

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: BLM WY Genetic Diversity and Adaptation and Restoration Seeding Success

Discipline: Natural
Type of Project: Research
Funding Agency: Bureau of Land Management
Other Partners/Cooperators: University of Wyoming
Effective Dates: 8/5/2013 - 7/31/2018
Funding Amount: \$41,000 [FY14: \$20,000; FY13: \$21,000]

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 principle purpose of this project is to better inform public land restoration and reclamation practices, as pertains to how choices of genetic plant materials (seed & seedlings) are made. A secondary purpose is to support and assist with the long-term Wyoming Basins and Front Range NPMDP objectives. The results of this project will provide scientifically rigorous evidence to support/refute the tenet that the use of local seed sources in restoration is preferable to non-local seed sources in the short- and/or long-term, and that greater amounts of genetic diversity will out-perform less genetic diversity, regardless of the locality source of that mixed genetic diversity. The resulting information will benefit the public in that land managers will be better informed when making restoration and reclamation choices for plant materials.

Outcomes: July 31, 2018

Keywords: University of Wyoming, Bureau of Land Management, genetic diversity, plant materials, seeds, seedlings