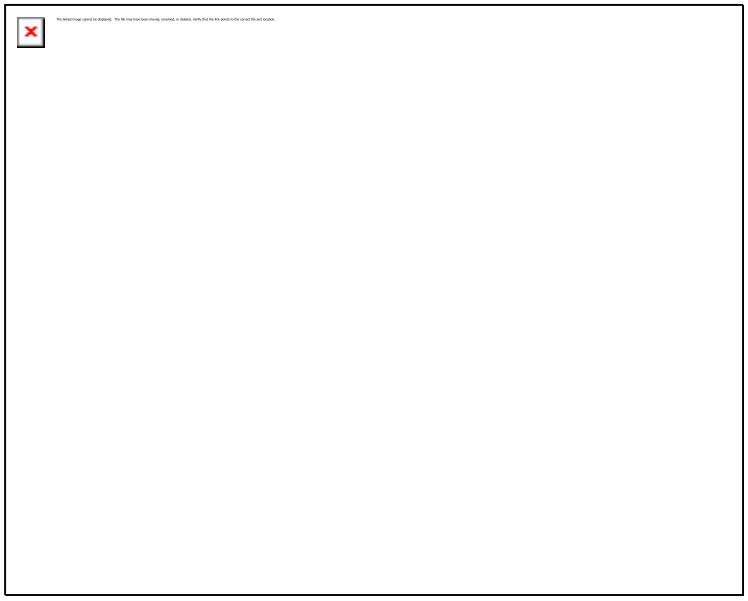
Burned-Area Emergency Rehabilitation Report
Hidden Fire
Clearwater National Forest

The Hidden Fire burned 1724 acres on the Powell Zone of the Lochsa Ranger District of the Clearwater National Forest. It started from a lightning strike on July 30, 2000. The fire burned in the Selway Bitterroot Wilderness Area (Management Area B2) and a confinement suppression strategy was used. The fire was declared 100% controlled on September 30, 2000.

A Burned-Area Emergency Rehabilitation (BAER) team consisting of Jim Mital – Team Leader and Forest Soil Scientist/Ecologist; Dick Jones – Forest Hydrologist; Chris Ourada– Powell Zone, Lochsa District FMO; Ron Heinemann – Geologist/BAER Trainee; Vicki Edwards – Fire Co-op/BAER Trainee; and Donna Bonzagni– Powell Zone, Lochsa District GIS Specialist was formed to determine if a flooding, erosion, or life and property emergency existed. Additional information came from Pat Murphy – Forest Fisheries Biologist.

Our finding was that *No Emergency Exists* and emergency funding is *not* requested.

The Hidden Fire started in the Hidden Creek watershed and tributaries of Big Sand Creek that flows into White Sand Creek and eventually into the Lochsa River. The fire was just inside the wilderness boundary and burned primarily in lodgepole pine, Engelmann spruce, and subalpine fir forest types.



The watershed and burned area are located in an undeveloped portion of the forest. No logging or road construction has occurred in this area. The fire burned primarily in alpine icecap uplands and basins. The streams support westslope cutthroat trout, steelhead, and brook trout The watershed inherent sensitivity is considered high, watershed disturbance has been low, and the riparian areas are essentially intact. Water quality supports beneficial uses; but the overall watershed condition (the status of its functions and processes based on its inherent sensitivity and disturbance history) is considered to be properly functioning.

The burn intensities for the Hidden Fire :

Low: 1272 acres (73.8%) Moderate: 293 acres (17.0%) High: 159 acres (9.2%)

Within each of the three different areas, vegetation recovery is expected as follows:

Low intensity Burn Areas: In areas where the burn intensity was non-existent to low, recovery would be expected to occur within one growing season. Vegetative Recovery is considered to be any vegetation which providing more than 80% cover which effectively intercepts rainfall and provides an extensive root mass as defined on page II-26 of the Clearwater National Forest Plan. These low intensity burn areas are expected to maintain adequate live tree stocking levels in most cases.

Perennial grasses, forbs, and shrubs generally will resprout after low intensity burns and a duff/litter layer will reform within several years. Vegetative recovery will vary from 0 to 5 years.

Moderate Intensity Burn Areas: In areas where the burn intensity was moderate an average of 50% of the trees are expected to die as a direct result of the fire. Continuing mortality should be expected for up to ten years due to root scarring, insect attack, and increased susceptibility to the pathogenic effects of native root diseases. Vegetative recovery will vary from 3-15 years. Some of the larger areas that burned at moderate intensity are a greater distance from surviving seed sources. This will slow the recovery time. Existing seed of shrubs and forbs, stored deeper in the soil, should provide some vegetation regeneration in these areas

High Intensity Burn Areas: In areas where the burn intensity was high, nearly all of the trees were killed or are expected to die as a direct result of the fire. Vegetative recovery will vary from 3-20 years. The largest areas that burned at high intensity are surrounded by medium intensity burn areas and thus are at a greater distance from seed sources. This will slow the vegetative recovery time. The heat produced in the high intensity burning in these areas has destroyed much of the existing seed stored in the soil.

The Team anticipates no emergency watershed emergency from the Hidden Fire. The pre-burn watershed conditions were good, and fire induced tree mortality and burn intensities were generally low. We expect small amounts of the burn-ash and surface soil to erode and be transported short distances downslope. However, most of this eroded material along with the surface runoff will be contained by and infiltrated into unburned areas on the slopes and in the green buffer strips along the stream channel riparian areas. The stream system has sufficient energy to easily manage the burn-ash and sediment that might enter Hidden Creek as a result of the fire. No exaggerated stream channel adjustments, or sustained reduction in water quality are anticipated; and there is little likelihood that fish or aquatic organisms will be adversely affected.

Normal fall rain (some of which are occurring on the date of this report) and the winter snowpack will reduce most of the hydrophobic soil conditions in the surface mineral soil. Surface erosion and soil productivity losses are not a likely result of this burn.

JIM MITAL
Forest Soil Scientist

USDA-FOREST SERVICE FS-2500-8 (7/00)

Date of Report: 10/13/2000

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

[ ] 1. Funding request for estimated WFSU-SULT funds
[ ] 2. Accomplishment Report
[X] 3. No Treatment Recommendation

B. Type of Action

[X] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)

[ ] 2. Interim Report
[ ] Updating the initial funding request based on more accurate site data or design analysis
[ ] Status of accomplishments to date

[ ] 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Hidden Fire

B. Fire Number: P10097

C. State: Idaho

D. County: Idaho

E. Region: One

F. Forest: Clearwater National Forest)

G. District: Powell Zone, North Fork Ranger District

H. Date Fire Started: July 30, 2000

I. Date Fire Contained: September 30, 2000

J. Suppression Cost: $140,000

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles):
2. Fireline seeded (miles):
3. Other (identify):

L. Watershed Number: 1706030342502000

M. Total Acres Burned:
NFS Acres(1724) Other Federal ( ) State ( ) Private ( )

N. Vegetation Types: Subalpine fir, lodgepole pine, Engelmann spruce,

O. Dominant Soils: Typic Cryocryepts, loamy-skeletal, mixed,.

P. Geologic Types: Idaho Batholith Granitics.

Q. Miles of Stream Channels by Order or Class: 2.92 Class 2

R. Transportation System

Trails: 3.55 miles Roads: miles

PART III - WATERSHED CONDITION

A. Burn Severity (acres): (See attached map)

Low: 1272 (73.8%) Moderate: 293 (17.0%) High: 159 (9.2%)

B. Water-Repellent Soil (acres): 257 (14.9%)

C. Soil Erosion Hazard Rating (acres):

Low: Moderate: High: Very High:

D. Erosion Potential: tons/acre

E. Sediment Potential: cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years):

B. Design Chance of Success, (percent):

C. Equivalent Design Recurrence Interval, (years):

D. Design Storm Duration, (hours):

E. Design Storm Magnitude, (inches):

F. Design Flow, (cubic feet / second/ square mile):

G. Estimated Reduction in Infiltration, (percent):

H. Adjusted Design Flow, (cfs per square mile):

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:
NONE

B. Emergency Treatment Objectives:

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Land __ % Channel __ % Roads __ % Other __ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads			
Other			

E. Cost of No-Action (Including Loss): **$0**

F. Cost of Selected Alternative (Including Loss): **$0**

G. Skills Represented on Burned-Area Survey Team:

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

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H. **Treatment Narrative:**
(Describe the emergency treatments, where and how they will be applied, and what they are intended to do. This information helps to determine qualifying treatments for the appropriate funding authorities. For seeding treatments, include species, application rates and species selection rationale.)

Land Treatments:

Channel Treatments:

Roads and Trail Treatments:

Structures:

I. **Monitoring Narrative:**
(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

			NFS Lands				Other Lands			All
		Unit	# of	WFSU	Other	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT $	$	units	$	Units	$	$
A. Land Treatments										
				$0			$0		$0	$0
				$0			$0			
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Land Treatments				$0			$0		$0	$0
B. Channel Treatments										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Channel Treat.				$0			$0		$0	$0
C. Road and Trails										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Road & Trails				$0			$0		$0	$0
D. Structures										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
Subtotal Structures				$0			$0		$0	$0
E. BAER Evaluation										
				$0			$0		$0	$0
				$0			$0		$0	$0
				$0			$0		$0	$0
G. Totals				**$0**			**$0**		**$0**	**$0**

PART VII - APPROVALS

1. _____ _____
Forest Supervisor (signature) Date

2. _____ _____
Regional Forester (signature) Date