

Document: BAER 2520-3/6520

To g.robertson  
CC k.m.vensel

CC p.hilliard  
CC j.strayhand

From: TUCKER,SUE  
Postmark: Jun 30,96 2:03 PM  
Status: Previously read  
Subject: Forwarded: 2520-3/6520 Burned Area Emergency Rehabilitation - Pot F  
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Comments:

From: TUCKER,SUE:R03F04A  
Date: Jun 30,96 2:03 PM  
George - Use 165114 for the Pot rehab work.

..

Joann - Please enter 165114 into paycheck and send to each district.

..

Kathy - need to get this code set up in PRPL. Lori and Chris tried to access PRPL last week, but never could get it. Sounds like our communications was the problem. I tried today to enter this code, but could not get into PRPL either.

Previous comments:

From: C. R. Kirkpatrick:R03A  
Date: Jun 28,96 3:51 PM  
Enclosed is authorization for Pot rehab funding. Understand your folks want to start the project today. ck

Previous comments:

From: Penny Luehring:R03A  
Date: Jun 28,96 3:47 PM

Previous comments:

From: DIRECTOR, WS&A:WO  
Date: Jun 28,96 5:47 PM  
No Hard Copy Will Follow!  
Enclosure

*Initial Funding Request*

United States  
Department of  
Agriculture

Forest  
Service

Washington  
Office

14th & Independence SW  
P.O. Box 96090  
Washington, DC 20090-6090

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Reply to: 2520-3/6520

Date: June 28, 1996

Subject: Burned Area Emergency Rehabilitation - Pot Fire  
Coconino National Forest

To: Regional Forester, R-3

We have received your request for Burned Area Emergency Rehabilitation (BAER) funding for the Pot Fire on the Coconino National Forest. The standards for approving emergency actions are found in FSM 2523 and FSH 2509.13.

We approve your request for a total of \$62,145 for land treatments. The Fund/Activity codes for this action are WFSU-FW22.

{AER ID Team costs are approved to the extent of actual salary, travel, and per diem cost incurred. Administrative personnel working in support of rehab survey are considered members of the team. Contracting and administration costs of implementing treatments should be reflected in treatment costs.

Send your final 2500-8 describing treatment units completed and their costs within 60 days after completing the treatments. If submitting supplemental funding requests, a brief status report of accomplishments to date will aid review of the request.

/s/Bonnie W. Mason (for)  
ARTHUR BRYANT, Director  
Watershed and Air Management

Enclosure

cc: P.Luehring:R03A  
L.Gadt:W01C  
A.Sartori:W01C  
A.Wojtasek:W01C

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 WFSU-FW22 funds  
☐ 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  
☐ 3. Final report - following completion of work

PART II - BURNED-AREA DESCRIPTION

- A. Fire Name: Pot Wildfire B. Fire Number: P-32644  
C. State: Arizona D. County: Coconino  
E. Region: Southwestern (R-3) F. Forest: Coconino  
G. District: Long Valley  
H. Date Fire Started: June 21, 1996 I. Date Fire Controlled: 6/27/96  
J. Suppression Cost: \$725,500.00  
K. Fire Suppression Damages Repaired with WFSU-PF12 Funds:  
    1. Fireline waterbarred (miles) 10  
    2. Fireline seeded (miles) 10  
    3. Other (identify) Fire Camp (5 acres), Helispot (10 acres)  
L. Watershed Number: 1506020391  
M. NFS Acres Burned: 7000 Total Acres Burned: 7000  
    Ownership type:  
    ( 0 ) State ( 0 ) BLM ( 0 ) PVT ( 0 ) \_\_\_\_\_  
N. Vegetation Types: Ponderosa Pine/Gambel Oak/Screwleaf Muhly; Douglas Fir;  
    Ponderosa Pine/Gambel Oak  
O. Dominant Soils: Typic Argiborolls; Mollic Eutroboralfs;  
    Lithic Eutroboralfs; Typic Dystrochrepts  
P. Geologic Types: Basalt and Limestone Parent Materials  
Q. Miles of Stream Channels by Order or Class:  
    1 - 2.5 Miles 2 - 3.5 Miles 3 - 3.0 Miles 4 - 0 Miles  
R. Transportation System:  
    Trails: 0 (miles) Roads: 22.5 (miles)

### PART III - WATERSHED CONDITION

- rr Fire Intensity (Acres): 4143 (low) 1300 (moderate) 1557 (high)
- B. Water Repellant Soil (Acres): 200
- C. Soil Erosion Hazard Rating (Acres):  
5245 (low) 805 (moderate) 950 (high)
- D. Erosion Potential: 8.2 tons/acre
- E. Sediment Potential: 1,747 cu. yds/sq. mile

### PART IV - HYDROLOGIC DESIGN FACTORS

- A. Estimated Vegetative Recovery Period: N/A years.
- B. Design Chance of Success: N/A percent.
- C. Equivalent Design Recurrence Interval: N/A years.
- D. Design Storm Duration: N/A hours.
- E. Design Storm Magnitude: N/A inches.
- F. Design Flow: N/A cfs.
- G. Estimated Reduction in Infiltration: N/A percent.
- H. Adjusted Design Flow: N/A cfs.

### PART V - SUMMARY OF ANALYSIS

The Pot Fire began June 21, 1996 and burned approximately 7000 acres of mostly ponderosa pine and some Douglas fir forest lands in an area approximately 45 miles southeast of Flagstaff, Arizona. All acres burned by the fire are under the management and administration of the Coconino National Forest. The fire was fueled by record low fuel moistures and very strong winds. Fire intensities were high in portions of the burned area, but due to the fast moving nature of the fire, the development of water repellent soils was limited. In areas where fire intensities were high, the fire resulted in complete consumption of ground fuels and live vegetation; and a complete loss of protective vegetative ground cover.

The fire burned entirely within the upper portions of the West Clear Creek Watershed (approximately 191,000 acres in size) which eventually drains into the Verde River. Even though the burned area does not contain any perennial waters, severely burned areas on moderately steep and steep slopes within the lower portions of Willow Valley and Long Valley drainages could generate substantial amounts of sediment into West Clear Creek thus effecting water quality. West Clear Creek, which is a perennial water, is also considered habitat for the Gila Trout which is considered a T&E fish species. West Clear Creek Canyon is a popular wilderness area noted for its breath taking views. It visited each year by many hikers and campers. The fire did jump Forest Service Highway 3. The highway was closed for a period of time, due to fire suppression activities, fire and dense smoke. It was reopened once the threat of fire and highway smoke passed and fire suppression activities subsided within the area.

The major landform impacted by the fire (roughly 75 percent of the burn area), is primarily elevated plains occurring on slopes of less than 15 percent. Soils are typically derived from basalt and limestone parent materials. These soils were identified by the Coconino National Forest Terrestrial Ecosystem Survey as having a slight erosion hazard. Potential soil loss rates do not exceed tolerable soil loss rates.

The remaining 25 percent of the fire burned on escarpments and scarp slopes of elevated plains. Slopes range from 15 to over 120 percent. Soils are derived mostly from limestone parent materials and contain varying amounts of surface rock. Erosion hazard is identified as mostly severe with some soils having a moderate erosion hazard.

A. Describe Emergency:

BAER survey of the area burned by the Pot Fire indicates the following emergency conditions exist:

**Threat To Long-Term Soil Productivity.**

Approximately 1,557 acres of soils occurring on moderately steep and steep slopes burned very hot in which all protective vegetative ground cover, live vegetation and ground fuels were consumed. Slopes average roughly 40 percent percent. Using the Universal Soil Loss Equation, there will be an estimated 15 tons/acre of soil loss while the soils have an average soil loss tolerance value of 4 tons/acre. There is a very high potential that on-site soil loss rates will increase dramatically, resulting in a loss of long-term soil productivity. Erosion hazard is mostly severe, however, some soils are characterized as having a moderate erosion hazard.

**Threat To Water Quality.**

Increases in sediment and turbidity are expected from the severely burned areas within Long Valley and Willow Valley drainages. Both of these drainages are ephemeral and flow only in response to surface runoff from storm events. However, they both feed into the upper end of West Clear Creek which is considered intermittent with some supporting short reaches of perennial flow. Further downstream, below the the fire, West Clear Creek becomes a continuous perennial stream and habitat for the Gila Trout a T&E fish species. The fish itself has not been found within West Clear Creek. Impacts to water quality are expected to be temporary, however, as once the severely burned areas become revegetated, soil loss will decrease.

B. Emergency Treatment Objectives:

The treatment objectives are to prevent on-site soil loss, minimize surface runoff, and to protect long-term soil productivity of severely burned soils on steep slopes. The proposed treatments are considered viable and are consistent with Forest Plan goals and other long term management goals of the area.

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

Land 50 %      Channel N/A %      Roads N/A %      Other N/A %

D. Probability of Treatment Success

	<----Years after treatment----->		
	1	3	5
Land	50	75	90
Channel	N/A	N/A	N/A
Roads	N/A	N/A	N/A
Other (Firelines)	75	90	100

E. Cost of No-Action (Including Loss): \$2,348,000.00

F. Cost of Selected Alternative (Including Loss): \$863,385.00

G. Skills Represented on Burned-Area Survey Team:

<input type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input checked="" type="checkbox"/> Geology	<input checked="" type="checkbox"/> Range
<input type="checkbox"/> Timber	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input checked="" type="checkbox"/> Ecology	<input type="checkbox"/> Research	<input type="checkbox"/> Archaeology
<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____

Team Leader: Dave Brewer

Phone: (520) 635-2681 DG Address: D.Brewer:R03F07A

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.

Approximately 1,557 acres of soils occurring on steep slopes within the ponderosa pine forest were intensely burned. The following seed mix is proposed to be used with the objective of protecting soils against excessive on-site soil loss and sedimentation of downstream waters.

Western Wheatgrass.....	50%
Mt. Brome.....	30%
Blue Flax.....	10%
Regreen.. ..	10%

Seed at a rate of 10.0 pounds/acre to achieve approximately 20 seeds per sq ft.

Regreen is a unique hybrid selected that can be a significant aid in the establishment of perennial grasses on severely disturbed sites during the period of time when the watershed is most at risk. Due to its seed sterile characteristics, the original seedling dies out within two to three years as the slower growing perennials become established. The Blue Flax was selected due to its drought tolerant capabilities. The other grasses were selected to give site stability over time.

**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		Other \$  ident.	Other Lands		All Total \$
			Number of Units	WFSU- FW22 \$		Number of Units	Fed \$  ident.	
A. LAND TREATMENTS								
Seed	Acres	\$35	1,557	\$54,495				\$54,495
Aerial Application	Acres	\$3.21	1,557	\$5,000				\$5,000
Project Administration	Days	\$200	8	\$1,600				\$1,600
Project Implementation	Days	\$175	6	\$1,050				\$1,050
B. CHANNEL TREATMENTS								
C. ROADS AND TRAILS								
D. STRUCTURES								
E. BAER EVALUATION/ ADMINISTRATIVE SUPPORT								
F. TOTALS				\$62,145				\$62,145

**PART VII - APPROVALS**

1. /s/ Fred Trevey June 28, 1996  
Forest Supervisor (Signature) Date
2. /s/ John R. Kirkpatrick June 28, 1996  
Regional Forester (Signature) Date