

United States
Department of
Agriculture

Forest
Service

WO

Reply to: 2520/6520

Date: September 1, 1988

Subject: Emergency Burn Rehabilitation Request - Warm Springs Fire

To: Regional Forester, R-1

We have received your revised request for emergency burn rehabilitation funding for the McClellan Creek Municipal Watershed portion of Warm Springs Fire (Helena NF), along with a supplemental narrative supplied by the Forest. We have approved your request, subject to apportionment authority, for emergency watershed rehabilitation funding as follows:

Seeding	\$28,600
Log Terracettes	19,500
Channel Log Checks	750
Bedload Checks	4,250
Hydroseeding	3,300
Trail Erosion	330
Road Drainage	
Culverts	6,400
Road Erosion	
Control	3,600
Total	<u>\$66,780</u>

Use the code NFFF-SW22 when expending these funds. These expenditures, not to exceed the amount of authorization, must be offset at yearend with any unobligated FFP funds. The standards for qualifying emergency actions are outlined in FSM 2523 and FSH 2509.13.

The 2500-8 was approved as submitted. We commend the team for the thorough analysis and cost conscious prescription.

/s/

JEFF M. SIRMON
Deputy Chief

cc:
Forest Supervisor Helena NF
Bill PUTnam, R-1
Gilbert Espinosa, F&PS
NFS-Unger

Concurred:RGordon:8/31/88
Concurred:REMcKay:8/31/88
I concur L.Schmidt 08/31/88
I concur G.Reynolds 08/31/88
I concur rg:08/31/88

BURNED AREA REPORT

DATE: August 29, 1988

PART I - TYPE OF REQUEST

1. (List as appropriate) A. Funding Request
2. A. Initial

PART II - FIRE LOCATION

1. Fire name: Warm Springs Creek
2. Supervisors Fire Number: 712824
3. State: MT
4. County: Jefferson & Broadwater
5. Region: 01
6. Forest: 12
7. Ranger District: D-1 & D-2
8. Date Started: 8/9/88
9. Date Controlled: 8/29/88
10. Estimated suppression costs: \$8 million
11. Fire suppression damage repaired with FFF 102 funds:
 - a. 7. . miles of firelines waterbarred
 - b. . . . acres of firelines seeded (FFF 102 REHAB IN PROGRESS)
 - c. . . . other (identify)
12. Fire intensity 20% low 10% medium 70% high

PART III - NATIONAL FOREST SYSTEM PROBLEM INVENTORY

1. Watershed Number: 1003010109
2. NFS acres burned: 37,600
3. Water repellant soil: 60% NFS acres burned
4. Vegetation types: Douglas Fir Series - 25%
Alpine Fis Series - 45%
Alpine Fir - White Bark Pine Series - 30%
5. Geologic Types: 50% Granitic & 50% Volcanic
6. Soil erosion hazard rating: 15% low 57% medium 28% high
7. Erosion potential: 112 cu.yd./sq.mi.
8. Miles stream channel by regional order or class: I - 11.5 miles 66.1
II - 8.4 miles 20.2
III - 4.0 miles 5.9
9. Miles FS trails: 24 miles
10. Miles FS roads by maintenance level:
 - a. 3.6 (level I)
 - b. 17.8 (level II)
 - c. 17.5 (level III, IV, V)

PART IV - CALCULATED RISK AND CLIMATIC EVALUATION

1. Est. veg. recovery period: 5 years
2. Chance of success desired by management: 90%
3. Equivalent design recurrence: 10 years
4. Related design storm duration: 6 hours
5. Related design storm magnitude: 1.4 inches
5. Related design flow: 8.5 cfs
7. Estimated reduction in infiltration: 60%
8. Adjusted related design flow: 13.6 cfs

PART V SUMMARY OF SURVEY AND ANALYSIS

1. Skills represented on burned area survey team (list as appropriate):
a. Hydrology b. Soils d. Range e. Timber f. Wildlife h. Engineering
1. Other: PIO
2. Describe emergency: High intensity fire burned out the McClellan Creek watershed, which is the municipal supply watershed for the city of East Helena, MT. High potential for water quality degradation. Potential for damage to 17.5 miles of fish habitat. Potential for sedimentation in two reservoirs.
3. Emergency rehabilitation objective: Stabilize soils and drainage channels in the McClellan Creek municipal watershed to minimize water quality degradation, protect site productivity, reduce damage to downstream facilities and reduce reservoir sedimentation.
4. Probability of completing treatment prior to first major damage producing storm:
80% Land 80% Channel 80% Roads % Other identify
5. Net Environmental-quality benefit index:
a. Significant
6. Net Social-well-being benefit:
b. Not Significant
7. Benefit/cost ratio:
3.5
8. Net benefits: \$214,900
9. Cost effectiveness index (choose one): b. II

PART IV

ELIGIBLE EMERGENCY REHABILITATION MEASURES OR TREATMENTS AND SOURCE OF FUNDS

(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 LAND				
	Units	Unit cost	units #	FFF \$	092 \$	other #	Federal \$	non-Fed \$	total \$	
A. LAND	.	.	.	.	.	.	.	.	.	.
seeding	Acres	.11.13	2,570	28,600.	.	715	.	7,950	.	36,550
log erosion terracettes	Acres	.130.	150	19,500.	.	20	.	2,600	.	22,100
B. CHANNELS	.	.	.	.	.	.	.	.	.	.
opening water courses	Miles	.	.	.	.	.	.	.	.	.
stabilizing streambanks	Miles	.	.	.	.	.	.	.	.	.
dry channel debris load	Miles	.179.	4.2	750	.	.	.	.	.	750
instream bedload control structures	.Each	.85.	50	4,250	.	30	.	2,550	.	6,800
C. ROADS & TRAILS	Miles	.	.	.	.	.	.	.	.	.
hydroseed	Acres	.660.	5	3,300	.	10	.	6,600	.	9,900
trail drainage structures	Miles	.110.	3	330	.	.	.	.	.	330
install larger culverts	.Each	.533.	12	6,400	.	.	.	.	.	6,400

remove culverts & waterbar road	Miles	. 100.	3.6	. 3,600	.	.	.	.	3,600
	
D. MAJOR STRUCTURES	.	.	.	.	.	.	.	.
	
E TOTAL	.	.	.	.66,730	.	.	.	. 19,700.	86,430

PART VII - APPROVALS

Forest Supervisor approval and date: /s/ .Ernie Nunn.....
Regional Forester approval and date: /s/ John Hughes for John W. Mumma..