## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assessment of Status and History of the Prairie Dog Colony at Sand Creek

Massacre National Historic Site and Recommendations for Managing the Population

Discipline: Natural

Type of Project: Technical Assistance
Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

**Effective Dates:** 9/25/2007-8/1/2012

Funding Amount: \$30,000 [two task agreements in FY07]

Investigators and Agency Representative:

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**Project Abstract:** The National Park Service and the Colorado Natural Heritage Program will work together to evaluate the history and status of the current prairie dog population at SAND. The objectives of the project are to recommend management options for:

- 1. keeping the prairie dog towns intact,
- 2. preventing the towns from expanding onto the adjoining private land, and
- 3. long-term management of the prairie dog towns, with the associated ecological values and habitat diversity.

Colorado Natural Heritage Program will be responsible for:

- documenting the status and history of prairie dogs at SAND including possible discussions with private ranchers whose lands adjoin SAND and contain portions of the towns that occupy SAND,
- identifying the future estimated population trends of the prairie dogs at SAND given the current ecological and climate conditions,
- identifying control strategies for within and outside of SAND that have proven to be effective in managing prairie dogs,
- identifying population densities appropriate for the acreage of suitable prairie dog habitat at SAND,
- defining the potential future impacts resulting from the use of the identified control strategies such as future changes in prairie dog population sizes, future expansion dynamics of prairie dogs, and changes to local plant community structure within the confined prairie dog towns.
- identifying future monitoring protocols required to define future impacts resulting from prairie dog control, and
- Additional tasks added late in FY07 related to testing of management strategies, including: (1) Purchase of fencing, shrubbery, etc. needed for confining prairie dog colonies; (2)Post mitigation monitoring of prairie dog colonies, (3) drafting of draft and final report including discussion of prairie dog control strategies, management methods, and post management monitoring.

## Outcomes with Completion Dates:

- $\bullet$  October 2007 literature review and compilation of existing information
- October 2007 November 2007 synthesis of existing information, phone or in person interviews with private ranchers, and initiation of report writing
- December 2007 report writing, completion of first draft of phase 1 report, draft review by NPS

- January 2008 discussion of implementing control measures
- Summer 2008 fencing, planting shrubs, etc. in cooperation with NPS staff
- Summer 2009 monitoring of the results of control measures on prairie dog colonies, and grassland ecosystem ecology

**Keywords:** black-tailed prairie dog, management, habitat, control strategies, Sand Creek Massacre NHS, Colorado State University

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