

United States
Department of
Agriculture

Forest
Service

WO

Reply to: 2520/6520

Date: July 21, 1988

Subject: Emergency Burn Rehabilitation Request - Brewer Fire

To: Regional Forester, R-1

We have received your request for emergency burn rehabilitation funding for the Brewer Fire (Custer 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	\$626,000
Temporary Fencing	85,000
Structures	2,000
Rehab Team	22,000

TOTAL	\$735,000

713.00

Use the code NFFF-PF11 when expending these funds. These expenditures, not to exceed the amount of authorization, must be offset at yearend with any unobligated FFP funds.

We reduced the per acre costs for seeding from \$63.25 to \$41.75, as recommended in the Forest's narrative. Additionally, we reduced the per mile cost for fencing from \$3,060 to \$1,000. The lower unit cost for fencing is adequate for temporary fence. Temporary fencing is applicable for emergency watershed protection, any additional cost incurred to install permanent fencing should be funded by the benefiting function.

The standards for approving emergency actions are outlined in FSM 2523 and FSH 2509.13.

/s/

JEFF M. SIRMON
Deputy Chief

I concur rg:07/20/88
I concur J.Nordin:07/20/88
I Concur G.Reynolds:07/20/88
Concurred:RMCCay:7/20/88 w/changes
Concurred:DUnger:7/20/88 w/change

BURNED AREA REPORT

DATE: JULY 1, 1988

PART I - TYPE OF REQUEST

1. A. Funding Request
2. A. Initial

PART II - FIRE LOCATION

1. Fire name: Brewer
2. Supervisors Fire Number: MT-MCD-H028
3. State: MT
4. County: Carter
5. Region: 01
6. Forest: Custer
7. Ranger District: Sioux
8. Date Started: June 20, 1988
9. Date Controlled: June 29, 1988
10. Estimated suppression costs: \$2,500,000
11. Fire suppression damage repaired with FFF 102 funds:
 - a. 216 miles of firelines waterbarred
 - b. 1309 acres of firelines seeded
 - c. . . . other (identify)
12. Fire intensity 38 % low 28 % medium 34 % high

PART III - NATIONAL FOREST SYSTEM PROBLEM INVENTORY

1. Watershed Number: 1011020117 (1011020218)
2. NFS acres burned: 51,780
3. Water repellant soil: 10% NFS acres burned
4. Vegetation types: ponderosa pine savanna
5. Geologic types: soft sedimentary rocks
6. Soil erosion hazard rating: 10 % low 58 % medium 32 % high
7. Erosion potential: 1370 cu.yd./sq.mi.
8. Miles stream channel by regional order or class: 160 miles of 1st-4th order
9. Miles FS trails: 0
10. Miles FS roads by maintenance level:
 - a. 2 (level I)
 - b. 68 (level II)
 - c. 26 (level III, IV, V)

90 1
50 2
40 3
30 4

PART IV - CALCULATED RISK AND CLIMATIC EVALUATION

1. Est. veg. recovery period: 5 years
2. Chance of success desired by management: 80 %
3. Equivalent design recurrence: 25 years
4. Related design storm duration: 6 hours
5. Related design storm magnitude: 2.4 inches
5. Related design flow: 165 cfs
7. Estimated reduction in infiltration: 25 %
8. Adjusted related design flow: 250 cfs

PART V SUMMARY OF SURVEY AND ANALYSIS

1. Skills represented on burned area survey team (list as appropriate):
hydrology, soils, engineering, range, timber, wildlife, local management
2. Describe emergency: Lightning-caused fire burned 83% of the Long Pines unit
Sioux District damaging the watershed condition of naturally flashy
drainages. There is potential for damage to archeology sites and water dev
3. Emergency rehabilitation objective: Stabilize the watershed to preserve
archeology sites and water developments from flood and sediment damage.
4. Probability of completing treatment prior to first major damage producing
storm:
Land 80 % Channel 80 % Roads 80 % Other %
5. Net Environmental-quality benefit index: 1.9
6. Net Social-well-being benefit: 1.8
7. Benefit/cost ratio: 4.67:1
8. Net benefits: \$5,282,500
9. Cost effectiveness index (choose one): a. I

PART VI

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.)

	<u>NFS LANDS</u>				<u>OTHER LAND</u>					
	Units	Unit	units	FFF	092	other	units	federal	non-fed	total
	cost	#	\$	\$	\$	\$	#	\$	\$	\$
A. LAND	.	.	.	.	.	.	.	.	.	.
SEEDING	Acres	63.25	20000	.1265	000.	.	.	.	.	.1265
FENCING	Miles	.3060	85.	260000	.	.	.	.	.	.260000
B. CHANNELS	.	.	.	.	.	.	.	.	.	.
STRUCTURES	Each	.133	15	2000	.	.	.	.	.	2000
C. OTHER	.	.	.	.	.	.	.	.	.	.
SURVEY TEAM	Hours	20	1100	22000	.	.	.	.	.	22000
E TOTAL	.	.	.	.1549	000.	.	.	.	.	.1549

PART VII - APPROVALS

July 1, 1988

Forest Supervisor approval and date: /s/ John Inman for David A. Filius
 Regional Forester approval and date: /s/ John Hughes for John W. Mumma.

Approved As Amended /s/ Gray F. Reynolds
 GRAY F. REYNOLDS
 Director, Watershed
 and Air Management