

DELTA SCIENCE FELLOW 2020

CHRISTINA RICHARDSON, PHD



PROJECT

In collaboration with the United States Geological Survey, my research will explore temporal and spatial variability of carbon and nitrogen biogeochemistry across the San Francisco Bay-Delta. This science synthesis will capitalize on existing multi-year isotope datasets to gain new insights useful for understanding future changes in the system.

TIMELINE

2020-2021 Investigate multi-scale isotopic trends with other water quality parameters to explore variations in carbon and nitrogen biogeochemistry.

2021-2022 Examine hydrological, climate, human-generated effects, and biological indices to shed light on changes and potential factors controlling nutrient dynamics and ecology in the SF Bay-Delta.

IMPACTS

The results generated from this two-year data synthesis project will be useful for improving our current understanding of factors driving changes in SF Bay-Delta biogeochemical processes. Results will also be informative for understanding the imminent changes coming to the from the Sacramento Regional Wastewater Treatment Plant upgrade.



Post-Doctoral Fellow

*University of California,
Santa Cruz*

Focus Changes in and controls on biogeochemistry in the SF Bay-Delta

Award \$221,659

Research Mentor

Dr. Adina Paytan, UC Santa Cruz

Community Mentor

Dr. Megan Young, United States Geological Survey

“This research will provide new insights into [variations across space and time] in carbon and nitrogen biogeochemistry across the San Francisco Bay-Delta.”



DELTA STEWARDSHIP COUNCIL
DELTA SCIENCE PROGRAM

