

DELTA SCIENCE FELLOW 2020

DAVE AYERS



PROJECT

My study focuses on understanding how restored tidal wetlands with different physical configurations function as refuge and rearing habitat for fishes, including native and imperiled species such as Delta smelt and juvenile Chinook salmon. This research will assess the spatial distribution of predation risk as it varies within and across tidal wetlands.

TIMELINE

2020-2021 Deploy autonomous predation event recorders throughout tidal wetland complexes in the Delta to help determine the abiotic factors that generate variation in fish predation risk.

2021-2022 Continue collecting data from event recorders. Analyze, publish and disseminate results.

IMPACTS

The proposed research will generate a statistical model that helps predict predation outcomes from various restored tidal wetland designs and channel configurations. This will be a powerful tool for managers to forecast how proposed habitat restoration or water management actions may impact native fish populations.



Doctoral Fellow *University of California, Davis/ United States Geological Survey*

Focus Risk of fish predation within and across tidal wetland complexes

Award \$129,762

Research Mentor

Dr. Andrew Rypel, *UC Davis*

Community Mentors

Dr. Stacy Sherman,
California Department of Fish and Wildlife

Cyril Michel, *NOAA Fisheries/UC Santa Cruz*

“It is my hope that this information will be used to optimize tidal wetland restoration design and achieve conservation goals for native fishes in this region.”



DELTA STEWARDSHIP COUNCIL
DELTA SCIENCE PROGRAM

