Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Using watershed characteristics to predict the sensitivity to acidification of high elevation lakes in Grand Teton National Park

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: University of Montana

Effective Dates: April 1, 2002 – April 1, 2004

Funding Amount: $10,000

Investigators and Agency Representative:

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Project Abstract:

The specific objectives of the research are:

1. Determine the current acid neutralizing capacity (ANC) status of a selected number of subalpine and alpine lakes in GRTE to provide baseline data for future water quality monitoring.
2. Relate the spatial variability in ANC to lake and watershed physical characteristics, such as lake elevation, drainage area, ratio of drainage area to lake area, lake volume, mean watershed slope, aspect characteristics, and percent of impervious area in watershed.
3. Use the relationships between ANC and watershed physical characteristics to predict which lakes in GRTE are most sensitive to acidification, and thus focus monitoring efforts.

Outcomes with completion dates:

Final Products include: 1) An approved MS thesis, 2) journal publication, and 3) electronic data in NPS format.
Due June 1, 2004

Keywords: acidification, lakes, watershed characterization, Grant Teton National Park, University of Montana, atmospheric deposition, acid neutralizing capacity, long-term monitoring

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Date Annual Report Received:
Date Final Report Received:
Publications, etc. on file: