

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Place-based Climate Change Communication using Repeat Photography in Southwest Alaska National Parks

Discipline: Interdisciplinary
Type of Project: Technical Assistance and Education
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 7/15/2011 - 3/31/2014
Funding Amount: \$72,609

Investigators and Agency Representative:

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Project Abstract: Alaska is experiencing the impacts of a changing climate faster than anywhere else in the United States. The National Park Service's Inventory and Monitoring Networks are focused on conducting long-term monitoring activities to determine current status, long-term trends, and effects of change on park resources and to inform park managers as well as the broader public of their findings. Several long-term monitoring efforts currently underway in the Southwest Alaska Network (SWAN) are helping scientists and natural resource managers better understand the current and potential effects of climate change. Efforts include seasonal monitoring weather, snowpack, vegetation, water quality, and the timing of seasonal processes, such as the freeze up of lakes in fall and the emergence of new leaves on plants in spring, among other monitoring efforts. To supplement data collected through field work and satellite imagery, repeat photography is used to provide a historical perspective on the changes to the landscape. For many of the southwest Alaska parks, pairs of photographs exist that, when combined and compared, document and demonstrate the natural processes and change agents at work in our parks. Over 1,000 photographs have already been acquired for Southwest Alaska Network (SWAN) parks. Of these, approximately 300 photographs were retaken in 2004-2006. An ACCESS database houses these photos can be found at http://science.nature.nps.gov/im/units/swan/index.cfm?theme=repeat_photos.

These photographs display striking evidence of climatic change effects in our parks as seen by glacial recession and expansion of trees and shrubs. This is an integrative project that seeks to capitalize on the past work completed across SWAN as well as the current work of Colorado State University to further understand place-based communication about climate change to create a state-of-the-art means for web users to view and appreciate current observed climate changes within southwest Alaska parks as well as to familiarize audiences with current monitoring work now underway. The National Park Service is well-suited as a credible messenger about climate change, according to the May 2011 "Six Americas" report published by the Yale Project on Climate Change Communication. In response to the question how much do you trust the National Park Service as a source of information about global warming, 13% of respondents said "Strongly Trust" and 62% said "Somewhat Trust;" ranking NPS as one of the top five most credible sources in the US, behind NOAA, Scientists, EPA, and the CDC (<http://environment.yale.edu/climate/news/SixAmericasMay2011/>).

Outcomes with Completion Dates: March 31, 2014

Keywords: communication materials, place-based, climate change, repeat photography, Southwest Alaska National Parks, Southwest Alaska Network (SWAN) and Ocean Alaska Science & Learning Center (OASLC), Colorado State University