EVALUATION REPORT

Achieving the Idaho Standards for Rangeland Health

Field Office: IDB010 Four Rivers

Allotment Name and Number: McPherson Individual #00196

Name of Permittee(s): Robert and Elsie Hanson

Introduction

The McPherson Individual Allotment (#00196) is located approximately 3.5 miles northwest of Eagle, Idaho (Map 1). The area is characterized by gently rolling topography with elevations ranging from approximately 2,600-2,800 feet. The allotment is comprised of 235 acres of BLM-administered land and 41 acres of private land.

Applicable Standards

The Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management provide management goals to maintain or improve resources, protect cultural values, and sustain productivity of the land. Standards that are appropriate to the allotment are used to provide information and to determine the health and condition of public lands. This document is an evaluation of whether those standards are being achieved based on information provided in the rangeland health assessment. Significant factors or causal agents where standards are not being met (e.g., historic and/or current livestock grazing management, wildland fire, weeds, etc.), and whether livestock management practices are in conformance with applicable guidelines, are presented in the Determination document**.**

Standards 1 (Watersheds), 4 (Native Plant Communities), 6 (Exotic Plant Communities, other than Seedings), and 8 (Threatened and Endangered Plants and Animals) apply to this allotment. There are no creeks or springs, so Standards 2 (Riparian Areas and Wetlands), 3 (Stream Channel/Floodplain), and 7 (Water Quality) do not apply. Standard 5 (Seedings) was also not applied. Broadcast seeding and seedling planting was conducted in fall 2011 on approximately 15 acres to facilitate rehabilitation of proposed critical slickspot peppergrass habitat after the 2010 Big Fire. The efficacy of treatment is not yet known; monitoring will take place spring/summer 2012 and 2013. Because the treatment area is a very small portion of the allotment, the plant communities which were assessed and evaluated for this effort are more representative of the allotment as a whole.

EVALUATE STANDARDS

Standard 1: Watersheds ___ Standard does not apply

Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, climate and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Evaluation and Information Sources

Rangeland health field assessments, field visits, actual use reports, and allotment files.

Rangeland Health

The soils range from deep sandy loams to moderately deep clay loams. Soils are adequately stabilized and ecological processes maintained primarily by high exotic annual grass (i.e., cheatgrass) cover, biological soil crusts, some perennial grass cover (e.g. Sandberg bluegrass, bottlebrush squirreltail, and purple threeawn), and some Wyoming big sagebrush cover.

Evaluation Finding – Allotment/watershed is:

_X_ Meeting the Standard
____ Not Meeting the Standard, but making significant progress towards meeting
____ Not Meeting the Standard

Rationale for Evaluation Finding

Vegetative and biological soil crust cover and litter amount are adequate to stabilize soils and cycle water, nutrients, and energy in the system.

Standard 2: Riparian Areas and Wetlands _X_ Standard does not apply

Riparian-wetland areas are in properly functioning condition appropriate to soil type, climate, geology, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Standard 3: Stream Channel and Floodplains _X_ Standard does not apply

Stream channels and floodplains are properly functioning relative to the geomorphology (e.g., gradient, size, shape, roughness, confinement, and sinuosity) and climate to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Standard 4: Native Plant Communities ___ Standard does not apply

Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Evaluation and Information Sources

Rangeland health field assessments, field visits, actual use reports, and allotment files.

Rangeland Health

Standard 4 was applied to vegetative communities maintaining approximately 25% to 30% composition of Wyoming big sagebrush. Shrub understories and interspaces have largely been

converted to cheatgrass with varying densities of perennial bunchgrasses (e.g., Sandberg bluegrass, bottlebrush squirreltail, and purple threeawn) remaining. Vigor of Wyoming big sagebrush, remnant perennial grasses, and bitterbrush (which is scattered in the sagebrush communities) is generally being maintained.

Evaluation Finding – Allotment/watershed is:
____ Meeting the Standard
____ Not Meeting the Standard, but making significant progress towards meeting
_X_ Not Meeting the Standard

Rationale for Evaluation Finding
Standard 4 is not being met on 131 acres due to shifts from native perennial grasses and forbs to cheatgrass dominated understories. Cheatgrass is less effective than perennial grasses and forbs at cycling nutrients and energy into the system due to its shallower root system, short life cycle, and competitive edge for nutrient and water acquisition. Its germination habits (winter/spring and fall) and high reproductive rate make it difficult for native perennial species to compete for resources such as space, water, nitrogen, etc. necessary to survive and reproduce.

Standard 5: Seedings _X_ Standard does not apply
Rangelands seeded with mixtures, including predominately non-native plants, are functioning to maintain life form diversity, production, native animal habitat, nutrient cycling, energy flow, and the hydrologic cycle.

Standard 6: Exotic Plant Communities, Other than Seedings ___ Standard does not apply
Exotic plant communities, other than seedings, will meet minimum requirements of soil stability and maintenance of existing native and seeded plants.

Evaluation and Information Sources
Rangeland health field assessments, field visits, actual use reports, and allotment files.

Rangeland Health
Standard 6 was applied to vegetative communities dominated by cheatgrass and annual mustards with low densities of herbaceous perennial vegetation and lacking shrubs. Cheatgrass and exotic annual forbs form a dense mat in these plant communities. Rush skeletonweed is present in small amounts across the allotment, but does not appear to be increasing or affecting overall ecosystem function.

Evaluation Finding – Allotment/watershed is:
_X_ Meeting the Standard
____ Not Meeting the Standard, but making significant progress towards meeting
____ Not Meeting the Standard

Rationale for Evaluation Finding
Standard 6 is being met on approximately 104 acres because these plant communities have adequate ground cover for site protection, existing perennial plants are being maintained, and noxious weed frequency is static.

Standard 7: Water Quality _X_ Standard does not apply
Surface and ground water on public lands comply with the Idaho Water Quality Standards.

Standard 8: Threatened and Endangered Plants and Animals ___ Standard does not apply
Habitats are suitable to maintain viable populations of threatened and endangered, sensitive, and other special status species.

Evaluation and Information Sources:
Rangeland health assessments, field visits, plant surveys, and Conservation Data Center monitoring data.

Rangeland Health
Plants
Slickspot peppergrass (*Lepidium papilliferum*), listed as threatened under the Endangered Species Act (BLM Type 1), and its habitat occur in the allotment. Slickspot peppergrass is a sagebrush obligate species. Wyoming big sagebrush communities which support healthy assemblages of native perennial grasses and forbs provide high quality slickspot peppergrass habitat, both in terms of structural integrity and the ability to attract pollinators. Habitat degradation has resulted in a conversion to invasive exotic annual grass and forbs surrounding slickspots.

Animals/Wildlife
No federally listed or candidate species or BLM special status animals/wildlife or their habitat are known to occur.

Evaluation Finding – Allotment/watershed is:
____ Meeting the Standard
____ Not Meeting the Standard, but making significant progress towards meeting
_X__ Not Meeting the Standard

Rationale for Evaluation Finding
Standard 8 is not being met due to the abundance of invasive annual plants throughout slickspot peppergrass habitat. These species do not provide adequate structure or attract pollinator populations necessary to facilitate reproduction success of slickspot peppergrass.