



United States
Department of
Agriculture

Forest
Service

Dakota Prairie Grasslands
3425 Miriam Ave.
Bismarck, ND 58501
(701) 250-4443

File Code: 2500

Date: 6/07/2013

Route To:

Subject: Pautre Fire BAER 2500-8 Initial Request

To: Regional Forester

Attached is an initial Burned Area Report (FS2500-8) for the Pautre Fire BAER. This is an initial request for \$13,060 for wildlife area fence reconstruction, weed treatments, implementation team, and assessment team funding.

We understand that the BAER team costs are approved to the extent actual salary, travel, and per diem are incurred. Administrative personnel working in support of the rehabilitation survey are considered members of the team. Contracting and administration costs of implementing treatments are reflected in treatment costs.

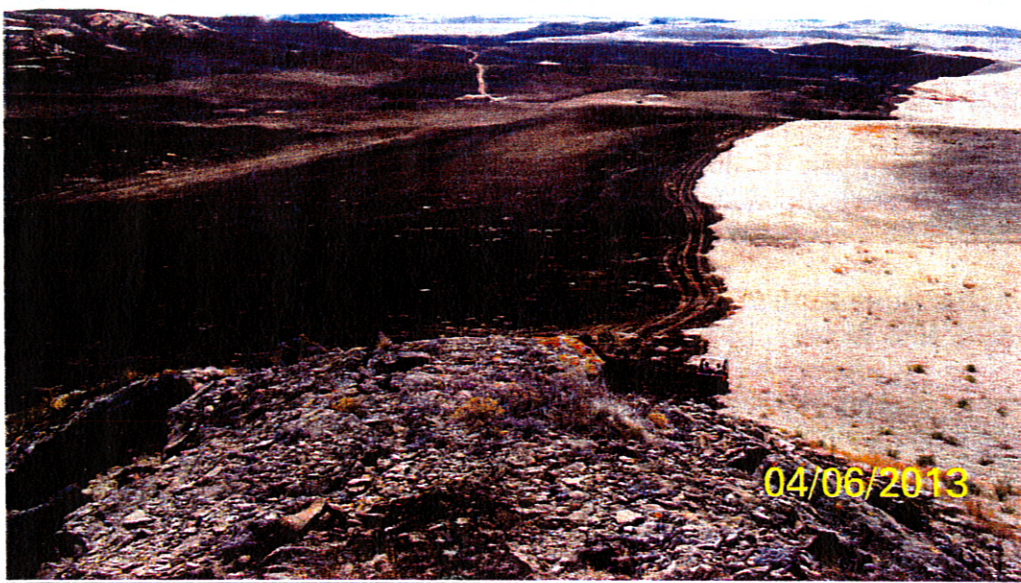
We will submit Interim reports or requests as needed to describe revised costs or additional needs based on monitoring results. We will send a final FS-2500-8 describing the treatments completed and their actual costs within 60 days after completing the activities.

Please contact District Ranger Paul Hancock at (605) 374-3592, if questions occur about this request.

DENNIS D. NEITZKE
Grasslands Supervisor



Date of Report: 04/30/2013

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: Pautre Fire

B. Fire Number: ND DPG 130601

- C. State:** South Dakota
- D. County:** Perkins
- E. Region:** R1, Northern Region
- F. Forest:** Dakota Prairie Grasslands
- G. District:** Grand River RD
- H. Fire Incident Job Code:** P1HD25
- I. Date Fire Started:** 04/03/2013
- J. Date Fire Contained:** 04/07/2013
- K. Suppression Cost:** \$ ~440,000
- L. Fire Suppression Damages Repaired with Suppression Funds**
1. **Fireline waterbarred (miles):** NA
 2. **Fireline seeded (miles):** NA
 3. **Other (identify):** Fencing
- M. Watershed Number:** 101303010602 (101303010602), 101303010603 (Giles Creek-North Fork Grand River), 101303010604 (White Butte-North Fork Grand River, 101303020803 (King School-Lodgepole Creek), 101303010601 (Wolf Butte)
- N. Total Acres Burned:** 10,679
[3519] NFS Acres ☐ Other Federal ☐ State [7160] Private
- O. Vegetation Types:** Native mixed-grass prairie; Tame grass pastures (Crested wheatgrass); Green ash woody draws
- P. Dominant Soils:**
The fire was of very low severity and little to no soil was detrimentally impacted. The following is a list of the dominant soils and the geology they were formed from instead of a detailed analysis by soil type and properties.

The following are the dominant soil complexes:

1. Vebar-Reeder-Cohagen: Moderately deep and shallow, well drained to excessively drained, gently sloping to steep loamy and sandy soils underlain by sandstone; on uplands.
2. Cabba-Lantry-Amor: Shallow and moderately deep, well drained, moderately sloping to steep loamy soils underlain by siltstone, sandstone; on uplands.
3. Regent-Reeder-Amor: Moderately deep, well drained, gently sloping to strongly sloping silty and loamy soils underlain by siltstone, sandstone, and shale; on uplands.
4. Savage-Regent: Deep and moderately deep, well drained, nearly level and gently sloping silty soils formed in alluvium and in material weathered from siltstone and shale; on uplands.
5. Shambo-Farnuf-Stady: Deep, well drained, nearly level and gently sloping loamy soils and well drained, nearly level loamy soils that are moderately deep over sand and gravel; formed in alluvium on terraces.

Q. Geologic Types: Most of the area burned overlies the Hell Creek Formation.

Tan to brown, light- to dark-gray, "somber beds" of shale. Interbedded with brown to red carbonaceous shale, gray and brown bentonitic silty shale, and gray, brown and yellow siltstone, sandstone, and claystone-pebble conglomerate. Thickness 260-600 ft (79-183 m). It formed during the Phanerozoic, Mesozoic and Cretaceous-Late eras.

R. Miles of Stream Channels by Order or Class: No perennial or intermittent streams were detrimentally impacted.

S. Transportation System

Trails: XXX miles **Roads:** XXX miles (no roads or trails were damaged by fire)

PART III - WATERSHED CONDITION

For USFS lands only (private lands had similar burn severity)

A. Burn Severity (acres): 3519 (low) 0 (moderate) 0 (high)

B. Water-Repellent Soil (acres): 0

C. Soil Erosion Hazard Rating (acres): 3519 (low) 0 (moderate) 0 (high)

D. Erosion Potential: NA tons/acre Erosion potential should not be impacted from fire. Vegetation all had intact root masses and had already begun spring growth before snow storm on 4/7/2013.

E. Sediment Potential: NA cubic yards / square mile

This should remain unchanged. Fire did not damage root masses. There were no areas of water repellent soils.

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):

If adequate moisture is available the vegetation should recover this growing season. There should be no increase in sediment production or water yield. Grazing should be held off until vegetation is sufficiently recovered.

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

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

D. Design Storm Duration, (hours): XXX

E. Design Storm Magnitude, (inches): XXX

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

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

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

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats (narrative):

The burn area includes several areas of known weed infestations, primarily leafy spurge, but also some Canada thistle. The infestations occur primarily along woody draws and intermittent streams. These have moderate to high probability of spreading due to suppression activities and windborne seeds.

The fire passed through a 160 acre Wildlife Area enclosure in the 5A allotment, completely burning off shrubs and trees that were recently planted to enhance wildlife habitat. These plantings were done in 2012 as an essential project in the DPGs priority watershed. Approximately 2 miles of fencing around this area was damaged by fire. Wood and metal posts will be replaced as needed to repair fence to protect the riparian areas and wildlife habitat within the enclosure from livestock. Grasses in the 5A Wildlife Area had intact root masses and are expected to be able to keep soil stable while they recover.

Humphrey Draw Wildlife Area was also burned. This wildlife area is designated as Management Area 2.1 – Aspen Stand Special Interest Area (8.4 acres) and Management Area 3.64 – Special Plant and Wildlife Habitat (560 acres). The aspen stand had some fire damage, but is expected to recover. MA 3.64 consists of woody draws with green ash, aspen, and multiple shrub species found in a well established riparian area. Approximately 5.5 miles of fencing around Humphrey Draw Wildlife Area was damaged by fire. Wood and metal posts as well as ~12115' of the bottom strand of wire will be replaced as needed to repair fence to protect the riparian area and woody draws. Herbicide treatments will also be done within this area to treat known patches of leafy spurge and Canada thistle.

Across the burned area, the fire was of low severity and short duration. High winds spread the fire very rapidly and root masses of vegetation were still intact everywhere the BAER team analyzed. On Friday April 12th, 2013 the entire burn area already showed significant sprouting of new grasses. The area was covered in 3-7 inches of new snow on 4/14/2013 and should have significant "green-up" once warmer weather arrives. Some woody vegetation was scorched but the majority of woody vegetation will likely survive. There were very few localized areas (less than 1/8 acre) of moderate severity burn on steeper slopes where creeping juniper was present. These areas present little to no risk of any sediment delivery.

B. Emergency Treatment Objectives (narrative):

To minimize spread of invasive weeds. Control known areas of invasive weeds.

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

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

D. Probability of Treatment Success

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

E. Cost of No-Action (Including Loss): NA**F. Cost of Selected Alternative (Including Loss):**

The local weed coordinator and range staff estimates the following needs for treating known weed infestations in the Pautre Fire area:

1 Gallon Imazapic (plateau)	\$115
1 Gallon Picloram (Tordon 22K)	\$48
4 Gallons MSO	\$51
1 Gallon Marking Dye (Bigfoot)	\$34

5 days of labor for 1 person or 2-3 days each for 2 people = \$1000.

5A Wildlife Area and Humphrey Draw Wildlife Area:

\$3500 for a variety of shrub species, weed fabric, and staples

\$1500 for staff time (1 day x 5-6 people).

Fence replacement = 2 bundles of wood corner posts (8'L x 7"W) = \$1450
 4 bundles of steel posts (5.5' L) = \$100
 Bottom strand smooth wire (12,115') = \$750
 Labor ~\$3000

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

Team Leader: Robert Lance George

Email: rlgeorge@fs.fed.us **Phone:** 701-227-7811

FAX: 701-227-7801

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: NA

Channel Treatments: NA

Roads and Trail Treatments: NA

Protection/Safety Treatments: NA

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.)

The burn area, especially the riparian areas, fire perimeter, travel routes, and known sites of noxious weed, will be surveyed early in the growing season (late May to early June) and again late in the growing season (late July to mid- August). Weeds will be treated with herbicide. Herbicide treatments will comply with the design criteria articulated in the Dakota Prairie Grasslands Noxious Weed EIS (2006). Treatment and GPS mapping will occur simultaneously with monitoring. Treatment records will be entered into the FACTS database. Initial treatment would begin in FY2013. Subsequent treatments are highly likely in FY2014.

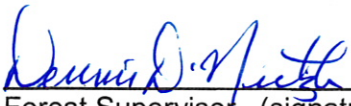
Shrub replanting will be monitored annually for successful of establishment.

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 Fed \$	
A. Land Treatments										
Fencing Wood Posts	Bundle	\$725	2	\$1,450	\$0		\$0		\$0	\$1,450
Metal Posts	Bundle	\$25	4	\$100						\$100
Strand Wire	Roll	\$750	1	\$750						\$750
Herbicide Treatment	Acres	\$13	20	\$260	\$0		\$0		\$0	\$260
Shrub Replacement	Acres	1000	5	\$5,000	\$0		\$0		\$0	\$5,000
Fencing Labor				\$3,000						\$3,000
Herbicide Labor				\$1,000						\$1,000
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$11,560	\$0		\$0		\$0	\$11,560
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treat.				\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$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
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Structures				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
Site Visit (4 team members)	Days	1	1500	\$1,500	\$1,500		\$0		\$0	\$1,500
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
Subtotal Evaluation				---	\$1,500		\$0		\$0	\$1,500
F. Monitoring										
		1	1500	\$1,500			\$0		\$0	\$1,500
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$1,500	\$0		\$0		\$0	\$1,500
G. Totals				\$13,060	\$1,500		\$0		\$0	\$14,560
Previously approved										
Total for this request				\$13,060						

PART VII - APPROVALS

1. 
Forest Supervisor (signature)

6/7/13
Date

2. _____
Regional Forester (signature)

Date