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

Date of Report: May 1, 2009

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
[X] 3. No Treatment Recommendation

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: Bear Fire

B. Fire Number: AZ-COF-015

C. State: AZ

D. County: Coconino

E. Region: 3

F. Forest: Coconino

G. District: Peaks

H. Fire Incident Job Code:P

I. Date Fire Started: 4/22/2009

J. Date Fire Contained: 5/29/2009 (60%). Est. 100% on 6/1

K. Suppression Cost: $180,000

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 0 miles as of 5/1/09
2. Fireline seeded (miles): 0 miles
3. Other (identify): (On backburn, chipped and spreaded mulch along a portion of fire perimeter (1-2 miles estimate

M. Watershed Number: Oak Creek - 1506020205

N. Total Acres Burned:
NFS Acres(**350**) Other Federal ( ) State ( ) Private ( )

O. Vegetation Types: Ponderosa Pine/Gambel Oak/Minor acres of Chaparrel.

P. Dominant Soils: Typic Eutroboralfs, fine, montmorillonitic, deep, gravelly fine sandy loams.
Q. Geologic Types: Residuum derived from cherty limestone over sandstone.

R. Miles of Stream Channels by Order or Class: 0 miles of perennial and intermittent. .2 miles of ephemeral streams.

S. Transportation System

Trails: 0 miles Roads: Forest Level 2: 1.85 miles.

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 261 (low/unburned) 85 (moderate) 4 (high)

B. Water-Repellent Soil (acres): 89 acres

C. Soil Erosion Hazard Rating (acres):
285 (low) 40 (moderate) 25 (high) (25 acres located in moderate burn severity areas under soils with moderate or severe erosion hazard)

D. Erosion Potential: 4 tons/acre

E. Sediment Potential: 1012 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):

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):

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

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats: The Bear Fire was lightning caused and burned within a perimeter of 350 acres. The majority of acres burned were backburned acres by the Forest Service in an effort to prevent fire spreading across FR 231 and prevent further loss of ponderosa pine forests and associated resource values and to protect a private parcel of land located about ½ to 3 miles NE of fire perimeter. No acres burned on Private property.

Almost all acres burned on Terrestrial Ecosytem Survey map unit 546 in ponderosa pine gambel oak vegetation type on soils that are relatively flat and therefore have slight erosion hazard. Most burned acres (about 75%) were dominated by a mosaic of unburned and low severity (about a 50/50 % split). Only about 1% (4 acres) burned in high burn severity while about about 24% (85 acres) burned with moderate severity and some in a mosaic with low burn severity. Most moderate burn severity acres occur on map unt 546 and post-fire runoff is not expected to be higher than tolerable limits and water runoff would be similar to preburned conditions and therefore, is not expected to cause appreciable on-site or downslope resource damage. Only .2 miles of streamcourses are present within the burned perimeter.

The following critical values within or surrounding the fire perimeter were identified and assessed; life and property, Forest road infrastructure, safety of travellers along Forest roads, stocktanks, Northern Goshawk, Mexican Spotted Owl Protected Activity Centers (PACS) and critical habitat, long-term soil productivity, threats from invasive weed expansion and known archaeological resources (none identified).

There are no structures or buildings with inhabitants located within the fire perimeter or adjacent to the fire. There is very low threat to life and property from post-fire storm events because loss of water control is negligible and not predicted to affect adjacent private land, or any travellers on Forest roads because runoff is expected to be low. In addition, there are no hazard trees present adjacent to Forest roads. No stocktanks are located within the burn and are not expected to fill in from post-storm events due to low predicted sedimentation.

There are no perennial streams located within or near the fire perimeter and no threatened, endangered or sensitive fishery species identified into downstream connected waters (Oak Creek). Overall, post-fire threats do not pose a significant risk or would cause permanent impairment to the adjacent Northern Goshawks, PACs or owls within because identifed areas were all outside burn.

Long-term soil productivity is not threatened by post-storm events because the majority of the burn occurred in low and unburned severity and on soils with slight erosion hazard and would not erode above tolerable limits on in any brun severity class. In addition, invasive weed expansion is not predicted because most (about 75%) of the burned area in in the low/unburned class and did not produce bare soil that could potentially create a habitat for invasive weeds to spread.

Summary: Due to the dominance of flat soils with slight erosion hazard and overall low percentages of high and moderate burn severity, no values were considered at risk from post-fire events or threats. Field assessment determined that potential post-fire loss of control of water would not pose any threats to adjacent life, property or cause appreciable resource damage. Therefore, this BAER assessment concludes that postfire storm events do not pose a watershed emergency and recommends no treatment for this fire.

B. Emergency Treatment Objectives: No emergency watershed conditions are identified so no treatment objectives are identified except to rely on natural recovery as the preferred treatment.

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

Land __ % Channel ___ % Roads/Trails ___ % Protection/Safety ___ %

D. Probability of Treatment Success NA

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

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

F. Cost of Selected Alternative (Including Loss): **NA, no treatments needed.**

G. Skills Represented on Burned-Area Survey Team:

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

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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: No emergency watershed conditions are identified so none are recommended.
Channel Treatments: No emergency watershed conditions are identified so none are recommended.
Land Treatments: No emergency watershed conditions are identified so none are recommended.
Roads and Trail Treatments: No emergency watershed conditions are identified so none are recommended.
Protection/Safety Treatments: No emergency watershed conditions are identified so none are recommended.

I. **Monitoring Narrative:** No emergency watershed conditions are identified so monitoring is not needed.

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

Subtotal Land Treatments				$0	$0		$0		$0	$0
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										
				$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										
				---			$0		$0	$0
Insert new items above this line!	pdays	4	337	---	$1,350		$0		$0	$1,350
Subtotal Evaluation				---	$1,350		$0		$0	$1,350
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				$0	$1,350		**$0**		**$0**	**$1,350**
Previously approved										
Total for this request				**$0**						

PART VII - APPROVALS

1. _____ _____
Forest Supervisor (signature) Date

2. _____ _____
Regional Forester (signature) Date