Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Developing a Restoration Plan for Fan Lake

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 4/25/2005 - 9/30/2006

Funding Amount: \$18,248.00

Investigators and Agency Representative:

NPS Contact: Michael Margo, 1000 Hwy 36, Estes Park, CO 80517, 970-586-1360,

michael_margo@nps.gov

Investigator: David J. Cooper, Dept. Forest, Rangeland, and Watershed Stewardship, Rm. 234 Natural Resources Building, Colorado State University, Fort Collins, CO 80523, 970-491-5430, davidc@cnr.colostate.edu

Project Abstract:

The primary goal of this restoration design project At Fan Lake in Rocky Mountain NP was to determine where suitable hydrologic conditions exist for the establishment of willows and sedges in the study area, to refine methods for plant establishment and protection, and to develop planting maps to guide restoration activities. The site was to be restored as it presently exists, with no earth-moving proposed. However, observations made during recent field visits with NPS staff to the study area suggest that the formation and persistence of Fan Lake has significantly altered topographic, soil, and hydrologic properties, making restoration to reference conditions difficult or impossible without more substantial changes to the site's hydrologic regime. Therefore, we propose that an additional objective, prerequisite to large-scale planting, should be reestablishment of the Fall River channel configuration, hydrologic regimes and landform characteristics present prior to the formation of Fan Lake. We believe that only by restoring the original meandering channel of Fall River, can the vegetation be restored to the conditions present prior to the Lawn Lake flood.

Outcomes with Completion Dates:

A Draft Report, including estimated plant materials to be produced and a final grading plan, will be submitted by November 1, 2005 and a Final Report, including final restoration recommendations, will be delivered by May 1, 2006. The Final Report will be developed and delivered in both hard copy and electronic format, to ROMO by May 31, 2006.

Keywords: restoration, revegetation, channel reconstruction, hydrology, Fall River, Fan Lake, Rocky Mountain National Park, Colorado State University

For Administrative Use Only:

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