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

Date of Report: 8/24/06

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: Bowen Fire

B. Fire Number: ID-IFD-030

C. State: Idaho

D. County: Oneida

E. Region: 4-Intermountain Region

F. Forest: Caribou-Targhee NF–Curlew National Grassland

G. District: Curlew National Grassland
Westside Ranger District

H. Fire Incident Job Code: P4C32S

I. Date Fire Started: 8/15/2006

J. Date Fire Contained: 8/17/2006

K. Suppression Cost: 1.0 million (rough estimate)

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 18 (Dozer line 16 miles & Hand line 2 miles)
2. Fireline seeded (miles): 16 (Dozer line will be seeded)
3. Other (identify): None Identified

M. Watershed Number: 1602030919 – Rock Creek, 1602030918 – Deep Creek, 16020030913 – North Canyon

N. Total Acres Burned: 19,105
NFS Acres(1,519) Other Federal (13,838 - BLM) State (775) Private (2,973)

O. Vegetation Types: The Curlew National Grassland portion of this fire falls into the true “sagebrush steppe” vegetation type and is not considered a “true” grassland. This vegetation type covers the northern portion of the Intermountain Region where sagebrush is co-dominant with perennial bunchgrasses. Approximately 75% of the grassland has been modified through the introduction of non-native species, especially crested wheatgrass (Agropyron critatum) and bulbous bluegrass (Poa bulbosa).

P. Dominant Soils: The dominant soils are Hondoho, Lizdale, Ridgecrest, Hymas, Arbone, Hutchley, McCarey, and Araveton. These soils are primarily mollisols and have significant amounts of calcium carbonate in the profile. They are susceptible to wind and water erosion if vegetative cover is removed.

Q. Geologic Types: The bedrock in the northern part of the fires is volcanic in origin, primarily basalt and ryholite. The southern end of the fire has lacustrine and alluvial parent materials. Lake terraces from historic Lake Bonneville, and the alluvial processes since the lake drained have shaped the landscape on the southern end of the fire. Over the majority of the area, a deposit of calcareous loess covers the bedrock.

R. Miles of Stream Channels by Order or Class: 3.3 miles of intermittent and 2.9 miles of perennial streams are within the burned area on National Forest System Lands.

S. Transportation System

Trails: 0 miles

Roads: Total = 4.8 miles on National Forest System Lands:
1.5 miles of county gravel; 1.2 miles of county improved; 0.5 miles of USFS gravel; 1.5 miles of USFS two track; and 0.1 miles of unmapped/unimproved

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 410 -2% (unburned) 18,590 – 97% (low) 101 - 1% (moderate) 0 (high)
Total Burn Area
0 (unburned) 24 – 2% (low) 1493 – 98% (moderate) 0 (high)
On National Forest System Lands (Curlew NG)

B. Water-Repellent Soil (acres):

C. Soil Erosion Hazard Rating (acres):
1177 (78%) (low) 226 (15%) (moderate) 113 (7%) (high)
On National Forest System Lands (Curlew NG)

D. Erosion Potential: 0.36-0.83 tons/acre

E. Sediment Potential: 67 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 1 to 2 years - grasses and forbs
2 to 20 years - shrubs

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

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

D. Design Storm Duration, (hours): 1.0

E. Design Storm Magnitude, (inches): 1.1

F. Design Flow, (cubic feet / second/ square mile): 12.7

G. Estimated Reduction in Infiltration, (percent): 8

H. Adjusted Design Flow, (cfs per square mile): +8.6

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

The Bowen Fire burn area is located approximately 25 miles west of Malad, Idaho in Oneida County and approximately 3 miles west of Holbrook, Idaho. The fire started on August 15th by a lightning strike and was contained on August 17th. The Bowen Fire has burned Forest Service, BLM, and Private Lands which started 3 days after the Stone 2 Fire was contained. The Bowen Fire was anchored to the eastern boundary of the Stone 2 Fire. Eight percent (1,519 acres) of the 19,105 acre fire burned on the Curlew National Grassland. A majority of the burned area occurred on lands administered by the Bureau of Land Management (BLM). The BLM performed a separate BAER analysis and the USFS has coordinated with the BLM to identify values at risk, burn severity, and treatment options. The following values and types of risks were evaluated on the Curlew National Grassland.

Ecological Integrity:

The "sagebrush steppe" vegetation type found in the Grassland is dominated by ten sagebrush subspecies types. The Grassland affected by this fire contains sensitive wildlife species as identified by the Forest Service Intermountain Region ; these are Columbia Sharp-tailed Grouse and Greater Sage Grouse. The Grassland is managed for multiple uses and grazing is one of the uses affected by the fire. In order to protect the burned portions of the Grassland from grazing impacts the following standard from the Final LRMP for the Curlew NG (pg 3-18) was established:

- *Allow no livestock grazing before seed set of the second growing season after natural fires and rangeland planting or seeding. If monitoring shows that this is not adequate to meet resource needs, defer livestock grazing as necessary.*

The primary concern for for soils is the post fire erosion potential related to wind and water erosion due to slope and soil properties, especially in the moderate severity areas. Loss of ground cover and discontinuous water repellency in these areas increases the potential for accelerated erosion. If an intense, heavy rainstorm or wind event occurred before ground cover recovered, valuable topsoil could be lost.

Noxious weeds exist in portions of the burned area. The disturbance of the fire and suppression activities, create opportunities for weeds to invade uninfested areas. Areas of low and moderate burn severity are suceptible to invasion by noxious weeds and other non-native invasives (e.g., cheatgrass).

Water quality within and downstream of the burned area could be reduced from the increases in stream flow and soil erosion from thunderstorms and snow melt due to the loss of ground cover and altered soil properties.

Transportation Infrastructure:

Public roads and road/stream crossings are susceptible to increased erosion due to the loss of ground cover and altered soil properties, potentially causing plugging and/or washout. The lost of these structures could also cause resource damage (e.g., soil loss and water quality degradation)

Critical Heritage Resources:

The result of burning vegetation and duff increases cultural resource site visibility and threat to vandalism. Several recorded sites and isolated artifacts were identified in and around the fire area.

B. Emergency Treatment Objectives:

Ecological Integrity:

The standard in the Final LRMP for the Curlew NG of resting burned allotment pastures is designed to allow for vegetation recovery and reduce soil erosions and water quality impacts. In the SW Peterson-Lonigan pasture containing a partial burned area a range rider will be used to keep cattle out of the black to allow for vegetation recovery and reduce soil erosions and water quality impacts. There are no other vegetation treatments for vegetation recovery. There are no indications that the natural recovery of the existing plant community will have a measurable adverse impact on the watershed stability in the area.

Monitor disturbed fire areas for new noxious weed infestations and reduce the potential of weed spread with initial treatment to reduce/eliminate flowering plants. Data gathered will be used to facilitate prompt treatment

to control weed populations for the purpose of protecting native plant diversity and ecological integrity of the plant communities in the burn area.

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

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

D. Probability of Treatment Success

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

E. Cost of No-Action (Including Loss): $55,000

F. Cost of Selected Alternative (Including Loss): $7,870

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Louis Wasniewski, Forest Hydrologist, Caribou-Targhee NF & Curlew NG
Co Team Leader: Brad Higginson, Assist. Forest Hydrologist, Caribou-Targhee NF & Curlew NG

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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:

Range Rider: The Curlew Cattle Association will graze the unburned portion of the North 13 pasture. A riding treatment is recommended to prevent livestock use in the burned area within the pasture. A range rider is required to ride for three weeks to inspect and to remove any cattle that wander onto the burned portions of the pasture. The cost for a rider will be $750.00. Other treatments considered included removing cattle and using temporary fencing. The removal of livestock is unwarranted due to the fact that only a small percentage of the North 13 field burned. A temporary electric fence would be the most cost efficient method of fencing . The cost of fencing materials and maintenance would exceed $1500.00

Monitor and Treat Noxious and Invasive Weeds: Monitor known and high potential infestation sites for noxious and invasive plants.

Location (Suitable) Sites: Primarily along roads, trails in heavily used grazing areas, and along boundary with BLM and other lands.

Design/ Construction Specification(s):

1. Conduct short-term monitoring (up to three years) of noxious/invasive weed infestation into the burn area.
2. Monitoring and mapping protocols will be established and implemented by the District Rangeland Specialist.
3. All species identified as invasive according to the Forest Noxious Weed Management Plan should be assessed.
4. If year 1 work reveals significant populations of weeds that may pose threats to the ecological integrity of native plant communities, prepare supplemental funding requests in a timely manner to the Regional BAER Coordinator to facilitate the treatment of these areas. Prioritize treatments based on jurisdictional weed management plans.
5. If FY 2007 work reveals additional populations of noxious/invasive weeds as a result of the fire in areas not identified in this specification, prepare supplemental funding requests in a timely manner to the Regional BAER Coordinator to monitor these populations and determine if control measures are necessary.
6. If year 2 and year 3 monitoring is warranted, prepare supplemental funding requests in a timely manner, in those years respectively, to the Regional BAER Coordinator to monitor these populations and determine if control measures are necessary

Cost:

Description	Cost
The District Range Specialist shall make one trip in early May and a final inspection in September.($280/day X 2 day)	$560
Chemicals and Equipment for Treatment.	$300
Weed Crew ($120/day/person X 2 people X 2 day)	$480
One day to write-up summary report. ($280/day)	$280
Treatment Cost for FY 2007	**$1620**

Channel Treatments: No treatments identified

Roads and Trail Treatments: No treatments identified

Protection/Safety Treatments: No treatments identified

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.)

See treatment descriptions above. Aside from the monitoring specified within the treatments, no additional monitoring is proposed.

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

			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										
Range Rider	1	750	1	$750	$0		$0		$0	$750
Noxious Weeds	1	1620	1	$1,620	$0		$0		$0	$1,620
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$2,370	$0		$0		$0	$2,370
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										
				---	$4,300		$0		$0	$4,300
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$4,300		$0		$0	$4,300
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				$2,370	$4,300		**$0**		**$0**	**$6,670**
Previously approved										
Total for this request				**$2,370**						

PART VII - APPROVALS

1. _Deb Tiller for_ _8/24/06_
   Jerald D. Tower — Date
   Westside District Ranger (signature)

2. _Robert Mickelsen for_ _8/25/06_
   Larry Timchak — Date
   Forest Supervisor (signature)

3. _/s/ Mary Wagner for_ _9/06/06_
   Jack Troyer — Date
   Regional Forester (signature)