Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Analysis of Changes in the Flow Regime and Preliminary Analysis of Recent Channel Changes of the Snake River in Grand Teton National Park

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: One Fly Fishermen, Jackson, WY

Effective Dates: August 1, 2003- March 31, 2004

Funding Amount: \$15,295

Investigators and Agency Representative:

NPS Key Official: Susan O'Ney, Grand Teton National Park, P. O. Drawer 170, Moose, WY 83012, 307-739-3666, susan o'ney@nps.gov

UNIVERSITY CONTACT: Dr. John C. Schmidt (PI), Associate Professor, Department of Aquatic, Watershed, and Earth Resources, Utah State University, Logan, UT 84322-5240, (435) 797-1791, jschmidt@cnr.usu.edu

Project Abstract:

The principal investigator and graduate student will collaborate with the Grand Teton National Park and other researchers to accomplish the following:

- (1) Determine the characteristics of flow changes that have occurred on the Snake River, using mean daily discharge data and modern analytical tools.
- (2) Analyze recent aerial photographs in order to determine the geomorphic effectiveness of high flows in the 1990s. The goal of the second objective is to evaluate what occurs geomorphically when there are high Snake River flows and to evaluate the effectiveness of these flows in relation to other possible releases from the dam.

The objective of this Cooperative Conservation Initiative project is to determine the appropriate methods of riparian restoration along the Snake River in Grand Teton NP

Outcomes with completion dates:

Final Products include: The hydrological analysis will be completed by October 1, 2003, and the aerial photograph analyses associated with the evaluation of recent channel change will be completed by January 1, 2004. (1) a final report summarizing the state of understanding of Snake River hydrology and geomorphology as it relates to the operation of the Jackson Lake Dam; and (2) a preliminary study plan for proceeding with the development of recommendations for changes in the release schedule of Jackson Lake Dam.

Keywords: Flow regime, channel changes, Snake River, Grand Teton National Park

For Administrative use only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: