

Rocky Mountains Cooperative Ecosystem Studies Unit  
Project Summary

**Project Title:** Lake McDonald Time-Series Water Quality Analysis

**Discipline:** Natural

**Type of Project:** Technical Assistance/Education

**Funding Agency:** National Park Service

**Other Partners/Cooperators:** University of Montana

**Student Participation:** No

**Effective Dates:** August 2019 – March 31, 2020

**Funding Amount:** \$11,985

**Investigators and Agency Representative:**

NPS ATR: Chris Downs, 406-888-7917; chris\_downs@nps.gov

Investigator: Shawn Devlin, Assistant Research Professor, Flathead Lake Biological Station, University of Montana, Polson, MT 59860; shawn.devlin@umontana.edu

**Project Abstract:** In 2018, National Park Service (NPS) staff collected water quality samples from Lake McDonald to evaluate potential trends in water quality due to a lack of recent monitoring and an increase in public concern over potential contamination. The last comprehensive water quality analysis of Lake McDonald was completed almost 40 years ago by the University of Montana Flathead Lake Biological Station (FLBS). The intent of the project is to compare Lake McDonald water quality now with the water quality in the late 1980's. Public concern has arisen over potential septic contamination from lake-front homes as well as contamination from increased visitor use and aerial deposition of contaminants.

The project supports the public purposes of:

- engaging the recipient and park visitors in shared environmental stewardship by monitoring and evaluating changes in water quality over time in response to public concerns; and
- delivering scientific information to the scientific community and researchers external to NPS as well as the general public and park inholders regarding the status of water quality in this iconic Glacier National Park lake. Further, this project assists with the facilitation and improvement of the public's understanding of natural systems, conservation areas, and the application of cutting-edge scientific methods to real-world conservation challenges.