



Forest  
Service

Rocky  
Mountain  
Regional Office

740 Simms Street  
Golden, CO 80401-4702  
Voice: 303-275-5350  
TDD: 303-275-5367

File Code: 2520-3/6520

Date: September 2, 2009

Route To:

Subject: Bradfield Fire, San Juan National Forest - Approval of Initial Request - Burned Area Emergency Response Funding

To: Forest Supervisor, San Juan National Forest

We have received your August 27, 2009, initial request for Burned Area Emergency Response (BAER) funding for the Bradfield Fire on the San Juan National Forest. The standards for approving emergency actions are found in FSM 2523 and FSH 2509.13.

Your request is approved to \$107,674 in the following categories as described in Part VI of FS-2500-8.

TREATMENT	AUTHORIZATION
Land	\$101,902
Protection/Safety	\$ 4,296
BAER Evaluation	\$ 1,476
Total Approval	\$107,674

These projects meet the intent of the BAER program. This letter provides the assurance that funds are available and gives the Forest the authority to process funds availability certification. An emergency stabilization incident job code (H2E39C) has been established for the implementation for this project. All treatments must be completed within one year of containment. The Forest is responsible for providing financial management oversight for this project. Any changes to this plan must be approved by the Regional Office. If there are any questions, please contact Tommy John, Regional BAER coordinator at 303-275-5583.

*/s/ Sharon Friedman for*  
ANTOINE L. DIXON  
Deputy Regional Forester, Resources

Enclosure

cc: Rebecca A Smith  
Jason J Kuiken



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Date of Report: 8/26/2009

**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  
☐ 3. No Treatment Recommendation

**B. Type of Action**

- ☒ 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: Bradfield  
B. Fire Number: CO-SJF-134  
C. State: Colorado  
D. County: Dolores and Montezuma  
E. Region: 02  
F. Forest: San Juan  
G. District: Dolores  
H. Fire Incident Job Code: P2E39C  
I. Date Fire Started: 08/02/2009  
J. Date Fire Contained: not yet contained  
K. Suppression Cost: Approx. \$400,000  
L. Fire Suppression Damages Repaired with Suppression Funds  
    1. Fireline waterbarred (miles): 0  
    2. Fireline seeded (miles): 0  
    3. Other (identify): 0  
M. Watershed Number:  
N. Total Acres Burned: 2,220  
    [2,018] NFS Acres   ☐ Other Federal   [13] State   [189] Private  
O. Vegetation Types: Ponderosa Pine, Mountain shrub, Pinyon-Juniper woodland, Mixed conifer

**P. Dominant Soils:** Argiustolls, Haplustalfs, Ustorthents, and rock outcrop

**Q. Geologic Types:** Geology is mixed sandstones and shales of the Morrison Formation, Dakota Sandstone and Burro Canyon Formation

**R. Miles of Stream Channels by Order or Class:** Order 1: 4.4 miles  
Order 2: 3.2 miles  
Order 3: 1.3 miles

**S. Transportation System**

Trails: 0 miles      Roads: 8.3 miles

**PART III - WATERSHED CONDITION**

**A. Burn Severity (acres):** 774 (low)      811 (moderate)      447 (high)

**B. Water-Repellent Soil (acres):** 1258

**C. Soil Erosion Hazard Rating (acres):** 774 (low)      811 (moderate)      447 (high)

**D. Erosion Potential:** 20 tons/acre

**E. Sediment Potential:** 25,000 cubic yards / square mile

**PART IV - HYDROLOGIC DESIGN FACTORS**

**A. Estimated Vegetative Recovery Period, (years):** 3-5

**B. Design Chance of Success, (percent):** 62%

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

**D. Design Storm Duration, (hours):** 1.73

**E. Design Storm Magnitude, (inches):** 1.58

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

**G. Estimated Reduction in Infiltration, (percent):** 57%

**H. Adjusted Design Flow, (cfs per square mile):** NA

## PART V - SUMMARY OF ANALYSIS

For a more detailed description of the analysis see the Narraguinnep and Bradfield Fires Emergency Stabilization and Rehabilitation Plan.

- A. Describe Critical Values/Resources and Threats (narrative):** Approximately 1,258 acres (57%) of the Bradfield Fire experienced moderate to high soil burn severity. Approximately 784 acres (35%) experienced high vegetation mortality (51-100% dominant overstory was killed) with most of those acres experiencing greater than 80% vegetation mortality. Watershed response is expected to include an initial flush of ash, some gully and rill erosion on steep slopes, sediment transport, and increased peak flows.

Vegetation types within the burned area are primarily ponderosa pine, mountain shrub, pinyon-juniper woodland, and mixed conifer. The fire resulted in about half of the pinyon-juniper woodland and roughly one third of the other vegetation types experiencing high vegetation mortality (51-100% of the dominant overstory was killed). Areas of low vegetation mortality experienced beneficial under burns.

The watersheds are not expected to recover for 3 to 5 years with some areas not recovering for another 10 years.

Populations of noxious weeds and other invasive non-native species are known to occur adjacent to or within the burned area. The Bradfield Fire has created a favorable seedbed to establish noxious weed populations, especially in severely burned areas. Noxious weeds will establish quickly in areas that will take native vegetation much longer to establish, taking advantage of the readily available soil nutrients and soil moisture with little competition.

- B. Emergency Treatment Objectives (narrative):** Seeding to reestablish desirable species and weed treatments are designed to reduce noxious and invasive weed invasions in areas that were severely burned. A gate will be installed to close access to a currently open road where hazard trees cannot be treated cost effectively. Installation of public safety warning signs will warn the public of post-fire safety hazards present in the burn area. Known cultural sites that may be at risk of damage from increased erosion and runoff will be assessed.

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

Land 50%   Channel NA   Roads/Trails NA   Protection/Safety 90%

- D. Probability of Treatment Success**

	Years after Treatment		
	1	3	5
Land	50%	75%	90%
Channel			

Roads/Trails			
Protection/Safety	90	95	95

**E. Cost of No-Action (Including Loss):****F. Cost of Selected Alternative (Including Loss):****G. Skills Represented on Burned-Area Survey Team:**

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input checked="" type="checkbox"/> Range
<input checked="" type="checkbox"/> Forestry	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input checked="" type="checkbox"/> Ecology	<input type="checkbox"/> Botany	<input checked="" type="checkbox"/> Archaeology
<input checked="" type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input checked="" type="checkbox"/> GIS

Team Leader: Becca Smith

Email: rsmith@fs.fed.us

Phone: (970) 264-1521

FAX: (970) 264-1538

**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:**

**Aerial Seeding** – Seeding will serve as an immediate and long-term ground cover to help in the prevention and spread of non-native and noxious weed species, increase infiltration and decrease surface erosion. Local resource specialists including ecologists and range conservationists assisted with development of the seed prescription. Seed is being prescribed in areas where seed is likely to be successful (i.e. flatter slopes) and in areas of known noxious weed infestation. Quickguard Sterile Triticale is not expected to persist.

**Seed Mix**

Common Name	Species Name	PLS Pounds/Acre	Cost/PLS
Blue grama	<i>Chondrosum gracile</i>	0.4	\$11.00
Western wheatgrass	<i>Pascopyrum smithii</i>	7.9	\$3.50
Mutton Grass	<i>Poa fendleriana</i>	0.3	\$41.00
Junegrass	<i>Koeleria macrantha</i>	0.3	\$28.30
Squirrel tail	<i>Elymus elymoides</i>	1.8	\$21.00
Slender wheatgrass	<i>Elymus trachycaulus</i>	5.5	\$2.20
Utah Sweetvetch	<i>Hedysarum boreale</i>	0.6	\$50.00
Quickguard Sterile Triticale	<i>Triticosecale rimpai</i>	10	\$2.60

*Non-Native Invasive Plant Control* – Areas with known noxious and invasive weed infestations and areas likely to be invaded by weeds (adjacent to known infestations and along road corridors) will be treated to prevent further spread.

*Implementation Leader* – The Implementation Leader will coordinate all aspects of approved emergency stabilization treatment activities.

**Channel Treatments:** None proposed

**Roads and Trail Treatments:** None proposed

**Protection/Safety Treatments:**

*Public Safety Road Closure* – Severely burned and charred trees will lose root integrity and are more susceptible to blow down or snap off at mid bole. Public safety issues will be addressed by installing a gate to close a currently open road where hazard trees cannot be removed cost effectively.

*Public Safety Warning Signs* – Signs will be placed where open roads enter or are near the burned area to advise road users of the presence of a burned area and associated safety issues, such as falling trees, rockfall, and flash floods.

**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.)**

Implementation monitoring will be conducted as part of the above treatments.

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

Interim #

Line Items	Units	Unit Cost	NFS Lands		Other	Other Lands				All Total
			# of Units	BAER \$		# of units	Fed \$	# of Units	Non Fe \$	
<b>A. Land Treatments</b>										
Aerial Seeding	acres	\$220	316	\$69,428	\$0		\$0		\$0	\$69,428
Non-Native Invasive Plant Control	acres	\$139	206	\$28,634	\$0		\$0		\$0	\$28,634
Implementation Leader	each	\$3,840	1	\$3,840	\$0		\$0		\$0	\$3,840
<i>Subtotal Land Treatments</i>				\$101,902	\$0		\$0		\$0	\$101,902
<b>B. Channel Treatments</b>										
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treat.</i>				\$0	\$0		\$0		\$0	\$0
<b>C. Road and Trails</b>										
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Road &amp; Trails</i>				\$0	\$0		\$0		\$0	\$0
<b>D. Protection/Safety</b>										
Public Safety Road Closure	roads	\$3,000	1	\$3,000	\$0		\$0		\$0	\$3,000
Public Safety Warning Signs	signs	\$324	4	\$1,296	\$0		\$0		\$0	\$1,296
<i>Subtotal Structures</i>				\$4,296	\$0		\$0		\$0	\$4,296
<b>E. BAER Evaluation</b>										
Cultural Site Assessment	sites	\$533	2	\$1,066	\$0		\$0		\$0	\$1,066
Native American Consultation	tribes	\$16	25	\$410	\$0		\$0		\$0	\$410
BAER Plan Preparation	plan	\$10,000	1	--			\$0		\$0	\$0
<i>Subtotal Evaluation</i>				\$1,476	\$0		\$0		\$0	\$1,476
<b>F. Monitoring</b>										
				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$0	\$0		\$0		\$0	\$0
<b>G. Totals</b>				\$107,674	\$0		\$0		\$0	\$107,674
Previously approved										
Total for this request				\$107,674						

**PART VII - APPROVALS**

Submitted by:

Becca Smith  
Becca Smith  
BAER Team Leader (signature)

8/27/09  
Date

Approval Recommended by:

Steven K. Beverlin  
Steven K. Beverlin  
District Ranger (signature)

8/27/09  
Date

Approved by:

1. Mark W. Stiles  
Mark W. Stiles  
Forest Supervisor (signature)

8/27/09  
Date

2. Sharon Lueder  
for Regional Forester (signature)

9/02/09  
Date