

Project Completion Report

Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: Status and Trends of Impaired, Threatened, and Outstanding National/State Resource Waters

Project Code: WASO agreement: J2380081027

Type of Project: Technical Assistance

Funding Agency: National Park Service

Partner University: Colorado State University

NPS Agreement Technical Representative (with complete contact information):
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Start Date of Project: September 1, 2008

End Date of Project: September 30, 2011

Funding Amount: \$164,600

Project Summary:
CSU provided research associates and graduate students to work with the National Park Service, Water Resources Division on a project to make physical, chemical, and biological water quality data collected by NPS staff, contractors, and cooperators widely available to the public and state regulatory authorities for assessment under the Clean Water Act by uploading the data to the Environmental Protection Agency's (EPA) STORET Warehouse. Two research associates worked exclusively on identifying, obtaining, digitizing, reformatting, quality assurance/quality control, and uploading datasets to STORET. As a result, the NPS' water quality database in STORET now contains 5,739,365 results for 4,638 physical, chemical, or biological characteristics from 47,569 monitoring locations in support of 1,160 different projects conducted in or near 258 units of the National Park System. This is one of the largest sources of data in the EPA's STORET Data Warehouse and is a treasure trove for states, federal and other governmental agencies, watershed organizations, academia, private entities, and the public for performing water resources assessments. Providing these data to the public allows them to serve a greater public purpose than just the National Park Service's reason for collecting the data. This project also supported the enhancement of NPSTORET – a Microsoft Access-based water quality data management system that can be used by anyone interested in managing water quality data in a manner compatible with STORET and WQX.

Number of students participating in this project: undergraduates, graduate students, degrees conferred.

Three research associates (including two who were former CSU graduate students) participated directly in this project. One graduate student was tangentially involved while working on a related thesis.

Lessons Learned from this project:

This agreement provided a mutual benefit to the NPS and CSU. CSU students, staff, and researchers gained invaluable experience, training, and research opportunities while working in close cooperation with WRD staff on real-world issues and concerns. The data uploaded to STORET can be downloaded from <http://www.epa.gov/storet/dbtop.html>. The NPSTORET application can be downloaded from <http://nature.nps.gov/water/vitalsigns/vitalsignsmgt.cfm#downloads> or <http://www.epa.gov/storet/otherapps.html>. State regulatory authorities have used the data in Clean Water Act 305(b) reports and 303(d) lists. The list of users of NPSTORET includes federal agencies, Indian tribes, watershed management groups, private citizens, and others both in the United States and abroad.