BLM IDAHO POST-FIRE RECOVERY PLAN

EMERGENCY STABILIZATION AND BURNED AREA REHABILITATION

PLAN TEMPLATE 2010

WEISER CMPLX FIRE (HX4J)

BLM Boise District Office

IDAHO STATE OFFICE

FIRE BACKGROUND INFORMATION

Fire Name	WEISER CMPLX
Fire Number	LFESHX4J0000 / LFBRHX4J0000
District/Field Office	Boise District Office
Admin Number	LLIDB00000
State	IDAHO
County(s)	WASHINGTON
Ignition Date/Cause	08/29/2013 Lightning
Date Contained	09/13/2013
Jurisdiction	*Acres*
State	1337
USFS	3952
Private	10327
BLM	13772
Total Acres	29388
Total Costs	$682,000
Costs to LF2200000 (2822)	$532,000
Costs to LF3200000 (2881)	$150,000

Status of Plan Submission (check one box below)

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

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON FIRE.

The Weiser Complex consisted of both the Hells Canyon and the Raft fires. Both fires were ignited by lightning on August 29, 2013 and burned a total of 29,388 acres (Raft Fire 20,335 and Hells Canyon 9,053). These fires occurred in Washington County Idaho in drainages adjacent to the Hells Canyon stretch of the Snake River along the eastern edge of Brownlee Reservoir. The fires burned portions of the McChord Butte, Sturgil Creek, Limestone, Little Jackson FFR, Cow Camp, Beef Trap, and Wolf Creek, BLM livestock grazing allotments as well as private, State of Idaho (IDL), and Payette National Forest (USFS) managed lands. The elevation throughout both fires varied between 2,100 and 5,700 feet with topography characterized by buttes and mountains dissected by steep and narrow canyons with either perennial or ephemeral creeks in the drainage bottoms.

Within the burned areas on BLM lands there are four main ecological sites delineated in the digital soil survey data (SSURGO, 2008). Approximately 4,895 acres (36%) are represented by the South Slope Loamy 12-16 inch precipitation zone ecological site typified by xeric big sagebrush (Artemisia tridentata ssp. xericensis) and bluebunch wheatgrass (Pseudoroegneria spicata); 4,639 acres (34%) are represented by the North Slope Loamy 12-16 inch precipitation zone ecological site typified by Idaho fescue (Festuca idahoensis), bluebunch wheatgrass, and xeric big sagebrush; 1,472 acres (11%) are represented by the North Slope Loamy 16-20 inch precipitation zone ecological site typified by mountain big sagebrush and Idaho fescue; and 1,314 acres (9%) are represented by the Very Shallow 12-20 inch precipitation zone ecological site typified by scabland sagebrush (Artemisia rigida) and Sandberg bluegrass (Poa secunda). The remaining acres (10%) in order of abundance are comprised of rock outcrops, Shallow South Stony 12-16 inch precipitation zone ecological site, Loamy 12-16 inch precipitation zone ecological site, South Slope Loamy 16-22 inch precipitation zone ecological site, water, Loamy Bottom 8-14 inch precipitation zone ecological site, and Loamy 16-22 inch precipitation zone ecological site.

Both the Hells Canyon and Raft fires burned over much of the area affected by the 2005 Snake One Fire (21,255 acres re-burned), the 1999 Sheep Creek fire (8,696 acres re-burned), and the 1986 Wayle Fire (4,577 acres re-burned). Approximately 4,500 acres had burned in all three of these fires prior to this summer. Therefore, pre-burn vegetation was predominantly herbaceous and included bluebunch wheatgrass and Idaho fescue on north facing slopes and bluebunch wheatgrass, Sandberg bluegrass, cheatgrass (Bromus tectorum), and other annual brome grasses on south facing slopes. Rubber rabbitbrush (Ericameria nauseosa) had re-sprouted following these fires and was present on deeper soils throughout the area. Younger sagebrush was present primarily on north facing slopes where sagebrush seeding efforts in the winter following the 2005 Snake One Fire were successful. In the Hells Canyon Fire only small pockets of mature xeric big sagebrush and antelope bitterbrush (Purshia tridentata) were present where previous fires in the past few decades had not burned. Approximately 12,375 acres of the Raft Fire had not seen fire over the last

several decades and pre-burn vegetation was comprised of mature stands of xeric big sagebrush and antelope bitterbrush, bluebunch wheatgrass, and Idaho fescue on north facing slopes, and mature stands of antelope bitterbrush, scattered xeric big sagebrush, scabland sagebrush, Sandberg bluegrass, cheatgrass, and other annual brome grasses on south-facing slopes. At higher elevations pre-burn vegetation was comprised of Douglas-fir (Pseudotsuga mensiesii) on north-facing slopes and Douglas-fir/ponderosa pine (Pinus ponderosa) on south-facing slopes. Understory shrub species in the forest included bitter cherry (Prunus emarginata), syringa (Philadelphus lewisii), ceanothus (Ceanothus velutinus), and ninebark (Physocarpus malvaceus).

Numerous riparian areas were affected by the two fires. The Hells Canyon Fire impacted Wolf Creek, Thorn Spring Creek, and Sumac Creek; and the Raft Fire impacted Raft Creek, Wayle Creek, Sheep Creek, Lick Creek, Sturgill Creek, and Benton Creek, as well as multiple ephemeral drainages. Vegetation in these riparian areas included willows, cottonwood, aspen, sedges, and rushes, or a combination of these species. Fire intensity varied from light to moderate with short stretches (up to a ¼ mile) of riparian vegetation burned. Light to moderate fire intensity is beneficial and invigorating to riparian vegetation (species will re-sprout) and so these areas are expected to fully recover within 5 years post-fire. All to most of the uplands surrounding these drainage bottoms were burned and so at the least, these creeks would be subject to increased levels of charcoal, fine flotsam, organic debris, and suspended sediment. At the worst, large debris flows could course through these creek channels if a major watershed event should occur in the next few years, which could significantly alter channel form. As uplands regain their vegetation cover, sediment levels should decline to normal background levels.

All of the private lands within the Hells Canyon Fire perimeter and the headwaters of Raft Creek in the Raft Fire perimeter are part of the Rocking M Ranch. The Idaho Department of Fish and Game (IDFG) acquired a conservation easement on the private lands of this Ranch and manage these lands for wildlife habitat enhancement as well as for increased public recreational opportunities. Cooperative management between the BLM, the Rocking M Ranch, and the IDFG has focused on improvement of wildlife habitat on private and public lands as well as allowing for other uses including livestock grazing. Casey and Pattie Chandler are the current livestock operators leasing the Rocking M Ranch deeded land (base property) and associated BLM grazing preference in the McChord Butte, Cow Camp, and Beef Trap grazing allotments. The remaining private lands within the Raft Fire perimeter are owned by Idaho Power Company and are not currently leased to anyone for livestock grazing. Both IDFG and Idaho Power have expressed an interest in working cooperatively to rehabilitate fire burned lands including sagebrush seeding for wildlife habitat and soil stabilization. Both entities will seek funding from their sources for post-fire stabilization and/or rehabilitation treatments on private lands in coordination with BLM ESR efforts.

The area burned in the Hells Canyon Fire portion of the Weiser Complex is a high priority for stabilization and rehabilitation because all acreage is categorized as Preliminary General Habitat (PGH) for the Greater sage-grouse (Centrocercus urophasianus) (Makela and Major 2012). There are two leks within six miles of the fires' perimeter to the south in Henley Basin. Prior to the Snake One Fire in 2005 the area provided sage-grouse breeding, nesting, brood rearing, and winter habitat. Wyoming and basin big sagebrush seed was applied aerially following the Snake One Fire and field assessments/monitoring indicate much of the

area seeded had young sagebrush plants established and growing prior to this years' fire. Preliminary General Habitat comprises areas that have been identified as having conservation value towards maintaining sustainable sage-grouse populations. To best minimize habitat loss in PGH, the BLM Instruction Memorandum No. 2012-043 states that Emergency Stabilization and Burned Area Rehabilitation (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 of invasive species; and 7) re-establish native species.

LAND USE PLAN CONSISTENCY

S3 - Aerial Seeding ES Issue 3

The 1988 Cascade Resource Management Plan (RMP), Wildlife Resource Objectives section includes, "Manage 185,860 acres of sage-grouse habitat to improve brooding and nesting habitat" and "Manage 181,640 acres of elk habitat, 275,250 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals" and "Maintain existing habitats for other wildlife species". The decision further stipulates under the Sage-Grouse section that where applicable, seed mixtures for fire rehabilitation projects will include a mixture of grasses, forbs, and shrubs that benefit sage-grouse. Therefore, aerial seeding of sagebrush following the Hells Canyon and Raft fires adheres to this direction and is in conformance with the RMP.

S5 - Noxious Weeds ES Issue 5

The control of noxious weeds is consistent with 1988 Cascade RMP, Resource Management Guidelines, Weeds (Control of Noxious), "BLM districts will work with 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 that purpose." The Vegetation Resource Objectives includes, "Protect candidate or sensitive plants". The control of noxious weeds is in compliance with State and county laws. Therefore, control of noxious weeds following the Hells Canyon and Raft fires adheres to this direction and is in conformance with the RMP.

S7 - Fence/Gate/Cattleguard ES Issue 3

The 1988 Cascade RMP, Fire Management, Rehabilitation, Greenstripping and Reduction Actions/Procedures, (3.) states "All grazing licenses issued that include areas recently burned and/or seeded will include a statement concerning the amount of rest needed in the seedings or burn area". Vegetation Resource Objectives includes "Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas". Therefore fence repair

to protect the recently burned areas from adjacent livestock grazing and to protect existing spring developments adheres to this direction and is in conformance with the RMP.

S12 - Closures (area, OHV, livestock) ES Issue 3
The 1988 Cascade RMP, Fire Management, Rehabilitation, Greenstripping and Reduction Actions/Procedures, (3.) state "All grazing licenses issued that include areas recently burned and/or seeded will include a statement concerning the amount of rest needed in the seedings or burn area". Therefore, closure of all or portions of BLM grazing allotments following wildfire until ESR treatment and grazing resumption objectives are met adheres to this direction and is in conformance with the RMP.

S13 - Monitoring ES Issue 3
The 1988 Cascade RMP, Monitoring Section states, "The effects of implementation (of the RMP) will be monitored and evaluated on a periodic basis over the life of the plan. The general purposes of this monitoring and evaluation will be: (1) to determine if plan objectives are being met, (2) to determine if an action is fulfilling the purpose and need for which it was designed, or if there is a need for modification or termination of an action, (3) to discover unanticipated and/or unpredicted impacts, (4) to determine if mitigation measures are working as prescribed, (5) to ensure that decisions are being implemented as scheduled and in conformance with the RMP, (6) to provide continuing evaluation of consistency with other federal, state, and local plans and programs, and (7) to provide for continuing comparison of plan benefits versus costs, including social, economic, and environmental costs. Therefore, monitoring ESR treatments to see if objectives are being met adheres to this direction and is in conformance with the RMP.

R3 - Aerial Seeding BAR Issue 1
The 1988 Cascade RMP, Wildlife Resource Objectives section includes, "Manage 185,860 acres of sage grouse habitat to improve brooding and nesting habitat" and "Manage 181,640 acres of elk habitat, 275,250 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals" and "Maintain existing habitats for other wildlife species". The decision further stipulates under Sage-Grouse that where applicable, seed mixtures for fire rehabilitation projects will include a mixture of grasses, forbs, and shrubs that benefit sage grouse. Therefore, aerial seeding of sagebrush following the Hells Canyon and Raft Fires adheres to this direction and is in conformance with the RMP.

R5 - Noxious Weeds BAR Issue 2
The control of noxious weeds is consistent with 1988 Cascade RMP, Resource Management Guidelines, Weeds (Control of Noxious), "BLM districts will work with 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 that purpose." The Vegetation Resource Objectives includes, "Protect candidate or sensitive plants". The control of noxious weeds is in compliance with State and county laws. Therefore, control of noxious weeds following the Hells Canyon and Raft

Fires adheres to this direction and is in conformance with the RMP.

R7 - Fence/Gate/Cattleguard BAR Issue 4

The 1988 Cascade RMP, Fire Management, Rehabilitation, Greenstripping and Reduction Actions/Procedures, (3.) states “All grazing licenses issued that include areas recently burned and/or seeded will include a statement concerning the amount of rest needed in the seedings or burn area”. Vegetation Resource Objectives includes “Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas”. Therefore fence repair to protect the recently burned areas from adjacent livestock grazing and to protect existing spring developments adheres to this direction and is in conformance with the RMP.

COST SUMMARY TABLES

Emergency Stabilization (LF2200000)

Action/ Spec #	ES Issue #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2013	FY 2014	FY 2015	FY 2016	Totals by Spec.
S1		Planning (Project Management)				$0.00	$15,000.00	$15,000.00	$15,000.00	$45,000.00
S2										
S3	3	Aerial Seeding	Acres	4,300	$49.42	$0.00	$213,000.00	$0.00	$0.00	$213,000.00
S4										
S5	5	Noxious Weeds	Acres	13,772	$2.11	$0.00	$29,000.00	$0.00	$0.00	$29,000.00
S6										
S7	3	Fence/Gate/Cattleguard	Miles	13	$7,230.77	$0.00	$94,000.00	$0.00	$0.00	$94,000.00
S8										
S9										
S10										
S11										
S12	3	Closures (area, OHV, livestock)	Acres	2	$1,000.00	$0.00	$2,000.00	$0.00	$0.00	$2,000.00
S13	3	Monitoring	Acres	13,772	$10.82	$0.00	$56,000.00	$47,000.00	$46,000.00	$149,000.00
S14										
[redacted]		**TOTAL COSTS (LF2200000)**				**$0**	**$409,000**	**$62,000**	**$61,000**	**$532,000**
OTHER FUND CODE TOTALS:						[redacted]				
[redacted]		TOTAL COSTS (???)								
[redacted]		TOTAL COSTS (???)								
[redacted]		TOTAL COSTS (???)								

Burned Area Rehabilitation (LF3200000)

Action/ Spec #	BAR Issue #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2013	FY 2014	FY 2015	FY 2016	Totals by Spec.
R1										
R2										
R3	1	Aerial Seeding	Acres	1,600	$53.75	$0.00	$86,000.00	$0.00	$0.00	$86,000.00
R4										
R5	2	Noxious Weeds	Acres	13,772	$3.63	$0.00	$0.00	$26,000.00	$24,000.00	$50,000.00
R6										
R7	4	Fence/Gate/Cattleguard	Miles	2	$7,000.00	$0.00	$14,000.00	$0.00	$0.00	$14,000.00
R8										
R9										
R10										
R11										
R12										
R13										
R14										
		TOTAL COSTS (LF3200000)				**$0**	**$100,000**	**$26,000**	**$24,000**	**$150,000**
OTHER FUND CODE TOTALS:										
		TOTAL COSTS (???)								
		TOTAL COSTS (???)								
		TOTAL COSTS (???)								

PART 2 - POST-FIRE RECOVERY ISSUES

EMERGENCY STABILIZATION ISSUES

1 - Human Life and Safety
N/A

2 - Soil/Water Stabilization
N/A

3 - Habitat for Federal/State Listed, Proposed, or Candidate Species
Greater Sage-grouse

Greater sage-grouse (a Candidate species for ESA listing) have been known to inhabit the Hells Canyon Fire portion of the Weiser Complex during the spring, summer, fall, and winter seasons. There are no known sage-grouse leks within the burned area, however, there are 2 occupied leks within 6 miles of the Hells Canyon Fire perimeter to the south in Henley Basin (IDFG 2012). A total of 9,053 acres (the entire Hells Canyon Fire) of preliminary general habitat (PGH) for sage-grouse (Makela and Major 2012) burned in the Weiser Complex.

Approximately 8,000 acres of the Hells Canyon Fire was previously burned in the 2005 Snake One Fire. Prior to the Snake One Fire the area provided sage-grouse breeding, nesting, brood rearing, and winter habitat. Only pockets of mature sagebrush and bitterbrush were present within the Hells Canyon Fire perimeter due to the Snake One Fire. Wyoming, basin, and mountain big sagebrush seed was applied aerially on all burned BLM land following the Snake One Fire. Field assessments and monitoring indicate seeded areas on northerly facing slopes and higher elevations had young sagebrush plants established and growing prior to this years' Hells Canyon Fire. These plants were 6-8 years old and were well on their way to providing habitat for sage-grouse and other sagebrush obligate wildlife species. South-facing slopes had a mixture of bunchgrasses, cheatgrass, and other annual brome grasses. Pockets of noxious weeds could be found along the bottoms of drainages where livestock use has historically been concentrated.

In anticipation of sagebrush seeding treatments for both the Hells Canyon and Raft fires, the IDFG Department in cooperation with the BLM National Seed Warehouse is working on a contract for collection of local xeric big sagebrush in Fall 2013. The seeding of xeric big sagebrush using locally collected seed on northerly-facing slopes will increase the odds of a successful sagebrush seeding because the plants would be locally adapted and would be applied on deeper soils where solar radiation is less intense and soil moisture retention levels are higher. If there are no bidders on the collection contract or enough seed to cover the identified areas then a mixture of other native big sagebrush species would be used. Seeding these areas with sagebrush will aid in a faster recovery of vegetation structure necessary for sage-grouse and other sagebrush obligates and will help to prevent the spread and domination of cheatgrass and noxious weeds. Similar seedings have proven successful from

past ESR treatments in the Boise District and are documented in monitoring reports: 2005 Snake One Fire (2013 personal communication, Anna Owsiak, IDFG), 2006 Cherry Fire (2008 monitoring report), and 2006 Frenchie Fire (2008 monitoring report).

Other Wildlife and Plants (including Special Status Species)

Other wildlife making use of the Hells Canyon Fire portion of the Weiser Complex includes elk (Cervus canadensis), mule deer (Odocoileus hemionus) and bald eagles (Haliaeetus leucocephalus) in the winter months, jack rabbit (Lepus spp.), pygmy rabbit (Brachylagus idahoensis), grey wolf (Canis lupus), coyote (Canis latrans), mountain quail (Oreortyx pictus), loggerhead shrike (Lanius ludovicianus), sage sparrow (Artemisiospiza nevadensis), Brewer's sparrow (Spizella breweri), Mojave black-collared lizard (Crotaphytus bicinctores) , longnose snake (Rhinocheilus lecontei), western ground snake (Sonora semiannulata), common garter snake (Thamnophis sirtalis), spotted bat (Euderma maculatum), and Townsend's big-eared bat (Corynorhinus townsendii). Potential nesting habitat occurs for the prairie falcon (Falco mexicanus) and ferruginous hawk (Buteo regalis).

Special status plant species found in the area include Snake River Goldenweed (Pyrrocoma radiate) and Bank Monkey Flower (Mimulus clivicola).

Livestock Grazing/Pasture Closures

Seven BLM grazing allotments were affected by the fire. Five of these allotments had less than 200 BLM acres burn and will not require a livestock closure. These allotments include; Little Jackson FFR 0 BLM acres burned (0%), Beef Trap 35 BLM acres burned (3%), Wolf Creek 166 BLM acres burned (11%), Cow Camp 42 BLM acres burned (10%), and Limestone 86 BLM acres burned (4%).

One out of the three pastures within the McChord Butte Allotment had substantial acreage burn (6,635 BLM acres in the Wolf Creek pasture - 88% of BLM acres). The Raft Creek pasture had 10,481 BLM acres burn (32% of BLM acres) and the Rock Creek pasture had only 70 BLM acres burn (2% of BLM acres). The Wolf Creek pasture will require a livestock closure until sagebrush seeding, natural vegetation recovery, and grazing resumption monitoring objectives are met.

The Raft Creek pasture is bounded on the north by the Sturgil Creek/McChord Butte allotment fence (BLM Range Improvement #1272), on the south by the McChord Butte fence (BLM Range Improvement #5690), on the west by Brownlee Reservoir, and on the east by the Payette National Forest Boundary Fence. The Sturgil Creek/McChord Butte allotment boundary fence crosses BLM, Idaho Power Co. private lands, and Rocking M Ranch private lands, however, Idaho Power Co. has the assigned fence maintenance responsibility. If funded, repair of this fence due to the Raft Fire would be shared between Idaho Power and BLM with BLM providing 5 miles of fencing materials and Idaho Power Co. providing the labor for installation.

The McChord Butte fence crosses BLM and Rocking M Ranch private lands with the Rocking M Ranch having maintenance responsibility. It was replaced in 2006 following the

Snake One Fire and most of the wood corners/braces were replaced with metal at that time. This fence was not badly damaged in the Raft Fire; however, a few corners and multiple rock jacks were burned and will require replacement. If funded, repair of this fence due to the Raft Fire would be shared between the Rocking M Ranch lessees (Casey and Pattie Chandler) and the BLM with the BLM providing 2 1/2 miles of fencing materials and the Chandlers providing labor for installation.

The Payette National Forest Boundary fence to the east was also replaced with steel in 2006 following the Snake One Fire and was not badly damaged in the Raft Fire. The USFS will be responsible for any fence repair associated with their boundary fence. With the Sturgil Creek/McChord Butte boundary fence, the McChord Butte fence, and the USFS boundary fence repaired, the Raft Creek Pasture of the McChord Butte Allotment would be available for livestock grazing in 2014 with only minimal burned acreage left unprotected (221 BLM acres). A livestock closure of the Raft Creek pasture would not be necessary and would provide the livestock operator more flexibility with his livestock rotation over the next few years helping to alleviate overuse in the Rock Creek pasture of the McChord Butte allotment as well as the Beef Trap and Cow Camp allotments. Four miles of boundary fence between the Wolf Creek pasture and Cow Camp/Beef Trap allotments were damaged by the Hells Canyon Fire and will also require repair in order to allow for grazing in these two adjacent allotments while protecting the sagebrush seeding treatment and allowing for natural vegetation recovery in the Wolf Creek pasture.

A total of 12,082 BLM acres in the Sturgill Creek allotment burned (87% of BLM acres) and will require a livestock closure until sagebrush seeding and grazing resumption monitoring objectives are met. Idaho Power Co. owns the private lands within the Sturgill Creek allotment and holds the associated BLM grazing permit. They have taking non-use for the past three years and do not currently run livestock or lease their private lands to a livestock operator. The Limestone allotment had 123 BLM acres burn (22% of BLM acres). The western allotment boundary let-down fence was affected in several locations by the fire. Two miles of existing fence repair would allow for continued authorized grazing on the BLM Limestone allotment and the adjacent unfenced USFS Limestone allotment while protecting the sagebrush seeding treatment on BLM, Idaho Power Co., and Rocking M Ranch lands to the west.

4 - Critical Heritage Resources
N/A

5 - Invasive Plants and Weeds
Canada thistle (Cirsium arvense), houndstongue (Hieracium cynoglossoides), Scotch thistle (Onopordum acanthium), jointed goatgrass (Aegilops cylindrica), perennial pepperweed (Lepidium latifolium), poison hemlock (Conium maculatum), rush skeletonweed (Chondrilla juncea), spotted knapweed (Centaurea stoebe), and whitetop (Cardaria draba) 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 infestation is small enough that if treated within the next three years will have a high likelihood of success. Without a noxious weed control effort, spotted knapweed and whitetop could significantly increase, negatively affecting

sage-grouse habitat and big game seasonal range. If an emergency treatment is not implemented, the economic impact to natural resources and the local economy could be significant. All 13,772 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 known infestation of noxious weed increase and new infestations using spot herbicide spraying and biological control. Additional inventory and further control is proposed for FY15-16 under BAR.

BURNED AREA RECOVERY ISSUES

1 - Lands Unlikely to Recover Naturally

The 20,335 acre Raft Fire burned cleanly through approximately 12,000 acres of mature sagebrush and bitterbrush leaving very few pockets of unburned shrubs behind. Due to large fire size as well as older adjacent fires, a sagebrush seed source for the interior areas of the Raft Fire are either very small or are several drainages away. Vegetation structure these shrubs provide would likely not be present across much of this fire for several decades without proactive seeding efforts. Seeding these areas with sagebrush will aid in a faster recovery of vegetation structure necessary for sagebrush obligates and other wildlife and will help to prevent the spread and domination of cheatgrass and noxious weeds. Similar seedings have proven successful from past ESR treatments in the Boise District and are documented in monitoring reports: 2005 Snake One Fire (2013 personal communication, Anna Owsiak, IDFG), 2006 Cherry Fire (2008 monitoring report), and 2006 Frenchie Fire (2008 monitoring report). These same reports document only limited success with the seeding and/or planting of antelope bitterbrush.

The Raft Fire is not within mapped sage-grouse preliminary priority or general habitat, however, there are many other wildlife species that depend on this area during one or more seasons. These wildlife species include bighorn sheep, elk, mule deer and bald eagles in the winter months, grey wolf, coyote, pygmy rabbit, jack rabbit, Mojave black-collared lizard, longnose snake, western ground snake, common garter snake, mountain quail, loggerhead shrike, sage sparrow, Brewer’s sparrow, prairie falcon, ferruginous hawk, northern goshawk, flammulated owl, calliope hummingbird, Lewis’ woodpecker, Williamson’s flycatcher, Hammond’s flycatcher, olive-sided flycatcher, spotted bat, and the Townsend’s big-eared bat. Special status plant species found in the area include Snake River Goldenweed and Bank Monkey Flower.

In anticipation of sagebrush seeding treatments for both the Hells Canyon and Raft fires, the IDFG Department in cooperation with the BLM National Seed Warehouse is working on a contract for collection of local xeric big sagebrush. The seeding of xeric big sagebrush using locally collected seed on northerly-facing slopes will increase the odds of a successful sagebrush seeding because the plants would be locally adapted and would be applied on deeper soils where solar radiation is less intense and soil moisture retention levels are higher. If there are no bidders on the collection contract or enough seed to cover the identified areas then a mixture of other native big sagebrush species would be used.

2 - Weed Treatments
Canada thistle, houndstongue , Scotch thistle, jointed goatgrass, perennial pepperweed, poison hemlock, rush skeletonweed, spotted knapweed, and whitetop 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 infestation is small enough that if treated within the next three years will have a high likelihood of success. Without a noxious weed control effort, spotted knapweed and whitetop could significantly increase negatively affecting sage-grouse habitat, big horn sheep and big game seasonal range. If an emergency treatment is not implemented the economic impact to natural resources and the local economy could be significant. All 13,772 acres of the burned public land would be inventoried and treated in FY14 through ES funds and additional inventory and treatment as needed for noxious weeds in FY15-16 through BAR funds. The objective of this treatment is to identify and control the expected known infestation of noxious weed increase and new infestations using spot herbicide spraying and biological control.

3 - Tree Planting
N/A

4 - Repair/Replace Fire Damage to Minor Facilities
Four spring development exclosures (approximately 2 miles) within the Wolf Creek pasture of the McChord Butte allotment were damaged during the Hells Canyon Fire and will require repair. A livestock grazing closure will be issued for the Wolf Creek pasture and so the four exclosure fences do not need to be repaired in the first year post-fire, but will need to be repaired prior to livestock grazing resumption.

PART 3 - DESCRIPTION OF TREATMENTS

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

S3 Aerial Seeding

A. Treatment/Activity Description

Aerially seed 4,300 acres of northerly-facing slopes in the McChord Butte Allotment (Wolf Creek Pasture) with native, locally adapted big sagebrush species (xeric big sagebrush and/or similar big sagebrush species) to rehabilitate Greater sage-grouse habitat and other special status species habitat. The treatment would ideally occur in December or January of FY14. Seeding at this time would better ensure seed stratification, germination, and establishment. However, if funding is not available in this timeframe the seeding would occur as soon as possible, but prior to March 1, 2014. Appropriate wildlife and cultural resource inventories/surveys would be completed prior to project implementation.

B. How does the treatment relate to damage or changes caused by the fire?

The fire burned most of the existing shrubs within the Wolf Creek Pasture of the McChord Butte Allotment which includes Greater sage-grouse preliminary general habitat. These shrubs were mainly remnant xeric big sagebrush and antelope bitterbrush that survived the 2005 Snake One Fire, and a mixture of young xeric, basin, Wyoming, and mountain big sagebrush that were aerially seeded following the Snake One Fire. The area is left with little to no above ground structural component. Because much of the sagebrush cover was consumed over a large area, natural regeneration is not anticipated as sagebrush seed does not persist in the soil. Further, the presence of unburned sagebrush islands as a seed source for natural regeneration are few across the 4,300 treatment acres as well as the rest of the burned area. Accelerating the rate of re-establishment of native shrubs is essential to maintain the value of the area as sage-grouse habitat, as well as habitat for other special status wildlife and plants.

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

The treatment is reasonable for the issues identified for the site. Estimated contracting and seed costs for aerial application would be typical for the area administered by the Boise District Office. Seed costs vary from year to year; however, this expense is far less than losing valuable sage-grouse and other sensitive wildlife and plant habitat to fire and degradation. Left untreated the area has a low probability of returning to a shrub dominated community in a reasonable time-frame. Without the reintroduction of sagebrush, plant communities would be highly vulnerable to infestation by noxious and other undesirable species.

S7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

Approximately 13 miles fence burned in the fire and would be repaired (portions may be removed and replaced depending on level of damage). The allotment boundary and internal fences necessary to protect the burned area from livestock grazing and movement during the closure period would be repaired.

B. How does the treatment relate to damage or changes caused by the fire?

The wildfire burned mainly through the McChord Butte and Sturgill Creek allotments disrupting the authorized grazing systems. Repair of damaged fences would help to manage vegetation recovery, protect the proposed aerial seeding, and protect exposed soils. Both boundary and interior allotment fences damaged by the wildfire need to be repaired in order to rest McChord Butte (Wolf Creek Pasture) and the entire Sturgill Creek Allotment from livestock grazing and trailing until vegetation recovery objectives have been met. Repair of these fences would allow livestock use to continue in the Raft Creek Pasture of McChord Butte, as well as the Cow Camp, Beef Trap, Wolf Creek, Limestone, and Little Jackson FFR allotments; only a minimal portion of BLM lands in these allotments burned and would remain open to grazing as authorized.

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

Fence repair is a cost effective means to rest areas damaged by wildfire during vegetation recovery. Damaged wood stretch points, corners, and rock jacks would be replaced with steel structures increasing both the longevity of the structures and their resistance to future wildfire damage. If fences were not repaired livestock movement in the area would be left unchecked and could cause immediate damage to exposed areas jeopardizing recovery of Greater sage-grouse habitat and other special status species wildlife and plant habitat.

S12 Closures (area, OHV, livestock)

A. Treatment/Activity Description

Close the Sturgill Creek Allotment and Wolf Creek Pasture of the McChord Butte Allotment to exclude livestock grazing for a minimum of two growing seasons. Further, necessary conditions regarding vegetation recovery must be achieved for grazing resumption to occur (see Part 8 - Monitoring Plan for details).

B. How does the treatment relate to damage or changes caused by the fire?

The fire burned much of the existing perennial grasses and forbs, and shrubs within the burn perimeter including Greater sage-grouse habitat. The remnant upland and riparian vegetation and soils would incur further damage if livestock were permitted to utilize the Sturgill Creek and McChord Butte (Wolf Creek Pasture) allotments. Sagebrush germination and establishment could also be inhibited by livestock use too soon following the aerial seeding. The purpose of this treatment is to rest the burned area to allow existing vegetation damaged by the fire to recover, aerially seeded shrubs to germinate and establish, and to protect vulnerable soils lacking vegetation. Recovery of plant communities and establishment of native shrubs would positively impact sage-grouse and other wildlife by increasing shrub cover, promoting recovery of forage (grasses and forbs), reducing/inhibiting weedy vegetation, and stabilizing soil resources.

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

Livestock preferentially graze native perennial vegetation. Measures need to be taken to allow burned vegetation to recover as well as protect the aerial seeding investment and exposed soils. Livestock grazing would cause additional, unacceptable, and mitigatable pressure on these plant communities putting their recovery at risk. Further, exposed soils in uplands and riparian areas as a result of the fire run the risk of further damage or degradation by livestock.

The loss of the above-ground portions of the vegetation from fire requires rest from livestock grazing to allow their recovery. Newly seeded shrubs and exposed soils run the risk of damage or degradation by livestock. The Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan Environmental Assessment (EA# ID-090-2004-050) states that natural recovery via rest from livestock grazing would "…contribute to the recovery of the remaining vegetation and would benefit future native plant community structure." Regarding seeding protection the EA states, "Exclusion of livestock and wild horses is critical for the recovery of burned vegetation or establishment and protection of new seedings." The EA also states, "…deferred livestock grazing would protect recovering sites for at least two growing seasons after the fire, or vegetation is established adequately to withstand grazing."

Costs associated with the proposed livestock grazing closure are minimal relative to the benefits of natural recovery of native plant communities and establishment of seeded native sagebrush. Livestock closure compliance monitoring would be conducted in conjunction with other treatment activities (e.g., fence repair) and other field efforts to increase cost efficiency.

S13 Monitoring

A. Treatment/Activity Description

Conduct monitoring to determine effectiveness of ESR treatments and to ensure treatments are properly implemented and maintained. Monitoring methods would be qualitative and quantitative, and commensurate with the level of treatment complexity and scale. Monitoring would be the responsibility of the ESR team. An annual monitoring summary report would be submitted documenting treatment status and effectiveness.

B. How does the treatment relate to damage or changes caused by the fire?

Monitoring will be necessary to determine survivorship of seeded shrubs, if plant communities are recovering, noxious weed populations are expanding and require treatment or shrinking as a result of treatment, and fences are functioning effectively to maintain livestock closures.

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

Monitoring of ES and BAR treatments is mandatory per BLM policy.

Issue 5 - Invasive Plants and Weeds

S5 Noxious Weeds

A. Treatment/Activity Description

Noxious weeds previously mapped by the weed program and/or observed during preliminary reconnaissance in the vicinity of the fire are Canada thistle, houndstongue, jointed goatgrass, perennial pepperweed, poison hemlock, rush skeletonweed, Scotch thistle, spotted knapweed, and whitetop. Inventory would be focused on areas with known infestations and those with a high probability for weed presence and/or invasion (e.g., disturbed areas near two-track roads, fencelines, watering/salting facilities, trailing routes, riparian areas, and other disturbed areas) and cursory where probability for noxious weeds is low (i.e., where conditions do not favor noxious weeds).

These or other noxious weed species found within the burn perimeter will be inventoried, treated chemically (spot herbicide treatment with BLM approved chemicals) or mechanically, monitored, and retreated if necessary. Infestations may also be treated with biological control agents if warranted.

B. How does the treatment relate to damage or changes caused by the fire?

Noxious weed infestations are likely to increase due to the removal of plant cover by the fire. Noxious weeds have a competitive edge over native plants in their ability to invade open niches taking advantage of the increased moisture and nutrients available. Their high reproductive rates and ability to acquire water and nutrients make it difficult for native species to compete. Inventory and treatment immediately after the wildfire will prevent expansion and stop new infestations of noxious weeds in the area.

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

Treating weeds immediately after wildfire is an effective means to prevent expansion of existing infestations and establishment of new weeds. Without inventories or treatments it would be reasonable to expect weed infestations to become permanent and/or expand substantially degrading the overall ecological condition of the site. If weeds are left to expand and/or invade novel sites, future treatment attempts become more costly and treatment effectiveness is reduced. Field efforts would be combined with other weed inventory and treatment in the vicinity to increase cost efficiency. All actions would be in accordance with the Boise District Noxious Weed Environmental Assessment (#ID100-2005-EA-265).

Issue 1 - Lands Unlikely to Recover Naturally

R3 Aerial Seeding

A. Treatment/Activity Description

Aerially seed 1,600 acres of northerly-facing slopes with xeric big sagebrush and/or similar big sagebrush species to rehabilitate the plant communities and wildlife habitat in the Sturgill Creek Allotment.

B. How does the treatment relate to damage or changes caused by the fire?

The fire consumed the majority of shrubs across the 1,600 treatment acres and the rest of the burned area in the Sturgill Creek Allotment. Shrubs here consisted largely of mature xeric big sagebrush and antelope bitterbrush, as well as mountain shrub species at higher elevations. Since the fire consumed much of the sagebrush over a large area, natural recovery of these shrubs via recruitment from adjacent populations would take a very long time. This treatment would expedite re-establishment of shrub communities matching the structural component and species composition that existed before the wildfire event. Establishment of sagebrush would also benefit overall plant community and watershed health, in turn benefitting the suite of wildlife using the area.

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

The treatment is reasonable for the issues identified for the site. Estimated contracting and seed costs for aerial application would be typical for the area administered by the Boise District Office. Seed costs vary from year to year; however, this expense is far less than losing valuable sage-grouse and other sensitive wildlife and plant habitat to fire and degradation. Left untreated the area has a low probability of returning to a shrub dominated community in a reasonable time-frame. Without the reintroduction of sagebrush, plant communities would be highly vulnerable to infestation by noxious and other undesirable species.

Issue 2 - Weed Treatments

R5 Noxious Weeds

A. Treatment/Activity Description

Noxious weeds designated for treatment as a result of ES inventory would be treated. Areas where weed treatment took place previously (under ES) would be monitored, treated, and re-treated if necessary in years two and three. Noxious weed infestations and treatments would be documented over three years to track population size and treatment effectiveness. Weed control and monitoring will be turned over to the Boise District Noxious Weed program after the three year period.

B. How does the treatment relate to damage or changes caused by the fire?

Removal of and disturbance to existing vegetation caused by the wildfire has left bare areas susceptible to weed invasion. Continued inventory and treatment of noxious weeds during the vegetation recovery period is imperative to control expansion and/or establishment within the burn area and beyond. Controlling noxious weeds, in turn, would promote recovery of native vegetation by minimizing competition for resources (i.e., water, nutrients, and space).

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

Treating weeds immediately after wildfire is an effective means to prevent expansion of existing infestations and establishment of new weeds. Without inventories or treatments it would be reasonable to expect weed infestations to become permanent and/or expand substantially degrading the overall ecological condition of the site. If weeds are left to expand and/or invade novel sites, future treatment attempts become more costly and treatment effectiveness is reduced. Field efforts would be combined with other weed inventory and treatment in the vicinity to increase cost efficiency. All actions would be in accordance with the Boise District Noxious Weed Environmental Assessment (#ID100-2005-EA-265).

Issue 4 - Repair/Replace Fire Damage to Minor Facilities

R7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

A total of approximately two (2) miles of riparian exclosure fences would be repaired (portions may be removed and replaced depending on level of damage).

B. How does the treatment relate to damage or changes caused by the fire?

Repair and/or reconstruction of management fences damaged by the fire would maintain the future integrity of the existing livestock grazing systems. The four exclosures were in place to protect riparian spring areas associated with water troughs from degradation by livestock. Repair of these exclosure fences would maintain the riparian habitat within them over the long term.

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

Similar to ES, fence repair is a cost effective means to rest areas damaged by wildfire during vegetation recovery. Damaged wood stretch points, corners, and rock jacks would be replaced with steel structures increasing both the longevity of the structures and their resistance to future wildfire damage. Fence repair is essential for the long-term management of livestock per the grazing permits issued by the Four Rivers Field Office.

PART 4 - DETAILED TREATMENT COST TABLE

Action / Spec #	Action Description	Unit Type	# Units	Unit Cost	FY13	FY14	FY15	FY16	Total Cost
S1	**Planning (Project Management)**								
1	Planning	Total	9	$5,000.00	$0.00	$15,000.00	$15,000.00	$15,000.00	$45,000.00
	Total			**$5,000.00**	**$0.00**	**$15,000.00**	**$15,000.00**	**$15,000.00**	**$45,000.00**
S3	**Aerial Seeding** ES Issue 3								
1	Aerial Seeding Implementation	Total	62	$1,000.00	$0.00	$62,000.00	$0.00	$0.00	$62,000.00
2	Aerial Seed Purchase	LBS (Pounds)	4,300	$35.00	$0.00	$150,500.00	$0.00	$0.00	$150,500.00
	Total			**$1,035.00**	**$0.00**	**$213,000.00**	**$0.00**	**$0.00**	**$213,000.00**
S5	**Noxious Weeds** ES Issue 5								
1	Noxious Weed Inventory/Treatment	Total	29	$1,000.00	$0.00	$29,000.00	$0.00	$0.00	$29,000.00
	Total			**$1,000.00**	**$0.00**	**$29,000.00**	**$0.00**	**$0.00**	**$29,000.00**
S7	**Fence/Gate/Cattleguard** ES Issue 3								
1	Repair Fences	Total	94	$1,000.00	$0.00	$94,000.00	$0.00	$0.00	$94,000.00
	Total			**$1,000.00**	**$0.00**	**$94,000.00**	**$0.00**	**$0.00**	**$94,000.00**
S12	**Closures (area, OHV, livestock)** ES Issue 3								
1	Livestock Closure	Each	2	$1,000.00	$0.00	$2,000.00	$0.00	$0.00	$2,000.00
	Total			**$1,000.00**	**$0.00**	**$2,000.00**	**$0.00**	**$0.00**	**$2,000.00**
S13	**Monitoring** ES Issue 3								
1	Monitoring	Total	149	$1,000.00	$0.00	$56,000.00	$47,000.00	$46,000.00	$149,000.00
	Total			**$1,000.00**	**$0.00**	**$56,000.00**	**$47,000.00**	**$46,000.00**	**$149,000.00**
ES	**Grand Total**			**$10,035.00**	**$0.00**	**$409,000.00**	**$62,000.00**	**$61,000.00**	**$532,000.00**
Action / Spec #	**Action Description**	**Unit Type**	**# Units**	**Unit Cost**	**FY13**	**FY14**	**FY15**	**FY16**	**Total Cost**
R3	**Aerial Seeding** BAR Issue 1								
1	Aerial Seeding Treatment	Total	30	$1,000.00	$0.00	$30,000.00	$0.00	$0.00	$30,000.00
2	Aerial Seed Purchase	LBS (Pounds)	1,600	$35.00	$0.00	$56,000.00	$0.00	$0.00	$56,000.00
	Total			**$1,035.00**	**$0.00**	**$86,000.00**	**$0.00**	**$0.00**	**$86,000.00**
R5	**Noxious Weeds** BAR Issue 2								
1	Noxious Weed Inventory/Trreatment	Total	50	$1,000.00	$0.00	$0.00	$26,000.00	$24,000.00	$50,000.00
	Total			**$1,000.00**	**$0.00**	**$0.00**	**$26,000.00**	**$24,000.00**	**$50,000.00**
R7	**Fence/Gate/Cattleguard** BAR Issue 4								
1	Repair Fences	Total	14	$1,000.00	$0.00	$14,000.00	$0.00	$0.00	$14,000.00
	Total			**$1,000.00**	**$0.00**	**$14,000.00**	**$0.00**	**$0.00**	**$14,000.00**
BAR	**Grand Total**			**$3,035.00**	**$0.00**	**$100,000.00**	**$26,000.00**	**$24,000.00**	**$150,000.00**
Project	**Grand Total**			**$13,070.00**	**$0.00**	**$509,000.00**	**$88,000.00**	**$85,000.00**	**$682,000.00**

PART 5 - SEED LISTS

DRILL SEED

AERIAL SEED

Aerial Mix 1 ES

Species	Scientific Name	PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Aerial Seedings (Acre)	PLS Lbs / Acre	Total PLS Lbs	Total Bulk Lbs	Cost / Lb	Total Cost
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	0.1600	9.18	399,881	2,500,000	2,499,255	4,300.0	0.2	688.0	4,300.0	$ 35.00	$150,500.00
TOTALS:			9.18	399,881	2,500,000	2,499,255		0.2	688.0	4,300.0	$ 35.00	$150,500.00

Aerial Mix 2 BAR

Species	Scientific Name	PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Aerial Seedings (Acre)	PLS Lbs / Acre	Total PLS Lbs	Total Bulk Lbs	Cost / Lb	Total Cost
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	0.1600	9.18	399,881	2,500,000	2,499,255	1,600.0	0.2	256.0	1,600.0	$ 35.00	$56,000.00
TOTALS:			9.18	399,881	2,500,000	2,499,255		0.2	256.0	1,600.0	$ 35.00	$56,000.00

SEEDLINGS

Seedling Species	Scientific Name	Acres of Seedlings planted.	# of Seedlings per Acre	Total # of Seedlings	Cost / Seedling	Total Cost
TOTALS:		0.0	0	0		$ 0.00

PART 6 - 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 [X] No [ ] Rationale:

Xeric big sagebrush is locally adapted to the main ecological sites within the proposed treatment areas. Originally considered a xeric form of mountain big sagebrush, xeric big sagebrush shares similarities with both basin and mountain big sagebrush and may be the result of hybridization between the two subspecies (Rosentreter and Kelsey, 1991). Further, ecological sites are present in the burned areas that support mountain big sagebrush and basin big sagebrush. Mountain big sagebrush, basin big sagebrush, and Wyoming big sagebrush (a similar species), have been utilized in the same/similar ecological sites, elevations, and aspects on lands administered by the FRFO. The following seedings in the FRFO which meet the above criteria - same/similar species, ecological sites, elevations, and aspects - have proven successful: the 2005 Snake One Fire (2013 personal communication, Anna Owsiak, IDFG), 2006 Cherry Fire (2008 monitoring report), and 2006 Frenchie Fire (2008 monitoring report).

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

Yes [X] No [ ] Rationale:

The Boise District will request xeric big sagebrush seed primarily from the regional seed warehouse and secondarily from IDFG. If xeric big sagebrush seed is unavailable or available in lower quantities than needed, other big sagebrush species also adapted to the area will be used entirely or to supplement shortfalls. These species are generally available in the quantities needed for the proposed treatment. Aerial seeding would not occur until the winter of FY14; therefore, seed in the quantity proposed is more likely to be available.

3. Is the cost and/or quality of the native seed reasonable given the project size and approved fiel unit management and Plan objectives?

Yes [X] No [ ] Rationale:

The primary native seed proposed for use (xeric big sagebrush) will be sourced from collections made in the vicinity of the fire; therefore, the quality of seed is expected to be high resulting in higher rate of establishment. Costs are expected to be comparable to sagebrush seed costs in recent years.

4. Will the native plants establish and survive given the environmental conditions and the curren or future competition from other species in the seed mix or from exotic plants?

Yes [X] No [ ] Rationale:

The xeric big sagebrush seed would be collected from shrubs growing in the same or similar locale as the burned area. Such seeds are expected to exhibit high rates of establishment and survivorship because they are locally adapted. The native taxa (xeric and similar big sagebrush) proposed for seeding have exhibited the ability to establish and persist in similar ecological sites within the Four Rivers Field Office. See citations for seeding success above.

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 [X] No [ ] Rationale:

The areas will be rested from livestock grazing for a minimum of two growing seasons and until resource objectives listed in this ES and BAR plan are met. This will facilitate shrub establishment. 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 Mixtures (Both ES & BAR Treatments)

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

Yes [ ] No [X] Rationale:

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 [X] Rationale:

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

Yes [ ] No [X] Rationale:

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

Non-native Plants	Native Plants
	Wyoming Big Sagebrush, Wyoming (Artemisia tridentata wyomingensis)

PART 7 - COST-RISK ANALYSIS

A. Probability of Treatments Successfully Meeting Objectives

Action/ Spec #	ES Issue #	Planned ES Action (LF2200000)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
S3	3	Aerial Seeding	Acres	4300	$213,000.00	90%
S5	5	Noxious Weeds	Acres	13772	$29,000.00	90%
S7	3	Fence/Gate/Cattleguard	Miles	13	$94,000.00	100%
S12	3	Closures (area, OHV, livestock)	Acres	2	$2,000.00	100%
S13	3	Monitoring	Acres	13772	$149,000.00	100%
					$487,000.00	
Action/ Spec #	**BAR Issue #**	**Planned BAR Action (LF3200000)**	**Unit (acres, WMs, Number)**	**# Units**	**Total Cost**	**% Probability of Success**
R3	1	Aerial Seeding	Acres	1600	$86,000.00	90%
R5	2	Noxious Weeds	Acres	13772	$50,000.00	90%
R7	4	Fence/Gate/Cattleguard	Miles	2	$14,000.00	100%
					$150,000.00	

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 aerial seeding of sagebrush would aid in the establishment and future recruitment of shrubs. These shrubs would benefit sage-grouse by providing essential cover, and would also have a positive effect on the plant community as a whole. Seeded sagebrush would also recover plant community structure and function benefitting habitat for other sensitive wildlife and plants, overall. Noxious weed treatments would help protect adjacent private, USFS, and BLM lands against further expansion of noxious weeds. Fence repair/replacement would help ensure that disturbance from livestock does not occur in the newly seeded areas, as well as facilitate natural recovery of vegetation.

No Action Yes [ ] No [X] Rationale for Answer:

Without sagebrush cover the area would be unsuitable for sage-grouse and other wildlife, sagebrush recovery would be unacceptably slow, and there would be a high likelihood for expansion of invasive annual grasses present in the vicinity. Known and newly identified noxious weed species could expand in the burned area and eventually dominate some of the plant communities. Greater sage-grouse and other special status wildlife and plant habitat in adjacent unburned areas would be at risk of invasive annual grass and noxious weed encroachment.

Alternative(s) Yes [ ] No [X] 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:

With removal of sagebrush by fire there is ample open area to establish aerially seeded sagebrush. Conversely, open areas also give introduced annual grasses present in the area a chance for expansion. A quick and successful establishment of sagebrush will help keep annual grass encroachment to a minimum. These open areas once occupied by shrubs are fertile ground for seedling establishment and there is little competition for nutrients, water, and space. When sagebrush seed that is locally adapted and of high PLS is applied in the

proper seeding treatment window, there is a high likelihood of success. Successful establishment of seeded shrubs in turn will facilitate establishment and recruitment of shrubs into the future, increasing cover and sustaining the area. Additionally, resting the area from livestock grazing will also promote seedling establishment and natural recovery of vegetation.

Suitable sites aerially seeded with sagebrush on average exhibit a 70% success rate across the Boise District, particularly in areas receiving 10 or more inches of average annual precipitation (e.g., Loamy 10-12, Loamy 10-13, Loamy 12-16 ecological sites). Success is defined as meeting ESR Plan objectives for seedling survivorship; typically an average of 1 (or >1) seedling per 10m² after third year in suitable locations across seeding area. Specific examples include:

2010 South Trail Fire:
13.0 and 6.0 average Wyoming big sagebrush/10m²
• Loamy 8-12 and Sandy Loam 8-12

2010 Hot Tea Fire:
1.1 average mountain big sagebrush/10m² and 5.3 average low sagebrush/10m² (in areas not burned by 2012 Stout Fire)
• Loamy 12-16, Loamy 8-12, Sandy Loam 8-12

All of the areas designated for aerial seeding treatment are in annual precipitation zones of 12 inches and above (see Background and Native Seed Worksheet for ecological site and success details, respectively).

Weed control efforts in this area and for similar noxious weed species and in similar soils and precipitation has proven to be successful. The objective is to contain known infestations from mass spread and to detect new invaders. Known sites are already identified which will aid in the successful monitoring of spread and treatment. Although the number of OHV trails and two track roads in the area will pose a threat, the OHV routs are identified, riders are kept to existing roads and trails, and these are easily traveled by noxious weed personnel to inventory the area. There is a high likely hood for early detection and rapid response for new noxious weed invasion.

No Action Yes [ ] No [X] Rationale for Answer:

Without sagebrush cover the area would be unsuitable for sage-grouse and other wildlife, sagebrush recovery would be unacceptably slow, and there would be a high likelihood for expansion of invasive annual grasses present in the vicinity. Known and newly identified noxious weed species could expand in the burned area and eventually dominate some of the plant communities. Greater sage-grouse and other special status wildlife and plant habitat in adjacent unburned areas would be at risk of invasive annual grass and noxious weed encroachment.

Alternative(s) Yes [ ] No [X] 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:
None

C. Risk of Resource Value Loss or Damage

No Action - Treatments not Implemented

Resource Value	N/A	None	Low	Med	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

Resource Value	N/A	None	Low	Med	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 8 - MONITORING PLAN

S3 - Aerial Seeding - ES Issue 3

Identify the objective of the treatment:

The goal of the treatment is to promote recovery of ecosystem health, restore sagebrush structure and function, reduce the expansion of invasive grasses and noxious weeds, and prevent erosion in susceptible areas from high fire severity.

The aerial seeding treatment would be considered successful when the following objectives are met:

1. Aerially seeded sagebrush species attain a density of 1 per 10m² in suitable areas.

2. Sagebrush is found to be common in qualitative surveys (site assessments).

Describe how implementation will be monitored:

Aerial seeding treatment implementation will be monitored during contract administration to ensure contract specifications are met. A Contract Officer Representative (COR) will be at the landing site with the contractor, and a Project Inspector (PI) will be on-site to measure seed distribution. Any changes from the planned implementation would be noted in the project file “as built” discussion.

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

The site will be monitored by District ESR staff annually for three consecutive years following fire containment. An evaluation of monitoring data and qualitative assessments by ESR and Field Office staff will be completed annually.

1. Aerially seeded shrub density will be collected utilizing a 10 m² plot (1.73 meter radius circle) in areas considered suitable for shrub establishment.

2. Photo plots and qualitative site assessments will also be conducted to inform seeding success.

S5 - Noxious Weeds - ES Issue 5

Identify the objective of the treatment:

Conduct an inventory of noxious weeds in the burned area. Noxious weeds detected during

the inventory would be treated when possible.

Describe how implementation will be monitored:

Inventory and treatment data will be recorded in the NISIMS database, in Pesticide Application Records, and using GPS/GIS. Data will include information on species, location and size of infestation, chemicals applied, amount of chemicals applied, weather, plant phenology, and other factors.

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

Size and abundance of noxious weed infestations as well as any necessary 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 Boise District Noxious Weed Program for ongoing inventory, treatment and monitoring using funding sources other than ESR.

S7 - Fence/Gate/Cattleguard - ES Issue 3

Identify the objective of the treatment:

Repair 13 miles of boundary fence to BLM standards to exclude livestock from the Sturgill Creek allotment and the Wolf Creek pasture of the McChord Butte allotment boundary during the grazing closure.

Describe how implementation will be monitored:

Boise District ESR and/or Operations personnel will serve as project inspectors during fence construction and repair to ensure fences meet BLM standards.

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

Boise District ESR and Four Rivers Field Office personnel will occasionally perform compliance checks to ensure fences are keeping livestock where authorized.

S12 - Closures (area, OHV, livestock) - ES Issue 3

Identify the objective of the treatment:

1. Aerial seeding treatment objectives are being met.

2. Canopy and ground cover of herbaceous vegetation would be at least 80% of what is found in unburned islands or adjacent areas (of the same or similar ecological site).

3. Greater than 95% of canopy gaps are less than 50cm.

4. In addition to the above objectives, a qualitative assessment of the following will also occur before grazing resumption would occur:
• Perennial plant vigor
• Desirable perennial plant seed production
• Precipitation information during the non-growing (winter) and growing (spring through early summer) seasons.
• Erosion potential

Describe how implementation will be monitored:

Closure areas would be monitored by Four Rivers Field Office and Boise District Operations personnel during the regularly scheduled grazing season to ensure the closure is functioning to keep livestock where authorized.

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

Vegetation recovery will be monitored by Boise District ESR staff annually for three consecutive years following fire containment. Recommendations for livestock grazing resumption in the burned area will be made by an ESR/Field Office interdisciplinary team based on monitoring results.

• Monitoring methods include line-point intercept, canopy and basal gap intercept, photo plots, and qualitative site assessments.

• Data collection will occur between April and July of each year.

• An ESR Monitoring Report which includes results, conclusions, and recommendations will be submitted by September of each year for three years to the Washington Office; the final report will be submitted on the third year after fire containment.

S13 - Monitoring - ES Issue 3

Identify the objective of the treatment:

See individual treatment for monitoring details.

Describe how implementation will be monitored:

N/A

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

N/A

R3 - Aerial Seeding - BAR Issue 1

Identify the objective of the treatment:

The goal of the treatment is to promote recovery of ecosystem health, restore sagebrush structure and function, reduce the expansion of invasive grasses and noxious weeds, and prevent erosion in susceptible areas from high fire severity.

The aerial seeding treatment would be considered successful when the following objectives are met:

1. Aerially seeded sagebrush species attain a density of 1 per 10m² in suitable areas.

2. Sagebrush is found to be common in qualitative surveys (site assessments).

Describe how implementation will be monitored:

Aerial seeding treatment implementation will be monitored during contract administration to ensure contract specifications are met. A Contract Officer Representative (COR) will be at the landing site with the contractor, and a Project Inspector (PI) will be on-site to measure seed distribution. Any changes from the planned implementation would be noted in the project file “as built” discussion.

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

The site will be monitored by District ESR staff annually for three consecutive years following fire containment. An evaluation of monitoring data and qualitative assessments by ESR and Field Office staff will be completed annually.

1. Aerially seeded shrub density will be collected utilizing a 10 m² plot (1.73 meter radius circle) in areas considered suitable for shrub establishment.

2. Photo plots and qualitative site assessments will also be conducted to inform seeding success.

R5 - Noxious Weeds - BAR Issue 2

Identify the objective of the treatment:

Decrease the size and abundance of noxious weed infestations within the burned area compared to the previous year.

Describe how implementation will be monitored:

Inventory and treatment data will be recorded in the NISIMS database, in Pesticide Application Records, and using GPS/GIS. Data will include information on species, location and size of infestation, chemicals applied, amount of chemicals applied, weather, plant phenology, and other factors.

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

Size and abundance of noxious weed infestations as well as any necessary 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 Boise District Noxious Weed Program for ongoing inventory, treatment and monitoring using funding sources other than ESR.

R7 - Fence/Gate/Cattleguard - BAR Issue 4

Identify the objective of the treatment:

Repair 2 miles of fence to BLM standards to facilitate authorized grazing following the closure period.

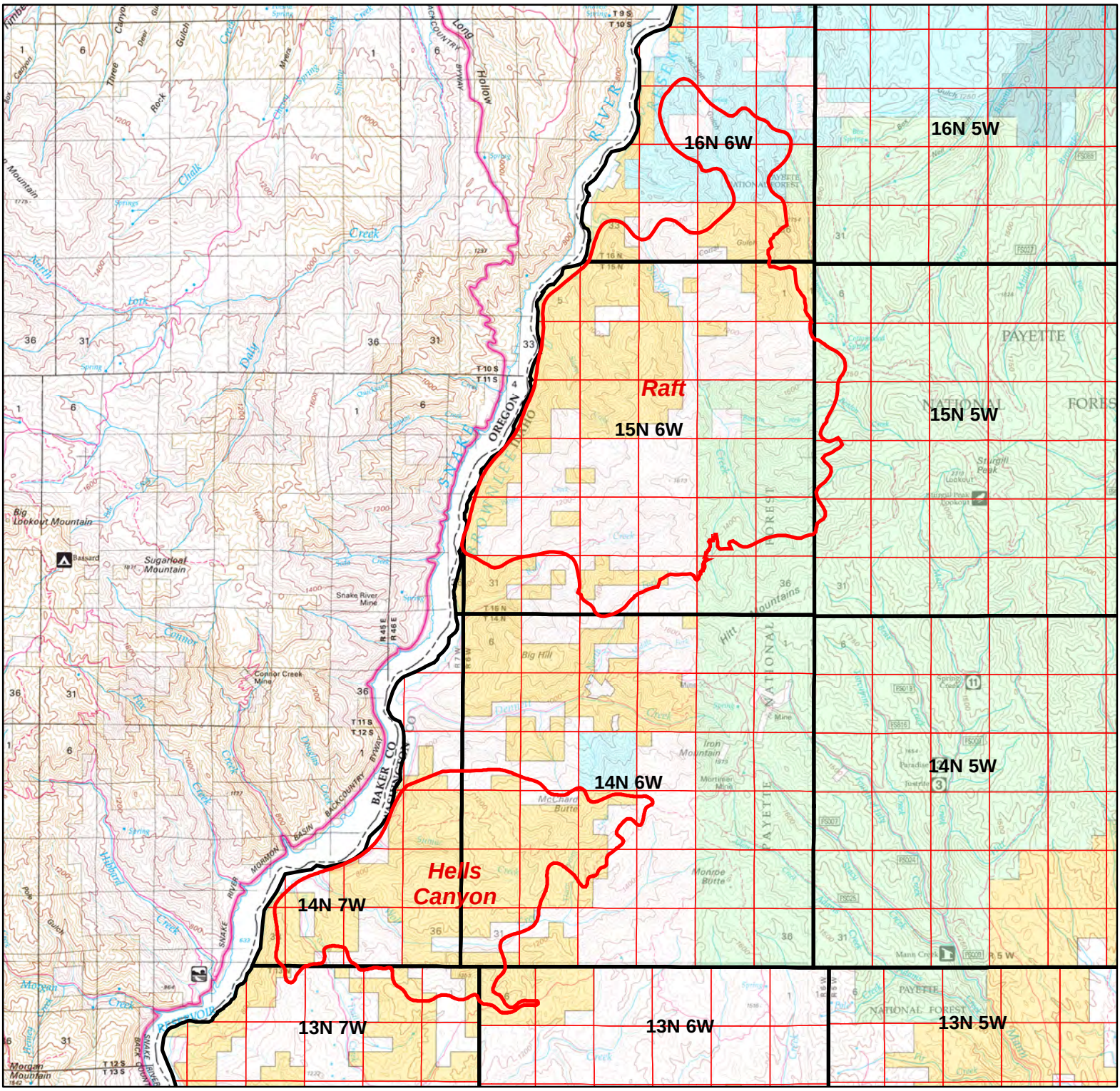
Describe how implementation will be monitored:

Boise District ESR and/or Operations personnel will serve as project inspectors during fence construction and repair to ensure fences meet BLM standards.

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

Boise District ESR and Four Rivers Field Office personnel will occasionally perform compliance checks to ensure fences are keeping livestock where authorized.

PART 9 - MAPS



Total acres: 29,388
BLM 13,771 acres
USFS 3,952 acres
State 1,337 acres
Private 10,327 acres

Boise District 2013
Four Rivers Field Office
Fire: HX4J Weiser Complex

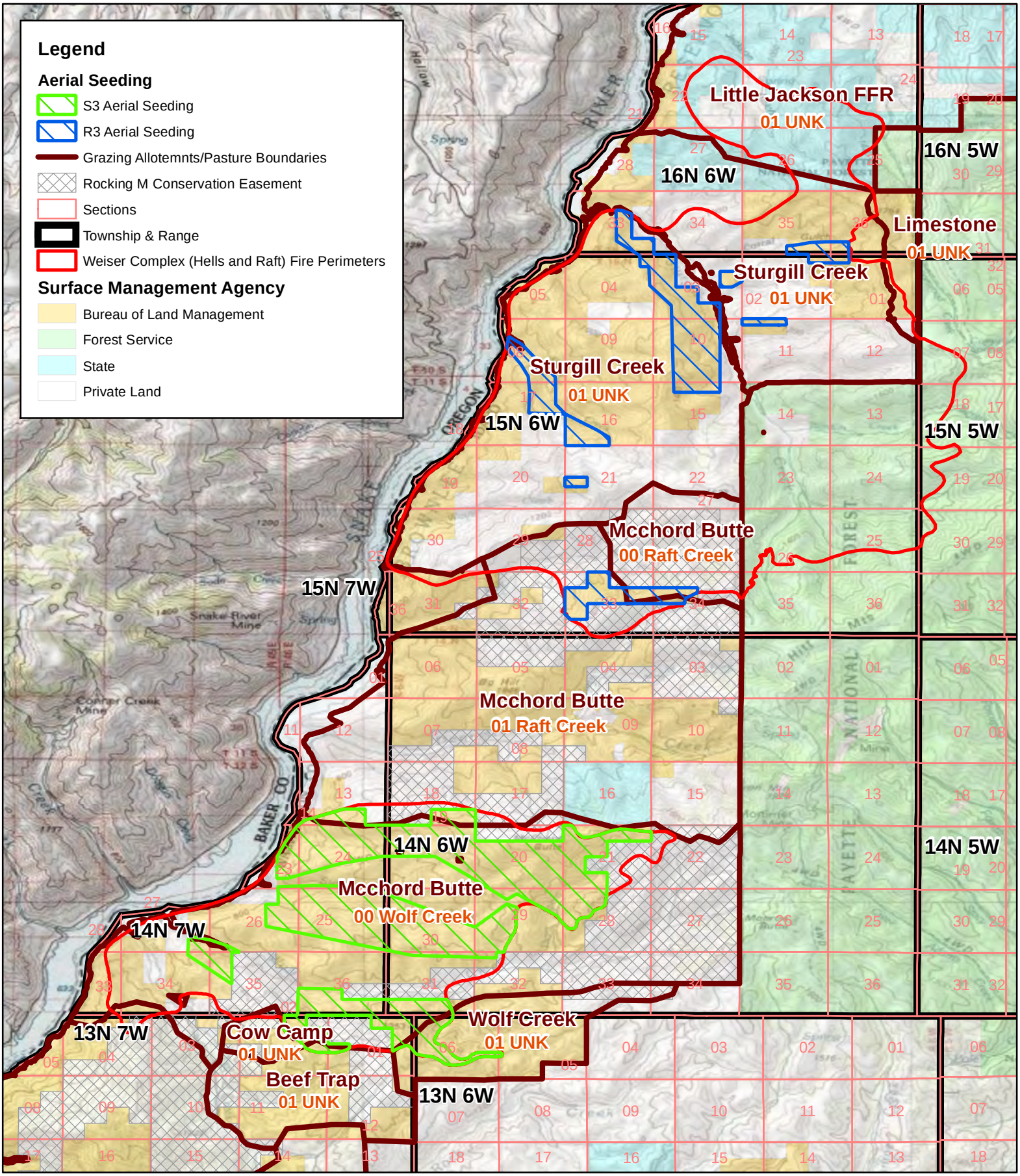
- Fire Perimeter
- BLM
- USFS
- State
- State Fish/Game
- Private
- Township
- Section

No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.
Map projection: UTM 11, NAD 1983, meters

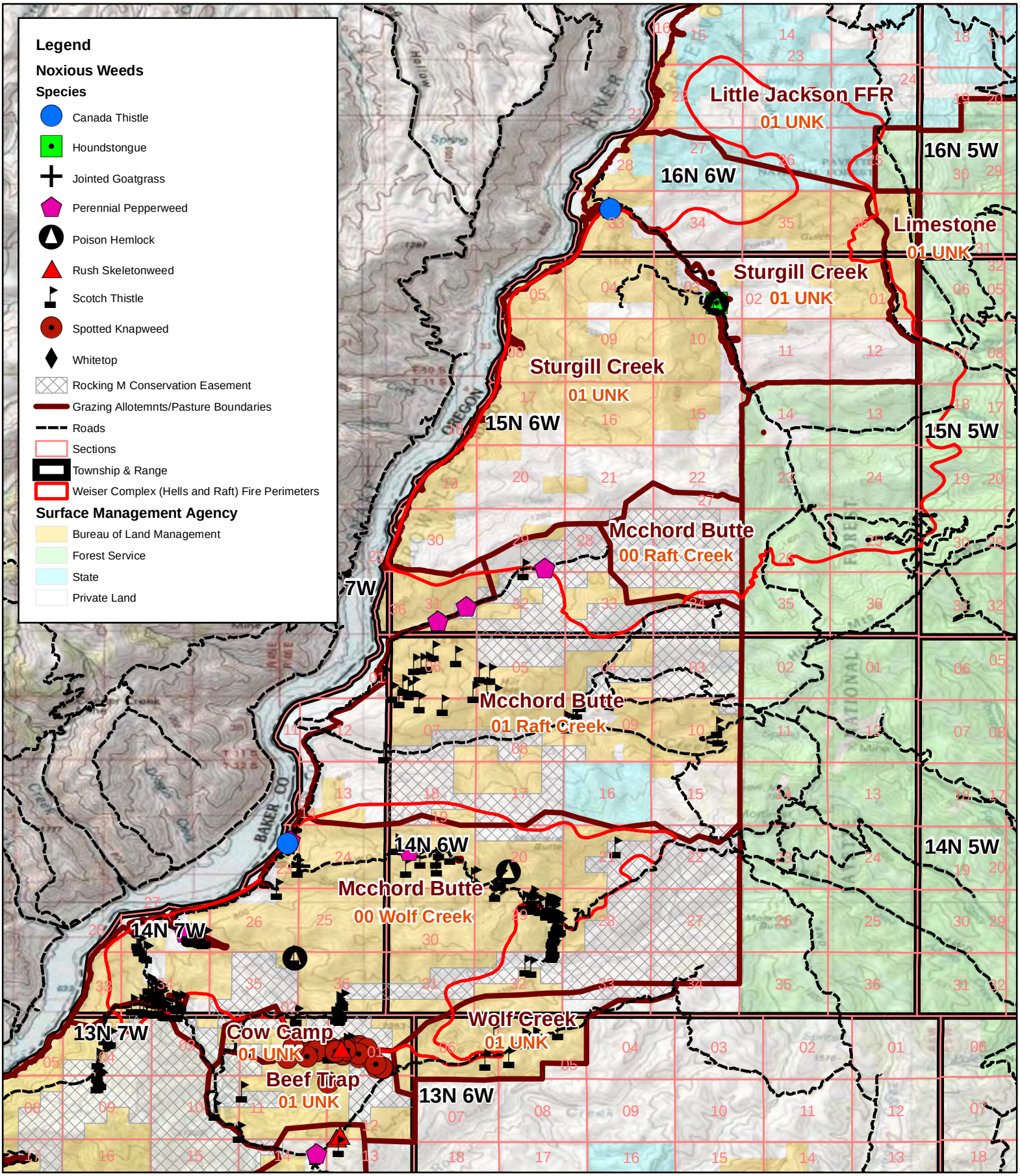
0 1 2 3 4 5
Miles

Map Date:September 18, 2013

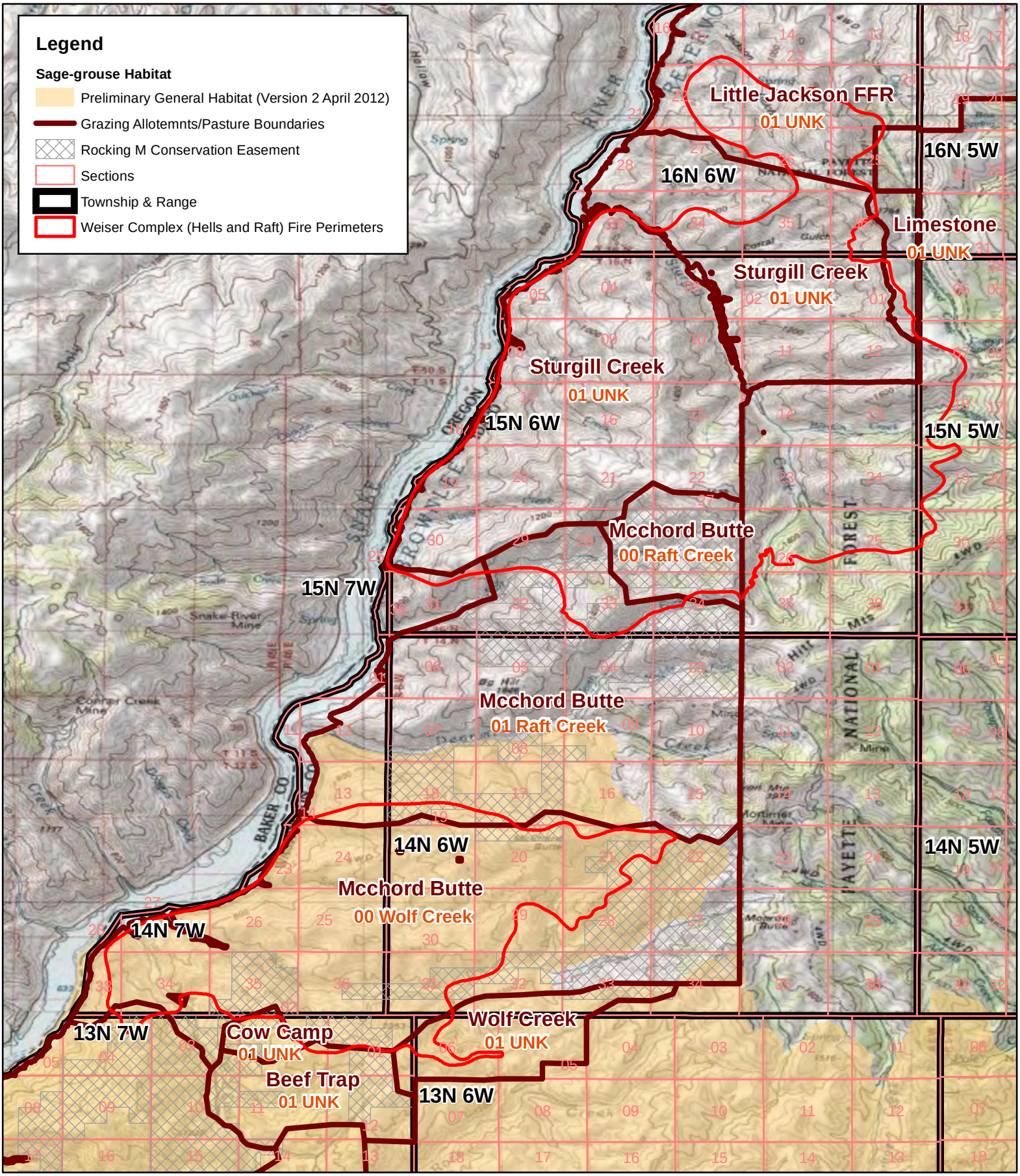
Boise District BLM
HX4J Weiser Complex ES&R
S3/R3 Aerial Seeding



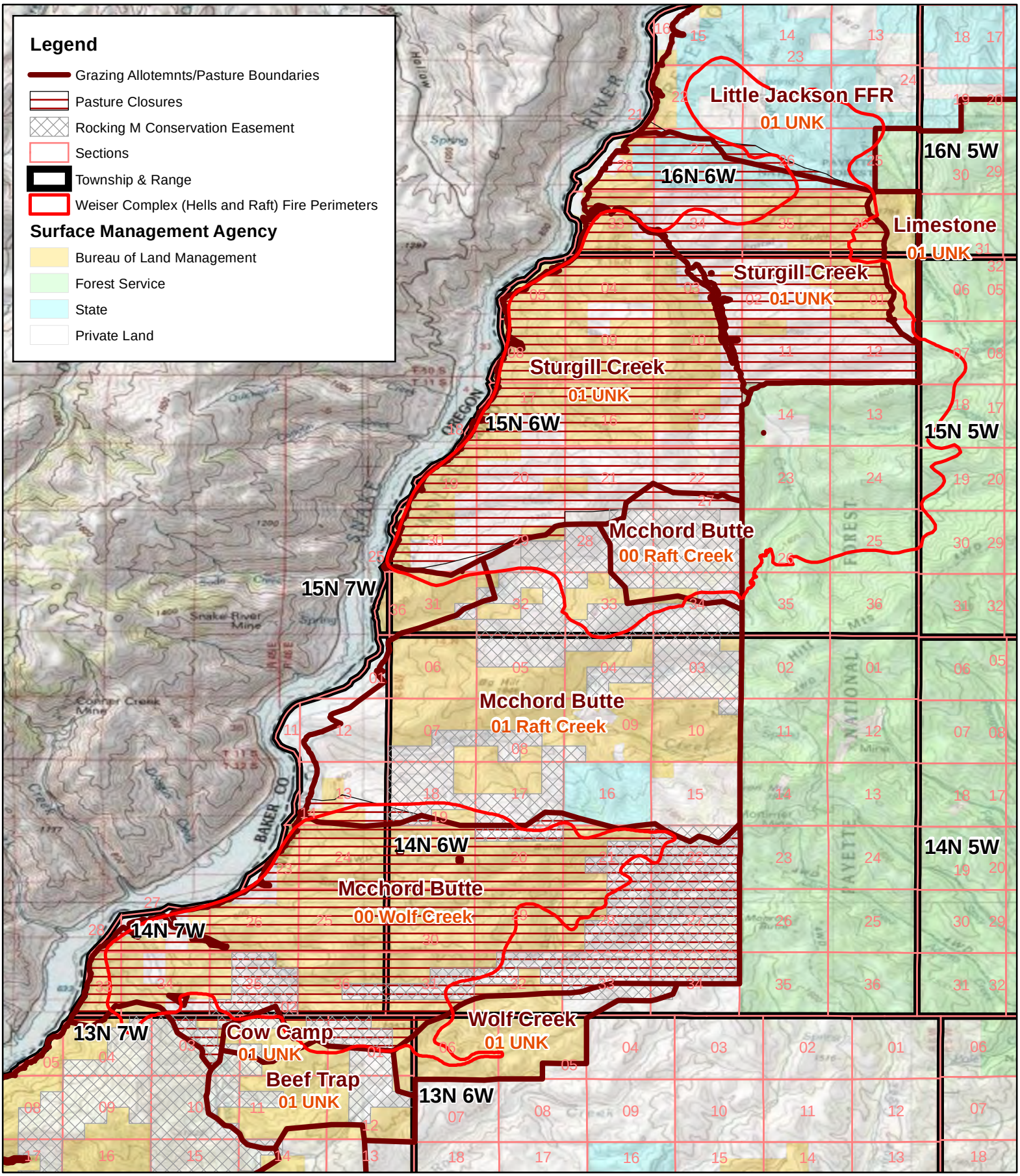
Boise District BLM
HX4J Weiser Complex ES&R
S5/R5 Noxious Weeds



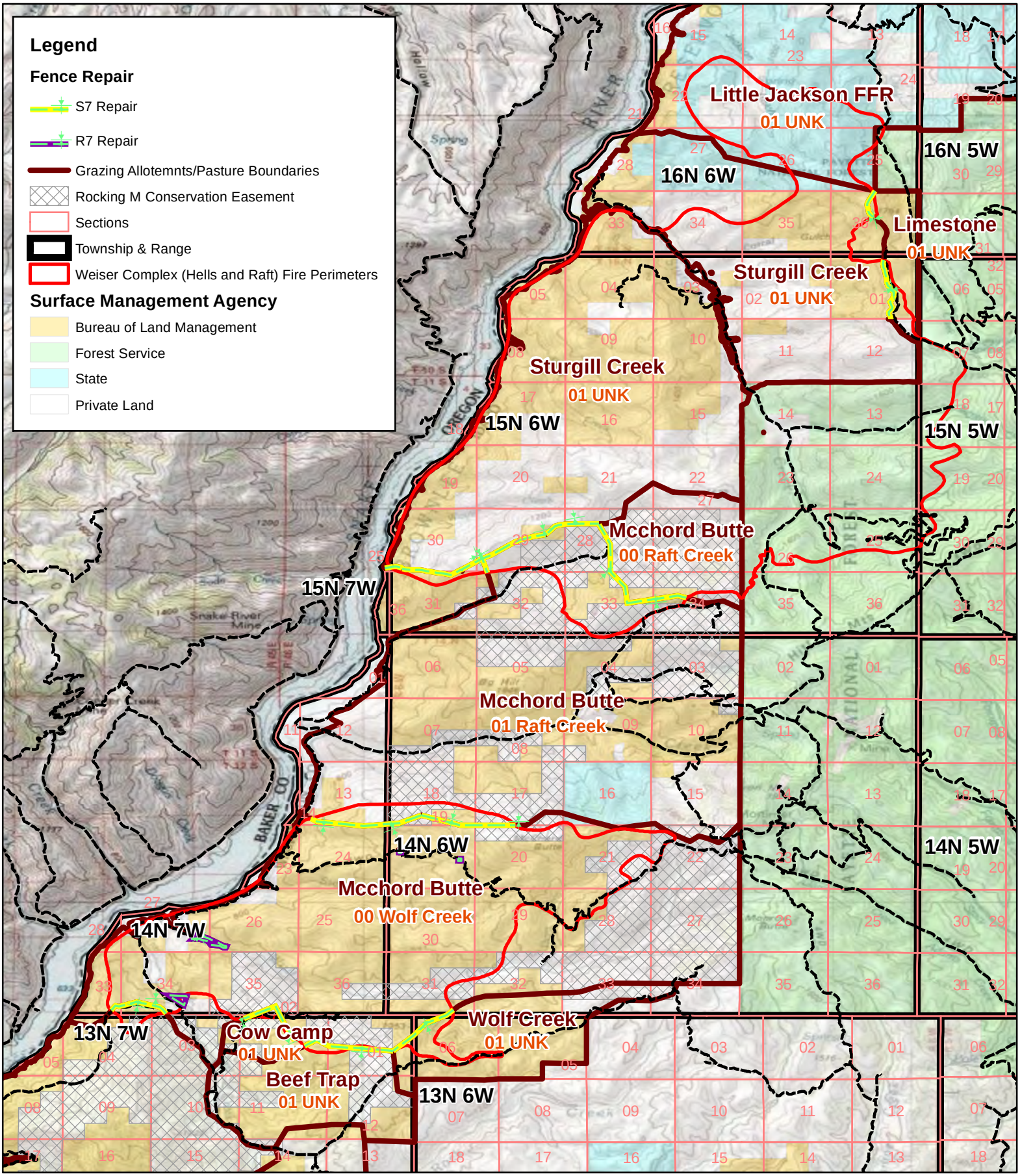
Boise District BLM
HX4J Weiser Complex ES&R
Sage-grouse Habitat



Boise District BLM
HX4J Weiser Complex ES&R
Allotments/Pastures Boundaries with Closures



Boise District BLM
HX4J Weiser Complex ES&R
S7/R7 Fence Repair



PART 10 - REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial	Date
Team Leader	Sarah Garcia (BLM Four Rivers FO)	Initialed	09/20/2013
Riparian specialist	Allan Tartar (BLM Four Rivers FO)	Initialed	09/20/2013
Operations	Alex Webb (BLM Boise District)	Initialed	09/20/2013
Operations	Lara Hannon (BLM Boise District)		
Wildlife Biologist	Jill Holderman (BLM Four Rivers FO)	Initialed	09/20/2013
Botanist	Mark Steiger (BLM Four Rivers FO)	Initialed	09/20/2013
Cultural Resources/Archeologist	Dean Shaw (BLM Four Rivers FO)	Initialed	09/20/2013
Other Technical Specialists	Anna Owsiak (Other Idaho Fish and Game)		
Other Technical Specialists	Gary Holmstead (Other Idaho Power Company)		
Rangeland Mgt. Specialist	Andy Bumgarner (USFS (US Forest Service) Payette National Forest)		
Rangeland Mgt. Specialist	Diane Green (Other Idaho Department of Lands)		

PLAN APPROVAL

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

/s/ Terry A. Humphrey 9/19/2013

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.