

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Identification and assessment of degraded wetland areas at select National Park Service (NPS) units within the NPS Servicewide (Phase I: Southeast Region)

Discipline: Natural

Type of Project: Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Student Participation: Yes

Effective Dates: 7/1/2018 – 9/30/2021

Funding Amount: \$150,000

Investigators and Agency Representative:

NPS Contact: Kevin F. Noon, Service-Wide Wetlands Scientist, National Park Service, NRSS-Water Resources Division. P.O. Box 25287, Denver, CO 80225. Phone: (303)969-2815. kevin_noon@nps.gov

Investigator: David Cooper, Department of Forest, Rangeland and Watershed Stewardship. Colorado State University, Fort Collins, CO 80523. Phone: (303)499-6441. david.cooper@colostate.edu

Project Abstract: The overarching goal is to develop conceptual models, analysis workflows, and site-specific information to support wetland restoration. Products and analyses will help define and demonstrate a process for inventorying and evaluating potential wetland restoration opportunities within NPS-Southeast Region (SER) units that can be used as a model to assess any of the NPS units.

Project Objectives – The project objectives include:

- Identify the largest and most degraded wetland systems within the Southeast Region's NPS units.
- Evaluate and document the functional status of the physical and biological conditions of the selected degraded wetlands.
- Conduct field work, ground verification, GPS location, wetland boundary identification using Cowardin et. al. (1979) classification.
- Document the extent of degradation of existing wetland functions including source(s) of degradation.
- Identify what types of modification to existing physical conditions will restore or improve the physical and/or biological functions of the degraded wetlands, including GPS coordinates and map for specific restoration locations.
- Recommend appropriate restoration actions to restore or enhance degraded wetland systems to a desired or natural condition (whichever will result in providing the maximum functional improvements).
- Estimate the cost of restoring the systems.
- Prepare park-specific summary reports that contain the project outcomes listed above for each degraded wetland system.
- Create a regional database that summarizes the key project outcomes for each degraded wetland system (NPS unit, wetland boundary, restoration cost estimate, link to pdf summary report).
- Prioritize the degraded wetland areas to be restored via a financial cost versus physical and biological functional benefit analysis at each site.