

DELTA SCIENCE FELLOW 2020

RICHELLE TANNER, PHD



PROJECT

My research aims to quantify the impacts of common reed (*Phragmites*) invasion on community structure and ecosystem function during early stages of tidal restoration in wetlands. The study will focus on the Tule Red Tidal Restoration site in Suisun Marsh. My research will produce a conceptual model that will describe habitat structure, invertebrate communities, and predator use of wetlands affected by *Phragmites* invasion.

TIMELINE

2020-2021 Begin field monitoring, field experiments, and laboratory studies.

2021-2022 Wrap up field surveys and laboratory analyses. Share results with community stakeholders and managers.

IMPACTS

The conceptual model resulting from this study will guide future predictions of wetland response to invasion and to develop mitigation strategies. Data collected will also support food web models and the understanding of invasive plants as stressors, as well as foster translational science to the management community.

Post-Doctoral Fellow
*University of California,
Davis*

Focus Consequences of *Phragmites* invasion for community function in Suisun Marsh

Award \$228,456

Research Mentor
*Dr. Anne Todgham, UC
Davis*

Community Mentors
*Dr. John Takekawa, Suisun
Resource Conservation
District*

*Dr. Susan De La Cruz,
United States Geological
Survey*

*Dr. Karin Kettenring, Utah
State*

*Dr. Monica Iglecia,
Monomet Inc.*

“We aim to further characterize the impacts of invasion on tidal wetland communities in real time.”



DELTA STEWARDSHIP COUNCIL
DELTA SCIENCE PROGRAM

