United States Department of Agriculture | Forest Service | KNF

Reply to: 2510 Watershed Surveys and Plans

Date: September 22, 1981

Subject: Kedzie Creek Fire

To: Regional Forester

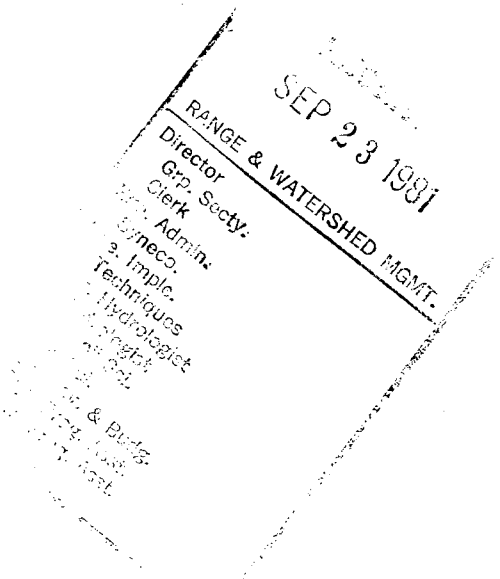
The Kootenai National Forest Burned-Area Rehabilitation Team was activated for the Kedzie Creek fire. The team consisted of Louis Kuennen, Soil Scientist; Larry Meshew, Hydrologist; Joe Spehar, Forester; Lee Emery, Forester; and Ernie Garcia, Wildlife Biologist. Kedzie Creek is in the headwaters of O'Brien Creek.

Following an on-the-ground survey of the burned area, specifically using fire intensity, it was determined that additional rehabilitation monies were not necessary. Even though 50 percent or more of the duff and litter was totally burned, live roots were in evidence within the top inch of soil. The determination was made that more than 50 percent vegetative cover would exist after two years.

It is therefore concluded that no emergency rehabilitation projects for soil and water projects are necessary.

Erosion control work in the form of waterbarring and seeding firelines is needed, but will be accomplished with those activities related to suppression of fire.

WILLIAM E. MORDEN
Forest Supervisor



USDA Forest Service

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	2. [X] Request [ ] Initial [ ] Interim [X] Final [ ] Accomplishment report [ ] FFF [ ] Other	3. Date of report
Kedzie Creek		9/18/81

4. State	5. County	6. Congressional District	7. Region	8. Forest	9. Ranger District
Montana	Lincoln	01	01	Kootenai	04 Troy

10. Supervisor	11. Date fire started	12. Date controlled	13. Estimated suppression cost
fire no. 714070	9/14/81	9/17/81 2000 hrs	$154,000

14. Fire suppression damages repaired with FFF 102 funds
4.5 mi. firelines waterbarred 4.0 acres firelines seeded

15. Fire intensity
49 % low 50 % medium 1% high

NATIONAL FOREST SYSTEM PROBLEM INVENTORY

16. Watershed no.	17. NFS acres burned	18. Water repellant soil
170101011402	172	0 % of NFS area burned

19. Habitat types
Tshe/Clun - 55%, Abla/Xete - 45%

20. Geologic types
Wallace Formation of the Belt Supergroup

21. Soil erosion hazard rating	22. Erosion potential	23. Flood peak potential
45 % low 55 % med. 0 % high	408 cu. yds./sq. mi.	20 cu. ft./sec./sq. mi.

24. Miles of stream channels by Regional order or classes
Second order: .7 mile; third order: .2 mile

25. Miles of Forest Service roads and trails by maintenance levels
0 mi. level I rds. 1.5 mi. level II rds. .5 mi. levels III, IV, V rds. mi. trails

CLIMATIC DATA

26. Annual precipitation	27. Design storm rainfall during 24 hour period
60 inches	2.1 inches 2 yr. frequency 3.0 inches 10 yr. frequency
28. Annual runoff	29. Maximum 30 minute intensity storm
28.5 inches	.38 inches 2 yr. frequency 0.8 inches 10 yr. frequency

SUMMARY OF SURVEY AND ANALYSIS

30. Skills represented on burned area survey team (check)
[X] Hydrology [X] Soils [ ] Geology [ ] Range [X] Timber [X] Wildlife [ ] Fire Management
[ ] Engineering [ ] Contracting [X] Local Management [ ] Research [ ] Other

31. Describe emergency The majority of the area was burned at low and moderate intensity. On fifty percent of the area the humus was destroyed but the majority of the roots in the soil remained alive. We anticipate more than 50 percent vegetative recovery within a two-year period.

32. Emergency rehabilitation objective

33. Personnel needs for rehabilitation project on NFS lands
man-years reassigned for $ man-years new hires for $

34. Probability of completing treatment prior to first major damage-producing storm
Land % Channel % Roads % Other %

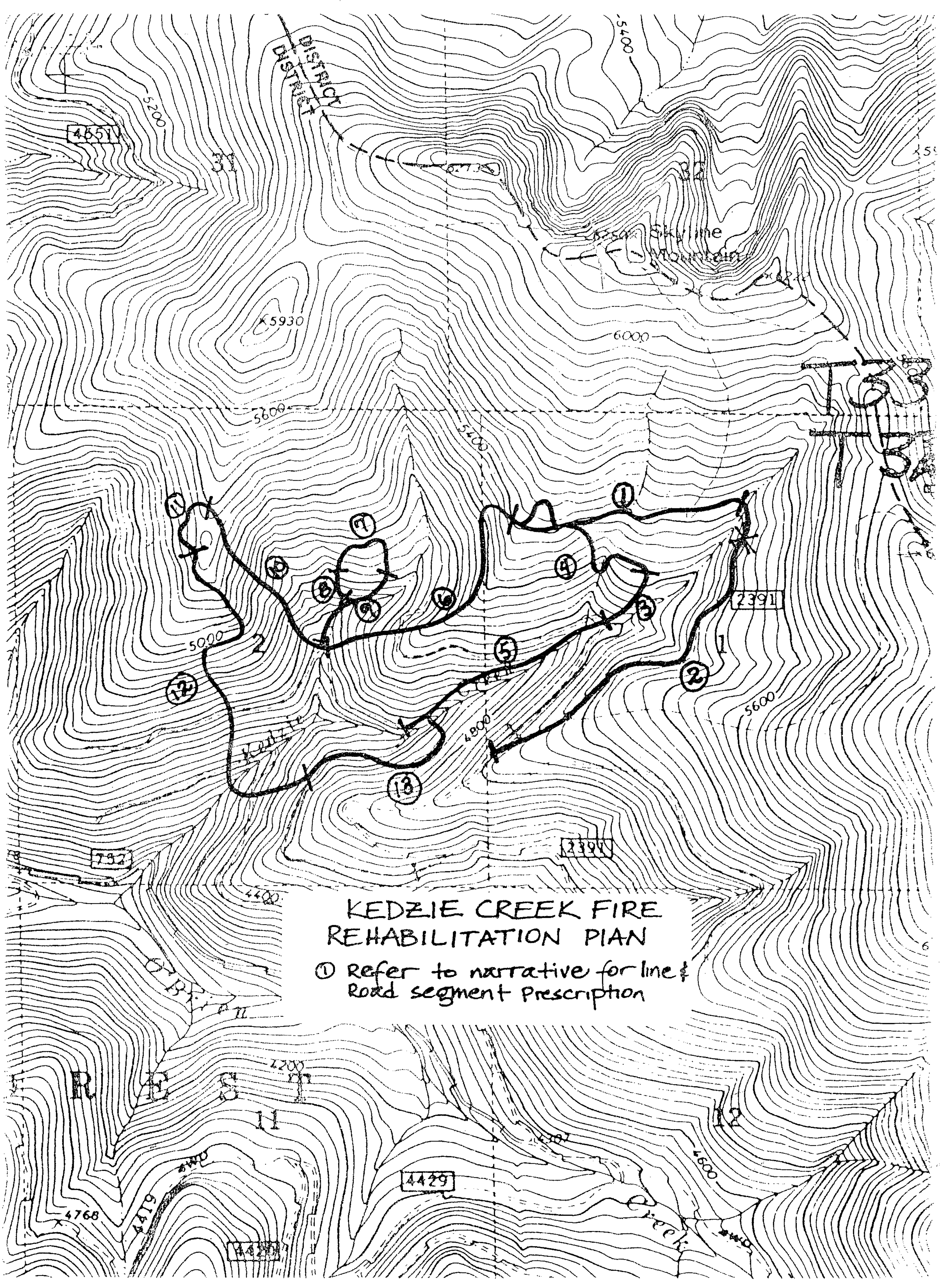
35. Net environmental quality benefit index	36. Net social wellbeing benefit index
[ ] Significant [ ] Not Significant	[ ] Significant [ ] Not Significant
37. Benefit/cost ratio Net benefits	38. Cost effectiveness index (check one) [ ] I [ ] II [ ] III [ ] IV

39. Forest Supervisor approval & date	Regional Forester approval & date	Date funding approved in WO
9-22-81		

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 1000	$250,000
42. Transportation systems	miles	
43. Water distribution systems (irrigation)	miles	
44. Agricultural development (crops, facilities)	acres	
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 B/C.)		

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


KEDZIE CREEK FIRE
REHABILITATION PIAN
① Refer to narrative for line &
Road segment Prescription
DISTRICT
DISTRICT
31
32
Skyline Mountain
5930
6000
5600
5400
5200
5000
4900
4400
4200
4600
2391
2397
4651
732
4429
4768
R E S T
11
12
T 33
T 34
Creek

REHAB NEEDS

9-16-81

LINE/ROAD SEGMENT	WORK NEEDED
1.	a. PULL FILL MATERIAL OUT OF DRAINAGE CROSSINGS
	b. WATERBAR [illegible]
	c. SEED & Fertilize
	d. SPOT FIRE TRACTOR LINE — PULL DEBRIS AND SOIL BACK INTO LINE on east flank. Do only if line is "cold". Water bar remainder of line.
2.	a. WATER BAR EVERY 150'-200' OR UTILIZE NATURAL DRAWS WHEN POSSIBLE
	b. RECLOSE ROAD AT * NEW OLD LANDING. NO
3.	a. Use logs to waterbar EVERY [illegible] OR BREAK OPEN LINE AT [illegible] POINTS
	b. SEED & Fertilize

4. Same as 3; but only on steep segment of line.

5. a. WATER BAR EVERY 300' - 50' TAKE ADVANTAGE OF NATURAL BREAKS

b. REMOVE BERM - seed + fertilize

6. WATERBAR EVERY 40-50' (LOG OR CUT) TAKE ADVANTAGE OF NATURAL BREAKS WHERE FEASIBLE

7. a. WATERBAR TO TAKE ADVANTAGE OF MEANDERS AND EAST AND TOP OF SLOPE.

At bottom of
b. WEST FLANK - DIVERT WATER WHERE IT TIES INTO ROADSIDE. PUT ONE WATERBAR JUST ABOVE BREAK INTO STEEP SLOPE (<5%)

8. Hand line scrape, use waterbars to take advantage of meanders or breaks in slope

9. Old skid trail from E spur along stream and bottom of spot.

a. Water bar every 100' and/or taking advantage of [illegible] breaks. Place water bar just on point of [illegible] line crossing stream, lower crossing.

b. Remove debris that was piled over stream at lower crossing

c. Seed + fertilize. No fertilizer last 100' before stream.

To disperse flow and increase infiltration

d. Place slash and organic debris on fireline on steep segment above stream crossing.

10. a. Water bar using natural [illegible] placing logs where [illegible] making sure logs are [illegible] and water can [illegible]

b. Seed and fertilize

11. a. Water bar all [illegible] on top of ridge. Will [illegible] done with hand [illegible].

b. Seed + fertilize

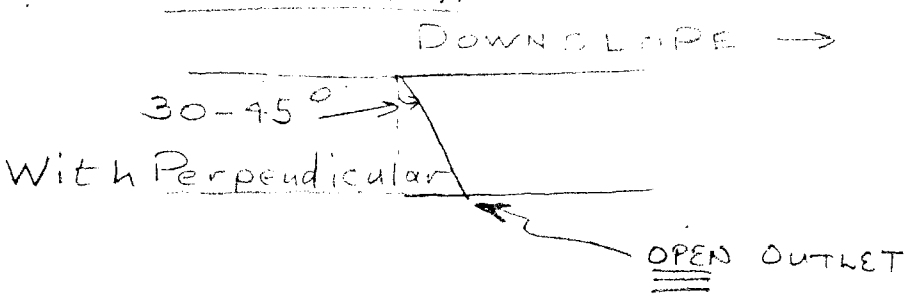
12. a. Water bar taking advantage of natural breaks but no more than 40-50 feet apart on slopes greater than 50% or [illegible] rocky ledges.

b. Seed + fertilize

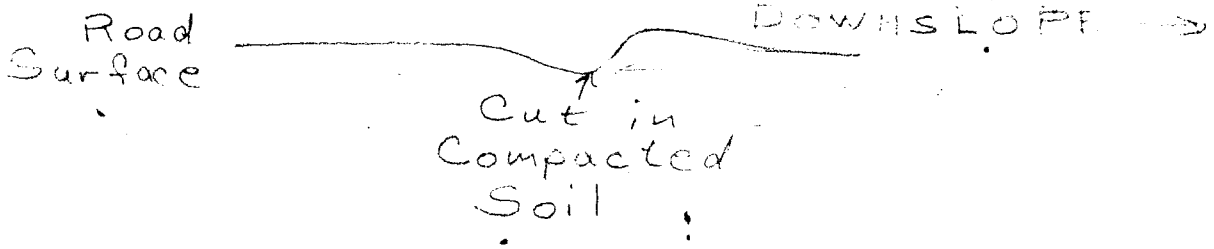
WATER BARS

1. Roads & Fire Line (Doz...)

TOP VIEW



SIDE VIEW



2. Hand Line

x - Water bar Sites

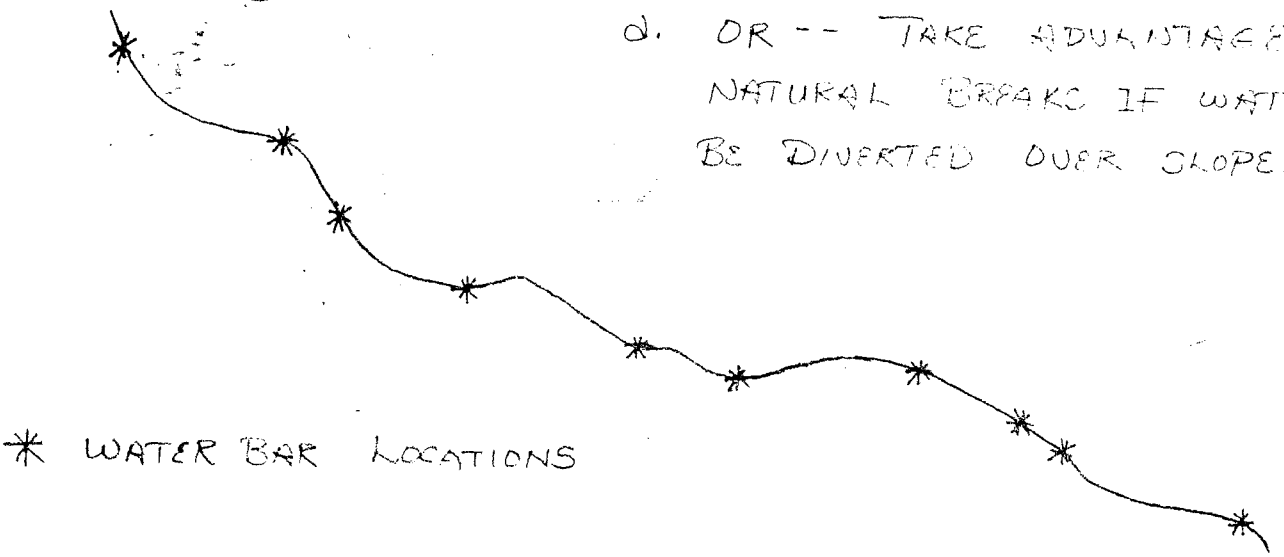
a. Use logs if [illegible]

b. Key in upper end of log at least 2 feet

c. Angle 30-45° with perpendicular

d. OR -- TAKE ADVANTAGE OF NATURAL BREAK IF WATER CAN BE DIVERTED OVER SLOPE.

PROFILE



* WATER BAR LOCATIONS