Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Landscape Condition Analysis, Dinosaur National Monument—Uintah County, UT and Moffat County, CO

Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming
Effective Dates: 7/10/2010– 3/31/2014
Funding Amount: $48,900

Investigators and Agency Representative:
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Project Abstract: Dinosaur National Monument is a 211,000 acre park located on the northeastern edge of the Colorado Plateau and the northeastern edge of the Uinta Basin. The park straddles the border between the states of Colorado and Utah (Moffat and Uintah Counties). Elevation ranges from just under 5,000 ft at the southwest boundary to just over 9,000 ft at Zenobia Peak on the eastern boundary. Vegetation includes desert shrublands and riparian communities at the lowest elevations, semi-desert and montane shrub-steppe and pinyon-juniper woodlands at mid-elevations, and montane forest at the highest elevations. Pinyon-juniper woodlands comprise roughly 60% of Dinosaur's vegetation; shrub-steppe covers approximately 25% of the landscape.

A comprehensive vegetation classification and a vegetation map were completed for Dinosaur in 2008 and a soil survey was completed in 2007. Increasingly complex interactions between fire and invasive species have begun to present unprecedented complications for park managers, leading to the need for a comprehensive assessment of current landscape condition, analysis of historical patterns of change, and an improved understanding of the past and future role of fire in Dinosaur's unique environment. This type of information will contribute substantially to our current management framework and will better prepare us to face the consequences of climate change in the coming decades.

This project aims to utilize new tools and data to improve our understanding of the history, structure and function of the Dinosaur landscape. We hope to identify aspects of resilience and vulnerability, thereby informing our approaches to sound science-based stewardship of one of America's most treasured places.

Outcomes with Completion Dates: Final Report – March 31, 2014

Keywords: fire, invasive species, landscape conditions, Dinosaur National Monument, University of Wyoming