Allotment Overview
Cox Ranch Individual #0217

Location: See Attached Map
7.5 Minute Topographic Map: Crump Lake
AUMs of Authorized Use: 74 AUMs
Permitted Seasons: Spring, Winter, Fall
Grazing System: Winter

The Cox Individual allotment is located approximately 15 miles northeast of Adel, Oregon on the east side of Crump Lake. Land Status within the allotment is 1,246 acres of public land and 280 acres of private land. The allotment was categorized as an M=Maintain, based on the 1983 rating form summarized as follows:

Range Condition is satisfactory.
Forage production potential is moderate to high and present production near potential.
Limited resource conflicts or controversy may exist.
No developments proposed and no opportunity for positive economic returns.
Present management is satisfactory.

The “M” rating from 1983 was based on the good range condition, the lack of resource conflicts and the good management. The allotment is smaller now and only includes the area around the Cox Ranch and the hot springs. With the small number of AUMs (74) and the current winter grazing there is little or no controversy in the allotment. The one resource conflict is grazing the source of the hot springs and that will be resolved soon by fencing off the area to protect it from grazing.
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 Beaty Butte 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 Cox INDIVIDUAL ALLOTMENT #0217

STANDARD 1 - UPLAND WATERSHED

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, trend studies and personal observations.

Soil Surface Factor (SSF) is an indicator of accelerated erosion and is a method of documenting observations regarding erosion. Of the acres in Cox Individual Allotment, 672 (43%) have an SSF rating of slight and 896 acres (57%) are unknown. A copy of the form used to document SSF is attached (Appendix B, "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 1987 Ecological Site Inventory, the percent of the allotment in each seral stage is summarized in the table below. As can be seen most of the allotment is unknown because the allotment is on the edge of private land and many of the small and narrow and vegetation types were not sampled. The sampled areas were in the Mid seral (37%) stage.

<table>
<thead>
<tr>
<th>Seral Stage</th>
<th>Percent comparability to Potential Natural Community</th>
<th>Percent of allotment in seral stage</th>
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<tbody>
<tr>
<td>Early</td>
<td>0-25%</td>
<td>3%</td>
</tr>
<tr>
<td>Mid</td>
<td>26-50%</td>
<td>37%</td>
</tr>
<tr>
<td>Late</td>
<td>51-75%</td>
<td>3%</td>
</tr>
<tr>
<td>Unknown*</td>
<td>57%</td>
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</tbody>
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Unknown acres are the inclusions within a vegetation community that include transition areas and plant communities too small to be mapped separately.

The Observed Apparent Trend (Appendix C) determined during the ESI (1987) found the trend to be static on the 43% of the acres there were rated and the remaining 57% are unknown.

The one remaining trend plot on the allotment is in the Fall pasture and the photos indicate improvement in range condition with more salt grass present in the last two photos (1991, 2005) compared to previous years. The vegetation cover and composition in this study site to be consistent with the potential/capability of the site.
STANDARD 2 - RIPARIAN/WETLAND
This standard is not being met.
There are no perennial streams on BLM in the pasture. The major intermittent/ephemeral stream in Fisher Canyon is well rock armored and functional. The spring head for the hot spring is non functional based on vegetation condition. The grazing on the spring head is uncontrolled and has resulted in hummocks and a decline in riparian vegetation components of the site. The major part of the drainage out of the spring is on private land but is in poor condition and modified by diversion.

There are approximately 50 acres of palustrine wetlands which occur within the allotment all of which are currently rated in Proper Functioning Condition.

STANDARD 3 - ECOLOGICAL PROCESSES
This standard is being met. The Observed Apparent Trend for the vegetation communities as described in Standard 1 is static 43% of the allotment. As explained in Standard 1 the trend for most of the allotment (57%) is unknown.

The trend plot that is found in the Fall pasture demonstrated in the photos from 1991 and 2005 that the condition of the pasture is improving from previous years. There is significantly more ground cover in the form of saltgrass in the 1991 and 2005 photos then there was in the photos from 1985, 1979, 1976, 1973 and 1972.

In 1995, the BLM executed a prescription burn that included a small part of this allotment. During the following few years, there was a drastic increase of cheat grass *(Bromus tectorum)* and Japanese brome *(Bromus japonica)* in the area of the burn, even in areas where no cheat grass was found pre-burn. However, over the past 10 years, the area has had an opportunity to recover, and this year the bunch grasses appear to be out-competing the introduced annual grasses. Little erosion has occurred in the past few years and the native grasses and forbs have re-established. The prescription burn was for the elimination of Western juniper *(Junipers occidentals)*, and where the fire burned the trees, none are still alive. Also, pre- and post-fire plots show that many of the small, young junipers were also eliminated.

The allotment is supporting the current and proposed number of mule deer and pronghorn identified by Oregon Department of Fish and Wildlife (ODFW) management plans.

There are scattered patches of perennial pepperweed, Canada thistle, and bull thistle on both BLM and private lands in the Estelle Calderwood and Fall pastures between the main road and shore of Crump Lake/Narrows. Most of the pepperweed populations are under treatment. Both thistle and Canada thistle are not priority weeds at this time. They are treated if they are on their way to or in the vicinity of the pepperweed treatment areas.
STANDARD 4 - WATER QUALITY STANDARDS

This standard does not apply here.

There are no waters in the pasture that are listed by the State of Oregon as Water Quality Impaired.

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

This standard is being met. The deer and pronghorn populations are healthy and stable in number within the allotment. Habitat quantity and quality do not appear to be limiting population size or health. The allotment also provide habitat for numerous small and nongame birds and mammals common to the Great Basin. There are no known sage grouse leks found within the allotment or pygmy rabbit habitat. The allotment also provides habitat for raptors and other sensitive species, as well as, one federally listed species. No critical habitat or limitations have been identified for any of these species which include wintering bald eagles, various sensitive bat species, or Peregrine falcons.

Special Status Plants: None found, none suspected. This area has been surveyed for Bureau special status plants and no plants were found. At this point in time, there are no known Bureau special status plants found within the allotment.

CURRENT MANAGEMENT AND RECENT MANAGEMENT CHANGES

The current management is to graze the four pastures; fall, south, Estelle Calderwood and Lower Fisher Canyon in conjunction with the state permit around Crump Lake and the grazing is in the winter months January and February. There are only 74 AUMs in this allotment so the grazing period is about 2 weeks. The only significant use is around the water source at the hot springs. To protect the public land around the hot springs and to meet standard 2, the public land portion will be fenced and excluded to protect it before the next grazing season.
Team Members

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Les Boothe</td>
<td>Range Management Specialist</td>
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<tr>
<td>Alan Munhall</td>
<td>Fishery Biologist</td>
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<tr>
<td>Erin McConnell</td>
<td>Weed Management Specialist</td>
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Determination

( ) Existing grazing management practices or levels of grazing use on the Cox Individual Allotment promote achievement of significant progress towards the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

(X) Existing grazing management practices or levels of grazing use on the Cox Individual 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.

Tom Rasmussen
Area Manager, Lakeview Resource Area

Date 9/3/05