

Detailed instructions for use of this form are in the Burned-Area Emergency Rehabilitation Handbook (FSH 2509.13), Section 41.

1. Fire name Metz	2. <input type="checkbox"/> Request <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Interim <input type="checkbox"/> Final	3. Date of report 7/13/79
4. State Arizona	5. County Coconino	6. Congressional District 3
7. Region 3	8. Forest 04	9. Ranger District Flagstaff
10. Supervisor fire no. 148	11. Date fire started 7/11/79	12. Date controlled 7/12/79
13. Estimated suppression cost \$175,000		
14. Fire suppression damages repaired with FFF 102 funds .85 mi. firelines waterbarred 10 acres firelines seeded		
15. Fire intensity % low 15 % medium 85 % high		

NATIONAL FOREST SYSTEM PROBLEM INVENTORY

16. Watershed no. 187	17. NFS acres burned 415	18. Water repellant soil 5 % of NFS area burned
19. Vegetation types Ponderosa pine		
20. Geologic types Basalt		
21. Soil erosion hazard rating 65 % low % med. 35% high	22. Erosion potential 64,000 cu. yds./sq. mi.	23. Flood peak potential 275 cu. ft./sec./sq. mi.
24. Miles of stream channels by Regional order or classes 2.5 miles Order I		
25. Miles of Forest Service roads and trails by maintenance levels mi. level I rds. 1.9 mi. level II rds. 1.5 mi. levels III, IV, V rds. mi. trails		

CLIMATIC DATA

26. Annual precipitation 23 inches	27. Design storm rainfall during 1 hour period 0.9 inches 2 yr. frequency 1.5 inches 10 yr. frequency
28. Annual runoff 3 1/2 inches	29. Maximum 30 minute intensity storm 0.7 inches 2 yr. frequency 1.2 inches 10 yr. frequency

SUMMARY OF SURVEY AND ANALYSIS

30. Skills represented on burned area survey team (check) <input checked="" type="checkbox"/> Hydrology <input checked="" type="checkbox"/> Soils <input type="checkbox"/> Geology <input checked="" type="checkbox"/> Range <input checked="" type="checkbox"/> Timber <input checked="" type="checkbox"/> Wildlife <input type="checkbox"/> Fire Management <input type="checkbox"/> Engineering <input type="checkbox"/> Contracting <input checked="" type="checkbox"/> Local Management <input type="checkbox"/> Research <input type="checkbox"/> Other	
31. Describe emergency The high intensity of this fire killed approximately 80% to 90% of all vegetation. Resultant denuded area needs quick establishment of vegetative cover to best protect on site productivity. Also several important stock watering developments stand to be filled in with sediment from the fire.	
32. Emergency rehabilitation objective Establish a protective vegetative cover as soon as practical to minimize the loss of soil productivity and to slow soil erosion and sedimentation.	
33. Personnel needs for rehabilitation project on NFS lands N/A man-years reassigned for S N/A man-years new hires for S	
34. Probability of completing treatment prior to first major damage-producing storm Land 50 % Channel % Roads % Other %	
35. Net environmental quality benefit index <input checked="" type="checkbox"/> Significant <input type="checkbox"/> Not Significant	
36. Net social well-being benefit index <input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not Significant	
37. Benefit/cost ratio 16:1	38. Cost effectiveness index (check one) Net benefits \$126,091 <input type="checkbox"/> I <input checked="" type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV
39. Forest Supervisor approval & date William A. Holmes 7/13/79	Regional Forester approval & date Date funding approved in NO

ON-SITE AND OFF-SITE DEVELOPMENTS SUBJECT TO HAZARDS FROM FLOODS, FLOATING DEBRIS, EROSION, OR SEDIMENT BECAUSE A WATERSHED IS IMPAIRED BY WILDFIRE. (Do not include value of resources damaged or destroyed by the fire as reported on Form 5100-29.)

	No. of units	Estimated value (dollars)
40. Community and urban development	people	
41. Municipal and domestic water supply	people served	
42. Transportation systems	XXXXX Crossings 1	3,000
43. Water distribution systems (irrigation)	miles	
44. Agricultural development (crops, facilities)	XXXXX Facilities 3	9,000
45. Industrial development (dams, power, manufacturing)	number	
46. Power and communication lines	miles	
47. Recreation development	PAOT	
48. Fish habitat	miles	
49. Other (specify)		
TOTAL HAZARD POTENTIAL (Indicates values threatened by design storm. Does not enter into the R/C.)		12,000

NARRATIVE (Optional. May be left out or expanded on additional sheets as needed)

Several important stock watering developments are located down stream from the fire and stand the chance of being filled in with sediment.

BURNED AREA REPORT

Fire Name

Date of Report

SUMMARY OF EMERGENCY REHABILITATION NEEDS BY LAND OWNERSHIP

Land ownership	50. Acres burned	51. Emergency rehabilitation needs				Source of emergency rehabilitation funds for needed work (dollars)							
		Land (acres)	Channel (miles)	Road and Trail (miles)	Other	52. FFF		53. 216	54. FR&T	55. Other Federal (name)	56. Non-Federal (name)	57. Total	
						094	102						
FEDERAL NFS	415	415				\$7900	300					\$ 8200	
Other (name)													
Subtotal Federal													
NON-FEDERAL State & county	185	185									3500	3500	
Indian reservation													
Private													
Subtotal Non-Federal													
TOTAL	600	600				\$7900	300				3500	11700	

Fire Name

Date of Report

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.)

	Units	Unit cost	NFS Lands			Other Lands			Total dollar all lands
			No. of units NFS	FFF 094 dollars	Other dollars (Name)	No. of units other	Federal dollars (Name)	Non-Fed. dollars (Name)	
58. LAND									
Seeding	Acres	\$19	415	7900		185		3500	11400
59. CHANNELS									
Opening water courses	Miles								
Stabilizing streambanks	Miles								
60. ROADS & TRAILS									
61. MAJOR STRUCTURES									
Preplanned — from Forest Plans	Each								
TOTAL				\$7900				\$3500	\$11400

Fire Name

Date of Report

EXAMINING IMPACTS OF MANAGEMENT ALTERNATIVES FOR AN EMERGENCY PROGRAM

62.

EXPECTED DAMAGE REDUCTION BENEFIT SUMMARY

at current Water Resources Council interest rate of 6.87 percent

Economic benefit indices	Units of measure	Damage expected				Expected \$ damage reduction
		Without treatment		With treatment		
		No. of units	Present value \$	No. of units	Present value \$	
WATERSHED IMPACTS						
SEDIMENTS						
Downstream water storage						
Sediment removal						
Fish habitat						
Water quality						
FLOOD WATER						
Land on site productivity	yd ³	77743	381301	51943	255210	126,091
Improvements						
Subtotal watershed						
RESOURCE RELATED IMPACTS						
Range						
Wildlife and recreation						
Timber						
Subtotal resource related						
OTHER IMPACTS						
Subtotal other						
Total dollars			381301		255210	126,091

Fire Name

Date of Report

EXAMINING IMPACTS OF MANAGEMENT ALTERNATIVES FOR AN EMERGENCY PROGRAM

63. (Table 4)

ENVIRONMENTAL QUALITY BENEFIT INDEX

ENVIRONMENTAL CRITERIA	Weight Factor	Without treatment		With treatment		Difference	
		Actual	Weighted	Actual	Weighted	Actual	Weighted
Erosion and sediment	7	2	14	1	7	1	17
Aesthetic land quality	3	2	6	1	3	1	3
Water quality	2	0	0	0	0	0	0
Site productivity	10	2	20	1	10	1	10
Wildlife habitat	3	1	3	0	0	1	3
Fish habitat	0						
Other			1				
TOTAL	25		43		20		23
Average weighted index			1.72		.8		.92
Net environmental quality benefit index							S

64. (Table 5)

SOCIAL WELL-BEING BENEFIT INDEX

SOCIAL CRITERIA	Weight Factor	Without treatment		With treatment		Difference	
		Actual	Weighted	Actual	Weighted	Actual	Weighted
Life, health, safety							
Employment							
Recreational opportunity							
Economic stability							
Income distribution							
Preserve special sites							
Other							
TOTAL							
Average weighted index							
Net social well-being benefit index							N/S