

# *Using Portal Data for Virginia's Updated Marine Mammal Conservation Plan*

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# DGIF's Role in Marine Mammal Conservation

- Title 29.1 of the Code of Virginia
  - Definition of “wildlife” is broad and inclusive of marine mammals
  - State agency charged with management of endangered and threatened wildlife
- Cooperative Agreement with the National Marine Fisheries Service to protect and manage listed sea turtles, marine mammals, and other marine species under the federal Endangered Species Act
  - Partnership with VMRC, Virginia Aquarium
- Conservation and management programs in place in the agency



# Current Management Plan

- Published in 1995
- Addresses distribution, abundance, ecology of the time
- Addresses threats existing and apparent in the 1990s
  - Missing updates on emerging issues (ocean energy development, climate change, sea level rise)
- Not aligned with the framework provided by the Virginia Wildlife Action Plan, updated in 2015



# Need for Updated Plan

- Update dated distribution, abundance, ecology
- Identify and evaluate impacts of existing and emerging issues and threats
- Identify and prioritize conservation actions to address these threats
- Develop measurable effectiveness measures to ensure actions are meaningful in resource conservation
- Capitalize on updated and new mapping, data syntheses, and research performed in the past 20 years
  - Virginia Institute of Marine Science
  - Virginia Aquarium and Marine Science Center
  - Duke University for MARCO
  - Others

# Focal Species

- Harbor porpoise
- Atlantic bottlenose dolphin
- Striped dolphin
- Saddleback dolphin
- Atlantic spotted dolphin
- Atlantic white-sided dolphin
- Risso's dolphin
- Rough-toothed dolphin
- Pygmy sperm whale
- Dwarf sperm whale
- Sperm whale \*
- Fin whale \*
- Minke whale
- Humpback whale \*
- Northern right whale \*
- Goosbeaked whale

# Focal Species

- True's beaked whale
- Blue whale \*
- Sei whale \*
- Bryde's whale
- West Indian manatee \*
- Gray seal
- Harbor seal
- Harp seal
- Hooded seal
- Short-finned pilot whale
- Long-finned pilot whale
- Dense-beaked whale
- Cuvier's beaked whale
- Gervais' beaked whale

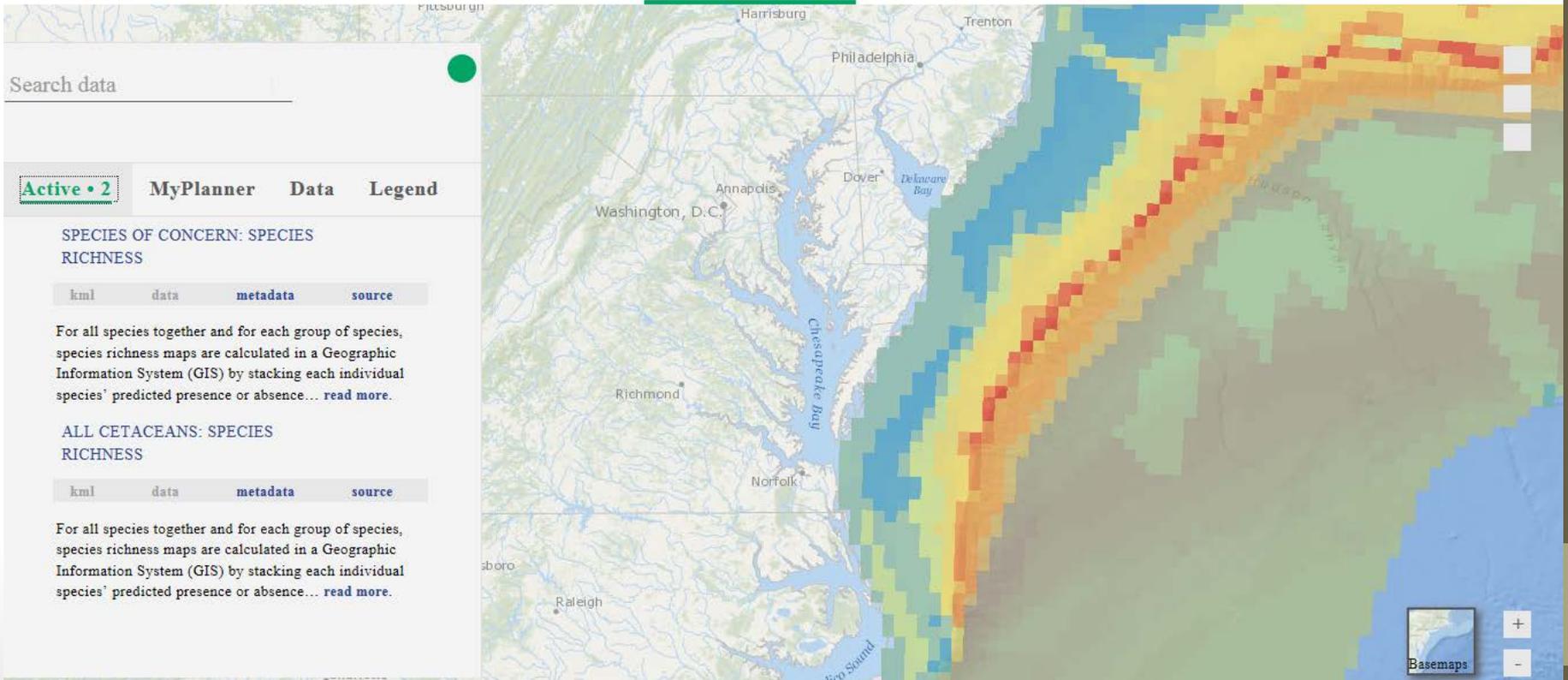
# Elements of New Plan

- Updated species descriptions
  - Distribution, abundance estimates, life history parameters most relevant to Virginia
- Current limiting factors, issues, threats
- Existing legislation, regulations, agreements in place to conserve these species in Virginia
- Synopsis of current conservation efforts
- Conservation actions and effectiveness measures likely to succeed in addressing threats and limiting factors, such as:
  - Implementing statutory or regulatory changes
  - Enhancing outreach and education
  - Improved communications, best practices for boaters, etc.
  - Improved management of commercial and recreational fishing interactions with marine mammals

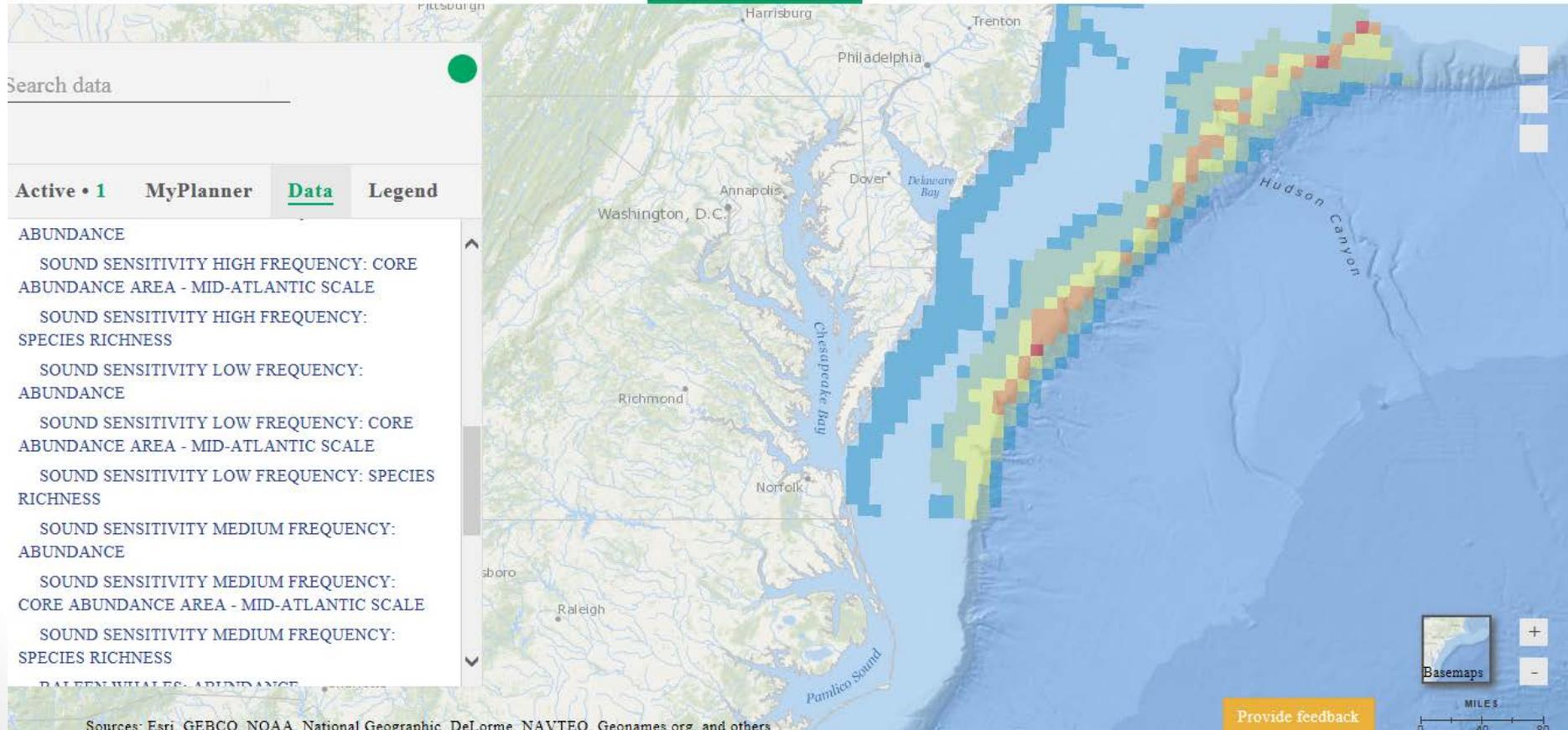
# How Do We Get There?

- Collaboration between DGIF, Virginia CZMP and Virginia Aquarium to develop introductory component of the plan
  - Species descriptions
  - Current limiting factors
  - Regulatory/legislative summary
  - Synopsis of existing information
- Leverage best science available from Virginia Aquarium, other partners, and the MARCO's Ocean Data Portal

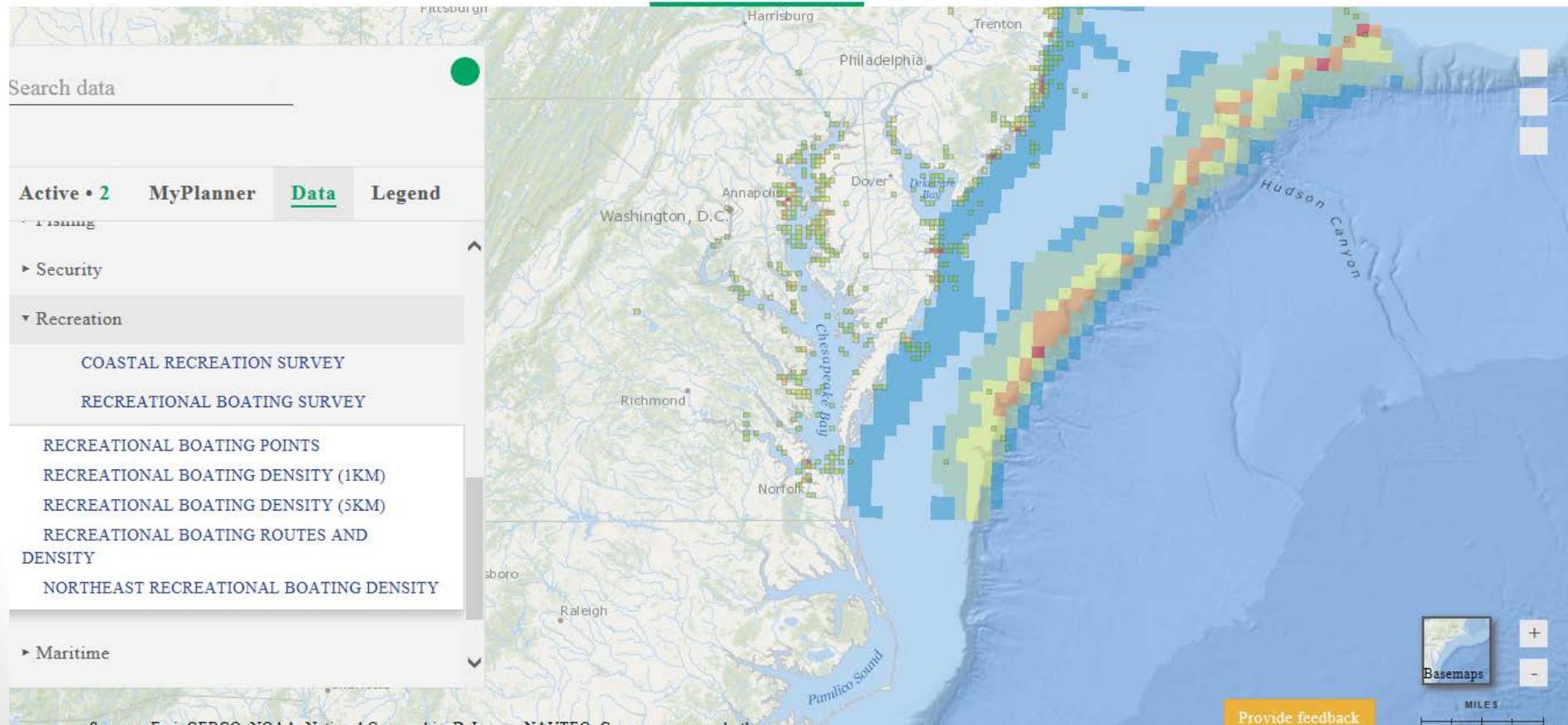
# Cetacean Species Richness



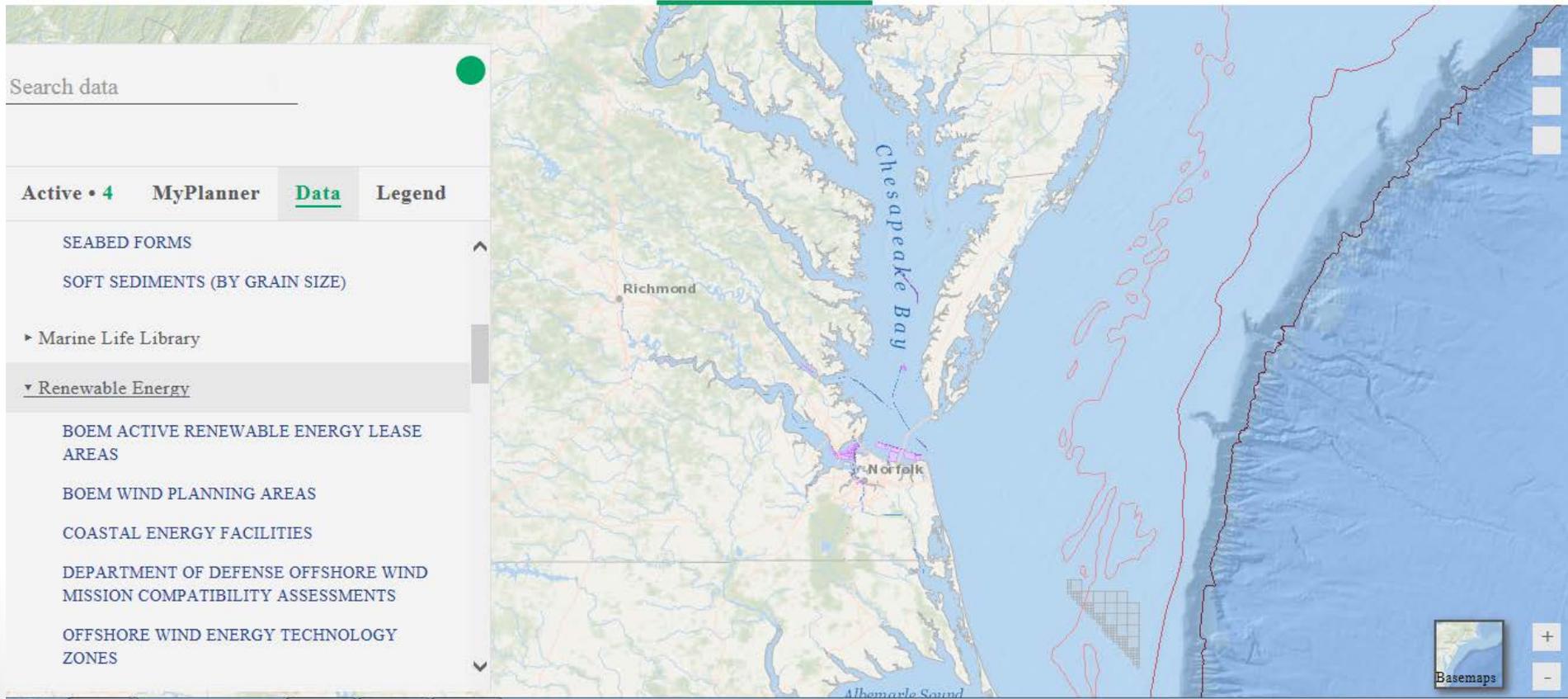
# Sound Sensitivities Abundance Areas – Military and Industry



# Potential Interactions – Recreational Boating



# Commercial and Industrial Interactions



# Informing Actions

- Overarching goal: enhance survival and conservation of marine mammals and the habitats that support them in Virginia
- Development of “in-depth assessments” of “ecologically rich areas” (Mid-Atlantic Ocean Action Plan)
- Inform and improve natural resource agency response in regulatory permitting decisions
- Inform and improve natural resource agency legislative and regulatory actions, especially in the context of competing or overlapping interests
- Inform and improve natural resource agency program prioritization, collaboration, and outreach with partners

# Questions?

