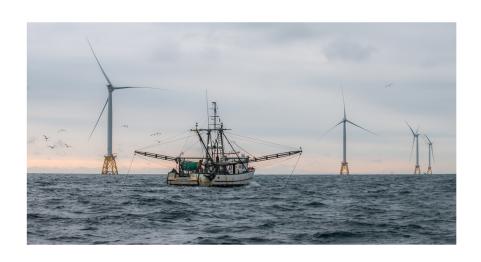


NMFS Roles and Responsibilities for Offshore Wind

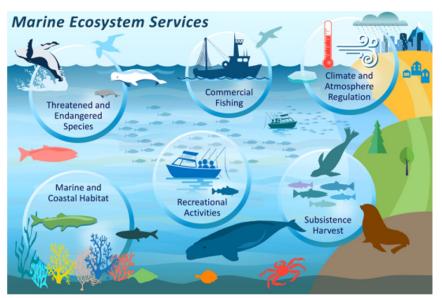


Maritime Risk Symposium November 15, 2023

NOAA Fisheries' Mission

NOAA Fisheries is responsible for the <u>stewardship of the nation's</u> <u>ocean resources and their habitat</u>. We provide vital services for the nation, all backed by <u>sound science</u> and an <u>ecosystem-based</u> <u>approach</u> to management:

- Productive and sustainable fisheries
- Safe sources of seafood
- Recovery and conservation of protected resources
- Healthy ecosystems



https://www.fisheries.noaa.gov/about-us#overview

https://www.fisheries.noaa.gov/topic/socioeconomics



Roles and Responsibilities Related to Offshore Wind

Technical Assistance, Comments, Recommendations

- National Environmental Policy Act (NEPA)
- Fish and Wildlife Coordination Act (FWCA)



Section 7 Consultation/Biological Opinion/Incidental Take Statement

Endangered Species Act (ESA)

Incidental Take Authorization

Marine Mammal Protection Act (MMPA)

Essential Fish Habitat Conservation Recommendations

Magnuson-Stevens Fishery Conservation and Management Act (MSA)

Scientific Support

- Ensure informed management decisions based on best available science
- Address impacts on scientific surveys and advice
- Research on the interactions with NOAA trust resources and coastal communities.



Magnuson-Stevens Fishery Conservation & Management Act

The MSA establishes a national program to:

- Promote domestic commercial and recreational fishing
- Promote the protection of habitats essential to fishery resources

NMFS' strategic goals in implementing the MSA include maximizing fishing opportunities while ensuring the sustainability of fisheries and fishing communities



MSA Sec. 305(b): Essential Fish Habitat

- EFH: waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity
- EFH is designated in Fishery Management Plans adopted by regional Fishery Management Councils
- Federal Agencies must consult with NMFS on any action or proposed action that may adversely affect EFH
- Federal action agency notifies NMFS of a proposed activity and submits an EFH Assessment
- NMFS Provides EFH Conservation Recommendations
- Action agency responds in writing to NMFS





Endangered Species Act





Section 7(a)(2) – Interagency Cooperation

Each Federal agency shall, in consultation with the Secretary, ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat

Section 9 – Take Prohibitions

It is unlawful for any person to take, possess, sell, deliver, carry, transport, or ship endangered species of fish or wildlife

Section 7 Consultation

- Lead action agency requests consultation and prepares a Biological Assessment
- NMFS responds to BA with a Biological Opinion
- Biological Opinion is comprehensive- covers entire life of the project and all federal actions associated with a single project
- May include Incidental Take Statement with mandatory Reasonable and Prudent Measures and Terms and Conditions



Marine Mammal Protection Act



- Prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters, and by U.S. citizens on the high seas
- Allows for the issuance of incidental take authorizations
- Issued for activities that result in take of any marine mammal species (not just ESA-listed) incidental to otherwise lawful activity
- Incidental Harassment Authorization (IHA)
 - valid for up to 1 year
 - requires one 30-day public comment period
- Letter of Authorization (LOA)
 - valid for up to 5 years
 - requires rulemaking on the part of NMFS and two 30-day public comment periods
- BOEM and NMFS rely on same NEPA document

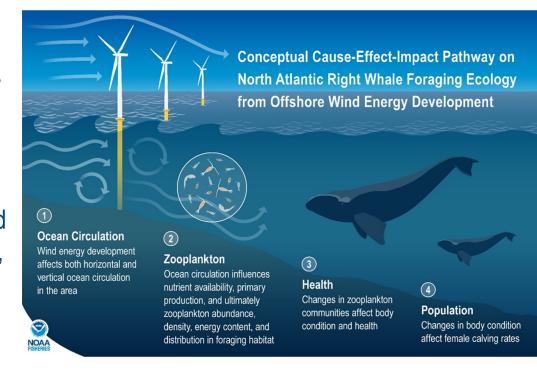




NOAA Fisheries: Role of Science

To provide scientific support to ensure informed management recommendations and decisions based on best available science these are the fundamental science questions:

- What are the effects of offshore wind energy development on populations, communities, habitats, and coastal and marine ecosystems - including humans?
- How can this information used in scientific advice and the regulatory process?
- Can adverse effects be avoided, minimized, or compensated?



https://www.boem.gov/sites/default/files/documents/environment/BOEM NMFS D RAFT NARW OSW Strategy.pdf



Interactions at Population-Level Scales

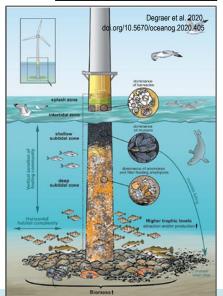
Scale of OSW Impacts:

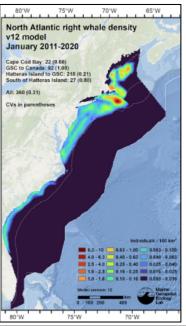
- Spatial: Beyond the footprint of development
- Temporal: Pre-construction to decommissioning 30 years
- Cumulative: Spatial and temporal effects in aggregate
- Occurring in the context of existing ecosystem changes: warming waters, acidification, population shifts, etc.

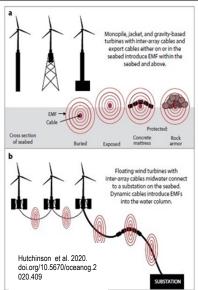
Impact producing factors:

- Noise
- o EMF
- Reef Effects
- Benthic and Pelagic Habitat Modification
- Invasive Species
- Entanglement
- Displaced Fishing Effort
- Contaminants
- Hydrodynamic Changes and wind wake induced effects









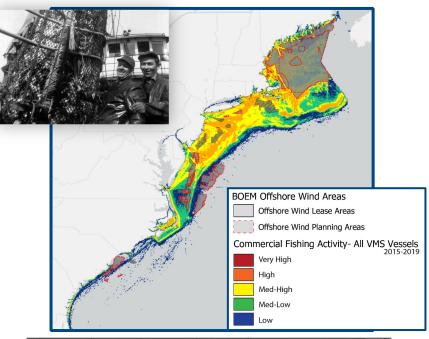


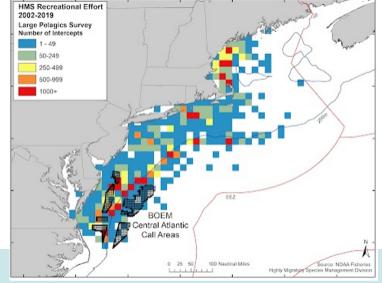
Challenge: Offshore Wind & Fisheries Interactions





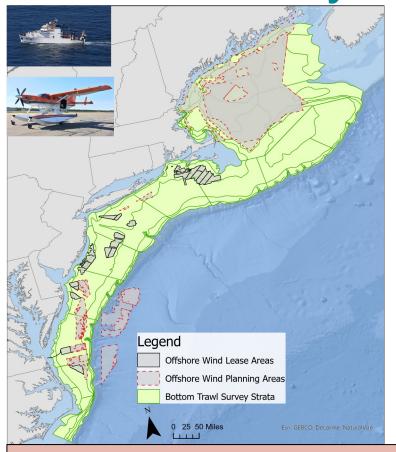








Scientific Surveys Interact with OWD



- 1. **Preclusion**displacement by infrastructure
- 2. Impacts to Statistical Survey Design
- 3. Habitat Change that affect species distribution, abundance, and vital rates
- 4. Impacts to sampling outside of developments by wind energy- induced transit effects that can result in lost sampling time

Impacts: Survey
Disruptions that are
unmitigated can lead to
Increased Uncertainty

NMFS Surveys Support Key Authorities:

- Marine Mammal
 Protection Act-1972
- Endangered SpeciesAct- 1973
- Magnuson-Stevens
 Act-1976
- Fish & Wildlife
 Coordination Act 1934
- Other policies & regulations

Nationally NMFS Surveys Support Assessment of:

- 500 Fish Stocks and Stock Complexes
- 120 Marine Mammal Species
- 163 Threatened and Endangered Species

Nationally NMFS Surveys:

- 50 long-term, standardized surveys
- Many time series >30 years

14 long-term scientific surveys will be impacted by offshore wind energy development in Northeast Region

Status of Efforts to implement Federal Survey Mitigation



NOAA Fisheries and BOEM Federal Survey Mitigation Strategy – Northeast U.S. Region

US DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Fisheries Science Center
Woods Hole, Massachusetts
December 2022

- NOAA/BOEM Survey Mitigation Strategy published (Hare et al. 2022)
- NOAA BOEM Survey Mitigation Implementation Team Established 2023
 - New Leasee requirements
 - Initial federal resources
 - Survey Mitigation Plans under development

	Survey Strategy	Regional Program	Survey Mitigation Plans	Implementation
Northeast	Completed	Update in progress	Underway	Initial Steps
Southeast	Underway	No	No	No
Northwest	Underway	No	No	No
Southwest	Not Started	No	No	No



Thank you!

Sue Tuxbury

Greater Atlantic Regional Fisheries Office
Offshore Wind Program Coordinator
Habitat and Ecosystems Services Division
susan.tuxbury@noaa.gov

Andy Lipsky

Northeast Fisheries Science Center
Offshore Wind Ecology Branch Chief
andrew.lipsky@noaa.gov

