

OCEAN ADVISORY COMMISSION

June 16, 2026



OAC AND SAC MEMBERSHIP

Ocean Science Advisory Council

Academic Institutions

Kevin Stokesbury	UMass Dartmouth, SMAST*
John Duff	UMass Boston, School for the Environment*
Kristin Uiterwyk	UMass Boston, Urban Harbors Institute

Private, Nonprofit Organizations

Jon Grabowski	MA Fishermen's Partnership*
Priscilla Brooks	Conservation Law Foundation
Jessica Redfern	New England Aquarium

Government Agencies

Mark Rousseau	MA DMF*
Todd Callaghan	MA CZM
Laura Brothers	USGS

*organizations named in statute

Ocean Advisory Commission

Legislators

Sen. Julian Cyr
Sen. Dylan Fernandes
Sen. Bruce Tarr
Rep. Patrick Kearney
Rep. Joan Meschino
Rep. Ken Sweeney

Agency Representatives

Alison Brizius	CZM Director
Dan McKiernan	DMF Director
Tay Evans	MassDEP Commissioner's designee

Stakeholder Representatives

Representative of a commercial fishing organization:

Beth Casoni	MA Lobstermen's Association
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Representative of an environmental organization:

Chris McGuire	The Nature Conservancy
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Expert in the development of offshore renewable energy:

Liz Marsjanik	Vineyard Offshore
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Representatives of six coastal Regional Planning Agencies:

Heather McElroy	CCC*
Daniel Doyle	MVC*
Jeffrey Carlson	NP&EDC*
Jerrard Whitten	MVPC*
Dominick Pangallo	MAPC*
Janice Robbins	SRPEDD*

AGENDA / OVERVIEW

- Background on the Ocean Management Plan
- Recap of Work Group Findings presented to SAC
- Proposed changes to the management framework
- Next steps

OCEAN MANAGEMENT BEFORE THE OCEAN PLAN

“Use of the state's public ocean resources have historically been determined on a ‘**first come, first served**’ basis...

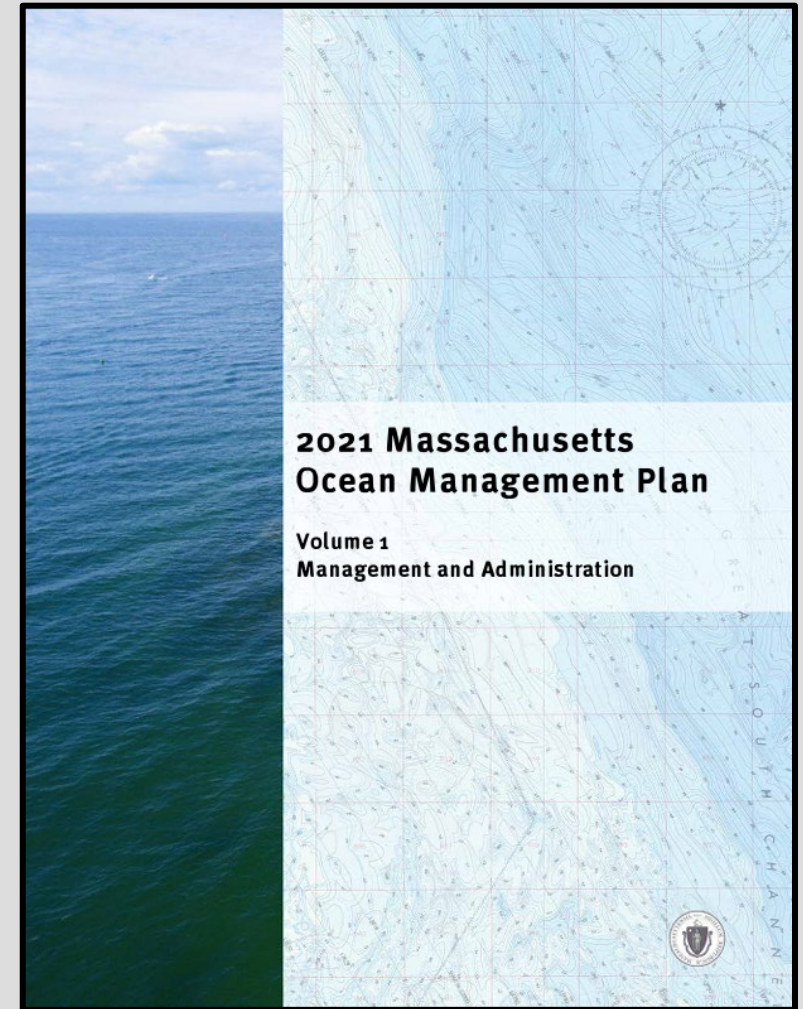
...we think that **more careful planning** for the use and protection of our ocean resources is critical to our long term interests.”

- *Massachusetts Ocean Management Task Force, 2004*



THE OCEAN MANAGEMENT PLAN

- Plan is reviewed at least once every 5 years
 - Published: 2009, 2015, 2021
- The Plan framework:
 - **Special, Sensitive, or Unique** resources (habitats)
 - **Water Dependent Uses** (e.g., traffic, fishing)
 - **Siting and performance standards** for projects (cables, pipelines, renewable energy, sand mining, others)
- State approvals must be consistent with Plan
 - Determined through MEPA





MASSACHUSETTS OCEAN PLAN JURISDICTION

Ocean Planning Area:

- Defined in Oceans Act of 2008
- 0.3 nautical mile from shore to state/federal boundary
- Does not include harbors, rivers, inlets

Ocean Plan Applicability:

- Project size/impact threshold: MEPA EIR triggers Ocean Plan standards
- Fisheries management is explicitly reserved for DMF

THE OCEAN MANAGEMENT PLAN SITING STANDARDS

Pink / SSUs:
Presumptive
Exclusion

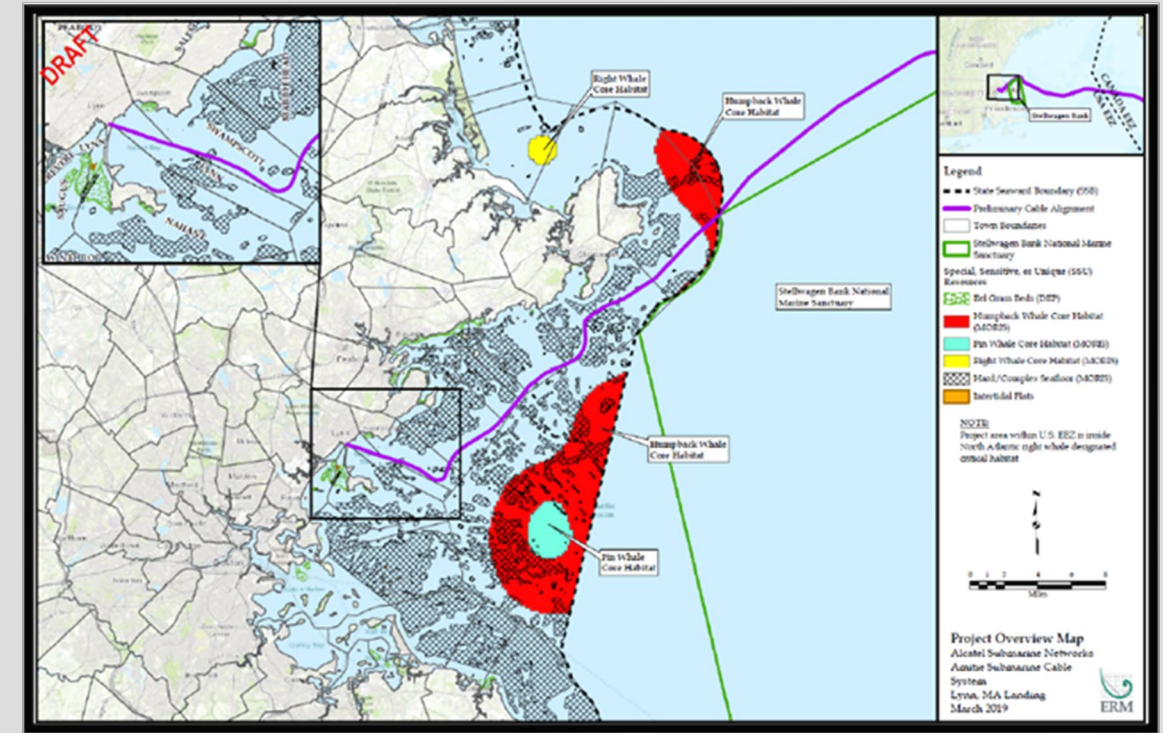
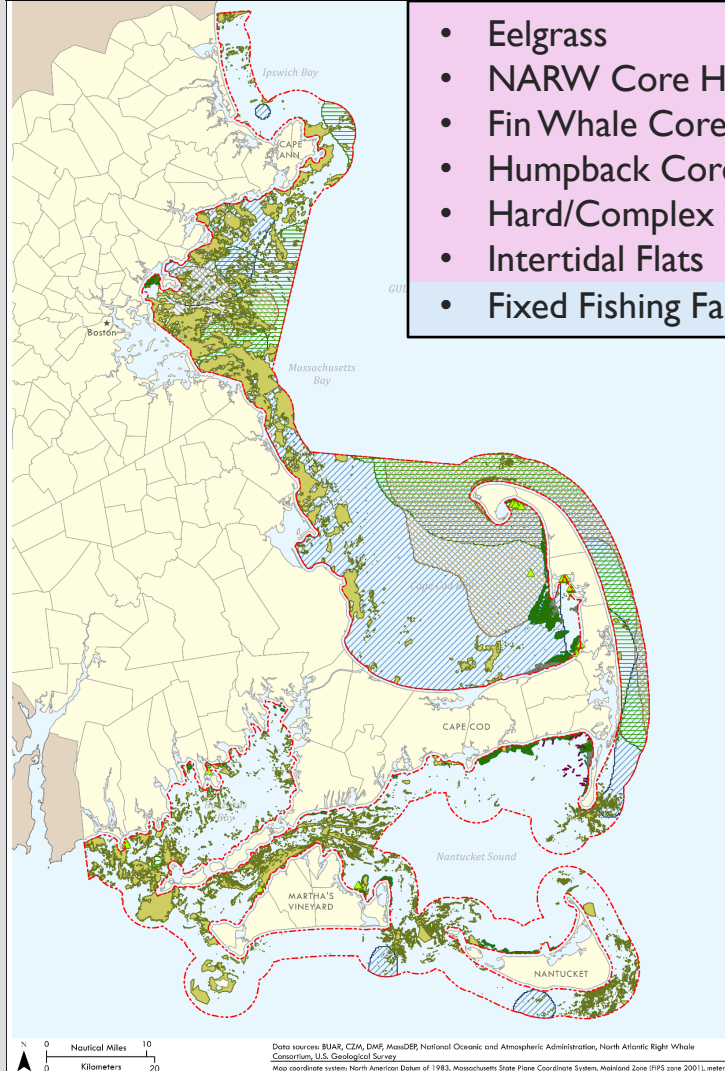
Blue / WDU:
Avoid,
minimize,
mitigate

Protected Area	Community Scale Wind	Commercial Tidal Energy	Sand & gravel mining	Cables	Pipelines
North Atlantic Right Whale	X	X	X	X	X
Humpback Whale	X		X	X	X
Fin Whale	X		X	X	X
Roseate Terns	X		X		
Special Concern Terns	X				
Sea Ducks	X				
Leach’s Storm Petrel	X				
Colonial Waterbirds	X				
Hard/Complex Seafloor			X	X	X
Eelgrass	X	X	X	X	X
Intertidal Flats	X	X	X	X	X
Important Fish Resource Areas		X	X		X
High Comm. Fishing Effort & Value	X	X	X		X
Recreational Fishing	X	X	X		X
Traffic	X	X			
Fishing Traffic	X	X			
Recreational Boating	X	X			
Fixed Fishing Facilities	X	X	X	X	X

OCEAN PLAN: IMPLEMENTATION

SSUs/WDUs addressed for cable projects (2021 plan):

- Eelgrass
- NARW Core Habitat
- Fin Whale Core Habitat
- Humpback Core Habitat
- Hard/Complex Seafloor
- Intertidal Flats
- Fixed Fishing Facilities

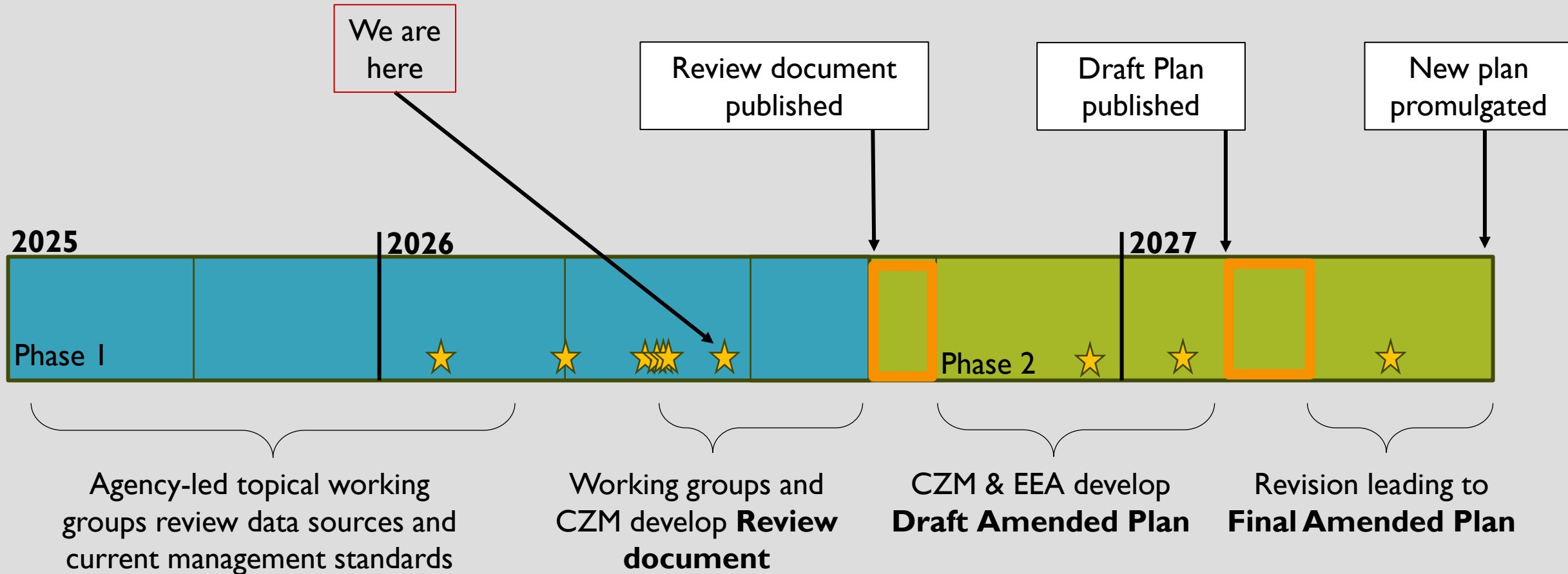


- Ocean Plan contains spatial info at planning scale
 - Cuts across broad range of uses and resources
 - Most important / vulnerable uses and resources highlighted as SSUs and WDUs
 - Not intended to be an exhaustive list
- Examples of Ocean Plan in action:
 - Marine Spatial Planning: identify potential OSW cable corridors with least conflicts
 - Individual project: identify best route for Amitie telecom cable

OCEAN PLAN REVIEW TIMELINE

★ OAC and SAC meetings

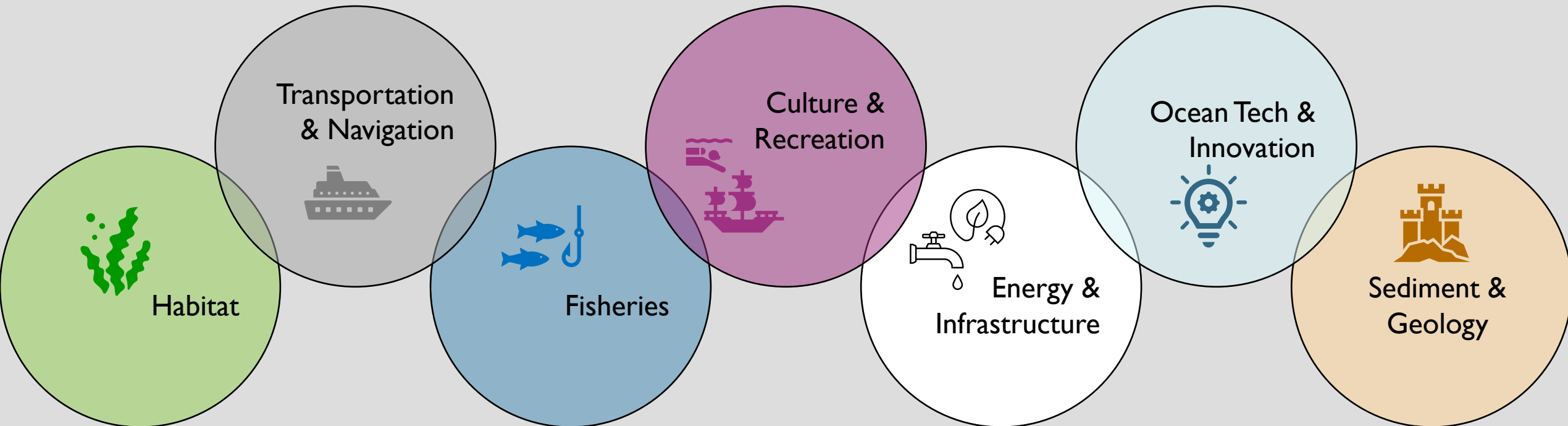
□ Public Comment Periods



Note: this is a tentative timeline subject to revision

RECAP: TECHNICAL WORK GROUP FINDINGS

- 7 technical work groups began reviewing the 2021 Ocean Plan in 2025
- Generated recommendations for the SAC and OAC
- 5 Meetings Spring 2026 to present findings to SAC





Protected area maps: SSUs and WDUs

- Update spatial data and maps
- Identify if any uses/resources warrant protection



Siting and performance standards

- Review recent experiences with ocean development
- Recommend standards for managed uses



Science and data priorities

- Assess progress on 2021 priorities
- Recommend priority topics and actions for the next five years



Trends and newly available data

- Update existing variables in the Baseline Assessment
- Identify new data and information on uses and resources

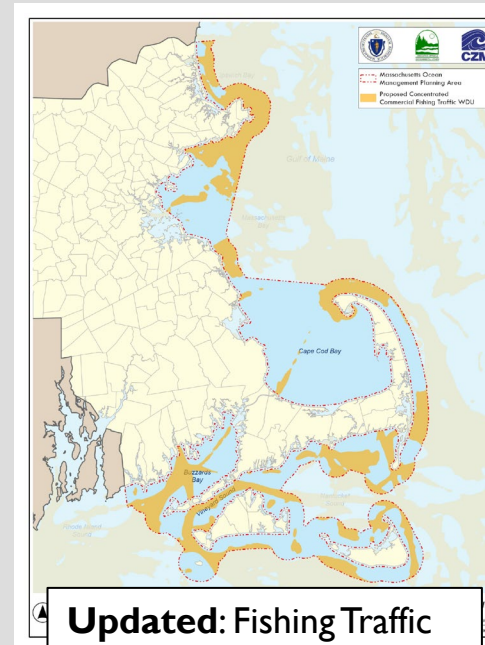
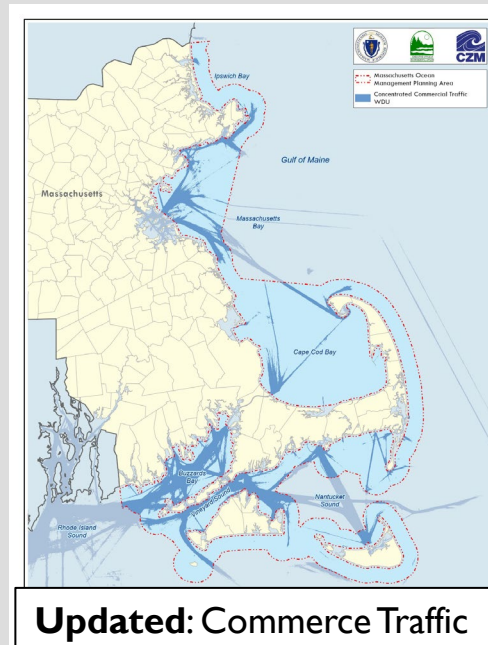
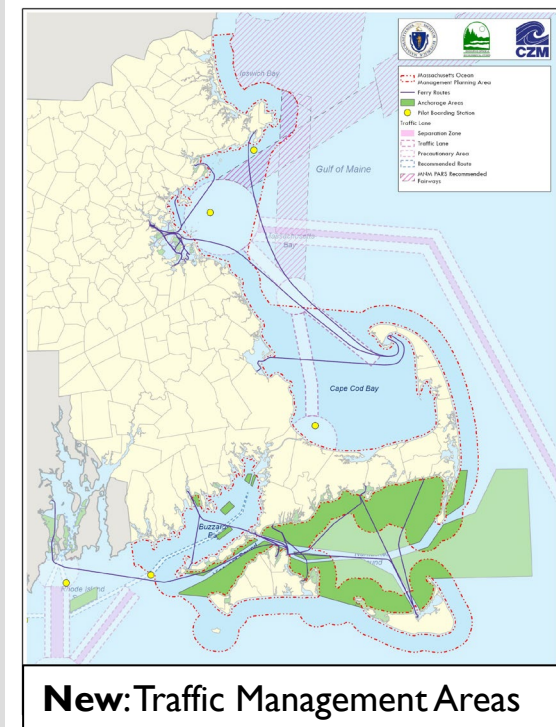
WORKING GROUP TASKS

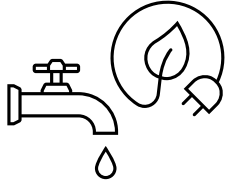


TRANSPORTATION & NAVIGATION PROTECTED AREAS

WDU Recommendations:

- Update the Commerce Traffic and Commercial Fishing Traffic WDUs
- Keep Recreational Boating WDU as-is (no new data)
- Consider a new WDU for Navigation Lanes and Ferry Routes

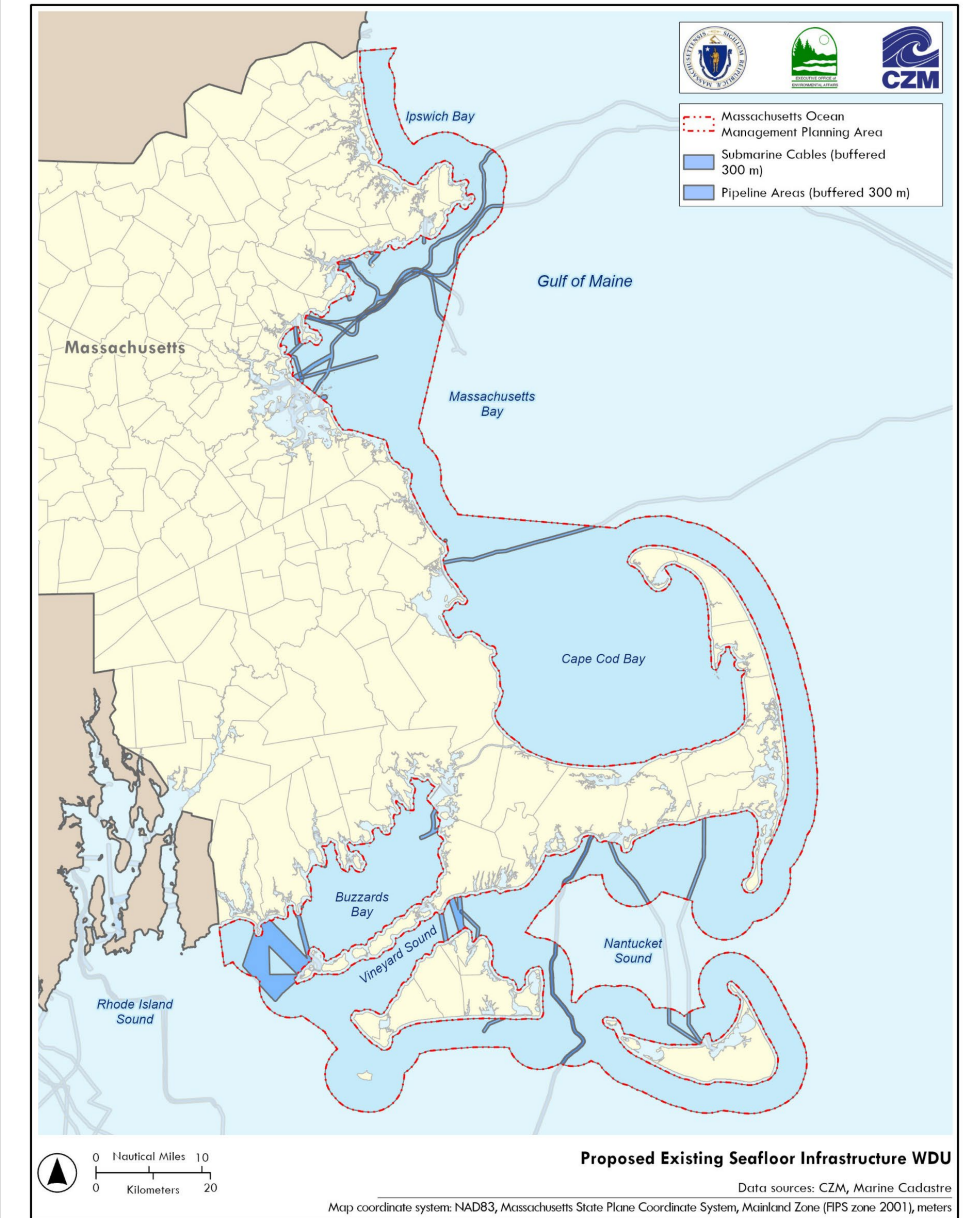




ENERGY & INFRASTRUCTURE PROTECTED AREAS

WDU Recommendation:

- New WDU: “Existing Seafloor Infrastructure”
 - Existing cable and pipeline areas + 300 m buffer



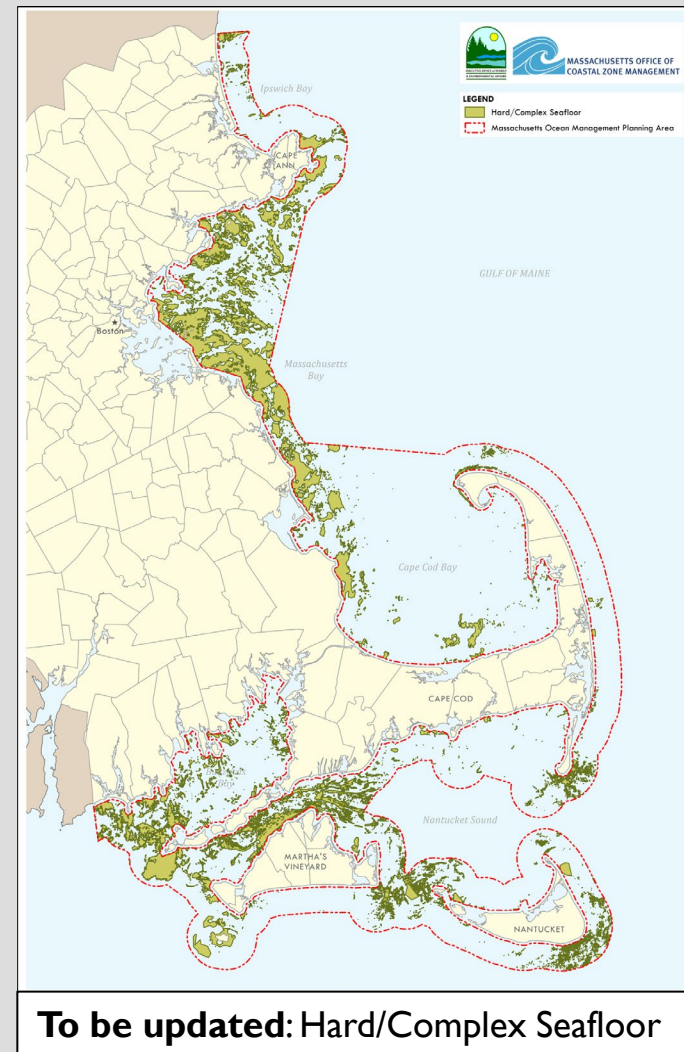
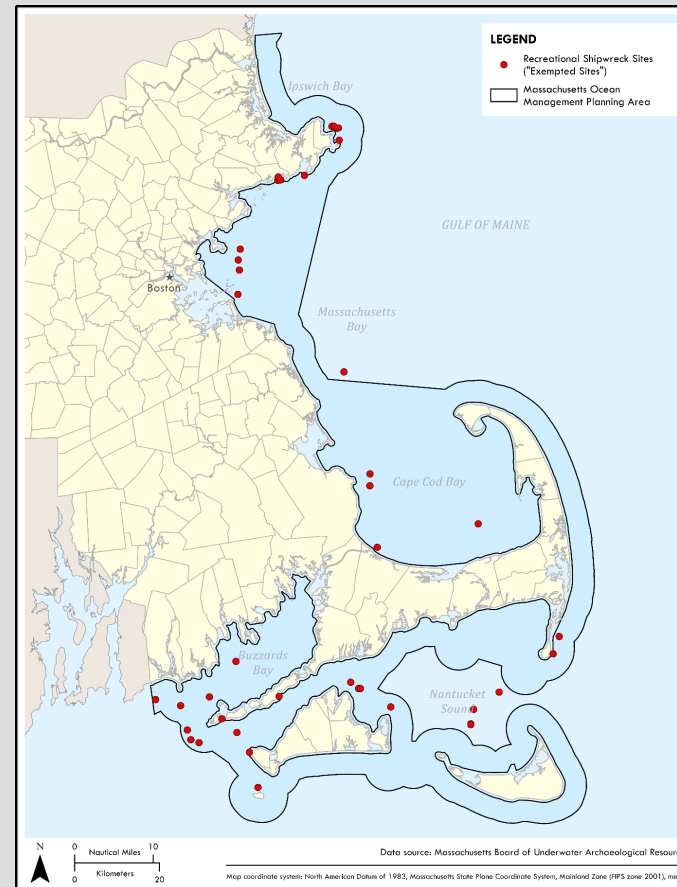
New: Existing Seafloor Infrastructure



CULTURAL & RECREATIONAL RESOURCES PROTECTED AREAS

SSU & WDU Recommendations:

- Continue to include shipwrecks in the Hard/Complex seafloor SSU
- Up-to-date spatial data on recreational and cultural uses and resources continues to be a notable data gap

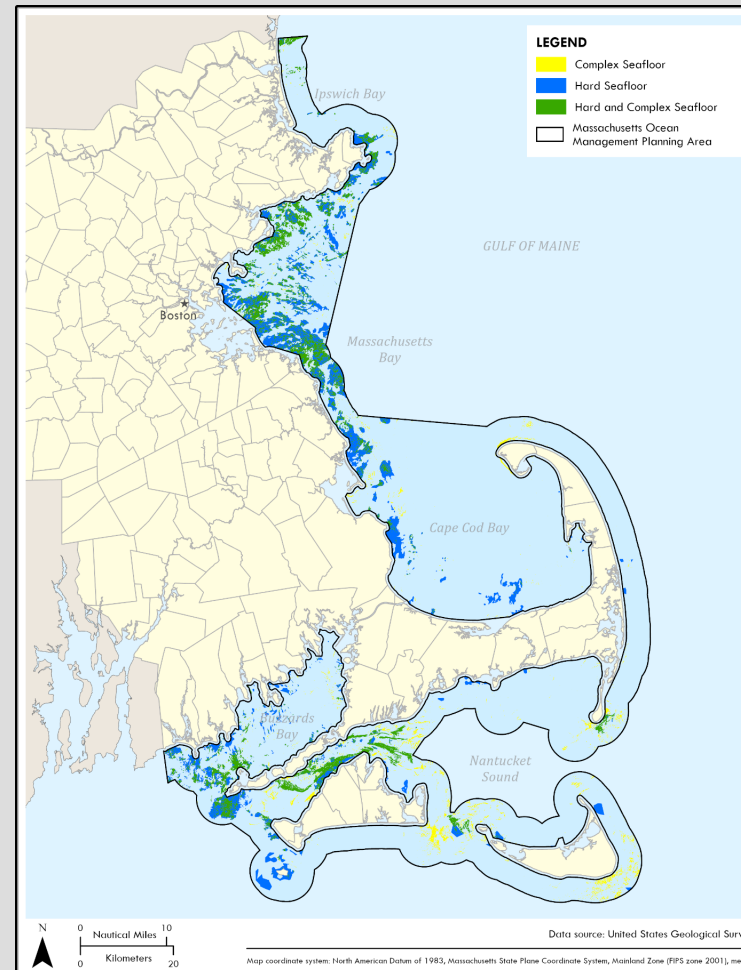




SEDIMENT & GEOLOGY PROTECTED AREAS

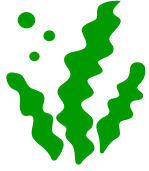
SSU & WDU Recommendations:

- Update the Hard/Complex Seafloor SSU with new data
- Update the Potential Offshore Sand Resource areas and propose them as a new WDU



New: Potential Sand Resource Areas

Known Hard and Complex
seafloor as of 2021

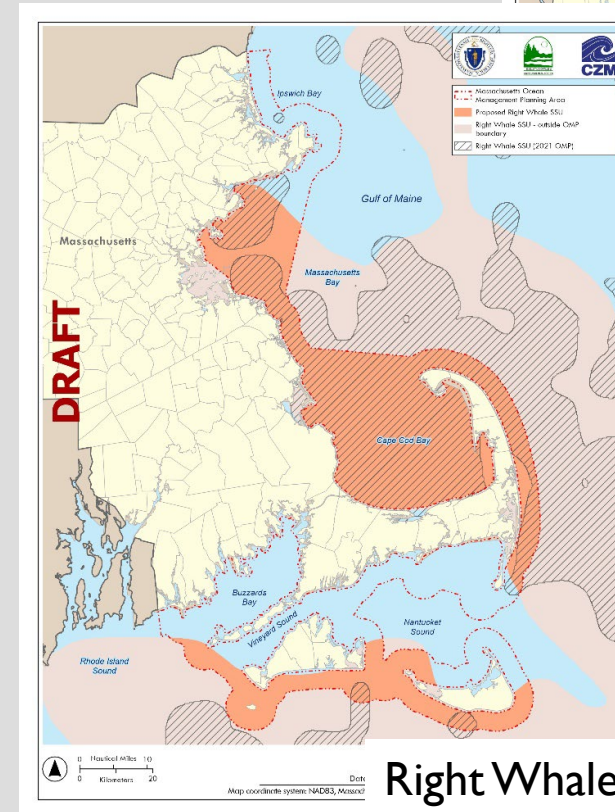


HABITAT PROTECTED AREAS

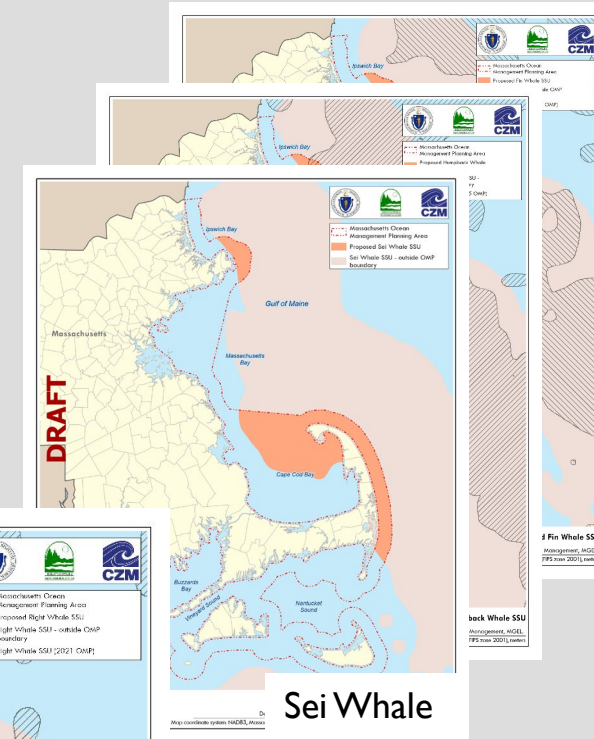
SSU Recommendations:

- Add Sei whale SSU (existing SSUs: NARW, fin, humpback)
- Delineate whale SSUs using modelled density data
- Adopt agency maps as they become available for 8 other SSUs:
 - Eelgrass, Intertidal flats (MassDEP / UMass)
 - Sea Ducks (USFWS)
 - Habitat for Roseate and Special Concern Terns, nesting sites for Colonial Waterbirds and Leach's Storm Petrels (NHESP)
- Continue to assess data availability for new SSUs (e.g., kelp, sea turtles)

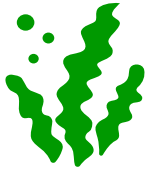
Current (hatched) and proposed (orange) whale SSUs



Right Whale



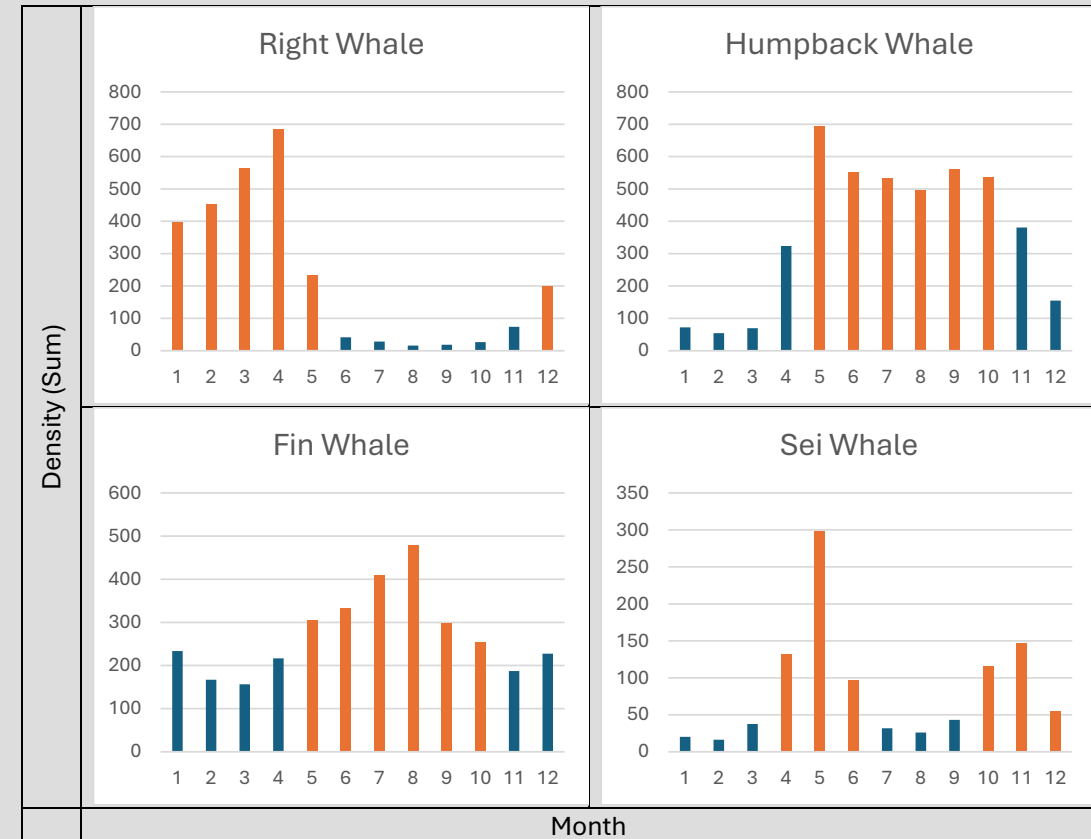
Sei Whale

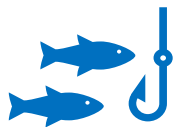


SEASONAL HABITAT PROTECTIONS

SSU Recommendations:

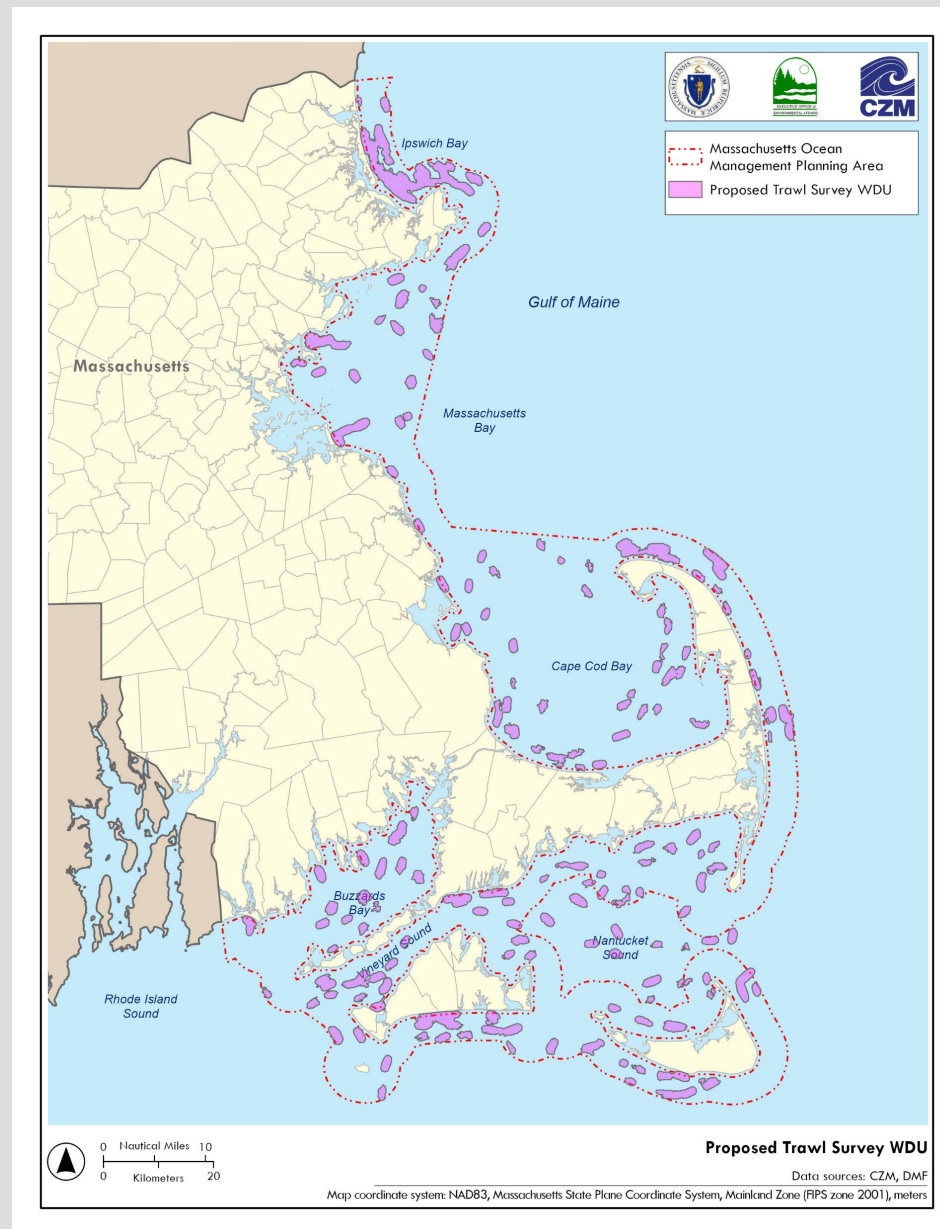
- Each whale SSUs should be in effect during the 6 months with highest modelled density for that species
- Creates windows in time for temporary disturbances like construction, dredging (for beach nourishment)
- Permanent installations: SSUs are functionally year-round
- Other species could also be considered where sufficiently time-resolved data is available
 - Some bird species are migratory
 - Nesting/spawning seasons

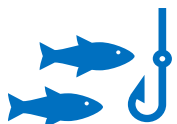




FISHERIES PROTECTED AREAS

- **SSU & WDU Recommendations:**
- Create a Trawl Survey WDU to protect critical DMF trawl survey areas
- Fixed Fishing Infrastructure WDU: add artificial reefs and any new weirs & aquaculture sites
- Recreational Fishing WDU: no new data, keep mostly as-is
- Update approach to fisheries maps:
 - Adopt a new set of comm. fishing WDUs – by gear
 - Adopt species/life-stage specific fish habitat SSUs for the most vulnerable species
 - Acknowledge seasonality of habitat SSUs, and commercial and recreational fishing WDUs
- For project review, include higher level of detail as supplemental information in the plan



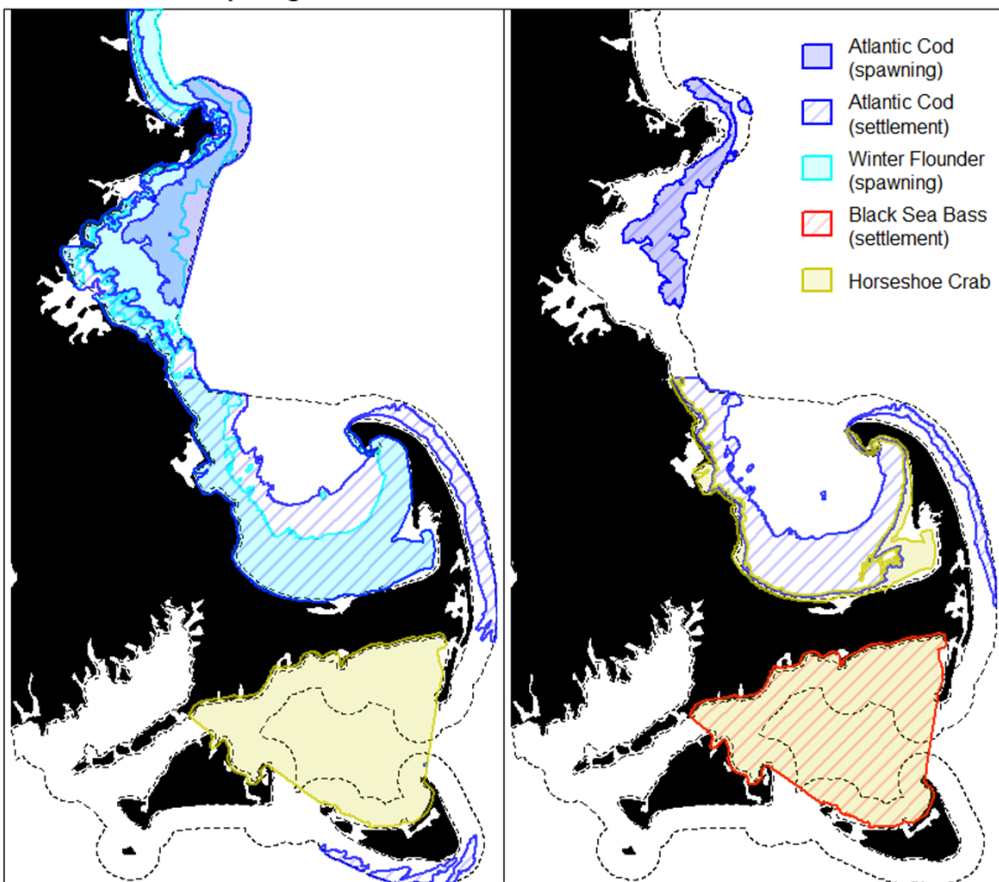


UPDATED FISHERIES PROTECTIONS

Differentiation by species, gear, and time of year makes management more precise, creates windows of opportunity

Spring

Fall



Proposed Fish Habitat SSUs

Mobile Gear

Fixed Gear

Hook & Line

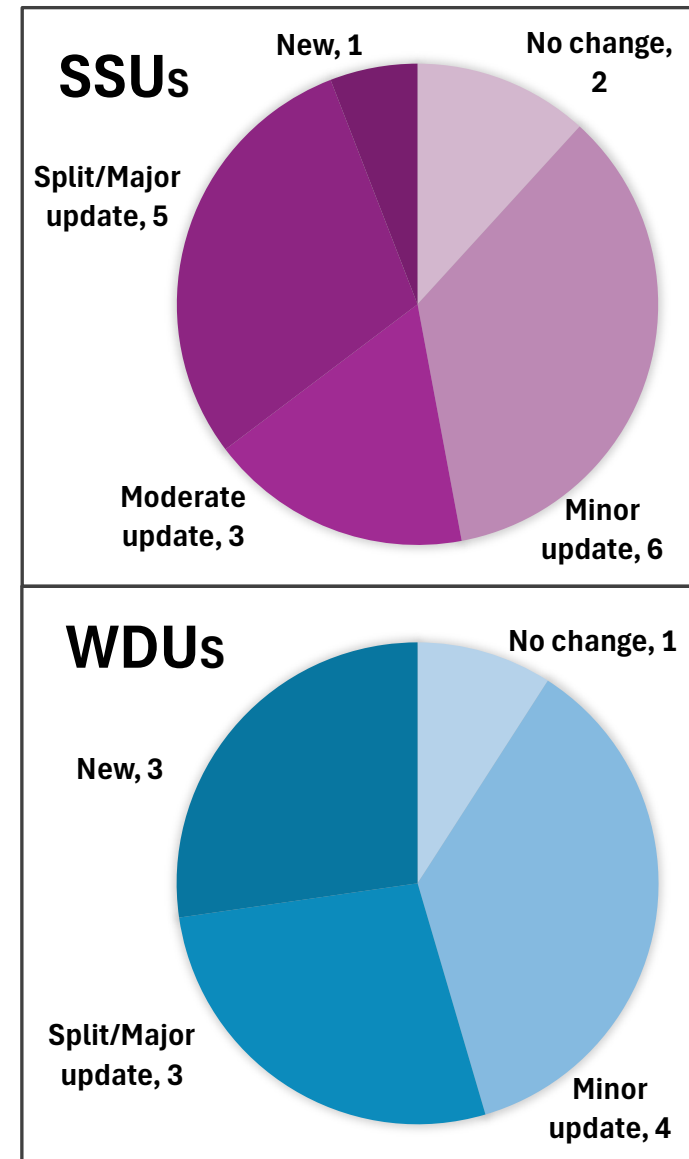


Proposed Commercial Fishing WDU

PROTECTED AREA UPDATES: BY THE NUMBERS

- **12 Special, Sensitive, or Unique (SSU)** habitat areas in the 2021 Plan
 - 6 are candidates for minor/routine data updates reflecting new agency maps
 - 3 are due for a moderate revision to reflect best available data
 - 1 could be split into 5 areas reflecting new approach to fisheries protections
 - 2 confirmed and carried forward
- **6 Water-Dependent Use (WDU)** human use areas in the 2021 Plan
 - 4 are candidates for minor updates to incorporate additional years of data
 - 1 could be split into 3 areas reflecting new approach to fisheries protections
 - 1 confirmed and carried forward
- **4 new protected areas** proposed for the updated 2027 Ocean Plan
 - 1 new SSU habitat area (sei whale)
 - 3 new WDU human use areas (trawl survey, seafloor infra., sand resources)

2027 Protected Areas (Proposed)



MANAGEMENT STANDARDS

(As of 2021)

Siting Standards (based on conflict matrix):

SSU: Presumptive Exclusion (rebuttable*)	X
WDU: Avoid, Minimize, & Mitigate Impacts (via permitting)	M
Neutral (no conflict)	



Performance Standards:

- Public Benefits > Public Detriments
- Appropriate Monitoring Plans (sand & cables)
- Appropriate Scale & Host Community Support (renewable energy generation)
- Documented need for nourishment, etc. (sand)

Conflict matrix:

	Protected Resource or Use Area	Wind Energy	Tidal Energy	Pipelines	Cables	Sand Mining
SSUs (12)	North Atlantic Right Whale	X	X	X	X	X
	Humpback, Fin Whales (2)	X		X	X	X
	Roseate Terns	X				X
	Other bird habitats (4)	X				
	Hard/Complex Seafloor			X	X	X
	Eelgrass, Tidal flats (2)	X	X	X	X	X
	Important Fish Habitat		X	X		X
WDUs (6)	Comm., Rec. Fishing (2)	M	M	M		M
	Traffic (3)	M	M			
	Fixed Fishing Facilities	M	M	M	M	M

*rebuttable if no less environmentally damaging practicable alternative + no significant alteration of resource + mitigation – OR – if Plan maps mischaracterized the area

UPDATES TO MANAGEMENT STANDARDS

Recommendations from the Work Groups:

Specific adjustments:

- Additional SSUs & WDUs
- Cables x commercial fishing
- Diving birds, whales x tidal/wave energy

Conflict matrix:

Protected Resource or Use Area		Wind Energy	Tidal Energy	Pipelines	Cables	Sand Mining
SSUs (17)	North Atlantic Right Whale	X	X	X	X	X
	Humpback, Fin, & Sei Whales (3)	X	X	X	X	X
	Sea Ducks / diving birds	X	X			
	Other bird habitats (4)	X				
	Hard/Complex Seafloor			X	X	X
	Eelgrass, Tidal flats (2)	X	X	X	X	X
	Fish Habitat Areas (5)		X	X	X	X
WDUs (12)	Comm. Fish (3), Rec. Fish, Trawl Survey	M	M	M	M	M
	Traffic (3) & Nav	M	M			
	Existing Infrastructure	M	M			M
	Sand Resource Areas	M	M	M	M	
	Fixed Fishing Infrastructure	M	M	M	M	M

UPDATES TO MANAGEMENT STANDARDS

Recommendations from the Work Groups:

Specific adjustments:

- Additional SSUs & WDUs
- Cables x commercial fishing
- Diving birds, whales x tidal/wave energy

Bigger picture:

- Align plan to current & near-term needs:
 - Set standards for additional Uses
 - Review existing standards
- Future-proof the plan

Conflict matrix:

	Protected Resource or Use Area	Wind Energy	Tidal Energy	Pipelines	Cables	Sand Mining
SSUs (17)	North Atlantic Right Whale	X	X	X	X	X
	Humpback, Fin, & Sei Whales (3)	X	X	X	X	X
	Sea Ducks / diving birds	X	X			
	Other bird habitats (4)	X				
	Hard/Complex Seafloor			X	X	X
	Eelgrass, Tidal flats (2)	X	X	X	X	X
	Fish Habitat Areas (5)		X	X	X	X
WDUs (12)	Comm. Fish (3), Rec. Fish, Trawl Survey	M	M	M	M	M
	Traffic (3) & Nav	M	M			
	Existing Infrastructure	M	M			M
	Sand Resource Areas	M	M	M	M	
	Fixed Fishing Infrastructure	M	M	M	M	M

LEARNING FROM PEER STATES

Marine Spatial Plans Consulted: CT, NY, OR, RI, WA

All/most plans contained:

- Maps of habitats and human uses
- Focus on renewable energy
- Rebuttable exclusion from habitat areas
- Provisions for implementation through existing permits

Plans varied on:

- Provisions for periodic review/update
- Approach to fisheries:
 - static maps ↔ project-specific consultations
- Identification of specific areas for energy or other development
- Jurisdiction (e.g., nearshore boundary, review thresholds/triggers)



Photo by Katrina Lassiter

**Marine Spatial Plan for
Washington's Pacific Coast**

October 2017
Publication no. 17-06-027 Revised June 2018



INFRASTRUCTURE: REVISE MANAGEMENT FRAMEWORK

- 4 infrastructure types are managed uses (uses with siting and performance standards) in the current plan:
 - Cables, pipelines, wind energy, tidal/wave energy
- **Proposed revision to siting standards:**
 - Manage categories of uses rather than specific uses:
 - CT Blue Plan as a model (*at right*)
 - Siting standards for infrastructure by location (surface, water column, seafloor)
 - Generalized from wind energy, tidal/wave energy, cables/pipelines respectively
 - Enables implementation of the plan for new and unforeseen project types

<i>ESA Siting and Performance Standards</i>			
Significant Ecological Resource Criteria	Air and Surface (AS)	Water Column (WC)	Benthos & Substrate (BS)
1. Areas with rare, sensitive, or vulnerable species, communities, or habitats			
1.1. Hard bottom and complex sea floor	No specific standards applicable. General policies apply.	No alteration, including changes in sedimentation or turbidity that would significantly adversely impact ecological characteristics and function.	No alteration that would significantly adversely impact ecological characteristics and function.
1.2. Areas of submerged aquatic vegetation	No structures or activities that would substantially shade or otherwise adversely impact growth.	No alteration, including physical impacts or changes in sedimentation or turbidity that would significantly adversely impact vegetation.	No bottom disturbance to existing vegetation. Protection and enhancement activities are encouraged pursuant to 22a - 92(c)(2)(A).
1.3. Endangered, threatened, species of concern, and candidate species listed under state and federal Endangered Species Act and their habitats	No specific standards applicable. General policies apply. Comply with applicable state and federal policies to avoid adverse impacts to designated species and habitats.		

UPDATES TO INFRASTRUCTURE SITING

Conflict matrix:

Protected Resource or Use Area	Wind Energy	Tidal Energy	Pipelines	Cables	Sand Mining
North Atlantic Right Whale	X	X	X	X	X
Humpback, Fin, & Sei Whales (3)	X	X	X	X	X
Sea Ducks / diving birds	X	X			
Other bird habitats (4)	X				
Hard/Complex Seafloor			X	X	X
Eelgrass, Tidal flats (2)	X	X	X	X	X
Fish Habitat Areas (5)		X	X	X	X
Comm. Fish (3), Rec. Fish, Trawl Survey	M	M	M	M	M
Traffic (3) & Nav	M	M			
Existing Infrastructure	M	M			M
Sand Resource Areas	M	M	M	M	
Fixed Fishing Infrastructure	M	M	M	M	M



Conflict matrix:

Protected Resource or Use Area	Infrastructure			Sand Mining
	Surface	Water	Seafloor	
North Atlantic Right Whale	X	X	X	X
Humpback, Fin, & Sei Whales (3)	X	X	X	X
Sea Ducks / diving birds	X	X		
Other bird habitats (4)	X			
Hard/Complex Seafloor, Tidal flats			X	X
Eelgrass	X	X	X	X
Fish Habitat Areas (5)		X	X	X
Comm. Fish (3), Rec. Fish, Trawl Survey	M	M	M	M
Traffic (3) & Nav	M	M		
Existing Infrastructure	M	M		M
Sand Resource Areas	M	M	M	
Fixed Fishing Infrastructure	M	M	M	M

SSUs
(17)

WDUs
(12)



INFRASTRUCTURE: REVISE MANAGEMENT FRAMEWORK

Siting Standards (based on conflict matrix):

SSU: Presumptive Exclusion (rebuttable*)	X
WDU: Avoid, Minimize, & Mitigate Impacts (via permitting)	M
Neutral (no conflict)	



Performance Standards:

- Public Benefits > Public Detriments
- Monitoring Plans
- Appropriate Scale & Host Community Support (renewable energy generation)
- Documented need for nourishment, etc. (sand)
- **POTW discharges into Ocean Sanctuaries must comply with [M.G.L. Chapter 132A §16 G and I](#)**

- **Proposed revision to performance standards:**
 - In addition to generalized siting standards, add or maintain type-specific performance standard where appropriate



PIPES: POTENTIAL PERFORMANCE STANDARDS

- Performance standards for new Publicly Owned Treatment Works pipes that are in the Ocean Planning Area **AND** one of the Ocean Sanctuaries:

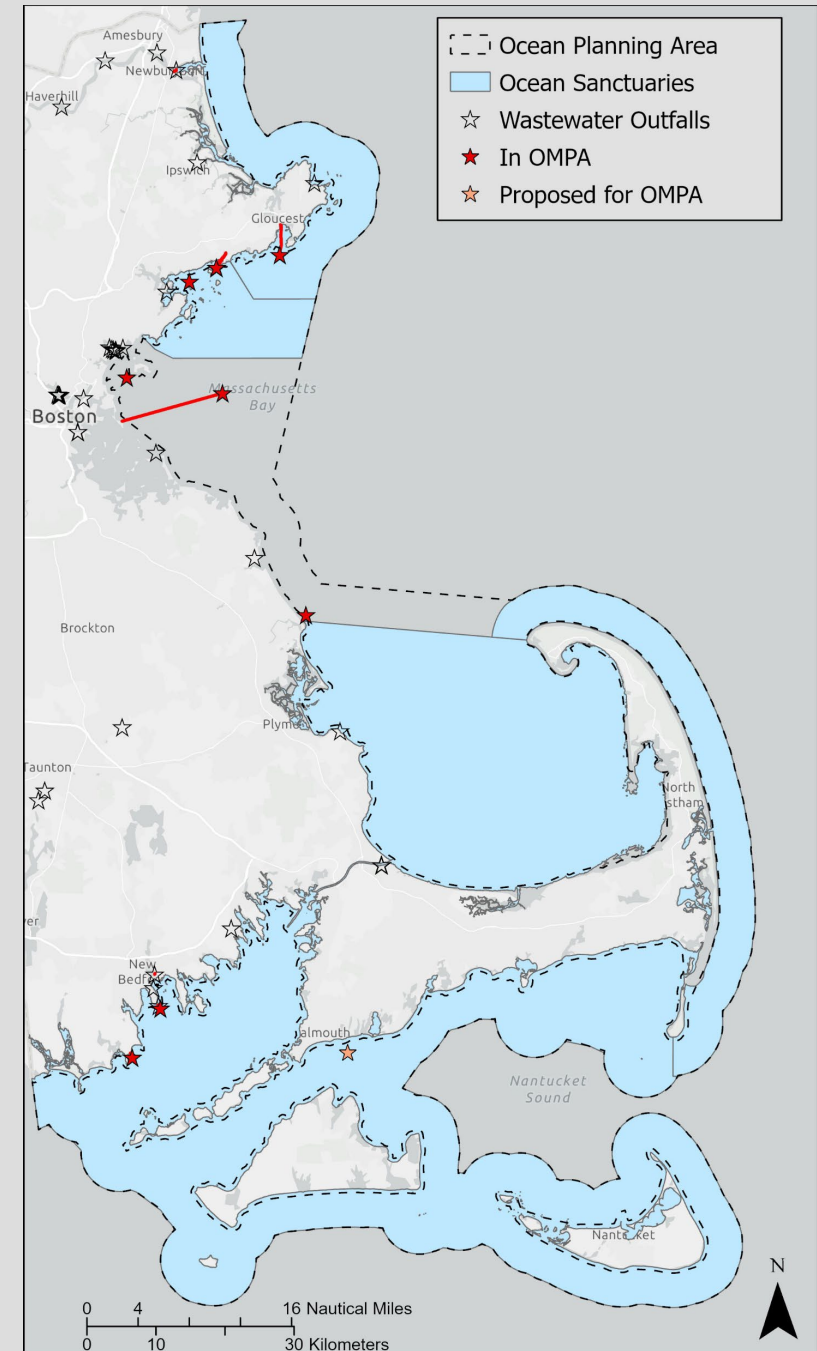
Requirements of M.G.L. Chapter 132A §16 G (paraphrased):

1. Meets WQ standards & the intent of the act
 2. Meets EPA TMDLs
 3. Commercial / industrial pre-treatment plan approved by DEP
 4. Water conservation plan approved by Water Resource Commission
 5. Inflow/infiltration plan approved by DEP
 6. CSO plan approved by DEP
 7. Will not reduce ground/surface water replenishment
 8. Consistent with policies and plans of CZM
 9. Consistent with all federal, state, and local requirements, including Ch. 21, 91, 130, 131
 10. Structure will not adversely impact marine fisheries operations
- + If in one of the sanctuaries bordering the Cape: advance treatment, disinfection (if chlorine, must also dechlorinate) and treatment to remove nutrients, pathogens or other pollutants

Requirements of M.G.L. Chapter 132A §16 I (paraphrased):

An application must include:

1. Final CWMP, FEIR+cert
2. Benthic survey & fish habitat evaluation
3. Baseline nutrient-related WQ monitoring
4. Site-specific hydrodynamic model
5. Hydrologic evaluation of the aquifer and recharge effects





OFFSHORE SAND: REFINE MANAGEMENT STANDARDS

- Siting standards and potential impacts don't match the "seafloor infrastructure" category
- Additional work is needed to inform refinements of performance standards

Current Performance Standards in the Ocean Plan

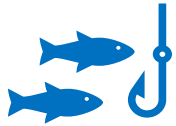
- Public benefits must outweigh public detriments
- Must have biological and physical monitoring plans of source and nourishment sites
- Must have a documented critical erosion problem
- Nourishment to protect public infrastructure, natural resources, and other public interest factors e.g., access and recreation
- Alternative sand resources (beneficial re-use, upland) are not reasonably practicable

Conflict matrix:

Protected Resource or Use Area	Infrastructure			Sand Mining
	Surface	Water	Seafloor	
North Atlantic Right Whale	X	X	X	X
Humpback, Fin, & Sei Whales (3)	X	X	X	X
Sea Ducks / diving birds	X	X		
Other bird habitats (4)	X			
Hard/Complex Seafloor, Tidal flats			X	X
Eelgrass	X	X	X	X
Fish Habitat Areas (5)		X	X	X
Comm. Fish (3), Rec. Fish, Trawl Survey	M	M	M	M
Traffic (3) & Nav	M	M		
Existing Infrastructure	M	M		M
Sand Resource Areas	M	M	M	
Fixed Fishing Infrastructure	M	M	M	M

SSUs
(17)

WDUs
(12)



AQUACULTURE: POTENTIAL SITING STANDARDS

- Aquaculture is currently *protected* via the Fixed Fishing Facilities (Infrastructure) WDU
- Also a candidate for being a managed use with **siting / performance standards**

Note: Ocean Plan standards would:

- Only apply to projects that a) are in the ocean planning area and b) require a MEPA EIR
- Not increase or decrease state authority or local authority over permitting aquaculture
- Provide DMF and other reviewing agencies with siting guidelines to point to in project reviews

Conflict matrix:

	Protected Resource or Use Area	Infrastructure			Sand Mining	Aquaculture
		Surface	Water	Seafloor		
SSUs (17)	NARW, Humpback, Fin, & Sei Whales (4)	X	X	X	X	X
	Sea Ducks / diving birds	X	X			
	Other bird habitats (4)	X				
	Hard/Complex Seafloor			X	X	X
	Tidal flats			X	X	
	Eelgrass	X	X	X	X	X
	Fish Habitat Areas (5)		X	X	X	
WDUs (12)	Comm. Fish (3), Rec. Fish, Trawl Survey	M	M	M	M	M
	Traffic (3) & Nav	M	M			
	Existing Infrastructure	M	M		M	
	Sand Resource Areas	M	M	M		M
	Fixed Fishing Infrastructure	M	M	M	M	

SEASONALITY IN THE MANAGEMENT FRAMEWORK

Siting Standards (based on conflict matrix):

SSU: Presumptive Exclusion (rebuttable*)	X
WDU: Avoid, Minimize, & Mitigate Impacts (w/ permits)	M
Excluded or Avoid – Temporary/Construction phase	C
Neutral (no conflict)	

- Some habitats and human uses are seasonal
- Activities such as construction that are temporary can avoid impacts via timing

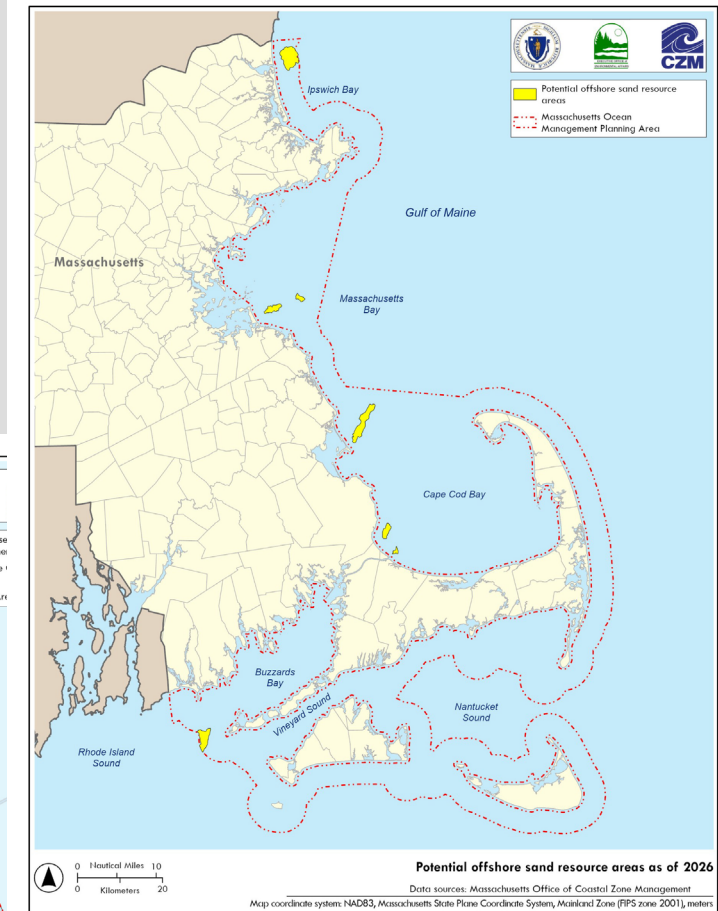
Conflict matrix:

	Protected Resource or Use Area	Infrastructure			Sand Mining	Aquaculture
		Surface	Water	Seafloor		
	Hard/Complex Seafloor			X	X	X
	Tidal flats			X	X	
	Eelgrass	X	X	X	X	X
SSUs (17)	NARW, Humpback, Fin, & Sei Whales (4)	X	X	C	C	X
	Sea Ducks / diving birds	X	X			
	Other bird habitats (4)	X				
	Fish Habitat Areas (5)		X	C	X	
WDUs (12)	Comm. Fish – mobile gear, Trawl Survey	M	M	M	M	M
	Comm. Fish – fixed gear	M	M	C	C	
	Comm. Fish – hook & line	C	C	C	C	
	Rec. Fishing	C	M			
	Traffic (3) & Nav	M	M			
	Existing Infrastructure	M	M		M	
	Sand Resource Areas	M	M	M		M
	Fixed Fishing Infrastructure	M	M	M	M	

*rebuttable if no less environmentally damaging practicable alternative + no significant alteration of resource + mitigation – OR – if Plan maps mischaracterized the area

MAPS TO ENCOURAGE (CO-)SITING

- Co-location of linear infrastructure or aquaculture projects with existing where feasible to reduce overall footprint
- Offshore sand in the Potential Sand Areas WDU has been pre-screened and preliminary characterizations are available
- Possible Future WDU: technology testing locations to facilitate innovation



PROPOSED UPDATED MANAGEMENT STANDARDS

Siting Standards (based on conflict matrix):

SSU: Presumptive Exclusion (rebuttable*)	X
WDU: Avoid, Minimize, & Mitigate Impacts (w/ permits)	M
Excluded or Avoid – Temporary/Construction phase	C
Neutral (no conflict)	
Siting Encouraged	+

Conflict matrix:

	Protected Resource or Use Area	Infrastructure			Sand Mining	Aquaculture
		Surface	Water	Seafloor		
SSUs (17)	Hard/Complex Seafloor			X	X	X
	Tidal flats			X	X	
	Eelgrass	X	X	X	X	X
	NARW, Humpback, Fin, & Sei Whales (4)	X	X	C	C	X
	Sea Ducks / diving birds	X	X			
	Other bird habitats (4)	X				
	Fish Habitat Areas (5)		X	C	X	
WDUs (12)	Comm. Fish – mobile gear, Trawl Survey	M	M	M	M	M
	Comm. Fish – fixed gear	M	M	C	C	
	Comm. Fish – hook & line	C	C	C	C	
	Rec. Fishing	C	M			
	Traffic (3) & Nav	M	M			
	Existing Infrastructure	M	M	+	M	
	Sand Resource Areas	M	M	M	+	M
	Fixed Fishing Infrastructure	M	M	M	M	+

*rebuttable if no less environmentally damaging practicable alternative + no significant alteration of resource + mitigation – OR – if Plan maps mischaracterized the area

PROPOSED UPDATED MANAGEMENT STANDARDS

Siting Standards (based on conflict matrix):

SSU: Presumptive Exclusion (rebuttable*)	X
WDU: Avoid, Minimize, & Mitigate Impacts (w/ permits)	M
Excluded or Avoid – Temporary/Construction phase	C
Neutral (no conflict)	
Siting Encouraged	+

Performance Standards:

- Public Benefits > Public Detriments
- Appropriate Monitoring Plans
- Appropriate Scale & Host Community Support (renewable energy generation)
- Documented need for nourishment, etc. (sand)
- Follow Ocean Sanctuary standards (POTW discharges)

Conflict matrix:

	Infrastructure			Sand Mining	Aquaculture
	Surface	Water	Seafloor		
Hard/Complex Seafloor			X	X	X
Tidal flats			X	X	
Eelgrass	X	X	X	X	X
NARW, Humpback, Fin, & Sei Whales (4)	X	X	C	C	X
Sea Ducks / diving birds	X	X			
Other bird habitats (4)	X				
Fish Habitat Areas (5)		X	C	X	
SSUs (17)					
WDUs (12)					
Comm. Fish – mobile gear, Trawl Survey	M	M	M	M	M
Comm. Fish – fixed gear	M	M	C	C	
Comm. Fish – hook & line	C	C	C	C	
Rec. Fishing	C	M			
Traffic (3) & Nav	M	M			
Existing Infrastructure	M	M	+	M	
Sand Resource Areas	M	M	M	+	M
Fixed Fishing Infrastructure	M	M	M	M	+

*rebuttable if no less environmentally damaging practicable alternative + no significant alteration of resource + mitigation – OR – if Plan maps mischaracterized the area

ADAPTING AND FUTURE-PROOFING

CURRENT 2021 PLAN

- Specific managed uses (wind, tidal/wave energy, sand mining, cables, pipelines)
- All protected areas are year-round
- Fisheries protected areas boiled down into 2 maps
- Conflict matrix largely unaltered since 2009

PROPOSED FOR 2026/2027

- Categories of uses (e.g., infrastructure by location, sand mining, aquaculture)
- Protections can be seasonal if use/resource is seasonal
- Composite fisheries areas (8 maps) plus detailed supplemental info
- Adjustment to fisheries/cables and for other resources based on experience

BENEFIT

- Ocean Plan standards can be applied to new, unforeseen project types
- Creates windows for temporary activities
- Fisheries protections useful for proponents and regulators
- Conflict matrix better reflects permitting landscape

Maintains current standards and review jurisdiction + adds flexibility and future-proofing

TOPICS FOR FOLLOW-UP



- Ocean Innovation and Technology development next steps



- Performance standards for pipes/discharges outside Ocean Sanctuaries?
- Approach to energy cable siting



- Performance Standards for Offshore Sand



TECHNOLOGY & INNOVATION

Context:

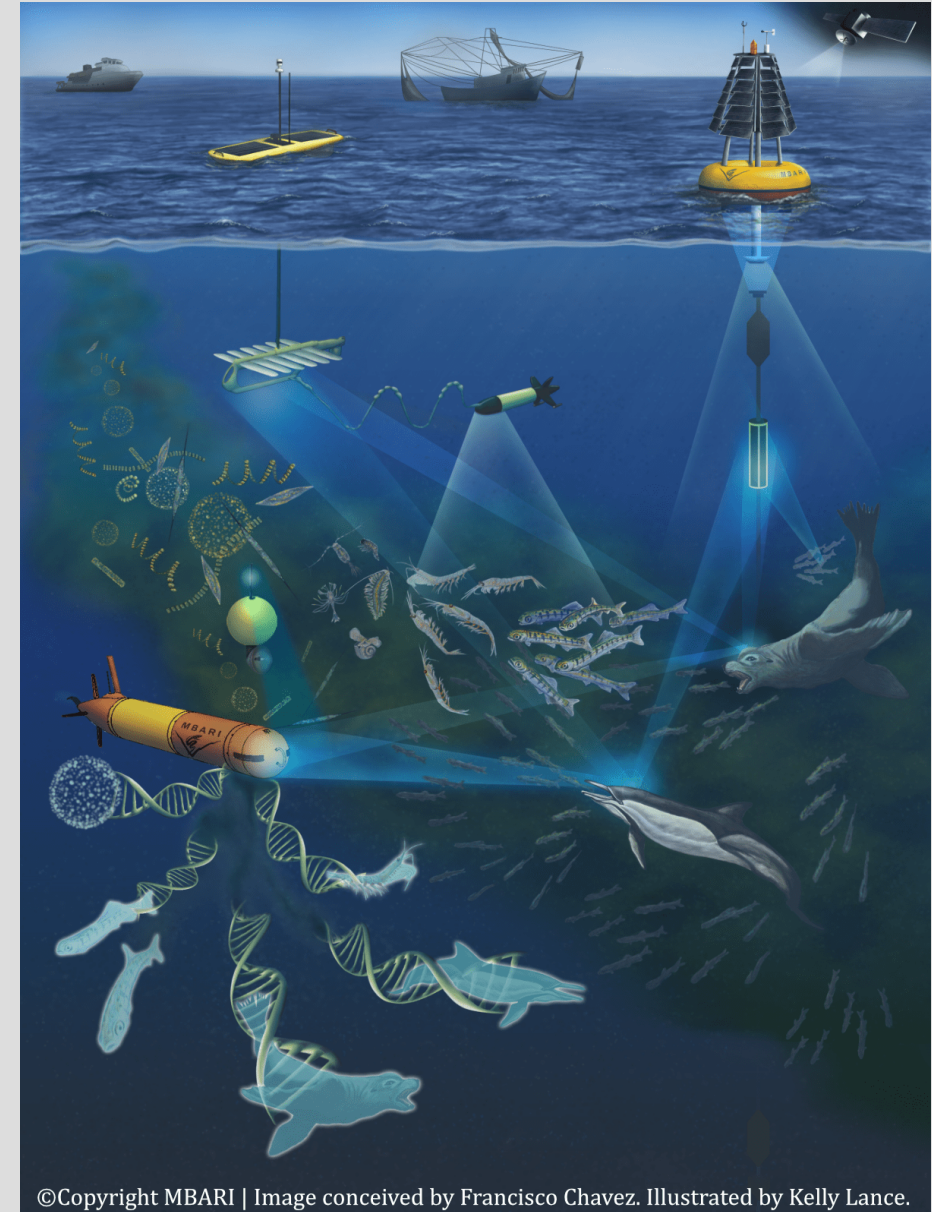
- Category of emerging uses in the ocean planning area:
 - AUVs, eDNA, mCDR, sensors/observing systems, pilot-scale energy projects, etc
- New Work Group formed during this review to support innovation in this area

Challenges Identified by Work Group:

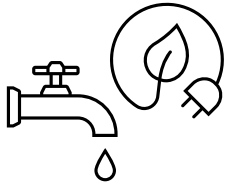
- Identifying the best places to test tech
- Permitting - timelines exclude small projects, lack of experience navigating process

Looking Ahead:

- Make data available to facilitate spatially-explicit deployment decisions
- Establish/expand purpose of pre-permitted zones and test ranges



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POTENTIAL PERFORMANCE STANDARDS FOR PIPES

Context:

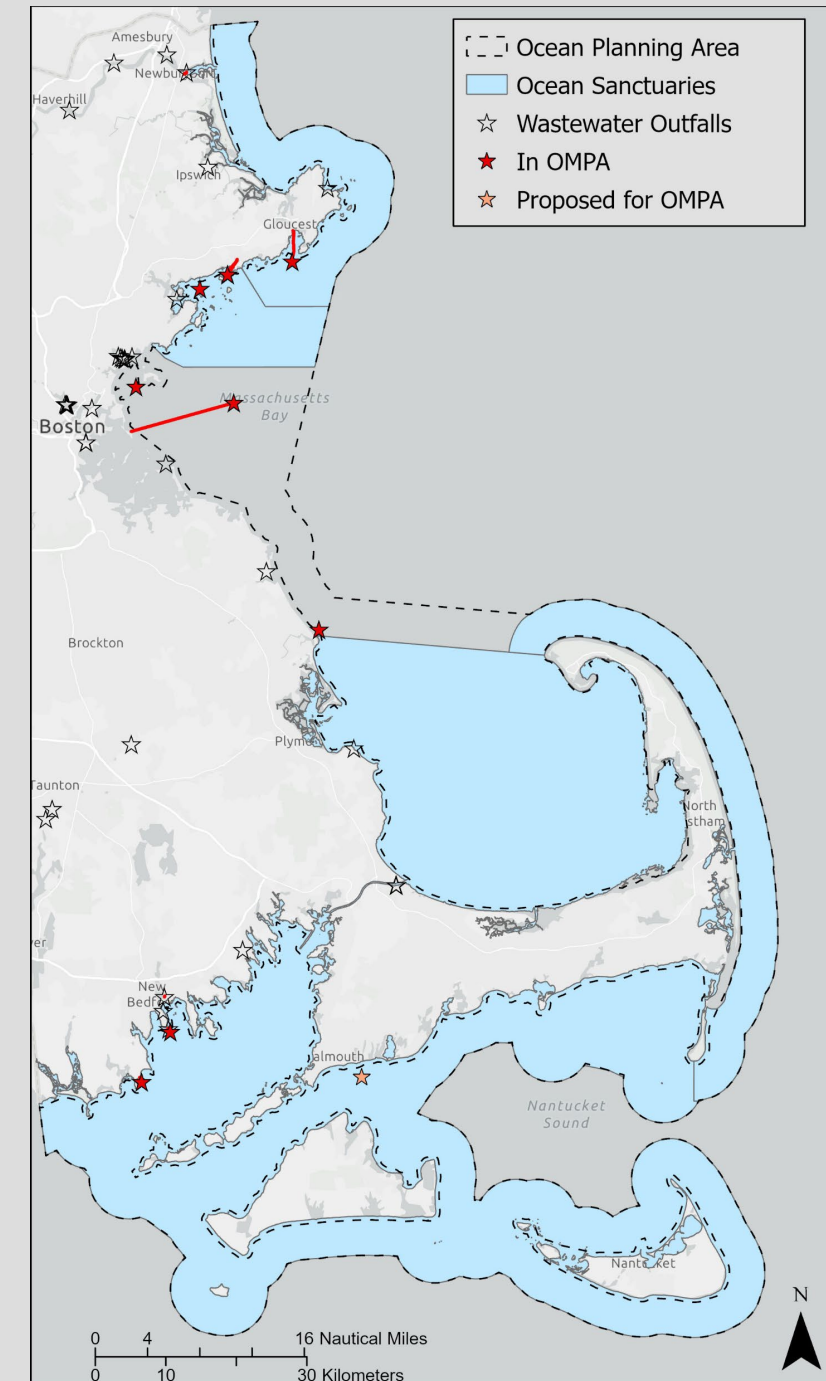
- For POTWs in the Ocean Planning Area AND one of the Ocean Sanctuaries, Ocean Sanctuaries regulations already apply
- Work Group recommends adopting requirements of M.G.L. Chapter 132A §16G and I as a performance standard in the Ocean Plan

Current Question:

- For POTWs in the OMPA but **NOT** in an Ocean Sanctuary, should standards apply?

Looking Ahead:

- Recommend convening a working group to discuss applying these standards outside the Ocean Sanctuaries



Context:

- 2015 Ocean Plan Identified “presumably permittable” cable routes for MA/RI wind energy areas
- Routes have not been utilized so far (see map)

Challenges with Current Approach:

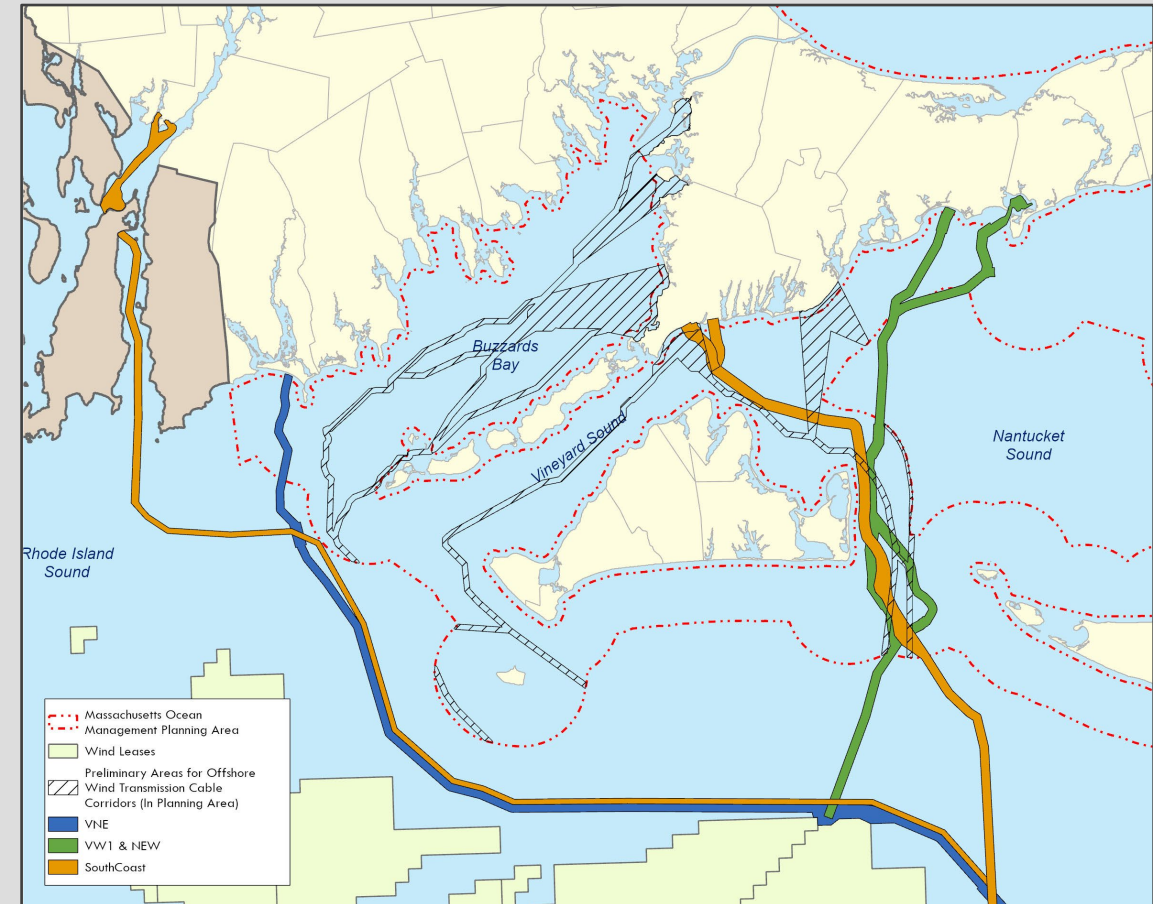
- Hard to anticipate engineering needs of any given project
- Uncertainties in onshore interconnection points and entry points from federal into state waters
- Plan incentives have not outweighed project design needs

Looking Ahead:

- Encourage co-location with existing cables where feasible
- Continue to direct cable siting using Ocean Plan siting and performance standards
- Continue to explore and evaluate strategies on cable siting



ENERGY CABLE SITING





OFFSHORE SAND FOR RESILIENCE



ResilientCoasts

Context:

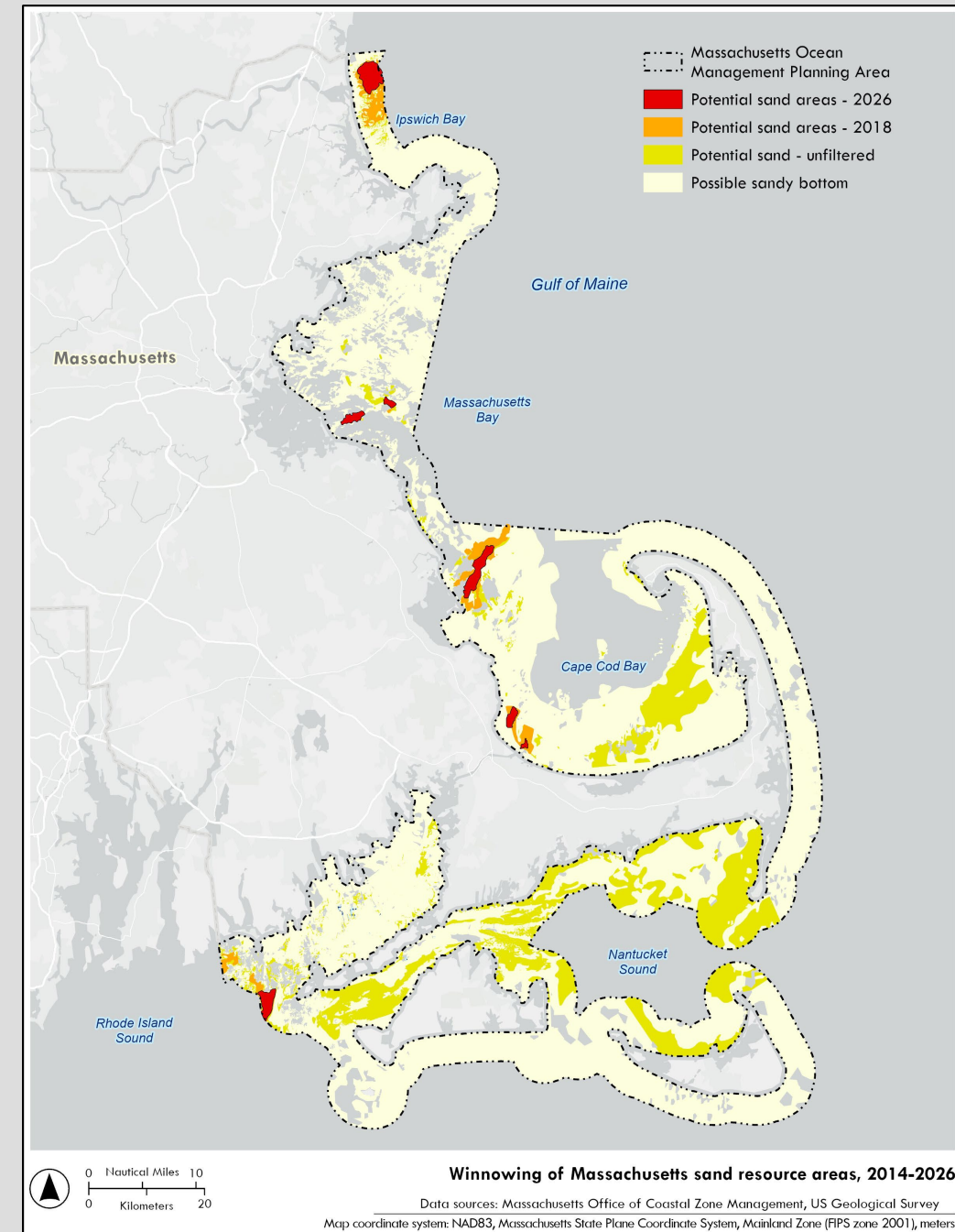
- Offshore Sand for beach nourishment and shoreline protection are possible tools for coastal resilience
- Work to date has identified areas where sand resources may exist

Current Status:

- Additional work is needed to quantify and characterize both available resources and possible projects

Looking ahead:

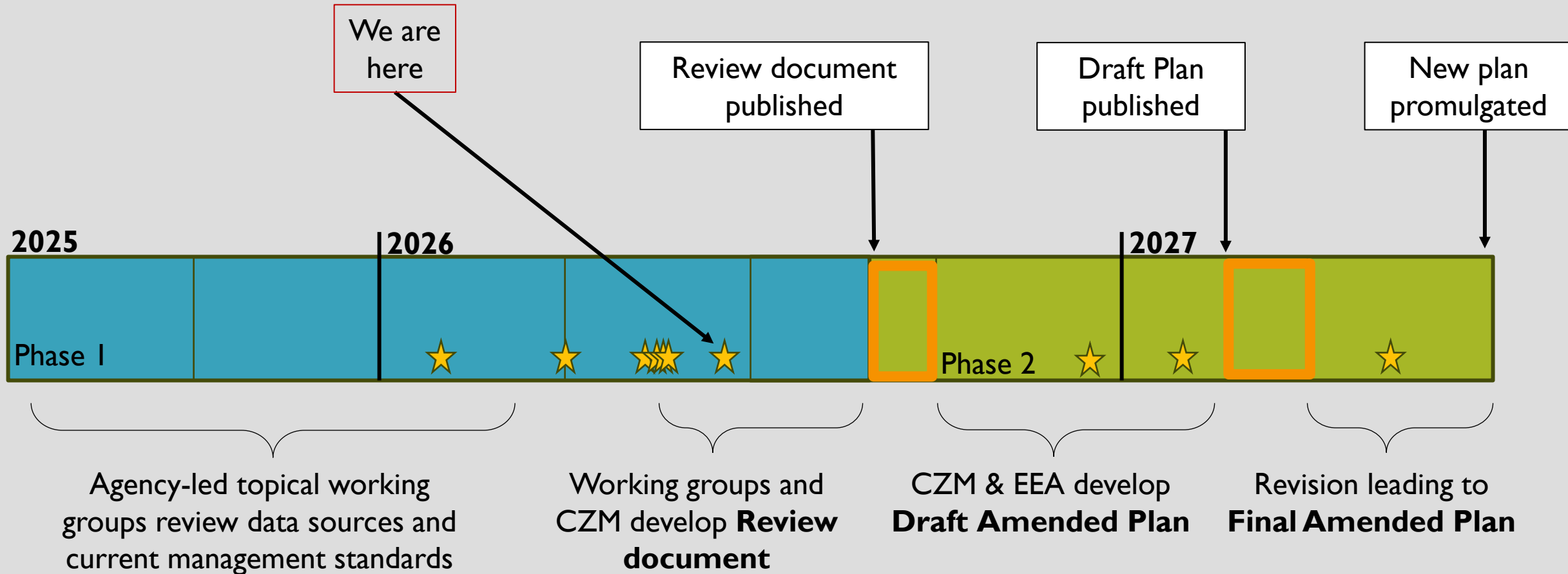
- Continue to characterize the potential offshore sand resource areas (grain size, thickness, surficial habitat)
- Create a centralized database of nourishment needs, permitted projects, and completed projects
- Review available science to characterize and compare impacts from onshore vs offshore sand sources



OCEAN PLAN REVIEW TIMELINE

★ OAC and SAC meetings

□ Public Comment Periods



Note: this is a tentative timeline subject to revision

PUBLIC COMMENT

- Please raise your hand to be unmuted
- Limit of 2 minutes per speaker
- Written comments can also be sent to czm@mass.gov