USDA-FOREST SERVICE FS-2500-8 (7/00)

Date of Report: 09/30/15

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

I. Type of Report

[X] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

I. Type of Action

[X] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation 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: Lumpkin Incident

B. Fire Number: CA-PNF-001417

C. State: CA

D. County: Butte

E. Region: 05

F. Forest: Plumas

G. District: Feather River

H. Date Fire Started: September 15, 2015

I. Date Fire Contained: September 17, 2015

J. Suppression Cost:

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

L. Watershed Number:

M. Total Acres Burned: 1045
NFS Acres (830) Other Federal (0) State (0) Private (215)

N. Vegetation Types: mixed conifer/hardwood overstory with mixed manzanita brush

O. Dominant Soils: Holland, Wapi-Chaix complex (sandy loam texture)

P. Geologic Types: Jurassic metavolcanics, trondhjemite & unnamed metagabbro

Q. Miles of Stream Channels by Order or Class:_____

I. Transportation System

Trails:_ miles Roads:_ miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 721 (low) 230 (moderate) 94 (high)

B. Water-Repellent Soil (acres):

C. Soil Erosion Hazard Rating (acres):
___ (low) ___ (moderate) ___ (high)

D. Erosion Potential: ____ tons/acre

E. Sediment Potential: ____ cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 2

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

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

D. Design Storm Duration, (hours): ____

E. Design Storm Magnitude, (inches):

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

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

I. Adjusted Design Flow, (cfs per square mile): ____

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency: State whether or not Values At Risk were identified and the degree or level of threats to them.

The values at risk that were identified during field assessments were to the following: 1) Butte County road 27672 (also known as "Lumpkin Road") that parallels the south-western perimeter corner of the fire 2) South Feather Water and Power's "Miner's Ranch" Canal running along the north-western perimeter of the fire and other hydroelectric facilities maintained by them and 3) PG&E power-lines and facilities located in the burn area. Of the 1,045 acres burned, approximately 397 acres (38%) were of unburned/very low severity, 324 acres (31%) low severity, 230 acres (22%) moderate severity, and only 94 acres (9%) high severity. The higher severity burns were located largely at higher elevation locations away from values at risk.

Forman, John Davis, with the South Feather Water and Power (SFWP) was contacted about concerns over this value at risk from the fire associated with their facilities. John Davis expressed some concern over the area that burned adjacent to the SFWP's canal and maintenance along "Ponderosa Way" service agreement road that was in the burn area. While the fire did burn all the way to the canal in some places, field surveys conducted by BAER team members found that the fire was of very low intensity leaving root and soil structure intact and plenty of canopy cover for rain interception and future ground cover. In other places, unburned flatter areas between the fire and canal provide ample buffering against sediment delivery. John Davis understood that low level of risk associated with the burn area adjacent to the canal and along Ponderosa Way road as both these areas may be susceptible to delivery of sediment and debris during precipitation events as the burned area recovers. John did point out that SFWP will be conducting routine surveys of the canal to identify and remove debris as part of their typical operations. No other facilities were identified by SFWP.

The high severity proximity exception occurs for approximately a one-quarter mile stretch on the Butte County Road 27672, also known as the Lumpkin Road. Based upon field surveys by BAER team members the high severity part of the fire came near the road and continued upslope for approximately one-half mile. While this section upslope of the road may benefit some from stabilization efforts, slopes are quite steep (~60%) and would require significant expensive efforts to apply while providing questionable efficacy on these highly erosive soils. Monitoring and clean-up of the affected section of road, if necessary, would be a more cost effective strategy. Sean Obrien with the Butte County Public Works Department was contacted regarding concerns over this value at risk and agreed with the finds of the BAER Team members and did not suggest any treatments. However, Sean did express concerns over standing dead trees, burned guard rails and road signage that was potentially burned up by the fire. I told Sean that if he found any of these issues existing out in the field to coordinate them with the Feather River Ranger District staff.

Pacific Gas and Electric was contacted, however they were unaware of any facilities that were damaged or threaten by the fire.

The potential risk to these values would be from increased post-fire runoff and erosion resulting from precipitation events that could result in disrupting the usage and maintenance of roads and other facilities such as the canal drainage(s) and power-lines. Based upon field assessments the level of threats to these values at risk are relatively low. No treatment was recommended for these values at risk as part of this BAER assessment.

Additionally, there are several noxious weed plants species that are known to occur within the Lumpkin fire (see Lumpkin Fire BAER Noxious Weeds Specialist Report for known species occurrences), but some are much more threatening to the ecosystem than others. Invasive weeds are very effective at occupying disturbed soil and displacing native plants and habitat. Non-native invasive weeds have the potential to displace native vegetation, degrade habitat for other plants and animals, and lower ecosystem stability. Ecological stability is impacted when noxious weeds displace native plant communities.

Many known occurrences of noxious weeds were burned over and further disturbed by vehicles and heavy equipment. Where weed seeds were present they are likely to germinate and establish seedlings in the post fire community. Many of these sites were driven over or parked on by suppression vehicles. It is likely that seeds were transported by vehicles into burned areas that are highly vulnerable to infestation. The BAER team visited several of the sites and confirmed that they had been burned and disturbed.

There was also no washing of vehicles or equipment at any time during the incident. Equipment such as water tankers, engines, dozers, and excavators were not washed or inspected or cleaned for dirt/plant parts on the way into the fire during suppression and rehabilitation efforts. Lack of washing increases the risk of introduction of invasive noxious weeds.

The potential values at risk, in relation to invasive noxious weeds are the native plant communities, soil stability, adjacent private lands, and the Sensitive plant habitat. The Lumpkin Fire impacted a variety of different plant communities and environments. Noxious weed populations established in the fire area also threaten all nearby public and private lands. Water quality may also be threatened when noxious weeds

displace native riparian and wetland plant species. Many native wetland plants prevent riparian soil erosion while some noxious weeds do not.

Provide justification why NO TREATMENT was chosen.

B. Emergency Treatment Objectives:

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Land __ % Channel __ % Roads __ % Other __ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads			
Other			

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

F. Cost of Selected Alternative (Including Loss):

I. Skills Represented on Burned-Area Survey Team:

[x] Hydrology [x] Soils [] Geology [ ] Range [ ]
[ ] Forestry (Adjunct Silviculturist) [ ] Wildlife [ ] Fire Mgmt. [ ] Engineering [ ]
[ ] Contracting [ ] Ecology [x] Botany [ ] Archaeology [ ]
[ ] Fisheries [ ] Research [ ] Landscape Arch [x] GIS

Team Leader: Antonio Dueñas

Email: tduenas@fs.fed.us Phone: (530) 836-7156 FAX: (530) 836-0493

I. 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:

1. Noxious weed detection surveys and treatment are expected to occur in 2016 of all roads, firelines, drop points, and safety zones affected by the Lumpkin fire will identify new and expanded infestations. These areas will be surveyed for introduction or spread of noxious weeds. If any new or outlying populations are found in these surveys, a supplementary request for noxious weed treatment may be submitted. Some populations will be treated by hand pulling—at the discretion of the Feather River District Botanist (see Lumpkin Fire BAER Noxious Weeds Specialist Report for further treatment description) and mapped by capturing treated areas with a GPS system unit.

2. Additional treatment consisting of revegetation with native grass seed will provide competition for and reduce the risk of spread of noxious weeds. Native grasses will also reduce the risk of erosion by providing soil. Revegetation should be done at all safety zones, drop points, and at the intersections of dozer lines with forest roads.

Based upon the Lumpkin Fire GIS layers and field surveys, there are approximately 15 miles of firelines, 6 miles of NFS roads, and 1 mile of road on private lands. The total firelines and roads to be surveyed and potentially treated would be approximately 22 miles. Additionally, there are a total of nine sites that were identified to be surveyed and treated that include a water source and staging area along with drop points and saftey zones. Assuming that survey and treatment cost would be around $400 per mile, the total cost for survey and treatment for noxious weeds is estimated to be around $8,800.

Based upon field assessments, the total noxious weed survey and treatment cost being requested is $8,600. This would consist of one GS-11 for 4 days, four GS-05's for 10 days and 1,500 miles at 0.40 per mile.

Channel Treatments:

Roads and Trail Treatments:

Structures:

1. 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 would consist of mapping treated areas with a GPS system unit. Monitoring cost was included within "land treatment" cost.

Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

A. Land Treatments										
noxious weed survey and treatment	GS-11	400	4	$1,600	$0		$0		$0	$1,600
	GS-05	160	40	$6,400	$0		$0		$0	$6,400
	Mileage	0.4	1500	$600	$0		$0		$0	$600
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$8,600	$0		$0		$0	$8,600
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										
				$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. Structures										
				$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 Structures				$0	$0		$0		$0	$0
E. BAER Evaluation										
	team	4500	1	$4,500	$0		$0		$0	$4,500
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$4,500	$0		$0		$0	$4,500
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				**$8,600**	**$0**		**$0**		**$0**	**$8,600**

Forest Supervisor (signature) _____ Date 10/6/2015

Regional Forester (signature) _____ Date 13 Apr. 2016