

**DECISION RECORD AND RATIONALE  
BLM/BOISE DISTRICT/BRUNEAU FIELD OFFICE  
BIG HILL FIRE (#GAK1) #DOI-BLM-ID-B020-2011-0013-DNA**

Applicant: N/A	Proposed Action: <b>Big Hill Fire (GAK1) Emergency Stabilization and Rehabilitation Treatments</b>	Fire #: <b>GAK1</b>	Project No.:	E.A. No.: <b>ID-B020-2011-0013</b>
State: <b>Idaho</b>	County: <b>Owyhee</b>	District: <b>Boise</b>	Field Office: <b>Bruneau</b>	Authority: <b>FLPMA</b>
Prepared By: (signature) /s/ <b>Kathi Kershaw</b>	Title: <b>Fuels Botanist/Ecologist</b>	Field Exam Date(s): <b>8/16, 19/2011</b>	Report Date: <b>September 12, 2011</b>	

**LANDS INVOLVED**

Meridian	Township	Range	Section(s)	Subdivision(s)	Acres
Boise	9S	5E	07 (Fire Origin)		67,070

**RATIONALE AND PLAN CONFORMANCE**

This proposal is consistent with the 1983 Bruneau Management Framework Plan. The following documents adequately consider the proposed action and constitutes BLM's compliance with the requirements of NEPA: (1) DNA Worksheet ID-B020-2011-0013; (2) Normal Fire Emergency Stabilization and Rehabilitation Plan Environmental Assessment, 2005, ID-090-2004-050; (3); and (4) Noxious and Invasive Weed Treatment for the Boise District and Jarbidge Field Offices Environmental Assessment, 2005, ID-100-2005-EA-265. My decision will result in the most beneficial, quickest recovery, and least costly stabilization and rehabilitation efforts for the pre-existing vegetation and soil resources of the burned area.

**ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES**

This wildfire management decision is issued under 43 CFR Part 5003.1 (or 43 CFR 4190.1 for rangelands) and is effective immediately. The BLM has made the determination that vegetation, soil, or other resources on the public lands are at substantial risk of wildfire due to drought, fuels buildup, or other reasons, or at immediate risk of erosion or other damage due to wildfire. Thus, notwithstanding the provisions of 43 CFR 4.21(a)(1), filing a notice of appeal under 43 CFR Part 4 does not automatically suspend the effect of the decision. Appeal of this decision may be made to the Interior Board of Land Appeals in accordance with 43 CFR 4.410. The Interior Board of Land Appeals must decide an appeal of this decision within 60 days after all pleadings have been filed, and within 180 days after the appeal was filed as contained in 43 CFR 4.416.

**DECISION**

It is my decision to implement the Big Hill Fire ESR Plan pending approval of funding. I have reviewed this plan conformance and NEPA compliance record and have determined that the proposed project is in conformance with an approved land use plan and that no further environmental analysis is required.

/s/ Aimee D. Betts  
Approving Official  
Acting Bruneau Field Manager

Sept 12, 2011  
Date

**2011 BLM IDAHO POST-FIRE RECOVERY PLAN  
EMERGENCY STABILIZATION AND BURNED AREA REHABILITATION**

**BIG HILL (GAK1) FIRE**

**DOI-BLM/BOISE DISTRICT/BRUNEAU FIELD OFFICE  
IDAHO STATE OFFICE**

**FIRE BACKGROUND INFORMATION**

<b>Fire Name</b>	Big Hill
<b>Fire Number</b>	GAK1
<b>District/Field Office</b>	Boise/Bruneau
<b>Admin Number</b>	LLIDB02000
<b>State</b>	Idaho
<b>County(s)</b>	Owyhee
<b>Ignition Date/Cause</b>	8/14/2011/Lightning
<b>Date Contained</b>	8/16/2011
<b>Jurisdiction</b>	<i>Acres</i>
<b>BLM</b>	63,051
<b>State</b>	3,836
<b>Private</b>	181
<b>Other</b>	
<b>Total Acres</b>	67,068
<b>Total Costs</b>	\$5,259,000
<b>Costs to LF20000ES (2822)</b>	\$5,053,000
<b>Costs to LF32000BR (2881)</b>	\$206,000
<b>Costs to other programs</b>	\$0

**Status of Plan Submission** (check one box below)

<input checked="" type="checkbox"/>	Initial Submission of Complete Plan
<input type="checkbox"/>	Updating or Revising the Initial Submission
<input type="checkbox"/>	Amendment

## **PART 1 - PLAN SUMMARY**

### **BACKGROUND INFORMATION ON THE FIRE**

The Big Hill fire was ignited by lightning on August 14, 2011 in Owyhee County, 15 miles south of Bruneau, Idaho. The fire perimeter encompasses approximately 63,000 acres of public land, 3,840 acres of State land, and 180 acres of private land. The northern boundary of the fire is the southern boundary of the 2010 Crowbar Fire and the southern boundary is the confluence of Louse and Sheep Creeks and the 2010 Black Sheep Fire. Near the confluence of Louse and Sheep Creeks and along Sheep Creek Canyon the fire burned approximately 500 acres in the Bruneau-Jarbridge River Wilderness Area, mostly along the canyon rim. The fire burned across four pastures of three grazing allotments including; approximately 27,000 acres of the 64,038 acre Center allotment (00809), 21,500 acres of the 29,914 acre Table Butte allotment (00839), and 18,500 acres of the 72,397 acre Blackstone allotment (00941) (Table 1 below). The topography of the burned area is rolling with steep drainages, plateaus, and escarpments. The rolling terrain and plateaus provide good opportunity for drill seeding.

The fire burned through several older crested wheatgrass seedings and large stands of Wyoming big sagebrush with Sandberg bluegrass, Indian ricegrass, and pockets of cheatgrass. The wheatgrass seedings also contained cheatgrass, Sandberg bluegrass, Indian ricegrass, and rabbitbrush. The seedings burned rather completely, consuming much of the biomass. The sagebrush communities burned in mosaic patterns leaving a mix of completely consumed areas, areas of shrub skeletons with some unburned foliage, and areas with a light or no consumed biomass. The areas of sagebrush that burned more completely tended to have higher densities of cheatgrass than areas with low densities of cheatgrass.

The fire burned sage-grouse habitat, and the burned area lies just to the northeast of the densest concentration of sage-grouse leks and one of the largest populations of sage-grouse in southwestern Idaho. Greater sage-grouse are a candidate species for listing under the Endangered Species Act. Candidate status was assigned because although listing was warranted, higher priority was given to other species. Additionally, the west central portion of the fire includes winter range for antelope and deer also utilize the area. The southeast portion of the fire adjacent to Sheep Creek overlaps with bighorn sheep habitat.

Four ecological sites comprise the majority of the burned area:

- Calcareous Loam 7-10 inch precipitation zone with shadscale saltbush (*Atriplex confertifolia*), bud sagebrush (*Picrothamnus desertorum*), Indian Ricegrass (*Achnatherum hymenoides*), and Thurber's needlegrass (*Achnatherum thurberianum*) (approx. 1,000 acres)
- Loamy 8-12 inch precipitation zone with Wyoming big sagebrush (*Artemisia tridentata* var. *wyomingensis*), bluebunch wheatgrass (*Pseudoroegneria spicata*), and Thurber's needlegrass (*Achnatherum thurberianum*) (approx. 26,000 acres)
- Loamy 10-13 inch precipitation zone with Wyoming big sagebrush (*Artemisia tridentata* var. *wyomingensis*) and bluebunch wheatgrass (*Pseudoroegneria spicata*) (approx. 26,000 acres),
- Very Shallow Stony 8-12 inch precipitation zone with black sagebrush (*Artemisia nova*)

and Thurber’s needlegrass (*Achnatherum thurberianum*) (approx. 1,500 acres). Proposed seed mixes for this project were developed based on available species that are associated with or have the potential to persist in these ecological sites.

**TABLE 1 – LIVESTOCK MANAGEMENT**

Allotment Name/Num.	Pasture ID	Livestock On-Off Dates	Pasture Acres			Fence Needed	Closure Full/Partial	Range Specialist
			Total	Burned	%			
Center/00809	1	11/16 – 5/31	50,471	27,000*	53*	Y	Partial	J. Haupt
		11/1 – 3/25						
Table Butte/00839	1	11/15 – 12/31	11,961	7,848	66	N	Full	
	4	3/1 – 5/15	14,535	13,515	93	N	Full	
Blackstone/00941	Big Lake	12/8 – 6/5	57,423	18,500	32	Y	Partial	
		4/8 – 6/5						
		8/11 – 11/15						

\*The 2010 Crowbar fire also burned Pasture 1. Those acres are unavailable for livestock use until objectives for that ESR plan are achieved. There are 10,168 acres remaining as unburned and available for livestock use which is 20% of Pasture 1.

Treatments being proposed in this plan are to:

- Drill seed 25,000 acres fall/winter 2011 with two different grass and forb mixtures (native and non-native mixes)
- Aerial broadcast seed 50,000 acres with native shrubs and forbs
- Repair 3 miles of existing fence and construct 15 miles of new protective fencing to protect the burned areas from livestock grazing during recovery. Prior to the re-introduction of livestock grazing on burned pastures, 24 miles of internal fence will be repaired
- Inventory and treat noxious weeds within the fire perimeter

These treatments are needed to stabilize soils, suppress invading annuals, and provide adequate habitat for greater sage-grouse, mule deer, pronghorn antelope, and several sensitive species. To complete project treatments and administrative functions associated with the project, limited off-road travel by vehicles, off-highway vehicles, and equipment may be necessary.

**LAND USE PLAN CONSISTENCY**

The project area occurs within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP), and effects of the proposed treatments were analyzed in the Normal Fire Emergency Stabilization and Rehabilitation Plan Environmental Assessment (EA# ID-090-2004-050).

**Treatment/Activity S2 Ground Seeding and S3 Aerial Seeding:** Seed mixtures comprised of native and non-native grasses, and native forbs and shrubs would be drill and aerial broadcast seeded. Drill seeding would occur on 25,000 acres and aerial seeding would occur over 50,000 acres of burned land. Aerial seeding of shrubs is proposed as an ES treatment to augment the development of vegetative structure across the burned landscape to further reduce sediment movement from wind and water erosion, which will aid in restoring habitat for sage-grouse and

several other BLM sensitive wildlife species associated with the sagebrush steppe. The area was also important habitat for antelope and is utilized by mule deer and bighorn sheep.

These proposed actions meet the MFP objectives to:

- 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);
- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage 520,000 acres of sage-grouse range in the BPU to improve nesting, brood rearing, and winter habitats by: improving all poor and fair big sagebrush, meadow, and riparian ecological sites to good ecological condition (WL-4.4);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Manage 1,079,000 acres of pronghorn habitat in the BPU, within IMP guidelines where applicable, to provide sufficient forage, water, cover, and space (WL-3.3);
- Manage mule deer spring, summer, and fall, and winter range, and pronghorn habitat in the BPU to obtain good ecological condition, and to provide adequate food, cover, and water (WL-3.1, 3.2, 3.3).

**Treatment/Activities S12 Livestock Closure, S7 Protective Fence/Cattle Guard, and S7/R7 Fence Repair/Gate:** Approximately 15 miles of protective fence would be constructed and 3 miles of fence would be repaired to protect the treatment area from livestock use during the seeding establishment period. Approximately 24 miles of interior fence would be repaired prior to the reintroduction of livestock following the closure period. Fencing of treatment areas is consistent with BLM Handbook H 1742-1, Burned Area Emergency Stabilization and Rehabilitation, which states; “*livestock will be excluded from the treatment area until monitoring results, documented in writing; show rehabilitation objectives have been met*”. In case of treatment failure, other factors may need to be considered, such as natural recovery of untreated areas, and need or reason to continue closure.

In the Pasture 1 of Center Allotment (00891), approximately 27,000 acres burned in the Big Hill fire. This pasture 1 is comprised of 50,471 total acres, however, in 2010 the Crowbar fire burned 13,303 acres in this pasture. Between 2010 and 2011, approximately 80% of the pasture has burned and is closed to livestock use for recovery and seeding establishment. The proposed fence will enable 20%, or 10,168 acres, of the pasture to continue to receive permitted livestock use.

In the Table Butte Allotment, of the 11,961 total acres in Pasture 1; 7,848 acres burned which is 66% of the pasture. In Pasture 4, 13,515 acres burned of the 14,535 total acres, which is 93% of the pasture. Both pastures will be closed to livestock grazing until ESR objectives have been achieved.

In the Blackstone allotment, 18,500 of the 57,423 acres in the Big Lake Pasture burned, which accounts for 32% of the pasture. The proposed fencing will enable the remaining 68% of the pasture to be available for permitted livestock use.

**Treatment/Activity S5/R5 Noxious Weeds:** Inventory and treatment of new and existing populations of noxious weeds would occur within the project area. This is in conformance with BLM policy requiring the BLM control the spread of noxious weeds on public lands and eradicate them where possible and economically feasible.

**Treatment/Activity S14 Monitoring Effectiveness of Treatments:** Monitoring would be conducted annually to evaluate the effectiveness of treatments and attainment of objectives within the project area. Monitoring data would be collected from initiation of the proposed treatments through the year 2014.

**COST SUMMARY TABLES**

**Emergency Stabilization (LF20000ES):**

GAK1 BIG HILL			EMERGENCY STABILIZATION COST SUMMARY TABLE						
Action/ Spec. #	Planned Action	Unit	# Units	Unit Cost	FY11	FY12	FY13	FY14	Totals by Spec.
S1	Planning (Project Mgmt)	WM's	10	\$8,600	\$0	\$34,000	\$34,000	\$18,000	\$86,000
S2	Ground Seeding	Acres	25,000	\$100	\$1,957,000	\$539,000	\$0	\$0	\$2,496,000
S3	Aerial Seeding	Acres	50,000	\$40	\$0	\$1,800,000	\$0	\$0	\$2,000,000
S5	Noxious Weeds	Acres	63,051	\$0.73	\$0	\$46,000	\$0	\$0	\$46,000
S7	Fence/Gate/Cattle Guard	Miles	18	\$8,444	\$0	\$134,000	\$0	\$18,000	\$152,000
S12	Closures (area, OHV, livestock)	#	63,051	\$0	\$0	\$0	\$0	\$0	\$0
S13	Monitoring	Acres( 3 yrs)	189,153	\$1	\$0	\$92,000	\$92,000	\$89,000	\$273,000
TOTAL COSTS (LF20000ES)					\$1,957,000	\$2,845,000	\$126,000	\$125,000	\$5,053,000

**Burned Area Rehabilitation (LF32000BR):**

GAK1 BIG HILL			BURNED AREA REHABILITATION COST SUMMARY TABLE						
Action/ Spec. #	Planned Action	Unit	# Units	Unit Cost	FY11	FY12	FY13	FY14	Totals by Spec.
R1	Planning (Project Mgmt)	WM's	3	\$8,667	\$0	\$13,000	\$13,000	\$0	\$26,000
R5	Noxious Weeds	Acres (2 yrs)	126,102	\$1	\$0	\$0	\$43,000	\$37,000	\$80,000
R7	Fence/Gate/Cattleguard	Miles	24	\$4,167	\$0	\$100,000	\$0	\$0	\$100,000
TOTAL COSTS (LF32000BR)					\$0	\$113,000	\$56,000	\$37,000	\$206,000

## **PART 2 – POST-FIRE RECOVERY ISSUES AND TREATMENTS**

Issues relate to resource problems caused by the wildfire and include both the immediate wildfire effects as well as effects predicted to occur as a result of the wildfire. Determining the appropriate funding code must be based on the scope of the issue, purpose of the treatment, and the availability of funds.

### **EMERGENCY STABILIZATION ISSUES AND TREATMENTS**

Emergency Stabilization Objectives: “determine the need for and to prescribe and implement emergency treatments to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of a fire.” 620DM3.4

Emergency Stabilization Priorities: human life and safety, property, and unique biological resources (designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species) and significant heritage sites. 620DM3.7

#### **ES Issue 1 - Human Life and Safety N/A**

#### **ES Issue 2 - Soil/Water Stabilization**

The establishment of a perennial plant community through drill and aerial broadcast seeding would provide perennial ground cover, protect against soil loss, and provide habitat for greater sage-grouse, a candidate species for listing as threatened or endangered by the US Fish and Wildlife Service. Protective fencing and livestock allotment closures would aid in meeting ESR vegetation establishment objectives.

##### ***Treatment Activity: S7 Fence***

A. Treatment/Activity Description. In the Center Allotment, approximately 3 miles of existing fence damaged by the fire will be repaired along Highway 51 and 5 miles of long-term permanent management fence will be constructed to protect the burned area from livestock grazing and allow livestock use in the unburned portion of the allotment. Ten miles of temporary fence will be constructed in Blackstone allotment to protect the burned area from livestock grazing while enabling livestock use in the remaining unburned area of the allotment. The three-strand, smooth bottom wire fencing will tie-in to existing structures and be built to BLM specification for wildlife. The temporary fencing will be removed following the livestock closure period.

B. How does the treatment relate to damage or changes caused by the fire? The objective of this treatment is to protect the burned area and seeding treatment to allow for seeding establishment as well as provide critical rest to existing native vegetation from livestock grazing. Construction of five miles of permanent fence, 10 miles of temporary fence, and repair of three miles of existing fence damaged by the fire will effectively protect the burned area from livestock grazing while allowing the remaining unburned portions of the pastures to be available for livestock use. The pastures in Table Butte Allotment within the fire perimeter had high percentages of burned versus unburned acres therefore the entire pastures will be closed and do not require protective fencing.

C. Why is the treatment/activity reasonable, within policy, and cost effective? Most of the burned area is protected by existing fences. Construction of five miles of permanent long-term management fence, 10 miles of temporary protective fence, and repair of three miles of existing fence damaged by the wildfire would protect the burned area and allow livestock grazing in the remaining unburned portions of the pastures during the closure period.

***Treatment/Activity S12/R12 Livestock Closure***

A. Treatment Activity/Description. The area burned by the Big Hill fire would be rested from livestock grazing until monitoring data shows that ES and BAR objectives have been met.

B. How does the treatment relate to damage or changes caused by the fire? The purpose of this treatment is to rest the burned area from livestock grazing to provide the opportunity for recovery of on-site vegetation and new seeding establishment. Establishment of resilient, competitive, perennial plant communities would inhibit the expansion of annual invasive vegetation and noxious weeds and stabilize soil resources.

C. Why is the treatment/Activity reasonable, within policy, and cost effective? This treatment conforms to the current land use plan. There are no costs associated with the livestock closure that would be borne by the ESR program. Without the treatment, the ability of the vegetation to become established or recover would not be effective.

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

The fire burned through habitat for greater sage-grouse, a candidate species for listing as threatened or endangered under the Endangered Species Act. The densest population of greater sage-grouse and leks in Idaho are just to the southwest of the burned area. Several thousand acres of sagebrush burned in the fire, and active leks are within reasonable travel distance for grouse. Seeding and establishment of shrubs and forbs would provide a food source and assist in maintaining habitat for greater sage-grouse. Areas identified for drill seeding in this project would not provide adequate habitat without the introduction of perennial grasses and forbs, and sagebrush would not reestablish on its own for many years. Seeding identified areas with perennial grasses, forbs, and shrubs would reduce the potential for cheatgrass to become dominant and prevent the degradation of several thousand acres of sage-grouse habitat.

According to the Idaho Sage-grouse Conservation Plan, the burned area is within the Owyhee Sage-grouse Planning Area, and provides nesting habitat for sage-grouse. Invasive species and fire ranked first and second, respectively, as risks for sage-grouse in this portion of their range. The Big Hill fire burned 20,880 acres of key habitat, 45,948 acres of R1 habitat (perennial grasslands, and 71 acres of R2 habitat (annual grasslands).

***Treatment Activity: S2 Ground Seeding***

A. Treatment/Activity Description: Approximately 15,000 acres of land burned in the Big Hill Fire would be drill seeded with a mix of native perennial grasses and forbs and an additional 10,000 acres would be drill seeded with a mix of non-native perennial grasses and forbs. Plant species in both mixes were selected based on their ability to establish and persist in the ecological sites common within the burned area. Forb species were specifically selected that are preferred forage by sage-grouse. Determination between using native or non-native mix for a given area was made based on pre-fire plant communities and their overall condition. The

native seed mix was selected where the pre-fire vegetation was in reasonably good condition. The non-native mix was selected for areas where cheatgrass occurred in sufficient quantity as to potentially out-compete existing perennial grasses during the recovery period. The non-natives are more vigorous than native species and better able to compete with invasive annual plants.

B. How does the treatment relate to damage or changes caused by the fire? The areas within the fire perimeter that were vegetated by crested wheatgrass prior to the fire have a high likelihood of persisting post-fire. Native plant communities, however, are often depleted of sufficient perennial grasses and forbs to fully occupy a site after above-ground biomass is removed by fire, providing an opportunity for cheatgrass to increase and become more common. Drill seeding perennial grasses and forbs into identified sites will ensure perennial vegetation is retained in areas of good condition.

C. Why is the treatment/activity reasonable, within policy, and cost effective? Areas containing habitat for federally listed animal and plant species are the Bureau's highest priority areas for reestablishment of shrubs, herbaceous grasses, and forb species. Benefits to critical resources will outweigh the cost of the treatment. Treatments attempted after the first year of the fire disturbance would be much higher in cost and the success rate would be minimal at best. Sage-grouse habitat would not be restored as quickly as with the proposed treatments and habitat could be lost if non-native plants, such as cheatgrass, dominate the area. Sites with the highest potential for successful rehabilitation have been selected for seeding.

***Treatment/Activity: S3 Aerial Seeding***

A. Treatment/Activity Description: A seed mix containing Wyoming big sagebrush, yarrow, and other native forbs would be aurally broadcast seeded across the majority of the area burned in the Big Hill fire during late fall or winter of 2011/2012. Timing of the seed application will ensure seed-to-soil contact prior to winter snow fall or precipitation. These species are paramount to the areas ability to support viable populations of sage-grouse. Seed would be broadcast using an end product contract by either a helicopter or fixed-wing aircraft.

B. How does the treatment relate to damage or changes caused by the fire? The seeding of grasses/forbs/shrubs would augment the replacement of those species destroyed by the fire before invasive annual species and noxious weeds have a chance to expand. The diverse mix of native and non-native species would provide an environment to attract pollinators to enhance propagation of critical forage and cover for sage-grouse while competing with noxious and/or invasive species found in the area. Other aerial seeding applications in the area have proven to be very effective in establishing sagebrush and forbs. The chance of success is the highest in the first year after the fire and following a drill seeding treatment when there are sufficient open areas for seeded species to establish.

C. Why is the treatment/activity reasonable, within policy, and cost effective? The burn removed an area of mature sagebrush within key sage-grouse habitat. These are the Bureau's highest priority areas for reestablishment of shrubs, grasses, and forb species. Benefits to critical resources would outweigh the cost of the treatment. Treatments attempted after the first year of the fire disturbance would be much higher in cost and the success rate would be minimal at best. The treatment would augment the restoration of suitable habitat conditions for sage-grouse.

#### **ES Issue 4 - Critical Heritage Resources. N/A**

#### **ES Issue 5 - Invasive Plants and Weeds**

First-year inventory and treatment of noxious weed species meets the ES criteria of maintaining the habitat in the highest priority areas. Several noxious weed species previously identified in the burned area include whitetop, scotch thistle, Canada thistle, diffuse knapweed, and rush skeletonweed. Immediate identification and treatment of these noxious weed species is necessary to control their impact in the area. Noxious weed detection and treatment will help limit the expansion of invasive species and noxious weeds within the burned area.

Continued inventory and treatment of noxious weeds in the second and third year meets the BAR criteria of actions necessary to regenerate and maintain identified critical sagebrush steppe and sage-grouse habitat. Several well-used roads border and transect the burned area, which could serve as a significant source of future weed transportation and introduction. Continued inventory and treatment of weeds will control their invasion and assist with the establishment of desirable native vegetation.

#### ***Treatment/Activity: S5/R5 Noxious Weed Treatment***

A. Treatment/Activity Description. The 63,051 acres of BLM land within the burned area would be inventoried for the presence of noxious weeds and appropriate treatments would be applied based on the species encountered. Herbicides on the BLM list of approved chemicals would be applied by ATV/UTV or backpack sprayer. Following BLM policy, appropriate procedures described in the chemical manufacturer's label, and applicable regulations would be adhered to. Initial inventory of weeds would occur both fall 2011 and spring 2012 and continue over the next two years under the BAR program.

B. How does the treatment relate to damage or changes caused by the fire? The likelihood of noxious weeds increasing within the burned area is very high because of exposed soil and proximity of weed species. The control of noxious weeds will help to ensure the successful establishment of seeded species as well as increase the vigor of existing plants on site. Control of noxious is imperative to creating a diverse mixture of plant species that will provide suitable conditions for quality habitat for sage-grouse in the future.

C. Why is the treatment/activity reasonable, within policy, and cost effective? Early detection and rapid response for weed treatments is much more cost effective than addressing a noxious weed infestation that is much larger and harder to control later. Field work is combined with other weed treatments in the area for cost efficiency. Surveying and treating weed infestations will occur before they become established. Current policy states that treatment should occur where there is threat that those species may quickly invade or hamper reestablishment of native vegetation.

#### **BURNED AREA REHABILITATION ISSUES AND TREATMENTS**

Burned Area Rehabilitation Objectives: 1) To evaluate actual and potential long-term post-fire impacts to critical cultural and natural resources and identify those areas unlikely to recover

naturally from severe wildland fire damage; 2) To develop and implement cost-effective plans to emulate historical or pre-fire ecosystem structure, function, diversity, and dynamics consistent with approved land management plans, or if that is infeasible, then to restore or establish a healthy, stable ecosystem in which native species are well represented; and 3) To repair or replace minor facilities damaged by wildland fire. 620DM3.4

Burned Area Rehabilitation Priorities: To repair or improve lands damaged directly by a wildland fire; and to rehabilitate or establish healthy, stable ecosystems in the burned area. 620DM3.8

**BAR Issue 1 - Lands Unlikely to Recover Naturally.** N/A

**BAR Issue 2 - Weed Treatments.**

Continued inventory and treatment of noxious weeds in the second and third year meets the BAR criteria of actions necessary to regenerate and maintain native plant communities which reduce erosion and sediment transport and provide habitat for sage grouse and other sagebrush obligate species. Several well-used roads border or go through the burned area, which could serve as a significant source of future weed transport and introduction. Continued inventory and treatment of weeds would allow for treatment and control their invasion and assist with the establishment of desirable native vegetation.

***Treatment/Activity: R5 Noxious Weed Treatment***

A. Treatment/Activity Description. Noxious weed inventory and treatment within the burned area would occur for three years following the fire to directly treat new occurrences. All actions would be in accordance with the Boise District Normal Fire Stabilization and Rehabilitation Plan EA #ID-090-2004-050, May, 2005, and the Noxious and Invasive Weed Treatment Program consultation with the US Fish and Wildlife Service (OALS #1-4-05-I-759). Noxious species identified in the burned area include whitetop, scotch thistle, Canada thistle, diffuse knapweed, and rush skeletonweed. A total of 63,051 acres would be surveyed and treated under this activity.

B. How does the treatment relate to damage or changes caused by the fire? The likelihood of noxious weeds increasing within the burned area is very high because of exposed soil and proximity of weed species. The control of noxious weeds will help to ensure the successful establishment of seeded species as well as increase the vigor of existing plants on site. Control of noxious is imperative to creating a diverse mixture of plant species that will provide suitable conditions for quality habitat for sage-grouse in the future.

C. Why is the treatment/activity reasonable, within policy, and cost effective? Early detection and rapid response for weed treatments is much more cost effective than addressing a noxious weed infestation that is much larger and harder to control later. Field work is combined with other weed treatments in the area for cost efficiency. Surveying and treating weed infestations will occur before they become established. Current policy states that treatment should occur where there is threat that those species may quickly invade or hamper reestablishment of native vegetation.

**BAR Issue 3 - Tree Planting. N/A**

**BAR Issue 4 - Repair/Replace Fire Damage to Minor Facilities.**

***Treatment/Activity: R7 Fence Repair, Exclosure Construction***

A. Treatment/Activity Description. Twenty-four miles of internal allotment/pasture fencing were damaged during the Big Hill fire. Repair of this fencing is needed to ensure livestock remain in permitted allotments and pastures. This fencing would be repaired prior to the re-introduction of livestock into burned areas of affected pastures or allotments following the livestock closure. Four exclosures will be constructed within the treated areas for long term monitoring of treatments. These exclosures will be constructed in 2012 or 2013 pending treatment establishment.

B. How does the treatment relate to damage or changes caused by the fire? Fence material can become damaged during the fire and become ineffective. Wooden material may be partially or fully consumed and steel wire may lose tensile strength if exposed to intense heat. Obvious failure of material integrity will be replaced and/or repaired. Replacement or repair of damaged fence material will result in the ability to direct the use of public land by permitted livestock.

C. Why is the treatment/activity reasonable, within policy, and cost effective? This treatment is reasonable and cost effective because it would utilize existing fences, gates, and structures to the greatest extent possible. It is cost effective because fire damaged wooden structures would be replaced with steel where possible thus increasing longevity of the structures and resistance to future wildfire events.

**PART 3 – DETAILED TREATMENT COST TABLE -- See separate detailed cost table/excel file.**

## **PART 4 – SEED LISTS**

### **DRILL SEED – Native Mix**

Seed Type/Variety	PLS Rating	Seeding Acres	BULK Lbs/Ac	PLS Lbs/Ac	BULK# Seeds/Lb	PLS# Seed Lb	BULK # Seed/Ac	PLS # Seed/Ac	PLS # Seed/Sq Ft	PLS Total Lbs	BULK Total Lbs	BULK Cost Per Lb	Total Cost
Snake River Wheatgrass, Secar	.7650	15,000	6.0	4.6	170,000	130,050	1,020,000	780,300	17.9	68,850	90,000	\$7.00	\$630,000
Basin Wildrye, Trailhead	.7650	15,000	0.5	0.4	150,000	114,750	75,000	57,375	1.3	5,738	7,500	\$8.00	\$60,000
Big Bluegrass, Sherman	.6300	15,000	0.5	0.3	917,000	577,710	458,500	288,855	6.6	4,725	7,500	\$12.00	\$90,000
Bottlebrush Squirreltail, Toe Jam	.6750	15,000	1.0	0.7	220,000	148,500	220,000	148,500	3.4	10,125	15,000	\$20.00	\$300,000
Indian Ricegrass, Nezpar	.7600	15,000	1.0	0.8	205,000	155,800	205,000	155,800	3.6	11,400	15,000	\$10.00	\$150,000
<b>TOTAL COST</b>		15,000	9.0	6.7	*****	*****	1,978,500	1,430,830	33	100,838	135,000	***	\$1,230,000

### **DRILL SEED – Non-Native/Native Mix**

Seed Type/Variety	PLS Rating	Seeding Acres	Bulk Lbs/Ac	PLS Lbs/Ac	BULK # Seeds/Lb	PLS # Seed Lb	BULK # Seed/Ac	PLS # Seed/Ac	PLS # Seed/Sq	PLS Total Lbs	BULK Total Lbs	Cost Per Lb	Total Cost
Siberian Wheatgrass, Vavilov II	0.8075	8,000	7.0	5.7	220,000	177,650	1,540,000	1,243,550	28.5	45,220	56,000	\$4.00	\$224,000
Russian Wildrye, Bozoiisky II	0.7650	1,000	4.0	3.1	175,000	133,875	700,000	535,500	12.3	3,060	4,000	\$12.00	\$48,000
Indian Ricegrass, Nezpar	0.7600	8,000	0.5	0.4	205,000	155,800	102,500	77,900	1.8	3,040	4,000	\$10.00	\$40,000
Fourwing Saltbush	0.3150	1,000	4.0	1.3	55,000	17,325	220,000	69,300	1.6	1,260	4,000	\$10.00	\$40,000
<b>TOTAL COST</b>			15.5	10.4	*****	*****	2,562,500	1,926,250	44	52,580	68,000	***	\$ 352,000

## AERIAL SEED

Seed Type/Variety	PLS Rating	Seeding Acres	Bulk Lbs/ Ac	PLS Lbs/ Ac	BULK # Seeds/ Lb	PLS # Seed Lb	BULK # Seed/ Ac	PLS # Seed/ Ac	PLS # Seed /Sq	PLS Total Lbs	BULK Total Lbs	Cost Per Lb	Total Cost
Sandberg's Bluegrass, Mtn Home	.7200	50,000	0.3	0.2	950,000	684,000	237,500	171,000	3.9	9,000	12,500	\$10.00	\$125,000
Sand Dropseed	.8075	50,000	0.05	0.0	5,000,000	4,037,500	250,000	201,875	4.6	2,019	2,500	\$12.00	\$30,000
Alfalfa, Ladak	.8075	50,000	1.0	0.8	230,000	185,725	230,000	185,725	4.3	40,375	50,000	\$4.00	\$200,000
Lewis Flax, Maple Grove	.7600	50,000	0.2	0.2	420,000	319,200	84,000	63,840	1.5	7,600	10,000	\$20.00	\$200,000
White Western Yarrow	.8100	50,000	0.1	0.1	2,700,000	2,187,000	270,000	218,700	5.0	4,050	5,000	\$20.00	\$100,000
Big Sagebrush, Wyoming	.1600	50,000	1.0	0.16	2,500,000	400,000	2,500,000	400,000	9.2	8,000	50,000	\$18.00	\$900,000
Spiny Hopsage	.3200	50,000	0.1	0.03	165,000	52,800	16,500	5,280	0.1	1,600	5,000	\$30.00	\$150,000
<b>TOTAL COST</b>		50,000	2.7	1.5	*****	*****	3,588,000	1,246,420	28.6	72644	135,000	***	\$1,705,000

## PART 5 - NATIVE/NON-NATIVE PLANT WORKSHEET

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

- Are the native plants proposed for seeding adapted to the ecological sites in the burned area?  
Yes  No  Rationale: The proposed native plants in the seed mix are adapted to the soils and precipitation zones within the project area and have a high chance for success of becoming established.
- Is seed or seedlings of native plants available in sufficient quantity for the proposed project?  
Yes  No  Rationale: The selected species are commonly used and almost always readily available.
- 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 current market rate for seed is reasonable compared to the benefit to the habitat. Seed purchased by the BLM is tested and insured to be of high quality and free of noxious weeds.
- 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: These species have been used nearby successfully establishing in surrounding areas with similar soil types, precipitation zones, and invasive competition. It is important to seed prior to the first growing season following wildfire disturbance to ensure the highest chance of success.

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: Current permitted livestock use is conducive to maintenance of these species. The proposed protective fence throughout the burned area will allow the BLM to manage livestock use until seeded plants are ready to withstand grazing pressure.

**B. Proposed Non-native Plants in Seed Mixture (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: Proposed non-native plants will stabilize soils and enhance sage-grouse habitat by providing a valuable food source for sage-grouse and native ungulates.
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: The proposed non-native species will not out-compete existing or seeded natives in the area. The species proposed will be preferred by wildlife and livestock over the natives, allowing the natives to establish and flourish on site.
3. Will non-native plants stay on the site they are seeded and not significantly displace or interbreed with native plants?  
 Yes  No  Rationale: Proposed species are not aggressive and do not have the ability to interbreed with local and seeded natives.

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

Native	Non-Native
Snake River wheatgrass – Secar	Siberian wheatgrass – Vavilov II
Basin wildrye – Trailhead	Russian wildrye – Bozoisky II
Bottlebrush squirreltail – Toe Jam	Alfalfa - Ladak
Indian ricegrass - Nezpar	
Sand dropseed	
Western yarrow	
Lewis’ flax	
Sherman big bluegrass	
Spiny hopsage	
Wyoming big sagebrush	
Four-wing saltbush	

**PART 6. – 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	25,000	\$2,496,000	80
S3	Aerial Seeding	Acres	50,000	\$2,000,000	80
S5	Noxious Weeds	Acres	63,051	\$46,000	90
S7	Fence/Gate/Cattleguard	Miles	18	\$152,000	100
S12	Closures (OHV, livestock, area)	#	3	\$0	100
<b>TOTAL COSTS:</b>				\$4,694,000	

Action/ Spec. #	Planned BAR Action (LF32000BR)	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
R5	Noxious Weeds (2 years)	Acres	63,051	\$80,000	90
R7	Fence/Gate/Cattleguard	Miles	24	\$100,000	100
R12	Closures (OHV, livestock, area)	#	3	\$0	100
<b>TOTAL COSTS:</b>				\$180,000	

**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 proposed actions should reduce the potential loss of sage-grouse habitat. Treatment of the upland vegetation was designed to minimize impact to natural resources. As with any treatments that are weather dependent, there is always a chance of limited success, especially with seeding treatments, but the risks to natural resources are far greater without treatment than as a result of the proposed action treatments.

**No Action** Yes  No  Rationale for answer: Failure to act quickly will result in the loss of the first year treatment window, and the area would likely experience a large increase of invasive annual grasses and noxious weeds. The remaining stands of native shrubs within and surrounding the burn will take decades to naturally establish within the burned area. Without swift action, it would be expected that the burned area would transition into an annual grass dominated site within a large stand of mature shrubs, which would increase the chance of future fires and the loss of remaining shrubs. This area is identified as habitat for sage-grouse. With the loss of shrubs and forbs, the area would become unsuitable habitat for sage grouse and the populations in the area would decline.

**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: In an area occupied by a shrub dominated plant community prior to the wildfire, the probability of success is high when seeding occurs within the first fall/winter season. Seeded species are able to establish in the ash mound areas of burned shrubs where there is little to no competition from annual grasses. The area is in sage-grouse habitat and costs associated with restoring this area back to suitable habitat are reasonable and acceptable.

**No Action** Yes  No  Rationale for answer: There would be no costs associated No Action, but no benefits would be realized, and further degradation of ecosystem components would occur.

**Alternative(s)** Yes  No  Rationale for answer: No alternatives have been identified that would be more cost effective than the proposed treatments.

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 treatments are anticipated to be cost effective, and will reduce vulnerability of the site to expansion of invasive annuals by restoring ecosystem components lost by the fire. The seeding will increase shrub cover and forb diversity helping to restore the area back to suitable habitat for sage grouse. The cost/risk is reasonable considering the benefits to the long-term health of the ecosystem and important habitat for sage-grouse.

**C. Risk of Resource Value Loss or Damage**

**No Action - Treatments Not Implemented (check one)**

Resource Value	N/A	None	Low	Medium	High
Unacceptable Loss of Topsoil				✓	
Weed Invasion					✓
Unacceptable Loss of Vegetation Diversity					✓
Unacceptable Loss of Vegetation Structure					✓
Unacceptable Disruption of Ecological Processes					✓
Off-site Sediment Damage to Private Property		✓			
Off-site Threats to Human Life		✓			
Other-	✓				

**Proposed Action - Treatments Successfully Implemented (check one)**

<b>Resource Value</b>	<b>N/A</b>	<b>None</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
Unacceptable Loss of Topsoil			✓		
Weed Invasion			✓		
Unacceptable Loss of Vegetation Diversity			✓		
Unacceptable Loss of Vegetation Structure			✓		
Unacceptable Disruption of Ecological Processes			✓		
Off-site Sediment Damage to Private Property		✓			
Off-site Threats to Human Life		✓			
Other -	✓				

**PART 7 – MONITORING PLAN**

**S2 Ground Seeding**

- 1) Objective of this treatment is to establish critical forage and cover for sage-grouse while outcompeting noxious and/or invasive species found in the area.
- 2) Implementation monitoring includes ensuring that the seed is planted at the proper time, in the correct area, and using the correct methods.
- 3) Effectiveness monitoring includes a combination of the following methods/objectives.
  - 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.
  - 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 years 2-3.
  - Conduct Basal Intercept Monitoring: A 30% decrease in basal gaps >50cm (perennial species only) compared to a burned, untreated control area.
  - The objective of the treatments is to restore the diversity of desirable grass and forb species, as compared to a burned, untreated control area.

**S3 Aerial Seeding**

- 1) The objective is to establish sagebrush, increase forb diversity, and establish early germinating cool season grasses that will reduce the expansion of invasive grasses and weeds on the site as well as prevent erosion to susceptible areas.
- 2) Aerial seeding implementation treatment will be monitored during contract administration to ensure contract specifications for the seeding treatment are met. A Contracting Officer’s Representative will be at the landing site with the contractor, and a Project Inspector will be on the on-site to measure seed distribution.

- 3) 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 m<sup>2</sup> plot (1.73 meter radius circle) will be used when counting and recording shrub density. The monitoring of forb establishment is difficult, because of irregularities in plant growth and phenology, being dependent on spring weather. The timing of the site visit needs to coincide with the seasonal appearance of perennial forbs on site. The treatment will be considered successful when aerially seeded sagebrush attains a density of 1/10m<sup>2</sup> in suitable areas.

### **S5/R5 Noxious Weeds**

- 1) Objective is to identify all existing and new infestations of noxious weeds. New infestations will be treated, and the objective is to eliminate them from the treatment area. Existing noxious weeds will be treated to contain the infestation and prevent them from expanding on site.
- 2) Implementation will be monitored by BLM noxious weed specialists conducting the inventory and work. Species identified, treatment and GPS location would be recorded.
- 3) Effectiveness will be monitored by revisiting the treated sites in 2013-2014 to evaluate mortality and inventory for additional weed populations.

### **S7 Protective Fence**

- 1) Objective is to build fence to protect the rehabilitation investment from livestock grazing before seeded plants are able to withstand grazing pressure.
- 2) Implementation will be monitored by Project Inspector or Project Lead on site ensuring fence is repaired to BLM fence specifications.
- 3) Fence will be considered effective when it prevents livestock from gaining access to project area.

### **S12/R12 Closures**

- 1) Objective is to rest site from livestock grazing until monitoring data indicate that the plants could withstand grazing pressure.
- 2) Site will be visited by Field Office and Operations personnel during grazing season to ensure permittee is successful in herding animals away from treatment area.
- 3) Effectiveness will be measured by site visits and the lack of evidence of livestock use within the seeding area. Resumption of livestock grazing will be based on the following objectives:
  - Ground seeding and aerial seeding effectiveness objectives have been met, or the treatment has been determined to be a failure and objectives are unlikely to be met.
  - Greater than 95% of canopy gaps are  $\leq 25\text{cm}$  (All biomass is measured with this method).
  - Drill 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.
  - Greater than 80% of drill seeded species are producing seed.

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

**PART 8 - MAPS**

1. Fire Perimeter and Unburned Islands of Vegetation over 40 acres
2. Colored Land Status Map
3. Burned Management Fences
4. Seeding Treatment areas
5. Protective Fences and the Adjoining Pasture Fences That They Tie Into
6. Threatened and Endangered Species Areas

**PART 9 – REVIEW, APPROVALS, and PREPARERS**

**TEAM MEMBERS**

<b>Position</b>	<b>Team Member (Agency/Office)</b>	<b>Initial and Date</b>
Plan Lead	Kathi Kershaw (Fuels)	/s/ KGK 9/8/11
Field Office Point of Contact	Jon Haupt (BFO)	/s/ JH 9/9/11
ESR Lead	Cindy Fritz (Ops)	/s/ CLF 9/9/11
<del>NEPA Compliance &amp; Planning</del>	<del>Jon Beck (BDO)</del>	
Botanist/Ecologist	Holly Beck (BFO)/Kavi Koleini (BFO)	/s/ KK 9/8/11
Cultural Resources/Archeologist	Lois Palmgren (BFO)	/s/ LP 9/8/11
Rangeland Mgt. Specialist	Jon Haupt (BFO)	/s/JH 9/9/11
Wildlife Biologist	Bruce Schoeberl (BFO)	/s/BCS 9/9/11
GIS Specialist	Dianna Sampson (BDO)	/s/ DLS 9/9/11
Resource Advisor(s) on Fire	Jon Haupt (BFO)	/s/ JH 9/9/11

**PLAN APPROVAL**

/s/ Aimee D. Betts

Sept. 9, 2011

FIELD OFFICE MANAGER

DATE



**Bureau of Land Management**  
Boise District Office  
Bruneau Field Office  
3948 Development Ave  
Boise, ID 83705  
<http://www.id.blm.gov>

---

**Determination of Land Use Plan Conformance and NEPA Adequacy (DNA)**  
U.S. Department of the Interior - Bureau of Land Management

---

**A. BLM Office:** Bruneau Field Office

**NEPA Log Number:** DOI-BLM-ID-B020-2011-0013-DNA

**Lease/Serial Case File No.:**

**Proposed Action Title/Type:** Big Hill Fire (GAK1) ES&R Plan

**Location/Legal of Proposed Action:** T 9-12S, R 5-7E

**Applicant (if any):**

**Description of the Proposed Action and any applicable mitigation measures:**

**Emergency Stabilization Treatments:**

- **Treatment/Activity S2 Ground Seeding and S3 Aerial Seeding:** Seed mixtures comprised of native and non-native grasses, and native forbs and shrubs would be drill and aerial broadcast seeded. Drill seeding would occur on 25,000 acres and aerial seeding would occur over 50,000 acres of burned land. Aerial seeding of shrubs is proposed as an ES treatment to augment the development of vegetative structure across the burned landscape to further reduce sediment movement from wind and water erosion, which will aid in restoring habitat for sage-grouse and several other BLM sensitive wildlife species associated with the sagebrush steppe. The area was also important habitat for antelope and is utilized by mule deer and bighorn sheep.
- **Treatment/Activities S12 Livestock Closure, S7 Protective Fence/Cattle Guard, and S7/R7 Fence Repair/Gate:** Approximately 15 miles of protective fence would be constructed and 3 miles of fence would be repaired to protect the treatment area from livestock use during the seeding establishment period. Approximately 24 miles of interior fence would be repaired prior to the reintroduction of livestock following the closure period. Fencing of treatment areas is consistent with BLM Handbook H 1742-1, Burned Area Emergency Stabilization and Rehabilitation, which states; "*livestock will be excluded from the treatment area until monitoring results, documented in writing; show rehabilitation objectives have been met*". In case of treatment failure, other factors may

need to be considered, such as natural recovery of untreated areas, and need or reason to continue closure.

- **Treatment/Activity S5/R5 Noxious Weeds:** Inventory and treatment of new and existing populations of noxious weeds would occur within the project area. This is in conformance with BLM policy requiring the BLM control the spread of noxious weeds on public lands and eradicate them where possible and economically feasible.
- **Treatment/Activity S14 Monitoring Effectiveness of Treatments:** Monitoring would be conducted annually to evaluate the effectiveness of treatments and attainment of objectives within the project area. Monitoring data would be collected from initiation of the proposed treatments through the year 2014.

**Burned Area Rehabilitation Treatments:**

- **Treatment/Activity R7 Fence Repair:** (see S7/R7 Fence Repair above)
- **Treatment/Activity S5/R5 Noxious Weeds** (see S7/R7 Noxious Weeds above)

**B. Conformance with the Land Use Plan (LUP) and Consistency with Related Subordinate Implementation Plans**

<b>LUP/Document<sup>1</sup></b>	<b>Sections/Pages</b>	<b>Date Approved</b>
Bruneau Management Framework Plan (MFP)		May 1983
Boise District Normal Fire Rehabilitation Plan		2004

The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions):

These proposed actions meet the MFP objectives to:

- 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);
- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage 520,000 acres of sage-grouse range in the BPU to improve nesting, brood rearing, and winter habitats by: improving all poor and fair big sagebrush, meadow, and riparian ecological sites to good ecological condition (WL-4.4);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);

- Manage 1,079,000 acres of pronghorn habitat in the BPU, within IMP guidelines where applicable, to provide sufficient forage, water, cover, and space (WL-3.3);
- Manage mule deer spring, summer, and fall, and winter range, and pronghorn habitat in the BPU to obtain good ecological condition, and to provide adequate food, cover, and water (WL-3.1, 3.2, 3.3).

The proposed treatments in the ES and ER plans conform to the 1983 Bruneau MFP. The interdisciplinary team developed objectives and treatments which respond to the identified issues and concerns. The BLM would evaluate the plans based on the success or failure in meeting these objectives.

**C. Identify applicable NEPA documents and other related documents that cover the Proposed Action. List by name and date other documentation relevant to the proposed action (e.g., biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring report).**

NEPA/Other Related Documents	Sections/Pages	Date Approved
Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic Environmental Impact Statement (PEIS) and the Vegetation Treatments on BLM Lands in 17 Western States Programmatic Environmental Report	All	June, 2007
Boise District Noxious and invasive Weed Treatment EA	All	Feb 6, 2007
Idaho's Standards for Rangeland Health and Guidelines for Livestock Grazing Management	All	August 1997

**D. NEPA Adequacy Criteria**

- 1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?**

Documentation of answer and explanation: **Yes**, a range of proposed actions were analyzed under the Normal Fire Emergency Stabilization and Rehabilitation Plan Environmental Assessment (NFESRP EA) for the Boise District BLM. These included; ground and aerial seeding, herbicide uses for noxious weed treatments, and livestock management actions. An interdisciplinary team review of this fire has determined that the resource values, concerns

and rehabilitation needs are substantially similar to those discussed and approved in the Boise District NFESRP of May 2005 and best meet the vegetative, watershed, and soil objectives of the Plan and the Bruneau MFP.

**2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, resource values, and circumstances?**

Documentation of answer and explanation: **Yes**, the range of alternatives analyzed in the NFESRP EA is appropriate for this action. Two alternatives to the proposed action were analyzed in the NFESRP EA (p 8-30). They included an alternative action that would not implement ESR treatments, but was eliminated from detail analysis because it was not consistent with BLM policy and the No Action Alternative, which would continue to use existing 1987/1988 NFESRP's. The overall objective of the Proposed Action of the NFESRP EA is to stabilize and return a burned site to its previous native and/or seeded condition in the shortest time frame to enhance and protect the watershed, soil, wildlife habitat, and livestock forage values of the area. The proposed actions of the Big Hill ES&R plan are designed to accomplish that objective for the area burned by the Big Hill Fire (GAK1).

**3. Is the existing analysis adequate and are the conclusions adequate in light of any new information or circumstances (e.g., riparian proper functioning condition reports; rangeland health standards assessments; inventory and monitoring data; most recent USFWS lists of threatened, endangered, proposed, and candidate species; most recent BLM lists of sensitive species)? Can you reasonably conclude that all new information and all new circumstances would not substantially change the analysis of the new proposed action?**

Documentation of answer and explanation: **Yes**, the proposed treatments especially the seeding of shrubs and forbs will speed the recovery of habitat used by sage-grouse and a number of other Idaho BLM sensitive species. The various temporary fences will be aligned and configured to minimize collision hazard for sage-grouse. Mitigation will include visual markers hung on the wires between posts to enhance visibility, and locating temporary fences as far from sage-grouse leks as possible, but at least 0.25 miles. These mitigation measures are the same as those listed in the NFESRP EA (p.21).

Seeding shrubs will help restore winter range for interstate herds of mule deer, pronghorn antelope, and elk. Treatments are generally scheduled in the fall (drill seeding) and will avoid stressing wildlife during the winter. The sole exception is the aerial seeding of sagebrush. The NFESRP provides the exception for aerial seeding of sagebrush (p. 21). Impacts to wintering wildlife were analyzed in the Normal Year Fire Rehabilitation Plan and are not expected to be different than analyzed NFESRP (p. 68 – 69). Sage-grouse using remaining islands of habitat within or near the edge of the burned area may be temporarily impacted. Impacts to wintering big game (p. 64) or sage-grouse (p. 68) may include

temporary displacement from habitat adjacent to areas being aurally seeded because of disturbance.

Species such as loggerhead shrike, Brewer's sparrow, sage sparrow, and other migratory song birds are no longer nesting and will have migrated from the area by the time drill seeding or aerial seeding is initiated. A few prairie falcons may be present in the fall into the winter, but the treatments are scheduled for periods outside the nesting/fledging periods. This is consistent with the analysis in the NFESRP (p. 67-69).

The livestock closure will minimize potential displacement impacts to wintering big game from remaining patches of suitable habitat within the burned area. All temporary fences will be constructed consistent with the NFESRP (p. 24) in big game habitat. The analysis in the NFESRP (p. 65) is valid.

Based on the new information gained during recent inventory and survey of the burn area, existing analysis from the Normal Year Fire Rehabilitation Plan is adequate. The proposed actions within the treatment area and their effects to the above species were analyzed in the plan and found to be insignificant.

**4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?**

Documentation of answer and explanation: **Yes**, the analyses of the direct and indirect impacts of the proposed action remain unchanged from those outlined in the existing NEPA document. The impacts outlined in the document directly correlate to those impacts expected from the current proposed actions of drill seeding, aerial seeding, noxious weed treatment, and infrastructure repair. The direct and indirect impact analysis does not analyze the impacts of the fire and the resulting loss of habitat, which is outside the scope of the document. The NFESRP EA analyzes site specific impacts to resources such as vegetation, wildlife, soils, and sensitive species as a result of the proposed treatments outlined in the ES and BAR plans. All specific design features outlined in the NFESRP will be followed during implementation of the emergency stabilization and rehabilitation treatments.

The cumulative impacts analyzed in the existing NEPA document are adequate with the addition of the proposed action. Special status and non-status plants and animals would be protected by the general and species specific design features, and would benefit from a return to more natural fire cycles and improved ecosystem function including better habitat/population connectivity, migratory corridors, habitat structure, forage and suitability.

**5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current Proposed Action?**

Documentation of answer and explanation: **Yes**, The public involvement and interagency review of the existing NEPA document is adequate for the current proposed action. The EA

states on page 77 that “scoping letters informing the public of the purpose and need for action was sent to 1,077 interested publics including organizations, and federal and state agencies in October, 2003.” The general publics and other agencies included interest from ranchers, academia, conservation groups, Tribal governments, Idaho Department of Fish and Game, and ESA consultation with the USFWS.

**E. Persons/Agencies/BLM Staff Consulted**

Name	Title	Resource/Agency Represented

Note: Refer to the EA/EIS for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents.

**F. Mitigation Measures:** List any applicable mitigation measures that were identified, analyzed, and approved in relevant LUPs and existing NEPA document(s). List the specific mitigation measures or identify an attachment that includes those specific mitigation measures. Document that these applicable mitigation measures have been incorporated and implemented.

## G. Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of NEPA.

/s/ Kathi G. Kershaw  
Preparer

Sept 12, 2011  
Date

/s/ Seth Flanigan  
NEPA Specialist

Sept. 13, 2011  
Date

/s/ Aimee D. Betts  
Bruneau Field Manager - Acting

Sept. 12, 2011  
Date

**Note:** The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.