



# State of the Science Workshop on Wildlife and Offshore Wind Energy 2020: Cumulative Impacts

Virtual Event Hosted by the  
New York State Energy Research and Development Authority (NYSERDA)

## Agenda

**November 16-20, 2020**

<https://www.nyetwg.com/2020-workshop>

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# Workshop Agenda

## Monday, November 16

<b>Session 1: Framework for Understanding Cumulative Impacts from Offshore Wind.</b> Moderator: Howard Rosenbaum, Wildlife Conservation Society 10:30 am – 12:30 pm EST	
10:30 am	<i>Virtual Check-in</i>
10:45 am	<b>Opening Remarks from NYSERDA</b> Doreen Harris, <i>Acting President and CEO of NYSERDA</i>
10:50 am	<b>Welcome and setting the stage</b> Greg Lampman, <i>NYSERDA</i>
11:05 am	<b>Cumulative anthropogenic impacts on the world's oceans</b> Sara Maxwell, <i>University of Washington</i>
11:20 am	<b>Framework for defining the scope of cumulative adverse effects assessments for offshore wind</b> Wing Goodale, <i>Biodiversity Research Institute</i>
11:35 am	<b>An ecosystem functioning approach for thinking about cumulative impacts</b> Steven Degraer, <i>Royal Belgian Institute of Natural Sciences</i>
11:50 am	<b>Metapopulation PVA: Developing methods for reducing uncertainty in impact assessments</b> Julie Miller, <i>Marine Scotland Science</i>
12:05 pm	<i>Panel Q&amp;A and Discussion</i>

## Tuesday, November 17

<b>Session 2: European Efforts to Understand Cumulative Impacts from Offshore Wind.</b> Moderator: Sophie Hartfield Lewis, Ørsted 10:30 am – 12:00 pm EST	
10:30 am	<i>Introduction</i>
10:35 am	<b>Assessing cumulative effects: challenges faced by offshore wind developers</b> Madeline Hodge, <i>Ørsted</i>
10:50 am	<b>WinMon.BE: The Belgian countrywide research program to understand cumulative impacts of offshore wind development</b> Steven Degraer, <i>Royal Belgian Institute of Natural Sciences</i>
11:05 am	<b>Offshore wind farms: Cumulative impact assessments in the Netherlands</b> Astrid Potiek, <i>Bureau Waardenburg</i>
11:20 am	<b>Developing a cumulative effects framework (CEF) for key ecological receptors in relation to offshore wind in the UK</b> Kate Searle, <i>UK Centre for Ecology and Hydrology</i>
11:35 am	<i>Panel Q&amp;A and Discussion</i>
12:00 pm	<i>Break</i>

**Session 3: Lightning Talks Round 1. Moderator: Matt Robertson, Vineyard Wind**  
12:15 – 1:30 pm EST

12:15 pm	<b>Status of NMFS survey activities impacted by wind development</b> Andy Lipsky, <i>NOAA Northeast Fisheries Science Center</i>
12:20 pm	<b>Migratory paths of horseshoe crabs in peril due to offshore energy development</b> John Tanacredi, <i>Center for Environmental Research and Coastal Oceans Monitoring</i>
12:25 pm	<b>Pelagic fish and zooplankton abundance and distribution in the New York Bight</b> Joseph Warren, <i>Stony Brook University</i>
12:30 pm	<b>Large bony fish information from New York OPA</b> Jeff Clerc, <i>Normandeau Associates Inc.</i>
12:35 pm	<a href="#"><i>Q&amp;A and Discussion</i></a>
12:40 pm	<b>The BOEM ‘RODEO’ Program: Lessons learned from environmental monitoring at multiple U.S. offshore wind farms</b> Kristen Ampela, <i>HDR, Inc.</i>
12:45 pm	<b>Mapping the distribution and habitat use of Atlantic cod spawning aggregations on Cox’s Ledge to assess potential impacts of offshore wind development</b> Rebecca Van Hoeck, <i>University of North Carolina at Chapel Hill</i> & Ali Frey, <i>University of Massachusetts Dartmouth School for Marine Science &amp; Tech.</i>
12:50 pm	<b>Multi-scale relationships between marine predators and the distribution of forage fish</b> Evan Adams, <i>Biodiversity Research Institute</i>
12:55 pm	<b>Benthic habitat and epifaunal monitoring at the Block Island Wind Farm</b> Zoe Hutchison, <i>University of Rhode Island</i>
1:00 pm	<a href="#"><i>Q&amp;A and Discussion</i></a>
1:05 pm	<b>Expected effects of proposed large scale offshore wind farm implementation of common guillemots (<i>Uria aalge</i>) in the southern North Sea</b> Verena Peschko, <i>University of Kiel</i>
1:10 pm	<b>Protected Species Observer (PSO) detections of North Atlantic Right Whales (NARW): Contributing to science, conservation, and management</b> Craig Reiser, <i>Smultea Sciences</i>
1:15 pm	<b>Age-based habitat use of humpback whales in the New York Bight and implications for vessel strikes</b> Julia Stepanuk, <i>Stony Brook University</i>
1:20 pm	<b>Review of night vision technologies for detecting cetaceans at sea</b> Mari Smultea, <i>Smultea Sciences</i>
1:25 pm	<a href="#"><i>Q&amp;A and Discussion</i></a>

## Wednesday, November 18

<b>Session 4: Current Knowledge on Cumulative Impacts I.</b> Moderator: Jillian Liner, Audubon New York 10:30 -11:45 am EST	
10:30 am	<i>Introduction</i>
10:35 am	<b>The Vineyard Wind SEIS: Assumptions made in the cumulative impact scenario</b> Ian Slayton, <i>Bureau of Ocean Energy Management</i>
10:50 am	<b>Cumulative impacts of displacement on seabirds</b> Stefan Garthe, <i>Kiel University</i>
11:05 am	<b>Cumulative impacts to birds from collisions with offshore wind farms</b> Aonghais Cook, <i>British Trust for Ornithology</i>
11:25 am	<i>Panel Q&amp;A and Discussion</i>
11:45 am	<i>Break</i>
<b>Session 5: Current Knowledge on Cumulative Impacts II.</b> Moderator: Ruth Perry, Shell New Energies 11:55 am – 1:30 pm EST	
11:55 am	<b>Cumulative physical effects of offshore wind energy development on oceanographic processes</b> Jeff Carpenter, <i>Institute of Coastal Research, Helmholtz-Zentrum Geesthacht</i>
12:15 pm	<b>Cumulative effects of offshore wind on benthic habitats</b> Drew Carey, <i>INSPIRE Environmental</i>
12:30 pm	<b>Cumulative noise impacts upon fishes (and turtles) from offshore wind construction and operation</b> Arthur Popper, <i>University of Maryland &amp; Anthony Hawkins, Loughine Ltd.</i>
12:50 pm	<b>Designing studies to detect the ecological impacts of offshore wind development</b> Elizabeth Methratta, <i>contractor to NOAA Northeast Fisheries Science Center</i>
1:05 pm	<i>Panel Q&amp;A and Discussion</i>

## Thursday, November 19

<b>Session 6: Current Knowledge on Cumulative Impacts III. Moderator: Francine Kershaw, Natural Resources Defense Council</b>	
10:30 am – 12:15 pm EST	
10:30 am	<i>Introduction</i>
10:35 am	<b>Decision framework to identify populations that are vulnerable to population-level effects of disturbance</b> Cormac Booth, <i>SMRU Consulting</i>
10:55 am	<b>Cumulative noise impacts to marine mammals from offshore wind development and operations</b> Brandon Southall, <i>Southall Environmental Associates Inc.</i> & Howard Rosenbaum, <i>Wildlife Conservation Society</i>
11:15 am	<b>Vessel encounter risk model tool</b> Mary Jo Barkaszi, <i>CSA Ocean Sciences Inc.</i>
11:30 am	<b>Population impacts to bats from wind energy development</b> Cris Hein, <i>National Renewable Energy Laboratory</i>
11:45 am	<i>Panel Q&amp;A and Discussion</i>
12:15 pm	<i>Break</i>
<b>Session 7: Lightning Talks Round 2. Moderator: Jenny Briot, Avangrid</b>	
12:30 - 1:30 pm EST	
12:30 pm	<b>Introduction to ICES Offshore Wind Working Group</b> Andy Lipsky, <i>NOAA Northeast Fisheries Science Center</i>
12:35 pm	<b>A stakeholder driven vision: Regional Wildlife Science Entity for Atlantic offshore wind</b> Kate McClellan Press, <i>NYSERDA</i>
12:40 pm	<b>The Responsible Offshore Science Alliance (ROSA): Establishing regional research and monitoring for offshore wind and fisheries</b> Lyndie Hice-Dunton, <i>Responsible Offshore Science Alliance</i>
12:45 pm	<b>U.S. Offshore wind synthesis of environmental effects research</b> Rebecca Green, <i>National Renewable Energy Laboratory</i>
12:50 pm	<i>Q&amp;A and Discussion</i>
1:00 pm	<b>Updating collision risk models to quantify cumulative impacts for endangered birds</b> Christopher Field, <i>University of Rhode Island</i>
1:05 pm	<b>Analysis and visualization of marine-life data in the context of offshore wind energy development</b> Marta Ribera, <i>The Nature Conservancy</i>
1:10 pm	<b>Development of monitoring protocols for automated radio telemetry studies at offshore wind energy areas</b> Pam Loring, <i>U.S. Fish &amp; Wildlife Service</i>
1:15 pm	<b>New technology reduces the probability of vessel strikes on whales – in certain situations all the way to zero</b> Dave Steckler, <i>Mysticetus</i>
1:20 pm	<b>Ecosystem dynamics: An examination of the relationships between environmental processes, primary productivity, and distribution of species at higher trophic levels</b> Frank Thomsen, <i>DHI Group</i>
1:25 pm	<i>Q&amp;A and Discussion</i>

## Friday, November 20

<b>Session 8: Designing Studies to Assess Cumulative Impacts.</b> Moderator: Louis Brzuzy, Shell New Energies 10:30 am – 12:25 pm EST	
10:30 am	<i>Introduction</i>
10:35 am	<b>Synthesis of the science: Interactions between offshore wind development and fisheries</b> Andrew Lipsky, NOAA Fisheries, Brian Hooker, Bureau of Ocean Energy Management, Annie Hawkins, Responsible Offshore Development Alliance, & Lyndie Hice-Dunton, Responsible Offshore Science Alliance
10:55 am	<b>Approaches to understanding cumulative effects of stressors on marine mammals</b> Peter Tyack, University of St. Andrews
11:15 am	<b>Designing monitoring to detect cumulative impacts and address the confounding variable of climate change</b> Jon Hare, NOAA Northeast Fisheries Science Center
11:35 am	<i>Panel Q&amp;A and Discussion</i>
12:05 pm	<i>Break</i>
12:10 pm	<b>Charge and process for working groups</b> Kate Williams, Biodiversity Research Institute
12:20 pm	<b>Closing Remarks</b> Kate McClellan Press, NYSERDA
<b>Session 9: Informal Breakout Group Discussions</b> 12:25 pm – 1:00 pm EST	
	<i>Informal breakout group discussions for the seven work group topics:</i> <ul style="list-style-type: none"> <li>• Benthos</li> <li>• Fishes and mobile invertebrates</li> <li>• Birds</li> <li>• Bats</li> <li>• Marine mammals</li> <li>• Sea turtles</li> <li>• Environmental change</li> </ul> Each group will discuss (1) intended focus/goals of group discussions, (2) resources to inform discussions, and (3) potential timing for winter meetings.