

Rocky Mountains Cooperative Ecosystem Studies Unit
Project Summary

Project Title: Hydrologic Monitoring of Reference and Degraded Wetlands in Big Thicket National Preserve

Discipline: Natural

Type of Project: Research and Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Student Participation: Yes, Graduate and Undergrad

Effective Dates: June 15, 2020 to December 31, 2022

Funding Amount: \$36,557

Investigators and Agency Representative:

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Project Abstract:

Project Goals – The overall goal of this study is to support improved monitoring, management, and restoration by collecting hydrological data from undisturbed (reference) and degraded wetlands in BITH.

Project Objectives – Specific objectives include: Use GIS analyses of remote sensing data and the existing geospatial data to characterize wetlands across BITH and select sites for instrumentation; Collect continuous water level measurements and analyze hydrographic characteristics in undisturbed and hydrologically impaired sites in representative wetland types across BIT; Develop data collection workflows and analysis scripts for processing, visualizing, and statistically evaluating data; Provide recommendations for long-term maintenance of data collection and application for management and restoration.