USDA-FOREST SERVICE

FS-2500-8 (7/00)

Date of Report: 1/11/02

BURNED-AREA REPORT (Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report	
[] 1. Funding request for estimated WFS[X] 2. Accomplishment Report[] 3. No Treatment Recommendation	SU-SULT funds
B. Type of Action	
[] 1. Initial Request (Best estimate of fun	ds needed to complete eligible rehabilitation measures)
[] 2. Interim Report [] Updating the initial funding reque [] Status of accomplishments to date	st based on more accurate site data or design analysis
[X] 3. Final Report (Following completion	of work)
<u>PART II - B</u>	URNED-AREA DESCRIPTION
A. Fire Name: Hidden Complex	B. Fire Number: <u>P369446</u>
C. State: NM	D. County: Eddy
E. Region: 03	F. Forest: Lincoln
G. District: GUADALUPE	
H. Date Fire Started: 5/27/2001	I. Date Fire Controlled: 6/5/2001
J. Suppression Cost: \$1,600,000	
 K. Fire Suppression Damages Repaired with S 1. Fireline waterbarred (miles): 5 2. Fireline seeded (miles): 5 3. Other (identify): 	Suppression Funds
L. Watershed Number:	
M. Total Acres Burned: 1780 NFS Acres(1342`) Other Federal (196) State () Private (242)
N. Vegetation Types: Ponderosa Pine, PJ/Oa	ak with some mixed conifer
O. Dominant Soils: LITHIC ARGIUSTOLLS	S, LITHIC HAPLUSTALFS, PACHIC ARGIUSTOLLS, EUTRIC

P. Geologic Types: SANDSTONE, SILTSTONE AND DOLOMITE

GLOSSOBORALFS.

Q. Miles of Stream Channels by Order or Class: 1st 20 miles, 2nd 12 miles, 3rd 3 miles R. Transportation System Trails: miles 0 Roads: miles 0 PART III - WATERSHED CONDITION A. Burn Severity (acres): 1150 (low) 500 (moderate) 130 (high) B. Water-Repellent Soil (acres): 50 C. Soil Erosion Hazard Rating (acres): <u>1200</u> (low) <u>450</u> (moderate) <u>130</u> (high) D. Erosion Potential: 80 tons/acre E. Sediment Potential: <u>55,000</u> cubic yards / square mile PART IV - HYDROLOGIC DESIGN FACTORS

A.	Estimated Vegetative Recovery Period, (years):	10
B.	Design Chance of Success, (percent):	<u>60</u>
C.	Equivalent Design Recurrence Interval, (years):	2
D.	Design Storm Duration, (hours):	24
E.	Design Storm Magnitude, (inches):	1.8
F.	Design Flow, (cubic feet / second/ square mile):	<u>54</u>
G.	Estimated Reduction in Infiltration, (percent):	45
Н.	Adjusted Design Flow, (cfs per square mile):	200

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

High intensity burn occurred at the head of a major canyon (Devil's Den) and on extremely steep slopes along the Guadalupe Rim. This canyon is a tributary to Dog Canyon containing private and other governmemt land.

High intensity burn occurred over 130 affected acres, effective ground cover and canopy removal on these acres within the watershed is close to 100%. The area has shallow soils and is subject to severe erosion.

The largest portion of the burned area is located on desert slopes of 70% or more. The area on the steepest slopes is extremely rocky and is also largely untreatable or unsafe for operations.

B.	Emerc	ency	Treatment	Obje	ctives
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Retain soils with high erosion potential to maintain ecological condition in Devil's Den and Big Canyons. Some of these intensely burned acres are part of a mixed conifer stand unique in the Region for its southerly location and relatively low elevation.

Spread and reduce flow velocity of runoff from the watershed and to retrain soil on site.

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

Land <u>75</u> % Channel ___ % Roads ___ % Other ___ %

D. Probability of Treatment Success

	Years after Treatment								
	1	1 3 5							
Land	75	80	90						
	·		·						
Channel									
Roads									
Other									

- E. Cost of No-Action (Including Loss): \$500,000
- F. Cost of Selected Alternative (Including Loss): \$ 130,000 (assumes 25% loss to private property)
- G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: Robert Dancker

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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:

HAND APPLICATION OF SEED ON 130 NFS BURNED ACRES TO BEGIN TO STABILIZE SLOPES AND EROSION PRONE SOILS. MIXTURE TO BE USED ON 130 NFS ACRES IS SPECIFIED BELOW-. APPLICATION OF SEED WILL BE BY LOCAL RESOURCES CREW. USE OF PERENNIAL SPECIES AND ANNUAL RYE AS SUGGESTED BY REGIONAL BAER COORDINATOR.

750 LBS						\$1,950
	50%	Annual Rye	375	LBS	2.57 #/AC	22
	20%	Green Sprangletop	150	LBS	2.57 #/AC	4
	15%	Little Bluestem	112.5	LBS	2.57 #/AC	3
	15%	Indian Grass	112.5	LBS	.41 #/AC	<u>3</u>
						32 seeds/sq.ft. at 85% purity
SUPPLIES	3					200
ADMINIST	TRATION					325
MONITOR	ING					300
RESOUR	CE CREWS					3.700
тот	AL					\$6,475

Channel Treatments: none

Roads and Trail Treatments: none

Structures: none

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.)

Grass seeding effectiveness will be visually and photographicly monitored to determine germination and erosion resistance success. Monitoring will occur at the end of October (end of first rainy season) and in April of the following year. Monitoring reports will document observations each time occurs. These reports will be retained at the District office with copies sent to the Lincoln BAER coordinator.

Additional monitoring will occur at late summer and spring for the next two years to determine effectiveness of treatment.

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

			NFS La	nds		X		Other L	ands		All
		Unit	# of	WFSU	Other	X	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT \$	\$	8	units	\$	Units	\$	\$
						X					
A. Land Treatments						Š					
Hand Seeding	AC	18.7	130	\$2,431		8		\$0		\$0	\$2,431
				\$0		8		\$0		\$0	\$0
						8		\$0		\$0	\$0
						X		\$0		\$0	\$0
Subtotal Land Treatments				\$2,431		∞		\$0		\$0	\$2,431
B. Channel Treatmen	its					8			-		
				\$0		8		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
Subtotal Channel Treat.				\$ 0		∞		\$0		\$0	\$0
C. Road and Trails						8		•			
						X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		Š		\$0		\$0	\$0
Subtotal Road & Trails				\$0		∞		\$0		\$0	\$0
D. Structures						8					
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		8		\$0		\$0	\$0
Subtotal Structures				\$0		8		\$0		\$0	\$0
E. BAER Evaluation						Š					
				\$0		X		\$0		\$0	\$0
				\$0				\$0		\$0	\$0
						8					
G. Monitoring Cost		2.31	130	\$300		8		\$0		\$0	\$300
On Site Visit				\$0		Š					
H. Totals				\$2,731		X		\$0		\$0	\$2,731
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PART VII - APPROVALS

1.	/s/ Dennis Watson Acting	<u>1/11/02</u>
	Forest Supervisor (signature)	Date
2.		
	Regional Forester (signature)	Date