

Facilitating Resilience and Adaptation in Commercial Fisheries in Response to Offshore Renewable Energy Development and Changing Climate

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Project Background

We're a team of researchers from the University of California Santa Barbara's [Environmental Markets Lab \(emLab\)](#) and the National Oceanic and Atmospheric Administration's [Northwest Fisheries Science Center](#) studying the effects of a changing climate and offshore wind development on West Coast fisheries and fishing communities. Offshore wind development and changing ocean conditions have the potential to unevenly alter the economic viability of commercial fisheries on the West Coast. Our research aims to predict the social and economic impacts and identify mitigation strategies for consideration by the Bureau of Ocean Energy Management (BOEM) in the development of lease conditions and community benefits agreements with lessees. Below is a brief overview of our work.

- ***Assessing the Overlap of Lease Areas and Current Fishing Grounds***

Our team is mapping the extent of overlap between the groundfish bottom trawl and midwater rockfish trawl fishing grounds and offshore wind lease areas. We're also investigating how changing ocean conditions may affect the abundance and distribution of these fisheries' target species. This information will help us to predict novel offshore wind and fisheries interactions that may occur as a result of a changing climate.

- ***Modeling to Understand Impacts to Fishing Industry***

We're using three different types of models to simulate how changing ocean conditions and offshore wind farms may affect fishing effort, catch, revenue, and costs to fishermen along the West Coast. These models will facilitate our understanding of the vulnerability of fishery participants and fishing communities to both a changing climate and offshore wind.

- ***Research on Mitigation Strategies***

We will review existing research and community benefits agreements to identify potential strategies to reduce the impacts of both changing ocean conditions and offshore wind farm development on fisheries and fishing communities. We will conduct a preliminary evaluation of which strategies have the potential to benefit fishing communities the most.

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This research will provide our team with a prioritized list of potential mitigation strategies to further explore through direct conversations with the fishing community.

Focus Groups

We're organizing small in-person focus group discussions with commercial fishermen from California, Oregon, and Washington to share our initial findings, engage in conversation, and learn from fishermen about their experiences, priorities, and needs related to a changing climate and offshore wind farm development. Our goal is to incorporate fishermen's knowledge into our research and ensure our findings, particularly related to mitigation strategies, are useful to local fishing communities. We have four goals for our focus group discussions:

1. learn about the impacts fishermen have already experienced and those they anticipate facing as ocean conditions change over time and as the offshore wind energy sector develops along the West Coast;
2. learn about mitigation strategies we may have missed;
3. learn which mitigation strategies would be the most impactful for fishermen and why; and
4. create an opportunity for fishermen to give us valuable feedback on our modeling results to help us interpret predicted conflicts.

The information gathered during these focus groups will be summarized in a report that is shared with BOEM with the intention of informing community benefits agreements and the results will be published in a peer-reviewed manuscript. Focus group participants would remain anonymous and have the opportunity to review the report.

Contact Information

We welcome your questions, concerns, and suggestions related to the focus groups. Please contact Ellen Willis-Norton via email or phone at ewillisn@ucsb.edu and (858) 692-8630.