United States Department of Agriculture **Forest Service** **Boise National Forest**
1249 South Vinnell Way, Suite 200
Boise, ID 83709-1663
208-373-4100

File Code: 2520-3 **Date:**
Route To:

Subject: Burned Area Emergency Rehabilitation (BAER) – Anderson/Danskin Fire

To: Regional Forester, R-4

Enclosed is our FS-2500-8 Burned-Area Report for the Anderson/Danskin fire requesting $10,900 that includes BAER evaluation costs of about $8,400, invasive plant monitoring costs of $1,250 per year, and invasive plant control cost of $1,250 per year.

The burned area includes all those areas burned outside prescription and considered to potentially threaten downstream life or property or areas initially thought to have large resource damage in terms of soil productivity. At this time, our biggest concern is the close proximity of spotted knapweed and the current abundance of rush skeletonweed in the area. We did not find life or property to be at an unacceptable risk, nor did we find the fire severity expected to diminish soil productivity or other resource values. Tree mortality was high, however, would not qualify as a standard treatment under BAER authority. Our findings are included in the enclosed report and more specifically within the documentation of field visits.

Please refer any questions to T.J. Clifford, BAER Team Leader at 208-373-4311 or email at tjclifford@fs.fed.us.

DAVID D. RITTENHOUSE
Forest Supervisor

Enclosure

cc:
T.J.Clifford
J.Bruggink, R-4

TJClifford:rlm

USDA-FOREST SERVICE FS-2500-8 (5/00)
Date of Report: 06/05/2002

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 and design analysis
[ ]Status of accomplishments to date

[ ] 3. Final report - following completion of work

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Anderson/Danskin

B. Fire Number: P41519

C. State: Idaho

D. County: Boise

E. Region: R4

F. Forest: Boise

G. District: Emmett

H. Date Fire Started: 05/20/2002

I. Date Fire Controlled: 05/28/2002 / 05/26/2002

J. Suppression Cost: $200,000

K. Fire Suppression Damages Repaired with -PF12 Funds:

L. Watershed Number: 170501210103, 170501200102 (Danskin-Poorman, Anderson)

M. NFS Acres Burned: ≈618 acres (outside prescription and inside boundary); ≈ 437 acres (outside prescription boundary)
Total Acres Burned: 1,055 acres

N. Vegetation Types: Douglas-fir, Ponderosa Pine, Aspen, Willows, Grasses, Ceonothus/shrubs

O. Dominant Soils: Idaho Batholith Granitics

P. Geologic Types: Granitic

Q. Miles of Stream Channels by Order or Class:

1st order:	2nd order:	3rd order:
4.3 km	**.3 km**	**1.1 km**

R. Transportation Systems: 139 miles of Forest Service System Roads including Forest Highway 17 within these two watersheds.

PART III - WATERSHED CONDITION

Fire intensity was high in at least 75 percent of the acres burned outside of prescription within and without the boundary of the prescribed burn. However, upon closer observation following aerial reconnaissance, it was determined that severity of these burned acres was low to moderate. Most of the grass and shrub components were actually intact (see attached photo documentation) with very little mortality. In a majority of the burned area that would be expected to consist of soils covered with duff, observations indicated 1 to 2 inches of the existing duff depth still remained. There were no water-repellent soils found through ground survey of both Anderson and Danskin burned areas. Because of these findings, we felt it unnecessary to discuss erosion potential and watershed condition any further.

PART IV - HYDROLOGIC DESIGN FACTORS

These design factors are discussed only in terms of potential for landslides, therefore, different factors were considered. Field review indicated that the Danskin area was burned at low to moderate severity and moderate intensity. There was high tree mortality, with predominantly a red canopy and intact needles. Needle fall is expected within the first year. Litter was consumed, but duff layer still exists in many instances. The burn was a mosaic of duff and litter consumption. There was not an expectation for excessive onsite soil loss due to low to moderate severity and other characteristics discussed in the previous section. However, there was extensive tree mortality in areas usually considered to be prone to landslide occurrence. This section reflects these considerations especially or specifically for the Danskin burned area, which involves about 80 acres of headwater hollows.

A. Estimated Vegetative Recovery Period: 6-10 years (at this time, it is expected roots will have decayed enough that landslide can be expected in saturation zones within the watershed).

B. Design Chance of Success: NA

C. Equivalent Design Recurrence Interval: NA

D. Design Storm Duration: NA

E. Design Storm Magnitude: NA

F. Design Flow: NA

G. Estimated Reduction in Infiltration: NA

H. Adjusted Design Flow: NA

PART V - SUMMARY OF ANALYSIS

A. Describe Watershed Emergency:

The Anderson/Danskin fire began as a prescribed fire. It consists of three major areas that burned outside of prescription and two of these areas burned outside of the prescribed fire boundary (see figure 2). A total of 618 acres burned outside of prescription within the prescribed fire boundary and 437 acres burned outside of the prescribed fire boundary. All of these acres considered for BAER were surveyed through aerial reconnaissance and ground survey. This assessment is also attached. Two roads travel within the burned area and several roads are in the path of debris flows, flooding, or mudslides. Irrigation facilities are also downstream from the burned area. However, the distance between areas burned at high intensities and any of these roads or irrigation facilities is great (see figure 1). There are two potential concerns as a result of this burn.

1. The portion of burned area in the headwaters of Danskin Creek is within an area considered to have a high potential for landslide occurrence under normal conditions. When the root cohesion is lost due to tree mortality, there will be a much greater risk to landslide occurrence within this area. This usually occurs 6 to 10 years after trees are killed and is based on research in Silver Creek, which is within the adjacent fourth field HUC basin. A number of road crossings are below this headwater area that would be damaged as a result of any landslide occurrence. In some locations, the road could also be impacted as has happened as recently as 1997 during a rain-on-snow event. This earlier event closed access from the lower Danskin road making it only possible to enter the area from one direction rather than providing loop access to forest visitors. If upstream portions are also damaged, forest visitors would be further displaced.

2. Invasive plant species exist in close proximity to the burned area, and portions of the burned area have very good access by road system as stated earlier. Experience with these particular invasive plant species within the Upper South Fork Payette River has indicated that elevations lower than 6,000 feet tend to be more prone to invasion than above this elevation. Elevations within the burned area with good access for spreading weed seed range from Danskin at 4,200 feet to Granite Basin at about 5,900 feet. Rush skeletonweed is already present within the burned area and difficult to control. Using the prioritization established in the UPCWMA Annual Operating Plan, the noxious weeds expected in the area include potential leafy spurge, and currently known diffuse knapweed, spotted knapweed, Canada thistle, and Dalmation toadflax.

B. Emergency Treatment Objectives:

Overall, treatment measures are intended to reduce threat to life, property, water quality, and soil productivity in the more fire-impacted areas where treatment is expected to be most beneficial and cost effective.

LAND:

A. General Description:
Monitor vegetative recovery within those areas burned at a moderate to high severity for the invasion of invasive/noxious weeds. Monitor vegetative recovery within the burned area for the invasion of invasive/noxious weeds on roads, dozerlines, handlines, and other areas disturbed by suppression actions.

B. Location (Suitable) Sites:

Refer to figure 1 for the areas burned at moderate to high severity.

C. Design/Construction Specifications:

1. Conduct short-term monitoring (3-5 years) on areas disturbed within the fire on historic populations of known noxious weed populations to determine spread of invasive species and noxious weeds. Monitoring protocols will be established by each jurisdiction and will be implemented in accordance with current management plans. These sites would be monitored according to the 2002 Annual Operating Plan (AOP) for the Upper Payette River Cooperative Weed Management Area. The monitoring would take one person 5 days a year.

2. Initiate agency-approved control measures on new weed occurrences where monitoring demonstrates the establishment of new or expansion of known weed populations that threaten the natural regeneration of native vegetation or establishment of effective ground cover. These actions are spelled out within the Upper Payette River Cooperative Weed Management Area 2002 AOP. The treatment, if weeds were found, would take one person an additional 1 to 5 days per year at a rate of $250 per day for a total of $1,250 for up to 5 years. Spring treatment would be primarily for the knapweeds and would include spraying with a clopyralid, which is an herbicide that will not harm conifers, thereby resulting in less risk to planted trees. The fall treatments would occur in late September and early October and would incorporate spraying leafy spurge, Canada thistle, and toadflax with picloram.

Picloram has a residual effect that will help to prevent new weeds from becoming established. Fall treatment on perennial, rhizomatous weeds like these has proven to be more effective than spring treatments. No broadcast spraying will occur on the Emmett Ranger District. Weeds would be spot-sprayed to avoid killing nontarget plants, using truck and ATV-mounted sprayers and more likely, backpack sprayers, given the terrain.

3. Prepare final report of findings for submission to NIFC for inclusion in fire effects database.

D. Purpose of Treatment Specifications:

Monitor disturbed areas within the fire area and known noxious weed populations to determine if suppression or rehabilitation actions have spread invasive species that may potentially threaten the long-term health of native plant associations or impact short-term recovery of revegetation efforts.

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

Land **NA** % Channel **NA** % Roads **NA** % Other ___ %

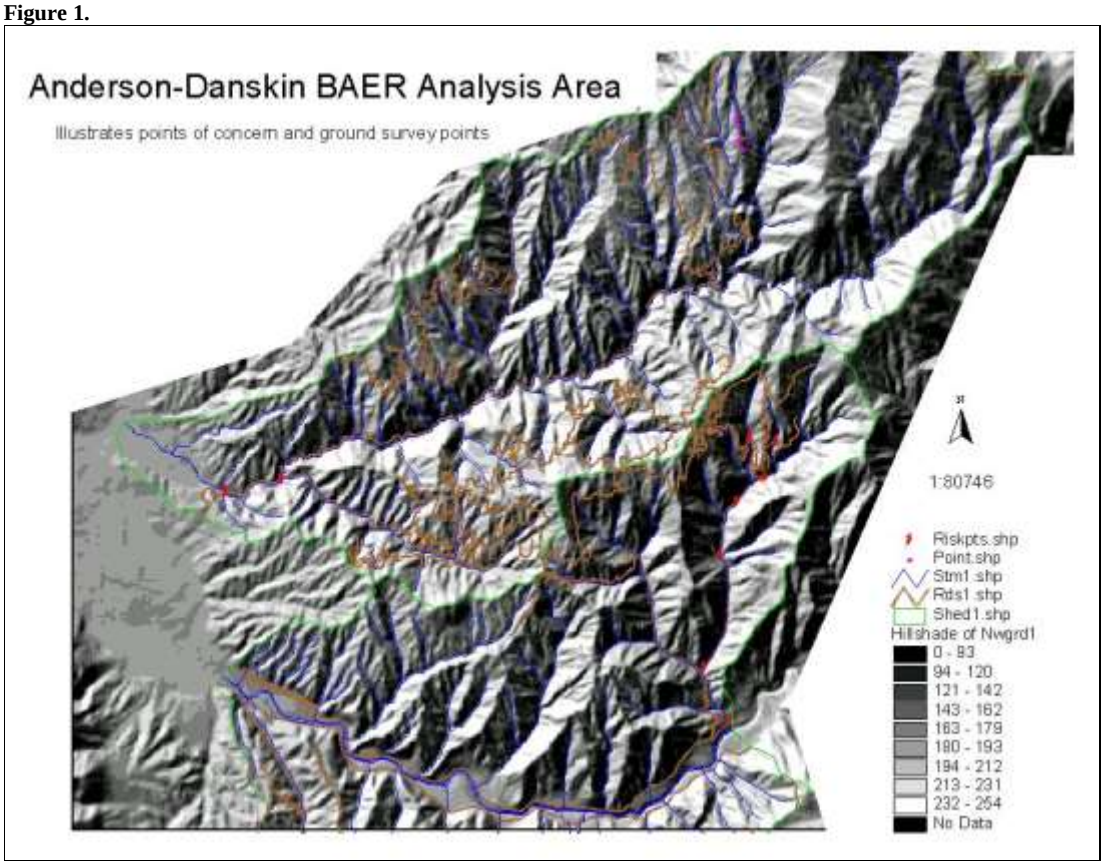
D. Probability of Treatment Success:

	Years after Treatment		
	1	3	5
Land	NA	NA	NA
Roads			
Other			

E. Cost of No-Action (Including Loss): $

F. Cost of Selected Alternative (Including Loss): $ 10,900

Figure 1.


Anderson-Danskin BAER Analysis Area
Illustrates points of concern and ground survey points
N
1:80746
Riskpts.shp
Point.shp
Stm1.shp
Rds1.shp
Shed1.shp
Hillshade of Nwgrd1
0 - 93
94 - 120
121 - 142
143 - 162
163 - 179
180 - 193
194 - 212
213 - 231
232 - 254
No Data

G. Skills Represented on Burned-Area Survey Team:

[x] Hydrology [ ] Soils [ ] Geology [x] Range [ ] Water Chem./Muni. Water
[x] Forestry [x] Wildlife [ ] Fire Mgmt. [ ] Engineering
[ ] Contracting [ ] Ecology [ ] Research [ ] Archaeology

Team Leader: T.J. Clifford, Hydrologist, Boise National Forest

Phone: 208-373-4311 Email: tjclifford@fs.fed.us

Contacts:
Jerry Bird, Hydrologist, Emmett Ranger District 208-365-7010
John Erickson, District Ranger, Emmett Ranger District 208-365-7001

H. Treatment Narrative: See above section 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 appropriate funding authorities. For seeding treatments, include species, application rates and species selection rationale.)

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 encroachment into the burned area will be monitored to determine need for control treatments. Monitoring will follow the UPCWMA protocols within section V as follows:

- Monitoring is the collection of information to determine the effectiveness of management actions in meeting the prescribed objectives. Noxious weed management is concerned with the density and rate of spread of specific exotic plant species and the effect these aggressive plants have on the natural resources of the Upper Payette River drainage.
- Monitoring of weed spread and /or suppression will be accomplished through existing database and GIS layer. An inventory to remap infestations will be completed in 5 years to compare with 1999/2000 inventory. Yearly treatment summaries will also be used to assess weed spread. Annual treatment activities will be mapped and incorporated into the existing databases.
- In 2002, Geographic Positioning Systems (GPS) technology will be used to locate infestations and collect information on each infestation regarding size, density, phenology, and treatment type and date.
- Short-term monitoring (2002) will be conducted to verify existing locations, add new locations, and gather information on size of infestation, density, phenology, and treatment.
- Long-term monitoring will be designed to answer general questions:
  - " Are the treatments effective in meeting the planned objectives?
  - " Are the weeds continuing to spread beyond our control actions?
- Information as result of specific monitoring of chemical treatments, bio-control agents, and general weed spread, will be evaluated to answer the resource questions stated above.
  - The monitoring would take one person 5 days per year to complete at a rate of $250 per day or $1,250.

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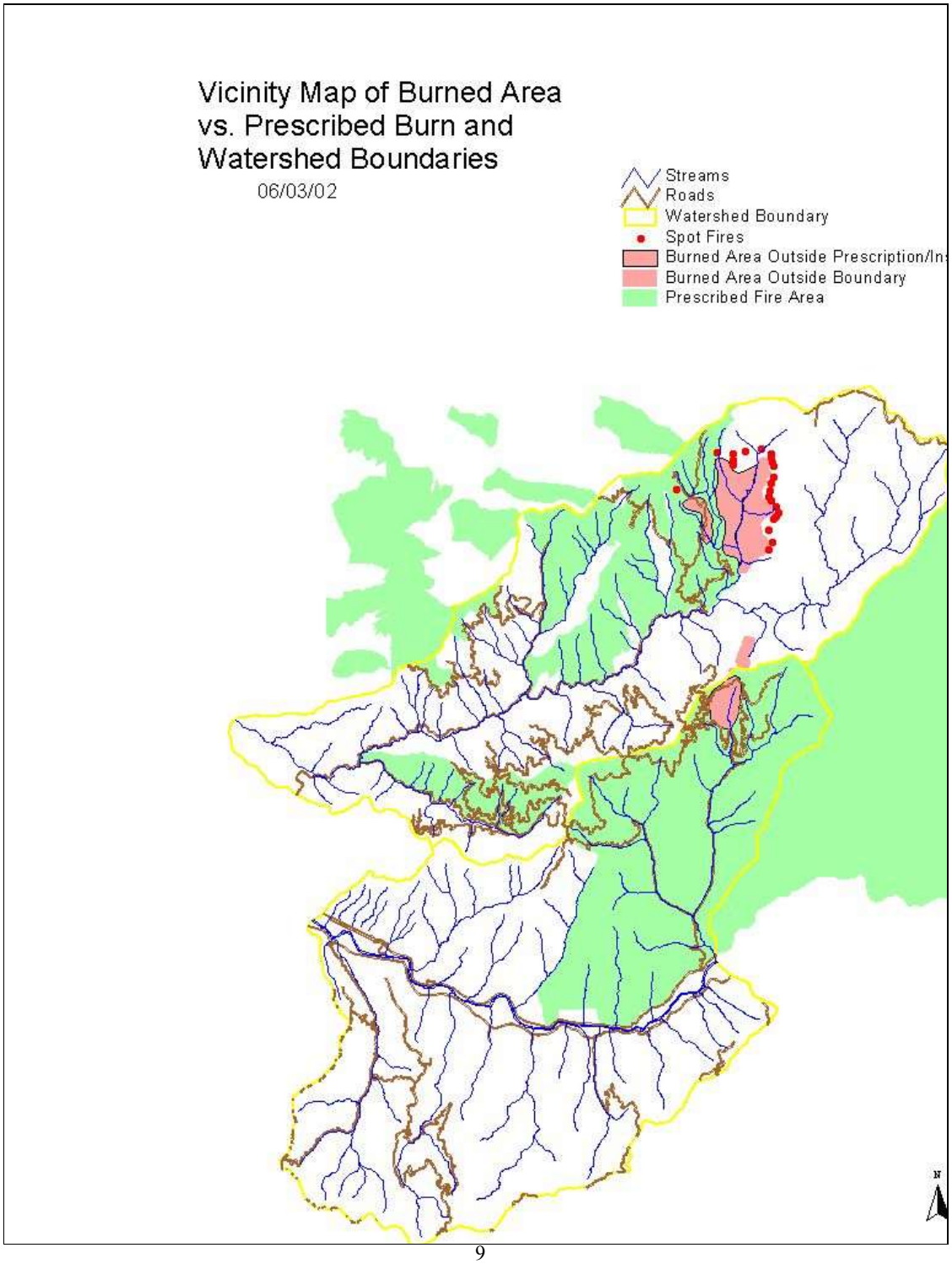
Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

Line Items	Units	Unit Cost	# of Units	WFSU SULT $	Other $	# of units	Fed $	# of Units	Non Fed $	Total $
A. Land Treatments										
Noxious Weed Control	days	250	5	$1,250			$0		$0	$1,250
Subtotal Land Treatments				$1,250			$0		$0	$1,250
B. Channel Treatments										
None				$0			$0		$0	$0
Subtotal Channel Treat.				$0			$0		$0	$0
C. Road and Trails										
	miles		0	$0			$0		$0	$0
	miles		0	$0			$0		$0	$0
Subtotal Road & Trails				$0			$0		$0	$0
D. Structures										
None				$0			$0		$0	$0
Subtotal Structures				$0			$0		$0	$0
E. BAER Evaluation										
Overhead	days	800	10	$8,000			$0		$0	$8,000
Helicopter	hours	200	2	$400			$0		$0	$400
				$0						
F. Monitoring										
Noxious Weed Control	days	250	5	$1,250			$0		$0	$1,250
G. Totals				**$10,900**			**$0**		**$0**	**$10,900**

PART VII - APPROVALS

1. ___/s/ Robert Russell_____ _____
   Acting Forest Supervisor (signature) Date

2. _____ _____
   Regional Forester (signature) Date


Vicinity Map of Burned Area
vs. Prescribed Burn and
Watershed Boundaries
06/03/02
Streams
Roads
Watershed Boundary
Spot Fires
Burned Area Outside Prescription/In
Burned Area Outside Boundary
Prescribed Fire Area
N