

**87547**

oral

**Sage-Grouse R & R**

J. Oakleaf\*, *Wyoming Department of Environmental Quality, Abandoned Mine Land Division, Lander, Wyoming.*

josh.oakleaf@wyo.gov

The sagebrush steppe ecosystem is the largest interconnected habitat type in North America. It covers 165 million acres in 11 western states and one Canadian province, and is home to hundreds of obligate wildlife species that rely upon the ecosystem's health and vigor, including the greater sage-grouse (*Centrocercus urophasianus*). Sage-grouse habitat fragmentation and population declines across the sagebrush steppe have been so severe in the last half a century that the species has been designated as a candidate for listing under the Endangered Species Act. An endangered species listing could have the potential to severely impact Wyoming's two most iconic industries, agriculture and energy development.

Current population estimates of 425,000 breeding individuals show a staggering decline from the historical population estimate of 16 million. A wide variety of factors ranging from; disease, energy development, habitat fragmentation, invasive species encroachment, mining, wildfires, and urbanization has caused sage-grouse population declines that may best be described as death by a thousand cuts – could the solution be a million stitches?

In 2019, Governor Mark Gordon strengthened Wyoming's Sage-Grouse Core Area Management Strategy by adding habitat restoration and enhancement as a conservation priority (Exec. Order No. 2019-3). AML identified this Executive Order as an opportunity to maximize reclamation outcomes by setting goals to establish functional sage-grouse breeding, brood rearing, and nesting habitats on large-scale geomorphic reclamation projects. AML's goal of designing and building sage-grouse breeding habitat, known as leks, on large-scale geomorphic projects is a lofty goal that requires an innovative reclamation approach. This approach is aimed at achieving the objectives identified within the Governor's Executive Order, with the additional goal of expanding the greater sage-grouse range.

**Keywords:** Sage-Grouse, Reclamation, Restoration