USDA-FOREST SERVICE HTF-Broad-Initial FS-2500-8 (6/06)

Date of Report: 8/10/2018

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[X] 1. Funding request for estimated emergency stabilization funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

[X] 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: Broad

B. Fire Number: 2018-NVHTF-020194

C. State: NV

D. County: Nye

E. Region: 04

F. Forest: 17

G. District: Austin/ Tonopah

H. Fire Incident Job Code: P4 L0SZ

I. Date Fire Started: 7/17/2018

J. Date Fire Contained: 10/31/2018

K. Suppression Cost: 566,000

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 0
2. Fireline seeded (miles): 0
3. Other (identify): 0

M. Watershed Number: 160600040903

N. Total Acres Burned: 522
NFS Acres(522) Other Federal ( ) State ( ) Private ( )

O. Vegetation Types: Pinyon Juniper with brush grass understory

P. Dominant Soils: Segura/Rock Outcrop/Itca family/Cropper Association Segura: LOAMY, MIXED, SUPERACTIVE, FRIGID ARIDIC LITHIC ARGIXEROLLS

Q. Geologic Types: Shale, limestone, metasedimentary with an ignious intrusion (granitic to monzonitic).

R. Miles of Stream Channels by Order or Class: 2.25 ephemeral

S. Transportation System

Trails: 0 miles Roads: 0 miles

PART III - WATERSHED CONDITION

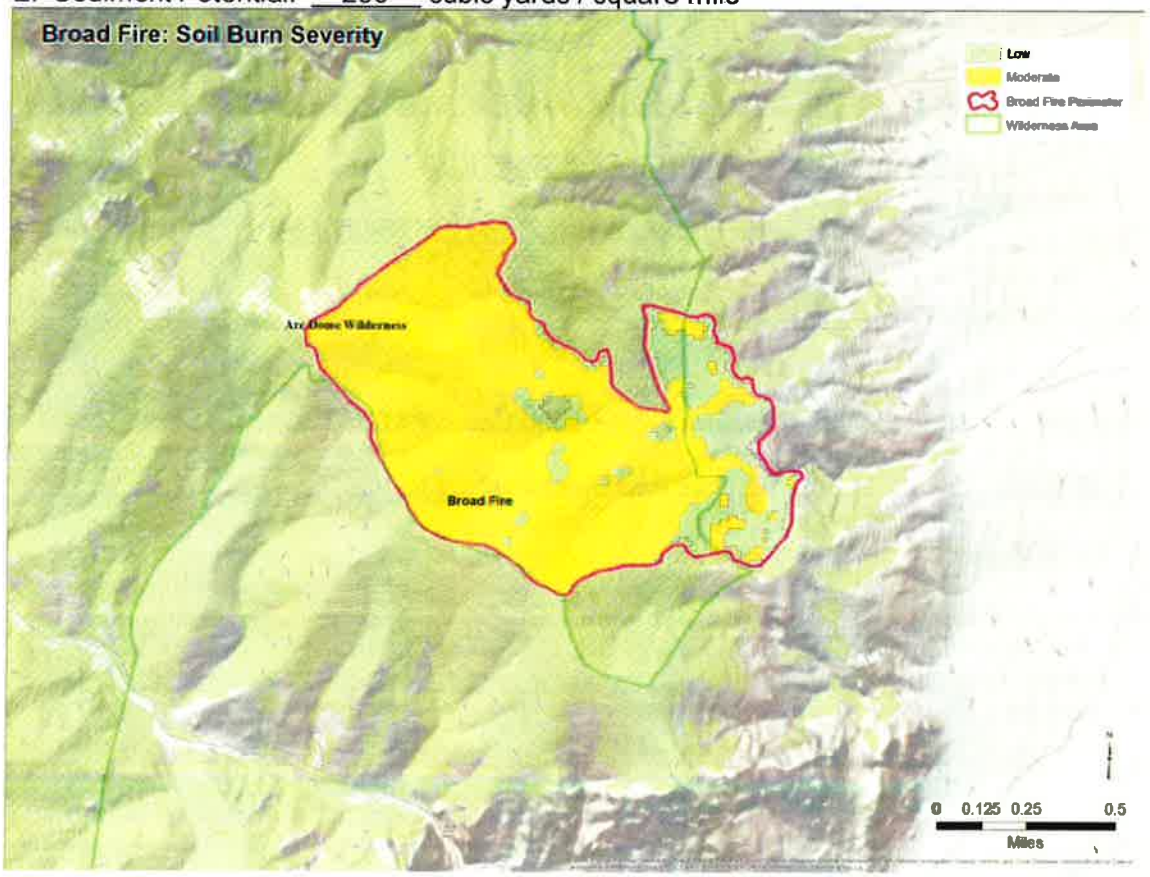
A. Burn Severity (acres): 87 (low) 414 (moderate) 0 (high)

B. Water-Repellent Soil (acres):

C. Soil Erosion Hazard Rating (acres):
5 (low) 52 (moderate) 465 (high)

D. Erosion Potential: .62 tons/acre

E. Sediment Potential: 290 cubic yards / square mile



PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 3

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

C. Equivalent Design Recurrence Interval, (years): 5

D. Design Storm Duration, (hours): 30min

E. Design Storm Magnitude, (inches): .4

F. Design Flow, (cubic feet / second/ square mile): 3

G. Estimated Reduction in Infiltration, (percent): 0

H. Adjusted Design Flow, (cfs per square mile): 3

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

A. Due to the moderate severity Fire through out the burn area there is increased risk of weed spread, increased visibility of hazardous mine sites, and the potential for flash floods to impact near by private lands. Based on the Risk assessment exihibit 2 in FSM 2500-2017-1 the following Value at risk table was developed.

A. Color Scheme Legend	
	Risk Level
	Very High
	High
	Intermediate (Where Treatments Are Recommended)

Value At Risk	Value Life (L), Property, (P), Resources (R)	Probability of Damage or Loss	Magnitude of Consequences	Risk	Discussion
Native plant community where invasive species or noxious weeds are absent or present in only minor amounts	R	Likely	Moderate	High	Adjacent fire areas in the same drainage have come back as predominantly invasive annuals.
Flash flooding and debris flows from the fire area	L, P	Likely	Moderate	High	FS WEPP PEP modeling for the fire area is showing dramatically increased potential for debris flows. The majority of soils in the fire area are rated high runoff potential. There was already a debris flow from the fire area that reached the county road via the ditch.

The potentail threats to the fire area include: signifigant increase in weed population in the fire with a potential for a spread of new species into the fire area due to fire suppression equipment passing through known populations outside of the fire area; flash flooding and/or debris flows could damage near by private property, the blm or county roads or trap forest visiters on one side or another of high flows. The drainage below the fire has already had visiters in it since the fire. The drainage below the fire has very steep skree slopes that would make it difficult for forest visiters to self rescue out of high flow events.

To address the flooding risk, closing the fire area was considered but not brought forward due to lack of ability to enforce the closure. A press release asking the public to stay out of the fire area was issued on 8/17/2018 by the forest.

In order to protect the identified values at risk the forest carried forward the following proposed actions: Early Detection Rapid Response (EDRR) weed surveys; informational signing at the mouth of the drainage and at the road turn off. Finally the Forest has made contact with the National Weather Service Elko (NWS Elko) to provide them geospatial data and rainfall intensity trigger points in order for them to put out pertinant storm and flood warnings for the fire area and down stream properties.

NWS Elko was able to download the dopller data for the storm event that triggered the debris flow so that the intensity and duration could be compaired to the WEPP PEP debris flow model outputs and used for potential calibration of the model.

The BAER team worked with BLM Battle Mountian's ES&R specialist to have the blm road checked and nessecary spot repairs were made. The BLM is aware that the debris flows have reached their road off forest and been advised to monitor the road condition. Nye county was contacted by the District Ranger and notified that the first debris flow had clogged the culverts under the freemont cut off road. Those culverts were cleaned out during the assessment period.

B. Emergency Treatment Objectives:
The objective of the EDRR is to allow natural regeneration to run its course and treat any increased weed populations and newly detected populations in a timely manner.

The storm warnings serve the objective or letting fire area visiters and down stream residents know that there might be an increased flow or a debris flow and that they need to take that into consideration in terms of moving to higher ground and not crossing flooded stream channels.

The informational signage is intended to allow fire area visiters to make an informed decision about entering the higher risk debris flow areas and the higher safety risk narrow canyon below the fire area.

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

Land **NA** % Channel **NA** % Roads/Trails **NA** % Protection/Safety **85** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	NA	NA	NA
Channel	NA	NA	NA

Roads/Trails	NA	NA	NA
Protection/Safety	95	95	95

E. Cost of No-Action (Including Loss):

Loss	**Estimated Value**
Native and desired naturalised plant community	$250,000+ to herbicide and reseed if whole fire area lost to invasives. Incluses loss of game and non-game wildlife habitat as well as range forage value for livestock.
Flood/debris flow	Loss varies from several thousand dollars to recover a vehicle ($500 dollar base response fee plus hourly rates apply to off road wrecker) to the potential loss of life. Economic loss due to the highway potentially needing to be shut down if the culverts clog and over top. Potential impacts to down stream residents and the community of Carver through flood and debris in yards and potentially basements as well as road damage. $1000-500,000

F. Cost of Selected Alternative (Including Loss): $16,100

G. Skills Represented on Burned-Area Survey Team:

[X] Hydrology [A] Soils [ ] Geology [A] Range
[ ] Forestry [**A**] Wildlife [ ] Fire Mgmt. [A] Engineering
[ ] Contracting [ ] Ecology [ ] Botany [A] Archaeology
[A] Fisheries [ ] Research [ ] Landscape Arch [A] GIS
Note: A= adjunct- consulted but not ordered to the incident.

Team Leader: Robin J Wignall

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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:

Noxious Weed Early Detection Rapid Response (EDRR) to protect BAER values Native and desired plant community: EDRR will concentrate on determining if weed sites are establishing or 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 additonal 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 totalling up to 20 visits to determine phenology and monitor effectiveness of treatments applied by others. The mileage includes the horse trailer for the crew to access the area as well as the milage to travel to the site from the office. The perimeter of the fire area is aproximatly 70 minute oneway drive from the Austin office where weed crews for this area are typically housed. Most road access to the fire are are level two roads.

Line Item	Unit Cost	Total
Salaries two GS 4	$135 per day x 2 x 11 days	$2,970
District plant specialist	$400 per day x 5 days	$2,000
GIS/FACTS specialist	$410 per day x 5 days	$2,050
Vehicle mileage	$ .60 per mile x 1600 miles + trailer misc expenses x2 for round trip	$2,000
Implementation team leader	$410 per day x 1 day	$ 410
Horse saddle sprayer	2 @ $2000 includes s&h & training	$4000
Horse feed and supplies	$5/day x 4horses x 11 days	$ 220
	Total Cost	**$13,650**

Channel Treatments:

NA

Roads and Trail Treatments:
NA

Protection/Safety Treatments:

Instal multiple signs to warn of fire area hazards.

Line Item	Unit Cost	Total
Salaries two GS 5	3 days @ 160x2	$ 960
Small flood warning signs	3 @ 60.	$ 180
Larger fire information and warning sign	1 @ 140	$ 140
Posts and hardware	5 @ 10.00 + 10.00 for hardware	$ 60
Implementation team leader	$410 per day x 1 day	$ 410
Per diem incase installers come from off district	3 days 2 nights x 2ppl	$ 700
	Total Cost	**$2,450**

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.)

NA

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

			NFS Lands				Other Lands			All
Line Items	Units	Unit Cost	# of Units	BAER $	Other $	# of units	Fed $	# of Units	Non Fed $	Total $
A. Land Treatments										
EDRR	each	13650	1	$13,650	$0		$0		$0	$13,650
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$13,650	$0		$0		$0	$13,650
B. Channel Treatments										
NA				$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										
NA				$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 Road & Trails				$0	$0		$0		$0	$0
D. Protection/Safety										
Sign Package	each	2450	1	$2,450	$0		$0		$0	$2,450
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$2,450	$0		$0		$0	$2,450
E. BAER Evaluation										
				---			$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$0		$0		$0	$0
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				$16,100	$0		**$0**		**$0**	**$16,100**
Previously approved										
Total for this request				**$16,100**						

PART VII - APPROVALS

1. _____ 8/21/18
Forest Supervisor (signature) Date

2. _____ _____
Regional Forester (signature) Date