

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

**Rangeland Health Assessment Update for the
Center East, Center West, South Pastures
of the
Abert Seeding Allotment #0522**

1/23/13

The Rangeland Health update presented below is based on field visits and monitoring data collected within the Abert Seeding Allotment (see Appendix A). There are six long-term trend monitoring plots located within the Center West, Center East, and South Pastures of the Abert Seeding Allotment. These three pastures are addressed in Abert Seeding and Rabbit Basin Allotment Permit Renewal Environmental Assessment DOI-BLN-OR-1050-2013-0003-EA.

Standards for Rangeland Health for Livestock Grazing Management Determinations for the Abert Seeding Allotment.

Standard	Met 2003	Not Met 2003	Current Assessment 2012	Comments
1. Watershed Function – Uplands	Center West, Center East, South, Leehmann Pastures are meeting Standards.	200 acres of the Highway ¹ Pasture not meeting Standards.	Center East, Center West, South, and Leehmann Pastures are meeting Standards. Livestock Grazing (Recommendation is to reduce spring grazing in pasture not meeting standard).	The three pastures (Center East, Center West, and South) of the Abert Seeding Allotment being evaluated under this EA are meeting standards. Plant composition and community structure of grasses, forbs, and shrubs are what is expected for the site. There is good plant vigor and plants are able to complete their reproductive cycle following the grazing rotation. Organic matter in the form of plant litter is accumulating and being incorporated into the soil. 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 applicable pastures of the allotment.
2. Watershed Function Riparian/Wetland Areas	Not Applicable	---	---	There are no perennial streams or wetlands within this allotment.
3. Ecological Processes	Center West, Center East, South, Leehmann Pastures are meeting Standards.	200 acres of the Highway ¹ Pasture not meeting Standards.	Center East, Center West, South, and Leehmann Pastures are meeting Standards. Livestock Grazing (Recommendation is to reduce spring grazing in pasture not meeting standard).	The three pastures (Center East, Center West, and South) of the Abert Seeding Allotment being evaluated under this EA are meeting standards. There is diverse plant composition and community structure across the allotment. 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, and there is good plant composition and community structure throughout the allotment.
4. Water Quality	Not Applicable	---	---	There are no perennial streams or wetlands within this allotment
5. Native, T/E, and Locally	All Pastures are meeting Standards.	---	All Pastures are meeting	The Abert Seeding Allotment is meeting this standards. Peregrine falcons and ferruginous

Standard	Met 2003	Not Met 2003	Current Assessment 2012	Comments
Important Species			Standards.	hawk nesting habitat is available on the allotment. Big horn sheep habitat exists within the allotment, as well as pronghorn antelope and mule deer. Restoration work would be needed to return areas previously burnt by wildfire to shrub covered sage-grouse habitat. However, some areas are nearing natural recovery to nesting habitat. There are no major conflicts between wildlife species mentioned above and livestock grazing.

¹The 200 acres in the Highway Pasture has a reduced perennial grass understory which may be attributed to yearly spring grazing, and reducing the amount of spring grazing is recommended. However, the Highway Pasture is not being analyzed under this EA. This pasture is used by another permittee and will be addressed when that permit comes up for renewal.

STANDARD 1 - Upland Watershed -Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.

Standard 1 was not met by the Abert Seeding Allotment in 2003 due to the loss of perennial grass in the understory of 200 acres in the Highway Pasture. A change in grazing management, providing more growing season rest has resulted in significant progress towards the attainment of this standard. This pasture is not part of the current permit being evaluated. This area will be further evaluated for Rangeland Health Standards during the permit renewal process for the permittee that operates in the two remaining pastures of the Abert Seeding Allotment (Highway Pasture and Leehman Pasture)

STANDARD 2 -Riparian/Wetland-Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

This standard is not applicable to the assessment area because there are no perennial streams or wetlands.

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 hydrologic cycle.

Standard 3 was not met by the Abert Seeding Allotment in 2003 due to the loss of perennial grass in the understory of 200 acres (see Standard #1 above). A change in grazing management, providing more growing season rest has resulted in significant progress towards the attainment of this standard. Indicators used to evaluate this standard include animal populations, vegetative composition, presence of weed species,

ecological status, OAT, current plant composition as compared to a defined Potential Natural Community (PNC) for the soil type and precipitation zone. SSF, OAT, Range Site, Seral Stage and PNC are from the Lake County ESI survey which is preliminary at this time. Data is used for estimation purposes only. See tables below for data regarding Observed Apparent Trend and vegetation cover.

STANDARD 4: NA

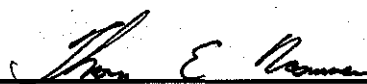
STANDARD 5: Native, T&E, and Locally Important Species

When taking into account the overall result of the current vegetation monitoring studies, there is a lack of plant diversity, presence of non-native species, and lack of cover for T&E species mainly due to the crested wheatgrass seeding.

2012 Determination

(X) Existing grazing management practices or levels of grazing use on the Center East, Center West, and South Pastures of the Abert Seeding 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 Center East, Center West, and South Pastures of the Abert Seeding 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

Date

Appendix A: Abert Seeding Allotment

Monitoring Summary 2012 (see Lakeview Resource Area Monitoring Files for Raw Data):

Actual Use and Utilization

Year	Center East AUMs	% Utilization (CE)	Center West AUMs	% Utilization (CW)	South AUMs	% Utilization (S)	Total AUMs
2012		11	170	12	418	40	588
2011	139	19			300	19	439
2010	212	49	296	31			508
2009			595	42	403	44	998
2008	88	36			338	62	426
2007	201		311	70			512
2006	257			50	344	48	601
2005	289	37			451	37	740
2004			318	63	577	61	895
2003	336	70	412	73			748
2002	348	47		65	499	44	847
2001			539		362		901
2000	278	60			855	43	1133
1999			997				997
1998			380		607	60	987
1997	345	60			407	42	752
1996			613	52	325		938
1995		75	99		1034	47	1133
1994					604	55	604
1993				59			0
1992		75	615		296		911
1991					255	65	255
1990		60	366		55		366
1989			485		346	72	831
1988							0
1987						57	0
1986				20			0
1985		50				69	0
1984			1040				1040
1983			751		387		1138
1982							0
1981							0
1980					845		845
1979			1554				1554

Year	Center East AUMs	% Utilization (CE)	Center West AUMs	% Utilization (CW)	South AUMs	% Utilization (S)	Total AUMs
1978			887		976		1863
1977					1032		1032
1975					1203		1203
1971							0
1969							0
1968							0
1967**					1027		1027
Avg 20yrs	249.3		445.4		488.8		663.8
Average	249.3		579.3		578.8		654.2

2003-2012 Average Actual Use AUM's: 645.5

Observed Apparent Trend:

OAT	CenterEast	CenterWest	CenterWest	South	South	South	South	South
	AS-12	AS-02	AS-02	AS-03	AS-03	AS-08	AS-10	AS-11
	2012	2012	2010	2012	2010	2012	2012	2012
Vigor	5	8	6	8	6	6	7	6
Seedlings	4	8	6	4	6	6	5	5
Surface Litter	4	5	4	5	4	5	5	4
Pedestals	5	3	4	4	3	4	4	3
Gullies	5	5	5	5	5	5	5	5
Total/35	23	29	25	26	24	26	26	23
Rating	Stable	Upward	Stable	Upward	Stable	Upward	Upward	Stable

OAT	Average
Vigor	7/10
Seedlings	6/10
Surface Litter	5/5
Pedestals	4/5
Gullies	5/5 NA
Total/35	25
Rating	Stable

Observed apparent trend studies began in the Abert Seeding allotment in 2010. Prior to 2010 photo monitoring sites were used to monitor changes in vegetation growth. OAT ratings show an average

score of 25/30 which represents a Stable trend overall. Plant vigor represented an average score of 7 out of 10 with crested wheatgrass monocultures representing the key forage species. Seedlings of key forage species were rated at a 6 out of 10 overall with crested wheatgrass monocultures representing the key forage species. This score also accounts for a large presence of Mediterranean sage and cheatgrass invasive species. Surface litter was given an average rating of 5/5 with little or no movement of litter and little visible bare ground. The category of pedestaling was given an average score of 4/5. This score represents the commonality of fine or sandy soil and also the natural pedestaling of bunch grasses. Gullies were rated as 5/5 or Not Applicable due to the lack of gullies across the allotment. Removing the "gullies" category and adjusting the score was found to produce the average same result overall.

Plant Composition based on Pace 180 vegetation monitoring:

P-180	CenterEast	CenterWest	CenterWest	South	South	South
	AS-12	AS-02	AS-02	AS-03	AS-03	AS-11
	2012	2012	2010	2012	2010	2012
AGCR	34	24	49	72	87	
POSE		25	34	1	2	12
STTH		3				11
PSSP						2
ELEL						1
BRTE	3	1	1	11	4	
ARTR	7				1	5
CHNA		4	10			
CHVI		6	2		1	4
Forbs		0	4		5	
Med Sage	1					
Bare Ground	24	21	28	13	17	29
Litter	27	14	12	41	22	16
Rock	1	1	2	4	4	20
Gravel	3	1	0	0	0	0
Vegetation	45	63	55	42	57	35
Moss/Crust	0	0	3	0	0	0

Plant Composition based on Pace 180 vegetation monitoring:

	Average
Bare	22
Litter	22
Rock	5
Gravel	1
Vegetation	50
Moss/Crust	1

AGGR	POSE	STTH	PSSP	ELEL	BRTE	ARTR	GHNA	CHVI	Forbs	Med Sage
53.2	14.8	7.0	2.0	1.0	4.0	4.3	7.0	3.3	3.0	1.0

Pace 180 vegetation studies were completed at trend monitoring site in 2012 and an additional study in 2010 in AS-03. The Abert Seeding allotment is dominated by *Agropyron cristatum*, crested wheatgrass, as the key forage species. The average ground cover of all vegetative species was 50% within the allotment. Of that number, 53% represented crested wheatgrass and 4% represented *Bromus tectorum*. Common vegetative species found amongst a typical rested wheatgrass seeding consisted of *Chrysothamnus viscidiflorus* and *Bromus tectorum*. Bare ground was often very abundant in crested wheatgrass seedings with an average score of 22% ground cover. Vegetative litter accounted for 22% of ground cover due to the abundance of crested wheatgrass feed left over from the previous growing season.

Line and Intercept for Shrub Cover:

Line and Intercept for % shrub cover	South
	AS-11
	2012
CHVI	7
ARTR	14
Average Shrub Height	1-3ft
Average % Cover	23

Within the Abert Seeding allotment, 10% of the area was said to have been in core sage-grouse habitat, and a small portion of that was in the South pasture, while the Center East and Center West pastures remained in low-density habitat. Three Line and Intercept transects were placed in the South pasture at trend site AS-11 in order to estimate percent shrub cover. *Artemisia tridentata* and *Chrysothamnus viscidiflorus* were estimated to occupy 14% and 7%, of the cover, respectively.

Center East Pasture Biological Soil Crusts

center east BSC	Sum_ACRES	% of area
4	908	59
6	637	41
8	1	0

Center West Pasture Biological Soil Crusts

Center west BSC	Sum_ACRES	% of area
0	494	33
4	985	67

South Pasture Biological Soil Crusts

South BSC	Sum_ACRES	% of area
ND	132	2
2	874	14
4	3603	58
6	1502	24
8	67	1
ND	46	1