

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

for

Pine Creek Allotment #00403

June 2015

There are 406 acres of public land within the Pine Creek Allotment. The allotment is permitted from 4/16-6/15 with a total of 18 AUMs. This is a C category allotment due to the small parcels of BLM land mixed in with private lands. The BLM lands of this allotment sit between two large private moist meadows where livestock graze throughout the summer and into the fall months. BLM lands are not fenced separate from the moist meadows. Exclosures have fenced all riparian areas out of the allotment.

Summary of Rangeland Health Assessments for the Pine Creek Allotment

Standard	Assessment Findings 2015	Comments 2015	Assessment Findings 2006	Comments 2006
1. Watershed Function – Uplands	Met	Uplands have not changed since the previous assessment. Erosion condition class was assessed in 2015 to be stable for 96% of the uplands acres. This indicates soils are stable and functioning appropriate to climate and landform.	Met	Deep rooted species are present which provide soil stability and resistance to erosion.
2. Watershed Function Riparian/ Wetland Areas	Not Met	Exclosures were built in 2006 and 2015 (Map 1) to exclude livestock in the riparian areas of the allotment. One riparian area is currently managed as a riparian pasture and is currently not grazed; it was recently rated Functional at Risk, Upward trend. Pine Creek below the road is rated as Functional at Risk, No Apparent Trend. Livestock grazing in this area is no longer a causal factor for not meeting the standard because all riparian is excluded.	Not Met	Most grazing use occurs on riparian areas of the allotment, resulting in heavy grazing utilization which was the cause for not meeting the standard. Proposed two exclosures.
3. Ecological Processes	Met	Medusahead is still largely present, however no dramatic increase has occurred since the previous assessment. Ventenata and Mediterranean sage are present on the allotment. Native plants are present and provide effective nutrient cycling. Standard 3 is being met for wildlife populations. The majority of habitats within the allotment are in functional condition and support natural ecological processes.	Met	Medusahead rye, Ventenata, cheatgrass and Mediterranean sage are documented throughout the allotment but, overall ecological processes are appropriate to soil, climate, and landform.
4. Water Quality	NA	There are no perennial streams on BLM-administered lands within the allotment.	Met	Waters have not been monitored.
5. Native, T/E,	Met	No fish or Special Status Plant	Met	No fish or Special Status Plant

Standard	Assessment Findings 2015	Comments 2015	Assessment Findings 2006	Comments 2006
and Locally Important Species		Species occur within the allotment. Wildlife species occur within the allotment and are spatially distributed across the landscape with a density and frequency suitable to meet their reproductive capability and sustainability in the area. There is no known conflict between livestock grazing and other wildlife species within the allotment (see narrative below). Surveys for special status species have been conducted during other project work within the allotment. Preliminary Priority sage grouse habitat (PPH) occurs within the allotment.		Species occur within the allotment. Wildlife species occur within the allotment and are spatially distributed across the landscape with a density and frequency suitable to meet their reproductive capability and sustainability in the area. No conflicts occur between wildlife and livestock grazing.

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

Soil surface factor was assessed in 2015 on Oxwall gravelly loam, 0 to 5 % slopes. This soil comprises 96% of the soils on the allotment and was rated with an erosion condition class of stable. Interpreting indicators of rangeland health evaluation sheet performed on the same site confirmed soil site stability as none to slight departure from expected. These findings support those assessed in 2006 based on vegetation growing on site are deep rooted providing soil stability and resistance to erosion while helping provide infiltration rates and nutrient cycles. Soils have a good layer of moss in the interspaces between sagebrush plants. Trend studies conducted throughout the allotments show stable to upward trends. Soils are appropriate for climate and landform.

Based on these finding this standard is being met.

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

Pine Creek is an intermittent channel that flows from southwest to northeast across the allotment. The BLM segment of Pine Creek north of County Road 2-10 (0.15 miles of stream) was assessed for proper functioning condition (PFC) in 2012 and determined to be Functioning at Risk with no apparent trend. Indicators for not meeting PFC were riparian vegetation lacked vigor and a diverse age class of riparian plant species. A fair number or raw and actively eroding banks were observed and were not re-vegetating. High utilization of riparian vegetation and active hoof action were observed. For these reasons, livestock grazing was found to be a contributing factor in not meeting standard 2 in this area.

A 10-acre enclosure was constructed in the spring of 2015 to eliminate livestock grazing as a causal factor for not meeting this standard on Pine Creek downstream of the county road.

The BLM portion of Pine Creek upstream (south) of the County Road 2-10 (0.15 miles) was assessed and determined to be at PFC in 2012. The previous PFC assessment, completed in 1997, assessed this stream segment to be non-functional. The enclosure was constructed in 2007 to exclude livestock grazing and improve riparian conditions. The results of excluding livestock from this area for the last 7 years, was successfully improving riparian conditions. This segment is now Functional At Risk with an Upward Trend.

Tributary 1 to Pine Creek, approximately ½ stream miles, in conjunction with approximately one acre categorized as freshwater emergent wetland located in the NWSW ¼ of section 7 is currently assessed to be at Functional At Risk with an Upward Trend.

Tributary 2 to Pine Creek (approximately ¼ mile in length) was assessed in April, 2015 and determined to be Functional at Risk with an Upward Trend.

Notes of the field visits in April of 2015 to Tributary 1 and Tributary 2 indicated that the existing delicate sandy soils onsite are susceptible to slight disturbances. Recovery is slow and riparian vegetation is the only stabilizing component for the head cuts and soil conditions. This is within a riparian pasture rested from livestock grazing. Many headcuts within the meadow and stream reaches continue to put the stream and associated riparian systems at risk of further instability.

For these reasons this standard is not being met. Livestock grazing is not a contributing factor.

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 and energy flow.

Upland plant communities assessed within long-term trend sites show an appropriate composition of species with high invasion by cheatgrass (*Bromus tectorum*), medusahead rye (*Taeniatherum caput-medusae*) and Ventenata (*Ventenata dubia*). These non-native invasive winter annual grass species successfully invaded the majority of the allotment over the past eight years. The most heavily infested areas are located in the easternmost sections of the allotment. In several areas dense monocultures of medusahead have formed, greatly reducing the native grass and forb species on the BLM portions of the allotment. Some aggressive treatments have been applied to neighboring private lands. These areas were sprayed with Imazapic and re-seeded into crested wheat and other favorable grass species. These treatments have successfully contained some medusahead infestations to BLM lands. The BLM sprayed medusahead along roadsides to prevent spread to other areas near the allotment. Mediterranean sage (*Salvia aethiopsis*) is present in small isolated infestations across the allotment. Native grasses and forbs are being reduced as the non-native invasive grasses continue to invade the allotment. All non-native invasive plants will continue to be actively managed with the most updated invasive plant integrated management plan for the Lakeview Resource Area.

Two long-term monitoring plots, established in 2012 and reread in 2014, indicate observed apparent trend to be stable to upward. Invasive species are not currently at a threshold to prevent the native plant community from providing diversity, cover, and abundance to support ecological processes within its current state. Native grasses and forbs have a high potential to be reduced

on the allotment if invasive plants are left untreated. Although non-natives have invaded the allotment the native plant community continues to maintain a healthy integrity and energy flow.

Habitat quality and population levels fluctuate over time, and generally represent natural trends in the ecosystem; however, some species may show erratic or negative trends. These trends are determined through monitoring of habitat and animal composition and community structure. This area supports diverse wildlife populations that are appropriate for the types of habitats available within the allotment. This standard is currently being met from the aspect of natural wildlife populations, diversity, and sustainability with current environmental conditions.

For these reasons this standard is being met on the allotment.

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

There are no perennial streams on BLM-administered lands within the pastures. Therefore, this standard is not applicable.

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.

Wildlife and Special Status Species and their habitats occur within the allotment. All species and habitats previously mentioned in 2006 continue to occur within the allotment and have not changed. Special status wildlife species or their habitats that are present within this allotment include the Bald Eagle (*Haliaeetus leucocephalus*), Ferruginous Hawk (*Buteo regalis*), Burrowing Owl (*Speotyto cunicularia*), Greater Sage-Grouse (*Centrocercus urophasianus*), and pygmy rabbit (*Brachylagus idahoensis*). There are also two species with high public interest. These are mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*).

No nesting or roosting habitat exists within this allotment for the Bald Eagle. Nesting and roosting does occur on U.S. Forest Service lands to the west. They are suspected as occasional visitors to the area. Bald Eagle foraging could occur within the allotment; however it is probably restricted mostly to road killed deer adjacent to the major roadways and occasional carrion scattered through the allotment.

There is some potential nesting habitat for Ferruginous Hawks on a few scattered junipers within this allotment. No surveys have been conducted for Ferruginous Hawk. Ferruginous Hawk foraging habitat exists through portions of the allotment. There are no resource conflicts for Ferruginous Hawks or Bald Eagles.

No observations of Burrowing Owls exist within the vicinity of the allotment. Assumption is that they occasionally do occur within the allotment. There are no resource conflicts for this species.

Mule deer inhabit much of the area. Moderate concentrations of wintering mule deer inhabit this allotment. No conflicts exist between mule deer and cattle grazing within this allotment.

Pronghorn use is occasional and scattered across the allotment. No major conflicts exist between pronghorn antelope and cattle grazing within this allotment.

Approximately 2,760 acres of preliminary priority habitat (PPH) and 2 acres of preliminary general habitat (PGH) for Greater Sage-Grouse occur within the allotment. Due to constraints in funding availability and priority on the district this allotment has not received additional Habitat Assessment Framework surveys. Habitats for sage-grouse on the allotment have not changed substantially since the previous assessment. Habitats for sage-grouse within the allotment are dominated by low sagebrush, although some scattered big sagebrush does occur. Sage-grouse use is probably mostly restricted to spring and early summer foraging with some nesting habitats in scattered portions of the allotment. Approximately 60% of the area is suitable for winter, spring and early summer use. Another 10% of the area is suitable for nesting habitat and additional 10% is suitable for late summer use. The remaining 20% of the area is non-habitat and is comprised of western juniper woodlands and areas invaded by medusahead. There are no known sage-grouse lek sites within the allotment, but there are two active lek sites approximately 1-2 miles to the northeast of the allotment.

Invasive noxious weeds may continue to be a limiting factor for sage grouse occurrence within the allotment. Efforts to improve this standard should focus on weed treatment. No major conflicts exist between cattle grazing and sage-grouse within this allotment.

For these reasons this standard is being met on the allotment.

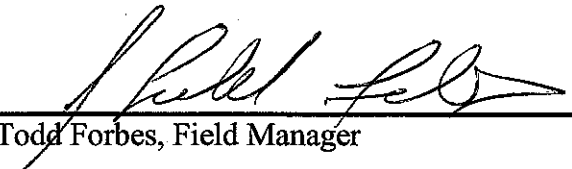
2015 ID Team Members

Name	Title
Lori Crumley	Rangeland Management Specialist
David Probasco	Wildlife Biologist
Theresa Romasko	Assistant Field Manager
Grace Haskins	Weed Management Specialist
Jimmy Leal	Fisheries Biologist
Jami Ludwig	Assistant Field Manager
Ian Grinter	Botanist
Paul Whitman	Planning and Environmental Coordinator

2015 Determination

Existing grazing management practices on the Pine Creek 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 Pine Creek 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.



J. Todd Forbes, Field Manager

6/4/15

Date

Pine Creek Allotment #00403 Monitoring Summary (2014):

The Pine Creek Allotment is permitted to grazed during the spring and summer (4/16-6/15). The total permitted AUMs are 18. The average actual use over the last 10 years is 18 AUMs and target utilization level of 50% has not been exceeded. Use on BLM lands may have been more intermittent season long as they are not fenced separate form private lands which are used spring summer and fall.

Specified Grazing Use

Allotment	Pasture	LIVESTOCK		GRAZING PERIOD		TYPE USE	% Public Land	AUMS
		Number	Kind	Begin Date	End Date			
Pine Creek (00403)	Pine Creek	9	CATTLE	4/16	6/15	Active	100	18

Actual Use and Utilization for Pine Creek

Year	Pine Creek	
	AUM	% use
2014	18	25
2013	18	-
2012	18	19
2011	18	-
2010	18	-
2009	18	-
2008	18	-
2007	18	-
2006	18	-
2005	18	-
2004	-	-
Average	18	22

Key Species and Target Utilization Levels for the Pine Creek Allotment (00403)

Pasture	BLM Acres	Trend Plot	Key Species	Utilization Target %
Pine Creek	1,560	PC-01	Sandberg Bluegrass (<i>Poa secunda</i>), Squirreltail (<i>Sitanion hystrix</i>),	50

Summaries by trend monitoring site

There are two long-term monitoring sites in the Pine Creek Allotment.

PC-01

Pine Creek Pasture

Years Data Recorded – 2012, 2014

Dominant species are POSE, VEDU, and ARAR. Photo trend and observed apparent trend are stable to upward.

Observed Apparent Trend

PC-01	2012	2014
Vigor	6	8
Seedlings	2	6
Surface Litter	4	5
Pedestals	4	4
Gullies	5	5
Total	21	28
Rating	<i>stable</i>	<i>upward</i>

Cover

PC-01	2012	2014
Bare Ground	8	8
Litter	23	23
Rock	16	24
Vegetation	53	45
Crust	-	--

PC-02

Pine Creek Pasture

Years Data Recorded- 2012, 2014

Dominant species are POSE, ELEL, VEDU, and ARAR. Photo trend and observed apparent trend are stable.

Observed Apparent Trend

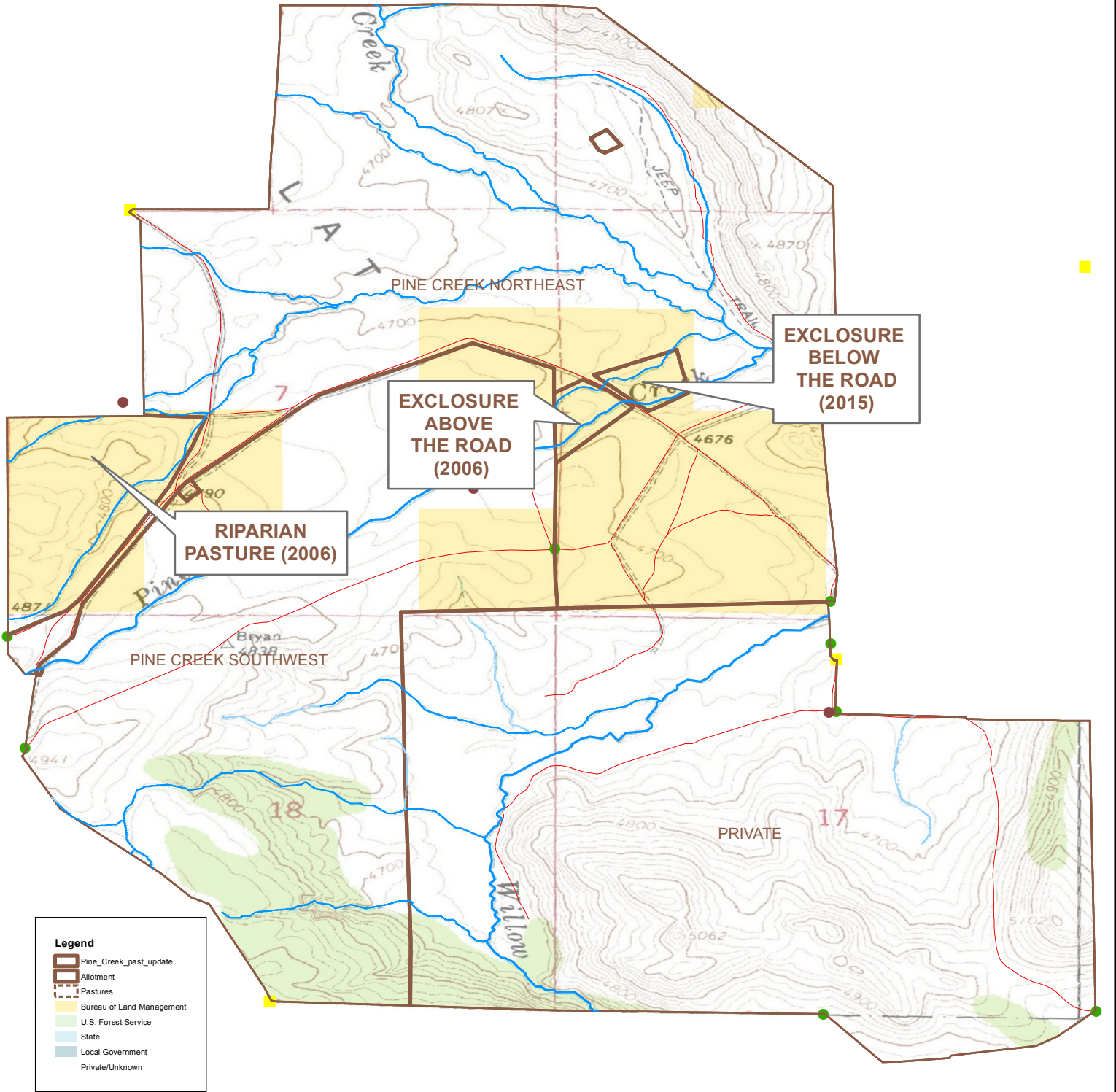
PC-02	2012	2014
Vigor	7	7
Seedlings	5	7
Surface Litter	3	5
Pedestals	3	3
Gullies	-	--
Total	18	27
Rating	<i>stable</i>	<i>upward</i>

Cover

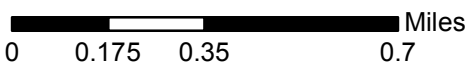
PC-02	2012	2014
Bare Ground	14	13
Litter	25	22
Rock	12	13
Vegetation	49	52
Crust	-	

Shrub cover for all plots in Pine Creek Allotment in 2012

Plot	Percent cover LI-1	Percent cover LI-2	Percent cover LI-3	Average Shrub Height	Species
PC-01	30%	17%	27%		ARAR
PC-02	20%	16%	22%		ARAR



Map 1 Pastures for Pine Creek Allotment



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