USDA-FOREST SERVICE Date of Report: 2/02/95

BURNED-AREA REPORT
(Reference FSH 2509.13, Report FS-2500-8)

PART I - TYPE OF REQUEST

A. Type of Report

[ ] 1. Funding request for estimated EFFS-FW22 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)

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

[X] 3. Final report - following completion of work

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: **BRIDGE** B. Fire Number: P36801

C. State: **NEW MEXICO** D. County: **OTERO**
E. Region: **R-3** F. Forest: **LINCOLN**
G. District: **CLOUDCROFT**

H. Date Fire Started: 6/3/94 I. Date Fire Controlled: UNK
J. Suppression Cost: est $ 4,000,000

K. Fire Suppression Damages Repaired with EFFS-PF12 Funds:
1. Fireline waterbarred (miles) 50
2. Fireline seeded (miles) 50
3. Other (identify) _____

L. Watershed Number: 13050004 069 (13060010 082)

M. NFS Acres Burned: 3,260 Total Acres Burned: 5,380 est
Ownership type:
(1,120) State ( ) BLM (1,000) PVT ( ) ____ _____

N. Vegetation Types: MIXED CONIFER, PONDEROSA PINE

O. Dominant Soils: PACHIC UDIC ARGIBOROLLS, UDIC ARGIBOROLLS, LITHIC ARGIBOROLLS

P. Geologic Types: YESO FORMATION; SILTSTONE, SANDSTONE, LIMESTONE
SAN ANDRES FORMATION; LIMESTONE

Q. Miles of Stream Channels by Order or Class:

_____ _____ _____ _____

R. Transportation System:
Trails: _____ (miles) Roads: 10.8 (miles)

PART III - WATERSHED CONDITION

A. Fire Intensity (Acres): 1470 (low) 897 (moderate) 897 (high)

. Water Repellant Soil (Acres): 700

C. Soil Erosion Hazard Rating (Acres): HAZARD HIGH SOILS MOSTLY MOD DEEP/DEEP
_____ (low) _____ (moderate) _____ (high)

D. Erosion Potential: _____ tons/acre
E. Sediment Potential: _____ cu. yds/sq. mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period: 10 years.
B. Design Chance of Success: 70 percent.
C. Equivalent Design Recurrence Interval: 25 years.
D. Design Storm Duration: 24 hours.
E. Design Storm Magnitude: 1.6 inches.
F. Design Flow: 10 cfsm.
G. Estimated Reduction in Infiltration: 50 percent.
H. Adjusted Design Flow: 30 cfsm.

PART V - SUMMARY OF ANALYSIS

A. Describe Emergency:
ERATIC FIRE, BURNED LIGHT IN MANT AREAS THREATENED THE COMMUNITY OF TIMBERON CAUSING EVACUATION AT ONE POINT. BURNED HOT ON 1200 OF PONDEROSA PINE, MIXED CONIFER. EFFECTIVE GROUND COVER REMOVAL IN THESE AREAS IS ESTIMATED TO BE 75 TO 100%. LOSS OF SOIL IS LIKELY WITHOUT STABILIZATION.

B. Emergency Treatment Objectives:
STABILIZE STEEP SLOPES WITH MODERATELY DEEP AND DEEP SOILS IN A GEOLOGIC FORMATION KNOWN TO HAVE A HIGH EROSION HAZARD AND REDUCE IRREPAIRABLE SOIL LOSS, PROTECT RIPARIAN AREAS, WATER QUALITY AND DOWNSTREAM PROPERTY VALUES.

USE LAYING LOGS HORIZONTALLY ON THE CONTOUR IN ORDER TO HOLD SOIL IN PLACE AND REDUCE SLOPE LENGTH, ALSO TO DISPERSE OVERLAND FLOW IN MOST BURNED AREAS OVER 20 PERCENT SLOPES. USE CHANNEL TREATMENTS TO SLOW SEDIMENT TRAVEL IN EPHEMERAL CHANNELS. WATERBARRING OF ROADS WHERE DIRECTLY AFFECTED BY THE FIRE.

C. Probability of Completing Treatment Prior to First Major Damage Producing Storm:
Land 50 % Channel 50 % Roads _____ % Other _____ %

D. Probability of Treatment Success

	<----Years after treatment----->		
	1	3	5
Land	60	70	80
Channel	60	70	80
Roads			
Other			

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

F. Cost of Selected Alternative (Including Loss): $_____

. Skills Represented on Burned-Area Survey Team:

[X] Hydrology	[X] Soils	[X] Geology	[X] Range
[X] Timber	[X] Wildlife	[X] Fire Mgmt.	[X] Engineering
[ ] Contracting	[X] Ecology	[ ] Research	[X] Archaeology
[X] Botany____	[ ] _____	[ ] _____	[ ] _____

Team Leader: ROBERT DANCKER
Phone: 505-434-7250 DG Address:R03F08A

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.

AERIAL APPLICATION OF SEED ON SEVERE AND MODERATELY BURNED AREAS TO STABILIZE STEEP SLOPES AND PREVENT IRREPAIRABLE SOIL LOSS, PROTECT WATER QUALITY, AND DOWNSTREAM PROPERTY VALUES. IN PROPOSING THIS ACTION WE ARE REQUESTING EXPEDITED APPROVAL IN ORDER TO COORDINATE REHAB (SEEDING) AND CONTOUR FELLING ACTIVITIES WITH THE AVAILABILITY OF FIRE CREWS AND HELICOPTER. QUICK ACTION WILL CAUSE LITTLE DOWN TIME AND ELIMINATE THE NEED FOR FUTURE HELICOPTER TIME TO CONDUCT SEEDING THIS BURNED AREA.

SEED MIX APPLICATION AT 3 PLS LBS PER ACRE ON SEVERE AND MODERATE EROSION HAZARD AREAS.

MIX:
30% MOUNTAIN BROME
50% SLENDER WHEATGRASS
10% LITTLE BLUESTEM
5% WOODS ROSE
5% YELLOW SWEET CLOVER

UNIT COSTS BASED ON THE FOLLOWING RATES

HELICOPTER SUPPORT CREW 325/DAY 2 DAYS = 650
SEED BUCKET 125/DAY 2 DAYS = 250
HELICOPTER 500/HR 12 HRS = 6,000

COSTS OF LAYING LOGS ON CONTOUR TO STABILIZE SOILS AND DISPERSE OVERLAND FLOW.
2000 ACRES TO BE TREATED
$1,500/ DAY FOR EACH OF TWO CREWS AND 10 DAYS TO COMPLETE = $30,000

CHANNEL TREATMENTS CONSIST OF PILED ROCKS AND FELLED LOGS LAID ACROSS THE BOTTOM OF PRIMARILY EPHEMERAL CHANNELS TO REDUCE SEDIMENT YIELD.

COST TO WATER BAR AFFECTED ROADS
24 HOURS CAT TIME AT $125 PER HOUR = $3,000

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

NOTE: Emergency rehabilitation is work done promptly following a wildfire and is not to solve watershed problems that existed prior to the wildfire.

Line Items	Units	Unit Cost $	NFS Lands Number of Units	NFS Lands EFFS-FW22 $	NFS Lands Other $ ident.	Other Lands Number of Units	Other Lands Fed $ ident.	Other Lands Non-Fed $ ident.	All Total $
A. LAND TREATMENTS									
SEED GRASS MIXES&LEGUME	AC	11.09	1200	13,310					
HELICOPTER	AC	3.52	1200	4,226					
SUPPORT CREW	AC	.50	1200	600					
SEED BUCKET & OPERATOR	AC	1.03	1200	1,240					
LAY LOGS ON CONTOUR	AC	18.24	500	9,118					
B. CHANNEL TREATMENTS									
C. ROADS AND TRAILS									
D. STRUCTURES									
E. BAER EVALUATION/ ADMINISTRATIVE SUPPORT									
EVAL. TEAM & SUPPORT				3,126					
F. TOTALS				31,620					

PART VII - APPROVALS

1. /s/ JOHNNY WILSON for Lee Poague — 6/13/94
   Forest Supervisor (Signature) — Date

2. /s/ _____ _____
   Regional Forester (Signature) — Date