DELTA SCIENCE FELLOW 2020
DENISE COLOMBANO, PHD

PROJECT

The goal of this research is to better understand how climate change will affect fishes with different life histories and habitat associations across the San Francisco Estuary. Existing datasets will be incorporated in synthetic analyses and cutting-edge statistical models to identify fish community responses to climate, flows, and habitats along the estuarine salinity gradient.

TIMELINE

2020-2021 Curate data and construct models to identify the main drivers of fish community dynamics and fish populations that fluctuate similarly along the salinity gradient.

2021-2022 Use spatially explicit data to relate fish abundance to physical habitat structure, climate, and freshwater flows along the salinity gradient.

IMPACTS

This synthesis-science project will use rich long-term datasets that have been collected by Bay-Delta researchers for decades that will then be analyzed in a reproducible and open science framework. It will also support efforts by the Interagency Ecological Program's Climate Change Project Work Team.
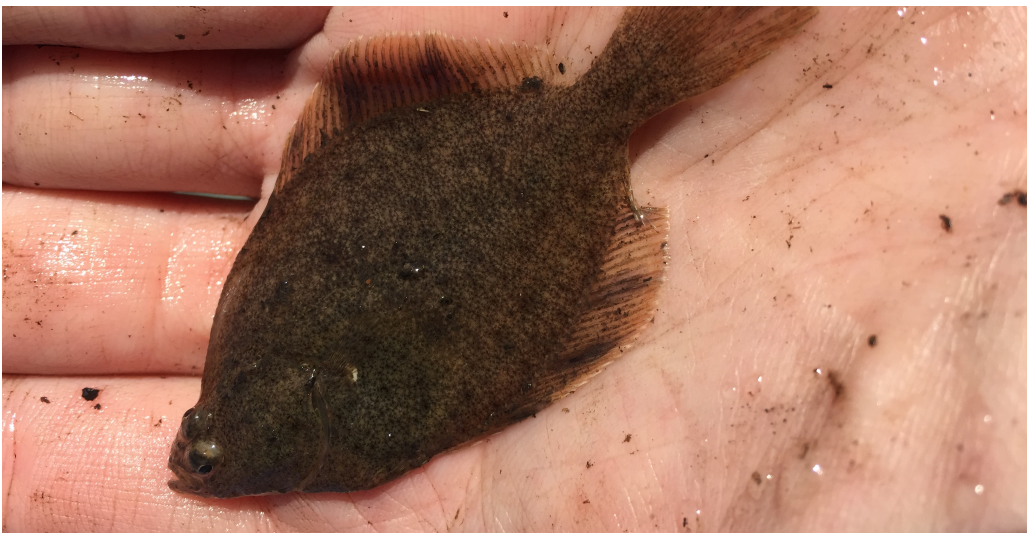
Post-Doctoral Fellow
University of California, Berkeley

Focus Estuarine fish community responses to climate, flow, and habitat

Award $192,470

Research Mentors
Dr. Albert Ruhi, *UC Berkeley*
Dr. Stephanie Carlson, *UC Berkeley*

Community Mentor
Dr. James Hobbs, *California Department of Fish and Wildlife*

"My aim is to provide data products and papers that improve our collective understanding of the estuarine fish community's response to climate change."

DELTA STEWARDSHIP COUNCIL
DELTA SCIENCE PROGRAM

Sea Grant
California