Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Remove Artificial Levee and Connect Glorieta Creek to its Recently Restored Floodplain at Pecos National Historical Park, NM

Discipline: Natural

Type of Project: Technical Assistance
Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 1/25/2008- 6/1/2011

Funding Amount: \$5957

Investigators and Agency Representative:

NPS Contact: Joel Wagner, National Park Service, Water Resources Division, P.O. Box 25287, Denver, CO 80225, (303) 969-2955, joel_wagner@nps.gov

Investigator: David Cooper, Department of Forest, Rangeland and Watershed Stewardship, Colorado State University, Fort Collins, CO 80523, Phone: 303-499-6441; dcooper@rm.incc.net Researcher: Edward Gage, Department of Forest, Rangeland, and Watershed Stewardship, Colorado State University, Fort Collins, CO 80523, 303-448-9434, edgage@lamar.colostate.edu

Project Abstract: Pecos National Historical Park in New Mexico is responsible for managing riparian and wetland habitats along Glorieta Creek and the Pecos River. One such area, a half-mile stretch of floodplain and terraces along lower Glorieta Creek, was mined for sand and gravel before becoming part of the park. Once mining ended in the mid-1980s, ranchers bulldozed the remaining material into a series of levees and dams, creating two reservoirs on 5.6 acres. These reservoirs soon became a threat to the ecology of Glorieta Creek. Floodwaters periodically swept thousands of fish from the creek into the reservoirs, where they were trapped and later died as the ponds dried. Flooding also caused breaches in the progressively weakening reservoir walls, washing sediment into the creek and toward the Pecos River, approximately % mile downstream. In fall of 1999 restoration began, with approximately 30,000 cubic yards of material were excavated from the levees and reservoir bottoms to achieve the wetland-riparian features of the Glorieta Creek floodplain as specified in the restoration design. CSU cooperators have worked on different phases of the restoration until funding was interrupted in FY08. At this point NPS-WRD requests that the cooperators reformulate a budget that would allow the project to proceed to a logical stopping point that would still yield a usable product and not waste the 2007 funds already expended. The logical stopping point was identified as completion of "bid-ready" final design drawings and specifications for the restoration work.

Outcomes with Completion Dates: By December 31, 2008 complete the restoration bid package specifications for (1) earthmoving, (2) erosion control, (3) wetland plant propagation.

Keywords: Pecos National Historic Park, riparian restoration, native vegetation, Pecos River, Glorieta Creek, Colorado State University