

SCIENCE ADVISORY COUNCIL: WORKING GROUP FINDINGS, PART 4

May 18, 2026



AGENDA / OVERVIEW



- Background on the Ocean Management Plan
- Energy & Infrastructure

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:

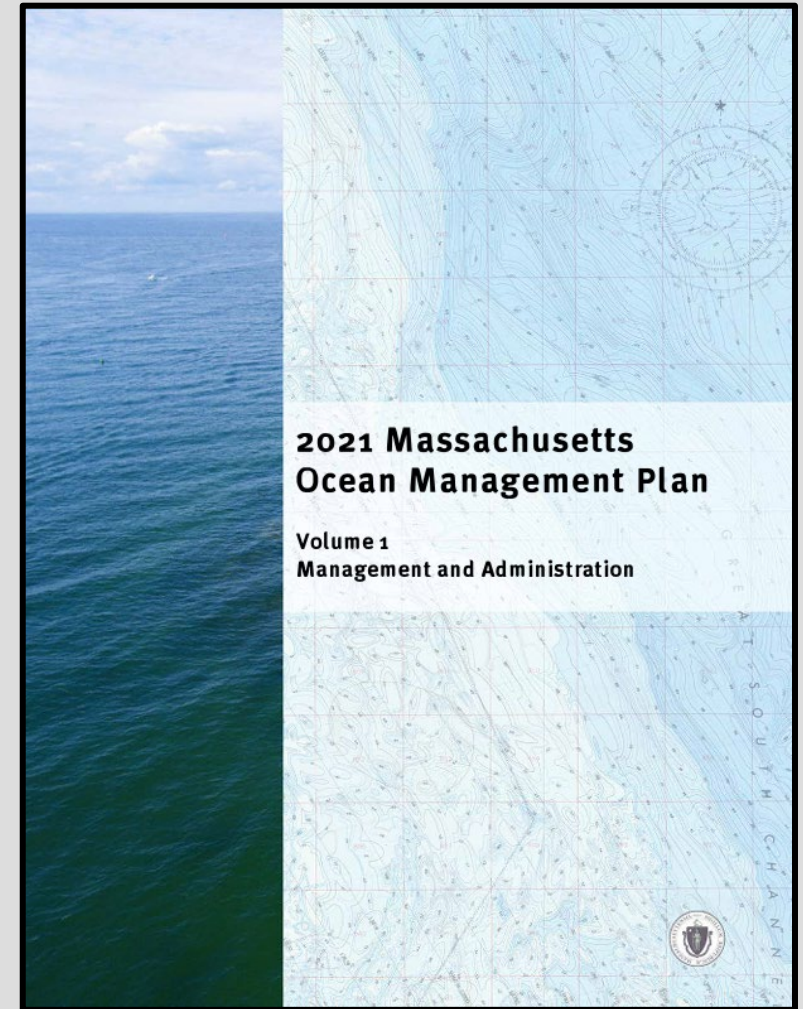
Liz Marsjanik	Vineyard Offshore
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Representatives of six coastal Regional Planning Agencies:

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

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

Green / SSUs:
Presumptive
Exclusion

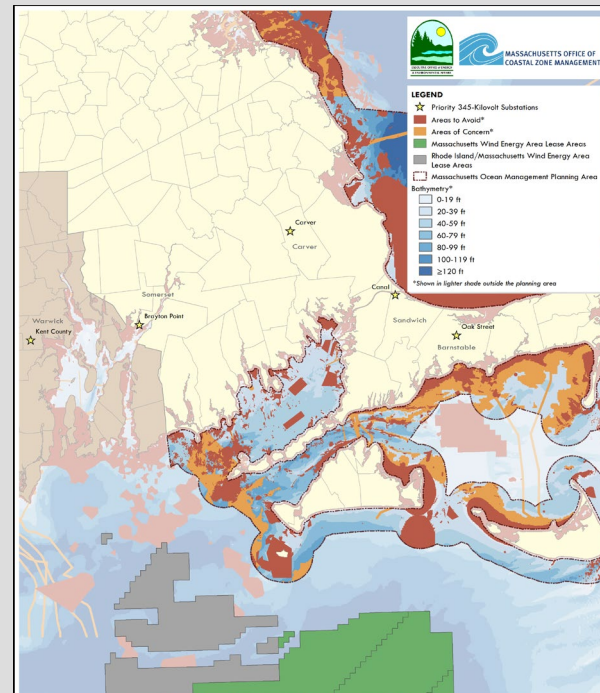
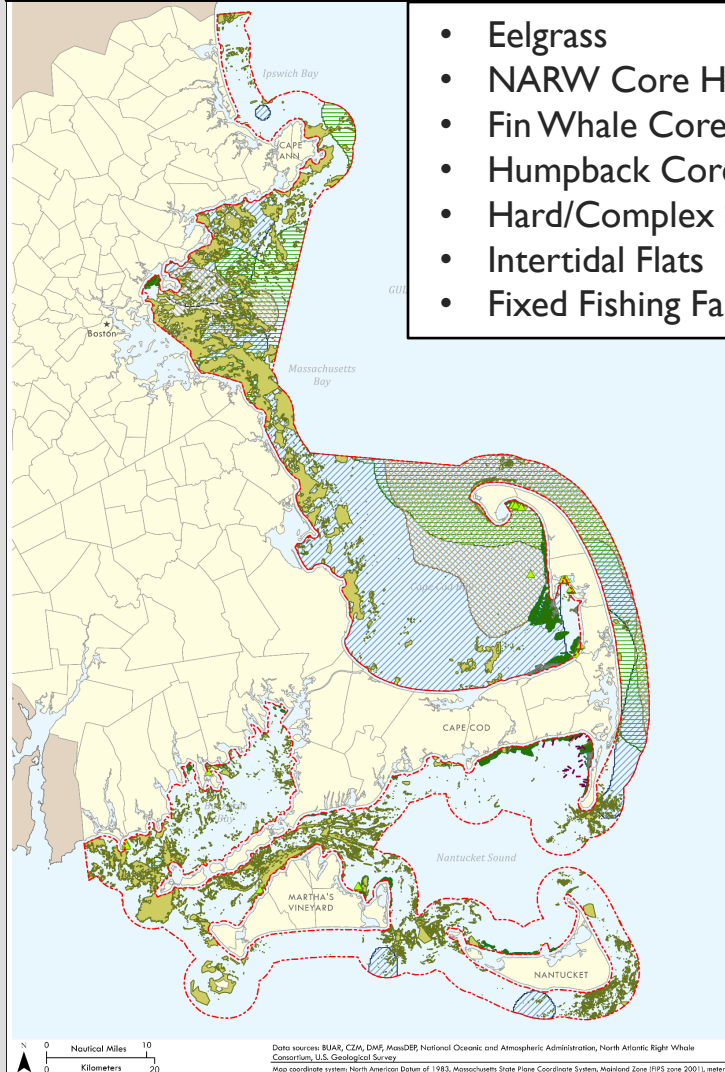
Protected Area	Community Scale Wind	Commercial Tidal Energy	Sand & gravel mining	Cables	Pipelines
North Atlantic Right Whale	X	X	X	X	X
Humpback Whale	X		X	X	X
Fin Whale	X		X	X	X
Roseate Terns	X		X		
Special Concern Terns	X				
Sea Ducks	X				
Leach’s Storm Petrel	X				
Colonial Waterbirds	X				
Hard/Complex 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

Blue / WDU:
Avoid,
minimize,
mitigate

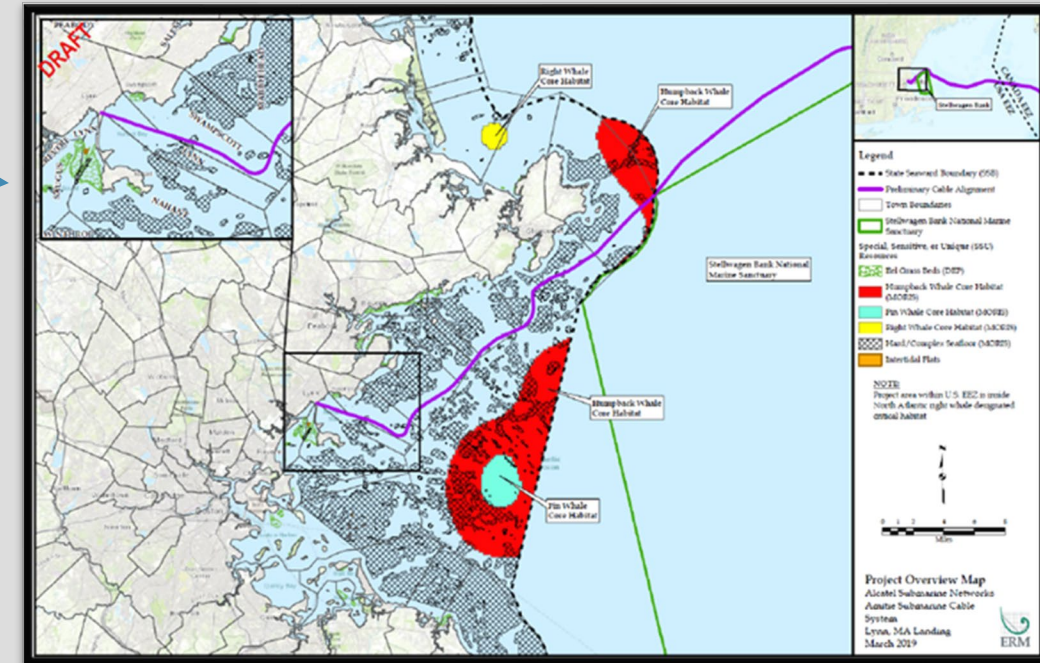
OCEAN PLAN: IMPLEMENTATION

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



REVIEW PROCESS: TECHNICAL WORK GROUPS

Transportation &
Navigation



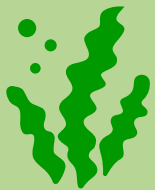
Culture &
Recreation



Ocean Tech &
Innovation



Habitat



Fisheries



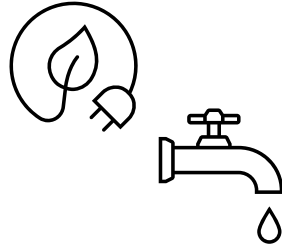
Energy &
Infrastructure



Sediment
& Geology



ENERGY & INFRASTRUCTURE



Work Group's Scope:

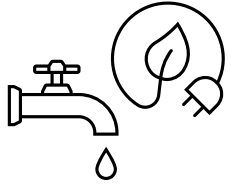
- Evaluate management framework: first experiences with offshore wind
- Ensure management framework can remain nimble as technology updates
- Consider:
 - New WDU for infrastructure
 - Addition of standards for intakes and discharges
- Evaluate progress on Science Priority #1: Continue to Support the Development of Offshore Wind Projects
- Update Baseline Assessment: ~5 variables

Name

Chris Connolly, group lead
Hollie Emery, GIS lead
Nicole Benoit
Todd Callaghan
Marissa Ribeiro Dahan
Shannon Dennehy
Lisa Engler
Whitney Fenwick
Kirsten Holland Nantz
Lealdon Langley
Liz Marsjanik
John Miller
Weezie Nuara
Katherine O'Malley
Lauren Peloquin Shea
Vandana Rao
Matthew Waldrip

Affiliation

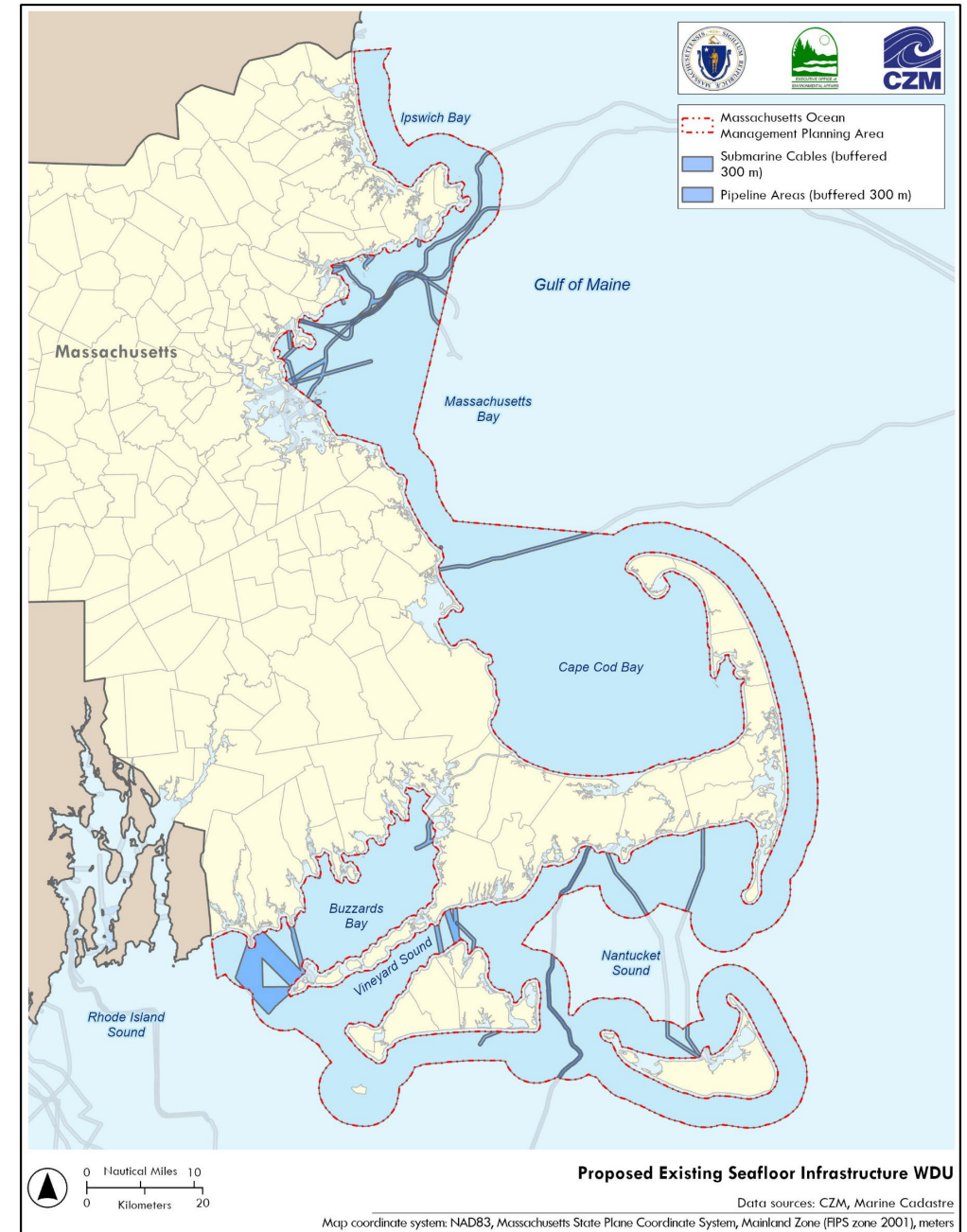
DOER
CZM
MWRA
CZM
ISO-NE
DPU
MassCEC
MassDEP
Orsted
MassDEP
Vineyard Wind
MREC
FREA
OET
National Grid
EEA Water Policy
Eversource



ENERGY & INFRASTRUCTURE

Recommendations:

- New WDU: “Existing Seafloor Infrastructure”
 - 300 m buffer around existing infrastructure
 - Known cables (telecom, electric) and pipelines (LNG, wastewater, etc..)
- Facilitate co-location to minimize cumulative impacts

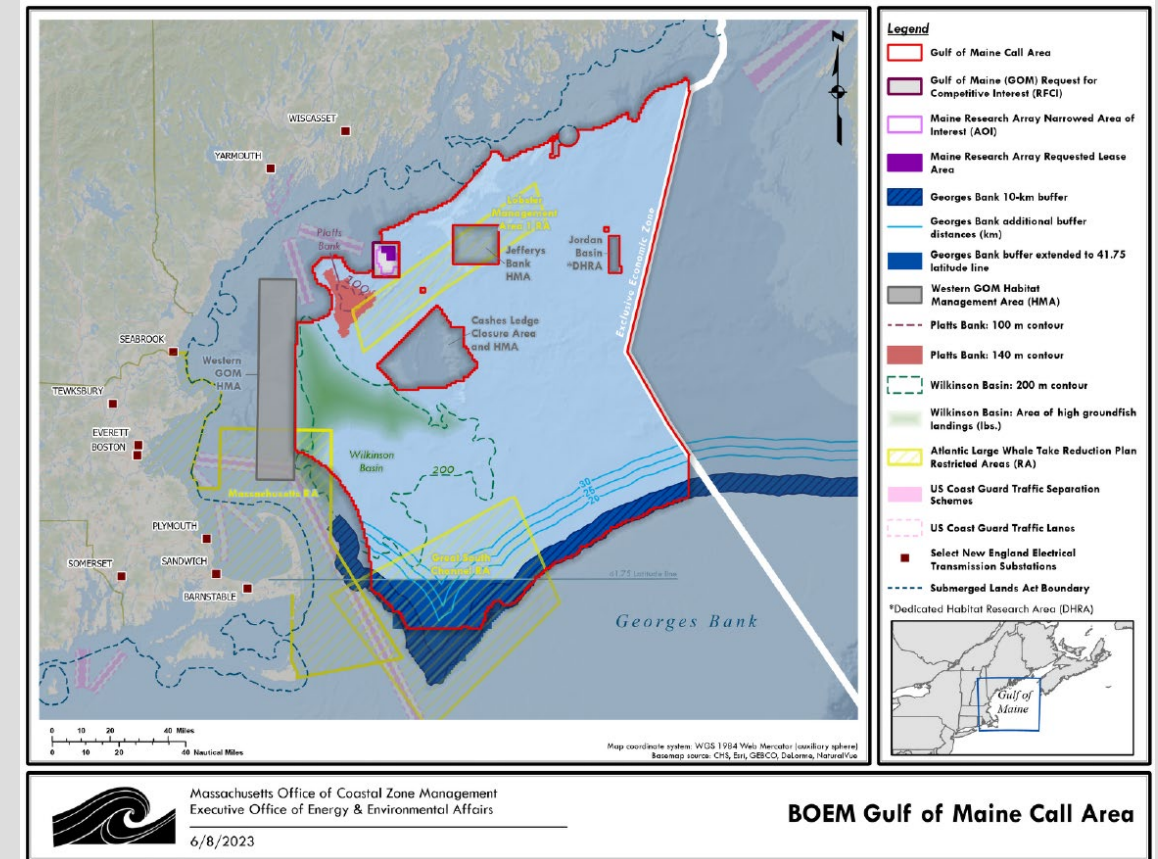


Science Priority I from the 2021 Ocean Plan:

“Advance data and information to support the sustainable use of shared ocean resources with existing and emerging uses in the development of offshore wind.”

Specific goals:

- ✓ Support and inform ongoing efforts by ME, NH, and MA by mapping existing uses and resources in the Gulf of Maine and using advanced GIS techniques to identify areas of least conflict for siting offshore wind.
- ✓ CZM will also identify data gaps and collaborate with other states to fill data gaps to inform these siting processes.
- ❑ Use existing spatial data on uses and resources to develop “presumably permissible” corridors for offshore wind export cables to onshore connection points north of Cape Cod.



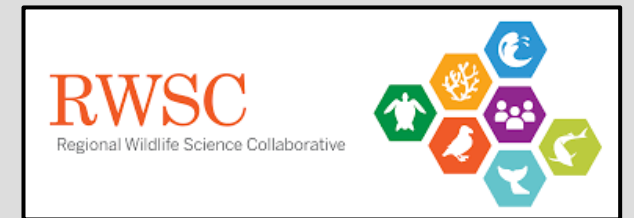
Status of goals:

- ✓ Gulf of Maine siting process
- ✓ Maine Offshore Wind Research Consortium, Seafloor Mapping prioritization effort with NROC
- ❑ Cable siting: continuing to evaluate

NEW ENERGY SCIENCE & DATA PRIORITIES?

Recommendation:

- Update Science Priority #1 to reflect progress in offshore wind deployment
 - Wind farm construction has begun (and in some cases completed) since the last plan. We can now conduct studies directly measuring e.g., impact to the economy, the environment, the electric grid, fishing, etc..
 - Efforts have evolved from siting offshore wind energy areas to also siting cables, individual wind farm components, etc. - we continue to need more data on seafloor at that scale
 - Some specific tasks in 2021 Science Priority #1 are complete, but there is more to do





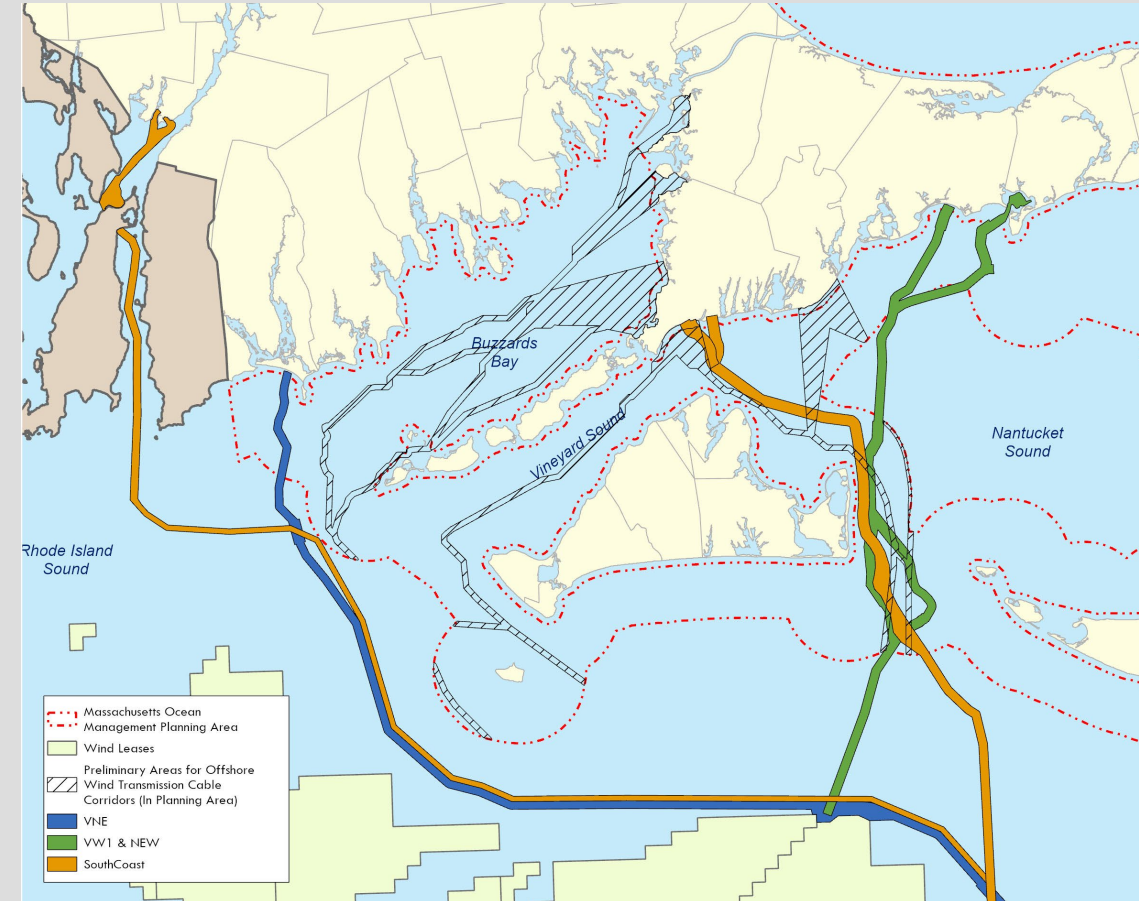
OCEAN PLAN – OFFSHORE WIND CABLE SITING

Background:

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

Work Group recommendations for the SAC:

- Encourage co-location with existing cables where feasible (new WDU & management framework)
- Continue to direct cable siting using Ocean Plan siting and performance standards (Seafloor Infrastructure)
- Continue to explore and evaluate strategies on cable siting



CHALLENGES WITH CURRENT CABLE SITING APPROACH

- Hard to anticipate all engineering needs of any given project
- Uncertainty in where cables will connect to the grid (landside)
- Uncertainty in where cables will enter from federal waters
- Ocean Plan incentives haven't yet outweighed project design needs

BASELINE ASSESSMENT UPDATE

Variables in the 2021 Baseline Assessment:

- Locations of energy cables
- WEA locations
- Marine Energy Infrastructure

What else?



ENERGY & INFRASTRUCTURE – PIPELINES

Recommendations:

1. Expand “pipelines” to include all pipes*
2. Include existing pipes in proposed “Existing Seafloor Infrastructure” WDU (as in figure to right)
3. Create siting and performance standards for “seafloor infrastructure”
4. Create additional siting and performance standards for NEW POTW pipes in Ocean Sanctuaries
5. Update the “Discharges” section of the Baseline Assessment with new data (esp. CSOs)

*Definition of pipes includes:

- Intakes (research, desalination, cooling water)
- Outfalls (sewage, heated cooling water, industrial/commercial)
- Pipes for conveyance (water for desalination or [heating/cooling](#), or for energy resources including gas, oil, hydrogen, ammonia)





SEAFLOOR INFRASTRUCTURE PROPOSED SITING STANDARDS

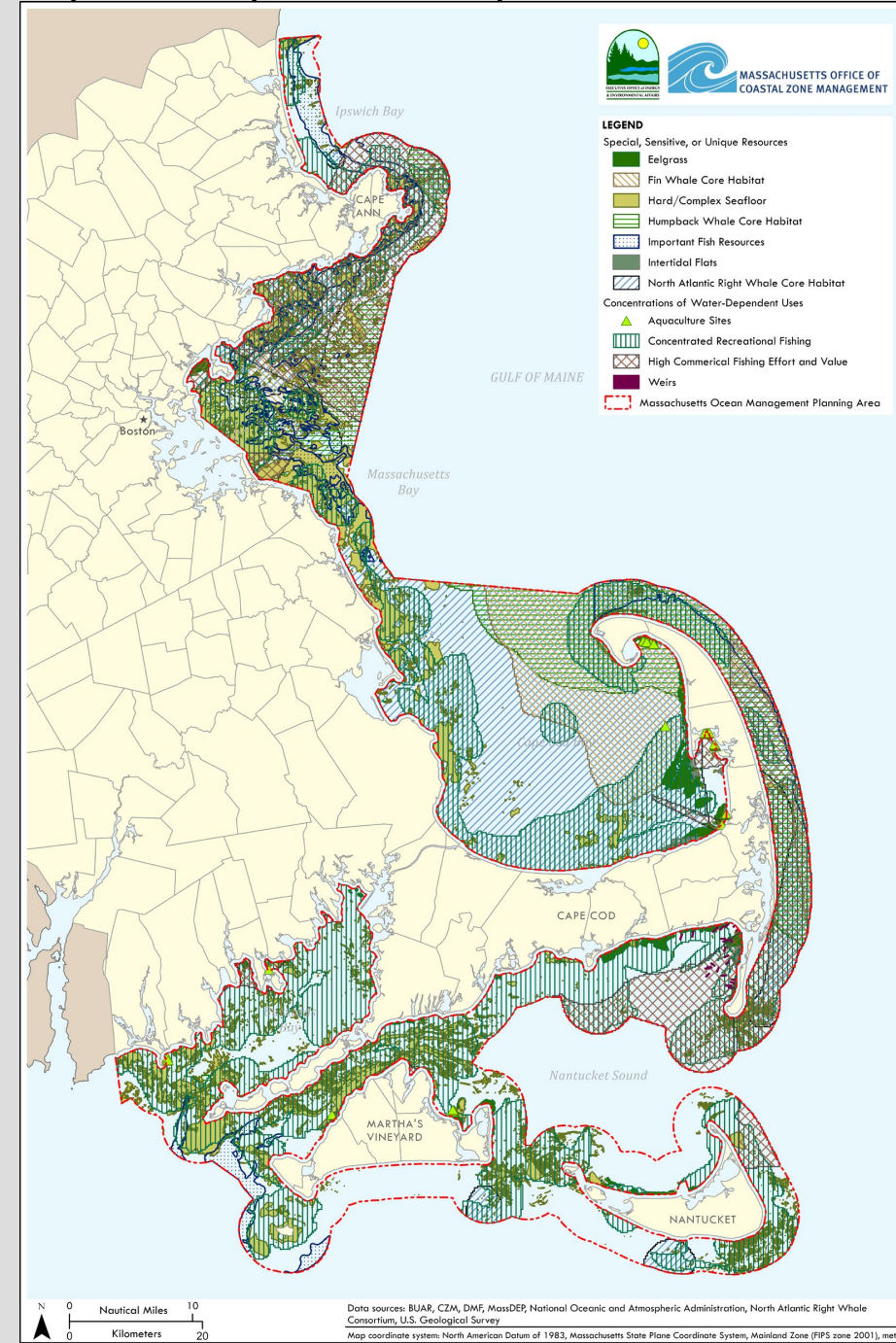
- SSUs & WDUs to be addressed for cables, pipes*, and other projects on/under the seafloor:

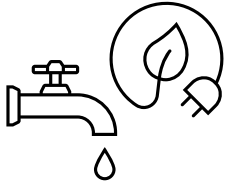
- Eelgrass
- Intertidal Flats
- Hard/Complex Seafloor
- Whale Core Habitats (seasonally)
- Fish Habitats (seasonally)
- Mobile gear fishing areas (seasonally)
- Fixed Fishing Facilities
- [Trawl survey areas](#)
- [Sand resource areas](#)

*Pipes include:

- Intakes (research, desalination, cooling water)
- Outfalls (sewage, heated cooling water, industrial/commercial)
- Pipes for conveyance (water for desalination or [heating/cooling](#), or for energy resources including gas, oil, hydrogen, ammonia)

Pipeline map from 2021 plan:





PROPOSED PIPE PERFORMANCE STANDARDS

Recommendation:

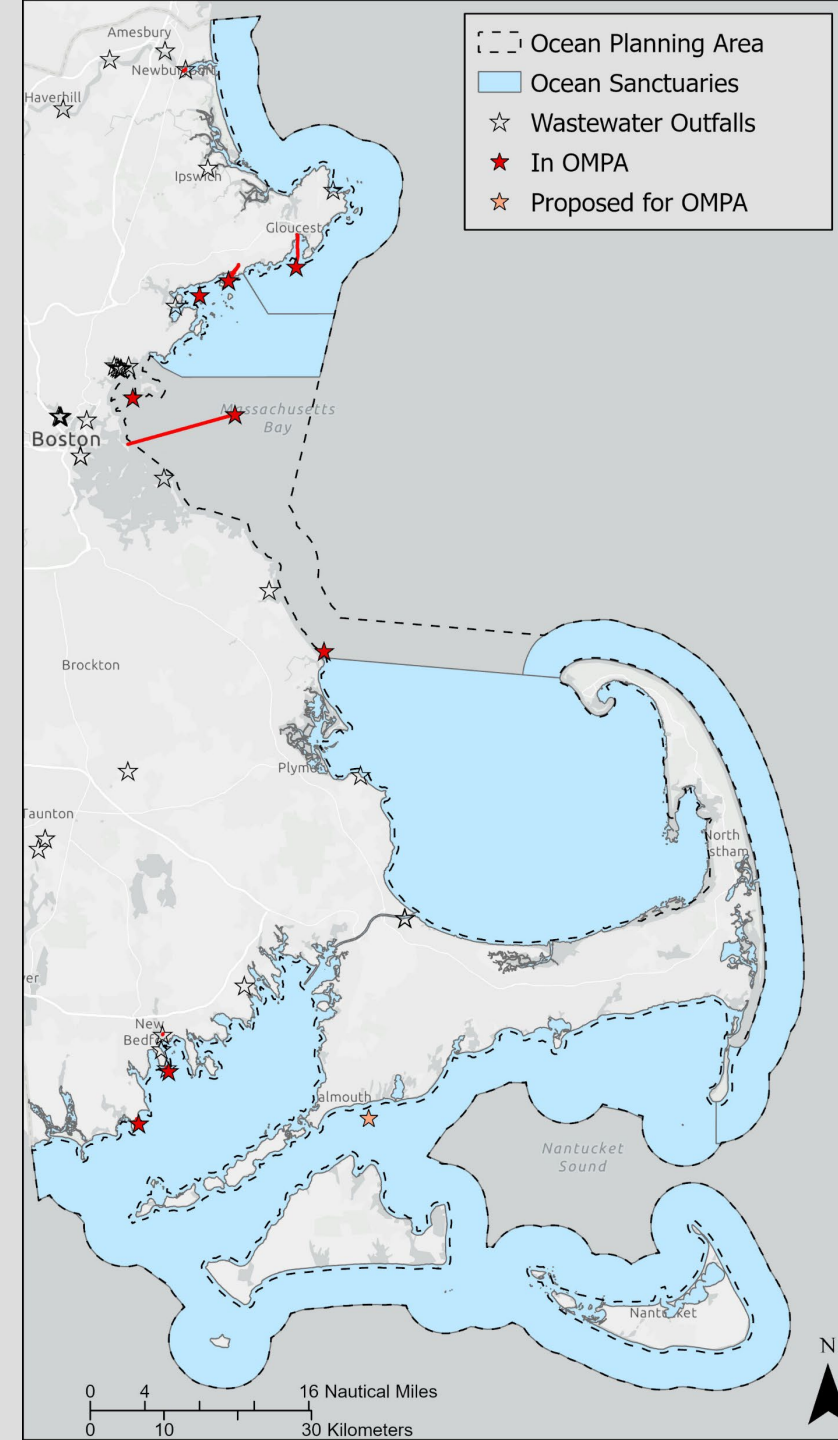
For POTWs in the Ocean Management Planning Area (OMPA) **AND** one of the Ocean Sanctuaries:

Adopt requirements of M.G.L. Chapter 132A §16G and I(paraphrased) as a performance standard:

1. Proposed outfall is consistent with applicable federal, state and local laws, CZM plans and policies, EPA TMDLs
2. Project will not adversely affect ground or surface water replenishment, or marine fisheries
3. Project includes plans for addressing water conservation, inflow and infiltration, combined sewer overflows, pretreatment, disinfection
4. Evaluation of receiving water body: benthic survey, fish habitat evaluation, 24 months baseline wq monitoring, hydrodynamic modeling illustrating the mixing zone

For POTWs in the OMPA but **NOT** in an Ocean Sanctuary:

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



BASELINE ASSESSMENT UPDATE

Recommendation from the WG:

- Update “Discharges” section of the BA (e.g., current status of CSOs)
- Consider mentioning updates to federal standards regarding shellfishing closures near POTW outfalls
- Consider mentioning work by EEA agencies and Town of Falmouth on an ocean outfall alternative for treated wastewater

FOR DISCUSSION

- Any questions or concerns?
- Are there any data sets, publications, etc., that we should add?
- Are there any experts or key stakeholder groups to engage?

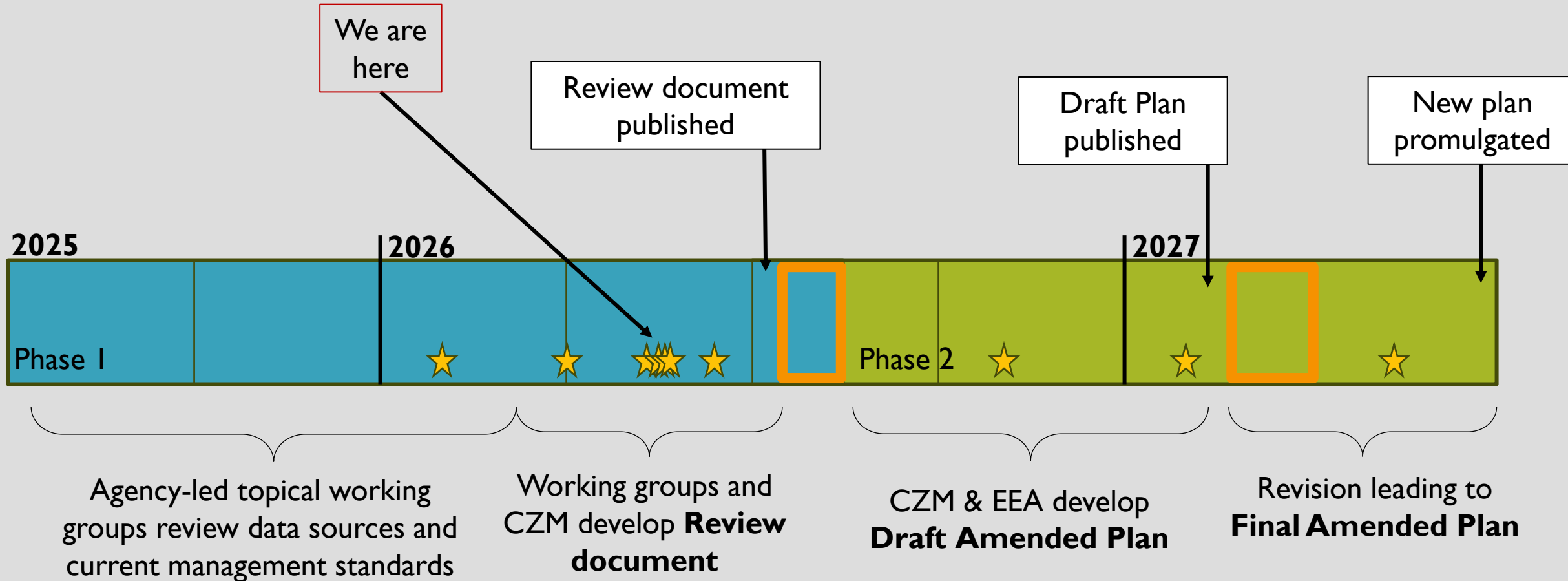
NEXT STEPS

- Additional SAC meeting to focus on:
 - Sediment & Geology (May 21, 11 am)
- OAC meeting on management framework and Ocean Plan administration
 - June 16, 1-3 pm
- Review Document
- Amended Ocean Plan

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