

EVALUATION AND DETERMINATION

Achieving the Idaho Standards for Rangeland Health and Conformance with the Guidelines for Livestock Grazing Management

Field Office: Owyhee Determination Date(s): September 11, 2006
Grazing Allotment Name/Number: Munro FFR #0461
Name of Permittee(s): Joe Parkinson

2013 Supplement to the Munro FFR Allotment Rangeland Health Standards and Guidelines Assessment

The Rangeland Health Standards and Guidelines Assessment for the Munro allotment was completed in 2006 as a portion of the grazing permit renewal process. To date, the permit authorizing grazing use in this allotment has not been fully processed for renewal. This 2013 supplement incorporates new information compiled since the 2006 assessment was completed, as well as a review of conclusions reached using earlier data. Portions of this 2013 document that supplement the 2006 document are presented in this two-field table format with the header above, while those portions carried forward unchanged from the 2006 document are outside the two-field tables. The 2013 supplement to the assessment includes data compiled between 2006 and 2013, as well as the completion of the 2013 evaluation report and determination consistent with the Livestock Grazing Permit Renewal Desk Guide for Idaho Bureau of Land Management, May 2009. The 2013 determination is compiled at the end of this document.

The Munro FFR allotment is identified as a C category allotment in the ORMP. The grazing permit authorizes 15 AUMs of use annually on the 78 acres of public land within the allotment, associated with 506 acres of private land.

Standard 1 (Watersheds)

Standard doesn't apply

Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Evaluation and Information Sources (required regardless of which box is checked):

Rangeland Health Summary Worksheet, photographs, Field office allotment file.

Rangeland Health: One rangeland health worksheet was completed on Federal lands in this allotment. All indicators for soil stability and hydrologic functions were in the non- to-slight or slight-to-moderate ranges. Increases in bare ground and rabbitbrush were noted, as well as weakened soil structure and reduced biotic soil crusts, relative to reference site conditions. Perennial bunchgrasses are abundant on this allotment, though some pedestals/terraces are apparent in site photos.

Rangeland Health Changes: No trend data is available for this allotment.

Livestock Grazing Management: This allotment is identified as a fenced federal range (FFR), and is managed at the discretion of the livestock permittee as long as resource degradation is not occurring and management objectives are being met. Public lands in this allotment consist of four small parcels (approximately 20 acres each) that comprise approximately 13% of the allotment, and have been identified for sale or exchange in the Owyhee RMP. Public lands within this allotment are surrounded by private lands, and no legal public access exists, making management impractical.

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Watershed indicators available at the time of the 2006 evaluation show some departure from expected conditions for the ecological site. Several indicators rated slight-to-moderate for erosion relics, although none were substantial enough to determine that Standard 1 would not be met. Overall, the plant community and soil conditions are adequate to provide for proper nutrient and hydrologic cycling and energy flow.

[Check box 1, 2, 3, 4, or 5, and either box 6, or 7]	
1. <input checked="" type="checkbox"/> Meeting the Standard	5. <input type="checkbox"/> Not Meeting the Standard, cause not determined
2. <input type="checkbox"/> Not Meeting the Standard, but making significant progress towards	
3. <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are not significant factors (list important causal agents)	6. <input checked="" type="checkbox"/> Conforms with Guidelines for Livestock Grazing Management
4. <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are significant factors (list important causal agents)	7. <input type="checkbox"/> Does not conform with Guidelines for Livestock Grazing Management (list Guideline No(s). in non-conformance)

Standard 2 (Riparian Areas and Wetlands)

Standard doesn't apply

No riparian areas or wetlands occur on Federal lands within this allotment. Therefore, Standard 2 does not apply.

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A wet meadow area that is contributing flow to Spring Creek was assessed in 2012 using the PFC protocol. The riparian-wetland area supports a diverse and vigorous herbaceous community and was rated in proper functioning condition (PFC).

Standard 3 (Stream Channel/Flood Plain)

Standard doesn't apply

No perennial or intermittent streams occur on Federal lands within this allotment. Therefore, Standard 3 does not apply.

Standard 4 (Native Plant Communities)

Standard doesn't apply

Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Evaluation and Information Sources *(required regardless of which box is checked):*

Rangeland Health Summary Worksheet, photographs, field office allotment file

Rangeland Health: Overall, perennial grasses are abundant and display good vigor. Site photos show appropriate composition and distribution of shrubs and perennial bunchgrasses. Conditions on the Munro allotment are expected to continue to maintain diverse native animal habitat and plant populations.

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A rangeland health assessment was completed in the Munro FFR allotment in 2002 (R.7S., R.3W., Sec 12). The overall rating for biotic integrity of the site was a none-to-slight departure from reference site conditions. Consistent with this RHA, the 2006 IAR for the Munro FFR allotment provided the following comment concerning Standard 4: "Large bunchgrasses (AGSP, FEID) present. Rabbitbrush present, however, adequate ARTRV and PUTR established. Adequate seedheads for recruitment and stand maintenance present at the time of RHA. RHA's indicate plant community is intact and vigorous."

The large bunchgrasses referred to in this statement are bluebunch wheatgrass (AGSP) and Idaho fescue (FEID). In addition, other plant codes in this statement refer to the native shrubs mountain big sagebrush (ARTRV) and bitterbrush (PUTR).

This information that was also available at the time of the 2006 evaluation, and in the absence of additional rangeland health assessment information, leads to concurrence with the conclusion that Standard 4 is met. It is noted that no grazing use was reported in the Munro FFR allotment between 2005 and 2012. At the same time, no actual use reports are available for the Munro FFR allotment prior to 2005.

Rangeland Health Changes: No trend data is available for this allotment.

Livestock Grazing Management: Refer to Standard 1 for a discussion of livestock grazing management on this allotment.

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Actual use reports submitted by the permittee have reported no use between 2005 and 2012. Although annual applications have only been returned by the permittee intermittently since 2005, in the years when they were returned, those applications did not identify a plan for non-use within the Munro FFR allotment. Utilization has only been recorded by BLM in 2006 and 2009, years when the recorded 3 percent utilization level indicates non-use consistent with reported actual use. The lowest class of utilization possible using the key forage plant method is the non-use class (0 to 5 percent, with a mid-point of 2.5 percent that is rounded up to 3 percent).

During a meeting with the permittee on June 5, 2013, the permittee stated that contrary to actual use reports he has submitted in recent years, the public land parcels have received incidental livestock grazing use. The four public domain parcels in the Munro FFR allotment have been fenced separate from the private land portion of the allotment. Actual use reported in the future will reflect grazing use that occurs on public land.

[Check box 1, 2, 3, 4, or 5, and either box 6, or 7]

1. <input checked="" type="checkbox"/> Meeting the Standard	5. <input type="checkbox"/> Not Meeting the Standard, cause not determined
2. <input type="checkbox"/> Not Meeting the Standard, but making significant progress towards	
3. <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are not significant factors (list important causal agents)	6. <input checked="" type="checkbox"/> Conforms with Guidelines for Livestock Grazing Management
4. <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are significant factors (list important causal agents)	7. <input type="checkbox"/> Does not conform with Guidelines for Livestock Grazing Management (list Guideline No(s). in non-conformance)

Standard 5 (Seedings)

Standard doesn't apply

Evaluation and Information Sources: Review of allotment files and field notes indicate that no Federal lands in the Munro FFR allotment are seeded with non-native species. Therefore, this standard does not apply.

Standard 6 (Exotic Plant Communities, other than Seedings) Standard doesn't apply

Though non-native plant species may occur on the Munro FFR allotment, review of allotment files and field notes indicates that exotic plant communities do not form the dominant vegetation on Federal lands in the allotment. Therefore, this standard does not apply.

Standard 7 (Water Quality)

Standard doesn't apply

Evaluation and Information Sources: Review of the Munro FFR allotment indicates that no streams occur on Federal lands within the allotment. Therefore, this standard does not apply.

Standard 8 (Threatened and Endangered Plants and Animals) Standard doesn't apply

Habitats are suitable to maintain viable populations of threatened and endangered, sensitive, and other special status species.

Evaluation and Information Sources (required regardless of which box is checked): Sage-grouse habitat assessments, rangeland health assessments for upland plant communities.

Rangeland Health:

Wildlife: One sage grouse breeding habitat assessment conducted in this allotment resulted in a suitable habitat rating. Sagebrush and other shrubs are providing good woody cover and structure for sage grouse and other sagebrush steppe species and occurrence and vigor of large perennial bunchgrasses and forbs are resulting in adequate herbaceous cover for sage grouse and other ground nesting and foraging species.

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Botany

No populations of special status plant species are known to occur in this allotment, and therefore, this Standard is not applicable for special status plants.

Information sources

Elemental Occurrences (EOs) for special status plant (SSP) populations are recorded in the Idaho Fish and Wildlife Information System (IFWIS) Species Diversity database (IDFG, 2011). EOs are derived by completion and review of Idaho Rare Plant Observation Reports through the Idaho Natural Heritage Program. Other sources that were used to assess and evaluate the composition and condition of SSP habitats within the Munro FFR allotment include RHAs, photographs, field notes, Plants database (USDA NRCS, 2013), literature search, and information summarized above in RHA Standards in this document. Records show no reported special status plants in this allotment.

Wildlife Habitats*Information Sources*

Information sources that were used to assess and evaluate the composition and condition of wildlife habitats within the Munro FFR allotment include sage-grouse habitat assessments (SG HA; 2002, 2012), land cover classification (2002), aerial imagery (2011), photographs (2002, 2012), in addition to information summarized above in Standards 1, 2, 3, 4, and 7 in this document.

Landscape Setting

One Level IV Ecoregion of Idaho is represented within the present allotment and includes the Owyhee Uplands and Canyons (80f) (Map WDLF-1) (McGrath, et al., 2002). The Owyhee Uplands and Canyons ecoregion occurs at mid to high elevations and is characterized by a volcanically-derived landscape of lava fields, tuffaceous outcrops dissected by deep, sometimes precipitous canyons. Vegetation communities in this ecoregion represented within the allotment include mesic shrub steppe.

Habitat, Cover Types, and Ecological Sites

A variety of major habitats and general cover types occur within the allotment (Table WDLF-1; Map WDLF-2). These upland and riparian habitats and cover types occur within a variety of ecological sites (Table WDLF-2).

Table WDLF-1: Major habitat and general cover types within the entire Munro FFR allotment

Habitat Type	General Cover Type	Percentage of Allotment	
		General Cover Type	Habitat Type
Grassland	bunchgrass	15	15
Shrub Steppe ¹	big sagebrush	29	49
	mountain big sagebrush	9	
	low sagebrush	11	
Mountain Shrub	mountain shrub	1	2
	bitterbrush	1	
Forest	aspen	2	10
	juniper	8	
	Douglas--fir	<1	
Riparian	wet meadow	12	12
Non-native/Disturbed	exotic annuals	12	12

¹Shrub steppe habitat type includes the predominant big and low sagebrush communities in the area. Big sagebrush (*Artemisia tridentata*) cover types include communities dominated by the subspecies Basin (*tridentata*). Mountain big sagebrush (*A. tridentata vaseyana*) and low sagebrush (*A. arbuscula*) cover types comprise the remaining sagebrush communities.

Table WDLF-2: NRCS Ecological Sites within Munro FFR allotment

Habitat Type	General Cover Type	Ecological Site Description	Percentage of Allotment	
			Ecological Site Description	General Cover Type
Shrub Steppe	Mountain Big Sagebrush	Loamy 13-16 ARTRV/PSSPS-FEID	43	43
	Low Sagebrush	Shallow Claypan 12-16 ARAR8/FEID	56	56

Approximately 1.5 percent of the pasture is classified as an unknown/no data.

Focal Special Status Species

Greater sage-grouse

Population Ecology

No fewer than three leks (occupied or active) are located near the allotment. In addition, the allotment is located within several 75 percent breeding bird density (BBD) lek buffers (4 mile; Table WDLF-3).

Table WDLF-3. Attendance at occupied lek¹ within 4 miles of the Munro FFR allotment, 2007-2012

Lek ²	Pasture/s	Survey Year ³					
		2012	2011	2010	2009	2008	2007
2O541*	1	0	--	--	11	19	--

¹A traditional display area where two or more male sage-grouse have attended in 2 or more of the previous 5 years (Idaho Sage-grouse Advisory Committee 2006).

²Leks with 75 percent BBDs are designated by an asterisk.

³Surveys were not conducted in years indicated by dashes (--).

Several additional leks that occur in proximity (≤ 4 miles) to the allotment that have been active within the last five years but that do not qualify as occupied include 2O557 (pastures 1 is within BBD), and 2O619.

Habitat Characteristics

Northern Great Basin Population/Owyhee Subpopulation Mid-Scale

Recently, Idaho BLM initiated a modeling effort to identify preliminary priority sage-grouse habitat (PPH) within the Snake River Plain MZ (Makela & Major, 2012). Priority habitat includes breeding, late brood-rearing and winter concentration areas. Because priority habitat areas have the highest conservation value for maintaining the species and its habitat, it is BLM policy (as per WO IM 2010-071) to identify these areas in collaboration with respective state wildlife agencies. The current model indicates that the allotment is comprised entirely of PPH (Map WDLF-3).

Owyhee Front/Triangle Local Population Fine-scale

A review of the 2012 PPH output revealed that the area around the Toy Mountain group allotments in one of the critical input data layers (i.e., Idaho Sage-grouse Key Habitat Planning Map) mostly had not been refined since its initial creation in the early 2000s. Much of the area was coarsely classified as Conifer Encroachment (R3). Review of recent (2012) aerial imagery and an Owyhee Field Office (OFO) land cover classification (Bunting & Strand, 2008) of the area have provided better habitat information and edits to be incorporated into the 2013 Greater Sage-grouse Habitat Planning Map (as per IM ID-2013-010). The update identifies large areas of currently Key Habitat (K) that were misclassified as R3 across the OFO, especially in the Toy Mountain group area. The update reveals that the entire allotment is key habitat (Map WDLF-4).

Allotment/Pasture Site-scale

Based on a telemetry study of sage-grouse from the Owyhee Front/Triangle local population, seasonal locations show that the BLM-managed portion of the allotment contains breeding, upland summer, early and late brood-rearing riparian summer, and winter seasonal habitats (Table WDLF-4; Map WDLF-5).

Table WDLF-4: Seasonal habitat types within the Munro FFR allotment on BLM lands

Allotment	Pasture	Seasonal Habitat			
		Breeding	Upland Summer	Early/Late Brood-rearing Lentic/Lotic Areas	Winter
Munro FFR	1	X	X	X	X

Habitat Assessments

The current conditions of sage-grouse seasonal habitats were assessed following protocols outlined in the Sage-grouse Habitat Assessment Framework (SG HAF; (Stiver, Rinkes, & Naugle, 2010)). The primary habitat indicators and habitat suitability ranges within the SG HAF are consistent with sage-grouse habitat management guidelines provided by Connelly et al. (Connelly, Schroeder, Sands, & Braun, 2000), the State of Idaho’s sage-grouse management alternative (The State of Idaho, 2012), and interim BLM sage-grouse habitat management guidance as per WO-IM 2012-043. Habitat indicators and suitability ranges should not be viewed independently but rather as an assembly of vegetation components that contribute to providing for sage-grouse seasonal habitat requirements.

Focal Special Status Species

Greater sage-grouse

Habitat Characteristics

Habitat Assessments

The allotment is entirely within the breeding, upland summer, and winter seasonal ranges of the Owyhee Front/Triangle local population (Map WDLF-5). Mountain big sagebrush and low sagebrush ecological sites support breeding (including early brood-rearing), upland summer, and winter sage-grouse habitat. There is one perennial stream (Spring Creek) and one lentic site on the BLM-managed portion of the allotment that provide important early and late brooding-rearing areas. All sage-grouse habitat within the pasture is considered key habit (Map WDLF-4).

Breeding Habitat

Three SG HAs were used to assess breeding habitat conditions within the allotment (Map WDLF-5). All SG HAs were located within what appears to be the Loamy 13-16” ARTRV/PSSPS-FEID Ecological Site. Mountain big sagebrush ecological sites represent a large portion of the allotment (43 percent; Table WDLF-2) and also constitute a substantial amount of inclusions within the low sagebrush ecological site matrix; therefore, the habitat assessment is representative of conditions that predominate within the allotment.

One SGHA was conducted in 2002 and two SG HAs were conducted in 2012. However, the 2012 sites were surveyed after the breeding season (see below). Nevertheless, based on a variety of indicators that are not affected by annual variation (i.e., sagebrush components and perennial bunchgrass canopy cover) or that displayed robust representation in the summer that might also be expected earlier in the season (i.e., forb diversity and abundance), results from these surveys provide provisional evidence supporting the breeding habitat suitability rating for the allotment

(see below).

Habitat conditions within the ecological site were consistent. Issues affecting breeding habitat quality within the pasture included excessive sagebrush canopy cover and height. However, these components do not appear to be inhibiting understory cover or production currently. Although only one breeding SG HA was conducted in 2002, a review of the results from two SG HAs conducted in the same ecological site in 2012 (see below) provide validation for the current rating of sage-grouse breeding conditions within the pasture as Suitable.

- 07S03W01-2002 (R025XY011ID)**
Suitable. Sagebrush and other shrubs are providing good woody cover and structure and occurrence and vigor of large perennial bunchgrasses and forbs are resulting in adequate herbaceous cover for nesting sage grouse. Forb diversity and abundance were also adequate (Table WDLF-5).
- 07S03W01a-2012 and 07S03W12-2012 (R025XY011ID)**
Suitable (provisionally). Although assessment was not conducted at the appropriate time of year, breeding habitat in this ecological site is provisionally rated at the lower end of suitable because several primary (perennial understory herbaceous vegetation CC and height, forb diversity and abundance) and important supplementary (perennial grass height) indicators fell within the suitable range (Table WDLF-5, Figure WDLF-1). Although sagebrush CC and heights were relatively high and growth form was mixed, perennial herbaceous understory vegetation is abundant and adequate in height. Too much sagebrush and shrub cover appear to be the greatest issues affecting habitat quality, perhaps inhibiting a sage-grouse's ability to detect predators. However, the excessive shrub cover currently does not appear to be affecting understory herbaceous production and nesting cover. Overall forb diversity was adequate; however, abundance varied greatly between transects and only a few species were common. It is possible that forbs could be more diverse and common in the spring when soil moisture is more available.

Table WDLF-5: Summary of breeding SG HAs¹ in Munro allotment FFR (2002 and 2012)

Habitat Indicator	Ecological Sites ²	
	R025XY011ID-2002	R025XY011ID-2012
	n=1	n=2
Sagebrush Canopy Cover (%)	(M) ³	43 (M)
Sagebrush Height (cm)	(S) ³	93 (M)
Sagebrush Growth Shape	Mixed (M) ³	Mixed (M)
Grass and Forb Height (cm)	(S) ³	26 (S)
Perennial Grass Canopy Cover (%)	(S) ³	52 (S)
Forb Canopy Cover (%)	(M) ³	6 (M)
Preferred Forb Availability	8 sp./abundant (S) ⁴	9 sp. abundant (S)
Overall Site Evaluation³	Suitable	Suitable*

¹Individual habitat indicator suitability ranges are given in parentheses and include Suitable (S), Marginal (M), and Unsuitable (U).

²Ecological sites include Loamy 13-16" ARTRV/PSSPS-FEID (R025XY011ID).

³Indicator ratings were taken from the 2002 Breeding Habitat summary worksheet. No standardized transect was

conducted at this site; indicator ratings were based on ocular estimates.

⁴Provisional ratings are designated by an asterisk.

Brood-rearing Riparian Habitats

The allotment contains short segments of a perennial stream (Spring Creek) and its intermittent side channel (0.1 and 0.1 miles, respectively) and a wet meadow/lentic area that support early and late brood-rearing habitat. The majority of Spring Creek within the allotment is located on private land that is separated from BLM-managed lands by fences. Although Spring Creek has not been assessed for PFC, imagery reveals a floodplain with succulent herbaceous vegetation and the occurrence of scattered woody cover (probably *Salix* sp.).

The BLM-managed portion of the allotment contains at least one wet meadow/lentic area. One formal SGHA was conducted in the wet meadow in 2012 and was used to assess riparian summer habitat condition in the allotment. Sage-grouse use of these riparian areas likely occurs and these areas appear to be providing Suitable brood-rearing/summer riparian habitat for sage-grouse and their broods.

Lentic

- **07S03W01b-2012**

Suitable. This site is a large lentic riparian area occurring in a basin surrounded by ARTRV (less than 100 m). The site was rated PFC and supports a diverse composition and age-class distribution of riparian vegetation, all exhibiting high vigor. There is some evidence of cattle utilization and very minor evidence of pugging. No headcuts or headcutting were observed. The soil is still wet at the center. There is evidence of sage-grouse predation (i.e., feathers observed near center of riparian area).

Upland Summer Habitat

Two SG HAs were used to assess upland summer habitat conditions within the allotment (Map WDLF-5). Both SG HAs were located within what appears to be the Loamy 13-16” ARTRV/PSSPS-FEID Ecological Site. Mountain big sagebrush ecological sites represent a large portion of the allotment (43 percent; Table WDLF-2) and also constitute a substantial amount of inclusions within the low sagebrush ecological site matrix; therefore, the habitat assessment is representative of conditions that predominate within the allotment. Although some issues were noted (see narrative below and figure), overall upland summer habitat within the pasture was rated as Suitable.

- **07S03W01a-2012 and 07S03W12-2012 (R025XY011ID)**

Suitable. Upland summer habitat in this ecological site is rated at the lower end of suitable because primary and supplementary indicators appear to be providing adequate concealment cover and available forage, although both sagebrush CC and height are moderately high (Figure WDLF-2). Overall forb diversity was adequate; however, abundance varied greatly between transects and only a few species were common. Excessive shrub component may indicate a community composition and rangeland health issue which is limiting habitat quality for sage-grouse.

Winter Habitat

Two SG HAs were used to assess winter habitat conditions within the allotment (Map WDLF-5). Both SG HAs were located within what appears to be the Loamy 13-16 ARTRV/PSSPS-FEID Ecological Site. Mountain big sagebrush ecological sites represent a large portion of the allotment (43 percent; Table WDLF-2) and also constitute a substantial amount of inclusions within the low sagebrush ecological site matrix; therefore, the habitat assessment is representative of conditions that predominate within the allotment. Habitat conditions within the ecological site were consistent, and winter habitat within the allotment was rated as Suitable.

- **07S03W01a-2012 and 07S03W12-2012 (R025XY011ID)**
Suitable. Overall this ecological site is rated suitable because all the primary and supplementary indicators fall within the suitable range. In general sagebrush CC and height is providing adequate forage and concealment and thermal cover above persistent snow under typical conditions (Figure 3).

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Figure WDLF-1: Summary of breeding SG HAs in the Munro FFR allotment in the Loamy 13-16" ARTRV/PSSPS-FEID Ecological Site (2012)

Form H-3 Sage-grouse Habitat Suitability Worksheet – BREEDING		R025XY011ID	
Allotment-Pasture Names: Munro FFR		Allotment-Pasture Number: 461	Number of Transects: 2
Ecological Site ID: R025XY011ID	Ecological Site Name: Loamy 13-16 ARTRV/PSSPS-FEID		Subpopulation: NC NV/ SE OR/ SW ID
Site IDs: 0461-01-07S03W01a-2012	Land Cover Type/s: ARTRV/FEID	Area Sampled (ha): 2	Date: 7/25/2012
0461-01-07S03W12-2012	ARTRV/FEID	12	7/25/2012
			Home Range Name: Owyhee Front/Triangle
			Associated Leaks: 2O541, 2O557, 2O619
			Site Info: Mesic

Habitat Indicator Suitability Range (Primary)

Habitat Indicator	χ	Suitable	✓	Marginal	✓	Unsuitable	✓
Sagebrush Canopy Cover (mean)	43.0	15-25%		5-<15% or >25%	X	<5%	
Sagebrush Height Mesic Site (mean)	92.6	40-80 cm		20-<40 cm or >80 cm	X	<20 cm	
Arid Site (mean)		30-80 cm		20-<30 cm or >80 cm		<20 cm	
Predominant Sagebrush Shape (mode)	Mixed	Spreading		Mix of Spreading and Columnar	X	Columnar	
Perennial Grass and Forb Height (mean)	26.2	≥18 cm	X	10-18 cm		<10 cm	
Perennial Grass Canopy Cover Mesic Site (mean)	52.0	≥15%	X	5-<15%		<5%	
Arid Site (mean)		≥10%		5-<10%		<5%	
Perennial Forb Canopy Cover Mesic Site (mean)	6.0	≥10%		5-<10%	X	<5%	
Arid Site (mean)		≥5%		3-<5%		<3%	
Preferred Forb Availability (relative to site potential)	Common	Preferred forbs are common with several species present	X	Preferred forbs are common but only a few species are present		Preferred forbs are rare	
Number of Preferred Forb Species (mean)	5.5		9 sp. total				

Habitat Indicator Suitability Range (Supplemental)

Habitat Indicator	χ	Suitability	Rationale
Other Shrub Canopy Cover (mean)	15.0	Suitable	Appropriate based on Ecological Site potential
Other Shrub Height (mean)	48.2	Suitable	Appropriate based on Ecological Site potential
Sagebrush and Other Shrub Canopy Cover (mean)	58.0	Marginal	Suitable breeding habitat should have total shrub CC ≤42%
Sagebrush and Other Shrub Height (mean)	80.8	Marginal	Suitable breeding habitat should have total shrub heights between 40-80 cm
Perennial Grass Height (excluding Poa spp.) (mean)	28.1	Suitable	Suitable breeding habitat should have perennial grass heights ≥18 cm
Poa Spp. Canopy Cover (mean)	2.0	Suitable	Appropriate based on Ecological Site potential
Annual Grass Canopy Cover (mean)	0.0	Suitable	Appropriate based on Ecological Site potential
Annual Forb Canopy Cover (mean)	0.0	Suitable	Appropriate based on Ecological Site potential
Bare Ground Canopy Cover (relative to site potential) (mean)	14.0	Suitable	Lower than expected; bare ground should be between 25-45%; ground cover includes relatively large amounts of moss and basal plant hits

Does ecological site potential limit suitability potential?

YES	NO
	X

Drought Condition:

Extreme Drought	Severe Drought	Moderate Drought	Mid-Range	Moderately Moist	Very Moist	Extremely Moist
		X				

Evidence of sage-grouse use?

Unknown-not noted

Evidence of recent livestock use?

Previous cattle pugging observed but no recent cattle use detected at 07S03W01a

Rationale for Overall Suitability Rating:

Although assessment was not conducted at the appropriate time of year, breeding habitat in this ecological site is provisionally rated at the lower end of suitable because several primary (perennial understory herbaceous vegetation CC and height, forb diversity and abundance) and important supplementary (perennial grass height) indicators fell within the suitable range. Although sagebrush CC and heights were relatively high and growth form was mixed, perennial herbaceous understory vegetation is abundant and adequate in height. Too much sagebrush and shrub cover appear to be the greatest issue affecting habitat quality, perhaps inhibiting a sage-grouse's ability to detect predators. However, the excessive shrub cover currently does not appear to be affecting understory herbaceous production and nesting cover. Overall forb diversity was adequate; however, abundance varied greatly between transects and only a few species were common. It is possible that forbs could be more diverse and common in the spring when soil moisture is more available.

Site-Scale Suitability

Suitable	Marginal	Unsuitable
P		

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Figure WDLF-2: Summary of upland summer SG HAS in the Munro FFR allotment in the Loamy 13-16" ARTRV/PSSPS-FEID Ecological Site (2012)

Form H-4 Sage-grouse Habitat Suitability Worksheet –		UPLAND SUMMER		R025XY011ID	
Allotment-Pasture Names	Munro FFR	Allotment-Pasture Number:	461	Number of Transects:	2
Ecological Site ID:	R025XY011ID	Ecological Site Name:	Loamy 13-16 ARTRV/PSSPS-FEID		
Site IDs:	Land Cover Type/s:	Area Sampled (ha):	Date:	Subpopulation: NC NV/ SE OR/ SW ID	
0461-01-07S03W01a-2012	ARTRV/FEID	2	7/25/2012	Home Range Name: Owyhee Front/Triangle	
0461-01-07S03W12-2012	ARTRV/FEID	12	7/25/2012	Associated Leaks: 20541, 20557, 20619	
				Site Info: Mesic	

Habitat Indicator Suitability Range (Primary)

Habitat Indicator	X	Suitable	✓	Marginal	✓	Unsuitable	✓
Sagebrush Canopy Cover (mean)	43.0	10-25%		5-<10% or >25%	X	<5%	
Sagebrush Height (mean)	92.6	40-80 cm		20-<40 cm or >80 cm	X	<20 cm	
Perennial Grass and Forb Canopy Cover (mean)	58.0	≥15%	X	5-15%		<5%	
Preferred Forb Availability (relative to site potential)	Common	Preferred forbs are common with several species present	X	Preferred forbs are common but only a few species are present		Preferred forbs are rare	
Number of Preferred Forb Species (mean)	5.5		9 sp. total				

Habitat Indicator Suitability Range (Supplemental)

Habitat Indicator	X	Suitability	Rationale
Predominant Sagebrush Shape (mode)	Mixed	Marginal	Mix of sagebrush growth forms including a high proportion of columnar and relatively tall individuals may be limiting use
Perennial Grass and Forb Height (mean)	26.2	Suitable	Suitable upland summer habitat should have perennial herbaceous vegetation heights ≥10 cm
Perennial Grass Canopy Cover (mean)	52.0	Suitable	Suitable upland summer habitat should have perennial grass CC ≥10%
Perennial Forb Canopy Cover (mean)	6.0	Marginal	Suitable upland summer habitat should have perennial forb CC ≥10%
Other Shrub Canopy Cover (mean)	15.0	Suitable	Appropriate based on Ecological Site potential
Other Shrub Height (mean)	48.2	Suitable	Appropriate based on Ecological Site potential
Sagebrush and Other Shrub Canopy Cover (mean)	58.0	Suitable	Sagebrush and other shrubs are providing horizontal concealment cover
Sagebrush and Other Shrub Height (mean)	80.8	Marginal	Suitable upland summer habitat should have shrub heights between 40-80 cm
Perennial Grass Height (excluding Poa spp.) (mean)	28.1	Suitable	Suitable upland summer habitat should have perennial grass heights ≥10 cm
Poa Spp. Canopy Cover (mean)	2.0	Suitable	Appropriate based on Ecological Site potential
Annual Grass Canopy Cover (mean)	0.0	Suitable	Appropriate based on Ecological Site potential
Annual Forb Canopy Cover (mean)	0.0	Suitable	Appropriate based on Ecological Site potential
Bare Ground Canopy Cover (relative to site potential) (mean)	14.0	Suitable	Lower than expected; bare ground should be between 25-45%; ground cover includes relatively large amounts of moss and basal plant hits

Does ecological site potential limit suitability potential?

YES	NO
	X

Drought Condition:

Extreme Drought	Severe Drought	Moderate Drought	Mid-Range	Moderately Moist	Very Moist	Extremely Moist
		X				

Evidence of sage-grouse use?

Unknown-not noted

Evidence of recent livestock use?

Previous cattle pugging observed but no recent cattle use detected at 07S03W01a

Rationale for Overall Suitability Rating:

Upland summer habitat in this ecological site is rated at the lower end of suitable because primary and supplementary indicators appear to be providing adequate concealment cover and available forage, although both sagebrush CC and height are moderately high. Overall forb diversity was adequate; however, abundance varied greatly between transects and only a few species were common. Excessive shrub component may indicate a community composition and rangeland health issue which is limiting habitat quality for sage-grouse.

Site-Scale Suitability

Suitable
X

Marginal

Unsuitable

Figure WDLF-3: Summary of winter SG HAs in the Munro FFR allotment in the Loamy 13-16” ARTRV/PSSPS-FEID Ecological Site (2012)

Form H-6 Sage-grouse Habitat Suitability Worksheet –		WINTER		R025XY011ID			
Allotment-Pasture Names:	Munro FFR	Allotment-Pasture Number:	461	Number of Transects:	2	Subpopulation:	NC NV/ SE OR/ SW ID
Ecological Site ID:	R025XY011ID	Ecological Site Name:	Loamy 13-16 ARTRV/PSSPS-FEID	Home Range Name:	Owyhee Front/Triangle	Associated Leks:	20541, 20557, 20619
Site IDs:	Land Cover Type/s:	Area Sampled (ha):	Date:	Site Info:			
0461-01-07503W01a-2012	ARTRV/FEID	2	7/25/2012	Mesic			
0461-01-07503W12-2012	ARTRV/FEID	12	7/25/2012				
Habitat Indicator Suitability Range (Primary)							
Habitat Indicator	\bar{x}	Suitable	✓	Marginal	✓	Unsuitable	✓
Sagebrush Canopy Cover (mean)	43.0	>10%	X	5-10%		<5%	
Sagebrush Height above Snow		>25 cm		10-25 cm		<10 cm	
0 cm snow (annual mean)	92.6	>40 cm	X	25-40 cm		<25 cm	
15 cm snow (annual mean)		>55 cm		40-55 cm		<40 cm	
30 cm snow (annual mean)							
Habitat Indicator Suitability Range (Supplemental)							
Habitat Indicator	\bar{x}	Suitability	Rationale				
Predominant Sagebrush Shape (mode)	Mixed	Suitable	Mixed sagebrush growth form provides adequate horizontal concealment cover				
Other Shrub Canopy Cover (mean)	15.0	Suitable	Appropriate based on Ecological Site potential				
Other Shrub Height (mean)	48.2	Suitable	Appropriate based on Ecological Site potential				
Sagebrush and Other Shrub Canopy Cover (mean)	58.0	Suitable	Total shrub CC is providing concealment and thermal cover				
Sagebrush and Other Shrub Height (mean)	80.8	Suitable	Sagebrush and other shrub height is providing available forage and adequate concealment and thermal cover				
Does ecological site potential limit suitability potential?				YES	NO		
					X		
Drought Condition:	Extreme Drought	Severe Drought	Moderate Drought	Mid-Range	Moderately Moist	Very Moist	Extremely Moist
			X				
Evidence of sage-grouse use?	Unknown-not noted						
Evidence of recent livestock use?	Previous cattle pugging observed but no recent cattle use detected at 07503W01a						
Rationale for Overall Suitability Rating:	Overall this ecological site is rated suitable because all the primary and supplementary indicators fall within the suitable range. In general sagebrush CC and height is providing adequate forage and concealment and thermal cover above persistent snow under typical conditions.						
Site-Scale Suitability	Suitable		Marginal		Unsuitable		
	X						

General Riparian Habitat

The allotment contains short segments of a perennial stream (Spring Creek) and its intermittent side channel (0.1 and 0.1 miles, respectively) and a wet meadow/lentic area. The majority of Spring Creek within the allotment is located on private land that is separated from BLM-managed lands by fences. Although Spring Creek has not been assessed for PFC, imagery reveals a floodplain with succulent herbaceous vegetation and the occurrence of scattered woody cover (probably *Salix* sp.).

The BLM-managed portion of the allotment contains at least one wet meadow/lentic area. One

PFC assessed was conducted in the wet meadow in 2012 and was found to be in PFC. The wet meadow displayed a diverse composition of species and age-class distribution. These components normally produce the structural diversity that provide adequate breeding, nesting and foraging substrates and cover for many wildlife species. In addition, hydric vegetation exhibited high vigor.

Riparian habitats within the allotment appears to support components that result in habitat that is suitable for most dependent wildlife and special status species such as spotted frog, redband trout, and migratory birds.

General Upland Habitat Assessment

Several upland habitats and cover types occur within a few ecological sites within the allotment (Table WDLF-2). Sagebrush and other shrubs are generally providing good woody cover, structure, and forage for sage-grouse and most other sagebrush steppe obligates throughout much of the allotment. Perennial bunchgrasses are abundant and vigorous and generally as expected, and are providing adequate cover for ground dwelling, nesting, and foraging species.

Botany: No populations of special status plant species are known to occur in this allotment.

Rangeland Health Changes: No trend data are available for this allotment.

Livestock Grazing Management: Refer to Standard 1 for a discussion of livestock grazing management on this allotment.

[Check box 1, 2, 3, 4, or 5, and either box 6, or 7]	
1. <input checked="" type="checkbox"/> Meeting the Standard	5. <input type="checkbox"/> Not Meeting the Standard, cause not determined
2. <input type="checkbox"/> Not Meeting the Standard, but making significant progress towards	
3. <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are not significant factors (list important causal agents)	6 <input checked="" type="checkbox"/> Conforms with Guidelines for Livestock Grazing Management
4. <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are significant factors (list important causal agents)	7. <input type="checkbox"/> Does not conform with Guidelines for Livestock Grazing Management (list Guideline No(s). in non-conformance)

Field Manager’s Determination Rationale:

The Munro FFR allotment is meeting Standards 1, 4, and 8. Standards 2, 3, 5, 6, and 7 do not apply in this allotment. This allotment is identified as a fenced federal range (FFR), and is managed at the discretion of the livestock permittee as long as resource degradation is not occurring and management objectives are being met. Current appears to be compatible with attainment of all applicable Standards for Rangeland Health and conforms to Idaho Guidelines for Livestock Grazing Management.

 (s) Ron Kay
 Field Manager (Acting)

 9/11/2006
 Date

2013 Evaluation Findings and Determination

Standard 1 (Watersheds)

Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform to provide for proper nutrient cycling, hydrologic cycling and energy flow.

Standard

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward meeting
- Not Meeting the Standard; Current livestock grazing management practices are not significant factors

Guidelines

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s).

Rationale for Evaluation Finding and Determination

One rangeland health worksheet was completed on Federal lands in the Munro FFR allotment. All indicators for soil stability and hydrologic functions were in the non-to-slight or slight-to-moderate ranges. Increases in bare ground and rabbitbrush were noted, as well as weakened soil structure and reduced biotic soil crusts, relative to reference site conditions. Perennial bunchgrasses are abundant on this allotment, though some pedestals/terraces are apparent in site photos.

Watershed indicators available at the time of the 2006 evaluation show some departure from expected conditions for the ecological site though none were excessive enough to determine that Standard 1 would not be met. Overall, the plant community and soil conditions are adequate to provide for proper nutrient and hydrologic cycling, and energy flow. In the absence of additional land health assessments or additional data and based on the apparent non-use between 2005 and 2012, this leads to the conclusion that current livestock management is compatible with attainment of Standard 1 for Munro FFR allotment.

Standard 2 (Riparian Areas and Wetlands)

Riparian-wetland areas are in properly functioning condition appropriate to soil type, climate, geology, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Standard

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward meeting
- Not Meeting the Standard; Current livestock grazing management practices are not significant factors

Guidelines

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s).

Rationale for Evaluation Finding and Determination

A wet meadow area that is contributing flow to Spring Creek was assessed in 2012 using the PFC protocol. The riparian-wetland area supports a diverse and vigorous herbaceous community. Therefore, the Munro FFR allotment is meeting Standard 2, and is in conformance with the Guidelines for Livestock Grazing Management.

Standard 3 (Stream Channel/Floodplain)

Stream channels and floodplains are properly functioning relative to the geomorphology (e.g., gradient, size shape, roughness, confinement, and sinuosity) and climate to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Standard

- Standard does not apply

Rationale for Evaluation Finding and Determination

No perennial or intermittent streams occur on Federal lands within this allotment. Therefore, Standard 3 does not apply.

Standard 4 (Native Plant Communities)

Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Standard

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard, Livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward meeting
- Not Meeting the Standard; Livestock grazing management practices are not significant factors (*altered fire regimes; juniper*)

Guidelines

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s).

Rationale for Evaluation Finding and Determination

Standard 4 is met in the Munro FFR allotment. One rangeland health assessment was completed in the Munro FFR allotment in 2002. The overall rating for biotic integrity of the site was a non-slight departure from reference site conditions. In addition, the assessment identified that large bunchgrasses (AGSP, FEID) were present. Although rabbitbrush is present, adequate mountain big sagebrush and bitterbrush are established. Adequate seedheads for recruitment and stand maintenance were present at the time of the assessment and the plant community was intact and vigorous.

Standard 5 (Seedings)

Rangelands seeded with mixtures, including predominately non-native plants, are functioning to maintain life form diversity, production, native animal habitat, nutrient cycling, energy flow, and the hydrologic cycle.

Standard

- Standard does not apply

Rationale for Evaluation Finding and Determination

Non-native seedings are not the dominant vegetation type on Federal lands within this allotment. Therefore, Standard 5 does not apply.

Standard 6 (Exotic Plant Communities, Other than Seedings)

Exotic plant communities, other than seedings, will meet minimum requirements of soil stability and maintenance of existing native and seeded plants. These communities will be rehabilitated to perennial communities when feasible cost effective methods are developed.

Standard

- Standard does not apply

Rationale for Evaluation Finding and Determination

Exotic plant communities are not the dominant vegetation type on Federal lands within this allotment. Therefore, Standard 6 does not apply.

Standard 7 (Water Quality)

Surface and ground water on public lands comply with the Idaho Water Quality Standards.

Standard

- Standard does not apply

Rationale for Evaluation Finding and Determination

Review of the Munro FFR allotment indicates that no streams occur on Federal lands within the allotment. Therefore, Standard 7 does not apply.

Standard 8 (Threatened and Endangered Plants and Animals)

Habitats are suitable to maintain viable populations of threatened and endangered, sensitive, and other special status species.

Standard

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward meeting
- Not Meeting the Standard; Current livestock grazing management practices are not significant factors

Guidelines

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s).

Rationale for Evaluation Finding and Determination

Botany

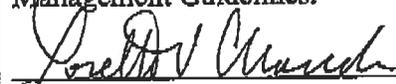
Standard 8 for botany is met in the Munro FFR allotment. There are no federally listed plant species and there is insufficient information to determine site-specific impacts of livestock grazing on any special status plants that may occur in this allotment.

Wildlife

Standard 8 and ORMP Wildlife Habitat and Special Status Species management objectives are met in the Munro FFR allotment. Upland habitats are providing adequate woody cover, structure, and forage for shrub-obligate and dependent species; deep-rooted, tall statured bunchgrasses are dominant, vigorous, and productive. These conditions are providing adequate habitat quality for many ground-dwelling, nesting, and foraging species. Riparian habitats support a variety of woody and herbaceous species and are providing adequate breeding and foraging conditions for many dependent wildlife species including spotted frogs and migratory bird species. Conditions of breeding, brood-rearing/summer riparian, upland summer, and winter seasonal habitats are meeting sage-grouse requirements.

Determination

I have determined that Standards 1, 2, 4, and 8 of the applicable Standards for Rangeland Health are being met in the Munro FFR Allotment. Standards 3, 5, 6, and 7 are not applicable to this allotment. Livestock management practices conform with the applicable Livestock Grazing Management Guidelines.

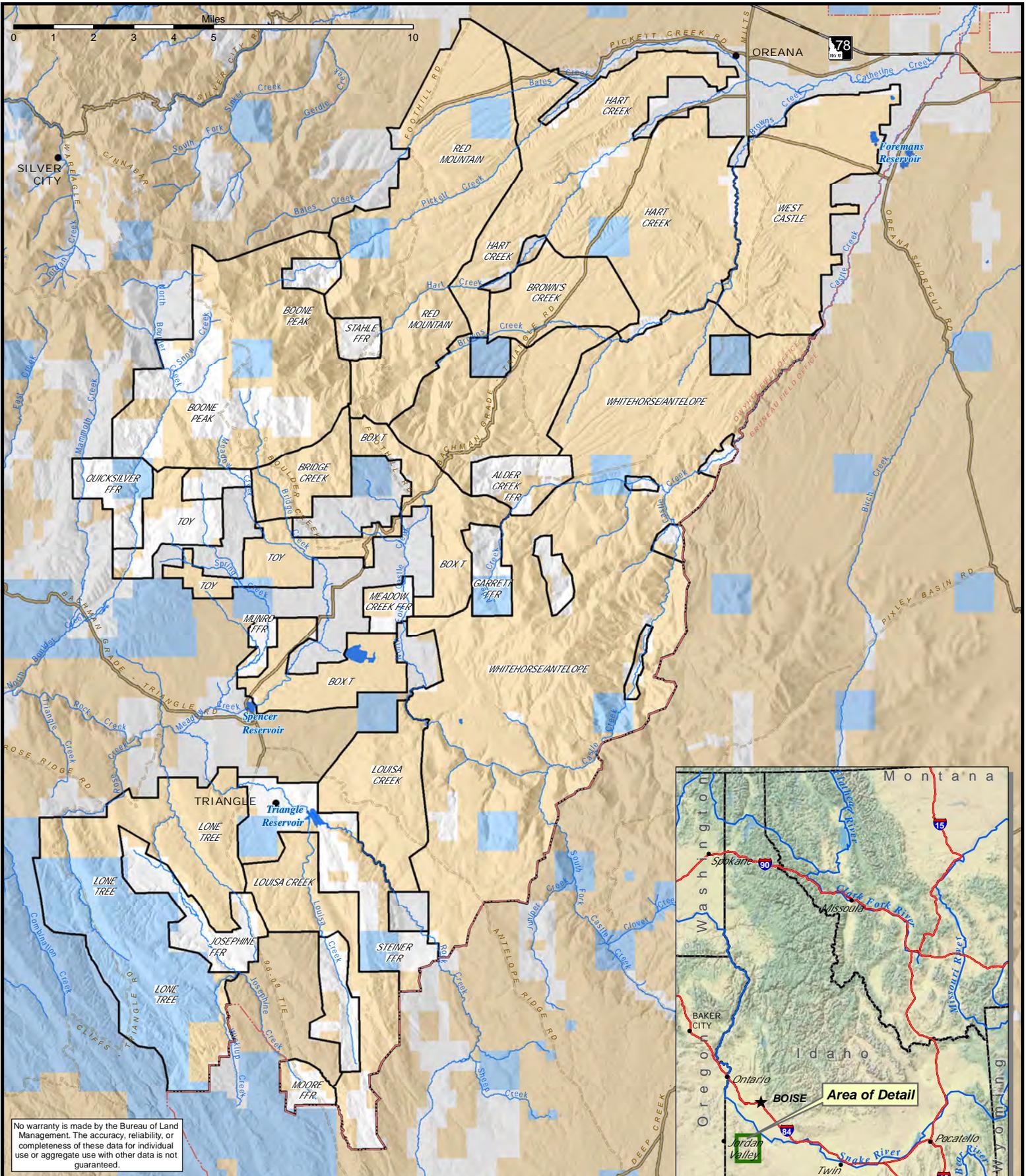


Field Manager
Owyhee Field Office

10 | 22 | 13
Date



GEN-1, Toy Mountain Allotments Overview



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.

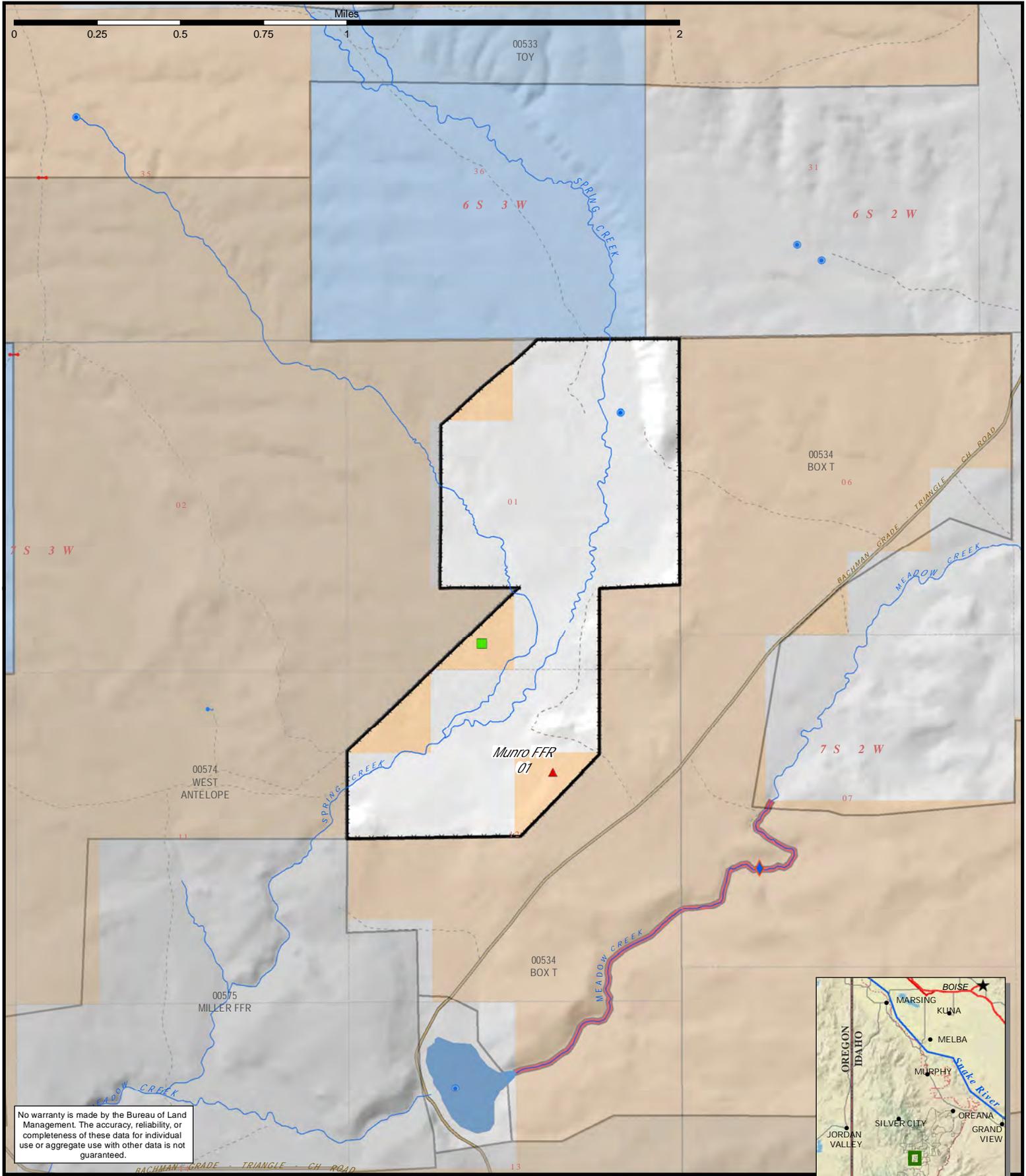
- Legend**
- Allotment Boundary
 - ~ Perennial Stream
 - Highway
 - Lake/Reservoir
 - Improved Road
 - Town/City
 - Unimproved Road
 - BLM Field Office Boundary

- Surface Management Agency**
- Bureau of Land Management
 - Private
 - State





RNGE-1: Munro FFR (00461), Range and Riparian Overview



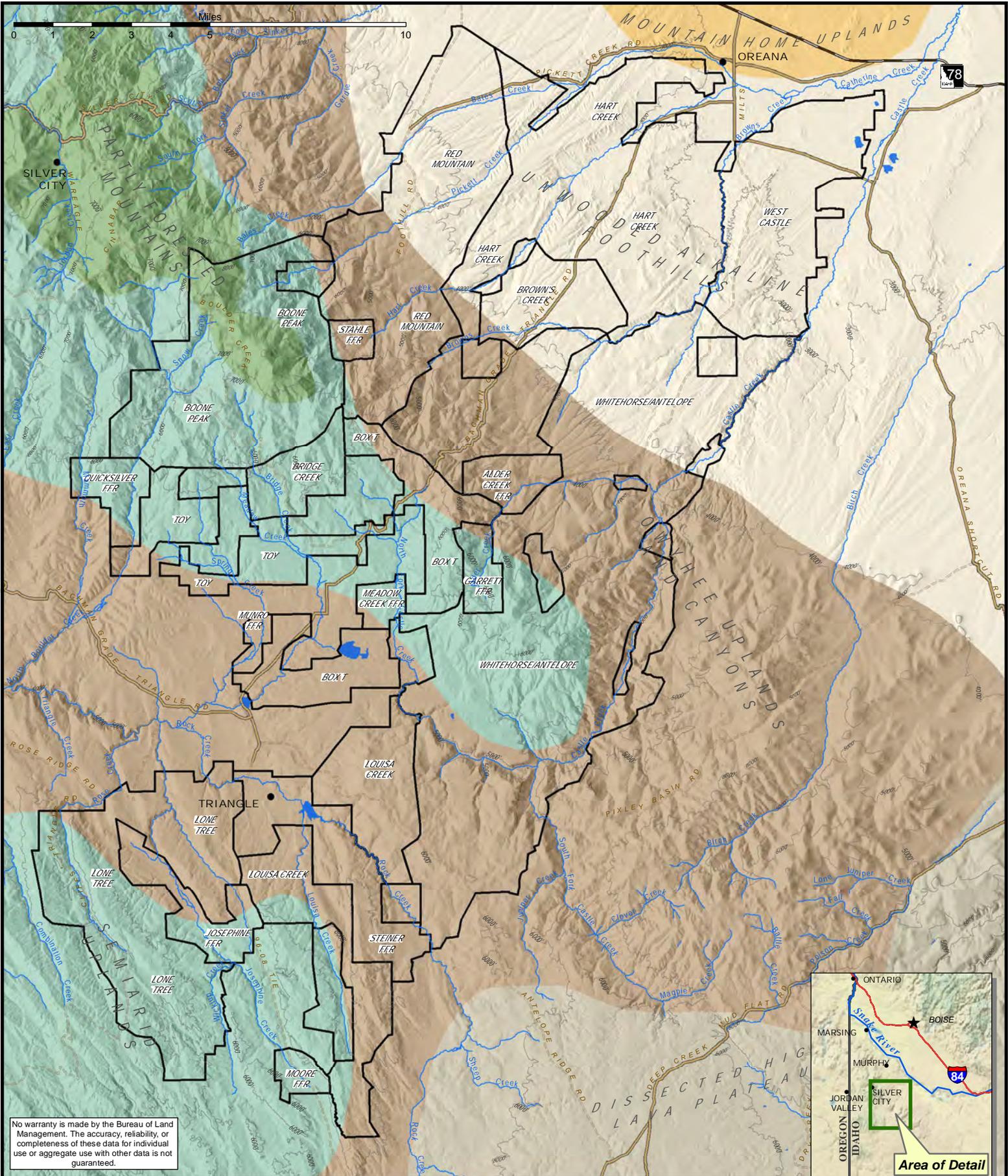
No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

Nested Plot Frequency Trend	Spring/Stream Assessment Rating	Improved Road	Management
Rangeland Health Assessment Point	PFC (Proper Functioning Condition)	4WD Road	BLM
Allotment of Interest Boundary	FAR (Functioning At Risk)	Gate	State
Pasture Boundary	NF (Non-Functioning)	Stock Pond	Private
Other Allotment Boundary	MIM Riparian Monitoring	Spring	Lake/Reservoir
Enclosure	Perennial Stream	Trough	





WDLF-1, Ecoregions, Toy Mountain Allotments



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.

- Allotment Boundary
- Perennial Stream
- Highway
- Lake/Reservoir
- Improved Road
- Town/City
- Unimproved Road
- 1000' Contour

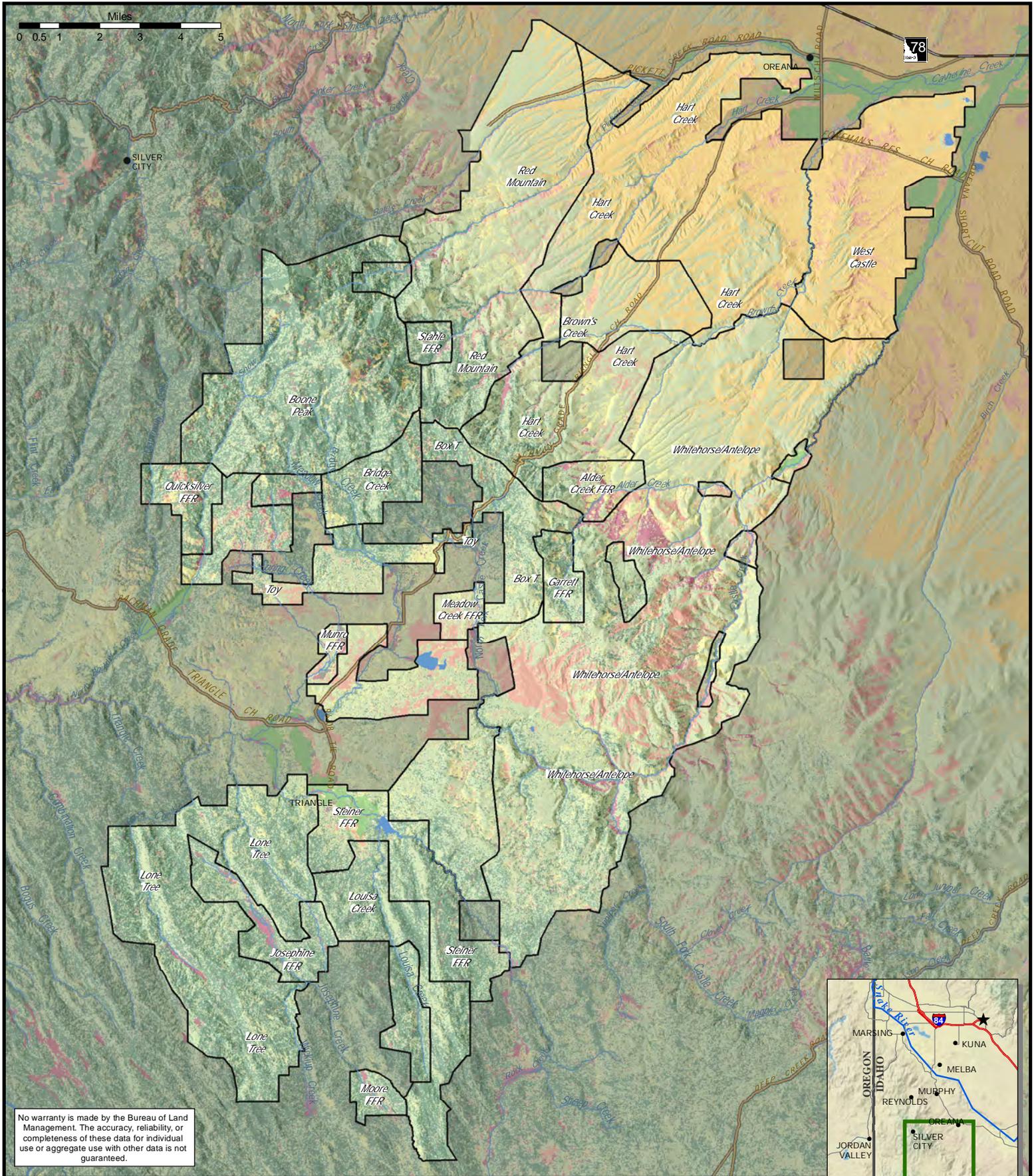
- Ecoregion Classification**
- Dissected High Lava Plateau
 - Mountain Home Uplands
 - Owyhee Uplands and Canyons
 - Partly Forested Mountains
 - Semiarid Uplands
 - Unwooded Alkaline Foothills



1:200,000



WDLF-2: Habitat/General Cover Types, Toy Mountain Allotments

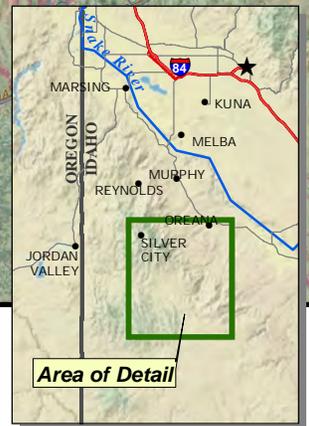


No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

- Allotment Boundary
- Highway
- Improved Road
- Perennial Stream
- Lake/Reservoir

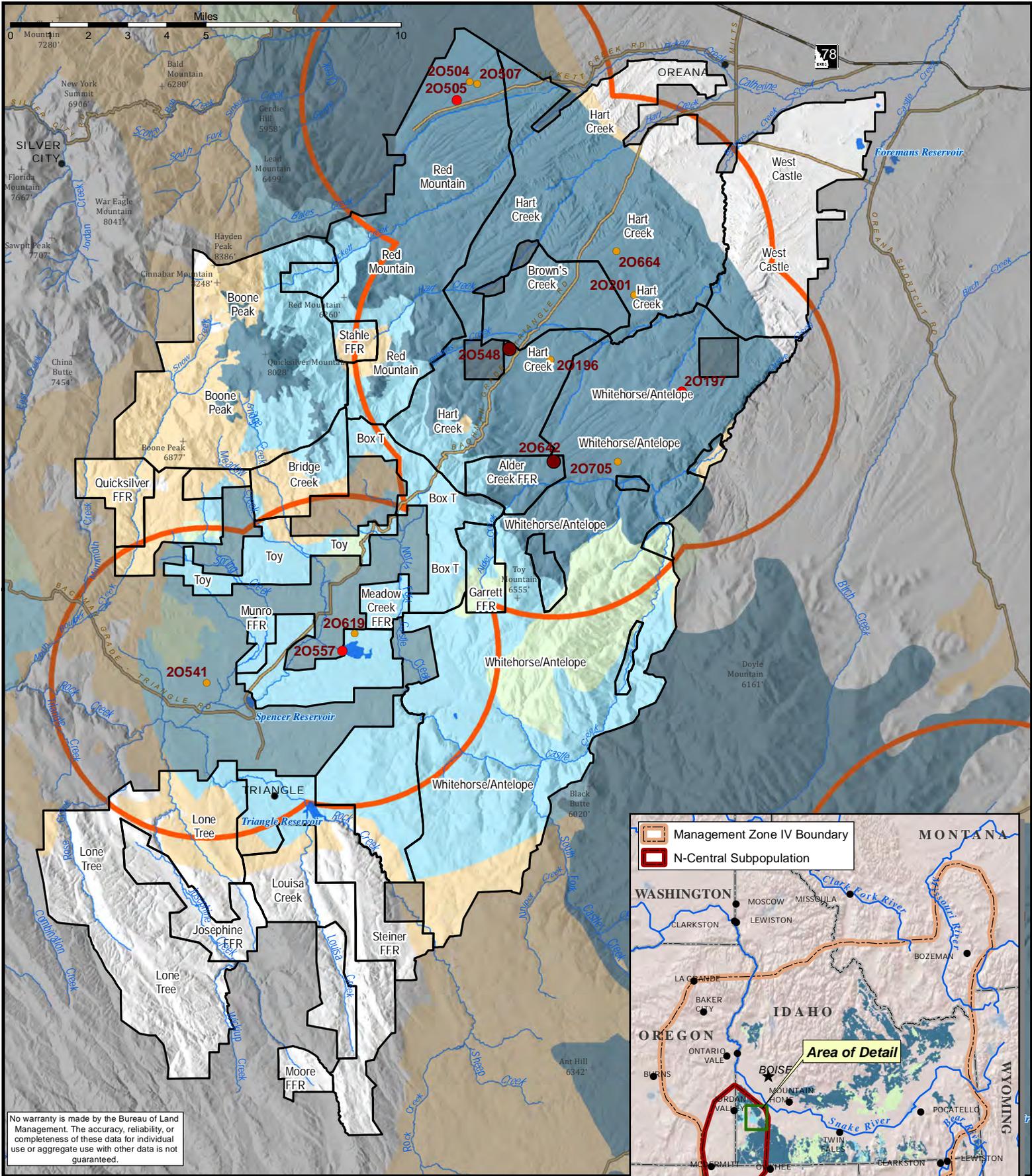
Vegetation Cover Classification

- | | |
|--------------|----------------------|
| Agriculture | Non-native/Disturbed |
| Forest | Salt Desert Shrub |
| Shrub Steppe | Urban |
| Grassland | Riparian |





WDLF-3, Sage-grouse Overview, Toy Mountain Allotments



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.

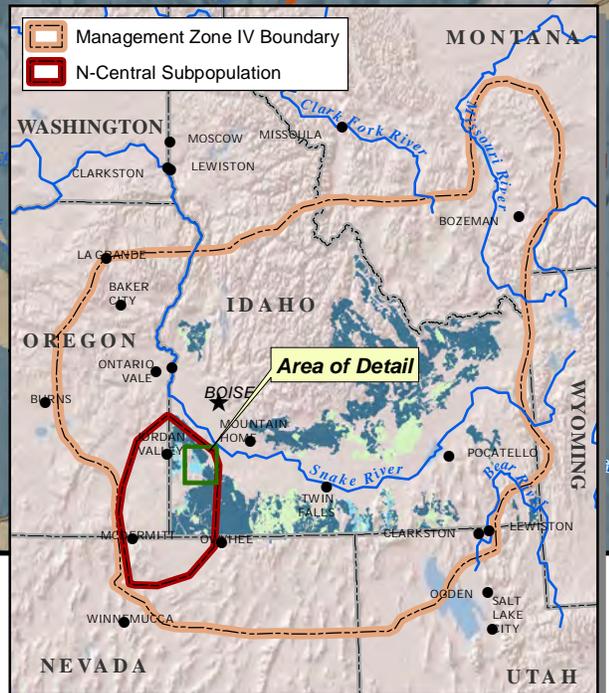
- Allotment Boundary
- Perennial Stream
- Lake/Reservoir
- Highway
- Improved Road

Idaho Occupied Sage-grouse Leks

- Maximum Count (2008-2012)
- 2 - 9
 - 10 - 29
 - 30 - 49
 - More than 50

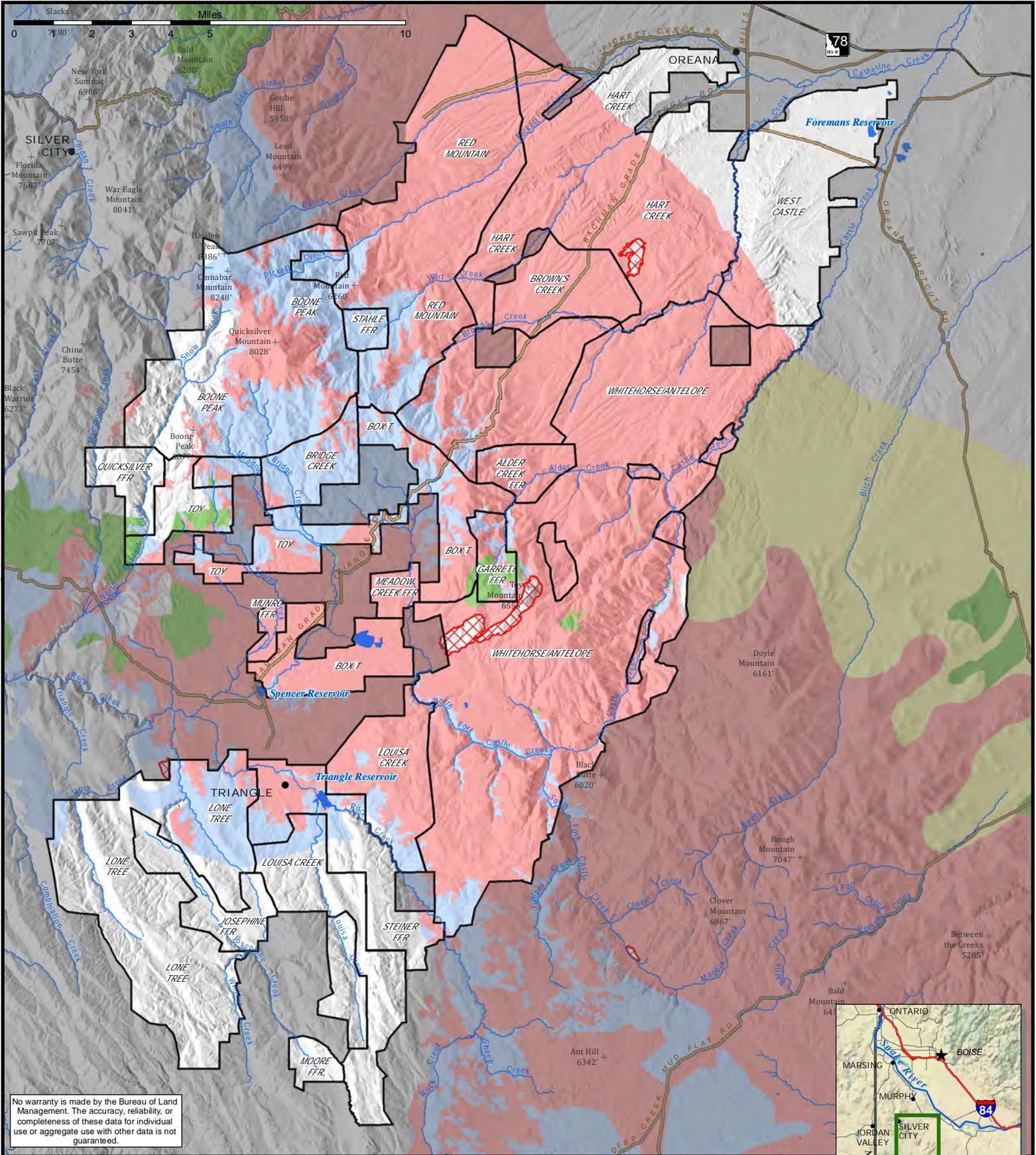
Idaho Sage-grouse Habitat Classes

- PPH - Sagebrush
- PPH - Perennial grassland
- PPH - Conifer encroachment
- PGH - All subtypes
- 75% Breeding Bird Density





WDLF-4, Key Habitat Overview, Toy Mountain Allotments



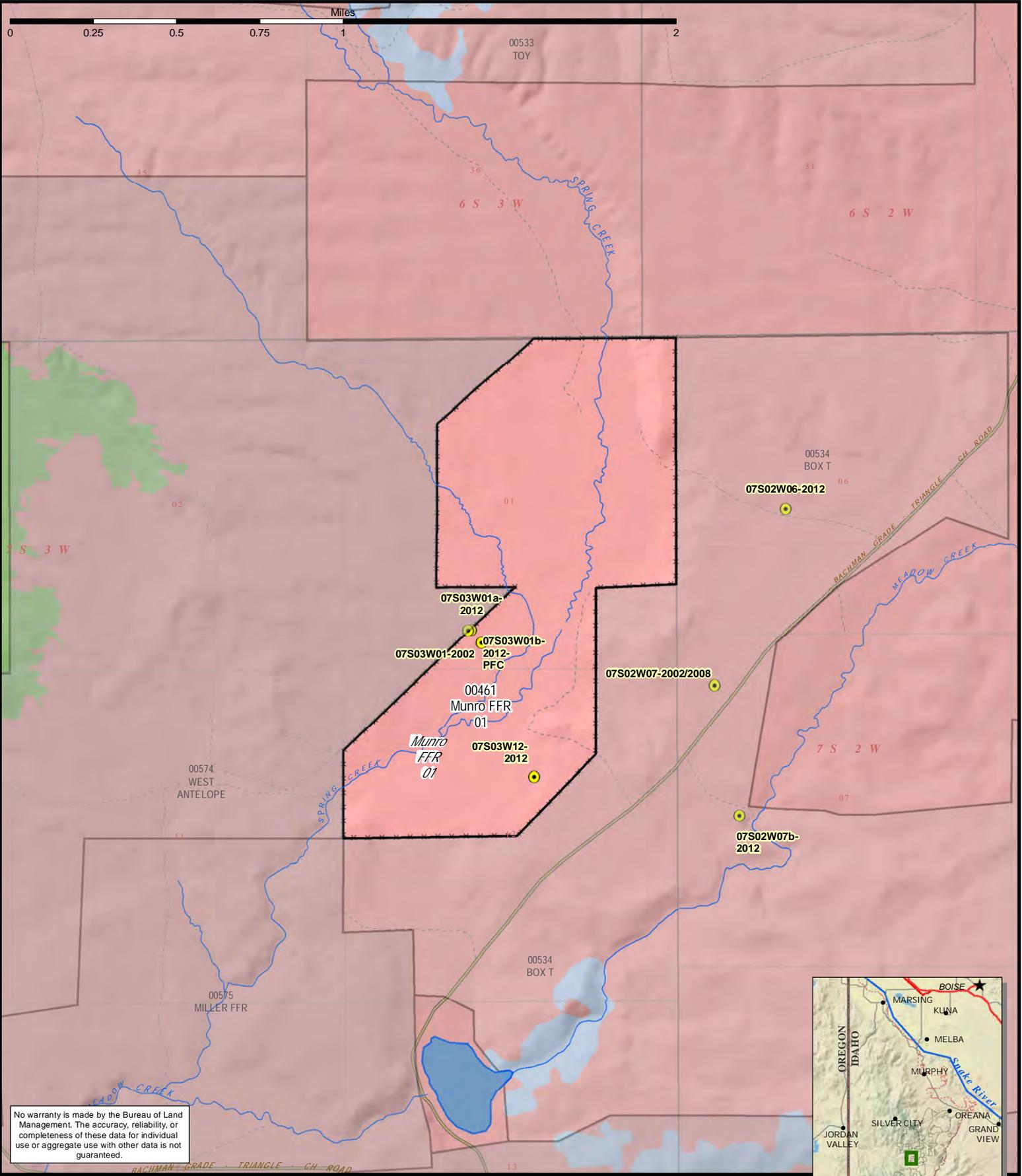
No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

- Allotment Boundary
- Perennial Stream
- Lake/Reservoir
- Highway
- Improved Road
- 2012 Sage Grouse Habitat**
- (K1) Key Habitat
- (R1) Perennial Grasslands
- (R2) Annual Grasslands Dominate
- (R3) Conifer Encroachment
- Area of Recent Burn





WDLF-5: Munro FFR (00461), Key Sage-grouse Habitat and Assessment Sites



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.

- | | | |
|--------------------------------|---------------------------------|-------------------------|
| Allotment of Interest Boundary | 2012 Sage Grouse Habitat | Habitat Assessment Site |
| Pasture Boundary | (K) Key Habitat | Perennial Stream |
| Other Allotment Boundary | (R1) Perennial Grasslands | Spring |
| Improved Road | (R2) Annual Grasslands Dominate | Lake/Reservoir |
| 4WD Road | (R3) Conifer Encroachment | |
| | Area of Recent Burn | |

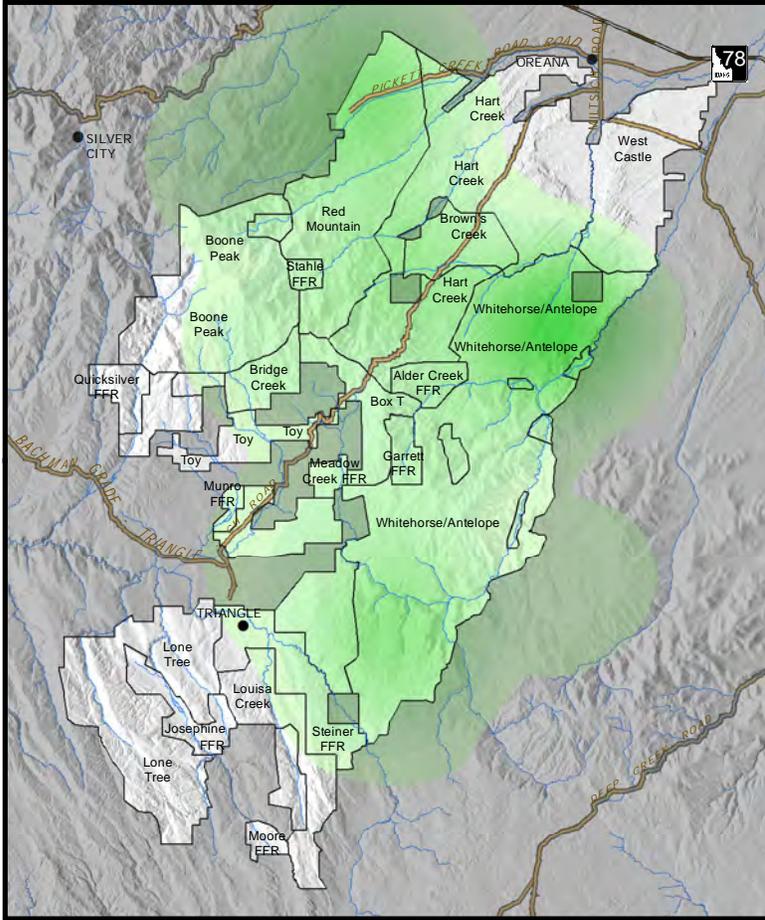




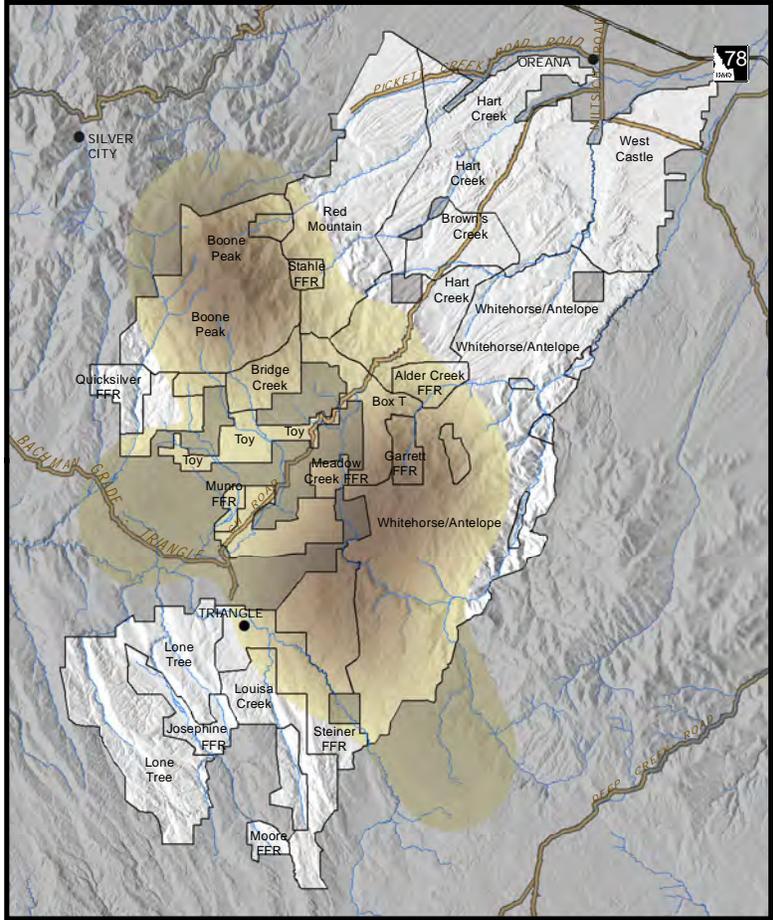
WDLF-6: Seasonal Sage-grouse Habitat, Toy Mountain Allotments



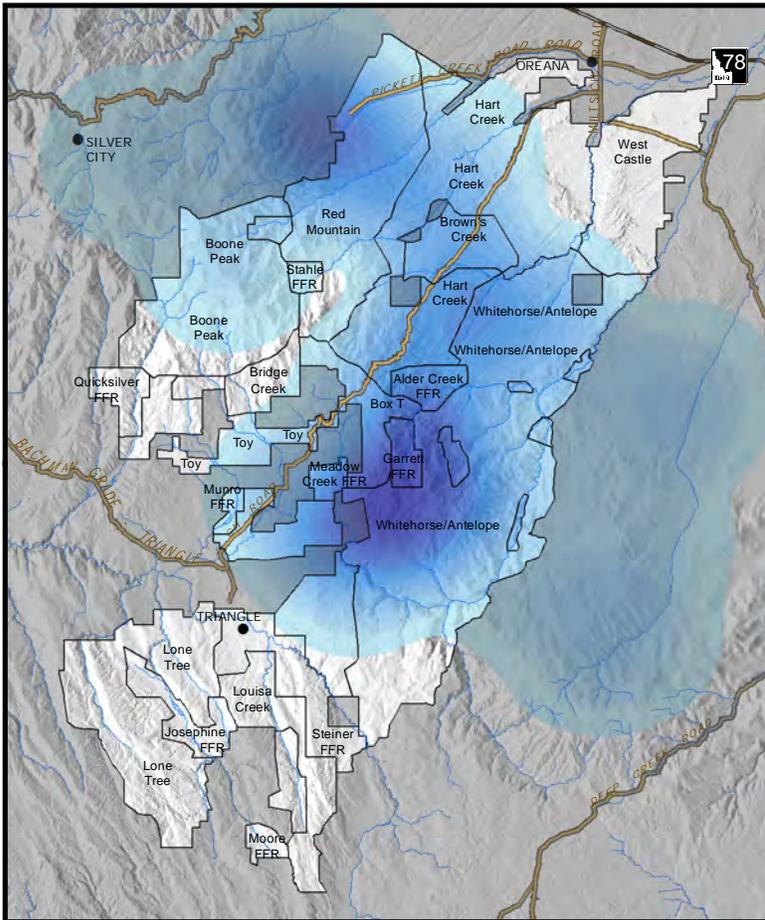
Breeding Habitat



Upland Summer Habitat



Winter Habitat



- Allotment Boundary
- Highway
- Improved Road
- Perennial Stream

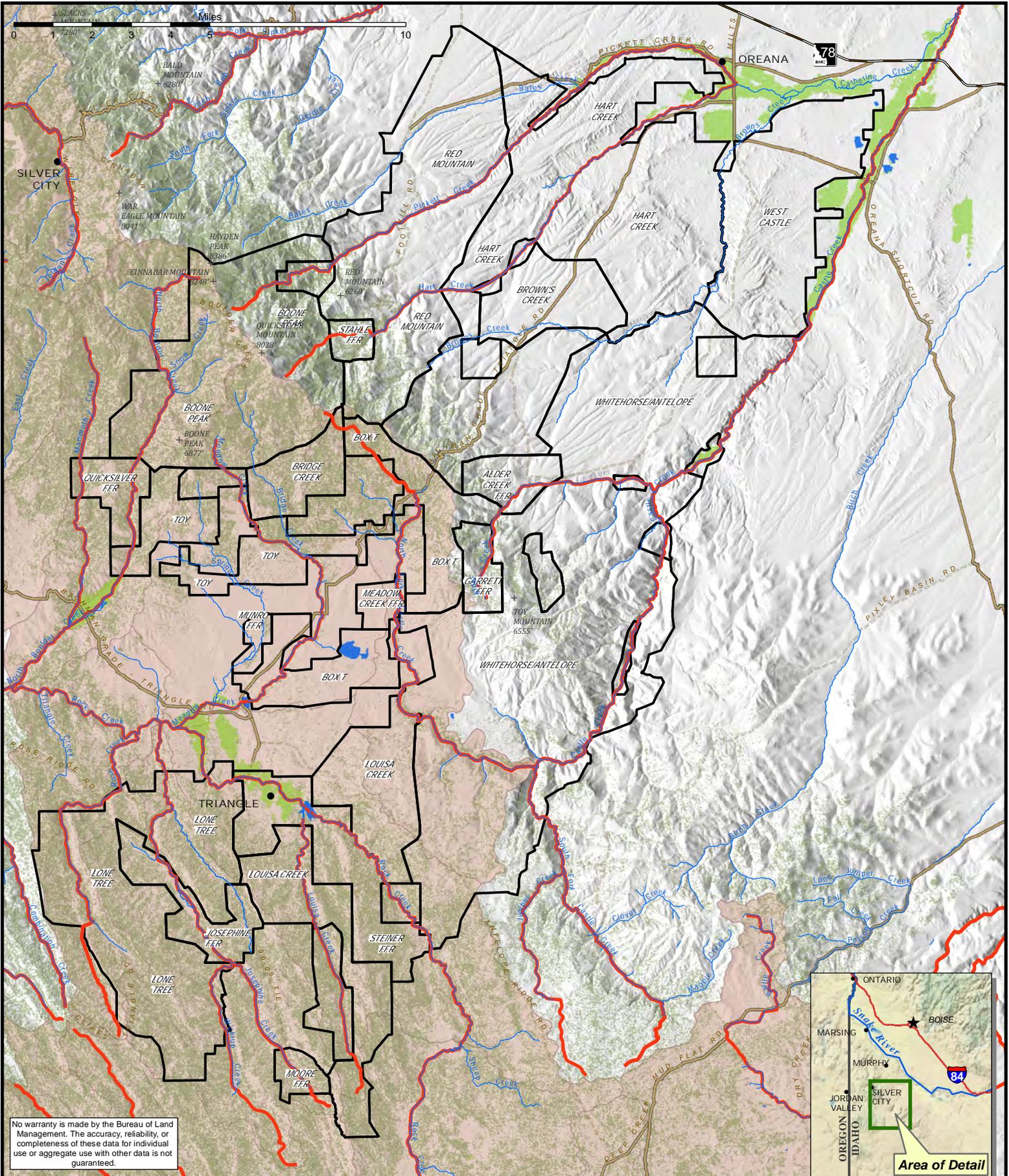
No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.



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WDLF-7, Columbia Spotted Frog and Redband Trout Overview, Toy Mountain Allotments



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.

- Allotment Boundary
- Perennial Stream
- Columbia Spotted Frog Occupied Watershed
- Agriculture
- Highway
- Lake/Reservoir
- Columbia River Redband Trout Presence
- Wooded
- Improved Road
- Town/City
- Unimproved Road



