USDA-FOREST SERVICE Date of Report: Oct. 11, 1996

# 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: **Pinatosa** B. Fire Number: **NM CIF 012**

C. State: **New Mexico** D. County: **Lincoln**
E. Region: **R-03** F. Forest: **Cibola**
G. District: **Mountainair**

H. Date Fire Started: **3/12/96** I. Date Fire Controlled: **3/18/96 est**
J. Suppression Cost: **$ 600,000 est**

K. Fire Suppression Damages Repaired with EFFS-PF12 Funds:
1. Fireline waterbarred (miles) 12
2. Fireline seeded (miles) 12
3. Other (identify) _____

L. Watershed Number: **1305000367**

M. NFS Acres Burned: **11,000** Total Acres Burned: **12000**
Ownership type:
( )State ( )BLM (1000 )PVT ( )____ _____

N. Vegetation Types: **Ponderosa Pine**
**Pinyon Pine/One Seed Juniper**
O. Dominant Soils: **Typic Usochrepts, coarse loamy to loamy skeletal, mixed**
**frigid to mesic in the lower sites**
P. Geologic Types: **granitic inclusions, San andras sedimentaries**

Q. Miles of Stream Channels by Order or Class:
**5 miles #6** **6 miles #7** _____ _____
R. Transportation System:
Trails: 0 (miles) Roads: 5 (miles)

## PART III - WATERSHED CONDITION

A. Fire Intensity (Acres): 6,550 (low) 4,200 (moderate) 1,250 (high)

B. Water Repellant Soil (Acres): 25 (2% of high)

C. Soil Erosion Hazard Rating (Acres):
6000 (low) 4,200 (moderate) 1800 (high)

D. Erosion Potential: 3,630 tons/acre

E. Sediment Potential: 118,530 cu. yds/sq. mile

## PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period: 5 years.
B. Design Chance of Success: 90 percent.
C. Equivalent Design Recurrence Interval: 25 years.
D. Design Storm Duration: 24 hours.
E. Design Storm Magnitude: 2.4 inches.
F. Design Flow: 262 cfsm.
G. Estimated Reduction in Infiltration: 1 percent.
H. Adjusted Design Flow: 500 cfsm.

## PART V - SUMMARY OF ANALYSIS

A. Describe Emergency:

Declared wildfire that has caused high intensity burn to 1250 acres in the Sawmill and Red Cloud Canyon area on the south end of the Gallinas Mountains. The varied topography with 60% of the high intensity burn on steep to very steep slopes currently threatens an occupied house and out buildings, wells, FS 99 roadway, and stock tank.
Site productivity is a concern with the underliing precambrian granite parent material which covers large areas of the fire.

B. Emergency Treatment Objectives:

Minimize damage to private residence, road system, and wells.
Protect site productivity

C. Probability of Completing Treatment Prior to First Major Damage Producing Storm:
Land 95 % Channel 90 % Roads _____ % Other _____ %

D. Probability of Treatment Success

<----Years after treatment----->

| | 1 | 3 | 5 |
|---|---|---|---|
| Land | 50 | 75 | 100 |
| Channel | 100 | 100 | 100 |
| Roads | | | |
| Other | | | |

E. Cost of No-Action (Including Loss): $ 27,300

F. Cost of Selected Alternative (Including Loss): $ 24,400

G. Skills Represented on Burned-Area Survey Team:

| | | | |
|---|---|---|---|
| [ ] Hydrology | [x] Soils | [ ] Geology | [x] Range |
| [ ] Timber | [x] Wildlife | [ ] Fire Mgmt. | [ ] Engineering |
| [ ] Contracting | [ ] Ecology | [ ] Research | [x] Archaeology |
| [x] Recreation | [X]district range | [ ] _____ | [ ] _____ |

Team Leader: **Steve McWilliams**
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.

Seed high intensity burn areas using helicopter application with:

SPECIE MIX
20% Intermediate Wheatgrass (Smithis - E. ovata)
15% Hard Fescue
40% Annual Rye
15% Smooth Brome
10% Yellow Sweet clover

This mix is similar to the mix the district has applied and found effective on past activities. It allows for protection of the area while holding competition for shrub and tree species to a moderate level.

Fire lines (hand and cat) seeded with district seed stock similar to mix

Mulch hillside behind residence following seeding with weed free straw. Cover aproximately 4 acres in strips at 1000# to the acres

Construct erosion fence on hill side behind residence after seeding and mulch for aproximately 150 feet in length using posts and staples. This will act as a last defense to prevent overland flow and sedimentation to the house.

2 debris rakes (trash racks) above residence to prevent large debris from damaging house, exact sites to be determined. This is to protect house, small bridge spanning drainage to access house and foot bridge. These bridges were not designed for the anticipated flow that can be expected following the wildfire.

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 | | | | | | | | | |
| Seeding (8015# @ .71/#) | acre | 3.55 | 1603 | 5690 | | | | | 5690 |
| Helicopter | acre | 2.73 | 1603 | 4388 | | | | | 4388 |
| Seeding bucket | acre | .31 | 1603 | 500 | | | | | 500 |
| mulch | acre | 368 | 1.5 | 552 | | | | | 552 |
| silt fence | FT | 1.85 | 200 | 370 | | | | | 370 |
| B. CHANNEL TREATMENTS | | | | | | | | | |
| Debris rakes | ea | 80 | 2 | 160 | | | | | 160 |
| | | | | | | | | | |
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| | | | | | | | | | |
| TOTAL | | | | | | | | | |
| C. ROADS AND TRAILS | | | | | | | | | |
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| D. STRUCTURES | | | | | | | | | |
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| E. BAER EVALUATION/ ADMINISTRATIVE SUPPORT | | | | | | | | | |
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| F. TOTALS | | | | 11,660 | | | | | 11,660 |

PART VII - APPROVALS

1. /s/ Jeanine A. Derby — Jeanine A. Derby — 10/11/96
Forest Supervisor (Signature) — Date

2. /s/ John R. Kirkpatrick
Deputy Regional Forester (Signature) — Date