

SCIENCE ADVISORY COUNCIL: WORKING GROUP FINDINGS, PART I

March 30, 2026



AGENDA / OVERVIEW

- Background on the Ocean Management Plan
- Technology and Innovation Working Group
- Transportation and Navigation
- Cultural and Recreational Resources



OCEANS ACT OF 2008

- **The Ocean Management Plan**

“...shall set forth the commonwealth's goals, siting priorities and standards for ensuring effective stewardship of its ocean waters”

- **Ocean Advisory Commission**

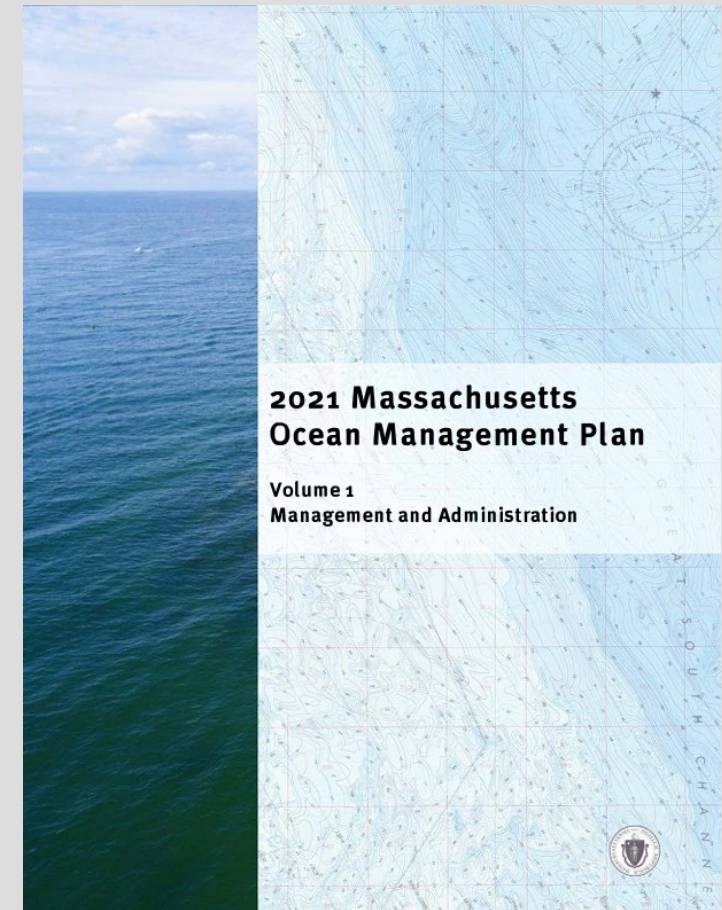
“...to assist the secretary in developing the ocean management plan”

- Legislators, agency leads, regional planning agencies, industry

- **Science Advisory Council**

“... to assist the secretary in creating a baseline assessment and obtaining any other scientific information...”

- Academic, non-profit, and agency scientists



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

Representative of an environmental organization:

Chris McGuire The Nature Conservancy

Expert in the development of offshore renewable energy:

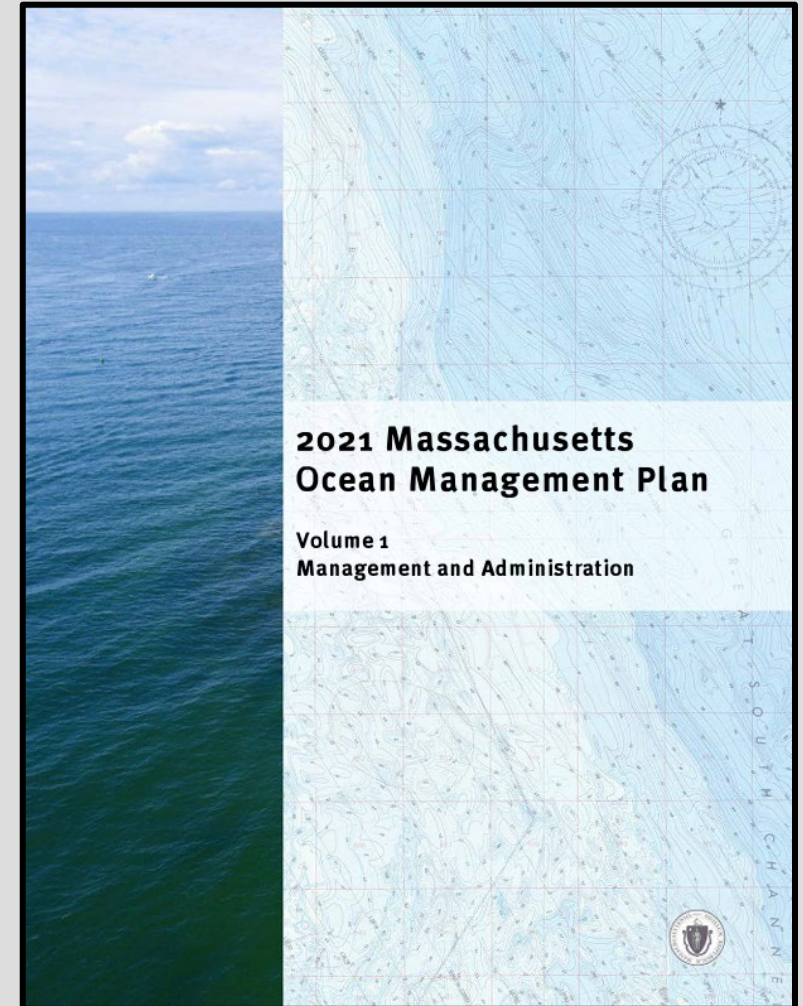
Liz Marsjanik Vineyard Offshore

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

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 |

THE OCEAN MANAGEMENT PLAN PERFORMANCE STANDARDS

In addition to siting standards, as of 2021:

- Public Benefits must outweigh public detriments
- Renewable Energy:
 - Appropriate Scale
 - Host Community Support
- Sand mining:
 - Used for nourishment project with documented need

OCEAN PLAN REVIEW: 2026 GOALS

Goals:

- 1. The Plan protects species and uses appropriately**
 - Data-driven changes to current resource maps
 - New resource maps when warranted
- 2. The Plan fosters economic growth and responsible development**
 - Acknowledge seasonality for inherently seasonal uses and habitats
 - Add nuance to protected areas to create windows for necessary development
- 3. The Plan's management framework is up to date and future-proof**
 - Apply lessons learned from recent energy development
 - Revise management framework to accommodate new and emerging uses

REVIEW PROCESS: TECHNICAL WORK GROUPS



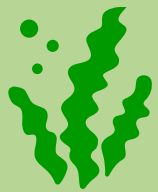
Sediment
& Geology



Culture &
Recreation



Energy &
Infrastructure



Habitat



Fisheries



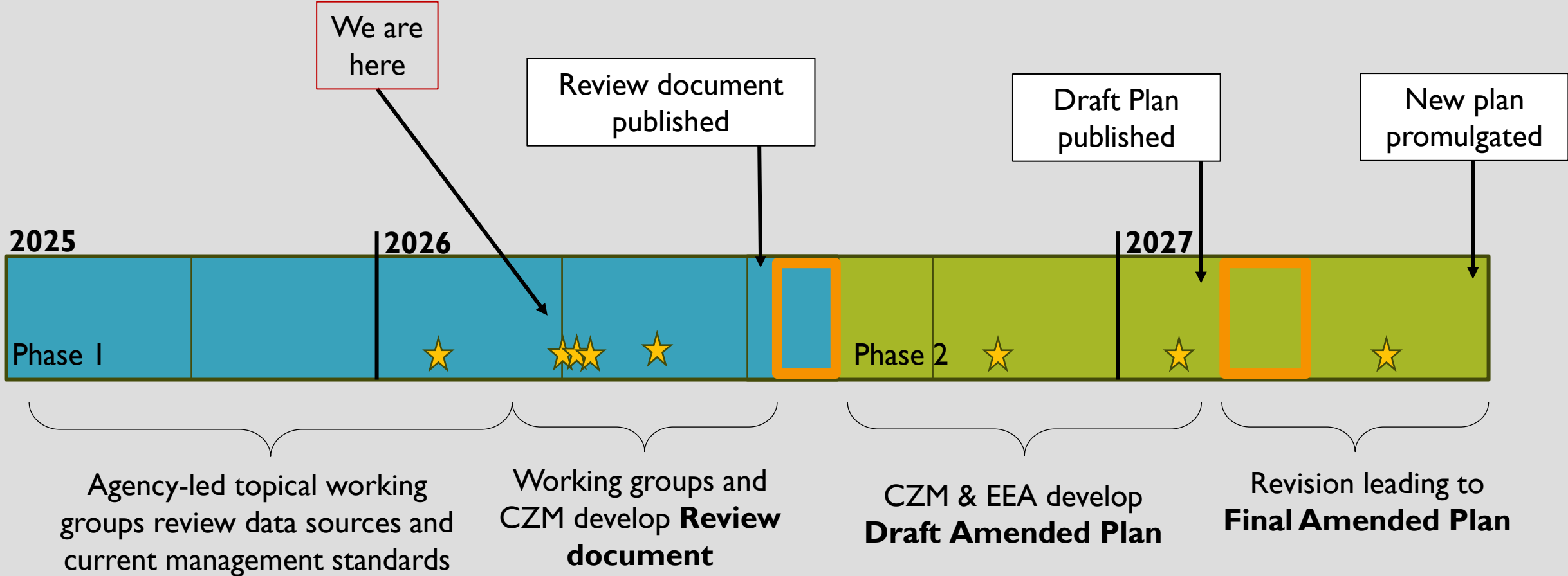
Transportation &
Navigation



Ocean Tech &
Innovation

OCEAN PLAN REVIEW TIMELINE

- ★ OAC and SAC meetings
- Public Comment Periods



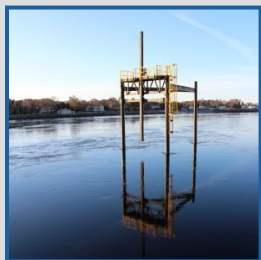
Note: this is a tentative timeline subject to revision

OCEAN TECHNOLOGY & INNOVATION WORK GROUP

| Name | Affiliation |
|---|---|
| Todd Callaghan, working group lead | CZM |
| Alissa Petersen | SeaAhead |
| Anthony Kirincich | Woods Hole Oceanographic Institution |
| Chris Ilsley | InnoVenture Labs |
| Ed Cesare | SeaAhead |
| Hobie Boeschenstein | SeaTrac |
| Jennifer Downing | New Bedford Ocean Cluster |
| John Miller | MRECo |
| Katie Kahl | UMass Amherst Gloucester Marine Station |
| Lena Weiss | New England Aquarium Balance Blue lab |
| Lisa Engler | Massachusetts Clean Energy Center |
| Rob Vincent | MIT Sea Grant |
| Scott White | Montserrat Strategies |
| Tim O'Donnell | Gloucester Marine Genomics Institute |

- New Work Group this Ocean Plan review cycle
- Looking for ways to support this emerging use





MRECo Bourne
Tidal Test Center
<https://teamer-us.org/facility/mreco/>

Renewable Energy Piloting

Access to Ocean

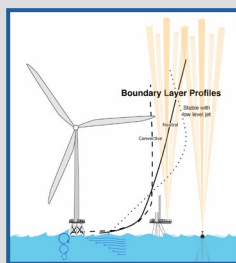


WHOI Loc-NESS Project
<https://subhaslab.whoi.edu/loc-ness/>

Ocean Chemistry Experimentation

Ocean Technology and Innovation

Autonomous Device Operation

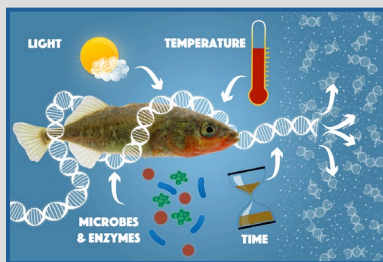


Sensor Deployment

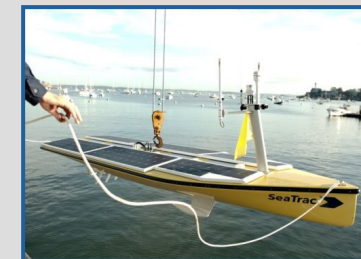
WHOI Martha's Vineyard Coastal Observatory

<https://mvco.whoi.edu/projects/>

eDNA



<https://www.usgs.gov/media/images/edna-environmental-dna>



SeaTrac

<https://www.seatrac.com/>

Challenges Identified by Work Group

- Getting technologies into the water
- Timeline for permitting excludes smaller projects/companies that lack capital
- Lack of guidance on how to navigate permitting – where does one begin?
- Access to data
- Identifying the best places to test various technologies
- Communication with boating community and authorities

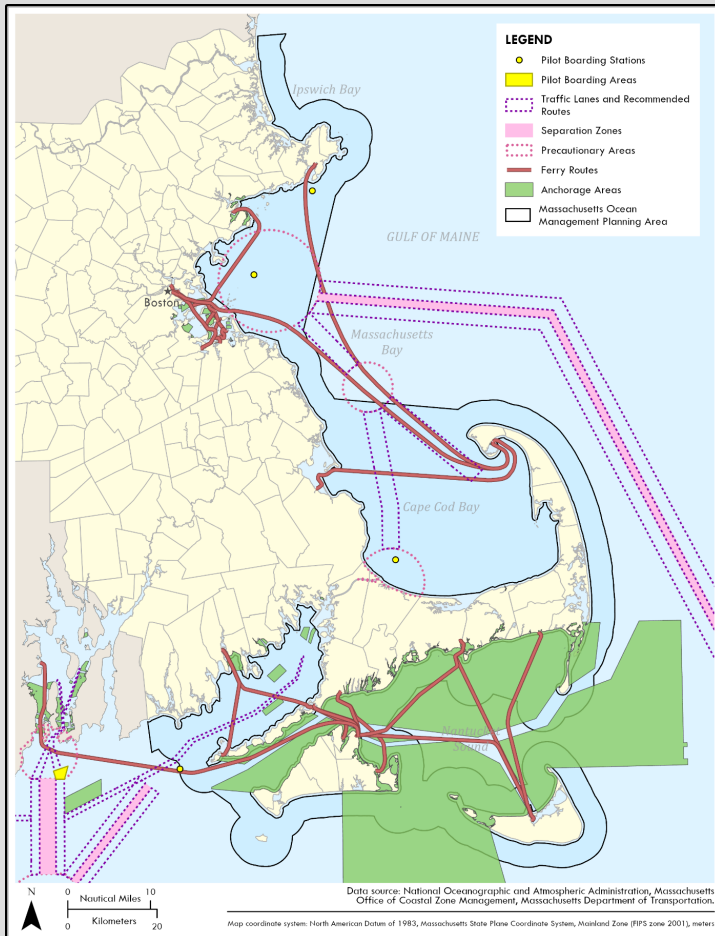


Work Group Draft Recommendations

- Establish access to the ocean
- Establish pre-permitted zones, test beds
- Expand the purpose of existing areas
- Make data available to facilitate spatially-explicit deployment decisions
- Develop models of successful communication
- Establish a community of partners



TRANSPORTATION & NAVIGATION



Name

Sean Duffey, group lead
Hollie Emery, GIS lead
Sylvie Agudelo
Gordon Carr
Mark Cutter
Kate Korotky
Tyler Miller
Tess Paganelli
David Perry
Greg Robbins
Collen Roche
Richard Stover
Jen Thalhauser
Joanna Yelen
Chris Zuffante

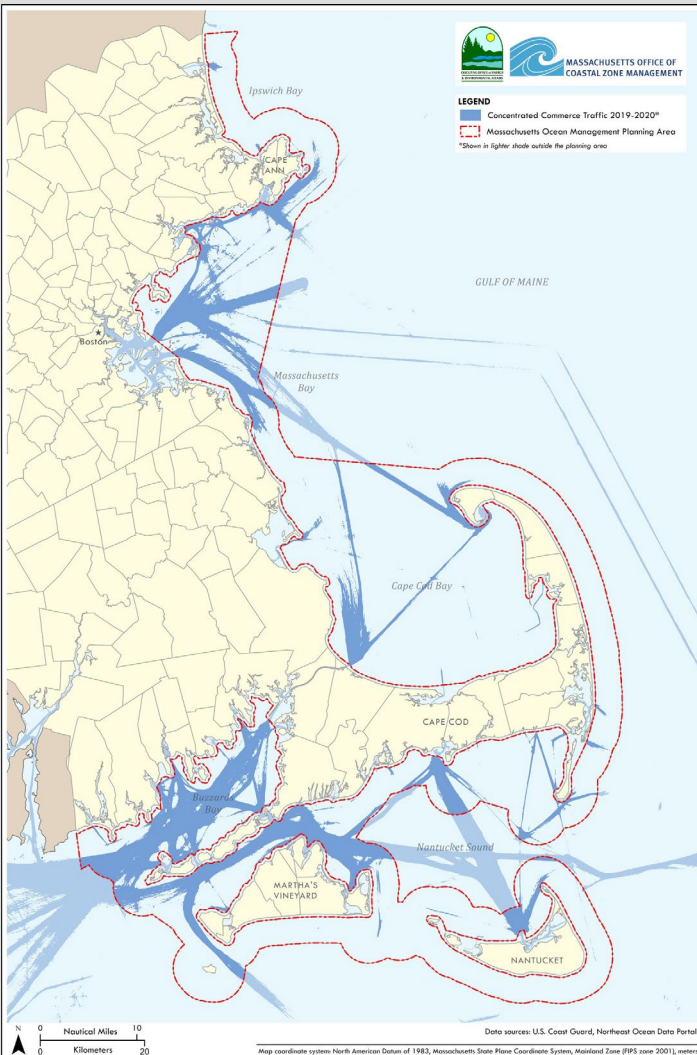
Affiliation

CZM
CZM
MassDEP, Waterways
NBPA
USCG
USCG
Massachusetts Marine Trades Association
MBTA
MBTA
DCR
NOAA
Boston Harbor Pilot Association
USACE
CZM
MassPort

Assigned Scope:

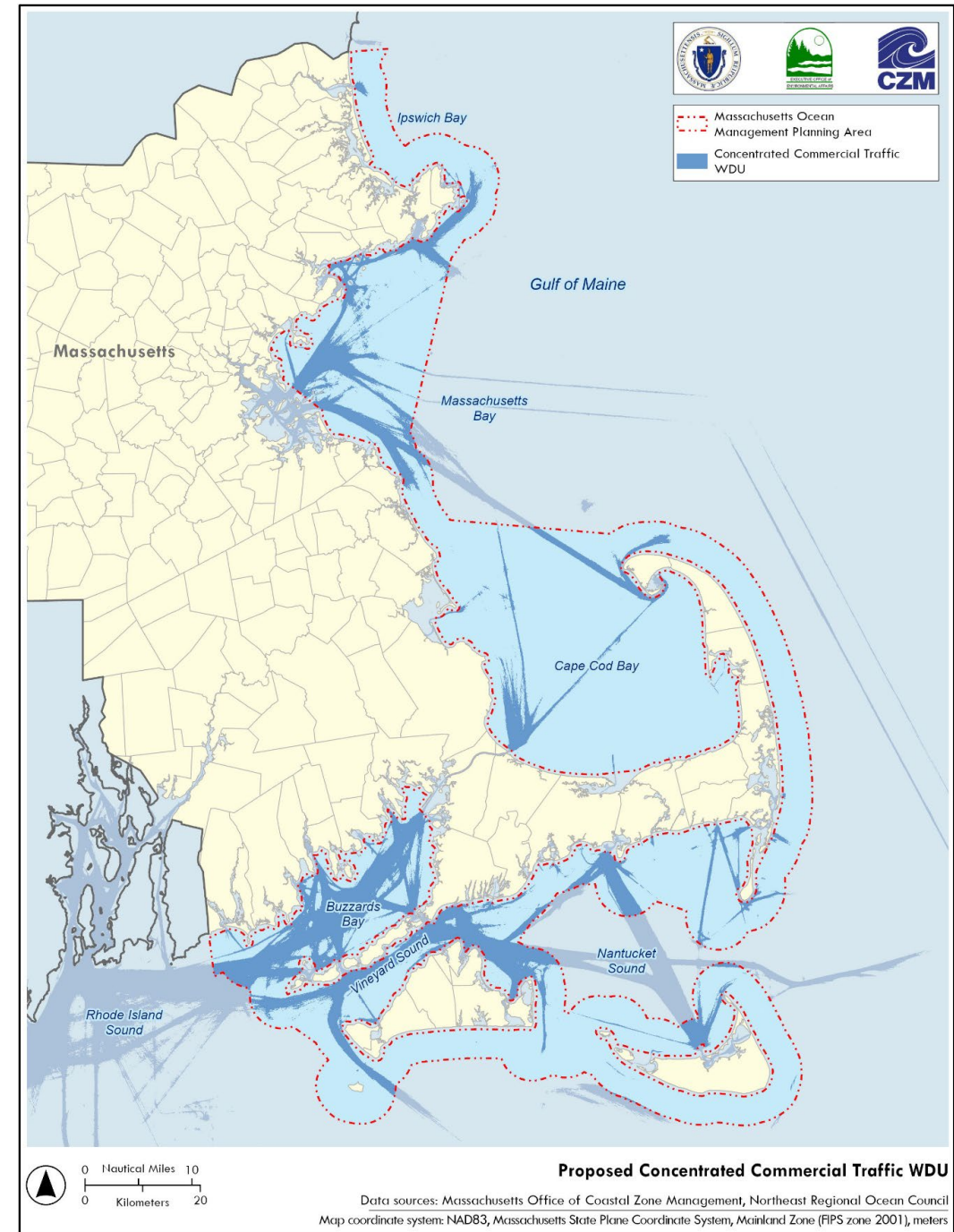
- 3 WDU – review data sources and maps:
 - Commercial Traffic, Commercial Fishing Traffic, Recreational Boating
- Consider a new WDU for traffic lanes and ferry routes
- Baseline Assessment: ~7 variables

COMMERCIAL TRAFFIC: DRAFT PROPOSED WDU

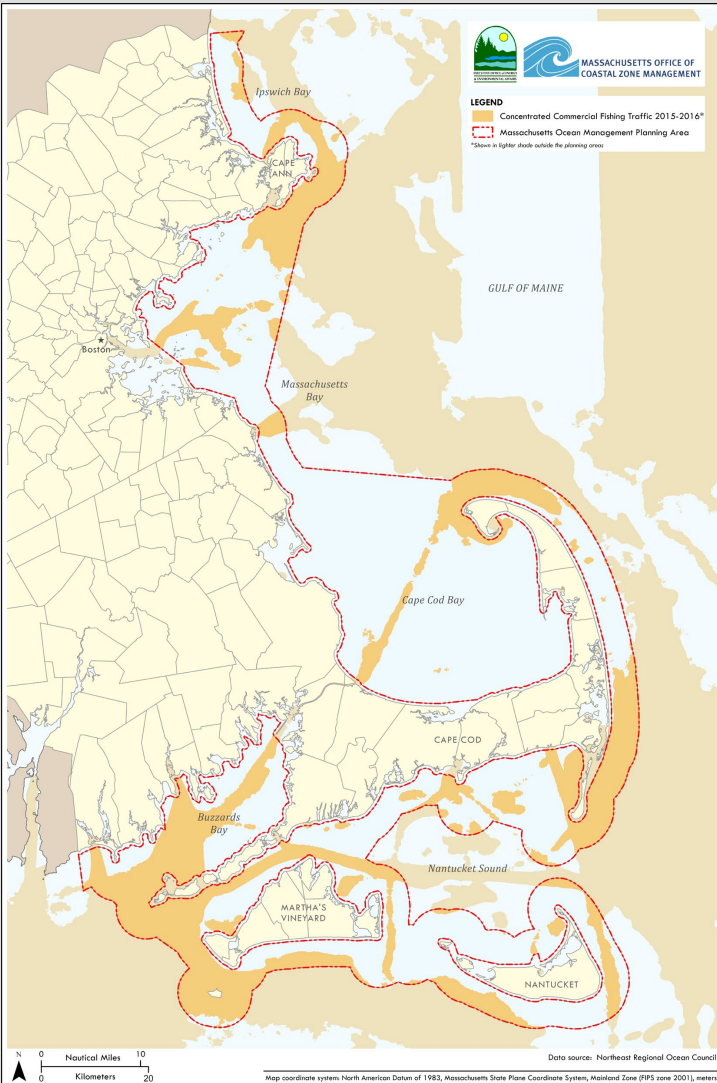


Concentrated Commerce traffic

- Based on AIS data 2023-2024
- Same geospatial methods:
 - Vessel counts 2023-2024
 - per 100 m x 100 m square
 - count > 100 is WDU

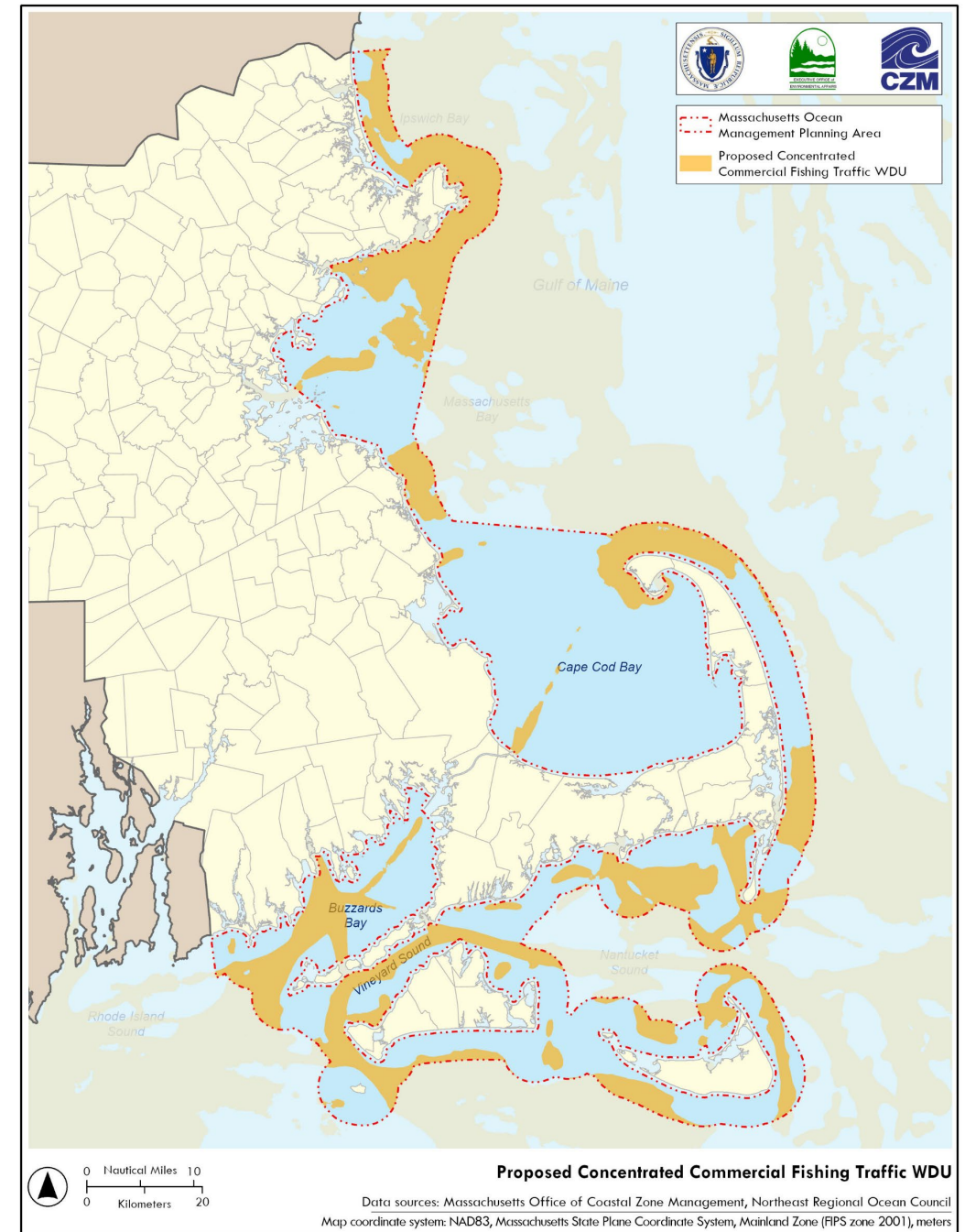


COMMERCIAL FISHING TRAFFIC: DRAFT PROPOSED WDU



Concentrated Commercial Fishing traffic

- Based on VMS data 2015-2019
- Same geospatial methods



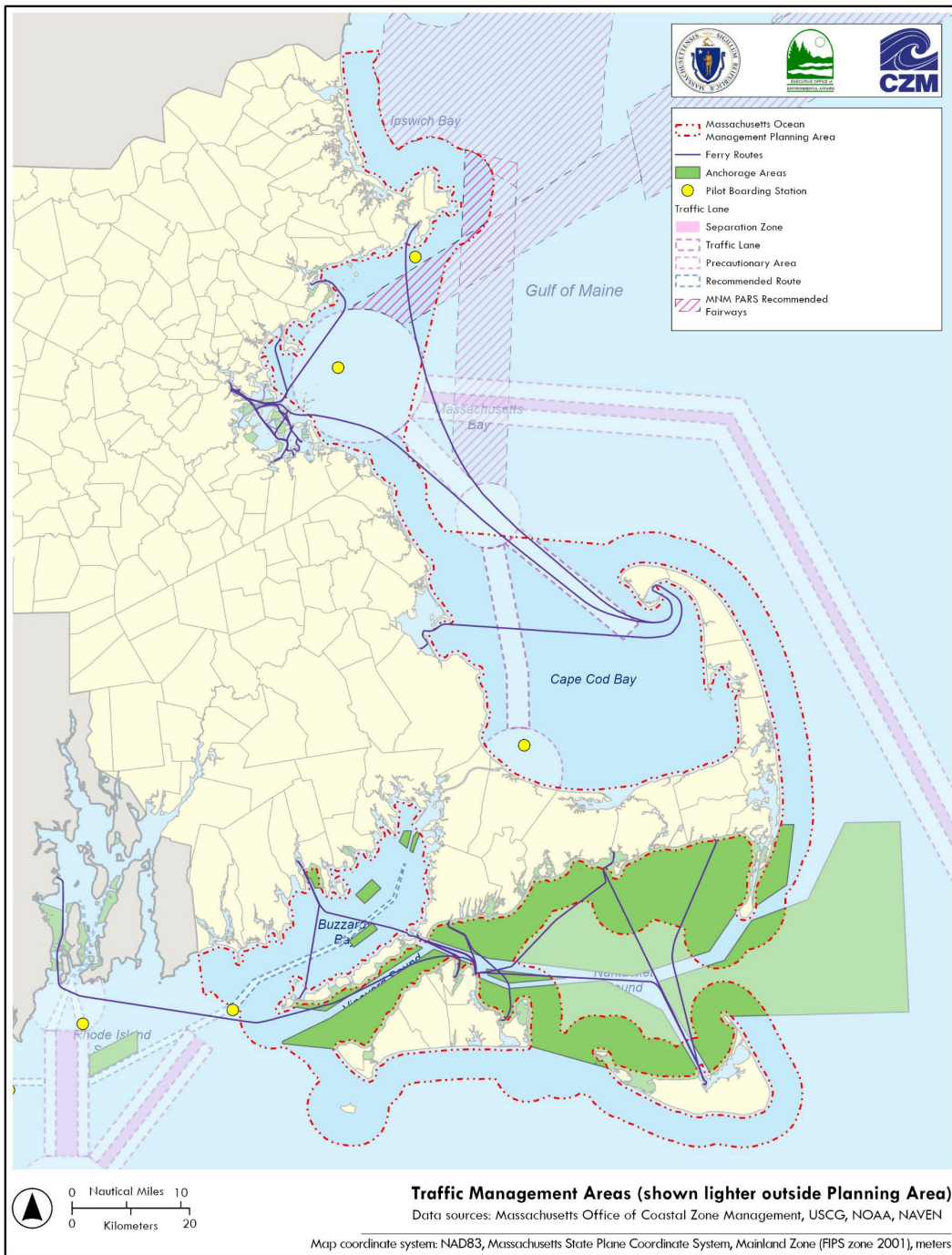
RECREATIONAL BOATING: CURRENT/PROPOSED WDU

Concentrated Recreational Boating

- Based on a recreational boating density dataset created from surveys conducted in 2010, 2012, and 2013 of registered boat owners who responded and reported recreational use of their vessels.
- Retaining the current delineation for the Recreational Boating WDU as no new spatial data or information exists that would improve the map.



TRAFFIC AREAS: POSSIBLE NEW WDU



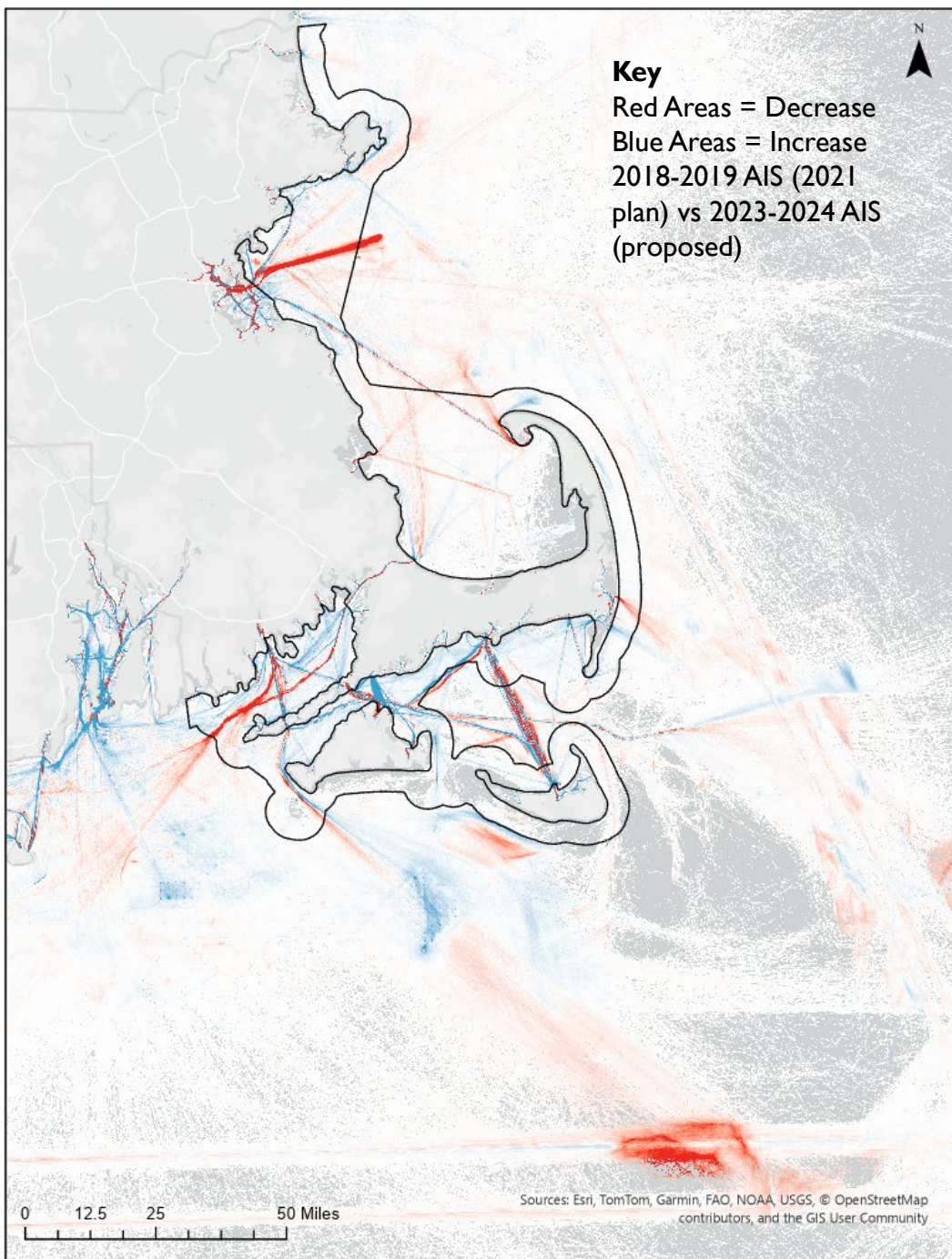
Traffic Designated Areas

- Ferry routes
- TSS traffic lanes and precautionary areas
- MNM PARS fairway
- Pilot boarding areas
- Anchorage areas

- Identifying these areas assists in evaluating potential overlap with existing uses as well as emerging initiatives such as offshore aquaculture operations and offshore sand extraction

TRANSPORTATION & NAVIGATION – OTHER TOPICS OF INTEREST

- Autonomous Underwater Vehicle (AUV) tracking
 - Data to inform tracking of AUVs does not currently exist
 - May be opportunity to more effectively track uncrewed vessels on the surface
- Electrification of public transportation and other vessels
 - Decided that this topic of interest may not be pertinent to the Ocean Plan management area at this time
- Offshore wind development impact on vessel traffic



TRANSPORTATION & NAVIGATION – NEW DATA AND INFO

- Offshore Wind Vessel Traffic
 - Traffic was slightly increased in and around the offshore wind projects that were under construction during 2023-2024 outside the planning area, but increased traffic related to offshore wind within the planning area (e.g., associated with the New Bedford offshore wind staging area) was not evident.
 - An increase in such traffic may exist, but if so, it was masked by the larger decrease in traffic to the Nantucket Light Ship scallop rotational area that is along the same bearing
- Other notable changes
 - Sharp drop in traffic associated with dredging in Boston Harbor during the 2018-2019 period
 - Increased traffic between Falmouth and Martha’s Vineyard during the 2023-2024 period due to the construction of telecom and electrical cables not associated with renewable energy

TRANSPORTATION & NAVIGATION – DRAFT RECOMMENDATIONS

- Update the Commerce Traffic and Commercial Fishing Traffic WDU
- Retain the current delineation for the Recreational Boating WDU as no new significant data or information exists that would inform the map;
- Consider a new WDU for Navigation Lanes and Ferry Routes, and at minimum continue to map these features informationally in the Ocean Plan;
- Traffic associated with offshore wind development should continue to be monitored and used to inform future planning efforts;
- A code for uncrewed versus crewed vessels should be created for AIS data to provide a way to track uncrewed vessel traffic in the planning area;
- Other potential sources should be explored for recreational boating data, including Safe Harbor Marinas and Dockwa, as well as the United States Coast Guard's yearly Recreational Boating Statistics reports.

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 meetings to focus on:
 - Cultural & Recreational Resources
 - Energy & Infrastructure
 - Habitat
 - Fisheries
 - Sediment & Geology
- OAC meeting to focus on management framework and Ocean Plan administration
- Review Document
- Amended Ocean Plan