

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

UPDATE for the
Egli Rim Allotment (#00420)

May 2014

Background

The initial Egli Rim Rangeland Health Assessment was completed in 2004. This allotment is located 10 miles east of Silver Lake Oregon. The Egli Rim Allotment has a total of 21,508 acres of BLM-administered lands and 374 acres of private land. A 10-year permit (#3601441) authorizes 1,056 AUMs to be used between 4/1 and 8/15. There are 20 AUMs allotted for deer and pronghorn antelope, and 11 AUMs allotted for other wildlife on the allotment. This allotment contains 7 pastures grazed in a rest-rotation system where each pasture is generally grazed every other year. The Pettus, Wee, and West Seeding Pastures were seeded with crested wheatgrass while the East Native, Middle Native, West Native Bench, and West Native Lake Pastures are primarily native vegetation.

Summary

The following table contains a summary of the 2004 rangeland health assessment and the update completed in 2014.

Summary of Rangeland Health Assessment for Egli Rim Allotment (00420)

Standard	2004 Assessment	2014 Assessment Update	Comments
1. Watershed Function – Uplands	Met	Met	Upland soils in the Egli Rim 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 Soil Surface Factor is slight in the majority (73%) of the allotment. Approximately, 6% of the allotment was rated as stable and 21% of the allotment was rated as moderate for soil surface factor rating. Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform. Available trend data show 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 majority of the allotment. Overall a diverse plant community exists to provide root systems throughout the soil profile, providing soil stability and water storage within the plant and soil systems. The most abundant plant composition is low sagebrush with bluebunch wheatgrass as the dominant perennial grass occurring on 53% of the allotment. This vegetation was rated to be in good condition and in late ecological status.
2. Watershed Function Riparian/ Wetland Areas	Met	Met	<p>There are no perennial streams in the Egli Rim Allotment. There are a number of intermittent drainages that seasonally flow into the Christmas Valley basin during precipitation events or during spring snowmelt. The National Wetland Inventory (NWI) classifies several of these drainages as “riverine” systems, but due to their intermittent nature, they do not support wetland or riparian vegetation.</p> <p>The NWI also identifies 11 small palustrine wetlands and 3 lacustrine systems scattered across the allotment totaling about 80 acres. The 3 largest areas sit along in the southern boundary of the allotment and actually represent seasonally flooded playa lakebeds that do not support wetland or riparian vegetation.</p> <p>There is one permanent lake in the northeast corner of the allotment that provides about 2 acres of palustrine wetland habitat along the shore. However, this area is not currently grazed, so livestock have no</p>

			<p>potential to impact this wetland.</p> <p>The rest of these areas represent livestock water developments and are not wetlands.</p>
3. Ecological Processes	Met	Met	<p>Plant production is appropriate and organic matter is accumulating in the form of litter and is being incorporated into the soil. Trend photos indicate good vigor of perennial vegetation and trend is stable to upward within the allotment. No special status plant species have been documented in the allotment.</p> <p>Noxious weeds that have been previously noted in the area and have been controlled near Highway 31 and the allotment boundary include musk thistle and diffuse knapweed. The 2004 RHA mentioned possible populations of medusahead rye and Mediterranean sage occurring in small isolated areas. Currently these weed populations have increased and threaten the natural vegetation community. The Mediterranean sage population is estimated at 30 acres and growing. There are also larger infestations of medusahead rye. Both species are being managed by the current integrated weed management plan, but effective control methods have not yet been approved.</p> <p>Overall, this standard continues to be met across the allotment.</p>
4. Water Quality	NA	NA	<p>This standard is not applicable to the assessment area. There are no perennial streams which must comply with State water quality standards. While there is one permanent lake in the northeast corner of the allotment, this area is not currently grazed, so livestock have no potential to impact water quality.</p>
5. Native, T/E, and Locally Important Species	Met	Met	<p>The allotment contains an appropriate assemblage of wildlife species and wildlife habitat expected for the shrub-steppe ecosystem.</p> <p>Special status wildlife species or habitats potentially present within this allotment may include bighorn sheep, bald eagle, ferruginous hawk, peregrine falcon, burrowing owl, sage-grouse, Townsends big-eared bat, fringed bat, pallid bat, spotted bat, kit fox, and pygmy rabbit. There are also several species with high public interest or concern. These include golden eagle, mule deer, pronghorn, and elk.</p> <p>There are no known resource conflicts between current livestock grazing management activities and existing wildlife species (including special status species) or their habitat within the allotment. For these reasons, this standard is being met. See discussion of Standard 5 below for more details.</p>

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

The allotment contains an appropriate assemblage of wildlife species and wildlife habitat expected for the shrub-steppe ecosystem.

Special status wildlife species or their habitats potentially present within this allotment may include the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), peregrine falcon (*Falco peregrinus*), burrowing owl (*Speotyto cunicularia*), sage-grouse (*Centrocercus urophasianus*), Townsends big-eared bat (*Corynorhinus townsendii*), fringed bat (*Myotis thysanodes*), pallid bat (*Antrozous pallidus*), spotted bat (*Euderma maculatum*), kit fox (*Vulpes macrotis*), pygmy rabbit (*Brachylagus idahoensis*), and bighorn sheep (*Ovis canadensis californiana*).

No bald eagle nesting habitat occurs within the allotment. The closest known bald eagle nest is located approximately 4.5 miles southwest of the allotment boundary; however, the nesting tree is suspected to have fallen according to a 2012 survey report. The next closest known bald eagle nests are located approximately 12 miles west of the allotment boundary. Bald eagle foraging may occur within the allotment, however it is probably restricted to road killed deer adjacent to the major roadways or occasional carrion scattered through the allotment.

Peregrine falcons have been observed in the general area, possibly due to releases from the Summer Lake hack site to the south and they may be an occasional visitor to the area. However, no nesting habitat or actual nesting activity has been documented within the allotment.

While potential habitat for ferruginous hawk and burrowing owl was identified in the 2004 assessment, these species have not actually been confirmed within the allotment to date. There have been no inventories or incidental sightings indicating ferruginous hawks or burrowing owls are present within the allotment.

Golden eagles (BOC species) have been observed within the area. There is 1 known golden eagle nest or nesting habitat within the allotment with last known activity in 1979. However, nest sites have been identified along the western and northern boundary of the allotment, as well as areas surrounding the allotment where suitable cliff habitat exists. The closest golden eagle nest with observed activity is approximately 82 meters from the western boundary of the allotment.

In the original assessment, sage-grouse habitat was noted within the allotment. Based on BLM's current sage-grouse habitat data, approximately 70% of the allotment is classified as Preliminary Priority Habitat (PPH, 15,548 ac.) and 30% is Preliminary General Habitat (PGH, 6,172ac.).

Four Bureau Sensitive Species of bats are known to occur within the Lakeview Resource Area (fringed myotis, pallid bat, spotted bat, and the Townsend's big-eared bat). Roosting and wintering (hibernacula) habitat for these species is limited or lacking throughout the allotment. However, it is likely that they may occur in caves scattered throughout neighboring allotments. Use of the area by these species is likely limited to foraging activities.

Scattered broken rims provide habitat across the allotment for bighorn sheep and are likely occasional visitors to the allotment. Bighorn sheep range does not occur within the allotment. California bighorns generally do not compete for forage with domestic cattle due to difference in habitat use patterns (ODFW 2003).

Kit fox and pygmy rabbits, both BLM sensitive species, are also known to occur within the Lakeview Resource Area. The potential for the presence of kit foxes is very low as the allotment lies outside of the northern range of the kit fox. There have been no inventories or incidental sightings indicating pygmy rabbits are present within the allotment, but potential habitat is suspected to occur within the allotment.

This allotment falls within mule deer winter range. Bitterbrush is a key forage species for wintering mule deer. A potential conflict exists due to the timing of fall grazing and the presence of bitterbrush. Although timing of grazing is a potential conflict, bitterbrush abundance and browse use appears to be stable at this time. The mule deer management objective of this allotment calls for monitoring browse

species (ie. Bitterbrush) utilization in winter areas to avoid livestock utilization levels that reduce the long-term viability of browse species. Generally, fall use is managed to protect the health needs of bitterbrush in the portions of this allotment that have significant amounts of bitterbrush. However, the exact impacts to bitterbrush from livestock grazing are not known at this time. It is expected that these impacts are low due to timing of grazing in those pastures with extensive bitterbrush and the rest rotation system in place within the allotment.

For these reasons, this standard is being met for wildlife species (including special status species) and their habitat within this allotment. Past use from cultivation and control of wildfire has made some portions of the allotment unsuitable for some species of wildlife. Some areas could benefit from restoration efforts, but it is unknown if these efforts would be effective on historically cultivated areas.

Guidelines for Livestock Management

Existing grazing management practices or levels of grazing use on the Egli Rim 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 rangeland health. BLM lands are grazed in coordination with private lands to minimize conflicts and promote adequate livestock distribution.

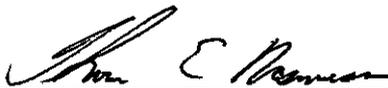
Recommendations

Increased water development on the allotment would provide great distribution and the ability to use those native pastures more frequently giving additional rest to crested wheatgrass seeding pastures, particularly the Middle Native Pasture which only has reliable water sources for livestock on good water years. This pasture has poor accessibility for water hauling.

2014 Determination

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

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



Thomas E. Rasmussen, Field Manager



Date

Egli Rim Allotment Monitoring Summary:

The allotment has a total of 1056 AUMs and the period of use for this allotment is 4/1-8/15.

Actual Use and Utilization for West Seeding/Collins, Bench, Lake and Sheep Dip Pastures

Year	Collins/West Seeding		Bench		Lake		Sheep Dip	
	AUM	% use	AUM	% use	AUM	% use	AUM	% use
2013	180	55	rest	0	rest	0	rest	0
2012	19	36	rest		rest		rest	
2011	299	63	40	60	rest	0	331	25
2010	rest		rest		rest		rest	
2009	113	61	rest	0	rest		rest	
2008	180		rest		rest		232	
2007	rest		rest		rest		rest	
2006	74		149		149		rest	
2005	181		11		rest		rest	
2004	rest		rest		88		637	
2003	97		rest		rest		rest	
2002	195		56	40	56	50	rest	
Average	165	54	64	50	98	50	400	25

Actual Use and Utilization for East Native, Petus, and Wee Pastures

Year	East Native		Petus		Wee		Total yearly AUMs
	AUM	% use	AUM	% use	AUM	% use	
2013	rest	0	rest	20	184	56	364
2012	55	0	330	76	134	23	538
2011	rest	0	rest		rest	0	690
2010	rest		289		174		463
2009	203	46	rest		32		235
2008	rest		344		rest		759
2007	115		rest		215		330
2006	rest		215		rest		675
2005	100		40		178		1034
2004	rest		92		rest		817
2003	153	30	rest		125		375
2002	140	38	543	70	92		1081
Average	128	38	265	48	142	40	672

Utilization on the allotment averaged moderate levels for the last 10 years. On occasion some pastures did receive higher than the 50% utilization level. This was mitigated by rest the year following to allow plants a full year of recovery and to fully complete their reproductive cycle and set seed.

Egli Rim Allotment trend plot monitoring:

ER-1 - Bench Pasture

Data recorded: photo trend in 1978, 1990, 2009, 2012, 2013

Photo trend: *stable to upward*. This long term trend plot was established in 1978, with photos retaken in 1990, 1999, 2009, 2012, and 2013. However photos in 1990, 1999, and 2009 were at a different 3X3 plot locations. Photo comparison from 1978 to 2012 and 2013 show a decrease in annual grass cover and increase in perennial grasses. Fewer sagebrush plants. Juniper encroachment looks to be the same over time.

ER-2 - Wee Pasture

Data Recorded: photo trend 1985, 1992, 2009, 2011

Photo Trend: *stable*. Planted with crested wheatgrass in 1985. Anything on site looked to be plowed up and removed or the site was occupied with little existing vegetation. Crested wheatgrass plants look to be very stable. Some rabbit brush on site otherwise conditions look the same since 1990.

ER-3 - Wee Pasture

Date recorded: 1985, 1992, 2009, 2011, 2012,

Photo Trend: *stable*. Planted to crested wheatgrass in 1985 through existing sagebrush vegetation without chaining or removal of sagebrush. Crested wheatgrass looks to be stable on site.

Observed Apparent Trend

ER-3	2012
Vigor	8
Seedlings	6
Surface Litter	4
Pedestals	4
Gullies	5
Total	27
Rating	<i>upward</i>

Percent Cover

ER-3	2012
Bare Ground	29
Litter	36
Rock	2
Vegetation	33

ER-4 - Middle Native/Sheep dip pasture

Date Recorded: 1987, 1988, 2008, 2012

Photo Trend: Stable to Upward: Site was established in 1987 native grasses look abundant and to be increasing in vigor and cover on site, juniper also looks to be increasing in cover and density on site. Perennial vegetative cover since 1987 has increased.

Observed Apparent Trend

ER-4	2012	1987
Vigor	6	4
Seedlings	7	3
Surface Litter	4	3
Pedestals	3	2
Gullies	5	5
Total	25	20
Rating	<i>stable</i>	<i>stable</i>

Percent Cover

ER-4	2012	1987
Bare Ground	42	34
Litter	19	32
Rock	17	24
Vegetation	21	10

Frequency of Plants in 2012

	Hits By Frame Size				% by Frame Size			
	4 (25in ²)	3 (100in ²)	2 (200in ²)	1 (400in ²)	4	3	2	1
POSE	17	43	63	74	17	43	63	74
STTH	4	15	32	53	4	15	32	53
PSSP	3	7	12	16	3	7	12	16
ELEL	1	2	3	5	1	2	3	5
KOMA	1	5	6	6	1	5	6	6
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
<i>Grasses</i>	26	72	116	154	26	72	116	154
Oxytropis	0	4	7	9	0	4	7	9
Lygod	1	4	9	13	1	4	9	13
Astragalus								
Crepis								
Clover	0	0	1	2	0	0	1	2
<i>Forbs</i>	1	8	17	24	1	8	17	24
ARAR	10	15	24	34	10	15	24	34
CHVI	3	4	5	9	3	4	5	9

JUOC	0	0	1	2	0	0	1	2
ARTR	2	4	6	8	2	4	6	8
	0	0	0	0	0	0	0	0
<i>Shrubs</i>	15	23	36	53	15	23	36	53

Shrub Cover at ER-4 in 2012

	Percent cover LI-1	Percent cover LI-2	Percent cover LI-3	Average Shrub Height
CHVI	7.4	3.7	2.2	Less than 1"
ARAR	23.8	25.6	33.1	Less than 1"
Total	31.2	29.3	35.3	Less than 1"

ER-5 - East Native Pasture

Date Recorded: 1987, 1999, 2009, 2012

Photo Trend: *Stable*. Plot was established in 1987. This range site is very stable with native grasses and shrub changing little since the plot was established.

Observed Apparent Trend

ER-5	2012	1987
Vigor	8	4
Seedlings	7	6
Surface Litter	4	4
Pedestals	4	3
Gullies	5	5
Total	28	22
Rating	<i>upward</i>	<i>stable</i>

Frequency of Plants in 2012

	Hits By Frame Size				% by Frame Size			
	4 (25in ²)	3 (100in ²)	2 (200in ²)	1 (400in ²)	4	3	2	1
POSE	16	50	68	83	16	50	68	83
STTH	1	16	25	37	1	16	25	37
BRTE	0	0	0	1	0	0	0	1
ELEL	0	1	3	3	0	1	3	3
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
<i>Grasses</i>	17	67	96	124	17	67	96	##
Crepis	0	5	10	15	0	5	10	15
Phlox	4	21	27	31	4	21	27	31
Lupine	0	1	2	8	0	1	2	8
Astragalus	0	2	4	8	0	2	4	8
Eriogonum	0	0	1	1	0	0	1	1

Castilleja	0	1	2	2	0	1	2	2
Forb	1	4	5	9	1	4	5	9
<i>Forbs</i>	5	34	51	74	5	34	51	74
ARAR	19	34	47	64	19	34	47	64
CHVI	2	15	24	35	2	15	24	35
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
<i>Shrubs</i>	21	49	71	99	21	49	71	99

Percent Cover

ER-5	2012	1987
Bare Ground	53	52
Litter	13	32
Rock	8	9
Vegetation	23	11

ER-6 - West Seeding/Collins pasture

Data Recorded: 1987, 1992, 1999, 2009, 2012

Photo Trend: *Stable*. This pasture was planted to crested wheatgrass in the mid-1980's most likely. The crested wheatgrass stand is stable with some increasing shrub component and some cheatgrass observed invading the site.

Percent Cover

ER-6	2012
Bare Ground	51
Litter	23
Rock	0
Vegetation	26

Observed Apparent Trend

ER-6	2012
Vigor	9
Seedlings	8
Surface Litter	4
Pedestals	4
Gullies	5
Total	30
Rating	<i>upward</i>

ER-7 - West Native Lake Pasture

Data Recorded: 1987, 1988, 1999, 2008, 2012, 2013

Photo Trend: *upward*. Site established in 1987 with photos taken 1987, 1999, 2008, 2012, and in 2013. Increase in seedlings and vigor of native grasses on this site. Juniper on site looks to be stable and not heavily increased yet. Bare ground cover has decreased and vegetative cover has increased.

Observed Apparent Trend

ER-7	2012	1987
Vigor	7	8
Seedlings	6	7
Surface Litter	4	4
Pedestals	4	5
Gullies	5	5
Total	26	29
Rating	<i>upward</i>	<i>upward</i>

Percent Cover

ER-7	2012	1999	1987
Bare Ground	14	59	44
Litter	20	5	28
Rock/Gravel	19	24	23
Vegetation	29	12	7
Crust/Moss	0.2	0	0

Frequency of Plants in 2012

	Hits By Frame Size				% by Frame Size			
	4 (36in ²)	3 (144in ²)	2 (288in ²)	1 (576in ²)	4	3	2	1
POSE	38	67	78	92	38	67	78	92
AGSP	31	53	68	81	31	53	68	81
BRTE	12	26	33	38	12	26	33	38
STTH	8	14	26	33	8	14	26	33
KOMA	4	12	15	17	4	12	15	17
SIHY	2	7	7	10	2	7	7	10
Total Grasses	95	179	227	271	95	179	227	271
Forbs								
phlox	1	3	6	8	1	3	6	8
penstamon	2	3	8	8	2	3	8	8
crepis	4	13	20	22	4	13	20	22
LYGOD	1	4	8	13	1	4	8	13
lomatium	1	2	5	8	1	2	5	8
lupine	0	0	0	2	0	0	0	2
clover	2	3	3	4	2	3	3	4
buckwheat	0	1	2	4	0	1	2	4
astragalus	4	8	14	18	4	8	14	18
erigeron	1	2	4	4	1	2	4	4
Total Forbs	16	39	70	91	16	39	70	91
Shrubs								
ARAR	8	10	17	19	8	10	17	19
CHVI	6	9	12	15	6	9	12	15
Total Shrubs	14	19	29	34	14	19	29	34

Nested Frequency data was collected in 1987, 1999, and in 2012. This is a summary of three plants occurring in all data sets.

	POSE			AGSP			STTH		
Plot size	1987	1999	2012	1987	1999	2012	1987	1999	2012
1	88	84	92	46	96	81	12	20	33
2			78		77	68		13	26
3			67		55	53		6	14
4			38		29	31		4	8