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

Rangeland Health Assessment Update for the

Fremont Allotment #00900

3/12/2014

The Rangeland Health update presented below is based on field visits and monitoring data collected within the Fremont Allotment (see Appendix A). There are five long-term trend monitoring plots located within the East McQueen, Jacobsen, Southwest, Harrison, and Butte Pastures of the allotment.

Season of use: Spring, Summer, Fall 4/1-9/30. Grazing system: Rest rotation grazing, eight pastures. Other: Several study plots were established in the Fremont Pastures to study two crop grazing systems. One large bitterbrush study plot is still present in the Butte pasture. The area is within mule deer winter range. Vegetation: Vegetation on the allotment is a diversity of mountain big sagebrush, bitterbrush, rabbitbrush, juniper and ponderosa pine overstory with understory species including Idaho fescue, bluebunch wheatgrass, several needlegrasses, and crested wheatgrass.

Standard	2005 Assessment	2013 Assessment Update	Comments
1. Watershed Function – Uplands	Met	Met	Overall, the allotment in this assessment area is functioning properly, and meeting the standard as indicated by the distribution and amount of ground cover, plant community composition, observed apparent trend. In 1999-2001 ESI data, the majority of the area (98%) had an SSF rating of stable to slight, and 1% was moderate. Overall, SSF data indicated the soils in majority of the assessment area were not susceptible to wind or water erosion. Areas in the moderate erosion class are not related to current grazing practices as indicated by livestock utilization, distribution, and grazing management. Grazing management systems have been followed and are designed to maintain healthy perennial vegetative communities. Livestock grazing levels have been at or below carrying capacities. Utilization levels for the past ten year period have typically been at the light to moderate level. Overall grazing management is maintaining a healthy perennial vegetative cover which assists in properly functioning soil properties. Another indicator of Upland Watershed Function is plant composition and structure. There are at least 16 different vegetative communities in the assessment area with a diversity of grass, shrub, forb and tree species. Overall a diverse plant community exists to provide root systems throughout the soil profile, providing soil stability and water storage within the plant and soil systems. Four of the five trend transects read and evaluated in 2013 showed a stable to upward trend in vegetation composition, vigor, seedling establishment, and litter and soil stability and/or movement. The fifth transect is located in a powerline corridor and shows a downward trend. This is due to initial disturbance associated with the powerline construction, as well as maintenance activities associated with the corridor.
2. Watershed Function Riparian/ Wetland Areas	NA	NA	This standard is not applicable to the assessment area because there are no streams, wetlands, or riparian areas on public land. The National Wetland Inventory identified two freshwater ponds in East McQueen Pasture and one freshwater pond in the Harrison Pasture of the Fremont Allotment. Two of the ponds are actually waterholes developed primarily for livestock, and secondarily for wildlife benefit and do not meet the definition of a wetland or riparian area. The third area is actually a small (less than 0.5 acres) vernal playa that is surrounded by upland vegetation types. Based upon examination of recent digital orthophoto quads, this small playa lacks vegetation and does not meet the definition of a wetland or riparian area.
3. Ecological Processes	Met	Met	Indicators used to evaluate this standard include animal populations, vegetative composition, presence of weed species, botanical reports,

Standards for Rangeland Health for the Fremont Allotment

~	2005	2013	
Standard	Assessment	Assessment Update	Comments
			ecological status, OAT, current plant composition as compared to a defined Potential Natural Community (PNC) for the soil type and precipitation zone. The vegetation data presented in ESI tables and plants data base indicates that the diversity of plant species in the assessment area is appropriate for the soil, climate and landforms present. The ESI survey compares the current plant composition to a defined Potential Natural Community for the identified soil type and precipitation zone. The 1999-2001 ESI data indicates that 70% of the native plant communities are in Late Seral and 30% are in Mid Seral stages.
			Observed Apparent Trend (OAT) assessment conducted for the area in the 1999-2001 ESI, show 21% had an OAT indicating upward trend, 79% had a Static trend and less than 1% had a downward trend. In 2013, the majority of OAT assessments for this allotment show a stable or static to upward trend. A stable or static trend is also evident in this allotment as determined by a pace 180 transect conducted in 2013. Photo trend studies repeated in 2013 concur that a stable to upward trend exists throughout the allotment (Lakeview RA Monitoring Files). As of 2013, no noxious weeds are known to this allotment.
			The plant community diversity could be hindered by juniper and ponderosa pine encroachment into sagebrush steppe on approximately 16% of the BLM acreage. Juniper expansion can reduce understory vegetation to the extent that soil is no longer protected. This is a reflection of fire suppression and is not attributed to current livestock management. The majority of OAT assessments for this allotment show a stable or static to upward trend. A stable or static trend is also evident in this allotment in a 180 toe-pace transect conducted in 2013 (refer to Appendix A (reflects past 10 years data 2003-2013).
4. Water Quality	NA	NA	This standard is not applicable to the assessment area. There are no perennial streams or other water sources which must comply with State water quality standards.
			This area has been surveyed for special status plants and none were found. With respect to special status plants, the allotment meets this standard.
5. Native, T/E, and Locally Important Species	Met	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 habitats potentially present within this allotment may include bighorn sheep, bald eagle, ferruginous hawk , peregrine falcon, burrowing owl, Lewis' woodpecker, white- headed woodpecker, black-backed woodpecker, sage-grouse, Townsends big-eared bat, fringed bat, pallid bat, spotted bat, kit fox, and pygmy rabbit. There are also several species with high public interest or concern. These include golden eagle, mule deer, pronghorn antelope, 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

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

Upland Watershed-Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate landform. Overall the allotment in this assessment area is functioning properly, and meeting the standard as indicated by the distribution and amount of ground cover, plant community composition, observed apparent trend. Long-term trend studies, upland forage utilization surveys and SSF data compiled from ESI. 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 and trend studies) which indicate plant and root health. Field surveys to determine Ecological Site Inventory (ESI) were done in 1999 and 2001. Refer to allotment specific tables and the ESI summary for full vegetative information including plant species, soil surface factor, observed apparent trend and ecological status. The majority of the area, 98% has an SSF rating of stable to slight, and 1% is moderate. Overall, SSF data indicates the soils in 98% of the assessment area are not susceptible to wind or water erosion. Areas in the moderate erosion class are not related to current grazing practices as indicated by livestock utilization, distribution and grazing management. Grazing management systems have been followed.

The grazing systems are designed to maintain healthy perennial vegetative communities. The recommended grazing systems from the Lakeview Grazing EIS have basically been followed throughout the assessment area. Livestock grazing levels have been at or below carrying capacities. Utilization levels for the past ten year period have been at the light to moderate level. The proper livestock management has assisted in maintaining perennial vegetation and the root systems of perennial vegetation which assist in holding soil in place. Perennial vegetation provides protective cover to reduce soil movement, decrease compaction and thus increase infiltration. Healthy perennial vegetation and surface litter improve the capture, storage and beneficial release of precipitation. This helps precipitation to safely reach and infiltrate the soil where it can be used by plants or travel underground to springs and seeps.

Overall grazing management is maintaining a healthy perennial vegetative cover which assists in properly functioning soil properties. Another indicator of Upland Watershed is plant composition and structure. There are at least 16 different vegetative communities in the assessment area with a diversity of grass, shrub, forb and tree species. Overall a diverse plant community exists to provide root systems throughout the soil profile, providing soil stability and water storage within the plant and soil systems. Four of the five transects assessed in 2013 showed a stable to upward trend in vegetation composition, vigor, seedling establishment, and litter and soil stability and/or movement. The fifth transect is located in a powerline corridor and shows a downward trend. This is due to initial disturbance associated with the powerline construction as well as maintenance activities associated with the corridor. Livestock grazing is not a factor causing the downward trend.

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

This standard is not applicable to the assessment area because there are no streams or wetlands on public land. The National Wetland Inventory identified two freshwater ponds in East McQueen Pasture and one freshwater pond in the Harrison Pasture of the Fremont Allotment. Two of the ponds are actually waterholes developed primarily for livestock, and secondarily for wildlife benefit and do not meet the definition of a wetland or riparian area. The third area is actually a small (less than 0.5 acres) vernal playa that is surrounded by upland vegetation types. Based upon examination of recent digital orthophoto quads, this small playa lacks vegetation and does not meet the definition of a wetland or riparian area.

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.

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 the hydrologic cycle. Indicators used to evaluate this standard include animal populations, vegetative composition, presence of weed species, botanical reports, ecological status, OAT, current plant composition as compared to a defined Potential Natural Community (PNC) for the soil type and precipitation zone. The vegetation data presented in ESI tables (Appendix A) and plants database indicates that the diversity of plant species in the assessment area is appropriate for the soil, climate and landforms present. The ESI survey compares the current plant composition to a defined Potential Natural Community for the identified soil type and precipitation zone. The 1999 and 2001 ESI data indicates that 70% of the native plant communities are in Late Seral and 30% are in Mid Seral stages. About 251 (1%) acres in the area have been seeded to crested wheatgrass, an introduced plant community. Crested wheatgrass were rated in good overall condition. Within the crested wheatgrass seeding there are pockets of native vegetation, as well as diversity of species on the borders of the seedings, creating healthy, productive and diverse overall plant communities.

Observed Apparent Trend (OAT) is an assessment conducted during the 1999-2001 ESI survey. Totals for the surveyed acreage, show 21% had an OAT indicating upward trend, 79% had a Static trend and less than 1% had a downward trend. Long-term trend studies at plots FI and F4 show an upward trend (see Appendix A), however, the majority of the assessment area has a stable trend.

As of 2013, no noxious weeds are known within this allotment. The plant community diversity could be hindered by juniper and ponderosa pine encroachment into sagebrush steppe on approximately 16% of the BLM acreage. Juniper expansion can reduce understory vegetation to the extent that soil is no longer protected. This is a reflection of fire suppression and is not attributed to current livestock management. The majority of OAT assessments for this allotment show a stable or static to upward trend. A stable or static trend is also evident in this allotment in a 180 toe-pace transect conducted in 2013 (refer to Appendix A (reflects past 10 years data 2003-2013).

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 assessment area. There are no listed perennial streams or other water sources which must comply with State water quality standards.

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

This area has been surveyed for Bureau special status plants and no plants were found. At this point in time, there are no special status plants or potential habitat known within the allotment and none are suspected. With respect to special status plants, the allotment meets this standard.

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*, Townsends 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*). 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*).

Some marginal bald eagle nesting habitat occurs within the western portion of the allotment. However, there are no known bald eagle nests within the allotment. The closest known bald eagle nest is located approximately 7 miles from the northeast boundary of the allotment with the last record with activity is in 2013. Bald eagle foraging may occur within the allotment, however it is probably restricted to road killed deer adjacent to the major roadways and occasional carrion scattered through the allotment.

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 2005 assessment, these species have not actually been confirmed within the allotments 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 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 area surrounding the allotment where suitable cliff type habitat exists. The closest golden eagle nest is located approximately 6 miles east of the allotment.

Transitional Ponderosa pine forest habitat occur on a small percentage along the western edge of the allotment, and therefore, habitat for the three woodpeckers species is very limited. These habitats are suitable, but marginal for black-backed and Lewis' woodpeckers. White-headed woodpeckers are known to occur within this area; however densities are probably low due to limited number of pine seeds available as a food source.

In the original assessment, sage-grouse habitat was noted within the 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. At that time, approximately 16% of the allotment was considered to be non-suitable habitat due to conifer encroachment and rock outcrops. Another 32% was considered to be non-suitable habitat due to lack of sufficient sagebrush cover, mainly due to historic cultivation during the homesteading era, when sagebrush habitats were converted to cultivated fields. After abandonment, rabbit brush dominated these sites and sagebrush was slow to reestablish. The remaining 52% was considered to be nesting and brood rearing habitats (yearlong habitat) with some wintering habitats available.

The original assessment also noted the presence of 3 leks in the allotment. However, based on ODFW's most recent sage-grouse lek data, the closest occupied leks to the Fremont allotment is the Devils Garden and Fort Rock leks at approximately 0.25 and 1 mile outside respectively. 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. While Fort Rock #1 lek reported 21 males at the last survey in 2013 with a 17 year average of approximately 18 males and an increase in a 10-year average of 20 males. Based on BLM's current sage-grouse habitat data, 0% of the Fremont Allotment falls within preliminary priority habitat (PPH) and approximately 93% (26,778 acres) falls within the preliminary general habitat (PGH) area. HAF survey data for the allotment shows that approximately 72% of the allotment is currently breeding and summer suitable sage-grouse habitat that represents a large contiguous block connecting to other seasonal use areas. There continues to be no major conflicts between livestock and sage-grouse within this allotment. Juniper expansion, although a small problem now, will become an increasing problem in the future if current trends continue.

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. However, it is likely that they may occur in caves scattered throughout neighboring allotments. Use of the area by these species is likely limited to foraging activities.

Bighorn sheep range occurs on the edge of the Devil's Garden lava flow along the very northeastern edge of the Fremont 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 kit fox. There have been no inventories or incidental sightings indicating pygmy rabbits are present within the allotment, but potential habitat is suspected to occur within the allotment.

This allotment falls within mule deer winter range. Bitterbrush is a key forage species for wintering mule deer. A potential conflict exists within this allotment due to the timing of fall grazing and the presence of bitterbrush. Although timing of grazing is a potential conflict, bitterbrush abundance and browse use appears to be stable at this time. Generally, fall use is managed to protect the health needs of bitterbrush in portions of this allotment that have significant amounts of bitterbrush. However, the exact impacts to bitterbrush from livestock grazing are not known at this time. It is expected that these impacts are low due to timing of grazing in those pastures with extensive bitterbrush and the rest rotation system in place within the allotment. 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.

Pronghorn antelope are common, but occur at lower densities in this allotment compared to adjacent allotments to the east. Use for this species is concentrated in areas without tall shrubs.

Although elk are relatively uncommon within this allotment, a few 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, black-backed woodpeckers, Lewis' woodpeckers, white-headed woodpeckers, 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 being met for wildlife species (including special status species) and their habitat within this allotment. Past use from cultivation and control of wildland fire has made some portions of the allotment unsuitable for some species of wildlife. Some areas could benefit from restoration efforts, but it is unknown if these efforts would be effective 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.

2014 Determination

(X) Existing grazing management practices on the Fremont 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 Fremont 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.

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Thomas E. Rasmussen, Field Manager

Date

APPENDIX A Fremont Allotment Utilization and Actual Use Data 2003 through 2013

Year	Butte Actual Use	Butte % Utiliz.*	McQueen Actual Use	McQueen % Utiliz.	Fremont SE Actual Use	Fremont SE % Utiliz.	Fremont SW Actual Use	Fremont SW % Utiliz
2004	Rested	Rested	Rested	Rested	Rested	Rested	Rested	Rested
2005	192	59	Rested	Rested	33	26-35=31*	121	35-37=36*
2006	Rested	Rested	236	No data	116	No data	No data	No data
2007	238	45	Rested	Rested	Rested	Rested	118	47
2008	163	90	Rested	Rested	64	No data	77	56-60=58*
2009	Rested	Rested	255	39-46=43*	50	40	No data	No data
2010	62	No data	400	22-33=28*	50	13-44=29*	59	50
2011	180	22-35=29*	400	No data	120	22-53=38*	No data	No data
2012	151	No data	393	No data	36	No data	145	18-29=24*
2013	138	43	382	55	139	50	145	33
Average	112	33	207	18	61	27	67	35
Year	Harrison Actual Use	Harrison % Utiliz.	North Fremont Actual Use	North Fremont % Utiliz.	East McQueen Actual Use	East McQueen % Utiliz.	Jacobsen Actual Use	Jacobsen % Utiliz
Year 2004	Harrison Actual Use 34	Harrison % Utiliz. No data	North Fremont Actual Use 35	North Fremont % Utiliz. No data	East McQueen Actual Use 83	East McQueen % Utiliz. No data	Jacobsen Actual Use 98	Jacobsen % Utiliz No data
Year 2004 2005	Harrison Actual Use 34 Rested	Harrison % Utiliz. No data Rested	North Fremont Actual Use 35 Rested	North Fremont % Utiliz. No data Rested	East McQueen Actual Use 83 Rested	East McQueen % Utiliz. No data Rested	Jacobsen Actual Use 98 Rested	Jacobsen % Utiliz No data Rested
Year 2004 2005 2006	Harrison Actual Use 34 Rested 471	Harrison % Utiliz. No data Rested No data	North Fremont Actual Use 35 Rested 116	North Fremont % Utiliz. No data Rested No data	East McQueen Actual Use 83 Rested 357	East McQueen % Utiliz. No data Rested 33-42=38*	Jacobsen Actual Use 98 Rested 236	Jacobsen % Utiliz No data Rested 44-54=49*
Year 2004 2005 2006 2007	Harrison Actual Use 34 Rested 471 445	Harrison % Utiliz. No data Rested No data 48	North Fremont Actual Use 35 Rested 116 116	North Fremont % Utiliz. No data Rested No data No data	East McQueen Actual Use 83 Rested 357 346	East McQueen % Utiliz. No data Rested 33-42=38* 20-21=21*	Jacobsen Actual Use 98 Rested 236 694	Jacobsen % Utiliz No data Rested 44-54=49* No data
Year 2004 2005 2006 2007 2008	Harrison Actual Use 34 Rested 471 445 590	Harrison % Utiliz. No data Rested No data 48 13-23=18*	North Fremont Actual Use 35 Rested 116 116 52	North Fremont % Utiliz. No data Rested No data No data No data	East McQueen Actual Use83Rested357346246	East McQueen % Utiliz. No data Rested 33-42=38* 20-21=21* No data	Jacobsen Actual Use 98 Rested 236 694 Rested	Jacobsen % Utiliz No data Rested 44-54=49* No data Rested
Year 2004 2005 2006 2007 2008 2009	Harrison Actual Use 34 Rested 471 445 590 Rested	Harrison % Utiliz. No data Rested No data 48 13-23=18* Rested	North Fremont Actual Use 35 Rested 116 116 52 50	North Fremont % Utiliz. No data Rested No data No data S0-57=54*	East McQueen Actual Use83Rested357346246380	East McQueen % Utiliz. No data Rested 33-42=38* 20-21=21* No data 5-8=7*	Jacobsen Actual Use 98 Rested 236 694 Rested Rested	Jacobsen % Utiliz No data Rested 44-54=49* No data Rested Rested
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Year 2004 2005 2006 2007 2008 2009 2010 2011	Harrison Actual Use 34 Rested 471 445 590 Rested 532 735	Harrison % Utiliz. No data Rested No data 13-23=18* Rested No data No data	North Fremont Actual Use 35 Rested 116 52 50 Rested 134	North Fremont % Utiliz. No data Rested No data No data S0-57=54* Rested 10-37=24*	East McQueen Actual Use 83 Rested 357 346 246 380 Rested 400	East McQueen % Utiliz. No data Rested 33-42=38* 20-21=21* No data 5-8=7* Rested No data	Jacobsen Actual Use 98 Rested 236 694 Rested Rested 799 Rested	Jacobsen % Utiliz No data Rested 44-54=49* No data Rested Rested 42-43=43* Rested
Year 2004 2005 2006 2007 2008 2009 2010 2011 2012	Harrison Actual Use 34 Rested 471 445 590 Rested 532 735 Rested	Harrison % Utiliz. No data Rested No data 13-23=18* Rested No data No data Rested	North Fremont Actual Use 35 Rested 116 52 50 Rested 134 Rested	North Fremont % Utiliz. No data Rested No data No data 50-57=54* Rested 10-37=24* Rested	East McQueen Actual Use 83 Rested 357 346 246 380 Rested 303	East McQueen % Utiliz. No data Rested 33-42=38* 20-21=21* No data 5-8=7* Rested No data No data	Jacobsen Actual Use 98 Rested 236 694 Rested Rested 799 Rested 786	Jacobsen % Utiliz No data Rested 44-54=49* No data Rested Rested 42-43=43* Rested 52
Year 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	Harrison Actual Use 34 Rested 471 445 590 Rested 532 735 Rested 786	Harrison % Utiliz. No data Rested No data 48 13-23=18* Rested No data No data Rested 19	North Fremont Actual Use 35 Rested 116 116 52 50 Rested 134 Rested Rested	North Fremont % Utiliz. No data Rested No data No data S0-57=54* Rested 10-37=24* Rested Rested Rested	East McQueen Actual Use 83 Rested 357 346 246 380 Rested 400 303 379	East McQueen % Utiliz. No data Rested 33-42=38* 20-21=21* No data 5-8=7* Rested No data No data 48	Jacobsen Actual Use 98 Rested 236 694 Rested Rested 799 Rested 786 Rested	Jacobsen % Utiliz No data Rested 44-54=49* No data Rested Rested 42-43=43* Rested 52 Rested

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

Range Site	Current Dominant	Acres	% of Allotment**	Condition Bating	Seral Stage	BSC	Soil Surface	Observed Apparent
ivumbei	vegetation Code		Anotinent	Nating	Stage		Factor	Trend
023XY210OR	/ARTRV/FEID/	15047	49	Good	L	4	Slight	Static
023XY607OR	/ARTRV/STOC2/	3111	10	Fair	Μ	6	Slight	Static
023XY606OR	/ARTRV/STOC2/	2654	9	Good	L	4	Stable	Static
023XY210OR	/PUTR2/FEID/	2117	7	Good	L	6	Stable	Upward
023XY508OR	/ARTRV/STOC2/	1695	6	Good	L	4	Slight	Static
023XY210OR	/PUTR2/FEID/	1148	4	Good	L	6	Stable	Upward
023XY210OR	/CHVI8/STOC2	979	3	Good	L	4	Slight	Upward
006XB211OR	PIPO/ARTRV/FEID/	840	3	Good	L	4	Stable	Upward
023XY606OR	/ARTRV/STOC2/	582	2	Good	L	4	Stable	Static
006XB211OR	PIPO/ARTRV/FEID/	391	1	Good	L	4	Slight	Upward
006XB211OR	/CHNA2/STTH2/	362	1	Fair	М	2	Moderate	Static
006XB211OR	PIPO/ARTRV/FEID/	323	1	Good	L	4	Stable	Upward
023XY607OR	/CHNA2/AGCR/	296	1	Good	Е	5	Stable	Static

Fremont Allotment Current Vegetation Types, Condition, Soil Crusts, and Trend

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

** 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.

Transect	Date	Pasture	Composition %	Cover %
			(trend reflects both	(trend reflects both
			quantitative data and	quantitative data and photo
			photo comparisons)	comparisons)
F-1 180 degree pace transect/photo trend/observed apparent trend	6/26/2013	East	Per. Grass $= 37$	Bareground $= 66$
		McQueen	Forbs = 33	Litter = 19
			Shrubs = 18	Vegetation $= 15$
			Upward Trend	Upward Trend
F-1 180 degree pace transect/photo trend/observed apparent trend	8/5/2008	East	Per. Grass $= 49$	Bareground $= 60$
		McQueen	Forbs = 19	Litter = 20
			Shrubs $= 32$	Vegetation = 20
			Upward Trend	Upward Trend
F-1 180 degree pace transect/photo trend	9/2/2004	East	Per. Grass $= 42$	Bareground $= 54$
		McQueen	Forbs = 32	Litter = 34
			Shrubs = 26	Vegetation $= 12$
			Upward Trend	Upward Trend
F-2 photo trend and observed apparent trend	6/12/2013	Jacobson	Upward trend	Upward trend
F-2 photo trend and observed apparent trend	8/15/2008	Jacobson	Upward trend	Upward trend
F-3 photo trend and observed apparent trend	6/10/2013	SW	Downward (transect	Downward
			in powerline	
			corridor, disturbance	
			from installation and	
			maintenance).	
F-3 photo trend and observed apparent trend	7/25/2008	SW	Stable trend	Stable trend
F-4 photo trend and observed apparent trend	6/26/2013	Harrison	Upward	Upward
F-4 photo trend and observed apparent trend	8/7/2008	Harrison	Upward	Upward
F-5 Freq. Trend and photo trend compared to previous base line reading	6/12/2013	Butte	Increase to stable	Stable trend vegetation cover.
8/15/1991			trend in perennial	
			grass composition.	
			Few to no perennial	
			forbs. Stable trend	
			shrub composition.	

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

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