Trails: 0 miles

Roads: 1.0.

2013

Date of Report: September 16,

BURNED-AREA REPORT

(Reference FSH 2509.13)

A.	Type of Report	<u> </u>	PE OF REQUEST				
	[X] 1. Funding request for estimated WFSL[] 2. Accomplishment Report[] 3. No Treatment Recommendation	J-SI	ULT funds				
В.	Type of Action						
	[] 2. Interim Report	oas	eeded to complete eligible rehabilitation measures) ed on more accurate site data or design analysis rk)				
PART II - BURNED-AREA DESCRIPTION							
A.	Fire Name: Snake One	В.	Fire Number: 4B19E				
C.	State: Idaho	D.	County: Washington				
E.	Region: 04	F.	Forest: Payette				
H. J. :	District: Weiser Date Fire Started: July 28, 2005 Suppression Cost: \$3,600,000 Fire Suppression Damages Repaired with Sup 1. Fireline waterbarred (miles): 5.0 2. Fireline seeded (miles): 0 3. Other (identify):	pre	Date Fire Controlled: August 05, 2005 ession Funds (Payette NF Only)				
M.		Stat					
	Dominant Soils: Lithic Argixerolls, Fine Loams Geologic Types: Columbia River Basalt.	<u>, N</u>	Mixed Mesic				
Q.	Miles of Stream Channels by Order or Class:_	0.8	s miles 1 st order perrenial, 1.6 miles ephermel. (PNF Only)				
R.	Transportation System (PNF Only)						

PART III - WATERSHED CONDITION

A.	Burn Severity (acres): 477 (low), 48 (moderate), 6 (high)	(PNF Only)
	(percent): 90%(low), 9% (moderate), 1%(high)	
	Water-Repellent Soil (acres): 0 (PNF Only) Soil Erosion Hazard Rating (acres): (PNF Only)	
D.	Erosion Potential: 0.11 tons/acre/yr	

E. Sediment Potential: 168.0 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):	<u>1-3</u>
B. Design Chance of Success, (percent):	90
C. Equivalent Design Recurrence Interval, (years):	<u>50</u>
D. Design Storm Duration, (hours):	24
E. Design Storm Magnitude, (inches):	<u>2.6</u>
F. Design Flow, (cubic feet / second/ square mile):	<u>10</u>
G. Estimated Reduction in Infiltration, (percent):	10
H. Adjusted Design Flow, (cfs per square mile):	<u>11</u>

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

The Snake One Fire was dominantly a range fire located in the steep river breaks of the Snake River above Brownlee Reservoir. Of the 25,254 acres of burned area only 503 acres were located on the Payette NF. On the PNF approximately 400 acres burned in the Sturgill Creek drainage and 103 acres burned in the Wolf Creek drainage.

A total of 704 acres, approximately 400 acres on the Payette NF and 300 acres private ownership, burned in the Sturgill Creek watershed (14,363 acre). 90 percent of this burn was low intensity. Since less than 5 percent of the watershed burning, there is no downstream flooding risk to the ranch structures downstream in the Sturgill Creek drainage.

Nearly the entire 10, 537 acre Wolf Creek drainage burned. Approximately 150 acres (less than 2 percent) burned on the PNF in the Wolf Creek watershed. There are no ranch structures present within this watershed.

Most of the land involved in the 25,240 acres Burned Area was evenly split between BLM and private range land. BLM will be addressing their resource and Burned Area Rehabilitation needs separately.

- 1. Threats to Ecosystem Integrity from Noxious Weeds:
 - a. The expansion of invasive non-native plants into fire-disturbed areas from nearby source areas poses a significant threat to the integrity of the native plant communities and ecosystem processes. This threat is greatest along the roads in or adjacent to burned areas where rush skeletonweed, Scotch thistle, and spotted knapweed currently exists. The invasion or expansion of noxious weeds is likely to alter soil stability, nutrient cycling, wildlife habitat and fire regimes with consequences for long-term ecological diversity and stability.

2. Threats to Vegetation Recovery:

- a. Revegetation of the fire area through natural processes will take 1-3 years to visually represent prefire conditions. Some impacted communities like the bittercherry, big sagebrush and tree canopy may take several years to re-establish back to pre-fire levels. Less than 20 acres on the PNF involved timber mortality.
- 3. Threats to Water Quality and Aquatic Habitat:
 There will be a short trem increase of nutrient loading form the fire into Brownlee Reservoir the first year after the fire. Brownlee Resrvoir is listed as a 303(d) water quality limited segment with nutients identified as a pollutant. No ESA aquatic species are present within the affected watersheds.

B. Emergency Treatment Objectives:

- 1. Noxious Weeds
- a. Monitor the susceptible burned areas for one year to prevent the expansion of rush skeletonweed, Scotch thistle, and spotted knapweed.
- b. Treat the known weed populations within or near the fire area with mechanical methods and herbicides. The purpose of the treatment is to maintain ecosystem integrity by treating known weed infested sites to prevent invasion into the burned area. By reducing the amount of weed seed in the area and treating new populations, native plant communities can have time to recover with less competition from non-native invasive plants.

2. Vegetation Recovery

 Allow vegetation to recover in order to facilitate: soil stability, nutrient cycling, wildlife habitat and fire regimes for long-term ecological diversity and stability. Evaluate resting range from livestock grazing for one to two years.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm: Land 90 % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success

	Years	s after Trea	<mark>itment</mark>
	1	3	<mark>5</mark>
Land			
Nx Weed	90	NA	NA
Inventory			
NX Weed	<mark>90</mark>	NA	NA

Treament			
Rest Range	90	NA	NA
<u>Land</u>			

E. Cost of No-Action (Including Loss): \$49,500

F. Cost of Selected Alternative (Including Loss): \$10,000

- 1. Ecosystem Integrity:
 - a. <u>Controlling invasive noxious weeds</u> and other non-native species following the fire; cost benefit can be evaluated by estimating control cost if invasions were left untreated for three years. New and current infestations would be expected to double in size each year, and spread, to at least, an estimated 100 acres requiring treatment, which would cost approximately \$50,000.
- 2. Vegetation Recovery:
 - a. Cost of not allowing livestock on the fire area is estimated at 5,000.

$$^{\cdot}$$
 TOTAL = [(C + D) * A] + [(C + E) * B]

A = 90%, probability of success of primary treatment;

B = 10%, probability of failure of primary treatment;

C = \$2,500.00, primary treatment cost;

D = \$ 0.00, potential resource value loss if primary treatment succeeds; and

E = \$80,000.00, potential resource value loss if primary treatment fails.

Selected Alternative = [(5,000+0.) * .90] + [(5,000 + 50,000) * .10] = \$10,000No Action Alternative = [(0+0.) * .10] + [(0+55,000) * .90] = \$49,500

- F. Cost of Selected Alternative (Including Loss): Total cost of selected alternative is \$10,000
- G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Dave Kennell

Email: <u>dkennell@fs.fed.us</u> Phone: <u>(208)634-0793</u> FAX<u>(208)634-0744</u>

- **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.)
 - 1. Treatments to Protect Ecosystem Integrity form Noxious Weeds

a. <u>Treat selected burned areas</u> (10 sites) within or adjacent to source weed populations in the fall of 2005 to prevent the expansion of rush skeletonweed, Scotch thistle, and spotted knapweed, Canada thistle. Spray with truck mounted sprayers or use a back pack sprayer for areas not accessible by vehicle.

2. Treatment to Protect Vegetation Recovery

a. <u>Remove</u> livestock grazing and ATV use within the fire perimeter for up to two years. This would allow native vegetation to recover and prevent the spread of noxious weeds and new weed infestations. This would be accomplished by an administrative closure.

I. Monitoring Narrative:

1. Monitor noxious weed encroachment into firelines, bulldozer lines and susceptible burned areas, for one year. Responsibility: Weiser District Ranger.

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

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PART VII - APPROVALS



