

Sandy Peak Fire
Final Report

The Sandy Peak fire started July 15, 1989 from a lightning strike and burned approximately 850 acres. The burn area is located on a steep mountain slope on the Cedar City Ranger District of the Dixie National Forest.

The Dixie National Forest requested \$7590 in emergency watershed rehabilitation funds for treating critical watershed areas of NFS lands with a grass-forb seed mixture.

The objective for treating the critical watershed area was to maintain site productivity by preventing soil loss and to prevent damage to riparian areas and water quality in Bear Creek, both on NFS lands and adjacent private lands in Bear Valley.

The Utah DWR was particularly interested in the burn area because of the important deer and elk habitat and donated 4250 pounds of seed for use on the area.

Funds were used to purchase and apply seed to the damaged watershed. The seed mixture cost \$4968 and consisted of:

Intermediate wheatgrass	- 2400 lbs.
Lincoln smooth brome	- 2400 lbs.
Piute orchardgrass	- 1800 lbs.
Yellow sweetclover	- 600 lbs.

The seed mixture provided by the Utah DWR was valued at \$2500 and consisted of:

Fairway crested wheatgrass	- 500 lbs.
Hycrest crested wheatgrass	- 500 lbs.
Pubescent wheatgrass	- 250 lbs.
Piute orchardgrass	- 500 lbs.
Hard fescue	- 500 lbs.
Yellow sweetclover	- 500 lbs.
Ladak alfalfa	- 500 lbs.
Rizo alfalfa	- 500 lbs.
Smooth brome	- 500 lbs.

Approximately 850 acres were seeded using a helicopter assigned to the fire. The seeded area received some rainfall immediately following seed application. Rainfall amounts and intensities were variable, however it did not appear that intensities were detrimental in washing seed off the soil surface or causing excessive erosion.

To date, our records show a total of \$5485.04 have been expended in watershed rehabilitation work on the Sandy Peak fire.

BURNED AREA REPORT
(Reference FSH 2509.13, Report FS-2500-A)

PART I - TYPE OF REQUEST

1. Type of Report

- ☐ A. Funding (Request for estimated FFF funds)
☒ B. Accomplishment Report

2. Type of Action

- ☐ A. Initial (estimated funding is first requested)
☐ B. Interim

☐ Updating the initial funding request.
☐ Supplying information for accomplishments to date
on emergency work underway.
☒ C. Final

- ☐ Best estimate for funds needed to complete eligible
rehabilitation measure.
☒ Following completion of funded work.

PART II - FIRE LOCATION

1. Fire Name (from Form FS-5100-29): Sandy Peak
2. Forest Supervisor's Fire No. (from Form FS-5100-29): P43508
3. State: Utah
4. County: Iron
5. Region: 04
6. Forest: Dixie
7. Ranger District: Cedar City
8. Date Fire Started: 7-15-89
9. Date Fire Controlled: estimated 7-25-89
10. Estimated Suppression Costs: \$ 350,000
11. Fire Suppression Damages Repaired with FFF 102 Funds:

5 miles (firelines waterbarred)
3 acres (firelines seeded)
Other (identify)

12. Fire Intensity: 0 % (low) 25 % (medium) 75 % (high)

PART III - NATIONAL FOREST SYSTEM PROBLEM INVENTORY

1. Watershed No.: 033
2. NFS Acres Burned: 850
3. Water Repellant Soil: 60 % of NFS acres burned

4. Vegetation Types: Conifer-40%; Mtn. Mahog.-40%; Sage-10%; PJ-10%
5. Geologic Types: Volcanic
6. Soil Erosion Hazard Rating:

 0 % (low) 30 % (medium) 70 % (high)

7. Erosion Potential: 5145 cu. yds/sq. miles
8. Miles of Stream Channels by Regional Order or Classes: 0
9. Miles of Forest Service Trails: 0
10. Miles of Forest Service Roads by Maintenance Levels:

 0 miles (Level I) 0 miles (Level II)
 0 miles (Levels III, IV, V)

PART IV - CALCULATED RISK AND CLIMATIC EVALUATION

1. Estimated Vegetative Recovery Period: 2 years.
2. Chance of Success Desired by Management: 95 percent.
3. Equivalent Design Recurrence Period: 2 years.
4. Related Design Storm Duration: 2 hours.
5. Related Design Storm Magnitude: 0.6 inches.
6. Related Design Flow N/A cfs.
7. Estimated Reduction in Infiltration: 60 percent.
8. Adjusted Related Design Flow: N/A cfs.

PART V - SUMMARY OF SURVEY AND ANALYSIS

1. Skills Represented on Burned Area Survey Team ("x" appropriate boxes):

☒ Hydrology ☒ Soils ☐ Geology ☒ Range
☒ Timber ☒ Wildlife ☐ Fire Mgmt. ☐ Engineering
☒ Contracting ☒ Local Mgmt. ☐ Research ☐ Other (identify)

2. Describe Emergency: Very steep severely burned watershed. Need to reestablish protective vegetative cover to maintain site productivity and minimize sediment damage to adjacent Bear Valley riparian values.

3. Emergency Rehabilitation Objective: Prevent loss of on-site soil productivity, prevent damage to riparian areas and water quality in Bear Creek on FS and private lands downslope from fire.

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

Land 95 % Channel % Roads % Other %

5. Net Environmental Quality Benefit Index:

☒ Significant ☐ Not Significant

6. Net Social Well Being Benefit Index:

☒ Significant ☐ Not Significant

7. Benefit/Cost Ratio: 11.7/1

8. Net Benefits: \$ 118,840 _____

9. Cost Effectiveness Index: ☒ I. ☐ II. ☐ III. ☐ IV.

PART VI - ELIGIBLE EMERGENCY REHABILITATION MEASURES OR TREATMENTS
AND SOURCE OF FUNDS

NOTE: Emergency rehabilitation is work done promptly following a wildfire and is not to solve watershed problems that existed prior to the wildfire.

Line Items	NFS Lands					Other Lands			All Lands
	Units	Unit	No. of	FFF 092	Other \$	No. of	Federal \$	Non-Federal	Total
		Cost	Units	\$		Units		\$	\$
					DWR ident.		ident.	identify	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
A. LAND									
a. Seeding	Acres	9.14	600	5485.04					5485.04
b.	Acres	10.00	250		2500				2500.00
c.									
d.									
e.									
B. CHANNELS									
a. Opening water courses	Miles								
b. Stabilizing streambanks	Miles								
c.									
d.									
e.									
C. ROADS AND TRAILS									
a.									
b.									
c.									
D. MAJOR STRUCTURES									
a. Preplanned - from Forest Plans									
E. TOTAL				\$5485.04	\$2500		\$	\$	\$7985.04

PART VII - APPROVALS

/S/ _____
Forest Supervisor (Signature) Date

/S/ _____
Regional Forester (Signature) Date