

Date of Report: 7/10/2018

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: Owl Fire B. Fire Number: NM-GNF-000338
C. State: New Mexico D. County: Catron
E. Region: 03 F. Forest: Gila
G. Districts: Glenwood/Quemado/Reserve H. Fire Incident Job Code: P3LXW3
I. Date Fire Started: 06/30/2018 J. Date Fire Contained: 63%, as of July 10th
K. Suppression Cost: 1,692,650 as of July 10th
L. Fire Suppression Damages Repaired with Suppression Funds
 1. Fireline waterbarred (miles): 14.4
 2. Fireline seeded (miles): 14.4
 3. Other (identify):
M. Watershed Number: 150400040401 Headwaters Saliz Canyon, 150400040601 Upper Pueblo Creek, 150400040502 Dry Blue Creek, 150400040506 Steeple Canyon-Blue River, 150400040504 Centerfire Creek-Blue River
N. Total Acres Burned: 4,543
 NFS Acres(4543) Other Federal () State () Private ()
O. Vegetation Types: Mixed Conifer and Ponderosa Pine
P. Dominant Soils: Vitrandid Argiudolls, Vitrandid Hapludolls, Pachic Argiustolls

The Owl Fire is located in the San Francisco Mountain Range in the vicinity of Aspen Mountain which is located approximately 8 miles south of Luna New Mexico. The fire was caused by a lightning strike on June 30th. As of July 10th it has burned approximately 4,500 acres and is 51% contained. Elevations of the burned area range from around 7,200 feet to 8,900 feet. The fire burned with mixed severities with a higher percent of high severity associated with the mixed conifer vegetation type. Critical Forest values at risk as a result of the fire include damage to Forest road 209 which is the access route to a manned lookout on Saddle mountain, a NRCS SNOWTEL site and one of the access routes to year round private residences on the Dry Blue. FR 209 is also a main arterial road for the Glenwood and Quemado Ranger Districts. Soil productivity and watershed function are at risk of experiencing negative effects due to loss of vegetative canopy, vegetative ground cover

and the duff layer which will significantly increase overland flow, erosion and sedimentation rates. Downstream threatened and endangered aquatic occupied habitat for the endangered loach minnow and the threatened narrow headed garter snake and chiricahua leopard frog will experience elevated levels of ash and sediment as a result of the fire.

Critical Values Identified

Critical Values identified (FSM 2523.1 Exhibit 01) during the BAER assessment are: Human life and safety, property, natural resources and cultural/heritage resources. The BAER team evaluated the risk to those critical values using the BAER Risk Assessment (FSM 23235.1 Exhibit 02).

The following risk matrix shown below, Exhibit 2 of Interim Directive No.: 2500-2017-1, was used to evaluate the Risk Level for each value at risk identified during Assessment:

BAER Risk Assessment

Probability of Damage or Loss	Magnitude of Consequences		
	Major	Moderate	Minor
	RISK		
Very Likely	Very High	Very High	Low
Likely	Very High	High	Low
Possible	High	Intermediate	Low
Unlikely	Intermediate	Low	Very Low

The Very High and High Risk are unacceptable risk levels due to threats to human life, property, infrastructure and resources, therefore treatments should be applied. An Intermediate Risk could be unacceptable if human life or safety is the critical value at risk.

Risk to Human Life, Safety and Forest Infrastructure

Post-wildfire threats exist to life, property and safety within the burned area. Portions of forest road 209 that are located in the drainage bottom are at risk of being washed out or blocked with debris during rain events and potential entrapment of vehicles and persons. It is a main arterial road for the Glenwood District and is access to a manned lookout tower on Saddle Mountain, a SNOWTEL site and one of the two access points to year round residences in the Dry Blue.

Risk to Natural and Cultural Resources

Soils

There is a very high risk of increased levels of soil erosion and sediment delivery predicted to result from the high and moderate burn severity areas within the Owl Fire. Modeling shows that erosion will increase from pre-fire levels just over 0 tons per acre to post fire levels of over 40 tons per acre. The initiation of new surface erosion sources from moderately steep and steep slopes pose an extreme threat to long-term soil productivity, water quality impacts, aquatic T&E habitat and damage to Forest Road 209 from bulking of flood flows and debris flows.

Hydrologic Function

Hydrologic function will be greatly reduced due to loss of vegetative overstory, vegetative ground cover, and the litter layer. The loss of these layers in the ecosystem has profound negative effects to hydrologic function.

Water Quality

Downstream water quality will be degraded due to post fire ash and sediment deposition and transport in several of the 6th code watersheds affected by the burn. The Upper Pueblo Creek 6th code watershed experienced the highest amount of burn severity and drains into the San Francisco River which is in non-attainment by the State of New Mexico for turbidity.

Threatened and Endangered Species

Downstream of burned area aquatic T&E species habitat will be negatively affected by excessive post-fire ash and sedimentation into these aquatic systems. Downstream of the burned area the San Francisco River is critical occupied habitat for the endangered loach minnow. Saliz Canyon is occupied habitat for the threatened narrow headed garter snake, and chiricahua leopard frog. The majority of the high burn severity within the fire is located in Mexican Spotted Owl occupied habitat.

Cultural Resources

There is one prehistoric cultural site that could be affected by post fire conditions.

B. Emergency Treatment Objectives:

The objective of the hazard signs protection measure is to reduce risks to human life and safety by warning Forest visitors/users of existing threats while traveling within the burned area.

The objective of aerial seeding is to reduce hill-slope erosion and associated flooding, sediment laden flows and/or debris flows within the burned area. This treatment is recommended to:

- Lower the risk of post wildfire impacts to life/safety of the public;
- Lower the risk of post wildfire impacts to private property, roads and water supply infrastructure;
- Reducing the negative impacts to downstream aquatic T&E species.

The objective of road stabilization treatment is to lower the risk of damage to property by lowering erosion and deposition on the road surface in severely burned and steep areas within the burned area and to provide for public safety.

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

Land 85 % Channel N/A % Roads/Trails 80 % Protection/Safety 90 %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	70	90	95
Channel	N/A		
Roads/Trails	75	80	90
Protection/Safety	85	90	95

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

F. Cost of Selected Alternative (Including Loss):

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

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BAER Team Members

Soils - Nori Koehler

Hydrology – Nessa Natharius

Roads – Rex Null

GIS – Brian Park

Timber- Gabe Partido

Wildlife – Steve Agaurri

Recreation – Annette Smits

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: *Aerial Seed approximaetly 900 acres of high severity burn with some intermingled moderate severity burn in the mixed conifer vegetation type with non-persistent annual barley and a small percentage of native grass species found within the burned area..*

This treatment is proposed to provide relatively quick establishment (within 3 to 4 weeks) of vegetative cover in areas of high burn severity. The objective of this treatment is to reduce soil erosion rates and aid in slope stabilization. This treatment is expected to reduce hillslope erosion and sediment delivery by an appreciable amount and assist in stabilizing burned slopes. Re-establishment of vegetation over the longer term will assist in site stabilization, assisting in maintenance of long-term site productivity. The certified weed free seed mix would be comprised of a quick growing annual non persistent cereal barley and a small percent of high elevation native seeds to give the burned areas a jump start in recovery.

Certified Weed Free Seed Mix

Species	Seeds/ft2 Contribution from Planting Rate
Barley (<i>Hordeum vulgare</i>)	10
Muttongrass (<i>Poa fiedleriana</i>)	2
Mountain Brom (<i>Bromus marginatus</i>)	3
Total	15

Road Storm Patrol and Response - The overall purpose of this treatment is to reduce the potential for loss and further damage to Forest roads and culverts as a result of storm events. Prior to implementing Storm Patrol and Response the line ditches and culvert inlets will be cleaned so that they will pass the additional water that is anticipated to occur in the burned area.

Protection/Safety Treatments: *Hazard warning signs on Forest Road 209. Implement Storm Patrol and response on sections of Forest road 209 identified as high risk. Post Hazard warning signs on other roads entering the burned area and at trailheads entering the burned area.*

Hazard Warning Signs The purpose of this treatment is to reduce risks to human life and safety by warning Forest visitors/users of existing threats while traveling within the burned area.

"Entering Burned Area" signs are needed to alert the public of possible threats to their life and safety that exist within the burned area. The signs contain language specifying items to be aware of when entering a burn area such as falling trees and limbs, rolling rocks, and flash floods.

Warning sign will be placed at key access roads and trails entering the burned area.

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.)

Part VI – Emergency Stabilization Treatments and Source of Funds

Interim #

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										
Seed Cost		26	900	\$23,400	\$0		\$0		\$0	\$23,400
Helicopter Time	days	10,000	5	\$50,000	\$0		\$0		\$0	\$50,000
Seeding Bucket	per	15,000	1	\$15,000	\$0		\$0		\$0	\$15,000
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$88,400	\$0		\$0		\$0	\$88,400
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
Subtotal Channel Treat.				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
Ditchline/culvert/leadout Pre	miles	500	4	\$2,000	\$0		\$0		\$0	\$2,000
Storm Patrol and Response	week	10,000	2	\$20,000	\$0		\$0		\$0	\$20,000
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Road & Trails				\$22,000	\$0		\$0		\$0	\$22,000
D. Protection/Safety										
Hazard Signs Roads	per	300	4	\$1,200	\$0		\$0		\$0	\$1,200
Hazard Signs Trails	per	150	2	\$300	\$0		\$0		\$0	\$300
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$1,500	\$0		\$0		\$0	\$1,500
E. BAER Evaluation	1	10,000		\$10,000						
				—			\$0		\$0	\$0
<i>Insert new items above this line!</i>				—	\$0		\$0		\$0	\$0
Subtotal Evaluation				—	\$0		\$0		\$0	\$0
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				\$111,900	\$0		\$0		\$0	\$111,900
Previously approved										
Total for this request				\$111,900						

PART VII - APPROVALS

1.

Forest Supervisor (signature)

Date

2.

Regional Forester (signature)

Date

