Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Bison ecology in the San Luis Valley, Colorado

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 9/1/2008-12/1/2010

Funding Amount: \$53,000

Investigators and Agency Representative:

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Project Abstract: CSU researchers will work with NPS, Great Sand Dunes NP&P and the NPS-BRMD to revise the habitat model developed by Neilsen and Schoenecker using an updated vegetation map that is currently being finalized by BOR, USFWS, CSU (Natural Heritage Program), and NPS. This revised and published map will allow for better prediction of available bison habitat based on higher quality maps than have previously been available. The objective is to be able to predict the amount and quality of bison habitat on NPS and USFWS lands, so resource managers can make informed decisions about bison restoration in the San Luis Valley, Colorado.

The second objective is to develop the study design and collect baseline data on vegetation conditions in areas where bison may be restored (pretreatment data). With input from stakeholders and federal and state wildlife agencies, we will determine where a bison fenceline would most likely be established. Researchers will set up vegetation measurement plots in the defined pilot restoration area, and begin to collect baseline vegetation data in those plots.

Outcomes with Completion Dates: By May 1, 2010 the following products will be completed: 1) report: A habitat model for bison in the San Luis Valley, Colorado 2) An annual report from the first year of pretreatment data collection

Keywords: habitat modeling, bison, San Luis Valley, USGS-BRD, Great Sand Dunes National Park and Preserve, Colorado State University