Minor Edit by RHopson, 8/31/07
USDA-FOREST SERVICE FS-2500-8 (6/06)

Date of Report: 8/27/2007

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: Wood

B. Fire Number: DWV2

C. State: Idaho

D. County: Oneida

E. Region: 4 – Intermountain

F. Forest: Curlew NG – Caribou-Targhee NF

G. District: Westside RD

H. Fire Incident Job Code: PDDWV2

I. Date Fire Started: 8/15/2007

J. Date Fire Contained: 8/18/2007

K. Suppression Cost: Unknown

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): Unknown of BLM & Private
2. Fireline seeded (miles): 8 ¼ miles on NFS Lands will be seeded in Sept./Nov. (seed purchased with P-code).
3. Other (identify): 8 ¼ miles rehabilitated on NFS Lands

M. Watershed Number: 160203090106-Deep Creek-Sheep Creek and 160203090301-Wood Canyon

N. Total Acres Burned: 3,905 NFS Acres (1,882)
Other Federal – BLM & Bankhead-Jones Land Use Lands (1,730) State (0) Private (293)

O. Vegetation Types: Big sagebrush complex, three tip sagebrush, and mountain brush.

P. Dominant Soils: Major soil types in the area affected by the wildfire are primarily molisols with calcic and argillic subsurface horizons. Particle-size classes range from fine-loamy to loamy-skeletal. One soil profile was described in the burned area, and it can be classified as a coarse-loamy, mixed, superactive, typic argixeroll.

Q. Geologic Types: The Sheep Creek and Wood Canyon drainages have Basin and Range physiographic characteristics and has been influenced by volcanic basalt flows and ancient lake deposits. Soil parent-material is a mix of sandstone, quartzite, basalt, and limestone.

R. Miles of Stream Channels by Order or Class:

Land Status	Intermittent (miles)	Perennial (miles)	Total (miles)
Curlew National Grassland	9.1	0.7	9.8
BLM & Bankhead-Jones Lands	5.5		5.5
Private Lands	2.2		2.2
Totals =	16.8	0.7	17.5

S. Transportation System (Roads):

Land Status	Secondary Roads (miles)	Highway (miles)	Two Track Trails (miles)	Total (miles)
Curlew National Grassland	6.1	1.5 (Arbon Valley)	3.9	11.5
BLM & Bankhead-Jones Lands	0.6			0.6
Private Lands	2.0			2.0
Totals =	8.7	1.5		10.2

PART III - WATERSHED CONDITION

A. Burn Severity (acres): **NFS Lands:** 1,882 (low) 0 (moderate) 0 (high)

B. Water-Repellent Soil (acres): **NFS Lands:** ~50 (10% of the area in the south end of East Hess A Pasture and the north end of East Hess B Pasture).

C. Soil Erosion Hazard Rating (acres): Potential for erosion on these soils ranges from low to moderate.
NFS Lands: 1,825 (97%) (Low to Moderate) 57 (3%) (High)

D. Erosion Potential: 0.02 tons/acre for the next 24 months.

E. Sediment Potential: 0.1 cubic yards / square mile for the next 24 months. Sediment delivery was estimated at 1% of eroded material

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 2 years (grasses) and 5 (shrubs)

B. Design Chance of Success, (percent): N/A – no hydrologic-related treatments needed

C. Equivalent Design Recurrence Interval, (years): N/A – no hydrologic-related treatments needed

D. Design Storm Duration, (hours): N/A – no hydrologic-related treatments needed

E. Design Storm Magnitude, (inches): N/A – no hydrologic-related treatments needed

F. Design Flow, (cubic feet / second/ square mile): N/A – no hydrologic-related treatments needed

G. Estimated Reduction in Infiltration, (percent): N/A – no hydrologic-related treatments needed

H. Adjusted Design Flow, (cfs per square mile): N/A – no hydrologic-related treatments needed

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Noxious and Invasive Weeds: The rangeland, wildlife habitat, and watershed health values of the area are potentially threatened by an expansion of noxious weeds and invasive plant species. There are minor noxious weed infestations within the burned area. The noxious weeds observed within the area include: *Cirsium arvense* (Canada thistle), *Onopordum acanthium* (scotch thistle), *Carduus nutans* (musk thistle), and *Hyoscyamus niger* (black henbane). Cheat grass (*Bromus tectorum*) and Bulbous Bluegrass (*Poa Bulbosa*) are the known invasive plant species with the area.

Rangeland Resources: Six unit pastures within the Buist Fields C&H Allotment were completely or partially burned. To protect burned areas, the Final Land and Resource Management Plan for the Curlew National Grassland contains the following grazing management standard (page 3-18):

- *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.*

Burned unit pasture summary.

Unit Pasture Name	Burn Severity	Total Pasture Area (acres)	Percent Burned
East Hess A	Low	514	100%
East Hess B	Low	824	52%
North Hess-Haws	Low	1,201	17%
Sheep Creek	Low	665	23%
Sheep Creek Riparian	Low	319	36%
South Hess-Haws	Low	715	66%

Water Quality: Water quality within and downstream of the burned area could be reduced due to the loss of ground cover. Increases in streamflow, soil erosion, and ash flows could result from thunderstorms and snowmelt. No emergency treatments to protect water quality are recommended.

Soil Productivity: The low severity burn reduced ground cover and increased the potential for erosion. This increase in erosion is expected to be minor and will not negatively affect soil productivity.

Protection of Life and Property: Given the low burn severity and the remote nature of the fire, there is a very small risk to life and property. The Arbon Valley Road, Sheep Creek Road, and Wood Canyon Road may experience flash flooding at the crossings on Wood Canyon Creek and Deep Creek. However, that risk is not greatly influenced by the fire.

As a precaution, a GIS shapefile of the burned perimeter has been given to the National Weather Service (NWS) in Pocatello. The NWS uses the burned perimeter to better forecast weather and flash flood warnings.

- Contact Information: Sherrie Hebert, Service Hydrologist. National Weather Service, Pocatello, Idaho. (208) 233-0834; sherrie.hebert@noaa.gov

B. Emergency Treatment Objectives:

Treatment L1 - Monitor and Treat Noxious Weeds and Invasive Plants: The objective is to protect the ecological integrity of the area by minimizing the establishment and spread of noxious weeds and other invasive plant species within the burned area.

Treatment L2 – Seeding to Control Cheat Grass: The objective is to minimize cheat grass invasive from existing locations along the roadsides into the burned area.

Treatment L3 – Rangeland Resource Protection: The objective is to protect burned rangeland and comply with the range protection standard in the Final Land and Resource Management Plan for the Curlew National Grassland.

C. Probability of Completing Treatment Prior to Damaging Storm or Event: Weed treatments will be done in spring of 2008. Seeding will occur in October of 2007. Temporary fencing will be done prior to grazing season.

Land: 100 % Channel: N/A % Roads/Trails: N/A % Protection/Safety: N/A %

D. Probability of Treatment Success:

Treatments	Years after Treatment		
	1	3	5
Land	90%	90%	90%
Channel	N/A	N/A	N/A
Roads/Trails	N/A	N/A	N/A
Protection/Safety	N/A	N/A	N/A

E. Cost of No-Action (Including Loss): $58,425: The BAER cost/risk spreadsheet was used to estimate this value with the following assumptions: 1) The ability to graze the North Hess-Haws Pasture (997 acres) was valued at $25/acre; 2) Approximately 67 acres are at risk to noxious weeds and invasive plant species infestation; and 3) The wildlife habitat value and site productivity values of those 67 acres were each assumed to be valued at $250/acre for a total of $500/acre.

F. Cost of Selected Alternative (Including Loss): $16,143: This includes $10,300 for treatment implementation and an estimated $5,843 worth of resource values that may be lost even with treatment. The BAER cost/risk spreadsheet was used to estimate this value with the following assumptions: 1) Approximately 67 acres will be treated for noxious weeds and invasive plant species; 2) The 2.0 miles of temporary fence will allow grazing of 997 acres; 3) Probability of treatment success is 90%; and 4) The wildlife habitat and site productivity values were each assumed to be valued at $250/acre for a total of $750/acre.

G. Skills Represented on Burned-Area Survey Team:

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

Team Leaders: Brad Higginson, Hydrologist – Caribou-Targhee NF/Curlew NG
Email: bhigginson@fs.fed.us Phone: (208) 557-5786 FAX: (208) 557-5826

Kara Kleinschmidt, Soils Scientist – Caribou-Targhee NF/Curlew NG
Email: kkleinschmidt@fs.fed.us Phone: (208) 557-5781 FAX: (208) 557-5826

Team Member: Hans Bastian, Rangeland Resources – Westside Ranger District

H. **Treatment Narrative:** All the proposed treatments would occur in FY 2008.

Land Treatments:

Treatment L1 *- Monitor and Treat Noxious Weeds and Invasive Plants:* This treatment would occur in the spring of 2008. Monitor known populations and high potential infestation sites for noxious weed and invasive plant spreading. Treatment and monitoring will be accomplished at the Ranger District level.

The County typically treats noxious weeds along the Arbon Valley road. However, that treatment is not effective against the invasive species of concern (cheat grass and bulbous bluegrass).

Suitable Sites: Priority areas for monitoring and treatment of new species or spread of existing species include: 1) the fire perimeter; 2) fire suppression dozer lines (~8 ¼ miles); 3) along roads within the burned area; 4) high vehicle activity areas; and 5) areas adjacent to known populations. The area for this treatment is estimated at 67 acres.

Design Specifications:

1. The District Rangeland Specialist will develop and use monitoring and mapping protocols similar to those used on previous BAER treatments (e.g. Rattlesnake and Stone II Fires).
2. All species identified as noxious or invasive according to the Forest Noxious Weed Management Plan should be assessed. Prioritize treatment based on jurisdictional weed management plans.
3. If year 1 work reveals significant populations of weeds, the Forest will prepare supplemental funding requests (up to Year 3). If year 2 and year 3 monitoring and treatment is warranted, prepare supplemental funding in those years as necessary.

Cost:

Description	Cost
One pre-season trip and a final inspection by District Range Specialist ($300/day X 2 day)	$600
Chemicals and Equipment for Treatment	$500
Weed Crew ($130/day/person X 2 people X 1 day)	$260
One day to write-up summary report. (300/day)	$300
Treatment Cost	**$1,660**

Treatment L2 – Seeding to Control Cheat Grass: This treatment would occur in October of **2007** ~~**2008**~~. The treatment will be accomplished at the Ranger District level.

Suitable Sites: The priority treatment areas for seeding will be along 11.5 miles of roadsides and two-track trails where there is known invasive cheat grass.

Design Specifications:

1. Seed mix – 45% *Agropyron desertorum* (crested wheatgrass *Nordan*), 35% *Elytrigia intermedia ssp. trichophorum* (pubescent wheatgrass *Mandan*), and 20% Medicago sativa (alfalfa *Ladak*). This seed mix is a cool season, drought tolerant, adaptive and produces high seedling vigor which competes well with cheat grass.
2. Broadcast seed 25 feet on both sides of the road or trail at the rate of 12-15 lbs/acre.

Cost:

Description	Cost
One pre-season trip and a final inspection by District Range Specialist	Included in cost for L1
1000 lbs of seed mix at $2/lbs	$2,000
Equipment and seed crew ($130/day X 2 people X 4 days)	$1,040
One day to write-up summary report. (300/day)	Included in cost for L1
Treatment Cost	**$3,040**

Treatment L3 – Rangeland Resource Protection: This treatment would be implemented in FY 2008. Burned rangeland will be rested at least until seed set of the second growing season through a combination of pasture rest and temporary electric fence.

Temporary Fencing of the North Hess-Haws Pasture: Approximately 2.0 miles of temporary fence will be constructed in the North Hess-Haws pasture to allow for grazing in the unburned portion (83%) and rest of the burned portion (17%) until seed set of the second growing season.

Continued use of the unburned portion would be very helpful given the urgent need for rangeland in the area. Approximately 70,000 plus acres have burned in the Holbrook area over the last year (Stone 2, Bowen, Basin, Combine, Mitchell, Hubbard, and Wood Fires). Several neighboring allotments on private and BLM lands are competing for the limited grazing lands. Complete removal of livestock is unwarranted because only 17% burned.

Design Specifications: The Forest will provide up to $5,000 worth of materials and maintenance. The grazing association will supply any remaining materials that may be necessary. The association will also install, maintain, and remove the fence when cattle are removed from pasture.

Rest of the Remaining Pastures: The East Hess A, East Hess B, Sheep Creek, Sheep Creek Riparian, and South Hess-Haws Pastures will be rested at least until seed set of the second growing season.

There may be potential for other partial burned pastures to be used within the next two growing seasons, but water supply is the limiting factor. East Hess B and South Hess-Haws may be available as other resources become available.

Summary of Treatment L3.

Unit Pasture Name	Percent Burned	Grazing Schedule/Treatment
North Hess-Haws	17%	Construct 2.0 miles of temporary electric fence to protect burned area. Graze unburned portion in 2008 & 2009. Evaluate grazing of the burned area in 2010.
East Hess A	100%	Rest entire unit pasture in 2008 and 2009. Evaluate grazing of the unit in 2010.
East Hess B	52%	
Sheep Creek	23%	
Sheep Creek Riparian	36%	
South Hess-Haws	66%	

Cost:

Description	Cost
One pre-season trip and a final inspection by District Range Specialist ($300/day X 2 day)	$600
Temporary electric fence in the North Hess-Haws Pasture (2 miles of material + maintenance) (2 miles X $2,500/mile)	$5000
Rest of the East Kurtz Riparian Pasture	$0
Treatment Cost	**$5,600**

Channel Treatments: N/A – No channel treatments appear to be necessary.

Roads and Trail Treatments: N/A – No road and trail treatments appear to be necessary. However, regular maintenance maybe needed along Grassland roads and the Arbon Valley Highway as flood events occur.

Protection/Safety Treatments: The National Weather Service (NWS) will be given a GIS shapefile of the fire location to be used for future flood forecasting needs.

I. **Monitoring Narrative:**

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

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

Please Note: All treatments would occur in FY 2008.

			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										
L1: Monitor/Treat Weeds & Invasives	acres	$25	67	$1,660	$0		$0		$0	$1,660
L2: Seeding to Control Cheat Grass	miles	$264	11.5	$3,040	$0		$0		$0	$3,040
L3: Rangeland Resource Protection	miles	$2,800	2	$5,600	$0		$0		$0	$5,600
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$10,300	$0		$0		$0	$10,300
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										
				---	$2,650		$0		$0	$2,650
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$2,650		$0		$0	$2,650
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				$10,300	$2,650		**$0**		**$0**	**$12,950**
Previously approved										
Total for this request				**$10,300**						

PART VII - APPROVALS

1. /S/ Lawrence A. Timchak — August 27, 2007
   Forest Supervisor (signature) — Date

2. /s/ Cathy Beaty for — 8/31/2007
   Regional Forester (signature) — Date