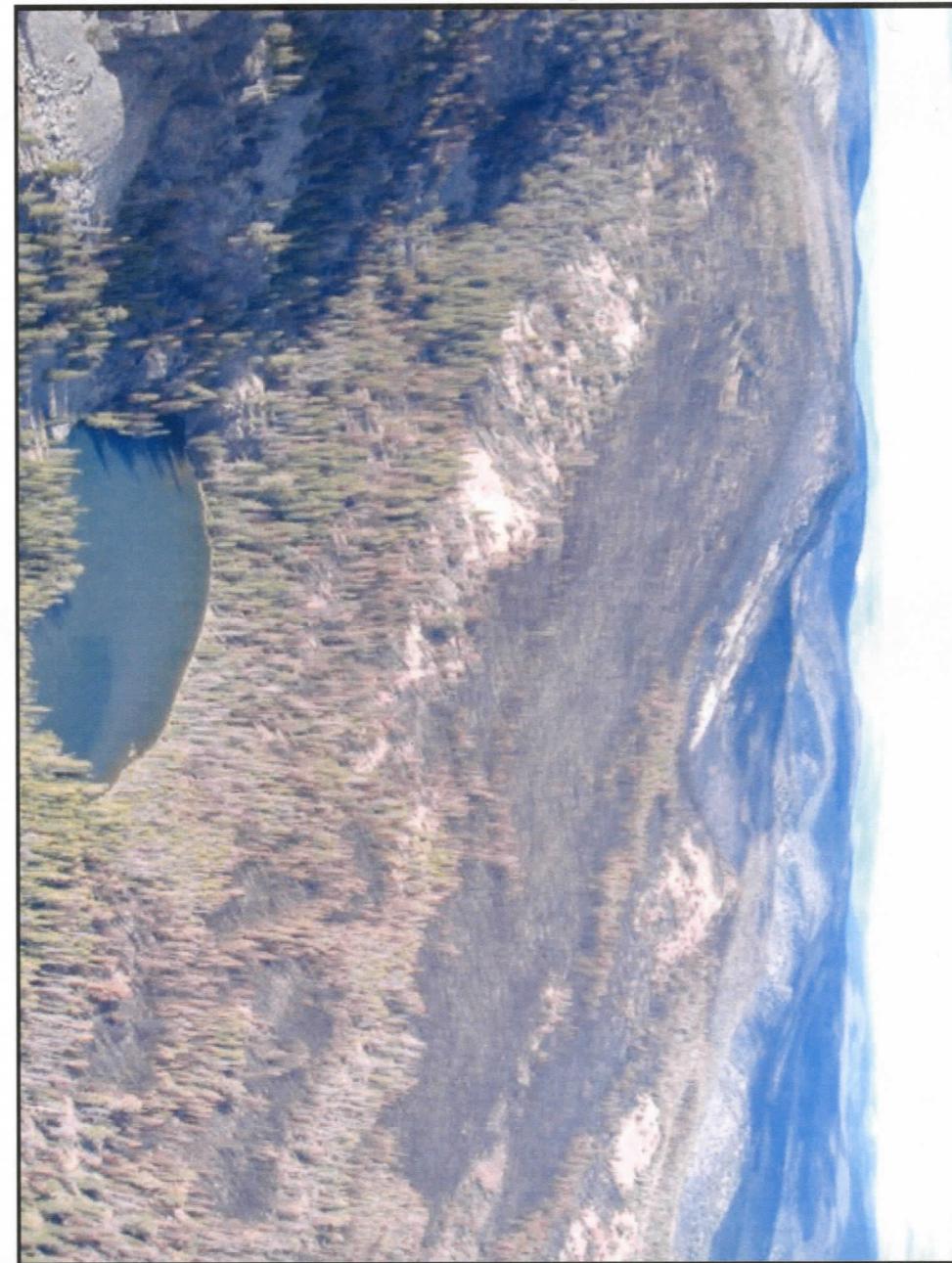


SALT FIRE



FS-2500-8
BURNED-AREA REPORT

BURNED-AREA REPORT
(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

- 1. Funding request for estimated emergency stabilization funds
- 2. Accomplishment Report
- 3. No Treatment Recommendation

B. Type of Action

- 1. Initial Request (Best estimate of funds needed to complete eligible stabilization 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: Salt

B. Fire Number: ID-SCF-011236

C. State: Idaho

D. County: Lemhi

E. Region: 4

F. Forest: Salmon-Challis N.F.

G. District: Salmon-Cobalt

H. Fire Incident Job Code: P4GCN0

I. Date Fire Started: August 25, 2011

J. Date Fire Contained: 20% contained in monitor status until significant winter weather event.

K. Suppression Cost: \$14,173.353

L. Fire Suppression Damages Repaired with Suppression Funds

1. Fireline waterbarred (miles): 2.05
2. Fireline seeded (miles): Topsoil containing native seed bank was respread over fire lines.
3. Other (identify):

Dozer Line 32.58 miles

- Rehab completed: 15.91 miles
- Waterbarred: 0.93
- Rehab not completed: 15.74 miles

Dozer Road Opening 3.61 miles

- Rehab completed: 1.98 miles
- Rehab not completed: 1.63 miles

Feller Buncher 1.17 miles

- Rehab completed: 0.56 miles
- Rehab not completed: 0.61 miles

Hand Line 8.91 miles

Rehab completed: 4.55 miles

Waterbarred: 1.12 miles

Rehab not completed: 2.51 miles

Shaded Fuel Break 2.02 miles

Rehab completed: 1.46 miles

Rehab not completed: 0.55 miles

Windrowed Slash 0.34 miles

Rehab completed: 0.34 miles

M. Watershed Number: **Middle Panther Creek 1706020311, Iron Creek-Salmon River 1706020302, Upper Pantehr Creek 1706020309**

N. Total Acres Burned: **21.667**
NFS Acres(21,667) Other Federal () State () Private ()

O. Vegetation Types: The timber vegetation in the burned area consists of several cover types. These include higher elevation mixed conifer stands (lodgepole pine, subalpine fir, Douglas-fir and Engelmann spruce). Lodgepole pine stands and, at mid to lower elevations, Douglas-fir stands. Much of the lodgepole pine cover type consists of dense, single age class stands. The trees are smaller diameter with poor crown cover ratios. Lodgepole pine has been steadily encroaching upon both the higher elevation mixed conifer stands and the lower elevation Douglas-fir stands. Much of the mature Douglas-fir stands have been harvested in the past, with one or more entries.

Common understory plant communities are dominated by elk sedge and pinegrass in the Douglas-fir stands and grouse whortleberry and beargrass at higher elevations.

There are also meadow complexes along streamcourses and at the upper elevations. The plant communities in the meadows are typically a mix of graminoids and forbs, although deciduous shrubs may be present. There has been steady conifer encroachment into these meadows.

P. Dominant Soils:

Quartzite Parent Material (93% of the area): The most common quartzite soil found is EOCT-4. The soil is moderately deep to deep, light in color, has a loamy sand to sandy loam texture, 15 to 35 percent gravel, 10 to 20 percent angular cobble and stone. Vegetation and litter cover 90 to 100 percent, surface rock and pavement cover 0-5 percent and bare soil is exposed on 0-5 percent of the area. These soils have a low inherent erosion hazard, a very low debris slide hazard, a very low slump hazard, and a very low surface creep hazard. The potential for creating a sediment source by soil disturbing activities is low because of the position on high ridges and the low angle slopes. The cold climate is the major limiting element in revegetating disturbed areas.

Volcanic Parent Material (7% of the area): The most common volcanic soil found is IUCT-10 and EOCT-10. These soils are moderately deep to deep. They are light in color throughout the profile and have sandy loam textures and 35 percent gravel and 5 to 10 percent cobble and stones. These soils have a low to moderate inherent erosion hazard, a very low debris slide hazard, a very low slump hazard, and a very low surface creep hazard. The potential for creating a sediment source by soil disturbing activities is low because of the position on the ridges with low angle slopes. The cold climate is the major limiting element in revegetating disturbed areas.

Q. Geologic Types: Bedrock consists of primarily quartzites with a small percentage of volcanics on the lower fire margins in the Iron creek drainage.

R. Miles of Stream Channels by Order or Class: perennial 16.65 miles, intermittent 31.78 miles

S. Transportation System

Trails: 17.7 miles Roads: 45.7 miles

PART III - WATERSHED CONDITION

- A. Burn Severity (acres): 3,776 18% (low) 5,795 27% (moderate) 3,558 17% (high) 8307 39% (unburned)
- B. Water-Repellent Soil (acres): 3,558
- C. Soil Erosion Hazard Rating (acres): 1,312 (high), 6,434 (moderate)
- D. Erosion Potential: 4-9 tons
- E. Sediment Potential: 1400-3200 cubic yards/ square mile

PART IV - HYDROLOGIC DESIGN FACTORS

- A. Estimated Vegetative Recovery Period, (years): 3-5
- B. Design Chance of Success, (percent): 80
- C. Equivalent Design Recurrence Interval, (years): 100
- D. Design Storm Duration, (hours): 6
- E. Design Storm Magnitude, (inches): 2
- F. Design Flow, (cubic feet / second/ square mile): 4.4
- G. Estimated Reduction in Infiltration, (percent): 17%
- H. Adjusted Design Flow, (cfs per square mile): 19.6

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

| The Salt Fire burned over 20,000 acres on the Salmon-Challis National Forest within the Salmon-Cobalt Ranger district. The fire burned in a mosaic pattern with a full range of burn intensities from very high to unburned in discontinuous patches. The fire burned primarily on the ridge tops and in the headwaters of numerous drainages, leaving the majority of riparian areas intact. Most indications are that effects from the fire will be environmentally beneficial at the ecosystem level. The post fire risks to life, property, and cultural resources are low. However, invasive plant species present a concern with respect to the goal of recovering and retaining native plant communities in order to maintain the structure and function of the local ecosystem.

The majority of known, mapped infestations found within the fire perimeter occur along or near roads. There are 45.7 miles of system roads, 47.9 miles of constructed fireline and 17.7 miles of trails within the fire perimeter. Existing roads, re-opened roads, and almost 48 miles of constructed fireline comprise the greatest potential for establishment and spread of invasive plant species in the burned area. There are a number of infestations of weed species that are top priority for eradication growing along or near some of these open

roads. Although these sites are treated annually for eradication and to deplete the seed bank, the potential of vectoring these invasive species into the burned area via motor vehicles is still very high.

There are, however, other vectors as well for weed seeds, including domestic cattle, wildlife species and water. Domestic livestock, in particular, can vector weed seeds long distances. Areas frequented by livestock, such as bedding grounds, salt grounds, and stock trails, require careful inspection to detect new weed infestations.

This combination of known weed species' presence, high road and fireline density and the high motorized traffic use combined with the vulnerable post fire condition of the soil and vegetation resources puts the burned area at high risk of derailing the recovery of native plant communities.

B. Emergency Treatment Objectives:

Locate and treat new and known invasive plant species infestations during early stages of spread in ecologically sensitive burned areas in order to maintain the structure and function of the local ecosystem.

C. Probability of Completing Treatment Prior to Damaging Storm or Event: **N/A**

Land % Channel % Roads/Trails % Protection/Safety %

D. Probability of Treatment Success

	Years after Treatment		
	1	3	5
Land			
Channel			
Roads/Trails			
Protection/Safety			

Does Not Apply

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

Year	Exponential growth factor	Cost
1	1	\$87,178
2	2	\$174,356
3	4	\$348,712
4	8	\$697,424
5	16	\$1,394,848

F. Cost of Selected Alternative (Including Loss): **Implied Minimum Value = (Treatment cost 77,305)(Prob. 0.85 loss occurring with no treatment – Prob. 0.25 loss occurring with proposed treatment) = \$128,841**

G. Skills Represented on Burned-Area Survey Team:

- | | | | |
|---|---|--|---|
| <input checked="" type="checkbox"/> Hydrology | <input checked="" type="checkbox"/> Soils | <input type="checkbox"/> Geology | <input type="checkbox"/> Range |
| <input type="checkbox"/> Forestry | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Fire Mgmt. | <input checked="" type="checkbox"/> Engineering |
| <input checked="" type="checkbox"/> Contracting | <input type="checkbox"/> Ecology | <input checked="" type="checkbox"/> Botany | <input type="checkbox"/> Archaeology |
| <input checked="" type="checkbox"/> Fisheries | <input type="checkbox"/> Research | <input type="checkbox"/> Landscape Arch | <input checked="" type="checkbox"/> GIS |

Team Leader: **David Deschaine**

Email: dpdedeschaine@fs.fed.us

Phone: **208-756-5171**

FAX: **208-765-5151**

H. Treatment Narrative:

Land Treatments:

Description- The Panther Creek drainage is a special weed management area where active control of all noxious weed species is a high priority to protect the intact native plant communities. For this reason, efforts are made to keep weed inventories reasonably current, given available funding. The most recent inventories date from 2007 to 2009. The noxious weed species depicted in the table below are known to occur within or near the fire perimeter.

Common Name	Scientific Name	Noxious/Invasive
Canada Thistle	<i>Cirsium vulgare</i>	Idaho State Listed Noxious Weed
Henbane	<i>Hyoscyamus niger</i>	Idaho State Listed Noxious Weed
Hoary Alyssum	<i>Berteroa incana</i>	Idaho State Listed Noxious Weed
Houndtongue	<i>Cynoglossum officinale</i>	Idaho State Listed Noxious Weed
Musk Thistle	<i>Carduus nutans</i>	Idaho State Listed Noxious Weed
Oxeye Daisy	<i>Chrysanthemum leucanthemum</i>	Idaho State Listed Noxious Weed
Rush Skeletonweed	<i>Chondrilla juncea</i>	Idaho State Listed Noxious Weed
Spotted Knapweed	<i>Centaurea biebersteinii</i>	Idaho State Listed Noxious Weed
Yellow Toadflax	<i>Linaria vulgaris</i>	Idaho State Listed Noxious Weed

Due to the potential for invasive species spread and adverse impact on the ecological structure and function of the local ecosystem, two site visits are needed during the 2012 growing season in an effort to perform Early Detection Rapid Response (EDRR) activities.

Weed treatments will be weather-dependent, with activity in lower elevation sites occurring earlier in the summer while high elevation sites may not be accessible until July or August. The second visit to the high elevation sites would then occur in September to October. To the extent possible, site visits will be timed to coincide with each target species phenological stages throughout the growing season to maximize detection of weeds and to prevent seedset. The life cycles of target weed species vary from annual to biennial to perennial species. There is also considerable variation in bloom times and seed set among the target weed species. This means that the fire area will be visited regularly from spring through fall to detect, map and control weed infestations.

In order of importance, EDRR activities will occur with the following priorities: primary system roads, dozer line, high clearance vehicle routes that are heavily traveled, areas occupied by livestock, trails and hand-constructed fireline, and then moderately to severely burned areas in plant communities that are most susceptible to weed establishment and spread (e.g. meadow complexes, Douglas-fir stands, and open riparian areas). EDRR activities will be planned to begin at known weed infestations and then radiate out from these epicenters to detect, map and treat new infestations. Crews will be trained to recognize and look for new invaders as well that may have been vectored into the burned area by fire suppression crews. This approach served well for BAER efforts after the 2007 Clear Fire in lower Panther Creek, when an astute crew member found and reported infestations of salt cedar establishing in the burned riparian area along Clear Creek.

Design- Perform Early Detection Rapid Response to locate and treat new and known invasive plant species infestations during early stages of spread in ecologically sensitive burned areas in order to maintain the structure and function of the local ecosystem. The selection of herbicide, application rate,

and time of application will based on specific weeds being treated, access to the locations of areas where weeds may occur and plant phenology at the time of treatment.

Purpose- Given the fire's proximity to the town of Salmon with its associated noxious weeds and high human use throughout the year, there is a real potential for Spotted Knapweed, among other invasive plants, to take a foothold within the disturbed area if it is not identified and treated soon after the fire.

Category	Personnel	Transportation	Materials and Supplies
Description	Salary and other costs associated with weed control personnel	Transportation costs associated with crew vehicles, herbicide sprayers (e.g. spray truck), and pack and saddle stock (e.g. pelletized feed, maintenance/repair of tack, etc.)	Spraying supplies, safety supplies (e.g. personal protective equipment that requires regular replacement), spraying equipment (e.g. parts such as nozzles that require regular replacement), miscellaneous supplies (e.g. heavyweight garbage bags for removing flower/seed stalks), etc.
Estimated Cost	\$58,200	Motor Vehicles - \$6,1500 Pack/Saddle Stock - \$2,500	Herbicides/ Adjuvants - \$10,000 Equipment/Maintenance - \$7,500 Miscellaneous - \$2,500

Channel Treatments: None recommended

Roads and Trail Treatments: None recommended

Protection/Safety Treatments: None recommended

I. Monitoring Narrative:

Part VI – Emergency Stabilization Treatments and Source of Funds

		NFS Lands				Other Lands			All	
Line Items	Units	Unit Cost	# of Units	BAER \$	Other \$	# of units	Fed \$	# of Units	Non Fed \$	Total \$
A. Land Treatments										
Diane Schultdt	Days	\$335.00	30	\$10,050	\$0		\$0		\$0	\$10,050
John Miller	Days	\$150.00	45	\$6,750	\$0		\$0		\$0	\$6,750
Gary English	Days	\$120.00	45	\$5,400	\$0		\$0		\$0	\$5,400
Courtney Krohn	Days	\$120.00	45	\$5,400	\$0		\$0		\$0	\$5,400
Katrina Knight	Days	\$120.00	45	\$5,400	\$0		\$0		\$0	\$5,400
Kallie McFarland	Days	\$120.00	45	\$5,400	\$0		\$0		\$0	\$5,400
Jake Speich	Days	\$110.00	45	\$4,950	\$0		\$0		\$0	\$4,950
Brandon Heaton	Days	\$110.00	45	\$4,950	\$0		\$0		\$0	\$4,950
GS-3 Seasonal	Days	\$110.00	45	\$4,950	\$0		\$0		\$0	\$4,950
GS-3 Seasonal	Days	\$110.00	45	\$4,950	\$0		\$0		\$0	\$4,950
Spray Truck (6397)	Days	\$51.00	45	\$2,295	\$0		\$0		\$0	\$2,295
Crew Vehicle (4268)	Days	\$46.70	45	\$2,102	\$0		\$0		\$0	\$2,102
Crew Vehicle (6942)	Days	\$46.70	45	\$2,102	\$0		\$0		\$0	\$2,102
Pack and Saddle Stock	Days	\$50.00	50	\$2,500	\$0		\$0		\$0	\$2,500
Materials and Supplies (Units)	Units	\$444.00	45	\$19,980	\$0		\$0		\$0	\$19,980
<i>Insert new items above this line!</i>					\$0		\$0		\$0	\$0
<i>Subtotal Land Treatments</i>					\$87,178		\$0		\$0	\$87,178
B. Channel Treatments										
<i>Insert new items above this line!</i>										
<i>Subtotal Channel Treat.</i>										
C. Road and Trails										
<i>Insert new items above this line!</i>										
<i>Subtotal Road & Trails</i>										
D. Protection/Safety										
<i>Insert new items above this line!</i>										
<i>Subtotal Protection</i>										
E. BAER Evaluation										
Deschaine, David	Days	\$345.11	6	\$2,071	\$0		\$0		\$0	\$2,071
Back, Jeremy	Days	\$129.74	6	\$778	\$0		\$0		\$0	\$778
Schuldt, Pete	Days	\$298.00	2	\$596	\$0		\$0		\$0	\$596
Schuldt, Diane	Days	\$335.00	4	\$1,340	\$0		\$0		\$0	\$1,340
<i>Insert new items above this line!</i>										
<i>Subtotal Evaluation</i>										
F. Monitoring										
<i>Subtotal Monitoring</i>										
G. Totals										
Previously approved					\$87,178		\$0		\$0	\$87,178
Total for this request					\$87,178		\$0		\$0	\$87,178

PART VII - APPROVALS

1.


Forest Supervisor (signature)

2.

Regional Forester (signature)

Date _____


Date