

Standards For Rangeland Health Assessment

Fish Creek Allotment #0519

FV-99

Standards for Rangeland Health and Guidelines for Livestock Grazing Management (BLM, 1997)

Introduction

The Range Reform '94 Record of Decision (BLM, 1995a) recently amended current grazing administration and management practices. The ROD required that region-specific standards and guidelines be developed and approved by the Secretary of the Interior. In the State of Oregon, several Resource Advisory Councils (RACs) were established to develop these regional standards and guidelines. The RAC established for the part of the state covering the Fish Creek allotment is the Southeastern Oregon RAC. These standards and guidelines for Oregon and Washington were finalized on August 12, 1997 and include:

Standard 1 - Upland Watershed Function

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

Standard 2 - Riparian/Wetland Watershed Function

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

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.

Standard 4 - Water Quality

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

**RANGELAND HEALTH STANDARDS ASSESSMENT
FISH CREEK ALLOTMENT #0519**

T.36 S., R. 24 E., T.37 S., R.23 E. (Attached Map)

Lakeview Resource Area

January 4, 1999

STANDARD 1 - WATERSHED FUNCTION-UPLANDS

This standard is being met.

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. The baseline SSF information with additional updates and existing vegetation monitoring (forage utilization studies) were the basis for this assessment.

Soil Surface Factor (SSF) is an indicator of accelerated erosion and is a method of documenting observations regarding erosion (refer to attachment 1). Of the 24,053 total acres in Fish Creek Allotment; 14,187 acres (59%) have an SSF rating of stable, 6,660 acres (28%) are rated as slight, and 577 acres (2%) moderate. The remaining 2,707 acres(11%) are unknown. These areas represent private lands within the allotment and inclusions within a vegetation community too small to be mapped.

Another indicator to consider is the current grazing system, rest rotation. Under this management two pastures receive yearlong rest every other year. Overall, the allotment is functioning properly given the amount and distribution of ground cover based on the SSF survey and observations from existing upland monitoring plots and annual forage utilization studies.

STANDARD 2 - WATERSHED FUNCTION-RIPARIAN/WETLAND

This standard is not being met. However, the existing conditions are largely a result of past grazing practices and natural conditions. Current management of livestock is resulting in significant progress towards meeting the standard, and is not a significant factor in not meeting the standard. Lotic PFC (Proper Functioning Condition) site inventories were completed in 1997 on Fish Creek and 1996 on Honey and Twelvemile creeks. The following table summarizes the non-PFC reach locations and their management status.

STREAM	REACH	PFC RATING	MANAGEMENT
Fish	Lower	FAR* Trend Not Apparent	Rest Rotation

*Functional At Risk

Of the 9.2 miles of Fish Creek, 86% are PFC and 14% are FAR. The FAR area is all one reach and located in the Lower Fish Creek pasture. Grazing in the Lower Fish Creek pasture is early use (April-May) with alternate years rest. This system has resulted in significant improvement in this particular area and in other riparian areas along Fish Creek throughout the allotment.

STANDARD 3 - ECOLOGICAL PROCESSES

This standard is being met.

The largest vegetation component in the allotment is comprised of Low sagebrush and mixed perennial grasses. These plant communities also represent the key areas that are consistently grazed by cattle and wildlife. The allotment has other plant communities though not as extensive, including; woodlands (aspen and juniper), bitterbrush/Low sagebrush, mountain big sagebrush/snow berry, Black sagebrush inclusions and riparian zones (Honey and 12 mile Creeks). The Observed Apparent Trend data collected (excluding the riparian areas) during the ESI along with subsequent updates following the Biological Evaluation (1994), showed an upward trend on 20% of the allotment and static trend on 80% of the allotment. All range photo trend sites within the allotment were updated and analyzed in 1998 and the vegetation trend at these areas was determined to be static.

Another potential indicator that addresses ecological processes is plant composition and desired plant communities. 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 (ESI), the percent of the allotment in each seral stage is summarized in Table-1 below. As can be seen most of the allotment is currently in the Mid seral (65%) stage.

TABLE-1

Seral Stage	Percent comparability to Potential Natural Community	Percent of allotment in seral stage
Early	0-25%	7%
Mid	26-50%	65%
Late	51-75%	6%
PNC	>75%	8%
Unknown*		12%

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

From the review of all the range vegetation monitoring data (photos, trend transects, climate, field observations and professional judgement), it appears that a large percentage of the vegetation in the allotment is in good condition with a static/upward trend.

The Fish Creek Allotment supports most of the terrestrial animals common to the sagebrush steppe in the Great Basin. The allotment provides habitat for huntable populations of mule deer, pronghorn antelope, Rocky Mountain elk, California bighorn sheep, and sage grouse. There is currently no major competition between wildlife and domestic livestock for forage, either early green-up grasses and forbs or winter browse such as antelope bitterbrush and curl-leaf mountain mahogany which are both limited in distribution within the allotment.

The allotment lies within ODFW's Warner Big Game Management Unit for deer, pronghorn antelope, and elk. Current populations are slightly below management objectives for mule deer and substantially below that proposed for elk. The allotment contains crucial winter range habitat for mule deer and pronghorn antelope. Portions of the allotment are occasionally used by elk throughout the year. The allotment also contains year-round habitat for sage grouse, however, no crucial habitat has been identified.

STANDARD 4 - WATER QUALITY

This standard is not being met on Honey Creek, however the current management of livestock is resulting in significant progress towards meeting the standard, and is not a factor for not meeting the standard. The stream is listed as water quality limited by the State DEQ due to temperature. Except for one short gap, Honey Creek has been excluded from grazing since 1980. The other two streams, Fish and 12 mile, were not listed by the State DEQ and temperature data is not available.

STANDARD 5 - NATIVE, T&E, and LOCALLY IMPORTANT SPECIES

This standard is being met.

Overall, the allotment exhibits a wide diversity of native plant communities, has minimum noxious weed infestations, and adequate litter and standing dead material is left at the end of each grazing season to provide proper nutrient cycling, hydrologic cycling and energy flow.

In the upland areas of the allotment, the invasive plants (noxious weeds) present are only in disturbed areas (main road and ditches). These plants include Hoary cress (whitetop),

Mediterranean sage, and Canada and Bull thistle. Mapping and inventory of these sites is ongoing and some control methods and treatments have begun. Larger and more continuous stands of noxious weeds can be found along the riparian zones of Honey and Twelve mile creeks. The most common invasive plant is Canada thistle with some additional patches of Klamath weed and Mediterranean sage.

Special status plants are not known to occur in this area.

The ESI data displayed in Table-1 shows a mix of vegetation stages in the allotment. The upland areas in excellent condition or PNC primarily exist along the rims of Honey and 20 mile creeks. The good condition uplands or late-seral are mostly found above these drainage's on the flats. The acres in mid and early seral primarily exists along Fish lake, the historic highway trailing route and areas immediately to playas.

Quaking aspen communities constitute a very small portion (100 acres) of the allotment(Upper Fish Creek pasture) but contribute to the ecological diversity in an area predominately sagebrush and scattered junipers. This area is relatively small when compared to the overall acreage available for livestock use. The entire aspen community is currently under encroachment from western junipers with some areas completely occupied. The aspen stands have been affected by historic livestock use over 80 years ago with sheep followed by cattle during a period of optimum climatic conditions. Consequently, reduced fire intervals resulted from reduction of fine fuels, fire suppression management improved, and the western juniper seed source continued to increase. The existing condition of the aspen plant community is a product of past events and the current management of livestock is not a factor in the expansion of juniper or decline of the aspen.

There are no big game habitat transects set up in the allotment due to the limited distribution of key browse (bitterbrush and mountain mahogany). There are numerous decadent or dead bitterbrush plants within the allotment which are still providing valuable forage and cover for deer, however, recruitment of young plants is relatively low. Overall the bitterbrush shows some improvement in vigor and stand replacement over the past 10-12 years.

The habitat provided within the allotment is crucial to wintering deer in that it adjoins with winter range on the forest to the west and to BLM - administered winter range to the north and south. It provides habitat connectivity as well as a spatial distribution of lower elevation range critical during high snowfall years.

The deer, elk, pronghorn, and bighorn populations are healthy and

Current Management and Recent Management Changes

The current grazing management includes a multi-pasture rest rotation system beginning in early spring and ending in mid July. There was a Section 7 Biological Evaluation completed in January, 1994 for a major portion of the allotment, followed by a Biological Opinion issued by the USFWS (April 25, 1994). At that time FWS concurred with the findings of the BLM and found the current grazing actions not likely to adversely affect the Warner sucker on Upper Fish Creek, Lower Fish Creek, and Kingens Pastures. In March of 1996 a change to the determinations for these pastures was made from not likely to adversely affect to no effect based on additional findings submitted by the BLM to the FWS (ref.1-7-96-F-117). Based on a review of these changes at a Level 1 streamlining consultation meeting, the FWS concurred with BLM's determination. The Deppy Creek pasture determination remains adverse affect due to the existing water gap on designated critical habitat.

Team Members

Title

David Pacioretty	Range Management Specialist
Alan Munhall	Fishery Biologist
Vern Stofleth	Wildlife Biologist
Lucile Housley	Botanist
Dick Mayberry	Supervisory NRS
Robert Hopper	Supervisory RMS
Erin McConnell	Noxious Weeds

Determination

- Existing grazing management practices or levels of grazing use on the Fish Creek 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 Fish Creek 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.

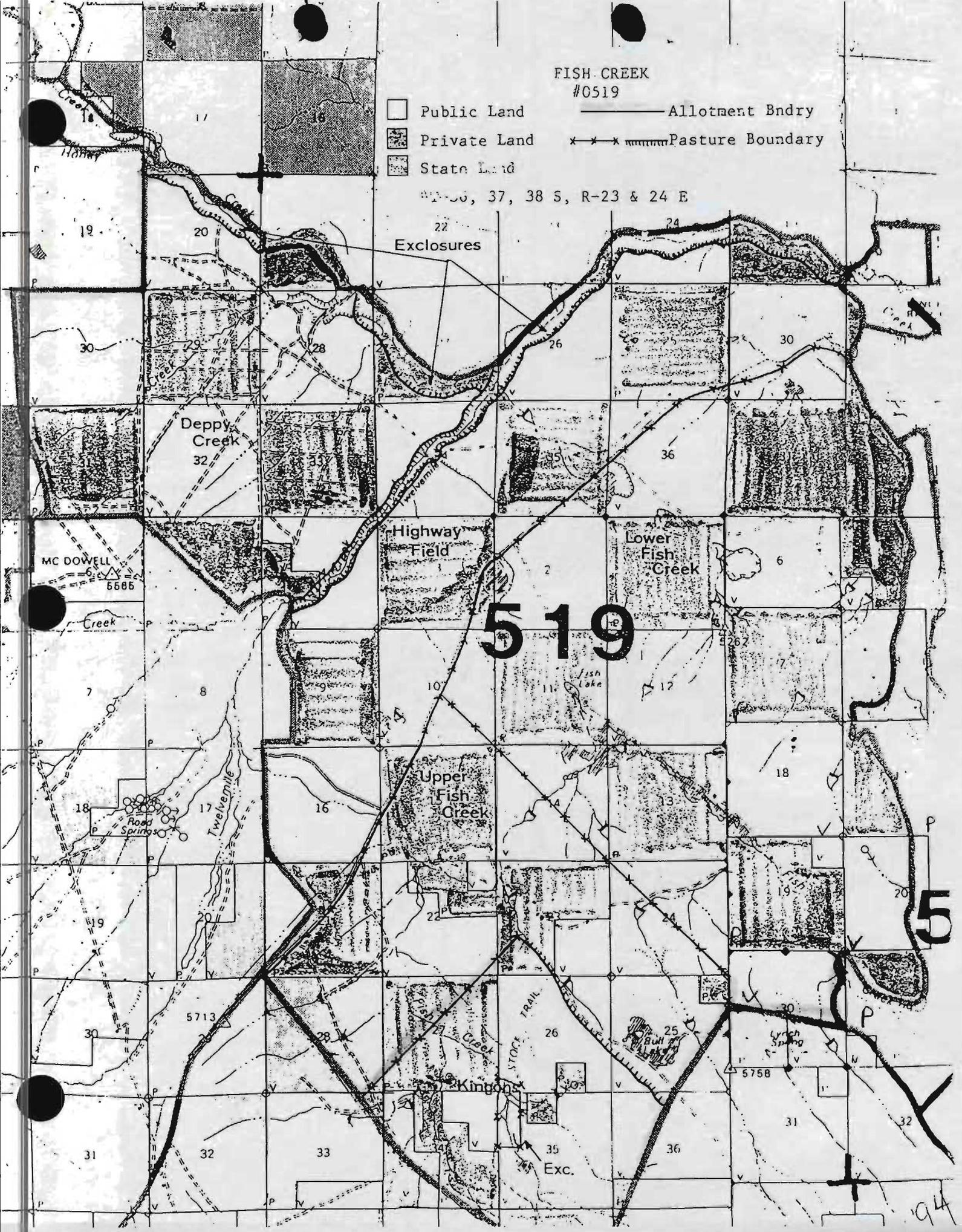
Scott R Florence
Scott Florence
Area Manager, Lakeview Resource Area

1/11/99
Date

FISH CREEK
#0519

- Public Land
- ▨ Private Land
- ▩ State Land
- Allotment Bndry
- x — x — Pasture Boundary

36-38 S, R-23 & 24 E



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