

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Impact to Vegetation Communities Following Cessation of Irrigation with the Medano Ranch Area of Great Sand Dunes Nation Park and Preserve

Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Cooperators: Colorado State University
Effective Dates: 6/10/2014 - 9/30/2014
Funding Amount: \$7,520

Investigators and Agency Representatives:

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Investigators: David Cooper, Department of Forest, Rangeland and Watershed Stewardship, Colorado State University, Fort Collins, CO 80523, Phone: 970-491-5430; david.cooper@colostate.edu

Project Abstract: Great Sand Dunes National Park and Preserve (GRSA) proposes to decommission the existing flood infrastructure, including surface water diversion and ditches, in the Medano Ranch area of the Park and reroute Big Spring Creek and Little Spring Creek back into their pre-irrigation "natural" channels. Ending the practice of flood irrigation and returning streamflow to natural channels could result in impacts to vegetation communities with GRSA including species composition and extend of area occupied by various vegetation communities. GRSA is interested in an expert evaluation of the impacts to wetland and upland vegetation with GRSA as a result of the proposed action.

The objective of this project is for CSU to provide an expert evaluation of the impacts to upland and wetland vegetation communities due to the decommissioning of the existing surface water irrigation infrastructure on the Medano Ranch area of GRSA and rerouting Big Spring and Little Spring Creeks back into their "natural" channels. CSU will provide the NPS a written documentation of the evaluation in the form of summary reports including the principal investigator's expert opinions regarding impact to upland and wetland vegetation resulting from the proposed action.

Outcomes with Completion Dates: 9/30/2014

Keywords: irrigation infrastructure, decommissioning, impacts, upland and wetland vegetation, Medano Ranch Area, Great Sand Dunes Nation Park and Preserve, Colorado State University