

## **Project Summary**

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

**Project Title:** Biogeochemical and Physical Processes Controlling Mercury Methylation and Bioaccumulation in Lake Powell, Glen Canyon National Recreation Area, Utah and Arizona

**Discipline:** Natural  
**Type of Project:** Research  
**Funding Agency:** USGS  
**Other Partners/Cooperators:** Montana State University  
**Effective Dates:** 5/1/2014 - 4/30/2017  
**Funding Amount:** \$12,840

**Investigators and Agency Representative:**

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**Project Abstract:** Specific project objectives are to: (1) map biogeochemical gradients in the water column and near-surface sediments along reservoir transects under two contrasting hydrologic conditions (spring runoff and summer low flow); (2) assess benthic Hg speciation and methyl (Me) Hg production and degradation rates; (3) characterize the microbial biodiversity associated with water and sediment samples collected along reservoir transects under differing hydrologic conditions; and (4) utilize the results from objectives 1 thru 3 to determine potential management scenarios that will decrease Hg bioaccumulation.

**Outcomes with completions dates:** April 30, 2017

**Keywords:** Mercury Methylation and Bioaccumulation, Lake Powell, Glen Canyon National Recreation Area, Utah and Arizona, USGS, Montana State University