Project Title: Evaluate NPS geohydrology and sustainable groundwater management, including a focus on the Cottonwood / Smoke Tree sub-basin in Joshua Tree National Park

Task Agreement: P18AC01179 **Mods:** 1
Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Student Participation: Yes
Effective Dates: August 1, 2018 – May 30, 2021
Funding Amount: $112,227

Investigators and Agency Representative:
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Project Abstract:
Project Goals – The goal of this study is to develop a watershed condition assessment framework that can be used to assist federal wild and scenic river managing agencies and their local and state partners to improve the water quality and hydrologic function of wild and scenic rivers. Watershed condition assessments will be made available to parks and their partners for the interpretation and communication of complex water resource issues, and to encourage collaboration and cooperation between federal, state and local partners for the benefit of wild and scenic rivers.

Project Objectives – The objectives of this study are to develop expertise through the Recipient to: (1) identify a set of key indicators that can be used to develop a watershed health and vulnerability assessment for wild and scenic rivers, including indicators such as reference flow conditions, upstream flow modifications, land use changes, flood and drought projections, potential pollutant sources, and water quality impairments; (2) provide river managing agencies and their partners with timely and relevant information to help prioritize land conservation and restoration activities that improve water quality and hydrologic function of wild and scenic rivers; (3) place special emphasis on developing and enhancing cooperative relationships between federal, state and local agencies to protect and improve water quality in a manner consistent with the intent of the 1968 Wild and Scenic Rivers Act, including opportunities for citizen science such as Stream Tracker, Swim Guide and/or Water Reporter.