



NYSERDA

**Department of
Environmental
Conservation**

Research Needs

November 2, 2018

New York State's Role



- Support environmental research to better understand how offshore wind could affect the marine ecosystem
- Inform interventions to help avoid minimize, mitigate, and measure these effects
- Inform permitting and adaptive management and advance responsible development
- Improve collaboration and support research that takes a broad, regional view
- Does not replace the need for project-specific research

Short-Term Research Needs

Short-Term Research Needs (1-2 years)

- NYSERDA and NYSDEC are would like the input of the F-TWG on priority research areas to inform NYSERDA's near-term research RFP
- Need to balance trade-offs between identifying specific research areas vs. broad content within an RFP
- Several agencies and groups are discussing similar topics

DRAFT: Recommended regional scale studies related to fisheries in the Massachusetts and Massachusetts-Rhode Island offshore Wind Energy Areas

June 2018

This document was drafted by the Massachusetts Division of Marine Fisheries and reviewed by individual staff members at the Rhode Island Division of Marine Fisheries, NOAA National Marine Fisheries Service, and BOEM Office of Renewable Energy Programs. This document does not reflect an official policy recommendation of any organization.



Regional Offshore Wind and Fisheries Research Collaborative

Framework Options

Introduction

This briefing document outlines options for a regional collaborative effort to identify, fund, review and disseminate science and other regional research and data collection needed to better understand the interaction between offshore wind development and New England fisheries. It was prepared at the



Recurring Research Areas



Fish & Fish Habitat



Socioeconomic
impacts of offshore
wind on fisheries



Fisheries Mitigation

Fish & Fish Habitat

- Baseline data on spatial and temporal distribution of key species, particularly egg and larval stages and any documented species distribution shifts
- Changes in biomass, species composition, and spatial distribution of species at multiple scales
- Changes in fish condition (growth rates, fecundity, etc.)
- Impacts on spawning and recruitment
- Changes in the types of species in an area (i.e. demersal vs. pelagic)
- Impacts to benthic species (infaunal and epifaunal) biomass and species composition
- Baseline habitat data and documentation and quantification of changes (habitat features, water quality, flow dynamics, etc.)
- Impacts of construction and operation- EMF, noise, vibration, anti-fouling, scour, aggregation/reef effect

Socioeconomic Impacts

- Baseline data on spatial and temporal distribution of fishing and fishing revenue
- Quantification of revenue beyond landings (i.e. ports, processors, fish markets, bait & tackle shops, gear manufacturers, coastal restaurants, etc.)
- Impacts of WEA on fishing
 - Impacts to access to fishing areas
 - Changes in catch composition
 - Changes in fishing practices (i.e. gear modification)
 - Changes in trip costs (transit, processing, insurance, etc.)
 - Transit safety under various weather conditions
 - Artificial radar effects
 - Impacts to ports and shoreside industries



Fisheries Mitigation

- Alternative turbine layouts and base structures and how they impact fishing and transit
- Improve the understanding of vessel and gear maneuverability, vessel drift during set/haul back
- Review of existing mitigation methods (including compensatory mitigation) in US and Europe and their relative success
- Strategies to avoid, minimize, restore, and/or offset anticipated impacts on fisheries
- Strategies to support and encourage cooperative research



Questions for the Group

- What do you view as the priority research areas?
- What methods can be used to refine and assess priorities within research areas?
- Thoughts on balancing trade-offs between identifying specific research areas vs. broad content within an RFP?
- How does could this RFP complement other efforts in the region?
- Suggestions for strategies to balance near-term efforts with long-term goals for research and regional coordination?



Long-Term Research Needs

Long-Term Research Needs (3-5 years)



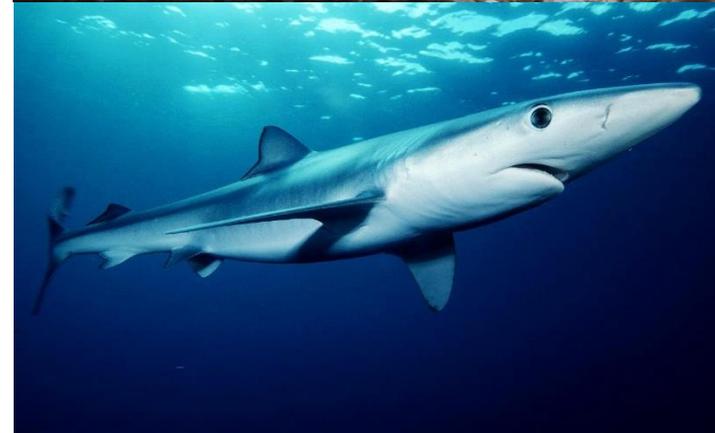
Credit: Royal HaskoningDHV

- How do the efforts of New York fit into other regional efforts?
- Several groups are discussing ways to better coordinate regional research
 - Regional Offshore Wind and Fisheries Research Collaborative
 - Offshore Wind and Fisheries Science Panels
 - Research plans within BOEM and NOAA Fisheries
- Recurring discussions on improving coordination, standardizing monitoring protocols, ways in which new studies can complement existing long-term datasets, and the need for collaboration with fishermen
- Long-term implications to fisheries management

Science Workshop

Proposed Workshop: State of the Science on Fisheries and Offshore Wind

- Similar to the State of the Science Workshop on Wildlife and Offshore Wind Energy Development being held on November 13-14 in Woodbury, NY
- Target audience: scientists, regulators, commercial and recreational fishermen, offshore wind developers
- Questions for the F-TWG
 - Is there interest in a workshop?
 - Are you aware of any other groups planning something similar elsewhere?
 - Best time of year to hold the workshop
 - Potential workshop locations
- If interested in proceeding, volunteers are needed to serve on a Workshop Steering Committee.



Questions/ Discussion