

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

for

Fitzgerald FFR (#00502)

August 2016

The Fitzgerald FFR Allotment (#00502) is located approximately 8 miles northwest and southwest of Plush, Oregon. The Fitzgerald FFR Allotment contains approximately 25,260 acres (18,857 acres private, 27 acres state, 226 acres Forest Service, and 6,150 acres BLM; see Map). This assessment focuses on the BLM-administered acres. The Fitzgerald FFR Allotment is classified as a "custodial" allotment. Grazing management includes limited periodic inventories and observations to measure long-term condition changes. There are 329 AUMs active use within the allotment from March 1 through February 28 each year.

The original rangeland health assessment (RHA) was conducted in 2005 and the allotment met applicable standards. This assessment is an update to the original RHA. A summary of the 2005 RHA and assessment update are presented in the Table 1 below.

Table 1. Summary of Rangeland Health Assessments for the Fitzgerald FFR Allotment #00502

Standard	2016 Assessment	Comments 2016	2005 Assessment	Comments 2005
1. Watershed Function – Uplands Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform	Met	This standard is being met for the allotment. Available trend data shows a stable trend. Roots of perennial plants occupy the soil profile, and are stabilizing the soil preventing erosion. Organic matter in the form of plant litter is accumulating and being incorporated into the soil, intercepting raindrop impaction and retaining moisture. Percent cover and percent bare ground is stable and is within the range of variability expected for the site. For a more detail, please refer to the discussion under standard one below.	Met	This standard was met in 2005. Overall, uplands appeared to be functioning properly.
2. Watershed Function Riparian/ Wetland Areas Wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.	Met	In 2015, an interdisciplinary team (ID) identified and surveyed a total of 12 acres of palustrine wetlands in the allotment based on more recent GIS riparian/wetland data. Based on field inventory, 8 acres in the east portion of the Chandler Pasture were found to be at PFC. Four acres in the west portion of Chandler Pasture were Functional at Risk (FAR), with an upward trend. (For a more detail, please refer to the discussion under standard two below).	Met	In 2005, an ID team estimated about 202 acres of palustrine wetlands within the allotment, based on national wetland inventory (NWI) paper map data, all of which were in Proper Functioning Condition (PFC).

Standard	2016 Assessment	Comments 2016	2005 Assessment	Comments 2005
<p>3. Ecological Processes</p> <p>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.</p>	Met	<p>This standard is being met. The long-term trend plots within the allotment show adequate diversity of community structure including grasses, forbs, and shrubs appropriate for the sites. This diversity ensures that the capture and storage of energy occurs throughout most of the season. Nutrient cycling is evident by litter accumulation and overall plant productivity.</p> <p>Non-native invasive annual grasses continue to invade the allotment; however the native grasses are still competing with the annual grass species. Medusahead rye and North African Grass have been documented within the allotment. The majority of the other infestations are documented in disturbed areas and drainages. The infestations are not currently at a level of damaging the ecological process of the allotment.</p> <p>For a more detail, please refer to the discussion under standard three below.</p>	Met	This standard was met in 2005 for plant populations and animal populations.
<p>4. Water Quality</p> <p>Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.</p>	Not Applicable	There are no streams listed as Water Quality Impaired in the Allotment. There are no streams that provide perennial flow over a long enough reach to monitor for temperature, the primary factor for listing as Water Quality Impaired in this area.	Met	This standard was met in 2005. Neither surface water nor groundwater within these allotments was listed for exceeding state water quality standards.
<p>5. Native, T/E, and Locally Important Species</p> <p>Habitats support healthy, productive and diverse populations and</p>	Met	This standard is met in 2015. Wildlife species within the area are described below under Standard 5.	Met	<p>The allotment contained an appropriate assemblage of wildlife species and wildlife habitat expected for the shrub-steppe ecosystem.</p> <p>There were no known resource conflicts identified between current livestock grazing management activities and existing wildlife species (including special status species) or their habitat. For these reasons, this standard was being met. (See</p>

Standard	2016 Assessment	Comments 2016	2005 Assessment	Comments 2005
communities of native plants and animals (including special status species and species of local importance)				discussion of Standard 5 below for more details).

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

Met:

All of the Fitzgerald FFR Allotment have stable to upward trends, and are meeting this standard. This is evident by a combination of pace 180° transects and photo trend monitoring. Observed apparent trend (OAT) data was also collected at the trend sites. The monitoring methods that are quantitative in nature are OAT and the pace 180° transects. The study measures attributes that are related to permeability and soil stability or erosion potential. This includes perennial plant cover, amount of bare ground, biological crust cover, seedling establishment, litter, and plant community composition. Based on the quantitative and qualitative data (photo monitoring) described above, the majority of the long-term monitoring sites were found to have stable to upward trends (refer to monitoring summary in Appendix A for a discussion at each trend site).

The long-term monitoring study indicates a stable trend. Roots of perennial plants are occupying the soil profile, and are stabilizing the soil preventing erosion. Plant cover is adequate to capture, store, and safely release moisture associated with normal precipitation events. Percent bare ground has remained stable or decreased in the trend plots read within the allotments. Litter has adequately intercepted raindrop impaction, and retained moisture. Therefore, this allotment is meeting this standard

The North Warner Hazardous Fuels Reduction Project (CX-OR-010-2007-02) is a past fuels project that have been conducted within the Fitzgerald FFR Allotment. Under the North Warner Hazardous Fuels Reduction Project, juniper trees were cut and burned and existing stands of ponderosa Pine thinned, to reduce hazardous fuel loadings and promote fire resilient plant communities within the project area.

Although treatment has been conducted in the Fitzgerald FFR Allotment in the past, there is still a need to treat areas under juniper/pine expansion. On field trips in 2015, the ID Team observed that despite the past treatment, there are still areas in need of treatment. The North Warner Hazardous fuels reduction project CX did not include all areas of juniper/pine expansion within the allotment needing treatment, as seen by the ID Team. In addition, areas treated under the CX would likely need revisited to treat young juniper tree. These areas are currently meeting this standard, and expansion is not attributed to current livestock grazing. However, if expansion continues over time, a loss of understory would occur and would increase the potential for soil erosion. The areas with juniper and/or pine expansion would not continue to meet this standard in the long-term if these areas are not treated.

Recommendations

The ID team recommended that to continue to meet Standard 1, areas with juniper and/or pine expansion be treated within the allotment.

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

Met:

In 2015, an ID team identified and surveyed a total of 12 acres of palustrine wetlands in the allotment based on updated GIS riparian/wetland data. Based on field inventory, 8 acres in the east portion of the Chandler Pasture were found to be at PFC. Four acres in the west portion of Chandler Pasture were Functional at Risk (FAR), with an upward trend. The primary concerns with the FAR wetland were some recent digging (cleanout) at the site that had yet to re-vegetate, some minor head-cutting in the meadow, and juniper invasion within existing exclosures. These concerns were not serious at present and wetland conditions were determined to be trending upward.

Recommendations

The ID team recommended treatment of young, invasive western juniper within affected riparian exclosures.

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.

Met:

Actual use and utilization data has been collected in this allotment for over 10 years. The monitoring summary (Appendix A) show the Actual Use data has been collected for each pasture for approximately 20 years. Use has been within both the active permitted AUMs and permit dates for the allotment for the last 10 years.

As described under Standard 1, two fuels treatments have been conducted in the allotment in the recent past. However, during field trips in 2015, the ID team observed areas of juniper expansion that still need treatment throughout the allotment. All areas with juniper expansion are currently meeting Standard 3, and expansion is not attributed to current livestock grazing. However, if expansion continues over time, a loss of understory would occur and would decrease the ability of the site/area to capture, store, and safely release moisture associated with normal precipitation events. Percent litter would decrease and decrease the ability to intercept raindrop impaction. The areas with juniper and/or pine expansion would not continue to meet this standard in the long-term if these areas are not treated.

The long-term monitoring plot within the allotment indicates a stable trend. This is indicated by healthy perennial grass species abundance, size, and vigor. This allotment has a healthy community structure (including grasses, forbs and shrubs), composition, and vigor, which is capable of capturing and storing nutrients and energy throughout the season. Nutrient cycling is indicated by litter accumulation and plant productivity.

Weeds

Non-native invasive annual grasses exist within the allotment. However, the native grasses are still competing with the annual grass species. Medusahead rye (*Taeniatherum caput-medusae*) has been documented within the allotment along the powerline ROW. The infestations have begun to spread off the ROW and into the shrubs and pockets of native grasses. Non-native invasive plant surveys took place on the eastern portions of the allotment during 2015. The surveys documented two species of whitetop which included Lenspod whitetop (*Lepidium chalepensis*) and hoary cress (*Lepidium draba*). These whitetop infestations all were documented within the Snyder creek drainage on both BLM and private lands. Trace amounts of bull thistle (*Cirsium vulgare*) were also documented within the allotment.

Recommendations

The ID team recommended that to continue to meet Standard 3, areas within the allotment with young, invasive western juniper should be treated.

In addition, medusahead sites on public lands should continue to be managed under the most recent invasive species management plan, including continued monitoring for other non-native, invasive species.

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

Not Applicable:

There are no streams listed as Water Quality Impaired in the allotment. There are no streams that provide perennial flow over a long enough reach to monitor for temperature, the primary factor for listing as Water Quality Impaired in this region.

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

Met:

Wildlife/Wildlife Habitat

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 south 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 peregrinus*), burrowing owl (*Speotyto cunicularia*), sage-grouse (*Centrocercus urophasianus*),

Townsend's 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*).

The allotment falls within the Oregon Department of Fish and Wildlife's Warner big game habitat management unit. The mule deer and pronghorn antelope populations are relatively stable within this unit. Habitat quantity and quality do not appear to be limiting big game population size or health within the unit. The allotment comprises a small percentage of the unit and provides habitat capable of supporting mule deer, pronghorn antelope, elk and California bighorn sheep. Elk winter habitat occurs in the southeastern portion of the allotment and the population appears to be relatively stable within this unit. California bighorn sheep habitat occurs within the western portion of the allotment and comprises approximately 16% (978 acres). California bighorns generally do not compete for forage with domestic cattle due to difference in habitat use patterns. The only limitations in bighorn habitat appear to be limited perennial water sites and unrestricted movement to and from these water sources. There are currently 75 AUMs of forage allocated for mule deer, pronghorn antelope, California bighorn sheep, and other wildlife species within the allotments (BLM, 2015).

Migratory birds use all habitat types in the allotment for nesting, foraging, and resting as they pass through on their yearly migrations. There has been no formal monitoring of migratory birds on the allotment. There are no known resource conflicts for these species.

The allotment is within the greater sage-grouse Priority Habitat Management Area (PHMA) in Sagebrush Focal Area (SFA), and the Greater sage-grouse General Habitat Management Area (GHMA); approximately 6,033 acres are in PHMA in SFA and approximately 21 acres are in GHMA. There are 2 leks within the allotment, both of which have a conservation status of "unoccupied pending". There are no known resource conflicts for this species.

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 within the allotment, but potential habitat is suspected to occur. There are no known resource conflicts for these species.

No nesting habitat exists within this allotment for bald eagle, golden eagle, or peregrine falcon. It is suspected that they are occasional visitors to the area. Habitat for nesting is available within the area surrounding the allotment where suitable cliff type habitat exists; however, no recent nesting activity has been documented within the allotment. There are no known resource conflicts for this species.

No burrowing owl sightings or nesting burrows have been observed within the allotment. There are no known resource conflicts for this species.

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. Use of the area by these species is likely limited to foraging activities. There are no known resource conflicts for these species.

This allotment also provides habitat capable of supporting many common mammals including jackrabbits, cottontails, coyotes, ground squirrels, chipmunks, marmots, bobcats, mountain lions,

badgers, bats, and other common shrub-steppe mammal species, as well as, amphibian and reptile species such as fence lizards, sagebrush lizards, gopher snakes, rattlesnakes, horned-lizards, and other common shrub-steppe species. There are no known resource conflicts for these species

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, bat species, kit foxes, pygmy rabbits, big horn sheep, pronghorn antelope, elk, or mule deer.

Recommendations

To continue to meet Standard 5, areas within the allotment with young, invasive western juniper should be treated in order to maintain or improve habitat conditions for sagebrush-dependent wildlife species, including sage-grouse.

Table 2. ID Team Members

Name	Title
Jayna Ferrell	Rangeland Management Specialist
Theresa Romasko	Assistant Field Manager
Grace Haskins	Weed Management Specialist/ Botanist
Jimmy Leal	Fisheries Biologist
Jami Ludwig	Assistant Field Manager
John Owens	Wildlife Biologist
Paul Whitman	Planning and Environmental Coordinator

2015 Determination

Existing grazing management practices on the BLM-administered portions of the allotment promote achievement of, or significant progress towards, meeting the Oregon Standards for Rangeland Health and conform with the applicable Guidelines for Livestock Grazing Management.

Existing grazing management practices on the BLM-administered portions of the 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 applicable Guidelines for Livestock Grazing Management.

for 

J. Todd Forbes
Field Manager
Lakeview Resource Area

8/10/16

Date

Appendix A – Fitzgerald FFR Allotment Monitoring Summary

Fitzgerald FFR Allotment is classified as a "custodial" allotment. Grazing management includes limited periodic inventories and observations to measure long-term condition changes. There are 329 AUMs active use within the allotment from March 1 through February 28 each year.

Fitzgerald FFR Allotment Actual Use by Year

Year	AUMs
2014	324
2013	324
2012	324
2011	324
2010	320
2009	324
2008	324
2007	324
2006	324
2005	
Average	324

FF-01 (Photo) – *Stable*

Observed Apparent Trend at FF-01

	2014
Vigor	7
Seedlings	7
Surface Litter	5
Pedestals	5
Gullies	5
Total	29
Rating	<i>Upward</i>

Percent Cover at FF-01

	2014
Bare Ground	9
Litter	6
Rock	23
Gravel	0
Vegetation	61
Crust/Moss	0

Percent Composition at FF-01

	2014
Thurber's needlegrass	6
Sandberg Bluegrass	16
Phlox	1
Low sagebrush	34
Cheatgrass	36

Percent Shrub Cover Line Intercept at FF-01

Transect #	2014
LI 1	18
LI 2	35
LI 3	26
Average % Cover	26

This trend plot was established in 2014 at a low sagebrush site within the allotment. Observed apparent trend was upward and percent cover of vegetation was high. Percent cover bare ground was low with hits on rocks being high at this site. This site has an average of 26 percent cover of low sagebrush. Data and photo analysis indicates a stable trend.






Overall trend at this site (FF-01) is stable.

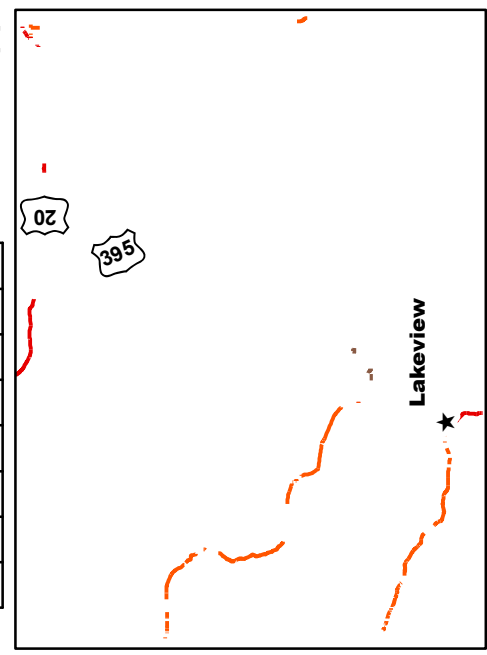
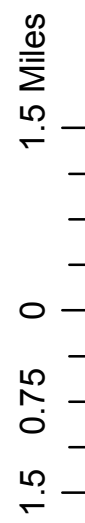
Map - 2

Fitzgerald FFR Allotment #00502

US DEPARTMENT OF INTERIOR
Bureau of Land Management
Lakeview District, Oregon

Legend

-  Allotment
-  Pastures
-  Bureau of Land Management
-  State
-  Private/Unknown



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