

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Applying Sound Science to Identify, Inform, Implement, and Track Climate Change Adaptation in the National Park Service with the NPS Climate Change Response Program

Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Student Participation: yes, grad interns
Effective Dates: 6/7/2017-9/30/2019
Funding Amount: \$52,176

Investigators and Agency Representative:

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Project Abstract: This agreement provides for the transfer of funds from the National Park Service to Colorado Natural Heritage Program of Colorado State University for support in developing and applying sound science to identify, inform, implement, and evaluate the application of climate change adaptation strategies across the U.S. national park service system. Supporting and tracking adaptation requires knowledge and expertise in scientific information gathering and synthesis, database and data management, and climate data acquisition, management, analysis, visualization, and presentation. The scope of work required to achieve the objectives includes database management and data analysis, visualization, and presentation, and additional and supporting work will include literature searches, reviews, and syntheses, as well as help preparing presentations and other science-based products.

Work described herein supports a broad range of activities for which the NPS CCRP has responsibilities. To effect climate change adaptation, the NPS CCRP needs ready access to information on past and existing adaptation projects (i.e., what's worked and what hasn't; identification of good examples), information on historical and projected climate trends, and materials for a broad range of presentations (for Resource Stewardship Strategies, adaptation workshops, educational classes, park technical support, etc.).

We describe two phases in this agreement, and anticipate a third phase which will require further design, dependent on the outcome of phases 1 and 2. Phase 1, funded by this Agreement, is focused on design, development, and implementation of a core set of tools and products to support climate adaptation. These tools and products include the NP Adapt database, processes to evaluate climate data, synthesis of information on climate impacts, and development of a coherent and structured set of materials that support a broad range of climate adaptation activities.

Phase 2 is focused on evaluation, further refinement, and implementation of "production-quality" products, and expansion to specifically include support for climate vulnerability assessments for parks. Phase 3 is focused on full implementation and operationalization of the mature products. This Agreement supports Phase 1. We anticipate modifications to the Agreement to support Phases 2 and 3.

Keywords: climate change, inventory, monitoring, National Park Service, Colorado State University, Colorado Natural Heritage Program