

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

PLAN TEMPLATE 2010

STOUT FIRE (G1UM)

BLM Boise District Office

IDAHO STATE OFFICE

FIRE BACKGROUND INFORMATION

Fire Name	Stout
Fire Number	G1UM
District/Field Office	Boise District Office
Admin Number	LLIDB00000
State	IDAHO
County(s)	ELMORE
Ignition Date/Cause	07/11/1912 Lightning
Date Contained	07/14/2012
Jurisdiction	<i>Acres</i>
State	1495
Private	393
BLM	10880
Total Acres	12768
Total Costs	\$1,216,000
Costs to LF20000ES (2822)	\$583,000
Costs to LF32000BR (2881)	\$633,000

Status of Plan Submission (check one box below)

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

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON FIRE.

The Stout fire was ignited by lightning at approximately 9:20 AM on July 11, 2012. The fire burned 10,880 acres of public land administered by the Bureau of Land Management (BLM), 1,495 acres of Idaho Department of Lands (IDL), and 393 acres of private land. The fire was declared contained on July 14 at 2:00 PM. The fire burned wholly within the boundaries of the Four Rivers Field Office (FRFO). Approximately 80 percent of the area that burned in the Stout fire has burned at least once since 2000; 7,722 acres burned in the 2000 Oregon Trail fire and 2,843 acres burned in the 2010 Hot Tea fire, 590 acres burned in all three fires. The area that was burned in 2000 had recovered sufficiently to support bitterbrush, big sagebrush, and perennial grasses and forbs.

The fire burned in portions of the Mountain Home Subunit (7%), East Hammett #5 (2%), Hammett #6 (28%), Lower Bennett Creek (69%), and North Cold Springs (0.46%) Allotments. The acres and percentage of each pasture burned are as follows: Mountain Home Subunit (00813), the fire burned in two pastures, 31% of #2 Bennett Creek (4,802 of 16,880), and 20% of #6 Teapot (1,175 of 6,390). In E. Hammett #5 (01037), 246 of 11,810 acres (02%) burned in the only pasture. In Hammett #6 (01038) 1,480 of 5,059 acres (47%) burned in the Thorn Creek pasture, and in Lower Bennett Creek (01045) 2,724 of the 3,842 acres (77%) burned in the main pasture. The 2010 Hot Tea fire burned nearly all of pasture #4 (Thorn Creek) of the Hammett #6 allotment.

Within the burned area, two main ecological sites are delineated using digital soil survey data (SSURGO, 2008). Approximately 8,529 acres are represented by the Loamy 12-16" ecological site with Mountain big sagebrush/bluebunch wheatgrass–Thurber's needlegrass and approximately 2,902 acres are represented by the Loamy 8-12" ecological site with Wyoming big sagebrush/bluebunch wheatgrass–Thurber needlegrass. Although not mapped, small inclusions of Shallow Stony Loam occur throughout the fire. The understory vegetation varied across the burned area; from a healthy understory of bluebunch wheatgrass, Thurber's needlegrass, Sandberg bluegrass, bottlebrush squirreltail and various forbs with inclusions of cheatgrass and medusahead, to areas dominated by cheatgrass and/or medusahead. The fire burned in varying intensities as it advanced across the landscape, resulting in a mix of low to high intensity with islands of sagebrush remaining.

Approximately 350 acres of habitat for slickspot peppergrass, a species listed in 2009 as threatened under the Endangered Species Act of 1973. This area of habitat is restricted to the southeastern portion of the burned area. The nearest occupied habitat is located over four miles from the southern boundary of the fire. Habitat is defined as land containing slickspots but presence of slickspot peppergrass was not documented at the time of the survey. Occupied habitat is defined as the area immediately surrounding a known element occurrence (EO) combined with a 0.5 mile buffer surrounding the occurrence to protect pollinator habitat.

Approximately 5,021 acres of the Stout fire were classified as Greater sage-grouse habitat. Of those acres; 2,697 acres were Preliminary Priority Habitat (PPH), and approximately 2,324 acres were classified as Preliminary General Habitat (PGH), additionally, two leks occur within three miles of the southeastern fire boundary. Priority habitat is defined as areas having the highest conservation value to maintaining greater sage-grouse populations. General habitat is defined as areas of occupied seasonal or year-round habitat outside of priority habitat. Greater sage-grouse is a candidate species for listing under the ESA. Candidate status was assigned because although listing was warranted, higher priority was given to other species. Special status species known to occur within, or in close proximity, to the burned area include Piute ground squirrel, ferruginous hawk, pygmy rabbit, golden and bald eagles.

Approximately 11,800 acres of the fire burned elk winter range and 10,500 acres of critical winter deer range.

LAND USE PLAN CONSISTENCY

S2 - Ground Seeding

The 1987 Jarbidge RMP, Wildlife Management section, states “Wildlife habitat will be managed to maintain or increase wildlife numbers over the long term, and the total acres of unsatisfactory crucial habitat will be reduced over the long term.” Under the Resource Management Guidelines section the plan states, “Minimize soil erosion by maintaining good, perennial vegetation cover on all sites. Manage native perennial range to attain good ecological condition. Rehabilitated or manipulated sites are considered to be in good condition from a watershed standpoint when at least 75% (by weight) of the sites potential for production is composed of perennial vegetation”. The same section also states, “Protect and enhance endangered, threatened and sensitive species habitats in order to maintain or enhance existing and potential populations within the planning area”. It goes on to say, “Seed mixtures for range improvement projects and fire rehabilitation projects will include a mixture of grasses, forbs and shrubs that benefit sage grouse. Rehabilitation of areas, particularly large areas, that have a high potential for fires or have a high frequency of fires, will utilize irregular buffer strips with seed mixtures that are fire resistant and/or meet watershed protection, wildlife and riparian objectives. These buffer strips will receive first priority for seeding prior to reseeding rest of burned area”.

The Kuna Management Framework Plan (KMFP) states under Watersheds, “... Manage all watersheds to achieve stable or moderate soil surface factor conditions and where feasible/economical, strive for maintaining or establishing good perennial vegetation cover.” Under Range Management, “...reduce invasion of less desirable species, improve range condition, and increase grazing capacity...” And under Wildlife-Terrestrial, “...Manage the adjacent vegetative cover to nesting birds of prey species to provide adequate food and cover for the birds’ major prey species.”

S3 - Aerial Seeding

The 1987 Jarbidge RMP, Wildlife Management section, states “Wildlife habitat will be managed to maintain or increase wildlife numbers over the long term, and the total acres of unsatisfactory crucial habitat will be reduced over the long term.” Under the Resource

Management Guidelines section the plan states, “Minimize soil erosion by maintaining good, perennial vegetation cover on all sites. Manage native perennial range to attain good ecological condition. Rehabilitated or manipulated sites are considered to be in good condition from a watershed standpoint when at least 75% (by weight) of the sites potential for production is composed of perennial vegetation”. The same section also states, “Protect and enhance endangered, threatened and sensitive species habitats in order to maintain or enhance existing and potential populations within the planning area”. It goes on by saying, “Seed mixtures for range improvement projects and fire rehabilitation projects will include a mixture of grasses, forbs and shrubs that benefit sage grouse. Rehabilitation of areas, particularly large areas, that have a high potential for fires or have a high frequency of fires, will utilize irregular buffer strips with seed mixtures that are fire resistant and/or meet watershed protection, wildlife and riparian objectives. These buffer strips will receive first priority for seeding prior to reseeding rest of burned area”.

The KMFP states under Watersheds, “... Manage all watersheds to achieve stable or moderate soil surface factor conditions and where feasible/economical, strive for maintaining or establishing good perennial vegetation cover.” Under Range Management, “...reduce invasion of less desirable species, improve range condition, and increase grazing capacity...” And under Wildlife-Terrestrial, “...Manage the adjacent vegetative cover to nesting birds of prey species to provide adequate food and cover for the birds’ major prey species.”

S5 - Noxious Weeds

The control of noxious weeds is consistent with Jarbidge RMP, Management Unit Area 3 - Lower Bennett Objectives, “Improve lands in poor ecological condition.” In addition under the Resource Management Guidelines the plan states, “BLM districts will work with their respective County governments to monitor the location and spread of noxious weeds and to maintain up-to-date inventory records. BLM will control the spread of noxious weeds on public lands where possible, where economically feasible, and to the extent that funds are prioritized for that purpose”. The control of noxious weeds is in compliance with State and county laws.

The KMFP states under Range Management, “...reduce invasion of less desirable species, improve range condition, and increase grazing capacity...” Therefore, controlling the spread of noxious weeds is in conformance with the KMFP.

S7 - Fence/Gate/Cattleguard

The Jarbidge RMP Resource Management Guidelines states, “All grazing licenses issued that include areas recently burned and/or seeded areas will include a statement concerning the amount of rest needed in the seedings or burn area. Normally two years of rest will be necessary to protect these areas. This rested area may include remnant stands of desirable species that survived the fire”. Existing pasture and allotment fences would be repaired to ensure that livestock remain within their area of authorized use and off the burned area until resource objectives are met. In addition temporary fence would be constructed to protect treatment areas and allow grazing to continue on unburned portions of pastures. The NFRP states that gates, cattleguards, fences, and other control features would be repaired and/or constructed as needed to protect treatments during the recovery period or the seeding establishment period (NFRP, p. 17). The BLM ESR Handbook allows for repair or

reconstruction of existing BLM approved fences, as well as temporary protection fence to protect new seedings and natural recovery areas (H-1742-1, p. 31).

The KMFP states under Range Management that: “Adjust livestock season of use and/or implement grazing systems on spring and summer ranges to meet minimum growth needs of preferred plant species.” Therefore, protective fences that exclude livestock from the burned area to permit watershed recovery and vegetation establishment are in conformance with the KMFP.

S12 - Closures (area, OHV, livestock)

The Jarbidge RMP Resource Management Guidelines states, “All grazing licenses issued that include areas recently burned and/or seeded areas will include a statement concerning the amount of rest needed in the seedings or burn area. Normally two years of rest will be necessary to protect these areas. This rested area may include remnant stands of desirable species that survived the fire”. Existing pasture and allotment fences would be repaired to ensure that livestock remain within their area of authorized use and off the burned area until resource objectives are met. In addition temporary fence would be constructed to protect treatment areas and allow grazing to continue on unburned portions of pastures. The NFRP states that gates, cattleguards, fences, and other control features would be repaired and/or constructed as needed to protect treatments during the recovery period or the seeding establishment period (NFRP, p. 17). The BLM ESR Handbook allows for repair or reconstruction of existing BLM approved fences, as well as temporary protection fence to protect new seedings and natural recovery areas (H-1742-1, p. 31).

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S13 - Monitoring

Although the Jarbidge RMP and Kuna MFP do not have objectives of management guidelines specific to monitoring the project is in conformance with both Management Plans.

R3 - Aerial Seeding

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R4 - Seedling Planting

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R7 - Fence/Gate/Cattleguard

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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	2,938	\$ 93.26	\$197,000	\$77,000	\$ 0	\$ 0	\$274,000
S3	Aerial Seeding	Acres	3,000	\$ 23.00	\$34,000	\$35,000	\$ 0	\$ 0	\$69,000
S4	Seedling Planting								
S5	Noxious Weeds	Acres	10,880	\$ 0.92	\$ 0	\$10,000	\$ 0	\$ 0	\$10,000
S6	Soil Stabilization (Other than seedling, planting)								
S7	Fence/Gate/Cattleguard	Miles	12	\$4,416.67	\$ 0	\$53,000	\$ 0	\$ 0	\$53,000
S8	Road/Trail Water Diversion								
S9	Cultural Protection (Stabilization/Patrol)								
S10	Tree Hazard Removal								
S11	Facilities								
S12	Closures (area, OHV, livestock)	Acres	10,880	\$ 0.46	\$ 0	\$5,000	\$ 0	\$ 0	\$5,000
S13	Monitoring	Acres	10,880	\$ 11.67	\$ 0	\$44,000	\$42,000	\$41,000	\$127,000
S14	Other Treatments								
	TOTAL COSTS (LF20000ES)				\$231,000	\$239,000	\$57,000	\$56,000	\$583,000
	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)				\$ 0	\$3,000	\$3,000	\$3,000	\$9,000
R2	Ground Seeding								
R3	Aerial Seeding	Acres	7,841	\$ 17.85	\$ 0	\$140,000	\$ 0	\$ 0	\$140,000
R4	Seedling Planting	#	150,000	\$ 2.70	\$ 0	\$135,000	\$135,000	\$135,000	\$405,000
R5	Noxious Weeds	Acres	10,880	\$ 1.75	\$ 0	\$ 0	\$10,000	\$9,000	\$19,000
R6	Soil Stabilization (Other than seedling, planting)								
R7	Fence/Gate/Cattleguard	Miles	4	\$5,000.00	\$ 0	\$20,000	\$ 0	\$ 0	\$20,000
R8	Road/Trail Water Diversion								
R9	Cultural Protection (Stabilization/Patrol)								
R10	Tree Hazard Removal								
R11	Facilities								
R12	Closures (area, OHV, livestock)	Acres	10,880	\$ 3.68	\$ 0	\$ 0	\$20,000	\$20,000	\$40,000
R13	Monitoring								
R14	Additional Treatments								
	TOTAL COSTS (LF32000BR)				\$0	\$298,000	\$168,000	\$167,000	\$633,000
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

The terrain in the Stout fire ranges from undulating with good soil to moderately steep sites with marginal soils to steep terrain with rocky surfaces and little soil. The risk of erosion of soils in the burned area range from low (3,774 acres), moderate (2,837 acres), and severe (5,392 acres) potential for erosion from wind and/or water (SSURGO, 2008). Soil texture and percent slope are key factors in the potential for erosion.

Although some areas burned light, retaining some above ground stems and perennial root structure many areas burned hot, leaving white ash where plants burned. Treatments for stabilization will focus on moderate to high intensity burn areas, with adequate soil to establish grasses and forbs.

The area is in a high use hunting unit, the area east of Bennett Creek is accessible to motorized use and was closed to motorized travel in a federal register notice following the 2010 Hot Tea fire. As a result of the Stout fire, a new closure will expand the area closure to include the newly burned area and extend the previous closure for two additional years to protect soil and vegetation during post-fire recovery.

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

Approximately 5,021 acres of the Stout fire were classified as Greater sage-grouse habitat. Of those acres; 2,697 acres were Preliminary Priority Habitat (PPH), and approximately 2,324 acres were classified as Preliminary General Habitat (PGH), additionally, two leks occur within three miles of the southeastern fire boundary.

4 - Critical Heritage Resources

N/A

5 - Invasive Plants and Weeds

Several species of noxious weeds have been observed in and adjacent to the burned area including rush skeletonweed, Scotch thistle, and perennial pepperweed. These adjacent populations have potential for establishment in the burned area.

BURNED AREA RECOVERY ISSUES

1 - Lands Unlikely to Recover Naturally

The area contains proposed preliminary habitat (PPH) and proposed general habitat (PGH) for Greater sage-grouse, a candidate species for listing as threatened or endangered under the ESA. The area is also critical winter habitat for deer and elk. The shrub component of the vegetation community is integral for these species. Re-establishing the shrub component

of these vegetation communities is important for the long-term maintenance of populations of these species in this area.

2 - Weed Treatments

Several noxious weed species have been observed in and adjacent to the burned area. The adjacent populations have potential to spread and establish in the burned area for a few years following disturbances such as wildfire. The treatment of noxious weeds is most effective if it occurs when satellite populations are small and confined. Treatments under BAR provides for critical follow up treatment which ensures new populations of noxious weeds are kept in check or eliminated.

3 - Tree Planting

Planting bitterbrush and sagebrush seedlings in strategic areas throughout the burned area would restore the shrub structure lost in the fire. Seedlings would be planted in early spring of FY13 in the lower accessible portion of the fire and then late fall of FY14 and FY15 when higher areas are more accessible than early spring time frame. Seedlings would be placed throughout the burn area in pockets where mature shrubs occurred prior to the fire. Seedlings would be one year old bare root stock. Protective biodegradable tubing would be used around the seedlings to protect them from browsing deer and elk. Plantings would be done by hand using sharpshooter shovels, hoe dads, or augers.

4 - Repair/Replace Fire Damage to Minor Facilities

Four miles of existing allotment/pasture boundary fence were burned during the wildfire. Multiple brace posts and corner posts are in need of replacement in order to make these fences functional again. These fences are needed to facilitate grazing systems to achieve standards for rangeland health.

PART 3 - DESCRIPTION OF TREATMENTS

Issue 2 - Soil/Water Stabilization

S2 Ground Seeding

A. Treatment/Activity Description

Approximately 2,938 acres of the burned area would be drill seeded with perennial grass species adapted to the ecological sites. The two species will be drill seeded in alternate seed carts in a three drill cart configuration. The Siberian wheatgrass will be in two out of three drills covering 2/3 of the seeding area at a rate of 15 bulk pounds (12.1 PLS pounds), which is 61.2 seeds per square foot. The Snake River wheatgrass will be in one out of the three drills covering 1/3 of the area at a rate of 15 bulk pounds (11.5 PLS pounds), which is 44.8 seed per square foot. The total seeds per square foot for ground and aerial seeding within the aerial strips is a maximum of 70.1 seeds per square foot. ESR Topic Guidelines are to limit seeding rates in combination to fewer than 80 seeds per square foot.

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

The intensity of the fire in some areas resulted in total consumption of the above ground biomass of grasses. Typically this type of fire intensity results in mortality of perennial bunchgrasses. The areas that burned with this intensity and also have soils conducive for drill seeding are where the ground seeding is being proposed. Seeding perennial plants would provide competition to cheatgrass and medusahead, which is expected to increase post-fire.

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

The terrain, precipitation range, and pre-fire condition of the vegetation in the areas proposed for drill seeding are suitable for drill seeding. The potential for this area to incur an invasion from exotic annual grasses is high based on observations made during post-fire visits. Failure to keep this area from becoming dominated by cheatgrass and medusahead would result in loss of important big game and sage grouse habitat.

The cost of drill seeding and seed varies by year and distance from district resources and averages \$50-\$75/acre. The 2% realization of plants expected to persist into 5-10 years with these seeding rates is approximately 2.1 plants per square foot for perennial grass and 0.2 plants per square foot for shrubs. (Equivalent to 1 shrub per 2 square meters). The seeding rate is at the higher end because the seeding is planned for an area that is between good condition uplands within sagegrouse and critical big game habitat and lower condition lowlands. The seeding is intended to establish a stand of competitive perennial grasses that will reduce the movement of annual invasive grasses into the uplands and provide adequate forage for wintering big game. Grass species selected are expected to be available in high quantities at low prices.

S7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

Approximately 12 miles of allotment and pasture boundary fence burned in the fire and is in need of repair to restrict livestock from the burned area during recovery and seed establishment and provide soil stabilization.

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

The fire burned existing livestock management fencing, which restricted livestock from trampling spring (lentic) areas and served as divisions for grazing allotments and pastures within allotments. These fences are essential for managing livestock movement between pastures and separating livestock by ownership.

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

This treatment is reasonable and cost effective because it minimizes the amount of fencing necessary by utilizing existing fencing to exclude livestock on the burned areas while allowing unburned areas to be available to livestock grazing.

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?

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

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

S3 Aerial Seeding

A. Treatment/Activity Description

Approximately 3,000 acres will be broadcast seeded with sagebrush using aerial application methods. The seed will be applied in strips rather than covering the entire area, which will increase the amount of seed applied to treated areas across the burned area without increasing costs. The acres for the seed mix table have been adjusted to accurately calculate acres that will be seeded, rather than total acres. This treatment is necessary to re-establish suitable preliminary priority habitat for Greater sage-grouse and viable winter range for elk and deer.

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

The fire burned 10,880 acres of public land that is habitat for sage grouse, deer and elk. These species rely on sagebrush for food and/or cover, especially during the winter months. The aerial application of sagebrush seed will promote a more rapid re-establishment of this critical resource, and will be augmented by native recovery from small unburned patches.

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

Aerial application of sagebrush seed has been used successfully across many lands in the Boise District and surrounding BLM districts. The cost of sagebrush seed varies from year to year, depending on availability but averages about \$10/acre.

S12 Closures (area, OHV, livestock)

A. Treatment/Activity Description

The burned areas will be closed to livestock use until resource objectives have been achieved. The closure will provide remaining perennial plants an opportunity to recover without added disturbance and seeded plants the opportunity to become established without livestock grazing or trampling. The combined use from wildlife and livestock during the recovery period would result in weakened plant vigor and possibly mortality.

The majority of the burned area will be closed to motorized recreational vehicles while the soil and vegetation recovers. This closure will be accomplished by a Federal Register Notice/Emergency Closure, signage, gate closures, and BLM and Idaho State Fish and Game law enforcement patrols to notify the public of the vehicle closure. Signs would be placed at access points along two-track road leading into and across the burned area. Increased patrols would occur during peak use periods of hunting and antler collecting with regular patrols occurring throughout rest of year to monitor and enforce closure. Public access would still be allowed to foot traffic with access being through a turn style gate at lower main closure.

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

The burned vegetation will recover faster and more completely with the reduction in grazing pressure. The area will be accessible to wildlife, which will be drawn to the new growth when rains resume grass growth. In the long-term the closure will provide better rangeland forage for the combined use by wildlife and livestock.

The area receives heavy use from off road vehicles by big game hunters and antler hunters. Following the fires, the loss of shrub cover opens the area to overland travel and increased antler hunting numbers. Heavy recreation use would damage any recovering existing vegetation, harm the establishment of seeded species, promote the spread of noxious weeds, and disturb wildlife re-occupying the area.

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

Closing burned areas to livestock use is a prudent management tool to ensure long-term maintenance and vigor of public rangelands. Costs are associated with the actual closure are outweighed by the benefit to resources, therefore this is a very cost effective treatment.

Utilizing current BLM and IDFG law enforcement personnel for additional patrol efforts is cost efficient. If a closure is established through the Federal Register to assist in vegetative recovery than enforcement of this closure is the responsibility of the agencies. The cost of loss of vegetation due to overland travel, the establishment of new trails in the area, and disturbance of wildlife greatly outweighs the cost of the closure.

Issue 5 - Invasive Plants and Weeds

S5 Noxious Weeds

A. Treatment/Activity Description

Rush skeletonweed diffuse knapweed, scotch thistle, and perennial pepperweed have been

documented in and adjacent to the burned area. Noxious weed inventory and spot herbicide treatment would occur during the first year following the fire within the burned area under ES. 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 followed 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 invasion and spread of noxious weeds due to vegetation removal and soil surface disturbance. 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 integral to maintain appropriate rangeland health.

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

Inventory and treatment of small noxious weed populations is more 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.

Issue 1 - Lands Unlikely to Recover Naturally

R3 Aerial Seeding

A. Treatment/Activity Description

Approximately 7841 acres will be broadcast seeded with sagebrush (mixes 2, 3) or forage kochia (mix 4) using aerial application methods. The seed will be applied in strips rather than covering the entire area which will increase the amount of seed applied to treated areas across the burned area without increasing costs. The acres entered into the seed mix tables reflect actual acres seeded, not total acres covered, to for accurate calculations. This treatments is necessary to re-establish a viable winter range for elk and deer and suitable habitat for Greater sage-grouse. The forage kochia will be seeded in a 200 ft strip in the burned area along highway 21 to provide long term protection to the ESR treatments from ignition starts off the highway.

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

The fire burned 10,880 acres of public land that is habitat for sage grouse, deer and elk. These species rely on sagebrush for food and/or cover, especially during the winter months. The aerial application of sagebrush seed will promote a more rapid re-establishment of this critical resource, and will be augmented by native recovery from small unburned patches.

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

Aerial application of sagebrush seed has been used successfully across many lands in the Boise District and surrounding BLM districts. The cost of sagebrush seed varies from year

to year, depending on availability but averages about \$10/acre.

R12 Closures (area, OHV, livestock)

A. Treatment/Activity Description

The burned areas will be closed to livestock use until resource objectives have been achieved. The closure will provide remaining perennial plants an opportunity to recover without added disturbance and seeded plants the opportunity to become established without livestock grazing or trampling. The combined use from wildlife and livestock during the recovery period would result in weakened plant vigor and eventual mortality.

The majority of the burned area will be closed to motorized recreational vehicles while the soil and vegetation recovers. This closure will be accomplished by a Federal Register Notice/Emergency Closure, signage, gate closures, and BLM and Idaho State Fish and Game law enforcement patrols to notify the public of the vehicle closure. Signs would be placed at access points along two-track road leading into and across the burned area. Increased patrols would occur during peak use periods of hunting and antler collecting with regular patrols occurring throughout rest of year to monitor and enforce closure. Public access would still be allowed to foot traffic with access being through a turn style gate at lower main closure.

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

The burned vegetation will recover faster and more completely with the reduction in grazing pressure. The area will be accessible to wildlife, which will be drawn to the new growth when rains resume grass growth. In the long-term the closure will provide better rangeland forage for the combine use by wildlife and livestock.

The area receives heavy use from off road vehicles by big game hunters and antler hunters. Following the fires, the loss of shrub cover opens the area to overland travel and increases access for antler hunting. Heavy recreation use would damage any recovering existing vegetation, harm the establishment of seeded species, promote the spread of noxious weeds, and disturb wildlife re-occupying the area.

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

Closing burned areas to livestock use is a prudent management tool to ensure long-term maintenance and vigor of public rangelands. No costs are associated with the actual closure; therefore this is a very cost effective treatment.

Utilizing current BLM and IDFG law enforcement personnel for additional patrol efforts is cost efficient. If a closure is established through the Federal Register to assist in vegetative recovery then enforcement of this closure is the responsibility of the agencies. The cost of loss of vegetation due to overland travel, the establishment of new trails in the area, and disturbance of wildlife greatly outweighs the cost of the closure.

Issue 2 - Weed Treatments

R5 Noxious Weeds

A. Treatment/Activity Description

Rush skeletonweed diffuse knapweed, scotch thistle, and perennial pepperweed have been documented in and adjacent to the burned area. Noxious weed inventory and spot herbicide treatment would occur during the first year following the fire within the burned area under ES. 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 followed 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 to blade fire lines, increases the potential for invasion and spread of noxious weeds due to vegetation removal and soil surface disturbance. Potential for invasion and spread of noxious weeds remains high in years immediately following fire during vegetation recovery and reestablishment.

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

Inventory and treatment of small noxious weed populations is more 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.

Issue 3 - Tree Planting

R4 Seedling Planting

A. Treatment/Activity Description

50,000 seedlings (40K bitterbrush, 10K sagebrush) a year for three years will be planted in strategic locations in the burned area to provide multiple age classes of shrubs in the burned area. The locations for the antelope bitterbrush and Wyoming big sagebrush seedlings will provide connectivity of habitat between the widely distributed unburned islands inside the fire perimeter and to habitat outside the fire perimeter. The planting sites will be located in draws where bitterbrush grew naturally pre-fire to provide optimum potential for growth and success.

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

The fire burned critical deer winter range and winter elk habitat. Bitterbrush is the key component for big game winter range and subsequent to the fire, animals would need to travel greater distances to find browse. This will increase the potential for collisions with big game on State Highway 21, as animals that typically use the burned area travel to unburned habitat. The fire burned sage grouse priority and general habitat, and planting seedlings at strategic locations in the burned area will provide connectivity with habitat outside the burned area and with the unburned islands within the fire perimeter. Planting seedlings will jump start the recovery process for shrubs, and provide multiple age classes. Both species of shrub proposed for seedling planting are needed for critical habitat; bitterbrush for deer and elk browse, and sagebrush for sage-grouse.

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

The planting of shrub seedlings will be accomplished using local volunteer groups (coordinated through Idaho Fish and Game). The use of volunteers provides community identity and fosters a positive relationship with the local communities. The cost is minimal using this workforce and exemplifies the principles of cooperation and coordination. Although the risk of re-burning is impossible to absolutely mitigate from lightning strikes, the two strips of forage kochia will provide protection from sources of ignition along the highway and the powerline, and provide potential fire suppression anchor points in the event of a wildland fire. In addition to the forage kochia strip, a large (>300 miles) fuel break project (Paradigm) is currently being planned and analyzed that includes this area. The project is designed to create a network of strategically placed fuel breaks across the landscape to protect habitat and provide safe opportunities for fire suppression by compartmentalizing large tracts of land.

Issue 4 - Repair/Replace Fire Damage to Minor Facilities

R7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

Approximately 4 miles of allotment and pasture boundary fence burned in the fire and is in need of repair to restrict livestock from the burned area prior to resumption of livestock grazing.

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

The fire burned existing livestock management fencing, which restricted livestock from trampling spring (lentic) areas and served as divisions for grazing allotments and pastures within allotments. These fences are essential for managing livestock movement between pastures and separating livestock by ownership.

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

This treatment is reasonable and cost effective since these fences need to be repaired prior to the resumption of livestock grazing to achieve provide grazing management objectives in these allotments.

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	2,850.0	8.1	22,999.5	\$ 4.00	\$113,440.00
Snake River Wheatgrass, Secar	Elymus wawawaiensis	85.0%	12.26	534,046	125,680	628,289	2,850.0	4.3	12,112.5	\$ 4.00	\$56,720.00
Forage Kochia, Immigrant	Bassia Prostrata	51.0%	37	1,611,720	395,000	3,160,235	70.0	4.1	285.6	\$ 12.00	\$6,720.00
TOTALS:			87.42	3,808,015	726,680	5,847,038		16.4		\$ 20.00	\$176,880.00

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
Low Sagebrush	Artemisia arbuscula	16.0%	2.45	106,722	972,000	667,013	1,470.0	0.1	161.7	\$ 15.00	\$15,600.00
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	16.0%	6.31	274,864	2,500,000	1,717,898	1,470.0	0.1	161.7	\$ 7.57	\$7,872.80
Mountain Big Sagebrush, Mountain	Artemisia tridentata vaseyana	16.0%	4.98	216,929	1,973,117	1,355,805	2,586.0	0.1	284.5	\$ 5.50	\$10,120.00
Forage Kochia, Immigrant	Bassia Prostrata	51.0%	61.66	2,685,910	395,000	5,266,489	30.0	6.8	204.0	\$ 10.90	\$4,360.00
Low Sagebrush	Artemisia arbuscula	16.0%	2.45	106,722	972,000	667,013	2,586.0	0.1	284.5	\$ 15.00	\$27,600.00
Mountain Big Sagebrush, Mountain	Artemisia tridentata vaseyana	16.0%	7.25	315,810	1,973,117	1,973,813	1,319.0	0.2	211.0	\$ 5.50	\$7,260.00
TOTALS:			85.1	3,706,956	8,785,234	11,648,029		7.4		\$ 59.47	\$72,812.80

SEEDLINGS

Seedling Species	Scientific Name	Acres of Seedlings planted.	# of Seedlings per Acre	Total # of Seedlings	Cost / Seedling	Total Cost
Antelope Bitterbrush	Purshia tridentata		134.0	300	\$ 1.00	\$40,200.00
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis		33.0	300	\$ 1.00	\$9,900.00
TOTALS:			167.0	600		\$50,100.00

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:

The proposed native species are adapted to the ecological sites within the proposed seeding area. Wyoming big sagebrush, and western yarrow have been utilized in similar ecological site condition within the Boise District.

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

Yes No Rationale:

The native seed proposed for use is generally available in sufficient quantities, although it may become scarce in high demand years. Drill and aerial seeding treatments would not occur until fall/winter of 2012-2013, which should allow seed quantities to increase following the current year's harvest.

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:

The native seed proposed for use has been utilized extensively in the Boise District for rehabilitation and restoration project work. The demand has resulted in increased production and decreased price. Proposed application of sagebrush seed was based on sage-grouse habitat and big game winter habitat.

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:

Based on past treatment monitoring and field observations, the native taxa proposed for seeding have been successfully established and persisted in similar ecological sites in the Four Rivers Field Office and Boise District.

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 proposed seeding areas will be rested from livestock grazing until monitoring shows that ES & BAR objectives have been satisfactorily achieved. The current livestock management system should maintain the plant community over the long-term.

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:

The proposed non-native species have been shown to be able to establish and compete where invasive annual grasses might increase following fires and other disturbances. Use of Siberian wheatgrass and forage kochia are proposed only where the interdisciplinary team determined they are needed to stabilize areas against dominance by noxious weeds and invasive plants (NRCS plant guide). This ability was observed first hand in the nearby Lockman Butte greenstrip. The greenstrip was seeded with crested wheatgrass and forage kochia, and 10 years of monitoring showed a relatively stable or slightly increasing populations of crested wheatgrass and forage kochia, with stable to substantial increases in existing native perennial grasses. The seeded species ultimately gained enough of a foothold to reduce the amount of cheatgrass in the area (Kershaw, personal observation and data).

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:

Where non-native plants are proposed, the natural successional processes and interspecific competition which normally occur have been altered by the introduction of invasive annual grasses and noxious weeds. The proposed non-native plants can effectively compete with these species. Establishing competitive perennial plant communities with a mixture of native and non-native species would promote a greater degree of resiliency within the plant community and restore more natural processes.

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

Yes No Rationale:

The proposed non-native plants have been used in the Four Rivers Field Office for over 20 years. The plants have been used in range sites similar to those which were burned. Incidental establishment of the proposed species may occur outside of the treatment area by seasonal movement of various wildlife or domestic animals, but this occurrence is not common nor has it been observed to result in the long-term displacement and dominance of native plant species or communities (NRCS Plants database - AGFR plant guide, 2012).

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

Non-native Plants	Native Plants
Forage Kochia, Immigrant (<i>Bassia Prostrata</i>)	Antelope Bitterbrush (<i>Purshia tridentata</i>)
Siberian Wheatgrass, Vavilov II (<i>Agropyron fragile</i>)	Low Sagebrush (<i>Artemisia arbuscula</i>)
	Mountain Big Sagebrush, Mountain (<i>Artemisia tridentata vaseyana</i>)
	Snake River Wheatgrass, Secar (<i>Elymus wawawaiensis</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	2938	\$274,000.00	85%
S3	Aerial Seeding	Acres	3000	\$69,000.00	85%
S5	Noxious Weeds	Acres	10880	\$10,000.00	90%
S7	Fence/Gate/Cattleguard	Miles	12	\$53,000.00	100%
S12	Closures (area, OHV, livestock)	Each	10880	\$5,000.00	98%
S13	Monitoring	Acres	10880	\$127,000.00	100%
				\$538,000.00	

Action/ Spec #	Planned BAR Action (LF32000BR)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
R3	Aerial Seeding	Acres	7841	\$140,000.00	85%
R4	Seedling Planting	Acres	150000	\$405,000.00	90%
R5	Noxious Weeds	Acres	10880	\$19,000.00	90%
R7	Fence/Gate/Cattleguard	Miles	4	\$20,000.00	100%
R12	Closures (area, OHV, livestock)	Each	10880	\$40,000.00	98%
				\$624,000.00	

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. Establishment of vegetated fuel breaks (non-ESR funded) would fragment fine fuels and reduce the potential for fire spread while providing for greater fire suppression safety.

The closures are needed to ensure adequate recovery occurs before recreation and grazing resume.

No Action Yes No Rationale for Answer:

Without the proposed seeding treatments and closures, critical habitat for sage-grouse, deer, and elk would be seriously compromised.

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 or identical to those proposed indicate that probability of success is high. 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 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 is the most cost-effective and the best option to re-establish sage-grouse habitat and provide critical winter elk and deer habitat.

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 an environment conducive to the preservation and maintenance of critical forage and cover for sage-grouse, mule deer, and elk while outcompeting noxious and/or invasive species found in the area.

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.
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. This will only be conducted in year 2-3.
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.

S3 - 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.

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:

There are pockets of suitable planting sites within the fire perimeter. They are not always easily to define post fire and would be impractical to delineate. Seeding of the entire area will ensure that all suitable sites are seeded. Monitoring for shrub seeding will be conducted using photo plots and landscape monitoring shrub hoop method. Long transect lines will be walked and when a suitable area is encountered a 10 m² sized plot (1.73 meter radius circle) will be used when counting and recording shrub density. The treatment will be considered successful when aerially seeded sagebrush attains a density of 1/10m² in suitable areas.

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 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.

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 closed the area to livestock use until resource objectives have been achieved.

A closure for motorized vehicles is to keep vehicles out of the burn area and from moving across the treatment area until vegetation is re-established. The closure is also to keep motorized vehicles out of the area during peak use periods of hunting and antler collecting. This burn along with several other burns in the area have drastically reduced the winter feeding areas for big game wildlife. Animals will be impacted by loss of browse and weakend and need additonal protection from motorized impacts.

Describe how implementation will be monitored:

Site will be visited by Field Office and Operations personnel during both the grazing season and hunting seasons to ensure both the permittee and law enforcement is successful in keeping animals and vehicle traffic out of the burned area.

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

Effectiveness will be measured by site visits and the lack of evidence of livestock use and recreational vehicle traffic within the seeding area. The vehicle closure will also be monitored through reporting summaries made and provided law enforcement patrols. Summaries will include patrol dates, patrol hours, violations and citations issued and observation reports of overall effectiveness of posted closures.

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.

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:

See each monitoring section above.

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.

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:

There are pockets of suitable planting sites within the fire perimeter. They are not always easily to define post fire and would be impractical to delineate. Seeding of the entire area will ensure that all suitable sites are seeded. Monitoring for shrub seeding will be conducted using photo plots and landscape monitoring shrub hoop method. Long transect lines will be walked and when a suitable area is encountered a 10 m² sized plot (1.73 meter radius circle) will be used when counting and recording shrub density. The treatment will be considered successful when aerially seeded sagebrush attains a density of 1/10m² in suitable areas.

R4 - Seedling Planting

Identify the objective of the treatment:

Objective is to establish antelope bitterbrush and big sagebrush in suitable planting sites.

Describe how implementation will be monitored:

Seedlings are to be planted under Contract. Monitoring plots will be established during the planting to identify plants for spring effectiveness monitoring and for contract compliance. A 16.6 foot diameter monitoring site will be established and the number of plants will be counted, pin-flagged, and diagramed for future data collection on survival and for contract inspection.

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

Effectiveness will be monitored in April-June each spring. Monitoring sites will be revisited and the number of plants alive vs. dead will be counted. Seedling establishment will be considered successful when 40% of the planted seedlings persist into the third growing season.

R5 - 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 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.

R7 - 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.

R12 - Closures (area, OHV, livestock)

Identify the objective of the treatment:

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

A closure for motorized vehicles is to keep vehicles out of the burn area and from moving across the treatment area until vegetation is re-established. The closure is also to keep motorized vehicles out of the area during peak use periods of hunting and antler collecting. This burn along with several other burns in the area have drastically reduced the winter feeding areas for big game wildlife. Animals will be impacted by loss of browse and weekend and need additional protection from motorized impacts.

Describe how implementation will be monitored:

Site will be visited by Field Office and Operations personnel during both the grazing season and hunting seasons to ensure both the permittee and law enforcement is successful in keeping animals and vehicle traffic out of the burned area.

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

Effectiveness will be measured by site visits and the lack of evidence of livestock use and recreational vehicle traffic within the seeding area. The vehicle closure will also be monitored through reporting summaries made and provided law enforcement patrols. Summaries will include patrol dates, patrol hours, violations and citations issued and observation reports of overall effectiveness of posted closures.

Livestock Closure Effectiveness Objectives for seeded areas are as follows:

- a. Greater than 95% of canopy gaps are \leq 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.

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

PART 9 - MAPS

1. - Fire Perimeter and Land Status
2. - S7_R7_Fence_Repair
3. - S2_Ground_Drill_Seeding
4. - S4_R4_Seedling_Planting
5. - S5_R5_Noxious_Weeds
6. - Allotments_T&E
7. - S12_R12_Closures
8. - S3_R3 Broadcast Seeding

PART 10 - REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial	Date
Team Leader	Kathi Kershaw (BLM Fuels)		
Operations	Rob Bennett (BLM Operations)		
GIS Specialist	Alex Webb (BLM Operations)		
NEPA Compliance & Planning	Seth Flanigan (BLM Boise District)		
Botanist	Mark Steiger (BLM Four Rivers)		
Rangeland Mgt. Specialist	Mike Barnum (BLM Four Rivers)		
Wildlife Biologist	Joe Weldon (BLM Four Rivers)		
Resource Advisor(s) on Fire	Dani Ostolasa-Mendiola (BLM Four Rivers)		

PLAN APPROVAL

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

/s/ Terry A Humphrey - Field Manager

7/26/2012

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.