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

Rangeland Health Assessment Update for the

North Webster Allotment #00906

3/12/2014

The Rangeland Health update presented below is based on field visits and monitoring data collected within the North Webster Allotment (see Appendix A). There is one long term monitoring study within this allotment.

Permitted Season: Summer, Fall, 6/1-10/30. Grazing System: Season-long use.
The North Webster Allotment is located approximately 12 miles northeast of Fort Rock, Oregon. Portions of the allotment are located within the Devils Garden Wilderness Study Area**.** Land status includes approximately 1,631 acres of public land and 3,416 acres of private land. The North Webster Allotment is categorized as an M, Maintain allotment, although the allotment was recommended for C, Custodial in 1982. The M category was selected because of the resource values within the Devils Garden WSA. Rating criteria as of 1982 are summarized as follows**:**

- Range condition is satisfactory; all acreage is in good condition.
- Forage production potential is moderate to high and present production is near potential.
- Serious resource conflicts or controversy may exist. The allotment is partially within a WSA and is in deer winter range. Land ownership is mixed with water sources being on private land.
- Present management is satisfactory or is the only logical practice. This is a single pasture allotment containing more private land than federal land.

Standards for Rangeland Health for the North Webster Allotment

Standard	2002 Assessment	2013 Assessment Update	Comments
1. Watershed Function – Uplands	Met	Met	This standard is being met on the allotment. Overall, this allotment is functioning properly as indicated by the amount and distribution of ground cover, observations from the ecological site inventory (ESI), including soil surface factor (SSF) and existing upland forage utilization surveys. All of the public land acreage within the allotment has an SSF rating of stable to slight, ranging from 8-30%. About 15% is classified as unknown and represents vegetative communities too small to be mapped (inclusions), transition zones, and rock outcrops. Species composition on the allotment includes a variety of native, deep rooted species well-distributed throughout the allotment, including Idaho fescue, bluebunch wheatgrass, mountain big sagebrush, bitterbrush and ponderosa pine which provide adequate ground cover to assist in functioning soils. The root systems of perennial vegetation assist in holding soil in place. Perennial vegetation provides protective cover to reduce soil movement, decrease compaction and thus increase infiltration. The grazing system is designed to maintain healthy perennial vegetative communities and is adequate to maintain existing vegetation conditions. Monitoring studies conducted in 2013 indicate a continued stable soil and vegetation cover and composition trend in this allotment.
2. Watershed Function Riparian/ Wetland Areas	NA	NA	This standard is not applicable as there are no perennial streams, riparian areas, or wetlands within this allotment. Livestock water sources are from wells or hauling of water.

Standard	2002 Assessment	2013 Assessment Update	Comments
3. Ecological Processes	Met	Met	This standard is being met in the allotment. 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. Indicators used to evaluate this standard include vegetative composition, presence of weed species ecological status, observed apparent trend (OAT), and current plant composition as compared to a defined Potential Natural Community (PNC) for the identified soil type and precipitation zone. Weed concerns in the allotment include potential for spotted knapweed and diffuse knapweed that may invade the Lakeview Resource Area especially adjacent to main roads. As of 2013, there are no known noxious weed sites within the allotment. The OAT indicates 58% of the BLM portion of the allotment has a Static trend and 42% of the allotment has an Upward trend. The current vegetation has many components of PNC. About 70% of the BLM portion of the allotment is in Late Seral stage and 15% of the BLM portion is in Mid Seral stage. A review of the range monitoring data (photos, trend transects, climate, field observations, OAT and professional judgment indicates that the majority of the allotment (80%) is in good condition with a static to upward trend. Monitoring data collected in 2013 indicates these trends continue in this allotment.
4. Water Quality	NA	NA	This standard is not applicable to the allotment as there are no perennial streams, other water bodies, or wetlands within this allotment. Livestock water sources are from wells or hauling of water.
5. Native, T/E, and Locally Important Species	Met	Met	The Lakeview RMP mentions the potential for monkeyflower in the allotment, but does not list a particular species. There are 3 special status species of monkeyflower (*Mimulus spp.*) that are suspected or documented in the resource area. BLM-administered lands within this allotment do not contain habitat suitable for the 3 *Mimulus* spp. There have been surveys for several Bureau special status plants in the allotment, but no plants were found. There are no known special status plants in the allotment. With respect to special status plants, this standard is being met. The allotment contains an appropriate assemblage of wildlife species and wildlife habitat expected for the shrub-steppe ecosystem. Species diversity may be somewhat higher due to its juxtaposition with the Ponderosa pine forest transitional zone along the western edge of the allotment providing additional habitat diversity. Special status wildlife species or their habitats that are present within the allotment may include the bald eagle, ferruginous hawk, peregrine falcon, burrowing owl, Lewis' woodpecker, white-headed woodpecker, black-backed woodpecker, sage-grouse, Townsends big-eared bat, fringed bat, palid bat, spotted bat, bighorn sheep, kit fox, and pygmy rabbit. There are also several species with high public interest or concern which include golden eagle, mule deer, and elk. 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.

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

This standard is being met on the allotment. Indicators used to evaluate this standard are Soil Surface Factor (SSF), which documents erosion class and soil susceptibility to accelerated erosion; plant community composition, which indicates the root capacity of the soil profile; grazing management, and existing vegetation monitoring (forage utilization studies). Overall, this allotment is functioning properly as indicated by the amount and distribution of ground cover, observations from the ecological site inventory (ESI) including SSF and existing upland forage utilization surveys.

Perennial vegetation provides protective cover to reduce soil movement, decrease compaction and thus increase infiltration. Species composition on the allotment includes a variety of native deep rooted species well-distributed throughout the allotment, including Idaho fescue, bluebunch wheatgrass, mountain big sagebrush, bitterbrush and ponderosa pine which provide adequate ground cover to assist in functioning soils. In particular, the root systems of perennial vegetation assist in holding soil in place. All of the public acreage within the allotment has an SSF rating of stable to slight ranging from 8-30%. About 15% is unknown and represents vegetative communities too small to be mapped, (inclusions), transition zones, and rock outcrops. The allotment is grazed season-long from June 1st to October 30th. Livestock use has been low, utilization levels on public lands have been slight to light. The existing water sources are on private land, therefore, the majority of use occurs on private land close to water.

The grazing system is designed to maintain healthy perennial vegetative communities. Current grazing management strategies are adequate to maintain the existing vegetation conditions. Monitoring conducted in 2013 indicate a continued stable soil and vegetation cover and composition trend in this allotment.

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

The standard does not apply to this allotment because there are no intermittent or perennial streams or wetland areas on the allotment. Water sources are from wells or hauling of water.

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.

Indicators used to evaluate this standard include vegetative composition, presence of weed species ecological status, observed apparent trend (OAT), current plant composition as compared to a defined Potential Natural Community (PNC) for the identified soil type and precipitation zone.

Weed concerns in the allotment include potential for spotted knapweed and diffuse knapweed that may invade the Lakeview Resource Area especially adjacent to main roads. As of 2013, there are no known noxious weed sites within the allotment.

The largest vegetative component on the BLM-portion of the allotment is in the Pumice 10-12 Range Site. Potential vegetation on this site includes bitterbrush, mountain big sagebrush, Idaho fescue and western needlegrass. The other two Range Sites, Juniper-Pine Lavaland 10-12, and Ponderosa Fescue Hills 12-14, have similar understory vegetation with western juniper and ponderosa pine overstory. The OAT indicates 58% of the allotment has a Static trend and 42% of the allotment has an Upward trend. The current vegetation has many components of PNC. About 70% of the BLM portion of the allotment is in Late Seral stage and 15% of the BLM portion is in Mid Seral stage. A review of the range monitoring data (photos, trend transects, climate, field observations, OAT and professional judgment) indicates that the majority of the allotment (80%) is in good condition with a static to upward trend. Monitoring data collected and evaluated in 2013 indicates these trends continue in this allotment.

STANDARD 4 - Water Quality - Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

This standard is not applicable to the allotment as there are no perennial streams, other water bodies, or wetlands within this allotment. Livestock water sources are from wells or hauling of water.

STANDARD 5 - Biological Diversity- Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

The Lakeview RMP mentions the potential presence of monkeyflower in the allotment, but does not list a particular species. There are 3 special status species of monkeyflower (*Mimulus spp.*) that are suspected or documented in the resource area. The livestock water sources for the allotment are located on private land. BLM-administered lands within this allotment do not contain habitat suitable for the 3 *Mimulus* spp. The typical soils on the allotments are well-drained and do not provide the hydrologic conditions suitable for any of the sensitive monkeyflowers. There have been surveys for several Bureau special status plants in the allotment, but no plants were found. There are currently no known special status plants in the allotment. With respect to special status plants, this standard is being met.

The allotment contains an appropriate assemblage of wildlife species and wildlife habitat expected for the shrub-steppe ecosystem. Species diversity may be somewhat higher due to its juxtaposition with the Ponderosa pine forest transitional zone along the western edge of the allotment providing additional habitat diversity.

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 peregrinusi),* burrowing owl *(Speotyto cunicularia),* Lewis' woodpecker *(Melanerpes lewis),* white-headed woodpecker (*Picoides albolarvatusi),* black-backed woodpecker *(Picoides arcticus*), sage-grouse *(Centrocercus urophasianusi*, bighorn sheep *(Ovis canadensis californiana),* Townsends big-eared bat *(Corynorhinus townsendii),* fringed bat (*Myotis thysanodes),* pallid bat (*Antrozous pallidus*), spotted bat (*Euderma maculatum),* kit fox (*Vulpes*

macrotis), and pygmy rabbit *(Brachylagus idahoensis).* There are also other species with high public interest or concern. These include golden eagles (*Aquila chrysaetos*), mule deer *(Odocoileus hemionus),* pronghorn antelope *(Antilocapra americana)* and elk *(Cervus elaphus).*

There are no known bald eagle nests within the allotment although they are occasional visitors to the area. Bald eagles may occasionally feed on road killed deer adjacent to the major roadways and scattered carrion within the allotment. The closest known bald eagle nest is located approximately 3.5 miles from the west boundary of the allotment, with the last record with activity is in 2013.

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 initial rangeland health 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 seen within the general area foraging on small mammals. There are no known golden eagle nests or nesting habitat within the allotment. However, nest sites have been identified within the areas surrounding the allotments where suitable cliff type habitat exists. The closest golden eagle nest is located approximately 7 miles southeast of the allotment.

Habitat for the three woodpecker species is very limited to the forest transitional zone along the west side of the allotment. These habitats may be suitable, but are marginal and limited as only a very small percentage of the allotment contains this transitional forest habitat.

The initial assessment noted that sage-grouse habitat existed within this allotment. Bird densities within the area were described as low when compared to other similar areas to the east. The allotment was noted as falling on the western edge of the species range and contained some marginal habitats due to pine forests, juniper expansion, and historic cultivation practices during the homesteading era.

The initial assessment also noted the presence of one known lek site in the allotment. Based on ODFW's most recent sage-grouse lek data, one occupied (Devils Garden) lek is found within the allotment. The Devils Garden lek reported 7 males at the last survey in 2013 with an 18-year average of approximately 4 males and an unchanged average male lek attendance over the past 10 years.

Based on current habitat data, 0% North Webster allotment falls within PPH and approximately 92% (1,589 acres acres) falls within PGH. HAF survey data for the BLM portions of the North Webster allotment shows that approximately 72% is currently breeding and summer suitable and connects to other seasonal use areas.

Four Bureau Sensitive bat species are known to occur within the Lakeview Resource Area. These include the fringed myotis, pallid bat, spotted bat, and the Townsend's big-eared bat.

However, spotted bats and fringed myotis rarely occur in the general area and are not known to occur on the allotment. There are no known caves, adits, shafts, or outbuildings on the BLM portions of the allotment capable of providing winter hibernacula for bats and there is a low potential or lack of roosting/resting habitat in the allotment.

There are no known roost sites within the allotment for Townsends big-eared bats. However known roosting sites occur adjacent to the allotment and foraging is suspected to occur within this allotment. Townsends big-eared bat summer roosts and wintering habitat have been observed in adjacent lava flows.

Bighorn sheep range occurs on the edge of the Devil's Garden lava flow along the very eastern edge of the allotment. According to ODFW's (2003) bighorn sheep management plan, there have been 3 releases of California bighorn Sheep in the Devils Garden sub-herd of the larger Paulina wildlife management unit over the years with an estimated population size of 40. The current status of the sub-herd is declining. Lack of water may limit distribution. Management actions such as spring developments or guzzler installations have made historic habitat once-again suitable for bighorn reintroductions. Because bighorns rely on their vision as a way to avoid predators, dense stands of junipers or other conifers can reduce visibility and increase predator effectiveness. Further, junipers may compete for water and nutrients needed by forage plants on desert ranges and, therefore, can decrease forage quantity and quality, as well as live water availability from springs and seeps. The ODFW has identified the limitations and decline of California bighorn sheep in the Devil's Garden sub-herd as being related to juniper encroachment and cougar predations and describes the overall habitat quality as low. California bighorns generally do not compete for forage with domestic cattle and other big game species due to differences 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 fox. Potential habitat is present for pygmy rabbits, but there have been no inventories or incidental sightings indicating pygmy rabbits are present within the allotment. There have been sightings within the surrounding area and they are suspected to occur within the allotment.

This allotment falls within mule deer winter range. A potential conflict exists within the allotment due to the timing of fall grazing and the presence of bitterbrush. Bitterbrush is a key forage species for wintering mule deer. Although timing of grazing is a potential conflict, bitterbrush abundance and browse use appears to be somewhat stable at this time. This is probably due to the low number of AUMs authorized for use and the short duration of use within bitterbrush areas. Generally, fall use is discouraged within portions of the allotment that have significant amounts of bitterbrush. The mule deer management objective for this allotment calls for monitoring browse species (ie. bitterbrush) utilization in winter range areas to avoid livestock utilization levels that reduce the long-term viability of browse species.

Although elk are relatively uncommon within the allotment, a few do use the allotment on a regular basis.

There are no known resource conflicts between current livestock grazing management activities and habitat for peregrine falcons, bald eagles, ferruginous hawks, burrowing owls, golden eagles, woodpecker species, bat species, kit foxes, pygmy rabbits, bighorn sheep, pronghorn antelope, or elk. Meeting the

mule deer browse utilization objective would be sufficient to maintain adequate bitterbrush densities within the allotment and avoid a conflict with livestock management.

For these reasons, this standard is currently being met for wildlife species (including special status species) and their habitat within this allotment. Past use from cultivation, control of wildland fire, and invasion of exotic plants has made some portions of the allotment unusable for some species of wildlife. Some areas could benefit from restoration efforts, however, effectiveness of these efforts would be doubtful on historically cultivated areas.

Current Management and Recommended Management Changes

Current livestock management is satisfactory and changes are not recommended at this time. With respect to mule deer habitat, a potential conflict exists between livestock grazing schedules and mule deer winter range. It is recommended that bitterbrush trends be monitored within this allotment and appropriate action taken in the future if use by cattle is found to be negatively impacting existing bitterbrush densities.

Allotment and pasture boundaries for the North Webster Allotment #00906 were corrected or updated recently. These changes were incorporated into BLM's GIS database and need to be reflected on future official allotment and district maps.

2014 Determination

(X) Existing grazing management practices on the North Webster Allotment promote achievement of, or significant progress towards, the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

( ) Existing grazing management practices on the North Webster 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 3/20/14

APPENDIX A

North Webster Allotment Utilization and Actual Use Data 2003 through 2013

Year	Actual Use AUMs	% Utilization
2003	91	No data
2004	229	No data
2005	Rest	Rest
2006	75	No data
2007	85	No data
2008	122	No data
2009	93	No data
2010	91	No data
2011	112	37-50=44*
2012	99	No data
2013	91	42
Average	107	29

*range and avg. utilization for multiple perennial grasses at site. Use categories:
Slight 6-20%; Light 21-40%; Moderate 41-60%; Heavy 61-80%; Severe 81-100%.

North Webster Allotment Current Vegetation Types, Condition, Soil Crusts, and Trend

Range Site Number	Current Dominant Vegetation Code*	Acres	% of Allotment **	Condition Rating	Seral Stage	BSC	Soil Surface Factor	Observed Apparent Trend
023XY210OR	/ARTRV/FEID/	502	28	Good	L	6	Slight	Static
021XY425OR	/ARAR8/FEID/	420	23	Good	L	4	Stable	Upward
023XY210OR	/ARTRV/FEID/	298	16	Good	L	6	Stable	Upward
006XB211OR	/ARTRV/FEID/	131	7	Good	L	6	Slight	Upward
023XY210OR	/ARTRV/FEID/	130	7	Good	L	6	Slight	Static
006XB211OR	PIPO/ARTRV/FEID/	121	7	Good	L	6	Slight	Static
006XB211OR	PIPO/ARTRV/FEID/	87	5	Good	L	6	Slight	Static
023XY210OR	/ARTRV/FEID/	58	3	Good	L	6	Slight	Static
023XY210OR	/ARTRV/FEID/	12	1	Good	L	6	Slight	Static

**The plant codes represent genus-species abbreviations adopted by USDA-NRCS; see also Plants Database available at http://www.plants.usda.gov).*

*** Every Site Writeup Area (SWA) has a 10-15% portion of that area that is considered inclusions of different (often unknown or unmapped) vegetation communities. The secondary vegetation type for a site DOMVEG2 is essentially the same unless noted.*

Values less than 1% of area are not displayed in table.

North Webster Allotment Monitoring (reflects past 10 years data 2003-2013)

Transect	Date	Pasture	Composition % (trend reflects both quantitative data and photo comparisons)	Cover % (trend reflects both quantitative data and photo comparisons)
NW-01 Transect is not permanently marked (start ref. post is permanent), re-read in same general area. Slight differences in composition and cover from first reading are probably attributable to slight variance in transect area sampled. Slight increase in Mtn. Big Sagebrush, bitterbrush, per. forbs. Slight decrease in per. grasses.	8/1/2013	Allotment has one pasture	Per. Grass = 61 Per. Forbs = 5 Shrubs = 34 Stable Trend	Bareground = 58 Litter = 26 Rock = 2 Vegetation = 13 Cryptogam = 1 Stable Trend
NW-01	11/2/2011	Allotment has one pasture	Per. Grass = 76 Per. Forbs = 0 Shrubs = 24 Base data, trend not determined	Bareground = 42 Litter = 19 Rock = 9 Vegetation = 30 Cryptogam = 0 Base data, trend not determined

*Stable and Static are used interchangeably on the Observed Apparent Trend forms.