Edited J.Bruggink 08/17/2003

Date of Report August 15, 2003: **UPDATED- September 3, 2004** 

### **BURNED-AREA REPORT**

(Reference FSH 2509.13)

### PART I - TYPE OF REQUEST

- A. Type of Report
  - [x] 1. Funding request for estimated WFSU-SULT funds
  - [X] 2. Accomplishment Report
  - [] 3. No Treatment Recommendation
- B. Type of Action
- [x ] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)
  - [x] 2. Interim Report
- [ x] Updating the initial funding request based on more accurate site data or design analysis
  - [x] Status of accomplishments to date
  - [] 3. Final Report (Following completion of work)

The new updated accomplishment information for FY 2004 is written in BLUE, and is found under the Monitoring Narrative, New Monitoring Plan- FY 2005, Knapweed Monitorin and Part VI.

#### PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Cramer B. Fire Number: P46052

C. State: Idaho D. County: Lemhi

E. Region: 04 F. Forest: Salmon-Challis

G. District: North Fork

H. Date Fire Started: 7/20/03 I. Date Fire Contained: 8/6/03 evening

J. Suppression Cost: 8/1/03 \$3.1 million

- K. Fire Suppression Damages Repaired with Suppression Funds
  - 1. Fireline waterbarred (miles): 1`
  - 2. Fireline seeded (miles):
  - 3. Other (identify): See Part V, On-Site Analysis (Ecologists 5 concerns)



- L. Watershed Number: 1706020701, 1706020313
- M. Total Acres Burned: <u>5,614</u>
  NFS Acres (x) Other Federal ( ) State ( ) Private ( )
- N. Vegetation Types: <u>Bluebunch wheatgrass</u>, <u>Ponderosa pine</u>, <u>Douglas-fir and mountain mahogany</u>
- O. Dominant Soils: Moderately Dissected Mountain Slopelands, Warm and Dry Sites; Steep timbered Headlands, Cold and Moist Sites; Steep Canyonlands, Hot and Dry Sites; Rocky Steep Canyonlands, Hot and Dry sites. Soil textures vary from loamy sand to coarse sandy loams.
- P. Geologic Types: Granite
- Q. Miles of Stream Channels by Order or Class: 6 miles of perennial; 15 miles intermittent (est from quad)
- R. Transportation System

Trails: miles Roads: 5.5 miles

## **PART III - WATERSHED CONDITION**

- A. Burn Severity (acres): <u>2934</u> (low) <u>1150</u> (moderate) <u>280</u> (high) unburned/rock outcrops <u>1.250</u>
- B. Water-Repellent Soil (acres): <100 acres (est)
- C. Soil Erosion Hazard Rating (acres): estimated 500 (low) 2,246 (moderate) 2,868 (high)
- D. Erosion Potential: 1.7 to 1.9 tons/acre under low fire intensity under normal rainfall
- E. Sediment Potential: 1,024 to 1,250 cubic yards / square mi

### PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 1-2 grassland

5- forest lands 20-streams

B. Design Chance of Success, (percent): 80

C. Equivalent Design Recurrence Interval, (years): 10-grassland

25-forest lands

100-streams

D. Design Storm Duration, (hours):

6- grass lands

24- forest lands

snowmelt peak- streams

E. Design Storm Magnitude, (inches): 1.5 -grass lands

2- forest lands

snowmelt peak-streams

F. Design Flow, (cubic feet / second/ square mile): 8 to 19 depending on

location

G. Estimated Reduction in Infiltration, (percent):

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

8.8 to 20.9 depending on

location

### PART V - SUMMARY OF ANALYSIS

# A. <u>Describe Watershed Emergency</u>:

On August 5, 2003 the Long Tom drainage including that portion burned in this fire experienced what was estimated to be in excess of the 100 year 15 minute storm event. The resulting flash flood removed approximately 30 feet of culvert and cut through the Salmon River Road. The existing pipe was 30 inches in diameter and approximately 66 feet long.

<u>Proposal</u>: Replace the existing 30 inch pipe with a 42-inch pipe at the same location. Given the existing damage to the drainage as a result of the fire and storm events, it is anticipated that greater than normal quanities of debris can be expected, until the vegetation recovers and stabilization occurs. A 42-inch pipe would approximately double the opening area of the pipe reducing the risk that the pipe would plug during all but the most severe events.

### On-Site Analysis of the Cramer Fire

On August 7, 2003 Gary Jackson, BAER Team Leader and Forest Soil Scientist along with Eugene Sundberg, Forest Silviculturist made a helicopter reconnaissance flight of the Cramer fire. The following consists of Gary Jackson's observation along with other BAER Team Members. The watershed that burned consists of very steep, rocky talus and outcrop granite lands with few areas less than 30 percent slopes. The average slope is greater than 70 percent. Two small riparian areas burned in Fountain Creek and an un-named creek west of Cramer Creek. This fire area is within the normal high intensity rainfall zone of the intersection of the Main and Middle Fork of the Salmon River. It is common for normal high intensity rainstorms to bring soil debris down through the narrow stream channels and block the Salmon River Road. They also create alluvial fans in the Salmon River, but are usually washed out soon. The forest hydroglist states the following "On August 5, another high intensity storm hit the Salmon River

in the Cramer Fire Area causing debris torrents in the Long Tom and Cramer Creeks that blocked the Salmon River Road and stranded recreationists. The rain gage data from the Long Tom Lookout was reported as 0.8 inches in 14 minutes. The 100 year-15 minute storm intensity in this area would be 0.69 inches. This validates that the recent storms have been very significant high intensity storms that exceed the predicted 100 year event". The Long Tom Lookout is located about 1 mile north of the fire. No erosion practices are recommended due to the very steep slopes, that are greater than 70 percent and it would be a safety hazard for employees. The main areas that eroded are in general the very steep side slopes of some of the drainages and at the head of some gullies. Aerial seeding was considered, but due to the very steep slopes, rocky, talus areas, low rainfall, natural very erosive soils, very hot south aspects, local high intensity storms patterns and the estimated low germination success, this method of rehabilitation was dropped due to high costs for a low success rate. Normal climatic conditions of high intensity rainstorms will continue in the area, the Salmon River Road will continue to be blocked at times and the frequency of these types of storms appears to be on the increase over the last decade. The engineer says that oversize culverts were designed after the 2000 Clear Creek Fire and last month they were completely washed out due a July 25<sup>th</sup> high intensity storm on Panther Creek. The Forest Silviculturist says that based on the helicopter reconnaissance flight and roaded access to the fire area via Forest Service Road #439, he concluded that there is not adequate fire killed salvage volume to support a timber harvest. The Ecologist has concerns over the potential of knapweed becoming established at two helicopter landing sites, (H4 and H5). These two sites will be monitored in 2003 and 2004. Monitoring for knapweed in the future will depend on what is found in 2003 and 2004 (see Monitoring Narrative "H") below). The Ecologist also identified five concerns that are also identified in the fire suppession rehabilitation report and signed by the District Ranger and are as follows: (1) USFS road # 439 at the end has an ephemeral draw above the road that has potential to cause road damage. (2) A two track road closure required from the Cadagan base camp to the Salmon River, (3) Soil filling of rutted tracks at Cadagan base camp, (4) Chimney repair required at the Colson Guard Station due to structure protection, (5) Herbicide treatment of noxious weeds at Cadagan base camp and the wash station located at the intersection of the Spring Creek Road and the Salmon River Road. The Fish Biologist says that for the potential rehabilitation area he does not believe any rehabilitation efforts to protect fisheries resources would be practical or have a high potential to be successful. Therefore, he is not recommending any fisheries fire rehabilitation efforts for this fire at this time.

### B. Emergency Treatment Objectives:

Replace the existing 30 inch pipe with a 42-inch pipe at the mouth of Long Tom Creek on the Salmon River Road. Given the existing damage to the drainage as a result of the fire and storm events, it is anticipated that greater than normal quanities of debris can be expected, until the vegetation recovers and stabilization occurs. A 42-inch pipe would approximately double the opening area of the pipe reducing the risk that the pipe would plug during all but the most severe events. This would minimize the impact to the Salmon River Road at the mouth of Long Tom Creek.

C. Probability of Completing Treatment Prior to First Major Damage Producing Storm:								
The first major storm has occurred on August 5, 2003 that was a 100 year event.								
	Land %	Channel	_% Roads <u>90</u> %	Other %				
D. Probability of Treatment Success								
	Years after Treatment							
Land	1	3	5					
Channel								
Roads	90	90	90					
Other								
E. Cost of No-Action (Including Loss): estimated from \$10,000 to \$12,000.								
F. Cost of Selected Alternative (Including Loss): \$8,200								
G. Skills Re	epresented o	on Burned-Are	a Survey Team:					
[x] Hy [x] Fo [ ] Co [x ] Fi	drology   restry   ntracting [ sheries [	[x ] Soils [x ] Wildlife x ] Ecology ] Research	[x] Geology [] Fire Mgmt. [x] Botany [] Landscape Arch	[] Range [x] Engineering [] Archaeology [] GIS	[] [] []			
Team Lead	er <u>: Gary Jac</u>	<u>ckson</u>						
Email: <u>gljackson @fs.fed.us</u> 756-5151			Phone: <u>208-756-5110</u> FAX: <u>208</u>					
H. <b>Treatment Narrative:</b> (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								

(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: Replace the existing 30 inch pipe on the Salmon River Road with a 42-inch pipe at the same location. Given the existing damage to the drainage as a result of the fire and storm events, it is anticipated that greater than normal quanities of debris can be expected, until the vegetation recovers and stabilization occurs. A 42-inch pipe would approximately double the opening area of the pipe reducing the risk that the pipe would plug during all but the most severe events. Without replacing this pipe, the Forest could similar results of the road beening blocked for some hours, such as occurred on August 5, 2003. This road is the only access in and out for hundards of river floaters that float the Middle Fork of the Salmon River and those that drive down to Corn Creek to float the Main Salmon River down towards Riggins.

A new 36 inch culvert, 70 feet long was installed under the Salmon River Road at Long Tom Creek crossing. A 36 inch pipe was installed since the 42 inch as first recommended for in the BAER report would have been too large to fit under the road without reconstruction of the road. Cost breakdown is as follows: materials were \$1,660; labor was \$2,690 and equipment was \$580 for a total of \$4,930. This is approximately \$570 less then was proposed for the project.

### 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.)

### Noxious Weed: Knapweed

No knapweed occurs at this time at the helicopter landing sites (H4 and H5) on the north fire boundary. The Ecologist has concerns over the potential of knapweed becoming established at two helicopter landing sites, (H4 and H5). These two sites will be monitored in 2003 and 2004. Monitoring for knapweed in the next three years will depend on what is found in 2004. Total monitoring costs for the first year is estimated for 2003 and 2004 include four hours of helicopter time at approximately \$600 per hour and a monitoring crew time of \$15.00 per hour for 4 hours, for a total of \$2,460.00.

Knapweed monitoring was not started in 2003 as suggested in the BAER report due to the fact that any new plants in late summer or early fall would not be established enough to be identified as knapweed. Since this monitoring was not started this year, the helicopter and monitoring crew was not used. Knapweed monitoring will start next summer afte the helicopter is stationed at Indianola.

### New Monitoring Plan

No noxious weeds are known to occur at the helicopter landing sites (H4 and H5) on the north fire boundary. The Ecologist has concerns over the potential of spotted knapweed becoming established at two helicopter landing sites, (H4 and H5). These two sites will be

monitored twice during 2004 to determine if spotted knapweed or any other noxious weeds are present. Monitoring will occur during spring (ie, June) when plants will be actively growing; another monitoring trip will be scheduled during September in order to allow a full growing season for any noxious weeds present to grow on site.

Monitoring will consist of searching the helispot and the area immediately adjacent to and surrounding the helispot, for the presence of noxious weeds. The initial monitoring trip costs during 2003 and 2004 was estimated to include four hours of helicopter time at approximately \$600 per hour and a monitoring crew time of \$15.00 per hour for 4 hours, for a total of \$2,460.00. Estimated cost for monitoring in June of 2004 is \$1,230. All noxious weeds (and other invasives including cheatgrass) found during the June 2004 monitoring trip to these helispots will be treated with herbicides. Additional funds may then be requested through the Central Idaho Resource Advisory Committee (RAC) to cover these herbicide costs (estimated at 1 gal Tordon 22K at \$100/gal per site x 2 sites = \$200). The treatment crew consists of a noxious weed field manager (GS-7) and a GS-5 crew. All personnel are trained in the identification of noxious weeds and will be under the supervision of a certified pesticide applicator on site.

Monitoring for knapweed in the next three years (September 2004, 2005, and 2006) will depend on what is found in 2004. If herbicides are applied during June, then monitoring during September will consist of the effectiveness of the herbicide treatment, and a potential re-treatment.

# New Monitoring Plan- FY 2005 Knapweed Monitoring

Knapweed monitoring was completed on September 1, 2004, for the first year after the 2003 fire. On September 1, 2004, a two person monitoring crew landed at helicopter landing sites H-4 and H-5 and checked the ground for any new seedlings of noxious weeds (knapweed). Approximately 20 new seedlings were identified at each site. At this same time, they sprayed with chemicals to destroy the plants. The total cost of this one day noxious weed monitoring project was \$1,765.70. The breakdown is as follows: helicopter flight time cost was \$1,505.70 and the two persons monitoring crew cost was \$ 260. Since approximately 40 new knapweed seedlings were found at these two sites and sprayed, the forest is requesting funds for noxious weed monitoring at the same two sites for FY 2005. Estimated funds requested for noxious weed monitoring for FY2005 is \$1,800. These two sites are to be monitored in 2005, between June and July, depending on an available helicopter.

Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

Subtotal Structures				\$0	X	\$0	\$0	\$0
					X			
E. BAER Evaluation					X			
BAER T.L.	hrs	\$30	8	\$240	X	\$0	\$0	\$240
Actual cost	hrs	\$35	8	\$280	X	\$0	\$0	\$280
Actual cost	hrs	\$35	28	\$980	X			\$980
Actual cost	hrs	\$26	4	\$105	× × × × × × × × × × × × × × × × × × ×			\$105
Total BAER cost	hrs.		40	\$1,365	X			\$1,365
BAER shortage				\$1,125	X			\$1,125
•					8			
F. Implem/overhead	hrs	\$25	12	\$300				\$300
Actual cost				\$490	$\infty$			\$490
					8			
G. Monitoring Cost	For Kna	pweed			8			\$0
Helicopter	hrs	\$600	4	\$2,400	8			\$2,400
Monitoring crew	hrs	\$15	4	\$60	8			\$60
New Helicopter Cost	hrs	\$600	2	\$1,200	<b>X</b>			\$1,200
New Monitoring Crew	hrs	\$15	2	\$30	<u></u>			\$30
FY04 Knapweed Cost				\$1,230	Χ̈́			\$1,230
FY04 Helicopter Cost	hrs	\$717	2.1	\$1,506	8			\$1,506
Monitoring Crew	hrs	\$26	10	\$260	8			\$260
<u> </u>				·	8			•
H. Totals				\$8,200	×××××	\$0	\$0	\$8,200
Total Cost Spent				\$6,295	X			\$6,295
•					X			•
Amount left for Knapwo	eed Mon	itoring		\$1,905	× ×			\$1,905

Total Cost FY2004 \$1,766
Total Cost Required for FY2005 \$1,800

\$1,766 \$1,800

# PART VII - APPROVALS

1.	/S/ WILLIAM A. WOOD			
	Forest Supervisor (signature)	_Sept 07, 2004 Date		
2.	/s/ Bert Kulesza for	October 12, 2004		
	Regional Forester (signature)	Date		

cc: Jeff Bruggink