

EAST FORK WIMPEY CREEK ALLOTMENT EVALUATION

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



Introduction

This document is an evaluation of Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management of the public lands administered by the Salmon Field Office (SFO) of the Bureau of Land Management (BLM) within the East Fork Wimpey Creek Allotment.

This is the first in a series of documents, including the East Fork Wimpey Creek Allotment Evaluation, and the appropriate National Environmental Policy Act (NEPA) documentation and subsequent Decision(s) that would change management where needed on the East Fork Wimpey Creek Allotment.

This Evaluation reports the condition and/or function of public land resources within the East Fork Wimpey Creek Allotment to the authorized officer, the Salmon Field Manager. The authorized officer reviews the findings in this evaluation to determine whether the eight Standards for Rangeland Health are being met and whether current livestock management conforms to the Idaho Guidelines for Livestock Grazing Management.

The assessed condition/function of the East Fork Wimpey Creek Allotment Evaluation will be used in the NEPA process. An environmental assessment (EA) will be written addressing all resource concerns identified within the East Fork Wimpey Creek Allotment. If existing grazing management practices or levels of grazing use on the East Fork Wimpey Creek Allotment are determined to be a significant factor in failing to achieve one or more of the eight Standards, the BLM is required by regulation (43 CFR 4180.1) to make grazing management adjustments.

Implementation of new management will begin following completion of the NEPA process, but full implementation of revised grazing plans, if needed, and/or range improvement projects associated with these plans may take several years. The new plans will be developed in consultation and coordination with the affected permittees, the agency having lands or managing resources within the area and other interested parties.

The SFO completed a Resource Management Plan (RMP) in 1987 and amended that plan in 2001. The Lemhi RMP will provide program guidance in the SFO until replaced by a new Land Use Plan. The Lemhi Resource Area Ecological Site Inventory of 1983 provides documentation of rangeland conditions.

Background

The East Fork Wimpey Creek Allotment is located in Lemhi County, Idaho and comprises 1,692 acres of public land. The allotment lies within Township 21 North and Ranges 23 & 24 East, Boise Meridian (Map 1). This evaluation addresses land health conditions on BLM public lands only.

Elevations range from approximately 5,400 feet to 8,000 feet. Topography varies from stream drainage bottoms to steep mountain ravines and ridge tops with rocky outcrops. Slopes range from undulating to very steep. Average annual precipitation is 12 inches, most of which occurs in May and June as rain (Western Regional Climate Center, 2007). Soils in the East Fork Wimpey Creek Allotment are predominantly gravelly loams ranging from shallow to deep.

These soils are affected by climate and parent material, and were formed primarily from alluvium.

Vegetation in the East Fork Wimpey Creek Allotment reflects the diversity of ecological conditions across the landscape. The dominant plant communities and habitat types vary depending upon the soils, precipitation, elevation, slope, and aspect. Vegetation includes wetland and riparian communities, drier upland sites, and forested habitats at higher elevations.

Livestock Grazing History

Livestock have grazed in the Lemhi valley since the 1860’s, after the discovery of gold. Large bands of sheep and herds of cattle grazed the valley, often season long or until winter snows began to limit forage availability.

The allotment consists of 1,692 acres of public land in two pastures. Inventory data found 437 acres in Fair condition and 1,255 acres unmapped due to timber and rock outcrop. The allotment is stocked at approximately 11 acres to the AUM under two pasture deferred rotation grazing use.

Figure 1: Ecological conditions of the East Fork Wimpey Creek Allotment (ESI, 1983).

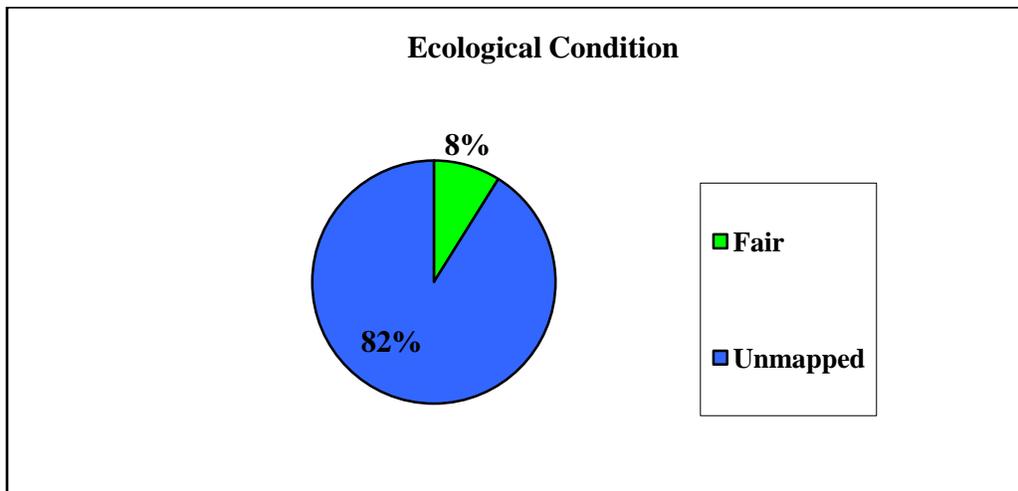


Table 1: The current permit/preference on the East Fork Wimpey Creek Allotment:

No. Livestock/Kind	Dates	% Public Land	Permittee
61 Cattle	05/01 – 07/15	100%	Kurt Williams
Preference:	153 AUMs Active	207 AUMs Suspended	360 AUMs Total

Table 2: The objectives for the number of AUMs for the East Fork Wimpey Creek Allotment from the RMP, as well as the average actual grazing use on the allotment from

1998 to 2007 as reported by actual use booklets submitted by the permittees at the end of the grazing season.

AUMs from the RMP:	Average Actual Use for the previous 10 years:
RMP short-term objective: 86 AUMs	59 AUMs
RMP long-term objective: 117 AUMs	
RMP Active preference: 153 AUMs	

Process

This evaluation was completed in accordance with BLM regulations regarding Rangeland Health Standards. Rangeland Health Standards are described in detail in the *Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management*. Standards are statements of physical and biological condition or degree of function required for healthy sustainable lands. Achieving or making significant progress towards these functions and conditions is required of all uses of public lands, as stated in 43 CFR 4180.1.

This evaluation will report condition and/or function for the following eight Idaho Standards for Rangeland Health:

- Standard 1: Watersheds
- Standard 2: Riparian and Wetland Areas
- Standard 3: Stream Channel/Floodplain
- Standard 4: Native Plant Communities
- Standard 5: Seedings
- Standard 6: Exotic Plant Communities, Other than Seedings
- Standard 7: Water Quality
- Standard 8: Threatened and Endangered Plants and Animals

Procedure to determine conformance with the standard(s):

The East Fork Wimpey Creek Allotment was assessed according to Interagency Technical Reference 1734-6 “Interpreting Indicators of Rangeland Health.” This qualitative process evaluates 17 “indicators” to assess three interrelated components of rangeland health: soil/site stability, hydrological function, and biotic integrity. Trend monitoring data, existing inventories, field visits, and historical photographs are used by the ID team to assess condition and function. The Natural Resource Conservation Service (NRCS) has developed Ecological Site Descriptions (site guides) based on specific soil types, precipitation zones and location. These describe various characteristics and attributes including the vegetative species and relative percentage each are expected to be present on the site. The ID team refers to these site descriptions while completing the Rangeland Health Assessment (RHA), which helps the ID team determine the departure from what is expected for the site assessed based upon soil/site stability, hydrologic function, and biotic integrity.

Rangeland Health Assessment Site Selection:

The site selected for the RHA was chosen based upon representative soil type and ecological sites of the allotment, and is representative of rangeland conditions occurring on the East Fork Wimpey Creek Allotment. Digital mapping of ecological sites, soil types, distances to developed and undeveloped water sources were also used by the ID team to examine potential sites to conduct the RHA. Soil type was determined by digging soil pits and comparing soils maps of the area, ensuring that the ID team collected data for the RHAs on soils representative of that portion of the allotment. This RHA was conducted on 10% slopes on the Dawtonia-Custco Association comprised of gravelly-loams within a Wyoming Big Sagebrush/Bluebunch Wheatgrass (*Artemisia tridentata wyomingensis/Pseudoroegneria spicata*) rangeland site.

Standard 1 (Watersheds)

□ Standard doesn't apply

Evaluation and Information Sources (*required regardless of which box is checked*): Rangeland Health Assessments (June 3, 2008) including visual observations, line-point intercept data, field visits, project inspections throughout the allotment in 2008, and ID team meetings on 04/16/2008 and 10/29/2008).

Watersheds should provide proper infiltration, retention, and water release that are specific to the soil type, vegetation, climate, and landform in order for proper nutrient and hydrological cycling as well as energy flow, to occur. No evidence of rilling, gullying, water flow patterns or fine litter movement. Some plant pedestals were evident around the older, established grass plants, but the younger, more newly established plants showed none. The soil surface is stable, intact, no compaction layer was evident. Bare ground was 26%. Ground cover was 52% from line point intercept data, which is within the expected range for this site (50% - 75%).

Table 3. Hydrologic and soil and site stability indicators for watersheds on the East Fork Wimpey Creek Allotment.

Hydrologic Function		Soil and Site Stability	
Indicators:	RHA	Indicators:	RHA
Rills	<i>None to Slight</i>	Rills	<i>None to Slight</i>
Water-flow patterns	<i>None to Slight</i>	Water-flow patterns	<i>None to Slight</i>
Pedestals and/or terracettes	<i>None to Slight</i>	Pedestals and/or terracettes	<i>None to Slight</i>
Bare ground	<i>None to Slight</i>	Bare ground	<i>None to Slight</i>
Gullies	<i>None to Slight</i>	Gullies	<i>None to Slight</i>
Soil surface resistance to erosion	<i>None to Slight</i>	Wind Scour	<i>None to Slight</i>
Soil surface loss or degradation	<i>None to Slight</i>	Litter movement	<i>None to Slight</i>
Plant community composition and distribution relative to infiltration	<i>None to Slight</i>	Soil surface resistance to erosion	<i>None to Slight</i>
Compaction layer	<i>None to Slight</i>	Soil surface loss or degradation	<i>None to Slight</i>
Litter Amount	<i>None to Slight</i>	Compaction layer	<i>None to Slight</i>

Hydrologic Function		Soil and Site Stability	
Indicators:	RHA	Indicators:	RHA
Overall Ratings:	<i>None to Slight</i>	Overall Ratings:	<i>None to Slight</i>

Overall, the watershed within the East Fork Wimpey Creek Allotment is stable and does not deviate from the site guide description and provides for water infiltration, retention, and release appropriate for the soils, vegetation, climate, and land forms present. There is no soil surface loss or degradation evident. There is a “*none to slight*” deviation from what is to be expected according the rangeland site guide.

1 <input checked="" type="checkbox"/> Meeting the Standard	4 <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are significant factors
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	5 <input type="checkbox"/> Not Meeting the Standard, cause not determined

Standard 2 (Riparian Areas and Wetlands)

Standard doesn't apply

Evaluation and Information Sources (*required regardless of which box is checked*): Rangeland Health Assessments including ID team meetings, visual observations, and Proper Functioning Condition assessments completed during field visits throughout the allotment in 2008.

Riparian and wetland areas should be in properly functioning condition appropriate to the soil types, climate, geology, and landform to provide for proper nutrient and hydrologic cycling, as well as, energy flow. The ID team members evaluated undeveloped springs and used data from stream condition class ratings to determine the vigor, age-class distribution, and composition of riparian and wetland vegetation present on the allotment. Riparian and wetland vegetation should also control erosion, stabilize streambanks, provide shading, filter sediment, aid floodplain development, dissipate energy, delay flood water, and increase groundwater recharge.

The riparian/wetland areas in the allotment are limited to 2.5 miles of the EF Wimpey stream channel. It is a relatively steep and rocky channel with a thick conifer overstory along most of the upper reach where cattle do not have access. Riparian trees and shrubs are present in the lower ¼ mile on public land and the area is in Proper Functioning condition. No upland springs are present. Overall condition of riparian vegetation is very good, supporting a diverse riparian community capable of maintaining the hydric soils and wetland characteristics. Grazing management of the allotment for early season use helps maintain and improve the conditions of the riparian vegetation.

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Standard 3 (Stream Channel/Flood plain)

Standard doesn't apply

Evaluation and Information Sources (*required regardless of which box is checked*): Rangeland Health Assessments including ID team meetings, visual observations, and Proper Functioning Condition assessments completed during field visits throughout the allotment in 2008.

Stream channels and floodplains should be properly functioning relative to the geomorphology and climate in order to provide proper nutrient and hydrologic cycling, and energy flow. Indicators that ID team members used to evaluate this standard include whether steam channels and floodplains dissipate energy and transport sediment, have access to floodplains, have limited compaction from human activities, and have stable streambanks.

See Standard 2 above. The EF Wimpey channel is the only perennial stream on the allotment. It is very steep and rocky and mostly inaccessible to livestock. The lower ¼ mile on public land has an overstory of aspen, cottonwoods and willows and an understory of hydric and mesic herbaceous plants. The channel is in Proper Functioning Condition with very few impacts from grazing.

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EF Wimpey Creek on public land

Standard 4 (Native Plant Communities)

Standard doesn't apply

Evaluation and Information Sources (*required regardless of which box is checked*): Rangeland Health Assessments including visual observations, line-point intercept data, and soil stability

tests (Field visits throughout the allotment in 2008, and ID team meetings on 04/16/2008 and 10/29/2008).

Healthy, productive, and diverse native animal habitat and populations of native plants should be maintained or promoted that appropriate to the soil types present on the East Fork Wimpey Creek Allotment, and should provide for proper nutrient cycling, hydrologic cycling, and energy flow. Native plant communities were evaluated throughout the allotment based upon the rangeland site guide and indicators of biotic integrity (Table 4) of the native plant communities present. This includes information from the RHA completed in June of 2008. The ID team evaluated upland health conditions in all native plant communities including sagebrush and grassland areas, forested areas, noxious weed and cheatgrass infestations, and special status plants occurring in the East Fork Wimpey Creek Allotment. Special status plants will be discussed in detail under Standard 8: Threatened and Endangered Plants and Animals.

Uplands: The uplands are in good ecological condition and the overall rating for the native plant communities within the allotment was a *none to slight* departure from the conditions expected for the soil type and ecological site (Table 4). The order of functional structural groups for the Wyoming big sage/Bluebunch wheatgrass ecological site found cool season bunchgrasses dominant to shrubs, shrubs dominant forbs, and forbs dominant to shallow rooted grasses. No soil loss or degradation was occurring at the RHA site and no compaction layer was present. The amount of coarse and fine litter on the site was as expected (12%), with fine litter accumulation present under shrubs. Plant mortality and decadence in perennial grasses and shrubs was not more than expected for the ecological site. All functional groups were visibly producing seeds, and seedlings were also present. Biological crusts at the RHA site was estimated at 15%-25%. Vegetative cover was calculated at 52% which correlates to the site guide (50%-75%). Cheatgrass is present along the two track road on the allotment.

Table 4: The biotic integrity ratings for the nine indicators of rangeland health that is associated with plant health and function.

Biotic Integrity	
Indicators:	RHA Rating
Soil surface resistance to erosion	<i>None to slight</i>
Soil surface loss or degradation	<i>None to slight</i>
Compaction layer	<i>None to slight</i>
Functional/Structural Groups	<i>None to slight</i>
Plant Mortality/Decadence	<i>None to slight</i>
Litter Amount	<i>None to slight</i>
Annual Production	<i>None to slight</i>
Invasive plants	<i>None to slight</i>
Reproductive capability of perennial plants	<i>None to slight</i>
Overall Rating:	<i>None to slight</i>

Overall, the native plant communities within the East Fork Wimpey Creek Allotment are healthy, productive, and provide diverse animal habitat and populations of native plants.

Herbaceous species and shrubs are reproducing and generally vigorous throughout the allotment. Native plant communities within the allotment are promoting healthy upland conditions with a “none to slight” departure from expected according to the rangeland site guide.

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Standard 5 (Seedings)

Standard doesn't apply

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3 <input type="checkbox"/> Not Meeting the Standard, current livestock grazing management practices are not significant factors	5 <input type="checkbox"/> Not Meeting the Standard, cause not determined

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

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

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Standard 7 (Water Quality)

Standard doesn't apply

Evaluation and Information Sources (*required regardless of which box is checked*): State of Idaho; Department of Environmental Quality (DEQ) “Lemhi River Watershed Assessment” and 303(d) stream list/Idaho 2002 305(B) Integrated Report (Final).

DEQ listed Wimpey Creek as water quality impaired in the Integrated Report for sediment and nutrients from the BLM boundary downstream. The water quality limited segment occurs on private land downstream of the allotment. The EF Wimpey Creek on public land is very lightly impacted by livestock and in Proper Functioning Condition. The allotment is meeting the Standard.

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

Evaluation and Information Sources (*required regardless of which box is checked*): Lemhi Resource Management Plan (1987), and Idaho Conservation Data Center (CDC) database. Rangeland Health Assessments including visual observations and line-point intercept data. Field visits were completed throughout the allotment in 2008.

Maintaining habitat that is suitable for viable populations of special status species, including threatened, endangered and BLM sensitive species is an important component of managing public lands. The ID team used several parameters to assess the existing and potential habitat of these species, including annual population monitoring of sensitive plant species, and field observations of fisheries and wildlife habitat and species presence.

The allotment provides habitat for various Special Status Species. Type 1 Special Status Species are those species that were listed as threatened or endangered, or were proposed or candidates for listing under the Endangered Species Act in 2003. Type 2 Special Status Species are species that are experiencing significant declines throughout their range with a high likelihood of being listed in the foreseeable future due to their rarity and/or significant endangerment factors. Type 3 Special Status Species are species that are experiencing significant declines in population or habitat and are in danger of regional or local extinctions in Idaho in the foreseeable future if factors contributing to their decline continue.

Type 1 Special Status wildlife species that have been documented on, or near, the East Fork Wimpey Creek allotment include the gray wolf and Canada lynx. Gray wolf sightings have increased in the area. No known dens or rendezvous sights are documented in the allotment. The allotment is within the North Beaverhead Canada Lynx Analysis Unit (LAU) and contains approximately 400 acres of mapped lynx habitat. The high elevation, forested habitat that is currently mapped as habitat includes dry-Douglas fir stands to about 6500 feet of elevation and then wetter communities above that.

There have been no Type 2 Special Status wildlife species documented on the allotment. The nearest sage grouse lek is more than four miles from the allotment. Due to the distance of the nearest known lek and the steepness of the allotment, nesting is probably not occurring on the allotment. The EF Wimpey Creek is habitat for rainbow and cutthroat trout. The condition of the stream is good to excellent. Fish habitat is negligibly affected by livestock grazing on the allotment.

Type 3 Special Status Animal Species that have been documented on, or near, the allotment include the northern goshawk and western toad. Northern goshawks have been identified on the allotment to the north. Goshawks are probably also using the BLM forested areas within the East Fork Wimpey Creek Allotment for foraging and possibly for nesting. Western toads have

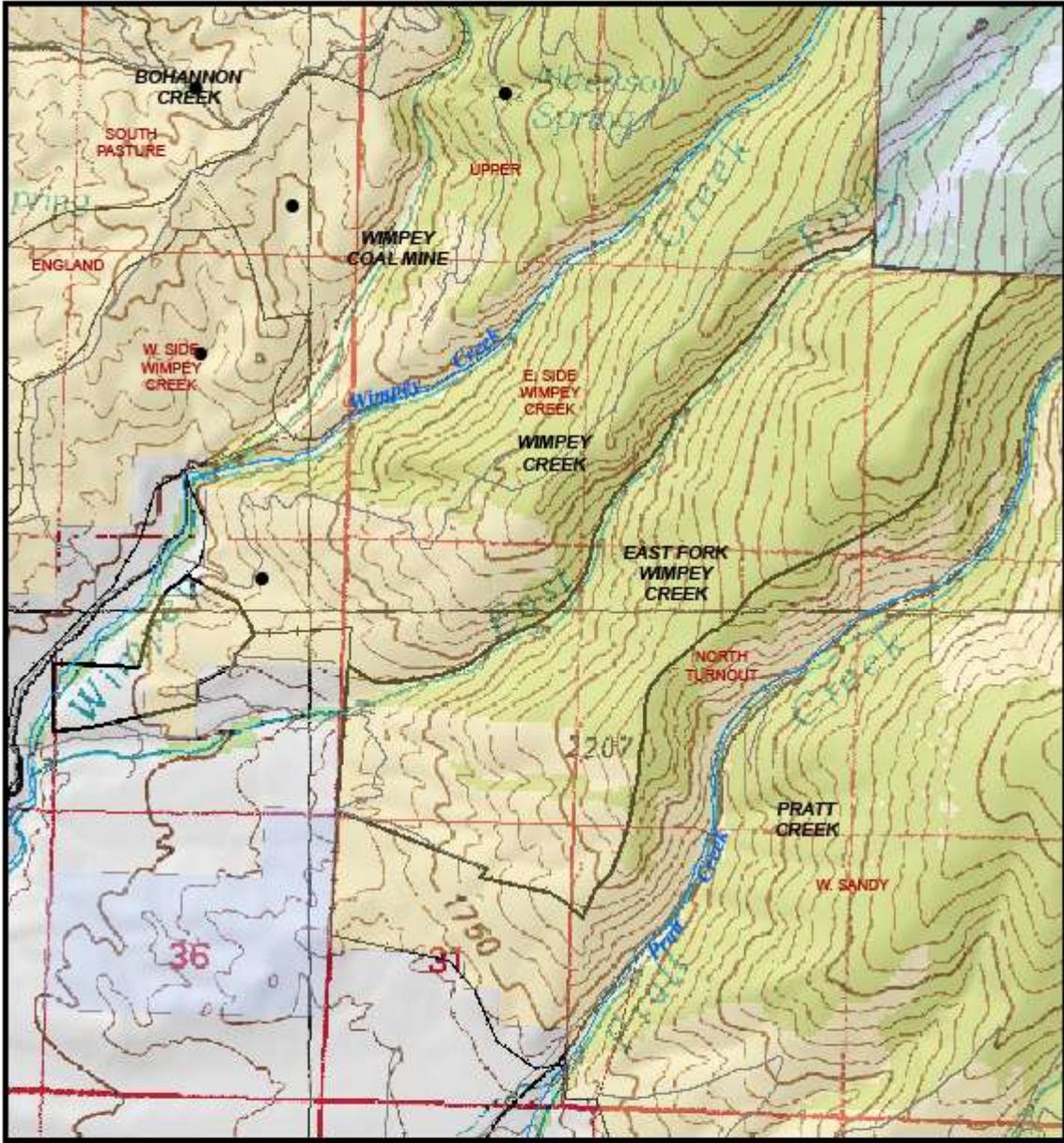
been found within the riparian areas of adjacent allotments, and probably occur with this allotment also. The allotment provides habitat suitable to maintain the Special Status wildlife populations on the allotment.

Surveys and field visits in 2008 indicated that no Threatened, Endangered, or BLM Sensitive plant species are present in the allotment. There are no ESA listed fish species on the allotment.

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ID Team:	Mark Bonner Tanya Thrift Vince Guyer Craig Nemeth Jude Trapani Alexia Cochrane Tricia Miller	Rangeland Management Specialist Rangeland Management Specialist Natural Resources Specialist (T&E) Supervisory NRS Fisheries Biologist Botanist SCEP Fisheries Biologist
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East Fork Wimpey Creek Allotment



Legend

- WATER DEVELOPMENT
- ROADS
- FENCES
- ENCLOSURES
- GRAZING ALLOTMENTS
- PASTURES

This map depicts the East Fork Wimpey Creek Allotment vicinity of the Salmon Field Office, BLM.

The sources of the data are from Idaho-BLM Corporate data and the USGS.

Datum: NAD 83, UTM Zone 12 N
 No warranty is made by the Bureau of Land Management (BLM). The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

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 2010
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