

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

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

Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: September 1, 2009 - September 30, 2012
Funding Amount: \$232,100

Investigators and Agency Representative:

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Project Abstract:

In undertaking this effort, CSU and the National Park Service (NPS) Water Resources Division (WRD) will create databases, schemas, software tools, reports, and maps that benefit a wide audience. The Environmental Protection Agency's (EPA) STORET Data Warehouse, to which CSU and the NPS will load data, is an interagency water quality database developed and maintained by the EPA. Archiving data in STORET supports all 56 states and territories that publish Clean Water Act 305(b) assessments and 303(d) lists which use the data from STORET to help compile these congressionally-mandated reports. The data will also be used by states and private entities to develop total maximum daily loads (TMDLs) for waterbodies to help bring 'impaired' waterbodies in compliance with state water quality standards. Archiving NPS and other water quality data in the STORET Data Warehouse (http://www.epa.gov/storet/dw_home.html) also makes them publicly accessible to universities (the data have appeared in class projects, theses, dissertations, and peer-reviewed journals), watershed organizations, private entities, and the general public. By sharing water quality data collected by the NPS for its own purposes with the states and other organizations, a greater public benefit is achieved. The database schemas and software tools, particularly the NPSTORET water quality database management system, developed by WRD and CSU are currently used by other federal, state, and foreign governments, Indian tribes, non-profit watershed organizations, and private entities.

WRD and CSU will produce a variety of information, documents, and maps (GIS coverages) that will be published for public use in appropriate media including, but not limited to peer-reviewed journals, grey-literature, theses, dissertations, and websites.

CSU students, staff, and researchers will gain invaluable experience, training, and research opportunities working in close cooperation with WRD staff on real-world issues and concerns. In the past, this close cooperation has resulted in many CSU students and staff going on to careers in the NPS or other land management agencies.

Outcomes with Completion Dates:

Databases, schemas, software tools, reports, and maps: Due 9/30/2012

Keywords: Clean Water Act, impairments, designations, Outstanding Natural Resource Waters, STORET, baseline water quality; NPS-Water Resources Division, Colorado State University