

MESSAGE SCAN FOR EARL C. RUBY

To Earl C. Ruby:R05F16A

2500-8 INTERIM

CHANGE IN TRMATS

From: 1Guest:R05F07D53A

Postmark: Dec 17,93 10:09 AM

Delivered: Dec 17,93 10:07 AM

Status: Previously read Urgent

Subject: Reply to a reply: Narratives

Reply text:

From: 1Guest:R05F07D53A

Date: Dec 17,93 10:09 AM

oops. forgot to send this...

*End of First Section
Study Plan*

Preceding message:

From: Earl C. Ruby:R05F16A

Date: Dec 17,93 8:46 AM

Yes. Please let me see the 2500-8 and narrative. I really want to see it, and I also want a copy to keep in my files. I collect all of those that I can find to use as background information for teaching and lectures.

Yes I also need the spec books for the blowers. I looked for that folder on my last day, but could not find it. I did not even THINK about asking you to help me look -- you had a sore eye and I felt for you so much that my eye hurt too.

The camera is Bob Bleckers. He gave it to me at fire camp, to use during the survey and rehab effort. Nice camera. I mailed all of the photographs yesterday.

ecr

From: 1Guest:R05F07D53A

Date: Dec 17,93 8:36 AM

I finished that 2500-8 for DEC. and sent it on to Bob. want to see it? I need to leave for about 30 min. or so so can send it and be back if you're going to be around. Also, I have your camera and those specs books for the blower I need to get to you. did you get that stuff in the mail (Gosh I hope so-its Friday.) I imagine you would have asked me about it if you hadn't.... !C

From: Earl C. Ruby:R05F16A

Date: Dec 17,93 8:03 AM

Yes

Retake Selected photos

From: 1Guest:R05F07D53A

Date: Dec 16,93 4:13 PM

Earl? You still around? !C

-----X-----

USDA-FOREST SERVICE

Date of Report: 12/15/93

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 FFFS-FW22 funds
☒ 2. Accomplishment Report

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: MARRE

B. Fire Number: CA-LPF-001254

C. State: CALIFORNIA

D. County: SANTA BARBARA

E. Region: 5

F. Forest: LOS PADRES

G. District: SANTA BARBARA / SANTA LUCIA

H. Date Fire Started: 9/25/93

I. Date Fire Controlled: 10/11/93

J. Suppression Cost: \$21,000,000.

K. Fire Suppression Damages Repaired with FFFS-PF12 Funds:

1. Fireline waterbarred (miles) 70 Mi
2. Fireline seeded (miles) 0 Mi
3. Other (identify) 10 Drop Points, 10 Staging Areas

L. Watershed Number: 1806 001 002, 1806 001 003, 1806 000 802

M. NFS Acres Burned: 29,629 Total Acres Burned: 43,221

Ownership type:

(8,068)State (none)BLM (5,524)PVT (none)

- N. Vegetation Types: Chamise, Grass-Oak Savanna, Ceanothus,
Manzanita Conifer Timber, Grass
- O. Dominant Soils: DIABLO, ALTAMONT, LODO, MILLSHOLM, SHEDD WITZEL
- P. Geologic Types: SEDIMENTARY-SANDSTONE, SILTSTONE, SHALE, SERPENTINE.
- Q. Miles of Stream Channels by Order or Class:
- | | | | |
|--------------|----------------|-----------------|----------------|
| <u>I = 0</u> | <u>II = 15</u> | <u>III = 15</u> | <u>IV = 23</u> |
|--------------|----------------|-----------------|----------------|
- R. Transportation System:
- Trails: 24 (miles) Roads: 30 (miles)

PART III - WATERSHED CONDITION

- A. Fire Intensity (Acres): 14,754 (low) 7,869 (moderate) 20,577 (high)
- B. Water Repellent Soil (Acres): 15,352
- C. Soil Erosion Hazard Rating (Acres):
- | | | |
|----------------|---------------------|----------------------|
| <u>0</u> (low) | <u>0</u> (moderate) | <u>43,201</u> (high) |
|----------------|---------------------|----------------------|
- D. Erosion Potential: 91 tons/acre
- E. Sediment Potential: 58,505. cu. yds/sq. mile

PART IV - HYDROLOGIC DESIGN FACTORS

- A. Estimated Vegetative Recovery Period: 10 years. (From Rowe, et al Erosion Rates)
- B. Design Chance of Success: 90 percent. (Where homes potentially affected)
- C. Equivalent Design Recurrence Interval: 100 years.
- D. Design Storm Duration: 24 hours (coincides with Rowe, et al & flood District)
- E. Design Storm Magnitude: 12 inches (from NOAA atlas)
- F. Design Flow: 85 - 115 cfs.
- G. Estimated Reduction in Infiltration: 40% percent.
- H. Adjusted Design Flow: 120 - 160 cfs.

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

Land 85 % Channel 90 % Roads 70 % Other 100 %
(Early Warning)

D. Probability of Treatment Success

	<----Years after treatment----->		
	1	3	5
Land	60%	75%	80%
Channel	80%	100%	100%
Roads	70%	70%	100%
Other (Early Warning)	95%	95%	95%

E. Cost of No-Action (Including Risk): \$34,742,316.

F. Cost of Selected Alternative (Including Risk): \$28,591,602.

G. Skills Represented on Burned-Area Survey Team ("x" appropriate boxes):

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input checked="" type="checkbox"/> Geology	<input checked="" type="checkbox"/> Range
<input checked="" type="checkbox"/> Timber	<input checked="" type="checkbox"/> Wildlife	<input checked="" type="checkbox"/> Fire Mgmt.	<input checked="" type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input checked="" type="checkbox"/> Ecology	<input type="checkbox"/> Research	<input checked="" type="checkbox"/> Archaeology
<input checked="" type="checkbox"/> Botany	<input checked="" type="checkbox"/> Fishery Bio.	<input checked="" type="checkbox"/> Economist	<input checked="" type="checkbox"/> Statistician

Team Leader: BOB BLECKER

Phone: (805) 681-2763 DG Address: B.BLECKER:R05F07A

Includes Deleted?

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 Lands	
Line Items	Units	Unit Cost \$	Number of Units	FFFS-FW22 \$	Other \$ S.B. County	Number of Units	Fed \$ SCS & USFSt	Non-Fed \$ CDF ident.	Total \$	
A. LAND TREATMENTS										
Aerial Grass Seeding	Acres	\$44	7,940	\$350M					\$ 350,000	
Rice Straw Mulching	Acres	\$871	70	\$61,000					\$ 61,000	
+Straw Bale Deflectors	Each	\$2.9M	3				8,800		\$ 8,800	
+Aerial Seeding	Acres	\$ 30	137				4,150		\$ 4,150	
+Donated Grass Seed-CDF	Lbs	\$ 3	530					\$1,590	\$ 1,590	
+Donated Grass Seed-USFS	Lbs	\$ 3	560				1,680		\$ 1,680	
+Earth Berm Deflector	Each	\$1.1M	1	Proj.Modified To Straw Deflector During Final Design.					Subtotal	427,220
B. CHANNEL TREATMENTS										
Channel Clearing	Mi.	\$4M	2.75	\$11,000					\$ 11,000	
Willow/Straw Wattles	Miles	\$2M	4.5	\$ 9,000	Proj.Deleted During Final Design					
Gradient control Struct	Each	\$100	100	\$10,000	Proj.Deleted During Final Design					
+Channel Clearing Privat	Feet	\$ 20	600				11.8M		\$ 11,800.	
								Subtotal Channels	\$ 22,800	
C. ROADS AND TRAILS										
Winter Flood Patrol	Days	\$1.2M	20	\$24,000					\$ 24,000	
Culvert Clearing	Each	\$188	80	\$15,000					\$ 15,000	
Clearing Ditches	Miles	\$6.7M	0.74	\$5,000					\$ 5,000	
Rip Rap Energy Dissipat	Cu.Yd	\$ 30	500	\$15M					\$ 15,000	
Debris Racks	Each	\$556	9	\$ 5M					\$ 5 000	
Trail Treatments	Mile	\$132	22	\$29M					\$ 29,000	
								Subtotal Roads	\$ 40,000	
								Subtotal Trails	\$ 29,000	
D. OTHER EMERGENCY ACTIONS										
Road Closures Gates	Each	\$1.7M	3	\$ 5,000					\$ 5,000	
Early Warning System	Each	\$ 4M	1	\$ 2,000	\$2000				\$ 4,000	
E. BAER EVALUATION/ ADMINISTRATIVE SUPPORT										
Team Leaders (5 Each)	Days	225	58	\$13,000					\$ 13,000	
Team Members	Days	225	320	\$72,000					\$ 72,000	
*Archaeology Support to Implementation	Days	214	48	12,000					\$ 12,000	
Implementation Overhead	Days	250	60	44,000					\$ 44,000	
F. TOTALS				\$663,000	\$2000		26430	1,590	\$ 693,020	

+Treatment to private land within Forest boundary (co-op with SCS).

* Based on 4-26-88 Fire Recovery PA by RF. [48 days (\$12,000) for land-disturbing channel, gate road, and trail treatments, 152 days (\$63,000) for aerial seeding treatments.]

EMERGENCY TREATMENTS.

Treatments were directed at those flood hazard areas identified in the burned area survey, and associated down slope areas that could be damaged by runoff from the flood source areas. Cost adjustments reflect nearest estimate based on available cost documentation. Final report will be forwarded within 6 weeks.

A. LAND TREATMENTS.

1. Aerial Seeding. (7,940 Acres)

Much of seeding operations were conducted using Helicopter 527 and crew. Daily availability rate of H-527 was covered by the Marre Incident for reconn. activities, reducing cost to seeding project.

2. Rice Straw Mulching (70 acres)

Approximately 60 acres of candidate mulching sites were initially located and staked on the ground. Ten additional acres were identified on site as candidate areas and mulched accordingly.

Logistical, personnel and supply needs were significantly underestimated.

3. Treatments on private property.

a. Straw Bale Deflectors. (3)

Three straw bale structures, 200 feet long and approximately 3 feet high were constructed. Implementation of this treatment was underestimated RE: logistics and personnel needs.

b. Earth Berm Deflector. During the design phase it was found that the soils onsite were not capable of being compacted sufficiently to make a safe structure. Therefore, it was determined that a straw bale deflector would be more reliable and achieve the same objective. The SCS representative, agreed with this change in type of structure.

c. Grass Seeding. (137 acres)

All of the 137 acres of private land were seeded with Blando Brome grass, at a rate of 8 pounds per acre. Forest Service estimates were offset by seed donations and application by fixed wing aircraft.

d. Channel Clearing. (600 feet)

A 600 foot long area was cleared over 5 days. Logistical, support and personnel needs were underestimated.

B. CHANNEL TREATMENTS.

1. Channel Clearing. (2.75 miles)
2.75 mile riparian area was cleared of floatable debris. Debris was burned on site for increased treatment efficiency and effectiveness. Delay in completion of project due to interruption by fire suppression emergencies in Southern California. Effectiveness monitoring devices established.
2. Willow & Straw Wattling. Deleted during final design due to unsuitable sites.
3. Gradient Control Log Sills. Deleted during final design due to unsuitable sites.

C. ROAD AND TRAIL TREATMENTS.

1. Winter Flood Patrol. Established and utilized as winter storms dictate
2. Culvert Clearing. 80 culverts were cleared
3. Clearing Ditches. .74 miles of ditches were cleared
4. Rip Rap Energy Dissipaters. 500 cu yds energy dissipater rip raps were established and determined adequate by final design.
5. Debris Racks. 9 debris racks were constructed and installed as determined on site.
6. Trail Treatments. Approximately 22 miles of trail within high flood hazard areas were treated.

Road and trail costs were reduced due to efficiency of implementation and final design modifications.

D. OTHER EMERGENCY ACTIONS.

1. Road Closure Gates. Three gates were installed as determined by final design.
2. Early Warning System. the Forest Service installation of an early warning system in Cachuma Canyon, near the Forest boundary. Operation and maintenance will be by the Santa Barbara County Flood Control District.

E. B.A.E.R EVALUATION AND ADMINISTRATIVE SUPPORT.

1. Team Leaders and Team Members. Approximately 27 people participated in the field and office survey, guided by a 5-person overhead team.

2. Archaeology Support. Qualified archaeologists worked with the project layout teams to establish protection measures for known sites, and to post and prescribe protection for subsequently identified sites
3. Implementation Overhead. Implementation of project goals required overhead personnel to support operations. Seven people were utilized in records keeping, contracting, project coordination and documentation.
4. Effectiveness Monitoring. To address NEPA requirements of evaluating estimated vs. actual effectiveness of treatments.

PART VII - APPROVALS

1. /s/ _____
Forest Supervisor (Signature) _____ Date _____
2. /s/ _____
Regional Forester (Signature) _____ Date _____

*NEPA not a part of
SWP/REH...
To ensure that all treatments
were up to standards effectiveness.*