

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assessment of indicator sites and quantifying short-term effects of high flows on riparian vegetation along the Yampa and Green Rivers: implications for monitoring future riparian resource conditions

Discipline: Natural Resources
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Utah State University
Effective Dates: June 30, 2011 - December 31, 2013
Funding Amount: \$ 80,000

Investigators and Agency Representative:

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Abstract: The Northern Colorado Plateau Network (NCPN) has been working with Dinosaur National Monument (DINO), USGS, Utah State University (USU) and NPS Water Resources Division staff to implement a long-term monitoring program on the Yampa and Green Rivers in DINO under existing agreements. In addition, anticipated rare high flows in 2011 on the Green and Yampa rivers through DINO provide the opportunity to examine the short-term effects of high shear stresses imposed by flood flows as well as the erosion, transport and deposition of alluvial sediments on existing riparian vegetation as well as longer-term effects on channel form and riparian vegetation establishment and succession. This agreement covers 2 objectives: 1) Implement the first stage of monitoring by conducting a baseline assessment of areas hypothesized to be susceptible to persistent change in the flow regime on the Yampa River; and 2) describing and quantifying the short-term effects of the high flows of 2011 on the Yampa and Green Rivers in DINO.

Outcomes with Completion Dates: December 31, 2013

Keywords: Utah State University, Northern Colorado Plateau Network (NCPN), Dinosaur National Monument, Yampa River, Green River, stream flow, riparian vegetation, monitoring