

DETERMINATION & RECOMMENDATIONS

Achieving Standards for Rangeland Health and Conforming with Guidelines for Livestock Grazing Management

Resource Area: Baker

GMA: Burnt River

Grazing Allotment Name/Number: Cave Creek #1003

Public Land (acres): 4842

Streams on Public Lands (miles): 3.9

Assessment Participants (Name & Discipline or Interest):

Clair Button Botanist _____

Jackie Dougan Fisheries Biologist _____

Todd Kuck Hydrologist _____

Greg Miller Wildlife Biologist _____

Craig Martell Range Management Specialist _____

Standard 1: Watershed Function - Uplands

Standard Met X

Standard Not Met _____

Standard Not Present _____

Livestock not a significant factor _____

Livestock a significant factor _____

East Pasture:

Although the standard is met for this pasture overall, the areas around Cave Creek Spring and upper Sinker Creek are heavily overgrazed and show impaired watershed function. Better distribution of cattle would help. Cattle need to be pushed more toward Horse Spring Pipeline, and spring developments such as Sinker Creek Spring #1, Baxter Spring #2, and Bob West Spring need maintenance to help keep cattle properly distributed.

West Pasture:

Although the standard is met for this pasture overall, the trend plot shows reduced litter cover. There is a need to manage grazing so more herbage is produced and left behind for litter cover and soil protection.

Standard 2: Watershed Function – Riparian/Wetland Areas

Standard Met _____ Standard Not Met X Standard Not Present _____
Livestock not a significant factor _____
Livestock a significant factor X

Causal factors for not achieving this standard in East Pasture:

Cattle trailing and trampling along Sinker Creek created deficient bank cover, bank instability, and erosion. Deep, unconsolidated channel material along lower Sinker Creek and mining aftereffects on the channel, as well as heavy juniper cover in the watershed are non-livestock factors.

Causal factors for not achieving this standard in West Pasture:

Historic placer mining had devastating consequences to these stream systems and set these streams back to a point where they will be long time recovering even without livestock impacts. But the livestock staying on the creeks, repeatedly grazing off the vegetation, trailing, and trampling are holding back recovery, especially aspen and cottonwood regeneration.

Standard 3: Ecological Processes

Standard Met X Standard Not Met _____ Standard Not Present _____
Livestock not a significant factor _____
Livestock a significant factor _____

East Pasture:

Although the standard is met in the pasture overall, there are signs of declining trend, resulting from periodic overuse of Idaho fescue. The historically heavily overgrazed area between Cave Creek Spring and upper Sinker Creek (see Writeup #8) is one spot where ecological processes are functioning below potential, and there is substantial juniper invasion. Brush has returned to the area of the 1983 sagebrush spray, with the only remaining visible effect of the spray being a higher percentage of rabbitbrush; it was not successful in improving plant composition in the long term.

West Pasture:

Again, although the standard is met overall in the pasture, there are signs of declining trend, resulting from periodic overuse of Idaho fescue. Juniper encroachments are significant, especially along Reagan Creek and tributaries.

Standard 4: Water Quality

Standard Met _____ Standard Not Met X Standard Not Present _____
Livestock not a significant factor _____
Livestock a significant factor X

Causal factors for not achieving this standard in East Pasture:

Heavy livestock grazing impacts along the nonfunctional segments of upper Sinker Creek are possibly the chief reason for not meeting the standard. It is important to note that there is not much flow to this creek; it is ephemeral for much of its length, and it makes a very negligible contribution to water quality of the Burnt River, where it flows into.

Causal factors for not achieving this standard in West Pasture:

Major channel disturbances caused by historic mining, livestock and wildlife grazing along riparian zones, and heavy grazing of private lands higher in the watershed.

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

Standard Met X

Standard Not Met

Standard Not Present

Livestock not a significant factor

Livestock a significant factor

East Pasture and West Pasture:

Most upland sites have shrub cover for suitable sage grouse habitat during brood rearing and winter. However, many sites lack the structure under the sage brush canopy for nesting habitat. Because of the elevation of the sites, these sites are probably covered in snow during early nesting season. Therefore nesting habitat is not a critical issue. Connectivity from lek locations to the north with lek locations to the south is the most critical issue for the Burnt River area, relative to sage grouse. Current conditions of the most of the uplands shows habitat cover consistent with habitat needs for brood rearing or dispersing sage grouse. Continued grazing management to allow recovery of the understory herbs and grasses will enhance habitat for dispersing, wintering, and brood rearing sage grouse.

Recommendations:

1. Vegetation treatments
 - a. In West Pasture, cut juniper along creeks and fall them into the creeks to catch sediment and to discourage livestock from grazing in the creeks. Also remove juniper from aspen stands. Plant aspen and willow cuttings and plant sedge and rush seeds along selected stretches of creek.
 - b. In East Pasture, cut juniper in the drainage at Cave Creek Spring and in upper Sinker Creek. Also treat the areas around upper Sinker Creek which have numerous young juniper plants on the uplands (burn or cut).
2. Better cattle distribution and control
 - a. In both pastures, require maintenance of spring developments before grazing can occur. This is already listed on the grazing authorization as one of the terms and conditions. At least develop a schedule for spring maintenance in 2005, focusing first on springs that do not require heavy equipment work.
 - b. Require more frequent riding to push cattle to Horse Spring Pipeline and Baxter Spring (East Pasture) and Cave Creek Guzzler (West Pasture).
 - c. Encourage allotment boundary fences to be maintained or reconstructed as necessary to prevent unauthorized use. The biggest problem is with the private land fences on the south side of the allotment.
3. Make changes to grazing plan
 - a. Eliminate fall use in the West Pasture to allow regrowth of riparian vegetation in summer and fall, and to allow aspens and cottonwoods to put on some growth without being browsed.
 - b. Allow recovery in the East Pasture by removing livestock at strategic times to allow plants to regrow and set seed. Early use can be allowed in alternate years as long as cattle are removed early to allow complete regrowth of key grass species. In other years, do not allow any grazing until after seed ripe.
4. Monitor the new grazing plan to adjust numbers if necessary to keep utilization moderate in both pastures. Check utilization at the two key area trend plots in the East Pasture every fall, starting no later than two to three weeks before the scheduled off-date, and require cattle to go home whenever the average utilization exceeds moderate. Another alternative to consider in the future that would also adjust numbers would be to encourage the building of a fence to separate the exchange-of-use land from the allotment.

5. Investigate opportunities to fence the spring source and side spring at Cave Creek Spring to protect the water source.
6. In all actions, use whatever procedures are necessary to improve the condition of bighorn sheep habitat and potential sage grouse habitat to the point where these species no longer warrant special status recognition.

Guidelines for Grazing Management

Grazing is in conformance with Guidelines for Grazing Management in Oregon and Washington, with two exceptions:

- 1) In riparian areas, the current grazing use has not provided adequate cover and plant community structure to promote streambank stability, debris and sediment capture, floodwater dissipation, and water quality.
- 2) Cattle distribution in both pastures, but especially the East Pasture, has resulted in excessive concentrations at certain areas and exceeding proper use in those areas. This is partly due to spring developments not being maintained, and cattle concentrating at just a few water sources and flat areas.

Authorized Officer concurrence with findings _____

Date _____