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

for the

Flagstaff Bench and Swamp Lake Pastures

of the

Warner Lakes Allotment #523

July 2013

The original Warner Lakes Allotment Rangeland Health Assessment (RHA) was conducted in 2004. This assessment included all pastures of the allotment. This 2013 update to the Rangeland Health Assessment only covers the Flagstaff Bench and the Swamp Lake Pastures of the Warner Lakes Allotment. The Rangeland Health Assessment will be updated for the other three pastures (Flagstaff Lake, Well, and Turpin) of the allotment at a later date.

Since the Rangeland Health Assessment in 2004, one long-term trend monitoring site has been added to to the Flagstaff Bench, and Swamp Lake Pastures. These trend plots were established and read in 2009, and read again in 2012.

The Flagstaff Bench and the Swamp Lake Pastures are grazed by the same operator during the fall and winter, from 9/15-12/31 with 280 AUMs.

Standard	2004	2013	Comments	
Stanuaru	Assessment	Assessment	connents	
1. Watershed Function – Uplands	Met	Met	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 grazing use each fall and winter. 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 pastures.	
2. Watershed Function Riparian/ Wetland Areas	Met	Met	There is a network of ephemeral lakes/wetlands throughout the allotment connected to the larger Warner Lakes system. Most of the lakes/wetlands within this network are overflow areas for the larger lakes. There are 1,712 acres of palustrine wetlands rated in Proper Functioning Condition (PFC). The 80 acres of wetlands located within the Flagstaff Bench and Swamp Lake Pastures continue to meet this standard.	
3. Ecological Processes	Met	Met	Plant composition and community structure across the Flagstaff Bench and Swamp Lake Pastures are 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.	
4. Water Quality	Met	Met	The 2004 Rangeland Health Assessment stated that neither surface water nor groundwater within the Warner Lake Allotments has been listed for exceeding State water quality standards. Since 2004, the Flagstaff Bench and Swamp Lake Pastures have not been added to the list for exceeding state water quality standards.	
5. Native, T/E, and Locally Important Species	Met	Met	Special Status Plant <i>Sesuvium verrucosum</i> (ONHP2, BLM Assessment ASM Species) is documented to occur around the edges of Flagstaff Lake and Swamp Lakes. Also, <i>Heliotropium</i> <i>curassavicum</i> (ONHP3, BLM Bureau Tracking TRA Species) was found on the southeast edge of Campbell Lake. The allotment provides very limited habitat to sage-grouse and California Bighorn sheep. There are no known sage-grouse leks in the allotment.	

Guidelines for Livestock Management

Existing grazing management practices or levels of grazing use on the Flagstaff Bench and Swamp Lake Pastures are consistent with the Guidelines for Livestock Grazing Management (August 12, 1997). These pastures have and continue to be grazed during the fall and 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 of levels of grazing use on the Flagstaff Bench and Swamp Lake Pastures of the Warner Lakes 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 Flagstaff Bench and Swamp Lake Pastures of the Warner Lakes 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

2013 Team Members

Name	Title		
Jayna Ferrell	Rangeland Management Specialist		
Vern Stofleth	Wildlife Biologist		
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Todd Forbes	Assistant Field Manager		
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Date

Flagstaff Bench and Swamp Lake Pastures of the Warner Lakes Allotment Monitoring Summary (2013):

The Flagstaff Bench and the Swamp Lake Pastures are grazed during the fall and winter (9/15-12/31). The total permitted AUMs for the two pastures is 240. The average actual use over the last 10 years is 281 AUMs (Swamp Lake-180; Flagstaff Bench-144), and target utilization level of 65% has been not exceeded. Use in each pasture has been within the permit dates for the last 10 years.

Year	Flagstaff Bench AUMs	% Utilization	Swamp Lake AUMs	% Utilization	Total AUMs
2011	143	41	137	29	280
2010		38		26	
2009	137	47	153	50	290
2008	150	37	136	39	286
2007	131	40	154	36	285
2006	30	25	257	46	287
2005			296	43	296
2004	173	59	110	20	284
2003			293		293
2002	267				267
2001	146	21	78	38	224
2000	116		186		302
Average	144		180		281

Actual Use and Utilization

Existing grazing management practices or levels of grazing use on the Flagstaff Bench and Swamp Lake Pastures promote achievement of the standards. These pastures have and continue to be grazed during the fall and winter. This grazing season enables the grass species to complete their reproductive life cycle each year.

Swamp Lake Pasture (WL-7):

Observed Apparent Trend

	2009	2012
Vigor	6	8
Seedlings	5	7
Surface	5	5
Litter		
Pedestals	4	5
Gullies	5	5
Total	25	30
Rating	Upward	Upward

Cover

	2009	2012
Bare Ground	30	27
Litter	22	30
Rock	1	0
Vegetation	46	43
Crust/Moss	1	0

% Composition

	2009	2012
DISP	34	44
AGCR	38	41
SIHY	4	0
SAVE	5	7
ARTR	6	5
CHNA	13	3

This trend site was established in the Swamp Lake Pasture in 2009. The trend data and photo analysis indicates a stable trend at this site. Percent bare ground and vegetative cover have decreased slightly in 2012 as compared to 2009. The percent composition varies slightly between species, except salt grass and grey rabbitbrush show a 10% change. Species composition is appropriate for this site. The observed apparent trend was in upward condition in 2009 and 2012. The only variation noted during photo analysis was in the amount of residual cover remaining. There was more residual cover remaining in the 2012 photos as compared to the photos in 2009. In summary, the trend in the Swamp Lake Pasture is static.

Flagstaff Bench Pasture (WL-8):

Observed Apparent Trend

	2009	2012
Vigor	7	8
Seedlings	6	6
Surface	5	3
Litter		
Pedestals	5	5
Gullies	5	5
Total	28	27
Rating	Upward	Upward

Cover

	2009	2012
Bare Ground	33	43
Litter	32	21
Rock/Gravel	5/0	2/1
Vegetation	30	31
Crust/Moss	0	1

% Composition

	2009	2012
DISP	28	10
SIHY	6	3
ORHY	3	3
ELCI	5	13
AGCR	0	2
STCO	5	0

This trend site was established in the Flagstaff Bench Pasture in 2009. The trend data and photo analysis indicates a stable trend at this site. Vegetative cover has increased slightly in 2012 as compared to 2009. Bare ground has increased 10%, and littler has decreased 9%. The percent composition varies slightly between some species. Percent composition of salt grass and basin wildrye, and to a lesser degree, needleandthread grass, has changed when comparing data from both years. Species composition is appropriate for this site. The observed apparent trend was in upward condition in 2009 and 2012. The only variation noted during photo analysis was an increase in cheatgrass in 2012 as compared to 2009. In summary, the trend in the Flagstaff Bench Pasture is static.

Watershed Function Riparian/ Wetland Areas (Standard 2)

The 2004 Rangeland Health Assessment was conducted for the entire allotment, and identified 1,712 acres of wetlands within the allotment. Of those wetland acres, 80 acres occur within the Flagstaff Bench and Swamp Lake Pastures.

Field reconnaissance was conducted in spring of 2013 to determine if Standard 2 (Watershed Function riparian and wetland areas) is still being met. It was determined that continuing current grazing management would maintain this condition over the 10-years.

Water Quality

The original 2004 Rangeland Health Assessment stated that neither surface water nor groundwater within the Warner Lake Allotments has been listed for exceeding State water quality standards. Since 2004, the Flagstaff Bench and Swamp Lake Pastures have not been added to the list for exceeding state water quality standards.