FS-2500-8 (7/00)

Date of Report: October 15,

### <u>2004 July 25, 2002</u>

# **BURNED-AREA REPORT**

(Reference FSH 2509.13)

## **PART I - TYPE OF REQUEST**

A.	Type	of	Rei	oort

- [X] 1. Funding request for estimated WFSU-SULT funds
- [] 2. Accomplishment Report
- [] 3. No Treatment Recommendation
- B. Type of Action
  - [X] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)
  - [X] 2. Interim Report/Request
    - [] 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: Ellsworth B. Fire Number: P47599
- C. State: Nevada D. County: Nye
- E. Region: R4 F. Forest: Humboldt-Toiyabe\_
- G. District: Austin\_
- H. Date Fire Started: July 13, 2002 I. Date Fire Contained: July 22, 2002
- J. Suppression Cost: ~ \$750,000
- K. Fire Suppression Damages Repaired with Suppression Funds
  - 1. Fireline waterbarred (miles):\_7.2
  - 2. Fireline seeded (miles):\_0
  - 3. Other (identify):\_safety zones 2.1 acres
- L. Watershed Number: 1606000310
- M. Total Acres Burned: 4454

NFS Acres (4084) Other Federal (353) State ( ) Private (17)

- N. Vegetation Types: Pinyon-juniper; sparse bunchgrasses, sagebrush, bitterbrush
- O. Dominant Soils: Gravelly medium sandy loam

P. Geologic Types: Shale, siltstone, sandstone, mudstone; some volcanics_						
Q. Miles of Stream Channels by Order or Class:  Order 1: 6.6 miles (intermittent) Order 2: 1.8 miles (intermittent)						
R. Transportation System						
Trails: 0 miles Roads: 1 miles						
PART III - WATERSHED C	ONDITION					
A. Burn Severity (acres): <u>2004</u> (low) <u>2450</u> (moderate)						
B. Water-Repellent Soil (acres): 0						
C. Soil Erosion Hazard Rating (acres):  4454 (low) (moderate)	(high)					
D. Erosion Potential:tons/acre						
E. Sediment Potential: cubic yards / square mile						
PART IV - HYDROLOGIC DES	IGN FACTORS					
A. Estimated Vegetative Recovery Period, (years):	<u>2-3</u>					
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:						
The Ellsworth fire was a lightning caused fire that started on July 13 in the Paradise Range about 10 miles northeast of Gabbs, Nevada. The fire burned 4454 acres, of which 4084 acres were on National Forest System lands, before being contained on July 22. The fire burned in steep, rocky pinyon-juniper country characterized by narrow drainages that carry water only during storm events and late spring snowmelt. Elevations in the burned area generally range from 7000 to 8500 feet. Vegetation is dominated by thick pinyon-juniper stands interlaced with sparse patches of bunchgrasses, sagebrush, and bitterbrush.						

The burn intensity was light to moderate with several pockets of unburned vegetation remaining within the burn perimeter. For the most part, the thicker stands of pinyon-juniper burned at a moderate intensity. Areas of less vegetation and rocky areas burned at a lower intensity. Throughout the burned area, the grass root tillers are intact and it is likely that the bunchgrasses will recover quickly when moisture falls. No areas of hydrophobic soils were noted.

#### Watershed

Several drainages emanate from the burned area, but as previously noted, they carry water only during storm events and snowmelt. The area receives only 6 to 8 inches of moisture annually and snow accumulation seldom exceeds 12 inches. Riparian vegetation is very limited and is present in only a couple of small patches around springs. These areas should recover quickly. Although there is some increased potential for soil erosion and transport if a significant moisture event occurs before grasses resprout, the medium-coarse sandy soils within the burned area rapidly absorb moisture. This soil characteristic did not appear to be affected by the burn. In addition, rocks cover a significant portion of the ground in much of the area, and they should help dissipate rain drop impact energy. Likewise, the affected channels are quite rocky and should act to dissipate energy and slow sediment transport.

#### Wildlife

Since there are no Federally listed threatened, endangered or candidate species or associated habitat within the fire perimeter and use by other wildlife such as mule deer is low in comparison with adjacent areas, the impact to wildlife resources is not a significant concern. The fire burned in a mosaic pattern leaving islands of green unburned vegetation that should provide cover for the limited wildlife in the area. Removal of much of the dense pinyon-juniper may in fact be a long-term benefit to wildlife since a more robust herbaceous vegetative component will likely be established in the future for utilization by deer and other species.

### **Heritage Resources**

The heritage resources issue of most concern during the Ellsworth fire was the threat to the Ellsworth historic site located about a mile north of the burn perimeter. One of the major management objectives for this incident was to protect the historic site that consists of numerous old prospector's cabins and other structures, a cemetery and a lime kiln. This objective was met and no significant impacts to the site were noted. Several scattered pockets of lithic artifacts were seen during the BAER reconnaissance but burn impacts appeared to be negligible.

#### Range

The Yomba-Shoshone Tribe has an active winter allotment in the Paradise Range supporting about 150 cattle. The burned area comprises 15-20 percent of that allotment but much of the area is very steep and the loss of suitable cattle range was minimal.

### Recreation

Recreation in the burned area and vicinity prior to the incident was limited. The area is used for fuelwood gathering by the local community but the loss of resource represents only a small fraction of the local fuelwood available. No campgrounds, recognized dispersed camping sites, or trails exist in the impacted area. Limited deer hunting occurs in the area during the fall.

## **Noxious Weeds**

One issue of concern is the potential for the spread of noxious weeds. Scotch thistle, musk thistle, spotted knapweed, whitetop, and leafy spurge have previously been detected in the general area of the burn. Equipment from areas outside of the burned area was not washed prior to being utilized for fire suppression and it is likely that seed from noxious weeds was deposited in the burn area from these sources. For these reasons, funding for monitoring and treatment to prevent the spread of noxious weeds is being requested for dozer lines, staging areas, and safety zones.

B. Emergency Treatment Objectives:

Monitoring to detect noxious weeds including thistle, spotted knapweed, whitetop, and leafy spurge is being proposed to prevent their wide-spread invasion into the area. Fire line, staging areas, and safety zones used for fire suppression are especially vulnerable. Based on previous experience, there is a high probability that noxious weeds will appear in these areas, and therefore funds for treatment are being requested. The estimated costs for noxious weed control is \$30/disturbed acre for monitoring and \$100/disturbed acre for treatment. Monitoring and treatment is recommended for 19.7 acres for at least 3 years since seed deposited in disturbed areas can remain viable for a number of years.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Sto	C.	Probability of	Completing	Treatment Prior	to First Major	<sup>-</sup> Damage-Producir	ng Storm
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Land	%	Channel	%	Roads _	%	Other _	%
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### D. Probability of Treatment Success

	Yea	Years after Treatment							
	1	3	5						
Land									
Noxious weed control	30	60	90						
Channel									
Roads									
Other									

- E. Cost of No-Action (Including Loss):\_Greater than \$25,000 for long-term noxious weed treatment
- F. Cost of Selected Alternative (Including Loss): \$7683. Includes noxious weed monitoring at \$30/acre and treatment at \$100/acre for 19.7 acres for 3 years
- G. Skills Represented on Burned-Area Survey Team:

[] Hydrology	[] Soils	[X] Geology	[X] Range	[
[] Forestry	[X] Wildlife	[] Fire Mgmt.	[] Engineering	[]
[] Contracting	[] Ecology	[] Botany	[X] Archaeology	[]
[] Fisheries	[] Research	[] Landscape Arch	[]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.)

<u>Land Treatments</u>: Noxious weed control <u>will\_focused</u> on those areas within the burned area most susceptible to invasion. These included rehabilitated fire lines, safety zones, and staging areas. The subject areas will be monitored for <u>treatment effectiveness and retreated if required.three years for noxious weeds and sprayed when detected by Forest weed crews. Access to the rehabilitated areas is possible by 4WD vehicles and ATVs.</u>

**Channel Treatments:** 

Roads and Trail Treatments:

Structures:

### 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 <u>treatment effectiveness will be evaluated in the burn area.</u> <u>encroachment into the burn and adjacent disturbed areas will be monitored to A</u> determination of the need for <u>retreatment if any will be made.control treatments for three years.</u>

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

	NFS Lands		nds	Ø Ot			Other L	ands		All	
		Unit	# of	WFSU	Other			Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT \$		8		\$	Units	\$	\$
						X					
A. Land Treatments						X					
						X					
						8		\$0			
				20		XXXXXX		\$0		\$0	
				\$0		X		\$0		\$0	,
Subtotal Land Treatments				\$0		X		\$0		\$0	
B. Channel Treatmen	ts			Φ0		XXXXXXXXX		<b>ሰ</b> ሳ			
				\$0 ©0		×		\$0 ©0		\$0	
				\$0 \$0		X		\$0 \$0		\$0 \$0	!
				\$0 \$0		×				\$0	-
0.1101 17				7 -				\$0 ©0		¥ -	,
Subtotal Channel Treat.  C. Road and Trails				\$0		X		\$0		\$0	,
C. Road and Trails				\$0		<b>XXXXXX</b>		\$0		\$0	:
				\$0 \$0		X		\$0 \$0		\$0	;
				\$0 \$0		XX		\$0 \$0		\$0	
				\$0		X		\$0		\$0	
Subtotal Road & Trails				\$0				\$0		\$0	
D. Structures				ΨΟ		X		ΨΟ		ΨΟ	
D. 01. 4014.00				\$0		XXXXXX		\$0		\$0	(
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				\$0		X		\$0		\$0	
				\$0		X		\$0		\$0	
Subtotal Structures				\$0		<b>XXXX</b>		\$0		\$0	:
E. BAER Evaluation				**		Ø		, ,		, ,	
						X					
				\$0		XXXX		\$0		\$0	
				·							
G. Monitoring Cost				\$0		XXXXXXX		\$0		\$0	;
Noxious weeds	Job	2560	1	\$2,560		8					
H. Totals				\$2,560		X					
_						X					

# PART VII - APPROVALS

1.	_/s/ Robert Vaught	October 14, 2005 <del>7/29/02</del>
	Forest Supervisor (signature)	Date
2.	/s/ Liz Close for	<del>08/07/02</del>
•	Regional Forester (signature)	Date

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