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

Date of Report: **10/30/02**

BURNED-AREA REPORT
(Reference FSH 2509.13)
Changes from Initial Shown in Red

PART I - TYPE OF REQUEST

A. Type of Report

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

B. Type of Action

[ ] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)

[**x**] 2. Interim Report
[**x**] Updating the initial funding request based on more accurate site data or design analysis
[**x**] Status of accomplishments to date

[ ] 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Wing

B. Fire Number: UT-UIF-18016

C. State: Utah

D. County: Utah

E. Region: 4

F. Forest: Uinta

G. District: Pleasant Grove

H. Date Fire Started: 6/10/00

I. Date Fire Controlled: 6/14/00

J. Suppression Cost: $270,000

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): 4.5
2. Fireline seeded (miles): 0
3. Other (identify):

L. Watershed Number:

M. Total Acres Burned: 813
NFS Acres(741) Other Federal ( ) State ( ) Private (72)

N. Vegetation Types: Gambel Oak; Sage-grassland

O. Dominant Soils: Typic Habloboroll (gravelly loam, rocky loam); talus

P. Geologic Types: Paleozoic Oquirrh Group; limestone and quartzite

Q. Miles of Stream Channels by Order or Class: 6 (ephemeral)

R. Transportation System

Trails: 3.5 miles Roads: 0 miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 213 (low) 400 (moderate) 200 (high)

B. Water-Repellent Soil (acres): 200

C. Soil Erosion Hazard Rating (acres):

210 (low) 573 (moderate) 30 (high) pre-fire
0 (low) 495 (moderate) 318 (high) post-fire

D. Erosion Potential: 4.4 tons/acre

E. Sediment Potential: 740 cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 5-10

B. Design Chance of Success, (percent): 90

C. Equivalent Design Recurrence Interval, (years): 3-10

D. Design Storm Duration, (hours): 6

E. Design Storm Magnitude, (inches): 1.33

F. Design Flow, (cubic feet / second/ square mile): 10

G. Estimated Reduction in Infiltration, (percent): 25%

H. Adjusted Design Flow, (cfs per square mile): 50

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency: Fire burned on steep slopes immediately above urbanized area (City of Springville, Utah). Homes are located on terrace at the base of slopes and immediately adjacent to the burned area. Homes are threatened by potential landslides, mud or debris flows resulting from summer thunderstorms. Several homes are located within 5 ephemeral draws leading from fire; additional homes downslope could be affected by runoff during large event. A large earthflow occurred on slope immediately to west of fire in early 1950's following fire.

B. Emergency Treatment Objectives: Until the risk abates (through 2001), trap excess sediment runoff from ephemeral drainages before runoff reaches urban areas to provide protection from summer thunderstorms and spring runoff.

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

Land **n/a** % Channel **90** % Roads **n/a** % Other **n/a** %

D. Probability of Treatment Success:

	Years after Treatment		
	1	3	5
Land	N/a	N/a	N/a
Channel	80%	90%	100%
Roads	N/a	N/a	N/a
Other	N/a	N/a	N/a

E. Cost of No-Action (Including Loss): $450,000

F. Cost of Selected Alternative (Including Loss): Initial Report approved $10,600. **About $10,594 was spent implementing the approved Initial Report. This Interim Report requests an additional $3,295, or a total to complete BAER work and reporting on this incidient of $13,895.**

G. Skills Represented on Burned-Area Survey Team: **(NOTE: areas below are for Interim Report Team)**

[x] Hydrology	[x] Soils	[ ] Geology	[ ] Range	[x] Budget and Fiscal
[x] Forestry	[ ] Wildlife	[ ] Fire Mgmt.	[ ] Engineering	[ ]
[ ] Contracting	[x] Ecology	[ ] Botany	[ ] Archaeology	[ ]
[ ] Fisheries	[ ] Research	[ ] Landscape Arch	[ ] GIS	

Team Leader: **Wm. Reese Pope**

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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: none proposed on USFS lands

Channel Treatments: 7 wire reinforced silt fences to be placed in ephemeral drainages on NFS lands immediately above private property. Structures will span width of floodway and act as barrier to sediment in case of large magnitude runoff event. Three structures will be placed in first drainage, 2 structures will be placed in each of two additional drainages; no structures will be placed in fourth drainage as lower part is unburned and enough vegetation remains to filter excess sediment. **Silt fences have been in place and monitoring indicates vegetative and soil recovery is occurring. Little sediment movement has occurred. Recommend remove the silt fences following one more growing season (i.e. remove late August or September of 2003), as the risk of major fire-induced debris flows will largely have been abated and these structures will no longer be needed.**

Roads and Trail Treatments: None proposed on NFS lands; Springville City has expended $12,300 for sandbagging and drainage improvements

Structures: none

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.)

1) Channel structures will be monitored each season for stability, amount of sediment runoff and expected life. Structures will be checked periodically until snowfall. Rainfall will be tracked through National Weather Service for the Springville reporting station. **Structures have been monitored. No major runoff events have occurred and structures are intact, but have as a result, caught little sediment. Continue monitoring these structures and rainfall events through 2003.**

2) Establish 6 photopoints to document vegetative recovery, and 3 ground cover plots in the vicinity of each photo point (18 total plots). **Photo points and transects have been installed and were monitored in FY01 and FY02. A report summarizing the results of the FY01 monitoring was prepared and sent to the RO for sharing. Continue monitoring these transects and points for ground cover and vegetation composition through 2003.**

3) Prepare a monitoring report annually (NOTE: Report for FY01 previously submitted to RO) summarizing the results of monitoring, and share report with the Regional Office for sharing with other BAER personnel.

PART VI – EMERGENCY REHABILITATION TREATMENTS AND SOURCE OF FUNDS BY LAND OWNERSHIP

INITIAL REPORT (APPROVED 9-15-2000)

	NFS Lands						Other Lands				
	Units	Unit Cost	# of Units	WFSU SULT$	Other $		# of Units	Fed $		Non-Fed $	All Total
A.Land Treatments								$12,300			$12,300
B.Channel Treatments		$1,100	7	$7,700							$7,700
C. Road and Trails				$0							$0
D. Structures				$0							$0
E.BAER Evaluation				$1,600							$1,600
G. Monitoring				$1,300							$1,300
H. TOTALS				$10,600				$12,300			$22,900

Notes: NRCS transferred $12,300 in EWP money to Springville City for work on private lands.

INTERIM REPORT (Prepared 10-30-2002, Reflects Actual Expenditures and Requested Funding)

	NFS Lands						Other Lands				
	Units	Unit Cost	# of Units	WFSU SULT$	Other $		# of Units	Fed $		Non-Fed $	All Total
A. Land Treatments				$0				$12,300			$12,300
B. Channel Treatments											
• Construction	Fence		7	~~$7,700~~ **$8,096**							~~$7,700~~ **$8,096**
• **Remove Silt Fence (8-9/03)**	**Job**		**1**	**$1,000**							**$1,000**
C. Road and Trails				$0							$0
D. Structures				$0							$0
E. BAER Evaluation											
• **Initial**			1	~~$1,600.00~~ **$1,368**							~~$1,600~~ **$1,368**
• **Interim (10//02)**			**1**	**$650**							**$650**
• **Final (9-10/03)**			**1**	**$650**							**$650**
G. Monitoring											
• **Initial (FY01-02)**	Reports		1	~~$1,300.00~~ **$1,131**							~~$1,300~~ **$1,130**
• **Final (10//02 Report and FY03 final field work and report)**	Reports		**2**	**$1,000**							**$1,000**
H. TOTALS				~~$10,600~~ **$13,895**				$12,300			~~$22,900~~ **$26,195**

Notes: NRCS transferred $12,300 in EWP money to Springville City for work on private lands.

PART VII - APPROVALS

1. *John Logan (for)* — *10/30/2002*
   Forest Supervisor (signature) — Date

2. _____ _____
   Regional Forester (signature) — Date