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
[ ] 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)

[ ] 2. Interim Report
[ ] Updating the initial funding request based on more accurate site data or design analysis
[ ] Status of accomplishments to date

[ ] 3. Final Report (Following completion of work)

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: School

B. Fire Number: ORUMF130

C. State: WA

D. County: Columbia, Garfield

E. Region: R-6

F. Forest: Umatilla National Forest

G. District: Pomeroy

H. Date Fire Started: 8/5/2005

I. Date Fire Contained: 8/18/05

J. Suppression Cost: $14.9+million (as of 8/26)

K. Fire Suppression Damages Repaired with Suppression Funds
1. Fireline waterbarred (miles): operations underway
2. Fireline seeded (miles): operations underway
3. Other (identify): unknown

L. Watershed Number: 1706010302, 1706010701, 1706010705, 1706010606, 1707010203

M. Total Acres Burned: 51924 (BAER assessed acres)
NFS Acres(27,589*) Other Federal (0) State (11,947) Private (12,388, includes county)

N. Vegetation Types: Bunchgrass, Shrub, Ponderosa Pine, Douglas fir, Grand fir associations

O. Dominant Soils: Klicker, Anatone, Harl, Limberjim, Stevenscreek

P. Geologic Types: Columbia River Basalt group, primarily Grande Ronde flows

Q. Miles of Stream Channels by Order or Class:
Rosgen Class A =275, B =32, B/C=10, C =7, TOTAL = 324

R. Transportation System

Trails: ___ miles Roads: 243

PART III - WATERSHED CONDITION

A. Burn Severity (acres): 19870 (low/unb) 25620 (moderate) 6433 (high)

B. Water-Repellent Soil (acres): 0* (*little/no fire increase- natural repellency volcanic ash)

C. Soil Erosion Hazard Rating (acres):
7789 (low) 10385 (moderate) 33750 (high)

D. Erosion Potential: 20% probability >7 tons/acre; 10% probability >10 tons/ac

E. Sediment Potential: 20% probability >4151 cubic yards / square mile;10% probability > 5930 cu yds/mi2

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 5

B. Design Chance of Success, (percent): 60-90

C. Equivalent Design Recurrence Interval, (years): 5 and 10

D. Design Storm Duration, (hours): 24

E. Design Storm Magnitude, (inches): 0.34 (NOAA Atlas 10-Year)

F. Design Flow, (cubic feet / second/ square mile): 22 (5-Year)

G. Estimated Reduction in Infiltration, (percent): 64

H. Adjusted Design Flow, (cfs per square mile): 33 (10-Year)

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:
Large area of High fire severity in the Tucannon River canyon with history of debris flow events in 1964 and 1996/1997 flood events. Significant areas of High and Moderate fire severity in and around residential areas on private ground and in headwaters on National Forest. Risk to inhabitants & residential & commerical property along major waterways, State buildings including Camp Wooten, Tucannon fish hatchery & wildlife station and residence, State recreation ponds with Wooten Wildlife, historic Tucannon FS guard station; Tucannon FS campground; cultural/heritage resources; FS and County roads including bridges; TES habitat for Snake River/Columbia Basin anadramous & resident fish species & Bull trout; extensive noxious weed and non-native plant populations on private & State lands, pioneer populations on the Umatilla NF, high productivity timber & soils burned to high severity on very steep slopes; valuable wildlife habitat including winter range; range for livestock burned extensively at moderate levels.

B. Emergency Treatment Objectives:

Reduction of erosion and storm runoff effects in select drainages with values at most risk; reduction of spread of noxious weeds onto FS managed lands; use and evaluation of newer treatment methods as part of national BAER techniques assessment by RMRS; assess need for early-warning system for down-stream developments at risk that cannot be cost-effectively mitigated with upland treatments at this scale.

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

Land **80** % Channel ___ % Roads **90** % Other ___ %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land	70	90	90
Channel			
Roads	90	100	100
Other			

E. Cost of No-Action: $8,136,500

F. Cost of Selected Alternative: $535, 367

G. Skills Represented on Burned-Area Survey Team: (not all separate individuals)

[x] Hydrology	[x] Soils	[ ] Geology	[ ] Range
[x] Forestry	[x] Wildlife	[ ] Fire Mgmt.	[x] Engineering
[ ] Contracting	[x] Ecology	[x] Botany	[x] Archaeology
[x] Fisheries	[x] Research	[ ] Landscape Arch	[x] GIS

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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:

Mulching and seeding treatments are intended to reduce erosion and impacts to water quality and down-stream, in a few select areas of High severity and drainage position, to residential, commercial & capital improvements. Mulching will be primarily aerial, with on-the-ground application of the wood-straw section. Seeding is primarily a weed control measure, with natives, and secondarily an erosion control measure for second year and beyond.

Assess efficacy and costs of recent developments in materials for mulching, e.g. wood straw mulch, and application options, and utilitity for larger areas.

Reduce risk of spread of noxious weeds from private lands and known populations on FS: Seed species are genetically local native species (Blue Wild Rye, Mountain Brome, Idaho Fescue, Bluebunch Wheatgrass), anticipated average rate @ 20 pls. Treatment areas targeted in High severity burn with adjacent populations of noxious weeds (primarily Knapweed(s), Yellow Starthistle, Sulfur Cinquefoil).

Channel Treatments: none in initial

Roads and Trail Treatments:

Reduce risk of drainage system failure and loss of road fills, road bed and subsequent deposition into waterways and salmonid habitat, loss of road use & expense of repairs.

Structures:

Fence reconstruction/repair for Pataha Natural Research Area, one of 2 RNAs on the Umatilla.

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 of treatment installation and effectiveness is planned. Seeding, mulching and road treatments will be monitored to ensure adequacy and short-term efficacy including future utility on other fires.

- Eight plots of each treatment (tentative) 1) wood straw 2) seed 3) mulch and seed 4) control will be intensively monitoring and measured with silt fence devices and data logger. Results will published via Research Station publication(s).

- Road treatments will be monitored during signifcant storm events and after significant storm events including spring runoff.

Seeding for noxious weed treatments will be monitored past the 3 year BAER term.

- Seeding installation, germination success, and efficiency of intended effect will be monitored when appropriate during and following sowing, after precipitation events as access allows into the winter months, and during spring green up.

Remote sensing, storm event warning system: Camp Wooten, Tumalum/Tucannon junction

Water quality sampling at Tucannon River – Forest boundary – replace destroyed ISCO & operate sampler 3 years.
Resurvey 4 channel reference reaches on the Tucanon River.

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

			NFS Lands				Other Lands				All
		Unit	# of	WFSU	Other		# of	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	SULT $	$		units	$	Units	$	$
							Treatment costs non-NFS in process				
A. Land Treatments											
Native seed -- aerial	acres	85	500	$59,500	$0		200	$0		$0	$59,500
Hydro-seed -- aerial	acres	2570	50	$128,500	$0			$0		$0	$128,500
Straw Mulch-seed -- aerial helibail	acres	900	80	$72,000							$72,000
Wood straw mulch trial (hand)	acres	800	20	$16,000							$16,000
Shrub plant. Cumming	miles	15000	2	$30,000							$30,000
Conifer plant Cumming	miles	7500	2	$15,000	$0			$0		$0	$15,000
Weed treatment*	acres	2,000	25	$50,000							$50,000
Insert new items above this line!				$0	$0			$0		$0	$0
Subtotal Land Treatments				$371,000	$0			$0		$0	$371,000
B. Channel Treatments											
Insert new items above this line!				$0	$0			$0		$0	$0
Subtotal Channel Treat.				$0	$0			$0		$0	$0
C. Road and Trails											
Replace burned culve	hrs	75	220	$16,500	$0			$0		$0	$16,500
Clear catch basins, ad	segmen	2640	2	$5,280	$0			$0		$0	$5,280
Storm patrol; bridge in	years	3750	2	$7,500							$7,500
Add rolling dips and dr	each	330	32	$10,560	$0			$0		$0	$10,560
Mobilization & contract	lump	11952	1	$11,952							$11,952
Subtotal Road & Trails				$51,792	$0			$0		$0	$51,792
D. Structures											
Pataha RNA fence	miles	12500	1.4	$17,500	$0			$0		$0	$17,500
				$0	$0			$0		$0	$0
Insert new items above this line!				$0	$0			$0		$0	$0
Subtotal Structures				$17,500	$0			$0		$0	$17,500
E. BAER Evaluation											
Assessment team				$45,655	$0			$0		$0	$45,655
Camp Wooten flood evaluation				$2,000	$0			$0		$0	$2,000
Insert new items above this line!				$0	$0			$0		$0	$0
Subtotal Evaluation				$47,655	$0			$0		$0	$47,655
F. Monitoring											
RMRS-Moscow				$21,420	$0			$0		$0	$21,420
treatment impl/effect.				$5,000							$5,000
Water sampling				$15,000							$15,000
CRR survey	site	500	12	$6,000							$6,000
Insert new items above this line!				$0	$0			$0		$0	$0
Subtotal Monitoring				$47,420	$0			$0		$0	$47,420
G. Totals				**$535,367**	**$0**			**$0**		**$0**	**$535,367**

PART VII - APPROVALS

1. /s/ Kevin Martin 8/30/05
   Forest Supervisor (signature) Date

2. _____ _____
   Regional Forester (signature) Date