Margaret Daly

- Ph.D. Student in Civil and Environmental Engineering, admitted Spring 2018
- Assistant, Center for Ocean Solutions

BIO

Margaret Daly is a Ph.D. Candidate studying Environmental Fluid Mechanics in CEE. She is interested in using novel approaches for coastal oceanography and interdisciplinary work towards ocean sustainability. She researches ocean flow through kelp forests, and the impact on benthic species, particularly abalone in Baja California, Mexico. She also studies how kelp plants move in different currents and wave conditions to better parameterize drag for coastal ocean models. In addition to her research in fluid mechanics, Daly is also interested in ocean policy and illegal fishing mitigation strategies. With the Stanford Center for Ocean Solutions, Daly is developing a risk tool for global seafood supply chains to use in assessing current vulnerability to illegally caught seafood. Lastly, Margaret is combining ocean drone imagery with machine learning to detect sea otters on the California Coast. Margaret is an experienced scientific diver with over 200 dives and 5 field campaigns. In the future, Daly is interested in working on problems in other coastal ecosystems such as coral reef or sea grass habitats, working with small scale fishery communities, and on policy to support ocean sustainability.

PUBLICATIONS

- **Influence of kelp forests on flow around headlands.** *The Science of the total environment*
  2022: 153952

- **Limited biogeochemical modification of surface waters by kelp forest canopies: Influence of kelp metabolism and site-specific hydrodynamics** *LIMNOLOGY AND OCEANOGRAHPY*
  Traiger, S. B., Cohn, B., Panos, D., Daly, M., Hirsh, H. K., Martone, M., Gutierrez, I., Mucciarone, D. A., Takeshita, Y., Monismith, S. G., Dunbar, R. B., Nickols, K. J.
  2021

- **Climate Change Effects on North American Fish and Fisheries to Inform Adaptation Strategies** *FISHERIES*
  2021; 46 (9): 449-464