

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assessment of Natural Resources and Watershed Conditions for Rocky Mountain National Park and Florissant Fossil Beds National Monument

Discipline: Natural

Type of Project: Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 9/15/2006- 2/28/2009

Funding Amount: \$170,000

Investigators and Agency Representative:

NPS Contact: Jeff Albright, Coordinator, Watershed Condition Assessment Program, Water Resources Division, 1201 Oakridge Drive, Fort Collins, CO 80525, 970-225-3528, jeff_albright@nps.gov

Investigator: David Theobald, Ph.D., Natural Resource Ecology Lab, Colorado State University, Fort Collins, CO 80523-1499, 970-491-5122, davet@nrel.colostate.edu

Project Abstract: This project will be a collaboration between the National Park Service (NPS) and Colorado State University to perform an ecological assessment of natural resource conditions in and adjacent to Rocky Mountain National Park (ROMO) and Florissant Fossil Beds National Monument (FLFO) in Colorado. The assessment will be conducted in the context of established watershed and/or ecological assessment frameworks, at appropriate scales of analysis. Some analyses (e.g., threats/stressors; current conditions) will likely be conducted at broader watershed or landscape scales that encompass areas extending beyond the park's boundaries in order to establish the ecological and social context for park resources. However, the purpose of the assessment is to understand and report on the condition of resources for park-managed watersheds and habitats, not to reach judgments or report on conditions for areas outside park boundaries.

This task agreement will fund phases 1 and 2, which include: (1) Develop a scientifically-credible assessment and analytical framework for assessing and reporting on the current condition of resources within each park, and identifying the principal near-term (~5-20 year) threats and stressors., and (2) Develop a list of products that will be most pertinent and useful for assessing conditions within each park and that can reasonably be developed given the financial and time constraints of the project. Phase 3 was funded in FY07 and includes the following tasks: (1) Analyses, statistics and report findings will be reported on the following themes: a) current conditions and trends, b) threats and stressors, and c) data/information gaps, and d) research needs. Note that in addition to a written technical report, final products will include maps (in PDF format and as ArcGIS map document files), raw spatial databases (i.e. Geodatabases and raster files), and ArcGIS ModelBuilder models and (2) PI will develop a socio-ecological indicator (i.e., "visitor use" measure) and evaluate its usefulness as an ecological condition and/or risk assessment indicator for the ROMO portion of the project work.

Outcomes with Completion Dates: Due by June 2007: (1) Workshop to refine project objectives; agree upon an initial outline for a scientifically credible and repeatable assessment and analytical framework; describe important park focal resources and ecological processes and/or assessment themes; identify park resource management issues or concerns; and, identify likely sources of data and information for use in the project; and, describe end products needed from the assessment, (2) Compilation of data and information sources, as identified through literature reviews and data mining exercises, deemed most relevant and useful to the project, (3) A finalized and mutually agreeable (to Principal Investigator and NPS) assessment and analytical framework for use in the project. At the end of phase 3 (late 2008), the following products are expected: (1) Meeting(s) to present preliminary findings to park managers and other scientific peer review experts, to obtain and incorporate their recommendations into final products., (2) Data preparation, analysis, and an interdisciplinary evaluation of selected data and information, resulting in a written report and Geographic Information System coverages, and (3) all data and metadata used and generated by the project.

Keywords: watershed condition assessment, stressors, Rocky Mountain NP, Florissant Fossil Bed NM, NPS-Water Resources Division

For Administrative Use Only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: