

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Rocky Mountain Inventory and Monitoring Network Stream Ecological Integrity Monitoring, Water Chemistry Project

Type of Project: Technical Assistance
Discipline: Natural
Funding Agency: National Park Service
Other Partners/Cooperators: University of Colorado at Boulder
Effective Dates: June 30, 2009 - December 31, 2012
Funding Amount: \$8,832 [FY10: \$4630; FY09: \$4202]

Investigators and Agency Representative:

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Project Abstract: The ROMN Inventory and Monitoring Program will work with CU-Boulder to analyze water samples collected as part of the Stream Ecological Integrity Vital Sign work. The Kiowa Lab at CU-Boulder will assist the ROMN network of parks in Colorado and Montana in the analysis of water samples collected over a spectrum of streams, rivers and lakes. Parks where samples will be collected include Glacier, Grant Kohrs Ranch and Little Bighorn Battlefield in Montana and Rocky Mountain, Florissant Fossil Beds and Great Sand Dunes in Colorado. Parameters to be measured include major anions and cations, nutrients, ANC, pH and conductivity.

The number of water samples and their timing will vary with year. In 2009, ROMN parks expect to collect 20-30 samples between June and September. In the future, the I&M network expects that most years will be similar to 2009; however there may be some years where we may collect more than 50 samples. Samples will be concentrated in an index period of later summer base flow but can occur during any month of the year. Samples will be delivered by FedEx (occasionally by hand) in well packed coolers. ROMN stream monitoring is a long term program and we anticipate these samples being collected every year into the future.

Outcomes with Completion Dates: By April 1, 2011

Water chemistry lab analysis and data delivered electronically in the standard Kiowa Lab reporting format. The complete data report generated by the Kiowa Lab's data management system should be delivered. This will include all units (mg/l, etc.) and internal lab metadata. All samples sent to the Kiowa lab will be accompanied by a standard Chain of Custody sheet that will need to be signed and returned to the ROMN upon receipt and evaluation of the samples.

Keywords: Rocky Mountain Inventory and Monitoring, water chemistry, stream integrity, vital signs, University of Colorado at Boulder