

Rangeland Health Standards Assessment

Allotment #422 Paisley Flat

Allotment Overview:

Allotment Boundaries: refer to attached map.

Allotment Acres: BLM 4,549

7.5 Minute Topographic Maps: Paisley and Loco Lake

AUMs of Authorized Use: Active Preference is 585 AUMs.

Permitted Season: Winter use in Trail Pasture 12/03-1/24

Spring use 4/24-5/23

Allotment Category: M

Allotment #422 is located 1 mile north of the town Paisley, Oregon.

Paisley Flat is primarily a crested wheatgrass (*Agropyron cristatum*) seeding. In 1963 the entire allotment was sprayed and seeded to crested wheatgrass except for 286 acres on the west side of the southwest pasture. The area receives 7-9 inches of precipitation annually and elevation is 4,500 feet. The soils are sandy loam.

Summary of monitoring data:

Photo plots are the only monitoring data available. Examination of photos reveals that crested wheatgrass seedings within all pastures (seeding is divided into 5 separate pastures) are suffering from sagebrush (*Artemisia tridentata spp.*) and cheatgrass (*Bromus tectorum*) encroachment. All pastures except the Winter Trail pasture have experienced a decrease in crested wheatgrass and an increase in cheatgrass. Maintenance of the seeding as a whole (brush beating and reseeding with crested wheatgrass approximately 66% of the seeding) is scheduled to begin in the fall of 2004. The proposed treatments should restore much of the crested wheatgrass seeding from poor condition to good condition (while maintaining some sagebrush habitats), contributing to site stability while benefiting upland watershed function.

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.

Indicators used to evaluate this standard are Soil Surface Factor (SSF), which documents erosion class and soil susceptibility to accelerated erosion; and plant community composition, which indicates the root capacity of the soil profile.

Soil Surface Factor is used to determine soil erosion condition. Soil Surface Factors used in the rating process are: soil movement, surface litter, surface rock, pedestalling, flow patterns, rills and gullies. Each factor is allotted points according to erosion conditions and the points totaled. Erosion condition classes are assigned based on a 0-100 scale. The following classes were used:

<u>Erosion condition class</u>	<u>Points</u>
Stable	0-20
Slight	21-40
Moderate	41-60
Critical	61-80
Severe	81-100

Refer to Appendix A for tables summarizing the available Ecological Site Inventory (ESI) data rating the SSF by acre within the allotment.

The second factor used to evaluate Standard 1 is plant community composition, which indicates root occupancy of the soil profile (**refer to Standard 5 for a list of known native plant species observed on the field tour with in allotment**).

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

There is one acre of palustrine wetlands in the Paisley Flat Allotment and it is rated in Proper Functioning Condition (PFC).

Meets standard.

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.

Does not meet standard.

As noted above the Paisley Flat Allotment is a crested wheatgrass seeding. Diversity is naturally low within these introduced plant communities compared to native plant communities. The Paisley Flat Allotment was seeded to crested wheatgrass in 1963. The current age of the seeding is over 40 years old and in need of maintenance. The only maintenance applied to the seeding was in 1971 (33 years ago) consisting of spraying for sage brush encroachment over 3,080 acres and reseeded of 864 acres on the western portion of the allotment. Beginning in the fall of 2004 the Lakeview Resource Area will begin a co-operative maintenance program with the permittee consisting of various treatments such as brush beating or disking and reseeded of crested wheatgrass and possibly basin wildrye (*Leymus cinereus*) to increase diversity. Although presently much of the allotment fails Standard 3, current plans of seeding maintenance coupled with following a rest rotation grazing system should enhance ecological processes of nutrient cycling, energy flow and hydrologic cycle through out much of the allotment.

Wildlife report:

Ecological processes within this allotment appear to be functioning, but at low ecological level. Wildlife species within this allotment appear to be at appropriate levels for diversity, but are probably at lower population levels than historically for the types of habitats present. Introduced non-native plants like cheatgrass are established very well here. Most of the understory grasses and forbs within this allotment are being dominated by cheatgrass.

Botanical Report:

The evaluation of Allotment 422 occurred just after livestock had been removed from the Trail pasture. The forage vegetation in the area had been utilized, but there were no obvious signs of overuse or damage in areas surveyed.

The dominant vegetation was sagebrush and rabbitbrush. There are areas of sagebrush with only a cheatgrass understory. Other areas of sagebrush did not have very much cheatgrass, but the understory community was not apparent.

The most diverse vegetation communities occur in the northeastern-most portion of the allotment. This area may be the healthiest and most natural plant community within the allotment. Native grasses are present in these areas. See Standard 5 for native plant species noted during this evaluation.

Few forbs were noted during this February evaluation. Those that were noted were dormant.

Introduced species included *Bromus tectorum*, *Lepidium perfoliatum*, and *Salsola kali*.

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

This standard is not applicable to these allotments because there are no perennial stream areas that would be guided by State water quality standards.

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.

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*), peregrine falcon (*Falco peregrinus*), burrowing owl (*Athene cunicularia*), kit fox (*Vulpes macrotis*), 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 habitat exists within this allotment for the bald eagle. It is suspected that they are occasional visitors to the area. Bald eagles may occasionally feed on scattered carrion within the allotment. No nesting habitat is available for peregrine falcons or ferruginous hawks within the allotment. No incidental sightings of peregrines or ferruginous hawks exist within the allotment, but it is assumed that they occasionally visit the area. There are no suitable foraging areas for peregrine falcons within the allotment. Ferruginous hawk foraging habitat exists through much of the allotment. There are no resource conflicts for peregrine falcons, ferruginous hawks or bald eagles.

Incidental sightings of burrowing owls have been observed within this allotment. No nesting activity has been observed. Inventories for burrowing owls were conducted in adjacent allotments in 2000 and only occasional sightings were documented. There are no resource conflicts for this species.

Habitat is present for kit fox and pygmy rabbit, but no known locations exist within the allotment for these species. No inventories have been conducted for either of these species within the allotment, however there are occasional sightings within the surrounding area. Habitat quality is very poor for pygmy rabbits and it is suspected that they do not occur within the allotment, although the possibility does exist. There are no resource conflicts for these species.

Pronghorn antelope are common in the allotment and surrounding areas. Pronghorn use is concentrated in portions of this allotment where brush is less dense and crested wheatgrass is common. Much of this allotment was re-seeded to crested wheatgrass. No major conflicts exist between pronghorn and cattle grazing within this area.

Mule deer inhabit much of the area, but are widely spread and in low numbers. Some higher concentrations of wintering mule deer inhabit this allotment, but focus use mostly on adjacent alfalfa fields in winter. No conflicts exist between mule deer and cattle grazing within this allotment.

There are no known sage-grouse lek sites within the allotment. Large proportions of these allotments are currently unusable to sage grouse due to grassland conversion and the amount of salt desert scrub. Current sage-grouse habitats within these allotments contain approximately 1% (50 acres) nesting habitats. Brood rearing habitats make up approximately 14% (650 acres) and winter habitats 38% (1700 acres). The other 47% (2100 acres) of the allotment contains areas that are considered non-suitable for sage-grouse. This is primarily due to a lack of shrub cover in much of these allotments due to crested wheatgrass conversion and salt desert shrub communities that occur around the northern and western edges of the allotment. It is estimated that 50% of the area has the potential to be sage-grouse nesting habitat. Another 10% has the potential to become brood rearing habitats. The other 40% of the area has no potential to become sage-grouse habitat.

In order for sage-grouse habitats within this allotment to improve, a great deal of restoration work and time would be needed to return shrub cover and diversity of understory grass species to areas where it was removed because of historic seedings. Much of the areas that were seeded to crested wheatgrass are now dominated by cheatgrass in the understory. If left undisturbed, these areas will most likely not be used in the future by sage-grouse. Sufficient shrub cover is returning to much of the area, but native understory grasses are not abundant. Restoration efforts are needed to attempt to reestablish native grasses without completely removing sagebrush from the site. No major conflicts exist between

current cattle grazing and sage-grouse within this allotment, however, if an attempt is made to restore understory grasses, a grazing system will have to be designed to allow newly seeded areas to establish before they receive any grazing use.

Overall, this standard is being met for wildlife species within this allotment. The abundance of cheatgrass and amount of salt desert shrub communities appear to be the limiting factors for sage grouse and most sagebrush dependant wildlife species. Efforts to improve this standard should focus on maintaining some sagebrush habitats while restoring understory grasses in past seeded areas. This could be accomplished through intensive restoration efforts with fire, mowing, seeding or herbicides.

Botanical Report:

Native Plant Species: *Artemisia tridentata* var. *wyomingensis*, *Atriplex spinosa*, *Chrysothamnus viscidiflorus*, *Cryptantha* sp., *Ericameria nauseosa*, *Oryzopsis hymenoides*, *Sarcobatus vermiculatus*, *Stipa comata*, and *Zigadenus venenosus*.

Special Status Plants: No sensitive species are known to occur in this allotment. There are no sensitive species suspected.

Locally Important Plant Species: No specific cultural plants were noted.

Weeds report:

No noxious weeds are known to occur in the allotment. However, the potential for noxious weed invasion is high due to heavy traffic associated with travel to the interior USFS nursery, irrigated interior private parcel, the rodeo grounds, and the airport. Also, State Highway 31 and Red House Lane border the allotment on two sides, are heavily traveled, and have had noxious weed infestations in the past. These roads and those within the allotment are monitored annually for the introduction of noxious weeds, and are treated if discovered.

Team Members

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Title

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Determination

Proposed grazing management practices and seeding maintenance within the Paisley Flat Allotment will 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 Paisley Flat Allotment will require modification or change prior to the next grazing season to promote achievement of the Oregon standards and Guidelines for Livestock Grazing Management.



Field Manager, Lakeview Resource Area

6/22/04

Date

Summary of ESI Data Allotment #422													
Vegetation Community	Total Acres	% of acre	SSF Acres				OAT Acres			Acres of Vegetative Community Seral Stage			
			St S	Mod C	Se D	St U	PN	La M	Ea				
Wyoming Sagebrush	354	8%	83	271			27	83		91	83	18	
Crested wheatgrass	3175	74%	31					31		31			
Incomplete	752	17%											
Stipa Com	38	1%		38				38	38				
Totals	4319	100%	32	309			27	83	32	38	32	83	18

Appendix A:

Legend

- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Federal Aviation
- US Forest Service
- US Fish & Wildlife
- General Services Administration
- Bureau of Indian Affairs
- Local Government
- National Parks
- Private
- State
- Unknown
- gr polygon



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