

Determinations of the Arizona Standards for Rangeland Health For the Big Bug Creek Allotment (#06143)

Introduction

This determination document seeks to identify whether current livestock management is meeting the Arizona Standards for Rangeland Health on the Big Bug Creek grazing allotment. A determination document is not a grazing decision but a stand-alone determination detailing the conditions of the allotment and the causal factors for achievement and/or non-achievement of the Arizona Standards for Rangeland Health. In cases where a significant causal factor for non-achievement of Standards is current livestock management practices, the proposed corrective actions will be analyzed under a NEPA analysis and implemented before the start of the following grazing year in which the Determination was made.

Arizona Standards for Rangeland Health

Standard One - *Upland soils exhibit infiltration, permeability, and erosion rates that are appropriate to soil type, climate, and landform (ecological site).*

This Standard is being met.

Rationale: Upland soils within the Big Bug Creek Allotment show plant cover percentages, litter amounts, erosion rates, and infiltration and permeability rates that are appropriate to each ecological site found within the allotment. Plant communities found within the allotment also show acceptable ranges of biodiversity of grasses, forbs, shrubs, and cactus.

Standard Two - *Riparian-wetland areas are in proper functioning condition.*

This Standard is not being met.

Rationale: The small riparian system within the Big Bug Creek Allotment has potential to be a thriving ecosystem for plants, wildlife (including Threatened and Endangered Species), and other living organisms (e.g. insects, humans). However, water is the limiting factor for the area. As noted in the Land Health Evaluation, it is believed that ongoing drought, encompassed by industrial activities and local subdivisions are reducing the quantity, frequency, and duration of water availability in Big Bug Creek. Without water being present in the area for more than a few days out of the year, there is little to no chance of riparian vegetation being able to establish and reproduce. This riparian area would likely be better managed as an ephemeral riparian area.

Cattle grazing within the Big Bug Creek riparian area is considered to be minimal. Cattle are not attracted to the riparian area because there is little to no water and/or forage available for consumption. No cattle use has been observed within the riparian area during the past several grazing seasons by BLM specialists. Therefore, cattle grazing within the Big Bug Creek

Allotment is considered to be in conformance with the Arizona Rangeland Health Standards even though Standard two has not been met.

Standard Three - *Productive and diverse upland and riparian-wetland communities of native species exist and are maintained.*

This Standard is not being met.

Rationale: The upland portion of Standard three is considered to be in conformance with the Arizona Standards for Rangeland Health. Various plant communities found at key areas located in the upland portions of the allotment are mostly native plants and are within an acceptable range of variability. Some non-native species were identified in the Land Health Evaluation, but were found in small populations in the allotment. These species have become naturalized across much of Arizona (and the Western United States) and are considered to be a minor part of most rangeland ecosystems.

The riparian portion of Standard three is not considered to be in conformance with the Arizona Standards for Rangeland Health. The portion of Big Bug Creek that is found within the allotment is generally dry and does not support the quantity, frequency, and duration of water needed to support a vigorous riparian plant community. Riparian resources within Big Bug Creek will continue to be impaired due to regional decreases in surface water. Until water levels are restored to historic levels, the plant community within the area adjacent to the creek will likely continue to change to an upland plant dominated community. Livestock grazing within the Big Bug Creek Allotment is not considered to be a causal factor of the riparian portion of Standard three not being met.

Final Determinations

The Big Bug Creek Allotment is achieving the Arizona Standards for Rangeland Health in upland portions of the allotment. However, the allotment is not meeting Standard two or Standard three in the riparian portions of the allotment. The causal factor for the failure to meet Standard two and Standard three in the riparian area is outside the management control of the Bureau of Land Management. This is due to lack of water in the riparian area from ongoing drought conditions, encompassed by industrial activities and local subdivisions which are all reducing the quantity, frequency, and duration of water availability in Big Bug Creek. Livestock grazing is not considered to be the causal factor for the riparian standards not being met within the allotment. Cattle use of the riparian area is limited due to no water availability and little amounts of herbaceous forage in the riparian area. Desired Plant Community objectives, Utilization limits on key forage plants, and requirements to submit Actual Use to the BLM will help ensure proper livestock management within the Big Bug Creek Allotment.



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Date