Rangeland Health Standards Assessment

Allotment #403 Pine Creek

Allotment Overview:
Allotment boundaries: refer to attached map.
7.5 Minute Topographic Maps: Clover Flat
AUMs of Authorized Use: 18 AUMs
Permitted Season: 4/16-6/15
Allotment Category: C
Total acres: 400 acres BLM, 1,160 acres private

Grazing Management:

The allotment is comprised of both BLM and private lands in flat to rolling country. Two isolated BLM parcels make up the public portion of the allotment and are completely surrounded by private lands. Pine Creek and one tributary is an intermittent stream located on both private and BLM. Cattle are generally allowed to graze in the allotment during spring into early summer.

STANDARD 1- Upland Watershed- Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and land form.

Meets Standard.

No Ecological Site Inventory (ESI) data is available for allotment #403. Indicator used to evaluate upland watershed condition is plant composition. Current plant composition is compared to a defined Potential Native Plant Community for the identified ecological site description. Two ecological sites are present on the BLM lands within the Pine Creek Allotment.; Shallow North 14-18" ARAR8/FEID/AGSP 021XY310O and the Claypan 14-18" ARAR8/FEID/AGSP 021XY214O. Potential native plant communities on both sites are dominated by idaho fescue (*Festuca idahoensis*) and Low sagebrush (*Artemisia arbuscula*)- bluebunch wheatgrass (*Pseudoroegneria spicata*) and sandberg bluegrass (*Poa secunda*) are common.

Current plant community is comprised mainly of Low sagebrush and Sandberg bluegrass with small amounts of squirreltail (*Elymus elymoides*), idaho fescue, thurber needlegrass (*Achnatherum thurberianum*) and bluebunch wheatgrass. Cheatgrass (*Bromus tectorum*) and medusahead ryegrass (*Taeniatherum caput-medusae*) have invaded most of the interspaces between native plants.

Very little utilization data is available due to Pine Creek being classified as a Custodial allotment utilization data has not always been gathered. Average utilization for uplands when conducted was 33%.

Ecological processes within this allotment appear to be functioning, but at a low ecological level. The Potential Native Plant community within this allotment is lacking in native grass species. As noted above introduced non-native species primarily cheatgrass and medusahead are well established and are driving the ecological functions in the interspaces between native plant species. Deep rooted species are present such as Low sagebrush and various native bunch grasses which provide soil stability and resistance to erosion while helping maintaining infiltration rates and nutrient cycles. Current populations of cheatgrass and medusahead have resulted in a decreased level of ecological processes within the Pine Creek Allotment. These impaired ecological functions are probably more a result of past grazing practices (late 1800's and early 1900's) setting the stage for infestation from weedy species such as cheatgrass and medusahead than current grazing practices. As noted above very little information is available in the allotment file due to Pine Creek being classified as Custodial. Long term monitoring sites need to be established and utilization needs to be conducted on a regular basis to evaluate further.

Weeds Report:
Noxious weeds are known to occur in the allotment. Medusahead is scattered throughout the allotment and on adjacent private lands mainly in the easternmost sections of the allotment. In the westernmost parcel, Mediterranean sage (*Salvia aethiopsis*) is present along the road in scab rock areas. Both species will be treated in accordance with the Resource Area Integrated Weed Management Program EA #OR-010-2004-03.

STANDARD 2- Riparian-wetland areas are in properly functioning physical conditions appropriate to soil, climate, and landform.

This standard is not being met.

During the allotment tour it was apparent that most of the grazing use in the allotment occurs in the riparian zones associated with Pine Creek and its tributaries. Very little evidence of utilization was noted in the upland portions of the allotment while the riparian areas were heavily utilized.

Table 1: PFC* Assessment by Allotment and Stream reach

Allotment	Stream Reach	PFC Rating	PFC Date
0403 Pine Creek	All, miles 0.0-0.3	NF	June, 1997
0403 Pine Creek	Spring System West of Road	FAR-down	Oct., 2005

*PFC= Proper Functioning Condition, FAR-up= Functional at Risk Condition with an upward trend, NF=Non-functional, FAR-down= Functional at Risk Condition with a downward trend FAR-?= Functional at Risk Condition with trend not apparent.

Lotic PFC site inventories were completed in 1996, 1997 or on the allotment site visit in October of 2005. Standard conditions are discussed below if the condition is less than PFC within the allotment as indicated in the table above.

Allotment 0403 Pine Creek:

Standard 2 is not being met in this allotment on both Pine Creek and on the springs in the south-east corner of Section 7. Current grazing is a factor.

Pine Creek in this allotment is in a non-functional condition. Grazing is likely the cause as indicated by the vegetation conditions. It was noted on the PFC form that given the intermittent nature of the stream that with grazing management riparian function could improve rapidly.

The riparian area associated with springs is being lost to active head cuts that are creating incision into the meadow. The head cut activity is being aggravated by the hummocking that has occurred on the spring meadows from grazing while the soil was saturated.

In 1998 there was one acre of lentic wetland assessed as PFC in this allotment.

Proposed action: During the allotment tour while the resource personnel were evaluating the allotment, a proposal to construct two exclosures on Pine Creek – one at the two springs in the SW corner of Section 7 and another on the west side of main road in section 8. These exclosures would protect the spring sources in section 7 and protect the stream channel in section 8 addressing the riparian issues raised in the above discussion. The two proposed exclosures were completed on June 9, 2006 prior to the signing of this report.

STANDARD 3- Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow and the hydrologic cycle.

Meets Standard.

The current plant community composition as compared to the potential native plant community was the indicator used to evaluate this standard. As stated above, species used to indicate potential native plant community for the identified ecological site description are part of the plant community composition currently found on the allotment (refer to discussion Standard 1).

Botanist report:

The Pine Creek Allotment is a harsh site, mostly covered with low sagebrush (*Artemesia arbuscula*) and with soil types that are rocky and have a hardpan eight inches below the soil surface. This site, because of soil types and proximity of noxious weeds, is open to expansion of medusahead (*Taeniatherum caput-medusae*), a state listed noxious weed. Possibly research being carried out at present in the immediate area may help eradicate the noxious grass; however, at present it tends to take over sites and has a competitive lead. The wetland portion of this Allotment, wet meadows and stream are in poor shape

and recommendations are being made of reduce impacts and protect the head cuts (refer to discussion Standard 2).

Wildlife report:
Much of this area supports healthy, diverse wildlife populations. There are non-native seedings and invasive noxious weeds within the allotment where wildlife populations are not as diverse as they could be if they were closer to their potential vegetative communities. Despite these issues, the allotment does have adequate levels of species diversity to remain functional.

STANDARD 4- Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

Meets Standard.

Water quality has not been monitored in the Pine Creek. While it is likely that perennial waters do not meet state standards for temperature, lack of water quality compliance is not due to current grazing management.

STANDARD 5- Native, T&E, and locally important species. Habitats support healthy, productive and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate and landform.

Meets Standard.

There is no known fish habitat on BLM in the Pine Creek Allotment.

Botanist report:
This area has been surveyed for BLM Bureau special status plants and no plants were found. Special Status Plants: **None found, none suspected.**

Plant species present:
Grasses:
Poa secunda
Elymus elymoides (Sitanion hystrix)
Distichlis spicata

Forbs:
Few are in evidence at this time of year (late fall)
Zigadenus venenosus

Shrubs:
Ericameria nauseosa
Artemisia arbuscula

Wildlife report:
Special status wildlife species or their habitats that are present within this allotment include the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), burrowing owl (*Speotyto cunicularia*), sage-grouse (*Centrocercus urophasianus*), and pygmy rabbit (*Brachylagus idahoensis*). There are also two species with high public interest. These are mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*).

No nesting or roosting habitat exists within this allotment for the bald eagle. Nesting and roosting does occur on U.S. Forest Service lands to the west. They are suspected as occasional visitors to the area. Bald eagle foraging could occur within the allotment; however it is probably restricted mostly to road killed deer adjacent to the major roadways and occasional carrion scattered through the allotment.

There is some potential nesting habitat for ferruginous hawks on a few scattered junipers within this allotment. No surveys have been conducted for ferruginous hawk. Ferruginous hawk foraging habitat exists through portions of the allotment. There are no resource conflicts for ferruginous hawks or bald eagles.

No observations of burrowing owls exist within the vicinity of the allotment. Assumption is that they occasionally do occur within the allotment. There are no resource conflicts for this species.

Mule deer inhabit much of the area. Moderate concentrations of wintering mule deer inhabit this allotment. No conflicts exist between mule deer and cattle grazing within this allotment. Pronghorn antelope are common in this allotment. Pronghorn use is occasional scattered across the allotment. No major conflicts exist between pronghorn and cattle grazing within this allotment.

Habitats for sage-grouse within the allotment are dominated by low sagebrush, although some scattered big sagebrush does occur. Sage-grouse use is probably mostly restricted to spring and early summer foraging with some nesting habitats in scattered portions of the allotment. Approximately 60 % of the area is suitable for winter, spring and early summer use. Another 10% of the area is suitable for nesting habitat and additional 10% is suitable for late summer use. The remaining 20% of the area is non-habitat and is comprised of western juniper woodlands and areas invaded by medusahead. At this time, there are only a few areas within the allotment that have been invaded by medusahead. Left unchecked, this will change over time as additional disturbances occur or medusahead slowly spreads across the allotment. There are no known sage-grouse lek sites within the allotment, but there are two active lek sites approximately 1-2 miles to the northeast of the allotment. These active lek sites occur within the vicinity of Red Knoll and are currently also being impacted by medusahead.

In order for sage-grouse habitats within this allotment to improve, restoration work would be needed to combat noxious weeds, specifically medusahead. This project is underway

and is currently being implemented on-the-ground within the allotment. No major conflicts exist between cattle grazing and sage-grouse within this allotment at this time.

Overall, this standard is being met for wildlife species within this allotment. The occurrence of invasive noxious weeds appears to be the limiting factor for sage grouse and most sagebrush dependant wildlife habitats. Efforts to improve this standard should focus on sagebrush restoration. This could be accomplished through intensive restoration efforts with fire, seeding or herbicides.

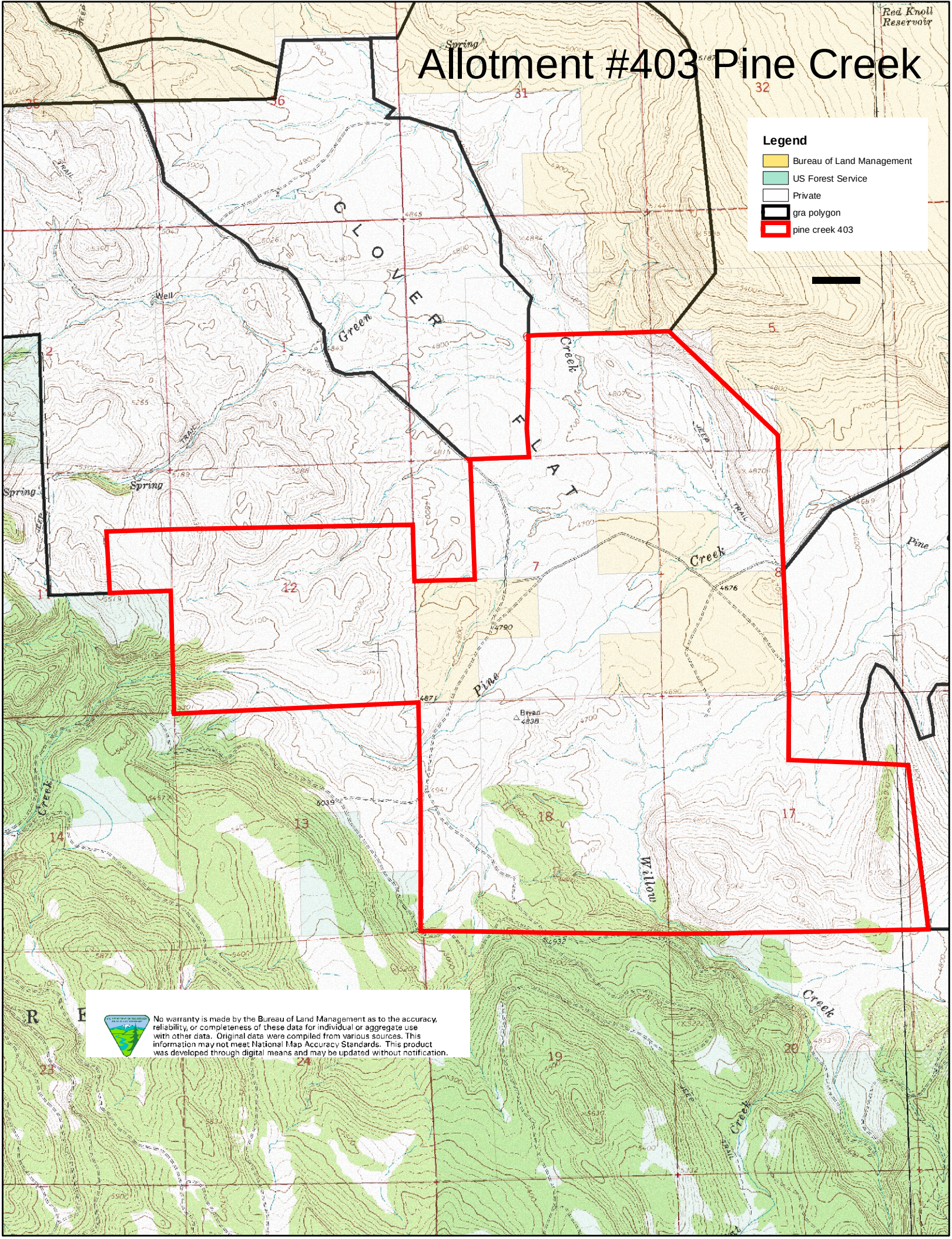
Team Members	**Title**
Lance Okeson	RMS
Todd Forbes	Wildlife Biologist
Lucile Housley	Botanist
Erin McConnell	Weed Management
Robert Hopper	Supervisory NRS
Ken Kestner	Supervisory NRS
Allan Munhall	Fisheries Biologist

Determination

(x) Existing grazing management practices or levels of grazing use on the #403 Pine Creek Allotment promote achievement of significant progress toward the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock grazing Management.

( ) Existing grazing management practices or levels of grazing use on the #403 Pine Creek Allotment do not require modification or change prior to the next grazing season to promote achievement of the Oregon standards and Guidelines for Livestock Grazing Management but, additional fencing of Pine Creek riparian areas will be required to protect these resources.

Thomas E Rasmussen 6/9/06

Field Manager, Lakeview Resource Area Date

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