

**BLM IDAHO POST-FIRE RECOVERY PLAN
EMERGENCY STABILIZATION AND BURNED AREA
REHABILITATION**

**PLAN TEMPLATE 2010
EAST ROCK FIRE (G4ZN)
BLM Boise District Office
IDAHO STATE OFFICE**

FIRE BACKGROUND INFORMATION

Fire Name	East Rock
Fire Number	G4ZN
District/Field Office	Boise District Office
Admin Number	LLIDB00000
State	IDAHO
County(s)	OWYHEE
Ignition Date/Cause	08/05/2012 Lightning
Date Contained	08/08/2012
Jurisdiction	<i>Acres</i>
State	69
BLM	2619
Total Acres	2688
Total Costs	\$438,000
Costs to LF20000ES (2822)	\$379,000
Costs to LF32000BR (2881)	\$59,000

Status of Plan Submission (check one box below)

X	Initial Submission of Complete Plan
	Updating or Revising the Initial Submission
	Amendment

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON FIRE.

The East Rock fire was ignited by lightning on August 5, 2012 with containment on August 8, 2012. The fire burned in two allotments; 606 acres (14% of allotment) in East Canyon View (00869) and 1,462 acres (25% of pasture) in the Big Lake Pasture of Blackstone Allotment (00941). Approximately 633 acres of the fire occurred within the Bruneau-Jarbidge Wilderness boundary. The Bruneau River contains habitat for Bull Trout, Bruneau Hotspring snail, and Snake River Physa snail all of which are listed species under ESA. Increased sedimentation is a threat for these species from the uplands down into the river corridor.

Approximately 64% of the burned area is characterized by the Loamy 8-12" ecological site with Wyoming big sagebrush with bluebunch wheatgrass and Thurbers' needlegrass. The remaining area is made up of Sandy Loam 8-12" (5%), South Slope Gravelly 12-16" (6%), and 24% is associated with the steep cliffs and drainages of the Bruneau Canyon.

Parts of the burned area have experienced previous wildfires; the earliest in 1974 and the most recent in 2001. Pre-fire vegetation in the northern half of the burned area consisted of weak crested wheatgrass seeding with Sandberg bluegrass and squirreltail, and few Wyoming big sagebrush, four-wing saltbush, and green rabbitbrush plants. The plant communities in the 650 acres (33% of the burned area) that had not previously burned were dominated by Wyoming big sagebrush with Sandberg bluegrass and bottlebrush squirreltail. Overall, the area contains some cheatgrass, but the extent of the invasion has been kept in check by the seedings and good microbiotic soil crust cover.

Noxious weeds observed and treated in, and adjacent to, the recently burned area include perennial pepperweed, rush skeletonweed, Scotch thistle, tamarisk, and whitetop. The risk of invasion into newly burned areas by noxious and invasive weed species is high, given the proximity to existing populations.

LAND USE PLAN CONSISTENCY

S2 - Ground Seeding

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the planning unit (RM-5);

- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

S5 - Noxious Weeds

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the planning unit (RM-5);
- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

S6 - Soil Stabilization (Other than seedling, planting)

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the planning unit (RM-5);
- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

S7 - Fence/Gate/Cattleguard

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the

planning unit (RM-5);

- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

S12 - Closures (area, OHV, livestock)

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the planning unit (RM-5);
- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

S13 - Monitoring

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the planning unit (RM-5);
- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

R3 - Aerial Seeding

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1)
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the

planning unit (RM-5);

- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

R5 - Noxious Weeds

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1),
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the planning unit (RM-5);
- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);
- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

COST SUMMARY TABLES

Emergency Stabilization (LF20000ES)

Action/ Spec #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2012	FY 2013	FY 2014	FY 2015	Totals by Spec.
S1	Planning (Project Management)				\$ 0	\$15,000	\$15,000	\$15,000	\$45,000
S2	Ground Seeding	Acres	1,800	\$ 106.11	\$126,000	\$65,000	\$ 0	\$ 0	\$191,000
S3	Aerial Seeding								
S4	Seedling Planting								
S5	Noxious Weeds	Acres	2,619	\$ 1.53	\$ 0	\$4,000	\$ 0	\$ 0	\$4,000
S6	Soil Stabilization (Other than seedling, planting)	#	20	\$1,200.00	\$12,000	\$12,000	\$ 0	\$ 0	\$24,000
S7	Fence/Gate/Cattleguard	Miles	6	\$11,666.67	\$ 0	\$59,000	\$ 0	\$11,000	\$70,000
S8	Road/Trail Water Diversion								
S9	Cultural Protection (Stabilization/Patrol)								
S10	Tree Hazard Removal								
S11	Facilities								
S12	Closures (area, OHV, livestock)								
S13	Monitoring	Acres	2,619	\$ 17.18	\$ 0	\$18,000	\$14,000	\$13,000	\$45,000
S14	Other Treatments								
	TOTAL COSTS (LF20000ES)				\$138,000	\$173,000	\$29,000	\$39,000	\$379,000
OTHER FUND CODE TOTALS:									
	TOTAL COSTS (???)								
	TOTAL COSTS (???)								
	TOTAL COSTS (???)								

Burned Area Rehabilitation (LF32000BR)

Action/ Spec #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2012	FY 2013	FY 2014	FY 2015	Totals by Spec.
R1	Planning (Project Mgmt)								
R2	Ground Seeding								
R3	Aerial Seeding	Acres	2,619	\$ 19.09	\$ 0	\$50,000	\$ 0	\$ 0	\$50,000
R4	Seedling Planting								
R5	Noxious Weeds	Acres	2,619	\$ 3.44	\$ 0	\$ 0	\$5,000	\$4,000	\$9,000
R6	Soil Stabilization (Other than seedling, planting)								
R7	Fence/Gate/Cattleguard								
R8	Road/Trail Water Diversion								
R9	Cultural Protection (Stabilization/Patrol)								
R10	Tree Hazard Removal								
R11	Facilities								
R12	Closures (area, OHV, livestock)								
R13	Monitoring								
R14	Additional Treatments								
	TOTAL COSTS (LF32000BR)				\$0	\$50,000	\$5,000	\$4,000	\$59,000
OTHER FUND CODE TOTALS:									
	TOTAL COSTS (???)								
	TOTAL COSTS (???)								
	TOTAL COSTS (???)								

PART 2 - POST-FIRE RECOVERY ISSUES

EMERGENCY STABILIZATION ISSUES

1 - Human Life and Safety

N/A

2 - Soil/Water Stabilization

N/A

3 - Habitat for Federal/State Listed, Proposed, or Candidate Species

The fire burned along the rim and down into the Bruneau River Canyon which is habitat for threatened Bull Trout, Bruneau Hotspring snail, and Snake River Physa snail. Sedimentation is a threat to habitat for these species, the risk of which increased as a result of fire. Soil erosion structures are proposed for specific locations along the rim to trap sediment laden overland flows prior to them entering the canyon. These locations have been selected where soil movement is expected to occur given topography, fire severity, and vegetation recovery potential.

4 - Critical Heritage Resources

N/A

5 - Invasive Plants and Weeds

Noxious weeds known to occur within, or in close proximity to, the fire perimeter include; perennial pepperweed, rush skeletonweed, Scotch thistle, tamarisk, and whitetop. Populations of weeds, including noxious species, tend to increase following fire due to suppression disturbances, increased nitrogen, and newly available ecological niches. Early detection and treatment will reduce the risk of these species spreading into previously unoccupied sites.

The northern portion of the burned area has experienced repeated fires, each fire exposing uninfested sites to the risk of cheatgrass invasion. The southern portion of the burned area has experienced little or no fire and with the expected increase in cheatgrass following fire, due to increased available nitrogen, wilderness characteristics are at an increased risk.

BURNED AREA RECOVERY ISSUES

1 - Lands Unlikely to Recover Naturally

The sagebrush component of the plant community burned in the fire. Reintroducing sagebrush post-fire will provide complementary structure and diversity to the plant community, which is preliminary general habitat for Greater sage-grouse, which is a candidate species for listing under ESA. The burned area is also between known nesting locations for golden eagles, whose prey base depends on sagebrush for cover.

2 - Weed Treatments

Noxious weeds known to occur within, or in close proximity to, the fire perimeter include; perennial pepperweed, rush skeletonweed, Scotch thistle, tamarisk, and whitetop. Populations of weeds, including noxious species, tend to increase following fire due to suppression disturbances, increased nitrogen, and newly available ecological niches. Early detection and treatment will reduce the risk of these species spreading into previously unoccupied sites.

The northern portion of the burned area has experienced repeated fires, each fire exposing uninfested sites to the risk of cheatgrass invasion. The southern portion of the burned area has experienced little or no fire and with the expected increase in cheatgrass following fire, due to increased available nitrogen, wilderness characteristics are at an increased risk.

3 - Tree Planting

N/A

4 - Repair/Replace Fire Damage to Minor Facilities

N/A

PART 3 - DESCRIPTION OF TREATMENTS

Issue 3 - Habitat for Federal/State Listed, Proposed, or Candidate Species

S6 Soil Stabilization (Other than seedling, planting)

A. Treatment/Activity Description

Straw check dams would be placed at strategic locations to reduce the potential for the movement of sediment from the uplands into the Bruneau River Canyon and side canyons. The locations will be based on topography, fire intensity, soil type, recovery potential of the vegetation.

B. How does the treatment relate to damage or changes caused by the fire?

The fire burned vegetation whose roots help stabilize soils and also whose structure improves snow retention and soil moisture by reducing snow melt. The check dams would retain soil on site and keep it from degrading trout and snail habitat.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

The check dams are an effective tool to keep bigger problems from developing. Failure to mitigate the risk of sediment movement into the stream channels would result in habitat degradation for listed species.

Issue 5 - Invasive Plants and Weeds

S2 Ground Seeding

A. Treatment/Activity Description

Approximatley 1800 acres would be drill seeded with Vavilov Siberian wheatgrass using a rangeland drill in a three drill-cart configuration.

B. How does the treatment relate to damage or changes caused by the fire?

The fire burned moderate to severe in the majority of the area resulting in mortality in existing perennial grasses. The perennial grasses that existed prior to the fire were sparsely scattered and would not be able to compete with the onslaught of cheatgrass that is expected following the fire.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Drill seeding of grasses has occurred in the recent past in adjacent areas and had very successful establishment. Drill seeding is consistent with ESR policy, to reduce the spread of cheatgrass, stabilize soils, and retain wilderness characteristics. Drill seeding costs vary from year to year, based on seed costs, and distance from the district, therefore the cost of seeding this country might be higher than somewhere closer to Boise, but the risk to the resources outweigh the higher costs.

S5 Noxious Weeds

A. Treatment/Activity Description

Noxious weeds observed and treated in, and adjacent to, the recently burned area include perennial pepperweed, rush skeletonweed, Scotch thistle, tamarisk, and whitetop. The risk of invasion into newly burned areas by noxious and invasive weed species is high, given the proximity to existing populations.

Noxious weed inventory and spot herbicide treatment would occur during the first year following the fire within the burned area. Noxious weeds would be treated with BLM approved chemicals in accordance with the Noxious Weed EA and Record of Decision for Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States, approved September 29, 2007 (Vegetation Treatment EIS). Appendix B of the Record of Decision includes a list of Standard Operating Procedures that would be strictly adhered to for vegetation treatments using herbicides.

B. How does the treatment relate to damage or changes caused by the fire?

Noxious weeds known to occur within, or in close proximity to, the fire perimeter include; perennial pepperweed, rush skeletonweed, Scotch thistle, tamarisk, and whitetop. Disturbance associated with wildland fire and wildland fire suppression, including the use of heavy equipment, increases the potential for weed invasion and spread of noxious weeds. The potential for invasion and spread of noxious weeds remains high in years immediately following fire during vegetation recovery and reestablishment. Noxious weed surveys and treatment are intergral to the achievement of the standards for rangeland health.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Inventory and treatment of new or small populations of noxious weed is more time and cost-effective than waiting until the population has had an opportunity to establish and spread. Field work would be combined with other noxious weed treatments for cost efficiency.

S7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

Approximately 6 miles of temporary protective fence would be constructed to BLM specification for wildlife to restrict livestock access into the burned area while vegetation establishment and recovery occurs. The fencing would allow livestock to access the remaining 86% of the East Canyon View allotment and 98% of the Big Lake pasture of the Blackstone allotment during plant establishment and recovery of the burned area.

B. How does the treatment relate to damage or changes caused by the fire?

The fencing would restrict livestock use while the burned area recovers and seeded species establish while they have access to the unburned portions of the pastures.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

The protective fencing will tie into existing fencing or natural barriers to reduce the amount necessary. Livestock will be drawn into the area to use the large playas that are nearby, and will be likely to wander into the area if no measures are taken to restrict their access.

S12 Closures (area, OHV, livestock)

A. Treatment/Activity Description

The burned area would be closed to livestock use to allow for seeded plant species to

establish until treatment objectives identified in the monitoring section have been achieved.

B. How does the treatment relate to damage or changes caused by the fire?

The closure would provide the opportunity for seeding treatments to establish and existing vegetation to recovery from the fire. Establishment and recovery of perennial plant community would inhibit the expansion of noxious and invasive plants and help stabilize soils in the burned area.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

The closure would allow for plants to recover and establish, which would result in improved plant vigor and long-term maintenance of the plant community. There are no ES costs associated with the closure.

S13 Monitoring

A. Treatment/Activity Description

Monitoring will be conducted on treatments and is described in detail in the Monitoring section of this plan.

B. How does the treatment relate to damage or changes caused by the fire?

Monitoring will provide valuable information that will be used to improve techniques, seed mixes, management, etc. The information gleaned from monitoring data and photographs is critical to understand successes and failures.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Monitoring will provide valuable insight into how and/or why treatments worked or were necessary.

Issue 1 - Lands Unlikely to Recover Naturally

R3 Aerial Seeding

A. Treatment/Activity Description

Approximately 1310 acres of the 2619 acres of burned BLM land would be broadcast seeded with Wyoming big sagebrush using aerial application methods. The BLM lands within the burned area have been identified as Preliminary General Habitat (PGH) for Greater sage-grouse. The seed would be flown on in strips resulting in half (1310) of the total area (2619) receiving seed. This will enable heavier seeding rates, using the same amount of seed, and covering a larger portion of the area. Prior to seeding the portion of the burned area within the wilderness boundaries, permissions and protocol would be established with the wilderness supervisor to ensure wilderness characteristics are protected.

B. How does the treatment relate to damage or changes caused by the fire?

The fire burned Preliminary General Habitat (PGH) for Greater sage-grouse, some of which was perennial grasses, and some of which was sagebrush. Re-establishing the sagebrush component of the habitat will continue to provide habitat for sage-grouse, and pronghorn antelope.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Aerial seeding of sagebrush has shown to be effective in the nearby and recent Crowbar, Big Hill, and Flat Broke fires. The area typically receives good snow cover, which benefits germination and establishment.

Issue 2 - Weed Treatments

R5 Noxious Weeds

A. Treatment/Activity Description

Noxious weeds observed and treated in, and adjacent to, the recently burned area include perennial pepperweed, rush skeletonweed, Scotch thistle, tamarisk, and whitetop. The risk of invasion into newly burned areas by noxious and invasive weed species is high, given the proximity to existing populations.

Noxious weed inventory and spot herbicide treatment would occur during years two and three, following the fire within the burned area. Noxious weeds would be treated with BLM approved chemicals in accordance with the Noxious Weed EA and Record of Decision for Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States, approved September 29, 2007 (Vegetation Treatment EIS). Appendix B of the Record of Decision includes a list of Standard Operating Procedures that would be strictly adhered to for vegetation treatments using herbicides.

B. How does the treatment relate to damage or changes caused by the fire?

Disturbance associated with wildland fire and wildland fire suppression, including the use of heavy equipment, increases the potential for weed invasion and spread of noxious weeds. The potential for invasion and spread of noxious weeds remains high in years immediately following fire during vegetation recovery and reestablishment. Noxious weed surveys and treatment are intergral to the achievement of the standards for rangeland health.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Inventory and treatment of new or small populations of noxious weed is more time and cost-effective than waiting until the population has had an opportunity to establish and spread. Field work would be combined with other noxious weed treatments for cost efficiency.

PART 4 DETAILED TREATMENT COST TABLE

PART 5 - SEED LISTS

DRILL SEED

Species	Scientific Name	% PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Drill Seedings (Acre)	Lbs / Acre	Total Lbs.	Cost / Lb	Total Cost
Siberian Wheatgrass, Vavilov II	Agropyron fragile	80.8%	38.16	1,662,250	206,000	2,058,513	1,800.0	8.1	14,526.0	\$ 5.00	\$90,000.00
TOTALS:			38.16	1,662,250	206,000	2,058,513		8.1		\$ 5.00	\$90,000.00

AERIAL SEED

Species	Scientific Name	% PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Aerial Seedings (Acre)	Lbs / Acre	Total Lbs.	Cost / Lb	Total Cost
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	16.0%	9.18	399,881	2,500,000	2,499,255	1,310.0	0.2	209.6	\$ 18.00	\$23,580.00
TOTALS:			9.18	399,881	2,500,000	2,499,255		0.2		\$ 18.00	\$23,580.00

SEEDLINGS

Seedling Species	Scientific Name	Acres of Seedlings planted.	# of Seedlings per Acre	Total # of Seedlings	Cost / Seedling	Total Cost
TOTALS:		0.0	0	0		\$ 0.00

PART 6 - NATIVE/NON-NATIVE PLANT WORKSHEET

A. Proposed Native Plants in Seed Mixtures (Both ES & BAR Treatments)

1. Are the native plants proposed for seeding adapted to the ecological sites in the burned area?

Yes No Rationale:

Wyoming big sagebrush is appropriate for the site, based on ecological site guides for the soils in the area. The precipitation range is high enough to support a successful rehabilitation effort.

2. Is seed or seedlings of native plants available in sufficient quantity for the proposed project?

Yes No Rationale:

Sagebrush seed is usually available in most years, however, there is currently a high demand for sagebrush seed due to large fires this year in the US. Unfortunately many of these fires burned stands where seed could also be collected, therefore, with high demand and potential for reduced availability cost may rise, but that is speculative. If seed isn't available during the first winter following the fire, it would be good to seed it when it becomes available within the parameters of BAR funding.

3. Is the cost and/or quality of the native seed reasonable given the project size and approved field unit management and Plan objectives?

Yes No Rationale:

Sagebrush seed has been used extensively in vegetation treatments, including fire rehabilitation in the field office and surrounding field offices.

4. Will the native plants establish and survive given the environmental conditions and the current or future competition from other species in the seed mix or from exotic plants?

Yes No Rationale:

Wyoming sagebrush occurred naturally in this area pre-fire, successful establishment of sagebrush is expected given the elevation and precipitation range. In the past, fires in the area that were seeded with sagebrush had good success with establishment.

5. Will the existing or proposed land management practices (e.g. wildlife populations, recreation use, livestock, etc.) maintain the seeded native plants in the seed mixture when the burned area is re-opened?

Yes No Rationale:

The land use practices, including permitted livestock use, are compatible with maintenance and persistence of sagebrush. The wildlife use is primarily pronghorn antelope, which move constantly and would not inflict serious damage to the developing sagebrush plants.

B. Proposed Non-native Plants in Seed Mixtures (Both ES & BAR Treatments)

1. Is the use of non-native plants necessary to meet objectives, e.g., consistent with applicable approved field unit management plans?

Yes No Rationale:

Siberian wheatgrass was selected specifically for its improved ability to establish and also provide structure and biomass similar to native perennial grasses, to comply with the BMFP objectives listed in the treatments section.

2. Will non-native plants meet the objective(s) for which they are planted without unacceptably diminishing diversity and disrupting ecological processes (nutrient cycling, water infiltration, energy flow, etc.) in the plant community?

Yes No Rationale:

Siberian wheatgrass was selected for its seedling vigor, which improves its ability to establish in areas with cheatgrass. It will provide a taller statured perennial grass in the plant community, and deeper root system, similar to native grasses that have slowly been reduced over time. Siberian wheatgrass will complement the nutrient and hydrologic cycling and energy flow in the plant community.

3. Will non-native plants stay on the site they are seeded and not significantly displace or interbreed with native plants?

Yes No Rationale:

Siberian wheatgrass has been used extensively across the Boise district for close to 20 years. While some varieties of crested wheatgrass have been observed to move into native plant communities, this has not been observed with Siberian wheatgrass, nor does it cross with native species.

C. Proposed Seed Species - Native & Non-Natives (Both ES & BAR Treatments)

Non-native Plants	Native Plants
Siberian Wheatgrass, Vavilov II (<i>Agropyron fragile</i>)	Wyoming Big Sagebrush, Wyoming (<i>Artemisia tridentata wyomingensis</i>)

PART 7 - COST-RISK ANALYSIS

A. Probability of Treatments Successfully Meeting Objectives

Action/ Spec #	Planned ES Action (LF20000ES)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
S2	Ground Seeding	Acres	1800	\$191,000.00	90%
S5	Noxious Weeds	Acres	2619	\$4,000.00	90%
S6	Soil Stabilization (Other than seedling, planting)	Acres	20	\$24,000.00	100%
S7	Fence/Gate/Cattleguard	Miles	6	\$70,000.00	100%
S13	Monitoring	Acres	2619	\$45,000.00	100%
				\$334,000.00	

Action/ Spec #	Planned BAR Action (LF32000BR)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
R3	Aerial Seeding	Acres	2619	\$50,000.00	95%
R5	Noxious Weeds	Acres	2619	\$9,000.00	90%
				\$59,000.00	

B. Cost Risk Summary

1. Are the risks to natural resources and private property acceptable as a result of the fire if the following actions are taken?

Proposed Action Yes No Rationale for Answer:

The ground and aerial seeding treatments would establish perennial plant communities which would reduce the potential of spread and dominance of the seeded areas by invasive annual grasses. Noxious weed treatments would protect the burned area and adjacent BLM administered lands against further expansion of noxious weeds. The closures are needed to ensure adequate recovery occurs before recreation and grazing resume.

No Action Yes No Rationale for Answer:

Without the proposed treatments, the plant community would likely become dominated by cheatgrass and noxious weeds would increase, resulting in a loss of general habitat for sage grouse and pronghorn antelope.

Alternative(s) Yes No Rationale for Answer:

N/A

2. Is the probability of success of the proposed action, alternatives or no action acceptable given their costs?

Proposed Action Yes No Rationale for Answer:

Monitoring and observations of treatments similar to those proposed indicate the probability of success is high in this area. Normal climatic conditions and exclusion of livestock to allow for burned area recovery and seeding establishment would increase the probability of success.

No Action Yes No Rationale for Answer:

The proposed treatment areas have high potential for expansion of noxious weeds and invasive plants. There is also a high potential for spread of noxious weeds into adjacent unburned areas.

Alternative(s) Yes No Rationale for Answer:

N/A

3. Which approach will most cost-effectively and successfully attain the objectives and therefore is recommended for implementation from a Cost/Risk Analysis standpoint?

Proposed Action

Alternative(s)

No Action

Comments:

The proposed action was developed for site specific conditions and variables. Therefore, it is cost-effective and the best option to re-establish general sage-grouse habitat, provide habitat for pronghorn antelope, and protect habitat for threatened bull trout and snails.

C. Risk of Resource Value Loss or Damage

No Action - Treatments not Implemented

Resource Value	N/A	None	Low	Med	High
Unacceptable Loss of Topsoil				X	
Weed Invasion					X
Unacceptable Loss of Vegetation Diversity				X	
Unacceptable Loss of Vegetation Structure					X
Unacceptable Disruption of Ecological Processes					X
Off-site Sediment Damage to Private Property		X			
Off-site Threats to Human Life	X				
Other-loss of Access Road Due to Plugged Culverts	X				

Proposed Action - Treatments Successfully Implemented

Resource Value	N/A	None	Low	Med	High
Unacceptable Loss of Topsoil			X		
Weed Invasion			X		
Unacceptable Loss of Vegetation Diversity			X		
Unacceptable Loss of Vegetation Structure			X		
Unacceptable Disruption of Ecological Processes			X		
Off-site Sediment Damage to Private Property		X			
Off-site Threats to Human Life	X				
Other-loss of Access Road Due to Plugged Culverts	X				

PART 8 - MONITORING PLAN

S2 - Ground Seeding

Identify the objective of the treatment:

Objective of this treatment is to establish perennial grasses to outcompete invasive species and noxious weeds while also providing critical forage and cover for sage-grouse, big game, and livestock.

Describe how implementation will be monitored:

Implementation monitoring includes ensuring that the seed is planted at the proper time, in the correct area and using the correct methods.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness monitoring includes a combination of the following methods/objectives.

1. Conduct Drill Row Basal Gap Monitoring of drill seeded species to determine seedling establishment success. Success would be attained when >50% of the transect gaps are 100cm. This will only be conducted in year 1.
2. Conduct Line-Point Intercept Monitoring to determine species abundance/composition. A 20% increase in desirable perennial vegetation foliar cover and a 20% decrease in invasive annual grass foliar cover as compared to a burned, untreated control area.
3. Conduct Basal Gap Intercept Monitoring: A 30% decrease in basal gaps >50cm and as compared to a burned, untreated area.
4. To increase the diversity of desirable grass and forb species, as compared to a burned, untreated control area.

S5 - Noxious Weeds

Identify the objective of the treatment:

The objective of this treatment is to contain or reduce the expansion of noxious weeds following the fire. During the first year the entire burned area will be inventoried and treated accordingly, during the second and third year treatments inventory and treatments will continue on all existing and new infestations of noxious weeds. If treatments initiated by this project are needed beyond the third year for effective noxious weed control coordination with the noxious weed program will continue to ensure that the investment is not lost. Because weeds are not uniformly distributed across the area a definable objective cannot be determined until site visits and inventories are completed during the first year. New infestations of noxious weeds previously unknown in the area could occur as a result of disturbances associated with the wildfire.

Describe how implementation will be monitored:

Locations of noxious weeds and size of infestations will be recorded by GPS and GIS technology. Treatments will be documented with a Pesticide Application Record for location, method of treatment, and time of treatment.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Extent and location of each noxious weed population will be compared to existing data and between years 1, 2 and 3, data and treatments. Noxious weed populations are expected to at least remain the same or be reduced but not expand with treatments. Noxious weed populations remaining in the area after the third year will become the responsibility of the Boise District Noxious weed program. If further treatments are needed they will be completed utilizing other funding but will assist in protecting the investment from the ESR program.

S6 - Soil Stabilization (Other than seedling, planting)

Identify the objective of the treatment:

The objective is to reduce the amount of fine sediment from burned area being transported downstream to springsnail, bull trout, and redband trout habitat.

Describe how implementation will be monitored:

Specialists will be on site to supervise installation of straw bale check dams.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness will be monitored with photo plots and qualitative analysis. Erosion structures will be considered effective when >80% are still intact and have shown that they've collected sediment.

S7 - Fence/Gate/Cattleguard

Identify the objective of the treatment:

To protect the ESR investment from livestock use until plan objectives have been met and resumption of grazing will not impede recovery.

Describe how implementation will be monitored:

Implementation will be monitored through contract administration to ensure the fence is constructed to BLM specifications. Any changes from project design will be noted in "as built" drawings and reflected in the monitoring report.

Describe how effectiveness will be monitored, how it will be measured, and within

what time period:

Fence construction will be documented in "as built" drawings and reflected in monitoring reports. Fencing will be considered effective when it prevents livestock from gaining access into project area. Construction will be completed within the first year of the fire.

S12 - Closures (area, OHV, livestock)**Identify the objective of the treatment:**

Objective is to close the area to livestock use until resource objectives have been achieved.

Describe how implementation will be monitored:

Site would be visited by Field Office and Operations personnel during grazing season to ensure the protective fences are successful in keeping livestock from treatment areas.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Livestock Closure Effectiveness Objectives for seeded areas are as follows:

- a. Greater than 95% of canopy gaps are 50cm.
- b. The amount of bare mineral soil (lacking cover of plants, litter, or biological soil crusts) is within 10% of what would be expected for early seral stages of the ecological sites found within the treated areas
- c. Seeded species must have developed root systems that are extensive enough to provide soil stabilization and prevent uprooting when grazed, especially when soils are moist.
- d. Greater than 80% of seeded species are producing seed
- e. Seeding objectives are being met (only where applicable).

If the evidence indicates the Monitoring Objectives are not being met, then the livestock closure period may be extended.

S13 - Monitoring**Identify the objective of the treatment:****Describe how implementation will be monitored:****Describe how effectiveness will be monitored, how it will be measured, and within what time period:****R3 - Aerial Seeding****Identify the objective of the treatment:**

The objective is to establish sagebrush to restore shrub structure and function in sage-grouse and big game habitat, and to restore wilderness characteristics to the area.

Describe how implementation will be monitored:

Aerial seeding implementation treatment will be monitored during contract administration to ensure contract specifications for the seeding treatment are met. A Contract Officer Representative will be at the landing site with the contractor, and a Project Inspector will be on the on-site to measure seed distribution.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Monitoring for shrub seeding will be conducted using photo plots and/or density plot methods. The aerial sagebrush seed treatment would be considered effective if sagebrush seedlings average 0.10 seedlings per square meter across suitable areas, or in qualitative surveys seedlings are found to be common.

R5 - Noxious Weeds

Identify the objective of the treatment:

See S5 - Noxious Weeds above.

Describe how implementation will be monitored:

See S5 - Noxious Weeds above.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

See S5 - Noxious Weeds above.

PART 9 - MAPS

1. - Fire Perimeter with Land Status
2. - S2 Ground Seeding
3. - S5/R5 Noxious Weeds
4. - S6 Soil Stabilization
5. - S7 Protective Fence
6. - R3 Broadcast Seeding

PART 10 - REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial	Date
Team Leader	Kathi Kershaw (BLM District Fuels)		
Operations	Rob Bennett (BLM District Operations)		
Operations	Alex Webb (BLM District Operations)		
Operations	Cindy Fritz (BLM District Operations)		
NEPA Compliance & Planning	Seth Flanigan (BLM District Planning)		
Hydrologist	TJ Clifford (BLM District Wilderness)		
Rangeland Mgt. Specialist	Jon Haupt (BLM Bruneau Field Office)		
Wildlife Biologist	Bruce Schoeberl (BLM Bruneau Field Office)		
Resource Advisor(s) on Fire	Kavi Koleini (BLM Bruneau Field Office)		
Cultural Resources/Archeologist	Lois Palmgren (BLM Bruneau Field Office)		

PLAN APPROVAL

The Agency Administrator is responsible for developing, implementing, and evaluating emergency stabilizations and rehabilitation plans, treatments and activities. 620 DM 3.5C

FIELD OFFICE MANAGER

DATE

FUNDING APPROVAL

The funding of ES treatments is approved through the appropriate administrative approval level in coordination with the National Office Budget Shop. As funding is available, ES funding requested within a plan that totals below \$100,000 may be approved by the State Director, while ES funding of \$100,000 and above must be approved by the WO. If the ES funding cap is reached, all ES funding will be approved through the National Office in coordination with State ES&R Coordinators to determine highest priority projects. Funding of all BAR treatments is accomplished through a scoring process and is dependent on accurate entries into NFPORS. All funding is approved and allocated on a year-by-year basis.