USDA-FOREST SERVICE FS-2500-8 (7/00)

Date of Report: **Feb. 15, 2006**

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[**X**] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[ ] 3. No Treatment Recommendation

B. Type of Action

[**X**] 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 DESCRIPTION

A. Fire Name: **Steeler**

B. Fire Number: **KS-PSF-00081**

C. State: KS

D. County: Morton

E. Region: 02

F. Forest: Pike/San Isabel, Cimarron/Comanche

G. District: Cimarron

H. Date Fire Started: Feb. 4, 2006

I. Date Fire Contained: Feb. 6, 2006
(Control: Feb. 7, 2006)

J. Suppression Cost: $45,000 (current estimate)

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles)
2. Fireline seeded (miles)
3. Other (identify)

L. Watershed Number: 110400060203 (HUC6)

M. Total Acres Burned
NFS Acres (**1,521**) Other Federal ( ) State ( ) Private (**859**) **[2,380 Total]**

N. Vegetation Types: Sand sagebrush/sand bluestem

O. Dominant Soils: Aridic Ustipsamments, Aridic Haplustalfs

P. Geologic Types: dust bowl blow sand on top of Late Pliestoscene epoch

Q. Miles of Stream Channels by Order or Class: N/A

R. Transportation System

Trails: miles Roads: 3.6 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 228 (low) 1,293 (moderate) ___ (high)

B. Water-Repellent Soil (acres): 1,283

C. Soil Erosion Hazard Rating (acres):
NFS lands 13 (low) ___ (moderate) 1,508 (high)

D. Erosion Potential: 134 tons/acre

E. Sediment Potential: ____ cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 10

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

C. Equivalent Design Recurrence Interval, (years):

D. Design Storm Duration, (hours):

E. Design Storm Magnitude, (inches):

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

G. Estimated Reduction in Infiltration, (percent):

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

PART V - SUMMARY OF ANALYSIS

Describe Watershed Emergency: The greatest threat to watershed health posed by the fire is the increased likelihood for wind erosion. The potential for significant loss of soil is highly dependent on weather conditions affecting vegetation regrowth. The wind erodibility index for the fine sandy loams of the burned area is 134 (tons per acre per year). Fire induced water repellency was found throughout areas of moderate burn intensity and is implicated in exacerbating wind erosion in sandy soils. Exposed soils will be afforded virtually no protection by vegetation regrowth until spring green-up 2 to 3 months from this time. Worsening drought has the potential to reduce what little soil moisture is available further threatening to increase susceptibility to wind erosion. With the high wind season peaking in March, the potential for severe erosion and development of blowouts is high. Soil loss associated with post-fire impacts on the 859 acres of private land (most of which is under the Conservation Reserve Program) will be addressed through the USDA Natural Resources Conservation Service, Morton County District office.

Hydrologic response from the burned area is expected to have no measureable impacts on human life and property despite this fire's high intensity and relatively large size.

There are no known effects to historical, archeological, and paleontological resources from this fire.

There are no threatened or endangered species affected by post-fire impacts.

B. Emergency Treatment Objectives: Conduct periodic road maintenance on Forest System Roads 736 and 738 as necessary to keep the roads passable. Monitor for new infestations of noxious weeds on a routine basis for the next year. If new infestations are identified, an Interim 2500-8 will be submitted to request additional funding needed to carry out effective control work.

All practical means of hillslope stabilization would involve ground-based equipment. Driving vehicles or equipment of any kind across the burned area would accelerate erosion by breaking through the protective soil crust. Rather than requesting funding for soil stabilization at this time, treatments would be postponed until it becomes apparent that the risk of further ground disturbance from mulching and seeding operations would be justified and offset by these activities. Should drought and high winds become manifest and trigger development of blowouts, funding for hillslope stabliization treatments would be requested to address that emergency with an interim report.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Land __ % Channel __ % Roads **90** % Other __ %

D. Probability of Treatment Success:

	Years after Treatment		
	1	3	5
Land	NA	NA	NA
Channel	NA	NA	NA
Roads	90	90	100
Other			

E. Cost of No-Action (Including Loss): $18,000 to reroute and resurface 2.5 miles of new road.

F. Cost of Selected Alternative (Including Loss): **$5,600**

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Ken Kanaan

Email: kkanaan@fs.fed.us Phone:719.553.1513 FAX:719.553.1440

H. **Treatment Narrative:**

Land Treatments: None at this time

Channel Treatments: None

Roads and Trail Treatments: Plan $4,100 for approximately 2.5 miles of road maintenance consisting of cleaning out blow sand from road. Road maintenance is estimated to be required 4 times until soils have stabilized in the first year of recovery. An additional $1,600 will be used to purchase and install plastic drift fence to capture blow sand along those road segments most prone to soil accumulation.

Structures: None

I. **Monitoring Narrative:**

(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur.)

This request is for $2,600 to cover invasive weed monitoring efforts during the first year after the fire. Monitoring will consist of monthly inspections of the burned area by the district range/weed specialist. Inspections will focus on areas of moderate severity burn along roads and well sites where seed introduction is most likely to occur. Inspections will begin in early spring when warmer temperatures and precipitation are expected to spur new growth. Inspections will cease in the winter. All new weed infestations will be identified to the species, and mapped using GPS technology.

Funding for monitoring in years two and three of this BAER project will be requested on an annual basis.

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

Line Items	Units	Cost	Units	SULT $	$	units	$	Units	$	$
A. Land Treatments										
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$0	$0		$0		$0	$0
B. Channel Treatments										
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treat.				$0	$0		$0		$0	$0
C. Road and Trails										
Road maintenance				$5,700	$0		$0		$0	$5,700
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road & Trails				$5,700	$0		$0		$0	$5,700
D. Structures										
				$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										
Charged to H2B6RZ				$4,534	$0		$0		$0	$4,534
(excluded from total at bottom)				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Evaluation				$4,534	$0		$0		$0	$4,534
F. Monitoring										
Noxious Weed Monitoring, Yr 1				$2,600						
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$2,600	$0				$0	
G. Totals				**$8,300**			**$0**		**$0**	**$0**

PART VII - APPROVALS

1. */s/ Robert J. Leaverrton* 2/16/05
   Forest Supervisor (signature) Date

2. _____ _____
   Regional Forester (signature) Date