

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Identifying the Next Generation of Ecosystem Indicators

**Discipline:** Natural  
**Type of Project:** Research  
**Funding Agency:** USGS  
**Other Partners/Cooperators:** Colorado State University  
**Effective Dates:** 6/1/2012 - 5/31/2013  
**Funding Amount:** \$25,300

**Investigators and Agency Representative:**

USGS Contact:

Investigator: Matthew Wallenstein, Natural Resource Ecology Lab, Colorado State University, 1499 Campus Delivery, Fort Collins, CO 80523-1499;  
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**Project Abstract:** The PI at Colorado State University will conduct research to define which microbial properties matter most to ecosystem function and how to measure them. Specifically, objectives include gather and format published datasets, analyze by microbial community property (metagenomic, phylogenetic, stoichiometry, microbial dormancy, and additional community level properties likely to influence ecosystem function that can be obtained from these and other datasets). The goal of this research is to discover emergent relationships among microbial properties and ecosystem processes that can be used to enhance predictive capability of larger-scale ecosystem processes.

**Outcomes with completions dates:** May 31, 2013

**Keywords:** microbial properties, ecosystem function, USGS, Colorado State University