RANGELAND HEALTH STANDARDS - ASSESSMENT –FISHER LAKE ALLOTMENT #0222

STANDARD 1 - UPLAND WATERSHED

Upland soils exhibit infiltration and permeability rates, moisture storage and stability that are appropriate to soil, climate and landform.

This standard is being met on the allotment.

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

Soil Surface Factor (SSF) is an indicator of accelerated erosion and is a method of documenting observations regarding erosion. Of the 4,450 acres in Fisher Lake Allotment, 2,714 (61%) have an SSF rating of slight and this is the second lowest level of erosion in this methodology. There are 1,614 acres (36%) unknown with the remaining 3% being split between rockland, playas and water. A copy of the form used to document SSF is attached (Appendix A, "Determination of Erosion Condition Class").

Another indicator of Upland Watershed condition is plant composition and community structure. Current plant composition is compared to a defined Potential Natural Plant Community for the identified soil type and precipitation zone. Using the 1988 Ecological Site Inventory, the percent of the allotment in each seral stage is summarized in the table below. Most of the acres that were in the Early seral stage are areas around the edges of the area that burned, but were not reseeded, are still dominated by cheatgrass. These areas are in the rougher terrain with generally light utilization and grazing has had little impact on these areas. About half of the allotment is in the Mid seral stage (38%) or in the Late seral stage (11%). The plant composition and community structure in this allotment is healthy.

Seral Stage	Percent comparability to Potential Natural Community	Percent of allotment in seral stage	
Early	0-25%	12% (520 acres)	
Mid	26-50%	38% (1,694 acres)	
Late	51-75%	11% (500 acres)	
Rockland or playa		1% (60 acres)	
Water or excluded areas		9% (411 acres)	
Unknown*		28% (1,262	

^{*} The unknown acres are the inclusions within a vegetation community that include transition areas and plant communities too small to be mapped separately. In this allotment the unknown areas also include areas around Fisher Lake that inundated by water at least part of the year.

STANDARD 2 - RIPARIAN/WETLAND

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

The 266 acres of wetlands found in the allotment are currently at Proper Functioning Condition (PFC). Livestock grazing does not appear to be impacting these areas.

STANDARD 3 - ECOLOGICAL PROCESSES

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.

This standard is being met. About 45% of the allotment is a crested wheatgrass seeding and as such is functioning. To convert the seeding to native forage would take a lot of effort and money. The remaining 55% of the allotment contains healthy, productive and diverse plant and animal populations and communities that are appropriate to soil, climate and landform and are supported by ecological processes of nutrient cycling, energy flow and the hydrologic cycle.

The Observed Apparent Trend (Appendix B) was determined during ESI (1988) and it was static on 1,489 acres (33%) of the allotment, downward on 21 % (927 acres) and upward on 7% (297 acres). There was 1% rockland/playa and 12% unknown. The areas

in downward trend were also in the Early seral stage. These are areas that were outside the seeding and were still dominated by cheatgrass.

There are four photo trend plots in the allotment with one on the edge of the crested wheatgrass seeding portion of the allotment and three in Lake Pasture. The three trend photos plots in the Lake Pasture have a static trend in recent years with changes in vigor and appearance correlating with precipitation. The photo trend plot on the edge of the crested wheatgrass stand showed dramatic improvement following the seeding in the early 70's and has remained static in recent years.

The utilization studies conducted since the late 1980's showed light to moderate use in the Lake Pasture every year, while both seeding pastures had heavy use in 1991 (65%) and 1995 (77%) and light or moderate use during six other years. The heavy use was the result of limited production during very dry years. The grazing in this allotment is during the winter and early spring and allows ample time for the plants to regrow during the growing season.

Standard 3 is being met for animal populations. The allotment is supporting the current and proposed number of mule deer and pronghorn antelope identified by Oregon Department of Fish and Wildlife (ODFW) management plans.

Noxious weeds are known to occur in the allotment. Halogeton has been present for several years along the pipeline, roads, and spasely vegetated disturbed areas. Since the Crump Fire in 1998, halogeton in the burned area has been on the increase. Perennial pepperweed occurs on the State and private lands on the western edge of the allotment and is moving on to BLM. Canada and bull thistles are scattered throughout the lower elevations of the allotment toward Crump Lake on State, private, and BLM lands. Treatment efforts are underway for all these species on all jurisdictions.

STANDARD 4 - WATER QUALITY STANDARDS

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

This standard is not applicable to this allotment since there are no 303d listed water bodies within the allotment.

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.

Standard 5 is being met for native, T&E, and locally important wildlife species.

There are two known sage grouse leks within the allotment and sage grouse have been seen using the allotment at different times of the year. Livestock grazing does not appear to be limiting sage grouse production within the allotment. There are numerous identified sage grouse leks and nesting habitat within the surrounding allotments, Peregrine falcons have been seen within the allotment, probably from releases from the Crump Lake hack site, however, no nesting occurs within the area. Bald eagles use the area in the winter feeding off dead waterfowl and other carrion.

Surveys have been conducted in the allotment and no special status plants have been found and none are suspected

Current Management and Recent Management Changes

The current management is to graze the allotment in the winter and early spring (November-March) using one of the seeded pastures first and then moving to the lake pasture during calving time in February and back to the other seeded pasture in March. The Neck Pasture is used when moving in and out of the allotment.

<u>Title</u>		
Range Management Specialist		
Fishery Biologist		
Wildlife Biologist		
Botantist		
Archaeologist		
Supervisory NRS		
Supervisory RMS		
Weed Management Specialist		

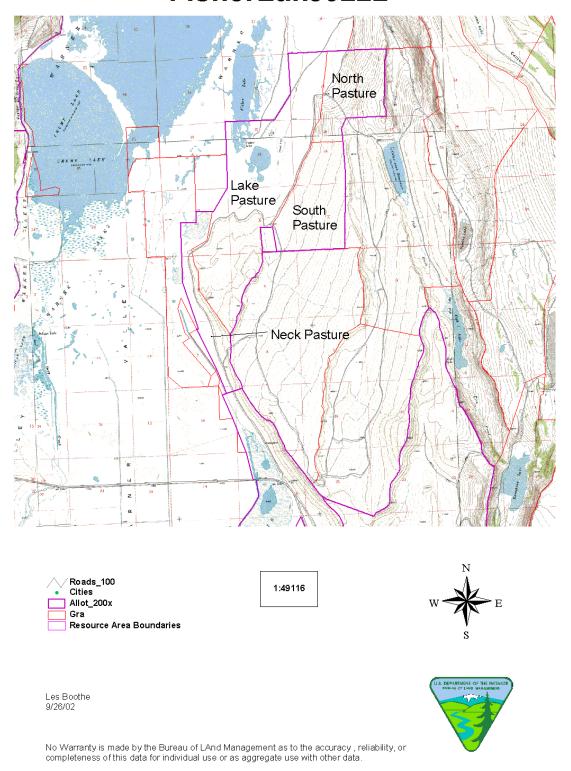
Determination

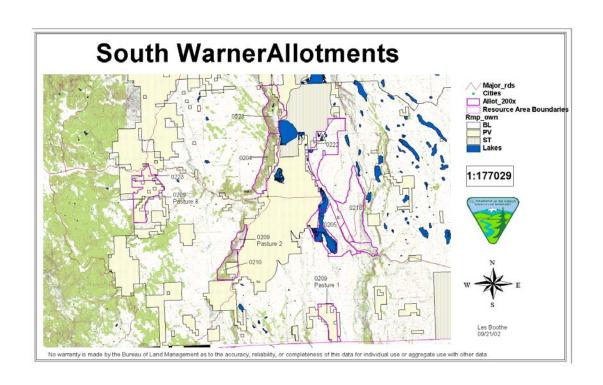
- Existing grazing management practices or levels of grazing use on the Fisher Lake Allotment promote achievement of significant progress towards the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.
- () Existing grazing management practices or levels of grazing use on the Fisher Lake Allotment will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

Acting Area Manager, Lakeview Resource Area

Date

FisherLake0222





Appendix A.

DETERMINATION OF EROSION CONDITION CLASS

Soil Surface Factors

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SOIL MOVEMENT	No visible evidence of movement	Some Movement of soils particles	Moderate Movement of soil is visible and recent slight terracing generally less than 1" in height	Occurs with each event. Soil and Debris deposited against minor obstructions	Subsoil exposed over much of area may have embryonic dunes and wind scoured dunes
	0 1 2 3	4 5	6 7 8	9 10 11	12 13 14
SURFACE LITTER	Accumulating in place	May show slight movement	Moderate movement is apparent, deposited against obstacles	Extreme movement apparent, large and numerous deposits against obstacles	Very little remaining (use care on low productive sites)
	0 1 2 3	4 5 6	7 8	9 10 11	12 13 14
SURFACE ROCK	If present, the distribution of fragments show no movement caused by wind or water		If present, fragments have a poorly developed distribution pattern caused by wind or water	If present, surface rock or fragments exhibit some movement and accumulation of smaller fragments behind obstacles	If present, surface rock or fragments or dissected by rills and gullies or are already washed away
	0 1 2	3 4 5	6 7 8	9 10 11	12 13 14
PEDESTALLING	No visible evidence of pedestalling	Slight pedestalling, in flow patterns	Small rock and plant pedestals occuring in flow patterns	Rocks and plants on pedestals generally evident, plant roots exposed	Most rocks and plants pedestalled and roots exposed
 	0 1 2 3	4 5 6	7 8 9	10 11 12	13 14 15
FLOW PATTERNS	No visible evidence of flow patterns	Deposition of particles may be in evidence	Well defined, small, and few with intermittent deposits	Flow patterns contain silt and sand deposits and alluvial fans	Flow patterns are numerous and readily noticeable. May have large barren fan deposits
<u></u>	0 1 2 3	4 5 6	7 8 9	10 11 12	13 14 15
RILLS	No visible evidence of rills		Rills 1/2" to 6" deep occur in exposed places at approximately 10' intervals	Rills 1/2" to 6" deep occur in exposed area at intervals of 5 to 10"	May be present at 3" to 6" deep at intervals less than 5'
	0 1 2 3	4 5 6	7 8 9	10 11 12	13 14 15
GULLIES	May be present in stable condition. Vegetation on channel bed and side slopes	A few gullies in evidence which show little bed or slope erosion. Some vegetation present on slopes	Gullies are well developed with active erosion along less than 10% of their length. Some vegetation may be present	Gullies are numerous and well developed with active erosion along 10 - 50% of their lengths or a few well developed gullies with active erosion along more than 50% of their length	Sharply incised gullies cover most of the area and over 50% are actively eroding
	0 1 2 3	4 5 6	7 8 9	10 11 12	13 14 15
SITUATION	TOTAL				
Eragion Condition Classes	Stoble 0.20: Slight 21.40: Madana	e 41-60; Critical 61-80; Severe 8			

Appendix B. OBSERVED APPARENT TREND
(Check appropriate box in each category which best fits area being observed)

VIGOR (10 Points)	Desirable grasses, forbs and shrubs are vigorous, showing good health. These plants should have good size, color and produce abundant herbage.
(6 Points)	Desirable grasses, forbs and shrubs have moderate vigor. They are medium size with fair color and producing moderate amounts of herbage, some seed stalks and seedheads are present.
(2 Points)	Desirable grasses, forbs and shrubs have low vigor. They appear unhealthy with small size and poor color.Portions of clumps or entire plants are dead or dying. Seed stalks and seedheads almost non-existent except in protected areas.
SEEDLINGS (10 Points)	There is seedling establishment of desirable grasses, forbs and shrubs. Seedlings are present in open spaces between plants and along edges of soil pedestals. Few seedlings of invader or undesirable plants are present.
(6 Points)	Some seedlings of desirable grasses, forbs and shrubs may or may not be present in open spaces between plants. Some seedlings of invader or undesirable plant species may or may not be present.
(2 Points)	Few if any seedlings of desirable grasses, forbs and shrubs are being established. Seedlings of invaders or undesirable should be present in open space between plants.
SURFACE LITTER (5 Points)	Surface litter is accumulating in place.
(3 Points)	Moderate movement of surface litter is apparent and deposited against obstacles.
(1 Point)	Very little surface litter is remaining.
PEDESTALS (5 Points)	There is little visual evidence of pedestalling. Those pedestals are sloping or rounding and accumulating litter. Desirable forage grasses may be found along edges of pedestals.
(3 Points)	Moderate plant pedestalling. No visual evidence of healing or deterioration. Small rock and plant pedestals may be occurring in flow patterns.
(1 Point)	Most rocks and plants are pedestalled. Pedestals are sharped sided and eroding often exposing grass roots.
GULLIES (5 Points)	Gullies may be present in stable condition with moderate sloping or rounded sides. Perennials should be establishing themselves on bottom and sides of channel.
(3 Points)	Gullies are well developed with small amounts of active erosion. Some vegetation may be present.
(1 Point)	Sharply incised V-shaped gullies cover most of the area with most of the gullies actively eroding. Gullies are mostly devoid of perennial plants with fresh cutting of the bottom.

TOTAL POINTS _____ Rating 26-35-Upward; 17-25-Static; 7-16-Downward