

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: BLM Wyoming Reclamation Grasses Genetics

Discipline: Natural
Type of Project: Research
Funding Agency: Bureau of Land Management
Other Partners/Cooperators: University of Wyoming
Effective Dates: 6/10/2013 - 5/31/2018
Funding Amount: \$90,000[FY14: \$50,000; FY13: \$40,000]

Investigators and Agency Representative:

BLM Contact:

Investigator: Kristina Hufford, Department of Renewable Resources, University of Wyoming, 1000 E. University Avenue, Laramie, WY, 82071

Project Abstract: The objective of this agreement is to initiate and support a scientifically rigorous investigation of genetic effects of cultivar seed use for reclamation of public lands. Such information may reassure the public of the appropriateness of common practices that have not been scientifically vetted, or may indicate that a change in best management practices is supported. This project will result in information to improve or support current reclamation practices, and to guide native plant materials development efforts, thus supporting scientifically-based long-term management of the health, diversity and sustainability of public lands.

This proposed research will determine if seeded cultivars used in reclamation of disturbed sites persist genetically through time, or if they are replaced through time by locally adapted genotypes through natural reinvasion of the disturbed site. This research will compare genetic and edaphic variation 1) within species and 2) between seed sources on a series of reference and reclaimed sites in central Wyoming.

Outcomes: May 31, 2018

Keywords: University of Wyoming, Bureau of Land Management, cultivar seed, reclamation, native plants, genetics