



SOUTHCOAST WIND

Project Update to MA Habitat Working Group

May 31, 2023

Business Proprietary and Confidential

SouthCoast Wind - Overview

- **Lease Area**

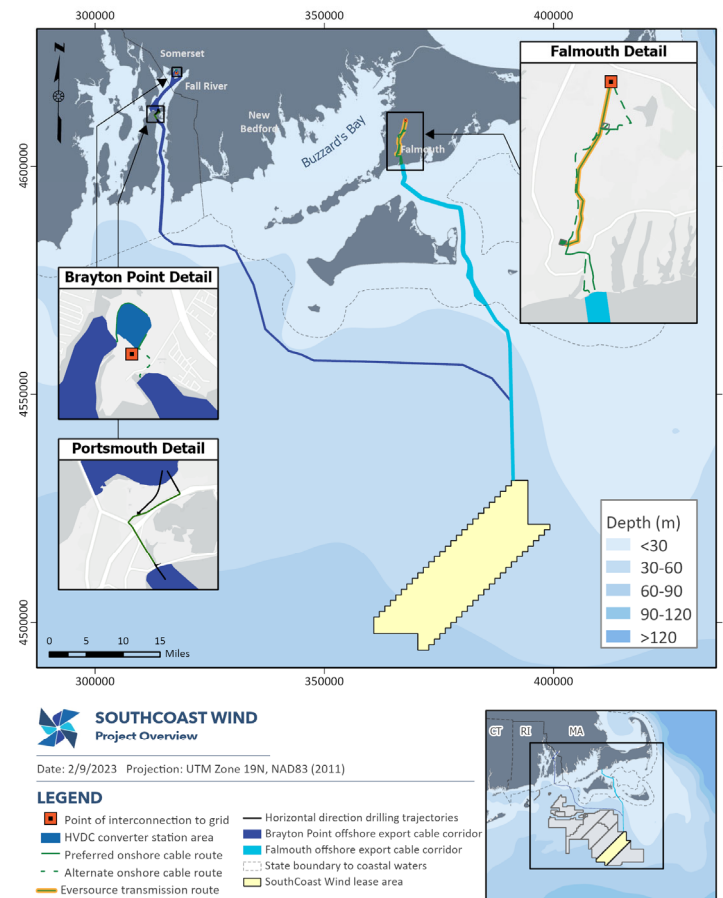
- 127,388 acres
- Up to 149 wind turbine/offshore substation platform positions
- 51 nautical miles from the RI coastline
- 1 x 1 nautical mile grid layout

- **Generation Potential**

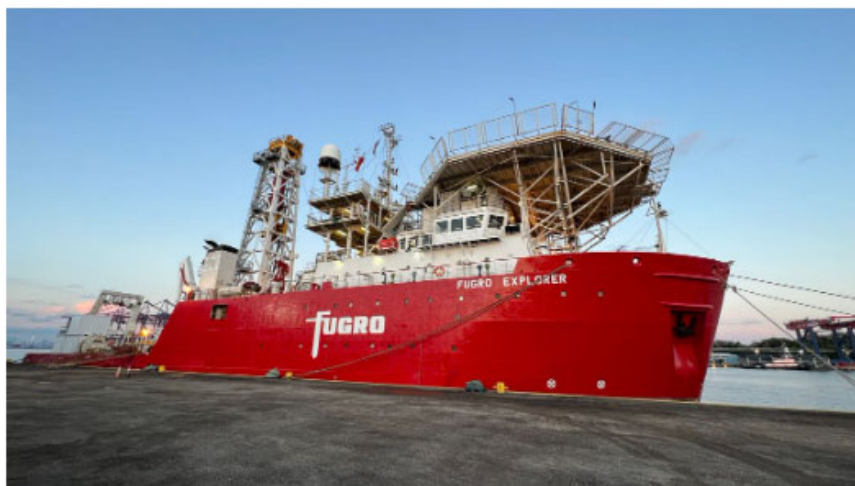
- Estimated 2,400 MW+ total generating capacity

- **Two points of interconnection**

- Brayton Point, Somerset, MA
- Falmouth, MA



Lease Area Surveys



Deep Water | Vessel: Fugro Explorer

Water Depths >~12m

Call Sign: 3FEV9

Phone: 713-489-3204

April – early August



Deep Water | Vessel: Minerva Uno

Water Depths >~12m

Call Sign: IZVM

Phone: 551-276-2658

May 29 – June 13

Surveys - Environmental Protection

BOEM Project Design Criteria (PDCs) and Best Management Practices (BMPs) for:

- Geophysical, geotechnical and biological surveys and metocean buoy deployment
- Atlantic OCS Region

PDC 1. Avoid Live Bottom Features

PDC 2. Avoid Spawning and Developmental Habitat of Sturgeon

PDC 3. Marine Debris Awareness and Elimination

PDC 4. Minimize Interactions with Protected Species during Geophysical Operations

PDC 5. Minimize Vessel Interactions with Protected Species

PDC 6. Minimize Risk During Buoy Deployment, Operations and Retrieval

PDC 7. Protected Species Observers

PDC 8. Reporting Requirements

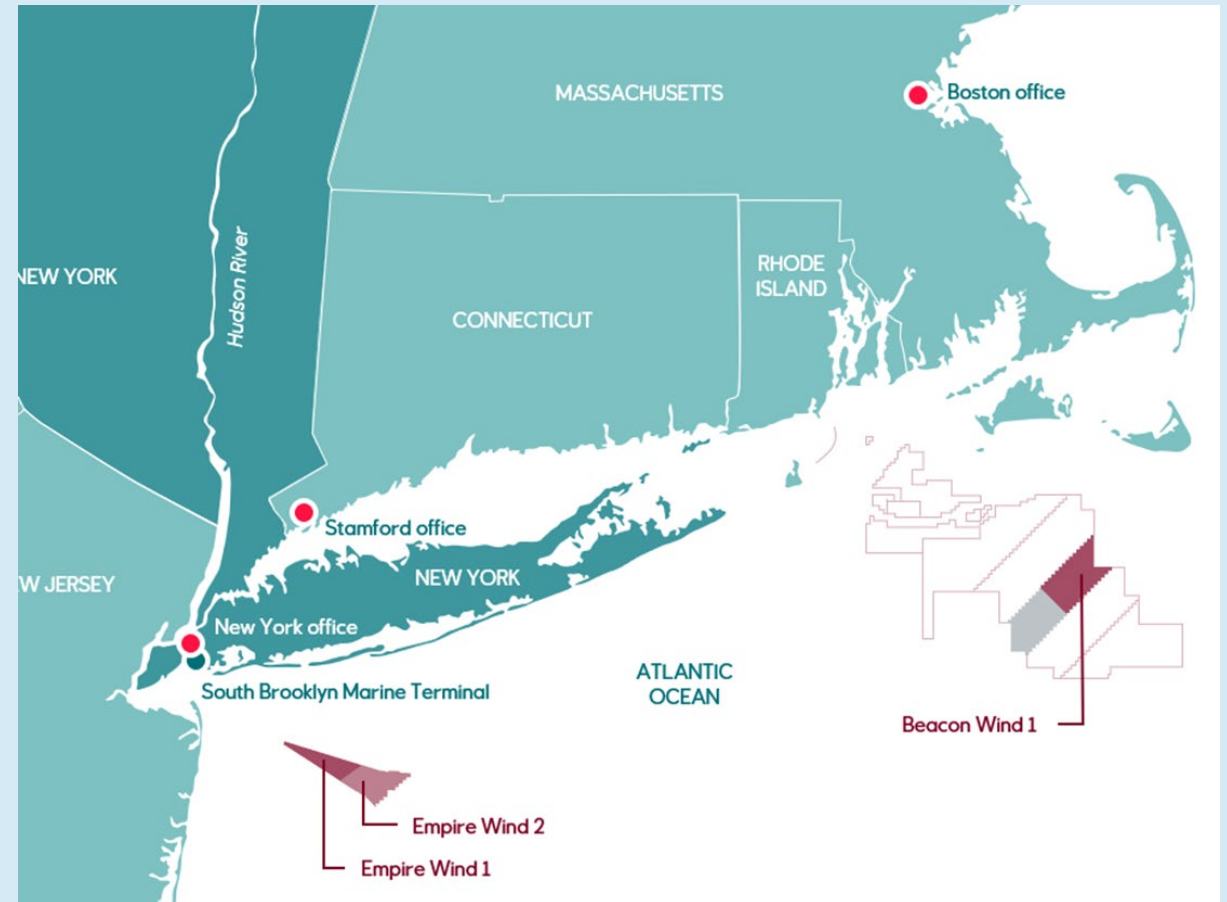
Beacon Wind

EEA Habitat Working Group
May 31, 2023



Beacon Wind | Agenda

- Beacon Wind Timeline
- Updates
- Questions?



Beacon Wind | Time line

2019 – Lease Acquired

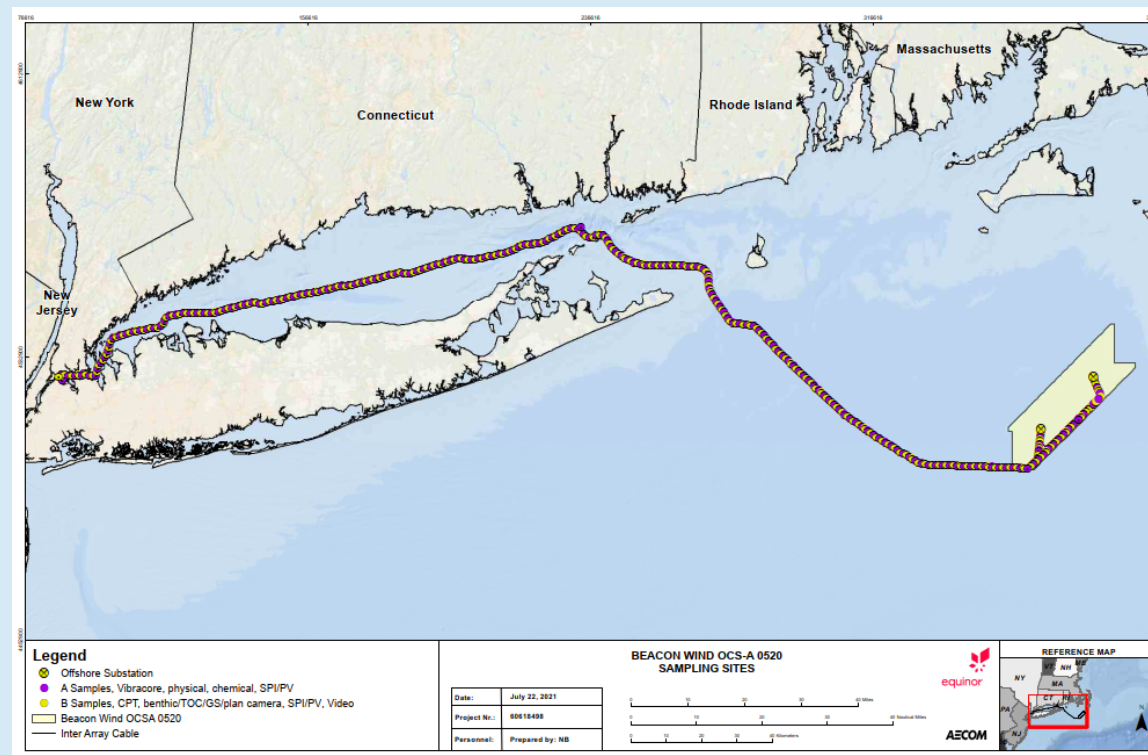
2020 – Aerial Wildlife and
Marine Survey
Commencement

2021 – Deployment of
Metocean Buoys

2022 – Federal & State
Permit Submission

2025 – Permits Approved

2025 – Construction and
Fabrication



FAST-41 (Federal)

<https://www.permits.performance.gov/permitting-project/beacon-wind>

Beacon Wind 1 Article VII (New York)

<https://www.beaconwind.com/environment-sustainability/article-vii/>

Beacon Wind | Time line

- Beacon Wind NOI expected Summer 2023
- 30-day comment period
- Public review of the COP available on BOEM's website
- Scoping meetings during 30-day period

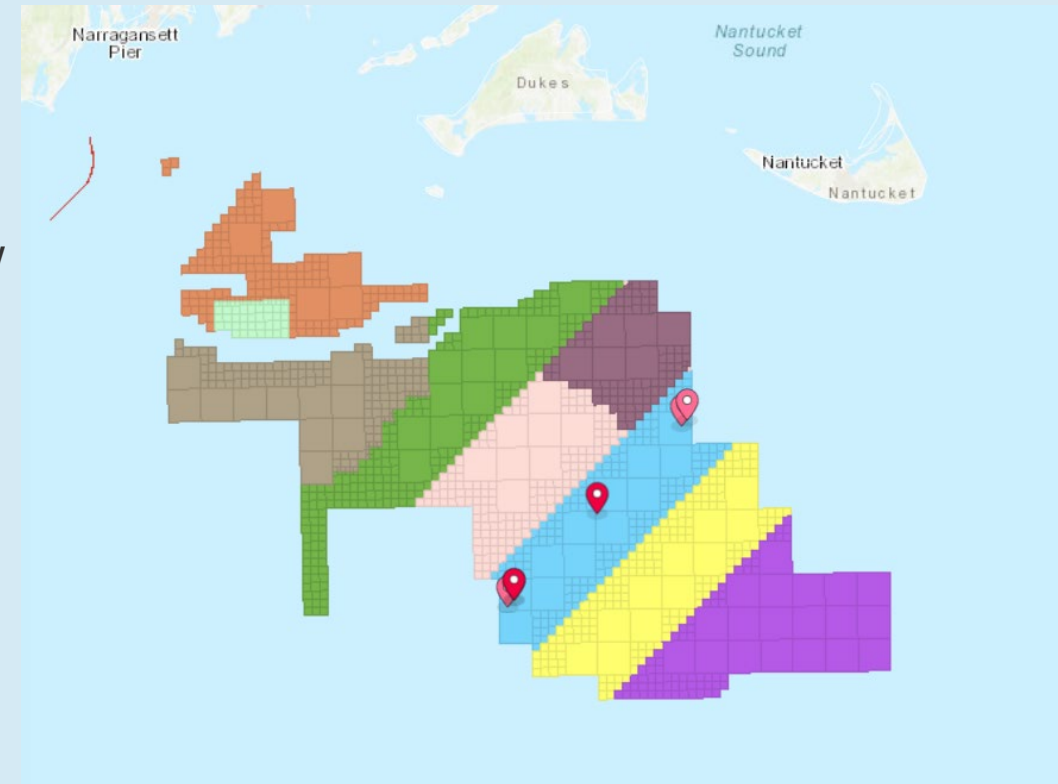


Survey Activity

- None since 2022

Metocean Buoys and Moorings in the Lease Area

- 6-month service visit completed May 2023
- Decommissioning of buoys/moorings planned for November 2023. Decommissioning plan under review by BOEM and BSEE.
- Bird tag data received on LiDAR and Metbuoy #2 downloaded and will be posted on Motus <https://motus.org/data/project?id=538>
- Reminder metoc data is accessible on [MARACOOS OceansMap](#)



Support for Monitoring of Key Commercial Fish Stocks and Wildlife of Conservation Concern in PSAs with NYSERDA for Beacon Wind 1 and Empire Wind 2

- To support regional monitoring of key regional commercial fish stocks to better understand how offshore wind energy development is potentially altering the biomass and/or distribution of these stocks;
- To support regional monitoring of wildlife of conservation concern to better understand how offshore wind energy development effects distribution and abundance of sensitive species;
- To advance the responsible development of the offshore wind energy industry

Update

- Monitoring Plan was approved by NYSERDA in March 2023.
- Regional Wildlife Science Collaborative (RWSC) and the Responsible Offshore Science Alliance (ROSA) will administer the nearly \$25 million in grants
- Requests for Proposals will be developed and issued in 2023, and contracts awarded in 2024



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SHAPING THE FUTURE OF ENERGY

Thank you for your attention. Questions?

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Ørsted Offshore North America

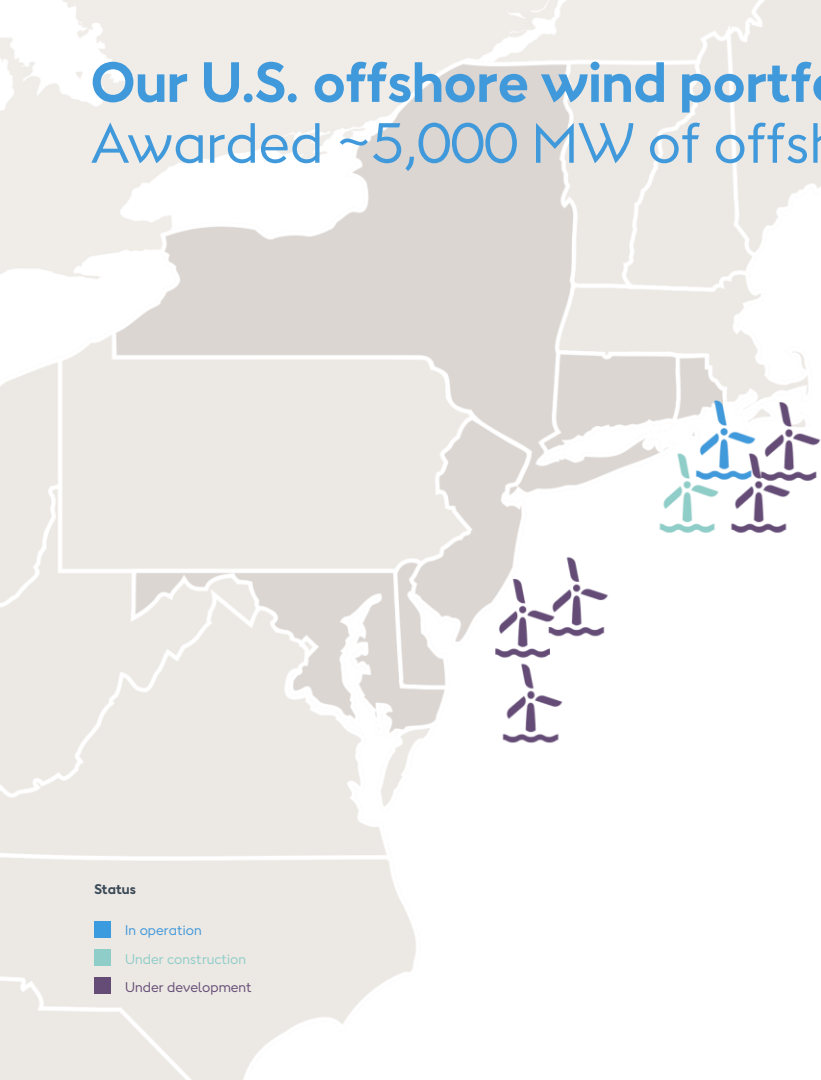
Northeast Program Update



MA EEA Habitat Working Group
Meeting on Offshore Wind
May 2023

Our U.S. offshore wind portfolio

Awarded ~5,000 MW of offshore capacity



In Operation

Block Island Wind Farm: 30MW

Under construction

South Fork Wind: 50/50 JV w/ Eversource, 130MW

Awarded

Revolution Wind: 50/50 JV w/ Eversource, 704MW

Sunrise Wind: 50/50 JV w/ Eversource, ~924MW

Ocean Wind 1: 75/25 JV with PSEG, 1,100MW

Ocean Wind 2: 1,148MW

Skipjack Wind: 966MW

as of April 2023

Orsted Northeast Program

50/50 JV with Eversource

South Fork Wind (OCS-A-0517)

- NY Article VII approved March 2021
- COP Approval January 2022
- Onshore: Construction Commenced
- **Offshore: Cable Install March 2023; Foundations June 2023**

Revolution Wind (OCS-A-0486)

- **Federal Consistency (May 2023)**
- **RIDEM Water Quality and Dredge Permit April 2023**
- RI CRMC/RIDEM permits December 2022
- **DEIS September 2022, FEIS July 2023**

Sunrise Wind (OCS-A-0487)

- CECPN Nov 2022, EMCP Nov 2022
- NY Article VII Settlement meetings Sept 2022
- **EPA Draft NPDES Permit May 2023**
- **Research Share Day May 9, 2023**
- **DEIS December 2022, FEIS July 2023**



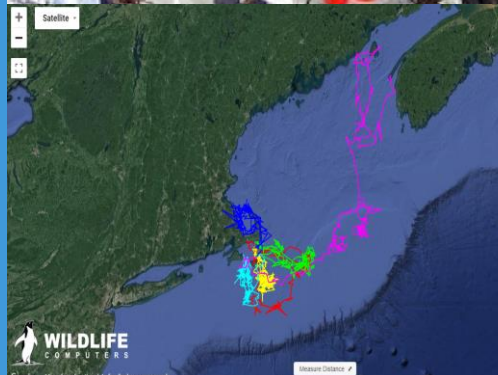
Northeast Program Update

MARINE MAMMAL LONG TERM PAM

- **SFW:** Two Long Term archival recorders (Sept 2022)
- **REV:** Long Term recorder deployments anticipated in 2024
- **SRW:** Long Term recorder deployments anticipated in 2024

MARINE MAMMAL & SEA TURTLE VOLUNTARY STUDIES

- **REV**
 - **Mystic Aquarium/Dr. Tracy Romano:** studies include laboratory e-DNA and stress studies and seal and ST tagging
- **SRW**
 - **PINNI-POD (AMSEAS/Rob DiGiovanni):** 10 tags deployed to date on harbor and 6 on gray seals
 - **Syracuse U/Susan Parks:** acoustic density estimation study using Cape Cod data and Opportunistic Focal data collection of large whales
 - **ECO-POD (Stony Brook U/Joe Warren and Lesley Thorne):** Desktop zooplankton studies underway, 4 field surveys completed to date
 - **Thermal Imaging A.I. (Stony Brook, Lesley Thorne):** Developing and evaluating benchmarking criteria to test thermal imaging systems and autodetection of cetaceans – final report received
- **SFW**
 - **PAM support and Improvement (New England Aquarium):** Use predictions from models for North Atlantic right whales to provide context needed to understand collected PAM data

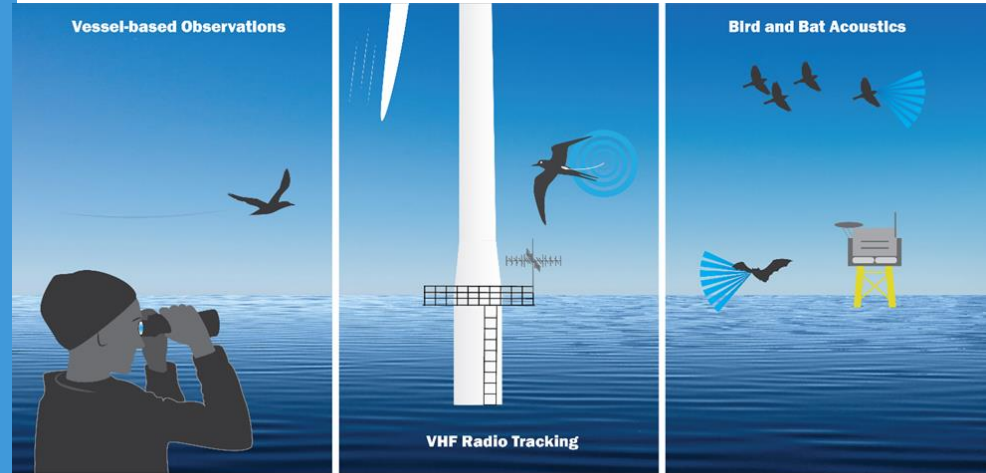


*Photos courtesy of JASCO Applied Sciences; Stony Brook U; Stockton U; AMSEAS/Wildlife

Northeast Program Update Bird and Bat Monitoring

Post Construction Monitoring Plan

- **SFW (PCM Plan [PCMP] submitted to BOEM)**
 - **PCMP is near final BOEM approval**
 - MOTUS receiving stations currently being installed on OSS and have been procured for WTG platform
 - Avian and bat acoustic recorders currently being installed on OSS; SMART bat recorder has been procured for WTG (platform and nacelle)
 - **Refurbishment of 2 onshore MOTUS stations (Block Island) - initiated and will be completed in June**
 - Worker Incidental Reporting System (WIRS) - training materials in development
 - Support for Roseate Tern tagging – evaluating opportunities
- **REV/SRW (PCM Frameworks submitted to BOEM)**
 - Draft PCMP are being developed for submission to BOEM
 - MOTUS receiving stations and bird & bat acoustic monitors are being procured
 - Evaluation of potential ESA avian tagging study(ies) for support is underway
 - Radar monitoring (horizontal and vertical) remains under consideration and likely to occur
 - WIRS for dead/injured birds & bats will mirror the SFW program



South Fork Bird and Bat Post-Construction Monitoring

Northeast Program Update

FISHERIES SURVEYS

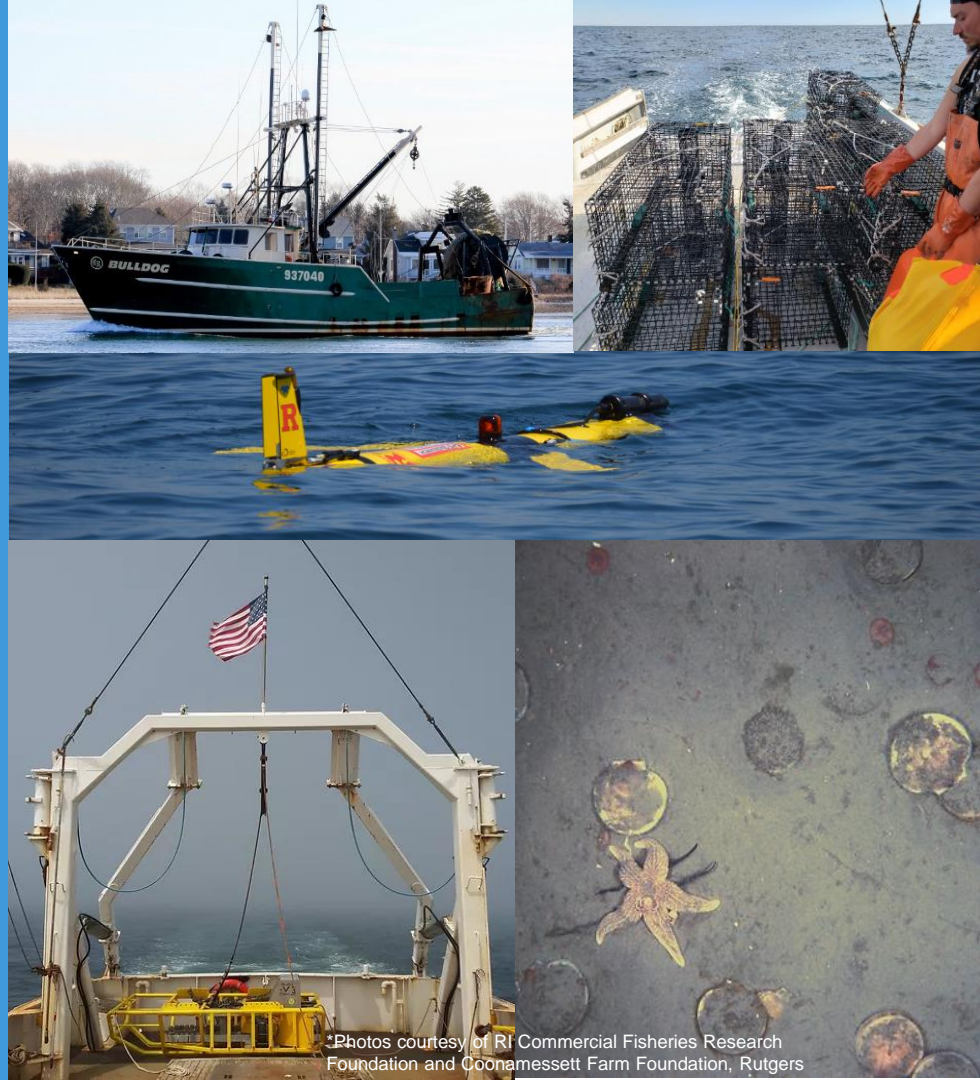
- **SFW (ongoing)**
 - Beam Trawl
 - Fish Pot Survey
 - Ventless Trap Survey
 - **Cod Spawning Monitoring (PAM) - completed**
 - Trawl Survey (Inshore, NY State)
- **REV/SRW (delayed by permitting)**
 - Bottom Trawl Survey
- **REV**
 - **Ventless Trap Survey (May 2023)**
 - Cable Route Ventless Trap Survey (Jan 2023)
 - **Quahog survey (summer 2023)**
- **SRW (ongoing)**
 - HABCAM survey

ACOUSTIC TELEMETRY SURVEYS (ongoing)

- Highly Migratory Species (SFW/REV/SRW- 32 receivers deployed)
- Export Cable (SFW-underway/SRW-array deployed and ~80 sharks tagged to date)

BENTHIC SURVEYS (planned)

- Soft and Hard Bottom Habitats (SFW/REV)
- Soft Bottom Habitats (SRW)
- **SAV mapping (REV, summer 2023)**



*Photos courtesy of RI Commercial Fisheries Research Foundation and Coonamessett Farm Foundation, Rutgers

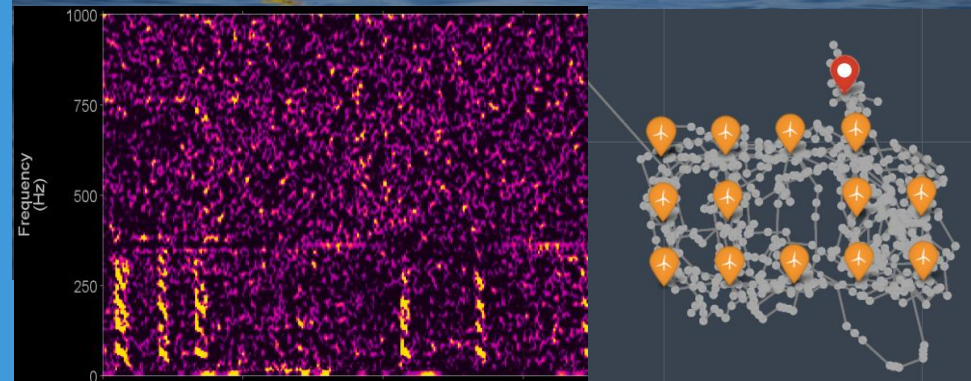
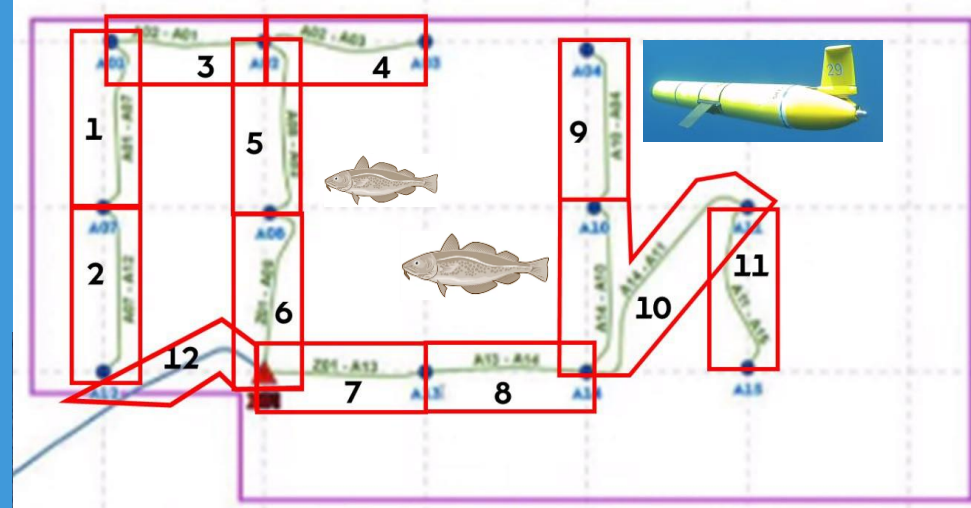
Northeast Program Update

SPAWNING COD MONITORING INITIATIVE

- Part of SFW permit condition was to monitor for aggregations of spawning cod between Nov 1 – March 30 each year where cable installation and foundation prep activities occur
- Partnered with JASCO and Rutgers University
- Traditional monitoring tools
 - Rod and Reel
 - Acoustic telemetry
 - Trawl
- Proposed and Approved Monitoring tool for SFW
 - Glider based PAM
 - Onboard automated cod grunt detector
 - Detections are sent to onshore analysts to verify daily
- Each construction zone was monitored
 - Threshold: 2 or more grunts per zone within 24 hrs.
 - Adaptive management triggered and activity would be delayed in any zone where cod were detected

Results

- Deployments occurred between March 5 – 23, 2023
- Glider maintained track and continuous communication for the entirety
- 4 cod grunts were detected and confirmed, but nothing exceeded the threshold



Thank you

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