

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Utilizing Natural Resource Information to Create STEM Lessons for K-12 Students

Discipline: Interdisciplinary
Type of Project: Education
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Student Involvement: Yes - K-12 participants
Effective Dates: 08/30/2015 - 012/31/2019
Funding Amount: \$99,595 [FY16: \$24,595; FY15: \$75,000]

Investigators and Agency Representative:

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Project Abstract:

In order to connect with the next generation of park stewards, the National Park Service (NPS) Natural Resources Stewardship and Science (NRSS) Directorate will partner with the CNS Education & Outreach Center (CNSEOC) at Colorado State University to create curriculum-based materials focused on Science, Technology, Engineering, and Math (STEM) subjects. This expands on a previous pilot project that developed pre-, syn-, and post- park visit STEM kits and curriculum materials centered around pressing park water quality and quantity issues at a specific park in Hawai'i. Two cohorts of 12 teachers received professional development, helped develop and pilot test materials, and are now training new teachers. The goal of this new multi-regional scale project is to create materials about natural resource subjects that best align with K-12 educational standards as well as the needs of the regional culture(s). It will engage students in the scientific research and monitoring being done in the parks and incorporate NPS protocols and data from the Natural Resource Stewardship and Science programs such as Inventory and Monitoring, Night Skies, and Natural Sounds programs. The pre- and post-visit activities developed via this project will be able to be done independently in classrooms or on school grounds and therefore are specifically designed to serve as a public benefit. This project will bring together scientists, park staff, teachers, and community partners to provide K-12 students with learning experiences that inspire them to take action on real-world problems.

Keywords: Colorado State University, NRSS, STEM education, K-12