



ROSA
Responsible Offshore
Science Alliance



Responsible Offshore Science Alliance

December MAFMC Meeting

Leading Regional Research on Offshore Wind & Fisheries



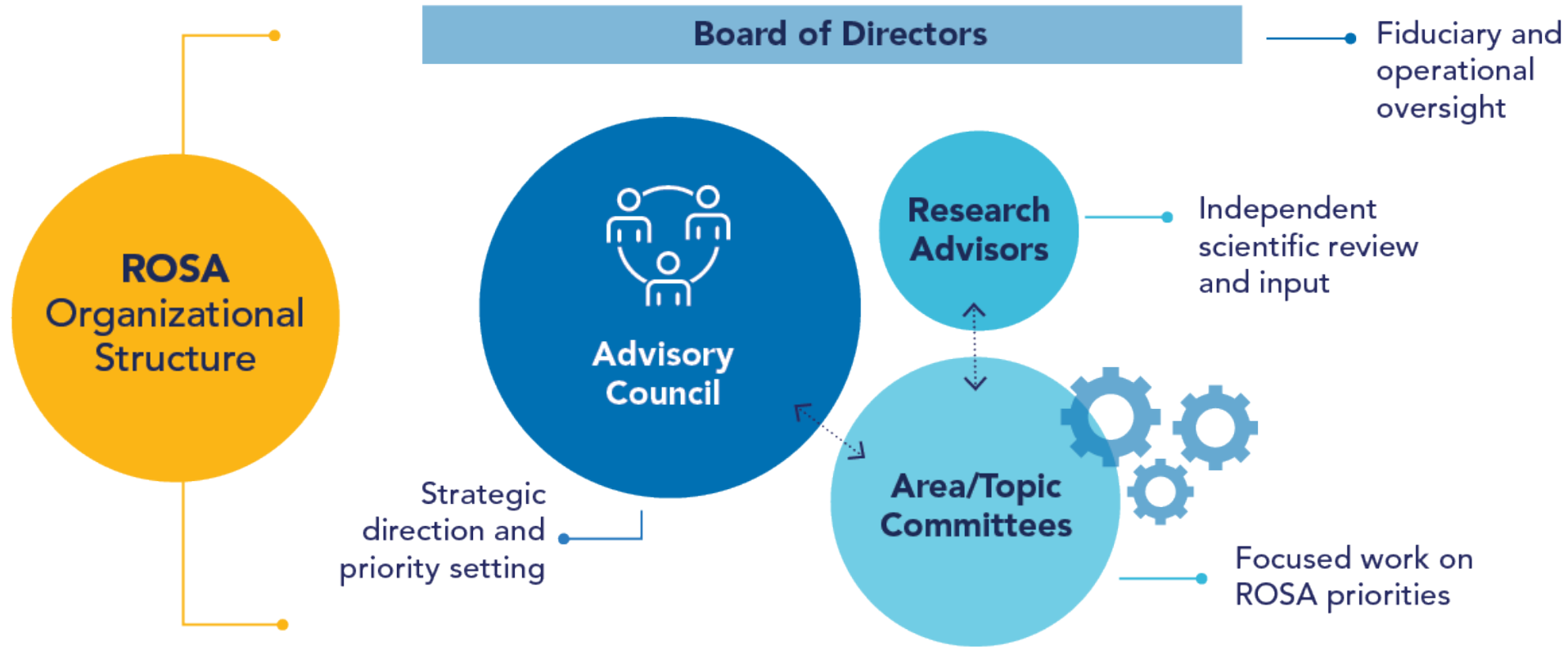
SCIENTIFIC
OBJECTIVE
COLLABORATIVE
TRANSPARENT

Mission:

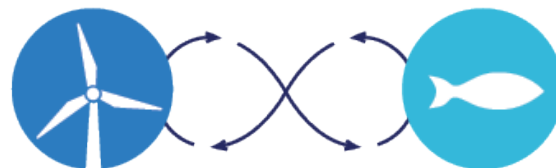
The Responsible Offshore Science Alliance (ROSA) is a nonprofit organization that advances research, monitoring, and methods on the effects of offshore wind energy development on fisheries across US federal and state waters. We serve as an objective resource for all sectors and facilitate the coordination of regional scientific research to collaboratively and efficiently deepen understanding.



ROSA's History & Organizational Structure



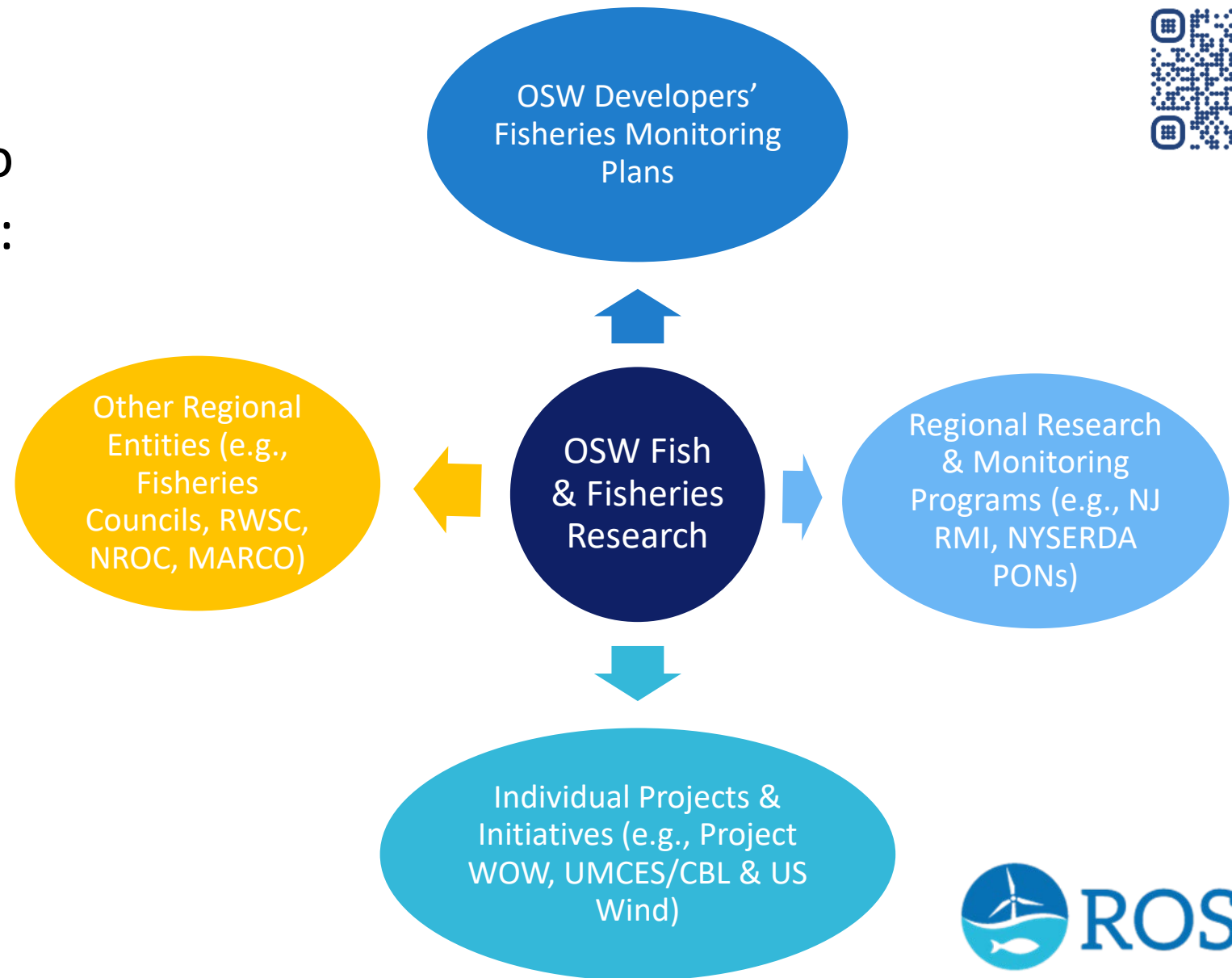
COLLABORATION + SCIENCE = IMPROVED UNDERSTANDING

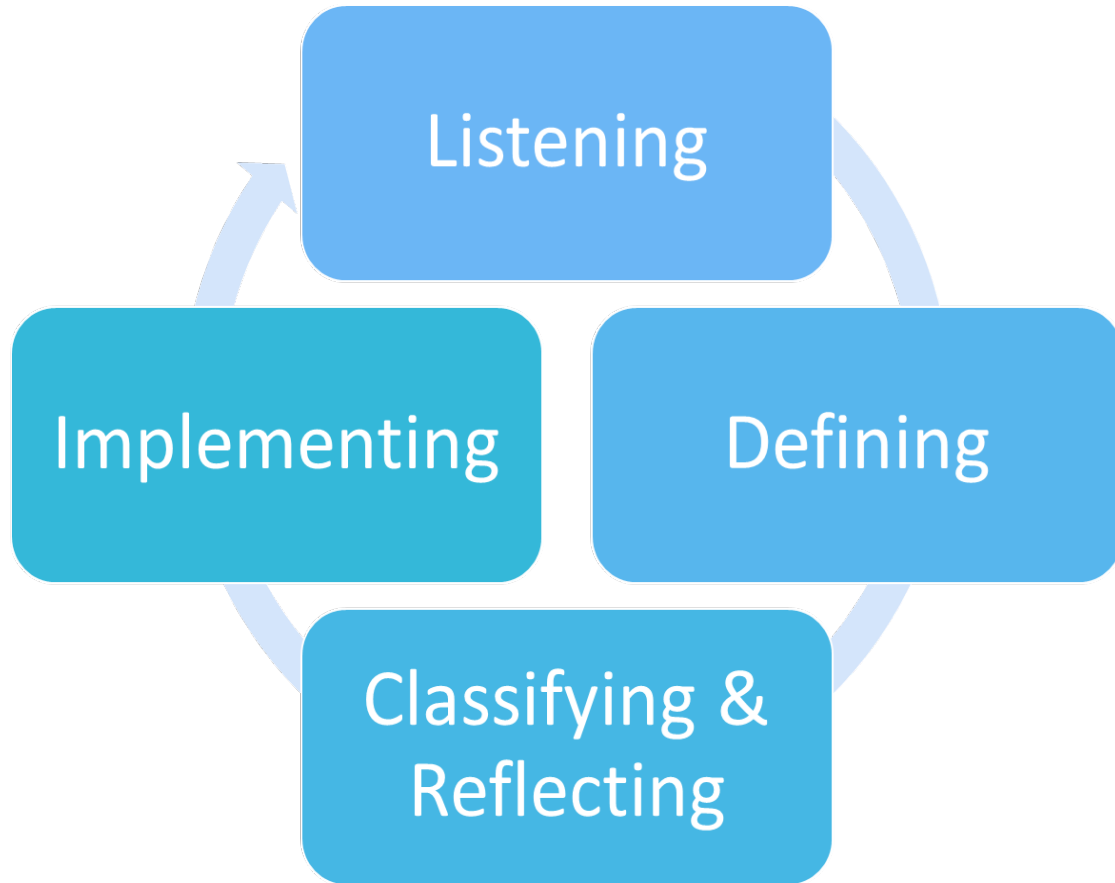


OSW Fish & Fisheries Research Landscape

ROSA uniquely situated to coordinate across various:

- Funding sources
- Research institutions & organizations
- Data infrastructures





ROSA Strategic Plan Elements

- Introduction
 - History, Vision, Mission
- 5-year Roadmap
 - Guiding Principles, 3 Key Strategic Goals & Objectives
- Conclusion
- Appendices
 - Organizational Structure
 - Initiatives

5-year Roadmap: Strategic Goals & Objectives



1. Coordinate OSW Fisheries Research & Monitoring
2. Facilitate Assessment of Regional & Cumulative Impacts
3. Maintain ROSA OSW Project Monitoring Framework & Guidelines

Strategy 1) Coordinate OSW Fisheries Research & Monitoring: Fish FORWRD

- Fish FORWRD is a database with two functions:
 1. Synthesizes existing research priorities
 2. Compiles research being undertaken by programs along the East Coast
- The analysis of data in these databases highlights gaps in research that can inform future research prioritization.
- New user-friendly webtool currently in development
- Looking to secure funding for regular updates to the database

Purpose and Background: ROSA Fish and Fisheries Offshore Wind Impacts Research Needs Database- Version November 2022
The overall purpose of this tool is to present a compilation of existing Fish and Fisheries Research projects (since 2017) related to offshore wind development from Maine to Hatteras, NC, capture the identified Research Needs, identify the outstanding gaps not yet fully addressed in the Research Needs by the existing projects, and provide a platform for users (e.g., agencies, developers, research institutions) to filter/sort Research Needs and identify areas for funding allocation. The spreadsheet was created as a relational database and to provide the back-end of a website or web tool.

Example of process for filtering spreadsheet entries to arrive at a subset of research needs that fits the requirements of the database user

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graph LR; T1[Tier 1: Filtering of identified needs] --> T2[Tier 2: Priority criteria]; T2 --> T3[Tier 3: Overall funding considerations];
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Tier 1: Filtering of identified needs

- Research focus areas
- Species/taxa
- Geographic focus
- Spatial scale
- Temporal scale
- Developmental stage
- Stakeholder identified
- Funding availability
- Level of research need completeness

• Narrow potentially 100s of research needs

Tier 2: Priority criteria

- Urgency of need
- Fills key data gaps
- Level of
- Achievability
- Contributes to understanding of regional- and population-level and cumulative effects
- Informs decision making

• Narrow to <10 priority needs

Tier 3: Overall funding considerations

- Various species/taxa of focus
- Grantees from multiple institutions
- Regional representation
- Engagement of stakeholders/collaborators
- Engagement of underrepresented communities

• Narrow to a few funded projects

Methodology/Table of Contents

Tab #/Name	Purpose	Process
<	<u>Overview</u>	
	1. Existing Research Projects	
	2. Identified Research Needs	
	3. Referenc	



Strategy 1) Coordinate OSW Fisheries Research & Monitoring: Coordination Sessions



- ROSA will be hosting a series entitled ***“OSW Fisheries Monitoring Plan Development, Implementation, & Evolution”*** beginning December 2023



- Sessions will be sector-specific:
 - Fishing Industries
 - OSW Developers
 - Regulators
 - Researchers
- Goal is to document inconsistencies & challenges, then identify solutions to increase coordination
- Summary from sessions & readout at final open session

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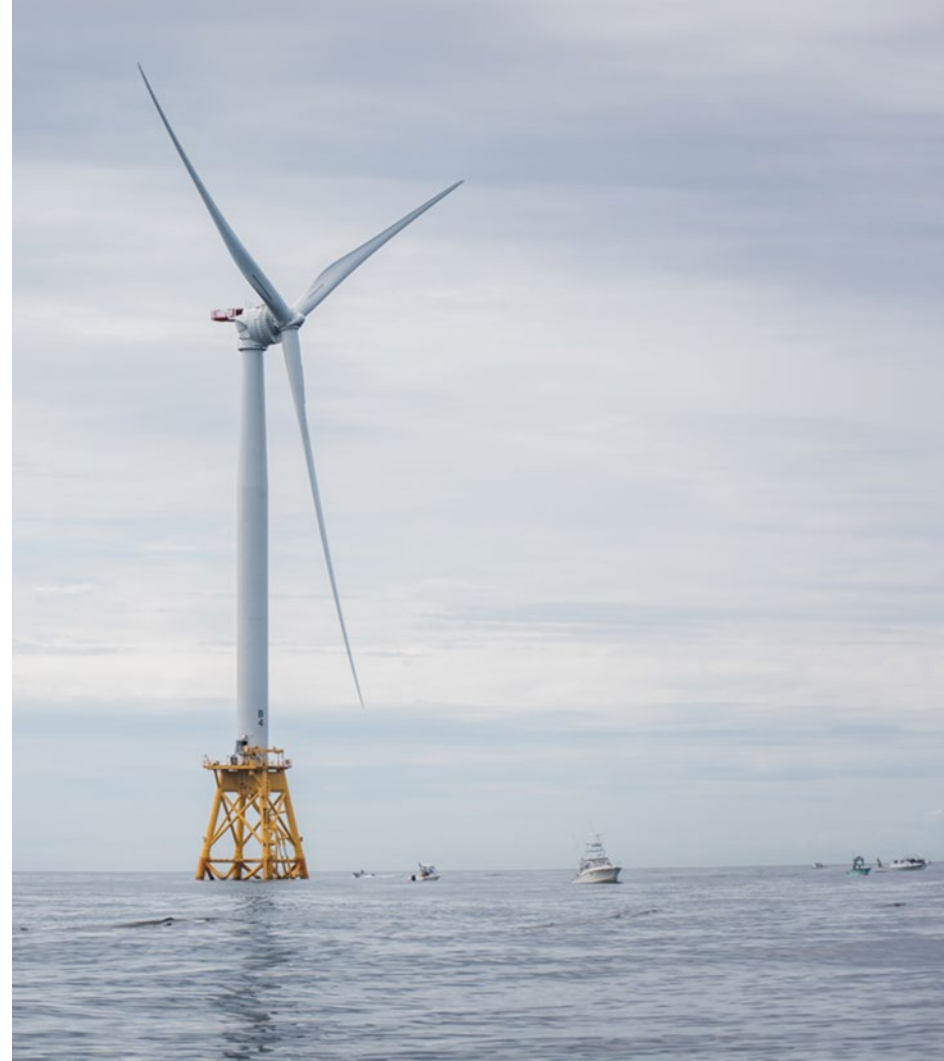
Strategy 2) Facilitate Assessment of regional/cumulative impacts



- **Regional Fisheries Research Programs**
 - Funds created through PPAs
 - Development of Regional Research Program
- **Regional Fisheries Monitoring Plans**
 - Development of Regional Monitoring Plan(s) for Fish & Fisheries
 - Tools requiring larger-scale coordination, e.g., acoustic telemetry
 - Build upon existing plans, create synergies & efficiencies

OSW Fisheries Monitoring Plan Status Quo

- High frequencies of extractive sampling
- Increased mortality and risk to protected species
- Difficulty in permitting
- Tension between monitoring and protecting marine resources
- Only one year pre-construction technically required, so “baselines” may not be established



Strategy 2) Facilitate Assessment of Regional & Cumulative Impacts

- Need to assess **regional** impacts from OSW on fisheries, but methods for doing so are currently unclear
- Regional coordination improves:
 - Scientific rigor
 - Efficiency
 - Effectiveness
- Regional monitoring approach (combining lease areas into one regional study area for specific tools) can resolve many project-specific monitoring plan issues



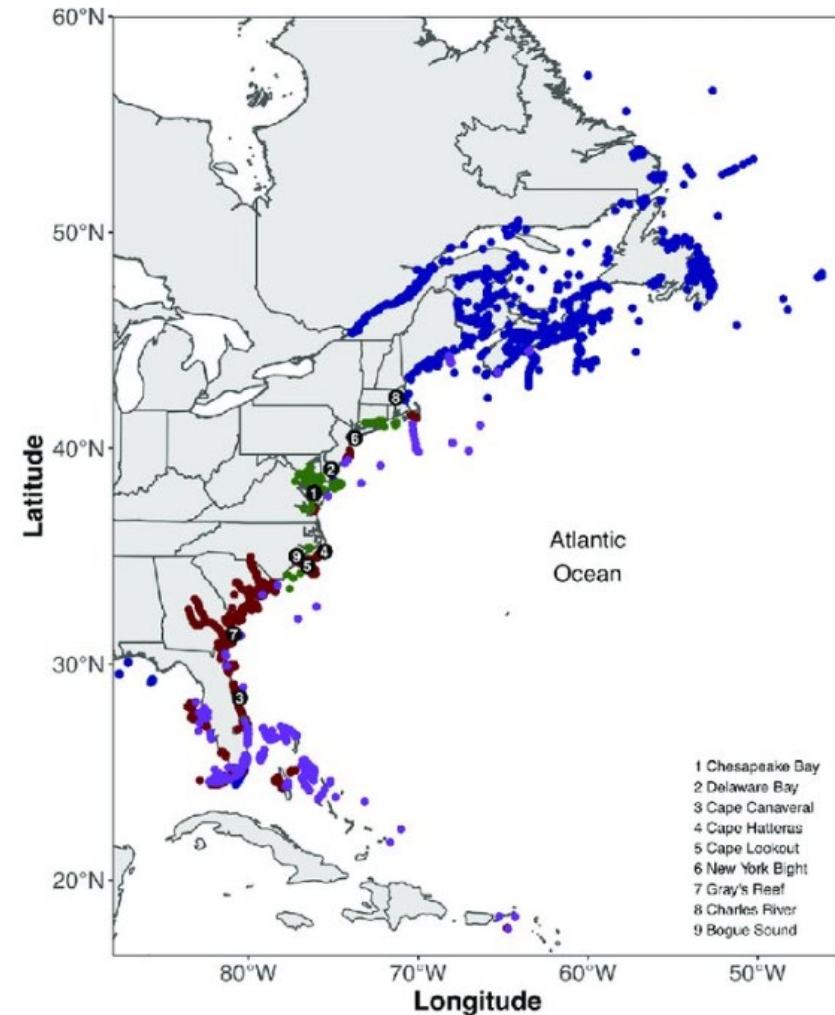
Feedback from ROSA Community



- Fine-scale lease monitoring for certain resources likely to be needed regardless
- Two tiers of monitoring may address both regional & project-specific impacts
- Fishing industry interest in ability to assess cumulative impacts
- Developer interest in efficiencies
- Scientific interest in cumulative impacts
- Regulatory interest in streamlining process

Strategy 2) Facilitate Assessment of Regional & Cumulative Impacts: Example – Acoustic Telemetry

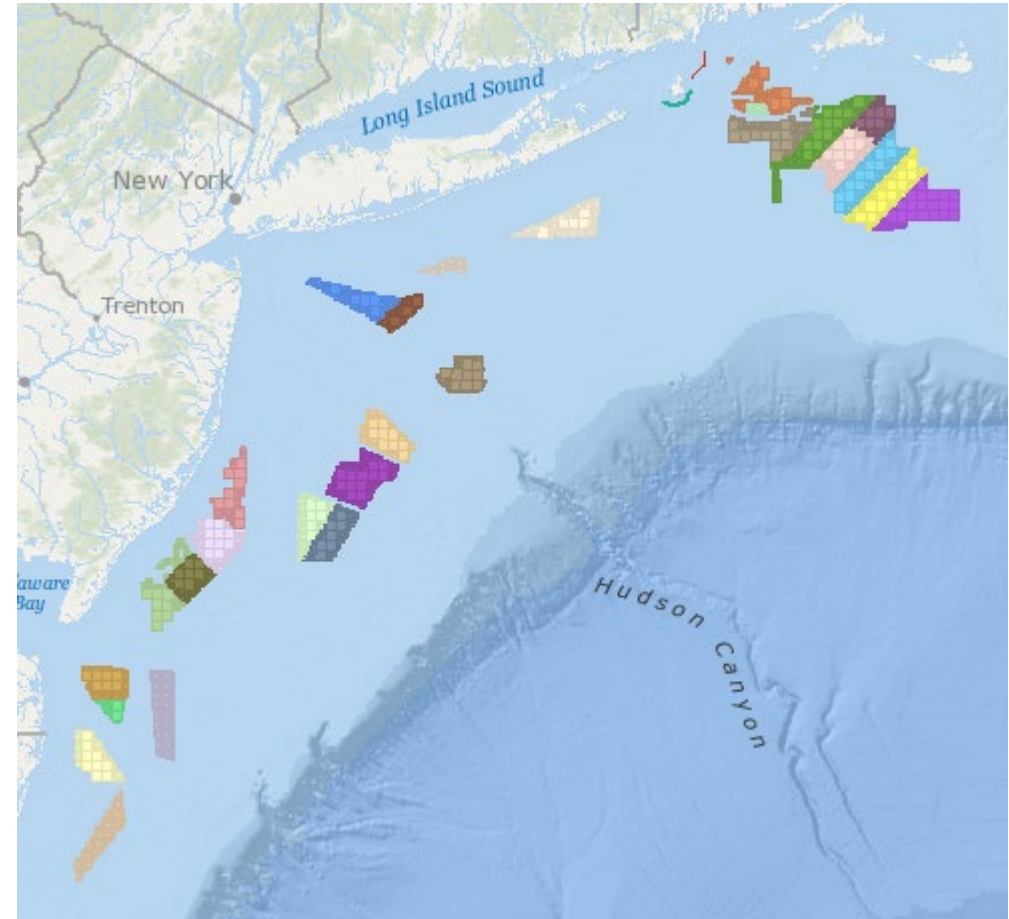
- Common and popular form of monitoring
- Existing example of regional study, but has challenges due to multiple funding sources
- Build on Passive Acoustic Monitoring example & guidance
- Relatively small group of practitioners
- Persistent & increasing infrastructure
- Right-sized & -placed array of telemetry receivers
- Coordinated tagging program
- Amenable to data sharing to existing network with gatekeeping by independent third party



Source for figure: [Bangley et al, 2020](#)

Strategy 2) Facilitate Assessment of Regional & Cumulative Impacts

- ROSA is working to collaborate (BOEM, NMFS, states, & developers) to understand how a regional monitoring plan could fulfill regulatory requirements & help mitigate impact to NMFS surveys
- Interest among fishing industry stakeholders, OSW developers, & agencies for a regional approach
- ROSA continues to work with monitoring subgroups (ME FWG, NYSERDA F-TWG, NJ ERWG) & the Regional Wildlife Science Collaborative for OSW (RWSC) to optimize approach
- Next steps require broad input, buy-in, & collaboration



generated using data on the Northeast Ocean Data Portal

5-year Roadmap: Strategic Goals & Objectives



1. Coordinate OSW Fisheries Research & Monitoring
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Strategy 3) Maintain ROSA OSW Project Monitoring Framework & Guidelines



Offshore Wind Project
Monitoring Framework
and Guidelines

March 2021

- Updating & maintaining [ROSA OSW Project Monitoring Framework & Guidelines](#) will:
 - Create alignment in experimental designs, tools & methods, data sharing, analysis, & governance
- Outcomes from the “Coordination Sessions” will be used for these updates, thereby implementing solutions that are co-created across sectors

Strategy 3) Maintain ROSA OSW Project Monitoring Framework & Guidelines



Offshore Wind Project
Monitoring Framework
and Guidelines

March 2021

- Monitoring Framework & Principles
- Fisheries Biological Monitoring Studies
- *Benthic Habitat/EFH Monitoring Studies*
- *Socioeconomic Monitoring Studies*

5-year Roadmap: Strategic Goals & Objectives



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ROSA & the Councils: Discussion



- Streamline communications
- Support existing & upcoming Council efforts in the OSW research space
 - E.g., research that will involve data streams from multiple developers
- Provide service to the broader community

Thank you



ROSA is committed to

- **producing a bridge** across sectors,
- **promoting science-based discourse around ocean co-use &**
- **supporting meaningful solutions** to realize the important, albeit challenging, goal of equity among ocean users.