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

Date of Report: June 28, 2006

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: Skates

B. Fire Number: NM-GNF-000086

C. State: New Mexico

D. County: Grant

E. Region: 03

F. Forest: Gila

G. District: Silver City

H. Fire Incident Job Code: P3CN3R

I. Date Fire Started: 06/02/2006

J. Date Fire Contained: 95% on June 26,2006

The fire was initially managed as a Fire Use Fire. It was declared a Wildfire on June 15th and renamed as the Skates II Fire.

K. Suppression Cost: $4.51 million

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 3 miles of Cat line
2. Fireline seeded (miles): 3 miles of Cat line
3. Other (identify): Part of the Cat line will be straw mulched.

M. Watershed Number: Sapillo Creek 5th Code-15040001070

N. Total Acres Burned: 12,500
NFS Acres(12,150) Other Federal ( ) State ( ) Private (350)

O. Vegetation Types: Psmeg/Pist/Pipos/Quga, Pipos/Pipos/Quga, Pipos/Jude2/Qugr3, Pied/Jude2/Jumo/Qugr3, and small areas of riparian vegetation.

P. Dominant Soils: General Ecosystem Survey Mapping Units 157, 196, and 371. Typic Eutroboralfs, Lithic Haplustalfs, Typic Haplustalfs, Mollic Eutroboralfs, Fluventic Ustochrepts, Aquic Ustifluvents.

Q. Geologic Types: Gila conglomerate, rhyolite, basalt, and alluvium.

R. Miles of Stream Channels by Order or Class: Six miles of perennial stream (Meadow Creek).

S. Transportation System

Trails: 2 miles Roads: 5 miles

PART III - WATERSHED CONDITION

A. Burn Severity Fire Use (acres): 3,920 (low) 2,710 (moderate) 70 (high) 6,700 (total)
Burn Severity Wildland (acres): 5,735 (low) 50 (moderate) 15 (high) 5,800 (total)

B. Water-Repellent Soil (acres): 2,000

C. Soil Erosion Hazard Rating (acres):
450 (low) 12,000 (moderate) 0 (high)

D. Erosion Potential: 1 tons/acre

E. Sediment Potential: 3 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

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

B. Design Chance of Success, (percent): 90%

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

D. Design Storm Duration, (hours): 1 hr

E. Design Storm Magnitude, (inches): 1.85 in

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

Watershed	CFS/ SQ mi
West	288
Meadow	106
Hill	217
Skates	155

G. Estimated Reduction in Infiltration, (percent): 10%

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

Watershed	CFS/ SQ mi
West	324
Meadow	121
Hill	235
Skates	162

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The fire started by lightning on 06/02/2006, was initially managed as a Fire Use Fire, and burned approximately 6,700 acres. On June 15 the decision was made to confine and contain the fire and was renamed the Skates II Fire. As of June 26 the fire had burned approximately 12,500 acres. The fire was located 12 miles northeast of Silver City, New Mexico and south of Lake Roberts.

The fire drains towards the north through several ephemeral drainages and one perennial drainage called Meadow Creek into Sapillo Creek. The eastern portion of the fire drains into Lake Roberts, which is a small lake about 100 surface acres in size. The lake is a popular recreation and fishing lake. Lake Roberts is listed as not attaining New Mexico State Water Quality Standards. Sapillo Creek drains toward the west and drains into the Gila River about 6 miles below the fire. Sapillo Creek below Lake Roberts is listed as not attaining New Mexico State Water Quality Standards. The Gila River has T & E Species (loach minnow and spikedace).

On the north side of the fire perimeter, mainly along Sapillo Creek and Lake Roberts, are private lands. The private lands have residential buildings and homes. Some of the buildings and homes are in the flood plain and/or outwash zones of small tributaries, and have a potential to be impacted by flooding.

The vegetation ranges from a Douglas Fir/Ponderosa Pine Forest at the high elevations to a Pinyon Pine/ Alligator Juniper Woodland at the lower elevations. There is some riparian vegetation along Meadow Creek. There are several Mexican Spotted Owl PACs within the fire area.

In the eastern portion of the fire are approximately 2 miles of the Continental Divide Trail. There is a safety concern along this trail from hazard trees and soil erosion of the trail. Within the fire are approximately 5 miles of roads, which are mainly low standard roads.

For this fire the main values at risk are loss of soil productivity, reduction of water quality in downstream areas, impacts to residential buildings in floodplains, impacts to loach minnow and spikedace, and impacts to the road and trail system.

B. Emergency Treatment Objectives:

1. To reduce soil erosion and loss of soil productivity.
2. To reduce sedimentation to downstream areas.
3. To reduce the potential for high water runoff.

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

Land **50** % Channel **50** % Roads/Trails **NA** % Protection/Safety **NA** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	50	60	70
Channel	90	90	90
Roads/Trails			
Protection/Safety			

E. Cost of No-Action (Including Loss): **$653,850**

F. Cost of Selected Alternative (Including Loss): **$297,810**

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Mike Natharius

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Team Members:
Carolyn Koury, Hydrologist
Jim Probst, Hydrologist
Charles Souders, Soil Scientist
Art Telles, Wildlife Biologist
Bob Schiowitz, Archeologist
David Bailey, GIS
Clare Haddock, Resource Advisor

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:

BAER request:

- Approximately 100 acres of high/moderate severity burn within the Skates II Fire perimeter are proposed for aerial seeding with a fixed wing aircraft. Seed mix will include 4-5 seeds including both native and annual cereal, and will be applied at a rate of approximately. 40 seeds / square foot.

- 10 heritage sites that have been compromised by burnt snags are proposed for sawyer work and mulching.

Other funding: Approximately 150 acres of high/moderate severity burn with the Skates II Fire perimeter are proposed for aerial seeding with a fixed wing aircraft. These dollars are proposed to be funded with Forest project dollars.

Channel Treatments:

Approximately 25 small, hand-constructed rock check dams are proposed in 2 small tributaries to Sapillo Creek above private property. These tributaries deliver their outwash immediately above private structures which are at risk for flooding or deposition. The structures are intended to trap sediment before it enters the private land.

Two dozer constructed check dams are proposed in the same 2 small tributaries listed above. These larger check dams will be located on Forest, close to the mouth of the drainages. They are intended to halt large sediment/debris flows from entering private land, and ultimately private structures.

Roads and Trail Treatments:
None Proposed

Protection/Safety Treatments:
None Proposed

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.)

The Forest will monitor the earthen sediment structures on their own budget.

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

Line Items	Units	Cost	Units	BAER $	$	units	$	Units	$	$
A. Land Treatments										
Seeding (aerial)	acres	85	100	$8,500	$0		$0		$0	$8,500
Seeding (aerial)	acres	85	150		$12,750		$0		$0	$12,750
Heritage site (mulch)	sites	500	10	$5,000						$5,000
heritage ass	week	1	1,500	$1,500						$1,500
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$15,000	$12,750		$0		$0	$27,750
B. Channel Treatments										
rock check dams	dam	160	25	$4,000	$0		$0		$0	$4,000
sediment catchment	dam	4,000	2	$8,000	$0		$0		$0	$8,000
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treat.				$12,000	$0		$0		$0	$12,000
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										
assessment					$5,000					$5,000
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				$0	$0		$0		$0	$5,000
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				$27,000	$12,750		**$0**		**$0**	**$44,750**
Previously approved										
Total for this request				**$27,000**						

PART VII - APPROVALS

1. /s/ Ronnee Sue Helzner — 6-29-2006
   (for) Forest Supervisor (signature) — Date

2. /s/ Lucia M. Turner (for) — 6-30-2006
   Regional Forester (signature) — Date