ROSA Advisory Council Meeting
November 23, 2020
<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Welcome</td>
</tr>
<tr>
<td>9:10</td>
<td>Fisheries Science around Offshore Wind Updates</td>
</tr>
<tr>
<td>9:20</td>
<td>Review of ROSA structure, roles, &amp; decision making</td>
</tr>
<tr>
<td>9:30</td>
<td>Update on ROSA Research Advisors</td>
</tr>
<tr>
<td>9:40</td>
<td>ROSA Interim Fisheries Monitoring Guidance</td>
</tr>
<tr>
<td>10:00</td>
<td>Fisheries Data Management</td>
</tr>
<tr>
<td>10:45</td>
<td>BREAK</td>
</tr>
<tr>
<td>10:55</td>
<td>Priority Setting for the Longer Term</td>
</tr>
<tr>
<td>11:40</td>
<td>Activities for 2021</td>
</tr>
<tr>
<td>12:00</td>
<td>Adjourn</td>
</tr>
</tbody>
</table>
Fisheries Science around Offshore Wind Science Updates
Fisheries Science Updates

• Recent procurements and introduction to requests for regional monitoring funding
  • New York
  • New Jersey

• Synthesis of the Science Workshop: Interactions between Offshore Wind Development and Fisheries
  • Updates and next steps

• State of the Science Workshop on Wildlife and Wind Energy
  • Updates and next steps
Review of ROSA structure, roles, and decision making
## ROSA Governance & Roles

<table>
<thead>
<tr>
<th>Board of Directors</th>
<th>Advisory Council</th>
<th>Research Advisors</th>
<th>Committees</th>
</tr>
</thead>
</table>
| **Members** | Offshore wind developers  
Fishing industry representatives | Offshore wind developers  
Fishing industry representatives  
Federal and state agencies  
Fisheries Councils and Commission | Membership open to any sector if criteria is met | Could be members of:  
Advisory Council  
Research Advisors  
Board of Directors  
Others outside of ROSA governance with the appropriate expertise |
| **Roles & Responsibilities** | Fiduciary, operational, and policy oversight  
Follows formal board procedures (motions, votes, etc.) | Organization guidance, including determining short- and long-term research goals | Provides independent scientific and technical input  
Contribute to development and advancement of scientific integrity of ROSA activities | Conduct core, detailed work  
May be issue- or area-specific  
Chair(s) determined by Advisory Council |
| **Examples** | Reviewing and approving ROSA's operating budget  
Audit oversight | Determining regional research needs  
Reviewing ROSA protocols, procedures, & documents | Help develop protocols and tools  
Develop/review RFPs  
Provide peer review | New England/Mid-Atlantic committees  
Monitoring Plan Guidance |
| **Meeting frequency** | Monthly to quarterly | At least 2x per year | As needed | Varies based on committee goals and timeline |
| **Decision-making** | Consensus, with majority vote if absolutely needed | Consensus and broad acceptance or support | Advisory only | Makes recommendations or advice to Council by consensus. Including any differences remaining |
- Works with the Executive Director to plan and coordinate the Council
  - Plan agendas, meetings, and work
  - Help address issues, problems, or conflicts that arise in Council meetings
  - Generally ensure the smooth functioning of the Council
  - Report the views of and gather input from the other members within their sector on the Council
  - Represent more than their views to help guide the success of the Council as a whole
ROSA Advisory Council Executive Committee

- Rachel Pachter, Vineyard Wind, ROSA board co-chair and New England developer rep
- Jennifer Daniels, Atlantic Shores, Mid-Atlantic developer rep
- Peter Hughes, Atlantic Capes Fisheries, ROSA board co-chair and Mid-Atlantic commercial fishing rep
- Eric Reid, Seafreeze Shoreside, New England commercial fishing rep
- Mike Pol, MA DMF, New England state rep
- Greg Lampman, NYSERDA, Mid-Atlantic state rep
- Peter deFur, MAFMC, Council/Commission rep
- Andy Lipsky, NEFSC, Federal Agency rep
- Mike Pierdinock, CPF Charters, recreational fishing rep
Update on the ROSA Research Advisors
ROSA Research Advisors- Progress to Date

• Introduced at Advisory Council meeting in September
• Draft criteria for members sent to ROSA Advisory Council for review
• Discussion with Council Executive Committee- revised name from “Research Advisory Board” to “Research Advisors;” will begin as a panel of diverse expertise to draw on as needed and varying by task or purpose
• Call for Research Advisors opened on November 12
• Informational webinar held November 19
• Application deadline December 19
• Provides **independent scientific input** and review

• Help identify **detailed scientific needs** based on Advisory Council direction and committee work

• Contribute to the development of effective and **consistent research and monitoring protocols, standards, and tools**

• Review and assist with developing **Requests for Proposals (RFPs)**

• Provide independent **peer review** as needed

• Serve as **subject matter experts** to contact as needed for scientific input

• Contribute to development and advancement of **scientific integrity** of ROSA activities
• Have demonstrated expertise & experience in fisheries research, monitoring or related scientific discipline that can inform fisheries science (i.e. oceanography, biogeochemistry, marine ecology, socioeconomics, etc.)

• Demonstrated subject matter expertise through advanced degree in fisheries biology, marine science, oceanography or related field OR long-term professional experience in collaborative fisheries research (including fishermen and fishing industry members)

• Demonstrated ability to work in collaborative processes and effectively with others

• May be from academia, state or federal government, Fisheries Councils and Commission, independent research organizations, consulting firms, non-profits, etc.

• Membership is not limited to the ROSA-focused geography- applications from throughout the US and internationally are welcome

• Members will be eligible to apply for ROSA-administered funds but shall recuse themselves when appropriate

• Funds (such as travel or honorarium) may be available to support Research Advisors participation in ROSA activities, as appropriate
ROSA Interim Fisheries Monitoring Working Group

- Partnership with **NOAA Fisheries NEFSC** and **GARFO**
- Members include:
  - Federal and state agency representatives
  - Researchers/Academics
  - Fishermen and RODA staff
  - Developer fishery staff
  - Several are also NTAP members
- Longer term goal of more **detailed guidance, regional monitoring plan**, and **data storage and sharing protocols**
- Builds upon existing **BOEM guidance** and **member expertise** to highlight **best practices** and elements that could help **improve future monitoring plan submissions**
Template-style guidance focusing on:

- **Fisheries Monitoring Plan Objectives for Offshore Wind Projects**
  - Plans should clearly define purpose, objectives assumptions, and testable hypotheses
  - Guidance describes several objectives monitoring plans should address at a minimum

- **Development of Sampling Design for Project Monitoring**
  - Sampling design should address monitoring plan objectives
  - Guidance describes sampling design elements such as power analysis, sampling frequency, design strategy (i.e. BACI/BAG), and duration of monitoring during construction phases

- **Description of Sampling and Analytical Methods**
  - Describes components of sampling methods that should be included such as gear types (and advantages/disadvantages of each), operational protocols, and types of information collected
  - Outlines goals of analytical methods and examples of statistical methods that could be used to assess change
Interim Guidance Considerations

• This initial guidance should be considered **INTERIM**
  • Longer term goals to delve into more detailed guidance
  • Guidance development process has shown complexity of components

• Monitoring plans will likely adapt over time

• Guidance should be considered a living document

• Plan acknowledges but not resolve:
  • Cumulative or across-project considerations
  • Access concerns for long-term surveys or fishery dependent data
  • Methods of assessing potential socioeconomic impacts
  • Development of research beyond monitoring goal
  • Data sharing protocols

• First step of many to improve our regional coordination for research and monitoring
Guidance Timeline

• June 2020- Working group began meeting
• July through October 2020- Working Group met regularly to draft guidelines
• October 15, 2020- Breakout group discussion to introduce guidance at Synthesis of the Science Workshop
• October 29, 2020- Draft released for public comment
• December 1, 2020- Draft Guidance comments due (deadline extended from November 18)
• December 2020- Working group reconvenes
• January 2021- Goal: Incorporate comments and finalize draft
Next Steps

• Began work as an Interim Fisheries Monitoring Working Group

• Terms of Reference (ToRs)
  • ToR 1: Interim Guidance. Develop an interim general guidance document that provides clear recommendations and principles for research and monitoring of fisheries resources at offshore wind farms. Timeline ~3 months

  • ToR 2: Detailed Guidance. Develop a detailed fisheries research and monitoring guidance document that clearly describes coordination and how to develop a research and monitoring program for offshore wind farms. Timeline ~6 months

  • ToR 3: Regional Plan. Develop a clear plan for regional research and monitoring conducted at offshore wind farms. Timeline ~1 year

  • ToR 4: Data Storage and Sharing. Define a protocol for reporting, sorting, curating, sharing and dissemination of data for all stakeholders. Timeline ~1 year

Next Steps?

• Continue to refine current guidance

• Begin addressing additional ToRs?
  • ToR 2 and 3 build upon ToR1
  • ToR 4- next agenda item?

• Develop other guidelines- i.e. outline components of socioeconomic analysis?

• Interim working group = ROSA committee?
Fisheries Data Management

• Goal for data management = Interim Fisheries Monitoring Working Group ToR 4?
  • ToR 4: Data Storage and Sharing. Define a protocol for reporting, sorting, curating, sharing and dissemination of data for all stakeholders. Timeline ~1 year

• Types of data collected:
  • Indices of Abundance and Occurrence:
    • Absolute or relative abundance by species (numbers & weight per tow)
    • Presence/absence by species (percent frequency of occurrence)
  • Individual Fish Condition (e.g., length, weight, maturity, diet, age, etc.)
  • Environmental Variables:
    • Oceanographic variables (e.g., temperature, depth, salinity, dissolved oxygen)
    • Sensory variables (e.g. Electromagnetic field (EMF), noise, etc.)
    • Bottom type/benthic habitat
  • Sampling design information:
    • Vessel, gear, and gear configuration
    • Operational protocols
    • Sampling locations
  • Socioeconomic data
Fisheries Data Management

• Examples of existing databases and portals
  • Atlantic Coast Cooperative Statistics Program (detailed data base with extensive data sets)
  • Regional data portals (NROC & MARCO; summary and synthesis products for use by state & federal agencies and others)
  • MARACOOS/NERACOOS (detailed near real-time data collection and management network with primarily oceanographic data)
  • International Council for the Exploration of the Sea (ICES) data portals (includes portals for trawl surveys, eggs and larvae, plankton, oceanographic data, and others)
  • Other data visualization and planning portals- Marine Cadastre, state-led portals, etc.
  • Research databases- NOAA, NEFSC, VIMS, SMAST
  • Others?
Fisheries Data Management

• Questions:
  • Please enter into MENTI other data bases or places for data you go to for fisheries data
  • What are ways ROSA can contribute to improving coordination and efficiency of data management, storage, and access?
  • What are our next steps?
    • ROSA prepare background/ summary paper of types of data, existing tools, limitations and gaps?
    • Working group/Committee? Under existing monitoring group or new?
    • What sectors/interests/ organizations should be included, including those relevant but not ROSA members
  • Please enter into MENTI other organizations that could be included in a data work group
Priority Setting for the Longer Term
Priority Setting

• Ongoing culmination of research efforts:
  • Synthesis of the Science for Fisheries and Offshore Wind white paper
  • State of the Science on Wildlife and Wind Energy and associated working groups
  • NREL/PNNL US Offshore Wind Synthesis of Environmental Effects Research (SEER)

• Given what is coming the ROSA Council’s way, what might be a good process for prioritizing research to create a 3-to-5-year research agenda?

• Process examples from US and European projects
Focusing and prioritising monitoring and research

Step 1: Scoping for societally major concerns

Step 2: Identifying overarching questions

Step 3: Verification overarching questions

Step 4: Long-listing operational questions

Step 5: Selecting operational questions

Monitoring/Research

Science

Science/Public/Industry/Policy

Scoping for societally major concerns

Step 2: Identifying overarching questions

Step 3: Verification overarching questions

Step 4: Long-listing operational questions

Step 5: Selecting operational questions

Monitoring/Research

Example

- Do offshore wind farms impact cod fisheries?
- ...

- Magnitude of change of cod production?
- Magnitude of fisheries displacement?
- ...

- Juvenile mortality due to piling noise?
- Adult fitness due to artificial reef effect?
- ...

Steven Degraer, Royal Belgian Institute of Natural Sciences
MA/RI/BOEM Approach

- Recognized need to prioritize concerns
- Once funding was available, we had to figure out how to spend it

Results that can improve our placement and management of wind farm development to lessen impacts
MA/RI/BOEM Approach

• Background, initial scoping
  • Management Objectives and Research Priorities for Offshore Wind and Fisheries
  • Written with input from multiple states and federal agencies
  • Public review and feedback

• Funding! Rescoping of priorities
  • Relied on Mass Fisheries Working Group, RI Fisheries Advisory Board
  • Used backgrounder as a guide, updated based on funding available, most recent priorities
  • Recommended Fisheries Studies for Offshore Wind Development

• RFP issued; proposals reviewed
  • Very transparent review, all narratives released to working groups for feedback
  • After public review stage, technical review stage with reviewers selected to ensure no conflict of interest and technical expertise in the topic

Steps 1-4

Step 5
MA/RI/BOEM Lessons Learned

Challenges

• Overload – when to pay attention to what, what meeting to go, what document to review
  • Our process overlapped with permitting processes

• Who gets to decide?
  • Verification and selection of priorities – not a clearly established process, not everything could be studied, not everyone got what they wanted

• Participation viewed as giving in to windfarms

Wins

• Transparency
• Unique public engagement on RFP review process
• Documentation of prioritization process
• Documentation of outstanding concerns
Breakout Groups

• 30 Minutes
• Breakouts for: 1) Council members; 2) Council Alternates and ROSA Board Members; 3) Others stay in Plenary for their breakout

• QUESTIONS
  • Should ROSA seek to inventory existing, on-going fisheries science projects that are recent or going on now in the region?
  • What process might the ROSA Council use to take the various State and Synthesis of the Science workshops, state or fisheries Councils research plans, and formulate a regional priority questions and needed research projects under each?
• Should ROSA inventory existing research in the region – YES or NO
  • ROSA Members **ONLY PLEASE** poll on this question in Menti (or alternates if standing in for a member)

• Briefly describe in 1 or 2 process suggestions for prioritizing research
  • **All participants** comments are welcome to add their thoughts in MENTI
Priority Setting for 2021
Priority Setting for 2021

• Given all we’ve discussed, where do we go from here in 2021?

• Possible near-term priorities for 2021
  • Follow up to Interim Monitoring guidance
  • Data management, storage, and access
  • Developing a longer-term, 3- to 5-year research plan
  • Tracking related research across the region
  • Framing socioeconomic research
  • Identifying baseline data needs for commercial fishing
  • Identifying baseline data needs for recreational fishing
  • Proactive strategies for up-and-coming topics- floating wind, coordinated transmission, West Coast and other regions
  • Extending existing pilot studies
  • Identifying joint funding efforts or projects
Priority Setting for 2021

• ROSA Council Members ONLY (or alternates in lieu of member) **please pick 3 priorities important to you for ROSA work in 2021** in Menti.

• **All may enter additional ideas important to you in Chat.**
Next Steps

**December 2020**
- Review Research Advisor applications
- Reconvene monitoring working group
- Incorporate feedback to monitoring guidelines
- Scope 2021 draft ROSA Research Plan

**January 2021**
- Meet with ROSA Council Executive Committee to review 2021 ROSA Research Plan
- Appoint Research Advisors
- Begin search for ROSA Research Director
- Finalize interim monitoring guidance
- Initiate Data Management Group (if consensus)

**Winter/Spring 2021**
- Synthesis of the Science white paper
- Reconvene ROSA Advisory Council in March
- Refine short- and long-term priorities
- Identify joint funding efforts