

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

Rangeland Health Assessment Update for the
Cahill FRF Allotment #00219

December 2013

The Cahill FRF Allotment, #00219, is located approximately 6 miles northeast of Adel, Oregon on the east side of Warner Valley. Land status within the allotment is a total 1,296 acres on the allotment of which about 571 acres are public land. The allotment is categorized as a C=Custodial allotment. Fenced Federal Range (FRF) is used to describe the allotment because it has a high percentage of private land fenced in with public land acres.

The allotment has a total of 280 AUMs authorized on public lands in a single pasture to one permittee. There is about 725 acres of private and state land fenced in with the public land. The allotment is used in conjunction with their private land. The current management is fall and winter grazing use.

The original Cahill FRF Allotment Rangeland Health Assessment was conducted in 2004. There are no long term trend studies in the allotment.

A summary of the assessment of the Standards in 2004 and an updated assessment is shown in the Table 1.

Table 1. Summary of Rangeland Health Assessments for Cahill FRF Allotment

Standard	2004	2013	Comments
1. Watershed Function – Uplands	Met	Met	<p>The 2004 RHA found upland soils in the allotment exhibited infiltration and permeability rates, moisture storage, and stability appropriate for soil, climate, and land form. Root occupancy for the soil was appropriate.</p> <p>No transects were done on this allotment during ESI in 1987. However, observations of the 571 acres of BLM land in the allotment indicated there was ample vegetation to prevent accelerated erosion. There is no evidence of significant wind or water erosion as the site is relatively flat with no gullies or rills apparent. In 2013, both SSF and OAT ratings were determined for largest soil type, Crump-Pit complex (53%) in the allotment. SSF was stable and OAT was upward trend. These ratings indicate there is still sufficient vegetation and litter cover to limit erosion and protect against development of rills and gullies.</p> <p>Another indicator of Upland Watershed condition is plant composition and community structure. The dominant vegetation was not mapped, but the range sites were identified from the soil mapping (Table 3). The vegetation associated with the dominant range sites mapped in the 1987 ESI (and described in the 2004 RHA) are still present in 2013. The Sodic Meadow, Semi Wet Meadow, Lakebed, and Sodic Flats contain significant vegetative cover and the appropriate vegetation composition to insure soil stability.</p>
2. Watershed Function - Riparian/ Wetland Areas	Met	Met	<p>There are no major intermittent or perennial streams on BLM in this allotment. There are 257 acres of lentic palustrine wetlands in the allotment, all were in PFC in 1998. Although there has been no recent lentic PFC assessments or surveys performed, the sites observed appear to be functioning properly.</p>
3. Ecological Processes	Met	Met	<p>The 2004 RHA found the allotment contained healthy, productive and diverse plant and animal populations and communities that were appropriate to soil, climate, and landform and were supported by ecological processes of nutrient cycling, energy flow, and the hydrologic cycle.</p>

			Following are observations from the ID team: vegetation appeared healthy and productive. Livestock did not appear to be having a negative effect on the vegetation in the areas surveyed. Ecological processes for plant growth and decomposition appeared normal. This allotment has an exceptionally healthy population of great basin wild rye. No introduced species were noted. In 2013, observations found the conditions similar to 2004. For this reason this standard continues to be met.
4. Water Quality	Met	Met	This standard was determined to be not applicable or otherwise met since there were no 303d listed water bodies within the allotment.
5. Native, Threatened and Endangered, and Locally Important Species	Met	Met	<p>The 2004 RHA found the allotment contained healthy, productive, and diverse plant and animal populations and communities that are appropriate to soil, climate, and landform. The deer and pronghorn populations are healthy and stable in number. Habitat quantity and quality do not appear to be limiting population size or health. Wildlife populations fluctuate at or slightly below ODFW's Management Objective for the unit. The allotment also provide habitat for numerous small and nongame birds and mammals common to the Great Basin. There are no known sage grouse leks or sage-grouse habitat in the allotment. The allotment provides habitat for raptors and other sensitive species, as well as, some federally listed species. No critical habitat or limitations have been identified for any of these species which include wintering bald eagles, Peregrine falcons, and possibly pygmy rabbits and sensitive bat species. Livestock grazing does not appear to be limiting wildlife habitat within the allotment.</p> <p>No special status or cultural plant species are known to occur in the allotment. Two noxious weed species currently occur in the allotment.</p>

Guidelines for Livestock Management

Existing grazing management practices or levels of grazing use on the Cahill FRF Allotment are consistent with the Guidelines for Livestock Grazing Management (August 12, 1997). The pasture is grazed in the Fall/Winter providing summer rest which enables the perennial grass species to provide adequate cover for infiltration, moisture storage and maintains diverse plants communities. BLM lands are grazed in coordination with private lands to minimize conflicts and promote adequate livestock distribution.

2013 Determination

Existing grazing management practices or levels of grazing use on the Cahill FRF 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 Cahill FRF 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

12/4/13

Date

Cahill FRF Allotment Monitoring Summary 2013 (see Lakeview Resource Area Monitoring Files for Raw Data):

In 2012, Cahill FRF Allotment was utilized from Sept 27 to February 28, 2013. The Cahill FRF Allotment has 280 Active AUMs. The average actual use from 2002-2012 is 280 AUMs

Table 2. Actual Use and Utilization Cahill FRF Allotment

Year	AUMs
2012	280
2011	280
2010	280
2009	280
2008	280
2007	280
2006	280
2005	280
2004	280
2003	280
2002	280
Total	3080
Ave.	280

The total active 280 AUMs did not exceed the permitted AUMS (280) during any year. (Table 2).

There is no utilization data for the Cahill FRF Allotment. There are no trend plots in Cahill FRF Allotment.

In a 2013 allotment visit the Observed Apparent Trend (OAT) and Soil Surface Factor (SSF) ratings were determined on the largest Site Writeup Area (689 acres) in the allotment, which is the Crump–Pit Complex and the associated vegetation types are Semi Wet Marsh and Lakebed. (Table 3). The OAT rating was upward trend for the site (Table 4) and the SSF rating (Table 5) found the site (689 acres) to be Stable and the remainder of the allotment unknown. The determination and the factors considered for the OAT is in Table 6 and the determination and the factors considered for the SSF rating is in Table 7.

Table 3. Dominant Vegetation in Cahill FRF Allotment (00219)

Range Types with associated Vegetation Type*	Acres	Percent of Allotment
Sodic Meadow alkali sacaton/inland saltgrass	328	25%
Sodic Flat Greasewood/basin wildrye/inland saltgrass	114	9%
Semi Wet Marsh Cattail/hardstem bullrush	345	27%
Lakebed spike rush/dock	241	19%
TOTAL VEGETATION	1028	79%
Playas	74	6%
Water	10	1%
Unknown**	184	14%
ALLOTMENT TOTAL	1296	100%

*The vegetation types were not described in the ESI (1987) but range types were identified.

** Every Site Writeup Area (SWA) has a 10-15% portion of that area that is considered inclusions of different unmapped vegetation communities.

Table 4 . Observed Apparent Trend for Cahill FRF 00219 Allotment

	Upward	Static	Downward	Water/Playa or Rockland	Unknown**
Acres	689	0	0	33	574
Percent of Allotment	53%	0	0	3%	44%

* The Observed Apparent Trend (OAT) is a numerical rating which considers vigor, seedlings, surface litter, pedestals and gullies to estimate the trend of a particular site and SWA.

** Every Site Writeup Area (SWA) has a 10-15% portion of that area that is considered inclusions of different vegetation communities. The transect data for the SWA may not apply to these inclusion, therefore the acres in these inclusions are considered unknown.

Table 5 . Soil Surface Factor by Cahill FRF 00219 Allotment

	Stable	Slight	Moderate	Water/Playa or Rockland	Unknown**
Acres	689	0	0	33	574
Percent of Allotment	53%	0	0	3%	44%

* The erosion condition classes are based on numeric scoring system which considers soil movement, surface litter, surface rock, pedestalling, flow patterns, rills and gullies.

** Every Site Writeup Area (SWA) has a 10-15% portion of that area that is considered inclusions of different vegetation communities. The transect data for the SWA may not apply to these inclusion, therefore the acres in these inclusions are considered unknown.

Table 6. Observed Apparent Trend

SWA# 437	2013	Possible
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		Score
Vigor	10	10
Seedlings	6	10
Surface Litter	4	5
Pedestals	5	5
Gullies	4	5
Total	29	35
Rating	<i>Upward</i>	

Rating: 26-35 Upward 17-25 Static 7-16 Downward

Table 7. Soil Surface Factor

SWA# 437	2013	Possible Score
Soil Movement	3	14
Surface Litters	3	14
Surface Rock	2	14
Pedestalling	1	15
Flow Patterns	3	15
Rills	3	15
Gullies	4	15
Total	19	102
Rating	<i>Stable</i>	

Rating: Stable 0-20 Slight 21-40 Moderate 41-60 Critical 61-80 Severe 81-100