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

BRAY LAKE FIRE

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

FIRE BACKGROUND INFORMATION

Fire Name	Bray Lake
Fire Number	HND7
District/Field Office	Twin Falls/Shoshone
Admin Number	LLIDT03000
State	Idaho
County(s)	Gooding
Ignition Date/Cause	7-03-2013/Lightning
Date Contained	7-04-2013

Jurisdiction	**Acres**
BLM	2,357
State	0
Private	45
Other	0

Total Acres	2,402
Total Costs	$402,000
Costs to LF2200000	$363,000
Costs to LF3200000	$39,000

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 Bray Lake fire started as a lighting strike on July 3, 2013 in the Clover Creek grazing allotment north of Bliss, Idaho. The fire burned a total of 2,402 acres in Gooding County. Of those acres that burned 2,357 were on BLM administered land and 45 acres on private land. The fire was contained primarily in the Bliss Point pasture of the allotment (2,216 acres). A small portion (121 acres) of the Bray Lake pasture of the Clover Creek allotment burned. Approximately 4 acres burned in the Bliss Well and Halogeton pastures of the Indian allotment.

The fire burned in low-elevation basin big and Wyoming big sagebrush habitat. The mix of vegetation communities in the burn area provided for crucial mule deer and pronghorn winter range. The fire burned a total of 1,983 acres of sage-grouse Preliminary Priority Habitat (PPH) and 87 acres of Preliminary General Habitat (PGH). The majority of the burn is mapped as sage grouse nesting and brood rearing habitat. The entire burn area is mapped as sage grouse winter range habitat. Fire intensities were a mix of high and low intensity across the burn area.

The proposed treatments will be focused on stabilization of sage grouse PPH habitat that is vulnerable to cheatgrass, medusahead wildrye, and noxious weed expansion. This area is priority for Emergency Stabilization (ES) and Burned Area Rehabilitation (BAR) efforts.

LAND USE PLAN CONSISTENCY

The following treatments are proposed under this ES and BAR plan.

Emergency Stabilization
S2 Ground Seeding
S3 Aerial Seeding (Sagebrush)
S5 Weed Control
S7 Fence, Gate, Cattleguard
S12 Livestock Closure
S13 Monitoring

Burned Area Rehabilitation
R5 Weed Control
R7 Fence, Gate, Cattleguard

The applicable land use plan for the ES/BAR project area is the 1976 Bennett Hills Management Framework Plan (MFP). The proposed treatments in this BAR plan conform to the Bennett Hills MFP. The treatments outlined in this plan are also consistent with the treatments analyzed in the Shoshone and Burley Field Office Normal Fire Rehabilitation Plan and Environmental Assessment #ID-077-2004-008.

The project is also in conformance with the analysis of Alternative E, the selected alternative, in the 2008 Final Fire, Fuels and Related Vegetation Management Direction Plan Amendment (FMDA) and Environmental Impact Statement (EIS). The Final FMDA/EIS amends all Land

Use Plans for the Shoshone Field Office except the Craters Management Plan, to provide direction and guidance for fire/fuels and related vegetation management.

The ESR 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 (acres, WMs, number)	# Units	Unit Cost (If Applicable)	FY13	FY14	FY15	FY16	Totals by Spec.
S1	**Planning (Project Mgmt.)**	**WM's**	2		$0	$10,000	$10,000	$10,000	$30,000
S2	**Ground Seeding**	**Acres**	1,636	$166.26	$197,000	$75,000	$0	$0	$272,000
S3	**Aerial Seeding (Sagebrush)**	**Acres**	800	$33.75	$20,000	$7,000	$0	$0	$27,000
S5	**Noxious Weeds**	**Acres**	2,357	$4.24	$0	$10,000	$0	$0	$10,000
S7	**Protective Fencing**	**Miles**	1.0	$3,000.00	$0	$3,000	$0	$0	$3,000
S12	**Closures (Livestock)**	**No.**	1	$0.00	$0	$0	$0	$0	$0
S13	**Monitoring**	**Acres**	2,357	$8.91	$0	$7,000	$7,000	$7,000	$21,000
	TOTAL COSTS (LF2200000)				**$217,000**	**$112,000**	**$17,000**	**$17,000**	**$363,000**

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**	2,357	$2.55	$0	$6,000	$6,000	$12,000
R7	**Fence Repair**	**Miles**	4.0	$5,250.00	$21,000	$0	$0	$21,000
	TOTAL COSTS (LF3200000)				**$23,000**	**$8,000**	**$8,000**	**$39,000**

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.

Protection Fences

The Bray Lake fire burned primarily through the Bliss Point pasture of the Clover Creek grazing allotment. First priority for protection from livestock grazing is the proposed seeding areas in the Bliss Point and Bray Lake pastures. The proposed drill and harrow seeding adjacent to unburned areas would be closed for a minimum of two growing seasons. The proposed protection fence would be critical for protection of the drill seedings and stability of the remaining permitted livestock grazing permits. The protection fence would prohibit livestock grazing in the seeded portions of the Bray Lake and Bliss Point pastures. Over 90% of the Bray Lake pasture is unburned and would remain available for livestock with the protection fence

Treatment Activity:S7 Fence, Gate , Cattleguard

A. *Treatment Activity Description.* The objective of this treatment is to construct approximately 0.5 miles of protection fence in the Bray Lake pasture. The protection fence would be constructed to BLM fence standards.
B. *How does the treatment relate to damage or changes caused by the fire?* The wildfire burned through the Bliss Point and Bray Lake pastures of the Clover Creek allotment disrupting the future grazing system. Priority for protection was given to proposed drill seedings. A protection fence would be required in the Bray Lake pasture. The fire burned approximately 2% of the pasture that will require seeding treatment. The protection fence would allow stabilization and recovery of the burn area and drill seeded areas while maintaining the

integrity of the livestock grazing system.

C. *Why is the treatment/activity reasonable, within policy, and cost effective?* New fence construction contracts typically run $10,000 per mile, including removal. The cost of damage to the vegetation resource from livestock grazing adjacent unburned areas during the recovery period would be much higher.

Livestock Closure

The Bray Lake burn area would be rested from livestock grazing until monitoring shows that rehabilitation objectives have been met. This rest would provide the opportunity for existing vegetation resources to stabilize the burn area and seeding efforts to establish. The burn area primarily affected the Bliss Point and Bray Lake pastures of the Clover Creek grazing allotment.

Treatment/Activity:S12 Livestock Closure

A. Treatment Activity Description. The Bray Lake burn area would be rested from livestock grazing until monitoring shows that ES/BAR rehabilitation objectives have been met.

B. How does the treatment relate to damage or changes caused by the fire? The purpose of this treatment is to rest the burn area from livestock grazing to provide the opportunity for existing vegetation resources to stabilize the burn area and seeding efforts to establish. Establishment of a perennial plant community would inhibit the expansion of annual vegetation and stabilize soil resources.

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

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

Wildlife Habitat

The Bray Lake burn negatively affected 1,995 acres of sage grouse PPH. The burn also negatively affected crucial winter range habitat for mule deer and pronghorn. Fire intensities were the highest in sage grouse PPH where sagebrush cover was dominant. The fire destroyed critical sagebrush cover for nesting and wintering sage grouse populations. The loss of sagebrush cover also reduced important browse and thermal cover for wintering big game.

Proposed sagebrush habitat rehabilitation will be focused in this area due to high fire intensities and associated negative impacts to wildlife habitat. Sage grouse, mule deer, and pronghorn are dependent on sagebrush plant communities for their year round habitat needs, especially winter browse. Due to the wildfire impacts, current conditions are not optimum for sage grouse or big game habitat. High fire intensities have impacted seed bank sources for sagebrush habitat recovery, therefore previous habitat conditions are not expected to recover naturally without a seeding effort.

Treatment Activity: S3 Aerial Seeding

A. *Treatment/Activity Description.* Approximately 800 acres of the Bray Lake fire would be aerial seeded with basin big and Wyoming big sagebrush in the winter of 2013/2014 (FY14). The sagebrush seeding would be strip seeded over the proposed drill and harrow seeding. Strip seeding of sagebrush allows for complete coverage of the burn area at a more economical cost and in the long term establishes a desirable mosaic habitat pattern.

   In addition to the sagebrush aerial seeding, fall hand planting of sagebrush and bitterbrush would be implemented with non-ESR funding.

Bray Lake Aerial Sagebrush Seed Mix-800 Acres

Species and Variety	Seed Rate Lbs/Acre
1. 'Basin' Big Sagebrush	0.50 (bulk)
2. 'Wyoming' Big Sagebrush	0.50 (bulk

B. *How does the treatment relate to damage or changes caused by the fire?* The objective of this treatment is to reestablish a desirable perennial plant community that more closely matches the structural and species composition and diversity of the native plant community to help achieve a healthy functioning rangeland. Accelerating the rate of reestablishment of sagebrush is important to maintaining the value of the area as sage grouse PPH, mule deer and antelope wintering habitat. Sagebrush is also an important component of suitable habitat for a number of sensitive sagebrush obligate species. The wildfire intensity impacted existing sagebrush cover which would not recover naturally without providing additional seed source.

C. *Why is the treatment/activity reasonable, within policy, and cost effective?* Prior to the fire the proposed sagebrush aerial seeding area contained a native sagebrush plant community that provided crucial wildlife habitat. Without accelerated establishment of desirable sagebrush cover it is expected that wildlife habitat will be negatively affected in the long term by reduction of plant community structure and diversity. High fire intensities have also temporarily reduced the annual vegetation seed bank allowing for an increased probability of establishing sagebrush habitat by aerial seeding. The proposed treatment is consistent with current policy for sage-grouse habitat management. Contracting costs for aerial application are typical for the Shoshone 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.

Not Applicable.

ES Issue 5 - Invasive Plants and Weeds.

The following is a list of common pre-burn vegetation in order of dominance. 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, in sage grouse PPH and in poor to fair ecological condition.

Common Pre-burn Vegetation in Order of Dominance:

Wyoming Big sagebrush, *Artemisia tridentata ssp. wyomingensis*
Basin Big Sagebrush, *Artemisia tridentata ssp. tridentata*
Cheatgrass, *Bromus tectorum*
Medusahead Wildrye, *Taeniatherum caput-medusae*
Sandberg bluegrass, *Poa secunda*
Bitterbrush, *Purshia tridentata*
Russian Knapweed, *Centaurea repens*
Rush skeletonweed, *Chondrilla juncea*
Diffuse Knapweed, *Centaurea diffusa*

Ecological Site(s):
Clay Pan 8-10 Wyoming Big Sagebrush/Bluebunch Wheatgrass
Loamy 8-10 Wyoming Big Sagebrush/Bluebunch Wheatgrass

Soil-vegetation correlation information indicates that the burn area is located primarily on a Clay Pan 8-10" Wyoming Big Sage or Loamy 8-10" Wyoming Big Sagebrush/Bluebunch ecological site. The potential natural plant communities on these sites would be comprised of Wyoming big sagebrush over story with principal understory plants dominated by bluebunch wheatgrass. Antelope bitterbrush is an important browse component of this plant community. Vegetation observations and data show a general lack of mid-bunch grasses in the plant community.

Cheatgrass and medusahead wildrye are the most common invasive species and would dominate the burn area without treatment. Re-vegetation with desirable, competitive species would provide effective competition against annual vegetation and noxious weeds in the long term.

Fire Intensity and Vegetation

The Bray Lake fire was characterized by low and high fire intensity. Areas with a dense overstory of sagebrush and a predominately exotic annual vegetation understory had higher intensities. The higher intensity burn areas removed the majority of plant cover and have exposed soils to accelerated soil erosion. These areas are a major concern due to wind erosion and the expansion of annual exotic vegetation and noxious weeds. The low intensity fire areas had a dense sagebrush component with primarily an annual vegetation understory. These low intensity areas were mainly along suppression backfiring efforts. These lower intensity areas cannot be drill seeded due to the dense sagebrush skeletons. Seed treatments in these low intensity areas will require a broadcast and harrow seed treatment.

Treatment/Activity: S2 Ground Seeding

A. *Treatment/Activity Description.* Approximately 1,636 acres within the Clover Creek allotment would be drill and broadcast seeded followed by a harrow with a mixture of grasses, forbs and shrubs. Approximately 1,236 acres would be drill seeded and 400 acres would receive a broadcast and harrow seed treatment. Seed would be applied at the rates

shown in the following tables. The seed treatment area is within sage grouse PPH.

Bray Lake Drill Seed-1,236 Acres

Species and Variety	Seed Rate Lbs/Acre
Grasses	
1. 'Discovery' Snake River Wheatgrass*	2.50
2. 'Anatone' Bluebunch Wheatgrass*	1.50
3. 'Vavilov II' Siberian Wheatgrass	2.00
4.'Alkar' Tall Wheatgrass	1.00
5. 'Sherman' Big Bluegrass*	0.30
Forbs	
1. Palmer Penstemon	0.10
2. 'Maple Grove ' Lewis Flax	0.20
Shrubs	
1. Bitterbrush♦	0.50
*** Native Cultivar / ♦ Wildland Collected**	

Bray Lake Broadcast Seed and Harrow-400 Acres

Species and Variety	Seed Rate Lbs/Acre
Grasses	
1. 'Discovery' Snake River Wheatgrass*	3.00
2. 'Anatone' Bluebunch Wheatgrass*	2.00
3. 'Vavilov II' Siberian Wheatgrass	2.50
4.'Alkar' Tall Wheatgrass	1.25
5. 'Sherman' Big Bluegrass*	0.40
Forbs	
1. 'Eagle' Western Yarrow*	0.10
*** Native Cultivar / ♦ Wildland Collected**	

B. *How does the treatment relate to damage or changes caused by the fire?* The objective of this treatment is to reestablish a desirable herbaceous perennial plant 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). The seed mix is designed to provide species and structural

diversity important to sage-grouse and other sagebrush-steppe obligate wildlife.

C. *Why is the treatment/activity reasonable, within policy, and cost effective?* Prior to the fire the proposed drill seed area contained a native sagebrush plant community with an annual vegetation understory. This proposed drill seed area is at high risk for degradation by noxious weeds and invasive plants if left untreated. Without establishment of a desirable perennial dominated plant community it is expected that annual vegetation would dominate the plant community and negatively affect wildlife habitat in the long term. Fire frequency would increase with annual vegetation dominance thus reducing plant community structure and diversity. The proposed treatment is consistent with current policy for fuels management and sage-grouse habitat management. In addition, the species selected are adapted to low elevation (8-10" ppt.) zones (USDI 2008). The ground seeding costs can vary year to year (approximately $50-100/acre) but are typical for projects of this type.

Noxious Weeds

Russian knapweed, diffuse knapweed, and rush skeletonweed are the primary noxious weeds of concern with high potential to increase within the burned area and surrounding rangeland. These weeds were documented during the fire reconnaissance surveys. Bio-control for knapweed has been implemented in the past.

The current state of the noxious weed infestation is treatable if done within the next three growing seasons. Without a noxious weed control effort, Russian knapweed, rush skeletonweed and diffuse knapweed will significantly increase negatively affecting big game habitat, sage grouse PPH and livestock forage capabilities. If an emergency treatment is not implemented the economic impact to natural resources and the local economy will be significant. The costs to suppress noxious weeds after a significant expansion has occurred increases exponentially. Spot herbicide spraying and biological control would be proposed 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*. 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. All actions would be in accordance with the Shoshone District Noxious Weed Management Plan, Environmental Assessment #ID050-EA-92031. Russian knapweed, diffuse knapweed, and rush skeletonweed are the primary noxious weeds targeted.
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 on the burned area. In addition, biological control agents for knapweed would be utilized. Knapweed and rush skeletonweed infestations are present in the area and are expected to increase due to the removal of existing plant cover by the wildfire. Treatments would be conducted for one year under ES.
C. *Why is the treatment/activity reasonable, within policy, and cost effective?* Weed treatments in this Field Office typically run about $3.21 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

Russian knapweed, diffuse knapweed, and rush skeletonweed are the primary noxious weeds of concern with high potential to increase within the burned area and surrounding rangeland. These weeds were documented during the fire reconnaissance surveys. The current state of the infestation is treatable if done within the next three growing seasons. Without a noxious weed control effort noxious weeds will significantly increase negatively affecting sage grouse PPH and big game habitat and livestock forage capabilities. If an emergency treatment is not implemented the economic impact to natural resources and the local economy will be significant. The costs to suppress noxious weeds after a significant expansion has occurred increases exponentially. Spot herbicide spraying and biological control would be proposed under rehabilitation to suppress the expansion of these weeds. Weed control would be conducted the first year under ES.

Treatment Activity: R5 Noxious Weeds

A. *Treatment/Activity Description.* Noxious weed inventory and control within the burned area would be done the second and third year following the fire to directly treat the expected weeds. All actions would be in accordance with the Shoshone District Noxious Weed Management Plan, Environmental Assessment #ID050-EA-92031. Russian knapweed, diffuse knapweed, and rush skeletonweed are the primary noxious weeds targeted.
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 on the burned area. In addition, biological control agents for knapweed would be utilized in areas not easily accessible to spraying equipment (rocky outcrops). Noxious weed infestations are present in the burn area and are expected to increase due to the removal of existing plant cover by the wildfire. Noxious weed control would be conducted

the second and third year under BAR.

C. *Why is the treatment/activity reasonable, within policy, and cost effective?* Weed treatments in this Field Office typically run about $3.21 per acre. 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 3.70 miles of interior pasture fence was damaged or destroyed by the fire. Primary damage occurred in the Clover Creek allotment. Damaged wire, corners and braces would be repaired or replaced. The repairs would be needed to maintain the integrity of the grazing systems and keep adjacent livestock grazing from entering the burn area during the rest period.

R7 Fence/Gate/Cattleguard

A. *Treatment/Activity Description.* The objective of this treatment is to repair or replace approximately 3.7 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 allotment. Reconstruction and repair of management fences damaged by the fire would maintain the future integrity of the existing livestock grazing system. 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 $5,000 per mile. This cost is typically lower than construction of new fence. Damaged wood stretch points and corners would be replaced with galvanized steel pipe thus increasing the longevity of the structures and would be resistant to future wildfire damages.

PART 3 – DETAILED TREATMENT COST TABLES

Bray Lake-HND7-Emergency Stabilization		Units	FY13	FY14	FY15	FY16	Total Costs
S1	***Planning (Plan Prep/Project Mgmt.)***						
	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	10,000	10,000	10,000	30,000
S2	***Ground Seeding (drill and harrow)***						
	Travel/Vehicles	Total		2,000			2,000
	Equipment Mobilization	Total		4,000			4,000
	Contract	Total		18,000			18,000
	Contract Administration	WM's		5,000			5,000
	Drill & Harrow Use Rate	Total		44,000			44,000
	Seed	Total	164,000				164,000
	Seed Mixing	WM's		2,000			2,000
cultural	Clearances	Total	33,000				33,000
	Total		197,000	75,000	0	0	272,000
S3	***Aerial Seeding***						
	Contract	Total		5,000			5,000
	Contract Administration	WM's		2,000			2,000
	Seed	Total	20,000				20,000
	Total		20,000	7,000	0	0	27,000
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
S7	***Protective Fence/Cattleguard***						
	Fence Material	Total		1,000			1,000
	Contract	Total		2,000			2,000
	Total		0	3,000	0	0	3,000
S13	***Monitoring***						
	Labor	WM's		6,000	6,000	6,000	18,000
	Travel/Vehicles	Total		1,000	1,000	1,000	3,000
	Total		0	7,000	7,000	7,000	21,000
	EMERGENCY STABILIZATION TOTALS		$217,000	$112,000	$17,000	$17,000	$363,000

Bray Lake-HND7-Burned Area Rehabilitation		Units	FY14	FY15	FY16	Total Costs
R1	***Planning (Plan Prep/Project Mgmt.)***					
	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		5,000	5,000	10,000
	Travel/Vehicles	Total		500	500	1,000
	Supplies/Materials	Total		500	500	1,000
	Total		0	6,000	6,000	12,000
R7	***Fence/Gate/Cattle Guard***					
	Fence Material	Total	8,000			8,000
	Travel/Vehicles	Total	500			500
	Contract	Total	12,000			12,000
	Contract Administration	WM's	500			500
	Total		21,000	0	0	21,000
	BURNED AREA REHABILITATION TOTALS		$23,000	$8,000	$8,000	$39,000

PART 4 – SEED LISTS

BRAY LAKE DRILL SEED

Species	% PLS	Seeds/lb (bulk)	Total Seeds/Acre (Bulk)	PLS Seeds/acre	PLS Seeds/sq.ft.	Drill Seeding [Acres]	Lbs/Acre	Total Lbs.	Cost / Lb.	Total Cost
Snake River Wheatgrass	.85	170,000	425,000	361,250	8.29	1,236	2.50	3,100	15.50	48,050.00
Bluebunch Wheatgrass	.85	140,000	210,000	178,500	4.09	1,236	1.50	1,850	15.00	27,750.00
Siberian Wheatgrass	.85	220,000	440,000	377,400	8.66	1,236	2.00	2,500	5.00	12,500.00
Tall Wheatgrass	.85	80,000	80,000	68,000	1.56	1,236	1.00	1,250	3.30	4,125.00
Big Bluegrass	.70	917,000	275,100	192,570	4.42	1,236	0.30	400	11.00	4,400.00
Penstemon	.76	600,000	60,000	45,600	1.04	1,236	0.10	150	24.50	3,675.00
Lewis Flax	.78	420,000	84,000	65,520	1.50	1,236	0.20	250	20.50	5,125.00
Bitterbrush	.85	15,000	7,500	6,375	.14	1,236	0.50	600	28.50	17,100.00
Totals					**29.70**		**8.10**	**10,100.00**		**122,725.00**

BRAY LAKE BROADCAST SEED and HARROW

Species	% PLS	Seeds/lb (bulk)	Total Seeds/Acre (Bulk)	PLS Seeds/acre	PLS Seeds/sq.ft.	Harrow Seeding [Acres]	Lbs/Acre	Total Lbs.	Cost / Lb.	Total Cost
Snake River Wheatgrass	.85	170,000	510,000	433,500	9.95	400	3.00	1,200	15.50	18,600.00
Bluebunch Wheatgrass	.85	140,000	280,000	238,000	5.46	400	2.00	800	15.00	12,000.00
Siberian Wheatgrass	.85	220,000	550,000	467,500	10.73	400	2.50	1,000	5.00	5,000.00
Tall Wheatgrass	.85	80,000	100,000	85,000	1.95	400	1.25	500	3.30	1,650.00
Big Bluegrass	.70	917,000	366,800	256,760	5.89	400	0.40	150	11.00	1,650.00
Yarrow	.85	2,700,000	270,000	229,500	5.26	400	0.10	50	34.50	1,725.00
Totals					**39.24**		**9.25**	**3,700.00**		**40,625.00**

AERIAL SEED SAGEBRUSH

Species	% PLS	Seeds/lb (bulk)	Total Seeds/Acre (Bulk)	PLS Seeds/acre	PLS Seeds/sq.ft.	Aerial Seeding [Acres]	Lbs/Acre	Total Lbs.	Cost / Lb.	Total Cost
Basin Big Sagebrush	.12	2,500,000	1,250,000	150,000	3.44	800	0.50	400	24.00	9,600.00
Wyoming Big Sagebrush	.12	2,500,000	1,250,000	150,000	3.44	800	0.50	400	24.50	9,800.00
Totals					**6.88**		**1.00**	**800**		**19,400.00**

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?
|X| Yes |__| No
Rationale: The proposed native species are all adapted to the ecological sites within the proposed seeding area. The proposed native species were selected utilizing guidance from the Shoshone/Burley Normal Fire Rehabilitation and Environmental Assessment/EA #ID-077-2004-008 (USDI 2005) and the Twin Falls District Emergency Stabilization and Rehabilitation Seed Mixture Development Instruction Memorandum/IM #ID200-2008-003 (USDI 2008). The native taxa were selected from the low elevation (8-10" ppt.) zone species list. This list was developed utilizing field experience and success in similar ecological sites within the Twin Falls District management area.

2. Is seed or seedlings of native plants available in sufficient quantity for the proposed project?
|X| Yes |__| No
Rationale: Native seed proposed for use is generally available in the required quantities. Drill seeding would not occur until the fall of 2013 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 ESR Plan objectives?
|X| Yes |__| No
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?
|X| Yes |__| No
Rationale: The proposed native species were selected from the low elevation (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 (USDI 2008). The native taxa provided in the list have exhibited the ability to establish and persist in similar ecological sites in the Twin Falls District management area.

5. Will the current or proposed land management (e.g. wildlife populations, recreation use, livestock, etc.) after the seeding establishment period maintains the seeded native plants in the seed mixture?
|X| Yes |__| No
Rationale: The seeded area will receive a minimum of two growing seasons of rest for establishment prior to resumption of livestock use. The current livestock management grazing system should effectively maintain the plant community over the long term.

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

General Note: The likelihood of introducing a non-native plant species into a plant community without altering the present competitive interaction among remnant native and non-native

species is remote. The proposed seeding of non-native species in this project may result in long-term disruption of ecological processes within the plant community on treated areas. However, the treatment area has already been disrupted by non-native species and the proportion of non-native to native species is low. The inclusion of non-native species is to enhance the probability of re-establishment of a perennial plant community in an environment where normal plant successional processes have been altered by invasion of exotic annual grasses and forbs, along with noxious weeds, and difficult site conditions (i.e. clay soils). Establishing a stable, diverse, multi-layered perennial plant community utilizing both native and non-native cultivars is expected to restore resource values that might not recover naturally, considering the pre-fire plant community and site conditions.

1. Is the use of non-native plants necessary to meet objectives, e.g., consistent with applicable approved field unit management plans?
|X| Yes |__| No
Rationale: The use of the proposed non-native plant species is in conformance with the goals and objectives outlined in the 2005 Shoshone and Burley Field Office Normal Fire Rehabilitation Plan. The proposed use of non-native plants is not located within a Wilderness or Wilderness Study Area.

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?
|X| Yes |__| No
Rationale: The proposed treatment area supported a sagebrush community with an herbaceous understory of exotic annual grasses, noxious weeds, and remnant native grasses and forbs. The natural successional processes and interspecific competition which normally occur within a native plant community have been altered by the introduction and establishment of exotic annual grasses and noxious weeds such as cheatgrass, diffuse knapweed, and rush skeletonweed. The proposed non-native plants can effectively compete with these species. Establishing a competitive perennial plant species with a mixture of native and non-native species will promote a greater degree of resiliency within the plant community and restore more natural successional processes.

3. Will non-native plants stay on the site they are seeded and not significantly displace or interbreed with native plants?
|X| Yes |__| No
Rationale: The proposed introduced plant species have been used in seedings in the Shoshone Field Office management area for over 40 years. The seedings have occurred in range sites similar to those which were burned. Incidental establishment of the proposed species may occur outside of the treatment area by the seasonal movement of various 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)

Non-native Plants	Native Plants
'Vavilov' Siberian Wheatgrass *Agropyron sibericum*	'Anatone' Bluebunch Wheatgrass *Pseudoroegneria spicata*
'Alkar' Tall Wheatgrass *Agropyron elongatum*	'Discovery' Snake River Wheatgrass *Elymus waiwaiensis*
	'Sherman' Big Bluegrass *Poa ampla*
	'Palmers' Penstemon *Penstemon palmeri*
	'Maple Grove' Lewis Flax *Linum lewisii*
	Bitterbrush *Purshia tridentata*

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	1,636	$272,000	80
S3	Aerial Seeding (Sagebrush)	Acres	800	$27,000	70
S5	Noxious Weeds	Acres	2,357	$10,000	90
S7	Protection Fence	Miles	0.50	$3,000	100
S12	Closures (OHV, livestock, area)	#	1	$0	100
S13	Monitoring	Acres	2,357	$21,000	100
			TOTAL COSTS:	$333,000	

Action/ Spec. #	Planned BAR Action (LF3200000)	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
R5	Noxious Weeds	Acres	2,357	$12,000	90
R7	Fence/Gate/Cattleguard	Miles	3.70	$21,000	100
			TOTAL COSTS:	$33,000	

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 |_X_| No |__| Rationale for answer: The ground and aerial seedings would establish a perennial plant community which would effectively compete against annual vegetation. The noxious weed treatments would protect the burn area and adjacent BLM lands against further expansion of noxious weeds.
No Action: Yes |__| No |_X_| Rationale for answer: Wildlife habitat on adjacent unburned lands would be compromised with the expansion of invasive plants and noxious weeds.
Alternative(s): Yes |__| No |__| Rationale for answer: N/A

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

Proposed Action: Yes |_X_| No |__| Rationale for answer: Monitoring and observations of recent weed control efforts in similar soils and precipitation zones indicate that success would be high (Clover/FK04/2010 and Dead Horse/F9FT/2011 fire monitoring reports). Normal climatic conditions, the use of competitive adapted species, 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: Yes |__| No |_X_| Rationale for answer: The burned area has a high potential for expansion of invasive plants and noxious weeds. There is also high potential for invasion of noxious weeds into adjacent unburned areas.
Alternative(s): Yes |__| No |__| Rationale for answer: N/A

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

Proposed Action: |_X_|,
No Action: |__|
Alternative(s): |__|,
Comments: None

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		

Resource Value	N/A	None	Low	Medium	High
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 ESR 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 ESR 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 Ground Seeding and S3 Aerial Seeding

1) Treatment Objectives:

The objective of the seeding treatments is to establish a perennial dominated plant community within 3 years. The following grass, forb, and shrub density objectives are based on ecological site potential.

The drill and harrow seed treatments would be considered successful if:

The seeded grass, forb, and shrub species reach densities of:

1) 3 plants per square meter for grasses;
2) 0.3 plants per square meter for forbs; and
3) 0.10 plants per square meter for shrubs (bitterbrush).

The aerial seed treatment of sagebrush would be considered effective if:

1) Sagebrush seedlings average 0.1 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 seeding and aerial seeding will be done for a period of three growing seasons.

Treatment/Activity: S5 and R5 Noxious Weed Treatments

1) Treatment Objectives:

Diffuse knapweed, rush skeleton weed and Russian knapweed are the primary weeds of concern in the burn area. It is expected that these weeds would 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 and treat any noxious weeds discovered on the burn area.

The objective for the second and third years is to decrease the acreage needing treatment as determined by the first year inventory.

2) Describe how implementation will be monitored:

During the first growing season treatment, a detailed map of location, weed species sprayed, and the amount of herbicide utilized would be documented. 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.

At the end of three years of treatment, the herbicide spray data would be summarized. If further treatment is required beyond the third year then the responsibility for treatment would be forwarded to the Twin Falls District normal weed spraying program.

Treatment/Activity: S12 Livestock Closure

1) Treatment Objectives:

Exclusion of livestock is critical for the recovery of burned vegetation or establishment and protection of new seedings. The burn area and 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 plan

ground 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 burn area to livestock would be the responsibility of an interdisciplinary team.

Implementation is monitored through rangeland management administration. A grazing decision would be issued closing the burn area to livestock grazing.

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 crust) is within 10% of what would be expected for the site,
- 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.

Natural recovery areas would be considered recovered and available for grazing when:

- Recovered herbaceous vegetation is providing sufficient ground cover to protect the site from accelerated erosion and expansion/conversion to annual grasses and noxious weeds.
- 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. Recommended study methods include line-point intercept or step point cover methods and photo points.

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
- Seed Production

An evaluation of collected monitoring data is completed documenting that reintroducing grazing to the area would not cause a downward trend in vegetation recovery.

Treatment Activity: R7 and S7 Fence/Gate/Cattleguard

1) Treatment Objectives:

The objective of this treatment is to repair or replace approximately 3.7 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.

The second objective would be to install approximately 0.5 miles of protection fence to protect natural recovery and drill seeded areas from continued livestock grazing in adjacent unburned areas.

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 protective fence installation will be monitored through contract administration. Repairs and protective fence installation will be documented in a project file "as built" and filed in the project file. Repairs and protective fence installation will be completed within the first year of the fire.

PART 8 - MAPS

1. Fire Perimeter
2. Colored Land Status Map
3. Burned Management Fences/Other Structures (guzzlers, signs, etc.)
4. Seeding or Seedling Treatment areas

References Cited

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). *Shoshone and/Burley Field Offices 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 9 – REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial and Date
Team Leader	Joe Russell (BLM, Shoshone FO)	JR 7/18/13
Operations	Scott Uhrig (BLM, Twin Falls DO)	SU 7/18/13
NEPA Compliance & Planning	Lisa Cresswell (BLM, Shoshone FO)	LJC 7/22/13
Botanist	Danelle Nance (BLM, Shoshone FO)	DN 7/22/13
Cultural Resources/Archeologist	Lisa Cresswell (BLM, Shoshone FO)	LJC 7/22/13
Rangeland Mgt. Specialist	Ray Pease (BLM, Shoshone Field FO)	RP 7/22/13
Wildlife Biologist	Gary Wright (BLM, Shoshone FO)	GW 7/18/13
GIS Specialist	Cassie Mavencamp (BLM, Shoshone FO)	CM 7/18/13
Resource Advisor(s) on Fire	Danelle Nance (BLM, Shoshone FO)	DN 7/22/13

PLAN APPROVAL

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

/s/ Elizabeth Maclean 7/22/13

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.