

# Stanford

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## Ryan Searcy

- Ph.D. Student in Civil and Environmental Engineering, admitted Autumn 2019
- research assistant, Civil and Environmental Engineering
- 📄 Curriculum Vitae available Online

### Bio

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#### BIO

Ryan Searcy is currently a PhD candidate at Stanford University. His research focuses on monitoring and modeling threats to coastal health. His current projects involve developing data-driven models to predict beach water quality, using environmental DNA (eDNA) to assess native salmonid populations in a coastal stream, and collecting physical oceanographic data to measure circulation and retention at a chronically-polluted beach. Prior to Stanford, Ryan was the beach water quality modeler for Heal the Bay. In that position, he built and managed the NowCast system which provides beachgoers and health agencies daily water quality predictions for dozens of California beaches. Ryan is a frequent user of the coast and surfs whenever the weather and work allow.

#### HONORS AND AWARDS

- Sea Grant Traineeship, U. of Southern California Sea Grant (2020-2021)
- School of Engineering Graduate Fellowship, Stanford University (2019-2021)
- Robert L. Wiegel Scholarship, California Shore and Beach Preservation Association (2019)

#### EDUCATION AND CERTIFICATIONS

- B.S., UC San Diego , Environmental Engineering (2013)
- M.S., UC San Diego , Mechanical Engineering (2014)

### Research & Scholarship

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#### LAB AFFILIATIONS

- Alexandria Boehm, Boehm Group (9/23/2019)

### Publications

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#### PUBLICATIONS

- **A Day at the Beach: Enabling Coastal Water Quality Prediction with High-Frequency Sampling and Data-Driven Models.** *Environmental science & technology*  
Searcy, R. T., Boehm, A. B.  
2021
- **Implementation of an automated beach water quality nowcast system at ten California oceanic beaches** *JOURNAL OF ENVIRONMENTAL MANAGEMENT*  
Searcy, R. T., Taggart, M., Gold, M., Boehm, A. B.  
2018; 223: 633–43