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

UPDATE for the

Buck Creek Bridge Creek Allotment #00702

December 2013

The Buck Creek Bridge Creek Allotment #00702 has 5,910 acres of public land and 459 acres of private land acres. The allotment has a total of 309 AUMs with a period of use 5/1-10/15. This allotment is grazed in a rest-rotational grazing system.

Many of the allotments in Silver Lake during the 1960's, 1970's and early 1980's were used in the winter and early spring. Oregon Department of Fish and Wildlife requested that grazing be moved later in the summer and fall to eliminate competition with wintering mule deer. This change was accepted and implemented in the 1980's on most all allotments.

The original Buck Creek Bridge Creek Allotment Rangeland Health Assessment was conducted in 2004. This allotment has 4 pastures grazed in a rest rotational system. The Emery seeding pasture was planted with crested wheatgrass in 1958. This pasture has typically been used later in the fall as livestock come home and has averaged moderate utilization in the pasture. The Middle and Bridge Creek Pastures were prescribed burned in the 1990's to provide an increase perennial grass vigor and abundance while reducing decadent sagebrush. These burns were successful and both pastures are grazed summer and fall. The South spring pasture has typically received more early summer use and some fall use.

Bridge Creek Draw, an intermittent tributary to Bridge Creek, runs through the south spring pasture and had historical degradation of stream conditions. Several factors contributed to these conditions including a road constructed along the creek bottom and juniper invasion, in the early 1980's. A road closure along the creek bottom was implemented in the early 1990s along with instream improvements made to increase the rate of recovery of riparian area soil and vegetation characteristics. This was done with placement of woody debris in stream to trap sediment and in 1993 some follow up willow plantings. The pasture was rested for approximately 3 years and grazing was changed to a rest rotation system within the allotment creating greatly improved riparian conditions along the creek. Previous areas of raw banks were revegetated with sedges and rushes. Some willow plantings were successful and established well in the riparian area. Grazing resumed in 1996 and riparian conditions continued to improve.

Moderate to heavy use of riparian vegetation in the south spring pasture was observed a few of the last 10 years mitigated with rest in between. In 2012, the pasture was rested, and in 2013 (when PFC was performed) grazing was observed to be heavy on the riparian area. Due to the very dry conditions this year and late season grazing of this pasture, vegetation grazed by livestock quickly lost moisture creating a high risk potential for deterioration of stream conditions in a small localized area. Increased exposed bare soil along stream banks and a few nick points where possible head cuts could occur were observed. Willow plants were severely grazed within a very short period of time with no leaves present and most new shoot growth removed. This was the first year in many when grazing occurred in the fall. Heavy use was observed in 2009 and 2011 on this pasture also.

Summary of Rangeland Health Assessment Buck Creek Bridge Creek Allotment (00702)

Standard	2004 Assessment	2013 Assessment	Comments
1. Watershed Function – Uplands	Met	Met	Upland soils in the Buck Creek Bridge Creek Allotment exhibit infiltration and permeability rates, moisture storage, and stability appropriate for soil, climate, and land form. Root occupancy for the soil is appropriate. The plant composition and community structure is defined by the soil type and precipitation zone. The entire allotment has a soil surface factor rating of slight, with the majority of the allotment in a static observed apparent trend, and the majority of vegetation in the late seral stage based on Ecological Site Inventory (ESI) data.
2. Watershed Function Riparian/ Wetland Areas	Met	Not Met	South Spring and a portion of Bridge Creek Draw runs through the South Pasture of this allotment. In 1997, a PFC assessment was completed on Bridge Creek Draw and found the creek to be FAR with an upward trend. In 2013, a PFC assessment rated Bridge Creek Draw to be FAR with a downward trend due to heavy use in recent years on the moist meadow area. Otherwise, this lentic system is in balance with the water and sediment being supplied and continues to have vegetative species present to maintain riparian and wetland soil characteristics. A change to the season of livestock use and protective exclosure are recommended to resolve the downward trend in PFC in this location. In the 2004 RHA, over 500 acres of palustrine wetlands were described collectively within the 00700-00716 series of allotments (which included 00702) as being in PFC. Based on a review of the USFWS National Wetland Inventory dataset, there are 7 polygons scattered across the allotment classified as palustrine wetlands which total less than 3 acres. (Two of these occur at South Spring and have already been discussed above). Based on a comparison with BLM's water development dataset, 4 of these which the USFWS classified as "freshwater ponds" actually represent constructed livestock waterholes (Seeding, Lake, and Staked) or reservoirs (Ted) devoid of wetland vegetation. The fifth is erroneously classified as a "freshwater emergent" wetland, but is actually an unvegetated playa. None of these 5 areas actually meet the definition of a wetland and were, therefore, not reassessed in 2013.
3. Ecological Processes	Met	Met	There is a diverse and vigorous plant composition and community structure of forbs, grasses and shrubs. Prior to 2013 there were no noxious weeds documented within the allotment. During a ID Team tour a small infestation of Canada thistle was found at the proposed enclosure site. The allotment provides important wintering habitat for populations of mule deer. There is adequate species diversity of wildlife within this allotment.
4. Water Quality	NA	NA	This standard is not applicable as there are no perennial streams in this allotment. Bridge Creek Draw within this allotment is intermittent and is not on the ODEQ's current list of 303(d) streams with known water quality problems. Buck Creek and Bridge Creek follow along the edge of the allotment on private property only.
5. Native, T/E, and Locally Important Species	Met	Met	No known locally important or sensitive plants species are currently known to occur on the allotment. It is suspected that peregrine falcons are occasional visitors to the allotment although no good foraging area exits on the allotment. Ferruginous hawk may occur and some foraging areas do occur within the allotment. Mule deer populations and some elk occur on the allotment. No resource conflicts currently occur between wildlife species and livestock grazing on this allotment.

Guidelines for Livestock Management

Existing grazing management practices or levels of grazing use on the Buck Creek Bridge Creek Allotment are consistent with the Guidelines for Livestock Grazing Management (August 12, 1997). The pasture is grazed at an appropriate season coordinated with precipitation, plant growth, and plant form to promote appropriate vegetative cover and optimal rangeland health.

BLM lands are grazed in coordination with private lands to minimize conflicts and promote adequate livestock distribution.

Recommendations

The rest-rotation grazing system has been effective. Overall the allotment is meeting rangeland health standards. The ID Team identified an area of concern in the South Spring Pasture near the South Spring approximately 2 acres in size. The ID Team suggests changing the grazing season in the South Spring Pasture to early spring use, additional water development and building a protective exclosure to improve conditions along Bridge Creek Draw. Development of an additional water source on private land would draw livestock away from wetland areas and increase distribution of livestock in this pasture.

2013 ID Team Members

Name	Title
Lori Crumley	Rangeland Management Specialist
Vern Stofleth	Wildlife Biologist
Theresa Romasko	Assistant Field Manager
Grace Haskins	Weed Management Specialist
Bill Cannon	Archeologist
Jimmy Leal	Fisheries Biologist
Chris Bishop	Recreation
Todd Forbes	Assistant Field Manager
Paul Whitman	Planning & Environmental Coordinator

2013 Determination

( ) Existing grazing management practices of levels of grazing use on the Buck Creek Bridge Creek Allotment promote achievement of significant progress towards the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

(X) Existing grazing management practices or levels of grazing use on Buck Creek Bridge Creek 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 — 12/19/13 Date

Buck Creek-Bridge Creek Allotment Monitoring Summary (2013):

The allotment has a total of 309 AUMs and the period of use for this allotment is 5/1-10/15.

Actual Use and Utilization

Year	Emery Seeding		Bridge Creek		Middle		South Spring	
	AUM	% use	AUM	% use	AUM	% use	AUM	% use
2012	120	40	94	56	94	38	Rest	
2011	132		104		Rest		104	65
2010	116		93	27	47		42	
2009	120		Rest		96	77	92	60
2008	80		63		61		63	
2007	124	37	94	54	94		Rest	
2006	122		61		63		65	45
2005	193	54	118		Rest		Rest	
2004	120		60		63		63	50
2003	218		Rest		Rest		61	54
2002	62	61	60		Rest		31	42
Average	**128**	**48**	**87**	**46**	**74**	**58**	**65**	**53**

Bridge Creek Pasture (prescribed burn in 1996):

Plot BB-1

Observed Apparent Trend

BB-1	**2012**
Vigor	8
Seedlings	7
Surface Litter	4
Pedestals	4
Gullies	5
Total	28
Rating	*Upward*

Cover

BB-1	**2012**	**1976**
Bare Ground	46	52
Litter	23	44
Rock	1	0
Vegetation	30	4
Crust/Moss	0	0

BB-1 Photo trend: upward. Heavy sagebrush occupied the site prior to the burn. After the burn abundant and diverse perennial grass species dominated the trend site. Sagebrush and rabbitbrush is increasing naturally on site as observed in the photo above. Perennial grass species continue to be vigorous and provide abundant forage and cover for livestock and wildlife species.

Middle Pasture

Plot BB-2

Observed Apparent Trend

BB-2	**2012**	**2008**
Vigor	5	9
Seedlings	8	7
Surface Litter	3	3
Pedestals	3	5
Gullies	5	5
Total	24	29
Rating	*Stable*	*Stable*

BB-2 Photo Trend: Stable. This site has remained stable since the 1980's in the photos. It is a very dry site so only small changes in vegetation occur over long periods of time. Although vigor in 2012 rated lower than 2008 this is accounted for by a low precipitation year in 2012 compared to a high precipitation year in 2008.

Emery Seeding Pasture

Plot BB-3

Observed Apparent Trend

BB-3	**2012**	**2008**
Vigor	8	7
Seedlings	7	5
Surface Litter	3	2
Pedestals	5	5
Gullies	5	5
Total	28	24
Rating	*Upward*	*Upward*

Cover

BB-3	**2012**
Bare Ground	51
Litter	22
Rock/Gravel	5
Vegetation	21
Crust/Moss	0

BB-3 Photo Trend: Stable and Upward. Crested wheatgrass was planted in sometime in the late 50's early 60's. Plants have remained very vigorous and abundant; however, sage brush and rabbit brush have increased in cover on site due to natural successional processes. There is still abundant forage and perennial vegetation for livestock and wildlife.

South Spring Pasture

Plot BB-4

Observed Apparent Trend

BB-4	**2012**
Vigor	7
Seedlings	7
Surface Litter	3
Pedestals	4
Gullies	4
Total	25
Rating	*Stable*

Cover

BB-4	**2012**
Bare Ground	29
Litter	28
Rock/Gravel	5
Vegetation	38
Crust/Moss	0

BB-4 Photo Trend: Stable and Upward. This long term trend site along the creek shows a dramatic improvement in stream conditions from the 1980's to today. Improved wet meadow conditions have occurred at this long term trend site including improved meadow conditions and improved moist vegetation species cover, and overall improved channel characteristics.

Middle Pasture

Plot BB-5

Observed Apparent Trend

BB-5	**2012**	**2008**
Vigor	6	7
Seedlings	7	6
Surface Litter	4	3
Pedestals	4	5
Gullies	5	5
Total	26	26
Rating	*Upward*	*Upward*

Cover

BB-5	**2012**
Bare Ground	66
Litter	18
Rock/Gravel	1
Vegetation	15
Crust/Moss	0

Nested Frequency data was collected in 1991 and in 2012. This is a summary of that data.

	STTH		SIHY		BRTE		ASTRA	
Plot size	2012	1991	2012	1991	2012	1991	2012	1991
1	40	2	9	4	5	4	1	0
2	72	4	19	10	18	8	6	2
3	84	9	27	25	26	18	6	5
4	96	11	38	31	34	20	8	6

The nested frequency data collected in 1991 was after a prescribed fire. All species increased in frequency from 1991 to 2012.

BB-5 Photo Trend: Stable