

Jump Allotment (#00854) Rangeland Health Standards Assessment

Allotment Overview

The Jump grazing allotment, #00854, is located approximately 20 miles east of Klamath Falls, Oregon, on the north end of Bryant Mountain. The allotment has approximately 200 acres of BLM-administered land that is surrounded by private land (see the attached map).

The Jump Allotment was created in 1987 when a portion of the base property for the McFall allotment, #00896, was sold to W.G. Jump. The current 200 acre allotment and 20 AUMs of use were transferred from the McFall Allotment. The current grazing lease for the Jump Allotment authorizes 20 AUMs of cattle use from May 1 to May 31. This translates to grazing by 20 head of cattle during this season of use. The case file records for the allotment show that the allotment has been in non-use status since 1987 when W. G. Jump was issued the lease. The lessee has indicated that the private land/allotment boundaries need to be fenced and that there is not a reliable water source.

The allotment was visited in 2005 to gather information for the Rangeland Health Standards Assessment using the Ecological Site Inventory (ESI) method. This inventory provided data on the current vegetation on the allotment. A map of the area was produced that divided the allotment into units based upon distinct vegetation communities. These units were labeled as Site Write-up Areas or SWAs (see the attached ESI map). For each of these SWAs, one or more Rangeland Inventory Ecological Status Worksheets (worksheets) was completed that provides information on vegetation, ground cover characteristics, production, erosion, and other site factors. The vegetation information on the worksheets was used to determine what ecological site or sites were in the SWAs. A condition rating was assigned to each ecological site based upon the site's current attributes when compared to a site in Potential Natural Community (PNC) condition. Following is a table showing the results of the ESI survey on the Jump Allotment.

<u>SWA#</u>	<u>Acres</u>	<u>Ecological Site</u>	<u>% of SWA</u>	<u>Condition</u>
JP1	51.0	Shallow Loam	80%	Good
	12.9	Juniper Claypan	20%	Good
JP2	18.0	Loamy	100%	Good
JP3	39.6	Juniper Claypan	100%	Good
JP4	20.0	Stony Claypan	100%	Excellent
JP5	32.5	South Slopes	100%	Fair
JP6	25.4	Shallow Loam	60%	Fair
		Juniper Claypan	40%	Good

During the ESI a general overview of an allotment is also done. This can include an inventory of any range improvements, indications of recent use by livestock and wildlife, and observations of riparian and wetland conditions. The data from the ESI and field observations will be the primary information used for this assessment.

Standard 1 - Watershed Function - Uplands

This standard focuses on the basic physical functions of upland soils that support plant growth, the maintenance or development of plant populations and communities, and promote dependable flows of quality water from the watershed.

During the ESI, the allotment was divided into several different SWAs as shown on the table above.

SWA JP1 is a mix of Shallow Loam and Juniper Claypan ecological sites that were both rated in good condition. The area had a good grass component with Idaho fescue (*Festuca idahoensis*) being the dominant grass with Thurber's needlegrass (*Achnatherum thurberianum*), Sandberg's bluegrass (*Poa secunda*), and Bluebunch wheatgrass (*Pseudoroegneria spicata spicata*) also common. The invasive exotic annual grasses cheatgrass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*) were also present with the medusahead being more prevalent in the Juniper Claypan portions of the area. The dominant shrubs were Mountain big sagebrush (*Artemisia tridentata vaseyana*) in the Shallow Loam portions and low sagebrush (*Artemisia arbuscula*) in the Juniper Claypan areas. Within the Shallow Loam areas, there was a high level of invasive western junipers present with trees in the upper range of 10-30 trees/acre in the 20'+ size class. Within these stands there were scattered sagebrush skeletons. The live sagebrush still comprised about 10% of the total production of the site, but was in scattered patches in the more open areas of the juniper stands. The slopes in this area ranged from 2-40% and there was little evidence of detrimental erosion occurring. Litter cover from the grasses and juniper needles were providing good soil protection. The Juniper Claypan areas had a high level of stones and cobbles which also provide soil protection.



SWA JP1

SWA JP2 is a Loamy ecological site that is on a bench just above Wright Creek, an intermittent stream that crosses through the allotment. On this site, Idaho fescue was the dominant grass with lesser amounts of Thurber's needlegrass, Sandberg's bluegrass, and Prairie junegrass (*Koeleria cristata*). Mountain big sagebrush was the dominant shrub with traces of Antelope bitterbrush (*Purshia tridentata*) and other minor shrubs. There was a good level of production on this site with no indication of any recent livestock use. Junipers have invaded the site but have not increased to a level where they are having a noticeable negative impact. The soils on this site were well protected by vegetation and litter.



SWA JP2

SWA JP3 is a Juniper Claypan ecological site with Idaho fescue as the dominant grass and Thurber's needlegrass, Sandberg's bluegrass, onespoke oatgrass (*Danthonia unispicata*), bottlebrush squirreltail (*Elymus elymoides*), and bluebunch wheatgrass present in order of their dominance. There were also scattered patches of the invasive exotic annual grass medusahead. Cheatgrass was also present throughout the area. Low sagebrush was the only shrub species encountered on this site and it was relatively sparse. Juniper has been increasing on this site with 10-30 trees/acre in the 3-12' and 12-20' size classes. The soil surface had just over 50% cover of stones, cobbles, and gravels and was relatively stable with slopes in the 2-8% range.

SWA JP4 is a Stony Claypan ecological site that lies along the hilltop in the northeast corner of the allotment. Idaho fescue was the dominant grass and comprised about 40% of the annual production on this site. Thurber's needlegrass, Sandberg's bluegrass, and bluebunch wheatgrass each contributed over 5% of the production. The dominant shrub was low sagebrush with a lesser amount of mountain big sagebrush also present. There were also 5-10 trees/acre in the "old-growth" age class of junipers. Soil stability was good on this site with slopes being in the 1-6% range and the surface cover of stones, cobbles, and gravels being about 44%.

SWA JP5 is a South Slope ecological site with a heavy cover of invasive junipers on a southwest facing 3-20% slope. There were 30-60 trees/acre in both the 12-20' and 20'+ size categories. There were a very limited amount of shrubs present in the understory likely due to the juniper density. Many shrub skeletons were present, mainly big sagebrush and some bitterbrush. Thurber's needlegrass was the dominant grass species with bluebunch wheatgrass also abundant. Vegetative production on the site was lower than the ecological site reference levels. The surface cover was about 25% stones, cobbles, and gravels and about 52% bare ground. The juniper litter was providing some soil surface protection, but there was still evidence of soil movement as indicated by surface rills, pedestalling, and sediment deposits.

SWA JP6 is a Shallow Loam ecological site on a 3-20% slope with over 50% stones, cobbles, and gravels. Idaho fescue was the dominant grass on the site with Sandberg's bluegrass also abundant. Mountain big sagebrush was the dominant shrub with the distribution mainly in scattered pockets. The level of junipers was moderately invasive which was resulting in the decline in shrubs in the denser juniper stands. Trace amounts of Antelope bitterbrush were noted in some of the more open areas. Some areas of soil movement were noted as indicated by pedestalling on plants and sediment deposits.



SWA JP6

The majority of the soils and plant communities that they support are in good condition on the Jump Allotment. There is adequate plant cover and litter to protect the soils from rainfall and runoff impacts. There are a few small areas where the density of invasive junipers had decreased the level of shrubs and grasses in the understory. Some of these sites have indications of excess soil movement. The juniper litter is providing some surface protection but the decrease in the shrubs and grasses has lessened the amount of protection provided by their structure, litter, and root systems. No evidence of recent livestock use was noted which coincides with the multiple years of nonuse authorized on the allotment.

This Standard is currently being met on the Jump Allotment.

Standard 2 - Watershed Function-Riparian/Wetland Areas

This Standard focuses on the properly functioning condition of riparian/wetland areas as appropriate to soil, climate, and landform.

Wright Creek, an intermittent stream, crosses through the allotment along the west edge. During the ESI survey, it was noted that the creek was well armored by riparian grasses and stones and gravels. Where the stream crosses through the south corner of the allotment, a two-track road parallels the drainage. During high flow events it appears that some flow goes down this road resulting in minor sediment transport to the stream. This road crosses over the creek at a point on the private land that is between the two BLM stretches. The road appears to receive little traffic as evidenced by the amount of vegetation growing on it. No recent livestock use or impacts were noted along the drainage. There are no other riparian or wetland areas on the Jump Allotment.

This Standard is currently being met on the Jump Allotment

Standard 3 - Ecological Processes

This Standard addresses the ecological processes of energy flow and nutrient cycling as influenced by existing and desired plant and animal communities.

The various vegetation communities on the Jump Allotment are generally in functional status in relation to the ecological processes of energy flow and nutrient cycling. The different ecological sites, as noted in the table above, are all in good or excellent condition except for two that are in fair condition. These two sites have a higher level of invasive junipers which are effecting the overall vegetation composition. The root systems of the junipers are able to extract moisture and nutrients from several soil levels. They can also send their roots out in varying horizontal distances depending upon the density of the tree stand. These characteristics effectively limit the growth of other vegetation in their vicinity. Both sites have good levels of perennial grasses and forbs, but the grass species have shifted to those that do better with less moisture. This resulted in a lower rating for the ecological site but the functionality of the site is still mainly intact.

As stated earlier, there has been limited livestock grazing on this allotment in recent years. This has allowed for good growth and reproduction of the vegetation species throughout the allotment. The increase in juniper densities will likely need to be addressed to sustain the good conditions in the future.

This Standard is currently being met on the Jump Allotment

Standard 4 - Water Quality

This Standard addresses surface and groundwater quality as influenced by agency actions and whether it complies with State water quality standards.

As noted under Standard 2 above, Wright Creek is the only water body on the allotment. It is in good condition with stream banks that are well protected by vegetation and rocks. At this time, neither the surface water nor groundwater within the Jump Allotment has been listed for exceeding State water quality standards.

This Standard is currently being met on the Jump Allotment.

Standard 5 - Native, T&E, and Locally Important Species

This Standard focuses on retaining and restoring native plant and animal (including fish) species, populations and communities (including threatened, endangered, and other special status species and species of local importance).

This allotment has a good variety of native plant communities that support the many species that are dependant on them for habitat needs. The increasing juniper levels are beginning to cause negative affects in some areas. The junipers do provide habitat for some species but also displace others. This allotment is considered deer winter range and it also supports many other native mammals including woodrats, rabbits, coyotes, ground squirrels, and mice. The vegetation communities also support many species of birds, herptiles, and invertebrates. A currently inactive eagle nest is found on the allotment. No other special status animal species are known to occur on the allotment.

The Jump Allotment (#0854) was systematically surveyed for botanical resources in July 2005. No special status plant or noxious weed populations were found during this survey or were previously known to occur on the allotment.

This Standard is currently being met on the Jump Allotment.

Management Recommendations

Livestock grazing on the allotment is not currently a concern. The allotment has been in nonuse status for several years. The fences around the allotment are in need of repairs in many locations and there is not a source of livestock water on the allotment. If active use of the allotment is requested, fence repairs will be required to be completed prior to livestock use. Livestock water would need to be supplied on adjacent private lands.

Some areas of juniper treatment should be considered to maintain and improve the vegetation conditions on the allotment. Access to the area would have to be gained over private land.

The current Land Tenure Zone status of this parcel of land is Zone 3 which designates it as being suitable for disposal through sale. This parcel should be sold if a qualified buyer is identified through the required processes. However, the recent discovery of an eagle nest on the parcel may change the status.

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Determination

- (X) Existing grazing management practices and/or levels of grazing use on the Jump grazing allotment promotes achievement or significant progress toward the Oregon Standards for Rangeland Health and conforms with the Guidelines for Livestock Grazing Management.

- () Existing grazing management practices and/or levels of grazing use on the Jump grazing 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.

/s/ Heather Bernier (Acting)
Manager, Klamath Falls Resource Area

7/20/06
Date