

Date Of Report: June 2, 2000

## **BURNED-AREA REPORT**

(Reference FSH 2509.13)

### **Part I Type of Request**

#### A. Type of Report

- ☐ 1. Funding Request for Estimated WFSU-FW22 Funds
- ☐ 2. Accomplishment Report
- ☒ 3. No Treatment Recommendation

#### B. Type of Action

- ☐ 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures).
- ☐ 2. Interim Report
  - ☐ Updating 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: Azusa

B. Fire Number: CAINF029

C. State: CA

D. County: Mono

E. Region: R5

F. Forest: Inyo NF

G. District: --

H. Date Fire Started: 05/29/00 10:15 AM

I. Date Fire Controlled: 05/31/00 18:00

J. Suppression Cost: \$475,000 (projected as of 6/1/00 PM)

K. Fire Suppression Damages Repaired with WFSU-PF12 Funds:

1. Firelines waterbarred 0.1 miles (dozer line)
2. Firelines seeded: 0 miles
3. Other (identify):
  - 6 miles of handline outsloped and covered with slash
  - 1 mile of dozer line outsloped and covered with slash
  - 1 barrier built (to discourage OHV trespass on dozer line)
  - repair of road damage caused by dozer
  - cleanup of slash around station that was cut as part of the suppression efforts

L. Watershed Number: 1809010102 (fifth field hydrologic unit code)

M. Total Acres Burned: 740

NFS Acres [408]      Other Federal []      State []      Pvt. [332]  
(estimate approx: 280 = City of Los Angeles (DWP), 50 pvt landowners, 2 SCE)

N. Vegetation Types: Pinyon Pine, Jeffrey Pine, Bitterbrush/Sagebrush/bunchgrass communities, Aspen, Willow, Sedge

O. Dominate Soils:

- MU 345: Corbett-Nanamkin families-RO, 30-60% slopes
- MU 328: Wrango family-Torriorthentic Haploxerolls 0-15% slopes
- MU 329: Wrango family-Torriorthentic Haploxerolls 15-30% slopes
- MU 159: Aquic Cryoborolls 5-30% slopes

P. Geologic Types: Glacial Moraine, granitics/metasediments, volcanic ash

Q. Miles of Stream Channels by Order or Class

estimate 2.5 miles of Class I stream (Lee Vining Creek), about 50% burned only 1 side of riparian understory, about 97% of riparian overstory remained intact along entire reach within the burn.

R. Transportation System:

Road: 0.2 mi (HWY395), 3 mi system and OHV roads  
Trail: 0 miles system trail, unknown amount of user created trail along creek

### **Part III - Watershed Condition**

#### A. Fire Intensity (acres)

Low:	110 (15%)
Moderate:	570 (77%)
High:	60 (8%)

B. Water-repellent Soil Acres: 315 (approx 50% of the mod&hi int burn, patchy distribution, areas with black ash and charred litter are strongly hydrophobic to a depth of about 1", the interspaces between shrubs are highly porous and show no signs of hydrophobicity.)

#### C. Soil Erosion Hazard Rating (estimated acres)

Low:	430
Moderate:	140
High:	160

D. Erosion Potential (tons per acre): There is a probable increase in soil loss due to wind and water erosion of 2-5 times background rates for 2-3 years until vegetation reestablishes.

E. Sediment Potential: (cubic yards / square mile): There is a probable increase in sediment slightly above background rates for 1 year until riparian buffer vegetation returns, however most of the riparian zone has sufficient ground cover and overstory intact to minimize this increase.

### **Part IV - Hydrologic Design Factors**

A. Estimated Vegetative Recovery Period, (years): riparian: 1 yr  
bitterbrush/bunchgrass: 3-10 yr  
jeffrey/pinyon: 50-100 yr

B. 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):

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

## **Part V – Summary of Analysis**

### **A. Describe Watershed Emergency:**

There is no watershed emergency or threat to life and property, however there is an unknown risk to soil and vegetation productivity due to weeds.

Approximately 10:15 5/29/00 a campfire on the south side of Lee Vining Creek, approximately 1 mile west of the Lee Vining Ranger Station escaped. The fire was driven by strong winds to the east towards the ranger station and the town of Lee Vining and to the south up over a ridge. Although several structures were threatened, none were destroyed. Highways 120 and 395 were closed for part of the day and reopened in the early evening. The fire burned to about 740 acres and was nearly contained by late evening and full containment was reached late afternoon on 5/30/00, the following day.

Lee Vining Creek parallels much of Highway 120, which leads to Yosemite National Park. This is a popular recreation area and fishery. There are also several diversions for power generation before the creek empties into Mono Lake. Approximately 3 miles of riparian habitat along Lee Vining Creek were impacted. The understory (willows, bitterbrush, sedges) burned to the creek edge, however most of the overstory (pine, aspen, larger willows) remained intact with only lower limbs singed or smaller trees consumed. The total burn area was about 740 acres. Generally the burn was of moderate intensity with about 5-10 percent patches that burned at high intensity on steeper slopes and ridgetops in the pinyon pine. About 15% burned at low intensity, mostly in riparian and the more gently sloped alluvial fans with bitterbrush and some Jeffrey and pinyon pine.

I discussed the need for treatments with Dale Schmidt, the Resource Advisor from Dept of Water and Power, and he felt that none were necessary. Only a small percentage of the watershed burned and most of that was at moderate intensity. The reach of stream within the burn is deficient in sediment due to intake structures and ponds higher up in the drainage and the power plant is fully capable of operating under high sediment loads if necessary. Total precipitation in this canyon is about 16 to 18 inches per year and about 80% or more falls as snow. Since most of the burn was of moderate or low intensity and precipitation in the area mostly falls as snow, the risk damage to life or property due to flooding is very low. Natural recovery is expected to be rapid in the riparian areas. The steeper slopes have a moderate to high erosion hazard, however there is overstory in much of the burn that will provide needle cast and ground cover by fall. Wind erosion is likely to be increased above natural levels for several years and may have a short term impact on air quality in this non attainment airshed.

Due to the high recreation use and proximity to major travel corridors, there is some concern for invasion of non native species and/or noxious weeds into the burned area. The area has not been surveyed and there are no known infestations of noxious weeds, however there are known concentrations of alien species such as cheat grass (*Bromus tectorum*). Several years ago a yellowstar thistle population was found and eradicated

approximately 3 miles from the burn area along Highway 120. The forest is requesting a small amount of funding to survey and monitor the burn area for invasion of weeds.

**B. Emergency Treatment Objectives:**

No watershed or soil stabilization treatments are planned. Survey and management of weeds is intended to reduce the impacts to soil productivity and vegetation within the burn area that could occur as a result of weed invasion.

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

Land\_\_\_\_%                  Channel\_\_\_\_%                  Roads\_\_\_\_%                  Other 99%

**D. Probability of Treatment Success**

	<-----Years after treatment----->		
	1	3	5
Land	75%	85%	99%
Channel			
Roads			
Other			

**E. Cost of No Action (including loss):** There is slight potential for loss of plant community productivity due to non-native plant invasion and soil loss as a result of the fire.

**F. Cost of Selected Alternative (including loss):** This alternative will cost slightly more in the short term (survey and monitoring costs) but could save significant expenses in lost productivity and weed eradication costs over the longterm.

**G. Skills Represented on Burned-Area Survey Team**

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

Team Leader: Lisa Bryant, forest watershed program leader and BAER coordinator

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#### H. Treatment Narrative:

The following treatments have been proposed to mitigate the threat to life, property, loss of site productivity and water quality.

#### Land Treatments:

Survey and monitor the burned area and vicinity for noxious weeds. The objective of the initial survey would be to determine if source areas are locally present and if there are protective measures that can be implemented to prevent or minimize the invasion of noxious weeds or alien species. The objective of the followup monitoring would be to determine if noxious weeds or alien species are invading the burn area and recommend eradication or control measures.

Complete an initial survey of the burn area, document and map nonnative and noxious weed species and enter the data into a GIS database. The initial survey should be completed in the early field season of 2000. (estimate 3 days botany time for survey, mapping, database entry, and report)

Monitor within the burn area twice per season for 3-5 years or until native grass and shrub communities reestablish (estimate 4 days botany time per year for followup monitoring, database updates, and reporting). At the end of each field season, maps and database will be updated. Reports will be provided upon request to the Regional Office and as part of the year end reporting for the Inyo NF weeds program. If necessary treat invasions under current forest policy and direction for weed management (currently forest guidelines approve mechanical removal and seeding or planting with natives, as well as educational signing and similar prevention measures – an Environmental Assessment is currently being written to update the forest weeds management direction). Treated acres will be reported with year end accomplishment reports. Funding for treatments will come from the weed management program.

A more comprehensive monitoring plan can be prepared and submitted if necessary.

#### Channel Treatments:

None proposed

#### Roads and Trail Treatments:

None proposed

## Ownership

	NFS Lands	Other Lands
Line Items:		
A. Land Treatments	\$3000.00	
B. Channel Treatments		
C. Road and Trails		
D. Structures		
E. BAER Evaluation	\$ 500.00	\$250.00
F. Totals	\$ 3500.00	\$250.00

## Part VII – Approvals

1. \_\_\_\_\_  
Forest Supervisor  
Date
2. /s/Gilbert Espinosa\_(for)  
Regional Forester  
6/8/00  
Date