

# NEFMC Council Meeting

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## Presentation

"Update and Briefing on NMFS Harbor  
Porpoise Take Reduction Plan"

by NMFS staff

for

Thursday, June 5

# **Harbor Porpoise Take Reduction Team/Plan History and Updates**



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# Overview

- NMFS mandates
- Pre-TRP Review of Abundance, Takes and PBR
- Formation of TRT
- Overview of HPTRP – Gulf of Maine and Mid-Atlantic
- Post-TRP Review of Abundance, Takes and PBR
- Reconvening the TRT
- Takes in the Gulf of Maine
  - TRT Discussions
- Takes in the Mid-Atlantic
  - TRT Discussions

# 1994 MMPA Amendments

- 1995 SAR indicated harbor porpoise takes in commercial fisheries were above PBR
- This triggered requirement to form a TRT under Section 118 of the MMPA
  - Provide recommendations to NMFS for immediately reducing bycatch to below PBR and eventually to insignificant levels approaching zero (ZMRG) within 5 years
- Focus now shifted to HPTRP process under the MMPA rather than under the fishery management process

# MMPA: Short-term Goal

- Short-term goal: get takes below the Potential Biological Removal (PBR) number (based on the # of harbor porpoises in the population)
- "...to reduce, within 6 months of its implementation, the incidental mortality or serious injury of marine mammals incidentally taken in the course of commercial fishing operations to levels less than PBR..."
  - PBR = the number of harbor porpoises that can be taken from the stock without negatively affecting the population
  - Current PBR (allowed take) = 610 harbor porpoises
- After HPTRP was initially implemented, this goal was reached

# MMPA: Long-term Goal

- Long-term goal: get takes to the Zero Mortality Rate Goal (ZMRG)
- "...to reduce, within 5 years of its implementation, the incidental mortality or serious injury of marine mammals...to insignificant levels approaching a zero mortality and serious injury rate..." (ZMRG)
- ZMRG defined as 10% of PBR
  - Current ZMRG = 61 harbor porpoises
  - After HPTRP implementation, we achieved PBR
  - Now we must work toward achieving PBR again and eventually reaching ZMRG



# **Early Porpoise PBR & Bycatch**

- PBR for harbor porpoises was set at 403 in 1995 as reported in the first NMFS Stock Assessment Report (SAR)
- Takes in the New England sink gillnet fishery were estimated at 1,875 animals per year
- Down from a high of 2,900 in 1990

# Pre-HPTRP

SAR Year	PBR	Mean annual mort.	Best abund. est. (CV)	Strategic?
1995 ('90-'93)	403	1,875 (NE only)	47,200 (0.19)	Yes
1997 ('90-'95)	483	1,833 (NE only)	54,300 (0.14)	Yes
1998 ('92-'96)	483	1,667 (NE all and MA from '95-'96)	54,300 (0.14)	Yes
1999 ('93-'97)	483	1,704 (NE all and MA from '95-'97)	54,300 (0.14)	Yes
2000 ('94-'98)	483	1,521 (NE all and MA from '95-'98)	54,300 (0.14)	Yes



# TRT History - Two Teams

- Two separate teams were formed
- Dividing line between Gulf of Maine and Mid-Atlantic Take Reduction Teams
  - 72° 30' W longitude
    - Used in summer flounder and NE multispecies FMP regulations (certain exemptions allowed)
  - GOMTRT
    - Waters from Maine to Rhode Island
  - MATRT
    - Waters from New York to North Carolina/South Carolina border

# Gulf of Maine TRT

- Gulf of Maine TRT
  - Established through notice published in Federal Register on 2/12/96
  - Several members came from earlier harbor porpoise bycatch reduction task forces
  - Met 5 times between Feb. and July 1996
  - Consensus draft TRP submitted August 1996
    - Incorporated pinger measures based on pinger experiments conducted with New England gillnetters and researchers in the 1990s

# Mid-Atlantic TRT

- Mid-Atlantic TRT
  - Established through notice published in Federal Register on 2/25/97
  - Some overlap in membership with GOMTRT
  - Met 5 times between Jan. and Aug. 1997
  - Draft report submitted Aug. 23, 1997 for regulatory and non-regulatory measures
- NMFS combined recommendations of both teams to form the HPTRP

# HPTRP Final Rule

- HPTRP was implemented (63 FR 66464)
  - Final rule published December 2, 1998
  - Most effective dates were January 1, 1999
  - Some effective dates were sooner in GOM
    - Mid-Coast – effective Dec. 2, 1998
    - Offshore – effective Dec. 8, 1998
    - MA Bay and Cape Cod South – effective Dec. 16, 1998
  - Gulf of Maine measures
    - Time/area closures, use of pingers, pinger training
  - Mid-Atlantic measures
    - Time/area closures, use of gear modifications

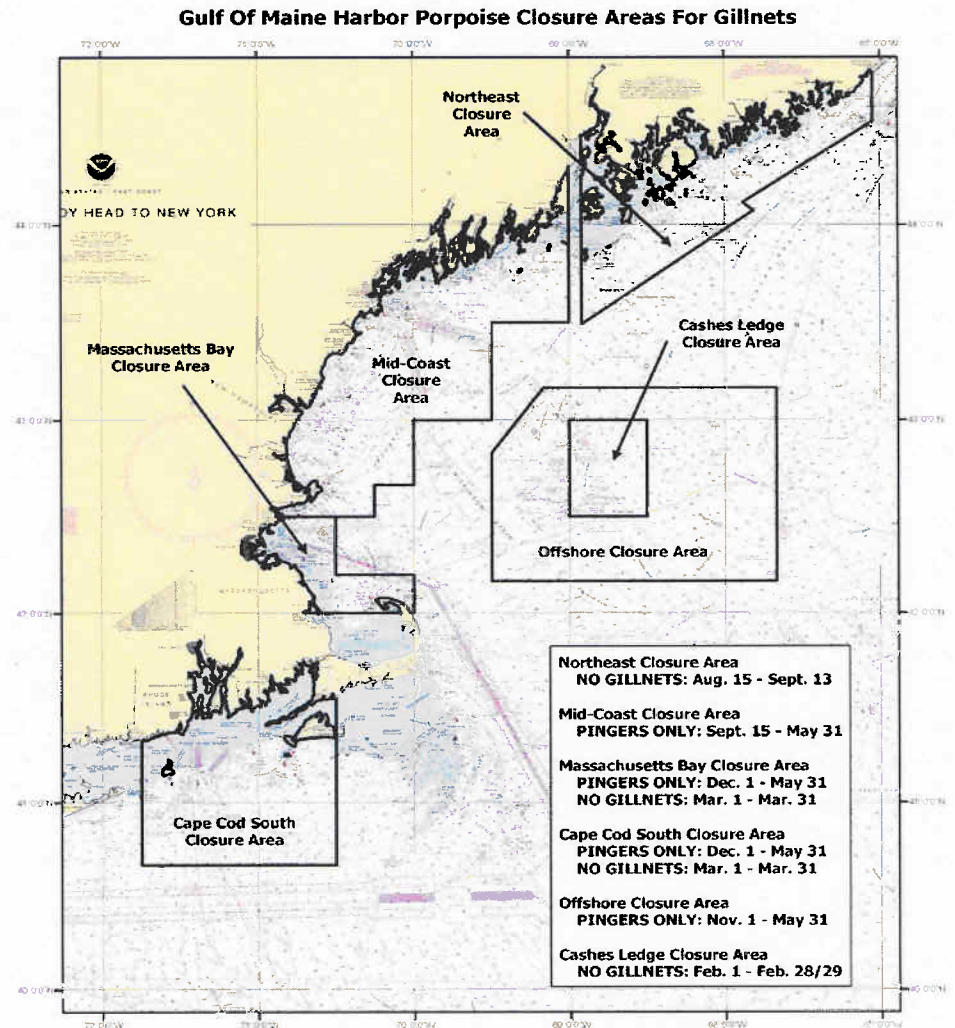
# **HPTRP Management Areas and Requirements**

***Gulf of Maine***



# HPTRP: Gulf of Maine

- Management Areas
  - Northeast
  - Mid-Coast
  - Massachusetts Bay
  - Cape Cod South
  - Offshore
  - Cashes Ledge
- Measures used
  - Some complete closures
  - Pinger usage
  - Pinger certification training required

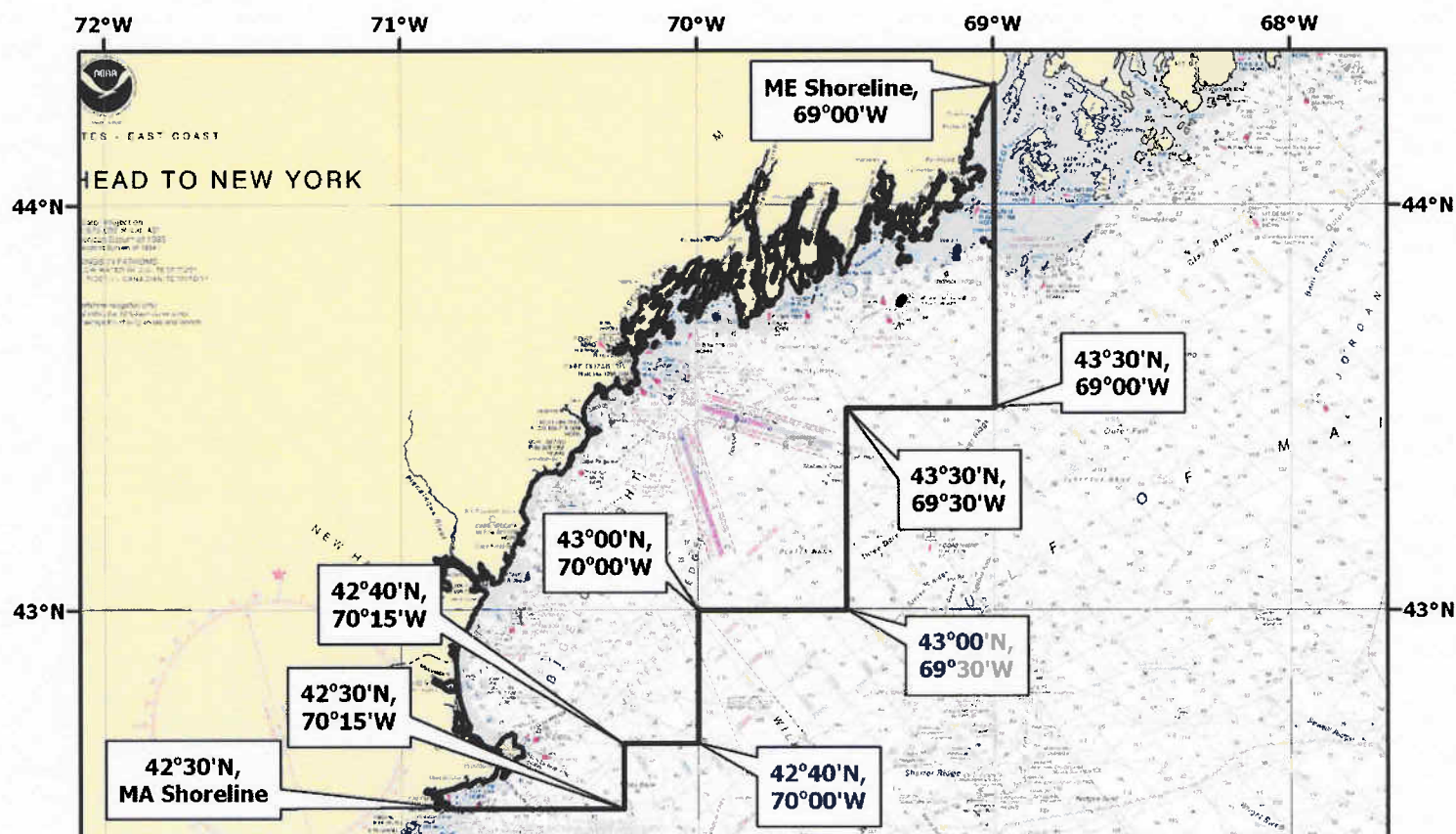




■ NO GILLNETS: Aug. 15 – Sept. 13

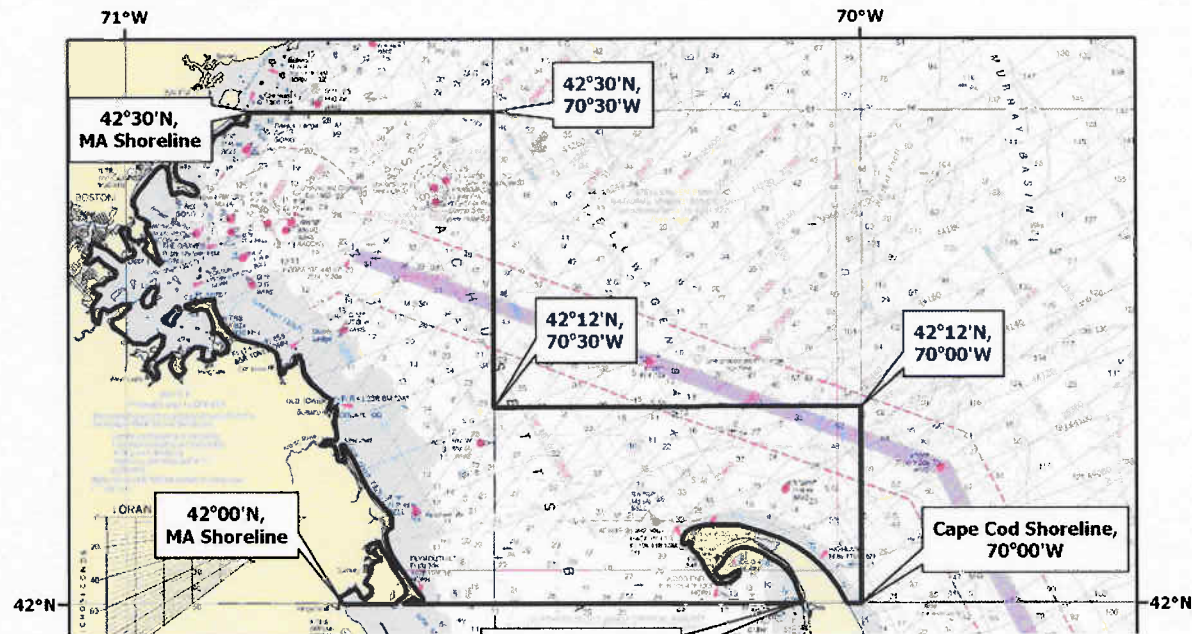
# Mid-Coast Closure Area Restrictions

- USE PINGERS: September 15 – May 31



# Massachusetts Bay Closure Area Restrictions

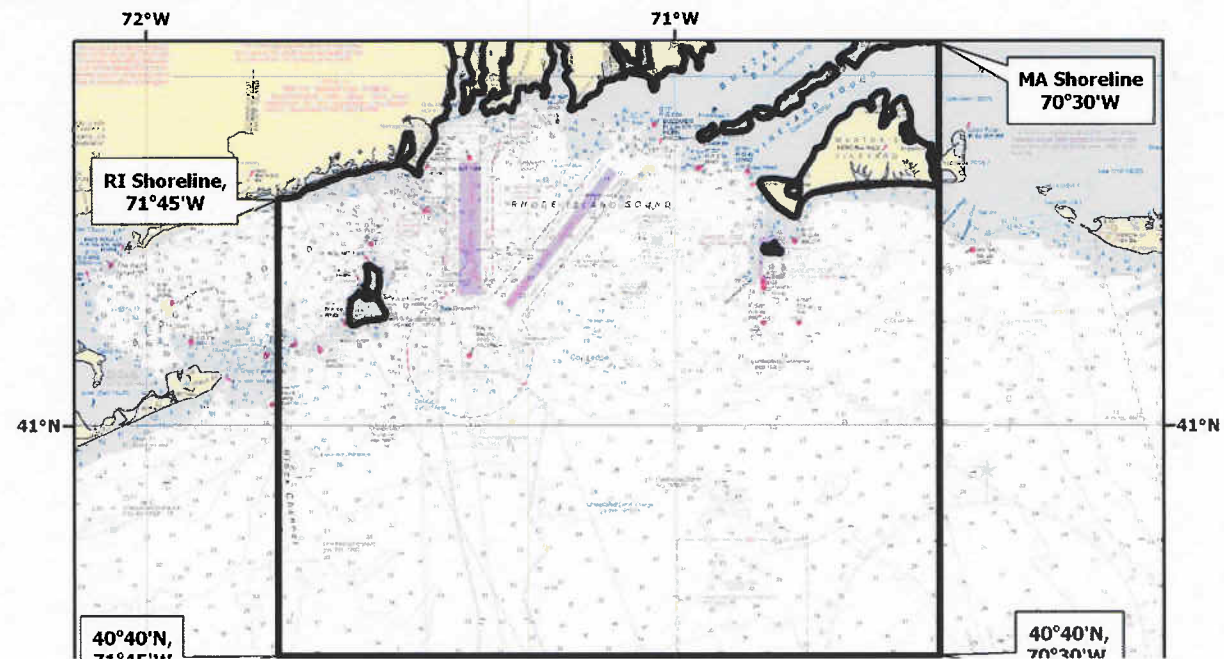
- USE PINGERS:
  - December 1 – February 28/29
  - April 1 – May 31
- NO GILLNETS: March





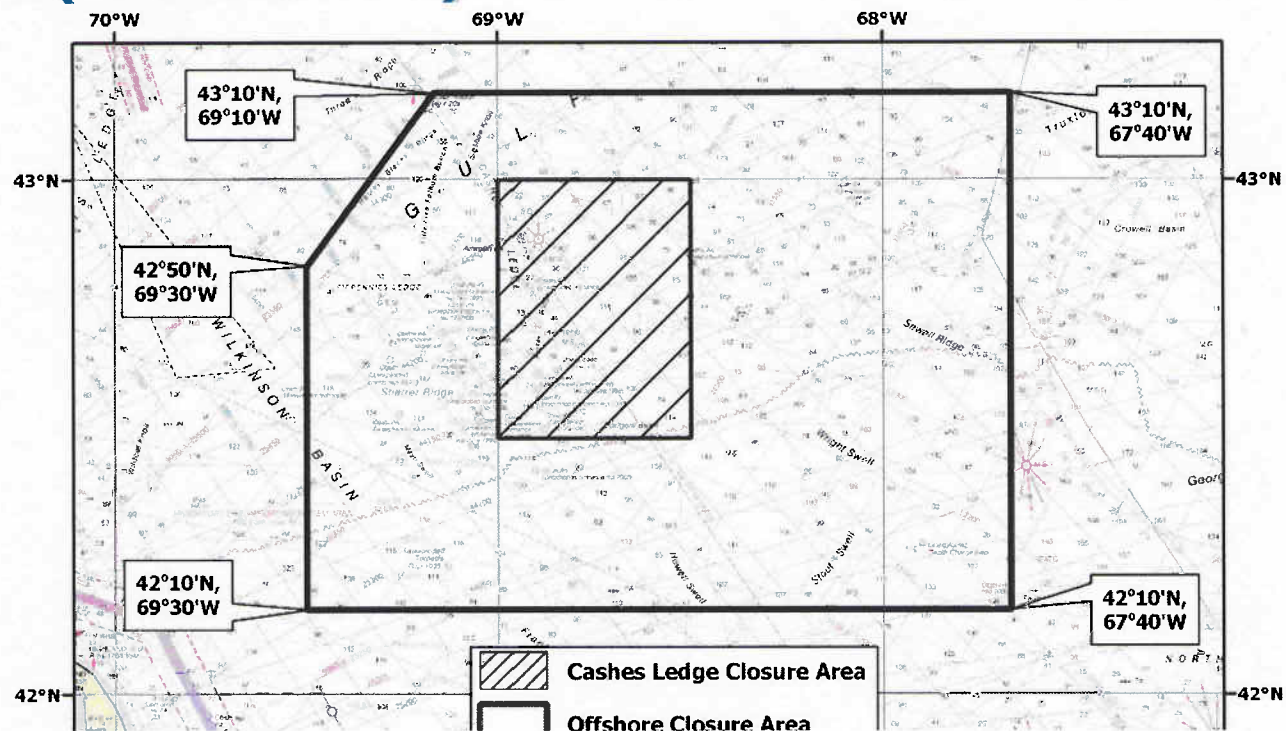
# Cape Cod South Closure Area Restrictions

- USE PINGERS:
  - December 1 – February 28/29
  - April 1 – May 31
- NO GILLNETS: March



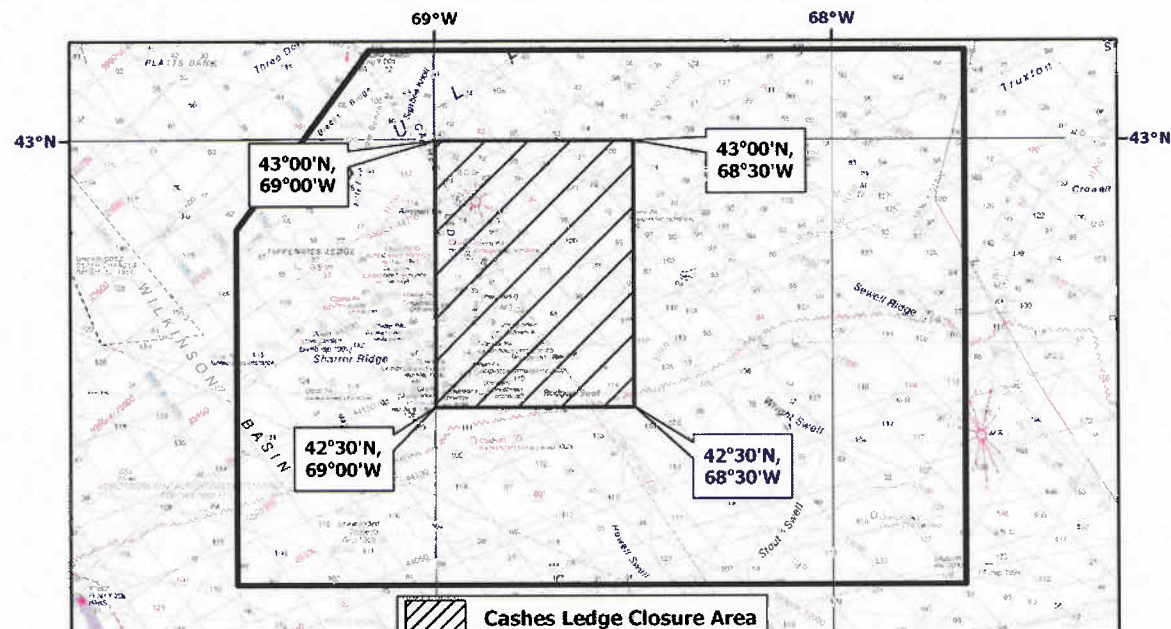
# Offshore Closure Area Restrictions

- USE PINGERS: November 1 – May 31
- NO GILLNETS: Cashes Ledge Closure in Feb. (next slide)



# Cashes Ledge Closure Area Restrictions

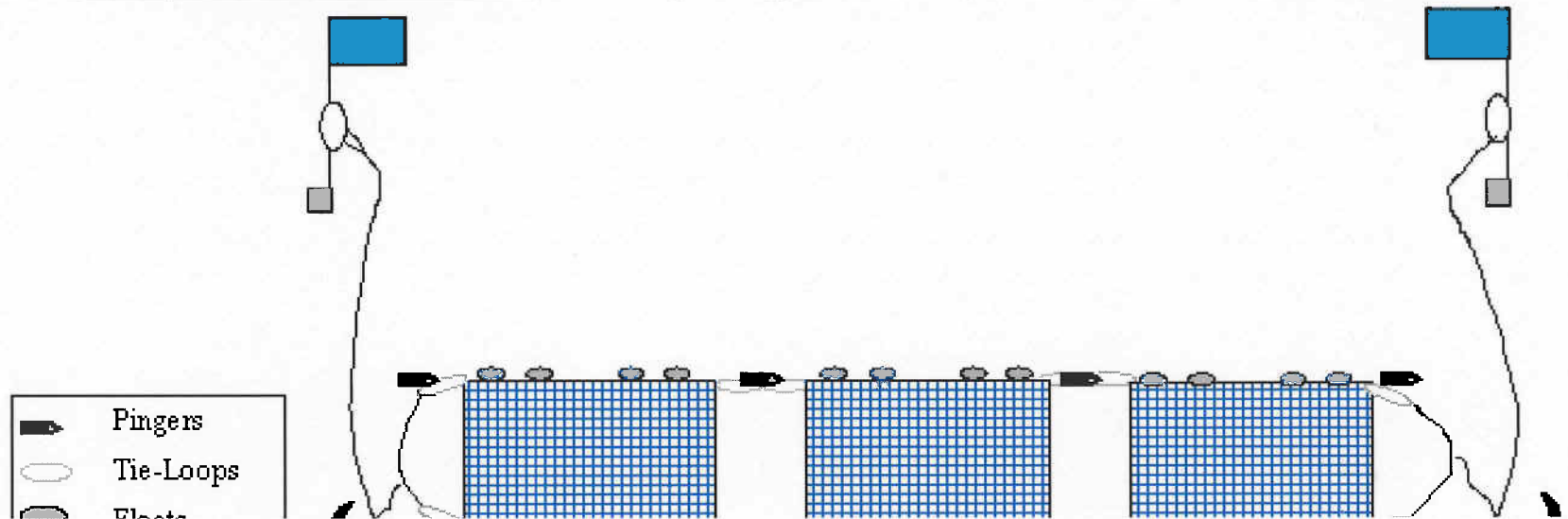
- USE PINGERS:
  - November 1 – January 31
  - March 1 – May 31
- NO GILLNETS: February





# Pinger Specifications

- Frequency:  $10 \pm 2$  kHz
- Loudness:  $132 \pm 4$  dB re 1 micropascal at 1 meter
- Pulse width:  $300 \pm 15$  milliseconds
- Repetition rate: 1 ping every  $4 \pm 0.2$  seconds

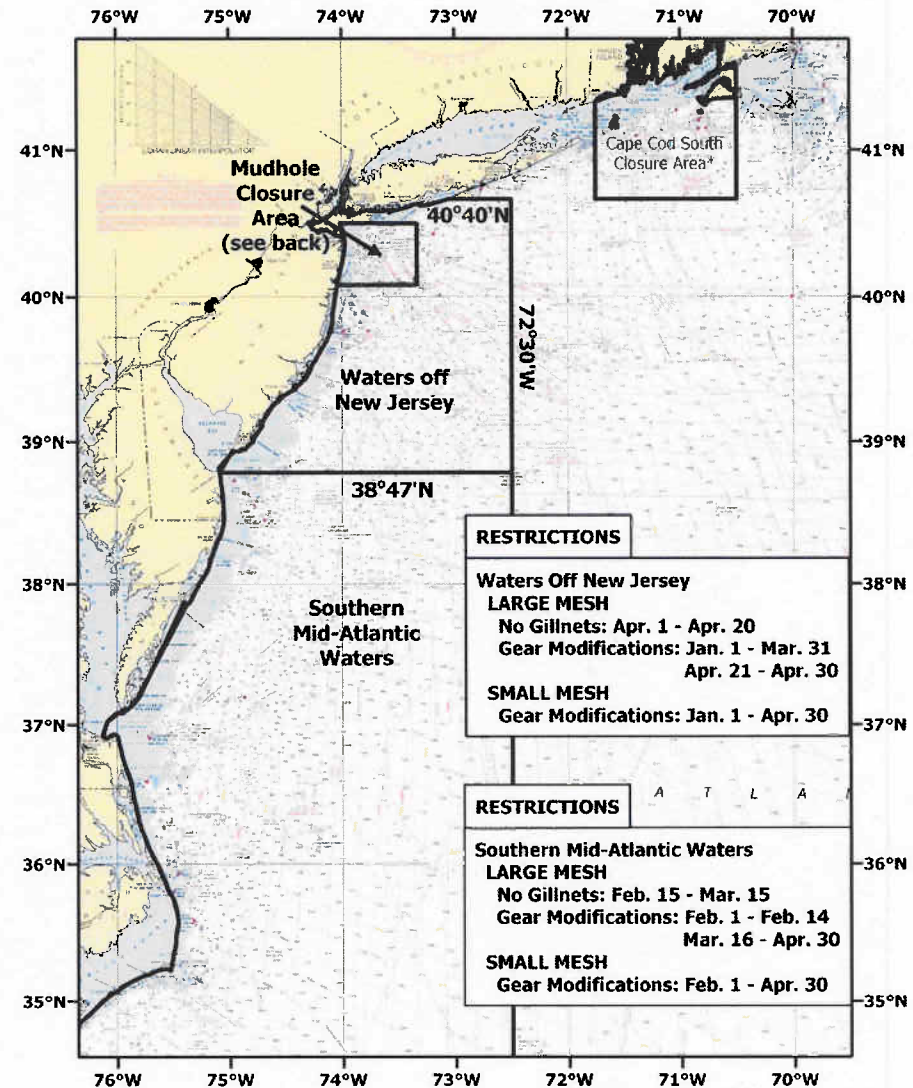


# **HPTRP Management Areas and Requirements**

***Mid-Atlantic***

# HPTRP: Mid-Atlantic

- Management Areas
  - Waters off New Jersey
  - Mudhole
  - Southern Mid-Atlantic Waters
- Measures Used
  - Some complete closures
  - Gear modification requirements
  - Exempted waters
  - Pingers can't be substituted for gear modification requirements in this area



# Exempted Waters

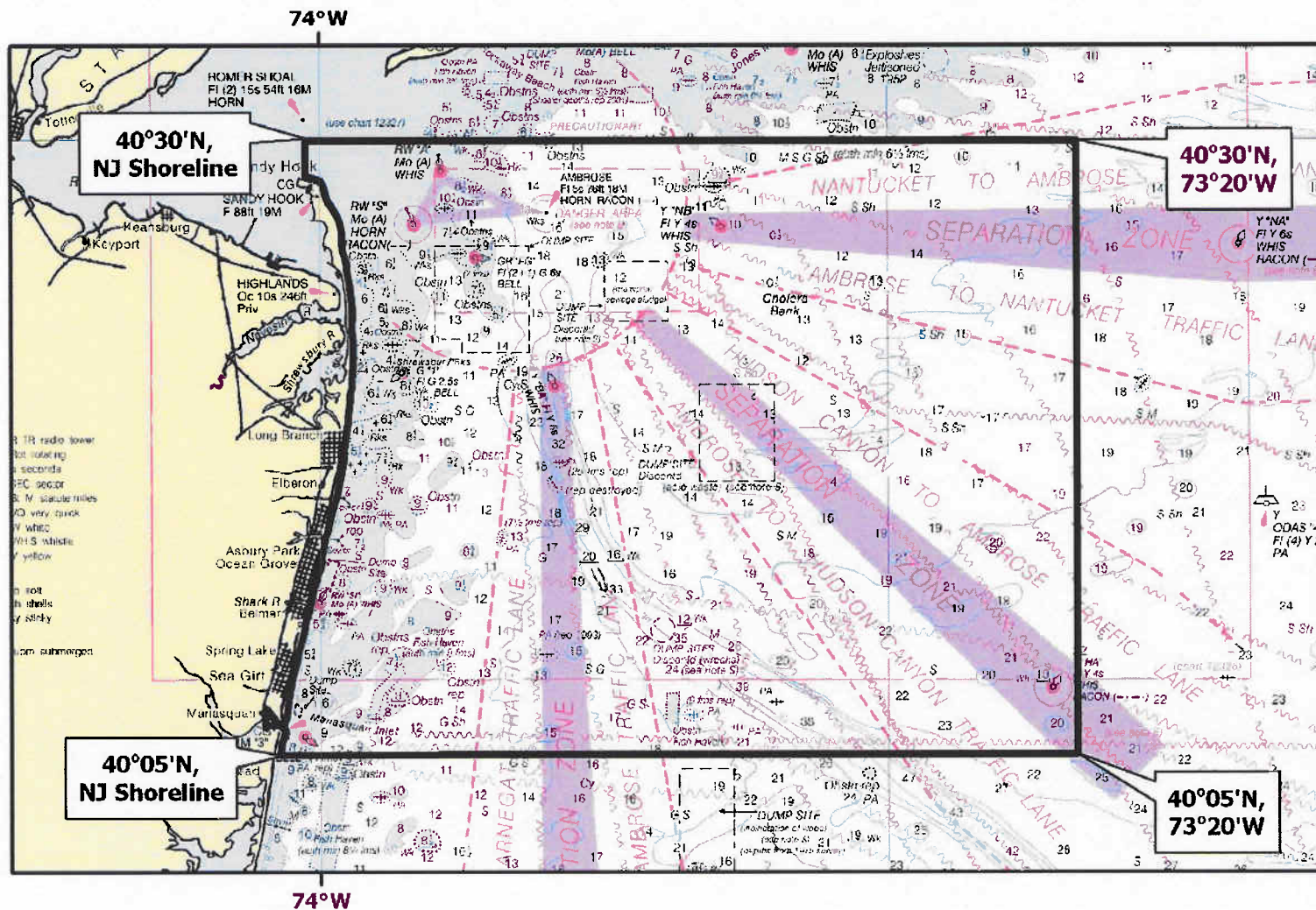
- All waters landward of the first bridge over any embayment, harbor, or inlet
- Landward of the lines across these inlets/bays:
  - NY: Moriches Bay Inlet, Fire Island Inlet, Jones Inlet
  - NJ/DE: Barnegat Inlet, Beach Haven to Brigantine Inlet, Cape May Inlet, Delaware Bay (COLREGS)
  - MD/VA: Ocean City Inlet, Chincoteague to Ship Shoal Inlet, Little Inlet, Smith Island Inlet
- NC: marine and tidal waters landward 72 COLREGS demarcation lines

# **Waters off New Jersey Restrictions**

- **Large mesh gillnets (7 – 18 in.)**
  - GEAR REQUIREMENTS: Jan. 1 – March 31  
April 21 – April 30
  - NO GILLNETS: April 1 – April 20
- **Small mesh gillnets (>5 in. to <7 in.)**
  - GEAR REQUIREMENTS: Jan. 1 – April 30



# Mudhole Closure Area





# **Mudhole Closure Area Restrictions**

## **Large Mesh Gillnets (7 – 18 in.)**

### **■ GEAR REQUIREMENTS:**

- January 1 – February 14
- March 16 – March 30
- April 21 – April 30

### **■ NO GILLNETS:**

- February 15 – March 15
- April 1 – April 20 (from the larger area Waters off NJ requirement)

# **Mudhole Closure Area Restrictions**

## **Small Mesh Gillnets (>5 in. to <7 in.)**

- **GEAR REQUIREMENTS:**

- January 1 – February 14
- March 16 – April 30

- **NO GILLNETS:**

- February 15 – March 15

# **Southern Mid-Atlantic Waters Restrictions**

- **Large mesh (7 – 18 in.)**
  - **GEAR REQUIREMENTS:** Feb. 1 – Feb. 14  
March 16 – April 30
  - **NO GILLNETS:** February 15 – March 15
- **Small mesh (>5 in. to <7 in.)**
  - **GEAR REQUIREMENTS:** Feb. 1 – April 30

# **Large Mesh (7-18 in.) Gear Requirements All Mid-Atlantic Waters**

- Twine size: at least 0.90 mm.
- Tie downs: spaced not more than 15 ft. apart along floatline; not more than 48 in. in length from point where it connects to floatline to point where it connects to leadline
- Net size:  $\leq 300$  ft.
- Net number: no more than 80 nets/vessel

# Area Specific Gear Requirements

## Large Mesh (7 – 18 in.)

### ■ Floatline Length:

- Waters off NJ (no Mudhole):  $\leq 4,800$  ft.
- Mudhole Closure Area:  $\leq 3,900$  ft.
- Southern Mid-Atlantic Waters:  $\leq 3,900$  ft.

### ■ Nets within a Net String (300 ft. net panel):

- Waters off NJ (no Mudhole):  $\leq 16$
- Mudhole Closure Area:  $\leq 13$
- Southern Mid-Atlantic Waters:  $\leq 13$



## **Small Mesh (>5 to <7 in.) Gear Requirements**

### **All Mid-Atlantic Waters and Area Specific**

- Twine size: at least 0.81 mm.
- Tie downs: prohibited
- Net size:  $\leq 300$  ft.
- Net number: no more than 45 nets/vessel
- Floatline Length:
  - Waters off NJ (including Mudhole):  $\leq 3,000$  ft.
  - Southern Mid-Atlantic Waters:  $\leq 2,118$  ft.
- Nets within a Net String (300 ft. net panel):
  - Waters off NJ (including Mudhole):  $\leq 10$
  - Southern Mid-Atlantic Waters:  $\leq 7$



# Current HPTRP Status

- 2007 SAR indicates we are above PBR
  - Covers the years: 2001-2005
- New population abundance estimates from August 2006 surveys (NEFSC)
- Analysis of take data from Jan. 1, 1999 through May 31, 2007 (NEFSC)
  - Updated harbor porpoise bycatch estimates for 2006
  - Take locations: harbor porpoise takes observed both inside and outside of HPTRP management areas
- From 2000 to present
  - NMFS completed a number of outreach activities to start addressing this issue, including outreach meetings from Maine through New Jersey from late 2006 to early 2007

# Post-HPTRP

SAR Year	PBR	Mean annual mort.	Best abund. est. (CV)	Strategic?
2001 ('99)	747	323	89,700 (0.22)	No
2002 ('99- '00)	747	425	89,700 (0.22)	No
2003 ('99- '01)	747	310	89,700 (0.22)	No
2005 ('99- '03)	747	417	89,700 (0.22)	No
2006 ('00- '04)	747	515	89,700 (0.22)	No
2007 ('01-	610	652	89,054 (0.47)	Yes

# New England & Mid-Atlantic Takes

SAR Year	PBR	Mean annual mort. (NE)	Mean annual mort. (Mid)	Total # of takes
1995 ('90-'93)	403	1,875	0 observed	1,875
1997 ('90-'95)	483	1,833	Not finalized	1,833
1998 ('92-'96)	483	1,460	207 ('95- '96)	1,677
1999 ('93-'97)	483	1,375	329 ('95- 97)	1,704
2000 ('94-'98)	483	1,163	358	1,521

# New England & Mid-Atlantic Takes

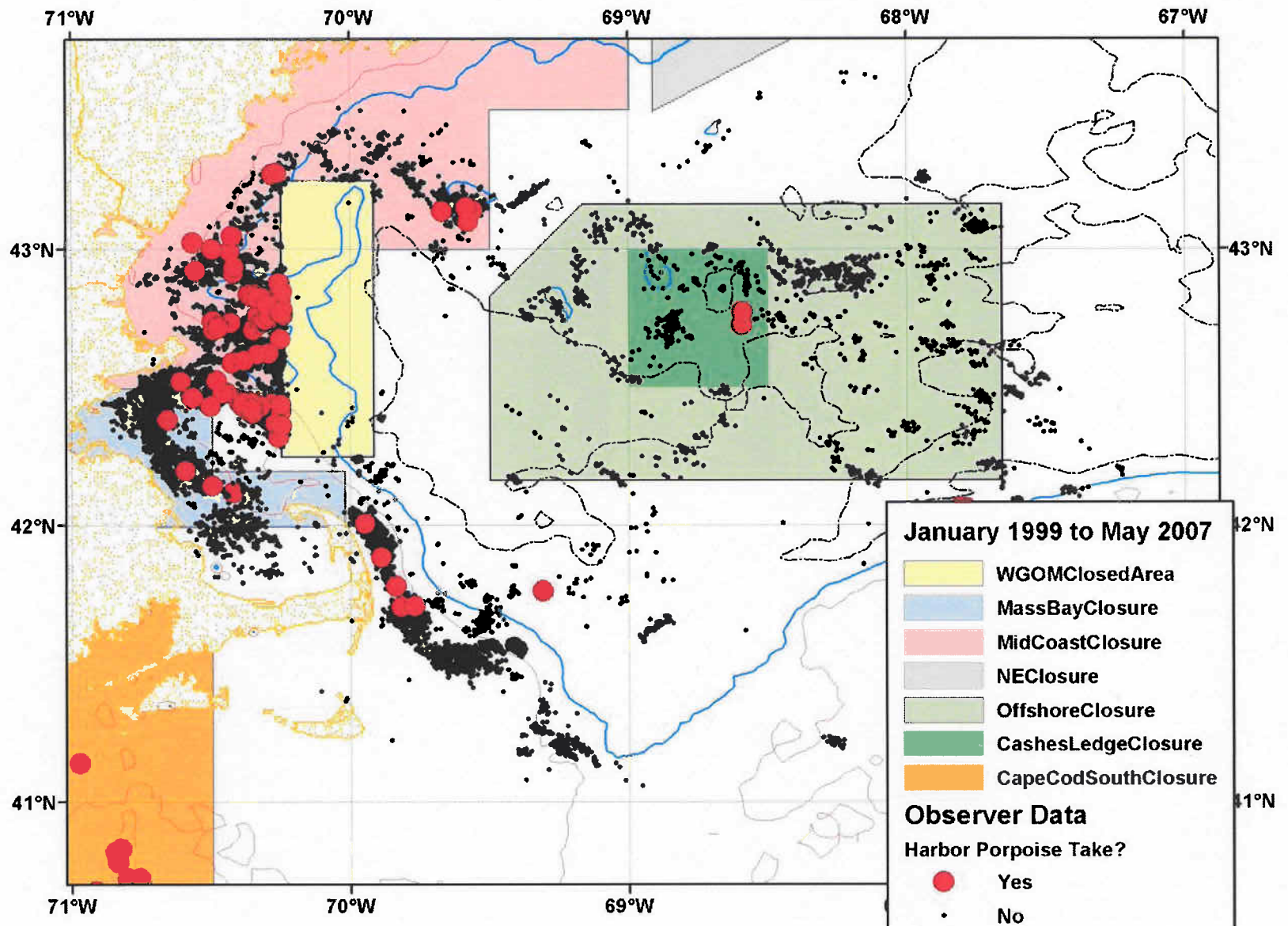
SAR Year	PBR	Mean annual mort. (NE)	Mean annual mort. (Mid)	Total # of takes
2001 ('99)	747	270	53	323
2002 ('99-'00)	747	388	37	425
2003 ('99-'01)	747	277	33	310
2005 ('99-'03)	747	373	44	417
2006 ('00-'04)	747	450	65	515
Draft 2007	610	475	177	652

# Reconvening of HPTRT

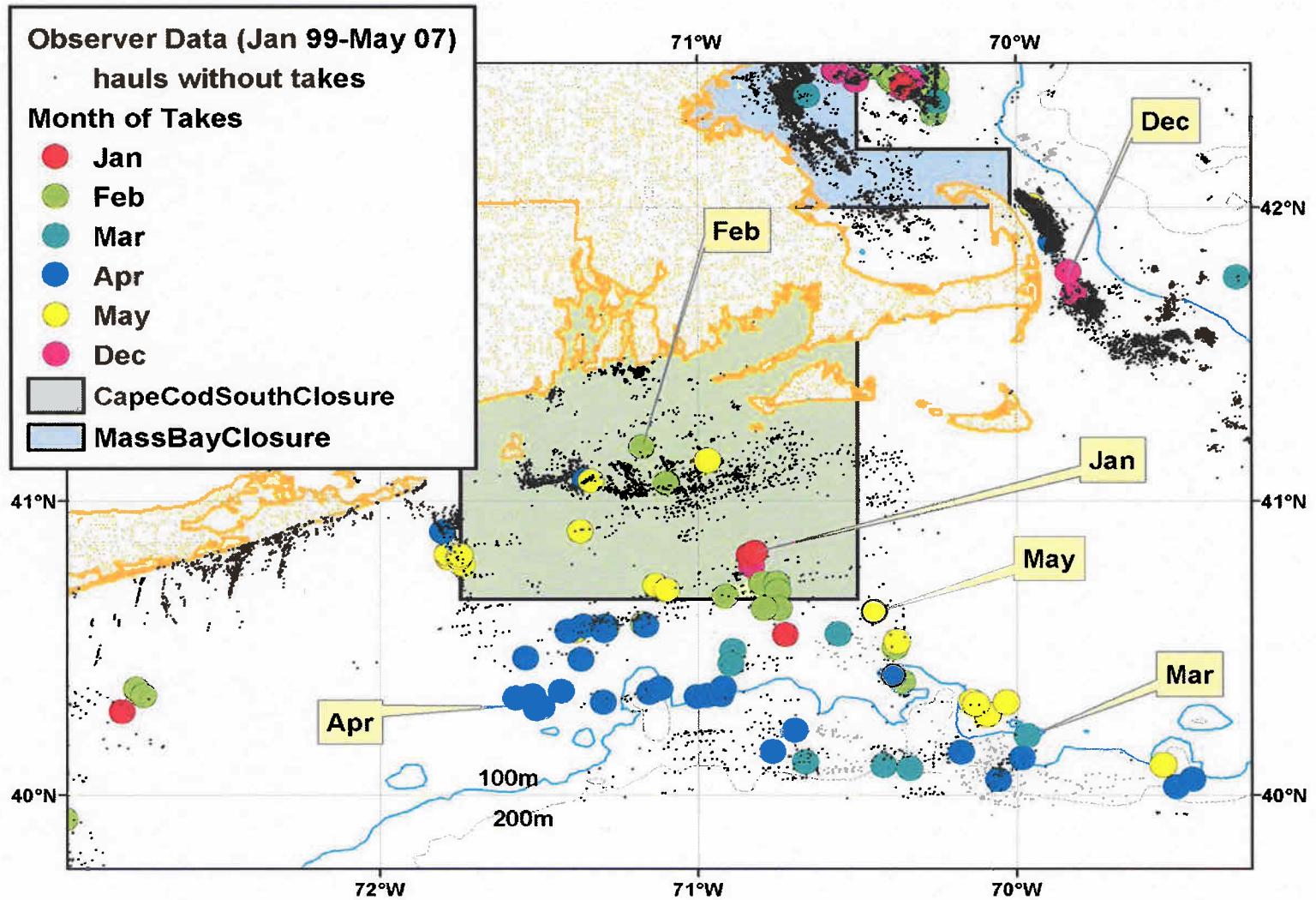
- Harbor porpoise takes are above PBR
- Harbor porpoise stock has not increased
  - Recent abundance surveys
- This is a two-part problem
  - Takes occurring outside of HPTRP management areas
  - Documented non-compliance with regs
- HPTRT meeting: Dec. 17-19, 2007 (Philadelphia, PA)



# Gulf of Maine: Harbor Porpoise Takes



# Southern New England: Harbor Porpoise Takes



# **Gulf of Maine Areas of Agreement (consensus reached)**

1. X Box
  - December and January – pingers required
  - February – closed to gillnetting
2. Massachusetts Bay Closure Area
  - Extend pinger requirement to November (currently pingers are required from December - February and April – May)
3. Codify the groundfish Western Gulf of Maine year-round closure area under the HPTRP
4. Eliminate the Offshore Closure Area but keep the Cashes Ledge Closure Area the same (Feb. closure) including the current gear restrictions from the Offshore Closure Area (pingers required from Nov. to Jan. and Mar. to May)
5. Fold the area/takes east of Cape Cod under the Southern New England Closure Area (next slide)
  - This was done by making the northern boundary of this area 42° 00'N latitude



# Area South of Cape Cod Areas of Agreement (consensus reached)

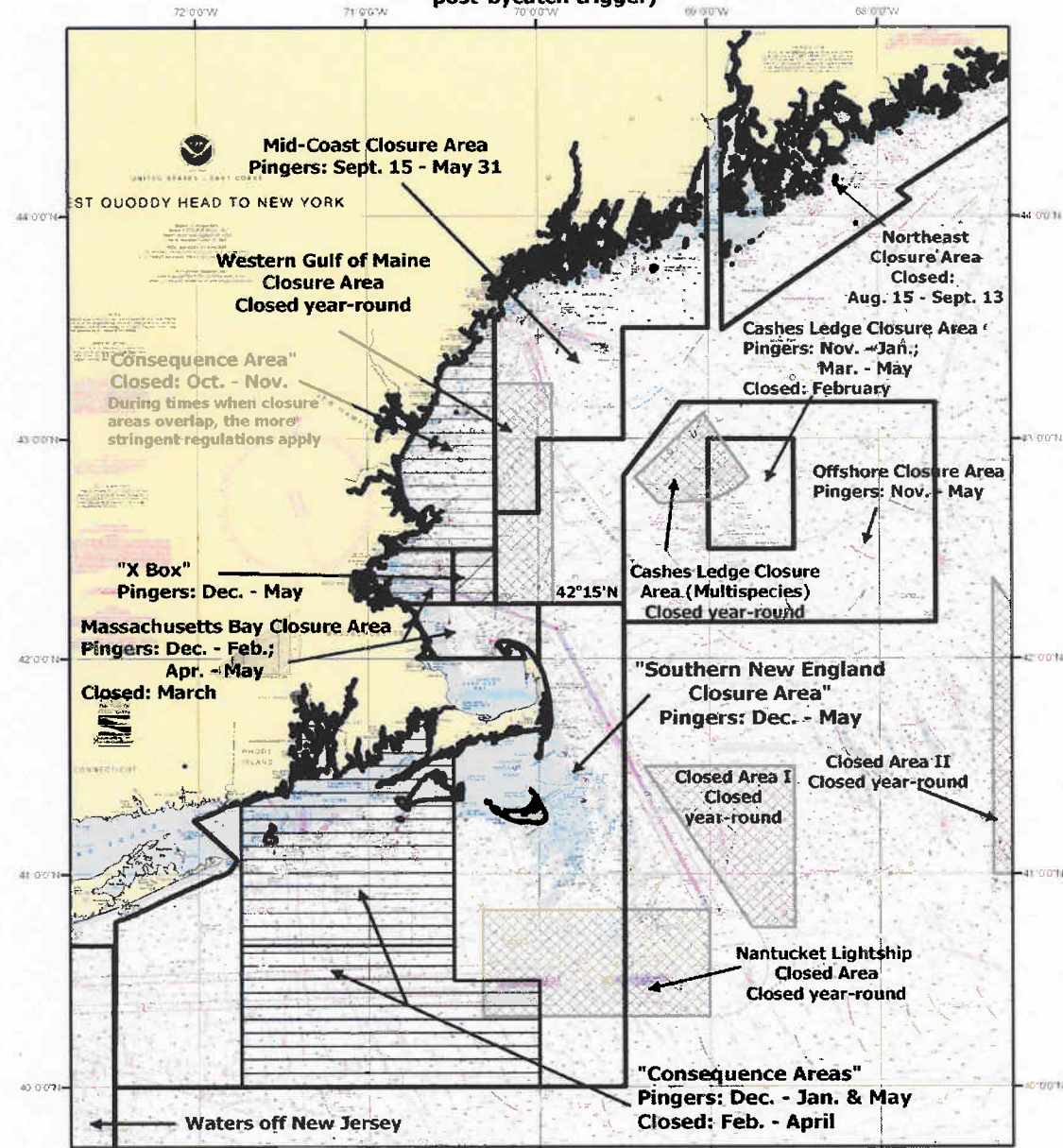
1. Create a new, larger pinger area south of MA/RI that would encompass the current Cape Cod. Agreed upon boundaries include:
  - Western boundary: 72° 30'W longitude and curving around LI Sound to the CT/RI border
  - Southern boundary: 40° 00' N latitude
  - Eastern boundary: 69° 30'W longitude
  - Northern boundary: 42° 00'N latitude and along the MA/RI coastline
2. Require pingers in this area from December through May with the March gillnet closure in the current Cape Cod South Closure Area remaining
3. Consequence Areas
  - NMFS would take action after 3 years
  - Establish "Consequence Areas" if takes are above the 0.03 bycatch rate trigger
  - The Team agreed upon the area consisting of the original Cape Cod South Closure Area and its southern expansion
  - The consequence areas will be closed February through April

# **Follow-up HPTRT Meeting (Teleconference: Jan. 31, 2008)**

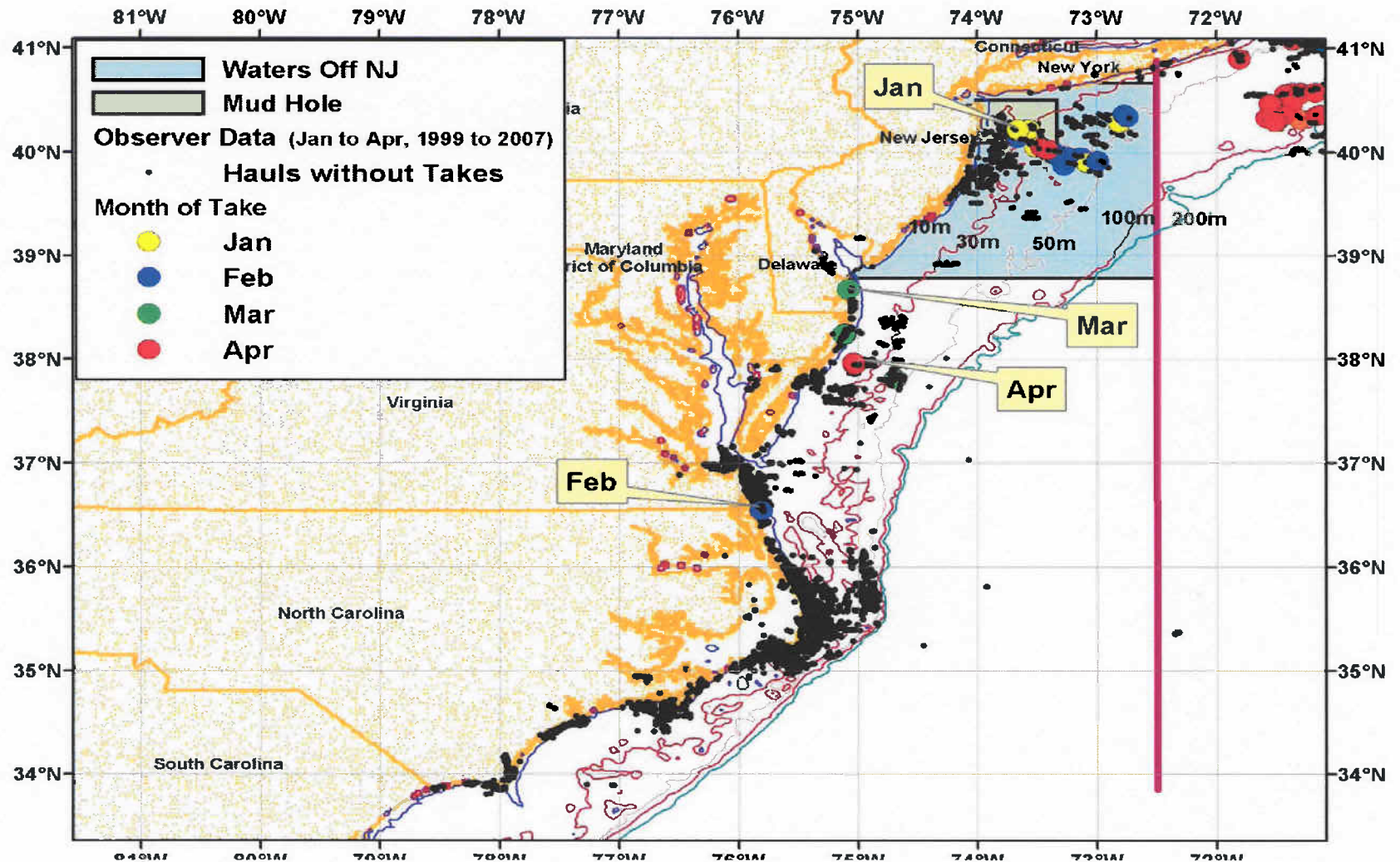
- Purpose: to address items from Dec. 2007 meeting that:
  - Lacked consensus
  - Required clarification from NMFS
  - Would benefit from reconfirming the approach
- Consensus on consequence area off coast of ME, NH, and MA
  - Includes portions of Mid-Coast, MA Bay, and X Box Management Areas
  - Agreed upon separate bycatch rate targets for this area versus Southern New England consequence area



**Figure 2: Gulf of Maine Harbor Porpoise Management Areas for Gillnets  
(options depicted with associated management measures post-bycatch trigger)**



# Mid-Atlantic: Harbor Porpoise Takes





## **Mid-Atlantic and Southern Mid-Atlantic Areas of Agreement (consensus reached)**

1. Create a new closure area to the south and east of the existing Mudhole Closure Area
  - Closed to large and small mesh gillnets from February 1 through March 15
2. Increase tie-down spacing from not more than 15 feet to not more than 24 feet for large mesh gillnets
3. Develop an enforcement and education effort, stressing the need to decrease soak time
4. Undertake an annual review of the HPTRP to assess ongoing effectiveness
5. Conduct annual workshops with fishermen to disseminate recent compliance and take data and provide information on effective gear and fishing practices
6. Enter into cooperative agreements with the relevant state fishery management agencies to establish a mechanism to annually certify fishermen to improve compliance
7. Facilitate timely testing of emerging gear technologies and designs by modifying HPTRP regulations to allow experiments to be conducted (after obtaining required authorization/permits)

**Figure 1: Mid-Atlantic Harbor Porpoise Management Areas for Gillnets**

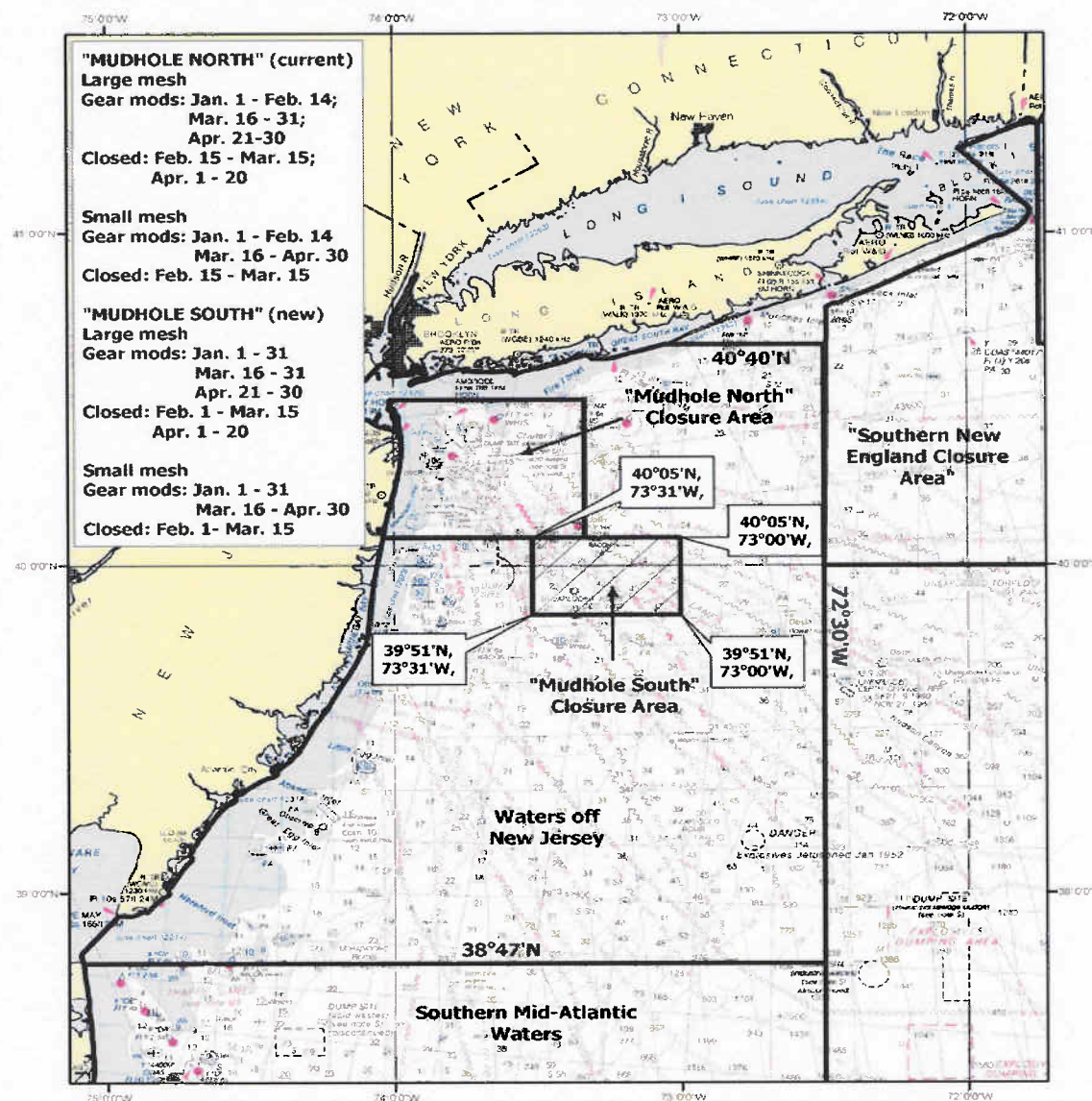


Chart Name: Cape Sable to Cape Hatteras  
 Chart #: 13003\_1  
 - Not for navigational purposes  
 - Depth units = fathoms

- Note that the southern boundary of the Southern Mid-Atlantic Waters Closure Area is the NC/SC border (33°51'N)

# **Next Steps**

- NMFS currently working on Draft EA and Proposed Rule to amend HPTRP
- Target implementation of amended HPTRP: January 2009



# **HPTRP Web Site**

[www.nero.noaa.gov/protectedresources/porptrp](http://www.nero.noaa.gov/protectedresources/porptrp)