September 29, 2023

Funds Overview

Sunrise Wind, Fisheries Compensatory Mitigation

Ørsted | EVERSOURCE

Commercial and Community Funds

Commercial Fisheries Compensation Fund

Objective: Direct financial compensation to commercial and for-hire fishers

Eligible Parties: Commercial and for-hire fishers

Administration: Claims process managed by third party (TAP) with support from fisheries liaison

Process:

- Sunrise Wind funds escrow account
- Eligibility period, if used by TAP, to pre-qualify fishers based on historical activity in the Project area
- Eligible fishers submit claims to TAP
- TAP processes claims and directs compensation from escrow

Coastal Community Fund

Objective: Funding to benefit the general fishing community and associated industries

Eligible Parties: Fishing community and associated industries

Administration: Escrow and general administration managed by independent council of fisheries representatives in concert with MA CZM

Process:

- Sunrise Wind funds escrow account
- Eligible parties submit proposals for grants and/or direct payments
- Independent council of fisheries representatives advises DMF Director on proposals to be funded
- DMF directs funds from escrow
- Periodical review to assess distribution among commercial and community funds

Navigational Enhancement and Training Program

Objectives: 1) enable commercial fishermen and for-hire vessels to acquire navigation equipment through a grant/voucher system and 2) provide training and experiential learning opportunities to those navigating the Orsted/Eversource lease areas.

Navigation Equipment

- Fishers eligible for the Commercial Fisheries Compensation Fund will automatically be eligible for a voucher to purchase navigation equipment.
- One-time grants in the form of a voucher of up to $10,000 will be available for each commercial vessel and inspected for-hire vessel and $5,000 for any uninspected for-hire vessel that does not already have navigation equipment.
- The process will be administered by the Technical Assistance Provider (TAP).

Professional Training & Experiential Learning

- Private anglers, charter captains, or commercial fishing industry members with a valid saltwater fishing license (federal or State) may attend a simulator session held at USMRC in Middletown, RI. Attendees will have the opportunity to navigate a vessel through a windfarm and experience various scenarios such as night conditions, adverse weather, and vessel crossings.
- Fishers in the commercial, for-hire, or party industries may attend one eligible professional training of their choosing up to $1,000 per person. Eligible trainings include but are not limited to a captain's course, license upgrade, or rules of the road refresher.

Sunrise Wind - Compensatory Mitigation Package

Commercial Fisheries Compensation Fund	$9,788,000
Coastal Community Fund	$1,000,000
Navigational Enhancement & Training Program	$500,000
Total Compensation (present value)	$11,288,000

Avangrid A member of the Iberdrola Group

New England Wind

Lease Area OCS-A 0534

Commercial and For-Hire Fisheries Assessment & Mitigation

September 2023

Project Overview

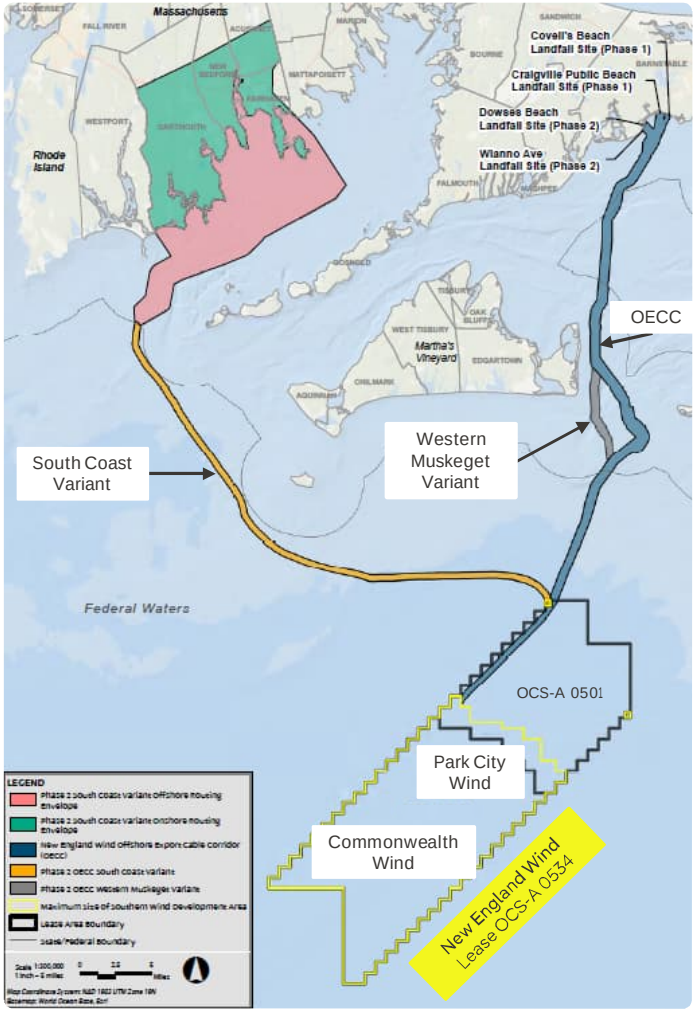
New England Wind includes offshore renewable wind energy facilities in Lease Area OCS-A 0534, along with associated offshore and onshore cabling and onshore substations

Two phases with a total maximum of 130 wind turbine generator (WTG) and electrical service platform (ESP) positions in the Lease Area

- Phase 1 includes Park City Wind
- Phase 2 includes Commonwealth Wind

Five offshore export cables within the Offshore Export Cable Corridor (OECC)

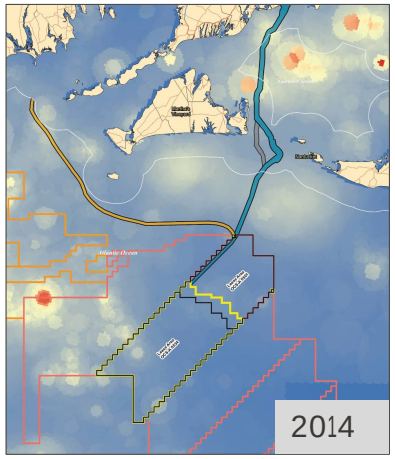
- Phase 2 includes two OECC variants

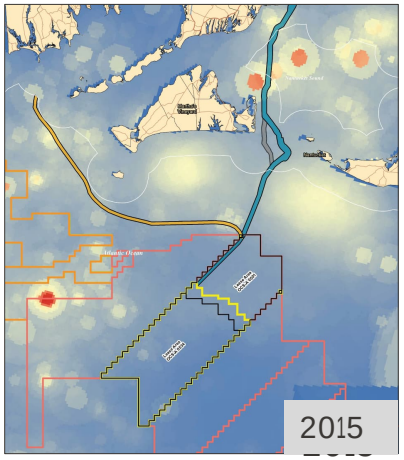


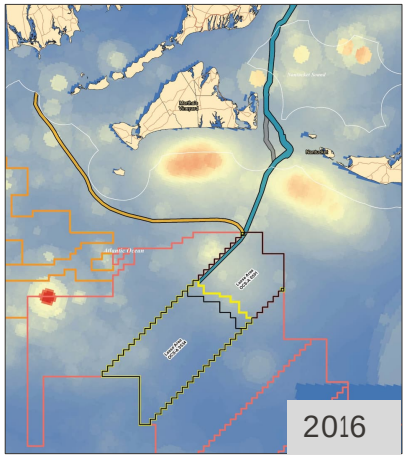
Commercial Fishing Revenue

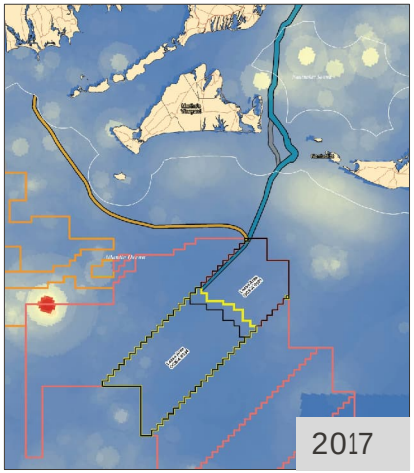
MA/RI Lease Areas	Annual Average Revenue per km^2 (2008-2021; 2021$)
Lowest Value	$534
New England Wind	$1,301
Average Value	$2,123
Highest Value	$4,700

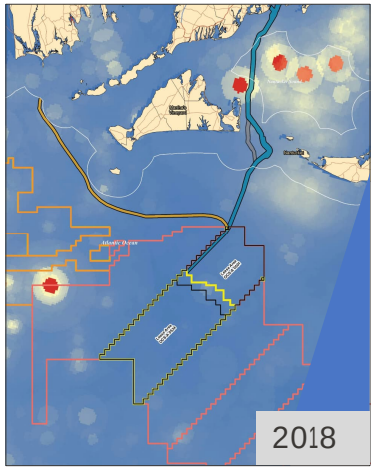
New England Wind	Baseline Annual Average Landing (2008-2021; pounds)	Baseline Annual Average Revenue (2008-2021; 2021 dollars)
Lease Area	530,444	$534,602
OECC	133,394	$209,331

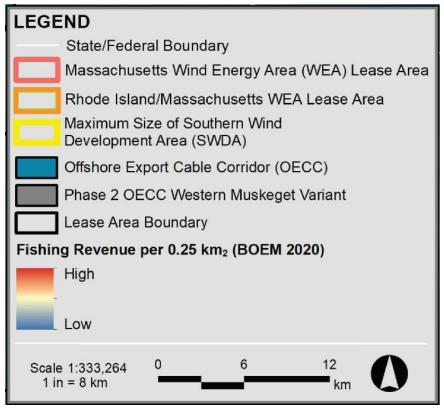








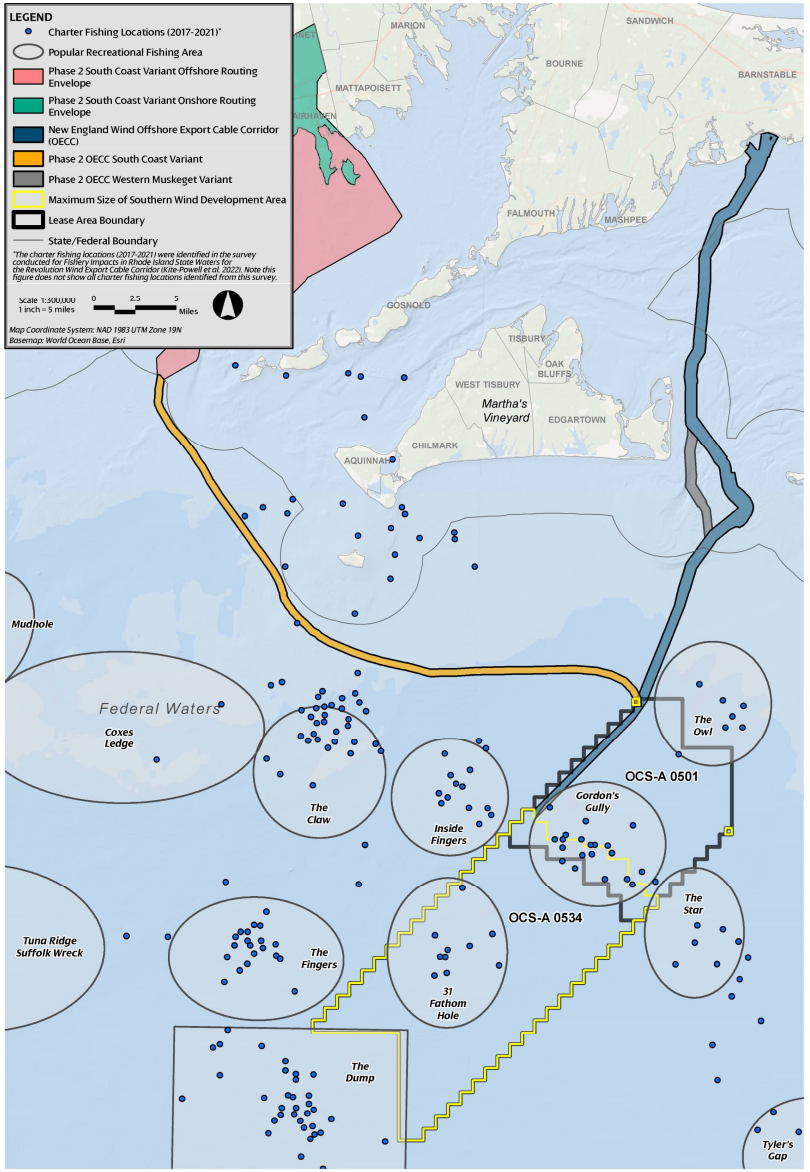




For-Hire Recreational Fisheries

Economic exposure estimate for MA for-hire fisheries based on an extrapolation of data from 2023 WHOI report:

- Percent of charter fishing locations from 2022 WHOI survey in Lease Area = 3.7%
- Annual economic exposure of MA-based for-hire fishing vessels in the Lease Area = $105,729



New England Wind Economic Impact Methodology - Massachusetts

Project Phase	Project Area	Assumptions/Effects	Duration
Construction	Lease Area	All (100%) commercial and for-hire charter revenue lost	3 years
	OECC	All (100%) commercial revenue lost from 3.14 km^2 safety buffer around cable installation activities	2 years
O&M	Lease Area	Draft BOEM guidance: • Yr 1: all (100%) commercial revenue lost • Yr 2: 80% of commercial revenue lost • Yr 3: 70% of commercial revenue lost • Yr 4: 60% of commercial revenue lost • Yr 5: 50% of commercial revenue lost <u>Plus:</u> • Yrs 6-30: 5% of commercial revenue lost • Yrs 1-30: 1% of for-hire charter revenue lost	30 years
	OECC	None	n/a
Decommissioning	Lease Area	All (100%) commercial and for-hire charter revenue lost	3 years
	OECC	All (100%) commercial revenue lost from 3.14 km^2 safety buffer around cable decommissioning activities	2 years

New England Wind Fisheries Mitigation Package - Massachusetts

Direct Compensation: $5,859,471 (net present value)

- Includes application of upstream and downstream multipliers to account for potential impacts to shoreside businesses
- Disbursement of funds will be tied to financial close of each Phase of New England Wind
- Funds will be paid into either:
  - An escrow account managed by a third-party administrator; or
  - A regional fund (if established and mutually agreed)

Additional Funding to Support Commercial and For-Hire Charter Fishing Operations: $1,500,000 (net present value)

- Purpose to include, but would not be limited to, grants, training programs, research initiatives, or a navigational/safety equipment support program
- Disbursement of funds will be tied to financial close of each Phase of New England Wind
- Funds to be paid to state or directly to entities or accounts established to hold and distribute such funds

Total Mitigation: $7,359,471

Contact Us

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A member of the
Iberdrola Group

BOEM Bureau of Ocean Energy Management

Munitions and Explosives of Concern (MEC)/Unexploded Ordnance (UXO)

Guidance for Risk Assessments and Site Clearance Activities

Renee Richards | OREP Engineering and Technical Review Branch

MA FWG September 29, 2023

Outline

- Regulations
- Definitions
- Risk Mitigation Framework
  - Hazard Assessment
  - Risk Assessment
  - Risk Validation
  - Risk Mitigation
- Guidance and next steps
- Questions

Relevant Regulations and Guidelines

- 30 CFR § 585.627(a)(1)

What information and certifications must I submit with my COP to assist the BOEM in complying with NEPA and other relevant laws?

(a) You must submit with your COP detailed information to assist BOEM in complying with NEPA and other relevant laws. Your COP must describe those resources, conditions, and activities listed in the following table that could be affected by your proposed activities, or that could affect the activities proposed in your COP, including:

(1) Hazard information….. Meteorology, oceanography, sediment transport, and shallow geological or **manmade hazards**.

BOEM MEC-UXO White Paper

- "Supporting National Environmental Policy Act Documentation for Offshore Wind Energy Development Related to Munitions and Explosives of Concern and Unexploded Ordinances" White Paper
  - Overview of the typical steps taken by a lessee in consideration of MEC/UXO when preparing a COP and the mitigation options, if MEC/UXO are found within a project area.
  - The potential impacts of those mitigation measures are summarized and can be incorporated by reference in BOEM's environmental impact statements (EIS) for proposed offshore wind projects.

Definition

- There is a possible risk of encountering hazardous military munitions or munitions constituents that are unexploded, abandoned or discarded. These include:
  - Discarded military munitions (DMM): munitions that have been improperly abandoned
  - Explosive hazards: explosives present that may detonate
  - Military munitions: confined gaseous, liquid and solid propellants, explosives, chemical agents, etc.
  - Munitions of Explosive Concern (MEC): military munitions present in high enough concentrations to pose an explosive hazard
  - Munitions constituents: materials originating from hazards listed above that may have degraded or broken down.
  - Unexploded ordnance (UXO): primed, fused, armed, and otherwise prepared for action and remains unexploded whether by malfunction, design or other cause.

ALARP and Risk Management

- As Low As Reasonably Practical (ALARP) describes the acceptable risk threshold for UXO site clearance.

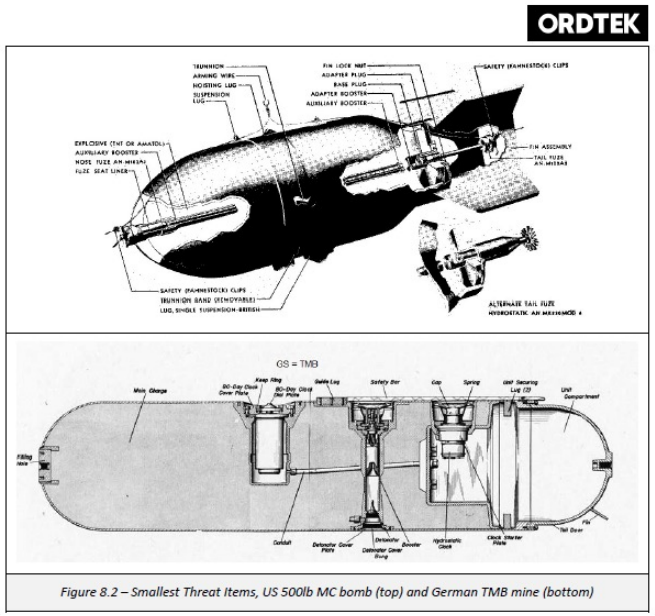
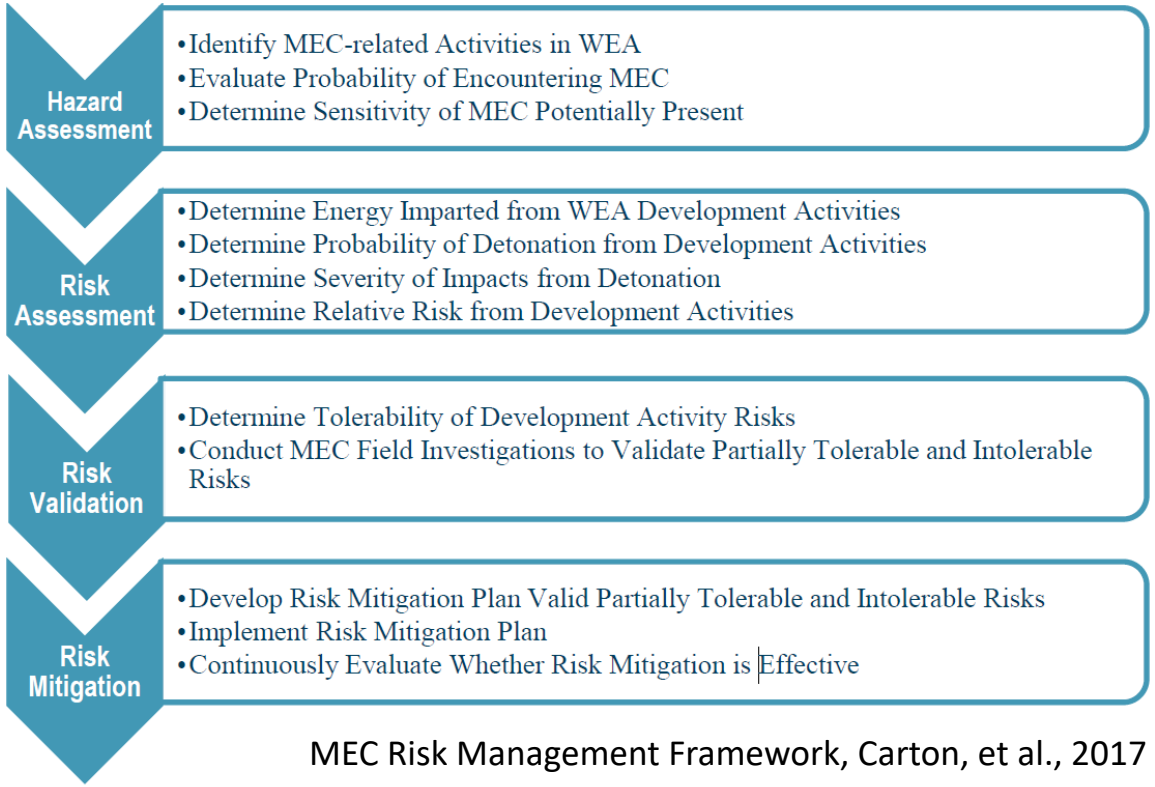


Figure 8.2 – Smallest Threat Items, US 500lb MC bomb (top) and German TMB mine (bottom)

Figure 5-1: MEC Risk Management Framework



MEC Risk Management Framework, Carton, et al., 2017

- The Risk Mitigation Framework is referenced in BOEM's MEC-UXO White Paper

https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/MEC-UXO%20White%20Paper.pdf

Smallest Threat Item and MEC/UXO Detection

- Smallest threat item to reach ALARP is determined based on geophysical data limitations and environmental conditions.
- Geophysical surveying is used for anomaly detection
  - Characterization of seafloor is done by analyzing reflectivity (changes in velocity), shape (bathymetry), and shallow sub-seafloor.
  - A combination of datasets (multi-beam echo sounder, side-scan sonar and magnetic sensors) can provide information about anomalies and target discrimination
- Environmental conditions can play a role in determining MEC/UXO risks
  - Expected MEC types based on historical activities
  - Depth of burial
  - Site conditions
  - Other potential anthropogenic hazards/debris

Hazard Assessment

- MEC/UXO Risks and Mitigations are required to be described in the Construction and Operations Plan (COP) and are typically submitted as a Desktop Study (DTS). DTS relies on historical information and publicly available datasets. Information is often provided to BOEM/BSEE as proprietary appendices to the COP or as part of the Marine Site Investigation Report (MSIR).
- Desktop Study includes the following information:
  - Historical activities related to MEC/UXO
  - List of MEC/UXO in the project area including size and weight
  - Smallest detectable threat item
  - Expected ordnance burial
  - Ordnance mitigation and assumptions
  - Project specific activities
  - Step-wise site clearance process that describes the level of effort needed to reach ALARP risk levels including information on recommended survey activities and purpose of each activity.
  - Acknowledgement of ALARP Certification
  - Residual Risk Management Plan

Risk Assessment

- Options for Mitigation
  - Re-route inter-array cables/export cables and re-position WTG locations (avoidance)
  - Relocate or removal (“lift and shift”)
  - Detonate/incinerate in place
- Analysis on likelihood of detonation, environmental effects and mitigation to minimize impact on marine fauna and includes the following information:
  - Anticipated MEC/UXO charge size
  - Blast mitigation measures
  - Acoustic thresholds
  - Environmental effects on marine mammals, sea turtles, fish habitats, etc.
- Findings in the Risk Mitigation Strategy are incorporated in BOEM’s Environmental Impact Statement for each project.

Risk Validation

- Investigation Survey Plan and Report
  - Identify potential MEC/UXO (pUXO) detections for areas identified in the Desktop Study with moderate to high risk.
  - Report includes summary of activities conducted, survey findings, description of further recommended investigations such as an identification study, and possible site clearance activities.
- Identification Survey Plan and Report
  - Specialized MEC/UXO study to identify pUXOs described in the investigation survey report.
  - Typically relies on ROV and onboard UXO specialist, though divers have been proposed in shallow waters.
  - Report includes description of activities conducted, survey findings, confirmed UXO or debris/other, and recommendations for managing confirmed UXO.

Risk Mitigation

- Survey Results Implementation Report
  - Lessee must document the implementation of the mitigation methods described in the Desktop Study, COP, and survey results as part of Facility and Design Report/Fabrication and Installation Report.
- ALARP Certificate Documentation
  - ALARP Certificates are required to provide evidence to the project stakeholders and contractors that the MEC Risk has been mitigated to a As Low As Reasonably Practicable (ALARP) level.
- The lessee is to provide BOEM and BSEE a Munitions Response Plan and Munitions Response After Action Report.
- Residual risks persist in the project areas, and it is possible that an area has been cleared of pUXO and there is an unexpected UXO discovery that requires removal or disposal. This is most likely to be encountered during construction and installation.

Confirmed MEC/UXO Notification Process

- In the event of a confirmed MEC/UXO, the Lessee must coordinate with the U.S. Coast Guard (USCG) to ensure the MEC/UXO discovery is published in the next version of the Local Notice to Mariners (LNM) for the specified area and provide BOEM and BSEE a copy of the LNM once it is available. The Lessee must also provide the following information to BOEM (BOEM_MEC_Reporting@boem.gov), BSEE (env-compliance-arc@bsee.gov), and relevant agency representatives within 24 hours of discovery for seabed clearance activities, construction, and operations:
  - Narrative describing activities that resulted in the identification of confirmed MEC/UXO;
  - Activity at the time of discovery (e.g., survey, seabed clearance, cable installation);
  - Location (latitude [DDD°MM.MMM'], longitude [DDD°MM.MMM]), lease area, and block;
  - Water depth (meters);
  - MEC/UXO type, dimensions, and weight;
  - MEC/UXO vertical position (description of exposure or estimated depth of burial).

Surveying and Reporting Timing

- MEC/UXO Surveys and Reports can be received and reviewed throughout the Construction and Operations Plan (COP) process depending on the project and survey schedule.
  - Proposed mitigation measures must be included in the Construction and Operations Plan and appropriately assessed in the Environmental Impact Statement (EIS).
  - MEC/UXO mitigation is considered a seabed preparation activity and therefore mitigation cannot be performed until the COP is approved.

Cooperating Agencies and CMTS Offshore Energy Facilitation Task Team

- BOEM and BSEE have coordinated with many government agencies throughout this process (USACE, DOD, USCG, NOAA, EPA, and others).
- The U.S. Committee on the marine Transportation System (CMTS) established a task team to coordinate with Federal agencies to:
  - Improve Federal marine transportation system coordination and policies
  - Develop outcome-based goals for the marine transportation system
  - Integrate marine transportation with other modes and other ocean uses
  - Recommended strategies and plans to maintain and improve the marine transportation system
- CMTS has published "Proposed National Guidance for Industry on Responding to Munitions and Explosives of Concern in U.S. Federal Waters" in the Federal Register on August 25, 2023.

Resources

- Unexploded Ordnance Dataset, National Oceanic and Atmospheric Administration (NOAA) (see link).
- Munitions and Explosives of Concern Survey, Methodology and In-Field Testing for Wind Energy Areas on the Atlantic Outer Continental Shelf, Carton, et al., 2017 (see link).
- Supporting National Environmental Policy Act Documentation for Offshore Wind Energy Development Related to Munitions and Explosives of Concern and Unexploded Ordinances, OCS Study, BOEM 2022-012 (see link).
- Proposed National Guidance for Industry on Responding to Munitions and Explosives of Concern in U.S. Federal Waters (see link).
- Managing UXO Risk in Offshore and Renewables Projects (see link).

Questions?

BOEM

Bureau of Ocean Energy Management

BOEM.gov

Renee Richards | renee.Richards@boem.gov

BUREAU OF SAFETY & ENVIRONMENTAL ENFORCEMENT (BSEE)

CMTS Offshore Facilitation Task Team

Jonathan Fraser

September 29th, 2023

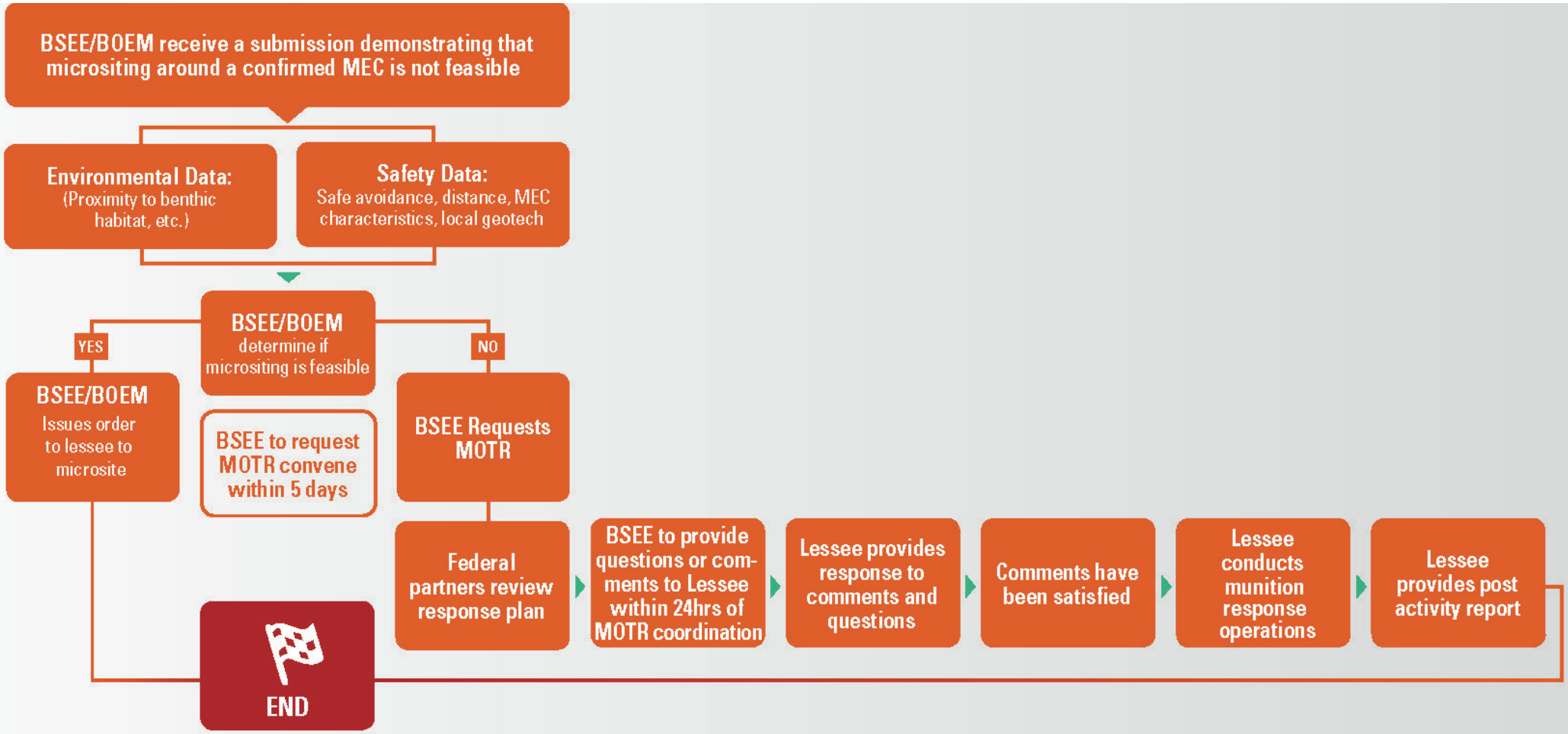
11:00 – 12:00 pm ET

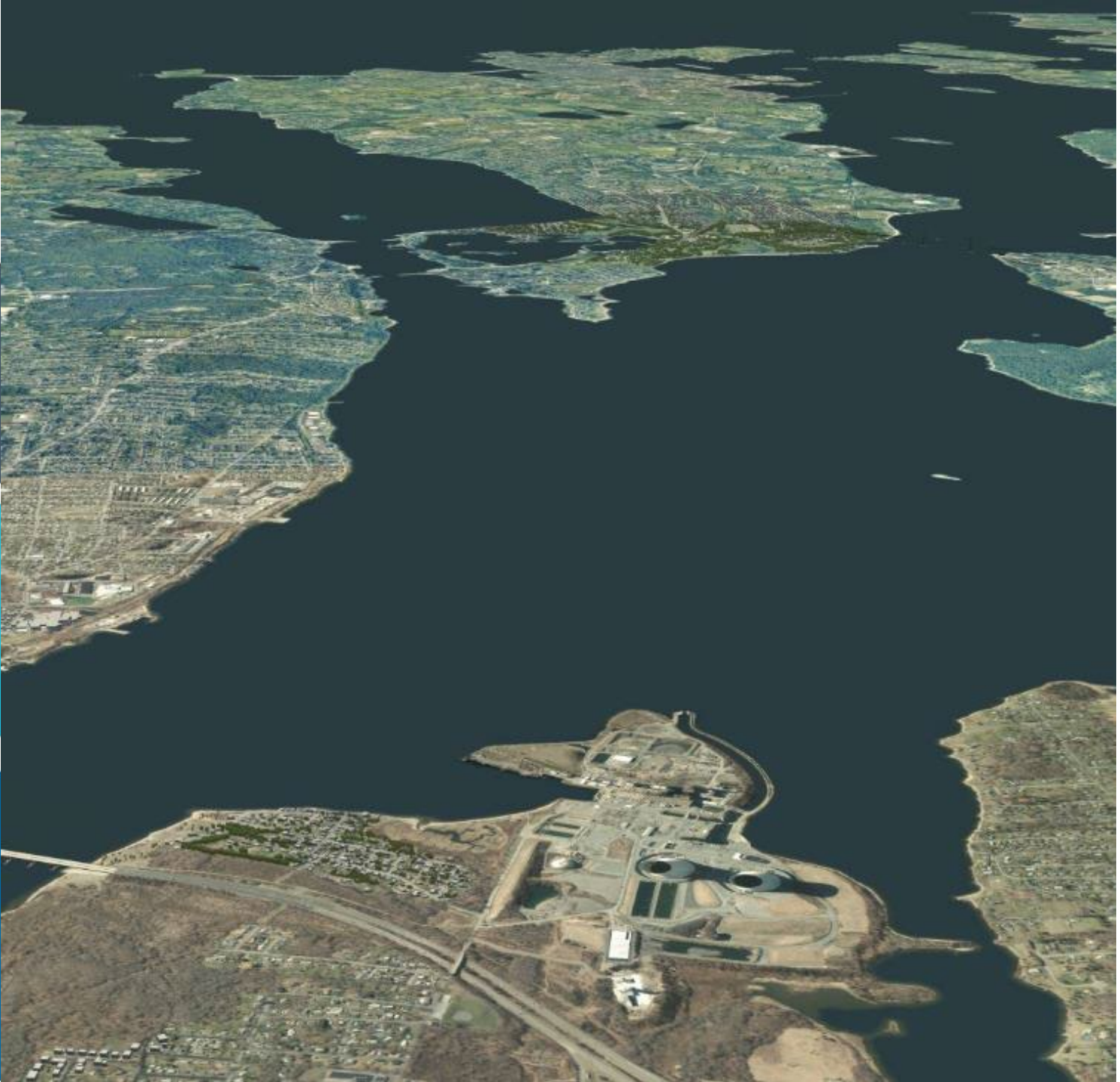
CMTS National Guidance Overview

Established in September 2021 with a mission: “facilitating the development of Federal guidance on munitions and explosives of concern mitigation within offshore wind energy leases and supporting new and emerging issues”

- https://www.cmts.gov/topic-offshore-energy/

PHASE 2


BSEE/BOEM receive a submission demonstrating that micrositing around a confirmed MEC is not feasible
Environmental Data: (Proximity to benthic habitat, etc.)
Safety Data: Safe avoidance, distance, MEC characteristics, local geotech
BSEE/BOEM determine if micrositing is feasible
YES
NO
BSEE/BOEM Issues order to lessee to microsite
BSEE to request MOTR convene within 5 days
BSEE Requests MOTR
Federal partners review response plan
BSEE to provide questions or comments to Lessee within 24hrs of MOTR coordination
Lessee provides response to comments and questions
Comments have been satisfied
Lessee conducts munition response operations
Lessee provides post activity report
END



SOUTHCOAST WIND

Baseline Fisheries Economic Exposure Review

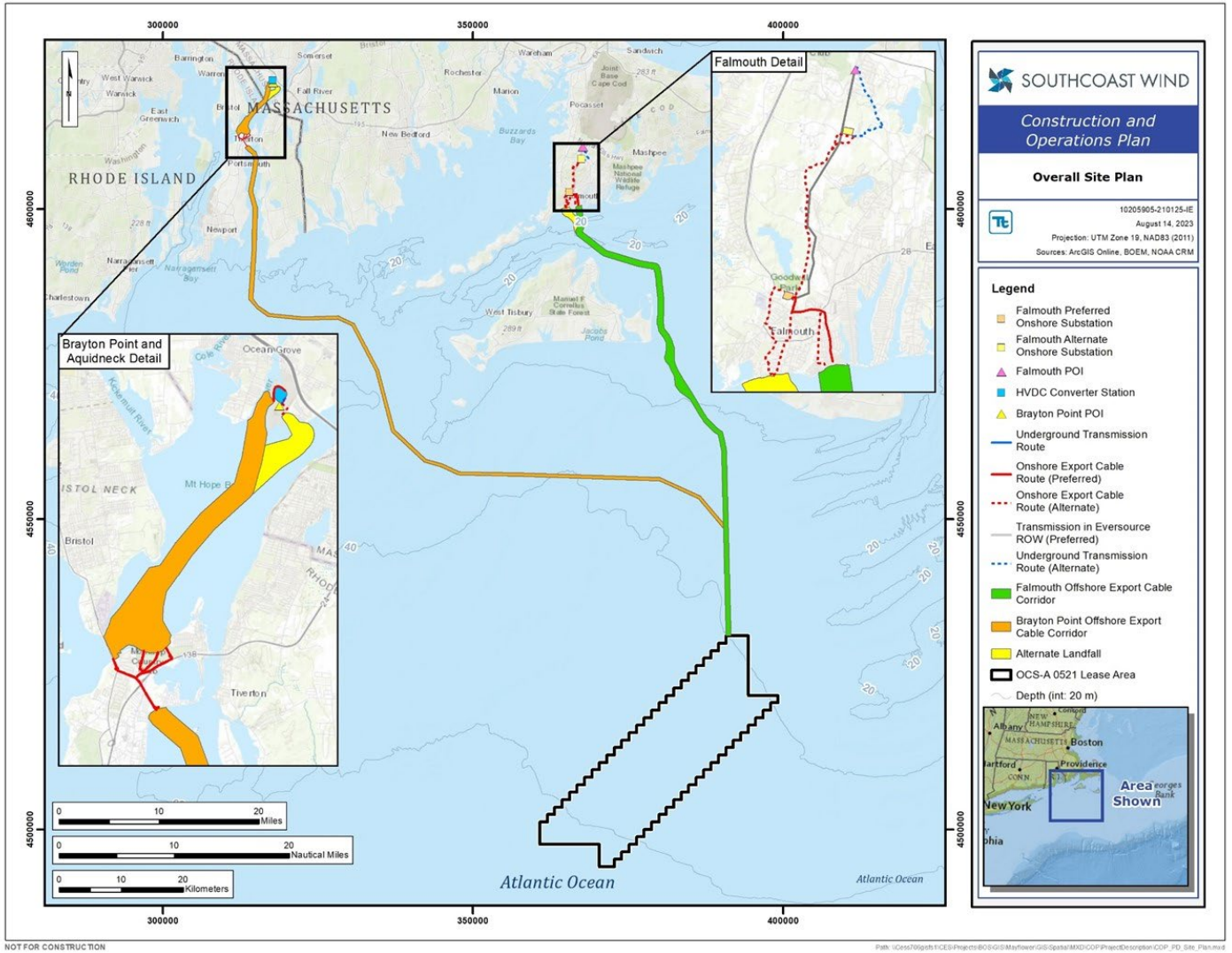
MA Fisheries Working Group

September 29, 2023

Business Proprietary and Confidential

SouthCoast Wind - Overview

- **Lease Area**
  - 127,388 acres
  - Up to 149 wind turbine/offshore substation platform positions
  - ~25 nautical miles south of Nantucket
  - 1 x 1 nautical mile grid layout
- **Generation Potential**
  - Estimated 2,400 MW+ total generating capacity depending on technologies
  - 1,200 MW per interconnection (per project)
- **Fisheries Economic Exposure**
  - Conducting analysis to determine mitigation measures for MA and RI
- **The focus of today is Baseline Assessment for Economic Exposure Analysis (WHOI)**



SouthCoast Wind Fisheries Baseline Massachusetts

Hauke Kite-Powell, Di Jin, and Michael Weir
Marine Policy Center, Woods Hole Oceanographic Institution
29 September 2023

SouthCoast Wind Fisheries Baseline

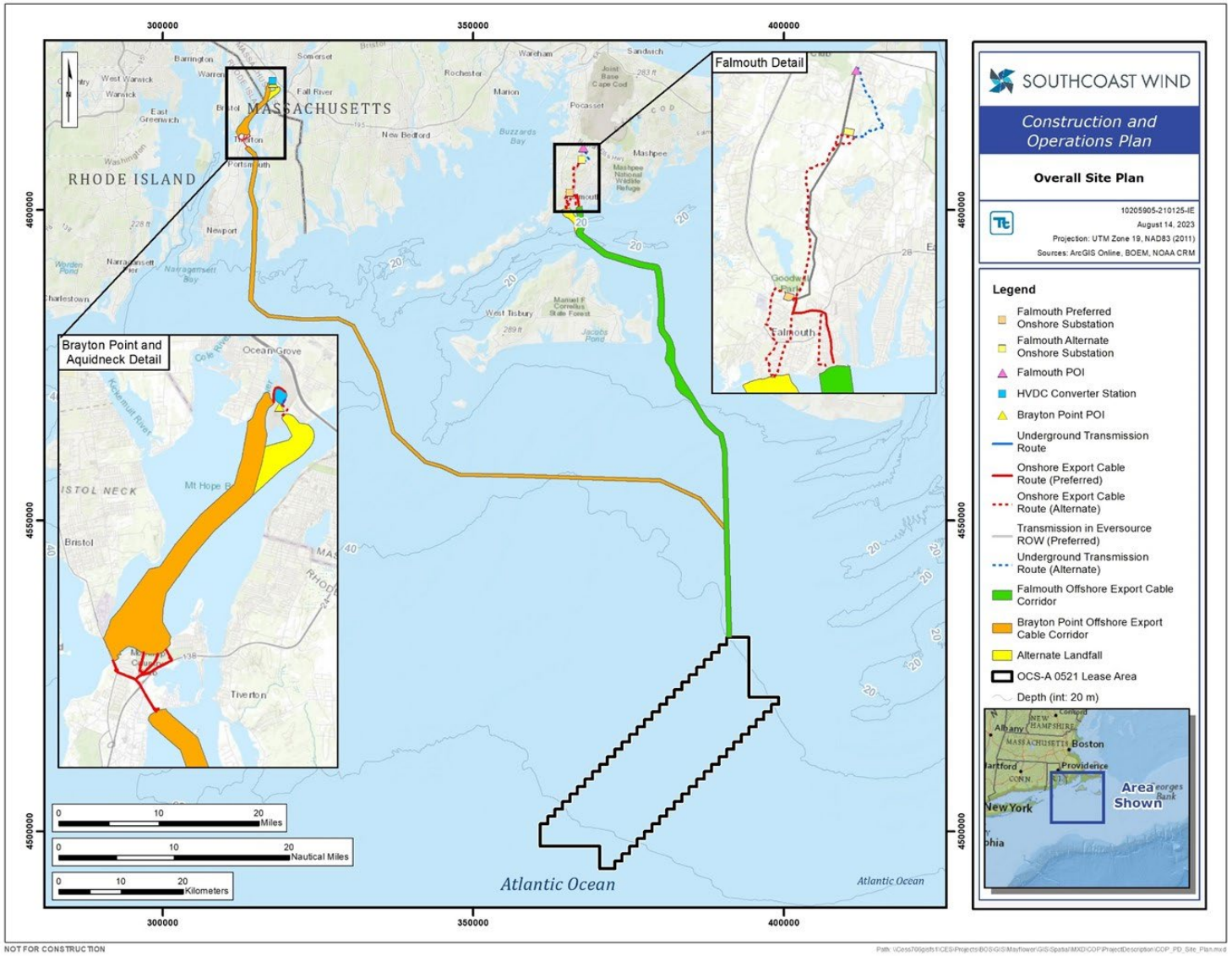
What is the value to Massachusetts from commercial and charter fishing around the SouthCoast Wind lease area and export cable route in federal waters?

Baseline value from NOAA data on landings and landed value

Baseline for-hire charter fishing revenue from 2022 charter captain survey

Indirect and induced impacts in Massachusetts estimated via multipliers

SouthCoast Wind project and fisheries data areas



What are baseline commercial landings associated with Massachusetts from the Wind Lease Area and the Export Cable Corridors?

What is the baseline charter fishing revenue associated with Massachusetts from the Wind Lease Area and the Export Cable Corridors?

NOAA baseline data - details

Table 3. Annual value and quantity of commercial fisheries landings by area.

Area	SouthCoast WLA		ECC Brayton Pt		ECC Falmouth	
Year	Value (2023$)	Landings (lbs)	Value (2023$)	Landings (lbs)	Value (2023$)	Landings (lbs)
2008	576,087	507,909	77,946	74,342	41,155	31,262
2009	507,153	435,991	57,984	64,216	26,258	21,616
2010	579,124	1,474,217	50,824	77,621	21,089	47,172
2011	318,346	225,495	55,577	57,318	21,858	11,827
2012	466,509	339,675	61,841	92,477	49,865	28,962
2013	477,113	377,424	62,185	134,331	23,630	14,428
2014	476,466	343,378	61,786	71,599	47,387	32,311
2015	449,827	312,035	73,543	54,892	54,611	30,480
2016	727,054	580,188	99,625	75,375	88,325	54,388
2017	619,432	524,306	49,263	29,039	43,149	25,904
2018	649,644	490,070	39,125	21,311	38,895	19,191
2019	881,716	477,266	55,923	33,399	55,651	28,743
2020	577,184	400,376	44,583	31,145	22,763	15,563
2021	686,402	411,206	75,878	38,992	56,267	31,215

NOAA baseline data – details: states

Table 7a. Average annual landings in SouthCoast WLA by state.

State	Mean		Standard Deviation	
	Value/year (2023$)	Landings/year (lbs)	Value/year (2023$)	Landings/year (lbs)
Rhode Island	216,016	188,750	63,730	54,585
Massachusetts	214,255	236,135	59,652	281,278
Others	140,591	67,939	--	--

Table 7b. Average annual landings in SouthCoast ECC Brayton Point by state.

State	Mean		Standard Deviation	
	Value/year (2023$)	Landings/year (lbs)	Value/year (2023$)	Landings/year (lbs)
Rhode Island	28,868	25,999	9,508	8,365
Massachusetts	27,635	31,305	7,675	24,392
Others	5,360	3,843	--	--

Table 7c. Average annual landings in SouthCoast ECC Falmouth by state.

State	Mean		Standard Deviation	
	Value/year (2023$)	Landings/year (lbs)	Value/year (2023$)	Landings/year (lbs)
Rhode Island	20,317	14,235	11,985	7,664
Massachusetts	15,633	10,276	4,525	9,224
Others	6,258	3,565	--	--

NOAA baseline data – details: ports

Table 6. Average annual landings at major ports in Rhode Island and Massachusetts.

Area/Port	Mean Value/year (2023$)	Mean Landings/year (lbs)	Standard Deviation Value/year (2023$)	Standard Deviation Landings/year (lbs)
SouthCoast WLA				
Point Judith, RI	159,899	135,373	49,867	40,053
New Bedford, MA	135,150	152,610	61,911	203,985
Newport, RI	35,769	29,544	26,190	22,135
Chatham, MA	26,883	22,826	17,468	15,863
ECC Brayton Point				
Point Judith, RI	19,690	15,609	8,680	6,563
New Bedford, MA	17,143	24,085	5,883	19,869
ECC Falmouth				
Point Judith, RI	19,774	13,613	11,696	7,445
New Bedford, MA	4,227	5,144	1,917	7,451

NOAA baseline data – details: species

Table 4. Average annual landings of major species by area, 2008-2021.

Area/Species	Mean		Standard Deviation	
	Value/year (2023$)	Landings/year (lbs)	Value/year (2023$)	Landings/year (lbs)
SouthCoast WLA				
Jonah Crab	95,258	93,024	54,977	43,231
Longfin Squid	89,715	57,894	55,760	35,371
Summer Flounder	58,874	17,641	57,881	18,957
Scup	50,583	56,725	51,310	57,549
Silver Hake	46,737	57,789	35,033	38,177
Monkfish	46,113	24,712	23,480	8,967
Golden Tilefish	40,936	8,494	42,300	8,724
American Lobster	36,610	6,049	18,527	3,766
Sea Scallop	30,639	2,749	39,611	4,102
ECC Brayton Pt				
Longfin Squid	15,786	10,329	11,259	7,264
American Lobster	12,770	1,958	3,052	453
Summer Flounder	6,373	1,540	2,111	666
ALL_OTHERS	4,948	5,596	3,037	4,131
ECC Falmouth				
Longfin Squid	26,947	17,003	17,674	11,111
Channeled Whelk	3,991	385	1,711	132
Summer Flounder	2,731	696	2,293	661
ALL_OTHERS	1,481	1,520	1,211	1,391
Scup	1,102	1,328	731	873
Silver Hake	1,101	1,496	622	895

NOAA baseline data – details: gear types

Table 5a. Average annual landings in SouthCoast WLA by gear type.

Gear	Mean		Standard Deviation	
	Value/year (2023$)	Landings/year (lbs)	Value/year (2023$)	Landings/year (lbs)
ALL_OTHERS	12,040	10,279	26,231	15,670
Dredge – Clam	4,290	3,386	7,384	5,674
Dredge – Scallop	29,839	2,712	40,002	4,129
Gillnet – Sink	66,458	60,314	29,234	24,306
Handline	-	-	-	-
Longline – Bottom	34,461	8,168	41,427	10,523
Pot – Lobster	135,124	103,776	53,782	42,542
Pot – Other	3,712	2,851	3,152	2,396
Trawl – Bottom	277,376	228,593	92,373	60,195
Trawl – Midwater	7,561	72,744	27,191	265,385

Table 5b. Average annual landings in SouthCoast ECC Brayton Point by gear type.

Gear	Mean		Standard Deviation	
	Value/year (2023$)	Landings/year (lbs)	Value/year (2023$)	Landings/year (lbs)
ALL_OTHERS	2,207	2,540	3,707	4,665
Dredge – Clam	3,041	3,316	2,975	3,419
Dredge – Scallop	2,791	248	2,604	279
Gillnet – Sink	4,122	4,132	1,928	2,431
Handline	297	77	252	58
Longline – Bottom	-	-	-	-
Pot – Lobster	13,904	3,157	2,798	745
Pot – Other	3,526	716	1,576	363
Trawl – Bottom	29,879	31,729	12,362	10,455
Trawl – Midwater	2,096	15,231	3,209	23,313

Table 5c. Average annual landings in SouthCoast ECC Falmouth by gear type.

Gear	Mean		Standard Deviation	
	Value/year (2020 $)	Landings/year (lbs)	Value/year (2020 $)	Landings/year (lbs)
ALL_OTHERS	706	761	1,339	1,384
Dredge – Clam	992	1,014	1,228	1,261
Dredge – Scallop	565	47	474	43
Gillnet – Sink	310	321	521	653
Handline	103	25	85	19
Longline – Bottom	10	2	39	9
Pot – Lobster	562	304	161	134
Pot – Other	4,978	703	1,764	178
Trawl – Bottom	33,660	22,128	18,085	11,218
Trawl – Midwater	323	2,772	1,083	9,568

Commercial fishing baseline data - summary

Average of 13 years of NOAA data (2008-2021) on commercial landings from the Wind Lease Area (WLA) and Export Cable Corridors (ECCs), defined as a 180m lanes around the cable routes

$340,000/year (2023$) in landed value in Massachusetts from commercial fishing in the SouthCoast Wind WLA and two ECCs

$690,000/year including indirect and induced effects

MA multipliers (IMPLAN) for 2021

Upstream	1.373
Downstream	1.635
Combined	2.008

Table 12. Estimated annual economic impact in Massachusetts (all values in 2023$)

Area	State	Average value of landings/year: VTR data only (Table 11, row 1)	Average value of landings/year: with lobster & Jonah crab adjustment	Average value of landings/year: with dockside sales adjustment (15% premium on RI lobster & JC landings)	Total impact/year "dockside sales" column multiplied by upstream & downstream multipliers, except RI lobster & JC
WLA	total	570,861	768,663	787,376	1,408,023
ECC Brayton Pt	total	61,863	82,430	84,830	149,528
ECC Falmouth	total	42,207	43,121	43,231	81,757
WLA	MA	214,255	288,494	288,494	579,295
ECC Brayton Pt	MA	27,635	36,823	36,823	73,941
ECC Falmouth	MA	15,633	15,971	15,971	32,070

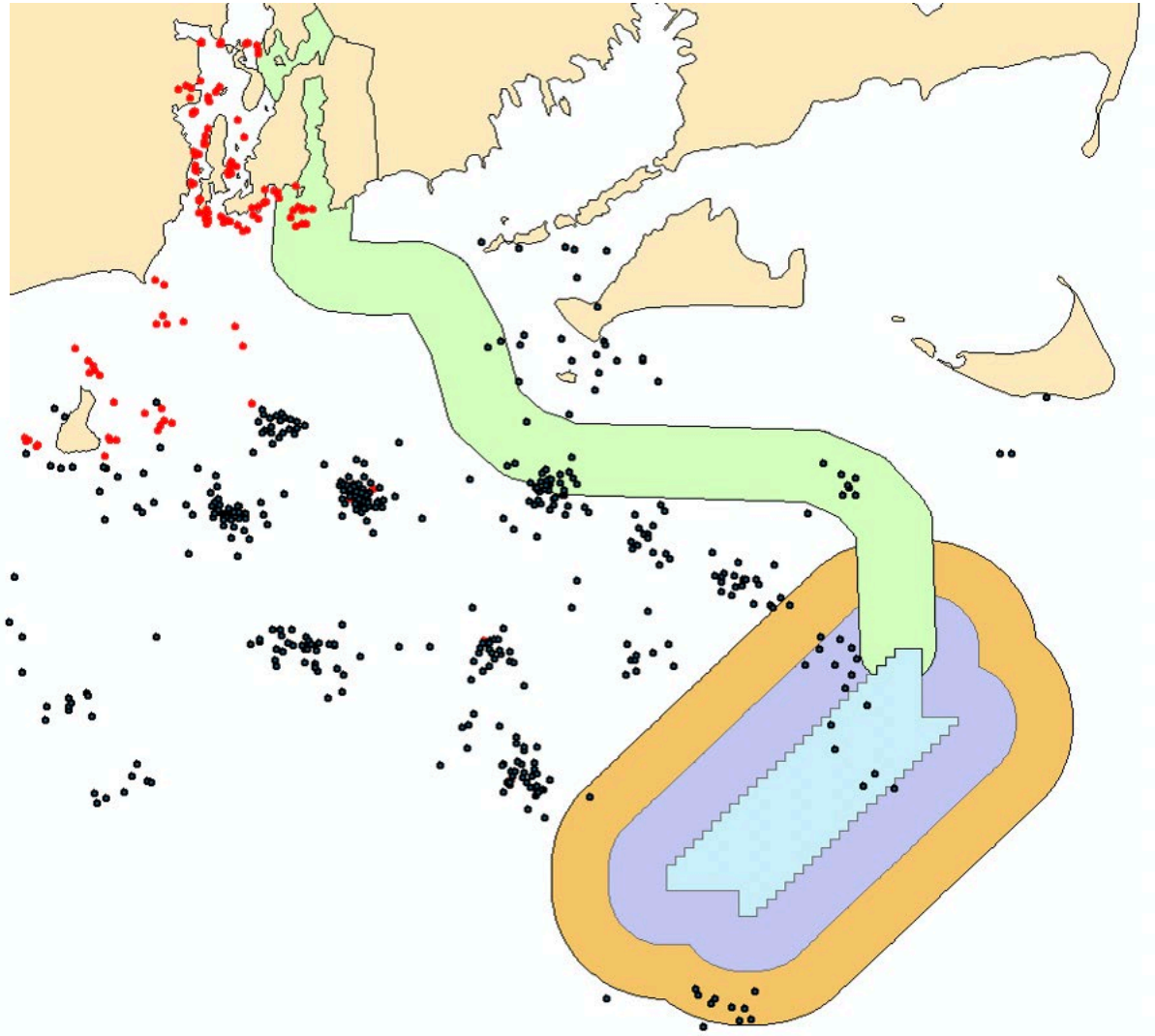
For-hire charter fishing survey (2022)

Table 17. Number of Massachusetts-based vessel trips and anglers by year, SouthCoast WLA.

Year	WLA		WLA + 15 km buffer	
	Vessel Trips	Anglers	Vessel Trips	Anglers
2017	0	0	10	35
2018	2	10	10	34
2019	6.5	28.5	10.5	40.5
2020	2	6	15	75
2021	5	15	45	181
Average	**3.1**	**11.9**	**18.1**	**73.1**

Table 18. Number of Massachusetts-based vessel trips and anglers by year, SouthCoast ECRA RI.

Year	Vessel Trips	Anglers
2017	11	48
2018	14.5	63.5
2019	14	65
2020	5	15
2021	7	25
Average	**10.3**	**43.3**



For-hire charter fishing baseline estimates

Table 20. Annual revenue and economic impact from MA-based charter fishing in SouthCoast Wind areas.

Area	Annual anglers	Revenue per angler (2023$)	Scale factor	Annual revenue (2023$)	Impact multiplier	Annual impact (2023$)
WLA	11.9	116.23	2.027	2,804	1.627	4,562
			3.269	4,522	1.627	7,357
WLA + 15km	73.1	116.23	2.027	17,222	1.627	28,021
			3.269	27,778	1.627	45,195
ECRA	119.1	116.23	2.027	28,060	1.627	45,654
			3.269	45,258	1.627	73,635

Summary of baseline economics for Massachusetts

Commercial fishing:

Massachusetts landings from WLA & 2 ECCs:	$340,000/year
Massachusetts landings with multipliers:	$690,000/year

For-hire charter fishing:

Massachusetts revenue from WLA+15 & ECRA BP:	$73,000/year
Massachusetts revenue with multipliers:	$119,000/year

Next Steps

Today:

- Feedback on baseline values
- Finalize baseline values

Next meeting:

- Estimate effects of construction, operation, and decommissioning activities for each project year
- Calculate expected exposure (reduction in landed value) relative to baseline