

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Preservation, Protection, and Management of Water and Aquatic Resources of Units of the National Park System

Discipline: Natural Resources
Type of Project: Technical assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 9/20/2007-9/30/2009
Funding Amount: \$461,670

Investigators and Agency Representative:

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Project Abstract: The NPS-Water Resources Division will work with the College of Engineering of Colorado State University on issues related to protection of water resources in parks. This project will be a collaborative work effort to:

- A. Develop effective tools and techniques to address and evaluate evolving threats to water and aquatic resources;
- B. Develop methods and guidelines for sound water resources management and for the long-term protection of surface and ground water resources;
- C. Develop analysis techniques for ecosystem-scale investigations of the scope, magnitude, and trend of existing or potential long-term effects on natural resources as a result of human activities;
- D. Research existing federal and state water law (legislation, case law, court rulings, rules and regulations, policies, legal notices, etc.) and develop water right protection strategies, in conjunction with the Office of the Solicitor and Department of Justice;
- E. Provide opportunities for students and recent graduates to gain real-world experience in resource management and to develop their skills for use in future careers;
- F. Collect water resources data and information (land ownership and use, hydrology, geology, biology, etc.) for use by the NPS, CSU, states and other federal agencies that can be used to assist in water resources protection, design and management.
- G. Develop and maintain reference "libraries" to manage collected data, information, and review findings and disseminate compiled water resource information via NPS-developed Internet sites and other outlets. This includes data bases, technical document repositories, map files, water-right issue files, and other filing systems as needed to allow effective archival, searching and retrieval of stored materials.
- H. Publish scientific reports and data and develop outreach materials to educate the public about water and aquatic resources preservation, protection and management.

Outcomes with Completion Dates: *Investigator's Annual Report* due by March 31, 2008 and 2009. Products will vary case by case and will include bibliographies of applicable scientific research and analyses of water right laws and administrative procedures, all due by 9/30/2009.

Keywords: water rights, water law, database management, NPS-Water Resources Division, Colorado State University