

**COLD FIRE
EMERGENCY STABILIZATION PLAN**

**BLM/BOISE DISTRICT/FOUR RIVERS FIELD OFFICE
IDAHO**

FIRE BACKGROUND INFORMATION

Fire Name	Cold
Fire Number	DUY5
District/Field Office	Boise/Four Rivers
Admin Number	ID 102
State	Idaho
County(s)	Elmore
Ignition Date/Cause	07-29-07/Human
Date Contained	08-01-07
Jurisdiction	
BLM	2,778
State	576
Private	213
Other	0
Total Acres	3,567
Total ES Plan Costs	\$116,000

Status of Plan Submission (check one box below)	
✓	Initial Submission of Complete ES Plan
	Updating or Revising the Initial Submission
	Amendment

PART 1. - EMERGENCY STABILIZATION PLAN SUMMARY

BACKGROUND ON THE FIRE (optional)

The Cold Fire burned 2,778 acres of public lands located within: the Hot Springs Allotment (1,126 acres), Hammett 4 Allotment (1,598 acres), and East Hammett Allotment (54 acres). The Hot Springs Allotment is grazed by cattle 4/10-6/30 (270 AUMS), 7/1-11/30 (5 AUMS) and 10/13-12/31 (311 AUMS). The Hammett 4 Allotment is grazed by cattle 4/10-6/30 (944 AUMs) and 10/15-12/31 (1,162 AUMs), and sheep trail through the allotment in June (100 AUMS).

Pre-fire vegetation along the northern extent of the fire, above the rim, was characterized by Mountain big sagebrush intermixed with scattered occurrences of rabbitbrush, serviceberry and patches of bitterbrush forming a major shrub component. Low sagebrush occurred in shallow soil areas. The understory was dominated by perennial grasses and forbs which included bottlebrush squirreltail, bluebunch wheatgrass, pussytoes, lupine, eriogonum, and stoneseed. Pre-fire vegetation on the rocky slopes below the rim was primarily low sagebrush with an understory of sixweeks fescue, western yarrow, bottlebrush squirreltail, and Thurber's needlegrass. The gentle sloped southern and eastern portion of the fire supported a pre-fire vegetation of Wyoming big sagebrush intermixed with low sagebrush. The understory was dominated by perennials (Sandberg's bluegrass, bottlebrush squirreltail, and western yarrow) with the scattered occurrence of areas dominated by cheatgrass.

The fire burned an area utilized by elk and mule deer during the winter. There is one abandoned sage grouse lek within the burned area.

COST SUMMARY TABLE

Spec. #	Planned Action	Unit	# Units	Unit Cost	FY07	FY08	FY09	FY10	Spec. # Totals
S1	Planning	WM	0.4	7,500	0	1,000	1,000	1,000	3,000
S2	Ground Seeding	Acres	524	23	0	12,000	0	0	12,000
S2	Ground Seed Purchase	Acres	524	73	36,000	2,000	0	0	38,000
S2	Ground Seeding Cultural Clearance	Acres	524	17	0	9,000	0	0	9,000
S5	Noxious Weeds	Acres	2,778	1	0	3,000	0	0	3,000
S7	New Protective Fence	Miles	2.0	9,500	0	16,000	0	3,000	19,000
S7	Fence Repair/Gate	Miles	3.1	3,548	0	11,000	0	0	11,000
S15	Closures	Acres	0		0	0	0	0	0
S16	Monitoring	Acres	2,778	8	0	7,000	7,000	7,000	21,000
	TOTAL COSTS		2,778	42	36,000	61,000	8,000	11,000	116,000

LAND USE PLAN CONSISTENCY

The proposed actions listed below are not directly addressed in the Jarbidge RMP; however they are clearly consistent with LUP decisions (objectives, terms, and conditions).

1. Ground Seeding (S2): Although not directly addressed in the Jarbidge RMP, the drill seeding of non-native perennial grasses is consistent with, Resource Management Guidelines, Fire Management, Rehabilitation and Reduction Actions/Procedures, (1.) “Rehabilitation of areas, particularly large ones, that have a high potential for fires or have a high frequency of fires, will utilize irregular buffer strips with seed mixtures that are fire resistant and/or meet watershed, protection, wildlife, and riparian objectives.”
2. Noxious Weeds (S5): Surveying fire area for the presence of noxious species, and initiating appropriate control measures is consistent with Jarbidge RMP, Resource Management Guidelines, Control of Noxious Weeds, “BLM districts will work with their respective county governments to monitor the location and spread of noxious weeds and to maintain up-to-date inventory records. BLM will control the spread of noxious weeds on public lands where possible, where economically feasible and to the extent that funds are prioritized for this purpose.”
3. Protective Fence (S7): Repair and/or replacement of allotment management fence damaged by the fire and the construction of protective fence to exclude livestock from seeding treatment area during the establishment period is not addressed in the Jarbidge RMP, but is consistent with Resource Management Guidelines, Fire Management, Rehabilitation and Reduction Actions/Procedures, (4.), “All grazing licenses issued that include areas recently burned and/or seeded areas will include a statement concerning the amount of rest needed in the seeding or burn area. Normally two years of rest will be necessary to protect these areas. This rested area may include remnant stands of desirable species that survived the fire.”
4. Livestock Closure (S15): The exclusion of livestock from the treatment areas until monitoring results, documented in writing; show rehabilitation objectives have been met is consistent with Jarbidge RMP, Resource Management Guidelines, Fire Management, Rehabilitation and Reduction Actions/Procedures, (4.), “All grazing licenses issued that include areas recently burned and/or seeded areas will include a statement concerning the amount of rest needed in the seeding or burn area. Normally two years of rest will be necessary to protect these areas. This rested area may include remnant stands of desirable species that survived the fire.”
5. Monitoring Effectiveness of Treatments (S16): Monitoring data would be collected from initiation of the proposed treatments through 2010. The collection of monitoring data to determine the effectiveness of fire rehabilitation treatments is not addressed in the Jarbidge RMP, but is consistent with the evaluation and assessment of the Resource Management Guidelines, Fire Management, Rehabilitation and Reduction Actions/Procedures statement “Public lands affected by the fire will be rehabilitated to accomplish multiple use objectives and designed to reduce fire size.”

PART 2. – EMERGENCY STABILIZATION ISSUES

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

Priorities: 1). Human Life and Safety, and Property, and 2). Unique biological (designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species) and significant heritage sites. 620DM3.7

Emergency Stabilization Issues

- 1. **Soil/Water Stabilization:** The pre-fire vegetation within the burned area was representative of a native perennial shrub/grass plant community with a relatively low occurrence of invasive annuals. The ground seeding of competitive non-native grasses would inhibit the spread of invasive annuals. Ground seeding would be conducted under ES and aerial seeding, which includes shrubs, would be considered in the BAR. Temporary protective fence construction is necessary to exclude livestock and provide for the establishment of seeded species.

- 2. **Invasive Plants:** Compliance with State and county laws requires the control of noxious weeds. The establishment and long-term maintenance of perennial seeded species could be jeopardized if noxious weeds are not controlled.

PART 3. - DESCRIPTION OF TREATMENTS

Issue 1. Soil/Water Stabilization

R2 - Ground Seeding

A. Treatment/Activity Description (Map 1): Drill Seed Mix 1: 524 acres would be seeded with two non-native perennial grasses using rangeland drills, fall/winter of 2007-2008.

Drill Seed Mix 1

Variety	Approximate Acres	PLS lbs/acre
Siberian wheatgrass (Vavilov)	524	3.25
Russian wildrye (Bozoisky)	524	4.0

B. How does the treatment relate to damage or changes caused by the fire? The goal is to establish non-native perennial bunchgrasses. The establishment and maintenance of the perennial grasses would impede the post-fire spread of cheatgrass and other invasive annuals, and contribute to the stabilization of the recovering ecosystem. The success of the seeding treatment is dependent upon spring moisture and could range in effectiveness from 65-85%.

C. Why is the treatment/activity reasonable, within policy, and cost effective? The selected perennial grasses have been successfully established in previous seedings conducted in the Four Rivers Field Office, during average or favorable growing conditions. Drill seeding is the most cost effective method for establishing perennial grasses in low precipitation habitats.

S7 - Protective Fence/Gate

A. Treatment/Activity Description: Repair and/or replacement of 3.1 miles of existing fence damaged by the fire and construction of 2.0 miles of temporary protective fence (Map 1). Repair of the existing fence would include replacing burned wooden brace structures with metal ones, and replacing damaged wire and steel posts as needed. The protective fence would tie into existing fencing and would be a 3-strand barbed wire (bottom wire smooth twisted), designed to facilitate pronghorn passage. The protective fence would remain in place to exclude livestock from the treatment areas until monitoring results indicate rehabilitation objectives have been met. Fence repair and construction of the protective fence would take place starting the fall/winter 2007.

How does the treatment relate to damage or changes caused by the fire? Repair of existing and construction of protective fence would provide for the exclusion livestock grazing from the seeding treatment while allowing grazing permittees to utilize unburned areas. This measure would be highly effective in controlling livestock distribution, and would provide for the establishment of seeded species and achievement of ES objectives.

B. Why is the treatment/activity reasonable, within policy, and cost effective? Protective fence construction would provide for the effective management of livestock and the protection of seeding treatment areas during the establishment period. Considering the significant cost of implementing the ES, protective fence construction is a reasonable and cost effective method of protecting this investment.

S15 - Livestock Closure

A. Treatment/Activity Description: Livestock closure of the eastern portion (1,598 acres) of the burned area, Hammett 4 Allotment, would be achieved through herding. Livestock would be excluded from the western portion (1,126 acres) of the burned area, Hot Springs Allotment, by repair of existing fences and construction of temporary protective fence. The burned area would be closed to livestock grazing until monitoring results, documented in writing; show rehabilitation objectives have been met. In case of treatment failure, other factors may need to be considered, such as natural recovery of untreated areas, and need or reason to continue closure.

B. How does the treatment relate to damage or changes caused by the fire? Closure of the area to livestock grazing would provide for the establishment of desired seeded species and achievement of ES objectives.

C. Why is the treatment/activity reasonable, within policy, and cost effective? Considering the significant cost of implementing the ES, the livestock closure is a reasonable and cost effective method of facilitating establishment of desired seeded species and protecting this investment.

Issue 2. Invasive Plants

S5 Noxious Weeds Treatment

A. Treatment/Activity Description: Diffuse knapweed and rush skeletonweed are known to occur in and adjacent to the burn. The 2,778 acre burned area would be surveyed for the presence

of noxious species. Site inventory and noxious weed control would be conducted and the appropriate treatment (s) would be applied during the suitable stage of plant growth. Monitoring and treatment would continue under the BAR until 2010.

B. How does the treatment relate to damage or changes caused by the fire? The potential for noxious weeds to spread is amplified after a wildland fire disturbance. Wildfires foster the spread of noxious weeds by the burning and removal of competitive vegetation. The application of appropriate treatments would control the spread of noxious weeds. The effectiveness of controlling noxious weeds is related to the size and configuration of the weed population. The smaller and more uniform the noxious weed population the more effective the control, anticipate 60-90% effectiveness.

C. Why is the treatment/activity reasonable, within policy, and cost effective? Compliance with State and county laws requires the control of noxious weeds. The establishment and long-term maintenance of perennial seeded species could be jeopardized if noxious weeds are not controlled. Considering the significant cost of implementing the ES plan, the treatment of noxious weeds is a reasonable and cost effective method of protecting this investment, and complying with State and county laws.

PART 4. - INDIVIDUAL TREATMENT SPECIFICATIONS

ES		FY07	FY08	FY09	FY10	Total Costs
S1	Planning (plan pres/project Management)					
	Project Management Idaho State Office	0	0	0	0	
	Project Management Boise District Office	0	1,000	1,000	1,000	
	Plan Preparation	0	0	0	0	
	Total	0	1,000	1,000	1,000	3,000
S2	Ground Seeding					
	Labor	0	524	0	0	
	Travel/Vehicles	0	262	0	0	
	Equipment Rental	0	0	0	0	
	Supplies/Materials	0	262	0	0	
	Contract Range Land Drills	0	5,240	0	0	
	Contract No-Till Drills	0	0	0	0	
	Contract Administration	0	2,096	0	0	
	Drill FOR and Transportation	0	3,537	0	0	
	Total	0	12,000	0	0	12,000
S2	Ground Seed					
	Seed	35,900	0	0		
	Seed Mixing/Testing/Handling	0	2,000	0	0	
	Total	36,000	2,000	0	0	38,000
S2	Ground Seeding Cultural Clearance					
	Labor	0	524	0	0	
	Travel/Vehicles	0	131	0	0	
	Supplies/Materials	0	131	0	0	

ES		FY07	FY08	FY09	FY10	Total Costs
	Contract	0	7,661	0	0	
	Contract Administration	0	262	0	0	
	Total	0	9,000	0	0	9,000
S5	Noxious Weeds					
	Labor	0	1,389	0	0	
	Travel/Vehicles	0	695	0	0	
	Chemical Purchase	0	556	0	0	
	Supplies/Materials	0	0	0	0	
	Contract	0	0	0	0	
	Contract Administration	0	0	0	0	
	Total	0	3,000	0	0	3,000
S7	Protective New Fence/Gate 3 Wire Temp					
	Labor	0	700	0	0	
	Travel/Vehicles	0	700	0	0	
	Clearances	0	1,000	0	0	
	Fence Material	0	7,000	0	0	
	Contract Fence Construction	0	5,000	0	0	
	Contract Fence Removal	0		0	3,000	
	Contract Administration	0	1,300	0	0	
	Supplies/Materials	0	500	0	0	
	Total	0	16,000	0	3,000	19,000
S7	Protective Fence Repair/Gate					
	Labor	0	930	0	0	
	Travel/Vehicles	0	465	0	0	
	Clearances	0	0	0	0	
	Fence Material	0	3,100	0	0	
	Contract Fence Construction	0	4,650	0	0	
	Contract Administration	0	1,240	0	0	
	Supplies/Materials	0	620	0	0	
	Total	0	11,000	0	0	11,000
S15	Closures (OHV/livestock/area)					
	Labor	0	0	0	0	
	Travel/Vehicles	0	0	0	0	
	Supplies/Materials	0	0	0	0	
	Contract	0	0	0	0	
	Contract Administration	0	0	0	0	
	Total	0	0	0	0	0
S16	Monitoring (implementation, effectiveness)					
	Labor	0	695	695	695	
	Travel/Vehicles	0	695	695	695	
	Supplies/Materials	0	278	278	278	
	Contract	0	3,473	3,473	3,473	

ES		FY07	FY08	FY09	FY10	Total Costs
	Contract Administration	0	1,389	1,389	1,389	
	Total	0	7,000	7,000	7,000	21,000
	EMERGENCY STABILIZATION	36,000	61,000	8,000	11,000	116,000

SEED LISTS

Seed Type/Variety	PLS Rating	Seeding Acres	Lbs/Ac Bulk	Lbs/Ac PLS	# Seeds/Lb Bulk	# Seed Lb PLS	# Seed/Ac Bulk	# Seed/Ac PLS	# Seed/Sq Ft PLS	Total Lbs PLS	Total Lbs Bulk	Cost Per Lb	Total Cost
Siberian Wheatgrass, Vavilov	0.8075	524	4.0	3.2	220,000	177,650	880,000	710,600	16.3	1,693	2,100	\$4.00	\$8,400.00
Russian Wildrye, Bozoisky	0.7650	524	5.2	4.0	175,000	133,875	910,000	696,150	16.0	2,084	2,750	\$10.00	\$27,500.00
TOTALS		1,048	9.2	7.2			1,790,000	1,406,750	32.3	3,777	4,850		\$35,900.00

NON-NATIVE PLANT WORKSHEET

Proposed Non-native Plants in Seed Mixture

1. Is the use of non-native plants necessary to meet objectives, e.g., consistent with applicable approved field unit management plans?

Yes No Rationale: Use of non-native species is consistent with the Jarbidge RMP. Use of site suitable non-natives is necessary in order to compete with invasive annuals.

2. Will non-native plants meet the objective(s) for which they are planted without unacceptably diminishing diversity and disrupting ecological processes (nutrient cycling, water infiltration, energy flow, etc.) in the plant community?

Yes No Rationale: Establishment of perennial non-native species would increase diversity and improve the ecological process. The established non-native perennials would inhibit the spread of invasive annuals.

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

Yes No Rationale: The general area receives low precipitation and based on past experience there is little likelihood that non-native seeded species would interbreed with native plants or spread off-site.

PROPOSED SEEDED SPECIES

Non-native Plants	Native Plants
Siberian wheatgrass (Vavilov)	---
Russian wildrye (Bozoisky)	---

PART 5. - COST-RISK ANALYSIS

Probability of Rehabilitation Treatments Successfully Meeting Objectives

Action/ Spec. #	Planned Action	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
S1	Planning	WM	.4	3000	100
S2	Ground Seeding	acres	524	59,000	65-85
S5	Noxious Weeds	acres	2,778	3000	60-90
S7	New Fence	miles	2.0	19,000	100
S7	Protective Fence Repair		3.1	11,000	100
S15	Livestock Closure	acres	2,778	0	100
S16	Monitoring	acres	2,778/ 3yrs	21,000	100
	TOTAL			116,000	

COST-RISK SUMMARY

The costs of the project and probability of success of the proposed treatments are compared with the risks to resource values if: 1) no action is taken, and 2) the proposed action is successfully implemented. Alternatives may be included in this analysis to assist in the selection of the treatments that will cost effectively achieve the rehabilitation objectives. Answer the following questions to determine which proposed treatments should be selected and implemented.

1. Are the risks to natural resources and private property **acceptable** as a result of the fire if the following actions are taken?

Proposed Action Yes [] No [] Rationale: The proposed treatments are related actions which maximize the probability of success and effectiveness of restoring ecosystem components and achieving objectives.

No Action Yes [] No [] Rationale: No action would not provide for the control of livestock grazing distribution or the protection of desired seeded species. The effectiveness of treatments to achieve designed objectives would be jeopardized by cheatgrass and other invasive annuals dominating the burned area.

Alternative(s) Yes [] No [] Rationale: Although acceptable alternatives may exist, none have been identified that would pose less risk to the natural resources or private property than the proposed treatments.

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

Proposed Action Yes No Rationale: The probability of the proposed treatments being successful are relatively high, and the costs is reasonable considering the benefits to be realized.

No Action Yes No Rationale: There would be no costs associated with no action, but no benefits would be realized.

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

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

Proposed Action , **Alternative(s)** , or **No Action**

Comments: The proposed treatments are anticipated to be cost effective, and are necessary in order to protect the ground seeding treatment, and improve accomplish of effectiveness objectives. Successful implementation of the ground seeding treatment would reduce the vulnerability of the site to expansion of invasive annuals by restoring ecosystem components lost by the fire. The cost/risk is reasonable considering the benefits to the long-term health of the ecosystem.

RISK OF RESOURCE VALUE LOSS OR DAMAGE

Identify the risk (high, medium, low, none or not applicable (NA) of unacceptable impacts or loss of resources.

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 6. - MONITORING PLAN

The proposed treatments would be actively monitored and documented by personnel of the Boise District Office; Division of Operations and Four Rivers Field Office.

1. S2 Ground Seeding: Effectiveness of the ground seeding would be monitored by measuring seedling density. The treatment objective would be achieved when data collected from 2-3 monitoring sites, with at least thirty (30) 0.25m² plots per site, indicate the mean density of mature established seeded perennial grasses, is $\geq 5/m^2$, have developed root systems that are extensive enough to provide soil stabilization and prevent uprooting when grazed, and 60% or more of those plants have produced seed heads. Monitoring of the drill seeding areas would take place during the summers of 2008-2010.
2. S5 Noxious Weeds: BLM noxious weed specialists would inventory the area, identify noxious weeds on the site, and conduct weed control. Species found, treatment and GPS location would be recorded. Personnel would revisit the treated sites to evaluate mortality and search for any additional weed populations. In addition, the Four Rivers Field Office Range Staff would watch for any occurrences of noxious weeds in the burned area and report their locations to the noxious weed specialist. The entire 2,778 acre burned area would be surveyed for the presence of noxious species. Site inventory and noxious weed control would be conducted starting spring of 2008. Monitoring and treatments would continue through FY 2010 under the BAR. Appropriate treatment (s) would be applied during the suitable stage of plant growth. The objective would be the elimination or control of noxious weeds on the site.
3. S7 Temporary Protective Fence: The objective is to prevent livestock access to the treated areas by constructing temporary protective fence. Fence construction would be monitored by the BLM Contracting Officer's Representative to ensure work meets BLM specifications. The effectiveness of the protective fence to control livestock grazing and provide for the establishment of the ground seeding, would be monitored by Four Rivers Range Staff during

routine allotment inspections. Routine site visits would be made by BLM personnel to monitor livestock grazing distribution and ensure effectiveness of fences to maintain the area closure.

4. S15 Livestock Closure: Livestock are to be excluded from the burned area until monitoring results, documented in writing; show rehabilitation objectives have been met. In case of treatment failure, other factors may need to be considered, such as natural recovery of untreated areas, and need or reason to continue closure. Routine site visits would be made by BLM personnel to monitor for livestock trespass and ensure effectiveness of area closure.

PART 7. - MAPS

Map 1: Drill Seeding, Protective Fence, Fence Repair

REVIEW, APPROVALS, and PREPARERS

EMERGENCY STABILIZATION PLAN TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial and Date
Team Leader Rangeland Mgt Spec	Mike Barnum (BLM/ID110)	
Operations ESR Coordinator	Cindy Fritz (BLM/ID102)	
Botanist	Mark Steiger (BLM/ID110)	
Cultural Resources/Archeologist	Dean Shaw (BLM/ID110)	
Natural Resource Specialist	Jack LaRocco (BLM/ID110)	

EMERGENCY STABILIZATION 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/ John Sullivan (Acting)

9/24/2007

FIELD OFFICE MANAGER

DATE

FUNDING APPROVAL

Funding of ES Plans is approved through a memo from the appropriate approval administrative level. ES Plans below \$100,000 may be approved by the State Director; ES Plans of \$100,000 and above must be approved by the WO. Funding is approved and allocated on a year-by-year basis.

Boise District 2007 Wildfire: Cold (DUY5) Drill Seed Perennial Grass Mix 2007, Temporary Protective Fence, Fence Repair

 DUY5_Cold Boundary  Drill Seeding  Protective Fence  Fence Repair

