Private ()

N. Vegetation Types: Primary types include several types of mountain brush(oak brush, sagebrush, mixed mountain brush, and mountain mahogany (1065 acres) and Ponderosa pine forest (990 acres). Minor types

include Douglas fir forest, aspen with either snowberry or mixed mountain brush, forested riparian areas, and rock outcrops.

- O. Dominant Soils: Hogg-Jemez-Bookcliff families complex; Sheek-Podo-Jemez families-Rock outcrop complex; Bookcliff, warm-Jemez, dry-Pinto families complex; Ring-Bookcliff, warm-Jemez, dry families complex
- P. Geologic Types: Morrison formation (1625 acres); remaining area is sandstones, shales, and laccolithic intrusion
- Q. Miles of Stream Channels by Order or Class: first order 11.6; second order 3.1; third order 2.8
- R. Transportation System
Trails: 0 miles Roads: 5.5 miles

PART III - WATERSHED CONDITION

- A. Burn Severity (acres): 746 (low) 823 (moderate) 367 (high) 418(unburned)
- B. Water-Repellent Soil (acres): limited investigation due to safety concerns (very high winds limited field work to mornings only). Soils in watershed emergency area have high rock content and no hydrophobicity.
- C. Soil Erosion Hazard Rating (acres): (low) 1587 (moderate) 85 (moderate to severe) 527 (severe)
- D. Erosion Potential: 13.5 tons/acre
- E. Sediment Potential: 1920 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

- A. Estimated Vegetative Recovery Period, (years): 5
- B. Design Chance of Success, (percent): 90
- C. Equivalent Design Recurrence Interval, (years): 2
- D. Design Storm Duration, (hours): 6
- E. Design Storm Magnitude, (inches): 1.0
- F. Design Flow, (cubic feet / second/ square mile): 11
- G. Estimated Reduction in Infiltration, (percent): 20
- H. Adjusted Design Flow, (cfs per square mile): 13

PART V - SUMMARY OF ANALYSIS

- A. Describe Watershed Emergency:
Drinking water source area for Blanding City – Described in initial report

Establishment of non-native, invasive species – Prior to the fire, the vegetation was a mixture of native and introduced grasses, forbs, shrubs, ponderosa pine, and pinyon-juniper. The effects of the fire coupled

with the catastrophic drought make it likely that a large portion of the rood stock and seed sources in areas burned at high intensity were destroyed. Establishment of cheatgrass in the burned area is of immediate concern, especially in areas burned at high intensity and areas where the native vegetation was already depleted due to recreation use. Cheatgrass is found throughout the District and is especially prevalent on many of the BLM areas south of the fire location. Numerous areas on the District where fire, or some other ground disturbing activity has taken place, has resulted in a quick migration of this species into the disturbed area. Concentrations of this species are located within the Johnson Creek drainage and are fairly heavy in the adjacent Dry Wash, Brushy Basin and Allen Canyon drainages to the west and are also prevalent in the Recapture drainage to the east. Seed sources likely exist on site and can easily be transported by wind, vehicles, livestock and wildlife. Seeding would provide competition, which should help to offset the probability of establishment of this species into the burn area. Cheat grass is quick to respond after a fire or similar disturbance activity, once it is on site then it is very competitive and will result in reduced germination and seedling production of desired species. Therefore, seeding this fall is critical.

Two noxious weed species, knapweed (*Centaurea* spp.) and Canada thistle (*Cirsium arvense*) have been inventoried and treated within and adjacent to the fire area. Minor outbreaks of these, and possibly other noxious weed species, are expected in the fire area. Seeding would provide competition against these species also.

Hazard Trees – Based on a preliminary reconnaissance, there are hazard trees adjacent to FH 079 and FR 50240. FH 079 is a forest arterial road connecting the Monticello and Blanding areas and a scenic backway. There are no alternate routes across the District between these two locations. FR 50240 is a local road heavily used by residents of Blanding. This road could be closed in lieu of felling hazard trees; however, the terrain and level of compliance with other area road closures make successful closure highly unlikely.

Enforcement of Travel Plan – In the travel plan the burned area is closed to off-road travel. With the loss of visual and physical barriers in areas of moderate and high fire intensity, we anticipate an increase in unauthorized ATV use. Since the fire in June, there has been some cross-country ATV use. With the beginning of the hunting season, we anticipate additional non-compliance as people take advantage of the openness and follow the tracks of other users. A network of user-developed tracks and trails through the burned area would interfere with vegetative recovery, spread noxious weeds and invasive species, and initiate rilling and gullying.

B. Emergency Treatment Objectives:

Drinking water source area for Blanding City – Described in initial report.

Establishment of non-native, invasive species – Establish a cover crop in the first growing season following the fire to provide immediate competition to cheatgrass and to allow for establishment of seeded and residual native species. The seed mix and rationale is attached.

Hazard Trees – Assess the threat of falling trees within a tree-length of all roads in the burned area open to the public. Fell hazard trees.

Enforcement of Travel Plan – Limit additional disturbance in the burned area from unauthorized off-road travel.

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

Establishment Of Invasive Species

Land 90 % Channel ___ % Roads ___ % Other ___ %

Hazard Trees

Land ___ % Channel ___ % Roads 90 % Other ___ %

D. Probability of Treatment Success

Establishment Of Invasive Species

	Years after Treatment		
	1	3	5
Land	75	80	90

E. Cost of No-Action (Including Loss): Establishment of Invasive Species - \$135,000

F. Cost of Selected Alternative (Including Loss): Establishment of Invasive Species - \$124,172

G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input checked="" type="checkbox"/> Range	<input type="checkbox"/>
<input checked="" type="checkbox"/> Forestry	<input type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering	<input type="checkbox"/>
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input 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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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.)

Drinking water Source Area

Described in initial report.

Establishment of Invasive Species

Land Treatments:

Aerially seed 1025 acres with a seed mix of species selected to provide quick, initial cover plus more persistent species to provide competition to cheatgrass over a two to four year period. The seed mix and rationale is attached. The area to be seeded is a 100' swath on both sides of FH 079 and FR 50240 and two blocks centered over the high intensity burned areas.

Hazard Trees

Evaluate road-side corridor and fell hazard trees.

Enforcement of Travel Plan

We will attempt to get user cooperation to limit unauthorized ATV use through education, coordination with local user groups, and enforcement. In lieu of preemptively closing the area and/or installing gates to control access, patrol and enforce the travel plan during the 2002 hunting season. If necessary, issue a closure order and install two gates to close FR 50240.

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.)

Establishment of Invasive Species

Seeding will be monitored for proper application rates during implementation. Germination and seedling survival will be monitored for three years beginning the spring following application. Standard transect methodologies will be used to monitor both the success of the seeding, and the recovery of on-site species in seeded and unseeded areas.

Hazard Trees

No monitoring will be done for hazard trees.

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

[illegible]

PART VII - APPROVALS

1. /s/Elaine J Zieroth
Forest Supervisor (signature)

Date _____

2. _____
Regional Forester (signature)

Date _____

Seed Mix Characteristics

Common name	Scientific name	Erosion Control	Rationale
Slender Wheatgrass	<i>Agropyron trachycaulum</i>	Very good	Initial cover good for 1-5 years. Short-lived perennial bunchgrass, moderately drought tolerant, establishes easily and quickly, but is non-aggressive..
Mountain Brome	<i>Bromus marginatus</i>	Very good	Initial cover good for 1-3 years. Short-lived perennial bunchgrass, establishes easily and quickly. Adapted to wide variety of relatively moist sites including those with thin, infertile soils.
Blue Bunch Wheatgrass	<i>Agropyron spicatum</i>	Good	Secondary cover to occupy sites as initial cover crop diminishes. Drought tolerant, long-lived perennial bunchgrass adapted to most sites, including thin non-productive soils. Starts growing in early spring with relatively short cycle to maturity and some regrowth in fall.
Sandberg bluegrass	<i>Poa secunda</i>	Poor	Secondary cover to occupy sites as initial cover crop diminishes. Drought tolerant perennial bunchgrass with fibrous root system, productive on poor sites. Useful as early season forage and to out-compete undesirable weedy spring annuals.