Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

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

Discipline: Natural Resources Type of Project: Technical Assistance Funding Agency: National Park Service Other Partners/Cooperators: University of Colorado Boulder Students Involvement: No Effective Dates: 9/1/2016 - 5/1/2019 Funding Amount: \$21,225

Investigators and Agency Representative:

NPS Contact: Mike Britten, Program Manager, Rocky Mountain Network, National Park Service, 2101 Oak Ridge Dr., Fort Collins, CO 80525; 970-267-2150; mike_britten@nps.gov

Investigator: Eve-Lyn Hinckley, Assistant Professor of Environmental Studies, Institute of Alpine and Arctic Research, Univ. of Colorado, Boulder, 4001 Discovery Drive, Boulder, CO 80303; 303-735-1239; eve.hinckley@colorado.edu

Project Abstract: The Rocky Mountain Network monitors (ROMN) the "vital signs" of park ecosystem integrity and health in 6 national parks in the Rocky Mountain Region. Stream ecological integrity is a primary vital sign for ROMN parks. Understanding water chemistry including nutrients and other contaminants is an important component of the ROMN stream monitoring protocol. The project purpose is to collaborate on the sampling, analysis and reporting of water chemistry in ROMN parks. The Kiowa Lab of the Institute of Alpine and Arctic Research at Univ. of Colorado, Boulder has conducted environmental chemistry analyses for agencies and academic partners in the Rocky Mountain regions for many years. They are part of the Niwot Ridge Long-term Ecological Research site and National Ecological Observatory Network; both of these organizations have a shared mission w/ROMN to understand long-term ecological integrity, esp. in the mountainous regions. By working together with Kiowa Lab, the ROMN engages a broader group of outside scientific researchers and develops a shared understanding of the dynamics of stream ecological integrity and water chemistry in the region. Both the ROMN and Kiowa Lab provide the data and information from their work to the research community and public in the form of datasets, technical reports, journal articles and resource briefs. The results from this project will also be shared widely among the research community and public.

Keywords: "vital signs", stream ecology, water chemistry, National Park Service, Rocky Mountain Inventory and Monitoring Network, University of Colorado Boulder