Uinta Flat Fire
Final Report

The Uinta Flat fire started July 15, 1989 from a lightning strike on the Cedar City Ranger District of the Dixie National Forest. It burned 7856 acres (4949 acres National Forest, 2916 acres private land).

The Dixie National Forest requested and received $42,504 Emergency Watershed Rehabilitation funds for treating critical watershed areas of NFS lands with a grass-forb mixture. The objective was to stabilize the critical watershed areas with steep slopes and erosive soils to protect site productivity and to reduce sedimentation and damage to fisheries habitat in Asay and Mammoth Creeks. An additional objective was to protect adjacent private lands and structures from potential flood damage.

Concurrently with the NFS requests for funding, the private land owners through the local Soil Conservation District applied for and received $55,000 of Emergency Watershed Protection funds to apply watershed rehabilitation measures on burned over private lands.

The funds from both sources were used primarily to purchase and apply seed to the most critical watershed areas. The seed mixture applied to NFS lands cost $28,224 and consisted of:

Hycrest Crested Wheatgrass	8,400 lbs.
Intermediate Wheatgrass	11,200 lbs.
Piute Orchardgrass	11,200 lbs.
Yellow Sweetclover	1,400 lbs.
White Dutch Clover	1,400 lbs.
	33,600

33600 / 2900 = 12 #/acre

The seed mixture applied to private lands cost $39,168 and consisted of:

Hycrest Crested Wheatgrass	6,400 lbs.
Intermediate Wheatgrass	9,600 lbs.
Piute Orchardgrass	6,400 lbs.
Lincoln Smooth Brome	6,400 lbs.
Ladak Alfalfa	3,200 lbs.
Sainfoin	3,200 lbs.
Small Burnett	3,200 lbs.

Approximately 2916 acres of private land and 2900 acres of NFS lands were seeded using a helicopter assigned to the fire. The seeded area received some rainfall during and immediately following the seeding effort. 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. Some ash was observed in Mammoth and Asay Creeks, however the water cleared up following the storms.

On the private lands, in addition to seeding, the private land owners constructed rock check dams in ephemeral drainages adjacent to Mammoth Creek. They also felled trees on the contour and keyed them into the slope as a means to catch sediment and hold it on site. These measures were done by the private land owners as payment of their 20 percent cost share for EWP funds.

Seeding of critical watershed areas on NFS and private lands was done to revegetate the watershed areas adjacent to Asay and Mammoth Creeks in an attempt to minimize the amount of sediment that will enter these streams. The severely burned over watershed had the potential of flooding and sedimentation of the water and irrigation supply of the town of Hatch and downstream users. Seeding and revegetation of the watershed should minimize the potential adverse impact. In addition, reducing the amount of sediment to Asay and Mammoth Creeks will help minimize the adverse impact to the fisheries habitat.

To date, our records show a total of $28,590.04 have been expended on the NFS portion of the Uinta Flat fire and $39,324.29 have been charged to the EWP funds for rehabilitation of the private lands burned.

Emergency work has now been completed and EWP is terminated. The amount of unused EWP funds is $15,675.71.

USDA-FOREST SERVICE Date of Report: 7-20-89

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 FFR funds)
[X] 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.

[X] C. Final

[ ] Best estimate for funds needed to complete eligible rehabilitation measure.
[X] Following completion of funded work.

PART II - FIRE LOCATION

1. Fire Name (from Form FS-5100-29):Uinta Flat Fire
2. Forest Supervisor's Fire No. (from Form FS-5100-29):P43509
3. State:Utah
4. County:Garfield
5. Region:04
6. Forest:Dixie
7. Ranger District:Cedar City
8. Date Fire Started:7-15-89
9. Date Fire Controlled: 7-23-89
10. Estimated Suppression Costs: $2,800,000 (Final costs not yet available)
11. Fire Suppression Damages Repaired with FFF 102 Funds:

__40____ miles (firelines waterbarred)
__50____ acres (firelines seeded)
_____ Other (identify)

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

PART III - NATIONAL FOREST SYSTEM PROBLEM INVENTORY

1. Watershed No.:028, 030
2. NFS Acres Burned:5000
3. Water Repellant Soil: 60% of NFS acres burned

4. Vegetation Types:Conifer-70%, Mtn Brush-Sagebrush-10%, Pinyon-Juniper20%
5. Geologic Types:Basalt, Sedimentary
6. Soil Erosion Hazard Rating:

30% (low) 40% (medium) 30% (high)

7. Erosion Potential: 3430 cu. yds/sq. miles
8. Miles of Stream Channels by Regional Order or Classes: Class II: .5 miles(.5 direcrly impacted); Class III: 21.4 miles(2 miles directly impacted)
9. Miles of Forest Service Trails:0
10. Miles of Forest Service Roads by Maintenance Levels:

0 miles (Level I) 10 miles (Level II)
1 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: 1 hours.
5. Related Design Storm Magnitude: 0.6 inches.
6. Related Design Flow 3.8 cfsm.
7. Estimated Reduction in Infiltration: 60 percent.
8. Adjusted Related Design Flow: 5.3 cfsm.

PART V - SUMMARY OF SURVEY AND ANALYSIS

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

[x] Hydrology [x] Soils [ ] Geology [x] Range
[x] Timber [x] Wildlife [ ] Fire Mgmt. [ ] Engineering
[x] Contracting [ ] Local Mgmt. [ ] Research [x] Fisheries

2. Describe Emergency:Severely burned watershed with highly erosive soils on steep slopes adjacent to class II & III trout streams, private lands and summer homes
3. Emergency Rehabilitation Objective:Prevent loss of on-site soil productivity, prevent damage to Class II & III trout streams & fisheries habitat, prevent damage to private property adjacent to fire.
4. Probability of Completing Treatment Prior to First Major Damage Producing Storm:
Land 95 % Channel N/A % Roads N/A % Other N/A %

5. Net Environmental Quality Benefit Index:

[x] Significant [ ] Not Significant

6. Net Social Well Being Benefit Index:

[x] Significant [ ] Not Significant

7. Benefit/Cost Ratio: 3.36/1

8. Net Benefits: $ _203,874_____
9. Cost Effectiveness Index: [x] 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.

			NFS Lands			Other Lands			All Lands
Line Items	Units	Unit Cost	No. of Units	FFF 092 $	Other $ ident.	No. of Units	Federal$ EWP ident.	Non-Federal $ identify	Total $
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
A. LAND									
a. Seeding	Acres	9.86	2900	28590.04					28,590.04
b.		13.49				2916	39324.29		39,324.29
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				$28,590.04			39324.29		$67,914.33

PART VII - APPROVALS

/S/ _____ _____

Forest Supervisor (Signature) Date

/S/ _____ _____

Regional Forester (Signature) Date