Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Vegetation classification and mapping at Bent's Old Fort National Historic Site (BEOL) and Sand Creek National Historic Site (SAND)

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 6/15/2005 – 12/30/2007

Funding Amount: $98,240

Investigators and Agency Representative:

NPS Contact: Dusty Perkins, Southern Plains Network, Post Office Box 329, Johnson City, TX 78636, 830-868-7128 ext. 281, FAX: 830-868-7792, dustin_w_perkins@nps.gov

Investigator: Joe Stevens, Colorado Natural Heritage Program, Colorado State University, 8002 Campus Delivery, Fort Collins, CO 80523-8002, 970-491-7760, js@lamar.colostate.edu

Project Abstract:

The National Park Service (NPS), in cooperation with the Biological Resources Discipline (BRD) of the USGS is currently completing a multi-year process to map the vegetation of the National Parks. The Vegetation Mapping Program brings together resource managers, planners, and administrators from the parks with photo-interpretation specialists, ecologists, and data managers from other Federal agencies, State Natural Heritage Programs, and NatureServe.

The Colorado Natural Heritage Program (CNHP) of Colorado State University will work with the Southern Plains Network (SOPN) of the NPS and the NPS Vegetation Mapping Program (VMP) to complete the vegetation classification portions of the Vegetation Classification and Mapping project at Sand Creek Massacre National Historic Site (SAND) and Bent's Old Fort National Historic Site (BEOL), Colorado. CNHP and NPS will work closely with NatureServe Ecologists to ensure that national standards for the USGS-NPS Vegetation Mapping Program and US National Vegetation Classification (NVC) are met.

In FY 06 SOPN added $11,792 to the task agreement to accomplish the following: perform an accuracy assessment (AA) of the vegetation maps at SAND and BEOL. The AA of the vegetation classification and mapping products will be completed using the protocols established by the NPS's National Vegetation Mapping Program (NVMP) (The Nature Conservancy and Environmental Systems Research Institute 1994). Specific tasks will include developing the AA sampling strategy, producing maps of the randomly selected sampling points, conducting field inventory of the sample points, statistical analysis of the sampling results, and presentation of the sampling results in the final project documents. The protocols used will be slightly modified so they are more applicable to the small size of these Parks. At 799 and 12,500 (authorized boundary) acres, BEOL and SAND are relatively small parks. At SAND, NPS manages approximately 2,400 acres, with the rest being in private ownership.

Outcomes with Completion Dates:

•Sample plot data will consist of completed field forms with photographs and GPS location files.

•Final Report will include digitized sample plot data, digitized map, final vegetation classification, dichotomous vegetation key (due 06-30-2007).

*Final Report should include the vegetation map accuracy assessment

Keywords: vegetation classification, vegetation mapping, accuracy assessment, Bent's Old Fort National Historic Site, Sand Creek National Historic Site, Southern Plains Inventory and Monitoring Network, Colorado State University

For Administrative Use Only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: