

FishFORWRD

ROSA FishFORWRD v2.1.1 Update

January 2025

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January 2025 Update to FishFORWRD

This update incorporates any corrections provided by the ROSA community and new projects submitted through the forms within FishFORWRD, shared through biannual ROSA Offshore Wind Fisheries Funder Coordination meetings, or shared through other coordination activities of ROSA. The interactive webtool has also been further refined for increased utility for users.

New Projects

This update to the FishFORWRD database includes an additional 54 research projects and monitoring surveys. Most of these are older projects that were initially missed, along with a few newly initiated projects since the last update. A summary of the projects is provided below, with full details available within the FishFORWRD database.

We encourage you to submit any missing or newly launched offshore fisheries research projects through the following link: https://forms.office.com/r/KK5wu41Z6u

Corrections and updates to existing projects can be submitted through the following link: https://forms.office.com/r/JfNNMKfmA4

Project #	Research Category	Project Title	Lead Entity	Funder
Ex-171	Fishery Access & Gear Modification	Planting and Survival of Juvenile Surfclams for Stock Enhancement	Rutgers University	New Jersey RMI
Ex-172	Data Management	OTT: Streamlining Integration and Distribution of Metocean Data from Offshore Wind Operations for Marine Stakeholders	Northeastern Regional Association of Coastal Ocean Observing Systems (NERACOOS)	NOAA Integrated Ocean Observing System
Ex-173	Resource Monitoring	Best practices for acoustic telemetry applications to offshore wind impact assessment	Smithsonian Environmental Research Center	NOAA NEFSC
Ex-174	Species Distribution/Com position	Beacon Wind HMS Acoustic Telemetry Study	New England Aquarium	Equinor
Ex-175	Resource Monitoring	ROSA Offshore Wind Project Monitoring Framework and Guidelines	ROSA	ROSA

Project #	Research Category	Project Title	Lead Entity	Funder
Ex-176	Habitat Fragmentation/ Modification	Anticipating the winds of change: A baseline assessment of Northeastern US continental shelf surficial substrates	SMAST - UMass Dartmouth	NOAA RSA Program
Ex-177	Species Distribution/Com position	Mid-Atlantic MBON: Dynamic Biodiversity and Telemetry Data for a Changing Coast	MARACOOS/S mithsonian	IOOS Marine Life Program
Ex-178	Species Distribution/Com position	Black Sea Bass and Tautog telemetry monitoring in offshore wind energy areas	New England Aquarium	NOAA NEFSC
Ex-179	Habitat Fragmentation/ Modification	Improving methods and identifying best practices for defining and delineating low-relief hardbottom Essential Fish Habitat in wind energy areas – case study in Carolina Long Bay	National Centers for Coastal Ocean Science	BOEM Environmen tal Studies Program
Ex-180	Socioeconomic Impact	Expansion of Offshore Wind Energy in the United States: Safety and Insurance Cost Implications for Fisheries	NOAA SEFSC	NOAA SEFSC
Ex-181	Cumulative Impacts & Fisheries Management Implications	Unravelling the overlap and ecological consequences of wind energy, fisheries, and predation	NOAA NEFSC	NOAA NEFSC
Ex-182	Species Distribution/Com position	Evaluating the effects of offshore wind development in southern New England on fisheries biodiversity using environmental DNA	Gloucester Marine Genomics Institute	Commonwe alth of Massachuse tts
Ex-183	Habitat Fragmentation/ Modification	Offshore Wind Impact On Oceanographic Processes: North Carolina To New York	Tetra Tech/RPS	BOEM Environmen tal Studies Program
Ex-184	Socioeconomic Impact	Shoreside Revenue Impact Analysis	VIMS	Dominion Energy

Project #	Research Category	Project Title	Lead Entity	Funder
Ex-185	Species Distribution/Com position	Ecosystem connectivity in the Revolution Wind project area	University of Connecticut	Orsted
Ex-186	Species Distribution/Com position	ME Research Array - Zooplankton & Larval Lobster Survey	Maine DMR	Maine DMR
Ex-187	Species Distribution/Com position	ME Research Array - Active Acoustic Survey	Maine DMR	Maine DMR
Ex-188	Species Distribution/Com position	ME Research Array - HMS Monitoring	Maine DMR	Maine DMR
Ex-189	Habitat Fragmentation/ Modification	ME Research Array - Oceanographic Monitoring	Maine DMR	Maine DMR
Ex-190	Socioeconomic Impact	ME Research Array - Interviews on Historic Use	Maine DMR	Maine DMR
Ex-191	Species Distribution/Com position	ME Research Array - Bottom Trawl Survey	Maine DMR	Maine DMR
Ex-192	Habitat Fragmentation/ Modification	ME Research Array - Oceanographic Modeling of Turbine Scale Processes	Maine DMR	Maine DMR
Ex-193	Fisheries Engagement & Capacity Building	Analyzing the effects of Block Island Wind Farm on tourism and recreation	University of Rhode Island	BOEM Environmen tal Studies Program
Ex-194	Socioeconomic Impact	Socio-Economic Impact of Outer Continental Shelf Wind Energy Development on Fisheries in the U.S. Atlantic, Volume I — Report Narrative	NOAA NEFSC	BOEM Environmen tal Studies Program
Ex-195	Socioeconomic Impact	Socio-Economic Impact of Outer Continental Shelf Wind Energy Development on Fisheries in the U.S.	NOAA NEFSC	BOEM Environmen tal Studies Program

		Atlantic Volume II — Appendices		
Project #	Research Category	Project Title	Lead Entity	Funder
Ex-196	Habitat Fragmentation/ Modification	Southern New England Juvenile Fish Habitat Research Paper	Coonamessett Farm Foundation	BOEM Environmen tal Studies Program
Ex-197	Species Distribution/Com position	Spatial and Temporal Distributions of Lobsters and Crabs in the Rhode Island/Massachusetts Wind Energy Area	University of Rhode Island	BOEM Environmen tal Studies Program
Ex-198	Species Distribution/Com position	Spatial and temporal distributions of lobsters and crabs in the Rhode Island Massachusetts Wind Energy Area, 2018 update	University of Rhode Island	BOEM Environmen tal Studies Program
Ex-199	Data Management	ROSA Data Governance Program	ROSA	ROSA
Ex-200	EMF	Electromagnetic Field (EMF) Impacts on Elasmobranch (shark, rays, and skates) and American Lobster Movement and Migration from Direct Current Cables	University of Rhode Island	BOEM Environmen tal Studies Program
Ex-201	EMF	Electromagnetic Fields: Background and Potential Impacts of Offshore Wind Farms on Marine Organisms	BOEM Gulf of Mexico Regional Office	BOEM Environmen tal Studies Program
Ex-202	Sound/Vibration Impacts	Impulsive pile driving sound does not induce hearing loss in the longfin squid (Doryteuthis pealeii)	Woods Hole Oceanographi c Institution	BOEM Environmen tal Studies Program
Ex-203	Data Management	Linking multiple data sources to better describe fishing vessel activity on the Atlantic OCS	National Centers for Coastal Ocean Science	BOEM Environmen tal Studies Program
Ex-204	Survey Adaptation	Development of a Strategy to Evaluate NMFS Northeast	NOAA NEFSC	BOEM Environmen

		Fisheries Science Center (NEFSC) Fishery Resource Surveys Affected by Offshore Wind Development		tal Studies Program
Project #	Research Category	Project Title	Lead Entity	Funder
Ex-205	Sound/Vibration Impacts	Ocean Environmental Monitoring and Sound Propagation Study at Mid-Atlantic Shelfbreak Offshore Wind Area	Undetermined	BOEM Environmen tal Studies Program
Ex-206	Cumulative Impacts & Fisheries Management Implications	Qualitative Risk Assessment Approach Refining Acoustic Processes and to Explore the Inclusion of Cumulative Effect Analysis for Offshore Windfarm Construction and Operations	Undetermined	BOEM Environmen tal Studies Program
Ex-207	Resource Monitoring	Socioeconomic Monitoring Standards	NOAA NEFSC	NOAA NEFSC
Ex-208	Cumulative Impacts & Fisheries Management Implications	Resource Occurrence and Productivity in Existing and Proposed Wind Energy Lease Areas on the Northeast US Shelf	NOAA NEFSC	NOAA NEFSC
Ex-209	Species Distribution/Com position	Forage Fish Species Prefer Habitat within Designated Offshore Wind Energy Areas in the U.S. Northeast Shelf Ecosystem	NOAA NEFSC	NOAA NEFSC
Ex-210	Survey Adaptation	The spatial correlation between trawl surveys and planned wind energy infrastructure on the US Northeast Continental Shelf	NOAA NEFSC	NOAA NEFSC
Ex-211	Resource Monitoring	Monitoring fisheries resources at offshore wind farms: BACI vs. BAG designs	NOAA NEFSC	NOAA NEFSC
Ex-212	Resource Monitoring	Ecological indicators to monitor offshore wind	NOAA NEFSC	NOAA NEFSC

		interactions with fisheries resources		
Project #	Research Category	Project Title	Lead Entity	Funder
Ex-213	Survey Adaptation	Offshore wind project-level monitoring in the Northeast U.S. continental shelf ecosystem: evaluating the potential to mitigate impacts to long-term scientific surveys	NOAA NEFSC	NOAA NEFSC
Ex-214	Resource Monitoring	Small effect sizes are achievable in offshore wind monitoring surveys	RI DEM	RI DEM
Ex-215	Fishery Access & Gear Modification	Spatial analysis of fishing tows with Automatic Identification System (AIS) data to inform offshore wind layouts	Sea Risk Solutions	Undetermin ed
Ex-216	Species Distribution/Com position	The flyway construct and assessment of offshore wind farm impacts on migratory marine fauna	University of Maryland Center for Environmental Science	US Wind
Ex-217	Species Distribution/Com position	Southcoast Wind Trawl Survey	SMAST	Ocean Winds
Ex-218	Species Distribution/Com position	Southcoast Wind Ventless Trap Survey	SMAST	Ocean Winds
Ex-219	Species Distribution/Com position	Southcoast Wind Lobster Larvae Sampling	SMAST	Ocean Winds
Ex-220	Species Distribution/Com position	Southcoast Wind Dropcam Survey	SMAST	Ocean Winds
Ex-221	EMF	Southcoast Wind Inshore Whelk Survey	Inspire Environmental	Ocean Winds

Project #	Research Category	Project Title	Lead Entity	Funder
Ex-222	EMF	Southcoast Wind Inshore Telemetry Survey	Inspire Environmental	Ocean Winds
Ex-223	Species Distribution/Com position	Southcoast Wind HMS Acoustic Telemetry Survey	New England Aquarium	Ocean Winds
Ex-224	Habitat Fragmentation/ Modification	Southcoast Wind Benthic Monitoring Plan	Inspire Environmental	Ocean Winds

New Research Needs

No new research needs in this update.

Updates to the Webtool

- Renamed tabs
 - "Current Projects" to "Research Overview"
 - o "Database Center" to "FishFORWRD Full View"
- Fixed broken links for "Project Website"
- Added search capability for "Project Title"
- New resources added on Submit Project tab including ROSA Coordination Resources, ROSA Data Governance Program, and RWSC Planning Map

Next Steps

ROSA will continue to update and develop the database in two ways:

- Biannual updates will occur to add new projects, research needs, and updates/corrections submitted through the forms within FishFORWRD, shared through biannual meetings of the Offshore Wind Fisheries Funder Coordination, or shared through other coordination activities of ROSA. The next update is scheduled for July 2025.
- 2. In Summer 2024, ROSA and WSP completed a <u>Research Gaps Analysis</u>. This process includes consolidating duplicative research needs, matching current projects to research needs, and highlighting which research gaps remain. ROSA plans to hold a peer review of this Research Gaps Analysis in Summer 2025 and will update FishFORWRD with these results, and share with the research and funder community.

Background

The Responsible Offshore Science Alliance (ROSA) in conjunction with WSP USA, Inc. (WSP) has developed the ROSA Fish and Fisheries OffshoRe Wind Research Database

(FishFORWRD) to provide a platform for interested stakeholders to view and learn of new and existing funded research projects and stated research needs in the offshore wind fisheries space on the U.S. east coast. FishFORWRD catalogs all research, monitoring efforts, and stated research needs for offshore wind, fish, and fisheries. This database differentiates ongoing projects funded to examine offshore wind interactions from other programs that provide valuable data, but which haven't necessarily been designed to assess offshore wind impacts. The objective of FishFORWRD is to increase awareness of ongoing work, avoid duplication of efforts, and create a common understanding of research needs. This tool is meant for research funders, fisheries and offshore wind researchers, offshore wind developers, and the public.

FishFORWRD was first released on ROSA's website in 2022 as an excel sheet complete with tables of ongoing research and research needs, as well as a pivot table to provide a gaps analysis of which research needs were currently being addressed by funded projects and which research needs still remained. The associated report outlines how to use this first version of the databases and how the database was created. In an effort to make this information more accessible, ROSA and WSP have continued their partnership to 1. update the database with new research projects and research needs announced since 2022; 2. create an interactive webtool to view, filter, and download information held within FishFORWRD.

Through mining of relevant sources, effective communication with the inaugural ROSA Offshore Wind Fisheries Funder Coordination Meeting held in May 2024, and one-on-one meetings held with each offshore wind developer, FishFORWRD v2.1.0 was released featuring an updated list of funded research projects, each fisheries monitoring survey being conducted for each developers implemented Fisheries Monitoring Plan, and each relevant research need from 17 different published documents by federal agencies, states agencies, and public-private partnerships. Research projects are included within FishFORWRD if they are conducted within the U.S. East Coast and funded to investigate effects of offshore wind on fish and fisheries. FishFORWRD v2.1.0 shared this information on an interactive webtool that allows for filtering projects and research needs by location, receptor, methodology, funder, and more. Lastly, the webtool provides submission forms for new projects, new research needs, and any requested corrections. Please see the FishFORWRD v2.1.0 Executive Summary for information on database structure and suggested uses of FishFORWRD.