Rocky Mountains Cooperative Ecosystem Studies Unit Project Summary

Task Agreement #:

Project Title: Evaluate sagebrush steppe condition, restoration efficacy and community trajectories, Grand Teton National Park

Discipline: Natural

Type of Project: Technical Assistance/Research

Funding Agency: National Park Service

Other Partners/Cooperators: University of Wyoming

Student Participation: yes

Effective Dates: February 16, 2021 – February 15, 2026

Funding Amount: \$40,166

Investigators and Agency Representative:

Agency Contact: Jeanine Foley, ATR Invasive Plant Program Manager, GRTE, Moose, WY jeanine_foley@nps.gov 307-690-5664

Investigator:

Daniel Laughlin

Associate Professor, Program in Ecology and Botany Dept.,

University of Wyoming, Laramie, WY

Daniel.Laughlin@uwyo.edu

307-766-7393

Project Abstract:

Project goals:

To support research projects in Grand Teton National Park's vegetation communities to better understand outcomes of restoration actions and evaluate resource conditions

Project objectives:

- a. Analyze existing vegetation monitoring datasets from reference plant communities and restoration sites to model restoration trajectory and identify divers of restoration outcomes.
- b. Collect and analyze plant functional trait data to inform selection of species for restoration seed mixes that could lead to more climate resilient and invasion resistant plant communities.
- c. Quantify the condition of restoration project units and determine whether they are recovering on a trajectory toward native sagebrush steppe plant communities.