USDA-FOREST SERVICE Date of Report: 6/17/92

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

PART I - TYPE OF REQUEST

A. Type of Report

[X] 1. Funding request for estimated EFFS-FW22 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 and design analysis
[ ] Status of accomplishments to-date

[ ] 3. Final report - following completion of work

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Onion B. Fire Number: NM-CNZ-P844

C. State: New Mexico D. County: Navaho, McKinley
E. Region: 3 F. Forest: Cibola
G. District: Boonies

H. Date Fire Started: 6/9/92 I. Date Fire Controlled: 6/15/92
J. Suppression Cost: $ 2,121,000.00

K. Fire Suppression Damages Repaired with EFFS-PF12 Funds:
1. Fireline waterbarred (miles) 7.8
2. Fireline seeded (miles) 15.6
3. Other (identify) Seed firecamp (5 acres)

L. Watershed Number: 1502000402

M. NFS Acres Burned: 2010 Total Acres Burned: 2250
Ownership type:
( )State ( )BLM (240)PVT ( )____ _____

N. Vegetation Types: Ponderosa Pine, Gambel Oak, Pinyon

O. Dominant Soils: Typic Eutroboralfs (clayey-skeletal, fine, and loamy-skeletal

P. Geologic Types: Limestone, Sandstone, Shale (Glorieta and Chinle Formation)

Q. Miles of Stream Channels by Order or Class:
1 mi (Order 1) 2 mi (Order 2) _____

R. Transportation System:
Trails: 0 (miles) Roads: 3.5 (miles)

PART III - WATERSHED CONDITION

A. Fire Intensity (Acres): 675 (low) 562 (moderate) 1013 (high)

B. Water Repellant Soil (Acres): 1000

C. Soil Erosion Hazard Rating (Acres):
338 (low) 1350 (moderate) 562 (high)

D. Erosion Potential: 18.6 tons/acre
E. Sediment Potential: 892 cu. yds/sq. mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period: 5 years.
B. Design Chance of Success: 80 percent.
C. Equivalent Design Recurrence Interval: 25 years.
D. Design Storm Duration: 2 hours.
E. Design Storm Magnitude: 1.6 inches.
F. Design Flow: 178 cfsm.
G. Estimated Reduction in Infiltration: 45 percent.
H. Adjusted Design Flow: 280 cfsm.

PART V - SUMMARY OF ANALYSIS

A. Describe Emergency: **The Onion Fire burned in an area where recent thinning activities had left heavy accumulations of slash. Approximately 45% of this 2250 acre fire burned at high intensity levels. Another 25% burned at moderate intensity. The high intensity burned areas exhibit a high degree of water repellancy and severely reduced infiltration capacity. A high potential exists for flooding downstream from the fire. This flooding could result in damage to property and 20 homes downstream in the Onion Fields subdivision as well as threats to human life. Other investments such as roads, bridges, and the domestic water supply for the town of Hammerville (population 5,000) are also threatened. Erosion could cause a loss of site productivity in 600 acres of highly productive timber lands. Approximately 3 miles of high quality fish habitat are threatened by scouring floods and sediment.**

B. Emergency Treatment Objectives: **Maximize on-site water retention through treatment of high intensity burned areas and re-establish erosion controlling herbaceous vegetation. Protect roads and bridge by removing potentially damaging debris in channels. Minimize sediment movement in channels.**

C. Probability of Completing Treatment Prior to First Major Damage Producing Storm:
Land 85 % Channel 75 % Roads 75 % Other _____ %

D. Probability of Treatment Success

	<----Years after treatment----->		
	1	3	5
Land	50%	80%	95%
Channel	70%	70%	70%
Roads	70%	70%	70%

E. Cost of No-Action (Including Loss): $ 4,173,584

F. Cost of Selected Alternative (Including Loss): $ 655,090

G. Skills Represented on Burned-Area Survey Team:

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

Team Leader: O.J. Shapiro
Phone: 505-761-4650 DG Address: :R03F03A

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 seed all acres of high intensity burn using following seed mix:

Species	Seed/Sq Ft	#/acre	% in mix
Slender wheatgrass (Agtr)	11	5.4	20%
Smooth brome (Brin)	8	2.7	15%
Sand lovegrass (Ertr)	17	.5	30%
Yellow sweetclover (Meof)	2	.3	5%
Sheep fescue (Feov)	15	1.1	30%
Total	53	10.1	100%

Hand seed steep slopes adjacent to Harris Valley Creek using same seed mix. Install log terraces in same area and utilize temporary fence to protect until vegetation is established.

Clear debris along Harris Valley Creek above bridge and install trash rack.

Install strawbale check dams along ephemeral drainages in upper watershed.

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.

			NFS Lands			Other Lands			All
Line Items	Units	Unit Cost $	Number of Units	EFFS-FW22 $	Other $ ident.	Number of Units	Fed $ ident.	Non-Fed $ ident.	Total $
A. LAND TREATMENTS									
aerial seeding	acres	40	1013	40520					40520
hand seeding	acres	30	22	660					660
log terraces	acres	22	1000	22000					22000
fencing	miles	2	1000	2000					2000
B. CHANNEL TREATMENTS									
channel clearing	miles	2500	2	5000					5000
straw bale check dams	each	120	70	8400					8400
C. ROADS AND TRAILS									
trash racks	each	1400	1	1400					1400
D. STRUCTURES									
E. BAER EVALUATION/ ADMINISTRATIVE SUPPORT									
BAER survey team	p-days	125	9	1125					1125
F. TOTALS				81,105					81,105

PART VII - APPROVALS

1. /s/ _____ _____
Forest Supervisor (Signature) Date

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