USDA-FOREST SERVICE FS-2500-8 (6/06)

Date of Report: 04/13/07

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[x] 1. Funding request for estimated emergency stabilization funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

[x] 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: Bernasconi

B. Fire Number:CA-INF-343

C. State: CA

D. County: Inyo

E. Region: 05

F. Forest: Inyo

G. District: White Mnt.

H. Fire Incident Job Code: P5DB5R

I. Date Fire Started: 4/12/07

J. Date Fire Contained: 4/13/07

K. Suppression Cost:50,000

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles):
2. Fireline seeded (miles):
3. Other (identify): Soil berms pulled back, cut brush placed on handlines

M. Watershed Number:180401020604

N. Total Acres Burned: 50.2
NFS Acres(27.7) Other Federal ( ) State ( ) Private (22.5)

O. Vegetation Types: Sagebrush, bitterbrush, cheatgrass and perrennial bunch grasses

P. Dominant Soils: Sur and Kiona Families derived from Tioga era glaciation

Q. Geologic Types: granitic lateral moraine deposits from Tioga era glaciation

R. Miles of Stream Channels by Order or Class:
.5 miles of ephermal stream channels.

S. Transportation System

Trails: miles Roads: .5 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 9 (low) 41 (moderate) ___ (high)

B. Water-Repellent Soil (acres): 20

C. Soil Erosion Hazard Rating (acres):
___ (low) 10 (moderate) 40 (high)

D. Erosion Potential: 3 tons/acre Wind erosion is likely to be an erosional process in this area.

E. Sediment Potential: 180 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 3-7 years for shrubs depending on severity of the burn

B. Design Chance of Success, (percent): 80

C. Equivalent Design Recurrence Interval, (years): 25

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 1.4

F. Design Flow, (cubic feet / second/ square mile): 1.6

G. Estimated Reduction in Infiltration, (percent): 20

H. Adjusted Design Flow, (cfs per square mile): 3.2

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:
Background: The Bernasconi fire started on April 12 by a campfire and burned a total of 50 acres. The fire started on Los Angeles Departement of Water and Power lands (LADWP) and burned on the Inyo.

Threats to Human Life and Property

- There is a native survace 4wd road on Los Angeles Department of Water and Power Lands (PVT) and national Forest Lands on the eastern edge of the fire. There are 3 ephemeral drainages coming off the fire area crossing the road. There is a risk for debris and sediment to cross the road and cause minor degradation to the road crossings due to a high intensity thunderstorm in the fire area. The threat to human life is low, however people travelling through this area should remain diligent, especially during a storm event.

Threats to Ecosystem Stability/Soil Productivity

- Invasive/noxious weed invasion and an increase in vehicles traveling off established roads in the fire are the greatest hazards to soil productivity in the fire area. The fire burned vegetation opening up areas adjacent to an unnamed 4wd road. This area is flat with scattered large boulders making it easy for OHV's to go off road into the fire area. This area contains loose, sandy soils where vehicle traffic becomes highly evident as the soil is easily displaced. Disturbance could slow native plant recovery, increase invasive/noxious weeds and decrease soil productivity. The rock and boulder content along road and in the fire area will partially mitigate this concern. The handlines that intersescts the road were rehabed and disguised to discourage off-road use.

- Noxious/Invasive species – There is a risk of invasion of noxious/invasive weeds into the fire area. Cheatgrass (*Bromus tectorum*), Red Brome *(Bromus rubens*), locust (*Robinia pseudoacacia)* and storksbill *(Erodium cicutarium)* are found in and adjacent to the fire area.

  Fire suppression lines may act as invasive highways carrying noxious weeds and invasive plants into uninfested wildland areas. Uncleaned fire engines and equipment was used to construct fire suppression lines; this along with numerous trips by heavy equipment and engines into the fire area can lead to new infestations. Following fire, soil nutrient conditions are more favorable towards noxious weeds and invasive species thus promoting their introduction over native plant species. In the case of sagebrush, and bitterbrush habitats, fire increases these areas susceptibility to invasion by cheatgrass and other weeds. Cheatgrass and red brome are likely to expand and become more dense in patches within the burn.

  Due to the change in plant structure and fuel loads, fires often burn much hotter than pre-settlement fires. These more intense fires can promote the invasion of exotics, most commonly cheatgrass. At elevations below 6500 feet, cheat grass can begin to out-compete native shrubs and perennial grasses. If there is a reoccurring fire before native vegetation has had an opportunity to re-establish itself, the plant community may become entirely dominated by cheatgrass so that a type conversion takes place. A more frequent fire cycle will then become established.

B. Emergency Treatment Objectives:
- Reduce the risk of noxious/invasive weed establishment
- Reduce the risk of degradation to ecosystem function and soil productivity.

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

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

D. Probability of Treatment Success

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

E. Cost of No-Action (Including Loss): $5,850 + loss of ecosystem stability

F. Cost of Selected Alternative (Including Loss):$ 5,600

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Todd J.Ellsworth

Email: tellsworth@fs.fed.us Phone: 760-873-2457 FAX:

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:

1. *Natural Vegetative Recovery*

Objective
This no cost treatment consists of allowing the on-site vegetative material to sprout or germinate to mitigate adverse post-fire conditins throughout the fire area.

Methods
Observe natural vegetative recovery during the first growing season.

2. *Noxious weeds*

Objective:
Evaluate and eliminate the potential for noxious weed establishment and spread, as a result of the fire.

Methods:
The handline will be inspected for newly established weed occurences. Monitoring will including documentation and hand pulling new weed occurrence at the time of inspection, and subsequent entry into the FACTS database.

Surveys will occur likely in May/June of 2008. If any plants are found and treated based upon the first year's survey, additional funds for continued survey and treatment may be requested in the future.

Channel Treatments:

n/a

Roads and Trail Treatments:

n/a

Protection/Safety Treatments:

1. *OHV Patrol*

Objective
Additional patrol will help deter potential off-road use into the burned area. The patroller can rake out new tracks and repair resource damage in a timely manner. They also can provide the public with post-fire conservation information and a field presence.

Methods
Provide additional OHV patrols for a total of 5 days, emphasizing high use time such as holiday weekends and hunting season. The burned area is close to the City of Big Pine and receives receives a moderate amount of OHV use, mostly from local users, especially throughout the fall, winter and spring months. The technician will also provide the public with information regarding post-fire recovery and the importance of staying on existing roads throughout the fire area. The Forest has an OHV technician that can perform this work. The technician will document if incursions occur and take corrective action.

2. *Advisory signs - Carsonite*

Objective
This treatment is preventative. Carsonite signs will be placed in the on the unnamed 4wd road encouraging visitors to stay on main roads to facilitate native plant recovery, decrease noxious/invasive weed vectors and protect soil productivity.

Methods
Place 3 carsonite signs along the road adjacent to the fire. The signs will inform user to stay on the main road to allow for vegetative recovery in the fire area.

3. *Advisory Letter*

Objective:
Advise downstream users of the presence of a burned watershed and associated safety and flooding issues.

Methods:
A letter will be written to the Los Angeles Department of Water and Power discussing the risk of flooding on their road and property downstream of the fire. This letter is a follow-up to the initial contact made to them discussing the risk to their road and property. This is an effective, low cost treatment.

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	# of Units	BAER $	Other $	# of units	Fed $	# of Units	Non Fed $	Total $
A. Land Treatments										
Nx. Weed survey	days	300	2	$600	$0		$0		$0	$600
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$600	$0		$0		$0	$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. Protection/Safety										
OHV Patrol	days	250	5	$1,250	$0		$0		$0	$1,250
carsonite signs	ea	4	50	$200	$0		$0		$0	$200
advisory letter	ea	1	250	$250	$0		$0		$0	$250
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$1,700	$0		$0		$0	$1,700
E. BAER Evaluation										
Salary	days	2000	1	$2,000			$0		$0	$2,000
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$0		$0		$0	$2,000
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				$4,300	$0		**$0**		**$0**	**$4,300**
Previously approved										
Total for this request				**$4,300**						

PART VII - APPROVALS

1. Jeffrey E. Bailey — 04/23/2007
   Forest Supervisor (signature) — Date

2. */s/ James M. Peña (for)* — 04/25/2007
   Regional Forester (signature) — Date