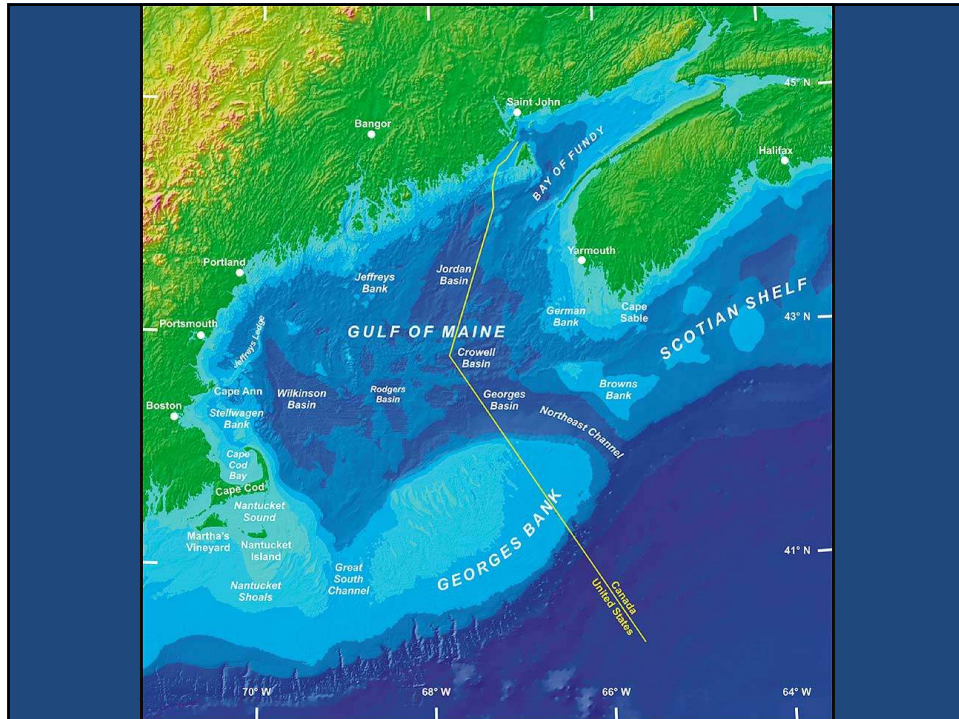
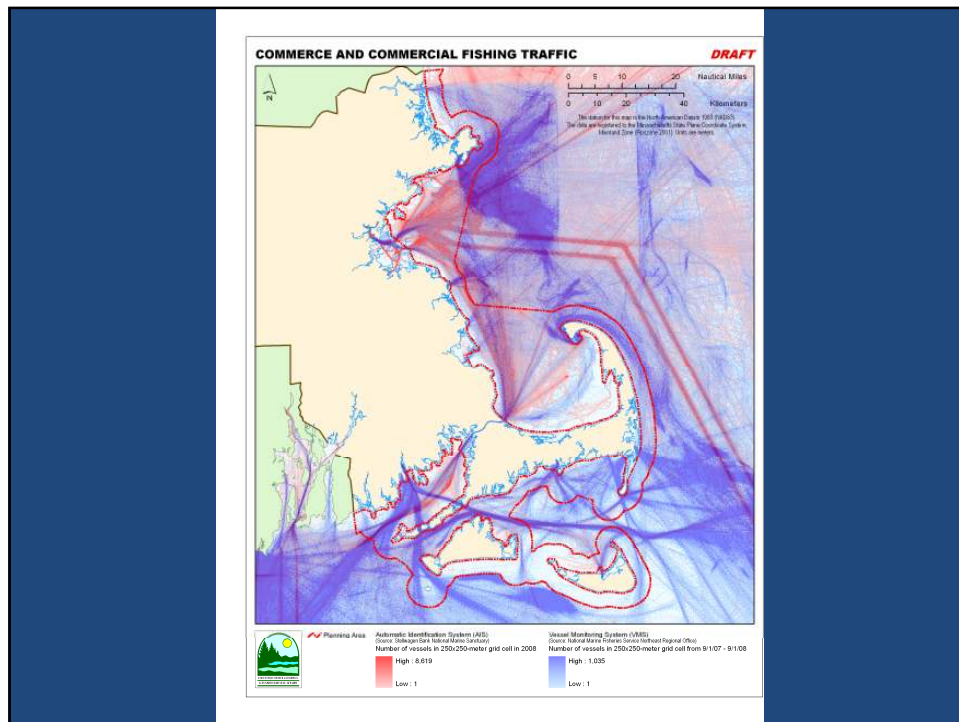


Massachusetts Ocean Plan

New Zealand Coastlines:
spatial planning for land and
sea
June 1, 2011

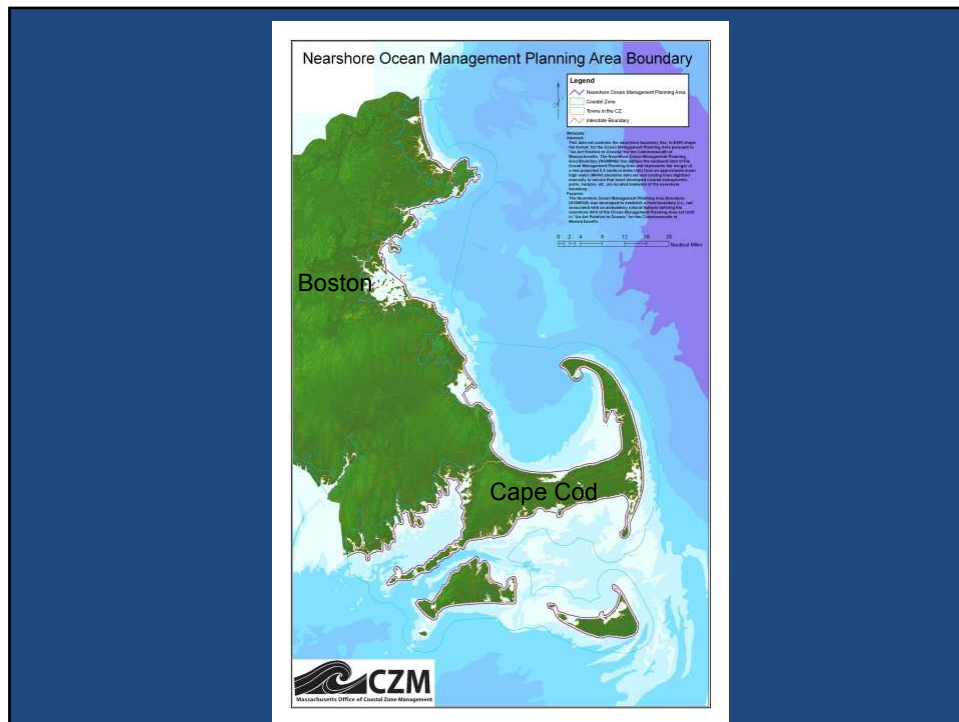




Background...

- New uses of ocean resources
- Management challenges for existing uses
- Pew/US Ocean Commissions
- 2003-2004: MA Ocean Management Task Force
 - Recommendations included Ocean Resources Management Act
- 2008: Oceans Act signed





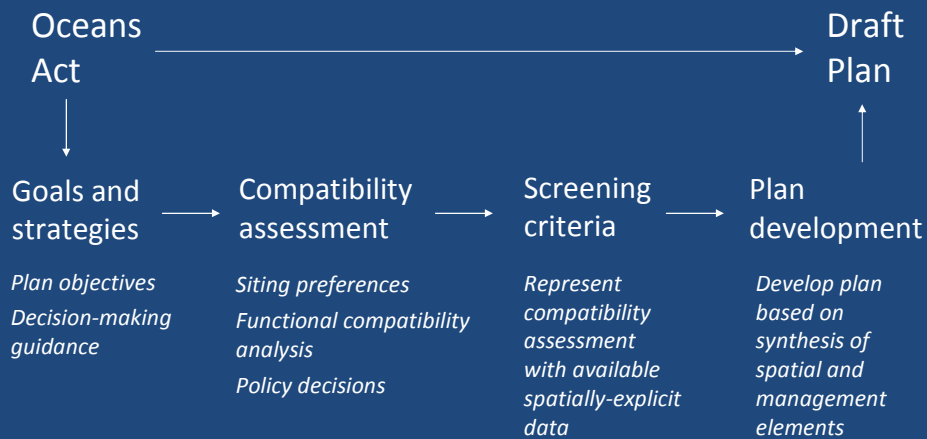
Oceans Act of 2008

- Plan must contain goals, siting priorities, and standards for uses allowed pursuant to Ocean Sanctuaries Act:
 - Renewable energy facilities
 - Pipelines
 - Cables
 - Sand extraction for beach nourishment
- Plan must identify and protect *special, sensitive, or unique* estuarine and marine life and habitats
- Develop draft plan in 12 months; final in 18 months

Public involvement

- Identify key decision points and structure public meetings/workshops accordingly
 - E.g., November '08 (marine spatial planning overview)
 - February '09 (data/science acquired)
 - March '09 (goals/strategies)
 - May '09 (preliminary spatial analysis)
- 100s of individual stakeholder meetings across the state

Translating the Oceans Act into an ocean plan through spatial data

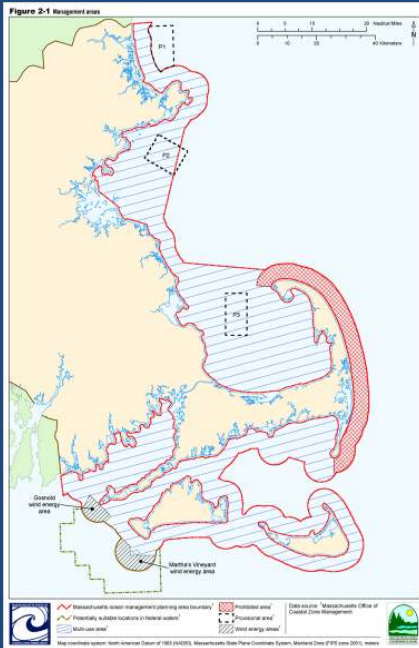


Screening and compatibility: Wind energy sites

- Use siting preference criteria:
 - Wind speed:
 - Water depth:
 - 20 meters for mono-pile technologies (existing application)
 - 60 meters for jacket truss technologies (in development / pilot application)
 - Influences of extreme storm wave height
 - Sub-bottom geology

Screening and compatibility: Wind energy sites

- Exclusionary: significant potential for adverse effects or functional incompatibility
 - Buffer from development and near-coast activities
 - High concentrations of marine avifauna
 - High concentrations of right whales
 - Water-dependent marine uses:
 - Coast Guard-designated navigation areas, ferry routes
 - Areas of high/significant commercial fishing effort and value
 - Direct transit navigation routes for shipping and fishing
 - Regulated airspace



Ocean Plan Management Areas:

- Prohibited
- Renewable Energy
- Multi-use

Special, Sensitive or Unique Resources

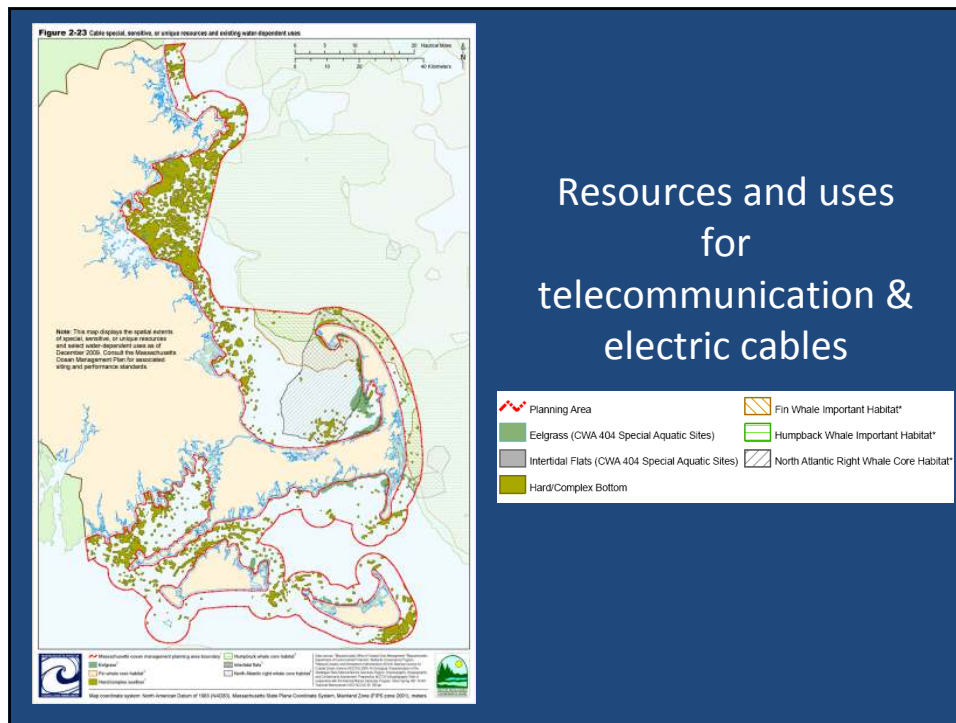
New regulatory siting standard:

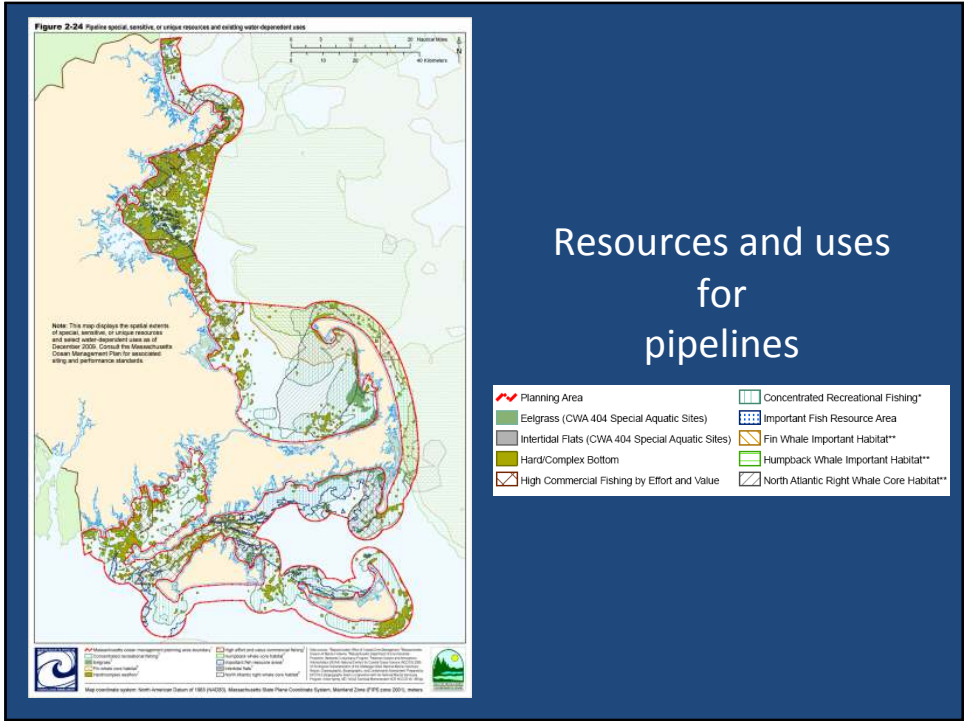
Specified uses presumptively excluded; presumption may be overcome by a clear demonstration:

- No less environmentally damaging practicable alternative, or
- Project will cause no significant alteration of the resource, or
- Clear and convincing evidence that SSU mapping was erroneous – plan does not accurately characterize the resource

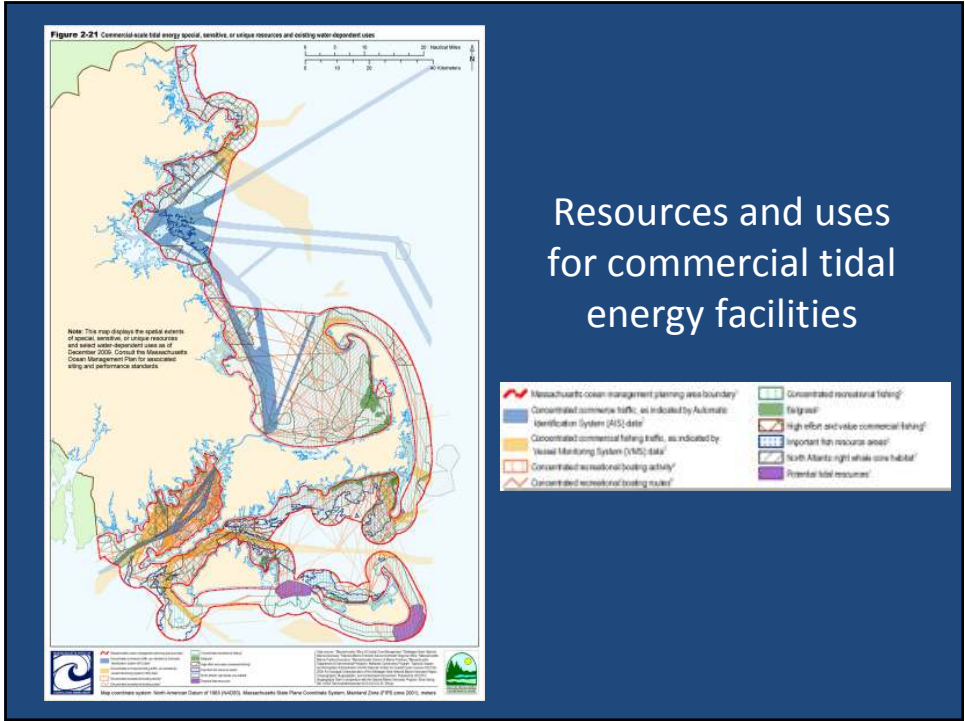
Special, Sensitive or Unique Resources

- Benthic/bottom habitat
Hard + complex seafloor, eelgrass, intertidal flats
- Fish resources
- Avifauna
Terns, Leach's storm petrel, Long-tailed duck
- Marine mammals
North Atlantic Right Whale, fin, humpback

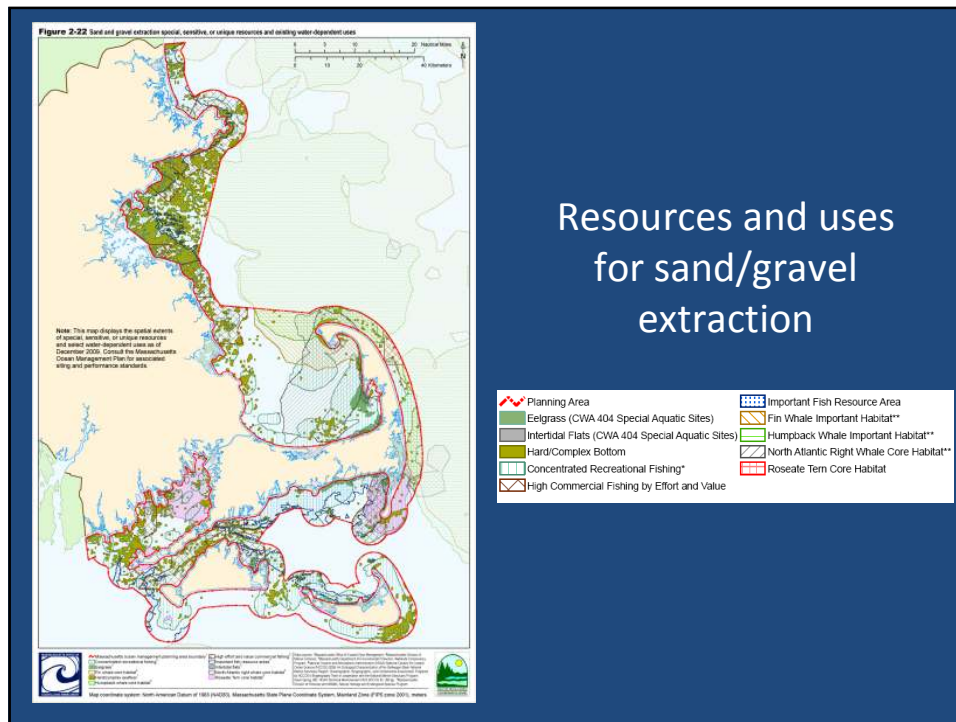




Resources and uses for pipelines



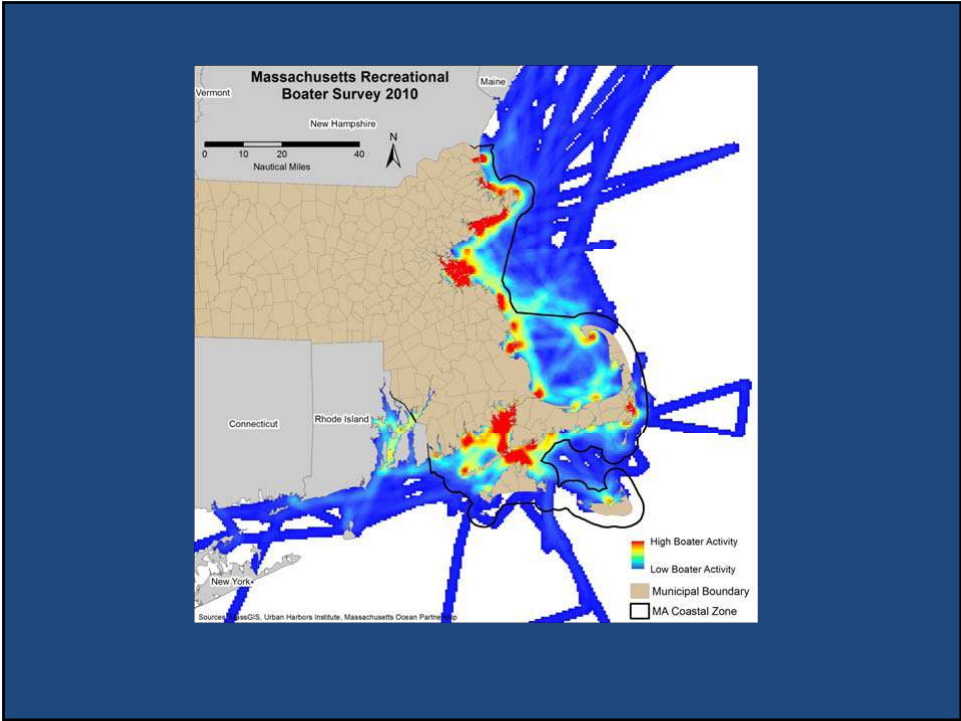
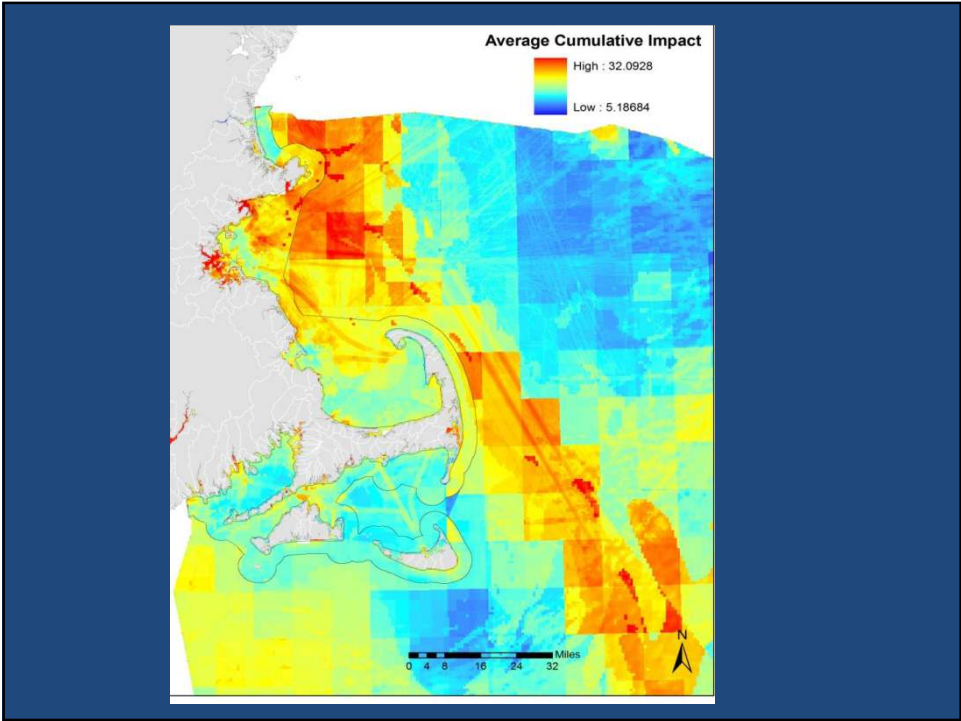
Resources and uses for commercial tidal energy facilities



Resources and uses for sand/gravel extraction

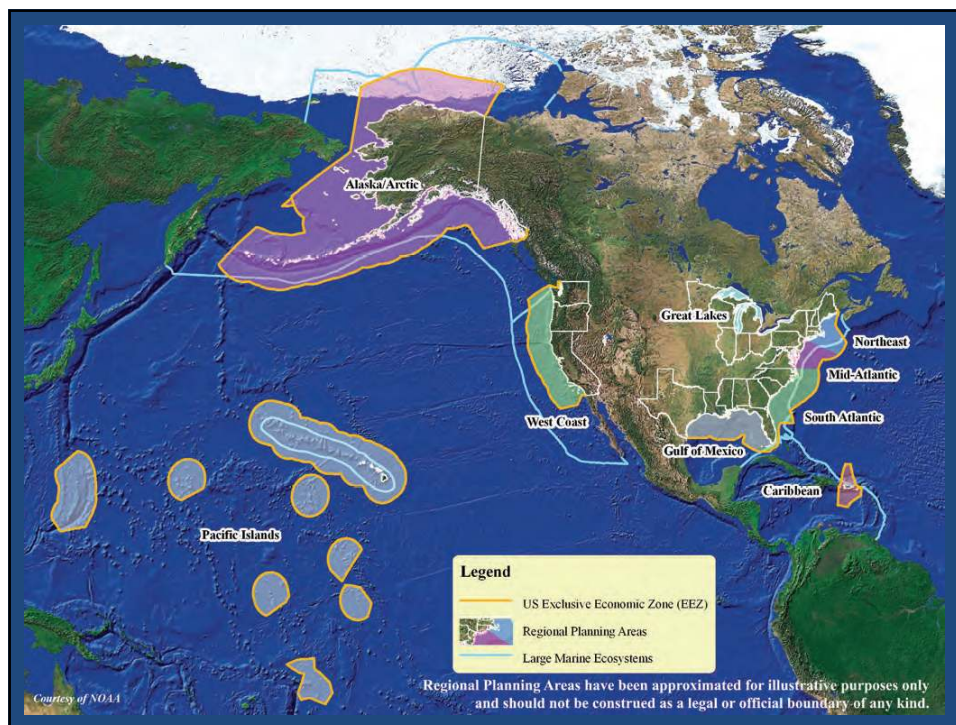
Five year science plan

- Science goal for the next five years:
Enable ocean management in MA to continue to evolve an ecosystem-based approach by:
 1. Providing enhanced information regarding habitats
 2. Developing spatial information regarding recreational uses, commercial fishing
 3. Increasing understanding of climate change
 4. Implementing performance indicators
 5. Furthering a data network
 6. Address cumulative impacts



Lessons learned

- Level of sophistication of plan commensurate with public appetite, science/data
- Important to establish clear, concise goals (in MA case, started with language in legislation)
- Public involvement, at all steps, key, but need to adapt engagement approaches to process
- Develop implementation methods simultaneously with spatial component



Thank you

John Weber

jweber@northeastoceancouncil.org

Web site for plan materials: www.mass.gov/eea