

Date of Report: 7/16/08

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

The Soldier Creek Complex consisted of four fires of which one, the Rimrock fire, was on private land. This request includes the other three, the Fencepost, Boot, and North Fork fires.

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 # 2
☒ 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:** Soldier Creek Complex**B. Fire Number:** NE – NES - 070822**C. State:** NE**D. County:** Sioux**E. Region:** 02**F. Forest:** Nebraska**G. District:** 02**H. Fire Incident Job Code:** P2DV9C**I. Date Fire Started:** 8/13/07**J. Date Fire Contained:** 8/17/07**K. Suppression Cost:** \$714,000 (preliminary estimate)**L. Fire Suppression Damages Repaired with Suppression Funds**

1. Fireline waterbarred (miles): 4 (estimate)
2. Fireline seeded (miles): 2 (completed April 4, 2008)
3. Other (identify): Dozer line – 1 mile, to be reseeded (completed April 17, 2008); old two-track within Wilderness to be reseeded; misc areas where engines/trucks drove up steep, slopes. ~1 mile of line has had berms pulled in and debris placed on it to retard erosion.

M. Watershed Number:**N. Total Acres** (2741) **Other Federal** () **State** () **Private** (750)**O. Vegetation Types:** Mixed grass, scattered ponderosa pine, riparian, woody draws

P. Dominant Soils: Ponderosa-Tassel-Vetal complex (LVFS, VFSL, SL), rock outcrop (primarily siltstone and sandstone).

Q. Geologic Types: Fine grained sandstone, siltstone, sandy/loamy colluvium

R. Miles of Stream Channels by Order or Class:

1st order: 16.39 miles

2nd order: 4.33 miles

3rd order: 4.30 miles

4th order: 1.35 miles

S. Transportation System

Trails: 5 miles

Roads: 1.5 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 60% (low) 30% (moderate) 10% (high)

B. Water-Repellent Soil (acres): <5

C. Soil Erosion Hazard Rating (acres):
50% (low) 25% (moderate) 25% (high)

D. Erosion Potential: "Severe to very severe" for soil types listed. ~2 tons/acre

E. Sediment Potential: ~ 1 T/acre (estimate from WEPP output)

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 2-5 (depending on drought conditions)

B. Design Chance of Success, (percent): 80%

C. Equivalent Design Recurrence Interval, (years): N/A

D. Design Storm Duration, (hours): N/A

E. Design Storm Magnitude, (inches): N/A

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

G. Estimated Reduction in Infiltration, (percent): negligable except in isolated pockets of moderate severity where reduction should be less than 20%.

H. Adjusted Design Flow, (cfs per square mile): N/A

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Noxious weeds: Infestation and establishment from outside sources and the expansion of existing populations are threats, particulary with Canada thistle and leafy spurge.

Erosion: There is some risk of accelerated erosion on steep slopes where there were handlines, dozer lines, and where vehicles drove. Soils in this area are highly vulnerable to erosion by both wind and water. Seeding, smoothing berms in, waterbarring, and debris placed to retard erosion are expected to address the problem sufficiently, but effectiveness will depend on the characteristics of precipitation and wind events that occur as vegetation re-establishes and slopes restabilize to pre-fire levels.

B. Emergency Treatment Objectives:

Detection and elimination of new noxious weed infestations attributable to the fire, and prevention of the expansion of existing infestations.

Detection and stabilization of areas with accelerated erosion attributable to the fire.

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

Land (Weeds) N/A % Channel N/A % Roads/Trails N/A % Protection/Safety N/A %
No treatments are currently planned, although it is expected that there will be new weed populations detected in FY08. Treatments will occur at that time.

D. Probability of Treatment Success:

	Years after Treatment		
	1	3	5
Land (weeds)	60	60	60
Channel			
Roads/Trails	90	95	95
Protection/Safety			

E. Cost of No-Action (Including Loss):

Expansion of noxious weed populations in a wilderness area and rilling/gullying along firelines and disturbed areas on steep slopes, sedimentation at the base of the steep slopes, all may affect watershed health. The cost of treating weeds too late would be exponentially greater than monitoring the area and treating new populations as they are identified.

F. Cost of Selected Alternative (Including Loss):

See spreadsheet at the end of this report.

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"/> Fire Ecology
<input checked="" type="checkbox"/> Forestry	<input 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 checked="" type="checkbox"/> Archaeology	
<input type="checkbox"/> Fisheries	<input type="checkbox"/> Research	<input type="checkbox"/> Landscape Arch	<input type="checkbox"/> GIS	

Team Leader: Mary Lata

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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: *No immediate treatment was proposed for the vegetation of the Soldier Creek Complex. It is believed that the area will eventually regenerate naturally, with the exception of firelines (handlines and dozer lines-seeded 4/4 and 4/17/2008) that are being rehabilitated as a part of the suppression effort.*

Invasive Species Control – Monitoring and mapping will be done this fall by FS personnel. A GS-4 for 10 days. If funding is received then we plan to issue a contract for invasive weed control for 60 acres. An IDIQ contract would be issued FY08 to carry over into FY09.

Channel Treatments: N/A

Roads and Trail Treatments: **As a part of suppression costs**, two track abandoned roads within the Soldier Creek Wilderness and within the fire boundary will be treated by hand broadcasting a mixture of native grass seed and a dozer line that occurs outside the Soldier Creek Wilderness area will also be seeded with a native seed mixture (completed). These areas will be monitored for new weed populations.

Structures: There were no structures affected by this fire. Cultural sites within the fire area were identified, but no treatments are needed.

Protection/Safety Treatments: None recommended.

Monitoring within the area affected by suppression efforts area identified noxious weed infestations. Treatment of these infestations will need to take place in late summer/early fall of 2008. Monitoring for noxious weeds will continue within the area.

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.)

Vegetation: *The burned area will be monitored for invasion and/or expansion of noxious weeds intensely next spring and summer 09. Disturbed areas with exposed soils are vulnerable to noxious weed infestations and will be monitored carefully, particularly for this first growing season. Areas where suppression activities occurred, such as vehicles driving cross country or on abandoned two-track roads, hand lines and dozer lines will need closer monitoring.*

Monitoring efforts have identified new infestations of Canada thistle within the area affected by the Soldier Creek Complex. Additional monitoring will continue through the remainder of the 2008 growing season.

Erosion: *Accelerated erosion is expected to some degree on steeper slopes, riparian areas and creek crossings where soil was exposed to a higher severity of burning and/or disturbance, but is expected to return to normal levels within one season with the completion of the suppression rehabilitation. These areas will be allowed to recover naturally.*

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

Line Items	Units	Cost	Units	BAER \$	\$	units	\$	Units	\$	\$
A. Land Treatments										
Noxious Weed Contract	acres	120	60	\$7,200	\$0		\$0		\$0	\$7,200
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>				\$7,200	\$0		\$0		\$0	\$7,200
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Channel Treat.</i>				\$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
<i>Subtotal Road & Trails</i>				\$0	\$0		\$0		\$0	\$0
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Structures</i>				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
GS - 11	days	327.08	3	\$981						
GS - 7	days	233.53	5	\$1,168						
GS - 9	days	304.59		\$0			\$0		\$0	\$0
<i>Insert new items above this line!</i>				---	\$0		\$0		\$0	\$0
<i>Subtotal Evaluation</i>				\$2,149	\$0		\$0		\$0	\$0
F. Monitoring										
GS - 4	days	\$120.00	10	\$1,200	\$0		\$0		\$0	\$1,200
Vehicle	day/mi	\$50.00	10	\$500						
<i>Insert new items above this line!</i>				\$0	\$0		\$0		\$0	\$0
<i>Subtotal Monitoring</i>				\$1,700	\$0		\$0		\$0	\$1,200
G. Totals				\$8,900	\$0		\$0		\$0	\$8,400
Previously approved										
Total for this request				\$11,049						

PART VII - APPROVALS

1. /s/ Jane D. Darnell
Forest Supervisor (signature)

8-14-08
Date

2. /s/ Cynthia Correll for
Regional Forester (signature)

8-21-08
Date