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

Date of Report: 6/29/06

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[ ] 1. Funding request for estimated emergency stabilization funds
[ ] 2. Accomplishment Report
[X] 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: Isabelle

B. Fire Number: WY-MB2F-000103

C. State: Wyoming

D. County: Albany

E. Region: 02

F. Forest: Medicine Bow Routt NF

G. District: Laramie

H. Fire Incident Job Code: P2CQ3R

I. Date Fire Started: June 19, 2006

J. Date Fire Contained: June 25, 2006

K. Suppression Cost: $996,500 as of 6/24/06

L. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 2
2. Fireline seeded (miles): 2
3. Other (identify): .01 (fuel trap); road maintenance.

M. Watershed Number: 101800100204 – Fox Creek

N. Total Acres Burned: 1190 acres
NFS Acres(1141) Other Federal ( ) State ( ) Private (49)

O. Vegetation Types: lodgepole pine, aspen, sage, grass

P. Dominant Soils: Ansel, Granile, Kittredge, Taglake.

Q. Geologic Types: Granite gneiss and quartz diorite.

R. Miles of Stream Channels by Order or Class: 1.2 perennial and 4.7 intermittent w/in fire perimeter.

S. Transportation System

Trails: 0 miles Roads: Oper. Maint. Level 1 (closed) 3.47 miles, OML 2 (High Clearance) 4.58 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 281 (24%) (unburned) 271 (23%) (low) 583 (49%) (moderate) 49 (4%) (high).
Based on our field assessment all private lands were estimated at low burn severity.

B. Water-Repellent Soil (acres): 250

C. Soil Erosion Hazard Rating (acres):
257 (low) 883 (moderate) 1 (high)

D. Erosion Potential: 1.16 tons/acre

E. Sediment Potential: 494 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 2-3 years

B. Design Chance of Success, (percent): N/A – No treatment recommended.

C. Equivalent Design Recurrence Interval, (years): N/A – No treatment recommended.

D. Design Storm Duration, (hours): N/A – No treatment recommended.

E. Design Storm Magnitude, (inches): N/A – No treatment recommended.

F. Design Flow, (cubic feet / second/ square mile): N/A – No treatment recommended.

G. Estimated Reduction in Infiltration, (percent): N/A – No treatment recommended.

H. Adjusted Design Flow, (cfs per square mile): N/A – No treatment recommended.

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Fire Effects Summary: The Isabelle fire burned gentle forested and un-forested mountain slopes in tributaries to Fox Creek, which enters the Laramie River just downstream/east of Woods Landing. The area is managed primarily for deer and elk crucial winter range, and to a lesser degree dispersed recreation. The fire burned mainly forested areas in a mosaic pattern, with over half of the area burned in a high fire intensity wind-driven crown fire. Fire severity in the high intensity burn areas was almost all moderate (49%), due to short residence time of the fire on the ground, small amounts of fuel on the ground, and high soil moisture conditions. Unburned litter and live roots were found at the soil surface in most of the high intensity burn areas. Water repellent soil conditions were limited (~20%), primarily at the surface, and not concentrated in any one area.

Potential Threats to Human Life and Safety: Burned trees (snags) falling can be a significant hazard after fires. Snags posing an immediate hazard along open roads were removed as a result of fire suppression activities. The fire area is not easy to access due to private lands to the east and limited motorized access on high clearance road and therefore does not receive heavy public use. Developed recreation areas, such as Lake Owen and the Medicine Bow Trail along the railroad bed, are well away from the burn area. Therefore, the potential for injury or death from burned trees falling is quite small.

Flooding as a result of increased runoff after fires can increase the risk of drowning. There are no known residences in floodprone locations or road crossings at significant risk of failure (see property below) on Fox Creek or its tributaries and any increased flows are expected to be well within the range of natural flows once they reach the Laramie River. Therefore, the potential for threats to human life and safety as a result of increased flooding after the fire is quite small.

Potential Threats to Property: Increased runoff and/or sedimentation has the potential to damage property. There are no know building structures within the burn area and the few buildings associated with ranches downstream of the burn area are out of the floodplain and not downslope of a burned areas. One small stock reservoir (<1 ac) was observed on an un-named tributary to Lake Owen Creek just downstream of the Forest boundary. There is a small risk of increased sedimentation and runoff to this reservoir as a result of the fire, but the watershed above it burned primarily with moderate severity and increased runoff and sedimentation are expected to be minor. The roads within the burn area are all high clearance two-tracks with waterbars for drainage and no culverts, therefore increased runoff and sedimentation from the burned areas is expected to have little effect on roads within the burn area. Downstream of the burn area, there is one bridge and one culvert crossing on Country Road 47 (Fox Creek Road). Both of these road/stream crossings were examined and found to have adequate capacity to pass any expected increased runoff and flooding from the fire. The City of Laramie diverts water for municipal use from the Laramie River about five miles downstream of the burn area. There is some potential in the next few years for increase turbidity in the Laramie River from ash and sediment from the burn area, but due to the pattern and severity of the fire, increased turbidity is expected to be well within the range of natural variability of the Laramie River. Therefore, while buildings, roads, road crossings, and a municipal water intake are located within or downstream of the burn area, the potential threats from fire effects to these property values is very minor.

Potential Threats to Critical Natural or Cultural Resources: Areas adjacent to the Isabelle fire have recently been burned under the Iron Mountain prescribed fire. These predominately grass and shrub lands have revegetated quickly and provide an good indication of what recovery potential is for the Isabelle burn area. Estimated rates of soil erosion are expected to be within the natural range of variability for the geographic area and do not pose a threat to the soil resource. Effects to water quality are also expected to be within the natural range of variability. Changes to terrestrial and aquatic habitat are also expected to be within the range of natural variability.

There are no known noxious weed infestations within the burn area, but cheatgrass, yellow and dalmation toadflax have been found in areas nearby. If monitoring conducted by District personnel (using approprioated funds) reveals noxious weeds in the burn area, a future BAER request for noxious weed treatments may be made before May 2007. Since there are no known populations of noxious weeds in the burn area and the amount of monitoring necessary to determine if there are noxious weeds in the burn area would be minimal, BAER funds are not being requested for noxious weed monitoring.

Summary: Based on our evaluation of fire effects in relation to human life and safety, property and critical natural and cultural resources, we have determined that there are no significant threats or emergency conditions as a result of the Isabelle fire.

B. Emergency Treatment Objectives:

No emergency treatments are recommended since there are no significant threats or emergency conditions as a result of the Isabelle fire.

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

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

D. Probability of Treatment Success **DAVE

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

E. Cost of No-Action (Including Loss): $0. There are no expected costs associated with no action, since there are no significant threats or emergency conditions as a result of the Isabelle fire.

F. Cost of Selected Alternative (Including Loss): $0 – no treatments are recommended.

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Dave Gloss.

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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: None recommended.

Channel Treatments: None recommended.

Roads and Trail Treatments: None recommended.

Protection/Safety Treatments: None recommended.

I. **Monitoring Narrative:** No BAER funded monitoring recommended.

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

				$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										
				---	$3,500		$0		$0	$3,500
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				---	$3,500		$0		$0	$3,500
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				$0	$3,500		**$0**		**$0**	**$3,500**
Previously approved										
Total for this request				**$0**						

PART VII - APPROVALS

1. ***/s/ Mary H. Peterson*** ***6/30/06***
   Forest Supervisor (signature) Date

2. _____ _____
   Regional Forester (signature) Date