

## Project Summary

### Rocky Mountains Cooperative Ecosystem Studies Unit

<b>Project Title:</b> Using watershed characteristics to focus monitoring efforts in high-elevation lakes at GRTE, Continuation of UMT-71
<b>Type of Project:</b> Research
<b>Funding Agency:</b> National Park Service
<b>Other Partners/Cooperators:</b> University of Montana
<b>Effective Dates:</b> January 1, 2004 - December 31, 2006
<b>Funding Amount:</b> \$9,750
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<b>Project Abstract:</b> The specific objectives of this project are:  1. Relate the spatial variability in acid-neutralizing capacity (or buffering capacity) of lake waters 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 watershed covered by rock vs. soil.  2. Use the relationships between acid-neutralizing capacity (ANC) and watershed physical characteristics to develop a model that will predict which lakes in GRTE are most sensitive to change, and thus focus monitoring efforts.  3. Develop a lake monitoring program to integrate with the vital signs monitoring program in the Greater Yellowstone I&M network.
<b>Outcomes with completion dates:</b> A long term monitoring plan for high elevation waters in the park, with application to other parks in the network, final report due December 31, 2006.
<b>Keywords:</b> high elevation lakes, acid-neutralizing capacity, watershed characteristics, lake chemistry, Grand Teton National Park, Greater Yellowstone I&M Network, University of Montana
<b><u>For Administrative use only:</u></b> <i>Date Annual Report Received:</i> <i>Date Final Report Received:</i> <i>Publications, etc. on file:</i>