

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

HORSE BUTTE 2 FIRE

**BLM/TWIN FALLS DISTRICT/JARBIDGE FIELD OFFICE
IDAHO STATE OFFICE**

FIRE BACKGROUND INFORMATION

Fire Name	Horse Butte 2 Fire
Fire Number	HQ47
District/Field Office	Twin Falls/Jarbridge
Admin Number	LLIDT01000
State	Idaho
County(s)	Owyhee
Ignition Date/Cause	07-16-2013/Lightning
Date Contained	07/18/2013

Jurisdiction	Acres
BLM	5,371
State	310

Total Acres	5,681
Total Costs	\$1,210,000
Costs to LF2200000	\$1,127,000
Costs to LF3200000	\$68,000
Costs to LF3100000	0
Costs to Other Funding	\$15,000

Status of Plan Submission (check one box below)

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

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON THE FIRE

The Horse Butte 2 Fire ignited on the southwest side of Horse Butte in the central Jarbidge Field Office on July 16, 2013, at about 1730 hours. Fire cause was lightning. The fire was contained on July 19 and controlled on July 20. The fire burned 5,371 acres of public land administered by the BLM and 310 acres of state land (Map 1).

The fire burned 5,471 acres of Sage-grouse Preliminary Priority Habitat (PPH) (5,161 acres BLM; 310 acres State) and 210 acres of Sage-grouse Preliminary General Habitat (PGH). Within the Sage-grouse PPH, 5,173 acres (4,896 BLM; 277 State) were classified as key habitat dominated by sagebrush communities and 261 acres (228 BLM, 33 State) were R1 restoration habitat dominated by perennial grasslands. Thirty-seven acres burned in the 2012 Horse Butte Fire (Map 2). There are three leks within 0.25, 0.5, and 0.75 miles west of the burned area, and one satellite lek within 1 mile that is periodically used. Nesting was documented in the sagebrush stand that burned in this fire. The burned area is within a large block of unburned key habitat that is considered to be some of the most important remaining sage-grouse habitat in the Jarbidge Field Office area.

The burned area also contains 1,896 acres of slickspot peppergrass (*Lepidium papilliferum*) potential habitat (Map 3). The fire burned into the 2012 Horse Butte Fire, which burned 738 acres north of the current fire. The 2012 Horse Butte Fire acted as a control line for the current fire due to low fuel conditions (Map 2).

The fire burned portions of the following allotments and pastures:

Allotment	Pasture	BLM Acres Burned	BLM Acres in Pasture	% of BLM Acres in Pasture Burned	AUMs Potentially Affected by Fire
Buck Flat AMP	#1	649	4,496	14	360
	#2	926	5,457	17	429
Horse Butte	SE	37	5,642	<1	3
	SW	2,617	5,748	46	395
Juniper Ranch	#6	1,144	7,183	16	471

Digital soil survey data (SSURGO 2008) indicate that nearly the entire burned area occurs on the Loamy 8-12 Wyoming Big Sagebrush/Bluebunch Wheatgrass-Thurbers Needlegrass ecological site. Previous to the fire, this area was occupied by Wyoming big sagebrush communities with Sandberg bluegrass, bottlebrush squirreltail, Thurber's needlegrass, and bluebunch wheatgrass in the understory. Cheatgrass was scattered throughout and dominant in small patches, particularly with rabbitbrush in the Buck Flat AMP pastures.

The Horse Butte 2 Fire burned hot, removing nearly all vegetation within the fire perimeter (Photo 1). Some small sagebrush islands were left in the southern third of the fire. The largest of these is estimated at about 20 acres (Photo 2).

Photo 1. Horse Butte 2 Fire.



Photo 2. Sagebrush island in the Horse Butte 2 Fire.



LAND USE PLAN CONSISTENCY

The following treatments are proposed under this Emergency Stabilization (ES) and Burned Area Rehabilitation (BAR) Plan.

Emergency Stabilization

- S2 Ground Seeding
- S3 Aerial Seeding
- S5 Weed Control
- S12 Closure (Livestock)
- S13 Monitoring

Burned Area Rehabilitation

- R4 Seedling Planting
- R5 Weed Control
- R7 Fence/Gate/Cattleguard
- R12 Closure (Livestock)

The applicable land use plan for the ES&BAR project area is the Jarbidge Resource Management Plan (RMP) and associated Record of Decision (ROD) dated March 23, 1987. The burned area is located in the West Devil Multiple Use Area (MUA-12).

Resource management objectives for the affected MUAs:

- Improve lands in poor ecological condition (p. II-47).
- Manage big game habitat to support mule deer and antelope (p. II-48).
- Improve sage-grouse habitat (p. II-48).

Management guidelines contained in the RMP are identified for affected resources under each treatment discussed below.

The treatments outlined in this plan are also consistent with the treatments analyzed in the Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan (NFRP) and Environmental Assessment (EA, #ID-090-2004-050), the Noxious and Invasive Weed Treatment EA (Noxious Weed EA, #ID100-2005-EA-265) for the Boise District and Jarbidge Field Office, and the Jarbidge Field Office Programmatic Shrub Planting EA (#ID-201-2008-EA-359).

Sage-grouse Habitat Conservation and Restoration

Proposed treatments are consistent with current Bureau policy (Instruction Memorandum No. 2012-043) for enhancement and restoration of Sage-grouse PPH, specifically:

- Evaluate land treatments in a landscape-scale context to address habitat fragmentation, effective patch size, invasive species presence, and protection of intact sagebrush communities. Coordinate land treatments with adjacent land owners to avoid any unintended negative landscape effects to sage-grouse.

- Coordinate plan, design, and implement treatments and associated effectiveness monitoring between Resources, Fuels Management, Emergency Stabilization, and Burned Area Rehabilitation programs to:
 - Promote the maintenance of large intact sagebrush communities;
 - Limit the expansion of invasive species, including cheatgrass;
 - Maintain or improve soil site stability, hydrologic function, and biological integrity; and
 - Enhance the native plant community, including the native shrub reference state in the *State and Transition Model*, with appropriate shrub, grass, and forb composition identified in the applicable Ecological Site Descriptions (ESDs) where available.
- Pursue short-term objectives that include maintaining soil stability and hydrological function of the disturbed site so a resilient plant community can be established.
- Pursue a long-term objective to maintain resilient native plant communities. Choose native plant species outlined in ESDs, where available, to revegetate sites.
- Meet vegetation management objectives that have been set for seeding projects prior to returning the area to authorized uses, specifically livestock grazing. This generally takes a minimum of two growing seasons.
- In Emergency Stabilization and Burned Area Rehabilitation plans, prioritize re-vegetation projects to (1) maintain and enhance unburned intact sagebrush habitat when at risk from adjacent threats; (2) stabilize soils; (3) reestablish hydrologic function; (4) maintain and enhance biological integrity; (5) promote plant resiliency; (6) limit expansion or dominance of invasive species; and (7) reestablish native species.

The proposed treatments also address applicable conservation measures identified in the 2006 Conservation Plan for the Greater Sage-grouse in Idaho, which included rehabilitation and restoration actions. Specifically,

Restoration and Burned Area Rehabilitation Conservation Measures (pp. 4-19 through 4-20):

- Emphasize the use of native plant materials to the greatest extent possible, and as appropriate for site conditions. Seeds should be certified weed free.
- Use proper site-preparation techniques (e.g., seedbed preparation, control of invasives, weed-control), seeding techniques, and seed mixes in designing restoration and burned area rehabilitation plans. For example, the restoration of annual grasslands may require preparatory chemical treatments and/or an exotic/native seed mix.
- When planting or reseeding sagebrush, favor the sagebrush species, subspecies, that are appropriate for the ecological site. Source identified seed is preferable. To maximize the likelihood of establishment, consider multiple approaches, such as aerial seeding, ground broadcast seeding with harrow or roller, and planting of seedlings in strategic patches or strips. Avoid seeding sagebrush or other shrubs near road margins if the road and road margin might otherwise serve as a fuel break in the event of future fire.
- When using exotic perennial grasses and forbs in restoration use species whose growth form, species, and phenology, most closely mimic native species.
- Provide for noxious weed control in burned area rehabilitation projects.

Existing Consultations for Slickspot Peppergrass

Slickspot peppergrass was listed as threatened under the Endangered Species Act (ESA) on October 8, 2009 (50 CFR Part 17 52014-52064). Following the listing, Idaho Governor C.L. “Butch” Otter, the Idaho Office of Species Conservation, and private individuals, brought action against the Secretary of the Interior and the U.S. Fish and Wildlife Service (Service) challenging the listing under the Administrative Procedures Act and the ESA. On August 8, 2012, Chief U.S. Magistrate Judge Candy W. Dale, U.S. District Court for the District of Idaho, ordered that the Secretary of the Interior’s Final Rule listing slickspot peppergrass as a threatened species under the ESA be vacated and remanded the matter for further consideration consistent with the Court’s decision. Slickspot peppergrass is currently proposed for listing under the ESA. BLM will follow conservation measures developed through existing consultations to ensure ongoing conservation of the species and its habitat.

Programmatic conference reports were prepared in 2006 by the Boise District Office for Noxious and Invasive Weed Treatment (144-2006-IC-0918) and Normal Fire Emergency Stabilization and Rehabilitation (14420-2006-IC-0975) programmatic actions. These programmatic actions were developed to include all field offices in the Boise District, which, at that point in time, included the Jarbidge Field Office. These Conference Reports were confirmed December 15, 2009 (14420-2010-TA-0103), following the listing decision.

BLM also consulted with the Service regarding programmatic shrub planting activities and received a letter of concurrence on January 27, 2012. The concurrence memorandum for Programmatic Shrub Planting – Jarbidge Field Office – Elmore, Owyhee, and Twin Falls Counties, Idaho and Elko County, Nevada (01EIFW00-2012-I-0084) stated that planting shrubs utilizing hand planting methods and design features included below is not likely to adversely affect slickspot peppergrass (Concurrence Memorandum, p. 5). In addition, the concurrence memorandum states that shrub plantings would have long-term beneficial effects for slickspot peppergrass and its habitat by accelerating native shrub re-establishment and decreasing habitat fragmentation (Concurrence Memorandum, p. 6).

The burned area does not contain known occupied habitat for slickspot peppergrass. However, the burned area contains 1,896 acres of potential habitat. Examination of the area on July 19, 2013, revealed that slickspot microsites are present. However, no plants were observed in a cursory examination of slickspots.

Since slickspot peppergrass habitat is located in portions of the burned area, project design features that address conservation measures are included to: 1) allow rest from grazing to promote vegetation recovery, 2) reduce the potential for introduction and spread of noxious weeds, and 3) restore perennial herbaceous plant and sagebrush cover within the burned area. Specific programmatic conservation measures addressed in this plan are:

- 1) Implement Emergency Stabilization and Rehabilitation (ES&R) activities to consider slickspot peppergrass habitat rehabilitation (ES&R Conference Report pp. 2-3).
 - a. All wildfires within slickspot peppergrass habitat will be evaluated for ES&R treatments, regardless of size.
 - b. As needed, protect disturbed and recovering areas using temporary closures or

other measures. BLM will continue to rest areas from land use activities to meet ES&R objectives, defined through the ES&R plans.

- c. BLM will initiate and complete ES&R efforts for slickspot peppergrass, such as planting shrubs and forbs, within slickspot peppergrass habitat. BLM will implement the following measures during fire ES&R efforts:
 - i. BLM will use seeding techniques that minimize soil disturbance such as no-till drills and rangeland drills equipped with depth bands when ES&R projects have the potential to impact slickspot peppergrass habitat.
 - ii. BLM will use native plant materials and seed during ES&R activities. BLM will include native forbs in seed mixtures that will benefit slickspot peppergrass insect pollinators.
 - iii. If native plant materials and seed are not available, non-invasive, non-native species may be used for stabilization activities in slickspot peppergrass habitat.
- 2) Although non-chemical methods will be the preferred approach in occupied habitat, when appropriate, projects involving the application of pesticides (including herbicides, fungicides, and other related chemicals) in slickspot peppergrass habitat and potential habitat that may affect the species will be analyzed at the project level and designed such that pesticide applications will support conservation and minimize risks of exposure (LUP BO pp. 70-71).
- a. Apply appropriate spatial and temporal buffers to avoid species' exposure to harmful chemicals.
 - b. Implement appropriate revegetation and weed control measures to reduce risks of non-native invasive plant infestations following ground/soil disturbing actions in slickspot peppergrass habitat.

Land Use Plan and Policy Consistency for Proposed Treatments

Ground Seeding/S2: The proposed ground seeding treatment addresses the RMP objectives to improve lands in poor ecological condition and manage and improve big game and sage-grouse habitat cited above. In addition, the proposed treatment addresses the following RMP Resource Management Guidelines:

Terrestrial Wildlife (pp. II-83 – II-84)

- o Manage all ecological sites on mule deer, pronghorn, elk, bighorn sheep and sage-grouse habitat currently in fair or poor ecological condition, for good ecological condition.
- o Protect and enhance endangered, threatened, and sensitive species habitats in order to maintain or enhance existing and potential populations within the planning area.
- o Manage all wildlife habitat within the resource area to provide a diversity of vegetation and habitats.
- o Seed mixtures for range improvement projects and fire rehabilitation projects will include a mixture of grasses, forbs, and shrubs that benefit sage-grouse.

- Fire Management (p. II-89): Seedings will include appropriate seed mixtures to replace wildlife habitat that is burned.

Proposed ground seeding would treat the area formerly occupied by Wyoming big sagebrush and rabbitbrush communities. The ground seeding treatment area is located primarily in Sage-grouse PPH and contains slickspot peppergrass habitat. The proposed ground seeding area is at risk for expansion of noxious weeds and invasive plants without treatment. Seeded species would be native grass cultivars similar to on-site natives, one non-native grass cultivar (for use only where cheatgrass has potential to dominate), and native and non-native forbs. These species are expected to assist in restoring plant community diversity and structure important for wildlife, including sage-grouse and other sagebrush-steppe obligate wildlife, and slickspot peppergrass, while effectively competing with noxious weeds and invasive plants. Seed mixes and project design features are consistent with existing policy direction and conservation measures for sage-grouse and slickspot peppergrass.

Aerial Seeding/S3: The proposed aerial sagebrush seeding treatment would address RMP Resource Management Guidelines listed above for the ground seeding treatment. Aerial seeding sagebrush over the entire burned area would re-establish shrub cover important for sage-grouse and other sagebrush-steppe obligate wildlife, slickspot peppergrass, big game, and upland game birds. The proposed treatment is in conformance with the Jarbidge RMP and consistent with existing policy direction and conservation measures for sage-grouse and slickspot peppergrass.

Shrub Planting/R4: The proposed shrub planting treatment would address RMP objectives and Resource Management Guidelines listed above for the seeding treatment. This proposed treatment is in conformance with the Jarbidge RMP, and consistent with existing policy direction and conservation measures for sage-grouse and slickspot peppergrass.

Noxious Weeds/S5/R5: The proposed noxious weed treatments address the RMP objectives cited above to improve lands in poor ecological condition, manage big game habitat, and improve sage-grouse habitat. Noxious weed control treatments would enhance seeding success by reducing the potential for noxious weed competition with newly seeded plants. They also address RMP Resource Management Guidelines to 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 (p. II-94). Therefore, the proposed noxious weed treatments are in conformance to the Jarbidge RMP. Proposed noxious weed treatments are also consistent with the treatments analyzed in the NFRP and Noxious Weed EA. Design features are included consistent with existing conservation measures for slickspot peppergrass. These include training weed treatment staff to detect slickspots and slickspot peppergrass, and implementation of treatment buffers should occupied slickspots be found. Noxious weed treatments are also consistent with existing policy direction and conservation measures for sage-grouse.

Fence/Gate/Cattle Guard/R7: Existing allotment fence would be repaired or replaced to ensure that livestock remain within their area of authorized use and off the burned area until ES&BAR objectives are met. 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 ES&BAR Handbook allows for

repair or reconstruction of existing BLM-approved fences to protect new seedings and natural recovery areas (H-1742-1, p. 31). Therefore, the proposed treatment is consistent with the NFRP and current BLM policy.

Closures (Livestock)/S12/R12: The Jarbidge RMP (p. II-89) states under the Fire Management Section that, “all grazing licenses issued that include areas recently burned and/or seeded will include a statement concerning the amount of rest needed in the seedings or burned 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.” The NFRP states that livestock grazing would be deferred for at least two growing seasons, or until resource objectives are met, through the closure of pastures, resting whole allotments, or construction or reconstruction of protective fences as needed (NFRP, pp. 17 and 19). The BLM ES&BAR Handbook (H-1732-1) states that livestock are to be excluded from burned areas until monitoring results, documented in writing, show ES&BAR objectives have been met (H-1742-1, p. 35). Therefore, the proposed treatment conforms to the Jarbidge RMP, NFRP, and current BLM policy. Livestock grazing closure is also consistent with policy direction and conservation measures for sage-grouse and slickspot peppergrass.

In addition, the allotments in the burned area are subject to court-ordered conditions. The Buck Flat AMP, Horse Butte, and Juniper Ranch allotments are subject to Chief Judge Winmill’s Decision and Order of February 26, 2009. The order directed BLM to adjust livestock grazing to maintain and enhance sage-grouse, pygmy rabbit, and slickspot peppergrass habitat.

The ES&BAR team developed objectives and treatments which respond to the identified issues and concerns. The BLM would evaluate this plan based on the success or failure in meeting these objectives.

COST SUMMARY TABLES

Emergency Stabilization (LF2200000):

Action/ Spec. #	Planned Action	Unit	# Units	Unit Cost	FY13	FY14	FY15	FY16	Total Cost
S1	Planning (Project Mangt)	WM's	12	5,000	\$0	\$20,000	\$20,000	\$20,000	\$60,000
S2	Ground Seeding	Acres	5,140	\$169.65	\$823,000	\$49,000	\$0	\$0	\$872,000
S3	Aerial Seeding	Acres	5,371	\$29.42	\$129,000	\$29,000	\$0	\$0	\$158,000
S5	Noxious Weeds	Acres	5,371	\$1.86	\$0	\$10,000	\$0	\$0	\$10,000
S12	Closures	No.	1	\$0.00	\$0	\$0	\$0	\$0	\$0
S13	Monitoring	Acres	5,371	\$1.68	\$0	\$9,000	\$9,000	\$9,000	\$27,000
TOTAL COSTS					\$952,000	\$117,000	\$19,000	\$29,000	\$1,127,000

Burned Area Rehabilitation (LF3200000):

Action/ Spec. #	Planned Action	Unit	# Units	Unit Cost	FY14	FY15	FY16	Total Cost
R1	Planning (Project Mangt)	WM's	1		\$2,000	\$2,000	\$2,000	\$6,000
R5	Noxious Weeds	Acres	5,371	\$1.86	\$0	\$10,000	\$10,000	\$20,000
R7	Fence Repair	Miles	6.0	\$7,000.00	\$42,000	\$0	\$0	\$42,000
TOTAL COSTS					\$44,000	\$12,000	\$12,000	\$68,000

OTHER FUNDING TOTAL COST		Shrub Planting	5,000	\$3.00	\$15,000	\$0	\$0	\$15,000
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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: 1). Human Life and Safety, and 2). Property and unique biological (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 burned area is vulnerable to soil loss and spread of noxious weeds and invasive plants due to vegetation removal. Proposed livestock closure would address this issue by reducing impacts associated with livestock, including trampling of bare soil, removal of resprouting and newly seeded vegetation, and weed spread. This would allow for seeding establishment and natural recovery to occur. Immediate and continued closure until ESR objectives are met is critical to treatment success and stabilization of the burned area.

Treatment/Activity: *S12/R12 Livestock Closure*

A. Treatment/Activity Description. *The Horse Butte 2 burned area would be rested from livestock grazing until monitoring shows that ES&BAR objectives have been met. Rest would be primarily accomplished through pasture closure. Should use of the remaining unburned portions of the pastures be necessary, temporary electric fence would be erected by the permittee adjacent to the fire periphery to keep livestock out of the burned area during use periods. Closure of the burned area would be documented through annual grazing agreements.*

B. How does the treatment relate to damage or changes caused by the fire? *The purpose of this treatment is to provide the opportunity for the drill and aerial seeding treatments to become established. Establishment of perennial plant communities would inhibit expansion of noxious weeds and invasive plants and stabilize soils in the burned area.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *No costs under ES are associated with livestock closures. Closure is consistent with policy direction and*

conservation measures for stabilization and restoration of sage-grouse and slickspot peppergrass habitat.

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

The entire burned area is mapped as Sage-grouse PPH and was identified as key sage-grouse habitat prior to burning. The burned area is within a large block of unburned key habitat that is considered to be some of the most important remaining sage-grouse habitat in the Jarbidge Field Office area. Fire intensities were high within most of the burned area due to the presence of sagebrush cover. High fire intensities likely impacted seed banks that would facilitate natural recovery. Therefore, ground and aerial seeding treatments are proposed to reduce potential for degradation of the burned area due to cheatgrass spread and accelerate recovery of sagebrush habitats.

The fire burned close to the following occupied leks: within 0.25 mile of sage-grouse lek number 2O145 (22 males); within 1 mile of satellite lek 2O158 which is occupied sporadically (no males in 2013, 2012, 2011, 12 males in 2010, 3 males in 2009), within 0.5 mile of lek number 2O698 (7 males), and within 0.75 mile of lek number 2O833 (9 males). Leks are considered occupied if there has been documented sage-grouse activity within the past five years. Most sage-grouse nest within 3 miles of leks in this area; nesting was documented in the burned sagebrush stand prior to this fire.

Treatment/Activity: *S2 Ground Seeding*

- A. Treatment/Activity Description. *Approximately 5,140 acres would be seeded utilizing rangeland or other types of drills. Seeding would occur in fall 2013. Areas containing slickspot peppergrass habitat would be drill seeded using methods that would minimize slickspot disruption to the extent possible. This could include the use of depth bands on conventional rangeland drills, or the use of no-till or minimum-till drills. Drilling implementation would occur in fall when soil moisture conditions are likely to be optimal to reduce slickspot disruption by drills. Cultural resource sites would be avoided during seeding operations.*

Two seed mixes are proposed to address pre-fire vegetation conditions. Plant materials and methods are based on analysis contained in the Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan (NFRP) and Environmental Assessment (EA, #ID-090-2004-050), species specific information contained in technical references (USDA 2004), and the Twin Falls District Instruction Memorandum No. ID200-2008-003 for Emergency Stabilization and Rehabilitation Seed Mixture Development.

The Horse Butte/Juniper Ranch seed mix (3,566 acres) would be used in areas that were occupied by sagebrush-steppe communities in good ecological condition prior to the fire. This seed mix was designed to address the potential for cheatgrass expansion, provide cover and food for sage-grouse and other sagebrush-steppe obligate wildlife, and provide structural and compositional diversity to decrease fine fuel continuity. The seed mix is consistent with policy direction and conservation measures that address stabilization and habitat restoration for sage-grouse and slickspot peppergrass.

**Horse Butte 2 Fire
Horse Butte/Juniper Ranch Drill Seed Mix
3,566 acres**

Species and Variety	Seed Rate in Lbs/Acre (PLS)
Grasses	
‘Anatone’ Bluebunch Wheatgrass*	4.00
‘Mountain Home’ Sandberg’s Bluegrass*	0.30
‘Rattlesnake’ Bottlebrush Squirreltail*	2.00
Forbs	
‘Eski’ Sainfoin	2.00
Western Yarrow*	0.10
‘Ladak’ Alfalfa	1.00

* Native Cultivar

The Buck Flat drill seed mix (1,574 acres) would be used in areas with greater potential for cheatgrass expansion and dominance. This seed mix is designed to provide cover and food for sage-grouse and other sage-brush steppe obligate wildlife, and provide structural and compositional diversity to decrease fine fuel continuity. The seed mix is consistent with policy direction and conservation measures that address stabilization and habitat restoration for sage-grouse and slickspot peppergrass.

**Horse Butte 2 Fire
Buck Flat Drill Seed Mix
1,574 acres**

Species and Variety	Seed Rate in Lbs/Acre (PLS)
Grasses	
‘Anatone’ Bluebunch Wheatgrass*	3.00
‘Vavilov II’ Siberian Wheatgrass	1.00
‘Mountain Home’ Sandberg’s Bluegrass*	0.50
‘Rattlesnake’ Bottlebrush Squirreltail*	2.00
Forbs	
‘Eski’ Sainfoin	2.00
Western Yarrow*	0.10
‘Ladak’ Alfalfa	1.00

* Native Cultivar

B. How does the treatment relate to damage or changes caused by the fire? *The proposed drill seed areas were occupied primarily by native sagebrush and rabbitbrush plant communities prior to the fire. These proposed drill seed areas are at risk for degradation by noxious weeds and invasive plants if left untreated. The proposed seed mixes contain plant materials that have been effective in past treatments in the Jarbidge Field Office, including the 2005 Clover Fire, 2007 Murphy Complex Fire, 2010 Long Butte Fire, and 2012 Kinyon Road and Horse Butte fires. The seed mixes are designed to provide the species and structural diversity that are important to sage-grouse and other sagebrush-steppe obligate wildlife and slickspot*

peppergrass. In addition, the seed mixes contain species that are not expected to establish in or invade slickspots and forbs which would support pollinators and provide compositional diversity to decrease fine fuel continuity.

C. Why is the treatment/activity reasonable, within policy, and cost effective? *The areas proposed for drill seeding treatment are primarily within Sage-grouse PPH and contain slickspot peppergrass habitat. Prior to the fire the area proposed for treatment contained native sagebrush communities that provided important habitat for nesting sage-grouse and other sagebrush-steppe obligate wildlife. Due to high fire intensities and potential for cheatgrass spread, the proposed treatment areas are not expected to recover naturally. The proposed seed mixes utilize taxa that are expected to be available at a reasonable cost while meeting resource objectives for sage-grouse and other sagebrush-steppe obligate wildlife, big game, and slickspot peppergrass.*

Treatment/Activity: *S3 Aerial Seeding*

Proposed aerial seeding of sagebrush is based on analysis contained in the Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan (NFRP) and Environmental Assessment (EA, #ID-090-2004-050), species specific information contained in technical references (USDA 2004), and the Twin Falls District Instruction Memorandum No. ID200-2008-003 for Emergency Stabilization and Rehabilitation Seed Mixture Development.

A. Treatment/Activity Description. *The entire burned area would be aerially seeded with Wyoming big sagebrush seed at a rate of 1.0 lb/acre (bulk). Seeding would occur during winter 2013/2014, over snow, if possible. This seeding treatment is consistent with policy direction and conservation measures that address stabilization and habitat restoration for sage-grouse and slickspot peppergrass.*

**Horse Butte 2 Fire
Sagebrush Aerial Seed Mix
5,371 acres**

Species and Variety	Seed Rate in Lbs/Acre (bulk)
Shrubs	
Wyoming Big Sagebrush*	1.00

* Wildland Collected

B. How does the treatment relate to damage or changes caused by the fire? *The objective of the aerial seed treatment is to reestablish sagebrush cover within the burned area. Accelerating the rate of sagebrush establishment is critical to habitat restoration for sage-grouse and other sagebrush obligate wildlife species, as well as slickspot peppergrass potential habitat.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *The proposed treatment is consistent with current policy for sage-grouse management and existing conservation measures for slickspot peppergrass. Prior to the fire the area proposed for treatment contained native sagebrush communities that provided important habitat for nesting sage-grouse and other sagebrush-steppe obligate wildlife. Natural seed sources for sagebrush*

were lost within much of the burned area; sagebrush cover in the burned area is not expected to recover naturally without supplemental seeding. Sagebrush seeding has been extremely successful following past fires in similar locations, including the 2005 Clover Fire, 2006 Sailor Cap Fire, 2007 Murphy Complex Fire, and 2010 Big Draw, Saylor Creek, and Long Butte fires. Contracting costs for aerial application are typical for the Jarbidge Field Office area. Sagebrush seed costs can vary from year to year dependent on availability, but generally average about \$10/acre.

ES Issue 4 - Critical Heritage Resources. N/A

ES Issue 5 - Invasive Plants and Weeds.

Scotch thistle, Canada thistle, diffuse knapweed, and rush skeletonweed are noxious weeds that have potential for introduction and spread in the burned area. These weeds, in addition to cheatgrass, have a greater potential for spread in the burned area due to vegetation removal. This would result in degradation of the burned area and adjacent Sage-grouse PPH. Immediate and continued treatment is critical to reducing the potential for this to occur.

Treatment/Activity: *S5 Noxious Weeds*

A. Treatment/Activity Description. *Scotch thistle, Canada thistle, diffuse knapweed, and rush skeletonweed are noxious weeds that have potential for introduction and spread in the burned area. Noxious weed inventory and spot herbicide treatment would occur the first year following the fire within the burned area under ES. Noxious weeds would be treated with the BLM-approved chemicals in accordance with the Noxious Weed EA and the 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 used for vegetation treatments using herbicides. Noxious weed control is consistent with policy direction and conservation measures that address stabilization and habitat restoration for sage-grouse and slickspot peppergrass.*

Design features for weed treatments:

Slickspot peppergrass potential habitat

- *Weed treatment staff will be trained to identify slickspots and slickspot peppergrass.*
- *Should slickspots containing slickspot peppergrass (aka, occupied slickspots) be located within the burned area, weed treatment staff will notify the Jarbidge Field Office Botanist to map the population area.*
 - *Within an element occurrence (EO), herbicide application will use only hand sprayers. A 10-foot no-herbicide treatment buffer will be established around occupied slickspots. Within the buffer zone, weeds will be treated using hand-pulling or cutting and bagging.*
 - *Herbicide applications will be implemented in a manner to avoid off-site movement of herbicides either through the air, soil, or along the soil surface.*

Project site terrain, soil type, and vegetation will be taken into consideration when selecting herbicide type, application method, and application timing. Weed treatments using persistent herbicides will not occur within 150 feet of slickspot peppergrass EOs to avoid potential adverse impacts to the species associated with movement of persistent herbicides into slickspot habitat through wind or water erosion.

B. How does the treatment relate to damage or changes caused by the fire? *Disturbance associated with the fire and fire suppression, including use of heavy equipment to create dozer lines, increases the potential for invasion and spread of noxious weeds due to vegetation removal and soil surface disturbance.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Inventory and treatment of new noxious weed populations is more cost-effective than waiting until the population has had opportunity to establish and spread. Field work would be combined with other noxious weed treatments for cost efficiency.*

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. 1) To repair or improve lands damaged directly by a wildland fire; and 2) To rehabilitate or establish healthy, stable ecosystems in the burned area. 620DM3.8

BAR Issue 1 - Lands Unlikely to Recover Naturally.

The entire burned area is mapped as Sage-grouse PPH and was identified as key sage-grouse habitat prior to burning. The burned area is within a large block of unburned key habitat that is considered to be some of the most important remaining sage-grouse habitat in the Jarbidge Field Office area. Fire intensities were high within most of the burned area due to the presence of sagebrush cover. High fire intensities likely impacted seed banks that would facilitate natural recovery. Therefore, shrub seedling planting using non-ESR funds is proposed to accelerate recovery of sagebrush habitats.

The fire burned close to the following occupied leks: within 0.25 mile of sage-grouse lek number 2O145 (22 males); within 1 mile of satellite lek 2O158 which is occupied sporadically (no males in 2013, 2012, 2011, 12 males in 2010, 3 males in 2009), within 0.5 mile of lek number 2O698 (7 males), and within 0.75 mile of lek number 2O833 (9 males). Leaks are considered occupied if there has been documented sage-grouse activity within the past five years. Most sage-grouse nest

within 3 miles of leks in this area; nesting was documented in the burned sagebrush stand prior to this fire.

Ferruginous hawks, a Type 3 BLM Sensitive species are known to nest in isolated junipers in the Buck Flat draw. The Buck Flat draw was surveyed for raptors on the 24 and 25 of June, 2013. Three Ferruginous hawk nests were located at the south end of the draw where the fire occurred, but were inactive during the survey period. The majority of the junipers in the nest area survived the fire.

Brewer's sparrow (Type 3), loggerhead shrike (Type 3), sage sparrow (Type 3), sage thrasher (Type 5), and pygmy rabbits (Type 2) were also present in the burned area pre-fire. The fire burned habitat for these species.

Treatment Activity: *R4 Seedling Planting*

A. Treatment/Activity Description. **Funding for this treatment would be from non-ES&BAR sources.** *The objective of the seedling planting treatment is to reestablish shrub patches in the interior of the burned area by supplementing seeding and natural recruitment, if necessary. Up to 5,000 containerized or bare-root Wyoming big sagebrush seedlings would be hand planted within the burned area in late fall. If possible, plants would be contract grown using seed collected from a local source. This treatment is consistent with policy direction and conservation measures that address habitat restoration for sage-grouse and slickspot peppergrass.*

Design Features for Shrub Planting:

Shrub seedlings would be planted in patches of about 200-500 plants throughout the burned area. Patches would generally be oriented in a north-south arrangement to facilitate natural dispersal of seed by wind. Shrub seedlings would be spaced no closer than 3 feet from each other, and placed at least 3 feet from existing, live mature or seedling shrubs. Shrubs could be placed less than 3 feet from dead sagebrush for sun and wind protection and to access soil nutrients and mycorrhizal fungi that are associated with areas under sagebrush canopies.

Vehicles would be restricted to existing roads. Planting would not occur within 0.25 mile of livestock water or supplement locations, within 50 feet of any two-track road or fence line, or during saturated soil conditions. Planting would not occur in slickspot microsites, but should occur adjacent to these areas. Under agreement between the Bureau and the State Historic Preservation Officer, cultural resource inventory is not required for compliance with Section 106 of the National Historic Preservation Act for hand planting projects. However, the Jarbidge Field Office Archeologist would be notified immediately should artifacts be found during implementation of the planting project. Fuels program specialists would be on-site the first day of planting to provide guidance to the contractor regarding planting restrictions.

B. How does the treatment relate to damage or changes caused by the fire? *Most of the burned area was key sage-grouse habitat within Sage-grouse PPH and contains slickspot peppergrass potential habitat. The burned area is mostly surrounded by unburned key habitat. Sagebrush recovery can take decades to return to a pre-burn level. The proposed plantings would supplement seeding and natural dispersal from surrounding sagebrush plants, if necessary, and*

provide additional seed sources in the burn area to speed recovery of habitat for sage-grouse and other sagebrush-steppe obligate wildlife, slickspot peppergrass, and big-game.

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Monitoring of sagebrush plantings in the Jarbidge Field Office following recent fires has determined that these projects are effective in re-establishing scattered shrub patches to assist in natural recruitment and spread. Planting shrubs in patches in locations selected to maximize potential for dispersal reduces the number of seedlings required to cover the burned area. Shrub planting is an accepted conservation measure for sage-grouse and slickspot peppergrass habitat restoration and consistent with current policy direction for sage-grouse.*

BAR Issue 2 - Weed Treatments

Scotch thistle, Canada thistle, diffuse knapweed, and rush skeletonweed are noxious weeds that have potential for introduction and spread in the burned area. These weeds, in addition to cheatgrass, have a greater potential for spread in the burned area due to vegetation removal. This would result in degradation of the burned area and adjacent Sage-grouse PPH. Immediate and continued treatment is critical to reducing the potential for this to occur.

Treatment/Activity: *R5 Noxious Weeds*

A. Treatment/Activity Description. *Scotch thistle, Canada thistle, diffuse knapweed, and rush skeletonweed are noxious weeds that have potential for introduction and spread in the burned area. Noxious weed inventory and spot herbicide treatment would occur the second and third years following the fire within the burned area under BAR. Noxious weeds would be treated with the BLM-approved chemicals in accordance with the Noxious Weed EA and the 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 used for vegetation treatments using herbicides. Noxious weed treatment is consistent with policy direction and conservation measures that address habitat restoration for sage-grouse and slickspot peppergrass.*

Design features for weed treatments:

Slickspot peppergrass potential habitat

- *Weed treatment staff will be trained to identify slickspots and slickspot peppergrass.*
- *Should slickspots containing slickspot peppergrass (aka, occupied slickspots) be located within the burned area, weed treatment staff will notify the Jarbidge Field Office Botanist to map the population area.*
 - *Within an element occurrence (EO), herbicide application will use only hand sprayers. A 10-foot no-herbicide treatment buffer will be established around occupied slickspots. Within the buffer zone, weeds will be treated using hand-pulling or cutting and bagging.*
 - *Herbicide applications will be implemented in a manner to avoid off-site movement of herbicides either through the air, soil, or along the soil surface. Project site terrain, soil type, and vegetation will be taken into consideration*

when selecting herbicide type, application method, and application timing. Weed treatments using persistent herbicides will not occur within 150 feet of slickspot peppergrass EOs to avoid potential adverse impacts to the species associated with movement of persistent herbicides into slickspot habitat through wind or water erosion.

B. How does the treatment relate to damage or changes caused by the fire? *Disturbance associated with the fire and fire suppression, including use of heavy equipment to create dozer 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.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Inventory and treatment of new noxious weed populations is more cost-effective than waiting until the population has had opportunity to establish and spread. Field work would be combined with other noxious weed treatments for cost efficiency.*

BAR Issue 3 - Tree Planting. N/A

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

Approximately 6 miles of livestock management fence was damaged due to high fire intensities. Repair or replacement of this fence is critical for both immediate closure and proper livestock management after grazing is resumed.

Treatment Activity: *R7 Fence/Gate/Cattleguard*

A. Treatment/Activity Description. *The objective of this treatment is to repair or replace approximately 6 miles of allotment and pasture fence damaged or destroyed by the fire. Damaged wood corners and braces would be replaced with galvanized steel posts. Damaged wire would also be replaced. The management fences would be constructed to BLM fence standards for wildlife.*

B. How does the treatment relate to damage or changes caused by the fire? *The wildfire damaged a portion of the fence associated with the livestock management of the affected allotments. Reconstruction and repair of management fence damaged by the fire would maintain the future integrity of the existing livestock grazing system. Repair of damaged management fences would also help to promote seeding establishment. A well-established seeding and proper post-fire management are critical to habitat restoration for sage-grouse and other sagebrush-steppe obligate wildlife and slickspot peppergrass.*

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 and gates to the greatest extent possible. Damaged wood stretch points and corners would be replaced with galvanized steel pipe thus increasing the longevity of the structures and resistance to future wildfire damages.*

PART 3 – DETAILED TREATMENT COST TABLE

Emergency Stabilization		Units	FY13	FY14	FY15	FY16	Total Costs
S1	Planning (Plan Prep/Project Mangt)						
	National Office ESR Support	WM's		10,000	10,000	10,000	30,000
	Project Management Field Office	WM's		5,000	5,000	5,000	15,000
	Project Management State Office	WM's		5,000	5,000	5,000	15,000
	Total		0	20,000	20,000	20,000	60,000
S2	Ground Seeding (drill)						
	Travel/Vehicles	Total		3,000			3,000
	Equipment Mobilization	Total		4,000			4,000
	Contract	Total	41,000				41,000
	Contract Administration	WM's		7,000			7,000
	Drill Use Rate and Mobilization	Total		32,000			32,000
	Seed	Total	679,000				679,000
	Seed Mixing	WM's		3,000			3,000
cultural	Clearances	Total	103,000				103,000
	Total		823,000	49,000	0	0	872,000
S3	Aerial Seeding						
	Contract	Total		27,000			27,000
	Contract Administration	WM's		2,000			2,000
	Seed	Total	129,000				129,000
	Total		129,000	29,000	0	0	158,000
S5	Noxious Weeds						
	Labor	Acres		6,000			6,000
	Travel/Vehicles	Total		1,000			1,000
	Supplies/Materials	Total		3,000			3,000
	Total		0	10,000	0	0	10,000
S13	Monitoring						
	Labor	WM's		8,000	8,000	8,000	24,000
	Travel/Vehicles	Total		1,000	1,000	1,000	3,000
	Total		0	9,000	9,000	9,000	27,000
	EMERGENCY STABILIZATION TOTALS		\$952,000	\$117,000	\$29,000	\$29,000	\$1,127,000

Rehabilitation		Units	FY14	FY15	FY16	Total Costs
R1	Planning (Plan Prep/Project Mangt)					
	Project Management Field Office	WM's	2,000	2,000	2,000	6,000
	Total		2,000	2,000	2,000	6,000
R5	Noxious Weeds					
	Labor	WM's		6,000	6,000	12,000
	Travel/Vehicles	Total		1,000	1,000	2,000
	Supplies/Materials	Total		3,000	3,000	6,000
	Total		0	10,000	10,000	20,000
R7	Fence/Gate/Cattle Guard					
	Fence Material	Total	12,000			12,000
	Travel/Vehicles	Total	2,000			2,000
	Contract	Total	24,000			24,000
	Contract Administration	WM's	4,000			4,000
	Total		42,000	0	0	42,000
	BURNED AREA REHABILITATION TOTALS		\$44,000	\$12,000	\$12,000	\$68,000

R4	Seedling Planting (Shrub/Tree)					
	Seedling Cost	Total	5,000			5,000
	Travel/Vehicles	Total	500			500
	Contract	Total	7,500			7,500
	Contract Administration	WM's	2,000			2,000
	OTHER FUNDED TOTALS		15,000	0	0	15,000

PART 4 – SEED LISTS

**Horse Butte/Juniper
Ranch Seed Mix @
3,566 acres**

Species	% PLS	Seeds/lb. (bulk)	Total Seeds/Acre (bulk)	PLS Seeds/ac.	PLS Seeds/sq. ft.	Drill Seeding (acres)	Lbs/Acre	Total Pounds	Cost per lb	Total Costs
Anatone Bluebunch WG	0.85	140,000	560,000	476,000	10.93	3,566	4.0	14,300	15.00	214,500.00
Mountain Home Sandberg Bluegrass	0.85	950,000	285,000	242,250	5.56	3,566	0.3	1,100	7.50	8,250.00
Rattlesnake Bottlebrush Squirreltail	0.85	220,000	440,000	374,000	8.59	3,566	2.0	7,150	28.50	203,775.00
Eski Sainfoin	0.70	28,000	56,000	39,200	0.90	3,566	2.0	7,150	3.00	21,450.00
Western Yarrow	0.85	2,700,000	270,000	229,500	5.27	3,566	0.1	350	34.50	12,075.00
Ladak Alfalfa	0.78	230,000	230,000	179,400	4.12	3,566	1.0	3,550	5.20	18,460.00
TOTALS					35.36		9.4	33,600		478,510.00

**Buck Flat Seed Mix
@ 1,574 acres**

Species	% PLS	Seeds/lb. (bulk)	Total Seeds/Acre (bulk)	PLS Seeds/ac.	PLS Seeds/sq. ft.	Drill Seeding (acres)	Lbs/Acre	Total Pounds	Cost per lb	Total Costs
Anatone Bluebunch WG	0.85	140,000	420,000	357,000	8.20	1,574	3.0	4,750	15.00	71,250.00
Vavilov II Siberian WG	0.85	220,000	220,000	187,000	4.29	1,574	1.0	1,600	5.00	8,000.00
Mountain Home Sandberg Bluegrass	0.85	950,000	475,000	403,750	9.27	1,574	0.5	800	7.50	6,000.00
Rattlesnake Bottlebrush Squirreltail	0.85	220,000	440,000	374,000	8.59	1,574	2.0	3,150	28.50	89,775.00
Eski Sainfoin	0.70	28,000	56,000	39,200	0.90	1,574	2.0	3,150	3.00	9,450.00
Western Yarrow	0.85	2,700,000	270,000	229,500	5.27	1,574	0.1	150	34.50	5,175.00
Ladak Alfalfa	0.78	230,000	230,000	179,400	4.12	1,574	1.0	1,600	5.20	8,320.00
TOTALS					40.63		9.6	15,200		197,970.00

**Aerial Seed
Sagebrush @ 5,371
acres**

Species	% PLS	Seeds/lb. (bulk)	Total Seeds/Acre (bulk)	PLS Seeds/ac.	PLS Seeds/sq. ft.	Aerial Seeding (acres)	Lbs/Acre	Total Pounds	Cost per lb	Total Costs
Wyoming Sage	0.12	2,500,000	2,500,000	300,000	6.89	5,371	1.0	5,360	24.00	128,640.00
TOTALS					6.89		1.0	5,360		128,640.00

PART 5 - 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 Rationale: *The proposed native species are all adapted to the ecological site within the proposed seeding areas. Selection of all native plant materials is based on analysis contained in the Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan (NFRP) and Environmental Assessment (EA, #ID-090-2004-050), species specific information contained in technical references (USDA 2004), and the Twin Falls District Instruction Memorandum No. ID200-2008-003 for Emergency Stabilization and Rehabilitation Seed Mixture Development. The native taxa were selected from the low- and mid-elevation zone (8-12" average annual precipitation) species lists contained in the Twin Falls District IM. These lists were developed utilizing field experience within the Twin Falls District management area. All of these species have been successfully utilized in similar ecological sites within the Jarbidge Field Office area.*

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

Yes Rationale: *The proposed native seed is generally available in the required quantities. The drill seeding treatment would not occur until fall/winter 2013/2014, which should allow seed quantities to increase following this 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 Rationale: *The native seed proposed for use has been increasingly utilized in recent years for stabilization, rehabilitation, and restoration projects. The demand has resulted in increased production and decreased price. The proposed drill and aerial seed areas contain habitat for several special status species, including sage-grouse*

and other sagebrush-steppe obligate wildlife, and slickspot peppergrass. The seeding treatments are designed specifically to address current policy direction and conservation measures for stabilization and restoration of sage-grouse and slickspot peppergrass habitats.

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 Rationale: *The proposed native species were selected from the low- and mid-elevation (8-12 inches average annual precipitation) zone species lists contained in the Twin Falls District Emergency Stabilization and Rehabilitation Seed Mixture Development Instruction Memorandum (IM #ID200-2008-003). The native taxa provided in the Seed Mixture Development IM have exhibited the ability to establish and persist in similar ecological sites in the Twin Falls District management area.*

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 Rationale: *The proposed seeding areas will receive rest from livestock grazing until monitoring shows that ES&BAR objectives have been met. The current livestock management system should maintain the plant community over the long term. This would be consistent with meeting Idaho Standards for Rangeland Health and requirements of current court orders.*

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 Rationale: *The use of proposed non-native plants is in conformance with resource management objectives, goals, and guidelines contained in the 1987 Jarbidge RMP, the NFRP, policy direction for sage-grouse, and conservation measures for slickspot peppergrass. Non-native forbs were proposed to provide plant community diversity and food for sage-grouse when no natives were commercially available in the quantity required and at a reasonable cost. The small amount of Siberian wheatgrass included in the Buck Flat seed mix is not expected to result in degradation of slickspot microsites.*

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 Rationale: *The proposed treatment area is within a large sagebrush stand and is at risk of alteration by the introduction and spread of invasive annual grasses and*

noxious weeds. Establishing a competitive perennial plant community with a mixture of native and non-native species would promote a greater degree of resiliency to future disturbance, including introduction of non-native invasive plants and noxious weeds. The proposed non-native forbs are expected to establish well in the burned area and are included in the drill seed mix to provide species and structural diversity important to sage-grouse and other sagebrush-steppe obligate wildlife and slickspot peppergrass. Monitoring from past use indicates that these forbs will not disrupt ecological processes in the plant community. In addition, these forbs not expected to invade slickspots and should support pollinators. A small amount of Siberian wheatgrass is proposed for the southern part of the burned area due to existing areas that are dominated by cheatgrass. Observations of past seedings containing this species indicate that it will compete well with cheatgrass, but will not dominate the area.

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

Yes Rationale: *The proposed non-native plants have been used in the Twin Falls District for at least 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.*

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

Native	Non-native
‘Anatone’ Bluebunch Wheatgrass <i>Pseudoroegneria spicata</i>	‘Vavilov II’ Siberian Wheatgrass <i>Agropyron fragile</i>
‘Mountain Home’ Sandberg’s Bluegrass <i>Poa secunda</i>	‘Eski’ Sainfoin <i>Onobrychis viciifolia</i>
‘Rattlesnake Bottlebrush Squirreltail <i>Elymus elymoides</i>	‘Ladak’ Alfalfa <i>Medicago sativa</i>
Western Yarrow <i>Achillea millefolium</i>	
Wyoming Big Sagebrush <i>Artemisia tridentata</i> ssp. <i>wyomingensis</i>	

PART 6. – COST-RISK ANALYSIS

A. Probability of Treatments Successfully Meeting Objectives

Action/ Spec. #	Planned ES Action (LF2200000)	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
S2	Ground Seeding	Acres	5,140	\$872,000	80
S3	Aerial Seeding	Acres	5,371	\$158,000	80
S5	Noxious Weeds	Acres	5,371	\$10,000	90
S12	Closures (OHV, livestock, area)	#	1		100
TOTAL COSTS:				\$1,040,000	

Action/ Spec. #	Planned BAR Action (LF3200000)	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
R4	Shrub Planting	#	5,000	\$15,000	75
R5	Noxious Weeds	Acres	5,371	\$20,000	90
R7	Fence/Gate/Cattleguard	Miles	6.0	\$42,000	100
R12	Closures (OHV, livestock, area)	#	1		100
TOTAL COSTS:				\$77,000	

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 Rationale for answer: *The ground seeding treatment would establish perennial plant communities which would reduce the potential for spread and dominance of noxious weeds and invasive plants in the seeded areas. Noxious weed treatments would further protect the burned area and adjacent key sage-grouse habitat against expansion of noxious weeds.*

No Action No Rationale for answer: *Habitat within and adjacent to the burned area for sage-grouse, other sagebrush-steppe obligate wildlife, and slickspot peppergrass would be compromised if treatment did not occur.*

Alternative(s) N/A

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

Proposed Action Yes Rationale for answer: *Monitoring and observations of recent weed control efforts in similar soils and precipitation zones indicate that success would be high. Normal climatic conditions, the use of competitive adapted species, and the exclusion of livestock grazing would increase the potential for on-site vegetation recovery and seeding establishment. In addition, qualitative observations of successful past efforts have contributed to the expectation of relatively high probability of seeding treatment success.*

No Action No Rationale for answer: *The proposed treatment areas have potential for introduction and spread of noxious weeds and invasive plants. There is also high potential for spread of noxious weeds into adjacent unburned areas.*

Alternative(s) 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 approach most likely to reduce the potential for degradation of habitat for sage-grouse and other sagebrush-steppe obligate wildlife and slickspot peppergrass within and adjacent to the burned area.*

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					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 (check one)

Resource Value	N/A	None	Low	Medium	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 7 – MONITORING PLAN

Treatment/Activity: *S2 Ground Seeding and S3 Aerial Seeding*

- 1) Treatment Objectives: *The objective of the seeding treatment is to establish perennial-dominated plant communities within 3 years. The following grass, forb, and shrub density objectives are based on ecological site potential.*

The drill seed treatments would be considered successful if:

The seeded grass and forb species reach densities of:

- *3 plants per square meter for grasses*
- *0.25 plants per square meter for forbs*

The aerial sagebrush seed treatment would be considered effective if:

- *Sagebrush seedlings average 0.10 seedlings per square meter across all density plots; or*
- *In qualitative surveys seedlings are found to be common*

- 2) Describe how implementation will be monitored: *Implementation is monitored through contract administration. Any changes from the planned implementation would be noted in the project file “as built” discussion.*

3) Describe how effectiveness will be monitored, how it will be measured, and within what time period. *The methods used to monitor the treated areas would include field observations, photo plots, cover transects utilizing the line-point intercept, and density plot methods. Plots would be randomly established in treated areas. Effectiveness monitoring of the ground and aerial seedlings would be done for a period of three growing seasons.*

Treatment/Activity: *R4 Seedling Planting*

1) Treatment Objectives: *The objective of the seedling planting treatment is to re-establish sagebrush cover within the burned area. The seedling planting treatment would be considered successful if the planted sagebrush seedlings have survival rates of:*

- 1) 40% or greater – fully successful*
- 2) 20-40% -- partially successful*
- 3) <20% -- poor survival or a failure.*

2) Describe how implementation will be monitored: *Implementation is monitored through contract administration. Any changes from the planned implementation would be noted in the project file “as built” discussion.*

3) Describe how effectiveness will be monitored, how it will be measured, and within what time period: *The methods used to monitor the plantings would include field observations, photo plots, and belt transects. Belt transects would record presence/absence and survival. Transects would be randomly established in the treated area.*

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

1) Treatment Objectives: *Scotch thistle, Canada thistle, diffuse knapweed, and rush skeletonweed are noxious weeds that have potential for introduction and spread in the burned area. It is expected that these weeds could expand their range as a result of the fire. Since these weeds are not uniformly distributed across the burn area a quantifiable objective cannot be determined until the first year inventory occurs.*

The objective for the first growing season is to conduct an inventory of the burned area. Any noxious weeds detected during the inventory would be treated.

The objective for the second and third years is to decrease the acreage of noxious weeds needing treatment as compared to the first year.

2) Describe how implementation will be monitored: *Locations of noxious weed populations (by species), treatment type, and the amount of herbicide used would be documented using GPS and GIS.*

3) Describe how effectiveness will be monitored, how it will be measured, and within what time period: *Size and location of noxious weed populations and needed treatments would be compared between years 1, 2, and 3 to determine treatment effectiveness. If noxious weed populations remain in the burned area beyond the third year, responsibility would be transferred to the Twin Falls District Noxious Weed Program for ongoing inventory, treatment, and monitoring using funding sources other than ES&BAR.*

Treatment/Activity: *R7 Fence/Gate/Cattle Guard*

1) Treatment Objectives: *The objective of this treatment is to repair or replace about 6.0 miles of interior livestock management fence damaged or destroyed by the fire. Damaged wood corners and braces would be replaced with galvanized steel posts. Damaged wire would also be repaired. All fences would be constructed according to BLM fence standards for wildlife.*

2) Describe how implementation will be monitored: *Implementation is monitored through contract administration. Any changes from the planned implementation would be noted in the project file “as built” discussion.*

3) Describe how effectiveness will be monitored, how it will be measured, and within what time period. *Construction, repair and replacement of damaged fence would be monitored through contract administration. Construction and repairs would be documented in a project file “as built” and filed in the project file. Construction and repairs would be completed within the first year after the fire.*

Treatment/Activity: *S12/R12 Livestock Closure*

1) Treatment Objectives: *Exclusion of livestock is critical for seeding establishment. The burned area would be closed to promote establishment of seeded species until monitoring results, documented in writing, show that ES&BAR objectives have been met, as specified in the BLM ES&BAR Handbook (H-1732-1) and consistent with the 2005 Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan (#ID-090-2004-050). Rest would be primarily accomplished through pasture closure. Should use of the remaining unburned portions of the pastures be necessary, temporary electric fence would be erected by the permittee adjacent to the fire periphery to keep livestock out of the burned area during use periods. Closure of the burned area would be documented through annual grazing agreements.*

2) Describe how implementation will be monitored: *Resumption of livestock grazing would ultimately depend on monitoring and meeting of natural recovery objectives. The monitoring for grazing availability and recommendations for opening the burned area to livestock would be the responsibility of an interdisciplinary team. Implementation is monitored through rangeland management administration.*

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

The drill seed treatment area would be considered recovered and available for grazing when:

- *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 area,*
- *Desirable herbaceous perennial plants are producing seed, and*
- *Desirable perennial vegetation have developed extensive root and shoot systems to provide for soil stabilization and are sustainable under livestock grazing.*

- *A qualitative visual assessment of the following would also be considered:*
 - *Plant vigor (perennial plants)*
 - *Precipitation information during the non-growing (winter) and growing (spring through early summer) seasons*
 - *Competition with invasive annual plants and noxious weed species*
- *An evaluation of collected monitoring data is completed documenting that reintroducing grazing to the area would not cause a downward trend in vegetation recovery.*

References

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. (2008). *Soil Survey Geographic (SSURGO) Database for portions of Elmore, Owyhee, and Twin Falls counties, Idaho*. Available online at <http://soildatamart.nrcs.usda.gov>. Accessed July 19, 2013.

U.S. Department of Agriculture, Forest Service. (2004). *Restoring western ranges and wildlands* (General Technical Report RMRS-GTR-136). Fort Collins, CO: Rocky Mountain Research Station.

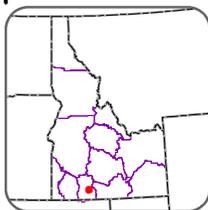
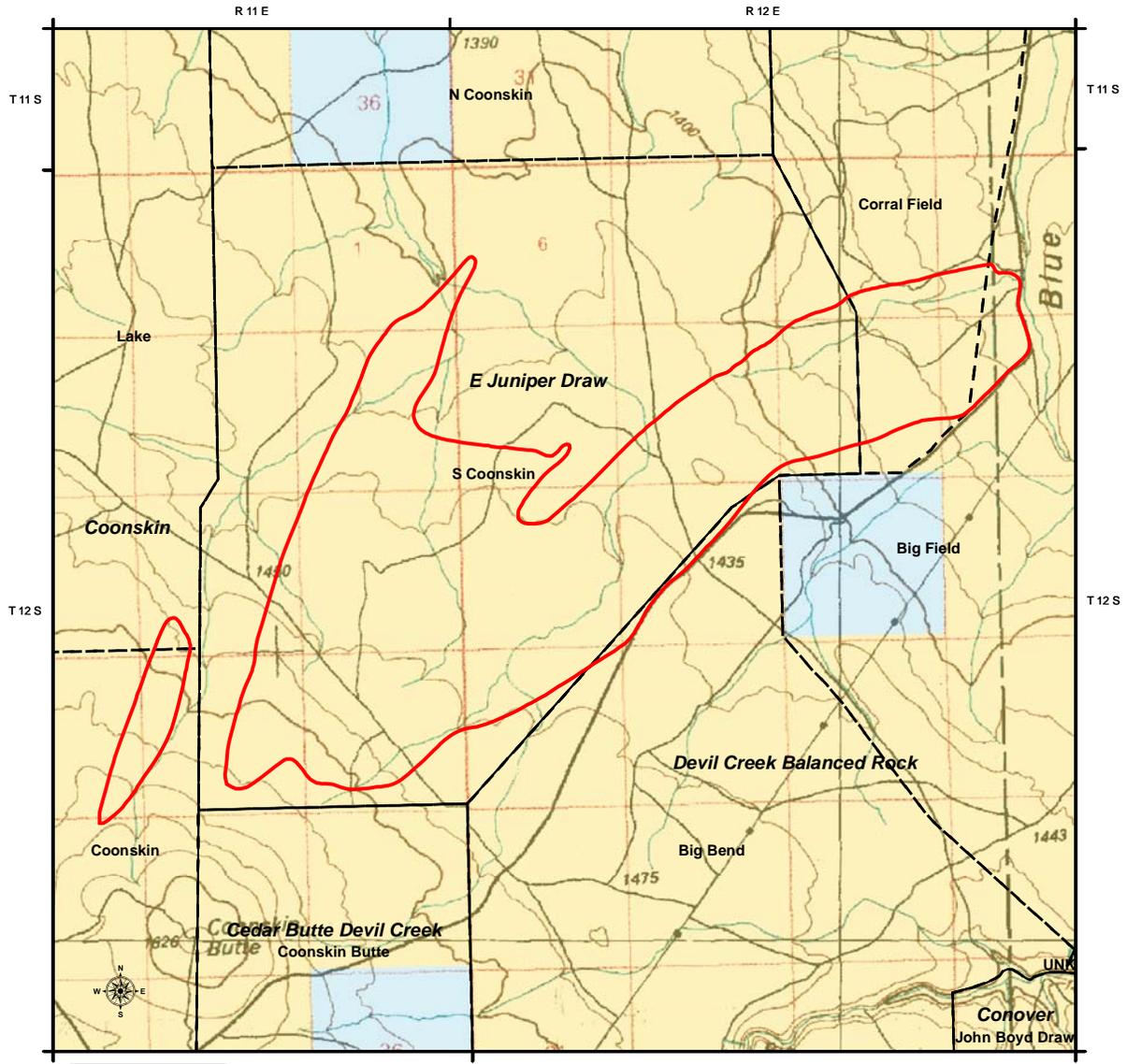
U.S. Department of Interior, Bureau of Land Management. (2005). *Boise District Office and Jarbidge Field Office Normal Fire Rehabilitation Plan and Environmental Assessment*. Twin Falls, ID: Twin Falls District Office.

U.S. Department of Interior, Bureau of Land Management. (2008). *Emergency Stabilization and Rehabilitation Seed Mixture Development Instruction Memorandum No. ID200-2008-003*. Twin Falls, ID: Twin Falls District Office.

PART 8 - MAPS

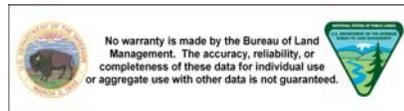
1. Fire Perimeter and Land Status
2. Sage-grouse Habitat in the Burned Area
3. Slickspot Peppergrass Habitat in the Burned Area
4. Proposed Seeding and Fence Repair Treatments

Map 1. Coonskin Fire (HS9E) - Fire Perimeter and Land Status



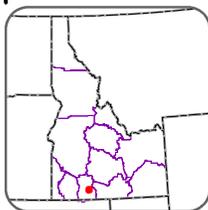
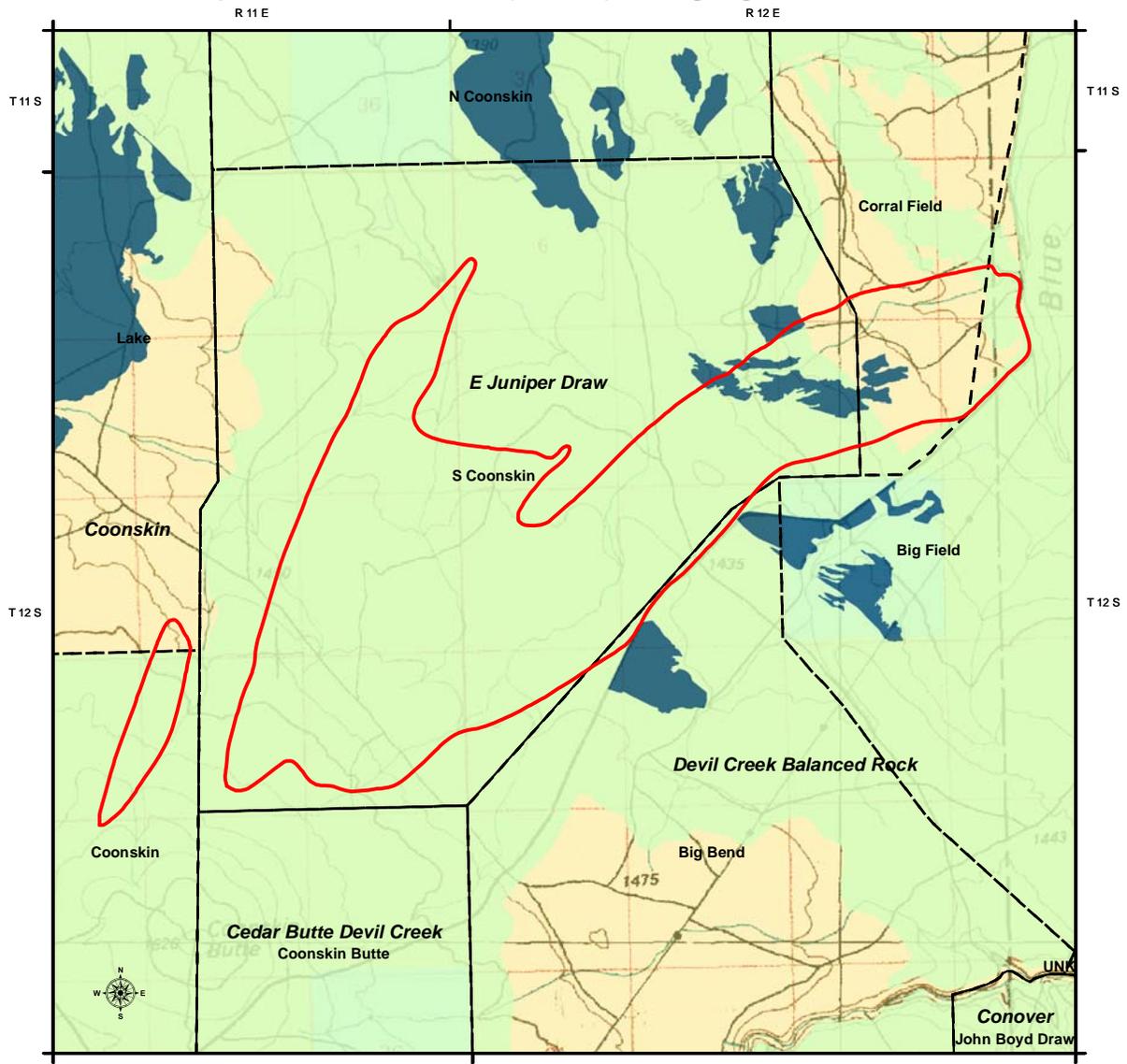
US Dept. of the Interior
Bureau of Land Management
Twin Falls District, Idaho

- Coonskin Fire Perimeter
- Range Allotment
- Pasture
- Land Ownership**
- Bureau of Land Management
- State



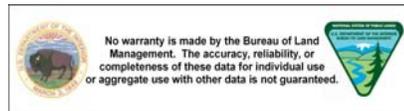
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Map Created By: BLM, Jarbridge Field Office
Datum: NAD 1983
Projection: UTM Zone 11N

Map 2. Coonskin Fire (HS9E) - Sage-grouse Habitat



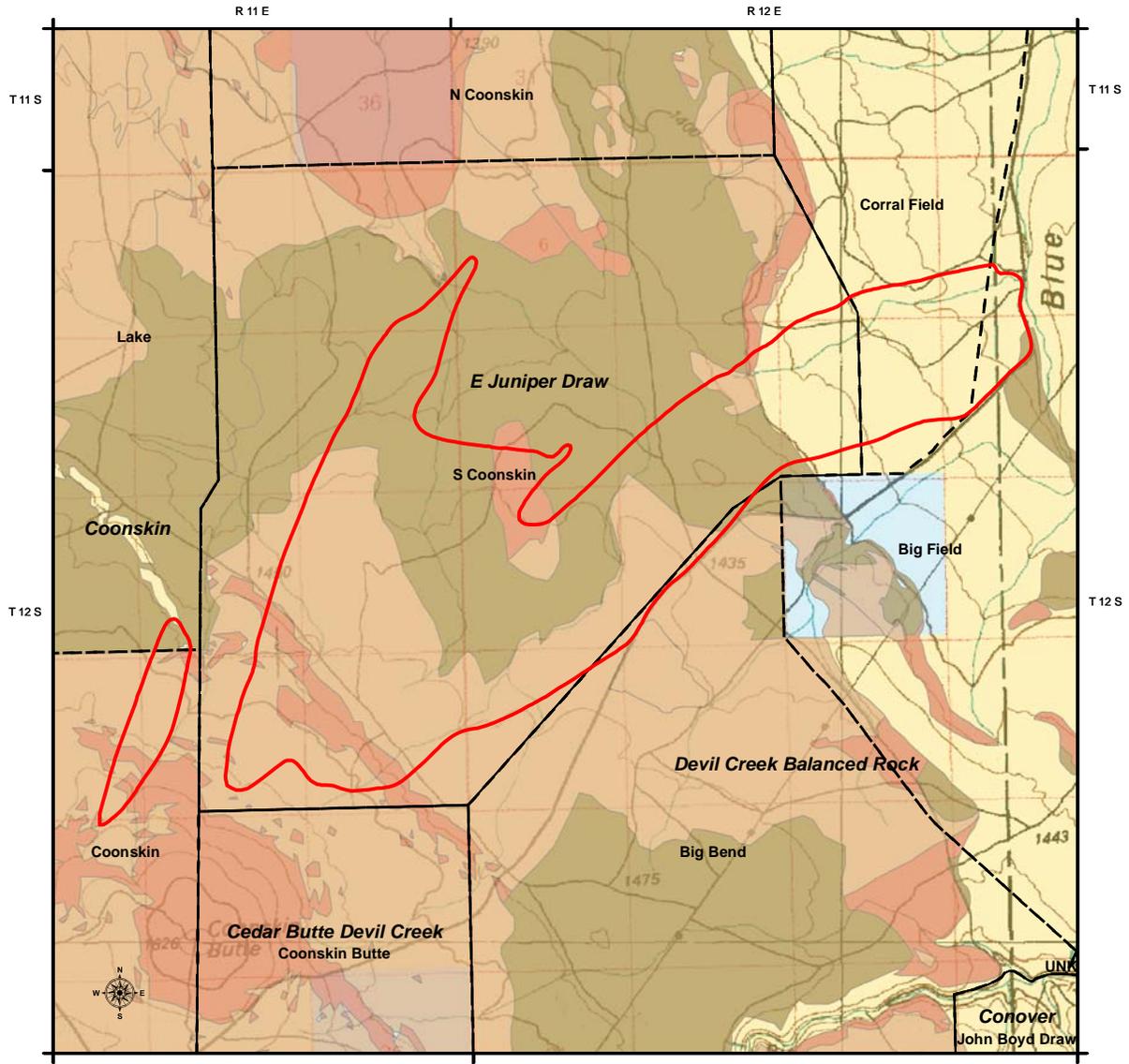
US Dept. of the Interior
Bureau of Land Management
Twin Falls District, Idaho

- Coonskin Fire Perimeter
- Range Allotment
- Pasture
- Idaho Sage-grouse Preliminary Priority Habitat
- Sagebrush
- Perennial grassland



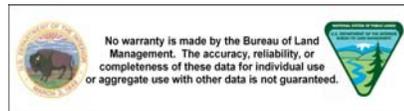
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Datum: NAD 1983
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Map 3. Coonskin Fire (HS9E) - Slickspot Peppergrass Potential Habitat



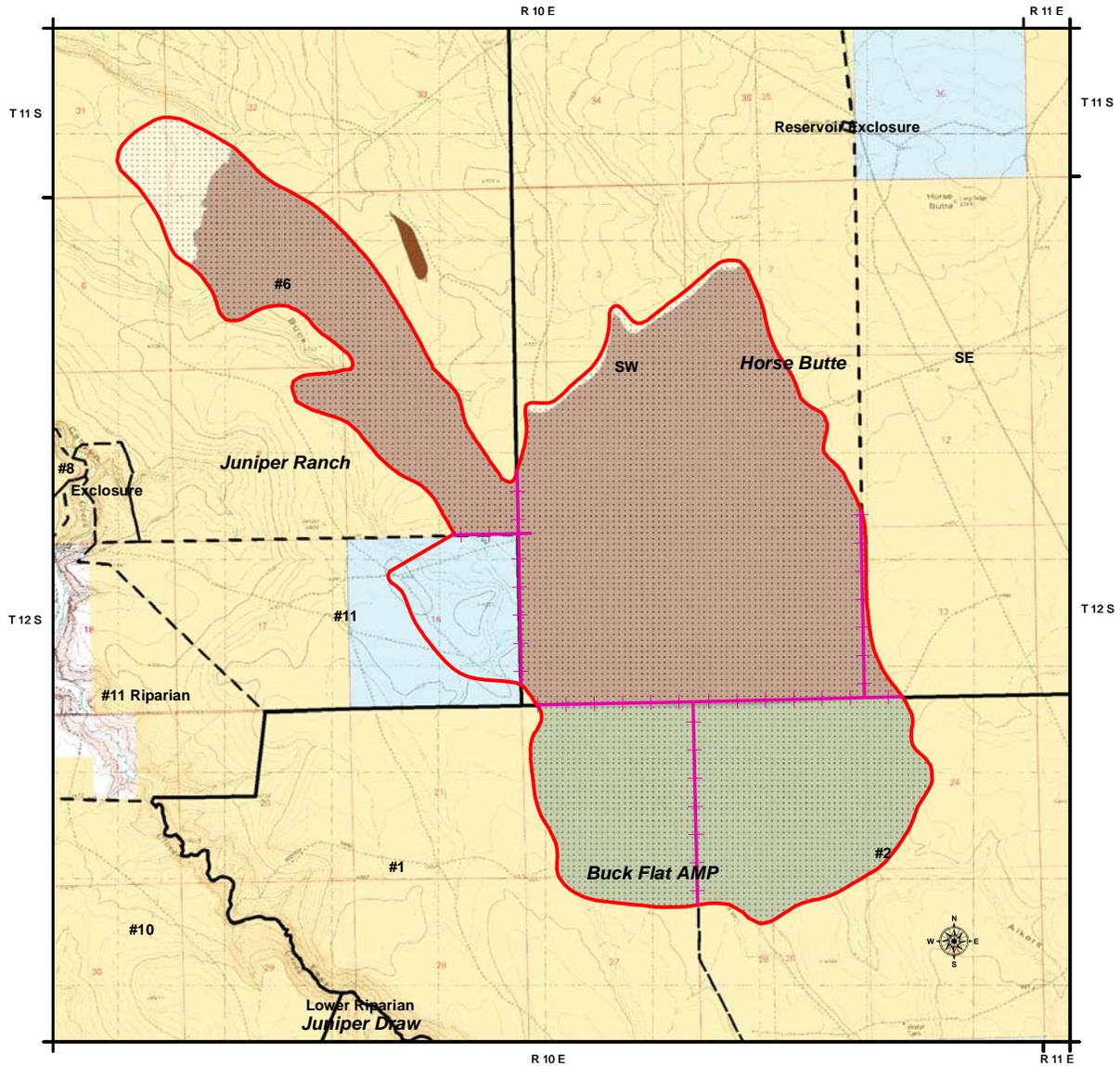
US Dept. of the Interior
Bureau of Land Management
Twin Falls District, Idaho

- Coonskin Fire Perimeter
 - Range Allotment
 - Pasture
- Slickspot peppergrass potential to occur
- High Potential Habitat
 - Low Potential Habitat
 - Medium Potential Habitat



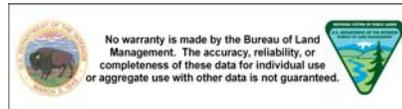
Map Created on: August 11, 2013
Map Created By: BLM, Jarbridge Field Office
Datum: NAD 1983
Projection: UTM Zone 11N

Map 4. Horse Butte 2 Fire (HQ47) - Proposed Seeding and Fence Repair



US Dept. of the Interior
Bureau of Land Management
Twin Falls District, Idaho

- Horse Butte 2 Fire Perimeter
- Range Allotment
- Pasture
- Proposed Fence Repair/Replacement
- Proposed Aerial Sagebrush Seed
- Proposed Drill Seed Mixes
- Buck Flat
- Horse Butte/Juniper Ranch



Map Created on: July 23, 2013
Map Created by: BLM, Jarbidge Field Office
Datum: NAD 1983
Projection: UTM Zone 11N

PART 9 – REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

*Position	Team Member (Agency/Office)	Initial and Date
Team Leader/Fire Ecologist	Julie Hilty (BLM, Jarbidge FO)	JH 7/23/2013
Operations	Scott Uhrig (BLM, Twin Falls DO)	SU 7/29/2013
NEPA Compliance & Planning	Krystle Pehrson (BLM, Jarbidge FO)	KP 07/30/2013
Cultural Resources/Archeologist	Jeff Ross (BLM, Jarbidge FO)	JR 7/29/2013
Rangeland Mgt. Specialist	Dan Strickler (BLM, Jarbidge FO)	DS 7/24/2013
Wildlife Biologist	Michael Haney (BLM, Jarbidge FO)	MH 7/25/2013

PLAN APPROVAL

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



Brian W. Davis
Jarbidge Field Manager

8/21/13

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.