NOAA FISHERIES

Northeast Regional Office

Harbor Porpoise Take Reduction Plan (HPTRP)

Overview and Report on Consequence Area Monitoring

November 27, 2012

Objectives

1. Brief HPTRP overview

2. Summary of 2010 amendment to HPTRP

3. Share results of Year 1 and 2 monitoring of the Consequence Closure Area Strategy

Overview
Harbor Porpoise Take Reduction Plan

- First implemented in December 1998 and amended in 2010 to address incidental takes of harbor porpoise during the course of commercial gillnet fishing operations.

- Developed by Take Reduction Team consisting of fishermen, scientists, environmentalists and managers that serve as an advisory body to NOAA Fisheries

- Harbor Porpoise Take Reduction Team consists of 38 members
  - 12 Gillnet fisheries seats
  - 3 Conservationist seats
  - 10 State manager seats
  - 4 Federal seats
  - 3 Fishery Management Organizations (2 Council seats, 1 ASMFC seat)
  - 3 Academic/Scientific seats
  - 3 Gear Research seats

Overview
Harbor Porpoise Take Reduction Plan

Goals of the Harbor Porpoise Take Reduction Plan

Under the MMPA, the TRP must achieve both short and long-term goals for reducing harbor porpoise bycatch.

- The immediate goal is to reduce bycatch to below the stock's Potential Biological Removal Level (PBR) within 6 months of implementation.
  - PBR: The maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population.
- The long-term goal is to reduce harbor porpoise bycatch to insignificant levels approaching a zero mortality and serious injury rate (Zero Mortality Rate Goal) within 5 years.
  - Zero Mortality Rate Goal: 10 percent of the PBR level

Background – HPTRP

- First implemented – December 1998
- Revised with additional measures – February 2010
- Mid-Atlantic (NY/NJ through NC)
  - Gear modification requirements (in lieu of pingers)
    - Large mesh (7 - 18 in.)
    - Small mesh (>5 - <7 in.)
  - Time/area closures
- New England (ME through RI)
  - Time/area closures
  - Seasonal use of pingers
  - One-time pinger training required

Post-Plan Monitoring

- Initially, the Plan worked – takes lowered below PBR
- Then…
  - Compliance began declining in early 2000s
  - Bycatch beginning to creep up
  - Eventually bycatch again above allowable levels set by the Marine Mammal Protection Act
- Outreach ramped up in 2004 to increase compliance

Outreach: Pre-2010 Amendment

- Gillnet permit holder letters
  - Mass Bay March closure reminder (March 2004)
  - HPTRP requirements reminder & graphics (Feb. 2005)
- Response to Council regarding March closure of Mass Bay (Aug. 2005)
- Pinger authorizations re-printed and mailed with laminated placards to pinger-trained gillnetters (Oct. 2006)
- Commercial Fisheries News
  - Outreach best way to increase compliance (Oct. 2006)
- Outreach meetings (Oct. 2006 through Jan. 2007)
  - Series of 9 meetings from Maine to New Jersey
- Council Briefing – June 2008
  - Updates on recent HPTRT meetings and deliberations

HPTRT Reconvened and 2010 Final Rule

- Team reconvened – December 2007
  - Address continued harbor porpoise bycatch
  - Takes occurring outside existing management areas
  - Non-compliance with Plan requirements
- Published on February 19, 2010
- Mid-Atlantic – changes
  - Established new management area; modified tie-down requirement; technical corrections
- New England – changes
  - New and expanded pinger areas
  - Expanded pinger season in Gulf of Maine
  - Consequence closure strategy with established targets

HPTRP – Mid-Atlantic Management Areas

Mid-Atlantic
HPTRP Measures:

- Seasonal gillnet closures
- Seasonal gillnet gear modification requirements for:
  - Number of nets/string
  - Number of nets/vessel
  - Tie-down use
  - Net size
  - Twine size

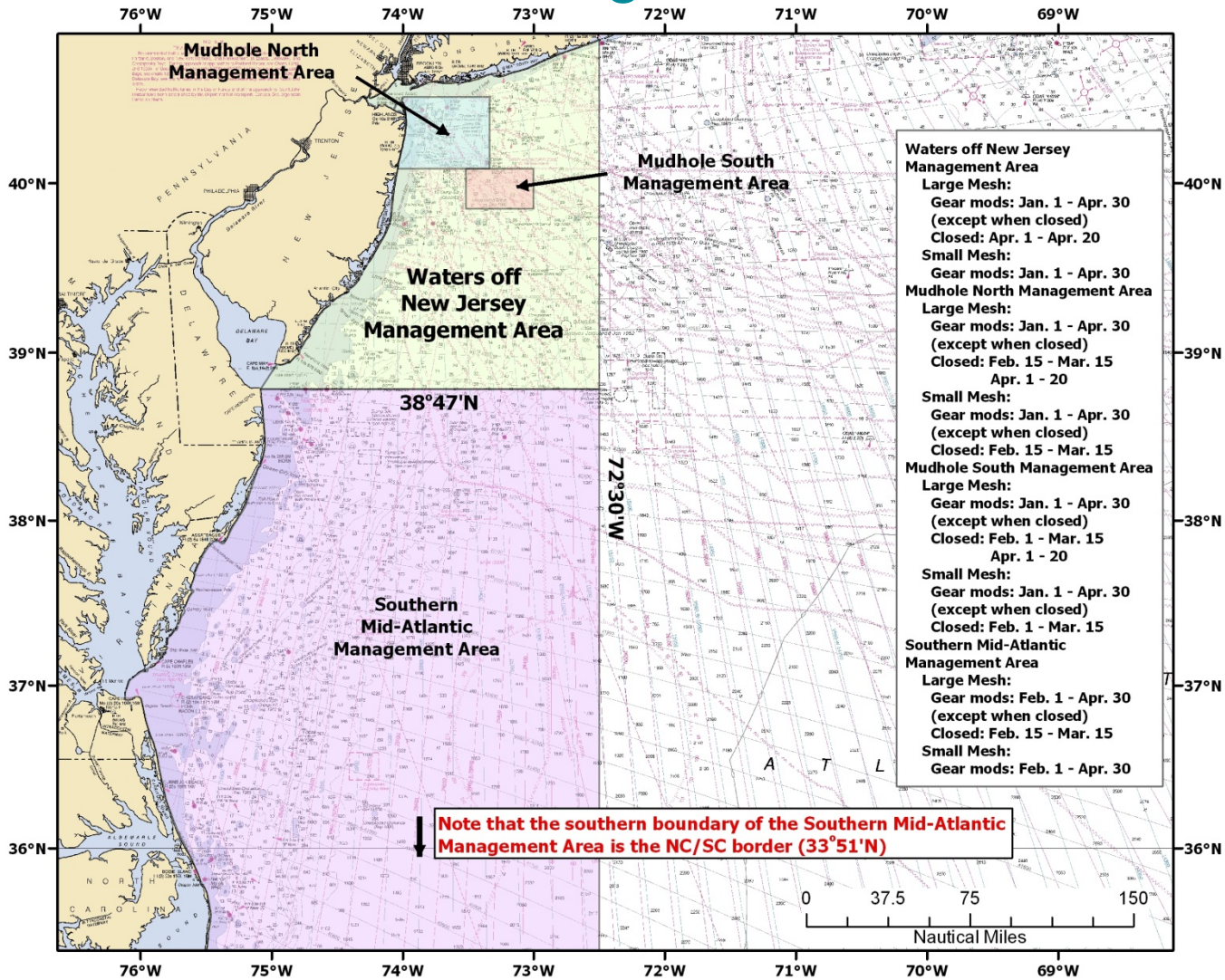

Chart Name: Cape Sable to Cape Hatteras
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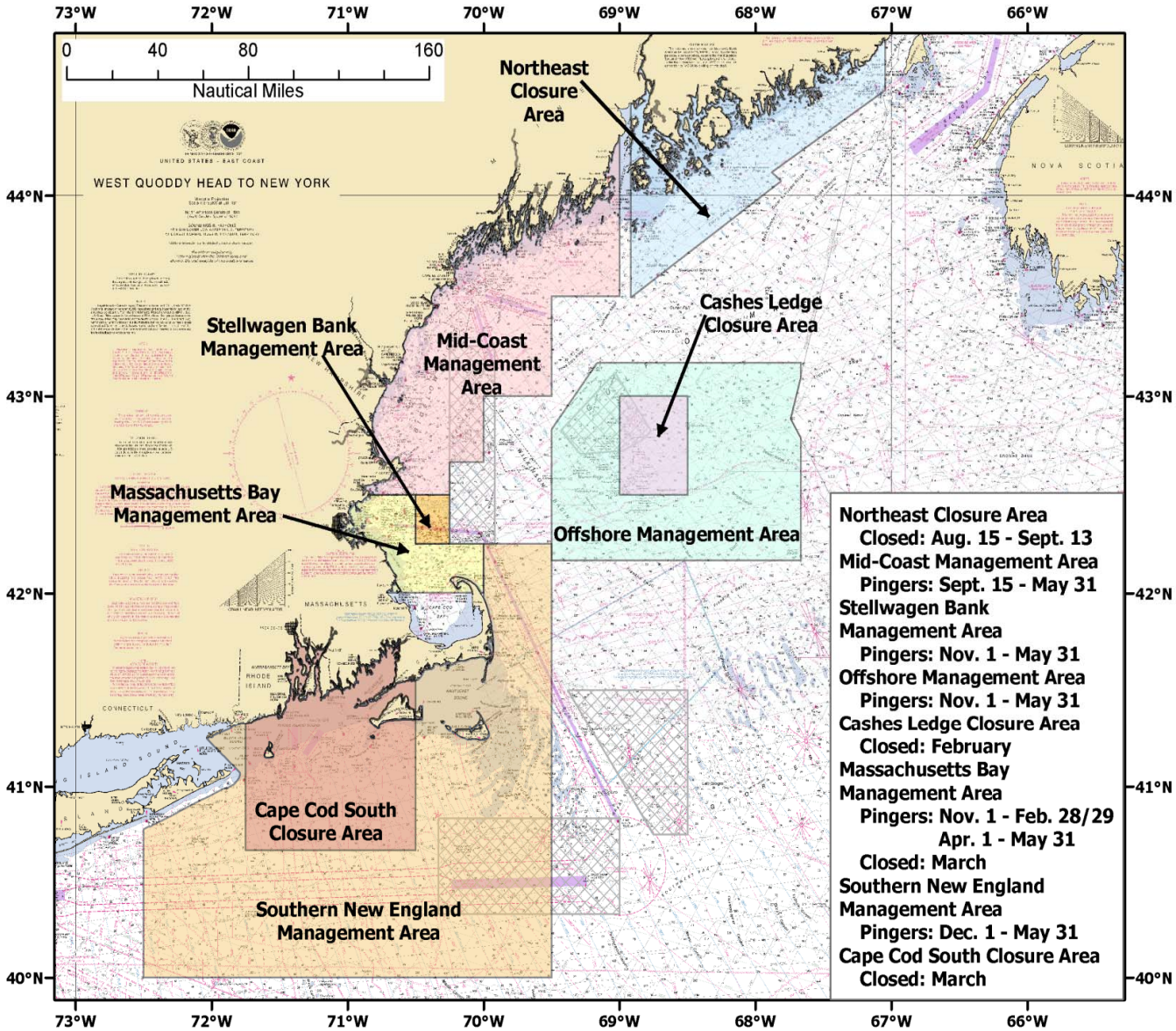
- Not for navigational purposes - Depth units = fathoms

HPTRP – New England Management Areas

New England HPTRP Measures:

- Seasonal gillnet closures
- Seasonal pinger usage on gillnets
  - Pinger specifications
  - Pinger placement
  - Pinger training required



- Depth units = fathoms / Not for navigational purposes
- Northeast Multispecies FMP Year-Round Closures are depicted as gray cross-hatched areas

Chart Name: West Quoddy Head to NY - East Coast
Chart #: 13006_1

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Outreach: Post-2010 Amendment

- Commercial Fisheries News articles
  - Final Rule Fact Sheet (Feb. 2010)
  - New rules take effect on Sept. 15 (Aug. 2010)
  - Preliminary analysis of year 1 bycatch rates for consequence areas (NOAA Navigator, Nov. 2011)
- Gillnet Permit Holder Letters
  - Final rule (Feb. 2010), Delay of new pinger requirements (Mar. 2010), Southern New England delay clarification (Apr. 2010), Reminder of new requirements & consequence areas (Sept. 2010)
- Distributed 1,100 laminated, key-ringed placards
- Press releases (July 2009 [proposed rule] and Feb. 2010 [final rule]) and website updates

Consequence Closure Area Strategy

OVERVIEW

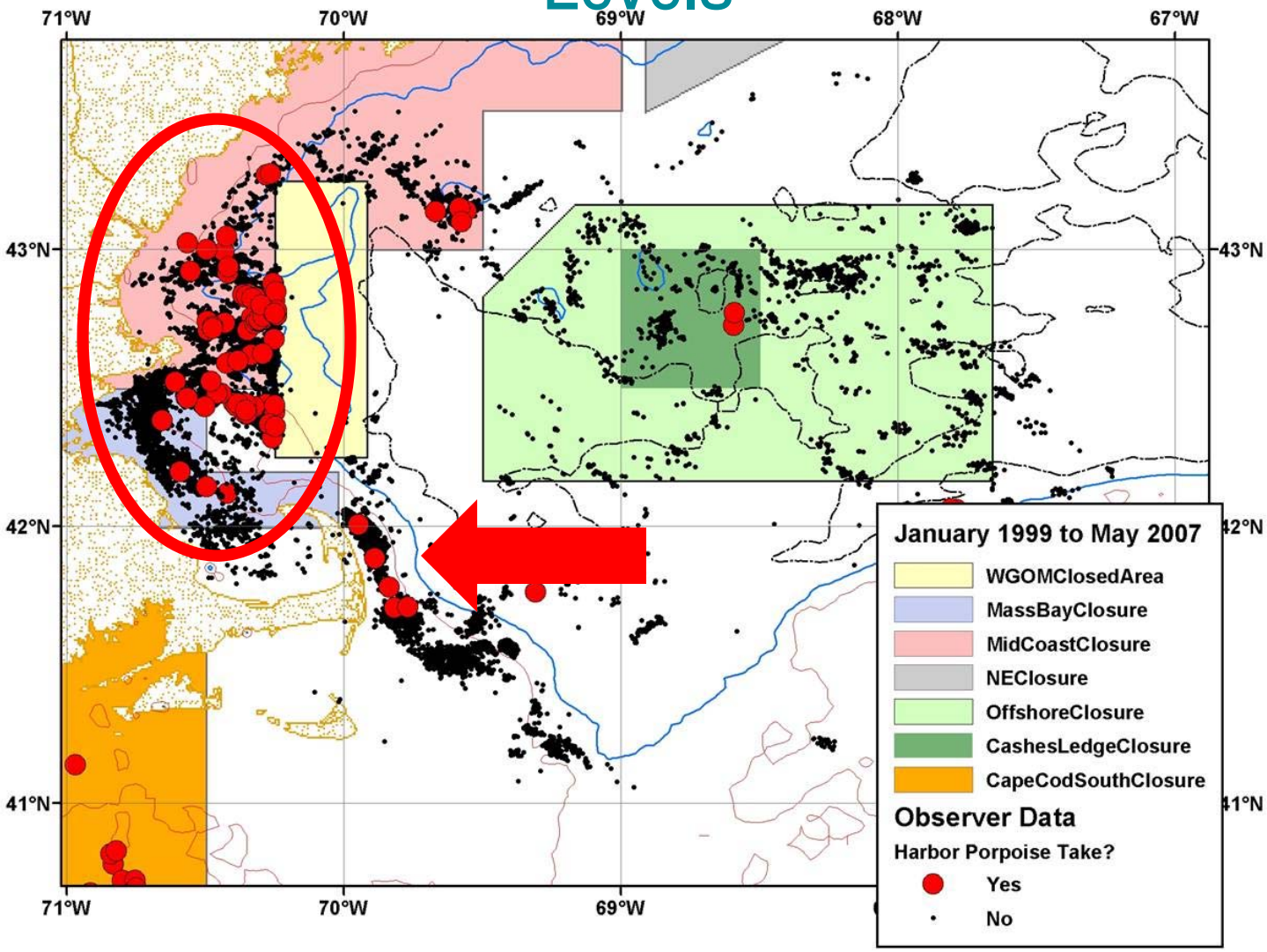
Consequence Closure Area Overview

- New management measure implemented with 2010 Harbor Porpoise Take Reduction Plan amendments
- What is it?
  - Establishes bycatch rate thresholds in management areas with historically high harbor porpoise bycatch levels
  - If thresholds are exceeded after 2 consecutive management seasons, seasonal closures are established
  - Monitor bycatch and landings by the Plan's management season and compare to the established thresholds
    - Year 1: September 2010 through May 2011
    - Year 2: September 2011 through May 2012

Consequence Closure Area Overview (continued)

- Why implement such a measure?
  - Harbor Porpoise Take Reduction Team concerned about continued bycatch and non-compliance with pinger requirements in specific management areas
    - Mid-Coast, Stellwagen Bank, and Massachusetts Bay Areas
    - Areas south and east of Cape Cod
  - Incentive is to increase compliance with pingers
- If exceeded – areas become seasonally closed until:
  - Zero Mortality Rate Goal (ZMRG) is achieved (e.g., 10% of PBR); or
  - NMFS, in collaboration with the Team, develops and implements new measures

Gulf of Maine – Areas with Historically High Bycatch Levels



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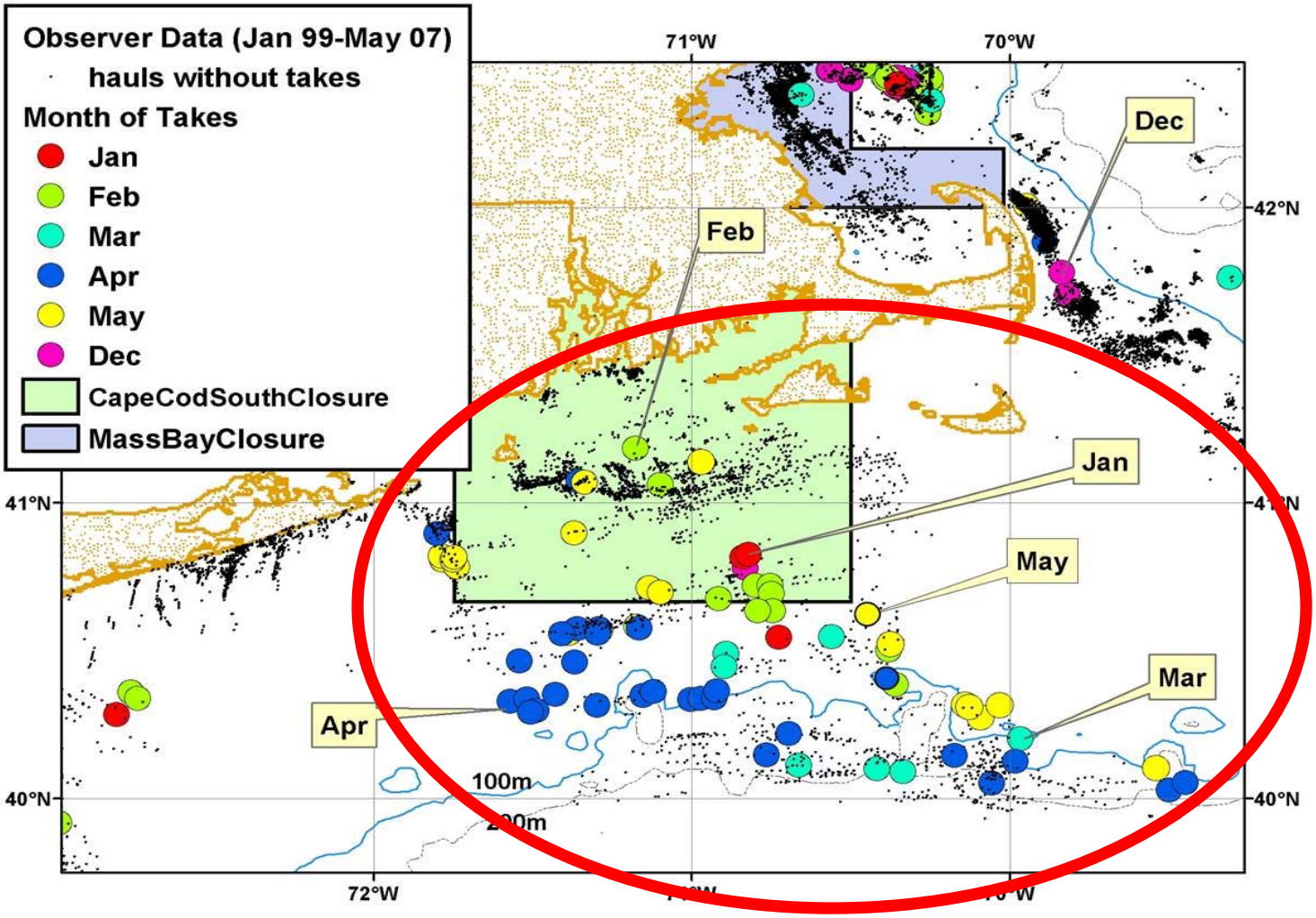
Bycatch information from observed gillnet hauls from January 1, 1999 through May 31, 2007

Southern New England – Areas with Historically High Bycatch Levels



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Bycatch information from observed gillnet hauls from January 1, 1999 through May 31, 2007

Establishing the Consequence Closure Areas

- What areas did the Team focus on?
  - Areas with historically high bycatch levels, even when pinger requirements were in place
    - Gulf of Maine (1 bycatch rate threshold; 1 consequence area)
      - Northern MA, all of NH, southern ME
    - Southern New England (1 bycatch rate threshold; 2 consequence areas)
      - One area east of Cape Cod; other area south of MA/RI

Calculating the Bycatch Rate Thresholds

- Bycatch rate thresholds were calculated by the NMFS Northeast Fisheries Science Center
- What is a bycatch rate?
  - Number of harbor porpoises observed as bycatch relative to the amount of observed fishing effort
  - Unit of fishing effort is metric tons of landings
  - Bycatch rates within each of the Plan's management areas are monitored using observer program data

Landings to Measure Effort

- Why are we using landings to equate to effort?
  - It is the best measure of effort available.
  - Other possible measures of effort such as gear length and soak time are not recorded accurately in the VTR data and are not recorded at all in the Dealer data.
  - In order to estimate the number of incidental takes for the whole fishery, the measure of effort variable must be available in both the observer data, and the effort data for the whole fishery (such as VTR or Dealer data).
  - Landings is the most statistically appropriate measure of effort available in both the observer data, used to calculate the bycatch rate, and the effort data, used to apply that bycatch rate to the whole fishery to generate a total bycatch estimate.

Calculating the Bycatch Rate Thresholds (continued)

- What data were used to calculate the thresholds?
  - Northeast Fisheries Observer Program data collected between January 1, 1999 and May 31, 2007
  - Observed gillnet hauls that utilized the full complement of pingers (presence/absence only, regardless of functionality)
    - This allowed calculation of a bycatch rate in gillnet strings that contained the appropriate number of pingers under the Plan's requirements
  - Bycatch information in the Gulf of Maine and southern New England for areas identified by the Team

Coastal Gulf of Maine Consequence Closure Area

- Area name (if established)
  - Coastal Gulf of Maine Closure Area
- Bycatch rate threshold
  - 0.031 harbor porpoise takes/mtons observed landings (equivalent to 1 harbor porpoise taken per 71,117 lbs.)
- How was this calculated?
  - Averaged the bycatch rates for compliant hauls from three areas that overlap the consequence area (Mid-Coast, Massachusetts Bay, and Stellwagen Bank)
- If established, will become seasonally closed
  - October and November

Coastal Gulf of Maine Consequence Closure Area

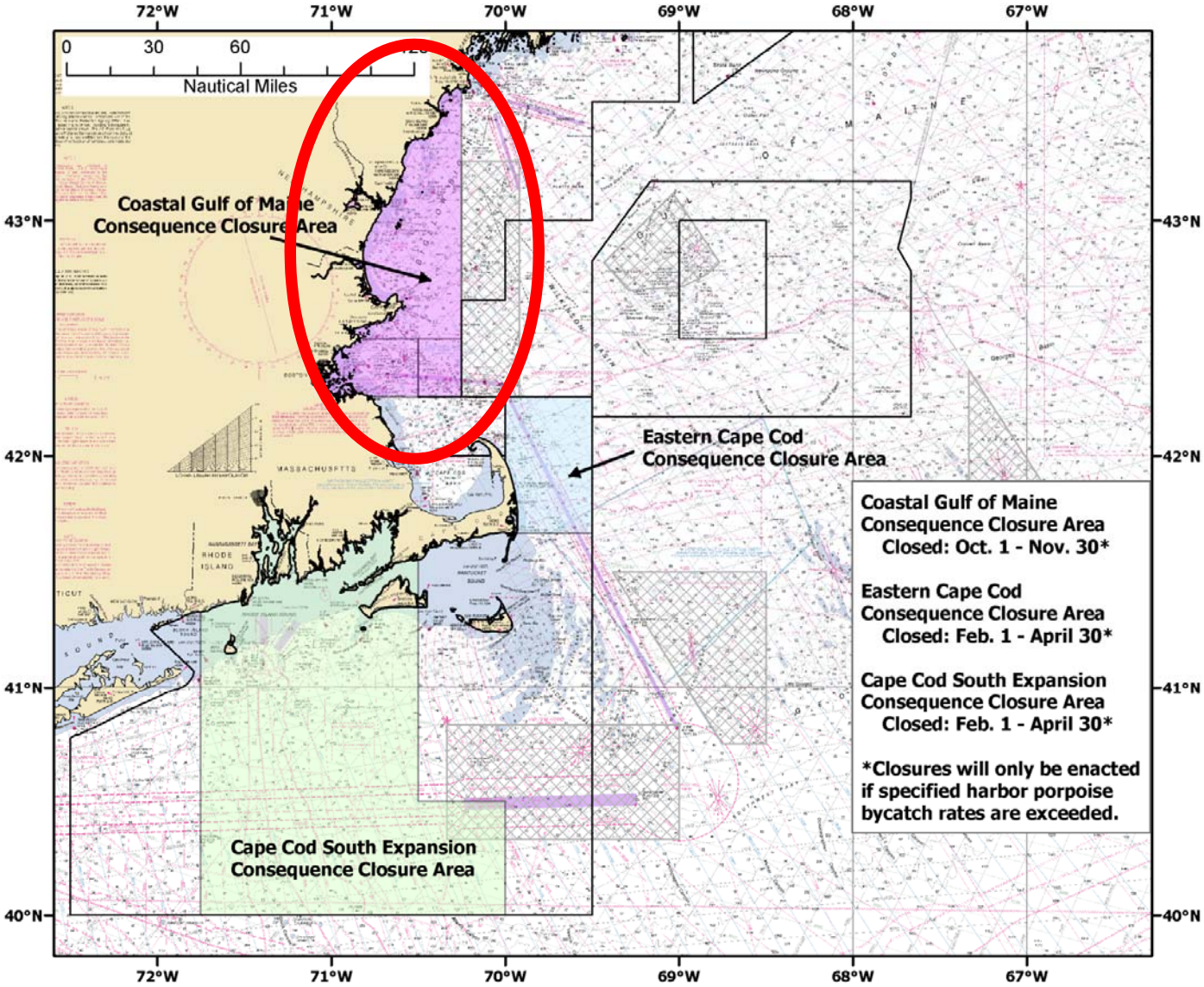

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Chart Name: West Quoddy Head to NY - East Coast
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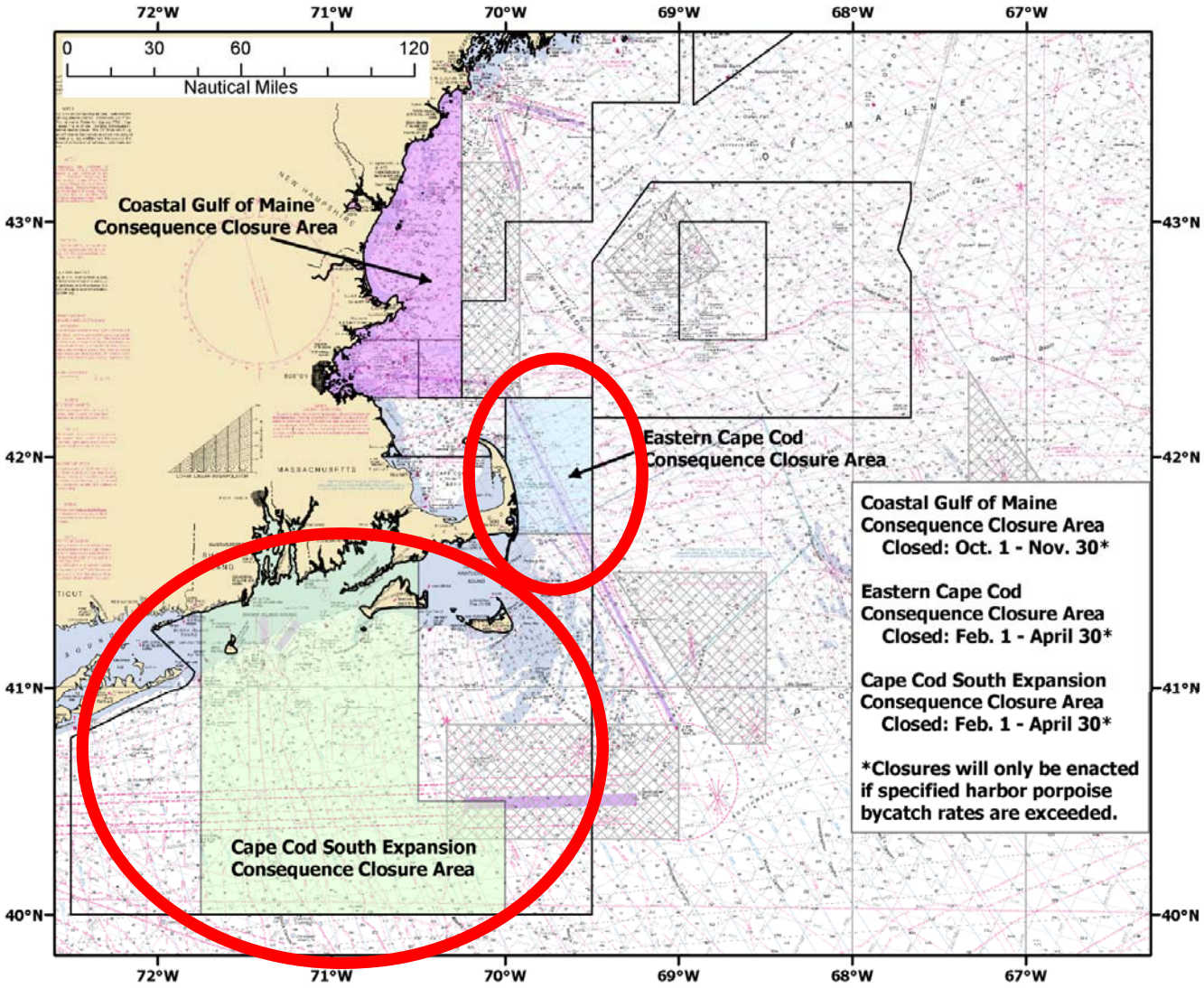
Southern New England Consequence Closure Areas

- Area names (if established)
  - Cape Cod South Expansion Closure Area
  - Eastern Cape Cod Closure Area
- Bycatch rate threshold
  - 0.023 harbor porpoise takes/mtons observed landings (equivalent to 1 harbor porpoise taken per 95,853 lbs.)
- How was this calculated?
  - Averaged the bycatch rates for compliant hauls from two areas (Cape Cod South Area and area to the south and east of it)
- If established, both areas will become seasonally closed
  - February through April

Eastern Cape Cod and Cape Cod South Expansion Consequence Closure Areas



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Upcoming Discussions

- Monitoring Strategy and Review of Year 1 and 2 data
- New harbor porpoise abundance estimate based on a 2011 abundance survey
- Harbor porpoise bycatch analysis for 2011
- How to improve compliance and enforcement
- Changes in fishing practices, upcoming fisheries related activities, research related updates