

Date of Report: 07/17/06

**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 other than Noxious weed surveys.

**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: Happy-Miler Complex
- B. Fire Number: CA-MDF-242/276
- C. State: CA
- D. County: \_\_\_\_\_
- E. Region: 05
- F. Forest: Modoc
- G. District: Doublehead and Big Valley RD's
- H. Fire Incident Job Code: P5B6UU
- I. Date Fire Started: 06/27/06
- J. Date Fire Contained: 07/16/06
- K. Suppression Cost: 4.4 M
- L. Fire Suppression Damages Repaired with Suppression Funds
  - 1. Fireline waterbarred (miles): 15.4
  - 2. Fireline seeded (miles): 0
  - 3. Other (identify): 0
- M. Watershed Number: 1802000211, 1802000215, 1802000209 and 1802000210.
- N. Total Acres Burned: 1831  
NFS Acres(1831)    Other Federal ( )    State ( )    Private ( )
- O. Vegetation Types: Pine, manazanita brush and misc forbs
- P. Dominant Soils: Volcanic with isolated pockets of shallow coarse textured Inceptisols (1510 acres).
- Q. Geologic Types: Lava flows and vesicular tubes (80% of Fire Complex), Mountain sides and undulating hillsides (20% of Fire Complex).

R. Miles of Stream Channels by Order or Class: Class I 0.08 miles

S. Transportation System

Trails: 0 miles      Roads: 15.4 miles

### **PART III - WATERSHED CONDITION**

A. Burn Severity (acres): 366 (low) 913 (moderate) 552 (high)

B. Water-Repellent Soil (acres): 150

C. Soil Erosion Hazard Rating (acres):  
1482 (low) 211 (moderate) 138 (high)

D. Erosion Potential: 1.4 tons/acre

E. Sediment Potential: NA cubic yards / square mile

### **PART IV - HYDROLOGIC DESIGN FACTORS**

A. Estimated Vegetative Recovery Period, (years): 25

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

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

D. Design Storm Duration, (hours): NA

E. Design Storm Magnitude, (inches):

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

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

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

### **PART V - SUMMARY OF ANALYSIS**

- A. Describe Critical Values/Resources and Threats: There are limited resources at risk as approximately 90% of the burn area does not have water quality concerns (acreage is contained within lava fields and lava vesicular flows. The remainder of the multiple divisions have relatively gentle slopes and sustained light to moderate burn intensity and as a result do not pose risk to water quality. The single greatest risk is for noxious weeds to spread from an existing site of Dalmatian Toadflax (adjacent to Division D) to within the burned area. The most unique feature within Division C and D are collapsed lava tubes that are now water holes supporting wildlife, riparian vegetation and sensitive plants. These areas are hydrologically disconnected from the burned areas. North and South Happy Divisions are dominated by volcanic lava flows with approximately 80% of the ground covered by lava flows. These divisions account for approximately 82% of the burned acres. Trees were growing on the small mounds and the interspatial areas between the lava flows. The Miller units of the complex has about 50% of the acreage

with steep slopes (>35%) and maximum erosion hazard rating of high. This accounts for 138 acres or less than 10% of the burned area. The surface has moderate amount of rock content and adequate supply of trees with potential for needle cast in the fall. There are no stream to speak of within the burned area to constitute a water quality concern (approximately 0.23 feet/acre of streams). The most unique feature within Division C and D are collapsed lava tubes that are now water holes supporting wildlife, riparian vegetation and sensitive plants. These areas are hydrologically disconnected from the burned areas.

Division Z (130 acres) has an intermittent tributary to Hays Canyon in the SE1/4 of the fire area. The tributary drains into a natural floodplain and the stream channel disappears as it enters the floodplain. Approximately a 10 to 20 acre portion of the fire burned from the edge of the intermittent drainage to the ridge top and could result as a sediment source to the floodplain. Division Z is located approximately is located within Section 34, T40N, R8E. The dominant soils in the area consists of Lawyer-Elmore-Gwin Association (Soil Map Unit 205). This map unit contains Gwin Family (15% of the map unit) that is a relatively shallow soil (less than 20 inches deep). has a moderate to high maximum erosion hazard rating, is a well drained soil and has a water runoff potential of rapid. The Gwin Family is located on the steeper pitches of the map unit on the upper sideslopes and mountainsides. The remainder of the soil map unit consists of soils 20 to 40 inches deep, has a moderate maximum erosion hazard rating, is a well drained soil and has a water runoff potential of slow ( due to the high content of clay).

Ranch/farm out buildings/structures are located approximately 5 miles from the drainage entering the floodplain and most likely are not at risk of debris flow coming out of the canyon. The most likely effect would be for an influx of new sediment/debris to be delivered to the flood plain. The burned section within Division Z adjacent to the intermittent drainage comprise less than 2% of the total acreage of the fire.

B. Emergency Treatment Objectives: Identify if noxious weeds were introduced into the burned area during suppression activities or if the existing noxious weed populations will expand due to the fire.

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

Land 100 % Channel     % Roads/Trails     % Protection/Safety     %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	100	50	
Channel			
Roads/Trails			
Protection/Safety			

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

Team Leader: Peter Adams

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Cost of BAER Assessment: \$6300

#### 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 Surveys of Roads, Dozer Lines and Hand lines with the Fire subdivisions in 2007. The estimated request is for \$4000. The survey would be completed in 2007 and would be completed by two bio/botany tech's and would include a follow up report by the Forest Botanist to determine if additional treatment/funding is requested.

##### Channel Treatments:

None

##### Roads and Trail Treatments:

None

##### Protection/Safety Treatments:

None

#### 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.)

None

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

**Interim #**

### **PART VII - APPROVALS**

1. /s/ Stanley G. Sylva 07/25/06  
Forest Supervisor (signature) Date
  
2. /s/ Beth G. Pendleton (for) 07/27/06  
Regional Forester (signature) Date