

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Cooperative Research and Support for Cultural Resource Condition Assessments and Cultural GIS Data Management

Discipline: Cultural

Type of Project: Technical Assistance/Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Student Participation: Yes, Research Associates

Effective Dates: 8/1/2016 to 12/31/2019

Funding Amount: \$178,699

Investigators and Agency Representative:

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Project Abstract: NPS requires cooperative technical expertise in geospatial technologies and cultural resource management from Colorado State University (CSU) to support the research and development of cultural data to support the Intermountain Region's enterprise data management efforts. These data will support the general understanding of cultural resources in our 84 park units and better serve the research communities.

CSU will provide Research Associates that have both cultural resource management experience and GIS. These Associates will research and develop cultural resource conditional assessments (CRCA) for Intermountain Region parks. CRCAs are a planning tool used by NPS to support the assessment and analysis of current conditions of resources and determine strategies and actions to address issues related to the resources. The NPS needs the expertise of Colorado State Universities and its Research Associates to support this effort.

The CRCAs will focus on reviewing current NPS databases for archeology, cultural landscapes, and historic structures, reviewing museum collection databases and analyzing future curation space and staffing needs assessments, developing the first assessment of cultural anthropology data for IMR parks, and integrating with NPS' asset management database to improve coordination and planning around construction and facilities management. All of this analysis will integrating the CR data with GIS to better understand the geographic context of the resources, the quality of data, and document gaps within each park.

The field of enterprise data and data delivery related to all data, especially sensitive cultural resource data, is changing rapidly. CSU can tap into the most current research related to open source web mapping protocols, data delivery technologies, and social media. The research associates, along with the Principal Investigator, will be connected to the CSU Geospatial Centroid network. The network provides a hub of information exchange related to GIS technologies. This connections allows NPS to benefit from the learning and research being done at CSU to support our mission. The research associates will also be able to present their experiences in data management and issues within the federal sector to other students, professions, and researchers at the University to influence their research and project work.

A cooperative partnership is the most effective and efficient method for completing these projects because the NPS must have substantial influence over completion of final products and will therefore work hand-in-glove with the Recipient. NPS can tap into the diversity of different Research Associates and their skills and research as needed to develop solutions to NPS problems. CSU will work with NPS to develop data and tools to increase public awareness of NPS's resource issues and solutions.

NPS also wishes to provide meaningful opportunities for university partners to experience and better understand applications of technology to improved resource management. They can then use this understanding to develop research projects for their students and own academic interests. The research associates gain hands-on experience outside of the academic setting to apply their knowledge to natural, cultural, resource management.

Keywords: Cultural Resource Condition Assessments, GIS, National Park Service, Colorado State University