

Rocky Mountains Cooperative Ecosystem Studies Unit  
Project Summary

**Project Title:** Degraded wetland condition assessment and a high priority wetland restoration design for the Marin Headlands, Golden Gate National Recreation Area

**Discipline:** Natural

**Type of Project:** Technical Assistance

**Funding Agency:** National Park Service

**Other Partners/Cooperators:** Colorado State University

**Student Participation:** Yes

**Effective Dates:** June 1 2019 – September 30, 2020

**Funding Amount:** \$37,398

**Investigators and Agency Representative:**

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**Project Abstract:**

The Marin Headlands area of Golden Gate National Recreation Area (GOGA) has a long history of land uses that impact wetlands, including cattle grazing, cultivation, road construction, ditching, filling, and various military operations (Striplen et al. 2004). As a result, new channels have formed and large erosion gullies have developed in sloping wetlands, causing significant lowering of water tables and conversion of wetlands to uplands (see photo in Attachment B). In 2013 the Federal Highway Administration funded restoration of one such degraded wetland in the Marin Headlands, known as the Surfer Lot at Rodeo Beach, to mitigate wetland impacts from road construction elsewhere in the park (Wolf and Cooper 2008). Similar, significant gully erosion has occurred in other wetlands in the area, but the extent and priority of impacted sites is not known.

In November 2018 a team comprised of park staff, cooperators from Colorado State University (Dr. Evan Wolf, Dr. David Cooper) and NPS Water Resources Division staff (Joel Wagner) visited several watersheds in the Marin Headlands to identify degraded wetlands and restoration needs. Although the team discovered and evaluated several degraded wetlands, they determined that a more extensive effort is needed to adequately map and analyze degraded wetland conditions, prioritize restoration opportunities, and proceed with new high priority restoration work.