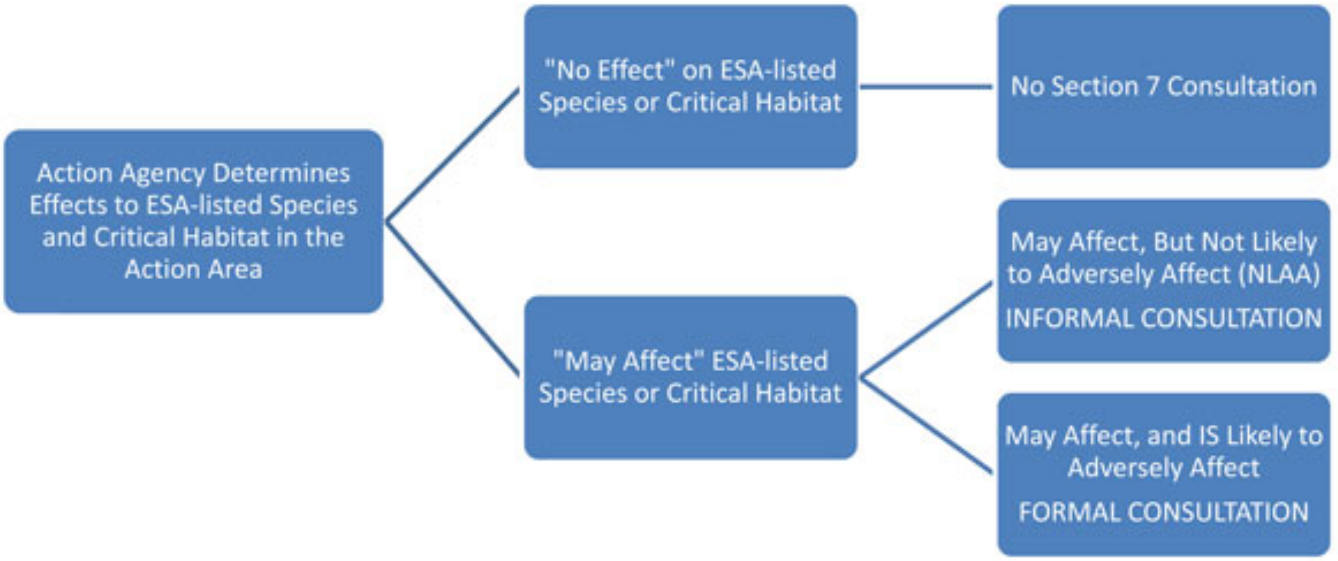
Data Synthesis and Agency Use

OCEAN PLANNING IN THE NORTHEAST

Flow Chart of Section 7 Process:



Source: NOAA Fisheries, Greater Atlantic Region, Protected Resources
http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/consultation/index.html

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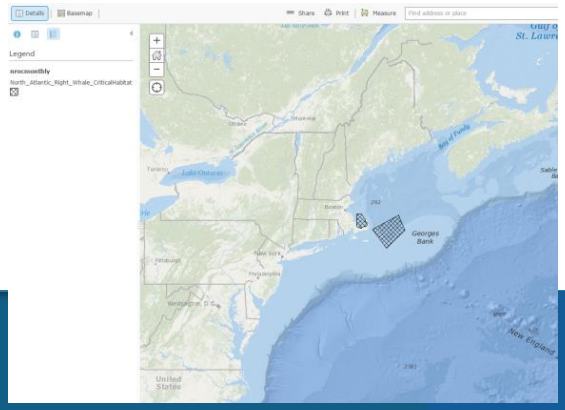
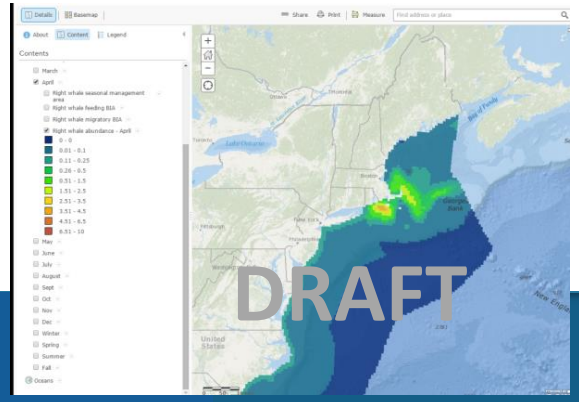
Siting & Planning
(pre-application, initial screening)

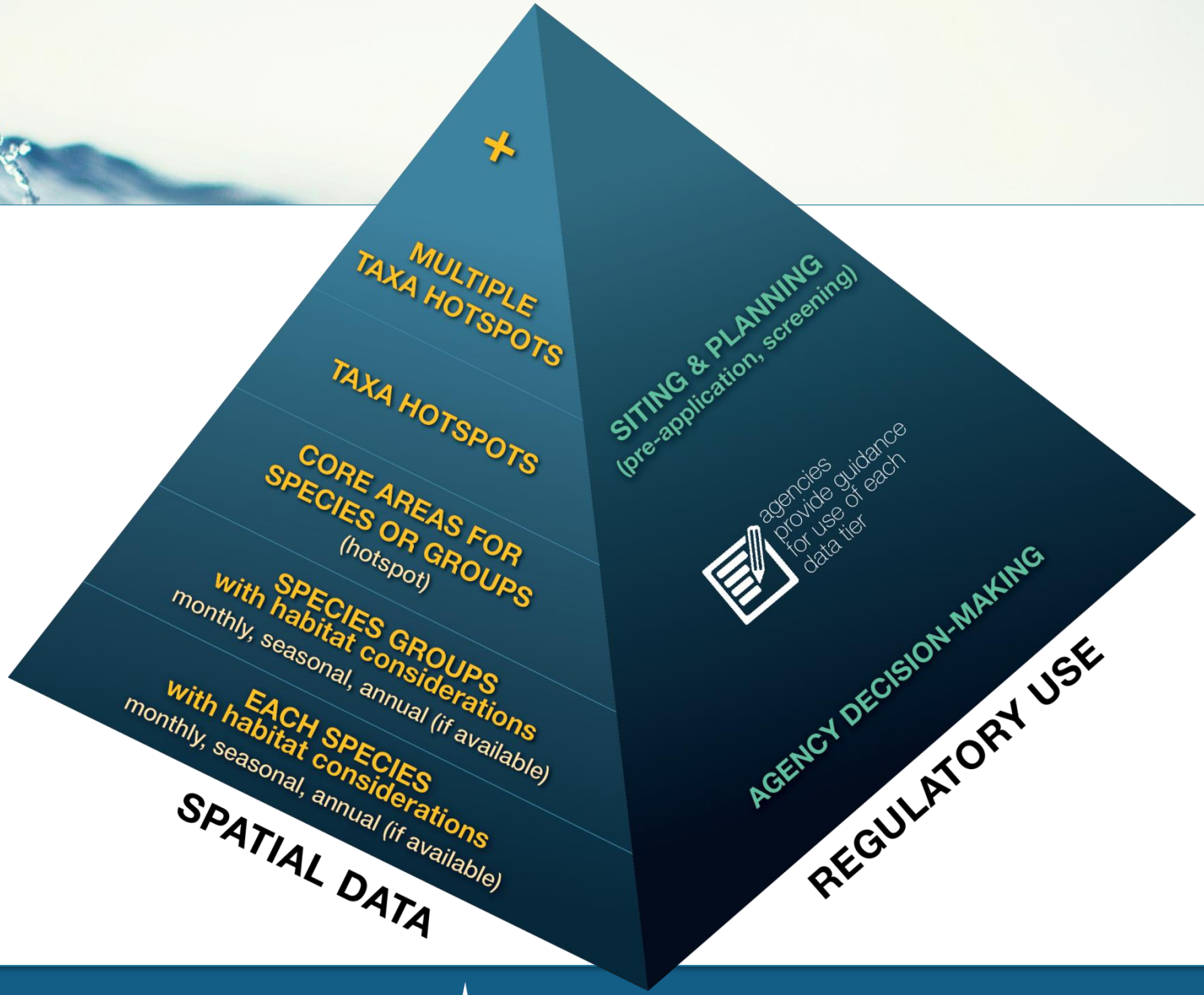


Right Whale Critical Habitat

Agency Decision Making
(consultation, biological opinion)

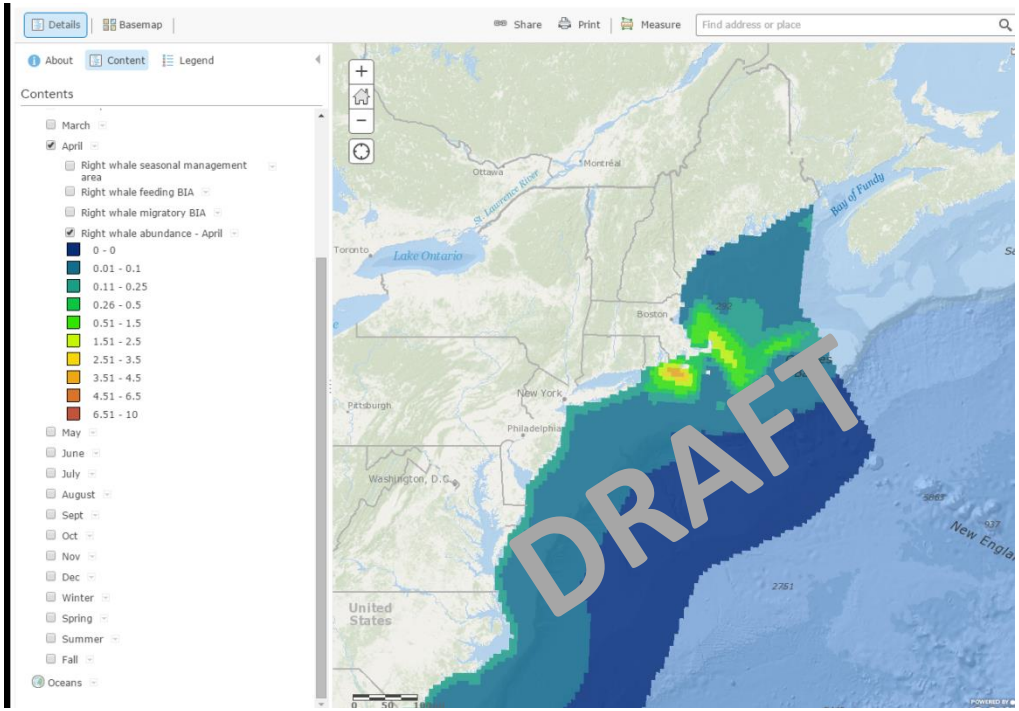


Right Whale Predicted Density (April)



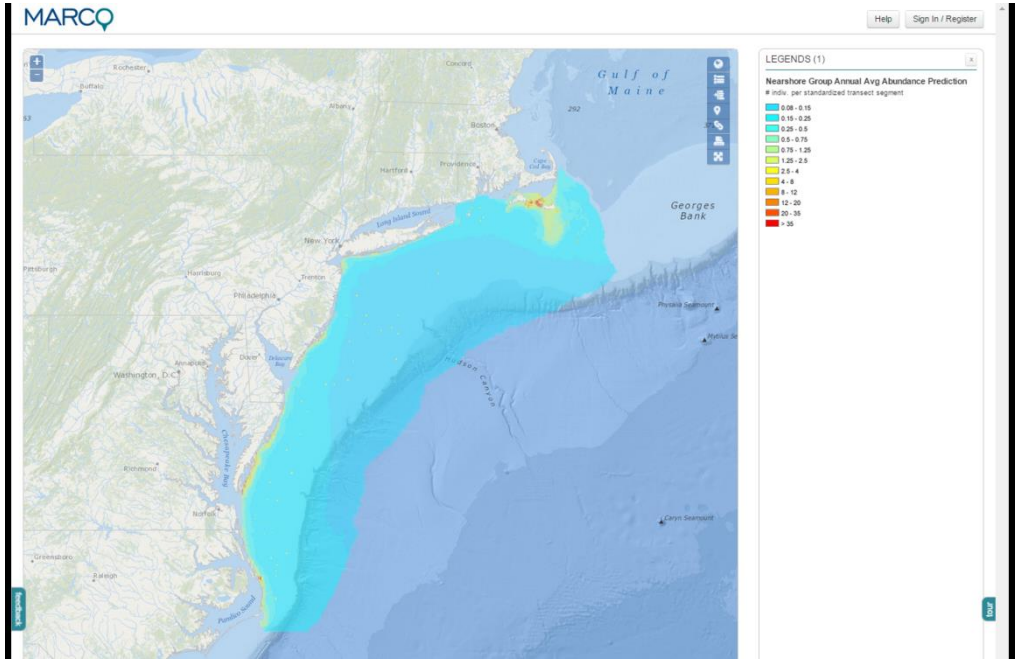
OCEAN PLANNING IN THE NORTHEAST

Right Whale Predicted Density, April (Draft)



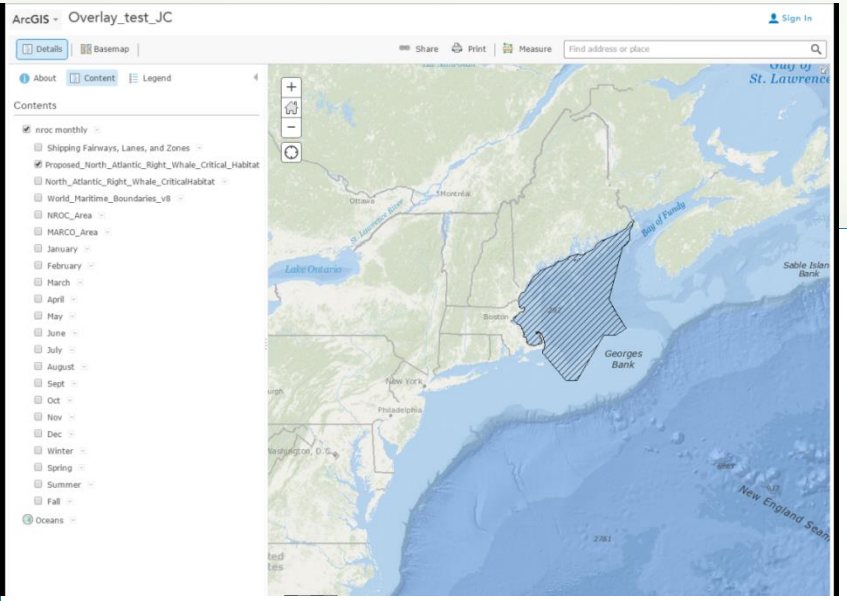
- Maps of individual species that are generally regulated under one to a few authorities
- Data Portal potentially includes (if possible):
  - Animations (intra or inter annual)
  - Measures of uncertainty
  - Additional info about projected change due to climate
- Products: Summer 2015

Nearshore Avian Group – Predicted Annual Average Abundance

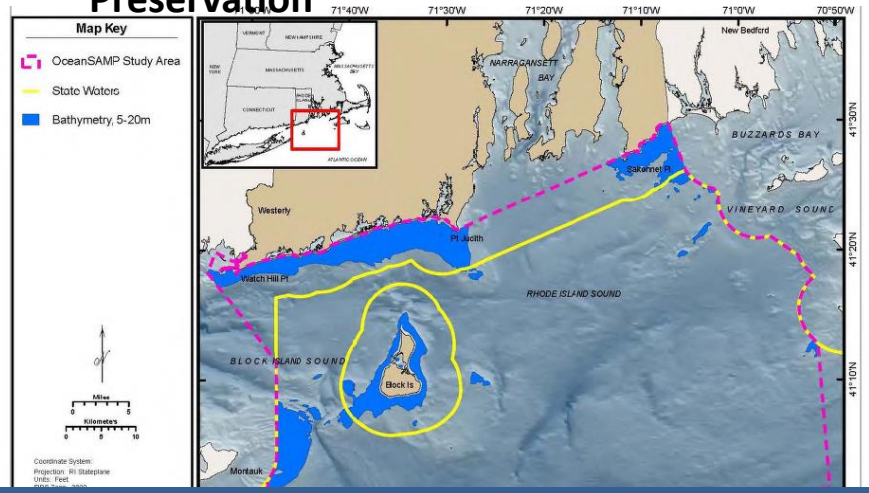


- Maps of species groups that are generally regulated under one to a few authorities
- Data Portal potentially includes (if possible):
  - Animations (intra or inter annual)
  - Measures of uncertainty
  - Additional info about projected change due to climate
- Products: Summer 2015

Proposed Right Whale Critical Habitat*



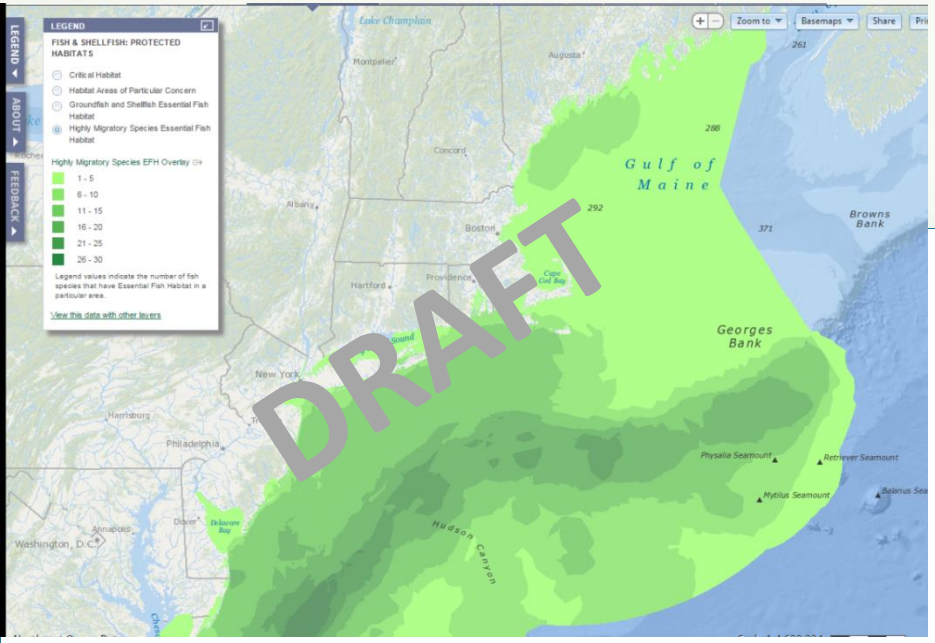
RI SAMP Sea Duck Area Designated for Preservation*



- Maps of core areas for individual species or species groupings that are generally regulated under one to a few authorities
- Data Portal potentially includes (if possible):
  - Information about components used to develop areas
  - Measures of uncertainty
- Work groups :
  - Identify data inputs and methods
  - Consider thresholds for deriving/separating areas

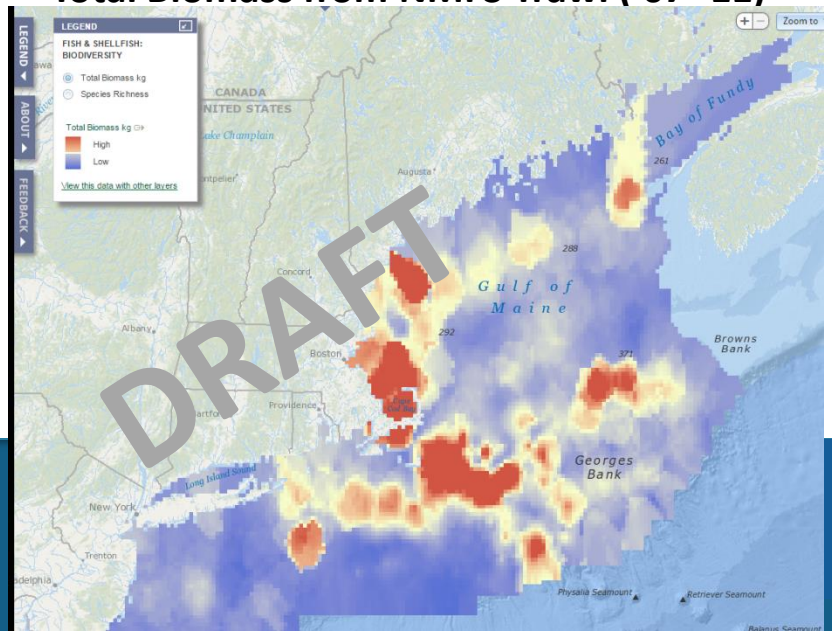
* Examples used to convey concept of deriving a core area; actual analysis using MDAT products and possibly incorporating additional habitat characteristics would need to be conducted

EFH for all Highly Migratory Species (Draft)*



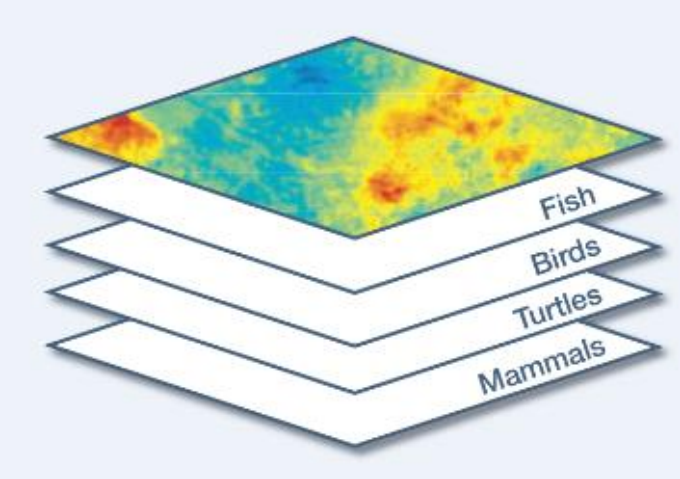
* Depicts areas of EFH overlap

Total Biomass from NMFS Trawl ('07-'11)



- Maps overlaying many/all species within a taxonomic group that are all generally regulated under one to a few authorities
- Data Portal potentially includes (if possible):
  - Information about components used to develop hot spots
  - Measures of uncertainty
- Work groups :
  - Develop methodology
  - Consider thresholds for deriving/separating areas

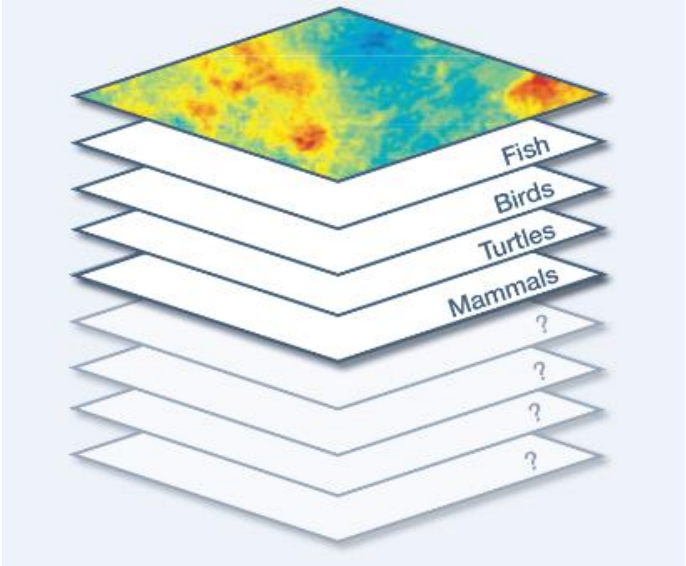
Concept for multiple taxa hot spots*

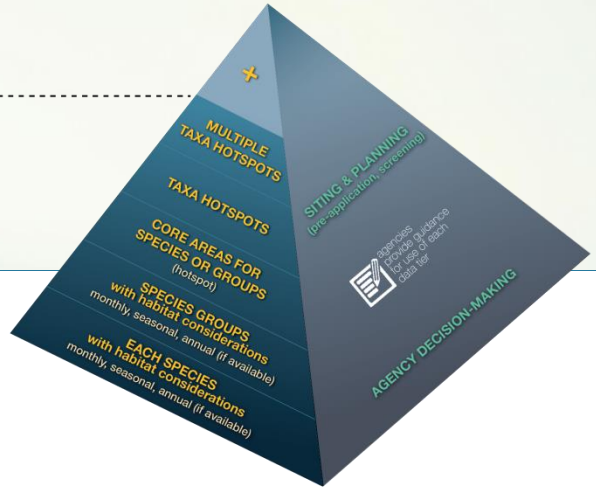


* Could include density hot spots, biomass, species richness, and/or other products. Inputs could include additional habitat and ecological process considerations.

- Maps overlaying multiple taxa that are generally regulated under multiple authorities
- Data Portal potentially includes (if possible):
  - Each pixel can be queried to identify species and related authorities
  - User can drill down into constituent layers
- Work groups :
  - Develop methodology
  - Consider thresholds

Additional EBM considerations (some longer-term?)



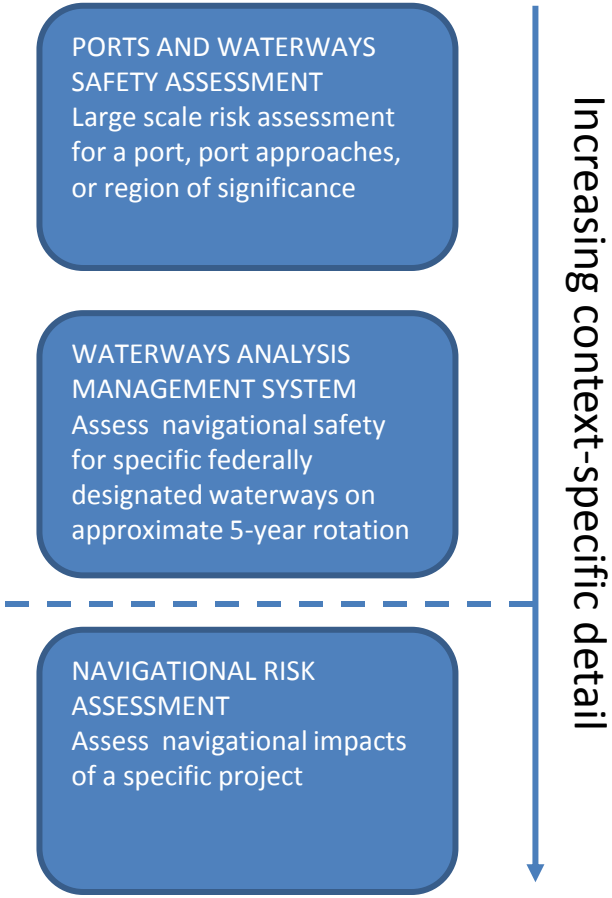


- Data Inputs:
  - Ecosystem process (forage fish, productivity, etc.)
  - Benthic & pelagic habitat (habitat classification, oceanographic hindcast)
  - Ecosystem service production & value

- Models & Indicators:
  - Vulnerability; impacts
  - Indicators based on specific ocean health goals & values
  - Scenarios

Marine Transportation and Safety

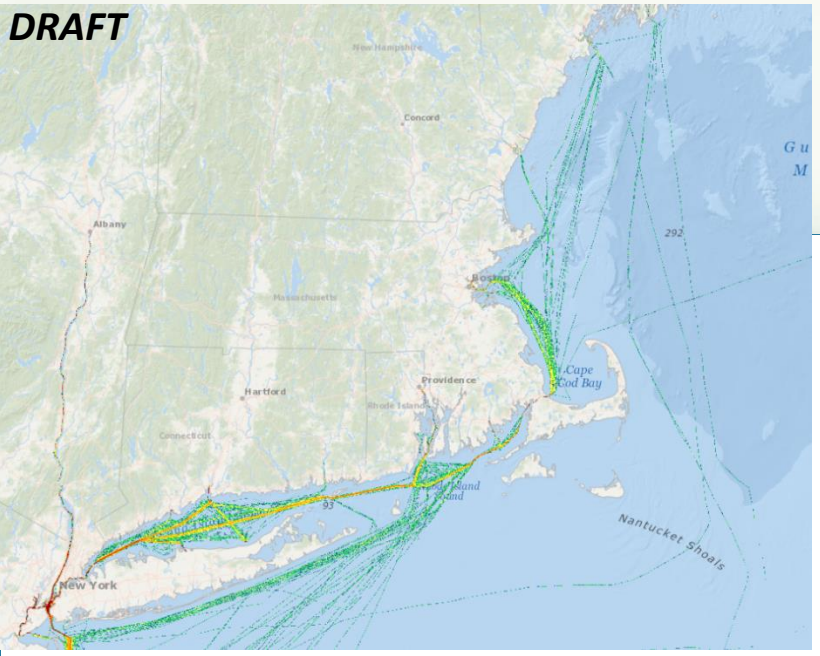
The PORTS AND WATERWAYS SAFETY ACT (PWSA) requires the Coast Guard to conduct studies to provide safe access routes for vessels traffic in the waters under U.S. jurisdiction. In doing so, the Coast Guard considers all waterway uses to reconcile the need for safe access routes.



OCEAN PLANNING IN THE NORTHEAST

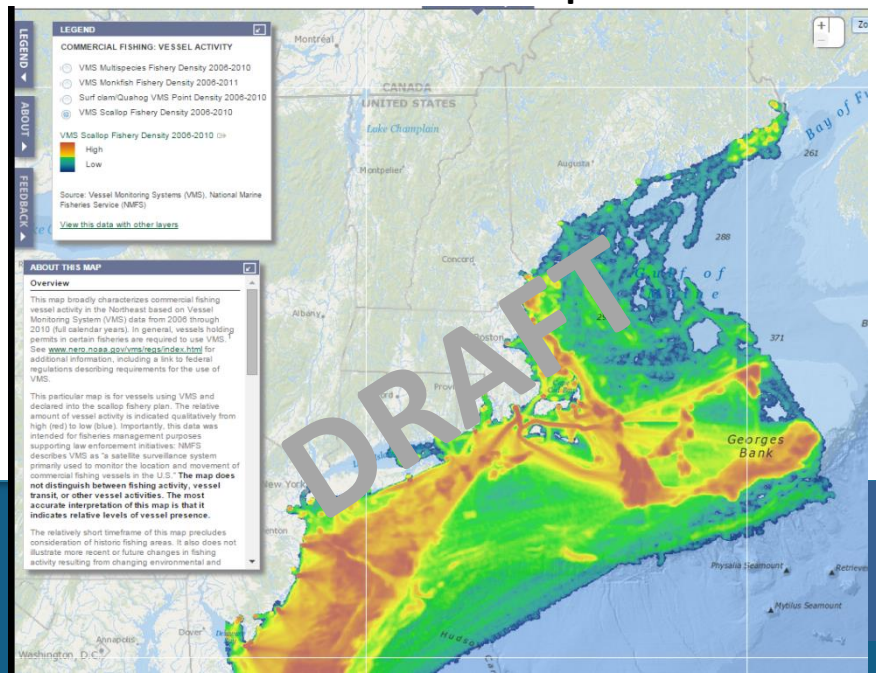
2012 Traffic for Towing Vessels (> 200m line)

DRAFT

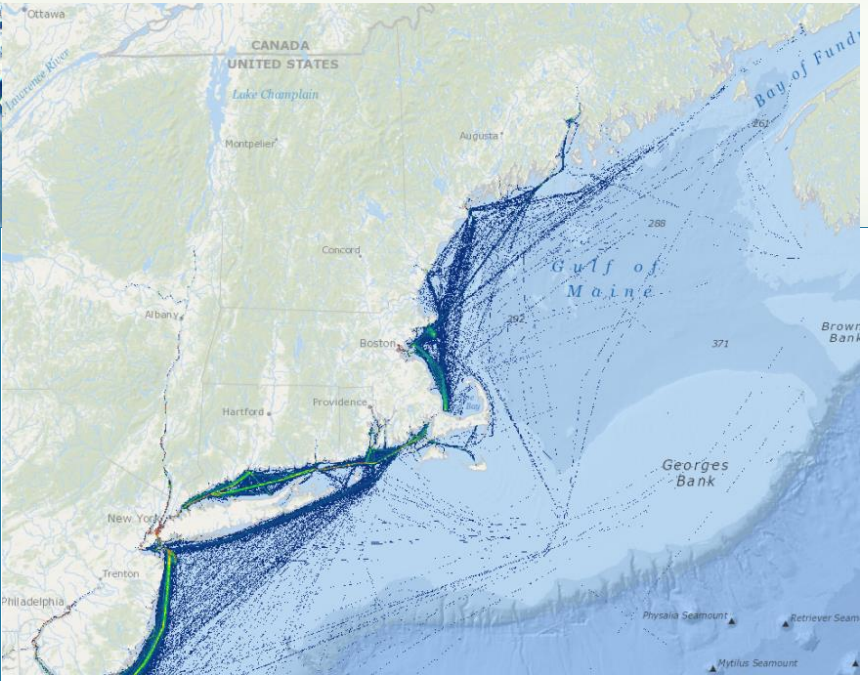


- Maps of traffic for specific activities or vessel types
- Additional information could include economic analyses, future trends, guidelines, & best practices
- *Maps will not replace need for more detailed and specific siting level data on a project basis*

2006-2010 Traffic for Scallop Boats

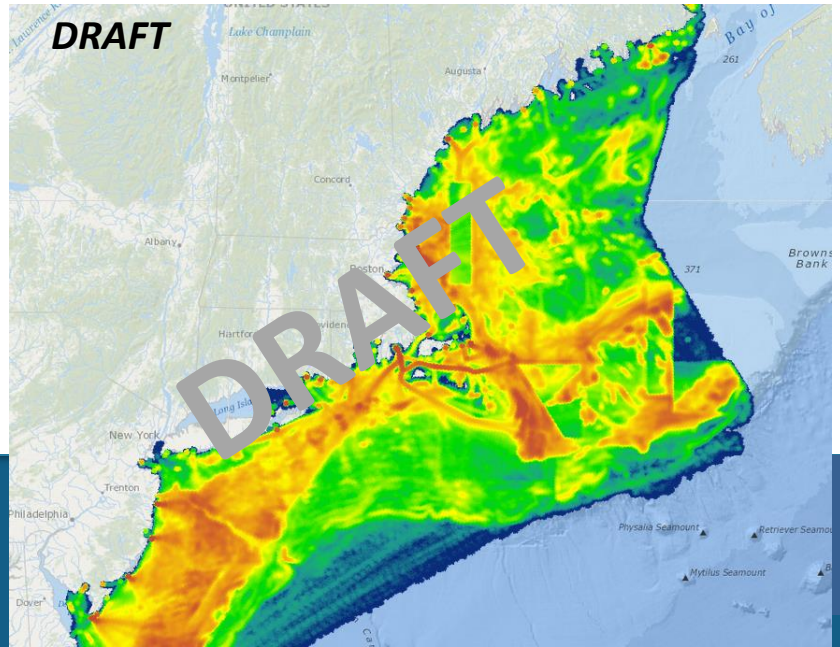


2012 Traffic for All Tug/Tow Vessels



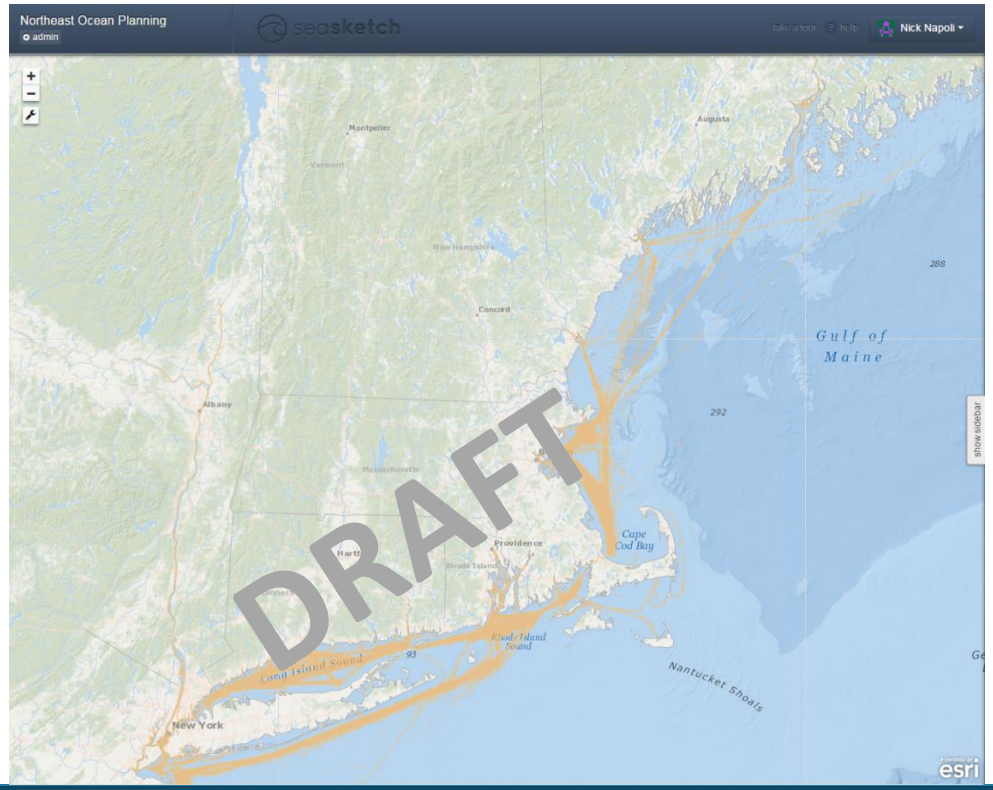
2006-2010 Traffic for All VMS Fisheries

DRAFT



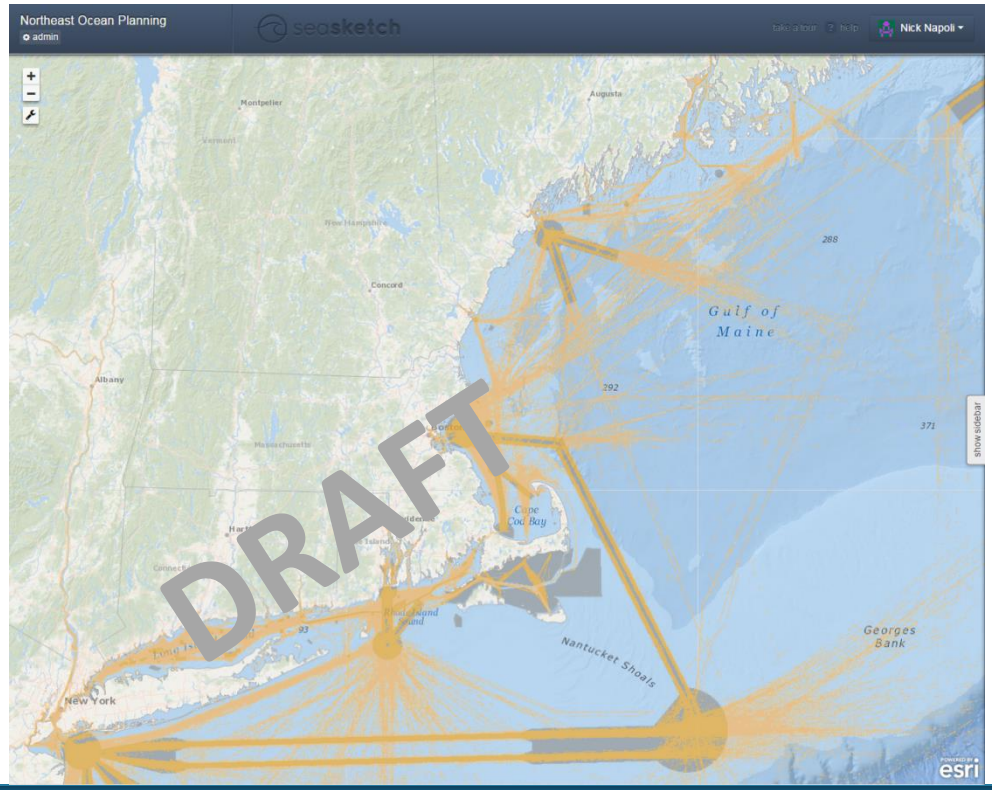
- Aggregated traffic maps for specific maritime industries
- Additional information could include economic analyses, future trends, guidelines, & best practices

2012 Core Routes for Tug/Tow Vessels
(DRAFT – For Demonstration Purposes Only)



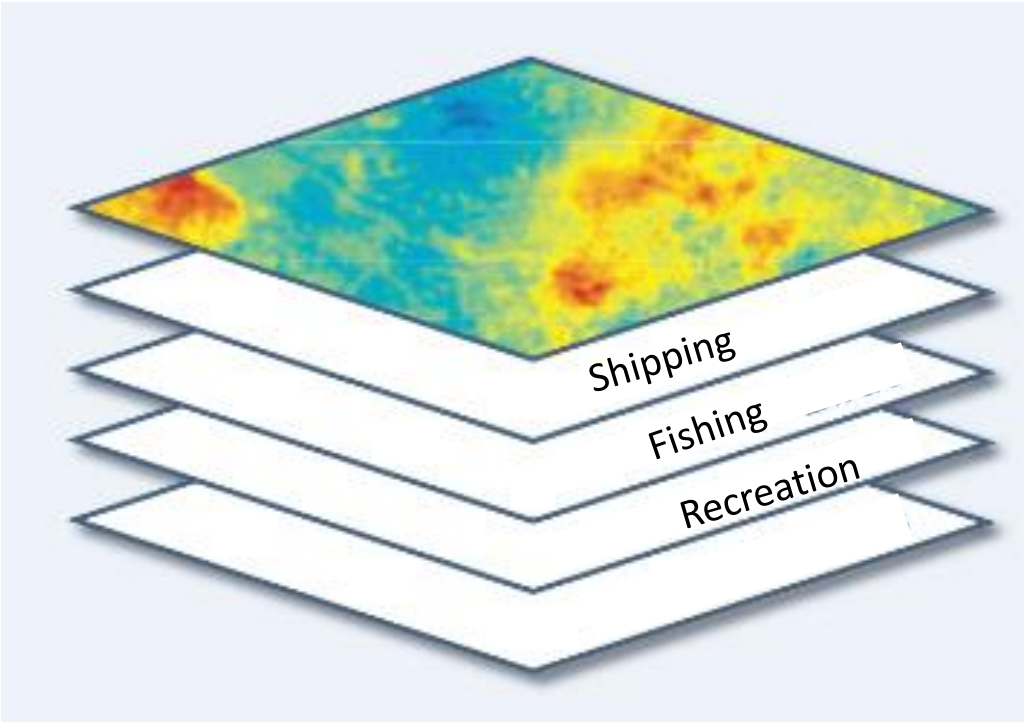
- Maps could include core routes/areas for each industry derived from AIS, VMS, and other data
- USCG will need to determine appropriate analyses and thresholds to identify core routes/areas
- Maps could include consideration of future trends, best practices, USCG marine planning guidelines, and industry standards

2012 Core Shipping Areas and Routes
(DRAFT – For Demonstration Purposes Only)



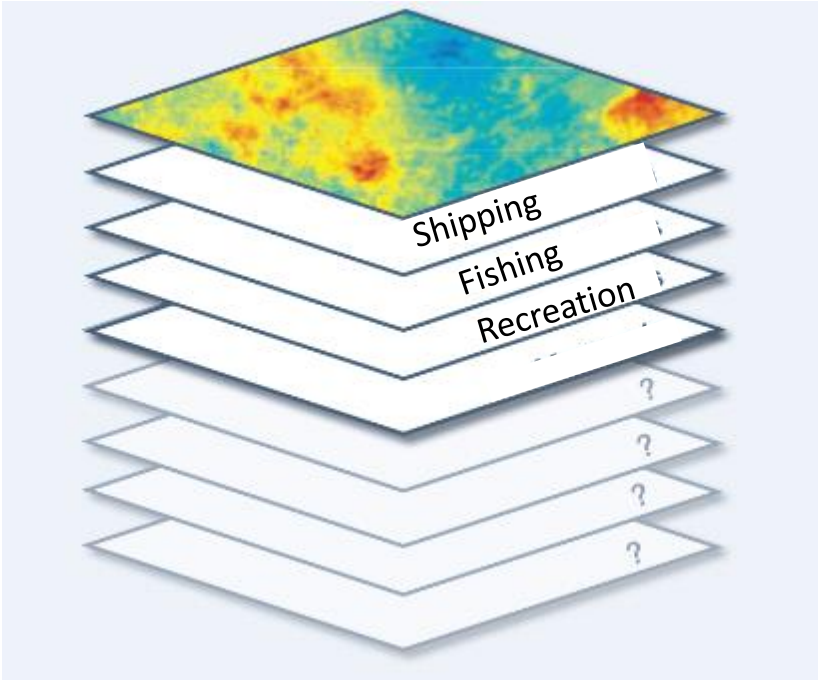
- Maps could include core routes and operational areas for each maritime sector (shipping, fishing, recreation) aggregated from each industry/activity within the sector
- Maps could include consideration of future trends, best practices, USCG marine planning guidelines, and industry standards

Marine Transportation & Safety Areas



- Consider merging shipping, fishing, and recreation areas to generally identify areas important for marine transportation and safety
- Note that maps and data from different shipping, fishing and recreational activities *vary significantly*
- Will need to consider future trends for each activity

Additional human use and other (some long term) considerations



- Potential to consider other human uses (near term)
  - Energy infrastructure & planning areas
  - Aquaculture
  - Telecommunications cables
  - Dredging and disposal sites
- Potential for cumulative use analysis
- Potential to consider cumulative impacts and ecosystem service production and values (in addition to input/output economic generation)