

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

UPDATE for the  
Coleman Seeding Allotment #432

And

Pike Ranch Allotment #425

June 2014

The Coleman Seeding Allotment is located approximately 29 miles north of Lakeview, OR. It encompasses approximately 5,698 acres of Bureau of Land Management (BLM) managed lands and 5 acres of state lands. The allotment is divided into two pastures; Triangle and South.

The Pike Ranch Allotment is located approximately 18 miles north of Valley Falls, Oregon. It encompasses approximately 5,683 acres of BLM-administered lands and 1,789 acres of other lands. The allotment has one pasture.

The original Coleman Seeding and Pike Ranch Allotment Rangeland Health Assessment (RHA) was conducted in 2003. This document is an update to the original RHA.

**Rangeland Health Assessment Summary for Coleman Seeding Allotment #00432**

Standard	2003 Assessment	2014 Assessment	Comments
1. Watershed Function – Uplands	Not Met in a portion of allotment	<p>Not Met in a portion of allotment</p> <p>Met in the majority of the allotment</p>	<p>Twelve hundred acres of the Coleman Seeding Allotment was not meeting this standard in 2003. Because of the presence of unhealthy perennial grasses with weakened root systems, increasing soil susceptibility to erosion hazard. However, this was not attributed to livestock grazing management. This area had decadent crested wheatgrass with low vigor. The 2003 recommendations included treatments to remove decadent plant material, including burning, mowing, increased grazing (remove decadent material and stimulate plant growth) by salt and protein block placement, change of season to include some winter use and/or implementation of fencing, as specified in the Juniper Fire Complex Emergency Stabilization Plan (BLM 2001). (This plan included aerially seeding of approximately 650 acres within the Triangle Pasture and building approximately 3.5 miles of fence, with the intentions of it becoming a permanent pasture fence. The wildfire area was seeded, but the fence was not constructed).</p> <p>Since 2003 there has been no change in management within the allotment. As a result, the allotment is still not meeting this standard in 2014, but this is <u>not attributed to current livestock grazing management.</u></p> <p>Current management recommendations include implementing a rest rotation grazing system with one pasture of the adjacent state block, where each pasture is rested one of three years, and incorporating winter use. In addition, salt and protein block placement would be used to increase use in these areas. If unsuccessful, then mowing may be</p>

			<p>implemented as funding and workload allow.</p> <p>The majority of the allotment is comprised of crested wheatgrass and is experiencing a stable trend as indicated by data collected at long-term trend monitoring plots, and is meeting this standard.</p>
2. Watershed Function Riparian/ Wetland Areas	Not Applicable	Not Applicable	<p>There are no perennial or intermittent streams or associated riparian areas in this allotment. The National Wetland Inventory dataset indicates there are 4 small freshwater ponds and 2 small freshwater palustrine emergent wetlands within the allotment. However, 5 of these are actually small livestock water development, which do not meet the definition of a wetland. Based upon examination of digital orthophoto quads, one of these areas is actually upland habitat and is not a wetland.</p>
3. Ecological Processes	Not Met in a portion of allotment	<p>Not Met in a portion of allotment –</p> <p>Met in the majority of the allotment</p>	<p>As discussed for Standard 1 above, 1,200 acres of the Allotment did not meet this standard in 2003 because of the presence of unhealthy perennial grasses with weakened root systems, and increasing soil susceptibility to erosion hazard. However, this was not attributed to livestock grazing management. This area had decadent crested wheatgrass with low vigor. The 2003 recommendations Related to this standard were similar to those described for Standard 1 above. Since 2003, there has been no change in management within the allotment. As a result, the allotment is still not meeting this standard in 2014, but <u>this is not attributed to current livestock grazing management.</u></p> <p>The 2003 RHA also noted Mediterranean Sage (<i>Salvia aethiops L.</i>) along the pipeline systems, near water developments, and along the roadsides in the Coleman Hills area. Halogeton (<i>Halogeton glomeratus (m.Bieb.) C.A. Mey.</i>) has also been documented near the water developments and along the roads in the allotment. These noxious weeds are currently monitored and controlled using the Lakeview RA IPM plan. Although not noxious, cheatgrass, tumble mustard and larkspur are species of concern.</p> <p>Current management recommendations to meet this standard are similar to those described for Standard 1 above.</p> <p>The majority of the allotment is experiencing a stable ecological trend as indicated by data collected at long-term trend monitoring plots, and is meeting this standard.</p>

4. Water Quality	Not Applicable	Not Applicable	There are no perennial streams or municipal water sources within the allotment. There is one well located along the northern edge of the allotment that provides water for livestock only.
5. Native, T/E, and Locally Important Species	Met	Met	<p>All of the allotment met this standard in 2003. The 2003 RHA noted: no nesting habitat existed within this allotment for bald eagle, but it was suspected that they are occasional visitors to the area. Burrowing owls have been observed in the allotment. Inventories for burrowing owls were conducted in 2000 and only occasional sightings were documented.</p> <p>Pronghorn antelope were common in this allotment, Mule deer inhabited much of the area, but are widely spread and in low numbers.</p> <p>Special status bats may occur within the allotment, but likely only involve occasional migrating individuals or animals foraging or passing through from adjacent habitat.</p> <p>Potential habitat was noted for kit fox and pygmy rabbit was identified in the 2003 RHA, but neither species have been confirmed.</p> <p>Large portions of the area were found to be unsuitable for sage-grouse habitat due to grassland conversion from past wildfires and/or treatments. Based on Oregon Department of Fish and Wildlife's (ODFW) most recent sage-grouse lek data, there are no occupied leks found within the allotment. However, approximately 2,359 acres of the allotment is currently mapped in sage-grouse Preliminary General Habitat (PGH).</p> <p>There are no special status plant species or habitat within the Coleman Seeding Allotment.</p> <p>Habitat within the Coleman Seeding allotment is supporting an appropriate assemblage of sagebrush steppe wildlife species, no substantial conflicts exist with current livestock grazing management, and therefore the allotment is meeting this standard.</p>

### Rangeland Health Assessment Summary for Pike Ranch Allotment #00425

Standard	2003 Assessment	2014 Assessment	Comments
1. Watershed Function – Uplands	Met	Met	<p>All of the acreage in the Pike Ranch Allotment was meeting this standard in the 2003. Plant composition and community structure of grasses, forbs, and shrubs were what is expected for the site. Available trend data shows that plant cover and the amount and distribution of bare ground is within the range of variability expected for the ecological sites found in the allotment. Large portions of the BLM administered lands within the allotment consist of intermittently flooded, vegetated alkali lake bed playa associated with the north end of Lake Abert discussed under standard two below.</p>
2. Watershed Function Riparian/ Wetland Areas	Not Applicable	Not Applicable	<p>There are no freshwater perennial streams located within the allotment; however, several intermittent drainages are visible on USGS topo maps of the area. The National Wetland Inventory (NWI) identifies about two-thirds of the allotment as a deepwater lake habitat. In reality, this area is inundated 1-2 years out of 10. The water and lakebed soils are highly alkaline, predominantly unvegetated, and are more similar to a saltwater system than a freshwater system. The majority of the emergent and shrub wetlands delineated in the NWI are located on private lands within the allotment.</p>
3. Ecological Processes	Met	Met	<p>All of the acreage in the Pike Ranch Allotment was meeting this standard in the 2003. Plant composition and community structure across the allotment were found to be appropriate for the site. Available trend data shows that organic matter is accumulating in the form of litter and is being incorporated into the soil. Plant roots appear to be occupying the soil profile, stabilizing the soil for what is expected for the site.</p> <p>The 2003 RHA also noted Mediterranean Sage along Abert Rim. Although not noxious, cheatgrass, tumble mustard and larkspur are species of concern.</p> <p>Through 2014, noxious weeds known to be present within the allotment consist of Canada thistle (<i>Cirsium arvense</i> (L.) Scop.) and Mediterranean sage (<i>Salvia aethiopsis</i> L.). It is estimated there are approximately 20 acres of noxious weeds across the allotment. There is also a historic site of Yellow starthistle within the allotment that was not monitored in 2013, but will be during the 2014 field season. All noxious weeds will be monitored and managed under the IPM weed management plan.</p>

4. Water Quality	Not Applicable	Not Applicable	There are no perennial streams or municipal water sources within Pike Ranch Allotment. One well exists on private land and provides livestock water only.
5. Native, T/E, and Locally Important Species	Met	Met	<p>There are no special status plant species or habitat located within the allotment. For this reason, the allotment is meeting this standard with respect to special status plants.</p> <p>The 2003 RHA noted: no nesting habitat existed within this allotment for bald eagle, but it was suspected that they are occasional visitors to the area. No conflicts with peregrine falcons and ferruginous hawks were noted. Burrowing owls have been observed in the.</p> <p>Western snowy plover occur within portions of the allotment associated with the playa lakebed and lake edge surrounding Lake Abert. Monitoring of the snowy plovers has occurred over the last decade. Under an MOU with the private landowner, which expired February 2011, grazing within snowy plover habitat was scheduled to be deferred until after nesting season. The MOU was not closely followed. There is currently no grazing deferment for western snowy plovers within this allotment.</p> <p>There is little Pronghorn antelope use within this allotment. Mule deer inhabit the uplands on the western edge of the allotment, but are in low numbers.</p> <p>Large portions of the area were found to be unsuitable for sage-grouse habitat due to the large amount of salt desert shrub and unvegetated playa habitat. Based on Oregon Department of Fish and Wildlife's (ODFW) most recent sage-grouse lek data, there are no occupied leks found within the allotment, nor are there PPH or PGH habitats present.</p> <p>Special status bats may occur within the allotment, but likely only involve occasional migrating individuals or animals foraging or passing through from adjacent habitat.</p> <p>Potential for habitat was identified for kit fox and pygmy rabbits in the 2003 RHA, but these species have not been confirmed.</p> <p>Habitat within the Pike Ranch Allotment is supporting an appropriate assemblage of sagebrush steppe wildlife species, no substantial conflicts exist with current livestock grazing management, and therefore the allotment is meeting this standard.</p>

**2014 Team Members**

Name	Title
Jayna Ferrell	Rangeland Management Specialist
Theresa Romasko	Assistant Field Manager
Grace Haskins	Weed Management Specialist
Jimmy Leal	Fisheries Biologist
Todd Forbes	Assistant Field Manager
Ian Grinter	Botanist

**2014 Determination**

Existing grazing management practices on the Coleman Seeding and Pike Ranch Allotment promote achievement of, or significant progress towards meeting the Oregon Standards for Rangeland Health and conform with the applicable Guidelines for Livestock Grazing Management.

Existing grazing management practices on the Coleman Seeding and Pike Ranch Allotment will require modification or change prior to the next grazing season to promote achievement of, or make significant progress towards meeting the Oregon Standards for Rangeland Health and conform with the applicable Guidelines for Livestock Grazing Management.



Thomas E. Rasmussen, Field Manager

6/9/14

Date

## Monitoring Summary:

### Coleman Seeding Allotment #00432 Actual Use and Utilization

Year	South Pasture AUMs	% Utilization (S)	Triangle AUMs	% Utilization (T)	Total AUMs (S+T)	TNR AUMs	Active AUMs
2013	687	30	196	28	<b>883</b>		920
2012	474		428		<b>902</b>		920
2011	354	45	553	47	<b>907</b>		920
2010	684	42	450	48	<b>1134</b>	214	920
2009	387	37	524	37	<b>911</b>		920
2008	784	39	330	43	<b>1114</b>	194	920
2007	495	41	414	39	<b>909</b>		920
2006	759	51	907	49	<b>1666</b>	746	920
2005	1196		764	13	<b>1960</b>	1040	920
2004	685	28	810	33	<b>1495</b>	575	920
2003	915		750	23	<b>1665</b>	745	920
2002	872	26	Rest		<b>872</b>		920
2001	699		825		<b>1524</b>	604	920
2000	759	60	615	58	<b>1374</b>	454	920
1999	791	23	835	36	<b>1626</b>	706	920
1998	1037		Rest	Rest	<b>1037</b>	117	920
1997		30	857	70	<b>857</b>		920
1996	501		754	60	<b>1255</b>	335	920
1995	368	20	421	26	<b>789</b>		920
1994	1083	70	612	51	<b>1695</b>	775	920
1993				47	<b>0</b>		
1992		70			<b>0</b>		
1991		64		69	<b>0</b>		
1990		60		Rest	<b>0</b>		
Avg 10 yrs	650.5		537.6		1188.1		
Overall Average	712.1		613.6		1228.8	542.0	

Each Pasture of the Coleman Seeding Allotment has been used generally from the first of February through the middle of May each year. Up until 2010, the permittee was authorized TNR on a fairly consistent basis. Utilization has not exceeded the target utilization level of 50 percent within the last ten years. Use has been within the permit dates over the last ten years.



**Pike Ranch Allotment #00425 Actual Use and Utilization**

Year	Pike Ranch AUMs	% Utilization
2013	95	30
2012	61	
2011	95	
2010	95	
2009		
2008		
2007	77	
2006	90	
2005	115	
2004	95	
2003		
2002		
2001		
2000		
1999		
1998		
1997		
1996		
1995		
1994	77	33
1993	94	
1992		
1991		
1990		
Avg 10 yrs	90.375	
Overall Average	90.4	

The Pike Ranch has been used within the general dates of June first through November 17. The majority of the feed livestock use is located on private property within the allotment. A large amount of the BLM administered land within the allotment is an intermittently flooded alkali lake bed at the north end of Lake Abert. This allotment along with the private lands with it were a part of the now expired MOU, which outlined grazing use on private lands in the Pike Ranch and XL Allotments for wildlife habitat enhancement, specifically snowy plover. This MOU specified dates the private land parcels (within the Pike Ranch Allotment) could be used, and were not always within the permit dates of 8/20-11/15. This explains use in the Pike Ranch occurring within permit dates 5 out of the last 10 years. Use has been within AUMs 9 of the last 10 years. Utilization was recorded one year, and did not exceed the target utilization level of 50%.

## Coleman Seeding Allotment Trend Plot Summaries

### Trend Plot C-1 (Photo and Pace 180) - *Stable* South Pasture

#### Observed Apparent Trend (OAT)

	2006	2009	2012
<b>Vigor</b>	7	7	7
<b>Seedlings</b>	7	7	5
<b>Surface Litter</b>	5	5	5
<b>Pedestals</b>	5	5	4
<b>Gullies</b>	5	5	5
<b>Total</b>	29	29	26
<b>Rating</b>	<i>Upward</i>	<i>Upward</i>	<i>Upward</i>

#### %Cover

	2006	2009	2012
<b>Bare Ground</b>	33	44	22
<b>Litter</b>	28	22	33
<b>Rock</b>	4	4	3
<b>Gravel</b>	0		16
<b>Vegetation</b>	35	30	26
<b>Crust/Moss</b>	0		

#### % Composition

	2006	2009	2012
<b>AGCR</b>	88	91	91
<b>POSE</b>	3	0	6
<b>Mustard</b>	5	0	
<b>CHVI</b>	4	4	3
<b>ARTR</b>	0	4	0

The observed apparent trend at this site was upward in 2006, 2009, and 2012. The percent bareground increase between 2006 and 2009, and decreased in 2012. The percent cover litter remained stable from 2006 to 2009, and increased in 2012. Percent cover vegetation remained stable between 2006 and 2009, but decreased in 2012. 2012 was noted to be a dry year, with low precipitation. The percent composition remained stable between years.

Years photos were taken: 2012, 2009, 2006, 1990, 1985, 1984, 1983, 1980, 1977, 1972, 1971, 1970, 1969, 1966.

In 1966 the general photo of this trend site shows dead sagebrush with a fairly healthy understory of crested wheatgrass. This area was sprayed and seeded in 1963. 1969 through 1985 shows the progression of the sagebrush skeletons decomposing, and a stable crested wheatgrass understory. The appearance of the seeding changes slightly throughout that timeframe, based on the grazing use, and the time of year the photos were taken. Sagebrush skeletons are no longer visible in the 1990 photos, and a low number of shrubs are visible and have become established. The original trend plot was unable to be found in 2006, so a new plot was established as close to the original location as possible.

Photo analysis of the general landscape photos shows a stable trend between 1990 and 2006. Although taken at different times of year, the 2006 to 2009 photo show a stable trend, with more litter occurring in the 2006 photos. The 2009 photos were taken a month earlier than the 2012 photos. The 2012 photos show more litter accumulation. Brush, particularly rabbitbrush, is slowly increasing at this site. Photo analysis indicates that this trend site is in a stable.

Overall, trend at this site (CS-1) is stable.

**Trend Plot C-2 (Photo and Pace 180) - Stable  
South Pasture**

**Observed Apparent Trend**

	2007	2009	2012
<b>Vigor</b>	7	7	3
<b>Seedlings</b>	7	7	4
<b>Surface Litter</b>	5	5	4
<b>Pedestals</b>	5	5	4
<b>Gullies</b>	5	5	5
<b>Total</b>	29	29	20
<b>Rating</b>	<i>Upward</i>	<i>Upward</i>	<i>Stable</i>

**%Cover**

	2007	2009	2012
<b>Bare Ground</b>	16	37	24
<b>Litter</b>	33	23	36
<b>Rock</b>			1
<b>Gravel</b>			14
<b>Vegetation</b>	49	38	25
<b>Crust/Moss</b>	2	2	0

**% Composition**

	2007	2009	2012
<b>AGCR</b>	83	77	92
<b>CHNA</b>	3	1	
<b>CHVI</b>			1
<b>ARTR</b>	14	22	7

This trend site was established in 2007 within the South Pasture of the Coleman Seeding Allotment. The observed apparent trend at this site was upward in 2007 and 2009, and rated stable in 2012. Percent cover bare ground increased between 2006 and 2009, and decreased between 2009 and 2012. Percent cover litter was down in 2009 as compared to the other two years. In 2012, hits occurred on rocks and gravel that did not occur in other years. Percent composition of crested wheatgrass has varied between years, but overall has remained high. The percent composition of shrubs indicates that shrubs have decreased in 2012 as compared to previous years. This variation is due to pace 180 transect being read in a slightly different location. Photo analysis, which is discussed below, indicates that the shrub cover has remained stable at this site from 2007 through 2012. Trend data indicates a stable trend at this site.

Year's photos were read: 2012, 2009, and 2007.

This 2007 photos were taken later in the year as compared to the other two years. 2012 shows excellent growth of crested wheatgrass plants. This site has remained stable over the last five years. With differences in use and time of year the photographs were taken.

Overall, trend at this site (CS-4) is stable.

**Trend Plot C-4 (Photo) - Stable**  
**Triangle Pasture**

**Observed Apparent Trend**

	<b>2003</b>	<b>2009</b>	<b>2012</b>
<b>Vigor</b>	10	8	6
<b>Seedlings</b>	6	7	8
<b>Surface Litter</b>	3	4	4
<b>Pedestals</b>	5	4	4
<b>Gullies</b>	5	5	5
<b>Total</b>	31	28	27
<b>Rating</b>	<i>Upward</i>	<i>Upward</i>	<i>Upward</i>

Years photos were taken: 2012, 2011, 2009, 2006, 2003, 1996, 1985, and 1982.

This photo plot was established in 1982 to pictorially document the increased utilization in the south end of the triangle pasture due to completion of the pipeline, and trough installation. This photo plot is located extremely close to the trough and taken off the pasture fence line. The OAT rating for this site in 2003, 2009, and 2012 was upward. Rabbit brush and sagebrush has increased between 1982 and 1996 at this site, and has continued to increase through 2012. The photos show different levels of utilization and regrowth throughout the years. Considering this trend plot's location to water and the pasture fence line, it has a stable trend over the years.

Overall, trend at this site (CS-4) is stable.

**Trend Plot C-5 (Photo and Pace 180) - Stable  
Triangle Pasture**

**Observed Apparent Trend**

	2003	2006	2009	2011	2012
<b>Vigor</b>	10	7	7	8	6
<b>Seedlings</b>	10	7	7	7	8
<b>Surface Litter</b>	3	4	5	4	5
<b>Pedestals</b>	5	5	5	4	4
<b>Gullies</b>	5	5	5	5	5
<b>Total</b>	35	28	29	28	28
<b>Rating</b>	<i>Upward</i>	<i>Upward</i>	<i>Upward</i>	<i>Upward</i>	<i>Upward</i>

**%Cover**

	2006	2009	2011	2012
<b>Bare Ground</b>	37	32	9	25
<b>Litter</b>	20	20	21	31
<b>Rock</b>	3	3	6	6
<b>Gravel</b>				4
<b>Vegetation</b>	40	39	61	34
<b>Crust/Moss</b>		6	3	0

**% Composition**

	2006	2009	2011	2012
<b>AGCR</b>	89	87	85	92
<b>POSE</b>	2	4	8	4
<b>Astrag</b>				
<b>CHVI</b>	6	7	7	4
<b>ARTR</b>	2	1		
<b>CHNA</b>	1			

This plot was reestablished in 2006 bare ground has remained fairly stable with the exception of 2011. Monitoring notes indicate the spring of 2011 was cold and wet, preceded by good winter precipitation. Percent cover in 2011 was high compared to other years. Percent composition of crested wheatgrass has remained stable from 2006 through 2012, with a slight increase in 2012.

Years Photos were taken: 2012, 2011, 2009, 2006, 2003, 1990, 1985, and 1968.

Photo analysis indicates between 1968 and 1985, the crested wheatgrass seeding became well established with a decrease in cheatgrass. There was abundance of old feed in the pasture at the time the 1985 photos were taken. Rabbit brush and some sagebrush established between 1985 and 1990. The vegetation in the 1990 photos appears slightly more vigorous than the 2006 photos. However, looking at the mean annual precipitation, 1990 received 13.7 inches and 2006 received 9.99 inches. General photos of the area were taken in 2003, however, the original trend plot was not found. The original trend plot was unable to be found in 2006, so a new plot was established as close to the original location as possible. Photo analysis indicates this plot is stable from 2006 through 2012.

Overall, trend at this site (CS-4) is stable.

## Pike Ranch Allotment Trend Plot Summaries

### Trend Plot PR-01 (Photo and Pace 180) - *Stable* Pike Ranch Allotment

#### Observed Apparent Trend

	2012
Vigor	8
Seedlings	9
Surface Litter	3
Pedestals	4
Gullies	5
Total	29
Rating	<i>Upward</i>

#### %Cover

	2012
Bare Ground	55
Litter	18
Rock	1
Gravel	12
Vegetation	14
Crust/Moss	

#### % Composition

	2012
SAVE	26
Bud Sage	16
Salt brush	30
unknown	28

The allotment is located at the head of Abert Lake and a large portion of it is lakebed. The 2003 RHA noted that 33% of the allotment is alkali lakebed. This monitoring site was established in 2012. Prior to 2012, the Pike Ranch Allotment did not have an established monitoring site. The site was established in the northeastern portion of the allotment. This area is salt desert shrub type, with some squirrelltail noted although not recorded under percent composition. The observed apparent trend was upward in 2012. The percent cover is about typical for this range type. Based on the photos and the available trend data, the overall trend at this site is stable.

