

Standards for Rangeland Health  
and  
Guidelines for Livestock Grazing Management  
for  
Public Lands in Oregon and Washington

Rangeland Health Assessment Update for the  
Cox Individual Allotment #217

May 2013

The original Cox Individual Allotment Rangeland Health Assessment was conducted in 2005. This assessment included the Fall, South, Lower Fisher Canyon and Estelle Calderwood Pastures. The Fall pasture contains the one Trend Plot (CI-01) remaining in the allotment as the Wool Lake and Robinson Lake pastures were transferred to the O’Keeffe Allotment in 1998. The CI-01 photo trend plot was established in 1972. The current management is to graze the four pastures; fall, south, Estelle Calderwood and Lower Fisher Canyon in conjunction with the state land around Crump Lake. The grazing is in the winter months January and February. There are 74 AUMs in this allotment so the grazing period is about 2-10 weeks. The 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 of the hot springs was fenced and excluded from grazing. In 2013 a site visit to the spring head and the enclosure found the fence is working well and the condition of the riparian vegetation continues to improve.

<b>Rangeland Health Standards for Cox Individual Allotment 2013 Update</b>				
Standard	Met 2005	Not Met 2005	Current Assessment 2013 Met/Not Met	Comments
1. Watershed Function – Uplands	Met	—	Met	The 2005 Rangeland Health Assessment stated that 43% of the allotment is in the Slight Erosion Condition Class and the remaining acres are unknown. The 2005 Rangeland Health Assessment stated that the photo trend plot indicated an improvement in range condition, with more inland saltgrass present in the latest photos when compared to the 1970's photos. The most recent photos (2010) continued to show good cover from inland saltgrass and greasewood with little or no evidence of soil erosion. There appears to be good plant vigor and plants are able to complete their reproductive cycle following grazing use each winter.
2. Watershed Function Riparian/ Wetland Areas		Not Met	Met	The 2005 Rangeland Health Assessment stated that 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 was non-functional based on vegetation condition. The grazing on the spring head was uncontrolled and 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 was in poor condition and modified by diversion. Fence was constructed in 2005 to keep livestock off the spring head. An assessment made in 2007 concluded the vegetation in the spring head had substantially improved with many of the hummocky areas filling in and stabilizing. While the riparian conditions on the spring were still not fully functional, livestock management is no longer the cause. With implementation of the fence the allotment meets the requirements of the S&G assessment.  A site visit in 2013 found the fence intact and functional, and vegetation conditions continuing to trend upward.  There are approximately 50 acres of palustrine wetlands which occur within the allotment all of which are currently rated in Proper Functioning Condition.
3. Ecological Processes	Met	—	Met	According to the 2005 Rangeland Health Assessment the Observed Apparent Trend for the vegetation communities is static in 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 salt grass in the 1991 and 2005 photos then there was in the photos from 1985, 1979, 1976, 1973 and 1972. The trend photos in 2010 further illustrate that the ground cover and vigor of the perennial vegetation is good and the trend is stable or improving
4. Water Quality	Met	—	Met	There are no Oregon listed water quality limited streams in this pasture (Rangeland Health Assessment, 2003).
5. Native, T/E, and Locally Important Species	Met	—	Met	In 2005 the deer and pronghorn populations were healthy and stable 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

				<p>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.</p> <p>This area has been surveyed for Bureau special status plants and no plants were found. In 2005 there were 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 the shore of Crump Lake Narrows. Most of the pepperweed populations were under treatment. In 2012 there are scattered patches of perennial pepperweed, and small infestations of bull thistle and spiny cocklebur currently being managed under the BLM's <i>Integrated Noxious Weed Management Program</i> (BLM 2004) and other weed management guidance</p>
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**Guidelines for Livestock Management**

Existing grazing management practices or levels of grazing use on the Cox Individual Allotment are consistent with the Guidelines for Livestock Grazing Management (August 12, 1997). These pastures have and continue to be grazed during the winter, and are providing growing season rest every year. The grazing season rest enables the grass species to provide adequate cover for infiltration, moisture storage and maintains diverse plants communities.

**2013 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.

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.



Thomas E. Rasmussen, Field Manager

5/13/13

Date

**Cox Individual Allotment Monitoring Summary 2013** (see Lakeview Resource Area Monitoring Files for Raw Data):

In 2013, Cox Individual Allotment was utilized from 3/4-3/14. The Cox Individual Allotment has 74 Active AUMs. The average actual use from 2004-2013 is 63 AUMs and target utilization level is 50%.

**Actual Use and Utilization**

<b>Year</b>	<b>Cox Individual AUMs</b>	<b>% Utilization</b>
<b>2013</b>	74	56%
<b>2012</b>	69	50%
<b>2011</b>	69	
<b>2010</b>	85	34%
<b>2009</b>	37	
<b>2008</b>	18	
<b>2007</b>	75	
<b>2006</b>	68	
<b>2005</b>	64	
<b>2004</b>	74	
<b>Total</b>	633	
<b>Average</b>	63	

Utilization in the Cox Individual Allotment exceeded the target utilization of 50% in 2013. The total active AUMs have been exceeded one time (2010) out of the last 10 years, and use has always been within permit dates. The higher utilization in 2013 is the result of the low plant production due to the extremely dry spring and summer of 2012. There is already excellent plant recovery and regrowth in the spring of 2013. The permittee has turned in actual use each year for the last 10 years.

The Observed Apparent Trend (OAT) the Soil Surface Factor (SSF) was estimated at the Trend Photo Plot in the Fall Pasture of the allotment in 2013 and the results are shown below. This trend plot is representative of the Fall pasture.

<b>Observed Apparent Trend (OAT) at Trend Plot (CI-01) in Fall Pasture</b>	
	<b>2013</b>
<b>Vigor</b>	7
<b>Seedlings</b>	6
<b>Surface Litter</b>	3
<b>Pedestals</b>	5
<b>Gullies</b>	5
<b>Total</b>	26
<b>Rating</b>	<i>Upward</i>

<b>Soil Surface Factor (SSF) at Trend Plot (CI-01) in Fall Pasture</b>	
	<b>2013</b>
<b>Soil Movement</b>	2
<b>Surface Litter</b>	3
<b>Surface Rock</b>	0
<b>Pedestalling</b>	3
<b>Rills</b>	0
<b>Gullies</b>	0
<b>Total</b>	11
<b>Rating</b>	<i>Stable</i>

The OAT (upward trend) and SSF (Stable) ratings determined in 2013 for the Fall pasture illustrated that even in the grazed portions of the allotment, standard 1 of the Standards and Guidelines was still being met.

The Ecological Range Condition ratings for the allotment in the Standards for Rangeland Health Assessment for Cox Individual Allotment (2005) were based on ESI data (1987). There was 37% of the allotment in mid seral stage and 3% in both Early and Late seral stages, with 57% not rated. The photos at the Trend Plot (CI-01) in the Fall pasture indicate the vegetation composition and cover has been stable since the 1970's. This trend plot (CI-01) represents the most consistently grazed portion of the allotment, with moderate utilization levels. The ecological condition of the site at the trend plot remains the same as the original survey. Therefore it can be assumed that the current grazing levels and winter use has either maintained or improved the ecological condition of the allotment since the 2005 RHA.