

Date of Report: 5 Aug 14

BURNED-AREA REPORT
(Reference FSH 2509.13)**PART I - TYPE OF REQUEST**

A. Type of Report

- ☒ 1. Funding request for estimated emergency stabilization funds
☐ 2. Accomplishment Report
☐ 3. No Treatment Recommendation

B. Type of Action

- ☒ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization 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: Sunflower B. Fire Number – OR-UMF-014166
C. State: Oregon D. County: Grant County
E. Region: 06 (PNW) F. Forest: 14 - Umatilla National Forest
G. District: Heppner Ranger District H. Fire Incident Job Code: P6H8JW (0614)
I. Date Fire Started: July 13th, 2014 J. Date Fire Contained. July 27, 2014
K. Suppression Cost: 5.8 million
L. Fire Suppression Damages Repaired with Suppression Funds
 1. Fireline waterbarred (miles): 19 miles
 2. Fireline seeded (miles): Rehab continuing with seeding as needed
 3. Other (identify):
M. Watershed Number: 1707020208
N. Total Acres Burned:
 NFS Acres- 6,862 acres Other Federal- 5 acres State - 0 Private - 234 acres
O. Vegetation Types: Mixed Conifer
P. Dominant Soils: Lithic haploxerolls, Vitrandic Argixerolls, Lithic Argixerolls
Q. Geologic Types Basalt flows with interbedded sediments.

R. Miles of Stream Channels by Order or Class:

Class 1 – 2.6 miles, Class 3 – 3.9 miles, Class 4 – 40.1 miles

S. Transportation System

Trails: 1.0 miles Roads: 22.9 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 3,804 (low) 1,154 (moderate) 119 (high)

B. Water-Repellent Soil (acres): 89 acres

C. Soil Erosion Hazard Rating (acres):

5,901 (low) 1,154 (moderate) 119 (high)

D. Erosion Potential: 0.002 tons/acre

E. Sediment Potential: 0.007 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 10

B. Design Chance of Success, (percent): 90

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

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches):

F. Design Flow, (cubic feet / second/ square mile): 54

G. Estimated Reduction in Infiltration, (percent): 10

H. Adjusted Design Flow, (cfs per square mile): 59

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The Sunflower Fire resulted from a mid-July lightning storm and burned 7,174 acres on the Heppner RD on the Umattial National Forest, 10 miles north of Monument, OR. The Sunflower fire is located in the Wall Creek watershed (HUC # 1707020208), a tributary watershed to the North Fork John Day River subbasin (HUC# 17070202).

Provide for health and safety of the public and employees/Transportation Infrastructure.

The perimeter roads and road 23 provide access to forest users, local residences and administrative access. Safe access is limited due to hazard trees and drainage issues which need to be addressed before the first larger rainfall event.

T & E Species and Preevious Restoration Investment: This Wall Creek watershed has been identified by the Umatilla National Forest as a priority for restoration and as a focus watershed for restoration by the Pacific Northwest Region. Big Wall Creek (designated critical habitat) dissects the fire area. Over \$200,000 has been spent in the last three years on passage projects along this portion of the stream to connect migratory corridors for Mid-Columbia River steelhead. Debris accumulation could cause the structures to fail.

Invasive Species - The burned area contains 18 existing invasive plant infestations covered for treatment under the Umatilla National Forest Invasive Plant Treatment EIS and ROD. These infestations will be treated in the first year reducing the risk of spread to newly disturbed ground within the fire perimeter. Existing infestations include houndstongue, diffuse knapweed and St. Johnswort. There is also a high risk of introduction of new invasive plant infestations from seed sources on proximal private land and detection of any new infestations is high priority.

B. Emergency Treatment Objectives:

Provide for health and safety of the public and employees/ Transportation

Infrastructure. - Hazard tree falling and providing for proper road drainage would reduce the risk to the public and employees. Interior roads need access restricted due to unsafe contitions within the fire perimeter.

T & E Species and Previous Restoration Investment: - Protect previous investments including \$200,000 in fish passage structures recently constructed in the fire area. Retain access to the structures by removing hazard trees, storm patrol and removal of debris accumulation if they develop.

Invasive Species - Treatment to prevent the further spread of 18 existing invasive plant infestations within the fire perimeter is critical. The risk of spread from existing infestations to newly disturbed ground where native ground cover has been removed is high.

C. Probability of Completing Treatment Prior to Damaging Storm or Event:

Land 90 % Channel % Roads/Trails 90% Protection/Safety 90 %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	90	90	90
Channel			
Roads/Trails	80	85	85
Protection/Safety	85	90	95

E. Cost of No-Action (Including Loss):_ \$370,000 known costs plus increased risk to public and employee safety, impacts to T&E species

F. Cost of Selected Alternative (Including Loss):_ \$100,000

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"/> Forestry	<input 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	

Team Leader: Joy Archuleta, Acting Forest Hydrologist

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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.)

Land Treatments:

Invasive Species Control

Purpose: The area burned by the Sunflower Fire includes 18 existing invasive plant infestations covered for treatment under the Umatilla National Forest Invasive Plant Treatment EIS and ROD. These infestations will be treated in the first year reducing the risk of spread to newly disturbed ground within the fire perimeter. Existing infestations include houndstongue, diffuse knapweed and St. Johnswort. There is also a high risk of introduction of new invasive plant infestations from seed sources on proximal private land and detection of any new infestations is high priority. Invasive plant infestations replace native ecosystem components, prevent regeneration of tree species, increase in many cases long-term erosion and loss in soil productivity, and alter the environment to the point that native flora and fauna are displaced. Unmanaged, the potential for noxious weed infestations spreading throughout the burned area would cost the public millions of dollars in lost resource uses, ecological values, and site productivity

Treatment: Treatment will be minimize the risk of further spread from 18 existing invasive plant infestations within the fire perimeter is critical. The risk of spread from existing infestations to newly disturbed ground where native ground cover has been removed by fire or bulldozer/line construction is high. Detection of new infestations (introduction as well as spread from existing infestations) is critical with the need to be analyzed before treatment via the Early Detection Rapid Response process authorized in the Umatilla National Forest Invasive Plant Treatment EIS and ROD (2010).

Roads and Trail Treatments:

Storm Patrol

Purpose: To patrol and identify hazards which have resulted from the burned watershed condition such as, accumulation of debris behind recently completed stream restoration passage projects and other road drainage structures.

Treatment: A team of two employees will be designated to patrol the area during high precipitation or runoff events and during spring snowmelt.

Debris Removal

Purpose: To reduce the hazard of debris accumulation impounding water and sediment that may endanger recently implemented stream restoration passage projects.

Treatment: Utilize an excavator or similar equipment to remove debris blockages allowing streamflow to move more freely.

Ditch clean out on RD 2128

Purpose: To reestablish road and trail drainage after rainfall events where rock and sediment deposits resulting from the wildfire has impaired the function of the road drainage system.

Treatment: Remove rock and soil deposits from the road ditch. Utilize an excavator or similar equipment to remove debris blockages. Road will be bladed to remove debris from road bed rather than incurring the cost of end haul.

Protection/Safety Treatments:

Hazard Tree Falling

Purpose: To provide safe utilization of through roads to the public and employees as well as safe access to private end holdings.

Treatment: A certified faller will remove hazard trees either side of system roads with access needs.

Hazard Signing

Purpose: To educate the public as to the hazards in the burn area, especially where use is concentrated along roads as well as signing closed roads.

Treatment: Install warning signs at access points to the fire area roads. The signs will describe potential dangers due to flood events, falling trees, rolling material, and any implementation operations.

Install Gates to Prevent Access into Hazardous Road Corridors and OHV Trail

Purpose: To provide safety to public utilizing trail and road system.

Treatment: Install gates which allow for administrative access to interior fire area and to check drainage structures but prevent public access to hazardous areas with snags.

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.)

Line Items	Units	Unit Cost	NFS Lands		Other \$	Other Lands				All Total \$
			# of Units	BAER \$		# of units	Fed \$	# of Units	Non Fed \$	
A. Land Treatments										
Invasive Species Treat	ax	1.47	6867	\$10,108	\$0		\$0		\$0	\$10,108
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$10,108	\$0		\$0		\$0	\$10,108
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treat.				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
Debris Removal	ea	3000	2	\$6,000	\$0		\$0		\$0	\$6,000
Storm Patrol	ea	750	9	\$6,750	\$0		\$0		\$0	\$6,750
Ditch Cleaning	mi	2	800	\$1,600						
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$14,350	\$0		\$0		\$0	\$12,750
D. Protection/Safety										
Hazard Tree Falling	mi	5000	10.5	\$52,500	\$0		\$0		\$0	\$52,500
Gates	ea	2100	4	\$8,400	\$0		\$0		\$0	\$8,400
Hazard Signing	ea	6	350	\$2,100	\$0		\$0		\$0	\$2,100
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$63,000	\$0		\$0		\$0	\$63,000
E. BAER Evaluation										
Personnel Cost				---			\$0		\$0	\$0
<i>Insert new items above this line!</i>	ea	9700	1	---	\$9,700		\$0		\$0	\$9,700
Subtotal Evaluation				---	\$9,700		\$0		\$0	\$9,700
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0		\$0		\$0	\$0
G. Totals				\$87,458	\$9,700		\$0		\$0	\$95,558
Previously approved										
Total for this request				\$87,458						

PART VII - APPROVALS

1. **David Hatfield (for) Kevin Martin**
Forest Supervisor (signature)

8/7/14
Date

2. _____
Regional Forester (signature)

Date