



**NOAA
FISHERIES**



BOEM
Bureau of Ocean Energy
Management

Fisheries and Offshore Wind Energy: Synthesis of the Science

Workshop Agenda

The Fisheries and Offshore Wind Energy: Synthesis of the Science project consists of two integrated components, a **virtual workshop** and a **published report**, which together have the overarching purpose of enhancing regional and national understanding of existing science and data gaps related to offshore wind energy interactions with fish and fisheries.

This joint effort brings together the National Oceanic and Atmospheric Administration (NOAA) Fisheries, the Bureau of Ocean Energy Management (BOEM), and the Responsible Offshore Development Alliance (RODA).

Through a collaborative process co-designed by fishermen, wind developers, and state, academic, and federal partners, this effort will advance the Responsible Offshore Science Alliance's (ROSA) regional science efforts, by describing the current state of science, existing research and monitoring programs, and data gaps and soliciting input regarding priority research questions.

Overarching Project Objectives

1. Introduce fisheries science, management, and industry experts to the topic of offshore wind energy and fisheries interactions in order to inform their work, leverage existing knowledge, create networks among interested professionals, and develop effective approaches to short and long term cross-disciplinary challenges;
2. Model best-practices to successfully engage the fishing industry in scientific processes and setting research and monitoring agendas;
3. Integrate offshore wind energy development into existing science and research efforts in the field of fisheries science and management;
4. Begin to establish a shared body of understanding and knowledge on offshore wind energy and fisheries interactions;
5. Identify data and knowledge gaps relevant to the study of marine fisheries biology and behavior, ecosystem function, and fisheries operations for use in future scientific and policy decisions;
6. Provide fora for open discussion to set relevant research and monitoring priorities for impacts to fish and fisheries; and
7. Promote future collaborative work across disciplines and sectors.

Workshop Goals

- Present the report framework and high-level overview of key topics by section

- Initiate dialogue between authors and among participants to frame issues and foster research collaboration
- Identify important constituents and groups to work with the authors during the drafting process to ensure inclusive representation in the report and for recommendations of future research priorities
- Inform and advance ROSA’s regional science efforts through the synthesis of information across expert networks

Code of Conduct

The workshop will be hosted entirely on the Zoom platform (webinar and breakout tools). Participants in the Synthesis of the Science workshop are expected to:

- Stay on track with the agenda
- Focus on scientific and technical matters -- politics and decision-making are outside the purview of this effort
- Use the electronic tools offered to provide input and comment
- Keep written comments in the webinar chat, Q&A, and other means constructive, substantive, and focused on the workshop content without disparaging remarks toward any organizations or individuals

Communication Guidelines

The convening parties of the workshop maintain responsibility for all press communications about the project. This event is a *workshop* and is not intended for the media. We respectfully request that participants contact the project planning team regarding distribution of information related to the project.

October 14, 2020: Welcome and Virtual Social Hour

TIME (ET)	TOPIC	PRESENTERS
3:45	“Room” Opens for Attendance (please sign-on as early as 15 minutes prior to start time to check sound and video)	
4:00	Orientation and Overview CBI provides orientation to the Zoom webinar features and overview of today’s agenda	Consensus Building Institute (CBI)
4:05	Opening Remarks	Cisco Werner & Jon Hare, NOAA Fisheries
4:20	Opening Remarks	Rodney Cluck, BOEM Environmental Sciences
4:30	Opening Remarks	Annie Hawkins, RODA
4:40	Opening Remarks	Lyndie Hice-Dunton, ROSA

4:50	Preview of Workshop Agenda, Code of Conduct, Use of Technology, Expectations and Roles, Questions	CBI & RODA
5:05	Meet and Greet Participants are “sent” to breakout rooms for informal introductions to one another	All Attendees
5:30	<i>Adjourn</i>	

October 15, 2020: Ecosystem Effects

TIME (ET)	TOPIC	PRESENTERS
9:15	“Room” Opens for Attendance (please sign-on as early as 15 minutes prior to start time to check sound and video)	
9:30	Agenda, Process and Code of Conduct for the Day	CBI & RODA
9:40	Welcome Keynotes	Chris Oliver, NOAA Fisheries Walter Cruickshank, BOEM
10:00	Keynote: Offshore Wind Energy and Ecosystem Effects	Andrew Gill, Centre for Environment, Fisheries and Aquaculture Science (CEFAS)
10:15	Benthic Habitat Modification <ul style="list-style-type: none"> ● Panel, 25 minutes ● Questions, 10 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> ● Michelle Bachman, NEFMC ● Drew Carey, Inspire Environmental ● Steven Degraer, Royal Belgian Institute of Natural Sciences <u>Moderator:</u> Brian Hooker, BOEM
10:50	<i>Break</i>	
10:55	Physical Habitat Modification <ul style="list-style-type: none"> ● Panel, 20 minutes ● Questions, 15 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> ● Andrew Gill, CEFAS ● Zoe Hutchison, URI ● Erica Staaterman, BOEM <u>Moderator:</u> Brian Hooker, BOEM
11:30	Physical Process Modification <ul style="list-style-type: none"> ● Panel, 30 minutes ● Questions, 15 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> ● Hans Burchard, DHI ● Josh Kohut, Rutgers ● Ruth Perry, Mayflower ● Ole Svenstrup Petersen, DHI

		<u>Moderator:</u> Brian Hooker, BOEM
12:15	Lunch	
1:15	Finfish, Squid, Shellfish and Community Interactions <ul style="list-style-type: none"> ● Panel, 50 minutes ● Questions, 40 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> ● Drew Carey, Inspire Environmental ● Zoe Hutchison, URI ● Cami McCandless, NOAA Fisheries ● Dara Wilber, Inspire Environmental <u>Moderator:</u> Elizabeth Methratta, NOAA Fisheries
2:45	Break	
3:00	Breakout Sessions - Attendees choose preferred session <ul style="list-style-type: none"> ● <i>Benthic Habitat: Fisheries Approaches and Opportunities</i> ● <i>Of Hammers and Hammerheads: Effects of EMF and Sound on Marine Life</i> ● <i>Not to Mix It Up, But Let's Talk about the Cold Pool</i> ● <i>Living in a New Material World: Assessing Changes with Presence of Structures</i> ● <i>The Matter of Migration: HMS, Small Pelagics, Anadromous Fish, and Others Who Roam</i> 	
3:55	Return to plenary room	
4:00	Breakout Sessions - Attendees choose preferred session <ul style="list-style-type: none"> ● <i>Interim Report of ROSA's Monitoring Working Group</i> ● <i>Getting Physical (Oceanography) with Fishermen: Incorporating Traditional Knowledge in Research</i> ● <i>Case Study in Cumulative Stressors: Squid</i> ● <i>From the Turbine to the Region: Scaling Up to Population Level Effects</i> 	
5:00	Adjourn	

October 16, 2020: Socio-Economics

TIME (ET)	TOPIC	PRESENTERS
8:45	"Room" Opens for Attendance (please sign-on as early as 15 minutes prior to start time to check sound and video)	
9:00	Agenda, Process and Code of Conduct for the Day	CBI & RODA
9:15	Phytoplankton & Zooplankton <ul style="list-style-type: none"> ● Presentation, 15 min 	<u>Presenter:</u> Kevin Friedland, NOAA Fisheries

	<ul style="list-style-type: none"> • Questions, 15 min 	<u>Moderator:</u> Elizabeth Methratta, NOAA Fisheries
9:45	Keynote: Socio-Economics, Fishing, and Offshore Wind Energy	Merlin Jackson, Thanet Fishermen's Association
10:00	Fishing Operation Effects <ul style="list-style-type: none"> • Presentations, 30 minutes • Questions, 20 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> • Mike Conroy, Pacific Coast Federation of Fishermen's Associations • Fred Mattera, Commercial Fisheries Research Foundation • Tom Sproul, URI • Talya Tenbrink, NOAA Fisheries <u>Moderator:</u> Angela Silva, NOAA Fisheries
10:50	<i>Break</i>	
11:00	Economic Effects <ul style="list-style-type: none"> • Presentations, 30 minutes • Questions, 30 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> • Ben Galuardi, NOAA Fisheries • Daphne Munroe, Rutgers University • Guy Simmons, Sea Watch International • Eric Thunberg, NOAA Fisheries <u>Moderator:</u> Angela Silva, NOAA Fisheries
12:00	<i>Lunch</i>	
1:00	Breakout Sessions - Attendees choose preferred session <ul style="list-style-type: none"> • <i>Sharing the Ports: Evaluating Challenges and Opportunities</i> • <i>Focus on Floating: Different Structures, Different Conditions</i> • <i>Integrating Fisheries and Wildlife, RWSE, and ROSA</i> • <i>Dock to Plate: Market Considerations</i> • <i>Safety at Sea</i> 	
2:00	Social & Cultural Effects <ul style="list-style-type: none"> • Presentations, 30 minutes • Questions, 30 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> • Monique Coombs, Maine Coast Fishermen's Association • Madeleine Hall-Arber, Fisheries Anthropologist • Talya Tenbrink, NOAA Fisheries <u>Moderator:</u> Angela Silva, NOAA Fisheries
3:00	Cumulative Impacts, Resilience & Adaptation <ul style="list-style-type: none"> • Presentation, 20 minutes • Questions, 10 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> • Teresa Johnson, UMaine • Tim Novotny, Oregon Dungeness Crab Commission

		<ul style="list-style-type: none"> ● Carrie Pomeroy, University of California Santa Cruz ● Ron Smolowitz, Fisheries Survival Fund <p><u>Moderator:</u> Fiona Hogan, RODA</p>
3:30	<i>Break</i>	
3:45	<p>Breakout Sessions - Attendees choose preferred session</p> <ul style="list-style-type: none"> ● <i>New Fisheries, New Entrants, New Gear? The Realities of Adaptation</i> ● <i>Perspectives from Small Communities</i> ● <i>Perspectives from Vertically Integrated Businesses</i> ● <i>What's Perception Got to Do With It? Socioeconomic Research, "Stakeholder & Rightsholder Engagement," and Participatory Governance</i> ● <i>Case Study: Cumulative Socioeconomic Approaches to Understanding Effort Displacement</i> 	
4:45	<i>Adjourn</i>	

October 30, 2020: Monitoring, Cumulative and Regional Issues, Fisheries Management and Synthesis

TIME (ET)	TOPIC	PRESENTERS
8:45	"Room" Opens for Attendance (please sign-on as early as 15 minutes prior to start time to check sound and video)	
9:00	Agenda, Process and Code of Conduct for the Day	CBI & RODA
9:10	<p>Sampling Design and Methods</p> <ul style="list-style-type: none"> ● Presentation, 20 minutes ● Questions, 20 minutes 	<p><u>Panelists:</u></p> <ul style="list-style-type: none"> ● Mike Jech, NOAA Fisheries ● Kevin Stokesbury, UMass Dartmouth ● Sofie Van Parijs, NOAA Fisheries <p><u>Moderator:</u> Elizabeth Methratta, NOAA Fisheries</p>
9:50	<p>Cumulative Impacts</p> <ul style="list-style-type: none"> ● Presentation, 20 minutes ● Questions, 10 minutes 	<p><u>Panelists:</u></p> <ul style="list-style-type: none"> ● Silvana Birchenough, CEFAS ● Ian Slayton, BOEM <p><u>Moderator:</u> Elizabeth Methratta, NOAA Fisheries</p>
10:20	Integrated Ecosystem Assessment	<u>Presenter:</u> Sean Lucey, NOAA

	<ul style="list-style-type: none"> ● Presentation, 20 minutes ● Questions, 10 minutes 	<u>Moderator:</u> Fiona Hogan, RODA
10:50	<i>Break</i>	
11:00	Fisheries Dependent Data <ul style="list-style-type: none"> ● Presentation, 20 minutes ● Questions, 20 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> ● Ben Galuardi, NOAA Fisheries ● Anna Mercer, NOAA Fisheries ● Mike Palmer, NOAA Fisheries ● Kevin Wark, F/V Dana Christine <u>Moderator:</u> Doug Christel, NOAA Fisheries
11:40	Fisheries Independent Data <ul style="list-style-type: none"> ● Panel, 45 minutes ● Questions, 15 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> ● Wendy Gabriel, NOAA Fisheries ● Capt. David Goethel, F/V Ellen Diane ● Dave Rudders, VIMS <u>Moderator:</u> Andy Lipsky, NOAA Fisheries
12:40	<i>Lunch</i>	
1:30	Impacts on Fisheries Management <ul style="list-style-type: none"> ● Presentation, 40 minutes ● Questions, 30 minutes 	<u>Panelists:</u> <ul style="list-style-type: none"> ● Julia Beaty, MAFMC ● Jason McNamee, RI DEM ● Chris Orphandies, NOAA Fisheries ● Dave Secor, University of Maryland ● Mary Beth Tooley, O'Hara Corporation <u>Moderator:</u> Fiona Hogan, RODA
2:40	<i>Break</i>	
2:45	Breakout Sessions - Attendees choose preferred session <ol style="list-style-type: none"> 1. <i>Fishery Independent Surveys: Impacts and Solutions</i> 2. <i>Crossroads: Where Fisheries Management Meets OSW and the Regulatory Changes Needed for Harmony</i> 3. <i>Other Fish in the Sea: How to Improve OSW Planning in the Context of Data-Limited Fisheries?</i> 4. <i>Fisheries Information Modernization: Big Data or Big Brother?</i> 5. <i>Beyond Data Collection: Best Practices in Interpretation through Cooperative Research</i> 6. <i>How to Prioritize Research?</i> 	
3:45	Next Steps, Co-Authors and Working Groups, Expected Process and Products	Annie Hawkins, RODA Lyndie Hice-Dunton, ROSA
4:00	<i>Adjourn</i>	