USDA-FOREST SERVICE FS-2500-8 (7/00)

Date of Report: 01/24/02

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

- A. Type of Report
 - [] 1. Funding request for estimated WFSU-SULT funds
 - [X] 2. Accomplishment Report
 - [] 3. No Treatment Recommendation
- B. Type of Action
 - [] 1. Initial Request (Best estimate of funds needed to complete eligible rehabilitation measures)
 - [X] 2. Interim Report
 - [] 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)

PART II - BURNED-AREA DESCRIPTION

- A. Fire Name: Sleepy91 B. Fire Number: WA-COF-092
- C. State: WA D. County: Ferry
- E. Region: 06 F. Forest: Colville
- G. District: Three Rivers & Republic
- I. Date Fire Controlled: Contained on 08/28/2001 H. Date Fire Started: 08/13/2001

Estimated control on 10/01/2001

- J. Suppression Cost: \$2,058,000 (as of 8/29/01)
- K. Fire Suppression Damages Repaired with Suppression Funds
 - 1. Fireline waterbarred (miles): 17.7 (4 miles handline, 13.7 miles dozer line)
 - 2. Fireline seeded (miles): same as above
 - 3. Other (identify): 1 culvert placement and removal
- L. Watershed Number: 170200011103 (Lake Roosevelt Hall Creek Upper Hall Creek)
- M. Total Acres Burned: 1400

NFS Acres (979) Other Federal (**0**) State (**0**) Private (421) 30 acres Boise Cascade,

391 acres Colville Indian Reservation

- N. Vegetation Types: Douglas-fir, Ponderosa Pine
- O. Dominant Soils: Growden Sandy Loam, 35-65% slopes 50%

Merkel Sandy Loam, 15-35% slopes -25% Nevine Sandy Loam, 0-30% slopes -

15%

Togo Loam, 15-35% slopes -10%

P. Geologic Types: Volcanic ash over till, volcanic ash over siliceous rock Q. Miles of Stream Channels by Order or Class: 1.9 miles Class III (perennial fish-bearing) 1.2 miles Class IV (intermittent) R. Transportation System Trails: 0 miles Roads: 8 miles (only 1.5 miles open road) PART III - WATERSHED CONDITION A. Burn Severity (acres): 1303 (low) 97 (moderate) 0 (high) (Acreages as estimated by BAER team) B. Water-Repellent Soil (acres): 0 C. Soil Erosion Hazard Rating (acres): 210 (low) 700 (moderate) 490 (high) D. Erosion Potential: 3 tons/acre E. Sediment Potential: 1 cubic yards / square mile PART IV - HYDROLOGIC DESIGN FACTORS A. Estimated Vegetative Recovery Period, (years): _3 B. Design Chance of Success, (percent): 95% C. Equivalent Design Recurrence Interval, (years): N/A D. Design Storm Duration, (hours): N/A N/A E. Design Storm Magnitude, (inches): F. Design Flow, (cubic feet / second/ square mile): N/A G. Estimated Reduction in Infiltration, (percent): N/A H. Adjusted Design Flow, (cfs per square mile): N/A

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency: Fire intensities were low to moderate through the majority of the burned area. However, some patches burned more intensively and initiated the need for BAER treatments. These patches were initially rated as high intensity burn by the incident command team but the BAER survey team scaled the classification of these areas back to moderate intensity (at the high end of the moderate ranking) after field examination. Some of these patches are located adjacent to roads where increased runoff through existing culverts or across the roadbed is expected for 2-3 years due to loss of vegetative cover. Treatments to accommodate this increased runoff are prescribed. No other erosion or sedimentation problems are anticipated. There are no campgrounds or trails within the burn perimeter, and no facility damage occurred. The Colville Tribe is conducting a separate assessment, but the Forest BAER team did not report the need for any treatments on private lands within the fire perimeter. All proposed treatments are on NFS lands and do not

affect private or tribal lands. Except where BAER treatments are prescribed, roads opened to facilitate fire control efforts will be restored to pre-fire conditions as part of suppression damage rehabilitation.

Approximately 2 acres of diffuse knapweed, 0.1 acres of yellow toadflax and scattered patches of St. Johnswort currently exist in the fire perimeter. Before the fire, the area where the weeds are located consisted of higher elevation open fescue meadows providing very good mule deer summer range. The wildfire has created suitable conditions for these weed populations to expand, which will impare site productivity. Annual treatment to control the spread of toadflax and knapweed will be required for three years. Because the areas to be treated are behind closed roads and motorized access is not expected, treatment by horseback is prescribed.

The existing knapweed and yellow toadflax will need to be treated this fall with project funds. No treatment is prescribed for the St. Johnswort because the Chrysolina beetle is expected to control the spread of this weed in the area.

- B. Emergency Treatment Objectives: To prevent imparement of ecosystem structure and function by preventing the spread of yellow toadflax and diffuse knapweed following wildfire. To control water, sediment and debris movement in a manner that protects roads and downstream ecosystem values.
- C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm: N/A

Land N/A % Channel N/A % Roads 90 % Other N/A%

D. Probability of Treatment Success (Year 1 for land treatments = first year following completion of three years of noxious weed control treatments)

	Years after Treatment							
	1	3	5					
Land	99%	99%	99%					
Channel	N/A	N/A	N/A					
Roads	99%	99%	99%					
Other	N/A	N/A	N/A					

- E. Cost of No-Action (Including Loss): \$29,400 (plus \$4,907 in BAER survey costs see narratives below for details)
- F. Cost of Selected Alternative (Including Loss): \$7,160 (plus \$4,907 in BAER survey costs)
- G. Skills Represented on Burned-Area Survey Team:

[X] Soils [X] Geology [X] Range [X] Noxious Weeds [X] Hydrology [] Forestry [X] Wildlife [] Fire Mgmt. [X] Engineering [] [] Contracting [] Ecology [X] Botanv [X] Archaeology [] [X] Fisheries [] Research [X] Landscape Arch [] GIS

Team Leader: James E. McGowan

Email: jemcgowan@fs.fed.us Phone: 509-684-7210 FAX: 509-684-7280

H. Treatment Narrative:

(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:

Annual herbicide treatments on 1-2 acres of new toadflax and knapweed for three years, and monitoring of treatment success and weed population expansion, are prescribed. Treatments will be conducted by horseback because motorized access into the area is not expected. This method of treatment is considered more economical than bringing in heavy equipment to re-open the road on an annual basis to allow motorized access to the treatment areas. Estimated annual cost of these treatments is as follows:

Labor \$400 (contract applicator and packhorse cost)

vehicle \$100
Overhead, contract prep, and inspection \$300
herbicide \$20
Total \$820

\$820 X 3 years treatment = \$2460.

Estimated cost to control and/or eliminate weed populations after 3-5 years, if allowed to expand (no treatment alternative) is \$3500.

Required NEPA planning for these treatments is completed. All herbicide treatments within this area will be conducted in accordance with the Environmental Assessment for Integrated Noxious Weed Treatment - Colville National Forest, September, 1998.

<u>Project Status as of January 2002 - No work on this project completed. Work was designed to treat new infestations and scheduled to be done in 2002-2004.</u> FY2002 funding (\$820) is requested at this time.

Channel Treatments: N/A

Roads and Trail Treatments: 2014250 Road - This road crosses the headwaters of the Sleepy Hollow drainage in three locations. Fire intensity above this road was moderate to high in several places and increased runoff is anticipated. Considering the increased runoff, three culverts located at MP 9.18, 9.40, and 9.60 are undersized based on anticipated 100 year flood calculations. These culverts need to be upgraded to prevent plugging and additional damage to the road and downstream values. Two 36" culverts and one 24" culvert will be installed to replace the existing culverts. Estimated cost = \$2,900

Project Status as of January 2002 - Work is completed.

2014335 Road - This road was closed to use a few years prior to the fire by removal of a culvert. To accommodate fire traffic, a new culvert was installed. The road also contains three log culverts that are now undersized and cannot handle the increased runoff anticipated as a result of the fire. The fire crossed this road at MP 0.2 - MP0.4, which will result in increased water flow across the roadbed. Due to the erodable soils, grade of the road, and close proximity to the stream, this road either needs to be armoured along its full length with a lift of aggregate or closed to traffic. Because the road was closed to traffic prior to the fire, closure is the prescribed option. The prescribed treatment is to remove all four culverts and close the road at both ends with earthen berms. Estimated cost = \$1,800.

Project Status as of January 2002 - Work is completed.

Estimated costs of no action include road repair and culvert replacement. The estimated cost of repair for the 2014250 road would be \$10,900, and the repair cost for the 2014335 road would be \$15,000.

The engineering analysis describing these treatments is available from the Forest Supervisor's office in Colville.

Structures: N/A

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.)

Monitoring to assess the effectiveness of noxious weed control treatments and weed population expansion will be conducted in conjunction with annual weed treatments prescribed above.

The Colville Forest also plans on establishing 10-12 photopoints within the area to monitor and assess the area's recovery following this fire. These photopoints will be established and monitored with project funds, not BAER funding. The purpose of these photopoints is to collect information on post-fire vegetative recovery and soil conditions for application in assessments of future fires.

The monitoring entries described above will be sufficient to monitor effectiveness of the prescribed road treatments.

Project Status as of January 2002 - Photopoints have been established.

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

Part VI – Ei	merger	icy Rei					<u>a 5ou</u>			by Land	
		NFS Lands		~		Other L	Other Lands		All		
		Unit	# of	WFSU		Š	# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT \$	\$	8	units	\$	Units	\$	\$
						X					
A. Land Treatments						X					
Noxious weed control	2	410	6	\$2,460		X		\$0		\$0	\$2,460
				\$0		X		\$0			
				\$0		Š		\$0		\$0	\$0
				\$0		8		\$0		\$0	\$0
Subtotal Land Treatments				\$2,460		∞		\$0		\$0	\$2,460
B. Channel Treatment	s					8					
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
Subtotal Channel Treat.				\$ 0				\$0		\$0	\$0
C. Road and Trails						8		-			
culvert replacement				\$2,900		8		\$0		\$0	\$2,900
road closure				\$1,800		X		\$0		\$0	\$1,800
				\$0		X X		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
Subtotal Road & Trails				\$4,700				\$0		\$0	\$4,700
D. Structures						Š					
				\$0		8		\$0		\$0	\$0
				\$0		8		\$0		\$0	\$0
				\$0		8		\$0		\$0	\$0
				\$0		X		\$0		\$0	\$0
Subtotal Structures				\$0		X		\$0		\$0	\$0
E. BAER Evaluation						X					
Survey Team costs				\$0	\$4,907	X		\$0		\$0	\$4,907
				\$0		8		\$0		\$0	\$0
						8					
G. Monitoring Cost				\$0				\$0		\$0	\$0
						X					
H. Totals				\$12,067		X		\$0		\$0	\$12,067
						X					

PART VII - APPROVALS

1.	/s/ Donald N. Gonzalez (EP& M Staff Officer)	01/24/2002		
	(for) Forest Supervisor (signature)	Date		
2.				
۷.	Regional Forester (signature)	Date		