

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

UPDATE for

NE Warner Allotment #511

21 June 2013

The Northeast Warner Allotment encompasses about 140,699 acres of which 139,019 are BLM-administered lands. There are 6 pastures in this allotment grazed by 4 permittees from 2/1-9/30 with a total of 6,155 AUMs. The east side and pastures in the Mule Springs Valley are grazed in common by three permittees. The west side of the allotment is primarily grazed by one permittee (under another permit). The two herds do mix some in the northern part of the allotment, but very little.

Livestock are typically put on the allotment in small bunches at waterholes that have water available early in the spring and then moved to water sources holding water later in the year. Water availability directs where livestock tend to graze and how they move throughout the pastures. The permittees on the allotment have developed best management practices when placing livestock on this allotment and moving livestock based on water availability. Permittees do not have a permanent range rider. However, all permittees take turns watching the water situation and moving livestock off in groups as water becomes limiting during the later summer months. During drier years permittees do not utilize all AUMs available and typically come off the allotment as early as July to mid-August. In 2001, the Juniper fire burned about 35,700 acres in this allotment. Some 2,700 acres of the burned area were reseeded to a native seed mix.

Guidelines for Livestock Management

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

Summary of Rangeland Health Assessment for Northeast Warner Allotment (00511)

Standard	Assessment Findings 2003	Current Assessment 2012	Comments
1. Watershed Function – Uplands	Met	Met	The ESI data collected in 1992 and documented on average approximately 60% of the allotment was in the moderate category for SSF. In 2012, a look at two ESI sites previously rated in the moderate category showed a SSF rating in a slight category. This change shows improved soil and vegetation conditions in the uplands. With this information it is likely the 60% of the allotment categorized in moderate category is no longer accurate information and possible other soil units have changed to a slight category. All 10 long term trend site show upward trend. The average utilization on the native grasses since 1990 has been 30%. With this information it is plausible to conclude the majority of the allotment has a SSF rating of slight. 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 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 allotment.
2. Watershed Function Riparian/Wetland Areas	Met	Met	The 1,687 acres of palustrine wetlands found in the Northeast Warner #00511 Allotment are all in Functioning properly. Livestock grazing is not a factor limiting Riparian/Wetland function.
3. Ecological Processes	Met	Met	Plant composition and community structure are appropriate for this allotment. Available trend data show 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. Standard 3 is being met for plant populations. There are no obvious signs of livestock overuse or damage in areas surveyed. Portions of the Allotment were burned by the Juniper Fire in Aug. 2001. Some of the burned areas have been allowed to recover naturally and the grasses have rebounded tremendously. Standard 3 is being met for wildlife populations. This allotment is supporting the current and proposed number of mule deer and pronghorn antelope identified by Oregon Department of Fish and Wildlife (ODFW) management plans.
4. Water Quality	Met	Met	This standard is not applicable to the assessment area. There are no perennial streams in this allotment.
5. Native, T/E, and Locally Important Species	Met	Met	Standard 5 is being met for native, T&E and locally important plant species. The deer and pronghorn populations are healthy and increasing in numbers within these allotments. The allotment provides habitat for numerous small and nongame birds and mammals common to the Great Basin, as well as, sage grouse and California bighorn sheep habitat. There are 3 known active sage grouse leks found within the allotment as verified from ongoing BLM and ODFW surveys. The allotment provides habitat for raptors and some BLM and state sensitive wildlife species and federally listed species. No critical habitat or limitations have been identified for any of these species which include wintering bald eagles, and possibly pygmy rabbits, various sensitive bat species or Peregrine falcons. Livestock grazing is not limiting wildlife habitat within these allotments.

2013 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

2012 Determination

Existing grazing management practices of levels of grazing use on the Northeast Warner 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 Northeast Warner 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

Thomas E. Rasmussen, Field Manager

6/21/13

Date

**Northeast Warner Allotment #511
Monitoring Summary (2012):**

The Northeast Warner allotment is grazed during the spring and summer (2/1-9/30). The total permitted AUMs is 6,385. The average actual use over the last 10 years is 5,033 AUMs and target utilization level of 50% has not been exceeded. Use in each pasture has been within the permit dates for the last 10 years.

Actual Use and Utilization 1996-2011

Year	Fitzgerald AUMs	NJN Flynn AUMs	Jack Flynn AUMs	Joe Flynn AUMs	Total AUMs	% Utilization
1996	1425	1221	1172	1357	5175	38
1997	1268	1608	1126	1328	5330	
1998	1389	1683	1246	1373	5691	31
1999	1225	1485	1194	1231	5135	39
2000	1329	1514	1197	1321	5361	19
2001	1512	1531	1176	1477	5796	
2002	880	1422	1219	1384	4905	
2003		878	1006	976	2860	15
2004	1682	1554	1310	1178	5756	
2005	1266	1603	1343	1210	5422	18
2006	1489	1373	1182	1253	5297	
2007	0	1004	793	1044	2841	26
2008	1213	1456	1255	1270	5194	31
2009	1323	1455	1308	1212	5298	32
2010	1501	1217	1210	1209	5137	27
2011	1272	1316	1400	1341	5329	24
Average	1252	1395	1196	1260	5033	27

Summaries by trend monitoring site

There are eight long-term monitoring sites in Northeast Warner allotment. NEW-01 and NEW-02 have nested frequency data from 1987-2011. All other trend plots originated as photo trend and in 2012, a Pace 180 monitoring protocol was added.

Observed Apparent Trend 1987-2012

Pasture	Plot	Year	Score (out of 35)	Category	
West	NEW-01	1987	28	Upward	
		1998	26	Upward	
		2011	29	Upward	
	NEW-02	1987	28	Upward	
		2008	33	Upward	
		2011	29	Upward	
		2012	29	Upward	
		NEW-04	2011	29	Upward
	NEW-08	2012	29	Upward	
		2008	32	Upward	
		2011	30	Upward	
		2012	27	Upward	
East		NEW-05	2008	32	Upward
			2011	27	Upward
	2012		31	Upward	
NEW-06	2008	30	Upward		
	2011	28	Upward		
	2012	27	Upward		
Mule Springs	NEW-07	2008	27	Upward	
		2011	27	Upward	
		2012	29	Upward	
Windmill	NEW-03	2008	33	Upward	
		2011	25	Stable	
		2012	26	Upward	

West pasture trend monitoring sites

NEW-01: A fire in 2001 changed the species makeup of this site. Almost all ARAR disappeared but other shrub, native grass, and forb recovery appear very good. Since 1993, frequency of POSE has increased but percent frequency of SIHY has decreased between 2008 and 2011. BRTE was first recorded on site in 2008 and may explain the higher percent of vegetative cover. Observed apparent trend and photo trend are upward for vegetation and soil characteristics.

Percent Cover by year at NEW-01

	1993	2008	2011
Veg-Basal	11	40	50
Litter	31	17	20
Bare Ground	53	38	25
Rock	1	3.8	4.2
Crust/moss	4.8	0	0
Gravel	0.8	0	0

Percent frequency by species

	1987	1993	1998	2001	2008	2011	frame size
POSE	73.5	57		FIRE	75	70	225in ²
SIHY	30	58			51	38	225in ²
STTH	21.5	26	63		42	40	900in ²
KOMA	19	28			47	30	900in ²
AGSP	11	17	30		29	36	900in ²
BRTE	0	0			21	18	900in ²
FEID	10	5			4	2	900in ²
unknown grass	0	15			0	0	900in ²
Total Grasses	213	264			303	271	900in ²
LUPIN	3	0			5	11	900in ²
TRIFO	4.5	0			0	0	900in ²
Cara	8	0			0	0	900in ²
ERDI	4	0			0	4	900in ²
ERUM	0	12			5	15	900in ²
CRAC	0	0			0	2	900in ²
ANRO	2.5	0			0	0	900in ²
PHAC2	26.5	37			48	25	900in ²
ASTRA	0	0			3	4	900in ²
ALLIU	0	0			8	35	900in ²
unknown forb	0	78			100	110	900in ²
BRASS2	0	0			4	0	900in ²
Total Forbs	48.5	127			173	206	900in ²
TRCA2	1	0			1	5	900in ²
ARTR	0	0			0	1	900in ²
CHVI	30	26			17	40	900in ²
ARAR	57	53			0	0	225in ²
Total Shrubs	126.5	113			20	46	900in ²

NEW-02: Native grass and shrub populations appear to have been stable from 1993-2011. The dominant grasses are POSE, SIHY, and AGSP with ARTR and some CHVI increasing presence on site. This site has healthy species diversity of grasses, forbs, and shrubs. Photo trend and observed apparent trend are upward.

Percent cover at NEW-02

	1993	2008	2011
Veg-Basal	8	49	43
Litter	26	19	22
Bare Ground	65	28	34
Rock	0	0.8	0
Cryptobiotic crust/moss	1.3	3.8	2
Gravel	0	0	0

Percent frequency by species at NEW-02

	1987	1993	2008	2011	frame size
AGSP	39	30	44	46	900in ²
POSE	44	55	70	52	225in ²
STTH	4	5	4	4	900in ²
SIHY	36	42	37	39	225in ²
KOMA	0	0	3	0	900in ²
FEID	0	0	6	0	900in ²
Total Grasses	186	196	206	193	900in ²
PHAC2	0	57	4	27	900in ²
CRAC	0	0	0	30	900in ²
ALLIU	0	0	3	4	900in ²
BRASS2	0	0	4	3	900in ²
ASTRA	2	0	4	7	900in ²
LOMAT	0	0	2	11	900in ²
ERUM	4.5	8	5	12	900in ²
PENST	0	0	5	1	900in ²
ASTER	0	0	24	0	900in ²
MERTE	0	0	1	0	900in ²
unknown forb	0	47	4	73	56.25in ²
Total Forbs	6.5	155	70	189	900in ²
ARTR	46	61	60	65	900in ²
CHVI	5.5	4	13	21	900in ²
TRCA	0	0	3	0	900in ²
Total Shrubs	51.5	65	76	86	900in ²

NEW-04: Vegetation composition on site is largely POSE and ARTR. This site has a good diversity of grasse, forbs, and shrubs. Some BRTE is present but at relatively low frequency. Some crust cover was present. Photo trend and observed apparent trend is upward.

Species	% Composition
POSE	56
SIHY	5
BRTE	11
SIAL	1
KOMA	1
CRAC	1
PHAC2	3
TECA	3
ARTR	21
CHVI	6
Ribes	4

Percent cover 2012 at NEW-04

Toe Hit	Cover
Bare ground	12
Litter	15
Rock	4
Moss	13
Gravel	7
Vegetation	49

NEW-08: Dominant plants on site include POSE, STTH, and ARAR. In 2011 and 2012 high diversity of plants and high abundance of cryptogamic crusts were noted and no BRTE was observed. In 2012, more vegetation and decreased gravel cover was noted than in 1983. Species composition has remained stable since 1983. This site has healthy vegetative cover and diversity of species on site. Photo trend and observed apparent trend is upward.

Species composition 2012 at NEW-08

Species	% Composition
STTH	13
KOMA	3
POSE	26
PHAC2	9
MERTE	1
CRAC	1
ERDI	1
ANRO	1
ARAR	45

Percent cover 2012 at NEW-08

Toe Hit	1983	2012
Bare ground	20	21
Litter	20	9
Rock	10	12
Crust/Moss	5	0
Gravel	30	0
Vegetation	15	58

East pasture trend monitoring sites

NEW-05: This site has a good age class and diversity of all species present. In 1983, the dominant grasses present were STTH, POSE, PSSP, and SIHY. In 2012, neither STTH nor PSSP was observed. Shrub composition has remained similar. Photo trend and observed apparent trend are upward.

Species composition 2012 at NEW-05

Species	% Composition
POSE	50
SIHY	3
LUDI	8
PHAC2	7
TRIFO	0
ERDI	3
CRAC	2
ARTR	15
CHVI	11
TECA	1

Percent cover at NEW-05

Toe Hit	1983	2012
Bare ground	35	31
Litter	15	12
Rock	5	5
Crust/moss	3	4
Gravel	20	4
Vegetation	22	44

NEW-06: This site has abundant and diverse species composition. The dominant species on site are STTH, POSE, and ARAR and very little BRTE is present. Percent cover of vegetation increased greatly from 1983-2012. Photo trend and observed apparent trend are upward.

Species composition 2012 at NEW-06

Species	% Composition
STTH	9
POSE	32
SIHY	2
PSSP	1
CRAC	1
PHAC2	5
ARAR	48
TRIFOL	2

Percent cover at NEW-06

Toe Hit	1983	2012
Bare ground	20	17
Litter	20	4
Rock	10	5
Crust/Moss	0	0
Gravel	25	4
Vegetation	25	70

Mule Springs pasture trend monitoring sites

NEW-07: Vegetative cover has greatly increased since 1983. Species composition has remained relatively stable and in 2012 largely consisted of ARTR, SIHY, POSE. Some presence of CHVI and BRTE were noted in 1983, although neither was found in 2012. The observed apparent trend and photo trend is upward.

Species composition 2012 at NEW-07

Species	% Composition
STTH	33
SIHY	8
POSE	9
ORHY	1
BRTE	6
ERUM	1
ARTR	48

Percent cover 2012 at NEW-07

Toe Hit	1983	2012
Bare ground	40	14
Litter	20	16
Rock	5	5
Crust/Moss	8	0
Gravel	15	20
Vegetation	12	45

Windmill pasture trend monitoring sites

NEW-03: This site has appropriate species composition and diversity. The dominant species are AGCR, POSE, SIHY, and ARTR. The vegetation is healthy and providing adequate cover and soil stability. Observed apparent trend and photo trend are upward.

Species composition 2012 at NEW-03

Species	% Composition
BRTE	2
POSE	19
SIHY	11
PSSP	3
STTH	23
AGCR	26
ARTR	17
CHVI	1

Percent cover 2012 at NEW-03

Toe Hit	Cover
Bare ground	26
Litter	23
Rock	9
Moss	1
Gravel	0
Vegetation	41

Shrub cover for all plots in Northeast Warner Allotment in 2012

Plot	Percent cover LI-1	Percent cover LI-2	Percent cover LI-3	Average Shrub Height	Species
NEW-02	27%	31%	28%	1-3'	ARTR, CHVI
NEW-03	10%	14%	12%	1-3'	ARTR
NEW-04	20%	24%	15%	1-3'	ARTR, CHVI, TECA
NEW-05	28%	18%	16%	3-5'	ARTR, CHVI, TEGL
NEW-06	25%	31%	37%	<1'	ARAR, CHVI
NEW-07	17%	16%	31%	1-3'	ARTR, CHVI
NEW-08	22%	29%	28%	<1'	ARAR, TEGL