Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Analogs of Environmental Change for National Park Service Units

Discipline: Natural

Type of Project: Technical Assistance/Research

Funding Agency: National Park Service

Other Partners/Cooperators: University Of Idaho

Student Participation: Yes

Effective Dates: 8/1/2018 - 9/30/2021

Funding Amount: \$120,001.30

Investigators and Agency Representative:

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Project Abstract:

Project Goals - A critical first step in responding to environmental change is to understand and communicate those changes that have occurred in the past and that are likely to occur in the foreseeable future. The goal of this project is to identify important environmental changes and to communicate these in ways that inform and support planning and decision making for the management of NPS land and water resources, visitor experience and access, and public infrastructure.

Project Objectives - This project will use the best available science and geospatial analyses to develop environmental analogs that articulate historical and emerging patterns of change pertinent to NPS units. These analogs will visualize complex analyses of changes in park units which relate to key management attributes such as water availability and quality; design and sizing of culverts and HVAC systems; estimation of hazards like mold, fire, and flood; management of invasive species and disease; and visitor services and public health. The project will create an interface for visualizing and contextualizing future conditions as they relate to natural resources and visitor experience. The web-accessible interface will allow for park visitors to learn more about contemporary and potential future conditions at parks.

Keywords: Environmental Change, Future Conditions, Ecological Resources, National Park Service