

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: \$25,680 [FY15: \$12,840; FY14: \$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