



Date of Report: 05/25/2014

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: Hunter Falls

B. Fire Number: NV-HTF-030081

C. State: NV

D. County: Washoe

E. Region: 04

F. Forest: Humboldt-Toiyabe

G. District: Carson

H. Fire Incident Job Code: P4H4N9

I. Date Fire Started: 5/18/2014

J. Date Fire Contained: 5/22/2014

K. Suppression Cost: \$ 1.5 million estimated cost.

L. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): 4.76

2. Fireline seeded (miles): 0

3. Other (identify): 0

M. Watershed Number:

N. Total Acres Burned:

[740 rounded (I am using the final perimeter provided by the fire team. I am not sure where they are getting 760)] NFS Acres [0] Other Federal [0] State [0] Private

O. Vegetation Types: mixed conifer and brush

P. Dominant Soils: Loam and cobbly loam

Q. Geologic Types: Flows, flow Breccia., olivine basalt

R. Miles of Stream Channels by Order or Class: 1.5miles perennial ~3 miles intermittent /ephemeral. Fire area is tributary to the Truckee River which is domestic water for the Reno Metro Area.

S. Transportation System

Trails: 0 miles

Roads: 1.6 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 137 (low) 230 (moderate) 115 (high)

B. Water-Repellent Soil (acres): 115

C. Soil Erosion Hazard Rating (acres): 0 (low) 690 (moderate) 50 (high)

D. Erosion Potential: 4.49 tons/acre

E. Sediment Potential: 3320 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 5

B. Design Chance of Success, (percent):	90
C. Equivalent Design Recurrence Interval, (years):	10
D. Design Storm Duration, (hours):	3.75
E. Design Storm Magnitude, (inches):	1.59
F. Design Flow, (cubic feet / second/ square mile):	.0450
G. Estimated Reduction in Infiltration, (percent):	33%
H. Adjusted Design Flow, (cfs per square mile):	.1125

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats (narrative): Initially detected on May 18th the cause of the Hunter Falls Fire is still under investigation. The fire burned approximately 740 acres based on the final fire perimeter. There were several spot fires which may account for the final reported on incident of 760 acres. The fire burned in the Mount Roase Wilderness and the Hunter Creek Watershed. The Hunter Creek watershed is tributary to the Truckee River which is Municipal water supply for the Reno Metro Area and surrounding communities as well as Lahontan Cutthroat Trout (LCT) habitat, a listed species under the endangered species act..

There were multiple values initially identified as being at risk from the Hunter Falls Fire. They included: trails, recreationist safety due to hazard trees, native plant community due to weed expansion and new population establishment, and water used for municipal supply being caused to be unusable due to turbidity or sediment.

Based on 2523.1 exhibit 2 of the interim BAER Manual the Values at Risk were evaluated as follows:

Value At Risk	Value Life (L), Property, (P), Resources (R)	Probability of Damage or Loss	Magnitude of Consequences	Risk	Discussion
Recreationist Safety due to hazard trees etc.	L	Low	Major	Intermediate	The known developed trails and undeveloped trails were assessed for hazard trees. The risk was found to be low. Subsequently no treatments were proposed.
Trail tread	P	Low	Low	Very low	The majority of developed trails were not within the burn area. The user created trail is at minimal risk of ravel and loss of the tread.
Native Plant Community	R	Possible	Major	High	The fire was accessed completely via helicopter by the suppression crews. The Helibase was in a field of cheatgrass and medusahead, both of which are highly invasive. Subsequently the helibase was assessed for weed transmittal risk and it was found to be possible due to the seed head stage of this year's seed. However the risk of all of the gear and fire fighters transmitting seeds into the fire area (including wilderness) still exists, therefore this is carried forward as a concern.

Municipal water supply for Reno area	R	Low	Major	Intermediate	Truckee Meadows Water Authority was consulted as to their level of concern from sediment and turbidity coming from the fire area. Ron Penrose of TMWA expressed that the treatment plants had the capacity to treat any turbidity or sediment that was generated from the fire. Therefore this was not carried forward as a concern.
Soil productivity	R	Possible	Moderate	Intermediate	Due to the small area that is at the higher severity burn rating and the minimal hydrophobicity detected this was not carried forward
Increased Flood Flows	R,L,P	Unlikely	Major	Intermediate	Due to the extensive intact riparian area between any values at risk below the fire area and the High severity burn areas this was not carried forward. There was a measurable precipitation event that aided in the fire being contained, there were no flood flows or major sediment events observed being generated by this precipitation. Observations of the stream channels directly before containment and after containment indicated minimal sediment and transport in the streams.
LCT Habitat	R	Unlikely	Moderate	Low	Hunter Creek below the falls was stocked with LCT fingerlings in recent years. However recent survival surveys have not showed that there is a viable population. USFWS the regulatory agency for the species was contacted and they had no concerns from the fire there for this was not carried forward as a concern.

B. Emergency Treatment Objectives (narrative): The forest proposes to implement an Early Detection Rapid Response (EDRR) weed detection protocol. This would allow the forest to detect at the earliest point if new weed species have been introduced to the fire area or if the existing weed populations are expanding significantly. Treatment of the detected weeds would occur via the forests weed control program and then follow up detection of weeds and the effectiveness of treatment during the initial growing season would be part of the EDRR.

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

Land 95% Channel na% Roads/Trails na% Protection/Safety na%

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	95	95	95
Channel	na	na	na
Roads/Trails	na	na	na
Protection/Safety	na	na	na

E. Cost of No-Action (Including Loss): The cost of allowing a new weed species to become established or existing weed populations to expand undetected into the fire area is approximately 150\$/acre/yr for treatment of the population. If the whole fire area is populated by weeds the cost is in the neighborhood of \$111,000 per year. However the highest likelihood of establishment of new weed populations is along the firelines and the 100ft inside of the lines where the fire crews performed mopup. This is a total of approx 58 acres or \$8700 per year. These costs may be under represented due to the wilderness designation of much of the area and the inability to use UTVs. UTV use is part of the \$150/acre cost due to required hiking and smaller herbicide tanks being available for use, the cost could be closer to 200\$/acre or \$11,600/year.

F. Cost of Selected Alternative (Including Loss): \$6,623

G. Skills Represented on Burned-Area Survey Team:

☒ Hydrology ☒ Soils ☐ Geology ☐ Range
☒ Forestry ☒ Wildlife ☐ Fire Mgmt. ☒ Engineering
☐ Contracting ☐ Ecology ☒ Botany ☒ Archaeology
☒ Fisheries ☐ Research ☐ Landscape Arch ☒ GIS

A=adjunct (consulted but not called to the incident)

Team Leader: Robin Wignall

Email: rjwignall@fs.fed.us **Phone:** 775-778-6122

FAX: 775-355-5399

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:

Noxious Weed Early Detection Rapid Response (EDRR) to protect BAER values Soil Productivity, Native Plant Community, and Hydrologic Function: EDRR will concentrate on determining if the weed sites are expanding and determine if extra treatments are necessary. No effort will be made to EDRR existing weed

infestation areas but surveys will be conducted to determine if these sites are expanding. The data gathered from this EDRR will be used to determine if and what treatment will be needed. During the course of this EDRR survey the district will be notified of any areas that need additional actions and a summary report will be developed at the end of the summer.

The work would be completed by multiple trips to the fire area totaling 11 days of time, but totaling up to 20 visits to determine phenology and monitor effectiveness of treatments applied by others. The mileage includes the atvs for the crew to access the area as well as the mileage to travel to the site from the office (75 miles round trip). The fire area is a 45 minute to 90 minute one-way drive (90 to 180 round trip) and an additional 4 to 6 hour round trip hike into the wilderness and back.

Line Item	Unit Cost	Total
Salaries two GS 4	\$135 per day x 2 x 11 days	\$2,970
District plant specialist	\$350 per day x 5 days	\$1,750
GIS/FACTS specialist	\$321 per day x 3 days	\$963
Vehicle mileage	\$.60 per mile x 1,500 miles	\$900
Implementation team leader	\$400 per day x 1 day	\$400
	Total Cost	\$6,623

Channel Treatments: none proposed

Roads and Trail Treatments: none proposed

Protection/Safety Treatments: none proposed

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.)

None proposed

Part VI – Emergency Stabilization Treatments and Source of Funds**Interim #**

Line Items	Units	Unit Cost	# of Units	BAER \$	Other \$	# of units	Fed \$	# of Units	Non Fed \$	Total \$
A. Land Treatments										
EDRR	EACH	6623	1	\$6,623	\$0		\$0		\$0	\$6,623
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				\$6,623	\$0		\$0		\$0	\$6,623
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treat.</i>				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road & Trails</i>				\$0	\$0		\$0		\$0	\$0
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Structures</i>				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation		4100		\$4,100						
				---			\$0		\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
<i>Subtotal Evaluation</i>				---	\$0		\$0		\$0	\$0
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0		\$0	\$0
G. Totals				\$6,623	\$0		\$0		\$0	\$6,623
Previously approved										
Total for this request				\$6,623						

PART VII - APPROVALS

1. /s/William Dunkelberger 5/29/14
Forest Supervisor (signature) Date
2. /s/ Chris Iverson 6/9/2013
Regional Forester (signature) Date