

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: Meadow Creek FFR 0491
 Name of Permittee(s): Robert Thomas

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

The Rangeland Health Standards and Guidelines Assessment for the Meadow Creek 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. The current document consists of the 2006 RHA, in full, including a Determination signed in 2006, which is superseded by the 2013 Determination found at the end of this document. 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.

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

Correction of the GIS coverage for allotments and pastures in 2013, as a portion of the grazing permit renewal process, more correctly located the allotment boundaries for the Meadow Creek FFR allotment. Those revised data show 360 acres of BLM managed lands and 493 acres of private land in the allotment.

Consistent with the Owyhee RMP listing of the Meadow Creek FFR allotment as a “C” category allotment, actual use (Table LVST-1) and utilization data are limited. Summarized data recorded 28 percent utilization on Idaho fescue in 2005, while utilization on bluebunch wheatgrass was recorded at 21 percent in 2006 and 52 percent in 2012.

Table LVST-1: Reported actual use data in the Meadow Creek FFR allotment

Year	Dates of use	AUMs*
2005	7/25 to 9/3	135
2006	8/14 to 10/10	305
2007	7/25 to 9/1	397
2008	No data	No data
2009	10/15 to 12/1	371
2010	7/17 to 9/7	715
2011	8/1 to 10/1	612

2012	7/17 to 10/8	1257	
<p>* AUMs calculated include use of private land and therefore exceed authorized active use for the public land portion of the allotment. Due to the differences in vegetation composition and livestock distribution, one is not able to accurately prorate AUMs used to identify the exact number of AUMs grazed on BLM land in the allotment.</p>			

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, Initial Allotment Review.

Rangeland Health: Limited water flow patterns exist, however they are short and unconnected. There is evidence of historic pedestaling on perennial grasses, and common occurrences of bare ground. The rangeland health evaluation conducted in 2003 showed evidence of heavy trampling and reduced vigor of desirable plant species. However, the allotment was revisited by BLM staff in 2005, and showed vigorous bunchgrasses, adequate ground cover and no major watershed issues.

Rangeland Health Changes: No trend data are available for the Meadow Creek allotment.

Livestock Grazing Management: The Meadow Creek FFR allotment includes approximately 360 acres (75%) of Federal lands, and 119 acres of private lands. Public lands within this allotment lack legal public access, are isolated from other public lands in the area, and were identified for sale or exchange in the Owyhee RMP. This allotment is managed as a fenced federal range (FFR) allotment; therefore, livestock management is discretion of the grazing permittee as long as resource degradation is not occurring and resource management objectives are met. Current livestock management appears to be compatible with attainment of Standard 1.

Check box 1, 2, 3, 4, or 5, and either box 6, or 7 [<input checked="" type="checkbox"/> or <input type="checkbox"/>]	
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)

The 2006 evaluation document identified a rangeland health assessment completed in 2003, although BLM files identify that this assessment was completed by an interdisciplinary team on Sept. 19, 2002, in the Meadow Creek allotment (T6S, R2W, Section 33). An overall rating of a “slight-to-moderate” departure from reference conditions was identified for soil stability and hydrologic function.

Although the above description of the 2002 rangeland health assessment conditions for the Loamy 13-16” ecological site correctly describes several of the findings, it did not mention degraded soil structure within interspaces, large amounts of mechanical damage, reduced biological soil crusts, degraded soils, and that pedestaling and erosion are both active and historic.

The 2006 evaluation incorporated a site visit in 2005 in the above write-up for the rangeland health assessment site; however, the interpretation is deemed questionable due to lack of information. The assessment for the 17 indicators was incomplete, only consisted of the cover sheet, and displayed one check mark for the first indicator (none-to-slight for rills) and no further information on soil, hydrologic, or biotic conditions.

While the one 2005 photo appears to display better conditions than the 2002 photos, large amounts of bare ground are still apparent. Both assessments depict a rangeland health in which the biotic integrity has been altered compared to reference conditions due to the dominance of shallow-rooted bunchgrasses and limited representation of deep-rooted bunchgrasses. However, the most recent data collected in 2009 and 2012 for sage-grouse habitat (see Standard 8) reflect an abundant shrub cover and suitable forage that translate into adequate perennial grass cover and diverse and abundant forbs. While watershed health may still be impaired, comparison of observations and data from 2002 to 2012 suggests that the improvements in vegetation are beneficial to soil stability and hydrologic function, making significant progress. This differs from the previous statement that the allotment is meeting the Standard.

Standard 2 (Riparian Areas and Wetlands)

■ Standard doesn't apply

Evaluation and Information Sources: Based on a review of allotment files and field notes, no riparian areas or wetlands occur on Federal lands within this allotment. Therefore, Standard 2 does not apply.

Standard 3 (Stream Channel/Flood Plain)

■ Standard doesn't apply

Based on a review of allotment files and field notes, 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, Initial Allotment Review.

Rangeland Health: In 2003, both decreaser and increaser bunchgrasses were present, though reduced vigor was noted. However, an allotment visit in 2005 showed good vigor and reproductive capability of the perennial grasses following adequate spring precipitation.

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

Livestock Grazing Management: See Standard 1 for a discussion of livestock grazing management on the Meadow Creek FFR 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

Standard 5 (Seedings)

Standard doesn't apply

No seedings are documented on this allotment. Therefore, Standard 5 does not apply.

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

Though exotic plant species occur on this allotment, they are not extensive enough to warrant managing the allotment as a non-native plant community.

Standard 7 (Water Quality)

Standard doesn't apply

No streams or wetlands occur on Federal lands within this allotment. Therefore, Standard 7 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, Initial Allotment Review.

Rangeland Health:

Wildlife: Sage-grouse breeding habitat within the allotment is suitable. Sagebrush and other shrubs are providing good woody cover and structure for sage-grouse and other sagebrush steppe species. Distribution and vigor of forbs and large decreaser bunchgrasses provide adequate herbaceous cover for sage grouse and other ground nesting and foraging species.

Botany: No populations of special status plant species are known to occur in this allotment. Upland plant communities are adequate to sustain populations of a diversity of native plant species.

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

Livestock Grazing Management: See Standard 1 for a discussion of livestock grazing management on the Meadow Creek FFR allotment.

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

Focal Special Status Species

Botany

No populations of special status plant species are known to occur in this allotment. There is insufficient information to determine site-specific impacts of livestock grazing on any special status plants that may occur in this allotment. For this reason, this Standard is not applicable.

A population of stiff milkvetch (*Astragalus conjunctus*) was reported north of Triangle (EO 13407) but is actually located on private land. However, since it is in close proximity to this allotment there is potential for this plant to be found within the allotment. Elemental Occurrences (EOs) are derived by completion and review of an Idaho Rare Plant Observation Report through the Idaho Natural Heritage Program. The Idaho Fish and Wildlife Information System (IFWIS) Species Diversity database (IDFG, 2011) depicts historic, extirpated, and extent occurrences of special status plants. The geographic depiction of probable population area for this EO extends into the allotment. Stiff milkvetch is an upright, creamy with purplish banner flowering perennial forb. It is found on dry rocky slopes, scablands, and hilltops throughout the sagebrush desert above 2,000 feet in elevation.

Wildlife Habitats

Information Sources

Information sources that were used to assess and evaluate the composition and condition of wildlife habitats within the Meadow Creek FFR allotment include sage-grouse habitat

assessments (SG HA; 2002, 2009, and 2012), land cover classification (2002), aerial imagery (2011), photographs (2002, 2009, 2010, 2012, and 2013), in addition to information summarized above in Standards 1, 2, 3, 4, and 7 in this document.

Landscape Setting

Two Level IV Ecoregions of Idaho are represented within the present allotment and include the Owyhee Uplands and Canyons (80f) and Semiarid Uplands (80j) (Map WDLF-1) (McGrath, et al., 2002). Although these ecoregions are relatively similar, they are distinguished by differences in physiography, precipitation, and elevation. The Owyhee Uplands and Canyons ecoregion is not well represented in the allotment and is more an artifact of the coarseness of the data. The Semiarid Uplands ecoregion is characterized by mountains, hills, and valleys that ascend out of the surrounding uplands; these areas typically are dominated by mesic shrub steppe, mountain shrub, woodland, and forest communities (Map WDLF-1). The Semiarid Uplands ecoregion in the relatively small Meadow Creek FFR allotment is represented primarily by rolling topography and a mountain big sagebrush mesic shrub steppe vegetation community.

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). Only upland habitats and cover types occur on the BLM-managed portion of the allotment. These upland habitats and cover types occur within several ecological sites (Table WDLF-2).

Table WDLF-1: Major habitat and general cover types within the BLM-managed portion of the Meadow Creek FFR allotment.

Habitat Type	General Cover Type	Percentage of Allotment	
		General Cover Type	Habitat Type
Grassland	bunchgrass	16	16
Shrub Steppe ¹	big sagebrush	50	65
	mountain big sagebrush	2	
	low sagebrush	14	
Mountain Shrub	mountain shrub	<1	<1
Forest	juniper	<1	<1
Riparian	wet meadow	<1	<1
Non-native/Disturbed	exotic annuals	18	18

¹ Shrub steppe habitat type includes the predominant big and low sagebrush communities in the area. Big sagebrush (*Artemisia tridentata*) cover types could include communities dominated by the subspecies Wyoming (*wyomingensis*) and Basin (*tridentata*) and mixed communities of both species. Due to elevation and information from site visits, the occurrence of Wyoming big sagebrush appears to be a classification mistake. 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 Meadow Creek FFR allotment

Habitat Type	General Cover Type	Ecological Site Description	Percentage of Allotment	
			Ecological Site Description	General Cover Type
Grassland	Grassland	Dry Meadow PONE3/PHAL2	<1	<1
Shrub Steppe	Mountain Big Sagebrush	Loamy 13-16 ARTRV/PSSPS-FEID	13	13
	Low Sagebrush	Shallow Claypan 12-16 ARAR8/FEID	87	87

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 the 75 percent breeding bird density (BBD) lek buffer (4 mile) of lek 2O557 (Table WDLF-3).

Table WDLF-3: Attendance at leks within 4 miles of the Meadow Creek FFR allotment, 2007-2012

Lek ¹	Pasture	Survey Year ²					
		2012	2011	2010	2009	2008	2007
2O541+	1	0	--	--	11	19	--
2O557*	1	--	--	32	--	--	--
2O619	1	--	--	17	--	0	--

¹An occupied lek is designated by the + symbol and defined as a 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). Leks with 75 percent BBD areas are designated by an asterisk.

²Surveys were not conducted in years indicated by dashes (--).

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) had, for the most part, 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 a 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 Owyhee Field Office (OFO), especially in the Toy Mountain group area. The update reveals that the allotment is comprised entirely of key habitat (Maps WDLF-4 and WDLF-5).

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, and winter seasonal habitats (Map WDLF-6).

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 within the breeding, upland summer, and winter seasonal ranges of the Owyhee Front/Triangle local population (Map WDLF-5). The dominant low sagebrush ecological site and mountain big sagebrush inclusions support breeding (including early brood-rearing), upland summer, and winter sage-grouse habitat. There are no lotic or lentic riparian habitats in the BLM-managed portion of the allotment. All sage-grouse habitat within the pasture is considered key habit. A few scattered junipers occur in the allotment, an encroachment is in the very early stages (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 the Loamy 13-16" ARTRV/PSSPS-FEID Ecological Site. Although the transect sites were inclusions within the surrounding low sagebrush matrix (Table WDLF-2), the mountain big sagebrush ecological site does occur within the allotment and therefore is representative of conditions of big sagebrush habitats that predominate within the allotment.

Although the most recent breeding SG HA in the pasture was conducted in 2009, a review of the results from two SG HAs conducted in the same Ecological Site in 2002 and 2012 (see below) reveal that measurements of most indicators have remained consistent and provide validation for the current rating of sage-grouse breeding conditions within the pasture as Suitable.

- **06S02W33a-2012**

Suitable (provisionally). Although assessment was not conducted at the appropriate time of year, it appears that breeding habitat would provisionally be rated on the lower end of suitable (Table WDLF-4; Figure WDLF-1). Many components necessary for suitable breeding habitat are present and would be expected to persist (sagebrush height, perennial herbaceous vegetation CC, and forb diversity and abundance) and be adequate when soil moisture is more abundant in the spring (i.e., forb diversity and abundance). Nevertheless, perennial herbaceous vegetation height is low and possibly limiting understory nesting cover. Based on past sage-grouse breeding habitat conditions perennial herbaceous vegetation understory height does not appear to be a chronic issue. However, the 2012 conditions were more than likely exacerbated by subsequent heavy utilization (more than 50 percent average measured in December 2012) after the SG HAF was conducted which itself was conducted after the growing season. Because perennial grass CC is not limiting (18 percent) this short-term indicator could respond quickly and fall within suitable range under appropriate utilization levels.

- **06S02W33-2009**

Suitable. All primary indicator metrics fell within suitable range except mean perennial herbaceous understory vegetation height although cover was suitable (48 percent) (Table WDLF-4). Preferred forbs were abundant and diversity was high. Bitterbrush, rabbitbrush and scattered juniper occurred within the area. The vegetation community continued to be within the Reference Plant Community Phase (i.e., State 1 Phase A; Table 3).

- **06S02W33-2002**

Suitable. All primary indicator metrics fell within suitable range except sagebrush and forb CC. Sagebrush CC was only slightly high, and the belt transect revealed that forbs were abundant although they were not detected on the point intercept transect (Table WDLF-4). Preferred forbs were abundant and diversity was high. Bitterbrush and scattered juniper occurred within the area. The vegetation community continued to be within the Reference Plant Community Phase (i.e., State 1 Phase A; Table 3).

Table WDLF-4: Summary of breeding SG HAs¹ in pasture 1 of the Meadow Creek FFR allotment (2002, 2009, and 2012)

Habitat Indicator	Ecological Sites ²		
	R025XY011ID - 2012	R025XY011ID -2009	R025XY011ID-2002
	n=1	n=1	n=1
Sagebrush Canopy Cover (%)	26 (M)	18 (S)	26 (M)
Sagebrush Height (cm)	78 (S)	66 (S)	68 (S)
Sagebrush Growth Shape	Mixed (M)	Spreading (S)	Spreading (S)
Grass and Forb Height (cm)	12 (M)	13 (M)	20 (S)
Perennial Grass Canopy Cover (%)	18 (S)	36 (S)	38 (S)
Forb Canopy Cover (%)	0 (U)	16 (S)	2 (U)
Preferred Forb Availability	13 sp./abundant (S)	9 sp./abundant (S)	8 sp./abundant (S)
Overall Site Evaluation	Suitable (<i>provisionally</i>)	Suitable	Suitable

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

²Ecological site includes Loamy 13-16" ARTRV/PSSPS-FEID (R025XY011ID).

Upland Summer Habitat

One SG HAs was used to assess upland summer habitat conditions within the allotment (Map WDLF-5). The SG HAs was located within the Loamy 13-16" ARTRV/PSSPS-FEID Ecological Site. Although the transect site was an inclusion within the surrounding low sagebrush matrix (Table WDLF-2), the mountain big sagebrush ecological site does occur within the allotment and therefore is representative of conditions of big sagebrush habitats that predominate within the allotment. In general, upland summer habitat within the allotment is rated Suitable (see below).

- **06S02W33a-2012**

Suitable. Upland summer habitat in this ecological site is rated suitable because the vast majority of the primary (concealment cover, forb diversity and abundance) and supplementary (perennial herbaceous vegetation heights) indicators fall within suitable ranges (Figure 2). Moderately high *Poa* sp. CC indicates a rangeland health issue that in the future may substantially affect community composition.

Winter Habitat

One SG HAs was used to assess winter habitat conditions within the allotment (Map WDLF-5). The SG HAs was located within the Loamy 13-16" ARTRV/PSSPS-FEID Ecological Site. Although the transect site was an inclusion within the surrounding low sagebrush matrix (Table WDLF-2), the mountain big sagebrush ecological site does occur within the allotment and

therefore is representative of conditions of big sagebrush habitats that predominate within the allotment. In general, winter habitat within the allotment is rated Suitable (see below).

- **06S02W33a-2012**

Suitable. Overall the area is rated as suitable winter habitat because sagebrush CC and height would provide forage above persistent snow. Sagebrush and other shrub CC provide adequate concealment and thermal cover also (Figure 3).

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

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

Form H-3	Sage-grouse Habitat Suitability Worksheet –		BREEDING	0491-01-06S02W33a-2012	R025XY011D	
Date:	7/25/2012	County:	Owyhee	State:	Idaho	
Evaluators:	Evans, Schroeder			Subpopulation:	NC NV/ SE OR/ SW ID	
Legal Description:	T06SR02WS33QSEQSW		Allotment-Pasture Names:	Meadow Creek FFR-01	Home Range Name:	Triangle
Land Cover Type:	ARTRV/FEID-POSE			Associated Leaks:	20619, 20557	
Number of Transects:	1	Area Sampled (ha):	25	Ecological Site:	Loamy 13-16 ARTRV/PSSPS-FEID	
List UTM Coordinates:				Site Info:	Mesic	
Starting (NAD83)	4744500N	534405E				
Ending (NAD 83)	4744447N	534407E				

Habitat Indicator Suitability Range (Primary)

Habitat Indicator	X	Suitable	✓	Marginal	✓	Unsuitable	✓
Sagebrush Canopy Cover (mean)	26.0	15-25%		5-<15% or >25%	X	<5%	
Sagebrush Height Mesic Site (mean)	77.9	40-80 cm	X	20-<40 cm or >80 cm		<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)	12.0	≥18 cm		10-18 cm	X	<10 cm	
Perennial Grass Canopy Cover Mesic Site (mean)	18.0	≥15%	X	5-<15%		<5%	
Arid Site (mean)		≥10%		5-<10%		<5%	
Perennial Forb Canopy Cover Mesic Site (mean)	0.0	≥10%		5-<10%		<5%	X
Arid Site (mean)		≥5%		3-<5%		<3%	
Preferred Forb Availability (relative to site potential)	Abundant	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 (n)	13.0		13 sp. total				

Habitat Indicator Suitability Range (Supplemental)

Habitat Indicator	X	Suitability	Rationale
Other Shrub Canopy Cover (mean)	8.0	Suitable	Appropriate based on Ecological Site Potential
Other Shrub Height (mean)	41.5	Suitable	Appropriate based on Ecological Site Potential
Sagebrush and Other Shrub Canopy Cover (mean)	34.0	Suitable	Suitable breeding habitat should be ≤42% total shrub CC
Sagebrush and Other Shrub Height (mean)	69.4	Suitable	Suitable breeding habitat should have shrub heights between 40-80 cm
Perennial Grass Height (excluding Poa spp.) (mean)	12.0	Marginal	Suitable breeding habitat should have perennial grass height of at least 18 cm
Poa Spp. Canopy Cover (mean)	28.0	Marginal	As co-dominant understory species, indicative of potential shift in community composition (State 1A to 1C); typically at the expense of deep-rooted, tall-statured bunchgrass CC
Annual Grass Canopy Cover (mean)	0.0	Suitable	Appropriate based on Ecological Site Potential
Annual Forb Canopy Cover (mean)	2.0	Suitable	Appropriate based on Ecological Site Potential
Bare Ground Canopy Cover (relative to site potential) (mean)	36.0	Suitable	Appropriate based on Ecological Site Potential

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?	Cows currently in pasture

Rationale for Overall Suitability Rating:

Although assessment was not conducted at the appropriate time of year, it appears that breeding habitat would provisionally be rated on the lower end of suitable. Many components necessary for suitable breeding habitat are present and would be expected to persist (sagebrush height, perennial herbaceous vegetation CC, and forb diversity and abundance) and be adequate when soil moisture is more abundant in the spring (i.e., forb diversity and abundance). Nevertheless, perennial herbaceous vegetation height is low and possibly limiting understory nesting cover. Based on past sage-grouse breeding habitat conditions perennial herbaceous vegetation understory height does not appear to be a chronic issue. However, the 2012 conditions were more than likely exacerbated by subsequent heavy utilization (>50% average measured in December 2012) after the SG HAF was conducted which itself was conducted after the growing season. Because perennial grass CC is not limiting (18%) this short-term indicator could respond quickly and fall within suitable range under appropriate utilization levels.

Site-Scale Suitability	Suitable p	Marginal	Unsuitable
------------------------	---------------	----------	------------

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

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

Form H-4	Sage-grouse Habitat Suitability Worksheet –		UPLAND SUMMER	0491-01-06502W33a-2012	R025XY011ID		
Date:	7/25/2012	County:	Owyhee	State:	Idaho	Subpopulation:	NC NV/ SE OR/ SW ID
Evaluators:	Evans, Schroeder		Allotment-Pasture Names:		Meadow Creek FFR-01	Home Range Name:	Triangle
Legal Description:	T06SR02WS33QSEQSW		Associated Leks:		20619, 20557	Ecological Site:	Loamy 13-16 ARTRV/PSSPS-FEID
Land Cover Type:	ARTRV/FEID-POSE		Area Sampled (ha):		25	Site Info:	Mesic
Number of Transects:	1		List UTM Coordinates:				
Starting (NAD83)	4744500N	534405E					
Ending (NAD 83)	4744447N	534407E					

Habitat Indicator Suitability Range (Primary)

Habitat Indicator	\bar{x}	Suitable	✓	Marginal	✓	Unsuitable	✓
Sagebrush Canopy Cover (mean)	26.0	10-25%		5-<10% or >25%	X	<5%	
Sagebrush Height (mean)	77.9	40-80 cm	X	20-<40 cm or >80 cm		<20 cm	
Perennial Grass and Forb Canopy Cover (mean)	18.0	≥15%	X	5-15%		<5%	
Preferred Forb Availability (relative to site potential)	Abundant	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 (n)	13.0		13 sp. total				

Habitat Indicator Suitability Range (Supplemental)

Habitat Indicator	\bar{x}	Suitability	Rationale
Predominant Sagebrush Shape (mode)	Mixed	Suitable	Mix of sagebrush growth form is probably not limiting considering adequate perennial herbaceous vegetation CC and heights
Perennial Grass and Forb Height (mean)	12.0	Suitable	Suitable upland summer habitat should have perennial herbaceous vegetation height ≥10 cm
Perennial Grass Canopy Cover (mean)	18.0	Suitable	Suitable upland summer habitat should have perennial grass CC ≥10%
Perennial Forb Canopy Cover (mean)	0.0	Suitable	Suitable upland summer habitat should have perennial forb representation; this appears to be an artifact of sampling method as belt transect demonstrates suitable conditions
Other Shrub Canopy Cover (mean)	8.0	Suitable	Appropriate based on Ecological Site Potential
Other Shrub Height (mean)	41.5	Suitable	Appropriate based on Ecological Site Potential
Sagebrush and Other Shrub Canopy Cover (mean)	34.0	Suitable	Sagebrush and other shrubs are providing horizontal concealment cover
Sagebrush and Other Shrub Height (mean)	69.4	Suitable	Suitable breeding habitat should have shrub heights between 40-80 cm
Perennial Grass Height (excluding Poa spp.) (mean)	12.0	Suitable	Suitable upland summer habitat should have perennial grass height ≥10 cm
Poa Spp. Canopy Cover (mean)	28.0	Marginal	As co-dominant understory species, indicative of potential shift in community composition (State 1A to 1C); typically at the expense of deep-rooted, tall-statured bunchgrass CC
Annual Grass Canopy Cover (mean)	0.0	Suitable	Appropriate based on Ecological Site Potential
Annual Forb Canopy Cover (mean)	2.0	Suitable	Appropriate based on Ecological Site Potential
Bare Ground Canopy Cover (relative to site potential) (mean)	36.0	Suitable	Appropriate based on Ecological Site Potential

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?

Cows currently in pasture

Rationale for Overall Suitability Rating:

Upland summer habitat in this ecological site is rated suitable because the vast majority of the primary (concealment cover, forb diversity and abundance) and supplementary (perennial herbaceous vegetation heights) indicators fall within suitable ranges. Moderately high Poa sp. CC indicates a rangeland health issue that in the future may substantially affect community composition.

Site-Scale Suitability

Suitable
X

Marginal

Unsuitable

Figure WDLF-3: Summary of winter SG HA in the Meadow Creek FFR allotment in the Loamy 13-16" ARTRV/PSSPS-FEID Ecological Site (2012)

Form H-6	Sage-grouse Habitat Suitability Worksheet –		WINTER	0491-01-06S02W33a-2012 R025XY011ID			
Date:	7/25/2012	County:	Owyhee	State:	Idaho	Subpopulation:	NCNV/ SE OR/ SW ID
Evaluators:	Evans, Schroeder					Home Range Name:	Triangle
Legal Description:	T06SR02W533QSEQQSW		Allotment-Pasture Names:	Meadow Creek FFR-01		Associated Leaks:	20619, 20557
Land Cover Type:	ARTRV/FEID-POSE					Ecological Site:	Loamy 13-16 ARTRV/PSSPS-FEID
Number of Transects:	1	Area Sampled (ha):	25			Site Info:	Mesic
List UTM Coordinates:							
Starting (NAD83)	4744500N	534405E					
Ending (NAD 83)	4744447N	534407E					

Habitat Indicator Suitability Range (Primary)							
Habitat Indicator	X	Suitable	✓	Marginal	✓	Unsuitable	✓
Sagebrush Canopy Cover (mean)	26.0	>10%	X	5-10%		<5%	
Sagebrush Height above Snow		>25 cm		10-25 cm		<10 cm	
0 cm snow (annual mean)	77.9	>40 cm	X	15-40 cm		<15 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	X	Suitability	Rationale
Predominant Sagebrush Shape (mode)	Mixed	Suitable	Mix of sagebrush forms is not a limiting factor as availability of forage is more important and excessive sagebrush and other shrub CC probably is providing effective concealment cover
Other Shrub Canopy Cover (mean)	8.0	Suitable	Appropriate based on Ecological Site potential
Other Shrub Height (mean)	41.5	Suitable	Other shrub heights are providing additional concealment and thermal cover
Sagebrush and Other Shrub Canopy Cover (mean)	34.0	Suitable	Appropriate based on Ecological Site potential
Sagebrush and Other Shrub Height (mean)	69.4	Suitable	Sagebrush height is providing available forage, and in combination with other shrub height is providing effective concealment 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?	Cows currently in pasture

Rationale for Overall Suitability Rating:

Overall the area is rated as suitable winter habitat because sagebrush CC and height would provide forage above persistent snow. Sagebrush and other shrub CC provide adequate concealment and thermal cover also.

Site-Scale Suitability	Suitable	Marginal	Unsuitable
	X		

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:

Currently, Meadow Creek FFR Allotment is meeting Standards 1, 4, and 8. Standards 2, 3, 5, 6, and 7 do not apply to the Meadow Creek FFR Allotment. Although this allotment is 75% BLM land (119 Private, 360 BLM), these acres have been identified for potential disposal due to the complete enclosure by privately owned land, and lack of legal public access. Currently, this allotment is categorized as a "Custodial" (1999 Owyhee RMP) allotment for management priority purposes. Current livestock management as a fenced federal range is at the discretion of the grazing permittee, as long as degradation of public lands is not occurring and resource objectives are achieved.

(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 (list important causal agents): historic grazing management practices, altered fire regime.

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 1 is not being met within the Meadow Creek FFR allotment due to altered hydrologic cycling, nutrient cycling, and energy flow relative to the expected reference conditions, although significant progress toward meeting the Standard has been made. Past livestock grazing management practices are significant causal factors for not meeting watershed Standard 1 and have resulted in accelerated soil erosion, reduced biological crusts, and soil surface loss and degradation. Much of the decline in soil stability and hydrologic function can be associated with a change in deep-rooted bunchgrasses to more shallow-rooted species.

Based on the available data, however, the 2005 assessment qualitatively identified the representative site in the Meadow Creek FFR allotment in a better state than in 2002, while sage-grouse habitat data from 2009 and 2012 reflect similar conditions of suitable vegetation that benefits soil stability and hydrologic function. Although hydrologic cycling, nutrient cycling, and energy flow relative to watershed health are altered and are not meeting Standard 1, significant progress toward meeting the standard has been made in the Meadow Creek 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 doesn't apply

Rationale for Evaluation Finding and Determination

Although a short reach of an unnamed creek traverses the Meadow Creek allotment, it does not appear to support riparian vegetation (USDA FSA, 2011). Therefore the PFC protocol is not applicable, and the stream was not assessed.

Standard 3 (Stream Channel/Flood Plain)

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 doesn't apply

Rationale for Evaluation Finding and Determination

Although a short reach of an Unnamed Creek traverses the Meadow Creek allotment, it does not appear to support riparian vegetation (USDA FSA, 2011). Therefore the PFC protocol is not applicable, and the stream was not assessed.

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, 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 (list important causal agents): historic grazing management practices.

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 not met in Meadow Creek FFR allotment, but is making significant progress toward meeting. Although the 2006 Evaluation/Determination for Standard 4 within the Meadow Creek FFR allotment identified a rangeland health assessment completed in 2003, BLM files identify that this assessment was completed by an interdisciplinary team on Sept. 19, 2002, in the Meadow Creek allotment (T.6S., R.2W., Section 33). An overall rating of biotic integrity for the site was identified between a slight-to-moderate and a moderate departure from reference conditions. The brief discussion of the qualitative assessment in the 2006 evaluation only

indirectly included detail of the indicators recorded in notes. Those notes identified functional/structural groups with increased shrubs and decreased large bunchgrasses. Additionally, the notes identified no seedheads on grasses growing in the interspace between shrubs. Photos associated with the assessment depict a site devoid of deep-rooted bunchgrasses in the interspaces and extensive bare ground.

In addition, a partially completed rangeland health assessment was completed in 2005, with indicators for biotic integrity not assessed. Notes included the identification of Sandberg bluegrass as the dominant herbaceous species on site, inconsistent with site potential for the Loamy 13-16" site that is co-dominated by bluebunch wheatgrass and Idaho fescue. Although the 2005 assessment identified the site as a Shallow Claypan 12-16" with inclusions of Loamy 13-16", compared to the 2002 identification of the site as a Loamy 13-16", both sites are co-dominated by the two deep-rooted bunchgrasses in equal production at reference site conditions. The 2005 assessment identified the vigor of shrubs and grasses in this above-average precipitation year.

Whereas both the 2002 and 2005 assessments depict a rangeland health that has limited representation of deep-rooted bunchgrasses, dominance by Sandberg bluegrass (a shallow-rooted bunchgrass that would be present in limited quantity in reference condition), and sagebrush dominance greater than potential, the 2005 assessment qualitatively identified the representative site in the Meadow Creek FFR allotment in better condition in a good precipitation year than the condition reported in 2002. As a result, although hydrologic cycling, nutrient cycling, and energy flow relative to biotic integrity are altered to a degree, leading to a conclusion that the site is not meeting Standard 4, significant progress toward meeting the Standard has been made. This conclusion differs from the 2006 evaluation using the same qualitative assessments from 2002 and 2005 and no additional data. Although historic grazing management practices have led to the current vegetation composition and its deviation from site potential, no information is present to conclude that current livestock management practices are contributing to the failure to meet the Standard. No long-term trend monitoring has been established for the Meadow Creek FFR allotment.

Actual use data identify annual deferment of grazing until mid-summer and fall since 2005, which are seasons outside the active growing season for shrub-steppe perennial herbaceous species, which is consistent with the guidelines. Limited utilization data suggest that moderate or greater intensity of use periodically occurs outside the active growing season. In summary, available information leads to a conclusion that the current livestock management practices are consistent with the guidelines, and recent seasons and intensity of grazing use are practices that should allow progress toward meeting Standard 4.

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 doesn't apply

Rationale for Evaluation Finding and Determination

No seedings are documented on 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 doesn't apply

Rationale for Evaluation Finding and Determination

Though exotic plant species occur on this allotment, they are not extensive enough to warrant managing the allotment as a non-native plant community.

Standard 7 (Water Quality)

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

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

Idaho Department of Environmental Quality (IDEQ) designates basins, sub-basins, and assessment units in order to manage the State's waterways. The 2010 Integrated Report (303(d)/305(b)) uses assessment units within the sub-basin. Assessment units (AUs) are groups of similar streams within a sub-basin that have similar land use practices, ownership, or land management. Assessment units are assessed for pollutants and assigned beneficial uses with associated Water Quality Standards. The Beneficial Use Reconnaissance Program (BURP) is a field assessment of stream segments (all IDEQ data and standards mentioned here are available on the IDEQ web site <http://www.deq.idaho.gov>).

According to the Clean Water Act, each state must develop Total Maximum Daily Loads (TMDLs) for all the waters on the 303(d) list. The objective of a TMDL is to determine the loading capacity of the water body and to allocate that load among different pollutant sources so that the appropriate control actions can be taken and water quality standards achieved. The

TMDL process is important for improving water quality because it links the development and implementation of control actions to the attainment of water quality standards. Once a TMDL is developed for a particular pollutant or pollution, it is effectively removed from the 303(d) list.

Although BLM did not identify or assess streams that the PFC protocol would apply to, current IDEQ information identifies that the BLM portions of the allotment contain approximately 0.9 miles of stream that are not supporting the watershed's beneficial uses. The allotment contains portions of AU #ID17050108SW015_02 that are not meeting the cold-water aquatic life beneficial use due to both flow alterations and temperature. Although the AUs are currently not supporting the beneficial uses, all of the streams that occur within the allotment have been removed from the 303(d) list of impaired waters for temperature. The AU has an approved TMDL with actions identified to de-list streams for temperature. However, the streams that occur within the AU are also not meeting the beneficial uses based on flow alteration, and are thus still 303(d) listed. Therefore, the allotment is not meeting Standard 7 based on flow alteration. The allotment is in conformance with the Guidelines for Livestock Grazing Management because the flow alteration cannot be attributed to livestock.

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

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

Wildlife

Although Standard 8 is not being met within the Meadow Creek FFR allotment due to altered hydrologic cycling, nutrient cycling, and energy flow relative to the expected reference biotic integrity as outlined in Standard 4, significant progress toward meeting the Standard has been made and habitat conditions are in conformance with the ORMP wildlife habitat and special status species management objectives overall.

Sagebrush and other shrubs are generally providing good woody cover, structure, and forage for sage-grouse and most other shrub-obligate special status species that would occur within the allotment. Although some issues exist with height of perennial understory herbaceous vegetation in regards to sage-grouse nesting cover, perennial grass canopy cover is adequate and forbs used as forage are diverse and abundant. Breeding, upland summer, and winter seasonal habitat conditions within the allotment are suitable and meeting sage-grouse requirements. Overall, uplands appear to be providing adequate habitat for a diverse assemblage of shrub and ground nesting and foraging special status species.

Determination

I have determined that Standards 1, 4, 7, and 8 of the applicable Standards for Rangeland Health are not being met in the Meadow Creek FFR Allotment. While significant progress is being made toward meeting Standards 1, 4, and 8, failure to meet Standard 7 is due to causes other than current livestock management practices. Standards 2, 3, 5, and 6, are not applicable to resources present within the Meadow Creek FFR allotment.



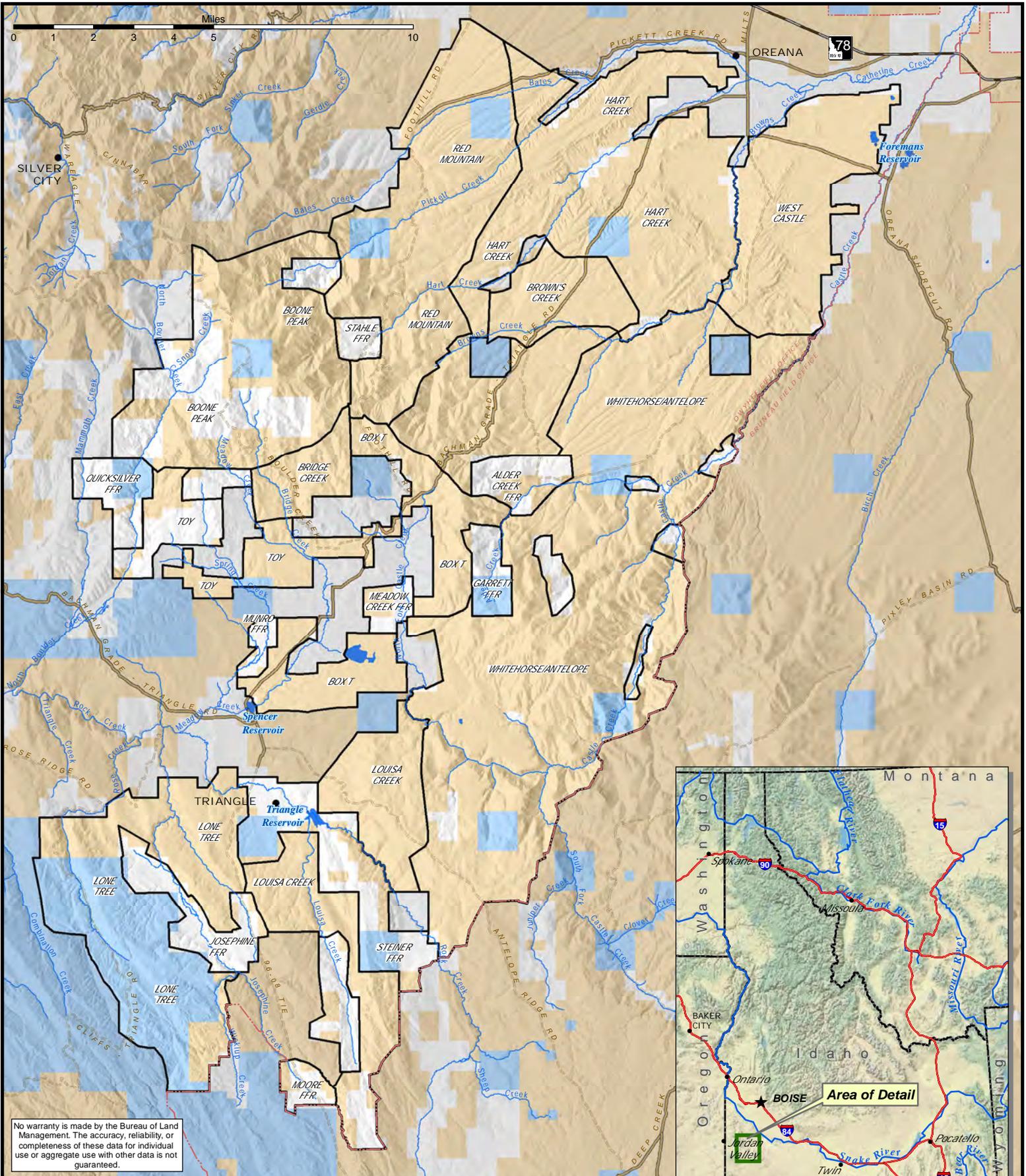
Field Manager
Owyhee Field Office

10 | 30 | 13
Date

Errata 2013 Determination 10/21



GEN-1, Toy Mountain Allotments Overview

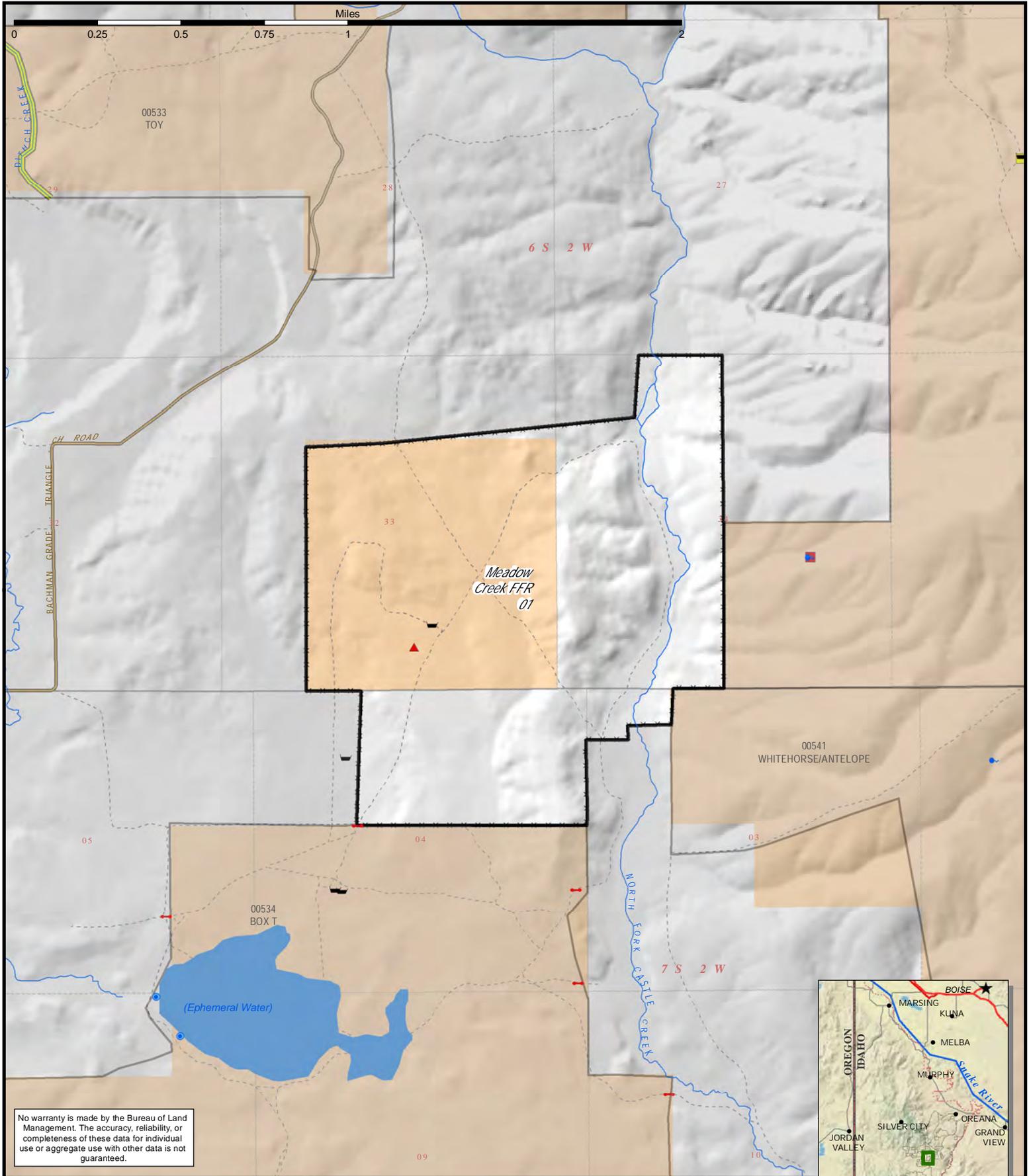


- Legend**
- Allotment Boundary
 - ~ Perennial Stream
 - Highway
 - Lake/Reservoir
 - Improved Road
 - Town/City
 - Unimproved Road
 - BLM Field Office Boundary

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



RNGE-1: Meadow Creek FFR (00491), 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
- Rangeland Health Assessment Point
- Allotment of Interest Boundary
- Pasture Boundary
- Other Allotment Boundary
- Exclosure

- Spring/Stream Assessment Rating**
- PFC (Proper Functioning Condition)
 - FAR (Functioning At Risk)
 - NF (Non-Functioning)
 - MIM Riparian Monitoring
 - Perennial Stream

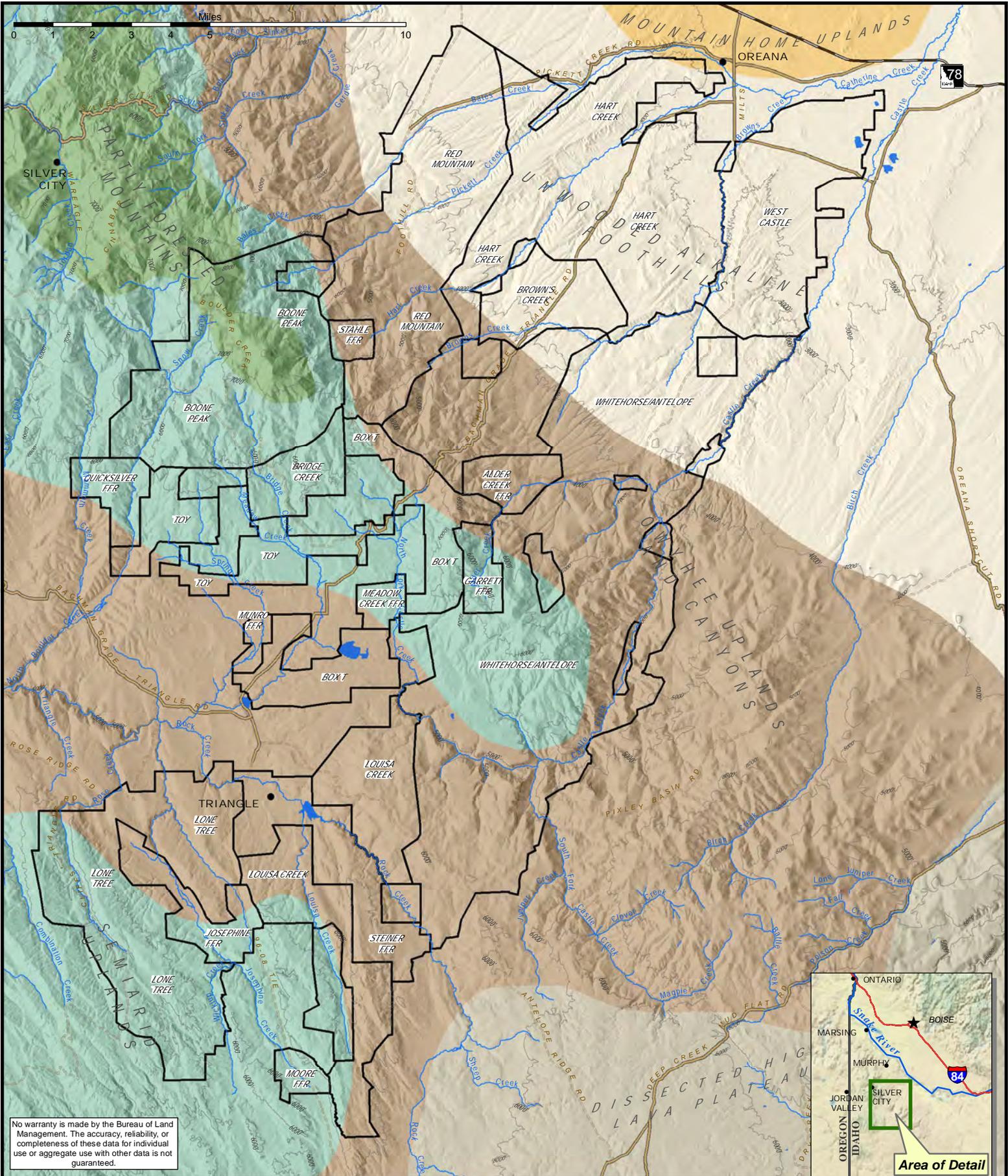
- Improved Road
- 4WD Road
- Gate
- Stock Pond
- Spring
- Trough

- Management**
- BLM
 - State
 - Private
 - Lake/Reservoir





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

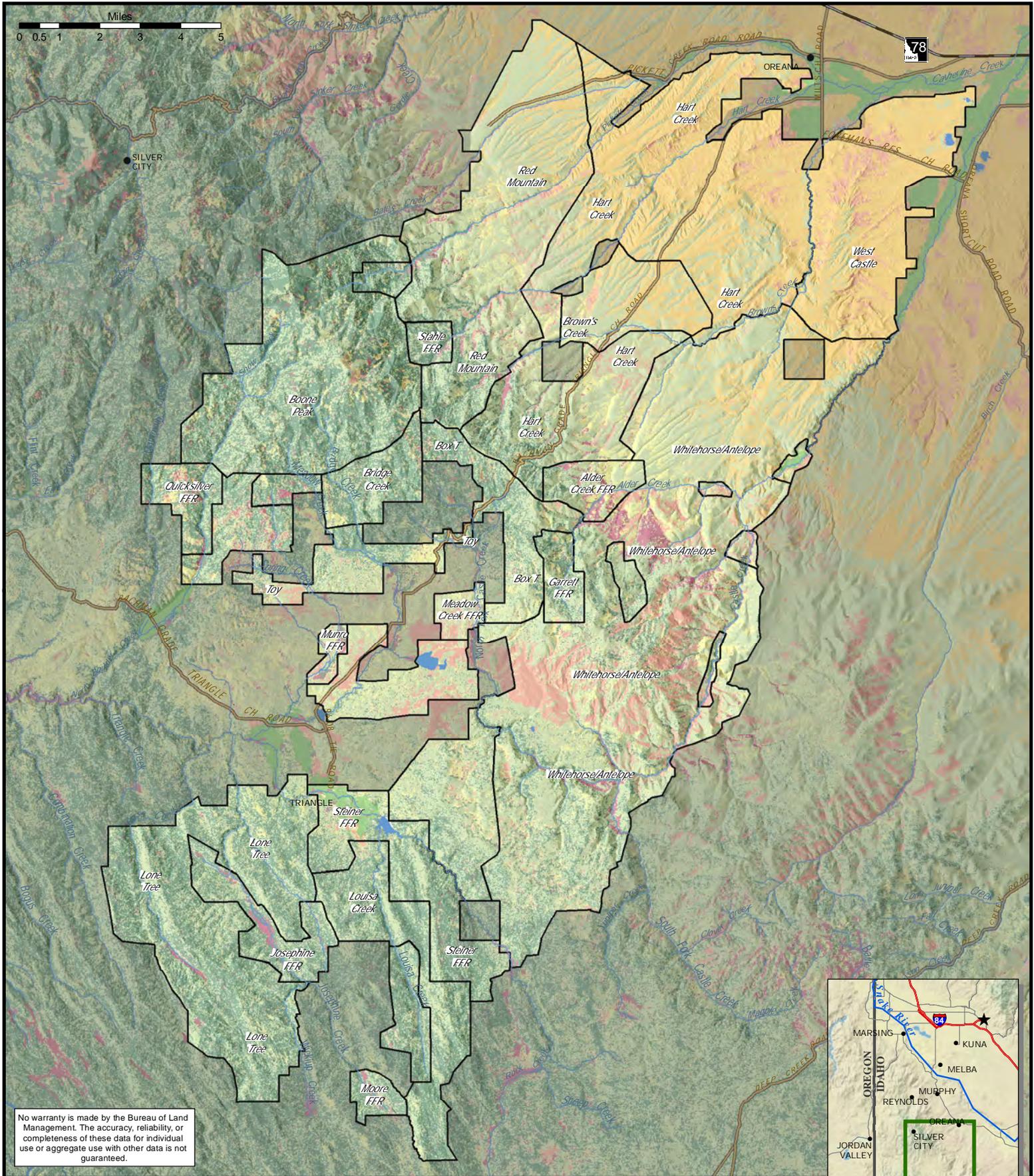
- Ecoregion Classification**
- Partly Forested Mountains
 - Mountain Home Uplands
 - Semiarid Uplands
 - Unwooded Alkaline Foothills
 - Dissected High Lava Plateau
 - Owyhee Uplands and Canyons



1:200,000



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

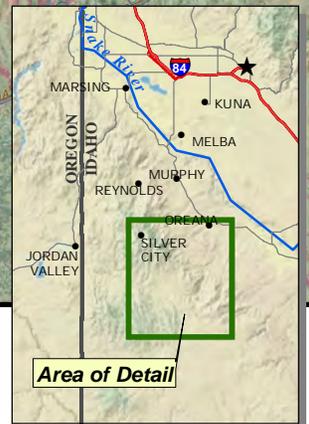


No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

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

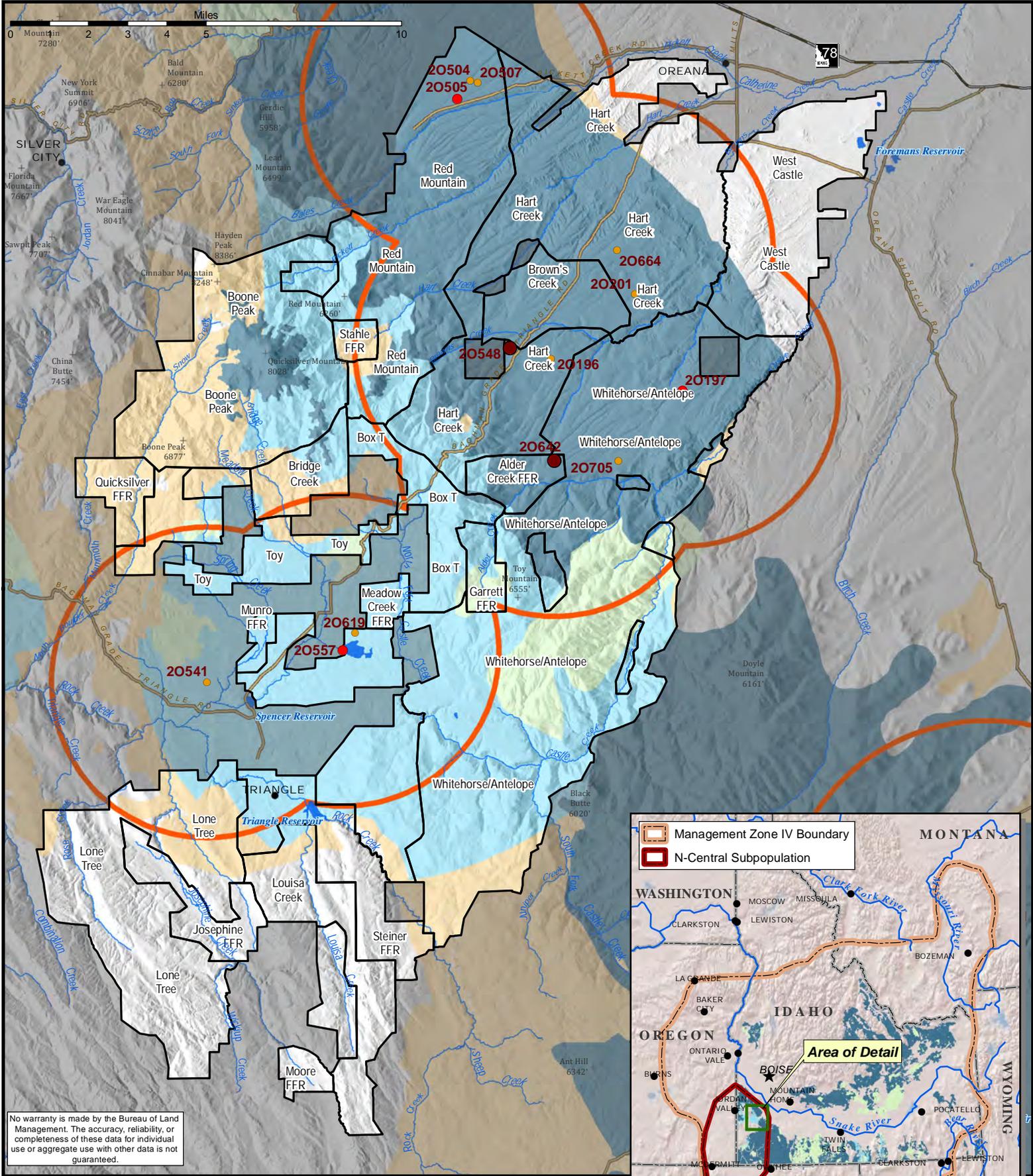
Vegetation Cover Classification

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





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

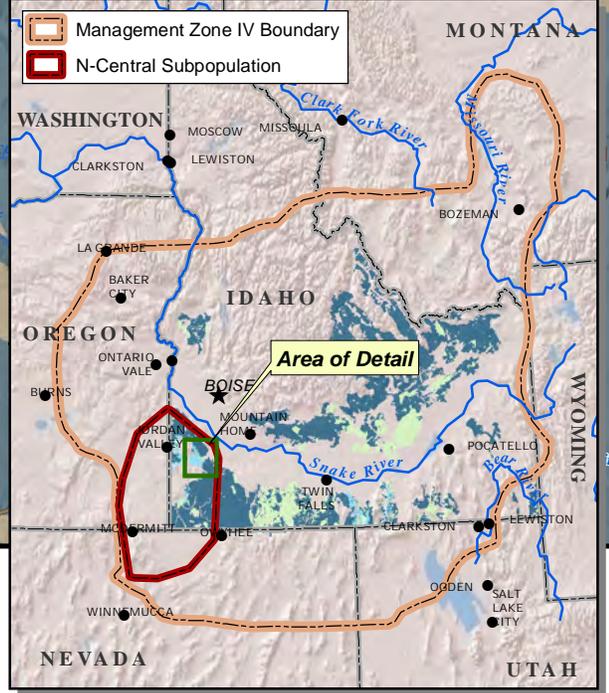


No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

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

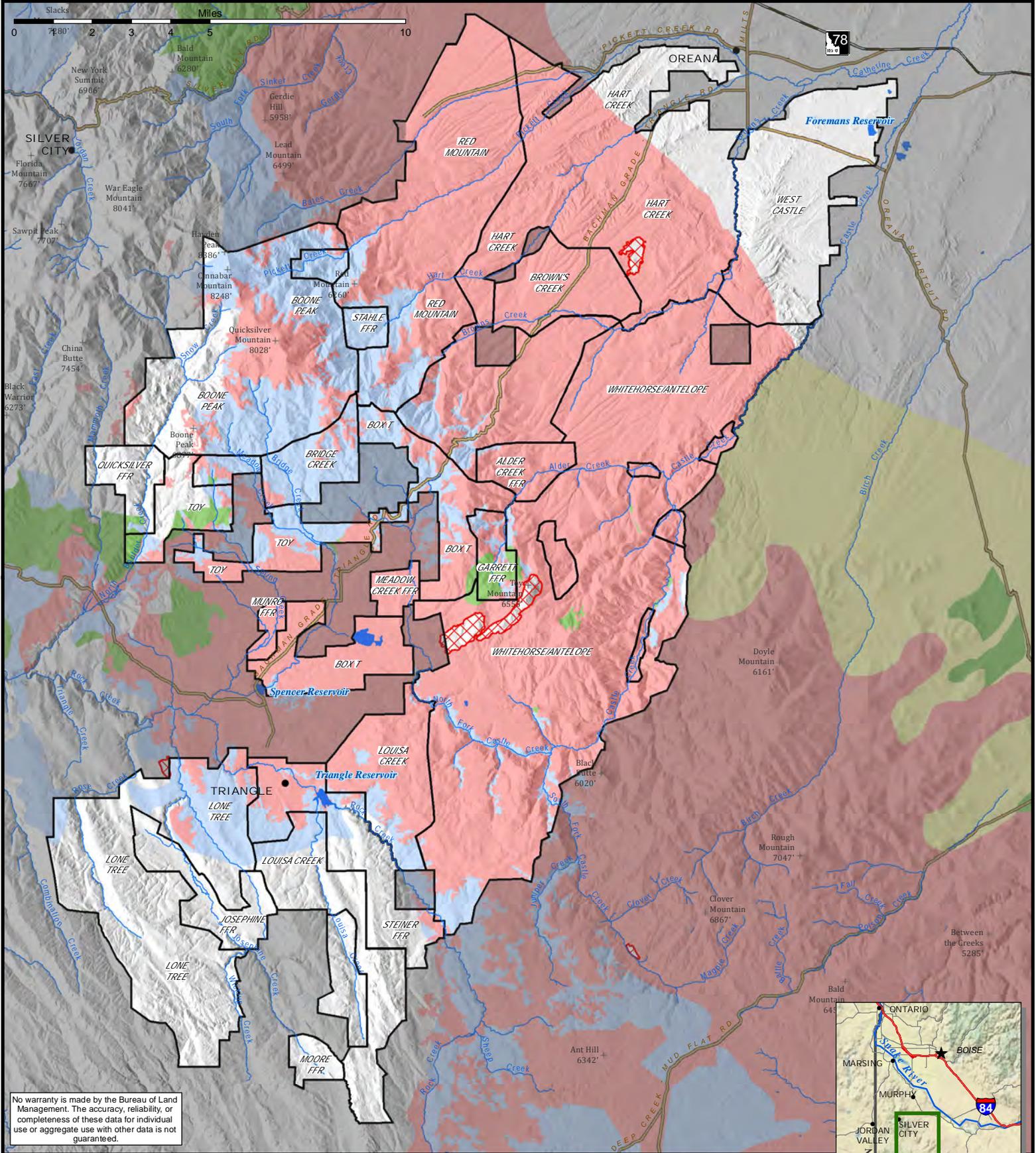
- Idaho Occupied Sage-grouse Leks**
Maximum Count (2008-2012)
- 2 - 9
 - 10 - 29
 - 30 - 49
 - More than 50

- 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



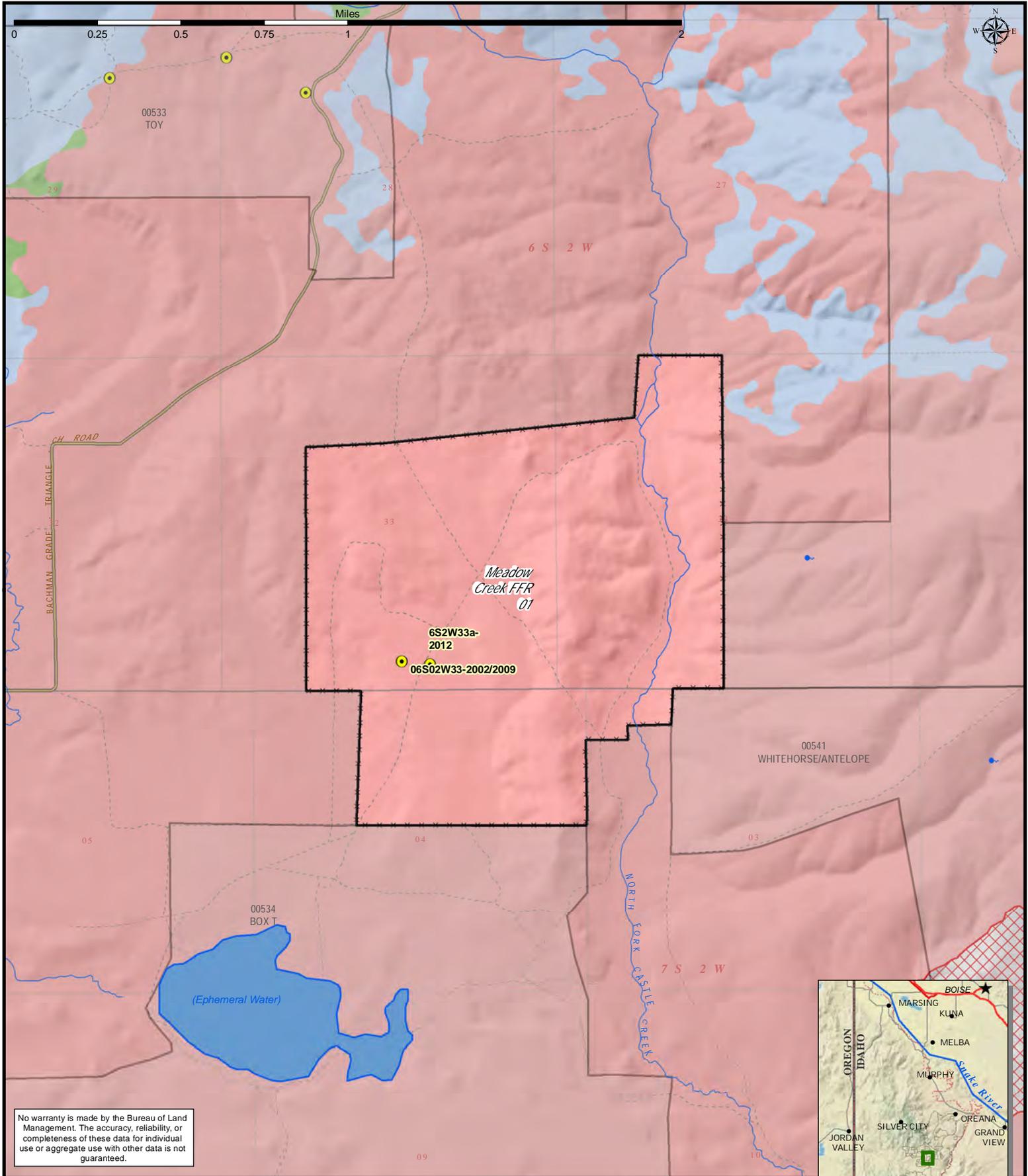
No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

- 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: Meadow Creek FFR (00491), Key Sage-grouse Habitat and Assessment Sites

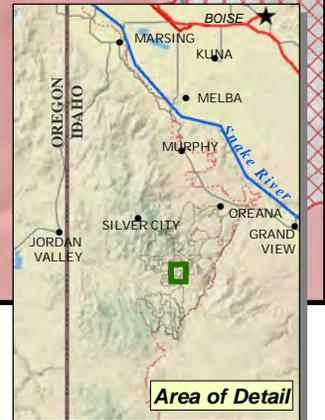


No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

- Allotment of Interest Boundary
- Pasture Boundary
- Other Allotment Boundary
- Improved Road
- 4WD Road

- ### 2012 Sage Grouse Habitat
- (K) Key Habitat
 - (R1) Perennial Grasslands
 - (R2) Annual Grasslands Dominate
 - (R3) Conifer Encroachment
 - Area of Recent Burn

- Habitat Assessment Site
- Perennial Stream
- Spring
- Lake/Reservoir

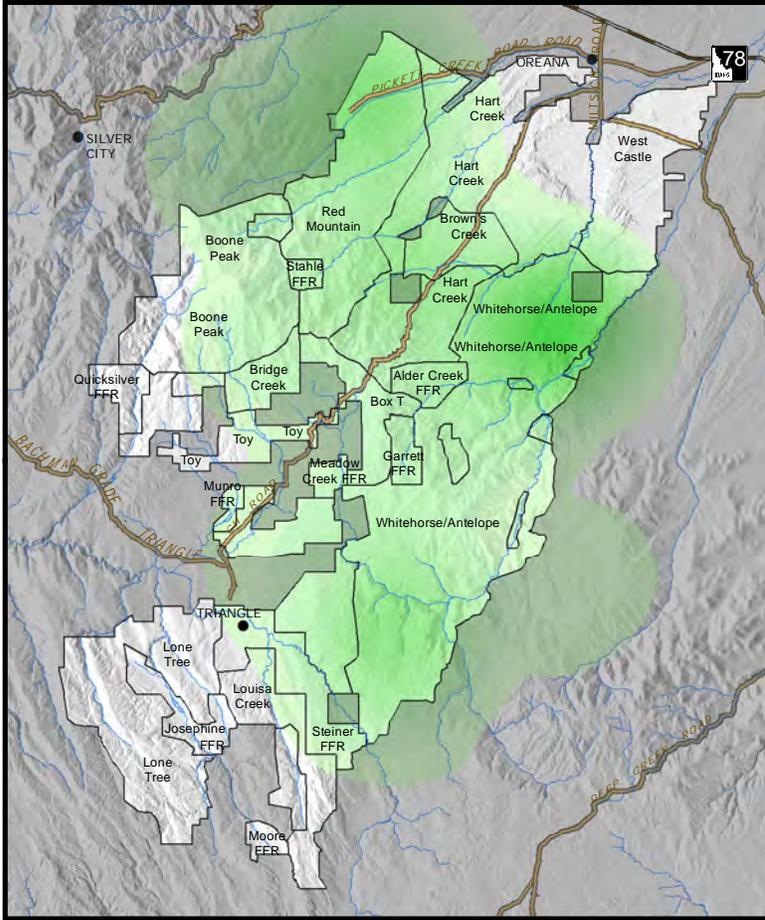




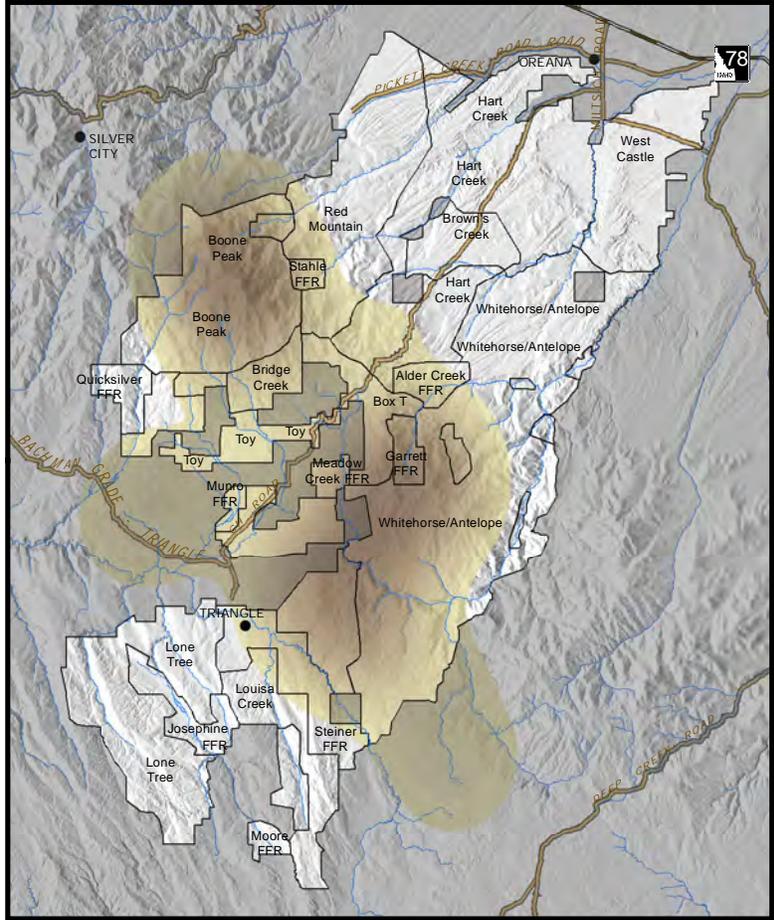
WDLF-6: Seasonal Sage-grouse Habitat, Toy Mountain Allotments



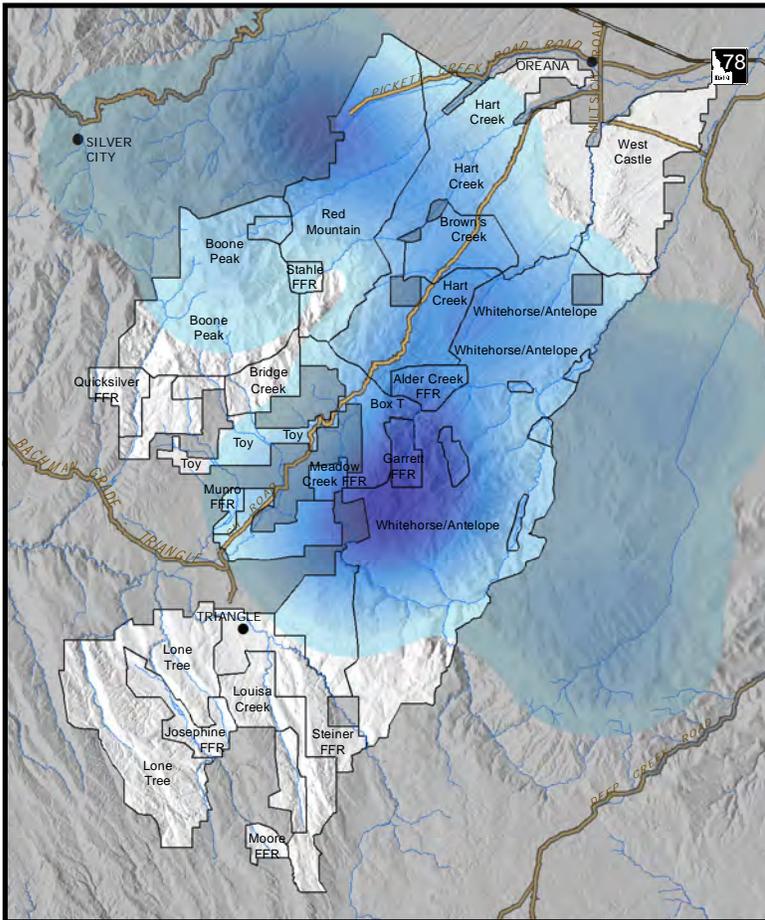
Breeding Habitat



Upland Summer Habitat



Winter Habitat



- Allotment Boundary
- Highway
- Improved Road
- Perennial Stream

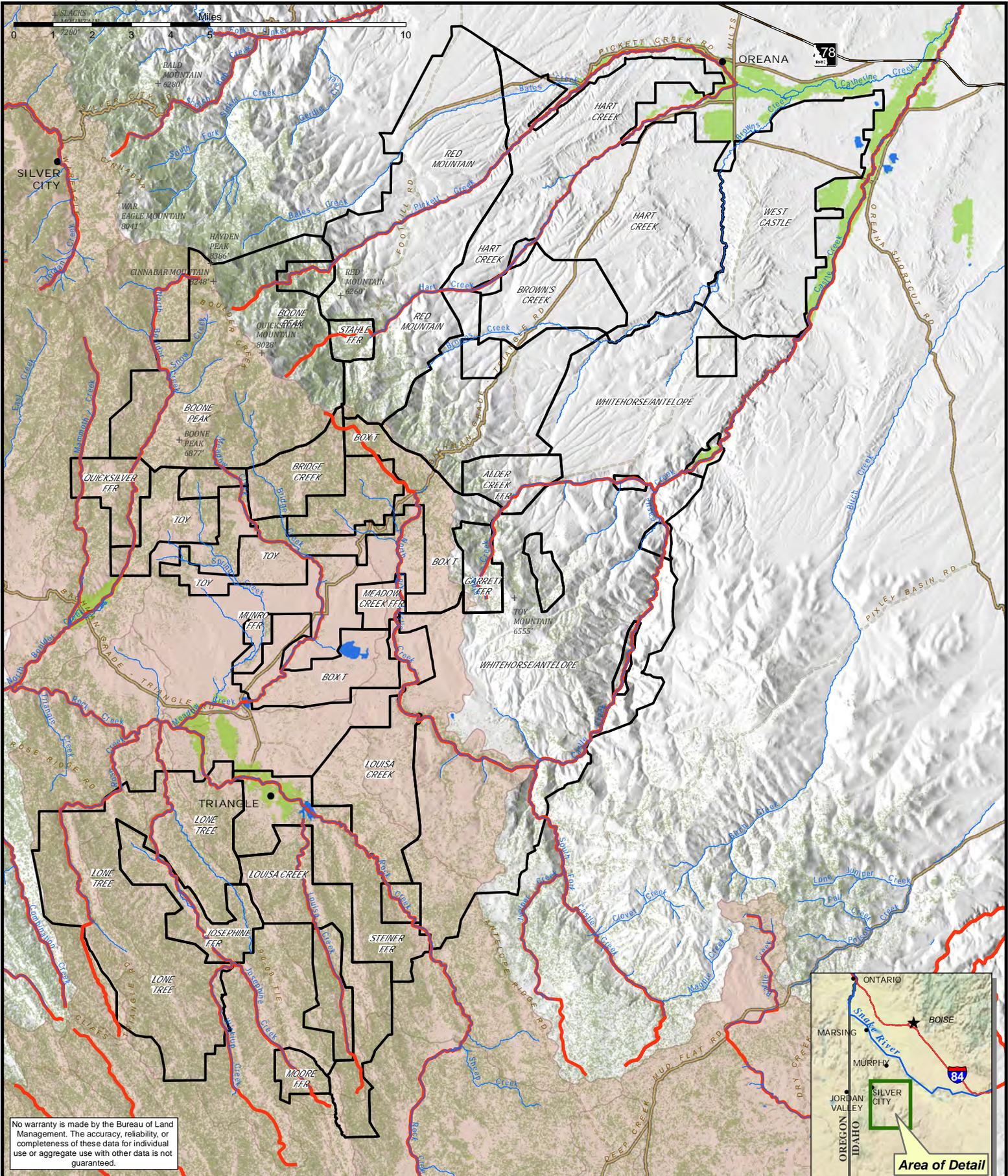
No warranty is made by the Bureau of Land Management. The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.



1:400,000



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
- Vegetation Cover
- Highway
- Lake/Reservoir
- Columbia River Redband Trout Presence
- Agriculture
- Improved Road
- Town/City
- Wooded
- Unimproved Road



