

BURNED AREA REPORT

DATE: Sept. 6, 1984

PART I - TYPE OF REQUEST

1. A. Funding Request
2. A. Initial

PART II - FIRE LOCATION

1. Fire name: North Hills
2. Supervisors Fire Number: 757166
3. State: Montana
4. County: Lewis and Clark
5. Region: 01
6. Forest: 12, Helena
7. Ranger District: D-2, Helena
8. Date Started: 8/27/84
9. Date Controlled: Not yet controlled
10. Estimated suppression costs: \$1,500,000
11. Fire suppression damage repaired with FFF102:
 - a. . 9 . miles of firelines waterbarred:
 - b. .25 . acres of firelines seeded
 - c. . . . other (identify) _____
12. Fire intensity 42 % low 26 % medium 32 % high

PART III - NATIONAL FOREST SYSTEM PROBLEM INVENTORY

1. Watershed Number: 1003010115
2. NFS acres burned: 18,600
3. Water repellant soil: 58 % NFS acres burned
4. Vegetation types: Psme/car, Psme/syal, Pipo/Agsp, Pipo/feid, Agsp/Stco
5. Geologic types: Limestone, Granite, Argillite, Basalt-Rhyolite
6. Soil erosion hazard rating: 35 % low 35 % medium 30 % high
7. Erosion potential: 26847 cu.yd./sq.mi.
8. Miles stream channel by regional order or class: Class 1 - 2mi., 3 - 9mi.
9. Miles FS trails: 9mi.
10. Miles FS roads by maintenance level:
 - a. 0 (level I)
 - b. 3 (level II)
 - c. 1 (level III, IV, V)

PART IV - CALCULATED RISK AND CLIMATIC EVALUATION

1. Est. veg. recovery period: 10 years
2. Chance of success desired by management: 70 %
3. Equivalent design recurrence: 25 years
4. Related design storm duration: 6 hours
5. Related design storm magnitude: 1.3 inches
5. Related design flow: 6 cfs
7. Estimated reduction in infiltration: 70 %
8. Adjusted related design flow: 10 cfs

PART V SUMMARY OF SURVEY AND ANALYSIS

1. Skills represented on burned area survey team (list as appropriate):
Hydrology Soils Engineering Geology Range Timber Wildlife
Local Management Fisheries Biology
2. Describe emergency: Man caused fire followed by a high intensity precipitation event which resulted in severe erosion and flooding.
3. Emergency rehabilitation objective: Stabilization of the soils within the burn area to prevent on and off site erosion and damage to public and private property and hazards to public health and safety.
4. Probability of completing treatment prior to first major damage producing storm:
Land 70 % Channel 80 % Roads 80 % Other %
5. Net Environmental-quality benefit index: Significant
6. Net Social-well-being benefit: Significant
7. Benefit/cost ratio: 0.949
8. Net benefits: -\$21,195
9. Cost effectiveness index (choose one): a. 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.)

		<u>NFS LANDS</u>			<u>OTHER LAND</u>			
	Units	Unit cost	units #	FFV 092 \$	other \$	units #	federal non-fed \$	total \$
A. LAND	.	.	.	.	.	.	.	.
SEEDING	Acres	.	.5913	.285,890.	.	.	.	.285,890
Log Er.Bar.	Acres	.	.1200	.81,470.	.	.	.	.81,470
Fence	Miles	.	1	3,836.	.	.	.	3,836
B. CHANNELS	.	.	.	371 196.	.	.	.	.
opening	Miles	.	2.5	5,116	.	.	.	5,116
water	.	.	.	.	.	.	.	.
courses	Miles	.	.	.	.	.	.	.
stabilizing	.	.	.	.	.	.	.	.
streambanks	Miles	.	4	.12,403	.	.	.	.12,403
Debris basin	EA.	231	12	2,772	.	.	.	2,772
Sed. Trap	EA	.120	85	.10,200	.	.	.	10,200
Stream Stab.	.	.	3	1,818	.	.	.	1,818
C. ROADS & TRAILS	Miles	900.	10	9,000.	32309	.	.	9,000
MAJOR STRUCTURES	Each	.	.	.	.	.	.	.
Aerial	.	.	.	.	.	.	.	.
Photog.	Acres	.03.	18,600	820	.	9,900	.	820
Aircraft & equipment courtesy of State of Montana								
E TOTAL	.	.	.	.413,325.	.	.	.	.413,325

PART VII - APPROVALS

Forest Supervisor approval and date: /s/ .Robert S. Gibson 9/6/84.....
 Regional Forester approval and date: /s/ .George M..Fleming..9/6/84.....

Seventy five percent of the area is wilderness or proposed wilderness. Request 75% of funds be withheld pending coordination of wilderness rehabilitation proposal with interested publics.

R1

9/7/84 Forest requested \$285,890 for seeding instead of \$262,829 for addition of cereal rye to mix. P. Leger notified. He will note on WO copy.

9/7/84 P. Leger indicated anything done in wilderness requires Chief's approval. This requires we spell out specifically what we propose to do in wilderness. Note is taken of the relatively long response time of native species in the seeding mixture. This does not meet emergency rehabilitation objectives, and is unlikely to be funded. Further coordination with WO is needed indicating what RF wants to propose by letter. WO contact next week will be Kermit Larson.

United States
Department of
Agriculture

Forest
Service

Helena National Forest
301 S. Park, Room 328
Helena, MT 59626

REPLY TO: 2520 Watershed Protection and Management Date: Sept. 12, 1984
2320 Wilderness Management

SUBJECT: North Hills Fire - Burned Area Rehabilitation

TO: Regional Forester

On September 10, members of my staff and I met with Bill Cunningham and Barry Krutcher of the Montana Wilderness Association and Jim Posewitz of the Montana Department of Fish, Wildlife, and Parks to present our proposed action plan for emergency burned area rehabilitation of the North Hills Fire, and especially the area within the Gates of the Mountains Wilderness and Big Log proposed wilderness addition (earlier in the day I discussed the same subject with Ken Knudson of the Montana Wildlife Federation). We discussed our responsibility for preventing further damage to the private residences near the community of Nelson and our desire to prevent continuing degradation of the valuable fishery resource of Beaver Creek and the Missouri River. Details of the location and function of erosion control measures such as log erosion barriers, drainageway sediment traps, and debris basins were carefully explained as well as the need to stabilize erodible soils by seeding native grasses with a cover crop of cereal rye.

The primary concern expressed by the MWA members was that nothing be done that would decrease the suitability of the Big Log area as an addition to the wilderness. The erosion control measures designed for the wilderness and proposed addition emphasize low visibility and use of native materials and would in no way detract from the suitability of the Big Log area for inclusion with the wilderness. At the conclusion of our presentation, the MWA members supported all of the measures proposed and stated there is a possibility of a volunteer effort by MWA to implement the measures in areas which the Forest Service cannot complete because of time or funding constraints. Jim Posewitz expressed concurrence for the project by the Montana Department of Fish, Wildlife, and Parks.

/s/Robert S. Gibson

ROBERT S. GIBSON
Forest Supervisor