

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): Grouse Creek
2. Forest Supervisor's Fire No. (from Form FS-5100-29): P41704
3. State: Idaho
4. County: Elmore
5. Region: 4
6. Forest: 02 - Boise NF
7. Ranger District: 02 - Boise RD
8. Date Fire Started: 6-11-92
9. Date Fire Controlled: 6-13-92
10. Estimated Suppression Costs: \$ 100,000
11. Fire Suppression Damages Repaired with FFF 102 Funds:

0.0 acres (firelines seeded)

_____ Other (identify)

12. Fire Intensity: 15 % (low) 40 % (medium) 45 % (high)

PART III - NATIONAL FOREST SYSTEM PROBLEM INVENTORY

1. Watershed No.: 1705011237 (Arrowrock)
2. NFS Acres Burned: 3,455
3. Water Repellant Soil: 50 % of NFS acres burned
4. Vegetation Types: Shrub/Grass- 90% Riparian- 10%
5. Geologic Types: Granitics
6. Soil Erosion Hazard Rating:

1 % (low)15 % (medium)84 % (high)
7. Erosion Potential: 208 cu. yds/sq. mile
8. Miles of Stream Channels by Regional Order or Classes:

2.1 miles Order 3

2.6 miles Order 2

11.2 miles Order 1
9. Miles of Forest Service Trails: 0.0
10. Miles of Forest Service Roads by Maintenance Levels:

___ 2.2 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: 4 years.
2. Chance of Success Desired by Management: 60 percent.
3. Equivalent Design Recurrence Period: 10 years.
4. Related Design Storm Duration: 6 hours.
5. Related Design Storm Magnitude: 1.3 inches.
6. Related Design Flow 12.9 cfs.
7. Estimated Reduction in Infiltration: 50 percent.
8. Adjusted Related Design Flow: 15.1 cfs.

PART V - SUMMARY OF SURVEY AND ANALYSIS

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

<input checked="" type="checkbox"/> Hydrology	<input checked="" type="checkbox"/> Soils	<input type="checkbox"/> Geology	<input checked="" type="checkbox"/> Range
<input type="checkbox"/> Timber	<input checked="" type="checkbox"/> Wildlife	<input type="checkbox"/> Fire Mgmt.	<input type="checkbox"/> Engineering
<input type="checkbox"/> Contracting	<input checked="" type="checkbox"/> Local Mgmt.	<input type="checkbox"/> Research	<input checked="" type="checkbox"/> Fisheries

2. Describe Emergency: Wildfire destroyed protective watershed vegetation which has increased the potential for accelerated erosion and sedimentation to Arrowrock Reservoir which is directly below the fire area. This reservoir is managed by the BOR and used for the purpose of irrigation, flood control, recreation and is in the process of installing a hydropower facility. This area is important big game winter range for deer and elk. The fire burned within the Grouse Creek cattle allotment (270 head) eliminating one of the pastures.

3. Emergency Rehabilitation Objective:
1. Reduce the fire induced sediment yield to Arrowrock Reservoir.
 2. Revegetate slopes and restore longterm soil productivity.
 3. Protect fisheries in Grouse Creek and Arrowrock Reservoir.

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

Land 80 % Channel ____ 50 % Roads 100 % Other ____ %

5. Net Environmental Quality Benefit Index:

☒ Significant ☐ Not Significant

6. Net Social Well Being Benefit Index:

☐ Significant ☒ Not Significant

7. Benefit/Cost Ratio: 1.9:1

8. Net Benefits: \$ 47,432

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	Units	Unit Cost	NFS Lands			Other Lands			All Lands	
			No. of Units	FFY 092 \$	Other \$	No. of Units	Federal \$	Non-Federal \$	Total \$	
(1)	(2)	(3)	(4)	(5)	ident. (6)	(7)	ident. (8)	identify (9)		
A. LAND										
a. Heli Seeding	Acres	5	1200	6,000					6,000	
b. Contour discing	Acres	25	500	12,500					12,500	
c. Seed Mix	Acres	18	1700	30,600					30,600	
d.										
e.										
B. CHANNELS										
a. Opening water courses	Miles									
b. Stabilizing streambanks	Miles									
C. ROADS AND TRAILS										
a.										
b.										
c.										
D. MAJOR STRUCTURES										
a. Preplanned - from Forest Plans										
E. EBAR Team	Total			3000					3000	
E. TOTAL				\$52,100	\$		\$	\$	\$52,100	

/s/ Stephen P. Mealey/Jack Gollaher Acting for
Forest Supervisor (Signature)

6/17/92
Date

/s/
Regional Forester (Signature)

Date

NARRATIVE: Grouse Creek Fire

The Grouse Creek Fire burned 4,300 acres of which 3,455 acres are National Forest lands. The fire was located directly above Arrowrock Reservoir which is an important irrigation and recreation storage facility. Due to the extremely droughty condition and strong winds the fire burned at high intensity. The landtypes within the fire are highly erosive and there are many old gully systems that were previously well vegetated which are now totally void of any protective vegetation. The area is also very valuable range and wildlife winter range.

Proposed treatments include aerial seeding of 1200 acres. There are 500 acres planned for contour discing (2-4 inches) to break up the hydrophobic soil layer. This will reduce the potential for flash floods as the result of high intensity thunderstorms. The proposed seed mix consists of:

Blue Bunch Wheatgrass	4.0 lbs/acre
Orchardgrass	3.0 lbs/acre
Smooth brome	2.0 lbs/acre
Yellow clover	1.0 lbs/acre
TOTAL	10.0 lbs/acre

**EXAMINING IMPACTS OF MANAGEMENT ALTERNATIVES FOR AN
EMERGENCY PROGRAM
(Reference FSH 2509.13)**

Fire Name		Date of Report									
Grouse Creek		June 16, 1992									
A. ENVIRONMENTAL QUALITY BENEFIT INDEX											
Environmental Factor (a)	Weight Factor (b)	Without Treatment		With Treatment		Difference					
		Actual (c)	Weighted (d)	Actual (e)	Weighted (f)	Actual (g)	Weighted (h)				
1. Erosion and sediment *	10	2	20	1	10	1	10				
2. Aesthetic land quality *											
3. Water quality *	4	2	8	1	4	1	4				
4. Site productivity *	10	2	20	1	10	1	10				
5. Wildlife habitat *	7	2	14	1	7	1	7				
6. Fish habitat *	4	2	8	1	4	1	4				
7. Other *Range	6	2	12	1	6	1	6				
8. TOTAL *	41	///	82	///	41	///	41				
9. Average weighted index *	///	///	2.0	///	1.0	///	1.0				
10. Net environmental quality benefit index*	///	///	///	///	///	///	1.0				
B. SOCIAL WELL-BEING BENEFIT INDEX											
Social Criteria (a)	Weight Factor (b)	Without Treatment		With Treatment		Difference					
		Actual (c)	Weighted (d)	Actual (e)	Weighted (f)	Actual (g)	Weighted (h)				
1. Life, health, safety											
2. Employment *											
3. Recreational opportunity *											
4. Economic stability *											
5. Income distribution *											

[illegible]

D. EXPECTED DAMAGE REDUCTION BENEFIT SUMMARY

Note: At current Water Resources Council interest rate * N/A percent
 Not used because all impacts were assumed to occur during first year

Economic Benefit Indices	Units of Measure	Damage Expected				Expected \$ Damage Reduction
		Without Treatment	Present Value (\$)	No. of Units	With Treatment	
(a)	(b)	(c)	(d)	(e)	(f)	(g)
I. Watershed Impacts Sediments						
1. Downstream water storage *	AF	100	5000	40	2000	3000
2. Sediment removal *	Cu. Yds.	1741	34825	696	13928	20897
3. Fish habitat and Riparian Resource	miles	2.1	4200	0.8	1600	2600
4. Water quality *						
II. Flood Water						
1. Land *						
2. Water Improvements *						
3. Subtotal, Watershed *			44025		17528	26,497
III. Resource Related Impacts						
1. Range *	AUM	1890 @7yr	13230	1080 @4yr	7560	5670
2. Wildlife *	Hunter Day per Yr.	581 @7yr	17185	333 @4yr	9820	7365
3. Soil Productivity	acres	2000	100,000	800	40,000	60,000
4. Subtotal, Resource Related *			130,415		57,380	73,035
IV. Other Impacts						
1.						

2. Subtotal, Other *					0			0
V. TOTAL DOLLARS *					174,440		74,908	99,532
E. REMARKS								

Water storage: Valued at \$50/AF; assumed to enter Arrowrock Reservoir

Sediment removal: Valued at \$20/Cu. yd.; assumed to enter Arrowrock Reservoir

Range AUM's valued at \$7/AUM

Wildlife valued at ELK Hunter Day= \$45; Deer Hunter Day=\$25; Upland Game Hunter Day=\$6

Sediment yield calculated from BOISED was increased by 25% due to BOISED using average runoff events and not from high intensity thunderstorms.

Soil Productivity was valued by looking at all the acres of high and half of the acres of moderate intensity fire (2000 acres) would lose enough soil to reduce the soil productivity. With BAR treatment 40% or 800 acres would need to be treated at a later time if a damaging storm occurred. The cost of restoration for the 800 acres would be \$50/acre.

Fish and Riparian habitat was valued at \$2000/mile.

GROUSE CREEK FIRE EMERGENCY BURN REHABILITATION PROJECT

Contour Ripping Hydrophobic Soils

Description of work: Approximately 600 acres will be contoured ripped to a depth of 6 to 10 inches to reduce the hydrophobic soil layer as well as improving the water storage, increase infiltration, and prepare a seedbed for subsequent helicopter seeding. Work will be performed on slopes from 0% up to 40%. There is little remaining vegetation except for scattered brush and there is mainly a sandy soil surface with little rock present. Contour ripping will be spaced evenly the same distance as between the rippers.

Location: The 600 acres are scattered throughout the Grouse Creek Fire area, (see attached map). There will be up to 6 miles of walking the cat to some of the work sites. The 500 acres is comprised of several areas in size from 40 acres to 2 acres most of which are within 1/2 mile of each other. The majority of the area is on the upper east and west ridges of the fire and adjacent to Grouse Creek in the bottom. The crawler tractors will be unloaded from the lowboys at Three Point Mountain Summit and then walked to the various sites. Support vehicles, (pickup trucks), may drive out the jeep roads to the ridgelines on the east and west side of the fire and up the bottom of Grouse Creek via Arrowrock Dam to the mouth of Little Grouse Creek.

Equipment Specifications: Crawler Tractor, with five hydraulic rippers. Six way dozer with minimum of 85 horsepower. Appropriate safety equipment such as roll cab, approved spark arrester, fire extinguisher are required. Anticipate the need for two crawler tractors to complete the work in the prescribed contract duration. Contractor to provide for all transport of equipment, operators, diesel and any other support needs to and from the project area. Contractor has 48 hours to replace or repair any equipment that is not functioning.

Method of Measurement - completed work will be mapped on aerial photos and topographic maps 1:24,000 scale with acreage calculations determined from maps, to the nearest acre.

Special Areas: There will be some special archeological sites that will be flagged and must be avoided from any disturbance for their protection.

Bids to be based on a per acre basis which will include all cost of equipment, operators, support vehicles, transport of equipment and supplies.

LIST OF INTERESTED PROSPECTIVE BIDDERS

Tom Owens
Owens Reclamation
PO Box Z
Twin Falls, ID 83303
208-734-9784

Moe Inama
PO Box 1095
Cascade, ID 83611
208-462-2128 Garden Valley, ID PO Box 751, Garden Valley, 83622
208-864-2128 Atlanta, ID

Jack Roberson
Roberson Construction
PO Box 1153
Homedale, ID 83628
208-337-3461

Steve Dobson
PO Box 366
Horseshoe Bend, 83629
208-793-2694

Grouse Creek Fire BAER Seed Specifications

Approximately 2,000 acres will be seeded by helicopter on the Grouse Creek Fire. The following is the seed mixture which will be applied at a rate of 10.25 lbs per acre within the fire area. Where possible we want all seed certified as well as tested for purity and germination at a State of Idaho, Oregon or Washington approved seed facility. The seed will then be mixed and put into 50 lbs bags and delivered and unloaded at the Lucky Peak Tree Nursery tree cooler. Payment for seed will be on the basis of Pure Live Seed (PLS).

Species	Common Name	lbs & lbs/ac	Purity %	Germination %
Ag sp	Bluebunch Wheatgrass (secar)	8,000 4lbs/ac		
Ag sm	Western Weatgrass	6,000 3lbs/ac		
Si hy	Squirrel Tail	4,000 2lbs/ac		
Da gl	Orchard Grass (paiute)	2,000 1lbs/ac		
	Western Yarrow	500 1/4lbs/ac		
		20,500 lbs		