Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Establish Desired Future Conditions for Mixed Grass Prairie Ecosystem, Sand Creek Massacre NHS

Discipline: Natural Type of Project: Technical Assistance Funding Agency: National Park Service Other Partners/Cooperators: Colorado State University Effective Dates: 7/1/2005 - 12/31/2007 Funding Amount: \$25,000

Investigators and Agency Representative:

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Investigator: Roy Roath, Department of Forest, Rangeland and Watershed Stewardship, Colorado State University, Fort Collins, CO 80523, 970-491-6543, royr@cnr.colostate.edu

Project Abstract:

Sand Creek Massacre NHS is a new NPS unit located in SE Colorado. This project is a collaboration between Colorado State University and the NPS to help the Sand Creek Massacre National Historic Site (SAND) determine its "desired future conditions" for the management of the park's short and mixed grass prairie ecosystem, and to help develop recommendations for appropriate management actions to achieve the desired conditions.

The CSU cooperator will analyze existing study results and data available on park vegetation communities and soils. Based on an analysis of the plant inventory and vegetation community maps, the results of all ecological studies in the park, NPS policy guidelines, and an ecological interpretation of *optimal* seral stages that provides for maximum native plant and animal diversity of grassland communities that should be present, Dr. Roath will develop a set of desired future conditions and recommendations for management actions that could be taken to move the park from the present conditions to the desired future conditions. The time spent on the project will be divided between field visits, analysis, and report preparation. NPS will provide all relevant information and data in park files; the park will arrange on-site visits between the researcher and the NPS soil scientist, and will provide any other on-site field assistance, research assistance, or office assistance.

Outcomes with Completion Dates:

Consultation with NPS staff/subject matter experts: July - September, 2006 Field tour/workshops at reference sites: August - September, 2006 Preliminary findings/progress report: November 1, 2006 Draft report submitted for review: February 1, 2007 NPS/Subject Matter Experts comments due: April 1, 2007 Incorporate comments/produce final report: April 1 - July 1, 2007 Submit final report/powerpoint presentation: July 1, 2007 Final Project Report and Final Report Summary-30 January 2007

Keywords: plant and soil inventory, Sand Creek Massacre, Colorado State University, desired future condition, General Management Plan

For Administrative Use Only:

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