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

Date of Report: 9/28/06

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

Only the wildfire portion (18,689 acres) of the Little Venus Fire was evaluated for treatment needs as fire use portions cannot be treated under BAER.

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: Little Venus

B. Fire Number: WY-SHF-93

C. State: Wyoming

D. County: Park

E. Region: Rocky Mountain (2)

F. Forest: Shoshone

G. District: Greybull

H. Fire Incident Job Code: P2CRU4

I. Date Fire Started: 6/19/2006

J. Date Fire Contained: 9/22/2006

K. Suppression Cost: $3,200,000 (estimate)

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 10 (estimate)
2. Fireline seeded (miles): 0
3. Other (identify): safety zones, drop points

M. Watershed Numbers: Upper Greybull River (1008000901)

N. Total Acres Burned: 34,778
NFS Acres (Wildfire = 18,311; Fire Use = 16,089)
Other (Wildfire = 378; Fire Use = 0)

O. Vegetation Types: Mountain bigsage/Idaho fescue; alpine; willow riparian; spruce/common juniper; limber pine series; Douglas-fire/common juniper

P. Dominant Soils: Cryalfs; Argic Cryolls; Fluvents

Q. Geologic Types: Tertiary-age volcanics; Quaternary-age alluvium and colluvium

R. Miles of Stream Channels by Order or Class: 183

S. Transportation System: Trails: 94 miles Roads: 5 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): Wildfire = 7,613; Fire Use = 6,723 (low/unburned) Wildfire = 6,688; Fire Use = 5,805 (moderate) Wildfire = 4,388; Fire Use = 3,560 (high)

B. Water-Repellent Soil (acres): Wildfire = 4,388; Fire Use = 3,560

C. Soil Erosion Hazard Rating (acres): Wildfire = 1,888; Fire Use = 1,721 (Slight) Wildfire = 9,856; Fire Use = 8,510 (moderate) Wildfire = 5,008; Fire Use = 3,350 (severe) Wildfire = 1,913; Fire Use = 2,508 (very severe)

D. Erosion Potential: <2 tons/acre 0-15%slopes; 2-14 tons/acre 16-40% slopes; 3-75 tons/acre >40% slopes

E. Sediment Potential: <64 cubic yards / square mile 0-15% slopes; 102-718 cubic yards / square mile 16-40% slopes; 288-2400 cubic yards / square mile >40% slopes

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):	5
B. Design Chance of Success, (percent):	80
C. Equivalent Design Recurrence Interval, (years):	25
D. Design Storm Duration, (hours):	0.5
E. Design Storm Magnitude, (inches):	1.0
F. Design Flow, (cubic feet / second/ square mile):	6
G. Estimated Reduction in Infiltration, (percent):	25
H. Adjusted Design Flow, (cfs per square mile):	8

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Threats to Life and Property

There are no significant threats to life and property resulting from the fire.

Threats to Water Quality, Fisheries, and Aquatics

There are no significant threats to water quality, fisheries, and aquatics resulting from the fire.

Threats to Long-term Soil Productivity and Ecosystem Integrity

The burn area is relatively weed free, but there are a few localized areas of known weed infestation. Species of concern in these areas are musk thistle, houndstongue, and knapweed. There is also concern that suppression activities could have brought in seed of numerous species of invasive and noxious plants. Weed infestation presents a significant threat to ecosystem integrity and long-term soil productivity.

There is one trail in the Jack Creek drainage (655.1A) that crosses through a high-value wetland. Puncheon was constructed across this section prior to the fire to rehabilitate wetland damage caused by trail use. This section of puncheon was consumed by the fire so the wetland is once again at-risk of damage, which presents a threat to ecosystem integrity and long-term soil productivity.

B. Emergency Treatment Objectives:

Mitigate effects of the fire on the spread of noxious and invasive weeds, particularly musk thistle, houndstongue, and knapweed.

Mitigate effects of the fire on a wetland trail crossing.

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

Land 90 % Channel n/a % Roads/Trails 90 % Protection/Safety n/a %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	70	85	85
Channel	n/a	n/a	n/a
Roads/Trails	90	95	95
Protection/Safety	n/a	n/a	n/a

E. Cost of No-Action (Including Loss): n/a, see qualitative cost-risk assessment in project file

F. Cost of Selected Alternative (Including Loss): n/a, see qualitative cost-risk assessment in project file

G. Skills Represented on Burned-Area Survey Team:

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

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H. **Treatment Narrative:**

Treatment specifications sheets are available in the project file. Personnel responsible for treatment implemention should refer to these sheets for specific details on locations, design, construction, personnel, materials, contract criteria, etc.

Land Treatments:

Noxious Weed Detection

The task involves site visits to targeted areas to detect infestation of invasive and noxious weeds to determine the necessity and extent of possible control treatments. The task may be completed by agency personnel or through contract with local weed managers.

Detection monitoring is expected to allow for protection of ecological integrity of native plant communities.

Channel Treatments:

No channel treatments are recommended.

Roads and Trail Treatments:

Jack Creek Trail Wetland Puncheon Replacement

Two hundred linear feet of wetland puncheon was consumed by the fire. The puncheon will be replaced in kind.

This treatment is expected to protect ecosystem integrity and long-term soil productivity as well as trail infrastructure.

Protection/Safety Treatments:

No protection/safety treatments are recommended.

I. **Monitoring Narrative:**

Implementation monitoring will occur as the above treatments (weed spot treatment and wetland puncheon replacement) are being conducted. Effectiveness monitoring will occur during the first year after implementation. If treatment effectivness issues arise, more detailed assessment will be conducted to determine if modifications or additional work are needed.

Weed detection will follow standard Shoshone National Forest monitoring protocols associated with that type of work.

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										
Weed spot treatment	each	8440	1	$8,440	$0		$0		$0	$8,440
				$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 Land Treatments				$8,440	$0		$0		$0	$8,440
B. Channel Treatments										
				$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										
Wetland puncheon rep	each	29960	1	$29,960	$0		$0		$0	$29,960
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$29,960	$0		$0		$0	$29,960
D. Protection/Safety										
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Structures				$0	$0		$0		$0	$0
E. BAER Evaluation										
Team					$4,000		$0		$0	$4,000
					$0		$0		$0	$0
				---	$0		$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$4,000		$0		$0	$4,000
F. Monitoring										
Weed detection	each	8750	1	$8,750	$0		$0		$0	$8,750
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$8,750	$0		$0		$0	$8,750
G. Totals				$47,150	$4,000		**$0**		**$0**	**$51,150**
Previously approved										
Total for this request				**$47,150**						

PART VII - APPROVALS

1. */s/ Rebecca Aus* — September 29, 2006
   Forest Supervisor (signature) — Date

2. _____ — _____
   Regional Forester (signature) — Date