



BOEM Bureau of
Ocean Energy Management

Gulf of Maine Socioeconomic Impacts of OCS Wind Development on Fishing

20th Meeting of the Standing Committee on Offshore Science and Assessment

July 11th & 14th 2022

Ursula Howson, PhD | Office of Renewable Energy Programs

BOEM Information Need

- Offshore wind (OSW) development will have impacts on commercial and recreational fishing and shoreside dependents in Gulf of Maine.
- Primary Concern: Potential socioeconomic impacts from presence of structures in offshore environment.
- Results of study – to be used by BOEM for:
 - environmental assessments of potential impacts of OSW on commercial/recreational fishing and shoreside dependents
 - for stakeholder engagement
 - to inform potential mitigation measures.



PICOC Summary

Problem	Socioeconomic impact of offshore wind on fishing.
Intervention	Study will (1) collate information about fishing activity and (2) estimate the socioeconomic impact from offshore wind development.
Comparison	Study will provide baseline information about fishing activity.
Outcome	Information on socioeconomic impacts of future offshore wind development on commercial and recreational fisheries in the Gulf of Maine.
Context	Gulf of Maine



Background

- BOEM is pursuing OSW leasing in Gulf of Maine.
- Key challenges for Atlantic fisheries are
 - minimization of space-use conflicts
 - analysis of artificial reef effects
 - Avoidance/minimization of habitat alteration
 - reduction of noise impacts from pile driving.
- For Gulf of Maine, most important fisheries knowledge gap: potential space-use conflicts for commercial fishing, which may result in lost revenue for industry.
- Similar study conducted for Mid-Atlantic/New England – important for environmental assessments for regional OSW projects.



Study Objectives

- To assess potential socioeconomic burdens and/or benefits from OSW development in Gulf of Maine on commercial and recreational fishing.
- Note that OSW facility environmental assessments must evaluate:
 - impacts on essential fish habitat and fish stocks
 - potential displacement/fishing effort changes and socioeconomic impacts from OSW development



Methods

- Primary methods - modeled after Kirkpatrick et al. (2017)
 - Some analyses may differ:
 - Certain components of that study were exploratory
 - Improved statistical methods may be warranted.
 - Methods would include exposure and impact analyses.
 - Exposure analysis: quantitative assessment to identify likelihood of individuals/groups to be affected by OSW development.
 - Impact analysis would estimate exposure due to OSW impacts:
 - Gain/loss due to impact
 - Magnitude of gain/loss.



Research Question

- How will offshore wind development in the Gulf of Maine impact commercial and recreational fishing industries in the region?



BOEM

Bureau of Ocean Energy
Management

BOEM.gov



Ursula Howson, PhD | ursula.howson@boem.gov | 571-491-7499