

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Data Collection and Detailed Restoration Design for the Rodeo Beach Wetland Complex, Golden Gate National Recreation Area, California

Discipline: Natural

Type of Project: Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 8/15/2006 - 5/31/2008

Funding Amount: \$19,855.00

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: 970-491-5430

Project Abstract:

The Rodeo Lagoon watershed, located in the Marin Headlands long history of activities that have altered stream and wetland functions. Construction of roads, buildings, parking lots, and other facilities as well as agriculture and livestock grazing have led to water quality problems (sediment, pathogens, and nutrients), channel incision, artificial drainage, and direct displacement of wetlands by filling. GGNRA and partners have determined that restoration of the Rodeo Beach Parking Lot (built on fill within the lower portion of the Rodeo Beach wetland in the early part of the 20th century) is the highest priority wetland restoration project in the Rodeo Lagoon watershed. Factors in this decision included the opportunity to restore increasingly rare coastal wetland habitat in this impacted watershed, the feasibility and likely success of restoration, the fact that the park considers the parking capacity there to be expendable, and the benefits to visitor enjoyment of coastal resources.

Restoration of the approximately 3 acre parking lot, as well as the portion of the wetland upstream that is drained by the ongoing channel incision, would re-create a wetland system that is central to the unique biota of the central California coast: a relatively rare transitional ecosystem from the open water of Rodeo Lagoon to emergent lagoon fringe to sand dunes, wet meadows and riparian shrubs. Animal species that are expected to benefit from the restoration include the California red-legged frog and the salt marsh harvest mouse, both of which are federally listed species.

GGNRA staff and hydrologists from the NPS Water Resources Division will work with Colorado State University to develop a detailed design plan for the restoration of the pre-disturbance hydrologic regime, vegetation and wetland functions of this - acre wetland system. This project will include collection of data necessary to develop a restoration plan for the entire wetland complex.

Outcomes with Completion Dates:

Final report documenting hydrology, vegetation, soil, seedbank, and topographic data collection methods, analyses, results and conclusions. The report will also include a final detailed restoration design plan, including an existing conditions topographic map (1 foot contour), a final design topographic map (0.5 foot contours), a grading plan including volumes of material to be excavated, transported, and placed, cross-sections suitable for construction bids, construction specifications and recommended sequencing, erosion control requirements, and a planting/seeding plan (species, quantities, seed sources, planting densities). Due Feb 28, 2008

Keywords: wetland restoration, Rodeo Beach, Golden Gate National Recreation Area, Colorado State University

For Administrative Use Only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: