

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assess the Condition of the Pecos River Riparian Corridor Prior to Implementation of a Public Fishing Program

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 3/1/2007- 6/1/2009

Funding Amount: \$35,735

Investigators and Agency Representative:

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Project Abstract: Pecos National Historical Park was expanded in 1990 to include a three-mile reach of the Pecos River. The river supports extensive forested and shrubby riparian communities, critical habitat in the park. One of the few perennial rivers in New Mexico, the Pecos River and its riparian corridor is a rare resource in the area and critical to the health and functioning of the park's natural resources, a significant component of the landscape of the park. Under heavy pressure from the general public and advocacy groups, park management has decided to open the park to fishing upon completion of the Fishing Management Plan, with target start date of summer 2007. This work will characterize baseline conditions in the riparian corridor prior to implementation of the Fishing Management Plan, develop an approach that can be used by NPS to evaluate the impacts of the public fishing program, and prepare a plan for long-term monitoring of riparian communities and the morphology of the stream. The objectives of the research are: 1) Evaluate existing datasets on riparian ecosystems of the Pecos River at PECO, 2) Classify and map principal geomorphic landforms and riparian communities along the river, 3) Identify critical locations for cottonwood and other woody plant establishment, 4) Create appropriate geospatial datasets including major community types, geomorphic landforms, and reach-level study locations using GIS and GPS, 4) Characterize species composition and the stand structure of riparian plant communities, 5) Develop and implement an approach for the assessment of conditions in the riparian corridor using a variety of data types such as permanent vegetation plots, photo points, and stream cross-sections, 6) Develop a monitoring protocol for evaluating the condition of riparian vegetation and geomorphic stability, particularly as they relate to proposed changes in fishing management.

Outcomes with Completion Dates:

- Annual accomplishments report
- Final research report, draft due September 30, 2008
- Monitoring protocol and training documents for PECO
- All relevant data sets in appropriate format for archiving upon project completion

Keywords: Pecos National Historic Park, public fishing, riparian assessment, Pecos River, watershed condition assessment, Colorado State University

For Administrative Use Only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: