## STANDARDS FOR RANGELAND HEALTH ASSESSMENT O'KEEFFE FRF INDIVIDUAL ALLOTMENT #0203





#### O'KEEFFE FRF INDIVIDUAL ALLOTMENT #0203

#### 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 O'Keeffe FRF Individual 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.

### NDARD 1 - UPLAND WATERSHED CONDITION:

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; plant community composition, which indicates root occupancy of the soil profile, and trend. Data in this allotment is insufficient to determine erosion condition or range trend. However, some inferences can be made based on the soil types, percent slope, soil texture, and other soil characteristics.

#### Erosion

1) <u>North Parcel (Lake subwatershed</u>): This parcel lies in a lakebed; therefore, due to shallow slope, water erosion hazard is slight. This area was unsurveyed, so vegetation and soils information are absent. Pelican Lake, which often contains water, is located between ¼ and ½-mile away over flat terrain. The nearest large lake, Crump Lake, is between two and three miles away.

2) <u>West Parcel (Twentymile subwatershed</u>): Slope is slight in most places, increasing in the extreme NW corner of the parcel. Twentymile Creek runs through the parcel, as well as two of its seasonal tributaries. Erosion hazard by water is mostly moderate. Livestock can easily access the creeks, due to shallow slope, but would not be "trapped" near the creek.

<u>last Parcel (Twentymile subwatershed)</u>: The east half is in a steep canyon of Twentymile Creek, with dium to fine textured soils. Erosion would probably tend to be moderate to severe. Due to the extreme steepness of slope, cattle use is limited.

#### **Plant Community**

Another indicator of upland watershed condition is plant composition and community structure. The major vegetation types and the parcels they are found in are shown below:

1) North Parcel (Lake subwatershed): Unsurveyed for vegetation.

2) <u>West Parcel (Twentymile subwatershed)</u>: Approximately half of the area consists of low sagebrush, with Idaho fescue and/or Sandberg's bluegrass and patches of western juniper. The other half is mountain big sagebrush, with Thurber's needlegrass and bottlebrush squirreltail.

3) <u>East Parcel (Twentymile subwatershed)</u>: Approximately 40% of the area contains low sagebrush, with Idaho fescue and some Sandberg's bluegrass. The other 60% of the area consists of basin big sagebrush, with bluebunch wheatgrass and small peices of Sandberg's bluegrass. Western juniper is found on the canyon rims but not in appreciably large amounts.

#### Trend

The permittee, John O'Keeffe, has a grazing permit for 48 AUM's in the #0203 Allotment, with a spring use period from April 1 - April 30. Considering the plant communities and the small amount of time that the as are grazed, the allotment would probably tend to show a static, or even an upward trend.



#### NDARD 2 - RIPARIAN/WETLAND

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

#### Wetland (Lentic)

| Allot<br>#/<br>Area | PALUSTRINE<br>(acres) | LACUSTRINE<br>(acres) | TOTAL<br>WETLAND<br>(acres) | PFC*<br>(acres) | Functional<br>At Risk<br>(acres) | Unknown<br>(acres) |
|---------------------|-----------------------|-----------------------|-----------------------------|-----------------|----------------------------------|--------------------|
| 0203                | 18                    | 0                     | 18                          |                 |                                  | 18                 |

\*Proper Functioning Condition

The allotment has not been analyzed for Proper Functioning Condition.

#### **Riparian** (Lotic)

This standard is being met. Lotic PFC (Proper Functioning Condition) site inventories were completed in 1996 on Twentymile Creek. All of the reaches in this allotment were rated as PFC.

Twentymile Creek has not been grazed since 1981. Prior to that, the lower reaches had very limited use, due to the steep rocky nature of the channel. The upper reach received some use prior to 1981 but has been uded since.

#### **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, according to the plant and animal communities, as well as the monitoring completed in the riparian areas of the O'Keeffe FRF Individual Allotment.

The O'Keeffe FRF Individual 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, and sage grouse. The 2 AUM's allocated to wildlife seem adequate to support the current wildlife populations. 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. Both are limited in distribution within the allotment.

The allotment lies within Oregon Department of Fish & Wildlife's (ODFW) 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 no crucial winter range habitat for mule deer. Portions of the allotment are occasionally used by elk throughout the year. The potment also contains year-round habitat for sage grouse and pronghorn antelope; however, no crucial witat has been identified.

#### ANDARD 4 - WATER QUALITY

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

This standard is not being met. Twentymile Creek does not meet state standards for temperature, from the mouth to the headwaters. Because of changes in grazing to better manage riparian vegetation, it is felt that the current management of livestock is resulting in significant progress towards meeting the goal and is not a significant factor in not meeting the standard.

#### **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.

This standard is being met. The diversity of the wildlife and plant species is an indication of health and productivity found in the different habitats within the allotment.

#### Wildlife/Biological Diversity

The Warner sucker is listed as a Threatened Species under the Endangered Species Act. There is occupied habitat on the lower reaches of the stream. Because no grazing occurs on Twentymile Creek, it was betermined that grazing in this allotment has no effect on suckers. Warner red-band trout, a Bureau Sensitive cies is found in the lower reach of Twentymile also.

There are no big game habitat transects set up in the allotment, due to the limited distribution of key browse (bitterbrush and mountain mahogany). The decadent or dead bitterbrush plants within the allotment are still providing forage and cover for deer; however, recruitment of young plants is relatively low. Overall, the bitterbrush appears to show 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 and pronghorn populations are healthy and increasing in number within the allotment. Habitat quantity and quality do not appear to be limiting population size or health. Coyote predation is thought to be depressing mule deer recruitment; however, deer and pronghorn populations continue to fluctuate at, or slightly below ODFW's management objective for the unit. A general hunt season is slowing the population expansion of elk within the unit; however, if ODFW is unable to limit future expansion to the proposed management objective for the area, competition with domestic livestock may occur, and depredation on private lands may become an issue.

The allotment also provides habitat for numerous small, nongame birds and mammals common to the Great Basin, as well as sage grouse and marginal California bighorn sheep habitat. There is one known sage grouse lek found within the allotment. Sage grouse populations, like the rest of southeastern Oregon, are ble to declining. The allotment also provides habitat for raptors, some BLM and state-sensitive wildlife cies, and federally listed species. No critical habitat or limitations have been identified for any of these ties, which include wintering bald eagles, possibly pygmy rabbits, and various sensitive bat species.

#### **Botanical/Biological Diversity**

Special Status Plants: none known to occur in this area. Threatened and Endangered (T&E) plant surveys have been conducted in the past by Lucile Housley, Lakeview Resource Area botanist.

Noxious weeds are not known to occur in the allotment. Though weeds do occur nearby, the early spring season-of-use in this allotment will minimize the potential for weeds to become established due to cattle movement.

#### **Current Management and Recent Management Changes**

The O'Keeffe FRF Individual Allotment #0203 consists of small, isolated parcels of BLM land (48 AUM's) that are used in conjunction with the grazing permittee's private lands. The private lands constitute a much larger portion of the total grazing area. These parcels are used in the spring and fall when going to the U.S. Forest Service grazing allotments and when returning.

Please see attached map for pasture locations and orientation.

#### **Team Members**

<u>Title</u>

| Morris         | Range Management Specialist             |
|----------------|---|
| man Munhall    | Fisheries Biologist                     |
| Vern Stofleth  | Wildlife Biologist                      |
| Walt Devaurs   | Wildlife Biologist                      |
| Lucile Housley | Botanist                                |
| Erin McConnell | Weed Coordinator                        |
| Bill Cannon    | Archaeologist                           |
| Dick Mayberry  | Supervisory NRS                         |
| Robert Hopper  | Supervisory Range Management Specialist |

#### **Determination:**

- Existing grazing management practices or levels of grazing use on the O'Keeffe FRF Individual 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 O'Keeffe FRF Individual Allotment will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

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ott R. Florence, Manager keview Resource Area

1/27/99 Date



