



# OLD DOMINION UNIVERSITY

Center for Coastal Physical Oceanography

## Spring 2023 Virtual Seminar Series

**Title** “Potential Recursions of Offshore Wind Development on Scientific Surveys and Population Assessment: A Case Study of Atlantic Surfclam Along the Northeast U.S.”

**Speaker** Sarah Borsetti, Virginia Institute of Marine Science

**Date** Monday, March 13, 2023

**Time** 3:30 PM EST

**Zoom Info** [Link](#)

Meeting ID: 964 7700 0562

Passcode: 687980

**Abstract** The Atlantic surfclam fishery, which spans the Northeast U.S. shelf, is among the most exposed to impacts from offshore wind energy development due to port location, overlap of fishing grounds and wind lease areas, and fishing practices. The assessment survey for surfclams is conducted on a commercial vessel and occupies stations that overlap offshore wind areas. Once offshore wind farm infrastructure is installed, assessment survey operations within wind farms may be curtailed or eliminated due to limits on vessel access, safety requirements, and assessment protocols. Excluding survey operations in certain areas could interrupt long-term survey time series, affecting stock assessments by increasing uncertainty in biomass estimates and other parameters used in projecting fishery quotas. An agent-based modeling framework that integrates spatial dynamics in surfclam stock biology, fishery captain and fleet behavior, and federal survey and management decisions was implemented to investigate the impact of excluding wind farm leases from the federal survey and population assessment. Simulations were designed to compare assessment estimates of key biological reference points under conditions where the survey is excluded from planned and future wind farm lease areas. Integrated ecological-economic fisheries models, such as the one used in this study to assess a single species fisheries survey, provide a basis for understanding the impact of offshore wind on population assessments that are critical for resource management.

**Biography** Dr. Borsetti is the Commercial Fisheries Specialist at the Virginia Institute of Marine Science (VIMS), where her work focuses on applied research to help meet the needs of the commercial fishing industry in Virginia. Her research interests focus on understanding the interactions between population



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dynamics and the environment of fished stocks. As a Post-Doctoral Researcher at Rutgers University, she worked to answer questions about the interactions among commercial shellfish fisheries, wind energy, and changing climate conditions. She holds a Ph.D. in Ecology and Evolution from Rutgers University, New Brunswick, NJ.