USDA-FOREST SERVICE

P. Geologic Types: sandstone and shale

FS-2500-8 (7/00)

Date of Report: 10/05/00

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A.	туре от кероп				
	[] 1. Funding request for estimated WFSU[] 2. Accomplishment Report[x] 3. No Treatment Recommendation	-SULT funds			
В.	3. Type of Action				
	[] 1. Initial Request (Best estimate of fund	s needed to complete eligible rehabilitation measures)			
	[] 2. Interim Report[] Updating the initial funding request[] Status of accomplishments to date	based on more accurate site data or design analysis			
	[x] 3. Final Report (Following completion of	of work)			
	PART II - BU	RNED-AREA DESCRIPTION			
A.	Fire Name: McDonald II	B. Fire Number: P17016			
C.	State: Montana	D. County: Lewis and Clark, and Teton			
E.	Region: Northern (01)	F. Forest:Lewis and Clark (15)			
G.	District:_Rocky Mountain				
Н.	H. Date Fire Started: July 22, 2000 I. Date Fire Controlled: not controlled				
J.	Suppression Cost: \$95,000				
K.	Fire Suppression Damages Repaired with Su 1. Fireline waterbarred (miles): 0 2. Fireline seeded (miles): 0 3. Other (identify):	ippression Funds			
L.	Watershed Number: 100301040101				
M.	Total Acres Burned: 4304 NFS Acres (4304) Other Federal () S	State () Private ()			
N.	Vegetation Types: lodgepole pine, whitebark	s pine/subalpine fir, Douglas fir, Englemann spruce			
Ο.	Dominant Soils: brown silt loam topsoils				

Q.	Miles of Stream Channels by Order or Class:1 st – 4.2 mile $2^{nd} - 4.3$ $3^{rd} - 2.5$		
R.	Transportation System		
	Trails: 5.9 miles Roads: 0.0 miles		
	PART III - WATERSHED CONDITION		
A.	Fire Severity – soils (acres): <u>1677</u> (low / unburned) <u>2448</u> (moderate) <u>179</u> (high)		
В.	Water-Repellent Soil (acres): 2627		
C.	Soil Erosion Hazard Rating – due to fire (acres): soil resource information unavailable (low) (moderate) (high)		
D.	Erosion Potential: tons/acre (on-site, upslope erosion)		
E.	Sediment Potential: tons/acre (delivered to ephemeral draws)		
	PART IV - HYDROLOGIC DESIGN FACTORS - Not Applicable		
A.	Estimated Vegetative Recovery Period, (years):		
В.	Design Chance of Success, (percent):		
C.	Equivalent Design Recurrence Interval, (years):		
D.	Design Storm Duration, (hours):		
E.	Design Storm Magnitude, (inches):		
F.	Design Flow, (cfs per square mile):		
G.	Estimated Reduction in Infiltration, (percent of area):		
Н.	Adjusted Design Flow, (cfs per square mile):		
	PART V - SUMMARY OF ANALYSIS		

A. Describe Watershed Emergency: This fire is located within the Bob Marshall Wilderness. The values at risk are newly established arctic grayling populations, wilderness character, trail systems and Gibson Reservoir.

This fire is within the natural range of fire disturbance regimes (intensity and frequency) and the resulting sediment pulse to the stream system will actually be beneficial in terms of nutrient loading to a relatively sterile environment. Aquatic productivity is expected to increase as a result of this fire.

Documentation on revegetation success after the 1988 Canyon Creek Fire (40 miles south of McDonald II) suggests that natural regeneration was as successful in the wilderness portion of the fire as was aerial seeding in non-wilderness areas. Due to the fact that burn severity was mostly low to mderate, plant roots are

expected to resprout. On-ground observations revealed vigorous beargrass growth throughout the area as of 09/11/00. Therefore, natural regeneration in the McDonald II Fire area is preferred over aerial seeding.

The main impact to the trail system will be from blowdown of dead timber and the need to clear trail routes for many years into the future. Land treatments to reduce overland flow (water or sediment) impacts to the trail system are not practical or likely to be effective.

Gibson Reservoir is located approximately 25 miles downstream from the southern perimeter of this fire. The reservoir is 6 miles long with a storage capacity of 105,000 acre-feet. A significant sediment pulse is expected to occur during intense rain events for the first growing season after the fire. Some of this sediment is expected to deposit in the reservoir. Emergency treatments to reduce hillslope erosion are not proposed because 1) vigorous natural regeneration is anticipated within the next growing season and will help to stabilze soils and 2) land treatments are not feasible over a large area within a remote wilderness.

B. E	mergency	Treatment	Objectives:	Not Applicable
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C.	Probability of Completing	Treatment Prior to First	Major Damage-P	Producing Storm:	Not Applicable

Land % Channel % Roads % Other %

D. Probability of Treatment Success: Not Applicable

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads			
Other			

F	Cast of	No-Action	(Including	l vee).	Not Appl	icable
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- F. Cost of Selected Alternative (Including Loss):_Not Applicable
- G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology	[] Soils	[] Geology	[] Range	[]
[] Forestry	[x] Wildlife	[] Fire Mgmt.	[] Engineering	[]
[] Contracting	[] Ecology	[] Botany	[] Archaeology	[]
[x] Fisheries	[] Research	[] Landscape Arch	[]GIS	

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H.	do. This information helps to determ	s, where and how they will be applied, and what they are intended to nine qualifying treatments for the appropriate funding authorities. For application rates and species selection rationale.)		
	Land Treatments:			
	Channel Treatments:			
	Roads and Trail Treatments:			
	Structures:			
H.	H. Monitoring Narrative: Not Applicable (Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)			
	Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership - Not Applicable			
		PART VII - APPROVALS		
1.	/s/ RICK PRAUSA Forest Supervisor (signature)	<u>10/05/00</u> Date		
2.	Regional Forester (signature)	Date		