Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Glacial Change in Grand Teton National Park

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming

Effective Dates: 6/1/2008 - 6/1/2009

Funding Amount: \$10,000

Investigators and Agency Representative:

NPS Contact: Susan O'Ney, Hydrologist, Grand Teton National Park, P.O. Drawer 170, Moose, Wyoming 83012, 307-739-3666, Susan_o'ney@nps.gov

Investigator: Dr. Glen Tootle, University of Wyoming, Department of Civil and Architectural Engineering, Dept. 3295 1000 E. University Avenue, Laramie, WY 82071 (307) 766-3299, tootleg@uwyo.edu

Project Abstract: The objective of the proposed research is to investigate glacial change in Grand Teton National Park (GTNP). First, an extensive literature review will be performed to identify past research efforts. Second, a field investigation will be performed in GTNP during summer 2008 to gather additional information on glaciated regions. Finally, remote sensing data will be obtained for the GTNP and a preliminary analysis of glacier area change will be performed. Since the glaciated regions of GTNP have not been intensely studied in the past, it is essential to understand the past behaviors of the glaciers in the region. This study aims to create a database of quantitative information for the glaciers in GTNP such that future observations may be compared to past observations in an attempt to identify any long term trends of glacier behavior. This is a new study that will be undertaken by graduate students; additional funding is being sought or committed from other sources for subsequent years of field work potentially involving installation of monitoring instruments.

Outcomes with Completion Dates: Final Report Due by November 30, 2008

Keywords: Grand Teton NP, University of Wyoming, glaciers, aerial photography, remote sensing data.