

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

PLAN TEMPLATE 2010

TINDALL FIRE (G5SO)

BLM Boise District Office

IDAHO STATE OFFICE

FIRE BACKGROUND INFORMATION

Fire Name	Tindall
Fire Number	G5SO
District/Field Office	Boise District Office
Admin Number	LLIDB00000
State	IDAHO
County(s)	OWYHEE
Ignition Date/Cause	08/10/2012 Lightning
Date Contained	08/12/2012
Jurisdiction	<i>Acres</i>
State	179
Private	320
BLM	2723
Total Acres	3222
Total Costs	\$213,000
Costs to LF20000ES (2822)	\$200,000
Costs to LF32000BR (2881)	\$13,000

Status of Plan Submission (check one box below)

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

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON FIRE.

The Tindall Fire burned approximately 3,222 acres, consisting of 2,723 acres public land, 179 acres state land, and 320 acres private land. The fire burned 2,403 acres (2,403 BLM acres) or 11% of the Tindall Reservoir Field Grazing Allotment, 214 acres (214 BLM acres) or 1% of the Antelope Field Grazing Allotment, and 605 acres (106 BLM acres) or 4% of the Trout Creek Grazing Allotment. Prior to the wildfire vegetation in the area was dominated by low sagebrush with pockets of mountain big sagebrush where deeper soils exist. Antelope bitterbrush was present on rocky slopes and ridges. Understory grasses include Idaho fescue, bottlebrush squirreltail, and Sandberg's bluegrass. The fire occurred in Priliminary Priority Habitat for greater sage grouse (*Centrocercus urophasianus*), a candidate species for listing under the Endangered Species Act. This area holds one of the densest concentrations of sage-grouse leks and one of the largest populations of sage-grouse in southwestern Idaho. There are two active leks within the fire's boundaries and 3 active leks within a 1 ½ mile radius of the fire perimeter. Fringed Waterplantain (*Damasonium californicum*), a BLM special status plant species, has historically grown along the banks of Tindall Reservoir approximately ¼ mile north of the fire's northern boundary. No other special status species are known to occur in the area. Big game (elk, mule deer, and antelope) use this area year round in low densities.

The fire occurred within the Dissected High Lava Plateau Level IV Ecoregion of Idaho (McGrath et al. 2002). Ecoregions stratify the environment by its probable response to disturbance (Bryce et al. 1999), and are critical for structuring and implementing ecosystem management strategies across geographical areas (Omernik et al. 2000). The Dissected High Lava Plateau Ecoregion is characterized as having both frigid and mesic Aridisol and Mollisol soils with a sagebrush/cool season grass vegetation community. The burned area is classified as a Shallow Claypan 12-16 inch ecological site (SSURGO, 2008) characterized by a low sagebrush/Idaho fescue plant community. During a field tour of the area, resource specialists estimated eighty percent of the burn to be a Shallow Claypan 12-16 inch ecological site and the other twenty percent to be a Loamy 12-16 inch ecological site characterized by mountain big sagebrush, Idaho fescue, and bluebunch wheatgrass. No previous wildfires have been recorded for this area and native vegetation communities were primarily still intact pre-fire. Cheatgrass (*Bromus tectorum*) and ventenata grass (*Ventenata dubia*) are present in the area but in low densities and restricted to roadways and livestock watering sites. Black henbane (*Hyoscyamus niger*) and Canada thistle (*Cirsium arvense*), both Idaho state listed noxious weeds, are also present along roadways and watering sites.

While some vegetation recovery is expected due to the number of acres burned in the moderate to low severity classes, sagebrush cover is not expected to return to pre-fire conditions for at least 30 years. The Aroga moth (*Aroga websteri*) has affected sagebrush on a large majority of this area and surrounding areas, with most shrubs showing signs of their impact. Drought in the area had already stressed sagebrush prior to the burn, leaving it extremely dry with shriveled leaves. The Aroga moth was expected to significantly thin the

sagebrush density even without the fire. Therefore, the combination of fire, insect, and drought in southwest Idaho has and will continue to greatly reduce the available habitat for the greater sage-grouse.

LAND USE PLAN CONSISTENCY

S3 - Aerial Seeding

Seed mixtures comprised of low sagebrush, mountain big sagebrush, and Sherman's big bluegrass would be aerial broadcast seeded. Aerial seeding would occur on 1365 acres in 100 foot wide strips separated by 100 foot spaces over a total of 2,723 acres of burned land. Aerial seeding of shrubs is proposed as an ES treatment to augment the development of vegetative structure, to reduce sediment movement from wind and water erosion, and to repair habitat for the greater sage-grouse and other sagebrush obligate species.

These proposed actions meet the MFP objectives to:

- Provide for protection and conservation of rare and endangered species within the planning unit;
- Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest;
- Protect and/or improve endangered species habitat within the BPU;
- Manage 520,000 acres of sage-grouse range in the BPU to improve nesting, brood rearing, and winter habitats by: improving all poor and fair big sagebrush, meadow, and riparian ecological sites to good ecological condition;
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations;
- Manage 1,079,000 acres of pronghorn habitat in the BPU, within IMP guidelines where applicable, to provide sufficient forage, water, cover, and space;
- Manage mule deer spring, summer, and fall, and winter range, and pronghorn habitat in the BPU to obtain good ecological condition, and to provide adequate food, cover, and water.

S5 - Noxious Weeds

Inventory and treatment of new and existing populations of noxious weeds would occur within the burned area. This is in conformance with BLM policy requiring the BLM to control the spread of noxious weeds on public lands and eradicate them where possible and economically feasible.

The fire is within the Bruneau Planning Unit (BPU) of the 1983 Bruneau Management Framework Plan (MFP) which is the current land use plan for the burned area. The proposed treatment is in compliance with the following MFP objectives;

- Protect and/or improve endangered species habitat within the BPU (WL-1);
- Manage sensitive species habitat in the BPU to maintain or increase existing and potential populations (WL-2);
- Provide for protection and conservation of rare and endangered species within the

planning unit (RM-5);

--Maintain and/or enhance unique or special habitats to retain and/or improve their character and value for wildlife, research, and human enjoyment. Protect habitats supporting nongame wildlife with high public and/or biological interest (WL-5);

--Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

S7 - Fence/Gate/Cattleguard

Approximately 2 miles of fence damaged in the fire would be repaired to protect the treatment area from livestock use during the seeding establishment and natural recovery period. Fencing of treatment areas is consistent with BLM Handbook H 1742-1, Burned Area Emergency Stabilization and Rehabilitation, which states; “livestock will be excluded from the treatment 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.

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--Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

S12 - Closures (area, OHV, livestock)

Approximately 2 miles of fence damaged in the fire would be repaired to protect the treatment area from livestock use during seeding establishment and natural recovery period. Fencing of treatment areas is consistent with BLM Handbook H 1742-1, Burned Area Emergency Stabilization and Rehabilitation, which states; “livestock will be excluded from the treatment 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.

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S13 - Monitoring

R5 - Noxious Weeds

Inventory and treatment of new and existing populations of noxious weeds would occur within the burned area. This is in conformance with BLM policy requiring the BLM to control the spread of noxious weeds on public lands and eradicate them where possible and economically feasible.

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- Maintain stability of 408,300 acres classified as moderate, high, and critical erosion hazard by reducing or minimizing wind and water erosion (WS-1).

COST SUMMARY TABLES

Emergency Stabilization (LF20000ES)

Action/ Spec #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2012	FY 2013	FY 2014	FY 2015	Totals by Spec.
S1	Planning (Project Management)				\$ 0	\$15,000	\$15,000	\$15,000	\$45,000
S2	Ground Seeding								
S3	Aerial Seeding	Acres	1,365	\$ 54.21	\$38,000	\$36,000	\$ 0	\$ 0	\$74,000
S4	Seedling Planting								
S5	Noxious Weeds	Acres	2,723	\$ 2.94	\$ 0	\$8,000	\$ 0	\$ 0	\$8,000
S6	Soil Stabilization (Other than seedling, planting)								
S7	Fence/Gate/Cattleguard	Miles	2	\$8,500.00	\$ 0	\$17,000	\$ 0	\$ 0	\$17,000
S8	Road/Trail Water Diversion								
S9	Cultural Protection (Stabilization/Patrol)								
S10	Tree Hazard Removal								
S11	Facilities								
S12	Closures (area, OHV, livestock)								
S13	Monitoring	Acres	2,723	\$ 20.57	\$ 0	\$19,000	\$19,000	\$18,000	\$56,000
S14	Other Treatments								
	TOTAL COSTS (LF20000ES)				\$38,000	\$95,000	\$34,000	\$33,000	\$200,000
OTHER FUND CODE TOTALS:									
	TOTAL COSTS (???)								
	TOTAL COSTS (???)								
	TOTAL COSTS (???)								

Burned Area Rehabilitation (LF32000BR)

Action/ Spec #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2012	FY 2013	FY 2014	FY 2015	Totals by Spec.
R1	Planning (Project Mgmt)								
R2	Ground Seeding								
R3	Aerial Seeding								
R4	Seedling Planting								
R5	Noxious Weeds	Acres	2,723	\$ 4.77	\$ 0	\$ 0	\$7,000	\$6,000	\$13,000
R6	Soil Stabilization (Other than seedling, planting)								
R7	Fence/Gate/Cattleguard								
R8	Road/Trail Water Diversion								
R9	Cultural Protection (Stabilization/Patrol)								
R10	Tree Hazard Removal								
R11	Facilities								
R12	Closures (area, OHV, livestock)								
R13	Monitoring								
R14	Additional Treatments								
	TOTAL COSTS (LF32000BR)				\$0	\$0	\$7,000	\$6,000	\$13,000
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

The burned area is considered Preliminary Priority Habitat (BLM 2012 - A Framework to Identify Greater Sage-grouse Preliminary Priority Habitat and Preliminary General Habitat for Idaho; BLM IM 2012-043) for the greater sage grouse and provides critical nesting, wintering, and lekking habitat. Invasive species (cheatgrass and ventenata grass) and wildfires pose the greatest risk to this portion of their range. There are 2 active leks within the fire perimeter and 3 active leks within a 1 1/2 miles of the fires' perimeter.

The sagebrush is expected to take at least 30 years to recover if left alone which, when combined with other large fires surrounding the area (e.g. 2007 Murphy Fire Complex Fires in the adjacent BLM Jarbidge Field Office) could significantly threaten the population of sage-grouse. If these areas convert to a cheatgrass dominated understory, the fire return interval might be 10 times as frequent as the historical fire patterns. Seeding sagebrush and Sherman's big bluegrass will quicken the recovery process and reduce the chance of invasive annual grass dominance. Repairing existing fence and closing a burned pasture within a grazing allotment will help to assure natural recovery of native species and success of the seeding treatment.

4 - Critical Heritage Resources

No specific treatments to mitigate impacts of the fire to critical heritage resources have been identified. However, significant heritage resources have been identified in the Tindall Fire area. Any treatments that would result in increased vegetative cover and BLM presence in the burned area would also serve to protect cultural resources in the burned area.

Further identification efforts would consider effects to significant heritage resources in the area of potential effect (APE) for the proposed treatments prior to implementation as per BLM policy.

5 - Invasive Plants and Weeds

Noxious weeds including Canada thistle and black henbane are known to occur adjacent to the fire's perimeter. Spot treatments are needed to avoid an increase in the number and vigor of these plants post-fire. Control of these weeds will aid native and seeded vegetation recovery.

BURNED AREA RECOVERY ISSUES

1 - Lands Unlikely to Recover Naturally

N/A

2 - Weed Treatments

Noxious weeds including Canada thistle and black henbane are known to occur adjacent to the fire's perimeter. Spot treatments are needed to avoid an increase in the number and vigor of these plants post-fire. Control of these weeds will aid native and seeded vegetation recovery.

3 - Tree Planting

N/A

4 - Repair/Replace Fire Damage to Minor Facilities

N/A

PART 3 - DESCRIPTION OF TREATMENTS

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

S3 Aerial Seeding

A. Treatment/Activity Description

Two seed mixes, 1) mountain big sagebrush and Sherman's big bluegrass and 2) low sagebrush, would be aurally broadcast seeded across the burned area during late fall or winter of 2012/2013. The mountain big sagebrush mix would be applied onto smaller areas of deeper soils found most often at the toeslope of hills. Prior to the fire these areas supported higher fuel loads (big sagebrush and bitterbrush) causing higher intensity fire and more complete consumption of vegetation. Because the availability of sagebrush seed is limited in 2012, sagebrush will be applied in 100 foot wide strips with 100 foot wide spacing between strips across the burned area. Timing of the seed application will ensure seed-to-soil contact prior to winter snow fall or precipitation. Sherman big bluegrass seed is small and should incorporate into the soil and germinate along rocks and crevices. These species are paramount to the areas ability to support viable populations of sage-grouse. Seed would be broadcast using an end product contract by either a helicopter or fixed-wing aircraft.

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

The seeding of shrubs/grass would augment and quicken the replacement of those species destroyed by the fire helping to ensure desirable vegetation recovery and avoiding expansion of invasive annual grasses/noxious weeds. Sherman big bluegrass would help to fill in the interspaces between shrubs reducing cheatgrass, ventenata grass, and noxious weed competition.

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

The burn removed an area of mature sagebrush within key sage-grouse habitat. These are the Bureau's highest priority areas for reestablishment of shrubs, grasses, and forb species. Benefits to critical resources would outweigh the cost of treatment. The treatments would quicken the restoration of suitable habitat conditions for sage-grouse.

S7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

The objective of this treatment is to repair approximately 2 miles of allotment boundary fence damaged or destroyed by the fire. Damaged wood corners and braces would be replaced with galvanized steel posts. Damaged wire would also be repaired. The management fences would be constructed to BLM fence standards for wildlife.

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

The wildfire damaged fences associated with the livestock management of the affected allotments. Reconstruction and repair of management fences damaged by the fire would maintain the future integrity of the existing livestock grazing system. Repair of damaged management fences would allow for grazing rest on seeded areas while allowing grazing to occur on the unburned portion of the affected grazing allotments.

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

This treatment is reasonable and cost effective because it would utilize existing fences and gates to the greatest extent possible, while allowing unburned areas to be available to grazing. Damaged wood stretch points and corners would be replaced with galvanized steel pipe thus increasing the longevity of the structures and resistance to future wildfire damages.

S12 Closures (area, OHV, livestock)

A. Treatment/Activity Description

The Tindall Reservoir Field South pasture (6,503 BLM acres) would be closed to livestock grazing (both cattle and horses) for 2 growing seasons or until objectives to resume grazing are met. Cattle will, however, be allowed to trail through the pasture including the burned area. Livestock closure would be achieved with a grazing decision to temporarily close the Tindall Reservoir Field South pasture. Grazing in the other two affected allotments (Antelope Field and Trout Creek) would be allowed however permittees would be required to keep livestock off of the burned area by herding and salt/mineral placement. Periodic compliance checks would be completed by Bruneau Field Office staff.

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

The purpose of this treatment is to protect the newly seeded plants and rest the burned area from livestock grazing providing the opportunity for recovery of on-site vegetation. Establishment of new plants and recovery of on-site perennial plants would help to inhibit the expansion of annual invasive vegetation and noxious weeds and stabilize soil resources.

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

There are no costs associated with the livestock closure (see S7 for cost of fence repair) .

S13 Monitoring

A. Treatment/Activity Description

See Monitoring Section

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

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

Issue 5 - Invasive Plants and Weeds

S5 Noxious Weeds

A. Treatment/Activity Description

Black henbane, Canada thistle, cheatgrass, and ventenata grass are known to occur within and adjacent to the burned area boundary. These noxious weeds and invasive annual grasses have a moderate to high potential for establishment in the burned area. Noxious weed inventory and spot herbicide treatment would occur the first year following the fire within the burned area under ES. Weeds would be treated with the BLM-approved chemicals in accordance with the Noxious Weed EA and the Record of Decision for Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States, approved September 29, 2007 (Vegetation Treatment EIS). Appendix B of the Record of Decision includes a list of standard operating procedures that would be used for vegetation treatments using herbicides.

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

Disturbance associated with the fire and fire suppression, including use of heavy equipment to create dozer lines, increases the potential for invasion and spread of noxious weeds due to vegetation removal and soil surface disturbance.

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

Inventory and treatment of new noxious weed populations is more cost-effective than waiting until the population has had opportunity to establish and spread. Field work would be combined with other noxious weed treatments for cost efficiency.

Issue 2 - Weed Treatments

R5 Noxious Weeds

A. Treatment/Activity Description

Black henbane, Canada thistle, cheatgrass, and ventenata grass are known to occur either within or adjacent to the burned area boundary. These and other noxious weeds have a moderate to high potential for establishment in the burned area. Weed inventory and spot herbicide treatment would occur in the second and third years following the fire under BAR. Noxious weeds would be treated with the BLM-approved chemicals in accordance with the Noxious Weed EA and Vegetation Treatment EIS (See Treatment S5 above).

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

Disturbance associated with the fire and fire suppression, including use of heavy equipment to create dozer lines, increases the potential for invasion and spread of noxious weeds due to vegetation removal and soil surface disturbance.

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

Inventory and treatment of new noxious weed populations is more cost-effective than waiting until the population has had opportunity to establish and spread. Field work would be combined with other noxious weed treatments for cost efficiency.

PART 4 DETAILED TREATMENT COST TABLE

PART 5 - SEED LISTS

DRILL SEED

Species	Scientific Name	% PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Drill Seedings (Acre)	Lbs / Acre	Total Lbs.	Cost / Lb	Total Cost
TOTALS:			0	0	0	0		0.0		\$ 0.00	\$ 0.00

AERIAL SEED

Species	Scientific Name	% PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Aerial Seedings (Acre)	Lbs / Acre	Total Lbs.	Cost / Lb	Total Cost	
Low Sagebrush	Artemisia arbuscula	16.0%	3.79	165,092	972,000	1,031,828	925.0	0.2	157.3	\$ 20.00	\$19,240.00	
Mountain Big Sagebrush, Mountain	Artemisia tridentata vaseyana	16.0%	7.25	315,810	1,973,117	1,973,813	440.0	0.2	70.4	\$ 18.00	\$7,920.00	
Big Bluegrass, Sherman	Poa secunda ssp. ampla	63.0%	31.01	1,350,796	1,046,960	2,144,120	440.0	1.3	567.6	\$ 12.00	\$10,824.00	
TOTALS:				42.05	1,831,698	3,992,077	5,149,760		1.6		\$ 50.00	\$37,984.00

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 No Rationale:

The proposed native plants in the seed mix are adapted to the soils and precipitation zones within the project area and have a high chance for success of becoming established.

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

Yes No Rationale:

The selected species are commonly used and almost always readily available.

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

Yes No Rationale:

The current market rate for seed is reasonable compared to the benefit to the habitat. Seed purchased by the BLM is tested and ensured to be of high quality and free of noxious weeds. Providing habitat for special status species, including sage grouse, is one of the highest priorities in the Bruneau MFP and for BLM in general.

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

Yes No Rationale:

These species have been used nearby successfully establishing in surrounding areas with similar soil types, precipitation zones, and invasive competition. It is important to seed prior to the first growing season following wildfire disturbance to ensure the highest chance of success.

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 No Rationale:

Current permitted livestock use is conducive to maintenance of these species. The proposed fence repair will allow the BLM to manage livestock use until seeded plants are ready to withstand grazing pressure.

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 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 Rationale:

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

Yes No Rationale:

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

Non-native Plants	Native Plants
	Big Bluegrass, Sherman (<i>Poa secunda</i> ssp. <i>ampla</i>)
	Low Sagebrush (<i>Artemisia arbuscula</i>)
	Mountain Big Sagebrush, Mountain (<i>Artemisia tridentata vaseyana</i>)

PART 7 - COST-RISK ANALYSIS

A. Probability of Treatments Successfully Meeting Objectives

Action/ Spec #	Planned ES Action (LF2000ES)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
S3	Aerial Seeding	Acres	1365	\$74,000.00	80%
S5	Noxious Weeds	Acres	2723	\$8,000.00	80%
S7	Fence/Gate/Cattleguard	Miles	2	\$17,000.00	100%
S13	Monitoring	Acres	2723	\$56,000.00	100%
				\$155,000.00	

Action/ Spec #	Planned BAR Action (LF32000BR)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
R5	Noxious Weeds	Acres	2723	\$13,000.00	80%
				\$13,000.00	

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 No Rationale for Answer:

The proposed actions should reduce the potential loss of sage-grouse habitat. Treatment of the upland vegetation was designed to minimize impact to natural resources. As with any treatments that are weather dependent, there is always a chance of limited success, especially with seeding treatments, but the risks to natural resources are far greater without treatment than as a result of the proposed action treatments.

No Action Yes No Rationale for Answer:

Failure to act quickly will result in the loss of the first year treatment window, and the area would likely experience an increase in invasive annual grasses and noxious weeds. The remaining stands of native shrubs surrounding the burn will take a decade or more to naturally spread its seed and establish new plants within the burned area. Without swift action to revegetate desirable shrubs and grass some areas within the burn perimeter would experience annual grass domination, giving the area as a whole an increased risk of future wildfire. This area is identified as priority habitat for sage-grouse and therefore speedy replacement of the sagebrush is essential.

Alternative(s) Yes No Rationale for Answer:

N/A

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

Proposed Action Yes No Rationale for Answer:

In an area occupied by a shrub dominated plant community prior to the wildfire, the probability of success is high when seeding occurs within the first fall/winter season. Seeded species are able to establish in the ash mound areas of burned shrubs where there is little to no competition from annual grasses and other weeds. The area is in priority sage-grouse habitat and costs associated with restoring this area back to suitable habitat are reasonable and acceptable.

No Action Yes No Rationale for Answer:

There would be no costs associated with the No Action, but no benefits would be realized, and further degradation of ecosystem components would occur.

Alternative(s) Yes No Rationale for Answer:

N/A

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

Proposed Action

Alternative(s)

No Action

Comments:

The sagebrush seeding will increase shrub cover helping to restore the area back to suitable habitat for sage grouse. The cost/risk is reasonable considering the benefits to the long-term health of the ecosystem and important habitat for sage-grouse.

Broadcast seeding is the most cost effective method for reestablishing sagebrush on a landscape scale. Although establishment success is variable, the benefit of restoring habitat for sage-brush dependent species and the other intrinsic benefits provided by rehabilitated healthy shrub steppe communities is well worth the risk.

Since fire is a natural component within most sagebrush steppe communities, these areas will undoubtedly reburn in the future. However, a rehabilitated sagebrush steppe community with its associated discontinuous fuels provided by the existing healthy stands of dominant Idaho fescue would be expected to result in a fairly long fire free interval. Accordingly, a future fire to this area would be expected to be spotty resulting in unburned islands of sagebrush as was experienced in this fire.

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

Identify the objective of the treatment:

The objective is to establish sagebrush and an early germinating cool season grass to promote the 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 burned area would be closed to promote recovery of burned vegetation and the establishment of seeded species until monitoring results, documented in writing, show that ES&BAR objective have been met and are predicted to be sustainable, as specified in the BLM ES&BAR Handbook (H-1732-1) and consistent with the 2005 Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan (#ID-090-2004-050).

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.

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

- Site will be monitored by District Operations ESR monitoring staff annually for three consecutive years following fire containment.
- Monitoring for shrub seeding will be conducted using landscape monitoring shrub hoop method. Long transect lines will be traversed and data will be collected within a 10 m² plot (1.73 meter radius circle) when a suitable area is encountered, this data will be used in along with photo plots, and site observations.
- The shrub seeding treatment will be considered successful and objectives met when aerially seeded sagebrush attain a density of 1 per 10m² in suitable areas.
- The monitoring of grass establishment is difficult, because of irregularities in suitable sites for aerially seeded grass to establish. Variables affecting grass establishment include; recovering existing native vegetation, severity of burn, and natural cover for seeded grasses. Grass monitoring will occur in sites where there is a high likelihood for grass seeding establishment as these would be the sites that necessitated a grass seeding treatment.
- The grass seeding treatment will be considered successful and objectives met when seeded grasses attain an average density of 1 plant/m² in suitable areas and 80% of the canopy gaps are <50cm.

An evaluation of collected monitoring data and qualitative assessments by ESR Monitoring staff and Field Office staff will be completed. Operations Monitoring Staff will begin

compiling monitoring data in early winter each year, documenting as-built treatments, site precipitation, etc. Ground data collection will occur April/July of each year and ESR Monitoring Report completed by September of each year for three years. A final report will be completed on the third year after fire containment.

S5 - Noxious Weeds

Identify the objective of the treatment:

Objective is to identify all existing and new infestations of noxious weeds. New infestations will be treated and objective is to eliminate them from the treatment area. Existing noxious weeds will be treated to contain the infestation and prevent it from expanding on site.

Describe how implementation will be monitored:

Implementation will be self-monitored by BLM noxious weed specialists conducting the inventory and work. Species identified, treatment and GPS location would be recorded.

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

Effectiveness will be monitored by revisiting the treated sites 2013-2014 to evaluate mortality and inventory for additional weed populations.

S7 - Fence/Gate/Cattleguard

Identify the objective of the treatment:

The objective of this treatment is to repair or replace approximately 2 miles of allotment boundary fence damaged by the fire. Damaged wood corners and braces would be replaced with galvanized steel posts. Damaged wire would also be repaired. The fences would be constructed to BLM fence standards for wildlife.

Describe how implementation will be monitored:

Implementation is monitored through contract administration. Any changes from the planned implementation would be documented in the project file.

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

Repair of existing fence would be monitored through contract administration and documented in the project file. Work would be completed within the first year following the fire.

S12 - Closures (area, OHV, livestock)

Identify the objective of the treatment:

Exclusion of livestock is critical for the recovery of burned vegetation. The burned area would be closed to promote recovery of burned vegetation until monitoring results, documented in writing, show that ES&BAR objective have been met, as specified in the BLM ES&BAR Handbook (H-1732-1) and consistent with the 2005 Boise District Office and Jarbidge Field Office Normal Fire Emergency Stabilization and Rehabilitation Plan (#ID-090-2004-050).

Describe how implementation will be monitored:

Site would be visited by Field Office and Operations personnel during grazing season to ensure the method of closure (allotment or pasture closures, protective fences, water sources, and/or mineral/salt placement) is functioning to keep livestock from treatment areas.

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

Site will be monitored annually for three consecutive years by District Operations ESR monitoring staff. The natural recovery areas would be considered recovered and available for grazing when the following criteria are met:

- The amount of bare mineral soil (lacking cover of plants, litter, or biological soil crusts) is within 10% of expected based on the appropriate ecological site guide for the area being monitored
- Greater than 95% of canopy gaps are less than 50cm
- Desirable herbaceous perennial plants are producing seed, and
- Desirable perennial herbaceous vegetation have developed extensive root and shoot systems to provide for soil stabilization and are sustainable under livestock grazing.
- A qualitative assessment with the following information would also be used :
 - Plant vigor (perennial plants)
 - Precipitation data for the dormant (fall/winter) and growing (spring through early summer) seasons
 - Competition stress from invasive annual plants and noxious weed species
 - Seed production
- Other treatments objectives included within the plan have been met.

Monitoring methods will include line-point, step point cover methods, gap analysis, photo plots, and site observations.

An evaluation of collected monitoring data and qualitative assessments by ESR Monitoring staff and Field Office staff will be completed. Operations Monitoring Staff will begin compiling monitoring data in early winter each year, documenting as-built treatments, site precipitation, etc. Field data collection will occur from April to July of each year and ESR Monitoring Report completed by September of each year for three years. A final report will be completed on the third year after fire containment.

S13 - Monitoring

Identify the objective of the treatment:

See individual treatments above

Describe how implementation will be monitored:

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

R5 - Noxious Weeds

Identify the objective of the treatment:

Objective is to identify all existing and new infestations of noxious weeds. New infestations will be treated and objective is to eliminate them from the treatment area. Existing noxious weeds will be treated to contain the infestation and prevent it from expanding on site.

Describe how implementation will be monitored:

Implementation will be self-monitored by BLM noxious weed specialists conducting the inventory and work. Species identified, treatment and GPS location would be recorded.

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

Effectiveness will be monitored by revisiting the treated sites 2013-2014 to evaluate mortality and inventory for additional weed populations.

PART 9 - MAPS

1. - A Plan Map S3_Broadcast Seeding
2. - G5SO_Tindall
3. - A Plan Map Allotments and Sage-grouse
4. - A Plan Map S5_R5 Noxious Weeds
5. - XXX_A Plan Map S7 Fence Repair
6. - A Plan Map S12 R12 Livestock ClosureA

PART 10 - REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial	Date
Team Leader	Sarah Heide (BLM Boise District)		
Wildlife Biologist	Bruce Schoeberl (BLM Bruneau FO)		
Rangeland Mgt. Specialist	Jon Haupt (BLM Bruneau FO)		
Ecologist	Kavi Koleini (BLM Bruneau FO)		
Operations	Alex Webb (BLM Boise District)		
Operations	Cindy Fritz (BLM Boise District)		
Cultural Resources/Archeologist	Lois Palgren (BLM Bruneau Field Office)		
Operations	Robert Bennett (BLM Boise District)		
Botanist	Holly Beck (BLM Bruneau Field Office)		

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/ Arnold L. Pike

8/22/12

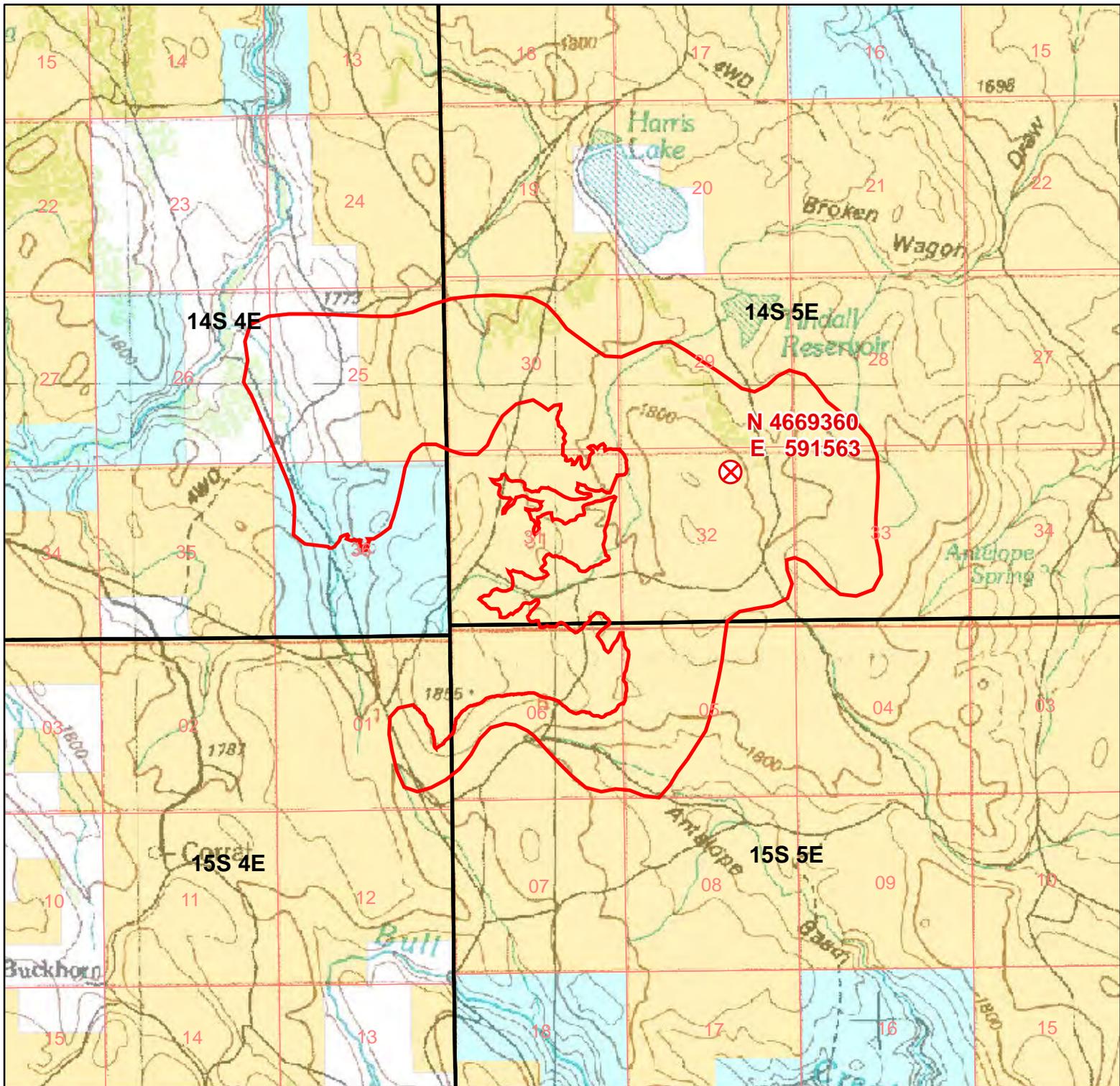
FIELD OFFICE MANAGER

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.

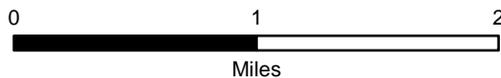


Fire Origin:
T14S R05E, Sec 32

Total acres: 3,222
BLM 2,723 acres
PRIVATE 320 acres
STATE 179 acres

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

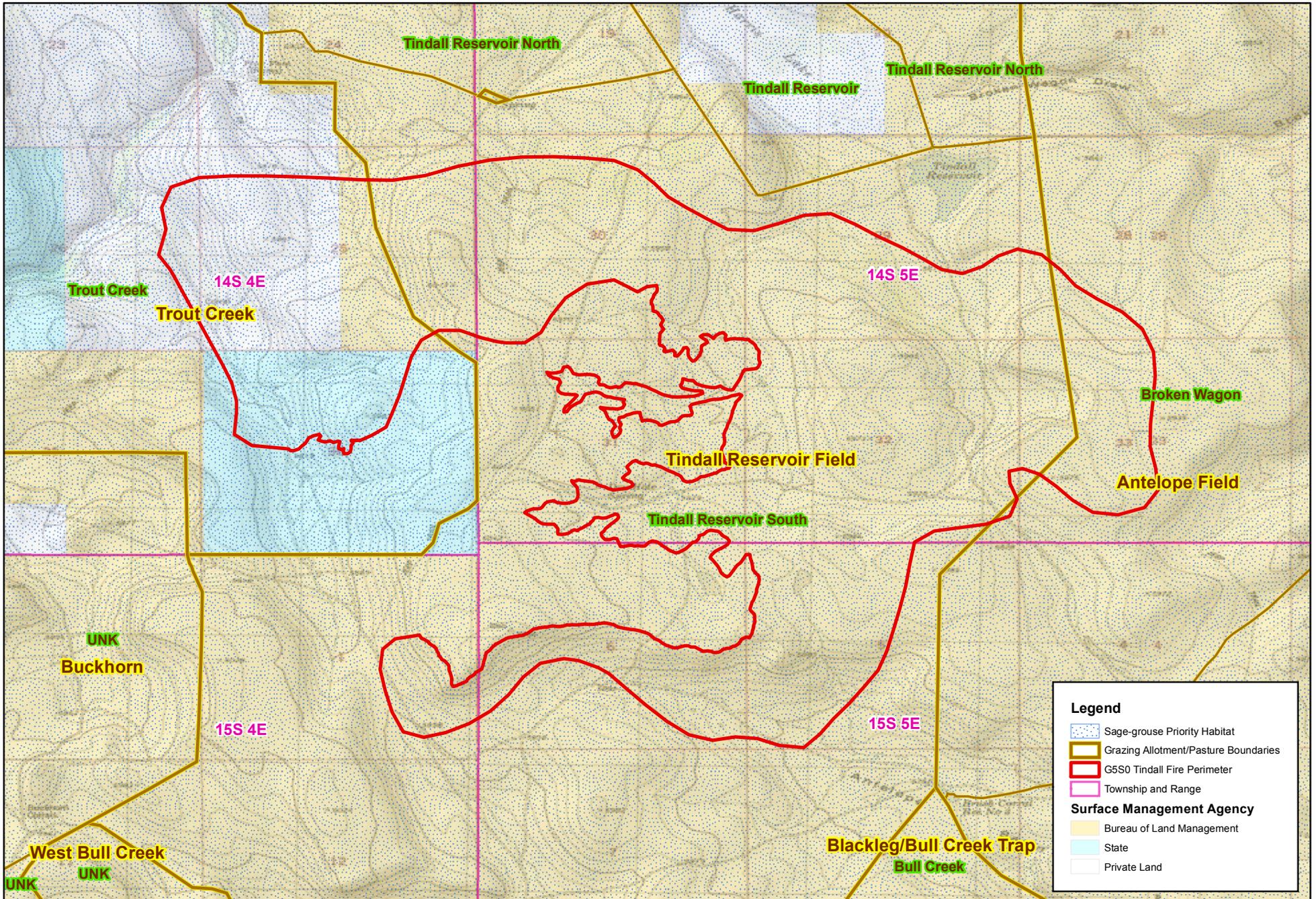
Boise District 2012 Bruneau Field Office Fire: G5S0 Tindall



- Fire Origin
- Fire Perimeter
- Township
- Section
- BLM
- Private
- State

Map Date: August 13, 2012

Boise District BLM
 G5S0 Tindall Fire ES&R
 Allotments and Sage-grouse Habitat



Legend

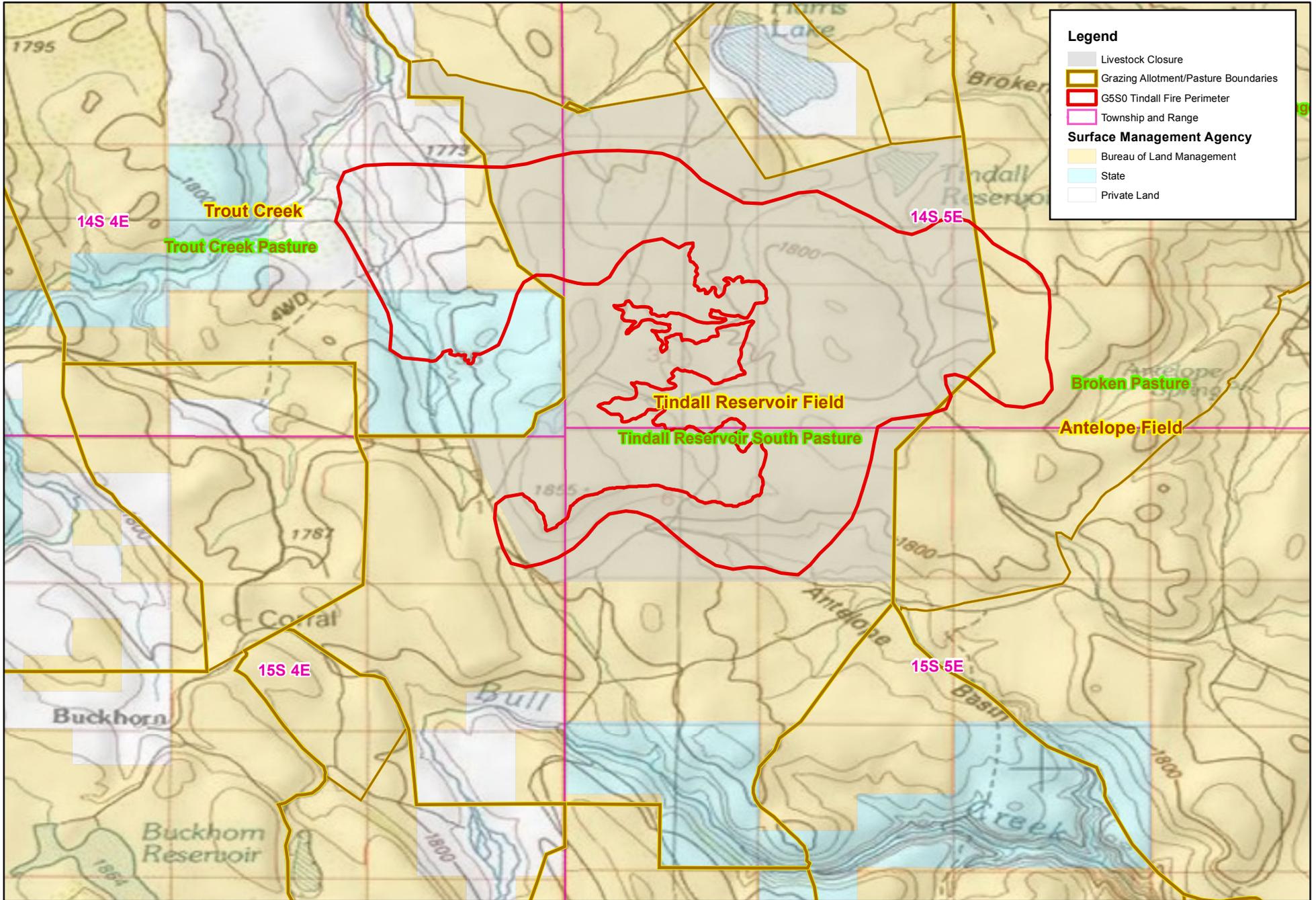
- Sage-grouse Priority Habitat
- Grazing Allotment/Pasture Boundaries
- G5S0 Tindall Fire Perimeter
- Township and Range

Surface Management Agency

- Bureau of Land Management
- State
- Private Land



Boise District BLM
 G5S0 Tindall Fire ES&R
 S12/R12 Livestock Closure



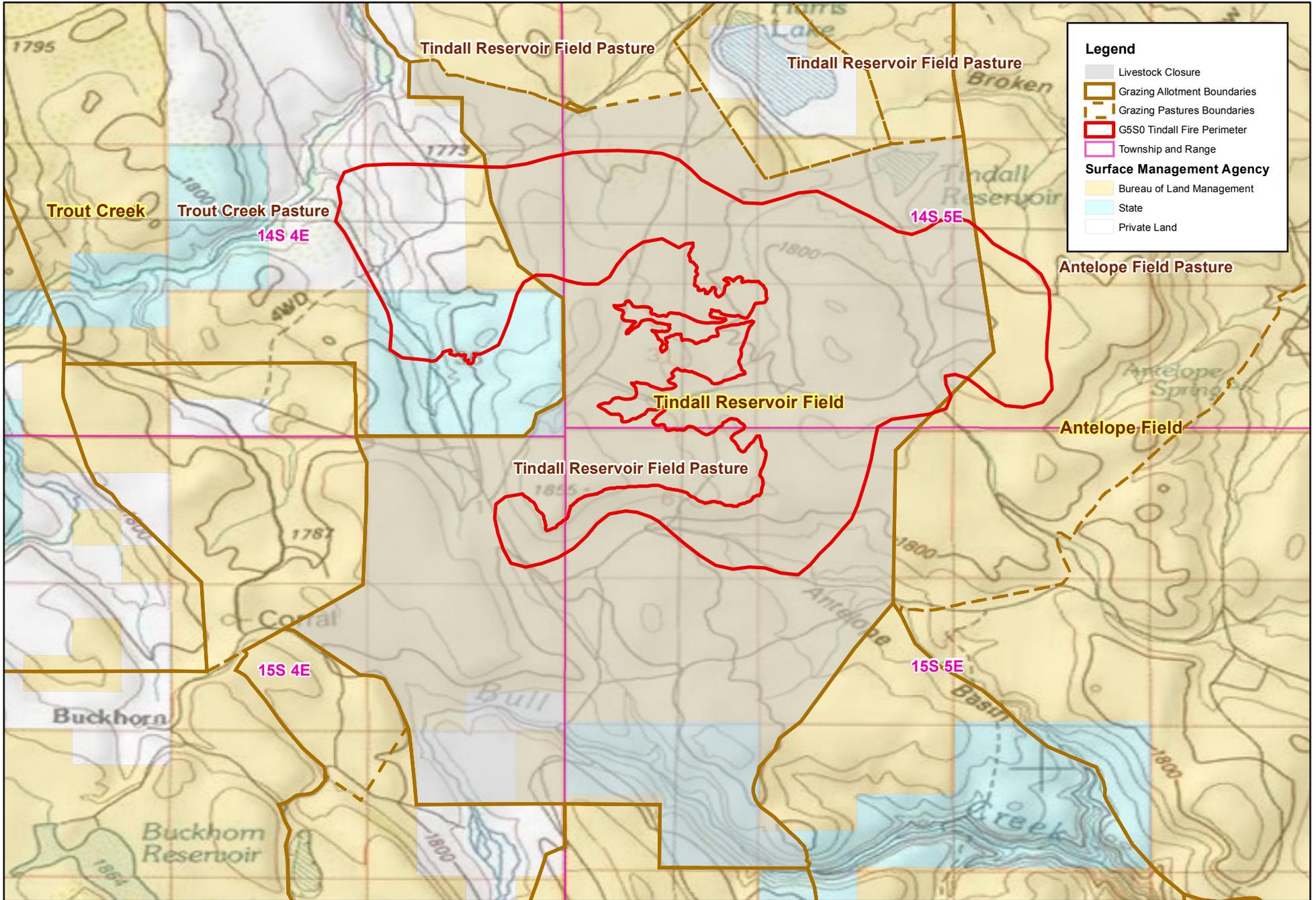
Legend

- Livestock Closure
- Grazing Allotment/Pasture Boundaries
- G5S0 Tindall Fire Perimeter
- Township and Range

Surface Management Agency

- Bureau of Land Management
- State
- Private Land

**Boise District BLM
G5S0 Tindall Fire ES&R
S12/R12 Livestock Closure**



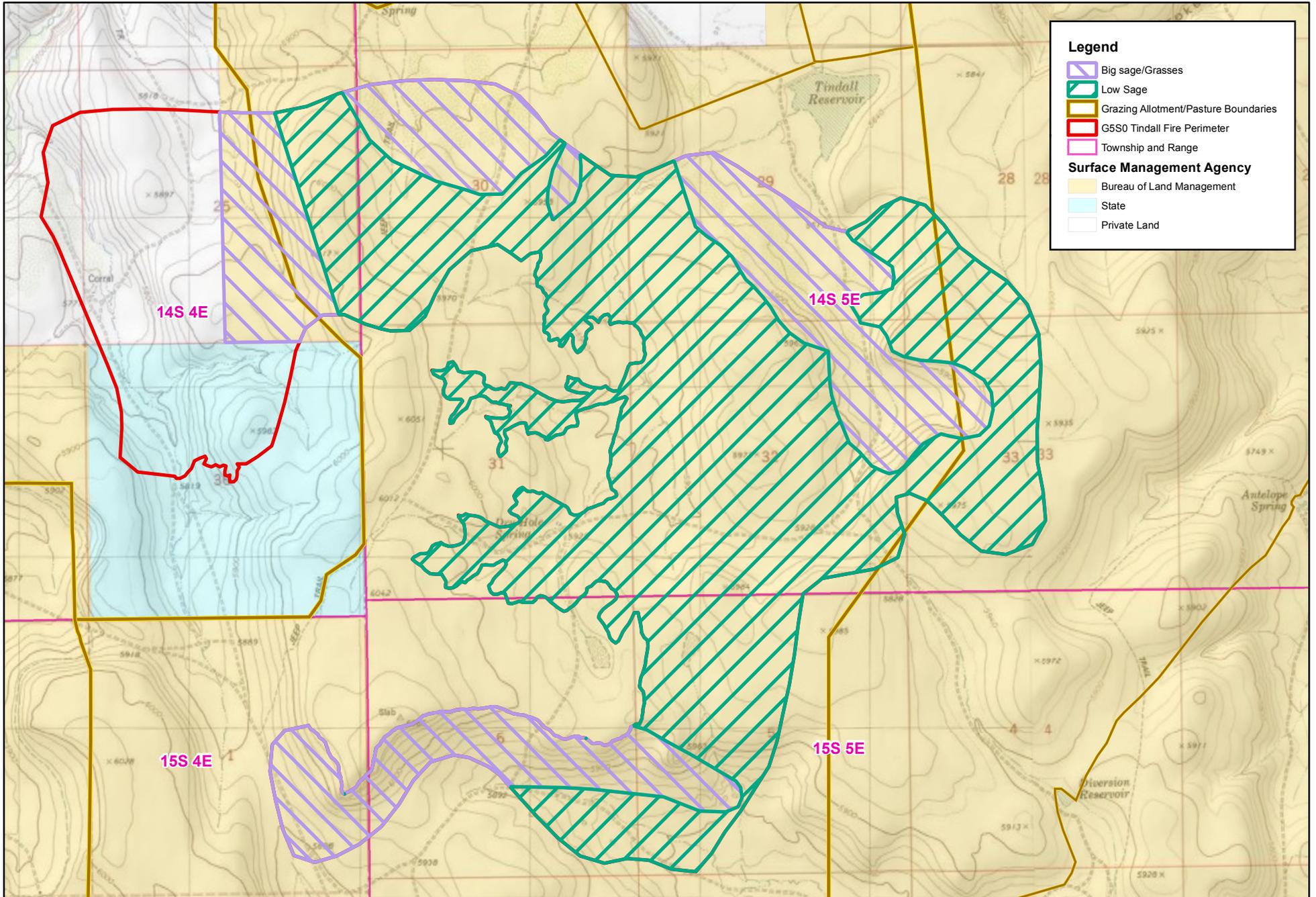
Legend

- Livestock Closure
- Grazing Allotment Boundaries
- Grazing Pastures Boundaries
- G5S0 Tindall Fire Perimeter
- Township and Range

Surface Management Agency

- Bureau of Land Management
- State
- Private Land

Boise District BLM G5S0 Tindall Fire ES&R S3 Broadcast Seeding



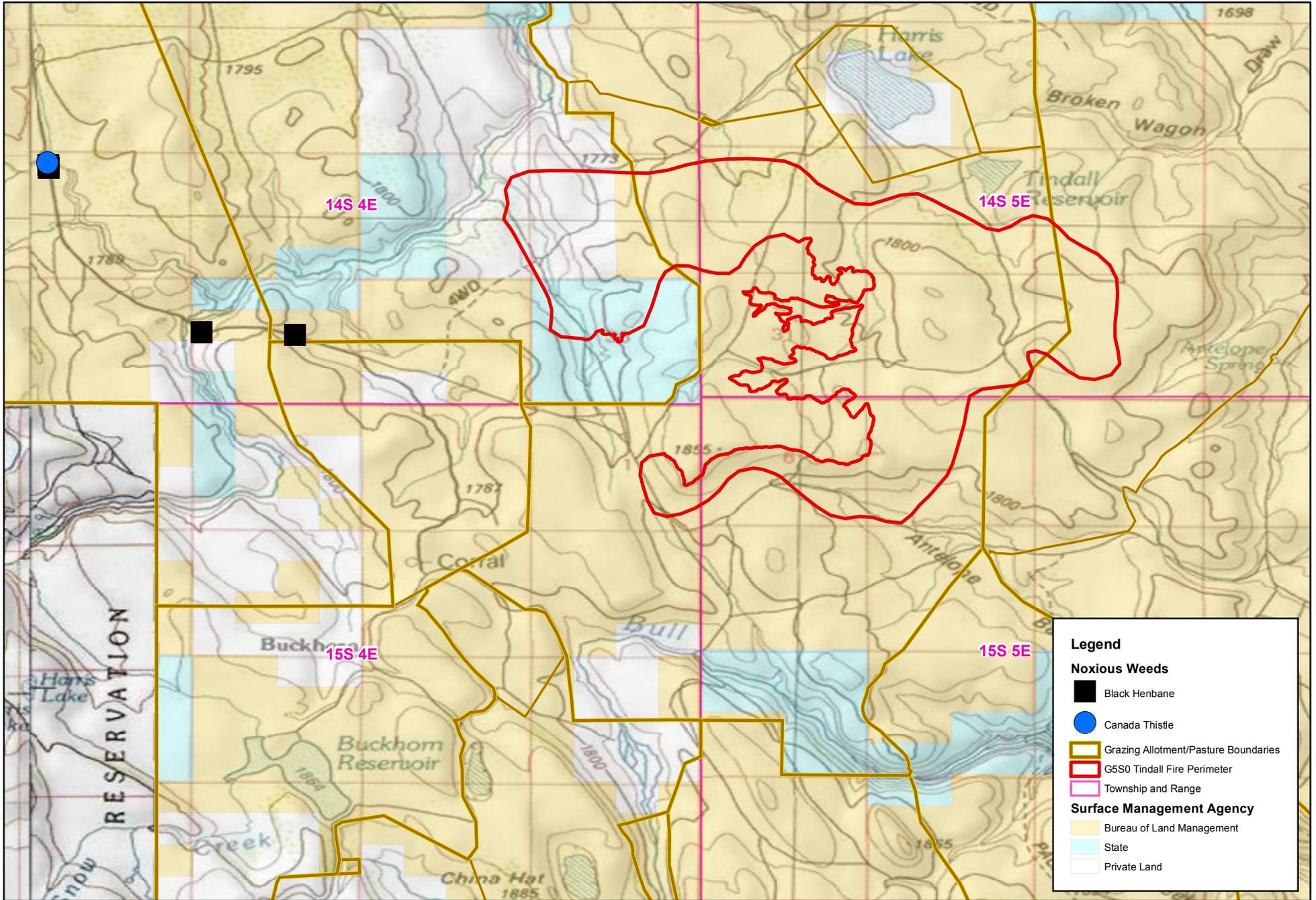
Legend

- Big sage/Grasses
- Low Sage
- Grazing Allotment/Pasture Boundaries
- G5S0 Tindall Fire Perimeter
- Township and Range

Surface Management Agency

- Bureau of Land Management
- State
- Private Land

Boise District BLM
 G5S0 Tindall Fire ES&R
 S5/R5 Noxious Weeds



Legend

Noxious Weeds

- Black Henbane
- Canada Thistle

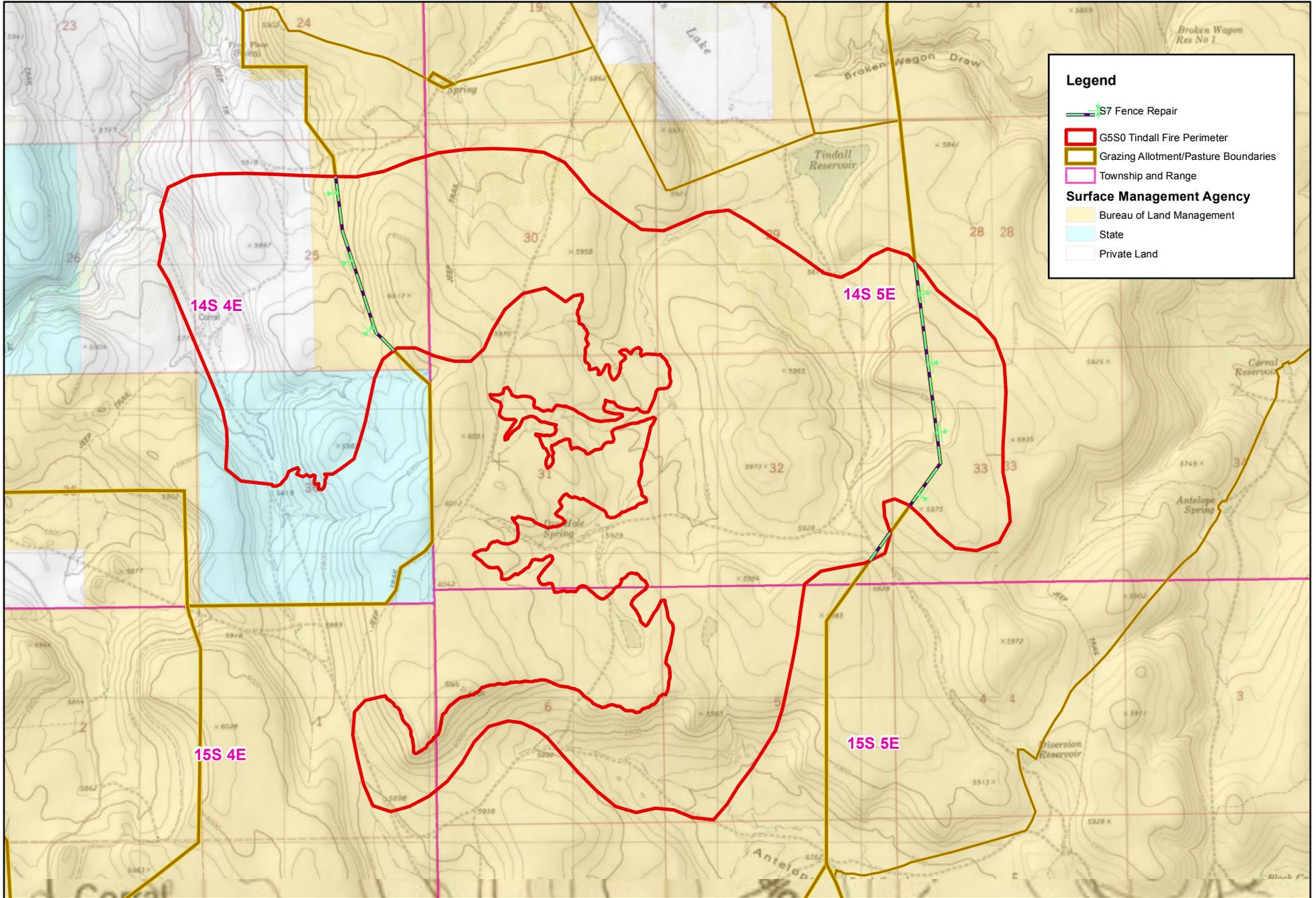
Other Features

- Grazing Allotment/Pasture Boundaries
- G5S0 Tindall Fire Perimeter
- Township and Range

Surface Management Agency

- Bureau of Land Management
- State
- Private Land

Boise District BLM G5S0 Tindall Fire ES&R S7 Fence Repair



Legend

- S7 Fence Repair
- G5S0 Tindall Fire Perimeter
- Grazing Allotment/Pasture Boundaries
- Township and Range

Surface Management Agency

- Bureau of Land Management
- State
- Private Land