

Date of Report: 8/24/12

**BURNED-AREA REPORT**  
(Reference FSH 2509.13)

**PART I - TYPE OF REQUEST**

I. Type of Report

- ☒ 1. Funding request for estimated WFSU-SULT funds  
☐ 2. Accomplishment Report  
☐ 3. No Treatment Recommendation

I. Type of Action

- ☒ 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: Bear Fire B. Fire Number: CA-SNF-002127  
C. State: CA D. County: Fresno  
E. Region: 5 F. Forest: Sierra National; Forest  
G. District: High Sierra H. Fire Incident Job Code: CA-SNF-002127  
I. Date Fire Started: August 5, 0700 J. Date Fire Contained: August 13, 2012  
K. Suppression Cost: Not Available  
L. Fire Suppression Damages Repaired with Suppression Funds  
    1. Fireline waterbarred (miles): Not Available  
    2. Fireline seeded (miles): N/A  
    3. Other (identify): N/A  
M. Watershed Number: HUC Watershed Florence Reservoir (#180400060102)  
N. Total Acres Burned:  
    NFS Acres( 924 ac) Other Federal ( ) State ( ) Private ( )  
O. Vegetation Types: Jeffrey pine, Lodgepole pine, Live oak, Manzanita

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## P. Dominant Soils:

MUID	MUNAME	Acres
750165	Stecum Family-Rock Outcrop association 45 to 65 percent slopes	290
750152	Rock Outcrop-Lithic Xeropsamments complex 15 to 45 per cent slopes	244
750160	Sirretta Family-Rock Outcrop complex 45 to 65 percent slopes	240
750153	Rock Outcrop-Lithic Xeropsamments complex 45 to 85 per cent slopes	75
750151	Rock Outcrop-Entic Cryumbrepts association 25 to 60 percent slopes	51

Q. Geologic Types: Quaternary Glacial Deposits, Quartz Monzonite of Bear Dome, Metavolcanic Rocks consisting of extensively recrystallized rhyolite tuff and tuff breccia.

The geomorphology of the area is dominated by glaciated terrain consisting of glacial erosional and glacial depositional landforms. These landforms consist of glacially scoured bedrock and moraines. Over printed on these glacial landforms are eroding hillslopes and undifferentiated stream systems. Slopes in the fire area vary from 15% on the lower slopes of the fire to 35% slopes in the middle of the fire to 45% slopes in the upper end of the fire area.

## R. Miles of Stream Channels by Order or Class:

STRCODE	Sum_LENGTH
Ephemeral Class IV/V	12.2
Intermittant Class III	1.3
Perennial Class II	1.1

HUC - Subdrainages by Burn Severity Sum of Acres					
	H	L	M	(blank)	Grand Total
511.0051		5	13		18
513.0009 (Poison Mdw)	12	199	49		261
513.0010 (Poison Mdw)		27	64		91
513.0011		4	151		155
513.0012			1		1
513.0054 (Poison Mdw)		6			6
(blank)					
<b>Grand Total</b>	<b>12</b>	<b>240</b>	<b>278</b>		<b>531</b>

## S. Transportation System

Trails: 1.57 miles      Roads: 0 miles

TRAIL_ID	NAME	Length
27E26	POISON MEADOW	0.41
28E45	HOOPER DIVERSION	0.04

**PART III - WATERSHED CONDITION**

- A. Burn Severity (acres): 248\_(low) 271 (moderate) 12 (high)
- B. Water-Repellent Soil (acres):12
- C. Soil Erosion Hazard Rating (acres):  
777 (low) 135 (moderate) 12 (high)
- D. Erosion Potential: .494 tons/acre
- E. Sediment Potential: .494 cubic yards / square mile

**PART IV - HYDROLOGIC DESIGN FACTORS**

- A. Estimated Vegetative Recovery Period, (years): 3-5 years
- B. Design Chance of Success, (percent): 90%
- C. Equivalent Design Recurrence Interval, (years): 2
- D. Design Storm Duration, (hours): 2.22
- E. Design Storm Magnitude, (inches):
- F. Design Flow, (cubic feet / second/ square mile): 91.81
- G. Estimated Reduction in Infiltration, (percent): 10%
- H. Adjusted Design Flow, (cfs per square mile):

**PART V - SUMMARY OF ANALYSIS**

A. Describe Watershed Emergency: The only value at risk in the Bear Fire area is portions of the Poison Meadow Trail and the Cirque Lake Trail. There are no other values at risk from the Bear Fire. The Bear fire is located in the John Muir Wilderness on shallow granitic, metavolcanic and glaciated soils, and extensive areas of rock outcrop (see Location Map). Jeffrey pine, Lodgepole pine and manzanita shrub are located within the fire area. Jeffrey pine and the Lodgepole stands are concentrated in the drainages and in an one area of the fire. Approximately, 31% of the fire resulted in moderate to high burn severity. Some of this moderate to high burn severity areas are located in the Lodgepole pine and Jeffrey pine stands and in the live oak shrub stands.

The Bear Fire is located in an area between the Bear Diversion and the Hooper Diversion. Both of these sites are water diversion structures under special use permit by Southern California Edison. The fire is not a threat to either of these water structures. Poison Meadow is located downstream of the fire area and is not a potential value at risk. Approximately, 125 acres of moderate and high burn severity areas are located in the HUC8 drainages (513.0054, 513.009, 513.0010) above Poison Meadow. Some erosion will occur on the moderate and high burn severity areas upstream of Poison Meadow. The erosion is expected to be minor and most sediment is expected to deposit onto Poison Meadow. Some of this sediment will move through the channels in Poison Meadow, downstream to the South Fork San Joaquin River. The southeast side of the fire area is drained by a small drainage that has 152 acres of moderate burn severity. The channel in this drainage

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(513.0011) drains directly into the South Fork of the San Joaquin River. Overall erosion and sedimentation is expected to be minor and is not expected to be a threat to any downstream values.

Approximately, 1.57 miles of the Poison Meadow Trail and the Cirque Lake Trail are located in the fire perimeter. Approximately, .77 miles of trail are located in low and moderate burn severity areas. Approximately .15 miles of the Cirque Lake Trail is located on moderate burn severity areas. There is potential for increased runoff in this area and loss of water control. Loss of water control across the trail could result in erosion of the trail and damage to the trail tread. There are areas along the Cirque Lake Trail that runoff could flow down the trail and damage the trail tread. There is a likely Probability of Damage on approximately 800 feet of the Cirque Lake Trail and a moderate Magnitude of Consequence, therefore there is a **high risk** that the Cirque Lake Trail could get damaged from the first winter storms.

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

## B. Emergency Treatment Objectives:

Storm proofing the Poison Meadow Trail and the Cirque Lake Trail would reduce potential damage to the trail for the first winter season and spring runoff. The trails should have waterbars constructed at appropriate spacing to prevent runoff from flowing down the trails. The work should be completed immediately after approval of the monies to conduct this work.

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

Land \_\_\_ % Channel \_\_\_ % Roads \_\_\_ % Trails 100 %

## D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads			
Trails	90	98	

E. Cost of No-Action (Including Loss): **\$20,000**

F. Cost of Selected Alternative (Including Loss): **\$10,000**

I. Skills Represented on Burned-Area Survey Team:

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input checked="" type="checkbox"/> Geology	<input type="checkbox"/> Range	<input type="checkbox"/>
<input type="checkbox"/> Forestry	<input type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering	<input type="checkbox"/>
<input type="checkbox"/> Contracting	<input 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 type="checkbox"/> GIS	

Team Leader: Alan J. Gallegos

Email: ajgallegos@fs.fed.us Phone: 559-297-0706 ext 4862 FAX: 559-294-4809

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:

Channel Treatments:

Roads and Trail Treatments:

**Selective Maintenance on System Trails** to prevent concentration of runoff through the installation of water bars where trail conditions and moderate and high burn severity may lead to such conditions during the winter rains and spring snowmelt and runoff. Specific placement would be under the direction of the local recreation officer or experienced trail personnel.

Structures:

I. **Monitoring Narrative:**

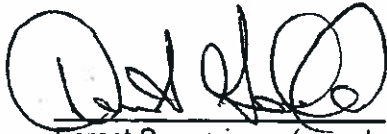
(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)

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

Line Items	Units	Unit Cost	NFS Lands			Other Lands				All
			# of Units	WFSU SULT \$	Other \$	# of units	Fed \$	# of Units	Non Fed \$	Total \$
<b>A. Land Treatments</b>										
Nx Weed Detection	ea			\$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
<b>Subtotal Land Treatments</b>				\$0	\$0		\$0		\$0	\$0
<b>B. Channel Treatments</b>										
				\$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
<b>Subtotal Channel Treat.</b>				\$0	\$0		\$0		\$0	\$0
<b>C. Road and Trails</b>										
Trail Maintenance	miles	\$3,184	1.57	\$4,999	\$0		#REF!		#REF!	#REF!
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Road &amp; Trails</b>				\$4,999	\$0		#REF!		#REF!	#REF!
<b>D. Structures</b>										
				\$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
<b>Subtotal Structures</b>				\$0	\$0		\$0		\$0	\$0
<b>E. BAER Evaluation</b>										
BAER Team	ea	\$2,231	1	\$2,231			\$0		\$0	
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Evaluation</b>				\$2,231	\$0		\$0		\$0	\$0
<b>F. Monitoring</b>										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<b>Subtotal Monitoring</b>				\$0	\$0		\$0		\$0	\$0
<b>G. Totals</b>				<b>\$7,230</b>	<b>\$0</b>		<b>#REF!</b>		<b>#REF!</b>	<b>#REF!</b>

**PART VII - APPROVALS**

1.



Forest Supervisor (signature)  
(Acting)

8/27/12  
Date

2.



Regional Forester (signature)

9/5/12  
Date

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