

RANGELAND HEALTH STANDARDS - ASSESSMENT – HICKEY FRF # 223

There is 851 acres in the Hickey FRF Allotment, of which 412 acres are public land and 439 acres are private land. The entire allotment will be assessed because it is managed as a single pasture and the ESI inventory provided data for both private and public lands.

STANDARD 1 - UPLAND WATERSHED

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.

This standard is being met on the allotment.

Soil Surface Factor (SSF) is an indicator of accelerated erosion and is a method of documenting observations regarding erosion. Of the 851 acres in the Hickey FRF Allotment, 661 (78%) have an SSF rating of Moderate and 20 acres (2%) are rated as Slight. There is one acre rated as Stable and 169 acres are unknown. The area rated as Moderate contained some evidence of surface erosion but no rill or gullies. A tour of the allotment by an interdisciplinary team in May of 2002 found most of grazing impacts were on private land with some small areas of grazing use on public land. There was no evidence of accelerated erosion caused by grazing on public land. 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 allotment is in the Mid seral (80%) with one acre in Late Seral stage and 20% (169 acres) unknown.

Seral Stage	Percent comparability to Potential Natural Community	Percent of allotment in seral stage
Early	0-25%	0
Mid	26-50%	80% (681 acres)
Late	51-75%	0.1% (1 acre)
Rockland		0
Unknown*		20% (169 acres)

* The unknown acres are the inclusions within a vegetation community that include transition areas and plant communities too small to be mapped separately.

STANDARD 2 - RIPARIAN/WETLAND

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

Standard two is being met for Riparian/Wetland function. The two 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.

The Observed Apparent Trend (Appendix B) was determined during ESI and it was static on 80% (681 acres) of the allotment, upward on one acre and unknown on 20% (169 acres).

There are no trend studies on the allotment. The one utilization study in 1991 showed a pattern of use, similar to the pattern seen on the tour in May, 2002. The use was light (30%-50%) to moderate on most of the public land and the heavy use was mostly restricted to the private land in the meadow and near the water sources.

Standard three 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. The uplands are essentially weed free at present but the private meadows have significant infestations, particularly of Canada thistle. There is potential over the years for the weeds in the meadows to move out on to the moister portions of the BLM lands.

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 no known sage grouse leks within the allotment, but there are three identified sage grouse leks and nesting habitat within the surrounding allotments. Sage grouse have been seen using the allotment at different times of the year but the forage habitat present is not being impacted by livestock grazing. 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.

No Special Status plants have been found and none are suspected.

Current Management and Recent Management Changes

The current management is to graze this allotment in conjunction with the private land meadow areas known as Crane Lake.


Team Members

Title

Les Boothe	Range Management Specialist
Alan Munhall	Fishery Biologist
Vern Stofleth	Wildlife Biologist
Lucile Housley	Botanist
Bill Cannon	Archaeologist
Ken Kestner	Supervisory NRS
Robert Hopper	Supervisory RMS
Erin McConnell	Weed Management Specialist

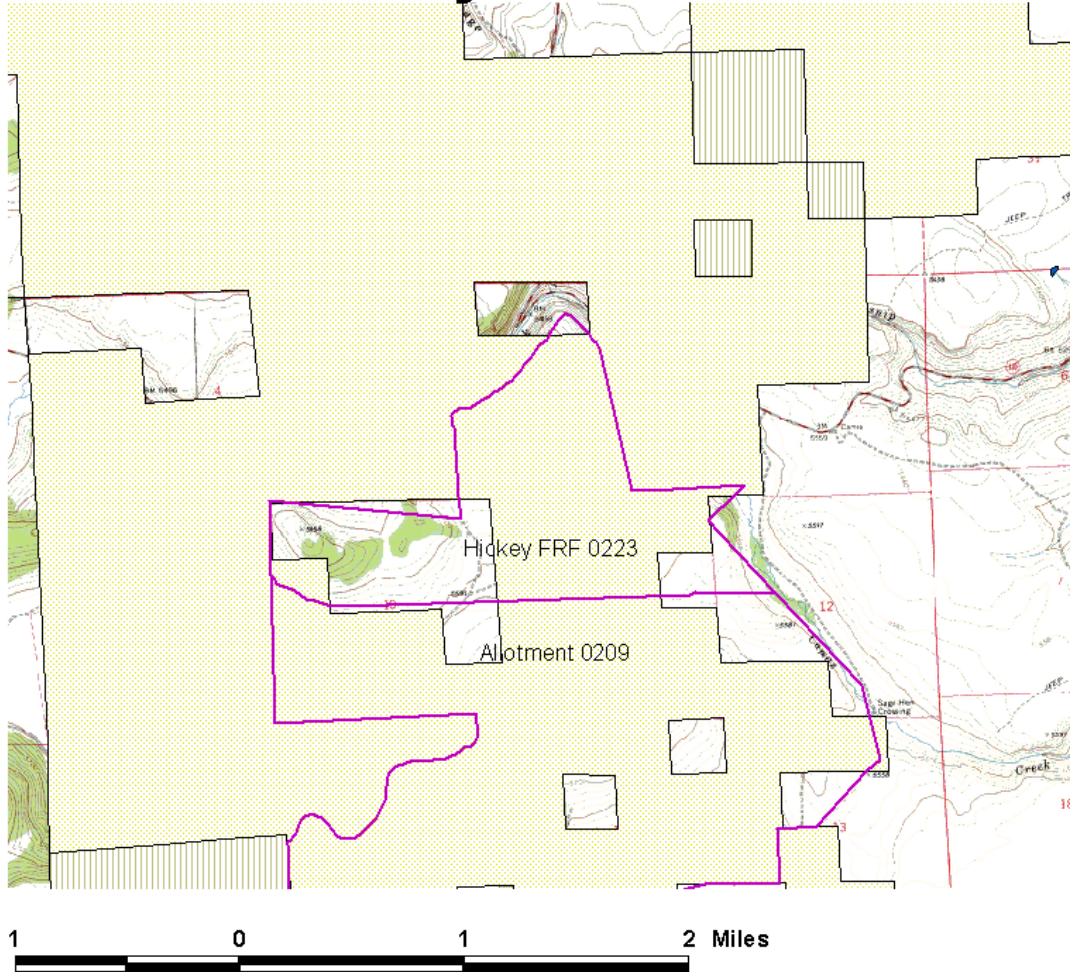
Determination

- Existing grazing management practices or levels of grazing use on the Hickey FRF 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 Hickey FRF 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.

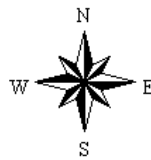

Acting Area Manager, Lakeview Resource Area

9/30/02
Date

Hickey FRF0223

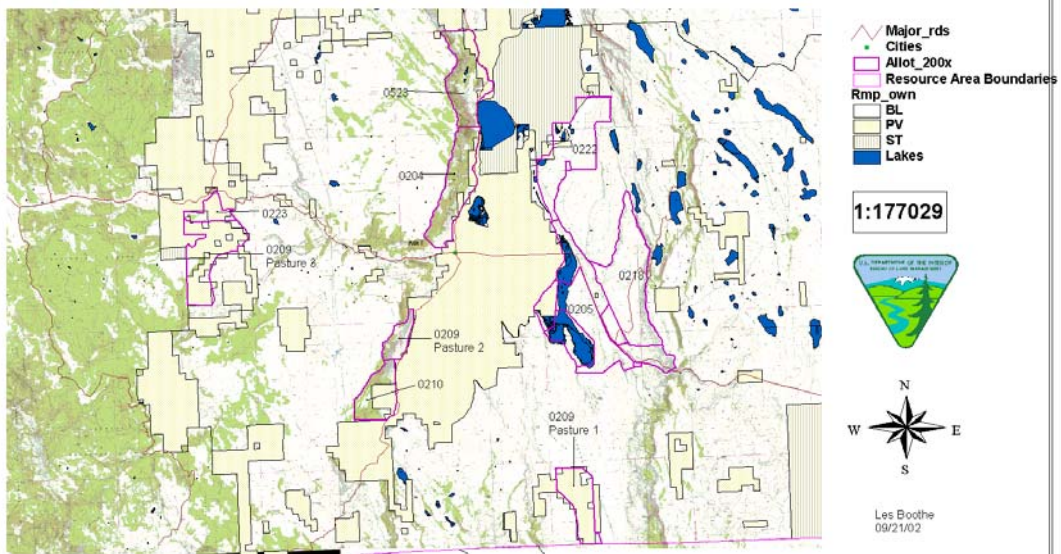


- Cities
 - Allot_200x
 - Resource Area Boundaries
 - Rmp_own
 - BL
 - PV
 - ST
 - Lakes
- Les Boothe



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South Warner Allotments



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

Appendix A.

DETERMINATION OF EROSION CONDITION CLASS
Soil Surface Factors

SOIL MOVEMENT	No visible evidence of movement 0 1 2 3	Some Movement of soils particles 4 5	Moderate Movement of soil is visible and recent Slight terracing generally less than 1" in height 6 7 8	Occurs with each event. Soil and Debris deposited against minor obstructions 9 10 11	Subsoil exposed over much of area, may have embryonic dunes and wind scoured dunes 12 13 14
SURFACE LITTER	Accumulating in place 0 1 2 3	May show slight movement 4 5 6	Moderate movement is apparent, deposited against obstacles 7 8	Extreme movement apparent, large and numerous deposits against obstacles 9 10 11	Very little remaining (use care on low productive sites) 12 13 14
SURFACE ROCK	If present, the distribution of fragments show no movement caused by wind or water. 0 1 2	If present, coarse fragments have a truncated appearance or spotty distribution caused by wind or water 3 4 5	If present, fragments have a poorly developed distribution pattern caused by wind or water 6 7 8	If present, surface rock or fragments exhibit some movement and accumulation of smaller fragments behind obstacles 9 10 11	If present, surface rock or fragments or dissected by rills and gullies or are already washed away 12 13 14
PEDESTALLING	No visible evidence of pedestalling 0 1 2 3	Slight pedestalling, in flow patterns 4 5 6	Small rock and plant pedestals occurring in flow patterns 7 8 9	Rocks and plants on pedestals generally evident, plant roots exposed 10 11	Most rocks and plants pedestalled and roots exposed 12 13 14
FLOW PATTERNS	No visible evidence of flow patterns 0 1 2 3	Deposition of particles may be in evidence 4 5 6	Well defined, small, and few with intermittent deposits 7 8 9	Flow patterns contain silt and sand deposits and alluvial fans 10 11 12	Flow patterns are numerous and readily noticeable. May have large barren fan deposits. 13 14 15
RILLS	No visible evidence of rills. 0 1 2 3	Some rills in evidence at infrequent intervals over 10'. 4 5 6	Rills ½" to 6" deep occur in exposed places at approximately 10' intervals. 7 8 9	Rills ½" to 6" deep occur in exposed area at intervals of 5 to 10". 10 11 12	May be present at 3" to 6" deep at intervals less than 5'. 13 14 15
GULLIES	May be present in stable condition. Vegetation on channel bed and side slopes 0 1 2 3	A few gullies in evidence which show little bed or slope erosion. Some vegetation present on slopes. 4 5 6	Gullies are well developed with active erosion along less than 10% of their length. Some vegetation may be present. 7 8 9	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 10 11 12	Sharply incised gullies cover most of the area and over 50% are actively eroding. 13 14 15
SITUATION	TOTAL				

Erosion Condition Classes: stable 0-20: Slight 21-40: Moderate 41-60: Critical 61-80: Severe 81-100

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 sharpened 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