USDA-FOREST SERVICE Date of Report: April 25, 1990

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

Forest # 208 373-4100

Total Acres NFS

PART I - TYPE OF REQUEST

1. Type of Report

[ ] A. Funding (Request for estimated FFF 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): Lowman Complex
2. Forest Supervisor's Fire No. (from Form FS-5100-29): 127, 132, 133, 135
3. State: Idaho
4. County: Boise
5. Region: R-4
6. Forest: Boise
7. Ranger District: Lowman
8. Date Fire Started:
9. Date Fire Controlled:
10. Estimated Suppression Costs: $_____
11. Fire Suppression Damages Repaired with FFF 102 Funds:

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

12. Fire Intensity: _____ % (low) _____ % (medium) _____ % (high)

~~Initial~~ used 8/1/89 so costs would be shown on 2500-8 Totals by year

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$ ident.	Non-Federal $ identify	Total $
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
A. LAND									
a. Seeding	Acres		29,810	210,000					
b. Slope Stabilization	Ac		14,180	2,880,000					
c.				3,090,000					
B. CHANNELS									
a. Sediment check dams w/in stream	Miles		100	20,000					
b. Stabilizing streambanks	Feet		15,000	30,000					
c. Log removal	trees		30+	3,000					
d.				53,000					
C. ROADS AND TRAILS									
a. Culvert replaced	Feet		970						
b. Enlarge catchbasin	Ea		90+						
c. Downspout replaced	Feet		764						
d. Trash rack	Ea		20						
e. Berm removal	Miles		15						
TOTAL ROAD WORK COST				42,500					
D. MAJOR STRUCTURES									
ID Team/ Admin cost				30,000					
E. TOTAL				$3,215,500			$	$	$

PART VII - APPROVALS

/S/ _____ _____

Forest Supervisor (Signature) Date

/S/ _____ _____

Regional Forester (Signature) Date

LOWMAN EMERGENCY FIRE REHAB

Supplement to FS-2500-8

The following is a brief description of the rehab work performed. Since seeing is worth a thousand words, we've included photos that are representative of our work items. We have attempted to keep track of cost for the individual items to give the reader an idea of what the items would cost on future rehab plans. The actual costs shown below should be within 5% of the real costs.

Grass seeding

Target: 30,000 acres; Estimated cost: $300,000
Accomplished: 29,810 acres Actual cost: $210,000 (approximate)

We used two seed mixes. On 25,823 acres we applied 6.2 pounds per acre of orchard grass, timothy grass, Greenar interm. wheatgrass, Tegmar inter. wheatgrass, Lincoln smooth brome and Manchar smooth brome. On 3,994 acres we applied eight pounds per acre of 100% annual rye grass. This rye grass was applied on sites that are to be planted with trees in the near future and was used so as not to hamper the reforestation program. The other 26,000 acres will not either not be reforested (non-commercial and marginal timberlands) or will not be reforested in the next two years, so we went with the perennial grass mix to help stabilize the slopes. We felt at the application rate of 6 pounds per acre, the grass population would not inhibit tree re-establishment when the time came to plant.

We did experience one contract problem with the seed mix. The seed mix did not fall within contract specifications for minimum weeds, seed mixtures and germination. As a result of failing to deliver the specified seed mixture, the seed company was paid a reduced price ($.62/lb reduced to $.54/lb). We had 20,000 pounds of seed remaining, which we returned to the seed company for replacement of seed that meets our specifications. By the time we received the replacement seed, it was too late to apply. This seed is currently setting in our warehouse, waiting to be applied next fall. The Forest will use appropriated funds to accomplish this.

Slope Stabilization

Target: 15,000 acres Estimated cost: $3,000,000
Accomplished: 14,180 acres Actual cost: $2,880,000 (approximate)

This was a monumental task that took 90% of our time. Contract services did almost 12,000 acres and Category I crews picked up the other 2,200 acres. As a general rule, contracting proved to be a considerably cheaper workforce. (Contracting: approx $170/acre; Forest Service crew: approx $290/acre) With Forest Service crews, we incurred logistic cost such as camp facilities, transportation, laundry and travel expenses. These add up to a 25-30% increase in production costs. In fairness to our Forest Service crews, they were given the more remote sites that necessitated helicopter flights. Also, they were accomplishing other work such as check dams in draws and scattering of straw on slopes that had no trees to work with.

At the start of the rehab effort, contract bids for slope stabilization were ranging from $180/acre to $400/acre. We felt most bids were out of line so only awarded bids that averaged under $200/acre. In the weeks that followed, we reoffered some areas plus added new areas. Each time the bid prices were less and by the last bid list in mid-November, the bids were averaging $100/acre. We realized the contractors were unfamiliar with this type work, and they were hedging their bids. We had to get some of them out on the slopes so they could experience the job. As they gained experience, subsequent bids were more competitive. We would hope that on future rehab efforts, the Forest Service would not have to re-educate the contractors. We suggest to other forests that plan slope stabilization projects to contact the Boise NF contracting shop for a list of experienced contractors. This call could save them thousands of dollars.

Our first contracts specified slope stabilization structures on slopes up to 70%. About half way through the project, we decided we were missing too much of the area, as much of the ground was just over 70%. Later contracts specified working slopes up to 80%. People could still safely work these steep areas. On slopes over 80%, we found the soils were shallow and in most places almost unworkable. Surprisingly, when we increased the slope specification on the contracts, bid prices did not raise, even though they probably had to work 25% more ground on their contract areas.

Check Dams In Channels

Target: 100 miles of streams Estimated cost: $20,000
Accomplished: 100+ miles Actual Cost: $20,000 (approximate)

Most of this work was done by the Forest Service crews in conjunction with slope stabilization work. We did incur some added expenses when we hand placed straw bales as check dams in some critical watersheds, because we did not have enough trees to use. Most of these watersheds were above domestic use intakes where we felt we needed the extra effort to protect improvements. We also used the straw bale work on those few days when the steep slopes were too wet and slippery to work on.

Bank Protection

Target: 21,200 feet Estimated cost: $31,680
Accomplished: 15,000 feet Actual cost: $30,000 (approximate)

The rehab plan indicated we had 12 domestic watersheds that needed protection. Upon examination of these streams, we found four did not lose the riparian vegetation and did not need protection efforts.

We used straw bales paralleling both sides of the streams for 200 yards up from the domestic use water intakes with the intent of keeping the sediment and ash from directly affecting the water sources.

The estimated cost of $1.50/foot proved to be low due to the logistics of transporting straw to the Lowman area as well as getting the bales into these steep V bottom draws. In some draws the only realistic method was to helicopter sling bales.

We had ordered enough straw bales for the planned 21,000 feet, but did not use them all for bank protection. We used the excess straw for check dams and for slope stabilization on slopes with no trees.

One comment on certifying straw bales to be weed free; Idaho does not require this certification and we did not pursue it last fall. Whereas we don't expect major noxious weed problems, because we know what area the straw came from, we do advise in the future we check into the certification before ordering straw. We will be monitoring the areas where straw was placed for noxious weeds.

Log Removal

Target: 10 trees Estimated cost: $3,000
Accomplished: 30+ Actual cost: $3,000 (approximate)

This task was to remove trees that had fallen into the South Fork, Payette River. The concern was when high water washed them downstream creating log dams, they would cause uncontrolled water releases when they broke. The original estimate of ten trees increased as more trees fell into the river, so we decided to remove these trees too. Logs that appeared to be beneficial in protecting the banks were left.

We contracted with a logger who had a jammer and a rubber tired skidder to pull the logs out. In areas where the skidding equipment could not reach the trees, we had Forest Service people saw up and remove the pieces.

Road Work

Target items:		Accomplished:
Culvert replacement:	825 feet	970 feet
Enlarge catchbasins:	84	90+
Replace downspouts:	1440 feet	764 feet
Trash racks:	19	20
Berm removal	15 miles	15 miles

Estimated cost: $44,875 Actual cost: $42,500

We used the Forest road crew for most of this work. Upon closer examination of some of the work items, minor shifting was necessary. Our biggest expense came in replacing culverts. Many of the draws and streams above existing culverts were burned out and the increase in runoff was expected to exceed the capacity of the existing culverts. Larger culverts wer installed, catchbasins enlarged and trash rakes in front of culverts. The berm was removed to prevent road surface runoff from accumulating.

Administration

Estimated cost: $30,000 Actual cost: $30,000

The administration cost included the ID Rehab Team, the project leaders' expenses and the Boise NF Contracting Office. We were heavily dependent upon contracting to procure materials, equipment and labor in a short time period. Contracting is the essential link in accomplishing a large scale rehab project.