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

Date of Report: October XX, 2011

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: **Otter**

B. Fire Number: ID-NPF-000242

C. State: Idaho

D. County: Idaho

E. Region: R1

F. Forest: Nez Perce

G. District: Moose Creek

H. Fire Incident Job Code: P1GDN6

I. Date Fire Started: 08/02/2011

J. Date Fire Contained: **Expected 12/1/2011**

K. Suppression Cost: **$250,000 on 09/26/2011**

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): Handline – less than one mile
2. Fireline seeded (miles): 0
3. Other (identify): 0

M. NHD Watershed Numbers: 17060302-0206, 17060302-0307

N. Total Acres Burned: **4,600** acres, as of 09/26/2011
NFS Acres(**4,600**) Other Federal (**0**) State (**0**) Private (**0**)

O. VegetationTypes:

Vegetation in burned areas includes mixed conifer with Western Redcedar, Grand Fir, and Douglas-fir. Much of the fire was a reburn of the Slims Fire (2003) composed of dead, heavy fuels and brushfields.

P. Dominant Soils:

Deep, well drained granitic soils.

Q. Geologic Types:

Steep (greater than 60% slope) stream breaklands: face drainages of the Selway River and Meadow Creek.

R. Miles of Stream Channels by Order or Class:

Stream miles by order within Otter Fire Perimeter on **09/26**/2011.

Stream Order	Length (Miles)
1	**11**
2	**2**
3	**2**
4	**2**
5	**0**
Grand Total	**17**

S. Transportation System

Trails: 8 miles Roads: 8 miles

The Indian Hill Lookout Road 290 was impacted by heavy rains in the spring of 2011 resulting in debris torrents and road template failure. Temporary reconstructioion of the template presently allows passage of trail vehicles (atv, utv, motorcycles and foot traffic). The road is presently under contract for reconstruction in 2012.

Trail conditions have not been assessed at this time. In addition to the miles of trail within the perimiter, the trail bridge crossing at Squirrel Creek (Trail 726) may be at risk from the high-severity burn in the upper watershed.

PART III - WATERSHED CONDITION

A. Burn Severity (acres): **xx** (unburned); **xx** (low); **xx** moderate); **xx** high)

Burn severity for the entire fire has not been assessed, pending BARC map arrival. Burn severity in the non-wilderness portion of the fire, above the road was initially assessed on 9/25/2011.

Burn severity influencing (above) Road 290 varies by each minor drainage. The initial survey identifies five crossings (about 25%) at a high risk of failure to high burn severuty upslope. These crossings are at risk from areas of 50% to 80% high severity burn conditions above them. It can be anticipated that additional high risk crossings will be identified with a more complete BARC analysis.

B. Water-Repellent Soil (acres): (all high severity plus 45% of moderate severity)

C. Soil Erosion Hazard Rating (acres):

2833 (low) **1095** (moderate) **629** (high)

D. Erosion Potential: **NA** tons/acre (estimate)

E. Sediment Potential: **6NA** cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 20

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

C. Equivalent Design Recurrence Interval, (years): 10

D. Design Storm Duration, (hours): 3.8

E. Design Storm Magnitude, (inches): **1.7**

F. Design Flow, (cubic feet / second/ square mile): **22 to 50**

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:

Presently, critical values at risk include road and trail prisims and related stream crossings, and native vegetative communities with minor amounts of invasive weed species.

Property Critical Values: The Indian Hill Lookout Road 290 provides accces to Outfitter camps as well as the Indian Hill Lookout. Already at a risk of faliure due to the steep lantype, the Slims Fire of 2003 and spring rains of 2011 have caused failures resulting in the award of a road reconstruction contract for 2012. The Otter fire has impacted multiple draws above the roadcreating a a Very High Liklehood of damage or loss. There is a risk to the roads and crossings from increased runoff, debris and debris flows, culvert plugging, road crossing failure, and stream capture by the road resulting in additional road failure.

Risk Assesment:

Probability of damage or loss;	Very Likely
Magnitude of Consequencees:	Moderate
Risk Assesment:	Very High

Natural resources Critical Values: Native or naturalized communities on NFS lands where invasive species or noxious weeds are absent or present in only minor amounts. Sporatic sites of priority weeds (Spotted Knapweed and Canadian Thistle) are known to be along roads 290 & 443, close to or within the perimeter.

Risk Assesment:

Probability of damage or loss;	Likely
Magnitude of Consequencees:	Moderate
Risk Assesment:	High

Values at Risk:

*The risk matrix below, Exhibit 2 of Interim Directive No.: **2520-2010-1**, was used to evaluate the Risk Level for each value identified during Assessment. Only treatments that had a risk of Intermediate or above are discussed below, but all values at risk are included in the Tables in the Appendix. Additionally more information on the values at risk by watershed that are driving treatments can be found in the appendix.*

Probability of Damage or Loss	**Magnitude of Consequences**		
	Major	Moderate	Minor
	RISK		
Very Likely	**Very High**	**Very High**	**Low**
Likely	**Very High**	**High**	**Low**
Possible	**High**	**Intermediate**	**Low**
Unlikely	**Intermediate**	**Low**	**Very Low**

Property:

Forest Service roads

FS roads exist throughout the burn area and there is a risk to the roads and crossings from increased runoff, associated sediment and debris and debris flows.

Risk Assessment – Threats to Forest Roads

Probablity of Damage or Loss: Likely – multiple crossings and parallel sections in the floodplain

Magnitude of Consequence: Moderate – water could channel down road with possible wash outs and there is a potential for crossings to be damaged or destroyed.

Risk Level: High to Very High– Road 290 is presently under contract for reconstruction in 2012. Immediate mobilization would allow crossing protection to minimize on 5-15 high risk crossings. Work will this fall will consist of cleaning culvert inlets, and to create road drainage features (berms, dips) to direct overtopped storm flows into the existing channel.

Natural Resources:

Native Plant community

Suppression efforts may have introduced non-native invasive species into the burn area with the potential to impact native plant communities. There were no or very minimal non-native invasive plants in the Chiricahua Mountains prio r to the fire

Risk Assessment – Probability of damage or loss of the native plant community

Probablity of Damage or Loss: Likely - Based on burn severity, miles of dozer line, and other suppression activities.

Magnitude of Consequence: Major – loss of native plants communities.

Risk Level: Very High – Inventory and treat noxious invasive weeds on firelines and within the fire perimeter and on roads within and adjacent to the fire perimeter.

B. Emergency Treatment Objectives:

As noted above, threats to property and natural resources from loss of water control, increased sediment delivery, increased debris flow potential, establishment of noxious weeds, and habitat degredation for Federally Endangered and Threatened species exist as a result of the Otter Fire. For these reasons the primary treatment objectives are:

- Mitigate effects of post-fire watershed response indicates a high risk of debris flows affecting Road 290. Debris flows will stop accessability to the Indian Hill Lookout, and the existing, active outfitter camp. They will introduce sediment into Meadow Creek and the Selway River, affecting TE&S aquatic habitats.
- Minimize the increased potential for the spread of invasive and noxious weeds.
- Minimize the effects of debris flows aver roads on downstream water quality and related aquatic habitat species.

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

Land **90** % Channel **na** % Roads/Trails **90** % Protection/Safety **na** %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	90%	na	na
Channel	na	na	na
Roads/Trails	90%	na	na
Protection/Safety	na	na	na

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

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Cara Farr and James Paradiso (retired)

Email: clfarr@fs.fed.us Phone: 208-983-4045 FAX: 208-983-4099

H. Treatment Narrative:

Land Treatments:

Inventory and treat noxious invasive weeds on firelines and within the fire perimeter and on roads within and adjacent to the fire perimeter.

Channel Treatments:

See Road treatments, below:

Road and Trail Treatments:

Short term floodproofing of road-stream crossings.
Road 290 is presently under contract for reconstruction in 2012. Immediate mobilization would allow crossing protection to minimize on 5-15 high risk crossings. Work will this fall will consist of cleaning culvert inlets, and to create road drainage features (berms, dips) to direct overtopped storm flows into the existing channel.

Protection/Safety Treatments:

No treatments at this time.

I. Monitoring Narrative:

Part VI – Emergency Stabilization Treatments and Source of Funds

			NFS Lands				Other Lands			All
		Unit	# of		Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER $	$	units	$	Units	$	$
A. Land Treatments										
Weed Inventory	***days***	400.00	***2***	$800						
Weed Treatment	***acre***	300	***28***	$8,400						
Subtotal Land Treatments				$9,200	$0		$0		$0	$9,200
B. Channel Treatments										
C. Road and Trails										
Road Stormproofing	***miles***	6,875	***8***	$55,000						
Contract Administration	***each***	20,000	***1***	$20,000						
Subtotal Road & Trails				$75,000	$0		$0		$0	$75,000
D. Protection/Safety										
Subtotal Protection				$0	$0		$0		$0	$0
E. BAER Evaluation										
Assessment	Day	600	3	$0	$1,800		$0		$0	$1,800
Subtotal Evaluation				$0	$1,800		$0		$0	$1,800
F. Monitoring										
Subtotal Monitoring				$0	$0		$0		$0	$0
G. Totals				$84,200	$1,800		**$0**		**$0**	**$86,000**
Previously approved										
Total for this request				**$84,200**						

PART VII - APPROVALS

1. /s/ _____ 10/31/2011
Forest Supervisor Date

2. /s/ _____ xx2011
Regional Forester Date