**PR Number:** R8219111146

**Award Number:** **P11AT10396 NAU-398**

**Park/NPS Unit:** Grand Canyon National Park

**Title of Project:** Colorado River Management Plan- Research, Monitoring, and Mitigation Program Data Analyses

**Administered through the: (pick from drop down list):** Colorado Plateau Cooperative Ecosystem Studies Unit Cooperative Agreement Number H1200-09-0005

**CESU Partner (pick from drop down list):** Northern Arizona University

**Project Contacts**

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**NPS Technical Expert (if appropriate):** Todd Chaudhry- as above.

**Funding Information:**

**Amount Funded:** $20,000

**Project Dates:**

**Start Date:** August 1, 2011

**Any Other Product Milestone Dates you need to include:** Phase 1 Report (December 31, 2011)

**End Date:** July 31, 2012

**Reporting & Invoicing Requirements for All Agreements:**

**PROJECT ABSTRACT:**

The 2006 Colorado River Management Plan (CRMP) is a visitor use management plan that specifies actions to conserve park resources and visitor experience while enhancing river running recreational opportunities on the Colorado River through Grand Canyon National Park (GRCA). To determine and address the effects of the 2006 CRMP recreational use limits and launch patterns on park natural and cultural resources, the NPS developed a Research, Monitoring, and Mitigation Program (RM&MP). Key objectives of the RM&MP include determining the status and trends of key resources, identifying and understanding meaningful resource condition changes associated with river use, identifying appropriate mitigation and management actions, and assessing the efficacy of such actions within an adaptive management framework. Accordingly, from 2007-2010 the NPS collected data on the condition of natural resources at 66 campsites of differing use levels and sizes during both spring and fall within a rotating panel study design. Data have been collected on campsite conditions, biophysical setting, vegetation floristics and structure, and avifauna composition and abundance. The primary goal for Phase 1 of this project is to both qualitatively and quantitatively assess the suitability of the current study design and monitoring indicators for subsequent analyses and monitoring efforts, and for Phase 2 is to analyze and interpret the monitoring datasets within an information-theoretic modeling framework to help answer key management questions and address the overall objectives of the RM&MP. Results from this project will be incorporated into a RM&MP Synthesis Report for 2007-2010 as well as help guide future monitoring and data analyses.