

Forest Service Intermountain Region 324 25th Street Ogden, UT 84401-2310

File Code: 2520-3 Date: November 6, 2000

Route To:

Subject: Fenster Interim #1 BAER Request

To: Chief

I have approved the enclosed Initial (August 21, 2000) and Interim #1 (October 18, 2000) 2500-8 BAER requests for the Fenster Fire. The initial request included funding of \$89,420 in treatments which was within the Regional Forester authority. The interim request includes an additional \$19,909 which makes the total request over our Regional authority. We are submitting the interim request to the WO for approval. The interim request only includes changes from the initial approval. These changes reflect updates to seed costs, knapweed control and administration of the treatments. The combined Initial and Interim requests are shown in the table below. We are requesting the approval of the additional \$19,909 for the Fenster fire and have included the Initial Regional Forester approved 2500-8 for your information.

TREATMENT	UNITS	Unit Cost	# of units	Treatment Cost
Spray spotted knapweed	Acres	\$95	60	\$5700
Hire new range riders to supplement existing riding conducted by the permittees.	Each	\$3600	1.5	\$5400
Idaho Fescue	Pounds	\$12.32	499	\$6148
Bluebunch wheatgrass	Pounds	\$7.70	3494	\$26904
Bone meal application	Pounds	\$0.54	499	\$269 (this is \$1655 less than the initial)
Seed application	Each	\$80000	0.58	\$46400
Seed Shipping and Handling	Each	\$353	1	\$353
Knapweed control	Days	\$400	.5	\$200
Cheatgrass control	Days	\$400	1	\$400
Implementation monitoring of treatments	People	\$1000	1	\$1000
Salary, Travel, Etc.	Salary			\$14450
	Travel			\$450
TOTAL				\$107674

Please contact Jeff Bruggink, Regional BAER Coordinator, at (801) 625-5357 if you have any questions or concerns.

JACK A. BLACKWELL Regional Forester





Enclosures (2)

Cc:

WO (Max Copenhagen, Margaree Williams)
AS (Mike Clontz)
BPR (Jeff Bruggink, Ken Heffner, Bill Burbridge)

INTERIM #1

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

Date of Report: 10/08/00

BURNED-AREA REPORT

(Reference FSH 2509.13)

<u>PARTI - TYP</u>	E OF REQUEST
A. Type of Report	
[]1. F [x]2. Accomplishment Report []3. No Treatment Recommendation	Funding request for estimated WFSU-SULT funds
B. Type of Action	
[] 1. Initial Request (Best estimate of measures)	funds needed to complete eligible rehabilitation
[x] 2. Interim Report [x] Updating the initial funding requanalysis	uest based on more accurate site data or design
[] Status of accomplishments to date	е
[] 3. Final Report (Following completion	of work)
<u>PART II - BURNED</u>	-AREA DESCRIPTION
A. Fire Name: Fernster Fire	B. Fire Number: ID-SCF-46026
C. State: ID	D. County: Lemhi
E. Region: 4 – Intermountain Region Salmon Field Office Area (BLM) Private	F. Forest: Salmon (FS) Salmon Field Office (BLM) Private
G. District: Salmon-Cobalt (FS) Salmon Field Office Private	
H. Date Fire Started:	I. Date Fire Contained:
J. Suppression Cost <u>:</u>	
K. Fire Suppression Damages Repaired with S1. Fireline waterbarred (miles):2. Fireline seeded (miles):	suppression Funds

	3. Other (identify) <u>:</u>
L.	Watershed Number:
M.	Total Acres Burned: NFS Acres() Other Federal() State() Private()
N.	Vegetation Types:
Ο.	Dominant Soils:
P.	Geologic Types:
Q.	Miles of Stream Channels by Order or Class:
R.	Transportation System
	Trails:_ miles Roads:_ miles
	PART III - WATERSHED CONDITION
A.	Burn Severity (acres): (low) (moderate) (high)
В.	Water-Repellent Soil (acres):
C.	Soil Erosion Hazard Rating (acres): (low) (moderate) (high)
D.	Erosion Potential:tons/acre
E.	Sediment Potential: cubic yards / square mile
	PART IV - HYDROLOGIC DESIGN FACTORS
A.	Estimated Vegetative Recovery Period, (years):
В.	Design Chance of Success, (percent):
C.	Equivalent Design Recurrence Interval, (years):
D.	Design Storm Duration, (hours):
E.	Design Storm Magnitude, (inches):
F.	Design Flow, (cubic feet / second/ square mile):
G.	Estimated Reduction in Infiltration, (percent):

H. Adjusted Design Flow, (cfs per square mile):										
	PART V - SUMMARY OF ANALYSIS									
A. Describe	e Watershed	d Emergency:								
B. Emergei	ncy Treatme	ent Objectives	:							
C. Probabili	C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:									
	Land %	6 Channel _	% Roads _	% Other '	%					
D. Probabili	ty of Treatn	nent Success								
	Ye	ears after Trea		-						
Land	1	3	5							
Lanu										
Channel										
Roads										
Other										
				J						
E. Cost of I	No-Action (I	ncluding Loss) <u>:</u> \$108,360 (d	oes not include tea	am costs)					
F. Cost of S	Selected Alt	ernative (Inclu	uding Loss) <u>:</u> \$2	237,009 (includes	team costs)					
G. Skills Re	epresented	on Burned-Ar	ea Survey Tear	m:						
[] For [] Coi	[] Hydrology [] Soils [] Geology [] Range [] [] Forestry [] Wildlife [] Fire Mgmt. [] Engineering [] Contracting [] Ecology [] Botany [] Archaeology [] [] Fisheries [] Research [] Landscape Arch [] GIS									
Team Lead	er <u>:</u>									
Email: Phone:_ FAX:										

H. Treatment Narrative:

The following treatment descriptions provide explanations for increased costs on already approved BAER projects.

Land Treatments:

Spray herbicide to control spotted knapweed (*Centaurea maculosa*) on approximately 60 acres, 30 acres of which is along open roads and 30 acres along closed roads and open hillsides. The original estimate of \$50 per acre was for herbicide application only; it did not include a cost for the chemicals themselves. The contractor is being required to supply the herbicide, at an additional cost of \$20 per acre. Treatment along open roads, using a pickup truck and boom sprayer, can be accomplished for \$70 per acre (\$20 for chemical and \$50 for application). Work along closed roads and open hillsides is more labor intensive, requiring an ATV with sprayer and/or backpack sprayer. Fewer acres can be treated per day, causing the treatment cost per acre to go up. The original estimate of weed treatment at \$50 per acre has been increased to \$95 per acre, to allow for cost of herbicide and the added expense of off-road treatments. The original estimate of \$3000 has thus been increased by an additional \$2700 (60 acres x \$95/acre = \$5700; \$5700 - \$3000 = \$2700).

Aerial seed 860 acres of Wyoming big sagebrush/bluebunch wheatgrass community type on Forest Service and Bureau of Land Management lands. An adjustment in seed cost is being made for three reasons. First, seed prices have changed since the original BAER request was submitted. Second, the number of pure live seeds (PLS) per square foot for Idaho fescue was miscalculated in the initial request (0.5 pounds PLS = 5 PLS per square foot; NOT 15). To adjust for this error, the amount of Idaho fescue has been increased from 0.5 to 1.0 pounds of PLS per acre and the amount of bluebunch wheatgrass decreased from 8.0 to 7.0 pounds of PLS per acre. Third, the cost of shipping and handling was not included in the initial. The original funding request for seed (minus the cost of the sagebrush, which will be paid for by the District) has thus been increased by \$18,849.20 (\$56,949.20 - \$38,700 = \$18,249.20; \$18,249.20 + \$600 S&H = \$18,849.20). The following table displays revised calculations and costs. The original request is italicized and in parentheses. Though BAER funds are not being used to purchase sagebrush seed, pure live seed calculations are displayed in order to show total amount of seed being applied.

Plant Species	Pounds PLS*/acre	PLS/pound	PLS/sq. foot	Cost of PLS/lb.	Total Cost fo 860 Acres
Idaho Fescue (Festuca idahoensis)	(0.5) 1.0	450,000	(15) 10.3	(\$14) \$ 12.32	(\$6020 \$10,595.2
Bluebunch Wheatgrass (Agropyron spictum)	(8.0) 7.0	140,000	(25.7) 22.5	(\$4.75) \$7.70	(\$32,680 \$46,354.0
Sagebrush (Artemisia tridentata wyomingensis)	0.25	2,500,000	14.3		
Shipping & Handling					(\$0) \$600.0
TOTAL	(8.25) 8.25		(55) 47.1		(\$38,700 \$57,549.2

^{*}PLS = Pure Live Seed

Bone meal will be added to the seed mix at the time of application. Based on application rates suggested by native revegetation specialist Craig Dremann, bone meal will be applied at the rate of one pound bone meal to 8.25 pounds seed. The original request was for 1:1 (bone meal:seed), or 6880 pounds of bone meal, at \$0.53 per pound, for a total of \$3646. The revised request is for 860 pounds bone meal at \$0.54 per pound, plus \$8.60 shipping and handling, for a total of \$473. This results in a savings of \$3173.

The original request for **BAER evaluation and administrative support** is not adequate to meet all implementation costs. An additional \$6,000 is being requested to cover expenses associated with contracting, purchasing, personnel management, supervision, accounting, oversight of project work, and reporting of accomplishments.

Part IV. The table below displays only those changes being requested for approval. Please see the initial BAER Report, dated August 21, 2000, for previously approved dollars.

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

		NFS Lands		nds		X		Other Lands			All	
		Unit	# of	WFSU	Other	Š	# of	Fed	# of	Non Fed	Total	
Line Items	Units	Cost	Units	SULT \$	\$	X	units	\$	Units	\$	\$	
						X						
A. Land Treatments						X						
Spray spotted knapwee	Acres	\$45	60	\$2,700	\$0	8	0	\$0	0	\$0	\$2,700	
Idaho Fescue	Pounds	\$5.32	499	\$2,655		X	361	\$1,921	0	\$0	\$4,575	
Bluebunch wheatgrass	Pounds	\$2.27	3494	\$7,931	\$0	8	2530	\$5,743	0	\$0	\$13,674	
Bone meal	Pounds	\$0.54	499	\$269	\$0	8	361	\$195	0	\$0	\$464	
Shipping & handling	Each	######	0.58	\$353	\$0	8	0.42	\$256	0	\$0	\$609	
Subtotal Land Treatments				\$13,909	\$0	X		\$8,114		\$0	\$22,023	
						X				ı		
B. Channel Treatment	ts					Š						
No change						∞						
Subtotal Channel Treatments	3			\$0		8		\$0		\$0	\$0	
C. Roads and Trails						∞						
No change				\$0		∞		\$0		\$0	\$0	
Subtotal Road & Trails				\$0		X		\$0		\$0	\$0	
D. Monitoring						$\propto \times$						
No change				\$0		X						
Subtotal Monitoring				\$0		X X X		\$0		\$0	\$0	
E. BAER Evaluation/A	dminist	rativa Sı	innnart			∞						
Salary	Salary	alive St	ippport	\$6,000		8		\$0		\$0	\$6,000	
Subtotal Eval/Admin	Galaiy			\$6,000		X		\$0 \$0		\$0 \$0	\$6,000	
				40,000		X		70		70	+0,500	
F. Totals				\$19,909		∞		\$8,114		\$0	\$28,023	
						X						

PART VII - APPROVALS

1.	_/s/ Robert A. Russell for	<u>10-18-00</u>
	Forest Supervisor (signature)	Date
2.	/s/ Jack G. Troyer (for)	_10/24/2000
	Regional Forester (signature)	Date



Forest Service Intermountain Region 324 25th Street Ogden, UT 84401-2310

File Code: 2520-3 Date: August 21, 2000

Route To:

Subject: Fernster Fire BAER Request

To: Forest Supervisor, Salmon-Challis

Your request for BAER funds for the Fernster Fire are approved in the amount of \$89,420, for emergency treatment of NFS lands.

The use of Sagebrush (Artemisia tridentate Wyomingensis) in your seed mix is not approved for BAER funding for reasons stated earlier. Your request for funding has been reduced by \$10,750 for this line item. If the Forest elects to plant sagebrush seed in conjunction with the approved BAER seed mixture, then funds other than BAER funds must be used.

Our August 3, letter explained that monitoring and weed control can only be financed for one year at a time. If after the first growing season you determine emergency funding is needed for further spraying and monitoring, an interim report and request for funds must be submitted at that time. You are not authorized to spend BAER funds for monitoring and weed treatment past one year.

You must keep track of all funds by treatment or project type, and by fiscal year. A report must be sent at the end of each fiscal year to the RO showing the expenditures for each fire. A final 2500-8 report must be submitted to the RO when projects and treatments have been completed and reviewed.

Please contact Jeff Bruggink, Regional BEAR Coordinator at (801) 625-5357, if you have any questions or concerns.

/s/ Jack G. Troyer for JACK A. BLACKWELL Regional Forester

Enclosure

cc:

BPR – (Jeff Bruggink, Ken Heffner)

BPR:KHeffner:ts:8/17/00

Date of Report: July 24, 2000

BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of	f Rep	ort								
[[X] 1. Funding Request for Estimated WFSU-FW22 Funds									
[]	2.	Accomplishment Report							
[]	3.	No Treatment Recommendation							
B. Type of	Action	on								
[[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 and design analysis Status of accomplishments to date 3. Final report-following completion of work 									
	PART II - BURNED-AREA DESCRIPTION									
A. Fire Nar	ne:	Fe	rnster Creek		B. Fire Num	nber: ID-SCF-46026				
C. State:	Ida	ho			D. County:	Lemhi				
E. Region:		mc	ermountain (FS) on Field Office Area (BLM) e		F. Forest:	Salmon (FS) Salmon Field Office (BLM) Private				

G. District: Salmon-C Salmon Fi Private			
H. Date Fire Started:	7/14/2000	I. Date Fire Contr	rolled: 7/20/2000
J. Suppression Cost:	EST \$3,000,000		
K. Fire Suppression Da	mages Repaired with V	WFSU-PF12 Funds:	
1. F	Fireline waterbarred (m	iles) <u>2.0</u>	
2. I	Fireline seeded (miles)	0.0	
3. (that w	lose and reseed 2.0 miles of as opened for the suppress replace damaged cattlegu	sion
L. Watershed Number:	170602070605 – Ba 170602070609 – W		
M. NFS Acres Burned:	1602	Total	Acres Burned: 2862
(0)State	(435)BLM	(825)PVT ()
N. Vegetation Types:	Threetip sagebrush/	ass, Idaho fescue,snowber	ry, and ninebark
O. Dominant Soils:	Dawtonia-Dacore A Cronks-Acord Asso Millhi-Lacrol Comp Dacore – Custco As	ciation blex	
P. Geologic Types:	Volcanics (34%)/Gr	ranitics (35%)/Quartzites ((31%)
Q. Miles of Stream Cha	unnels by Order or Clas	ss:	
Total in watershed – perennial and intermittent	Salmon - 3.2 Wallace - 13.5 Slump - 3.8 S36 - 3.1 Gooby - 0.8	Within burn – perennial and intermittent	Salmon - 0.3 Wallace - 3.4 Slump - 2.2 S36 - 1.2 Gooby - 0.3

	Diamond - 8 Other - 6.8		Diamond - 2.5 Other - 1.2				
R. Transportation System	m:						
Trails: 0 m	iles	Road	ds: <u>13.4</u>	miles			
		PART III -	WATERSHE	ED CONDITIO	<u>N</u>		
A. Fire Intensity (acres):	2390 (includes unburned islands)	(low)	442	(moderate)	31	(high)	
B. Water-Repellent Soil	I (acres): 0			-			
C. Soil Erosion Hazard I	Rating (acres):	644	(low)	1310	(moderate)	909	(high)
D. Erosion Potential:	7.0	tons/acre					
E. Sediment Potential:	90	_cubic yards	s / square mil	e			
	<u>P/</u>	ART IV - H	YDROLOGIC	DESIGN FAC	CTORS		
A. Estimated Vegetative	Recovery Perio	od: <u>5</u>		years			
B. Design Chance of Success:	80		perc	ent			
C. Equivalent Design Re	ecurrence Interv	/al: 10		years	3		
D. Design Storm Duration	on: <u>24</u>		hours				
E. Design Storm Magnit	ude: <u>2.0</u>		inches				
F. Design Flow: Walla	ace Creek – 2 r – 5 to 10.0	22.8 cubic	feet per seco	ond per square	e mile		
G. Estimated Reduction Infiltration:	·	Wallace Ca Other - 5	reek – 5	percent			
H. Adjusted Design Flov	w: Wallace– 23.9	cubic fe	et per second	d per square n	nile		

Other–5.25 to 10.5

PART V - SUMMARY OF ANALYSIS

A.	Describe Wate See attached r	rshed Emergenc narrative.	y:						
B.	Emergency Tre See attached r	eatment Objective narrrative.	es:						
C.	Probability of C	Completing Treatr	ment F	Prior to First M	ajor Damago	e-Producing	Storm:		
	Land	d >= 95_ %	Char	nnel $ >= 95 $	% Roads	>= 95	% Other	N/A	<u>4</u> %
D.	Probability of T	reatment Succes	ss						
				<	-Years after	treatment	·->		
				1	3		5		
	Land	Noxious weed	ls	90	90	90			
	Land	Invasive weeds		80	80	80			
	Channel	Clearing		90	90	90			
	Roads	Culvert cleani	ng	95	95				
	Other	None	0	N/A	N/A	95 N/A			
Ε.	Cost of No Acti	ion (Including Los	ss):		3,360(does m costs)	not include			
F.	Cost of Selecte	ed Alternative (Ind	cluding	Loss): \$ 208		des team			
G.	Skills Represe	nted on Burned- <i>l</i>	Area S	urvey Team:					
	[X] Hyd	rology	[X]	Soils	[X]	Geology		[X]	Range
	[X] Fore	estry	[X]	Wildlife	[]	Fire Mgmt.		[X]	Engineering
	[] Con	tracting	[X]	Ecology	[]	Research		[X]	Archaeology
	[X] Fish	eries							

Team Leader: Greg Bevenger, Hydrologist

Shoshone National Forest

808 Meadow Lane Cody, WY 82414

Phone:: 307/578-1263 Electronic Address: gbevenger@fs.fed.us

H. Treatment Narrative:

The following treatments have been proposed to mitigate the threat to life, property, water quality, and loss of long-term soil productivity:

Land Treatments:

Spray herbicide to control spotted knapweed (*Centaurea maculosa*) on approximately 60 acres, targeting areas along open roads first, then infestations within the interior of the burn. Follow the guidelines provided in the Salmon National Forest Noxious Weed EA. Conduct the herbicide application during the fall of 2000, 2001, and 2002.

Hire three (3) new range riders for three (3) months during 2001 and 2002 to patrol the allotment to keep livestock from entering the burn, in an effort to re-establish native grasses and forbs and control cheatgrass (*Bromus tectorum*). If monitoring during 2001 and 2002 indicates the range riding is ineffective or less than desirable relative to keeping livestock out of the burn, then possibly construct a maximum of 8.5 miles of temporary electric fence, including installation of one (1) cattleguard on the Diamond Creek road.

Aerial seed 860 acres of Wyoming big sagebrush/bluebunch wheatgrass community type on Forest Service and Bureau of Land Management lands with Idaho Fescue (*Festuca idahoensis*) at 0.5 pounds/acre and bluebunch wheatgrass (*Agropyron spicatum*) at 8 pounds/acre and Wyoming big sagebrush (*Artemisia tridenta spp. Wyomingensis*) in the mix at 0.25 pounds/acre to re-establish native vegetation and control cheatgrass (*Bromus tectorum*). The sagebrush is included in the mix to facilitate accelerated re-establishment of an important winter range shrub to help insure available, sustainable and diverse forage resources for native ungulates on key winter range grazed by domestic livestock. Rapid re-establishment of Sagebrush will reduce the potential for unacceptable degradation of other native plant species from overgrazing during post fire recovery. The proposed seeding area is in a generally low elevation, low precipitation zone that is best suited for Wyoming Sagebrush. The seeding application will be conducted during November 2000, shortly before normally expected snowfall.

After a review of BAER guidelines we believe that the addition of Sagebrush to the seed mix is justifiable. According to FSM 2523.02, one of the objectives of the BAER rehab is "to prevent permanent impairment of ecosystem structure and function". FSM 2523.03 #1.b. states that treatments "should be applied to stabilize... biotic communities in order to prevent unacceptable degradation..." FSM 2523.03 #2.a states that appropriate treatments include "seeding... to prevent permanent impairment to ecosystem structure and function, or to prevent detrimental invasion by non-native plants." It is our understanding that Sagebrush has been included in BAER seed mixes on the Boise National Forest (per phone conversation with Wayne Patton 208-377-4149).

The following table shows the amount of pure live seed (PLS) targeted for the 860 acres.

Plant Species	Seeding	Pure Live	Estimated	Pure Live	Total Cost
I failt Species	becume	I uic Live	Listimated	I uic Live	Total Cost

	Rate (lb.	Seeds per	Cost of	Seed Per	of PLS for	
	PLS*./acre)	Pound*	PLS/Lb.**	Foot ²	860 Acres	
Idaho Fescue (Festuca	0.5	450,000	\$14.00	15	\$6020	
idahoensis)	lb.PLS/ac	430,000	\$14.00	15	\$0020	
Bluebunch Wheatgrass	8 lb.PLS/ac	140,000	\$ 4.75	25.7	\$32,680	
(Agropyron spicatum)	0 10.FL3/ac	140,000	φ 4. /3	23.1	\$32,000	
Sagebrush (Artemisia	0.25	2,500,000	\$50.00	14.3	\$10,750	
tridentata Wyomingensis)	lb.PLS/ac	2,300,000	\$30.00	14.3	\$10,730	
TOTAL	8.75 lb/ac			55	\$49,450	

Based on regional suggestions BAER funding is requested for the addition of bone meal to the seed mix to improve seed germination. Bone meal will be applied at the rate of 8 lb. per acre (bone meal cost is \$0.53 per lb. for a total cost of \$3646).

Monitor the above land treatments for up to three (3) years for implementation success and effectiveness in meeting project objectives. If monitoring indicates these treatments are ineffective or less than desirable, develop possible alternative treatments and request subsequent funding.

Channel Treatments:

Remove floatable woody debris from approximately 400 yards of Wallace Creek, above where the Diamond Creek road crosses, to reduce the risk of a debris jam blocking culverts. Remove only that woody debris that could become mobilized during spring snowmelt. Place material on the hillside in such a fashion that it cannot roll back into the channel. Conduct this work using Type III fire crews or other local resources, resulting in no additional request for BAER funds.

Roads and Trail Treatments:

Clean accumulated sediments from the culverted crossing of a tributary to Wallace Creek located approximately ¼ mile east of the main Wallace crossing. These sediments can be cleaned by hand. Place all removed sediments on nearby uplands such that they cannot erode back into the channel. Conduct this work using Type III fire crews or other local resources, resulting in no additional request for BAER funds.

PART VI - EMERGENCY REHABILITATION TREATMENTS AND SOURCE OF FUNDS BY LAND OWNERSHIP

	NFS Lands Other Lands							All				
Line Items		Unit Cost	of Units	F	WFSU- FW22	Other		mber Units	Fed	No Fe		Total
A. LAND TREATMENTS												
Spray spotted knapweed	Acres	\$50		60	\$3000	\$0		0	\$0		0	\$3000
Hire new range riders to supplement existing riding conducted by the permittees.	s Each	\$360)0	1.5	\$5400	\$0		1.5	\$5400)	0	\$10800
Idaho Fescue	Pound	s \$14	.00_	249.5	\$3493	\$0		180.5	5 \$2527	7_	0	\$6020
Bluebunch wheatgrass	Pound			3992	\$18962			2888			0	\$32680
Sagegrush seed	Pound	s <u>\$50</u>		215	\$10750	\$10,	750	0	\$0		0	\$10750
Bone meal application	n Pound	s \$0.5	ز <u>3</u>	3990	\$2115			2890	\$1531	1_		\$3646
Seed application	Each	\$800	000	0.58	\$46400	\$0		0.42	\$3360	00	0	\$8000
B. CHANNEL TREATMEN Floatable debris clearing	NTS Yards	\$2		400	\$0	\$800	0 0)	\$0		\$0	\$800
C. ROADS AND TRAILS Culvert cleaning	Each	\$200		1	\$0	\$200	0 0	<u> </u>	\$0	\neg	\$ 0	\$200
D. MONITORING												
Knapweed control	Days	\$400	,	.5	\$200	\$0		5	\$200		\$0	\$400
Cheatgrass control	Days	\$400		1	\$400	\$0	1		\$400		\$0	\$800
Implementation monitoring of	People	\$100	0	1	\$1000	\$0	1		\$1000) (0	\$2000
treatments	+	+	+		 	+	+			+		

F	BAER EVALUATION/ADMINISTRATIVE SUPPORT
_	Ditert Eviles trion, the minute of the control of the

E. BAER EVALUATION/ADMINISTRATIVE SUPPORT									
Salary, Travel, Etc.	Salary			\$8000	\$0		\$3000		\$11000
	Travel			\$450	\$0		\$0		\$450
F. TOTALS									
				\$89,420	<u>\$11,750</u>		\$61376	\$0	\$16254
		•			•		•		

PART VII - APPROVALS

	/s/ George Matejko	<u>8/15/00</u>
•	Forest Supervisor	Date
1	/s/Stephanie Snook (Acting)	8/15/00
	Field Manager	Date
2.	/s/ Jack G. Troyer for	8/21/00
_	Regional Forester	Date

Part V-A Watershed Emergency

Threats to Human Life

Field reviews within and downstream of the burn confirmed there are no situations where human occupancy of flood prone areas exist. Therefore, the effects of the fire do not appear to have created any significant threats to human life.

Threats to Property

Field reviews within and downstream of the burn confirm there is property potentially threatened by effects of the fire. They are:

- There are numerous culverted crossings on the lower Diamond Creek road that appear to be undersized, even for pre-fire conditions. This road is maintained by Lemhi County from Highway 93 to Wallace Creek, where it then becomes private. While flood flows are not expected to signficantly increase as a result of the fire there could be debris loading over the next few years that could result in culvert plugging. The county and private landowners should be notified that these conditions may develop and that they may want to patrol these crossings on a more frequent basis for the next 1 to 3 years.
- There are two culverted crossings on the Diamond Creek road that could be at risk. One is a 24-inch culvert on an unnamed Wallace Creek tributary approximately ¼ mile southeast of Wallace Creek proper. This culvert is partially plugged with sediment and thus no longer functions as designed. The other crossing of concern is where the road crosses Wallace Creek. This crossing consists of two (2) 48-inch culverts spaced approximately six (6) feet apart. There is floatable woody debris in the channel upstream of the crossing that could mobilize during higher flow events. This material could block one or both culverts and put the crossing at risk of breaching. This material should be removed for up to 400 yards above the crossing in order to reduce the risk.
- There are two (2) water transmission lines that divert water from Wallace Creek that could also plug with floatable woody debris. The line that traverses National Forest lands could fill in selected locals with sediment eroded from burned hillsides. The probability of this occurring is believed to be low, but either the Forest or the special use permittee should walk the ditch after snowmelt and significant rains over the next 2-3 years as a preventative measure.
- There is a small pond on private land in Slump Draw that could fill with sediment and debris. This pond formed after a mass movement was triggered many years ago by an old water transmission line. The risk of the mass movement dam breaching appears to be minimal.

• There is irrigation pipe on private land that straddles Wallace Creek near its confluence with the Salmon River that is at risk if floatable woody debris were to accumulate behind it.

Threats to Water Quality

Field reviews within and downstream of the burn confirmed there are no significant threats to water quality. There will be sediment and ash output and minor, inconsequential changes to chemical quality but the effects to on-site and downstream water quality and aquatic resources are expected to be minor.

Threats to Long-term Soil Productivity and Ecosystem Integrity

Field reviews within the burn indicate there are serious and significant threats to long-term soil productivity and ecosystem integrity. This threat is related to an expected increase in noxious and invasive weeds, primarily spotted knapweed (*Centaurea maculosa*) and cheatgrass (*Bromus tectorum*). The threat is due to past management of the area coupled with consumption of rangeland vegetation by the fire.

Past management decisions of allowing fire exclusion, heavy grazing pressure, and invasion of exotic plants has resulted in a burn area where biogeochemical and vegetation succession processes have been interrupted. As a result, desired natural revegetation of the burn area is not expected to occur. Instead, it is expected the burn area will see minimal production of natives that show low vigor, and that will, in a very short time, be overtaken by spotted knapweed (*Centaurea maculosa*) and cheatgrass (*Bromus tectorum*). This invasion will result in very poor range land condition and subsequent accelerated soil erosion and associated loss of long-term soil productivity.

Threats to Heritage Resources

Field reviews within and downstream of the burn confirmed there are no significant threats to heritage resources.

Part V-B Emergency Treatment Objectives

The goal of the burned area emergency rehabilitation is to:

• Re-establish native plant communities in a timely fashion in order to reduce or eliminate a threat to long-term soil productivity and protect the ecological integrity of the ecosystem.

Treatment objectives to achieve the goal are:

- Control expected invasion by spotted knapweed (*Centaurea maculosa*) through herbicide application.
- Control expected invasion by cheatgrass (*Bromus tectorum*) through application of annual ryegrass (*Lolium multiflorum*) and bluebunch wheatgrass (*Agropyron spicatum*).
- Accelerate, using wildlife funds, re-establishment of an important winter range plant through application of Wyoming big sagebrush (*Artemisia tridenta spp. Wyomingensis*).

In addition to the above there is a need to minimize the risk of culvert blockage through channel clearing and culvert cleaning. This need will be conducted through the use of existing fire crews or other local resources.

Fernster Creek Fire BAER Implementation and Effectiveness Monitoring Plan

Spotted Knapweed

For a period of three years after the fire (2001, 2002 and 2003), monitor areas where herbicide application occurred to determine of the spraying has been effective. Utilize a local BLM rating system as the protocol for monitoring. A local GS-9 staff will conduct the monitoring. Monitoring will occur once during the spring and once during the fall. In conjunction with this monitoring, train and utilize the range riders to monitor for and treat spotted knapweed as it is encountered.

Cheatgrass

For a period of two years (per local BLM and FS direction to monitor noxious and invasive weeds after wildfire), monitor four (4) line-intercept transects stragetically placed within the burn perimeter. Two local GS-9 staff will conduct the monitoring. Each transect will be read twice yearly (spring and fall) in 2001 and 2002.

If the above monitoring indicates treatment has been ineffective or less than desirable, local BLM and FS staff may decide to request additional dollars to re-seed with the same or alternate seed mix, spray additional acreage infested with knapweed, or oust cheatgrass.