

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Monitoring Recreation Related Trail Impacts in the Bear Lake Corridor

**Type of Project:** Research/Social Science

**Funding Agency:** National Park Service

**Other Partners/Cooperators:** Colorado State University

**Effective Dates:** 1/1/2005 - 9/1/2006

**Funding Amount:** \$24,072

**Investigators and Agency Representative:**

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Investigator: Peter Newman, Department of Natural Resource Recreation and Tourism  
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**Project Abstract:**

As visitor use in Rocky Mountain National Park (RMNP) continues to rise, and visitors and types of activities continue to diversify, the RMNP administration is challenged to balance use and preservation in wilderness and related areas as is mandated by the National Park Service Organic Act of 1916 and the Wilderness Act of 1964. Park and wilderness managers can meet these mandates through the formulation of management objectives, associated indicators, standards of quality, and a sound monitoring program. The purpose of this project is to help RMNP develop a trail impact monitoring program for the Bear Lake Corridor that once is implemented, may be expanded in the future to a wider area of the park.

Bear Lake is a popular visitor destination in RMNP all year round. Reconstruction of the Bear Lake Road and parking lots has improved access to visitors traveling to trailheads in cars. Moreover, a shuttle system originating in Estes Park will be initiated that allows more visitors to travel to Bear Lake corridor trailheads beyond the current parking lot limitations. Prior to the advent of the shuttle, available parking spaces at trailheads within the corridor served to limit visitor use. With the shuttle system in place, more visitors can access the trails in the area. Increasing visitor use may be impacting the trails themselves and the natural resources in the vicinity of trails.

The goal of this project is to create a recreation-related trail impact monitoring system for the Bear Lake Corridor.

The objectives of this project are:

1. Conduct a thorough literature review of current trail impact monitoring systems and techniques.
2. Assist RMNP in the formulation of recreation related trail impact indicators.
3. Develop a GIS database and spatial monitoring protocol for the trails in the Bear Lake Corridor that will have statistical validity in determining if changes are occurring over time leading to possible impairment of park resources.

**Outcomes with Completion Dates:**

This project will produce a recreation related impact monitoring system and database related to trails in the Bear Lake corridor to assist RMNP in making informed management decisions.

Products from this project will include:

- A literature review of current trail impact monitoring techniques.
- Assist in the formulation of indicators.
- A GIS database and spatial monitoring protocol for the trails in the Bear Lake Corridor that could also be used in a wider area of the park.
- . Quarterly progress reports, in the form of electronic mail and/or oral presentations,
- . One hard copy and one electronic copy of an annual report describing progress, December 31, 2005, to be delivered to the ROMO key contact.
- . One hard copy and one electronic copy of the final report, due May 31, 2006, to be delivered to the ROMO key contact, and one electronic copy is to be provided to Kathy Tonnessen at the Rocky Mountains CESU.
- . An oral presentation will be provided to the ROMO staff describing the research findings and the resulting management implications of this work. Other oral presentations at professional meetings and to scientific peers will occur throughout the project.

**Keywords:** recreation, trail impacts, monitoring program, Rocky Mountain National Park, Colorado State University, Bear Lake Corridor, social science, wilderness

**For Administrative Use Only:**

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: