

Date of Report: 06/01/2013

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:** Sweats Complex Fire **B. Fire Number:** MT-HNF-000014
C. State: Montana **D. County:** Lewis and Clark
E. Region: 1 **F. Forest:** Helena NF
G. District: Helena RD **H. Fire Incident Job Code:** P1HG16
I. Date Fire Started: 05/16/13 **J. Date Fire Contained:** 05/22/13
K. Suppression Cost: \$ TBD
L. Fire Suppression Damages Repaired with Suppression Funds
 1. Fireline waterbarred (miles): Handline: approximately 4 miles
 2. Fireline seeded (miles):
 3. Other (identify):
M. Watershed Number: Lower Beaver Creek (100301011703), Soup Creek (100301011606)
N. Total Acres Burned:
 [520] NFS Acres ☐ Other Federal ☐ State ☐ Private
O. Vegetation Types: The fire area is dominated by dry ponderosa pine with minor amounts of Douglas-fir.

P. Dominant Soils: Lithic Ustochrepts, Typic Chryochrepts

Q. Geologic Types: Argillites, siltites, quartzites

R. Miles of Stream Channels by Order or Class:

S. Transportation System

Trails: 2.5

Roads:

PART III - WATERSHED CONDITION

A. Burn Severity (acres): low 200 moderate 200 high 120

B. Water-Repellent Soil (acres): not quantified

C. Soil Erosion Hazard Rating (acres): not quantified

D. Erosion Potential: not quantified

E. Sediment Potential: N/A

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): N/A

B. Design Chance of Success, (percent): N/A

C. Equivalent Design Recurrence Interval, (years): N/A

D. Design Storm Duration, (hours): N/A

E. Design Storm Magnitude, (inches): N/A

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

G. Estimated Reduction in Infiltration, (percent): N/A

H. Adjusted Design Flow, (cfs per square mile): N/A

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The primary values at risk in this burned area are native vegetation communities and soil productivity. Burned area vegetation communities are under threat from rapid expansion of noxious weeds from existing populations within and immediately adjacent to the burned area perimeter. Mapped weed species within the burned areas include leafy spurge, spotted knapweed, musk thistle, Dalmatian toadflax. Mapped weed species adjacent to burned areas include the species listed above, as well as Canada thistle and common mullein. The average infestation rate for the mapped acres is 20 percent.

A secondary value at risk is trail #255 (Hunter's Gulch), which passes through the Hunter's Gulch fire. Portions of this trail are in a vulnerable side-slope location below relatively long, steep hillslopes with moderate-to-high burn severity. These segments of trail are vulnerable to washout from post-fire high-intensity precipitation events, which are likely to trigger enhanced runoff this summer due to the post-fire conditions and topography.

B. Emergency Treatment Objectives:

The emergency treatment objective is to prevent the expansion of noxious weeds in areas burned in the Sweats Complex fires, as well as to protect the Hunter's Gulch trail from enhanced runoff below areas of moderate to high burn severity.

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

Land 80% Channel N/A Roads/Trails 90% Protection/Safety N/A

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	80%	50%	30%
Channel	N/A		
Roads/Trails	90%	80%	60%
Protection/Safety	N/A		

E. Cost of No-Action (Including Loss): The value of protecting the ecological integrity and soil productivity of the burned area from noxious weed infestation easily exceeds the cost of treatment and monitoring, although this was not quantified. The cost of reconstructing washed out trail sections across a steep hillslope exceeds the cost of the proposed drainage work.

F. Cost of Selected Alternative (Including Loss): \$29,085

G. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input type="checkbox"/> Range
<input type="checkbox"/> Forestry	<input type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input type="checkbox"/> Ecology	<input type="checkbox"/> Botany	<input type="checkbox"/> Archaeology
<input type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input type="checkbox"/> GIS
<input checked="" type="checkbox"/> Weeds			

Team Leader: David Callery

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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:

Burned areas infested with noxious weeds will be treated within the burn perimeters. Both biological and herbicide applications are recommended. Treatment will include the following:

- Herbicide treatment of fire line and approximately 10 feet either side of line. The fire line is about four miles or about 10 acres.
 - Spraying in the early summer before weeds begin to seed.
 - Backpack or horse pack treatment only.
 - Herbicides and approved application techniques based appropriate for the weed species, topography and environmental factors. All treatments will be done within the environmental protection measures outlined in the 2006 Helena National Forest Noxious Weed Treatment Record of Decision.
- Herbicide treatment of all fire access routes from the main County Route 4 and east toward and within the fire perimeter. These routes also total about four miles but in this case the treatment area would be 30 feet either side of the line for a total of 29 acres.
 - Spraying in the early summer before weeds begin to seed.
 - Truck or OHV treatment.
 - Herbicides and approved application techniques based appropriate for the weed species, topography and environmental factors. All treatments will be done within the environmental protection measures outlined in the 2006 Helena National Forest Noxious Weed Treatment Record of Decision.
- Biological treatment of the interior of the burned area for Dalmatian toadflax, spotted knapweed and Canada thistle. The fire area is about 320 acres and releases would occur in about 30 percent of the area, or around 100 acres. Releases will be inundative.
- Monitoring for treatment effectiveness on approximately 30 percent of the acres treated.

Channel Treatments: No channel treatment prescribed at this time.

Roads and Trail Treatments:

Trail work will treat the segments of the Hunter's Gulch trail within the burned area that are at high risk of damage from elevated post-fire runoff and erosion. Treatments will consist of replacement of burned drainage structures, installation of new drainage structures for additional drainage in anticipation of greater runoff and erosion, and spot

stabilization/outsloping of eroding trail segments. Treatment would occur as soon as possible this summer prior to thunderstorm season.

Protection/Safety Treatments: No protection/safety treatments prescribed at this time.

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.)

Monitoring will be conducted for any noxious weed populations not effectively treated during initial treatment efforts will be targeted for additional herbicide application in out-years using appropriated funds. Monitoring of trail improvements following high-intensity summer precipitation events will occur to ensure effectiveness of trail treatments.

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

Part VI – Emergency Stabilization Treatments and Control of Invasive Plant Species										
			NFS Lands			Other Lands				All
		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$	units	\$	Units	\$	\$
A. Land Treatments										
herbicide application truck/ohv	Acre	85	29	\$2,465	\$0		\$0		\$0	\$2,465
herbicide application backpack or horse	Acre	135	10	\$1,350	\$0		\$0		\$0	\$1,350
bio-control	Lump	130	100	\$13,000	\$0		\$0		\$0	\$13,000
weed assessment	Lump			\$8,820			\$0		\$0	\$8,820
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$25,635	\$0		\$0		\$0	\$25,635
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treat.				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
Trail drainage structure each	120	20	\$2,400	\$0			\$0		\$0	\$2,400
Trail tread outslope/drain mile	1,300	0.5	\$650				\$0		\$0	\$650
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$3,050	\$0		\$0		\$0	\$3,050
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
Assessment	Lump	400	1	\$400			\$0		\$0	\$400
Insert new items above this line!				---	\$0		\$0		\$0	\$0
Subtotal Evaluation				\$400	\$0		\$0		\$0	\$400
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
Insert new items above this line!				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0		\$0		\$0	\$0
G. Totals										
Previously approved				\$0						
Total for this request				\$29,085	\$0		\$0		\$0	\$29,085

PART VII - APPROVALS

1. 

Forest Supervisor (signature)



Date

2. _____
Regional Forester (signature)

Date