

Date of Report: 04/18/03

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST**A. Type of Report**

- ☐ 1. Funding request for estimated WFSU-SULT funds
- ☒ 2. Accomplishment Report
- ☐ 3. No Treatment Recommendation

B. Type of Action

- ☐ 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation 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 DESCRIPTIONA. Fire Name: Judith ComplexB. Fire Number: P17019C. State: MontanaD. County: Meagher and Judith BasinE. Region: Northern (01)F. Forest: Lewis and Clark (15)G. District: Judith and MusselshellH. Date Fire Started: July 30, 2000I. Date Fire Controlled: Lost Fork Ridge Fire - not controlledJ. Suppression Cost: \$3.1 million**K. Fire Suppression Damages Repaired with Suppression Funds**

- 1. Fireline waterbarred (miles): 9.5
- 2. Fireline seeded (miles): 16
- 3. Other (identify): dozer lines rehabed without waterbars: 7.2 miles.

L. Watershed Number: 100401030102 and 100402010204M. Total Acres Burned: 1409 acres - Lost Fork Ridge, 1536 acres – Judith Complex total
NFS Acres (1521) Other Federal () State () Private (15)N. Vegetation Types: alpine fir/whitebarkpine, alpine fir/heartleafed arnica, alpine fir/pinegrassO. Dominant Soils: brown silt loam topsoils (4-8" thick), clayloam or silty clay loam subsoils (20-40" thick) containing 35-50% angular cobble.P. Geologic Types: limestone and some intrusive granitic rocks

Q. Miles of Stream Channels by Order or Class: 1.5 mile of ephemeral draws - Lost Fork Ridge Fire

R. Transportation System - Within Lost Fork Ridge Fire perimeter only

Trails: 5.5 miles Roads: 0.0 miles

PART III - WATERSHED CONDITION – Lost Fork Ridge Fire Only

A. Fire Severity – soils (acres): 282 (low / unburned) 634 (moderate) 211 (high)

B. Water-Repellent Soil (acres): 845

C. Soil Erosion Hazard Rating – due to fire (acres):
700 (low) 709 (moderate) 0 (high)

D. Erosion Potential: 13 tons/acre (on-site, upslope erosion)

E. Sediment Potential: 0.1 tons/acre (delivered to ephemeral draws)

PART IV - HYDROLOGIC DESIGN FACTORS – Not Applicable

A. Estimated Vegetative Recovery Period, (years): _____

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

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

D. Design Storm Duration, (hours): _____

E. Design Storm Magnitude, (inches): _____

F. Design Flow, (cfs per square mile): _____

G. Estimated Reduction in Infiltration, (percent of area): _____

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

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency: Due to the longevity of this fire, a significant amount of vehicle and machinery traffic occurred adjacent to and within the fire perimeter throughout a two month time period. Although there are no known noxious weed infestations immediately adjacent to the fire perimeter, there is a high probability that noxious weed seeds were brought into the area during this time. Due to the dry site conditions found here, there is potential for noxious weeds to get established prior to natural regeneration. These circumstances also occurred on two smaller fires within the Judith Complex of fires, i.e., the High Springs Fire (30 acres) and the McGuire Ranch Fire (25 acres). Estimated cost for treatment of noxious weeds is approximately \$125.00 per acre. Estimated cost to monitor over three years is \$3,045.00. The benefit vs cost of monitoring will be exceeded if noxious weed infestation were to exceed only 25 acres.

Other values at risk include westslope cutthroat trout populations in the West Fork Lost Fork River and the Middle Fork Judith wilderness study area. A sediment pulse is expected to occur during intense rain events for the first growing season after the fire. Some of this sediment is expected to be routed to the West Fork Lost Fork River. Emergency treatments to reduce hillslope erosion are not proposed because 1) soils are not rated as a high erosion hazard, 2) vigorous natural regeneration is anticipated within the next growing season and will help to stabilize soils, 3) the lower slopes adjacent to the West Fork Lost Fork did not burn and should provide a depositional area for most upslope sediment sources and 4) land treatments such as log or straw barriers are not expected to significantly improve on sediment filtering capability beyond what will occur naturally in the unburned streamside areas.

B. Emergency Treatment Objectives: To locate and treat new noxious weed infestations before they have a chance to spread or get firmly established.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm: Not Applicable

Land ___ % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success: Not Applicable

| | Years after Treatment | | |
|---------|-----------------------|---|---|
| | 1 | 3 | 5 |
| Land | | | |
| | | | |
| Channel | | | |
| | | | |
| Roads | | | |
| | | | |
| Other | | | |
| | | | |

E. Cost of No-Action (Including Loss):__ Not Applicable

F. Cost of Selected Alternative (Including Loss):__ Not Applicable

G. Skills Represented on Burned-Area Survey Team:

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

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H. Treatment Narrative: Not Applicable

(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:

Channel Treatments:

Roads and Trail Treatments:

Structures:

H. 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.)

Monitor travel routes and firelines for new noxious weed infestations for five days per year over a period of three years. If infestations are located and cover a significant area, request funding for treatment measures, i.e., herbicide application. A Forest level EIS on Noxious Weed Control has been completed.

ACCOMPLISHMENTS:

The Lost Fork portion of the Judith Complex comprised about 92% of the complex fire area and nearly all of the fireline that was seeded. Fireline and areas of concentrated vehicle use in the Lost Fork Fire were monitored in 2001. Good seed germination was observed in nearly all areas, while no infestations of noxious weeds were observed.

This same area burned again in 2001 and expanded the original fire perimeter to the east and south. Noxious weeds will continue to be monitored within the combined fire perimeter area over the next few years. Most infestations apparently do not show up significantly for 3-5 years after the initial seed source was deposited. Monitoring funds were requested and approved under the 2001 Monarch Fire 2500-8.

Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

| | | | NFS Lands | | | | Other Lands | | | All | |
|--------------------------|-------|------|-----------|---------|-------|--|-------------|-----|-------|---------|-------|
| | | Unit | # of | WFSU | Other | | # of | Fed | # of | Non Fed | Total |
| Line Items | Units | Cost | Units | SULT \$ | \$ | | units | \$ | Units | \$ | \$ |
| | | | | | | | | | | | |
| A. Land Treatments | | | | | | | | | | | |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | | |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| Subtotal Land Treatments | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| B. Channel Treatments | | | | | | | | | | | |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| Subtotal Channel Treat. | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| C. Road and Trails | | | | | | | | | | | |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| Subtotal Road & Trails | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| D. Structures | | | | | | | | | | | |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| Subtotal Structures | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| E. BAER Evaluation | | | | | | | | | | | |
| team leader | days | 254 | 0 | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | \$0 | | | | \$0 | | \$0 | \$0 |
| | | | | | | | | | | | |
| G. Monitoring Cost | days | 113 | 2 | \$227 | | | | \$0 | | \$0 | \$227 |
| | | | | | | | | | | | |
| H. Totals | | | | \$227 | | | | \$0 | | \$0 | \$227 |
| | | | | | | | | | | | |

PART VII - APPROVALS

1. /s/ EDDIE ALFORD
Acting Forest Supervisor (signature)

04/18/03
Date

2. _____
Regional Forester (signature)

Date