BLM IDAHO POST-FIRE RECOVERY PLAN
EMERGENCY STABILIZATION AND BURNED AREA REHABILITATION
2013 PLAN

EMERY FIRE

BLM/TWIN FALLS DISTRICT/BURLEY FIELD OFFICE
IDAHO STATE OFFICE

FIRE BACKGROUND INFORMATION

Fire Name	**Emery**
Fire Number	**HM2X**
District/Field Office	**Twin Falls/Burley**
Admin Number	**LLIDT02000**
State	**Idaho**
County(s)	**Cassia**
Ignition Date/Cause	**07/01/2013**
Date Contained	**07/04/2013**

Jurisdiction	**Acres**
BLM	572
State	0
Private	67
Other	0

Total Acres	639
Total Costs	$254,000
Costs to LF2200000	$227,000
Costs to LF3200000	$27,000

Status of Plan Submission (check one box below)

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

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON THE FIRE

The Emery Fire started as a lightning strike July 1, 2013 around Emery Creek in the Goose Creek drainage area. The Fire grew rapidly due to erratic winds, steep and inaccessible terrain. The Fire burned a total of 639 acres in Cassia County approximately 12 miles south of Oakley Idaho. Of those burned acres, 572 acres occurred on lands managed by the Bureau of Land Management (BLM). The Fire affected the Wilson Gulch pasture within the Goose Creek Group allotment. The elevation of the Emery Fire varies from 4900 feet to 5600 feet. The burned area's topography is characterized as rocky cliff areas, side slopes and terraces.

The Fire burned in phase 2 and 3 Utah juniper vegetation types and in mid to late seral Wyoming sagebrush vegetation communities. Cheatgrass is found throughout the burned area and dominant in portions. The bulk of the burned area is highly vulnerable to the expansion of cheatgrass and noxious weeds. Past fires on the same mountain range demonstrate there is a high likelihood for success if rehabilitated and poor recovery of natural vegetation if not rehabilitated.

The area burned by the Emery Fire is a high priority for stabilization and rehabilitation because of the greater sage-grouse (*Centrocercus urophasianus).* The majority of the burned area was mapped as sage-grouse Preliminary Priority Habitat (PPH) in 2012. PPH comprises areas that have been identified as having the highest conservation value to maintaining sustainable greater sage-grouse populations. Of the 572 acres of BLM-managed land burned, 379 acres or 66% is classified as PPH burned. Also, a portion of the area is classified as Preliminary General Habitat (PGH) which comprises areas of occupied seasonal or year-round habitat outside of priority habitat. Of the 572 acres of BLM-managed land burned, 189 acres or 33% is classified as PGH. To best minimize habitat loss in PPH, the Instruction Memorandum No. 2012-043 states that ES and BAR treatments are to be utilized to: 1). Maintain and enhance unburned intact sagebrush habitat when at risk from adjacent threats; 2). Stabilize soils; 3). Re-establish hydrologic function; 4). Maintain and enhance biological integrity; 5). Promote plant resiliency; 6). Limit expansion or dominance or invasive species; and 7). Re-establish native species. The proposed treatments are expected to protect adjacent unburned sagebrush habitat which would otherwise be at risk from potential weed invasion and increased wildfire threat that are expected to result from the Fire. The proposed treatments are expected to stabilize soils on sites (phase 2-3 juniper) already exhibiting vulnerability due to reduced understory cover. The proposed treatments are expected to help re-establish hydrologic function by increasing the understory and thereby increasing basil cover, litter, foliar cover, and soil stability. The proposed treatments are expected to increase the diversity of vegetation which will enhance biological integrity. Species proposed are expected to improve plant resiliency. Treatments are expected to limit expansion and dominance of invasive species while re-establishing native like species where they have been reduced or extirpated by the dense Utah juniper vegetation.

The proposed treatments also address conservation measures identified in the 2006 Conservation Plan for the Greater sage-grouse in Idaho, which recommended seeding or planting the appropriate species and subspecies of sagebrush as part of restoration or burned area rehabilitation treatments (pp. 4-19 through 4-20), re-establishing sagebrush in seeded perennial grasslands (pp. 4-85 through 4-87), and noxious weed control in burned areas (p. 4-20).

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 Noxious Weeds
S7 Temporary Protective Fence/Cattle Guard
S12 Closures (Livestock)

Burned Area Rehabilitation
R5 Noxious Weeds
R7 Permanent Fence Repair
R12 Closures (Livestock)

The applicable land use plan for the Emergency Stabilization (ES) and Burned Area Rehabilitation (BAR) project area is the Cassia Resource Management Plan (RMP) 1985. The RMP was amended in 2008 by the Fire, Fuels and Related Vegetation Management Direction Plan Amendment (FMDA). The treatments outlined in this plan are also consistent with the treatment analyzed in the Burley/Shoshone Field Office Normal Fire Rehabilitation Plan and Environmental Assessment (#ID-077-2004-008).

Ground Seeding/S2: Objectives and management actions from the FMDA state (page 17) that objective 1 is to make progress towards desired future conditions (DFC) in low-elevation, perennial grass and invasive annual grass areas. Strategically place treatments on a landscape scale to reduce the likelihood of fire spreading into important sagebrush steppe habitat. In addition, management actions for objective 2 states that following a wildland fire the use of chemical, mechanical, and seeding treatments will be used to stabilize sites and prevent dominance of invasive annual vegetation and noxious weeds in order to maintain, protect and enhance sage-grouse habitat. Therefore, the planning for ground seeding treatments and activities that meet these objectives are in conformance with the RMP as amended by the FMDA.

Aerial Seeding/S3: Objective 2 of the FMDA's objective and management actions is to maintain, protect, and expand sage-grouse source habitats. Following wildland fire, use seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Therefore aerial seeding meets this objective and is in conformance with the RMP as amended by the FMDA.

Noxious Weeds/S5/R5: Management actions for objective 1 states (page 17) that to achieve DFC chemical, mechanical and seeding treatments will be used. Also, management actions for objective 2 states that following wildfire fire, use of chemical, mechanical, and seeding treatments with appropriate plant material to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Therefore, the planning for noxious weed

treatments and activities that meet these objectives are in conformance with the RMP as amended by the FMDA.

Fence/S7/R7: Existing pasture and allotment fences will be repaired to ensure that livestock remain within their area of authorized use and off the burned areas until resource objectives are met. Also, temporary protective fence will be installed to ensure the investment of the seeding treatment will be protected. The FMDA states on page 31 that all treatment areas would be rested from livestock grazing until project-specific monitoring identified in site-specific project plans and/or NEPA documents show that resource objectives have been met. Resumption of grazing would be determined on a case-by-case basis. Therefore, fence treatments that ensure livestock will remain in authorized areas of use are in conformance with the RMP as amended by the FMDA.

Closures (livestock)/S12/R12: The management restrictions, conservation measures, and guidelines for livestock grazing, on page 31of the FMDA, states that all burned areas would be rested from livestock grazing until project/site-specific monitoring identified in site-specific project plans and/or resource objectives have been met. The resumption of grazing would be determined on case-by-case basis. Therefore, resting the burned area under the rehabilitation plan from grazing would ensure that the area recovers and is in conformance with the RMP as amended by the FMDA.

COST SUMMARY TABLES

Emergency Stabilization (LF2200000):

Action/ Spec. #	Planned Action	Unit (acres, WMs, number)	# Units	Unit Cost (If Applicable)	FY13	FY14	FY15	FY16	Totals by Spec.
S1	**Planning (Project Mgmt)**	**WM's**	1		$0	$5,000	$5,000	$5,000	$15,000
S2	**Ground Seeding/Chaining**	**Acres**	460	$69.57	$11,500	$20,500	$0	$0	$32,000
S3	**Aerial Seeding**	**Acres**	1,144	$125.00	$129,400	$13,600	$0	$0	$143,000
S5	**Noxious Weeds**	**Acres**	572	$8.74	$0	$5,000	$0	$0	$5,000
S7	**Temporary Protective Fence**	**Miles**	2.0	$8,500.00	$0	$14,000	$0	$3,000	$17,000
S12	**Closures**	**No.**	1	$0	$0	$0	$0	$0	$0
S13	**Monitoring**	**Acres**	572	$8.74	$0	$5,000	$5,000	$5,000	$15,000
	TOTAL COSTS (LF2200000)				**$140,900**	**$63,100**	**$10,000**	**$13,000**	**$227,000**

Burned Area Rehabilitation (LF3200000):

Action/ Spec. #	Planned Action	Unit (acres, WMs, number)	# Units	Unit Cost (If Applicable)	FY14	FY15	FY16	Totals by Spec.
R1	**Planning (Project Mgmt)**	**WM's**	1		$2,000	$2,000	$2,000	$6,000
R5	**Noxious Weeds**	**Acres**	572	$8.74	$0	$5,000	$5,000	$10,000
R7	**Permanent Fence Repair**	**Miles**	2.0	$5,500.00	$11,000	$0	$0	$11,000
	TOTAL COSTS (LF3200000)				**$13,000**	**$7,000**	**$7,000**	**$27,000**

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: 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.

Not Applicable

ES Issue 2 - Soil/Water Stabilization.

Fire Intensity and Vegetation

The Fire removed the vegetation cover across the majority of the burn and was characterized as moderate to high fire intensity. Due to a combination of topography and terrain, extremely low fuel moisture and hot and dry weather conditions, the Fire grew and spread rapidly. The majority of the burned area had not burned for 80-100+ years. The vegetation in the Fire area was varied from phase 2 or 3 Utah juniper woodlands to late seral Wyoming sagebrush mix with an understory of scattered native and non-native grasses. Areas with a dense canopy-cover of juniper and a late seral sagebrush or shrub step had higher fire intensity and removed most of the plant cover. In the areas of higher elevation (5600 feet), cheatgrass was observed in unburned islands within the Fire perimeter. There is a high potential of the burned area to be encroached by cheatgrass because of the dense cover of Utah juniper and the lack of native grass understory and the amount of bare ground. With the combination of the high fire severity and presence of cheatgrass, there is a high possibility of the area being invaded. The burned area is also vulnerable to accelerated soil erosion through wind and water. Lastly, the area is a major concern to the expansion of noxious weeds.

Closures (Livestock)

The Goose Creek Group allotment was the only allotment affected by the Fire. This portion of the Goose Creek Group allotment will be temporarily closed. Because only a small portion of the allotment burned, grazing will continue as authorized. However, appropriate rest will be applied to the treated area under the ES&R plan. This will allow newly seeded species to become

established. Closure on the treated area would be implemented by the Range program to ensure that the area meets objectives (see monitoring section) for the resumption of livestock grazing. Burned fences will be restored to their original working structure to keep livestock out of burned areas.

Emery Fire						
Allotment Name	Allotment Number	Acres	Acres burned	% Acres burned	AUMS burned	% AUMs burned
Goose Creek Group	4027	30,866	572	2	0*	0*

*Because of the large size of the Goose Creek Group allotment in proportion to the Fire size, the number of AUMS will not be affected if the burned area is fenced temporarily for treatment recovery.

Treatment/Activity: S12 Closures (Livestock)

A. Treatment/Activity Description. *The burned portion of the allotment affected by the Emery Fire would be rested from livestock grazing until monitoring shows that ES treatment objectives have been met or it is determined to be a failure.*

B. How does the treatment relate to damages or changes caused by the fire? *The Fire burned most of the existing vegetation within the burn perimeter so the remnant vegetation and soil surface are highly susceptible to further damage if livestock were allowed to continue grazing within the burn area. The purpose of this treatment is to rest the burn area from livestock grazing to provide the opportunity for existing vegetation resources and seeding efforts to stabilize the burn area. Establishment of a perennial plant community would reduce or inhibit the expansion of annual vegetation and stabilize soil resources.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *No cost under ES is associated with closures. It is a reasonable method for attaining vegetation objectives, as compared to implementation of other aspects of the ES plan.*

Temporary Protective Fence

Approximately two miles of temporary protective fence will be needed to ensure livestock are kept out of the burned area. This will ensure that objectives are being met and allow livestock to graze the portion of the pasture that were not burned. The Goose Creek Group allotment will have temporary protective fence built across a portion of the allotment. All temporary protective fences will be marked to minimize or eliminated potential collision risk to sage-grouse.

Treatment/Activity: S7 Temporary Protective Fence

A. Treatment/Activity Description. *Approximately two miles of temporary protective fence and a cattle guard is needed to help protect seeded portions of the burn and areas left for natural recovery without grazing disturbance.* ***Wherever possible, temporary protective fence would be built using existing materials removed from areas burned in 2011 and 2012****. Also, a cattle guard that has been used in past ES&R projects will be used for this project. The fence would be constructed to BLM fence standards. Temporary protective fence will be in the Goose Creek*

allotment. All fences will be tied into existing BLM interior fence or natural barriers.

B. How does the treatment relate to damages or changes caused by the fire? *The temporary protective fence associated with the livestock management of the affected allotments. Construction of two miles of temporary protective fence and a cattle guard would maintain the future integrity of the existing livestock grazing systems.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Most of the burned area is protected by existing fences. When possible, temporary protective fence would be constructed from existing materials removed from 2011 and 2012 fires. Construction of two miles of temporary protective fence and a cattle guard would allow livestock grazing to occur in the remaining unburned portions of the pastures during the closure period.*

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

Threatened, Endangered, and/or Candidate species:

Greater sage-grouse inhabit the area and Goose Creek milkvetch occurs on surrounding lands nearby. The greater sage-grouse and Goose Creek milkvetch are both classified as Candidate species. There are no other federally listed threatened and/ or endangered terrestrial fauna within Cassia Counties (FWS, 2011).

Greater Sage-grouse

The Emery Fire did not negatively impact greater sage-grouse habitat because the dense pre-burn juniper cover excluded sage-grouse, however the lack of potential for natural recovery if untreated would preclude any potential enhancement of sage-grouse habitat. The IM 2012-043 states the BLM national policy includes the management of habitats to maintain, enhance, or restore conditions that meet greater sage-grouse life history needs. Much of the surrounding vegetation is also recovering from recent burns and was successfully rehabilitation. Other restorations projects including the Burley Landscape Restoration Project are connected with this treatment for the overall habitat improvement for sage-grouse. Because of the increased fire activity in the Goose Creek Watershed, it is expected that this Fire may actually benefit sage grouse and offer a rare opportunity to allow the expansion of sage-grouse into new habitats. The burned area does not contain any known sage-grouse leks however, a lek one mile to the north occurred historically (IDFG, 2011). There are numerous leks to the north and south of the burn area. It is expected that rehabilitation is necessary for the burned area to eventually become suitable for sage grouse.

A total of 379 acres of preliminary priority sage-grouse habitat burned in the Emery Fire, refer to **Table 1**. Of the acres burned the most adverse negative impacts to Greater sage-grouse would be the loss of sagebrush. Also, impacting sage-grouse would be the potential increase in noxious and invasive weeds and potential increased wildfire spread.

Table 1. Approximate acreage of Preliminary Priority/General Habitat burned.

	CATEGORIES	TOTAL ACRES	BLM ADMINISTERED ACRES
PRELIMINARY PRIORITY SAGE-GROUSE HABITAT	Conifer encroachment	408	341
	Perennial grassland	38	38
	Total	**446**	**379**
PRELIMINARY GENERAL SAGE-GROUSE HABITAT		**189**	**189**

Approximately 408 acres of juniper encroached habitat was burned in the Fire. Greater sage-grouse are known to avoid areas of juniper encroachment. The removal of juniper could foster the succession of sagebrush upon successful restoration. The removal of juniper would improve sage-grouse habitat in the long-term, contingent upon successful restoration. Juniper encroached areas would not be expected to recover naturally. Areas of juniper encroachment would be susceptible to proliferation of invasive and noxious weeds, particularly at lower elevations and south aspects.

Goose Creek Milkvetch

Goose Creek Milkvetch is a narrowly endemic plant which only occurs on ashy soils in the Goose Creek Watershed. Populations occur near the Emery Fire but no known populations burned as a result of the Fire. Because of the proximity of the Fire to Goose Creek milkvetch habitat, the potential increase in noxious weeds in the watershed and the increased potential for fire spread is expected to threaten Goose Creek milkvetch. Rehabilitation of the burned area is expected to reduce the potential for this threat to occur.

Big Game:

Mule Deer

Mule Deer are known to inhabit the Emery Fire area. The Emery Fire area provides wintering range habitat. A total of 572 acres of mule deer winter range administered by BLM were negatively impacted by the Emery Fire. Winter range is a limiting factor for mule deer in the region. The loss of intact shrub communities (*Artemisia tridentata ssp. wyomingensis and Artemisia tridentate ssp vaseyana,)* will have negative long-term impacts to mule deer (IDFG, 2010). The successful restoration of wintering habitats will be crucial for the viability of mule deer in the region.

Ecological Site(s):

South Slope Stony 10-13" Wyoming big sagebrush/Bluebunch Wheatgrass- 53% of burned area

Loamy 10-13" Wyoming big sagebrush/Bluebunch Wheatgrass – 29% of burned area
North Slope Loamy 16+"Mountain big sagebrush/Idaho Fescue – 13% of burned area

Shallow Claypan 12-16" Little sagebrush/Idaho Fescue – 10% of burned area

Ashy South Slope 10-16" Wyoming big sagebrush/Indian Ricegrass – 5% of burned area

The majority of the burned area is capable of deep rooted grass species with the exception of the rocky outcroppings. This is demonstrated by data and photos collected from past Stabilization and Rehabilitation projects north of the burned area on the same soil type. This data validates that the area is capable of sustaining the proposed grass seed species. Forbs were considered in the seed mix but were left out because of the high return of natural recovery forbs observed during monitoring and the expert knowledge of the Specialist in the Field Office. Also, there is a viable seed source for natural recovery from the surrounding unburned area and in small islands of unburned vegetation within the Fire perimeter. The Emergency Stabilization and Rehabilitation Seed Mixture Development Instruction Memorandum No. ID200-2008-003 was used in process of developing the proposed seed mix.

The following is a list of common pre-burn vegetation. The list was developed using field surveys of unburned islands of vegetation and range management trend monitoring plot data. This list is for vegetation determined to be in the burn areas not previously treated.

Common Pre-burn Vegetation:

Utah Juniper, *Juniperus osteosperma*
Wyoming big sagebrush, *Artemisia tridentata ssp. Wyomingensis*
Mountain big sagebrush, *Artemisia tridentata ssp. vaseyana*
Idaho fescue, *Festuca idahoensis*
Sandberg bluegrass, *Poa secunda*
Bluebunch Wheatgrass, *Pseudoroegneria spicata*
Cheatgrass, *Bromus tectorum*
Western Wheatgrass, *Pascopyrum smithii*
Indian Ricegrass, *Achnatherum hymenoides*
Crested wheatgrass, *Agropyron cristatum*

Treatment/Activity: S2 Chaining

A. Treatment/Activity Description. *Identified areas totaling approximately 460 acres will be chained following the aerial seeding to cover the grass seed in portions of the burn area. The areas that will be Ely chained are identified on the map. The majority of the burn area would not be accessible by a rangeland drill due to the amount of dead standing juniper skeletons and steepness of the terrain. An Ely chain will be pulled by two tractor dozers. This will aid in a better soil to seed contact and help cover the seed for future growth. Also, the chaining will help remove the juniper skeletons which will benefit in the process of decomposition of the burned material. In past treatments where an Ely chain has been used to cover seed, monitoring has shown successful results. This is proposed to be accomplished in late FY13 or early FY14. Appropriate cultural resource inventories/surveys will be complete prior to implementing these specific projects.*

B. How does the treatment relate to damages or changes caused by the fire? *This treatment will help restore sagebrush steppe habitat that was encroached by juniper. The chaining will aid in the establishment of a desirable perennial grass community. This area is identified as greater sage-grouse PPH and PGH mule deer winter range. The greater sage-grouse are identified by the US Fish and Wildlife Service as a candidate species, and mule deer are identified as one of Idaho's species of management concerns. The high intensity wildfire removed the majority of existing shrub cover and likely killed the majority of the remnant seed bank making the burn area less likely to support the mule deer and sage-grouse due to lack of cover and forage.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *This treatment and activity is reasonable for the type of issues found on the site. Past monitoring and field observations have shown a success rate with the seeding of perennial grasses and aid in the recovery of a shrub species.*

Treatment/Activity: S3 Aerial Seeding

A. Treatment/Activity Description. *All of the burned BLM land was identified to be aerial seeded with Wyoming big sagebrush and a native perennial grass mix. This is proposed to be accomplished in two separate applications. The perennial grass mix is proposed to be accomplished first in late FY13 or early FY14. The Wyoming big sagebrush is proposed to be aerial seeded in early FY14 after the perennial grass mix has been covered with a chain and there is adequate moisture on the ground (snow cover). Appropriate wildlife and cultural resource inventories/surveys will be complete prior to implementing these specific projects.*

Emery Aerial Seed Mix 572 Acres	
Species and Variety	**Seed Rate Lbs/Acres**
Grass/Shrub Mix	
1. P-7 Bluebunch Wheatgrass	4.00
2. Anatone Bluebunch Wheatgrass	6.00
3. Secar Snake River Wheatgrass	3.00
4. Sherman big bluegrass	0.30
5. Wyoming big sagebrush	0.50

B. How does the treatment relate to damages or changes caused by the fire? *The objective of this treatment is to re-establish a desirable sagebrush and perennial grass community that more closely matches the structural and species composition and diversity of the native plant community to help achieve a healthy functioning rangeland. Establishment of a perennial plant community would inhibit the expansion of annual vegetation and noxious weeds (USDA Forest Service, 2004). Accelerating the rate of re-establishment of sagebrush and native grasses is important to maintaining the value of the area as sage-grouse and mule deer winter habitat. The wildfire intensity impacted existing sagebrush and grass cover which would not recover naturally without providing an additional seed source.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *The treatment and activities are reasonable for the type of issues found on the site. Qualitative monitoring in the Burley Field Office in areas similar to the Emery Fire that have not been treated has shown a higher chance of dominance by noxious weed and invasive plants such as cheatgrass (2010 Emery Fire ESR Monitoring Report). This dominance could alter fire regimes and result in landscape scale changes in vegetation composition and structure. This change would have a higher economic cost of controlling noxious weeds and invasive plants as opposed to treating the Fire with stabilization and rehabilitation funds. Contracting costs for aerial application are typical for the Burley Field Office area. The cost of seed can vary from year to year dependent on availability.*

ES Issue 4 - Critical Heritage Resources.

Not Applicable

ES Issue 5 - Invasive Plants and Weeds.

Noxious Weeds

Leafy Spurge, Diffuse Knapweed, Black henbane and Canada thistle are the primary weeds of concern with high potential to increase within the burned area and surrounding rangeland. These weeds were documented during the Fire reconnaissance and in field visits prior to the Fire. The current state of the infestation is treatable if done within the next three growing seasons. Without a noxious weed control effort, these noxious weeds will significantly increase negatively affecting sage-grouse PPH and PGH, Goose Creek milkvetch, mule deer winter range and livestock forage capabilities. If an emergency treatment is not implemented the economic impact to natural resources and the local economy will be significant. All 572 acres of the burned public land will be inventoried and treated as needed for noxious weeds in FY14. The objective of this treatment is to identify and control the expected noxious weed increase using spot herbicide spraying and biological control. This would be proposed under the rehabilitation to suppress the expansion of these weeds. Weed control would be conducted the first year under ES.

Treatment Activity: S5 Noxious Weeds

A. Treatment/Activity Description. *Over five species of noxious weeds have been identified and recorded within or around the burned area. The primary weeds of concern are Leafy Spurge, Diffuse Knapweed, Canada thistle and Black henbane. Noxious weed inventory and control within the burned area would be done in the first year following the Fire to directly treat the expected weeds. Areas where weeds have been treated in the past will be inventoried first. The weeds will be treated with the BLM approved chemicals.*

B. How does the treatment relate to damage or changes caused by the fire? *The objective of this treatment is to identify and control the expected noxious weed increase using spot herbicide application of the burn area. It is expected that noxious weeds will increase due to the removal of existing plant cover by the wildfire which has opened up bare ground for the weeds to invade. Treatments would be conducted for the first year under ES.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Weed treatments in the Burley Field Office typically run about $8.74 per acre. Field work would be combined with other weed treatments in the area 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.

Not Applicable

BAR Issue 2 - Weed Treatments.

Noxious Weeds

Leafy spurge, diffuse knapweed, black henbane and Canada thistle are the primary weeds of concern with high potential to increase within the burned area and surrounding rangeland. These weeds were documented during the Fire reconnaissance and in field visits prior to the Fire. The current state of the infestation is treatable if done within the next three growing seasons. Without a noxious weed control effort, these noxious weeds will significantly increase negatively affecting PPH and PGH sage-grouse habitat, Goose Creek milkvetch, mule deer winter range and livestock forage capabilities. If an emergency treatment is not implemented the economic impact to natural resources and the local economy will be significant. All 572 acres of the burned public land will be inventoried and treated as needed for noxious weeds in FY14 -15. The objective of this treatment is to identify and control the expected noxious weed increase using spot herbicide spraying and biological control. This would be proposed under the rehabilitation to suppress the expansion of these weeds. Weed control would be conducted the second and third years under BAR.

Treatment Activity: R5 Noxious Weeds

A. Treatment/Activity Description. *Over five species of noxious weeds have been identified and recorded within the burned area. The primary weeds of concern are Leafy spurge, diffuse knapweed, black henbane and Canada thistle. Noxious weed inventory and control within the burned area would be done in the second and third year following the Fire to directly treat the*

expected weeds. Areas where weeds have been treated in the past will be inventoried first. The weeds will be treated with the BLM approved chemicals.

B. How does the treatment relate to damage or changes caused by the fire? *The objective of this treatment is to identify and control the expected noxious weed increase using spot herbicide application of the burn area. In addition, biological control agents for knapweed would be utilized in areas not easily accessible to spraying equipment (rocky outcrops). It is expected that noxious weeds will increase due to the removal of existing plant cover by the wildfire which has opened up bare ground for the weeds to invade. Treatments would be conducted for the second and third year under BAR.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Weed treatments in the Burley Field Office typically run about $8.74 per acre. 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 weed treatments in the area for cost efficiency.*

BAR Issue 3 - Tree Planting.

Not Applicable

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

Livestock Management Fences

Approximately two miles of interior pasture fence were damaged or destroyed by the Fire. Damaged wire, corners, and braces would be repaired or replaced by steel posts. The repairs would be needed to maintain the integrity of the grazing system and keep adjacent livestock grazing from entering the burn area during the rest period. Where possible, materials will be used from previous fences that were salvaged or material that was left over from previous projects. Emery Creek Fence (BLM project # 4141), Goose Creek Cattle Guard (BLM project # 3509).

Treatment/Activity: R7 Permanent Fence Repair

A. Treatment/Activity Description. *The objective of this treatment is to repair and/or replace approximately two miles of interior livestock management fence damaged by the Fire. Damaged wood corners and braces would be replaced with galvanized steel posts. Damaged wire would also be repaired. The management fences would be constructed to BLM fence standards.*

B. How does the treatment relate to damage or changes caused by the fire? *The wildfire damaged fences associated with the livestock management of the affected allotments. Reconstruction and repair of management fences damaged by the Fire would maintain the future integrity of the existing livestock grazing systems. Repair of damaged management fences would also help to manage vegetation recovery.*

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

contracts typically run $5,500 per mile. This cost is typically lower than new fence construction. This treatment is reasonable and cost effective because it would utilize fences and gates to the greatest extent possible, while allowing unburned areas to be available to grazing. Damaged wood stretch points and corners would be replaced with galvanized steel pipe thus increasing the longevity of the structures and resistance of future wildfire damages.

PART 3 – DETAILED TREATMENT COST TABLE

Emergency Stabilization		Units	FY13	FY14	FY15	FY16	Total Costs
S1	***Planning (Plan Prep/Project Management)***						
	Project Management Field Office	WM's		5,000	5,000	5,000	15,000
	Total		0	5,000	5,000	5,000	15,000
S2	***Ground Seeding (chaining)***						
	Equipment/Rental	Total		8,000			8,000
	Equipment Mobilization	Total		5,000			5,000
	Contract/Labor	Total		7,000			7,000
cultural	Clearances	Total	11,500				11,500
	Supplies/Materials/vehicle	Total		500			500
	Total		11,500	20,500	0	0	32,000
S3	***Aerial Seeding***						
grass	Contract	Total	11,400				11,400
	Contract Administration	WM's		1,000			1,000
	Seed	Total	118,000				118,000
	Vehicle			400			400
sage	Contract	Total		4,600			4,600
	Contract Administration	WM's		400			400
	Seed	Total		7,000			7,000
	Vehicle	Total		200			200
	Total		129,400	13,600	0	0	143,000
S5	***Noxious Weeds***						
	Labor	Acres		4,000			4,000
	Travel/Vehicles	Total		500			500
	Supplies/Materials	Total		500			500
	Total		0	5,000	0	0	5,000
S7	***Protective Fence/Gate***						
	Fence Removal	Total				3,000	3,000
	Fence Material	Total		6,000			6,000
	Cattle Guard	WM's		2,000			2,000
	Contract	Total		6,000			6,000
	Total		0	14,000	0	3,000	17,000
S13	***Monitoring***						
	Labor	WM's		4,500	4,500	4,500	13,500
	Travel/Vehicles	Total		500	500	500	1,500
	Total		0	5,000	5,000	5,000	15,000
	EMERGENCY STABILIZATION TOTALS		$140,900	$63,100	$10,000	$13,000	$227,000

Rehabilitation		Units	FY14	FY15	FY16	Total Costs
R1	***Planning (Plan Prep/Project Management)***					
	Project Management State Office	WM's				0
	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		4,000	4,000	8,000
	Travel/Vehicles	Total		500	500	1,000
	Supplies/Materials	Total		500	500	1,000
	Total		0	5,000	5,000	10,000
R7	***Fence/Gate/Cattle Guard***					
	Fence Material	Total	4,000			4,000
	Travel/Vehicles	Total	500			500
	Contract	Total	6,000			6,000
	Contract Administration	WM's	500			500
	Total		11,000	0	0	11,000
	BURNED AREA REHABILITATION TOTALS		$13,000	$7,000	$7,000	$27,000

PART 4 – SEED LISTS

AERIAL SEED

Species	% PLS	PLS Seeds/sq.ft	PLS Seeds/ac.	Seeds/lb (bulk)	Total Seeds/Acre (Bulk)	Aerial Seeding [Acres]	Lbs / Acre	Total Lbs.	Cost / Lb.	Total Cost
Anatone Bluebunch WG	76%	140,000	840,000	638,400	14.66	572	6	3,450	15.00	51,750.00
P-7 Bluebunch WG	76%	140,000	560,000	425,600	9.77	572	4	2,300	15.00	34,500.00
Secar Snakeriver WG	76%	170,000	510,000	387,000	8.90	572	3	1,750	17.00	29,750.00
Sherman Big Bluegrass	63%	917,000	275,100	173,313	3.98	572	0.3	200	11.00	2,200.00
TOTALS					**37.30**		**13.00**	**7,700**		**118,200.00**

Wyoming Sagebrush	12%	2,500,000	1,250,000	150,000	3.44	572	0.5	280	25.00	7,000.00
TOTALS					**3.44**		**0.50**	**280**		**7,000.00**

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 adapted to the ecological sites within the proposed treatment areas. These species have been extensively utilized in similar ecological sites within the Burley Field Office.*

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

Yes Rationale: *The native seed proposed for the estimated 572 acres in the treatment area is generally available in the required quantities. Aerial seeding for the perennial grasses would not occur until the fall of FY14 and the aerial seeding of the sagebrush would not occur until the winter and spring of FY14 which should allow seed quantities to be more available.*

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. The demand has resulted in increased production and decreased price.*

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 juniper areas (8-10" ppt.) zone species list 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 areas will be rested from livestock grazing until resource objectives listed in this ES and BAR plan are met. This will help the new herbaceous seeding treatments become established. Prior to the resumption of livestock grazing the treatment areas will have to meet minimum criteria (see monitoring plan) before livestock grazing may resume.*

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

No non-native plants are being proposed in the treatment.

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

Non-native Plants	Native Plants
	'Anatone' bluebunch wheatgrass *Psuedoroegneria spicata*
	'P-7' bluebuch wheatgrass *Pseudoroegneria spicata*
	'Sherman' big bluegrass *Poa ampla ssp. ampla*
	"Secar' Bluebunch Wheatgrass *Elymus wawawaiensis*
	Wyoming big sagebrush *Artemisia tridentata ssp. wyomingensis*

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	460	$32,000	80
S3	Aerial Seeding	Acres	572	$143,000	90
S5	Noxious Weeds	Acres	572	$5,000	90
S7	Temporary Fence/Cattle Guard	Miles	2	$17,000	100
S12	Closures (OHV, livestock, area)	#	1	$0	100
S13	Monitoring	WM's	572	$15,000	100
			TOTAL COSTS:	$212,000	

Action/ Spec. #	Planned BAR Action (LF32000BR)	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
R5	Noxious Weeds	**Acres**	572	$10,000	90
R7	Permanent Fence Repair	**Miles**	2	$11,000	100
			TOTAL COSTS:	$21,000	

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 aerial seeding of perennial grass and sagebrush will help with the establishment and recruitment of future grass and shrub cover.*

The noxious weed treatments will help protect adjacent private and BLM lands against further expansion of noxious weeds. The temporary protective fence will ensure no disturbance to the newly seeded area.

No Action *No* Rationale for answer: *Wildlife habitat on adjacent unburned land would be compromised with the expansion of noxious weeds. The burned area will have a high chance of invasion of cheatgrass and noxious weeds due to the bare soil.*

Alternative(s) 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* Rationale for answer: *Monitoring and observation 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 (as outlined in the Twin Falls District Emergency Stabilization and Rehabilitation Seed Mixture Development Instruction Memorandum/IM #ID200-2008-003 (USDI 2008), the exclusion of livestock grazing for on-site vegetation recovery and establishment, qualitative observations of successful past efforts have contributed to the relatively high probability of seeding treatment success.*

No Action *No* Rationale for answer: *The burned area has a high potential for expansion of noxious weeds and invasive plants. There is high potential for adjacent unburned areas becoming dominated by noxious weeds as well as invasive plants.*

Alternative(s) Rationale for answer: N/A

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

Proposed Action |_X_|,
Alternative(s) |__|,
No Action |__|

Comments: *The burn size, terrain and vegetation type are contributing factors of this plan having a high cost per acre ratio. The burn area is mapped as sage-grouse PPH (66% of the burn area) and PGH (33% of the burn area). Because of the priority and general sage-grouse habitat, it is critical that ES&R treatments occur to aid in the re-establishment of PPH and PGH.*

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

Monitoring and evaluation of ES and BAR treatments would be implemented to ensure that treatments are properly implemented, effective, and maintained. Monitoring methods may be qualitative or quantitative, and would be commensurate with the level of treatment complexity and extent. Monitoring and evaluation information would provide adaptive management feedback to improve ES and BAR treatment performance. Monitoring would be the responsibility of the BLM interdisciplinary team. An annual monitoring summary report would be submitted documenting treatment effectiveness.

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

1) Treatment Objectives: *The objective of the seeding treatments is to establish a perennial dominated plant community within three years. The results are based on site potential.*

The aerial seed treatment would be considered successful if:

The seeded grass species reach densities of:

1) *Three plants per square meter for grasses.*

The aerial seed treatment would be considered successful if:

1) *Sagebrush seedlings average 0.10 seedlings per square meter across all density plots; or*
2) *In qualitative surveys they 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 area would include field observations, photo plots, and cover transects utilizing the line-point intercept and density plot methods. Plots would be randomly established through the treated area. Effectiveness monitoring of the ground and aerial seeding will be done for a period of three growing seasons.*

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

1) Treatment Objectives: *Over five species of noxious weeds have been identified and recorded within the burned area. It is expected that these weeds will expand their range as a result of the Fire. Since these weed species 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 burn 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: *During the first growing season treatment, locations of noxious weed populations (by species), treatment type, and the amount of herbicide used would be documented using GPS and GIS. The second and third year objective would be measured by the number and size of locations sprayed and the amount of herbicide utilized.*

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 one, two and three 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&R.*

Treatment/Activity: **S7/R7 Temporary Protective Fence/Cattle Guard**

1) Treatment Objectives: *The objective of this treatment is to repair or replace approximately two miles of existing interior livestock management fence and to build approximately two miles of temporary protective fence and a cattle guard. This will help to ensure natural recovery of the burned area with no disturbances and help maintain grazing allotment integrity. The fences would be constructed to BLM fence standards.*

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. *Repair and replacement of damaged fences and the temporary protective fence will be monitored through contract administration. Repairs and completion will be documented in a project file "as built" and filed in the project file. Construction of temporary protective fence will be completed within the first year of the Fire. Repairs will be completed within the second or third year of the Fire.*

Treatment/Activity: ***S12 Closures (Livestock grazing)***

1) Treatment Objectives: *Exclusion of livestock is critical for the recovery of burned vegetation or establishment and protection of new seeding. The seed treatment area would be closed to livestock grazing for a minimum period of two growing seasons to promote recovery of burned vegetation and to facilitate the establishment of seeded species as specified in the 2005 Shoshone and Burley Normal Fire Rehabilitation Plan (#ID-077-2004-008).*

2) Describe how implementation will be monitored: *Resumption of livestock grazing would ultimately depend on monitoring and meeting of ES&R plan seeding and natural recovery objectives. Recovery of the treated area would be monitored for availability to grazing on a yearly basis. 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 seed treatment area would be considered recovered and available for grazing when:*

- *Recommended monitoring would include both qualitative and quantitative methods (e.g. line-point intercept or step point cover methods, density quadrates, photos points).*

- *The amount of bare mineral soil (lacking cover of plants, litter, or biological soil crust) is within 10% of what would be expected for the site.*
- *Desirable herbaceous perennial plants are producing seed.*
- *Desirable perennial vegetation have developed extensive root and shoot systems to provide for soil stabilization and are sustainable under livestock grazing.*

PART 8 - MAPS

1. Fire Perimeter
2. Colored Land Status Map
3. Burned Management Fences/Other Structures (guzzlers, signs, etc.)
4. Seeding Treatment Areas
5. Protective Fences/cattle guards and the Adjoining Pasture Fences That They Tie Into
6. Vegetation Communities
7. Threatened and Endangered Species Areas
8. Invasive Species

PART 9 – REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial and Date
Team Leader	Dustin Smith (BLM/Burley)	
Operations	Scott Uhrig (BLM/Shoshone)	
Botanist	Jason Theodozio (BLM/Burley)	
Cultural Resources/Archaeologist	Suzann Henrikson (BLM/Burley)	
Rangeland Mgt. Specialist	Tucker Porter (BLM/Burley)	
Wildlife Biologist	Jeremy Bisson (BLM/Burley)	
GIS Specialist	Denise Tolness (BLM/Burley)	
Resource Advisor(s) on Fire	Jeremy Bisson (BLM/Burley)	

PLAN APPROVAL

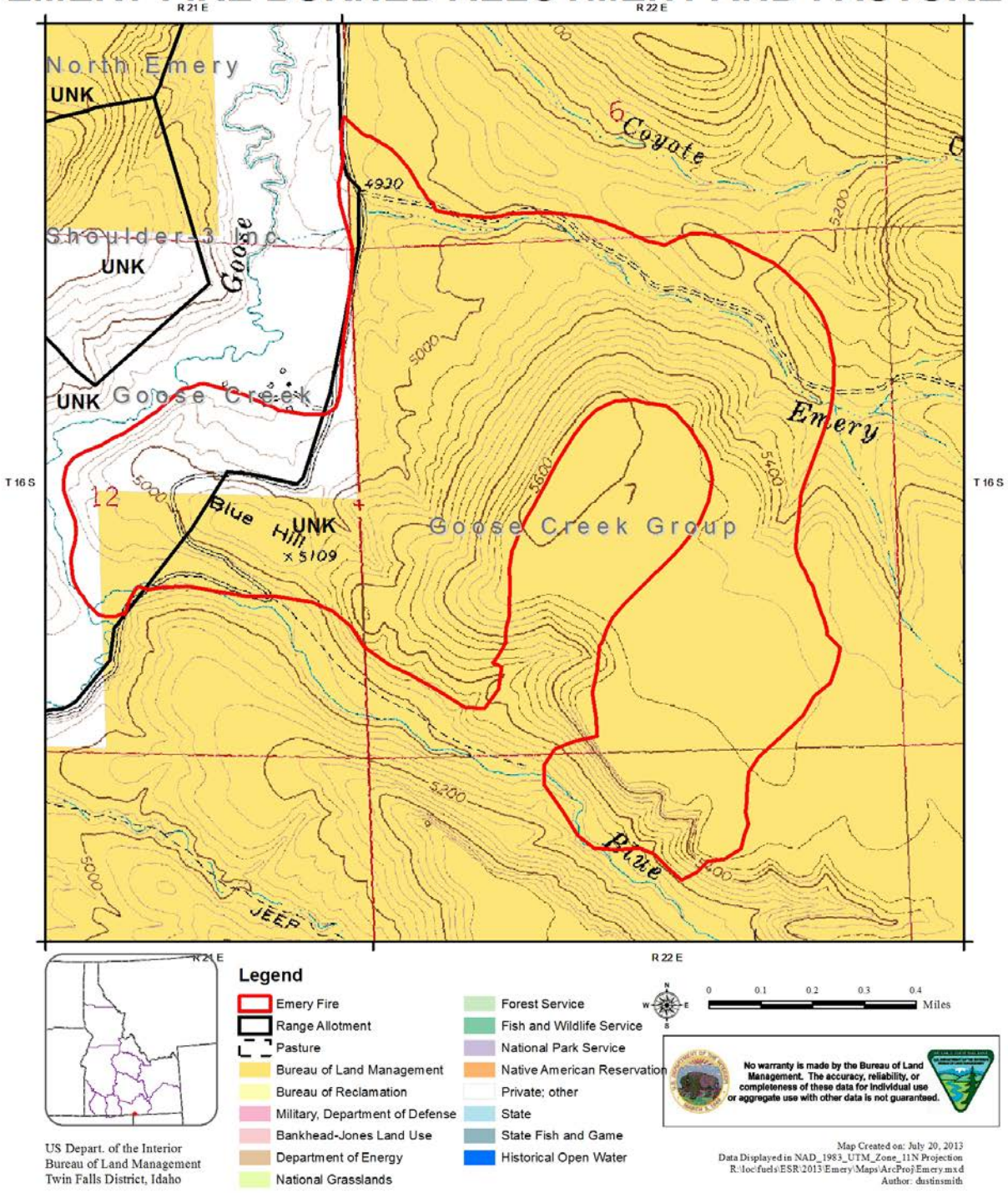
/s/ Jim Tharp for Michael C. Courtney 7/22/2013

Michael C. Courtney
FIELD OFFICE MANAGER DATE

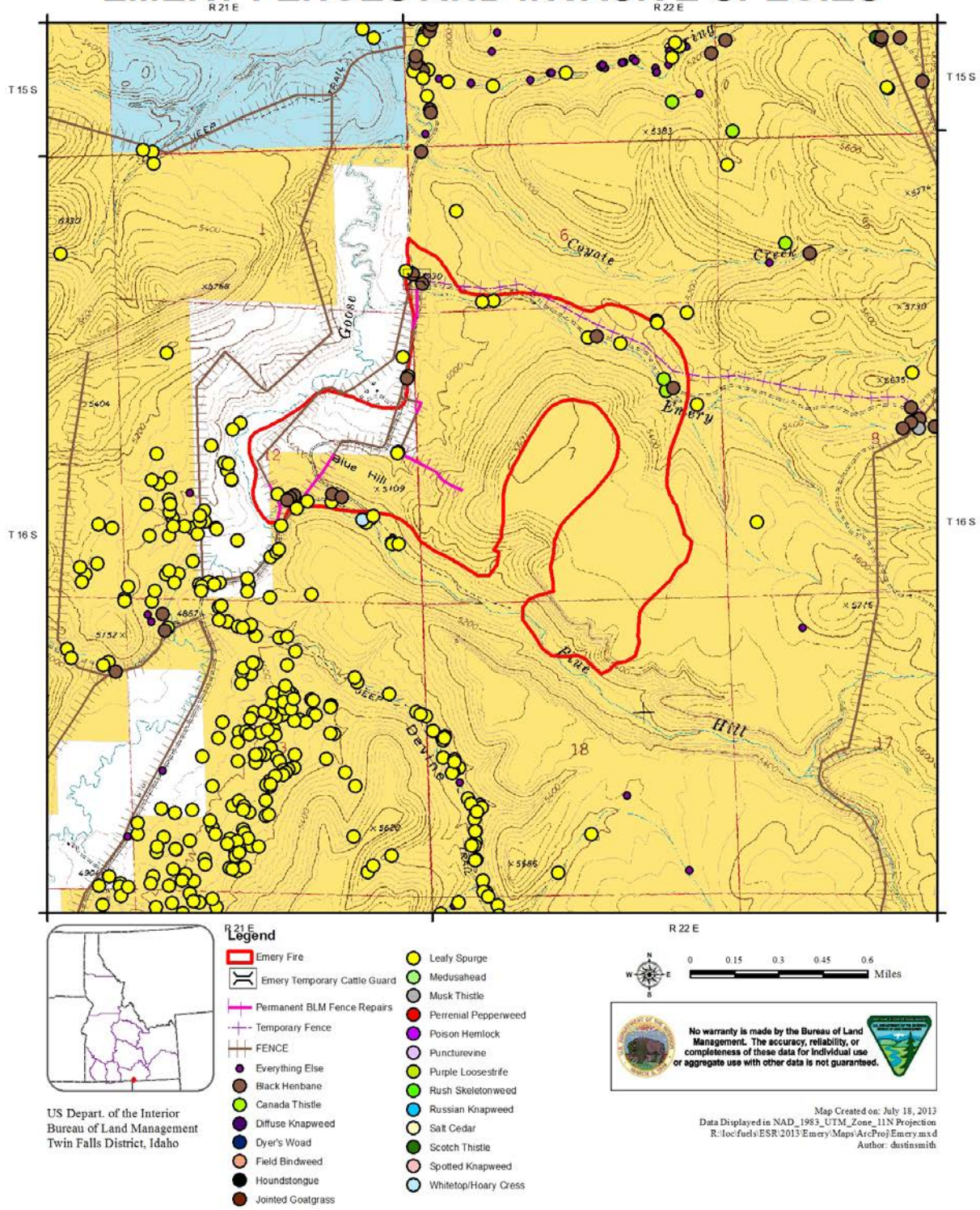
FUNDING APPROVAL

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

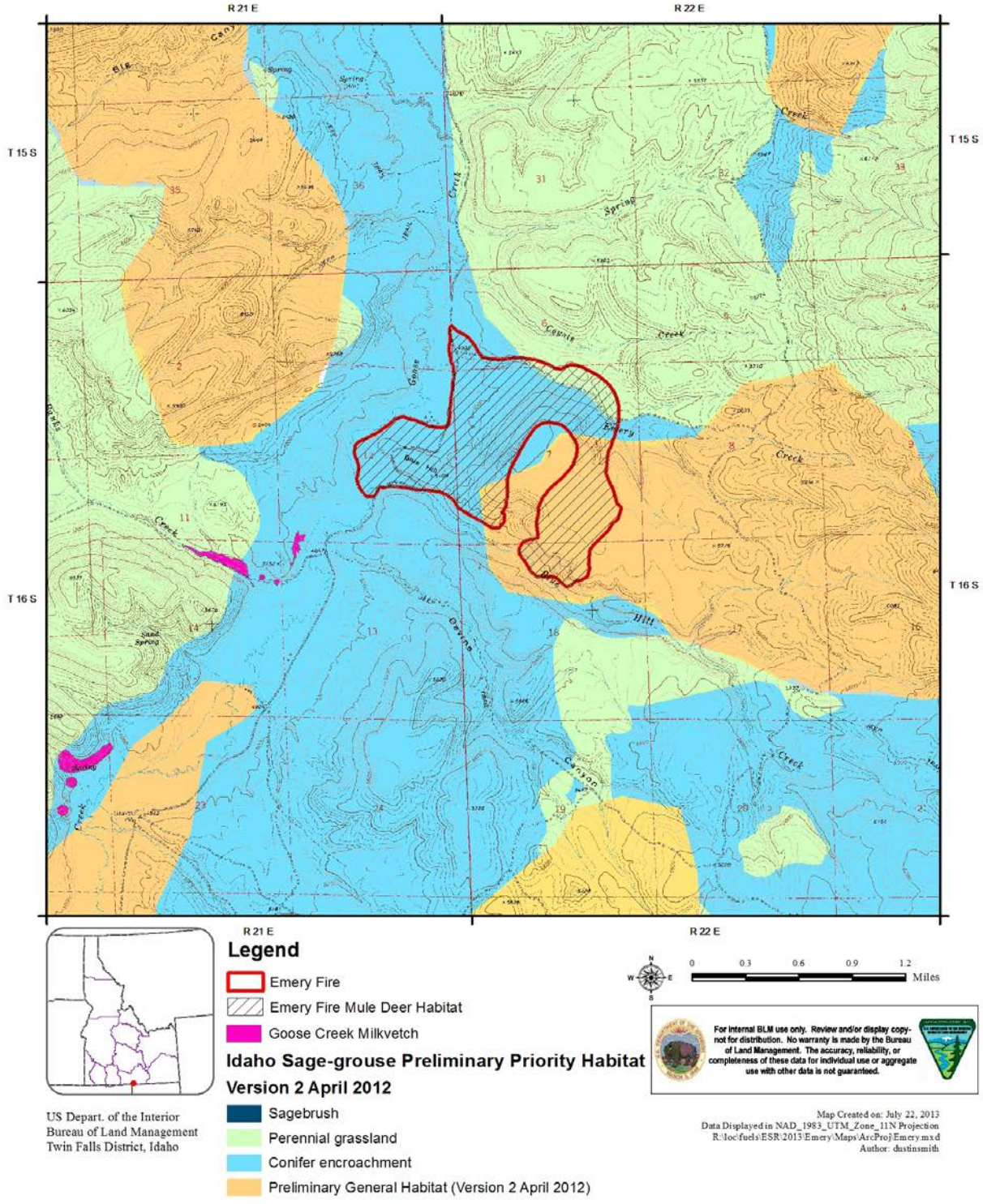
EMERY FIRE BURNED ALLOTMENT AND PASTURE



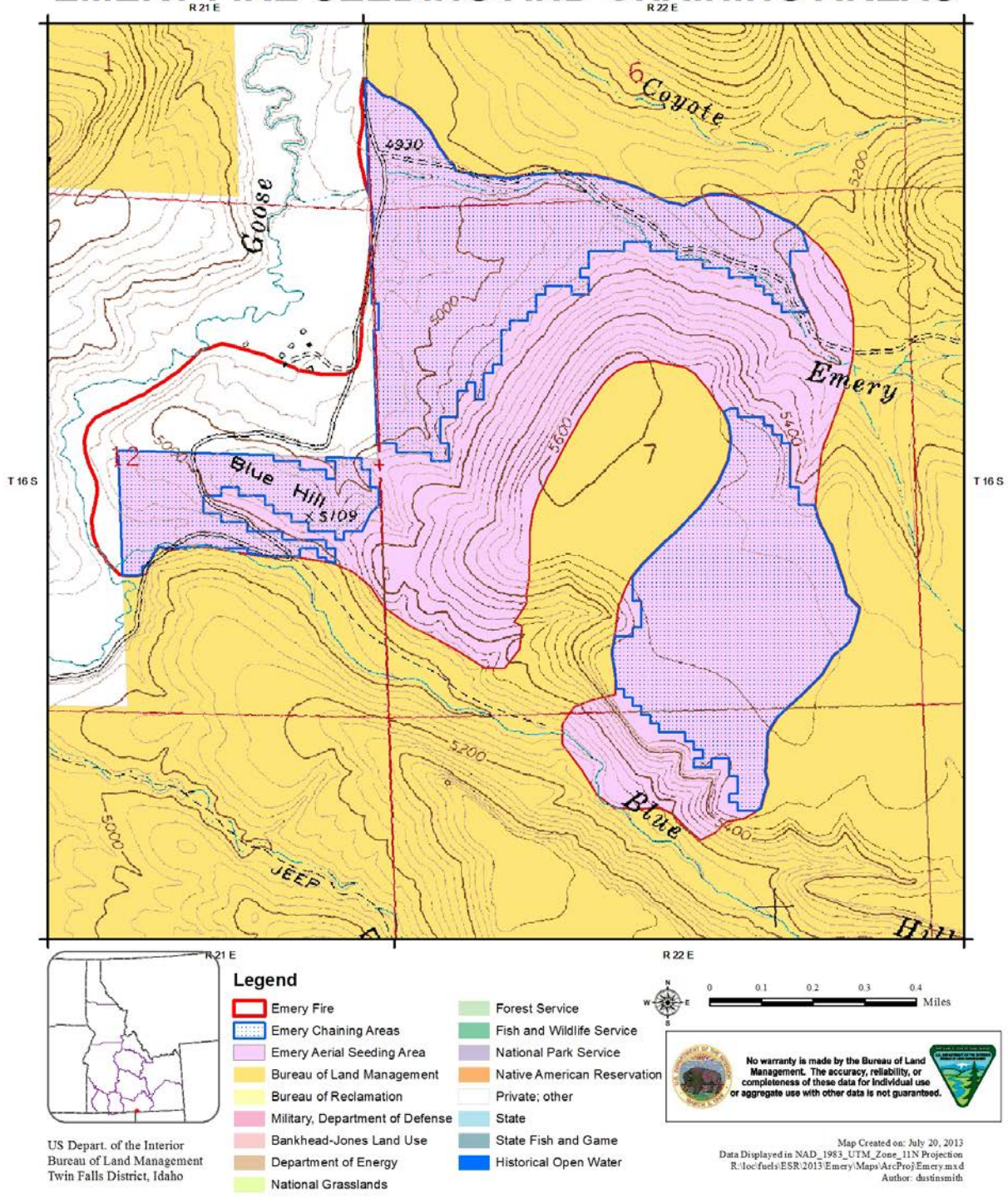
EMERY FENCES AND INVASIVE SPECIES



EMERY FIRE SAGE-GROUSE PPH AND PGH, MILKVETCH, MULE DEER HABITAT



EMERY FIRE SEEDING AND CHAINING AREAS



EMERY FIRE VEGETATION COMMUNITIES