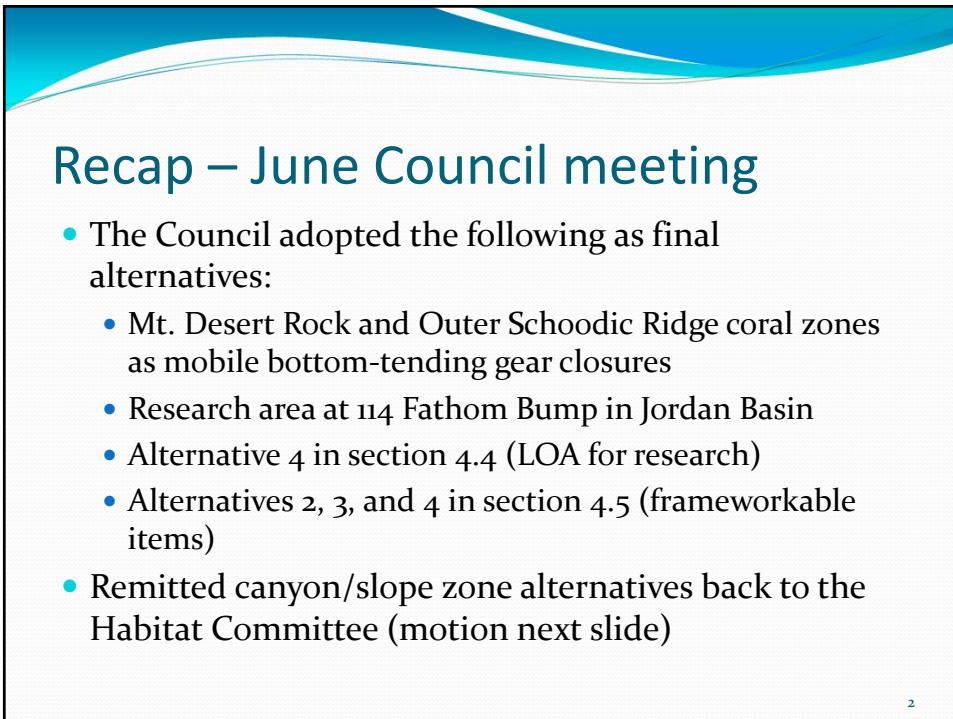




Deep-Sea Coral Amendment Update

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NEFMC Habitat Committee
October 4, 2017
New Bedford, MA



Recap – June Council meeting

- The Council adopted the following as final alternatives:
 - Mt. Desert Rock and Outer Schoodic Ridge coral zones as mobile bottom-tending gear closures
 - Research area at 114 Fathom Bump in Jordan Basin
 - Alternative 4 in section 4.4 (LOA for research)
 - Alternatives 2, 3, and 4 in section 4.5 (frameworkable items)
- Remitted canyon/slope zone alternatives back to the Habitat Committee (motion next slide)

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Broad zones motion from June meeting

Commit the following to the Habitat Committee for further analysis and consideration so that it can be brought back to the Council for a final decision as soon as the analyses are complete.

- Option 6 (boundary of 600m minimum depth) as a broad coral protection zone. The use of all bottom tending gear will be prohibited within the zone (Section 4.3, Option 1). The use of pot gear for red crab (Section 4.3, Sub-Option A) shall be exempt from these restrictions.
- In addition, Option 7, a broad zone management area (Section 4.2.1), as revised consistent with the June 14, 2017 PDT Memorandum recommendations (pp. 4-5). This area will be closed to all mobile bottom-tending gear (Section 4.3, Option 2).

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Option 7 criteria

During workshop in March 2017, participants agreed that 500 m was the maximum depth fished by mobile bottom-tending gears along the shelf/slope break

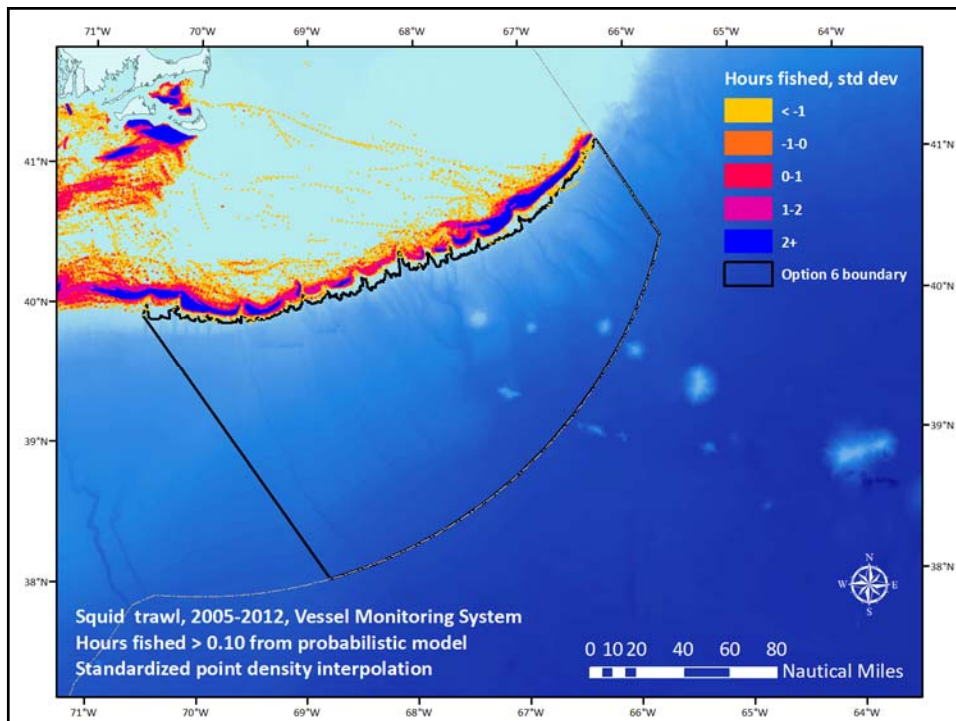
Contour	Criteria	Rationale
550 m	Evidence of MBTG fishing, but no evidence of coral habitat	Provides an additional buffer beyond what was identified as the deepest current fishing during the New Bedford workshop.
500 m	Evidence of MBTG fishing and coral habitat - or - No evidence of MBTG fishing or coral habitat	Accommodates what the mobile bottom fishing industry identified as the maximum depth of current fishing
Coral footprint, min of 300 m	No evidence of MBTG fishing, but evidence of coral habitat	Would protect shallower water coral habitats in locations where impacts to MBTG fishing activity are unlikely to occur

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Data to support ID of fishing footprint

- Model-based VMS from 2005-2012
 - **Method:** Estimate probability that a given poll represents fishing by comparing VMS, VTR, observer data using generalized linear models (working paper by Records and Demarest, Muench et al 2017)
 - **Gears:** Gillnet, longline, otter trawl, raised footrope trawl, scallop limited access, scallop general category, shrimp trawl, squid trawl, trap
 - **Maps:** filter out polls where probability is $< 10\%$; interpolate using point density tool in ArcMap (similar to Northeast Ocean Data Portal method); check for confidential data and combine years as needed

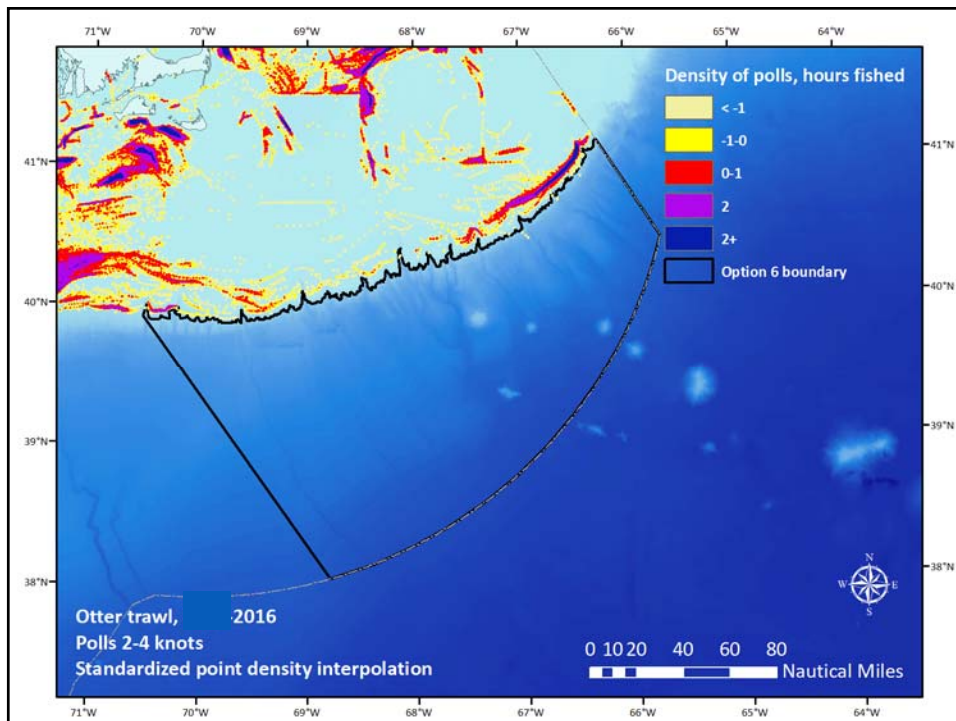
5



Data to support ID of fishing footprint

- Speed-filtered VMS from 2010-2016
 - **Methods:** Palmer and Wigley 2009
 - Includes all polls regardless of VMS declaration, based on VTR match
 - Fishing indicated by polls between 2 and 4 knots
 - **Gear:** All trawl gears where VTR indicated catch of butterfish, silver hake, offshore hake, unclassified hake, red hake, longfin squid, *Illex* squid, summer flounder, scup, black seabass, and monkfish
 - **Maps:** Interpolate polls using point density tool in ArcMap (similar to Northeast Ocean Data Portal method); check for confidential data and combine years as needed

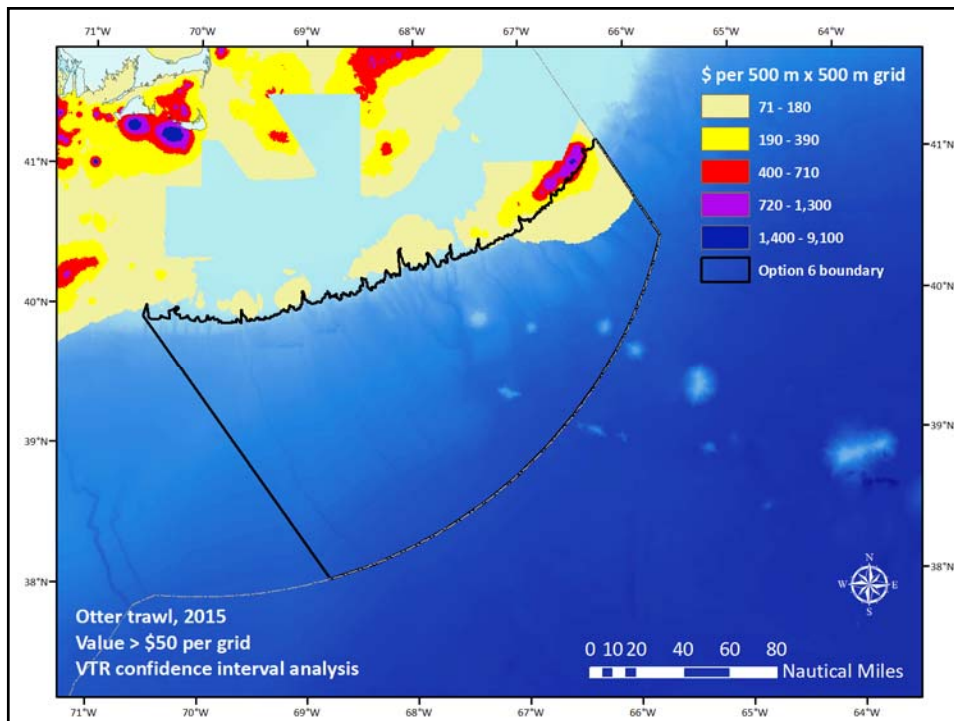
7



Data to support ID of fishing footprint

- Model-based VTR from 2003-2015 (or earlier)
 - **Method:** DePiper 2014 (used for OHA2 as well)
 - Analysis compares VTR and observer data to assess how far fishery revenues are likely to be generated from the reported VTR point
 - Each trip is represented as a circular footprint, with more revenue or catch attributed to areas closer to point
 - **Gears:** Gillnet, longline, otter trawl, raised footrope trawl, scallop limited access, scallop general category, shrimp trawl, squid trawl, trap
 - **Maps:** circular footprints are overlaid for all trips occurring during a specific time period, estimated revenues are gridded at 500 m by 500 m resolution

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Next steps

- PDT work
 - Complete data processing and mapping
 - Evaluate Option 7 boundary using these data sources
 - Publish map book and coordinates
- Potential review process
 - Informal staff outreach to stakeholders as needed
 - Collect feedback at an Advisory Panel meeting
 - Make any adjustments suggested through AP, then analyze impacts of boundary and provide information to the Committee