Northeast Ocean Planning

May 2015 Stakeholder Forum

OCEAN PLANNING IN THE NORTHEAST

Recent/Upcoming Schedule

- End of 2014- June 2015:
  - Outreach to shipping, fishing, recreation, energy, cable, & aquaculture industries: data products, future trends, other compatibility-related issues
  - Develop marine life data with expert work groups
  - Continued discussions with federal regulatory/management agencies
- April 8: Ecosystem Based Management Workshop
- May 12: Stakeholder Forum
- June 3-4: RPB Meeting
- Fall 2015: Stakeholder Forum and RPB Meeting
- Early 2016: RPB Meeting to approve Draft Plan for public review
- Mid 2016: RPB Meeting to approve Final Plan for submission to NOC

RPB focus

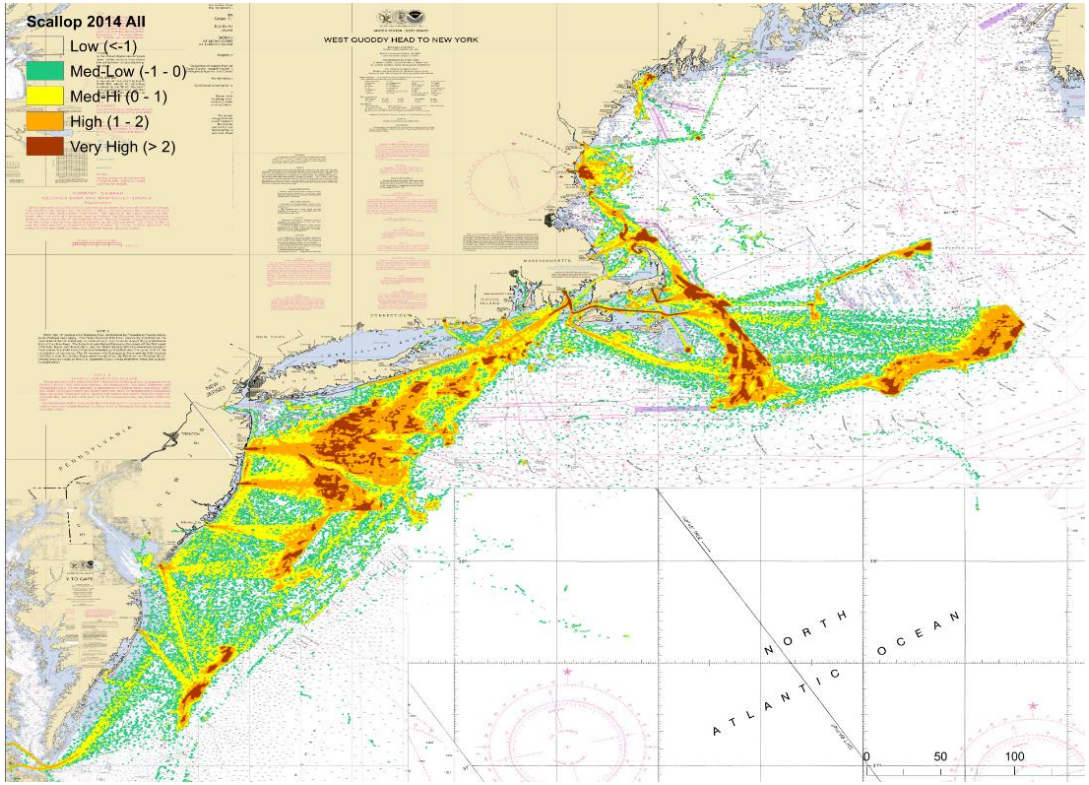
Integrating projects to frame draft plan…

- MDAT and human use characterization projects
- specific opportunities to advance EBM (workshop discussion)
- Future trends/emerging issues (compatibility discussions)
- Incorporate input from:
  - Topical engagement (shipping, fishing, recreation, etc.)
  - Marine life work groups
  - EBM workshop

Question: How will agencies use products from MDAT and human use characterization projects to achieve goal of effective decision-making?

…requires understanding of work to date

Fishing

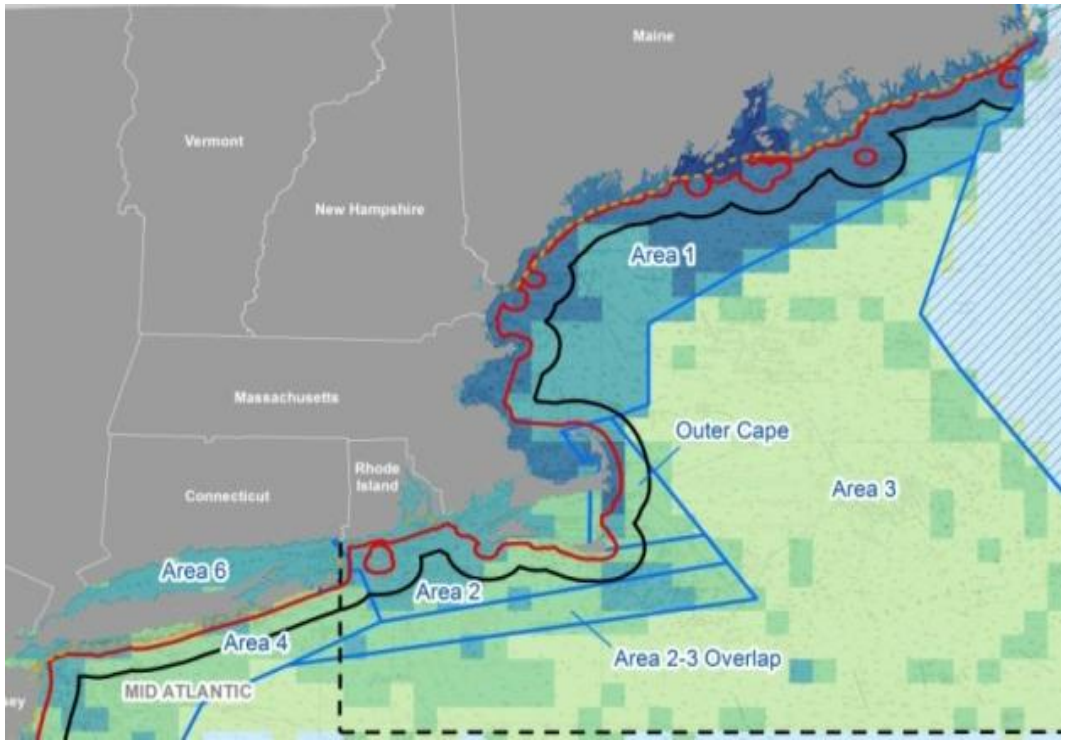


- Reviewing vessel monitoring system data with the industry, including separating fishing and transit areas
- Developing a pilot project to work with charter captains to identify recreational fishing and transit areas
- Determining methods to fill gaps for other fisheries, particularly lobster

Fishing

- VMS-derived maps have limitations:
  - Not all fisheries (VMS for groundfish, scallops, certain vessels targeting monkfish, ocean clam; limited utility with herring)
  - Back to ~2007, not previously
  - Regional view may mask important local areas
  - Need to consider how fishery management affects spatial patterns
- (Nearly) impossible to predict future: management? Climate? Price? Fuel costs? Etc.
- ….But are useful to understand general patterns

Lobster

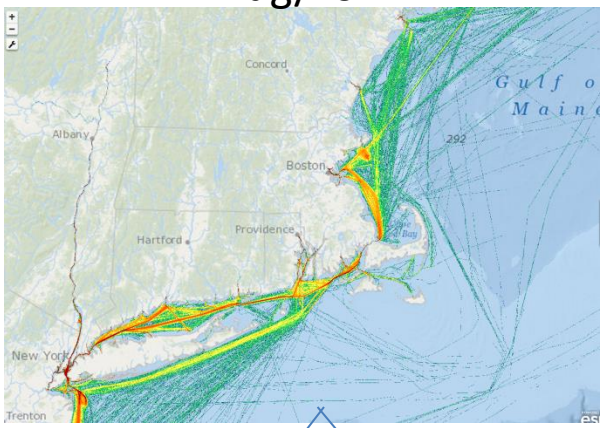


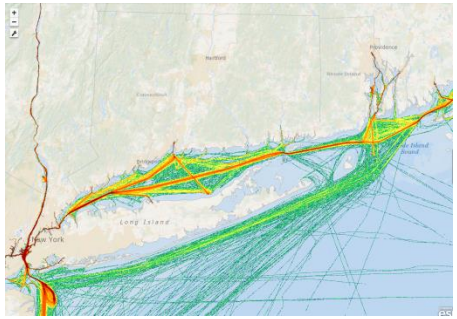
NMFS LOBSTER FISHERY VERTICAL LINE SURVEY, 2010 - 2011

- No single data set across entire region similar to VMS
- Considering broad brush such as vertical line density analysis as proxy
- Long term issue?

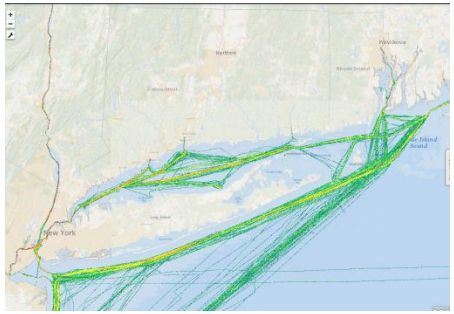
Marine Transportation

Tug/Tow





Towing



Pushing/Hauling alongside

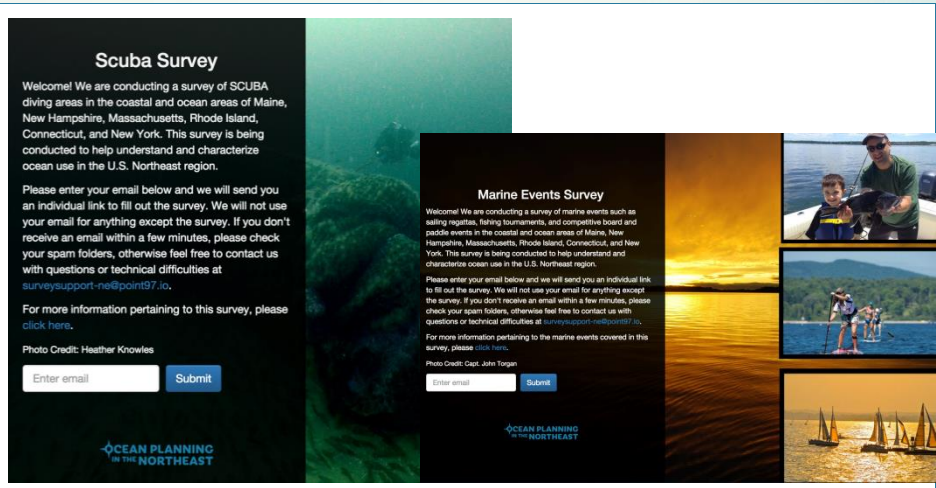
- Reviewing vessel traffic data (from AIS) with the industry to understand shipping activity and identify additional analyses
- Identifying other important marine transportation, safety and operational areas
- Understanding potential future trends
- Summary report being finalized

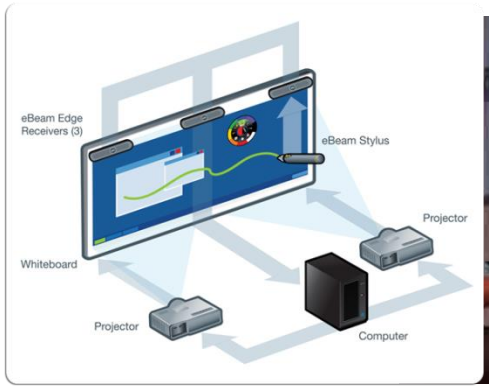
Marine Transportation

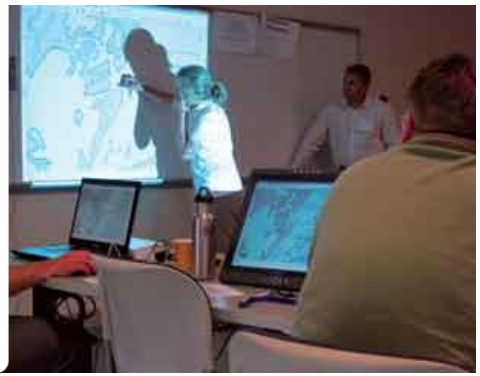
- AIS-derived maps have limitations:
  - Not all vessels required to carry AIS
  - Industry feeling that would be useful to look at multiple years-trends, growth, etc.
  - Recent trends may enhance/increase existing routes (e.g., cruise ships, cargo) or result in “new” routes (tug/tow transit to Atlantic Canada)
  - (Nearly) impossible to predict future, with exception of: cruise ships (itineraries usually out a year-18 months) and general feeling that there will be growth in certain tug/tow operations.
  - In general, existing routes will continue, with some fluctuation in traffic volume.
- …useful recognizing data limitations

Recreation

- Commercial whale watch, SCUBA diving, sailing regattas, sport fish tournaments, board and paddle events
- Using various participatory mapping methods regionally, including online surveys and in-person workshops
- In process; data aggregation capabilities will be dependent on results

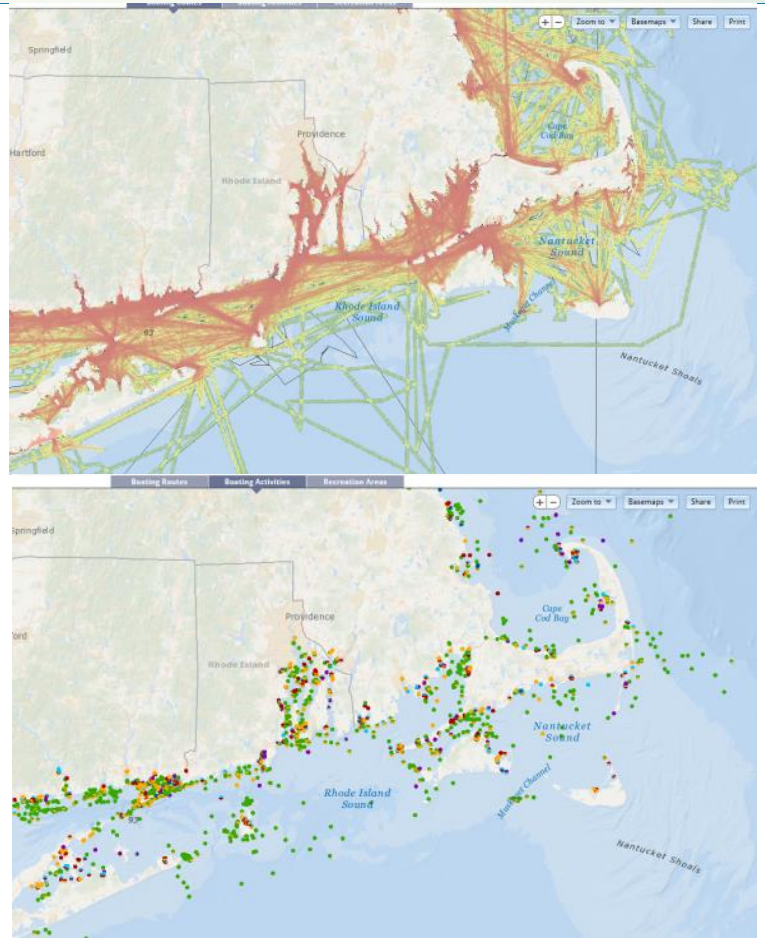






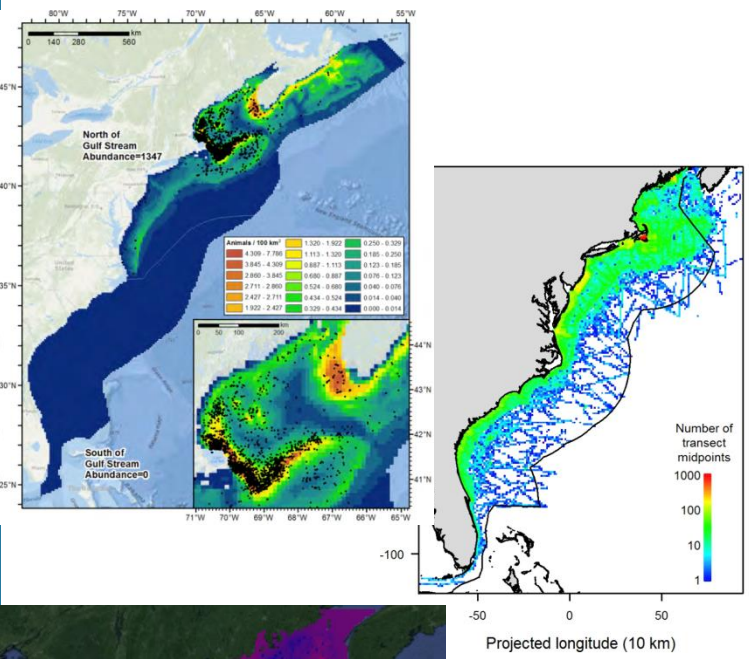
Recreation

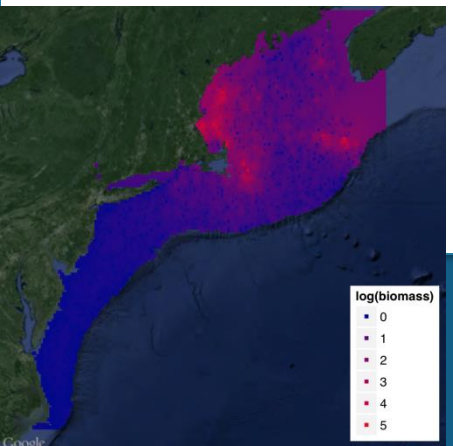
- Much still in progress, results will have QA/QC
- Combine data for different activities?
- Combine routes, points, and polygons?



Marine Life

Marine mammals (19), turtles (3), birds (46) and fish (~70)





- Duke/NOAA Team guided by expert work groups composed of academic, private and agency scientists, tribes, managers, & regulators
- Spatial models integrate animal observations with environmental and climatological features
- Distribution and abundance (for each species):
  - Multiple temporal scales
  - Persistence
  - Probability of occurrence
  - Uncertainty

OCEAN PLANNING IN THE NORTHEAST

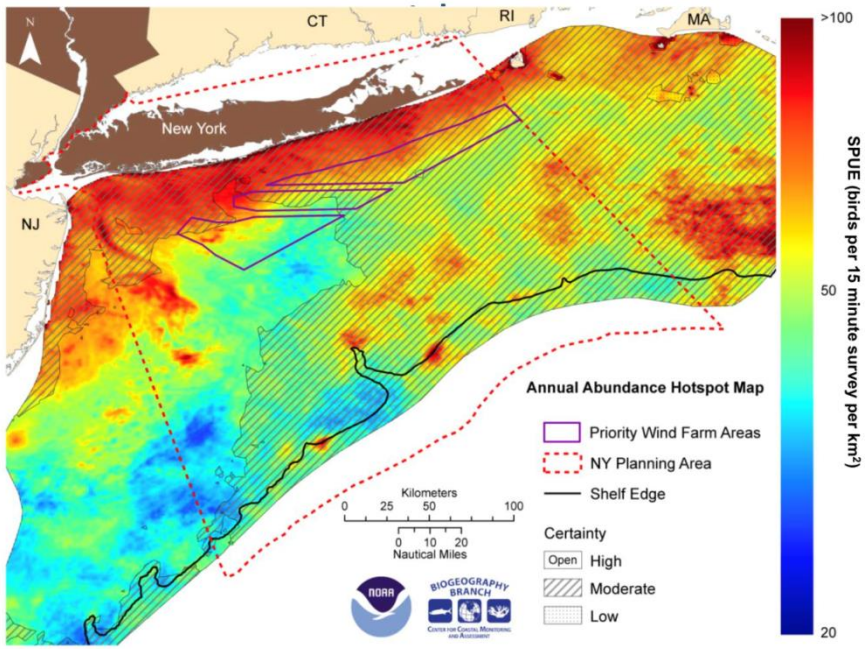
Marine Life

Data Synthesis:

- Synthetic data products for each taxa could include:
  - functional groups
  - total diversity
  - total biomass
  - species richness
  - uncertainty
  - Hot spots? (see example)

- Additional synthesis across taxa and including additional ecosystem processes/components TBD

Synthetic map products: abundance hotspots



Marine Life

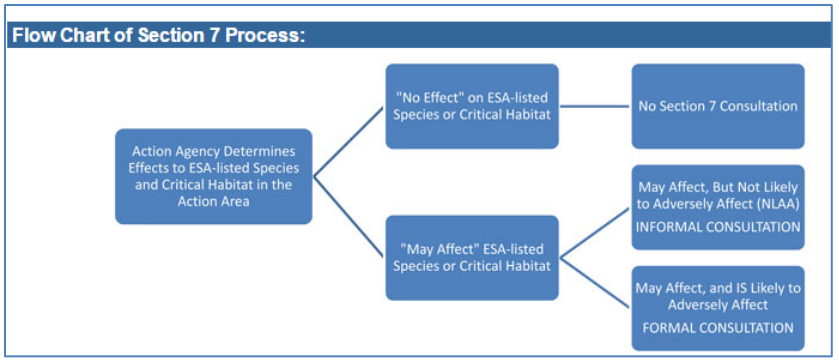
Data synthesis challenges include:

- Variability of data inputs increases with the number of species and habitats
- Agreement on synthesis methodology?
- Incorporating ecosystem processes? Which? How?
- RI and MA plans were unable to use composite indices at that scale of decision making

Existing Regulatory Framework

Working with federal agencies to:

- Understand the use of data/info in existing decision making (permitting/leasing)
- Develop best practices for use of data and agency coordination during Pre-Application phase
- Determine opportunities for increased federal/state coordination under CZMA



Thank you

www.neoceanplanning.org
www.northeastoceandata.org

OCEAN PLANNING IN THE NORTHEAST