

## BURNED AREA REPORT

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

1. Fire name Curley	2. <input type="checkbox"/> Request <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Interim <input type="checkbox"/> Final <input type="checkbox"/> Accomplishment report <input type="checkbox"/> FFF <input type="checkbox"/> Other	3. Date of report 6/27/80
4. State Arizona	5. County Coconino	6. Congressional District 03
7. Region 03	8. Forest 04 Coconino	9. Ranger District Flagstaff
10. Supervisor Fire no. 52	11. Date fire started 6/21/80	12. Date controlled 6/24/80
13. Estimated suppression cost \$ 500,000		
14. Fire suppression damages repaired with FFF 102 funds 16 mi. firelines waterbarred 38 acres firelines seeded		
15. Fire intensity 5% low 40% medium 55% high		

## NATIONAL FOREST SYSTEM PROBLEM INVENTORY

16. Watershed no. 116	17. NFS acres burned 2,304	18. Water repellent soil 10% of NFS area burned
19. Vegetation types Ponderosa pine with scattered pinyon pine and juniper		
20. Geologic types Cinder cones and basalts		
21. Soil erosion hazard rating 25% low 35% med. 40% high	22. Erosion potential 42,800 cu. yds./sq. mi.	23. Flood peak potential 104 cu. ft./sec./sq. mi.
24. Miles of stream channels by Regional order or classes Order I - .64 miles Order II - 1.0 mile		
25. Miles of Forest Service roads and trails by maintenance levels 2.2mi. level I rds. mi. level II rds. 12.3mi. levels III, IV, V rds. 1.4 mi. trails		

## CLIMATIC DATA

26. Annual precipitation 23 inches	27. Design storm rainfall during 1 hour period 1.0 inches 2 yr. frequency 1.2 inches 10 yr. frequency
28. Annual runoff 2.0 inches	29. Maximum 30 minute intensity storm .79 inches 2 yr. frequency .95 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 checked="" type="checkbox"/> Engineering <input type="checkbox"/> Contracting <input type="checkbox"/> Local Management <input type="checkbox"/> Research <input type="checkbox"/> Other	
31. Describe emergency This fire occurred on soils derived from cinder material. Most of the vegetation protecting the soils were consumed leaving the soils susceptible to erosion. Because of the high potential erosion hazard of these soils, a quick establishment of protective vegetation is needed.	
32. Emergency rehabilitation objective To minimize long term soil loss through erosion and sedimentation and maintain soil productivity by establishment of a protective vegetative cover as soon as possible.	
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 50 % 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 3.5:1	38. Cost effectiveness index (check one) Net benefits \$169,121 <input type="checkbox"/> I <input checked="" type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV
39. Forest Supervisor approval & date William L. Holmes 6/27/80	
Regional Forester approval & date Date funding approved in NO	

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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 N/A	
41. Municipal and domestic water supply	people served N/A	
42. Transportation systems	<del>miles</del> crossings 2	\$2,000
43. Water distribution systems (irrigation)	miles N/A	
44. Agricultural development (crops, facilities)	<del>miles</del> facilities 1	\$3,000
45. Industrial development (dams, power, manufacturing)	number N/A	
46. Power and communication lines	miles N/A	
47. Recreation development	PAOT N/A	
48. Fish habitat	miles N/A	
49. Other (specify)		
TOTAL HAZARD POTENTIAL (indicates values threatened by design storm. Does not enter into the R/C.)		\$5,000

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

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## 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. 094	53. 216	54. FR&T	55. Other Federal (name)	56. Non- Federal (name)	57. Total
FEDERAL NFS	2,304	1,625		.1		48,300					48,300
Other (name)											
Subtotal Federal	2,304	1,625		.1		48,300					48,300
NON-FEDERAL State & county											
Indian reservation											
Private											
Subtotal Non-Federal											
TOTAL	2,304	1,625		.1		48,300					48,300

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 dollars all lands
			No. of units NFS	FFF 094 dollars	Other dollars (Name)	No. of units other	Federal dollars (Name)	Non-Fed. dollars (Name)	
58. <u>LAND</u>									
Seeding	Acres	28.50	1,625	46,300					46,300
59. <u>CHANNELS</u>									
Opening water courses	Miles								
Stabilizing streambanks	Miles								
60. <u>ROADS &amp; TRAILS</u>									
Crossings		1,000	2	2,000					2,000
61. <u>MAJOR STRUCTURES</u>									
Preplanned from Forest Plans	Each								
TOTAL				48,300					48,300

EXAMINING IMPACTS OF MANAGEMENT ALTERNATIVES FOR AN EMERGENCY PROGRAM

62. EXPECTED DAMAGE REDUCTION BENEFIT SUMMARY  
at current Water Resources Council interest rate of 7.125 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.						
<del>FLOOD WATER</del> loss of on- Land site productivity	yd <sup>3</sup>	292,500	753,187	227,500	591,824	\$161,363
Improvements						
Subtotal watershed			753,187		591,824	161,363
RESOURCE RELATED IMPACTS						
Range	Pounds Forage prod. loss	7,475,000	3,536	3,575,000	1,633	1,903
Wildlife and recreation	Pounds Forage prod. loss	7,603,773	8,511	2,207,547	2,656	5,855
Timber						
Subtotal resource related			12,047		4,289	7,758
OTHER IMPACTS						
Subtotal other						
Total dollars			765,234		596,113	169,121

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## 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	2	2	4	1	2	1	2
Aesthetic land quality	3	1	3	1	3	0	0
Water quality							
Site productivity	10	2	20	1	10	1	10
Wildlife habitat	1	1	1	0	0	1	1
Fish habitat							
Other							
TOTAL	16		28		15		13
Average weighted index			1.75		.94		.81
Net environmental quality benefit index							.5

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							NS