

Hammett #1 Allotment (01033), North and Berry Ranch Pastures
DETERMINATION DOCUMENT

SECTION 1

- ___ All Standards are met or making significant progress towards meeting and there is conformance with the guidelines. (No Determination is required, review is complete)
- X One or more Standards is not being met and/or there is non-conformance with the guidelines. (An Authorized Officer's Determination is required, complete Section 2)

SECTION 2

1. Documentation of causal factors (other than livestock grazing).

Four wildfires have burned 4,475 acres since 1957:

- Coyote Point Fire (1963) - 400 acres between North Fork King Hill and East Fork King Hill creeks;
- Boise Fire (1977) - 190 acres in the southeast corner of the allotment, all within the Blair Fire boundary;
- Hill Creek Fire (1991) – 35 acres in the northwest corner of the allotment; and
- Blair Fire (2011) – 4,040 acres in the southern part of the allotment.

Overall, the majority (81%) of the allotment has been unaffected by wildfire. Trends and conditions do not represent burned areas [only one trend plot and one assessment location burned prior to sampling (1963)].

2a. Is it more likely than not that existing grazing management practices or levels of grazing use are significant factors in failing to achieve the Standards or conform to the guidelines? (YES/NO) Provide rationale:

Yes. Livestock grazing is currently authorized for 609 cattle from April 1 to July 9 for 1,917 Animal Unit Months (AUMs) and 906 cattle from October 1 to November 30 for 1,818 AUMs, annually. Spring use averaged 1,041 AUMs and fall use averaged 673 AUMs between 2007 and 2011. The spring/early summer use period coincides with the critical growth period of perennial bunchgrasses. When light (<40% utilization) grazing occurs yearly during this period, perennial grasses are generally able to recover growth, set seed, and show little impact. However, moderate (41-60%) to heavy (61-80%) grazing during this period on an annual basis results in bunchgrasses that cannot achieve adequate re-growth to set seed and replace carbohydrate root reserves.

The late fall use period occurs during the dormant season for perennial grasses, which with light to moderate use levels has little effect on vigor and health of perennial grasses. However, the combination of spring and fall use more rapidly depletes carbohydrate root reserves, and few plants reach seed ripe/seed dispersal stages without being grazed. This type of use on a yearly basis eventually reduces a plants' ability to produce and set viable seeds, and to withstand unfavorable climatic conditions, such as severe winters or drought.

Over time, annual spring and fall grazing causes plants to become weaker and smaller, and they may eventually die. This opens the area up to exotic annual grass invasions which in turn increase the probability of ignition and fire frequency. Ultimately, improper grazing practices contribute to larger, more severe, and more frequent disruptions, such as fire, which damage native plant communities, watersheds, riparian areas and wildlife habitat.

Grazing practices, particularly prior to 2007, have resulted in overall reductions of deeper-rooted native perennial bunchgrasses (e.g., bluebunch wheatgrass). Other shifts in plant community composition, namely increases in invasive exotic annual grasses have also taken place. Since 2007, some attempt at a spring/fall deferment grazing system has been made in the upper portion of the pasture in which livestock move from south to north in spring on one side of the North Pasture, trickle from north to south in fall on either side, then move south to north on the side not used the previous spring. Additionally, the average stocking rate since 2007 has decreased. The effect of these changes, because they occurred relatively recently, could not be determined from the long-term trend data. Over the long term, annual spring and fall grazing has not allowed for significant improvements to rangeland health/plant community condition.

Grazing practices have also depleted riparian plant communities, destabilized banks, reduced the level of woody debris in stream channels, and altered stream morphology in segments of West Fork King Hill, Deer, and Little Canyon creeks. These conditions result in poor aquatic and fisheries habitat for redband trout, a BLM Special Status Species, and terrestrial wildlife species. Vegetation at several springs is being converted to disturbance-related and upland plants due to soil disturbance and selection of herbaceous riparian plants by livestock. Grazing in late spring/early summer and again in fall does not provide sufficient rest for riparian plant species to build root reserves and retain vigor for maintenance and reproduction. Fall grazing produces fewer impacts as riparian vegetation is mostly dormant. However, fall grazing does result in heavier browsing on woody riparian vegetation which reduces recruitment/regeneration of woody vegetation.

2b. Is there conformance with Idaho Guidelines for Livestock Grazing Management?
(YES/NO) *If not, list the guidelines that are not in conformance and provide evidence):*

No, livestock grazing management practices are not in compliance with the following guidelines:

Guideline 1- Use grazing management practices and/or facilities to maintain or promote significant progress toward adequate amounts of ground cover (determined on an ecological site basis) to support infiltration, maintain soil moisture storage, and stabilize soils.

Although the quantity of ground cover increased over time, its quality decreased; the decline of the native deep-rooted perennial grasses and increase of exotic annual grasses resulted in inadequate watershed protection.

Guideline 4 – Implement grazing management practices that provide periodic rest or deferment during critical growth stages to allow sufficient regrowth to achieve and maintain healthy, properly functioning conditions, including good plant vigor and adequate vegetative cover appropriate to site potential.

The current permit does not incorporate periodic rest or deferment during the critical growth period to allow sufficient regrowth to maintain healthy and vigorous perennial plants. Since none of the sampling locations have burned recently, degradation is attributed to livestock grazing.

Guideline 5 - Maintain or promote grazing management practices that provide sufficient residual vegetation to improve, restore, or maintain healthy riparian-wetland functions and structure for energy dissipation, sediment capture, ground water recharge, streambank stability, and wildlife habitat appropriate to site potential.

High levels of utilization were frequently observed in riparian areas.

Guideline 6 – The development of springs, seeps, or other projects affecting water and associated resources shall be designed to protect the ecological functions, wildlife habitat, and significant cultural and historical, archeological, and paleontological values associated with the water source.

High levels of disturbance and troughs in disrepair were observed at some developed springs.

Guideline 7 – Apply grazing management practices to maintain, promote, or progress toward appropriate stream channel and streambank morphology and functions. Adverse impacts due to livestock grazing will be addressed.

Areas of trampling, pugging, bank shearing, and vertical banks were observed.

Guideline 8 – Apply grazing management practices that maintain or promote the interaction of the hydrologic cycle, the nutrient cycle, and energy flow that will support the appropriate types and amounts of soil organisms, plants, and animals appropriate to soil type, climate, and landform.

Invasive plants and low diversity of functional and structural groups are providing less than optimum conditions for adequate nutrient, energy and hydrologic cycling. Since none of the sampling locations have burned recently, degradation is attributed to livestock grazing.

Guideline 9 – Apply grazing management practices to maintain adequate plant vigor for seed production, seed dispersal, and seedling survival of desired species relative to soil type, climate, and landform.

Plant mortality and decadence was observed and documented at many rangeland health field assessments and large perennial grass frequencies decreased in long-term trend plots, leading to lower reproduction capabilities. Increasing exotic annual grasses result in native seedling mortality due to competition, and shorter fire return intervals that coincide with increased annual grasses leads to greater native plant mortality. Since none of the sampling locations have burned recently, degradation is attributed to livestock grazing.

Guideline 12 – Apply grazing management practices and/or facilities that maintain or promote the physical and biological conditions necessary to sustain native plant populations and wildlife habitats in native plant communities.

Physical and biological conditions capable of supporting native plant populations and wildlife habitat are not being maintained in some uplands and riparian areas. Sage-grouse breeding and brood-rearing habitat has been compromised by the amount of invasive exotic

annual grasses and reduced levels of tall-stature perennial grasses. Since none of the sampling locations have burned recently, degradation is attributed to livestock grazing.

/s/ *Tate Fischer*

May 27, 2014

Authorized Officer: Tate Fischer
Four Rivers Field Manager

Date

SUMMARY OF EVALUATION AND DETERMINATION

Check Box 1, 2, 3, 4, or 5 (Do not add data or explanatory remarks here.)	STANDARDS							
	1	2	3	4	5	6	7	8
1) Meeting the Standard					NA	NA		
2) Not Meeting the Standard, but making significant progress towards								
3) Not Meeting the Standard, current livestock grazing management practices are not significant factors								
4) Not meeting the Standard, current livestock grazing management practices are a significant factor	X	X	X	X			X	X
5) Not meeting the Standard, cause not determined								
Guidelines for Livestock Grazing								
6) Conforms with Guidelines for Livestock Grazing Management							No	
7) If no, list the guidelines not in conformance: 1, 4, 5, 6, 7, 8, 9, and 12								