Date of Report: December 14, 2005

Edited J.Bruggink 01/03/06

## **BURNED-AREA REPORT**

(Reference FSH 2509.13)

## PART I - TYPE OF REQUEST

## A. Type of Report

- [X] 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)
- [X] 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**:South Sage Fire B. **Fire Number**: P45555
- C. <u>State</u>: Nevada D. <u>County</u>: White Pine
- E. Region: 4 F. Forest: Humboldt-Toiyabe
- G. **District**: Ely
- H. Date Fire Started: Sept. 16, 2003 I. Date Fire Contained: Sept. 22, 2003
- J. Suppression Cost: \$900,000
- K. Fire Suppression Damages Repaired with Suppression Funds
  - 1. Fireline waterbarred (miles): 2.5
  - 2. Fireline seeded (miles): 0
  - 3. Other (identify): The downed trees at Success Camp (with multiple buildings) were cleaned up so dry fuels did not pose a future problem and the camp was left in a tidy condition.
- L. Watershed Number: 160600084020
- M. Total Acres Burned: 330

NFS Acres(319) Other Federal () State () Private (11)

## PART III - WATERSHED CONDITION

A. Burn Severity (acres): 35 (low) 180 (moderate) 115 (high)

B. Water-Repellent Soil (acres): 115

<u>C. Soil Erosion Hazard Rating</u> (acres): <u>35</u> (low) <u>195</u> (moderate) <u>100</u> (high)

**<u>D. Erosion Potential</u>**: 10.8 tons/acre (WEPP erosion rate over 24 month time period)

E. Sediment Potential: 2613 cubic yards / square mile (WEPP sediment leaving profile over 12 month time

period)

## PART IV - HYDROLOGIC DESIGN FACTORS

A.	<b>Estimated Vegetative Recovery Period</b> , (years):	5
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B. Design Chance of Success, (percent): 85

C. Equivalent Design Recurrence Interval, (years): 25

D. **Design Storm Duration**, (hours):

E. **Design Storm Magnitude**, (inches):

F. **Design Flow**, (cubic feet / second/ square mile): \_\_\_\_28\_\_

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

H. **Adjusted Design Flow**, (cfs per square mile): 33.6

## PART V - SUMMARY OF ANALYSIS

## A. Describe Watershed Emergency:

#### **Springs**

There are two springs in the burn area. Both had fencing around them to protect them from livestock trampling. The fire burned parts of the fences and trees fell across the wire. Even though the allotment will be closed to grazing for at least two years, there are no allotment fences to keep livestock out of the burn area and there may be unauthorized grazing use. The area also receives a high level of ATV use, especially during the current hunting season. The springs would be impacted by soil compaction and vegetation disturbance during this time if they are not adequately fenced. Therefore new fences are needed to protect this sensitive resource. The basin has little water in the area and wildlife depend on this limited resource.

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

#### **Fencing Springs:**

Repair the two spring fence exclosures that are necessary to protect the areas from trampling by livestock and maintain the existing flow by reducing compaction from animals and ATV's.

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

## **D. Probability of Treatment Success**

	'	Years after Treatment				
	1	3	5			
Land						
Channel						
Roads						
Other	99	99	99			
(signing, tree felling, fencing)						

## G. Skills Represented on Burned-Area Survey Team:

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

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## **H.** Treatment Narrative:

## **Fencing Springs:**

Repair damaged spring fencing \$500. Fences will consist of three strand barbed wire, T-posts and wooden corner tension structures to protect spring areas from trampling by livestock and maintain the existing flow by reducing compaction from animals and ATV's.

## **I. Monitoring Narrative:**

#### **Monitoring Needs:**

Monitoring is needed in 2006 for determining success of treatments \$3000. If monitoring shows the need for additional treatments, future requests for funding will be submitted.

**Treatments to be Monitored, How, and When:** Monitoring will include photo documentation. Monitoring will take place during the spring or summer of 2006.

<u>Seeding success across the entire burn area</u> – Re-measure four transects where occurrence and cover of plant species and ground cover are recorded along transect lines that cross the plant community types within the burn area. Utilize this data to determine seeding success, regeneration success and presence of invasive species.

Roads and drainage dips – Visually monitor to make sure erosion isn't excessive.

<u>Intermittent drainages</u> - Visually monitor changes in drainage using proper functioning condition approach. Impacts from sediment and scour would be recorded.

<u>Springs</u> - Visually monitor fences, document impacts from sediment (depth, affect to vegetation, spring flow impacts) and recommend necessary repairs.

<u>Straw bale erosion structures</u> - Visually monitor the function for 3 years, estimate amount of sediment trapped, and recommend necessary repairs/modifications.

Rock headcut structures – Visually monitor the function, recommend necessary repairs/modifications.

<u>Single log check dams</u> – Visually monitor the function, recommend necessary repairs/modifications.

<u>Erosion</u> - Visually monitor for sheet erosion, rills, and gullies. Measure average depths of rills and gullies. Use data to verify erosion models and calculate how much sediment has eroded from the burn area.

Private Land - Visually monitor private land for impacts from fire (sediment, scour, impacts to PFC).

<u>Livestock</u> – Visually monitor for livestock use in the burn area and document any impacts.

Elk – Visually estimate elk use on woody species; especially on aspen.

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

Unit			NFS Lands			8		Other L	ands		All	
A. Land Treatment Subtotal Land Treatment B. Channel Treat. Subtotal Channel Treat. Subtotal Road & Trails D. Structures fencing Perimeter \$500 1 \$500 Subtotal Structures E. BAER Evaluation Subtotal Evaluation F. Monitoring Team of 3 specialists total \$3,000 1 \$3,000 Subtotal Monitoring G. Totals  A. Land Treatment  B. Channel Treat.  B. Channel Treat.			Unit	# of	WFSU	Other		# of	Fed	# of	Non Fed	Total
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	Line Items	Units	Cost	Units	SULT \$	\$	Š	units	\$	Units	\$	\$
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<							Ž					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	A. Land Treatment						X					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	Subtotal Land Treatment						X					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	B. Channel Treat.						X					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	Subtotal Channel Treat.						8					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	C. Road and Trails						8					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	Subtotal Road & Trails						8					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	D. Structures						8					
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	fencing	Perimeter	\$500	1	\$500		8					\$500
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<							8					\$500
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	E. BAER Evaluation						8				<del> </del>	
F. Monitoring         Second of 3 specialists         Stotal         \$3,000<	Subtotal Evaluation						8					
Team of 3 specialists         total         \$3,000	F. Monitoring											
Subtotal Monitoring \$3,000 #REF! #REF! \$3,500	Team of 3 specialists	total	\$3,000	1	\$3,000		8					\$3,000
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# **PART VII - APPROVALS**

1.	Robert L. Vaught	12/16/05
	Forest Supervisor (signature)	Date
2.	/s/ William P. LeVere for	_1/5/06
	Regional Forester (signature)	Date