

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

UPDATE for the  
Middle and North Abert Pastures of the  
XL Allotment # 427

June 2014

The XL Allotment is located approximately 8 miles north of Valley Falls, OR. It encompasses approximately 42,671 acres of Bureau of Land Management (BLM) managed lands and 3,507 acres of other lands within the allotment. The allotment is divided into three pastures; North Abert, Middle Abert, and Caves Springs.

The original XL Allotment Rangeland Health Assessment (RHA) was conducted in 2003 for the entire allotment. This document is an update to the original RHA, but will only include the Middle and North Abert Pastures.

**Summary of Rangeland Health Assessment for XL Allotment #00427**

Standard	2003 Assessment	2014 Assessment	Comments
1. Watershed Function – Uplands	Not Met on a portion of the allotment	Not Met on a portion of the pastures  Met on the majority of the pastures	<p>The 2003 RHA found approximately 4146 acres of the North and Middle Abert Pastures were dominated by cheatgrass and not meeting this standard. This introduced shallow-rooted annual species increases soil susceptibility to erosion hazard as compared to cover by native perennial deep-rooted plants. The main cause of cheatgrass invasion was the Abert Lake (1971) and Sharptop (1983) wildfires. This area is still dominated by cheatgrass and not meeting this standard in 2014; However, this is not attributed to current livestock grazing management. A combination of noxious weed treatment and seeding is recommended in this area, as funding and workload allows.</p> <p>The remainder of the allotment is meeting this standard, and is experiencing a stable trend as indicated by data from long-term trend monitoring plots.</p> <p>The majority of the pastures are dominated by crested wheatgrass</p>
2. Watershed Function Riparian/ Wetland Areas	Not Applicable	Not Applicable	There are no perennial streams or wetlands on BLM administered lands within the pastures.
3. Ecological Processes	Not Met on a portion of the allotment	Not Met on a portion of the pastures  Met on the majority of the pastures	As discussed under Standard 1, the 2003 RHA found approximately 7,400 acres of the XL Allotment was dominated by cheatgrass due to past wildfire and was not meeting this standard. This was not attributed to current livestock grazing management. This area is still dominated by cheatgrass and not meeting this standard in 2014 and is not attributed to current livestock grazing management. A combination of noxious weed treatment and seeding is recommended in this area, as funding and workload allows.

			<p>The 2003 RHA also noted Mediterranean Sage along the pipeline systems and bordering the west side of Lake Abert. The current noxious weeds being managed within the allotment are Mediteranean sage (<i>Salvia aethiopsis L.</i>) and musk thistle (<i>Carduus nutans</i>). These species are being managed under the Lakeview IPM Weed plan. Although not noxious, cheatgrass, tumble mustard and larkspur are species of concern in the area.</p> <p>The remainder of the allotment is currently meeting this standard, and is experiencing a stable trend as indicated by data from long-term trend monitoring plots.</p>
4. Water Quality	Not Applicable	Not Applicable	There are no perennial streams or municipal drinking water sources on BLM administered lands within the pastures.
5. Native, T/E, and Locally Important Species	Met	Met	<p>The 2003 RHA notes habitat for one special status plant species, <i>Plagiobothrys salsus</i> (desert allocarya) present in the Cave Springs Pasture of the allotment. However, no special status plant species or habitat is known to occur within the Middle Abert and North Abert Pastures. For this reason, these pastures continue to meet the standard with respect to special status plant species.</p> <p>The 2003 RHA noted: no nesting habitat existed for bald eagle, but was suspected that they are occasional visitors to the area. Nesting habitat is available for peregrine falcons and ferruginous hawks on a few cliffs within the allotment. These sites were surveyed in 1999 and none were found. No surveys have been conducted for ferruginous hawk, although foraging habitat exists within the allotment. Two nesting burrows of burrowing owls have been recorded in the allotment.</p> <p>Western snowy plover occur within portions of the allotment associated with the playa lakebed and lake edge surrounding Lake Abert and XL Spring. Monitoring has occurred over the last decade. Under an MOU with the private landowner, which expired in February 2011, grazing within snowy plover habitat was deferred until after nesting season. There is currently no grazing deferment for western snowy plovers within this allotment.</p> <p>Bighorn sheep inhabit the southern portion of the XL Allotment; however, this area lies outside of the North and Middle Abert pastures considered in this assessment. Pronghorn antelope are common in this</p>

		<p>allotment. Mule deer inhabit 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 for pygmy rabbit and kit fox was identified in the 2003 RHA, but neither species has been confirmed in the allotment to date.</p> <p>Three sage-grouse lek sites were noted on the western edge of this allotment in 2003, but are located outside the pastures considered in this allotment. Based on Oregon Department of Fish and Wildlife's (ODFW) most recent sage-grouse lek data, there are no occupied leks found within the North and Middle Abert Pastures being evaluated. Large portions of the area were found to be unsuitable for sage-grouse habitat due to grassland conversion from past wildfires. However, approximately 6,875 acres of the North and Middle Abert pastures are currently mapped in sage-grouse Preliminary General Habitat (PGH).</p> <p>Habitat within the North and Middle Abert Pastures 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>
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**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
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**2014 Determination**

( ) Existing grazing management practices on the XL 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 XL 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*

Thomas E. Rasmussen, Field Manager

*6/9/14*

Date

## Monitoring Summary:

### XL Allotment #00427 Actual Use and Utilization

Year	Middle Abert AUMs	% Utilization (MA)	North Abert AUMs
2013	2006*		1471
2012	1496	57	
2011	Non-Use*		1433
2010	1367	6	1497
2009	1513	25	
2008			1461
2007	Non-Use*		1473
2006	2417	42	
2005			1880
2004	1474*		2022
2003	2481	25	
2002			1469
2001	1359		2135
2000	1456	11	
1999			1348
1998	1636*	13	1908
1997	1985	13	
1996			2437
1995		45	
1994			491
1993			
1992			
1991			
1990			
Avg 10 yrs	1698.25		1605.29
Overall Average	1759.3		1536.9

\*Use by the other permittee within the allotment.

The XL Allotment has been used as a three pasture rest rotation grazing system for years. Each pasture is grazed two years in a row and rested the third year. This is a common allotment with two permittees, who share the Middle Pasture. Utilization has been within the target utilization of 50% all but once in the Middle Pasture, and once in the North Pasture, by 1%. Use has been within permit dates the last 10 years.

## Trend Plot MA-2 (Photo and Pace 180) - Stable North Abert Pasture

### Observed Apparent Trend

	2010	2012
Vigor	7	6
Seedlings	6	5
Surface Litter	3	4
Pedestals	4	4
Gullies	5	5
Total	25	24
Rating	Stable	Stable

### %Cover

	2010	2012
Bare Ground	14	22
Litter	19	10
Rock	18	20
Gravel	0	5
Vegetation	41	39
Crust/Moss	8	4

### % Composition

	2010	2012
AGCR	93	98
Astragalous	2	1
SAVE	4	1
CHVI	1	

This trend site was originally a photo site. A pace 180 transect was added to the site in 2010, and it was reread in 2012. Two years of comparative trend data has been collected at this site. The observed apparent trend was stable at this trend site in 2010 and 2012. Bare ground increased in 2012 as compared to 2010. In 2010, percent cover litter and vegetation was higher than in 2012. Precipitation data indicates that the year 2010 received approximately an inch more rain than 2012. The percent composition remained nearly unchanged when comparing 2010 and 2012.

Year's photos were taken: 2012, 2010, 2007, 1990, 1985, 1984, 1983, 1980, 1976, 1975, 1974, and 1973.

This photo station is located in an area that was seeded in the fall of 1971. The file noted many of the AGCR seedlings in this area were damaged by blowing sand during the spring of 1972. Species in the

area include scattered stands of crested wheatgrass, thistle, cheatgrass, squirrelltail, and annual weeds. The 1973 photo shows the landscape after wind erosion had occurred. They also show a large amount of bare ground along with fairly sparse crested wheatgrass plants. The 1974 photos show an increase in ground cover, although it appears that the majority of the cover is Russian thistle and annual forbs with some crested wheatgrass occurring. The 1975 and 76 photos show less Russian thistle and more mature crested wheatgrass plants. In the 1980 photos, the crested wheatgrass seeding has matured since the 1976 photos and there is less Russian thistle and less bare ground. A few shrubs have also appeared in the 1980 photos. In 1983, ground cover has increased, especially with litter. Crested wheatgrass plants appear healthy and vigorous, with the previous year's growth remaining. Cheatgrass is visually more abundant in 1983. 1984 and 1985, appear stable with differences showing in the time of year the photos were taken. The 1990 photos were taken in August and the amount of shrubs, mainly greasewood, has increased since 1985. There is almost no Russian thistle by this point. The 2007 photos were taken in June one or two weeks after the cattle were removed. Crested wheatgrass plants appear abundant, although not overly vegetative, in the photos as compared to previous years. Precipitation data shows that 1990 received approximately 8 more inches in precipitation as compared to 2007. 2007 through 2012 appear to be stable, with no detectable change. Comparing these years with 1990, there is a slight increase and maturation of shrubs. Crested wheatgrass plants have slightly increased filling in some interspaces slightly decreasing bare ground, especially when comparing the 2007-2012 photos with the older photos. Cheatgrass is not a detectable species in the 2007-2012 photos, but is noted to be present.

Overall, trend at this site (MA-2) is stable.

### **Trend Plot MA-3 (Photo and Pace 180) - Stable Middle Abert Pasture**

#### **Observed Apparent Trend**

	<b>2012</b>
<b>Vigor</b>	5
<b>Seedlings</b>	5
<b>Surface Litter</b>	3
<b>Pedestals</b>	5
<b>Gullies</b>	5
<b>Total</b>	23
<b>Rating</b>	<i>Stable</i>

#### **%Cover**

	<b>2012</b>
<b>Bare Ground</b>	45
<b>Litter</b>	15
<b>Rock</b>	5
<b>Gravel</b>	7
<b>Vegetation</b>	27
<b>Crust/Moss</b>	1

#### **% Composition**

	<b>2012</b>
<b>SIHY</b>	22



<b>Phlox</b>	52
<b>CHVI</b>	1
<b>ARTR</b>	25

This monitoring plot was established in 2012 to add a long-term photo and pace 180 trend monitoring site to the Middle Pasture of the XL Allotment. The observed apparent trend at this site was stable. Notes from the file state that the pace 180 transect ends just before the crested wheatgrass seeding begins. This trend site is located within native vegetation. Percent cover of bare ground is 45, with litter at 15, and vegetation at 27. Without comparative trend data, it is difficult to detect a trend at this site. However, photo analysis, OAT, and percent cover and composition all indicate that trend is stable at this site.

Overall, trend at this site (MA-3) is stable.

### **Trend Plot XL-4 (Photo) - Stable North Abert Pasture**

#### **Observed Apparent Trend**

	<b>2012</b>
<b>Vigor</b>	4
<b>Seedlings</b>	2
<b>Surface Litter</b>	4
<b>Pedestals</b>	3
<b>Gullies</b>	5
<b>Total</b>	18
<b>Rating</b>	<i>Stable</i>

Photos were taken: 2012 and 2010.

This photo monitoring site was established in 2010 to add an additional photo monitoring site to the North Pasture, particularly in the northern portion of the North Pasture. Observed apparent trend at this site was stable in 2012. The largest detectable change between 2010 and 2012 is the grazing use. 2010 was a graze year for the North Pasture, and 2012 was a rested year. The 2012 photos show an amount of previous year's growth remaining. However, photo analysis between years indicates that this trend site is stable.

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

## Trend Plot XL-5 (Photo and Pace 180) - *Stable* North Abert Pasture

### Observed Apparent Trend

	2010	2012
Vigor	8	4
Seedlings	8	7
Surface Litter	4	4
Pedestals	4	4
Gullies	5	5
Total	29	24
Rating	<i>Upward</i>	<i>Stable</i>

### %Cover

	2010	2012
Bare Ground	10	23
Litter	32	20
Rock	16	16
Gravel	0	0
Vegetation	37	41
Crust/Moss	5	0

### % Composition

	2010	2012
AGCR	96	95
Phlox	4	4
Astragalus	0	1

XL-5 located in the North Abert Pasture of the XL Allotment. This trend plot was established in 2010 to add another long-term trend monitoring site to the North Abert Pasture. The observed apparent trend was rated upward in 2010, and stable in 2012. The pace 180 data shows the percent cover bare ground increasing between years. 2010 precipitation data recorded approximately an inch more precipitation than in 2012. The percent cover of litter decreased in 2012 from 2010, the percent cover in vegetation changed slightly. The percent composition of crested wheatgrass plants remained almost unchanged between years, with a minor difference in the percent composition astragalus.

Photos were taken: 2012 and 2010.

Just as XL-4, XL-5 photo analysis indicates the largest detectable change between 2010 and 2012 is the grazing use. 2010 was a graze year for the North Pasture, and 2012 was a rested year. The 2012 photos show an amount of previous year's growth remaining, and a slight increase in litter as compared to 2010. Photo analysis between 2010 and 2012 indicate a stable trend at this site.

Overall, trend at this site (XL-5) is stable.

