# Omnibus Essential Fish Habitat Amendment 2 Management Alternatives

New England Fishery Management Council
Portland, ME
June 19, 2013

### Purpose of meeting

- Select a range of alternatives to be analyzed in the OA2 DEIS
- Two types of alternatives:
  - Groundfish spawning
  - Habitat protection minimize adverse effects on EFH, protect juvenile groundfish habitats, designate areas for habitat research
- Alternatives related to EFH and HAPC designations are already included in the amendment

### Recent meetings and analyses

- Joint meetings to develop individual area management options and suggest regional groupings of alternatives
  - Technical teams April 29, May 10, and May 29-30
  - Habitat and Groundfish Committees May 17 and June 11
- Joint technical team
  - Evaluated most of the options in terms of juvenile and spawning groundfish hotspots and habitat vulnerability (5/10)
  - Determined whether sub-regional options in combination are likely to meet key objectives of the amendment (5/29-5/30)
  - Drafted sub-regional alternatives to meet objectives (5/30)

#### Next steps

- Develop draft EIS, analyze probable effects, including practicability analysis
- Fine tune alternatives as needed to improve performance and/or practicality
- Council reviews draft and selects preferred alternatives (planned for November)
- Public hearings and comment period
- Council reviews comments and selects final alternatives (planned for April)

#### **Materials**

- Committee summaries Documents 2 and 3
- Alternatives document Document 4
- Memo from CATT/PDT to Committees with evaluation of objectives and draft alternatives –
   Document 14
- Gears that catch groundfish Document 8
- Enforcement Committee comments Document
   1 under Tab 11
- Correspondence

### Goals and objectives – EFH-driven

- Identify and implement mechanisms to protect, conserve, and enhance the EFH of those species managed by the Council to the extent practicable;
- Integrate and optimize measures to minimize the adverse impacts to EFH across all Council managed FMPs;
  - Develop analytical tools for designation of EFH, minimization of adverse impacts, and monitoring the effectiveness of measures designed to protect habitat
  - Modify fishing methods and create incentives to reduce the impacts on habitat associated with fishing
  - Develop criteria for establishing and implementing dedicated habitat research areas, design a system for monitoring and evaluating the benefits of EFH management actions including dedicated habitat research areas

#### Goals and objectives – groundfish-driven

- Enhance groundfish fishery productivity
- Maximize societal net benefits from the groundfish stocks while addressing current management needs
  - Improved groundfish spawning protection; including protection of localized spawning contingents or subpopulations of stocks
  - Improved protection of critical groundfish habitats
  - Improved refuge for critical life history stages
  - Improved access to both the use and non-use benefits arising from closed area management across gear types, fisheries, and groups. These benefits may arise from areas designed to address the other three groundfish closed area objectives

### Spawning alternatives

- Alternative 1 (No Action): Year round groundfish closures (WGOM, CL, CAI, CAII, NLCA), sector rolling closures, common pool rolling closures, May Georges Bank closure, GOM seasonal cod spawning area (Whaleback). Closed to gears capable of catching groundfish. Seasonal recreational fishery closures for Whaleback (and two MA areas).
- Alternative 2: Seasonal implementation of CAI and CAII groundfish closures (Feb, March, April), spawning closures to groundfish gears based on sector rolling closure boundaries (April, May, June), the May Georges Bank closure, and the GOM seasonal cod spawning area (Whaleback). Probably closed to same fleets as above.
- Alternative 3: Alternative 2 but northern part of CAI only?

No Action
Spawning
Alternative,
March

Includes all existing year round groundfish closures (parts of CAI, CAII, and NLCA not shown) and March common pool rolling closure.

No Action
Spawning
Alternative,
April

Includes all existing year round groundfish closures (parts of CAI, CAII, and NLCA not shown), GOM cod spawning protection area (Whaleback), and April sector and common pool rolling closures.

No Action
Spawning
Alternative,
May

Includes all existing year round groundfish closures, GOM cod spawning protection area (Whaleback), May sector and common pool rolling closures, and the Georges Bank seasonal closure area.

No Action
Spawning
Alternative,
June

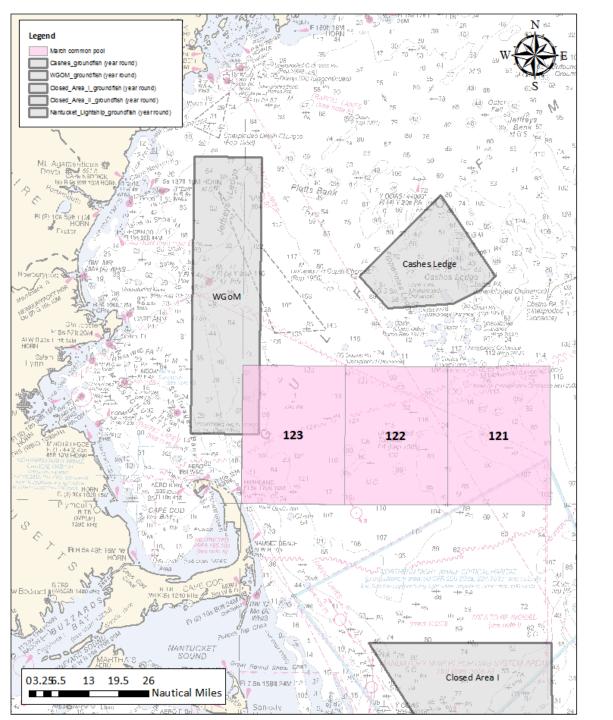
Includes all existing year round groundfish closures (parts of CAI, CAII, and NLCA not shown) and March common pool rolling closure.

No Action
Spawning
Alternative,
Oct-Nov

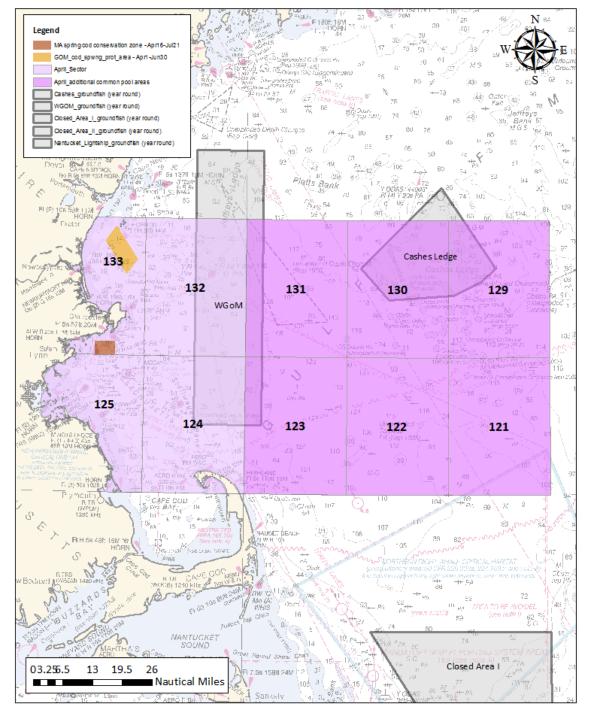
Includes all existing year round groundfish closures (parts of CAI, CAII, and NLCA not shown), GOM cod spawning protection area (Whaleback), and June sector and common pool rolling closures.

No Action
Spawning
Alternative,
other months

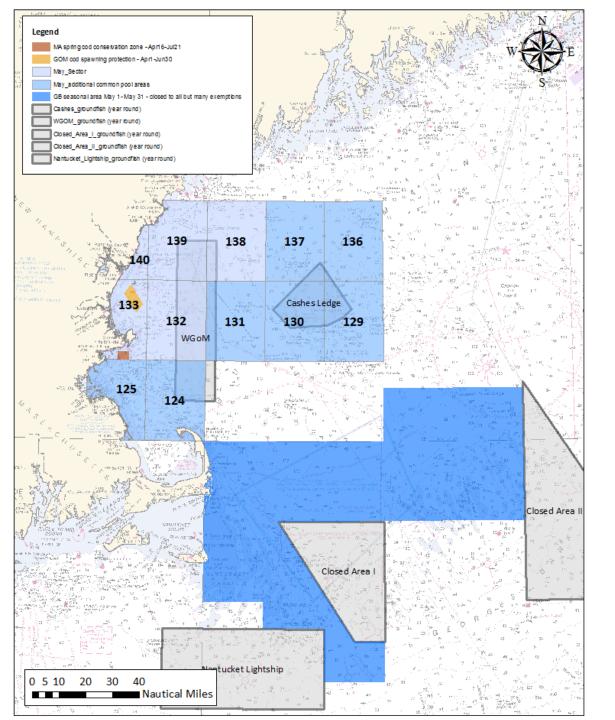
Includes all existing year round groundfish closures



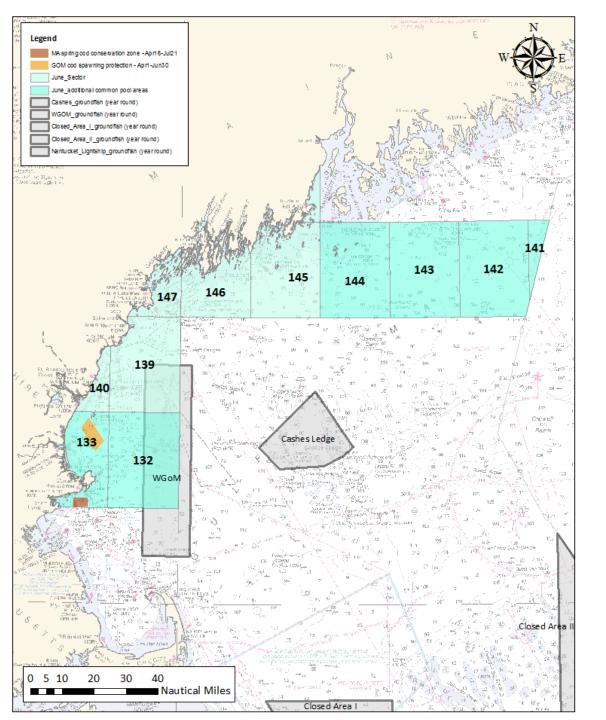
# No Action Spawning Alternative, March



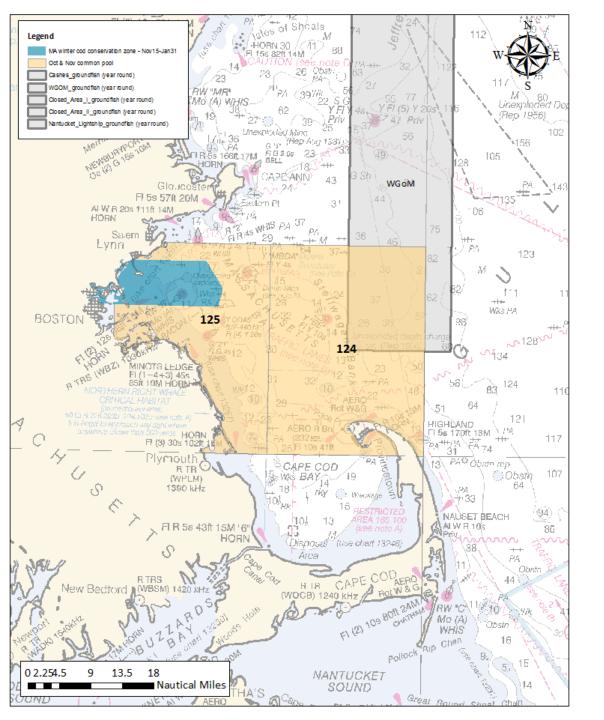
# No Action Spawning Alternative, April



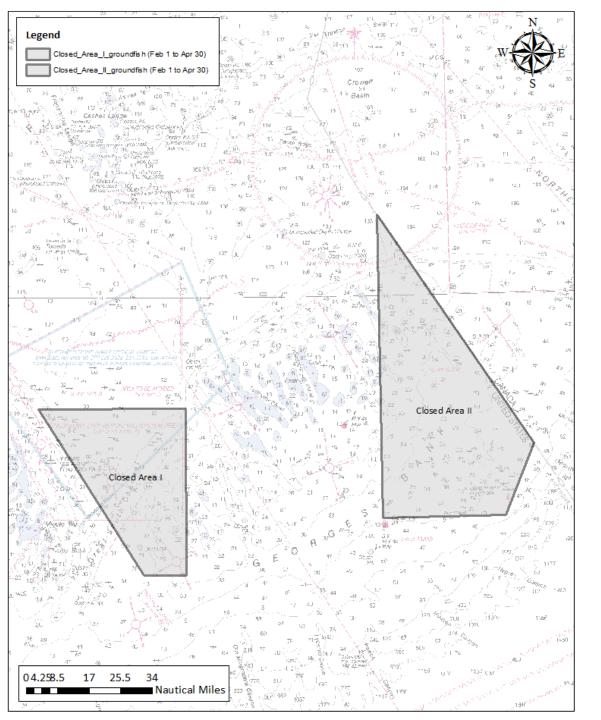
# No Action Spawning Alternative, May



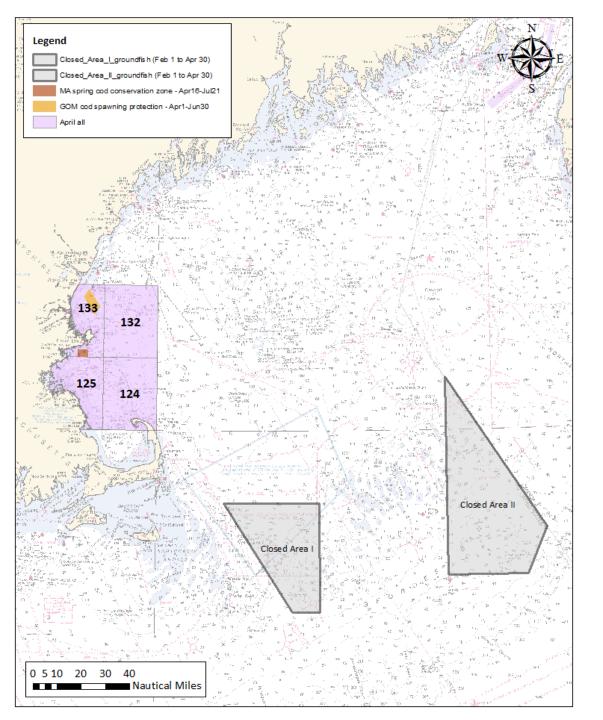
# No Action Spawning Alternative, June



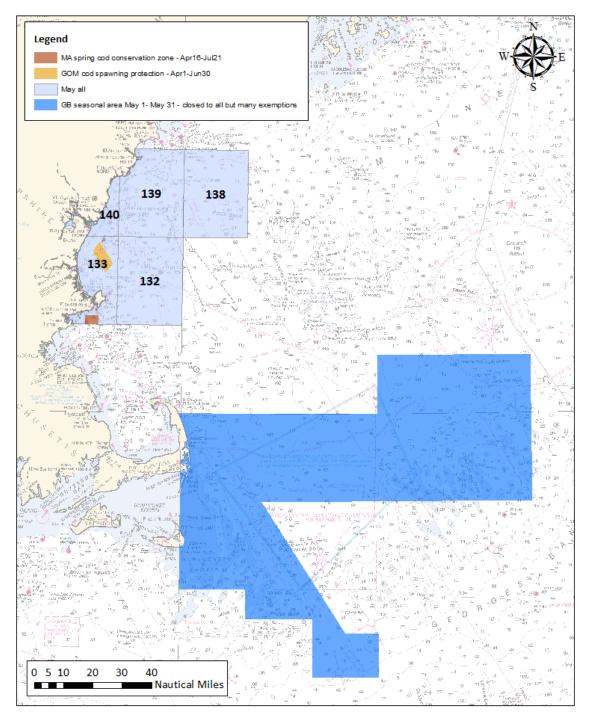
# No Action Spawning Alternative, Oct-Nov



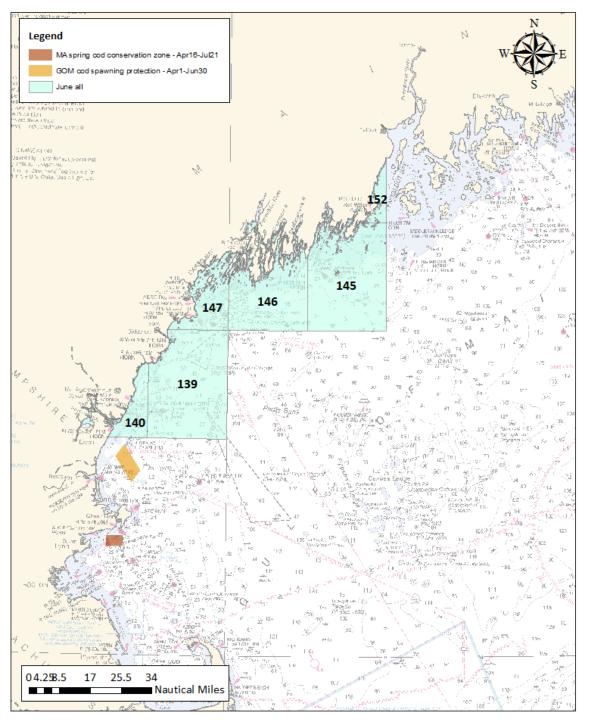
Spawning
Alternative 2,
Feb-Mar



# Spawning Alternative 2, April



# Spawning Alternative 2, May



# Spawning Alternative 2, June

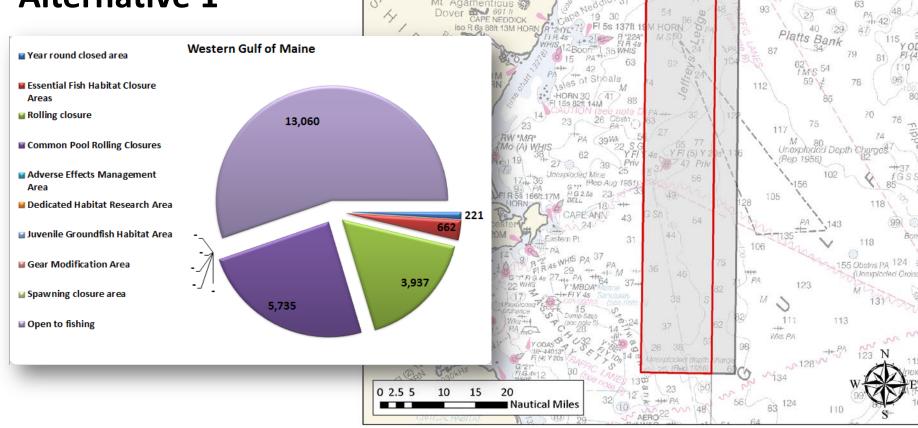
# Alternatives to minimize adverse effects, improve protection for juvenile groundfish, and designate research areas

- Alternative 1 (No Action): Existing year-round groundfish closures (gears capable of taking groundfish, with some access programs) and habitat closures (closed to bottom tending mobile gears)
- Action alternatives: Areas developed by the Habitat PDT, CATT, and Oversight Committees to protect vulnerable habitats, aggregations of juvenile groundfish and their associated habitats, and facilitate habitat research (closed to bottom tending mobile gears; possible exemptions for hydraulic dredges)
  - Presented by region Western GOM, Central GOM,
     Eastern GOM, Georges Bank, Great South Channel/SNE

# WGOM Alternative 1

- Existing WGOM habitat closed area, plus
- Existing WGOM groundfish closed area

# WGOM Alternative 1



Legend

WGOM EFH

Biddeford &

FI 6s 38ft 12M HORN

WGOM

EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

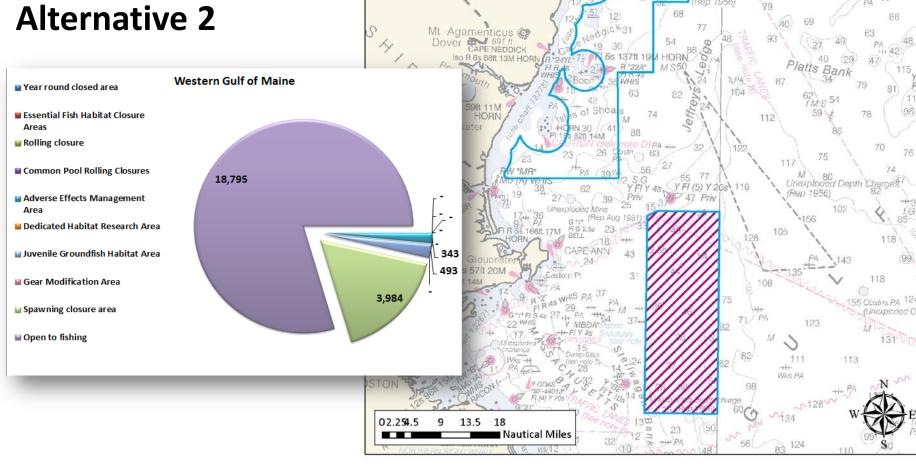
AEMA - adverse effects habitat area GMA - gear modification area

#### **WGOM**

#### **Alternative 2**

- Bigelow Bight juvenile groundfish habitat area (coastal area) and the Sanctuary Ecological Research Area (SERA) II adverse effects minimization area (overlaps with hatched area).
- The SERA II area would also be designated as a DHRA.
- All areas would be designated outside of state waters.

# WGOM Alternative 2



Legend

Bigelow Bight JGMA

SERA II AEMA

SERA II DHRA

EFH - current habitat area

CAPE ELIZABETH FI (4) 15s 129ft 15M HORN

Biddeford #

FI 6s 38ft 12M HORN JGHA - juvenile groundfish habitat area

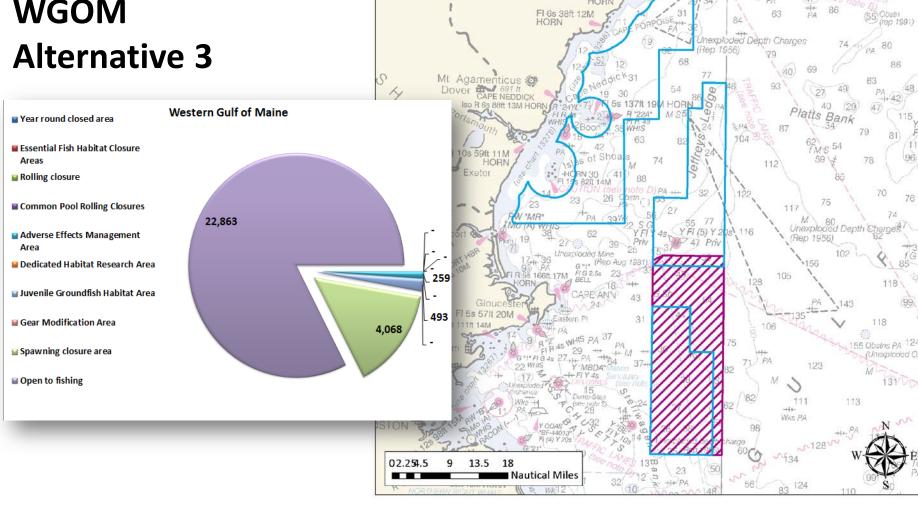
DHRA - dedicated habitat research area

AEMA - adverse effects habitat area GMA - gear modification area

## WGOM Alternative 3

- Bigelow Bight juvenile groundfish habitat area (coastal area) and the Jeffreys Ledge and Stellwagen adverse effects minimization areas. The Committees recommended considering an exemption for surfclam/ocean quahog hydraulic dredges.
- The SERA II area would be designated as a DHRA.
- All areas would be designated outside of state waters.

# **WGOM**



Legend

**Bigelow Bight JGHA** 

Jeffreys Ledge AEMA

Biddeford AI W G 10s 71ft 16N

Stellwagen AEMA SERA II DHRA

EFH - current habitat area

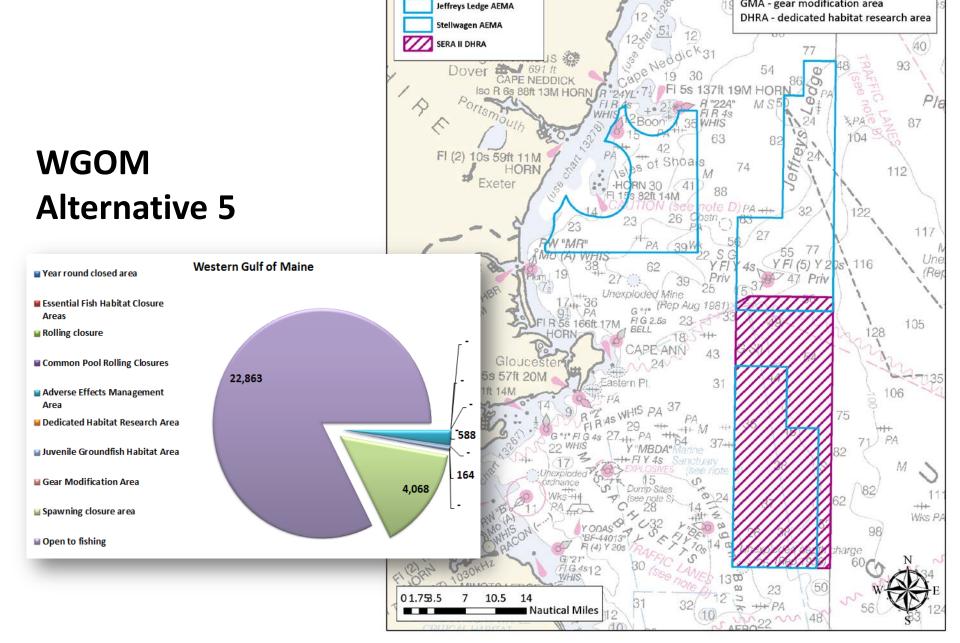
JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

AEMA - adverse effects habitat area GMA - gear modification area

### WGOM Alternative 5

- A smaller subset of the Bigelow Bight juvenile groundfish habitat area (coastal area) and the Jeffreys Ledge and Stellwagen adverse effects minimization areas.
- The DHRA designation in the SERA area
- All areas would be designated outside of state waters.



Legend

**Bigelow Bight South JGHA** 

EFH - current habitat area

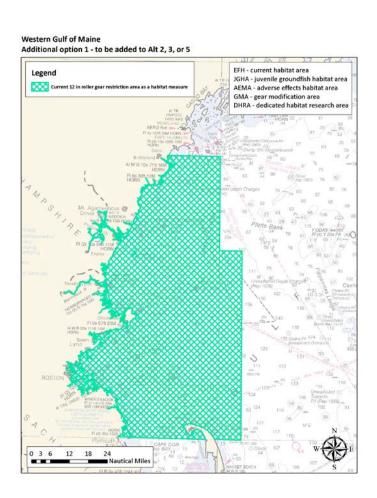
JGHA - juvenile groundfish habitat area

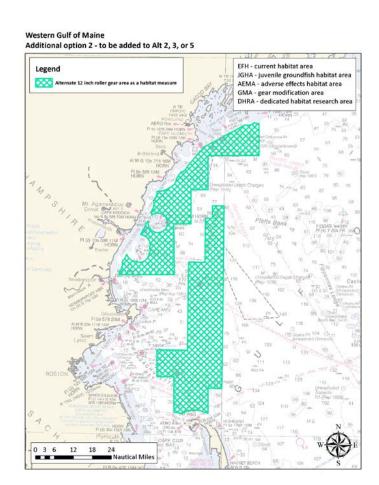
AEMA - adverse effects habitat area GMA - gear modification area

FI 6s 38ft 12M HORN

#### Other options for WGOM

#### Specify roller gear restriction as a habitat measure

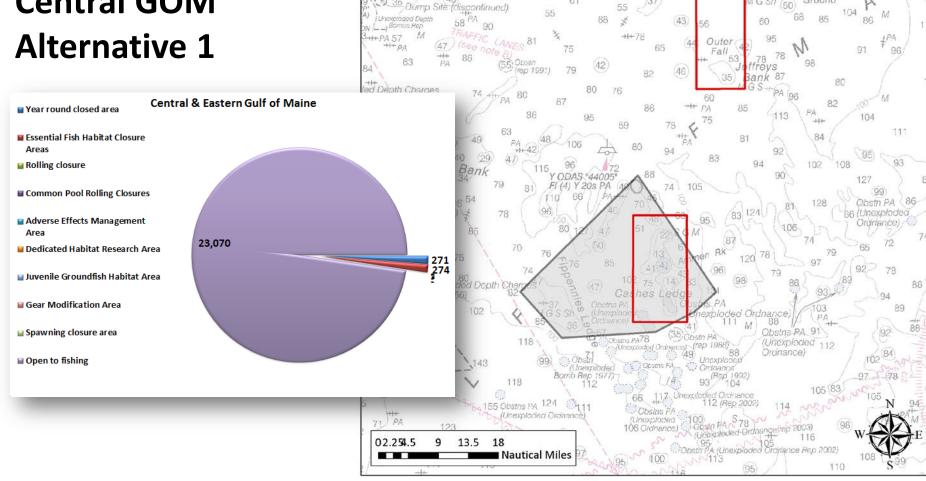




#### Central GOM Alternative 1

- Cashes Ledge and Jeffreys Bank habitat closed areas,
- Cashes Ledge groundfish closed area
- Note that Jeffreys Bank is also listed with the Eastern Maine alternatives and should be assigned to a single region unless the central and eastern Maine alternatives are recombined.

# **Central GOM**



Legend

Cashes Ledge EFH

effreys Bank EFH

Cashes Ledge

EFH - current habitat area

Matinicus/Rock

59

60

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

95 PA MG

97

87

85

AEMA - adverse effects habitat area GMA - gear modification area

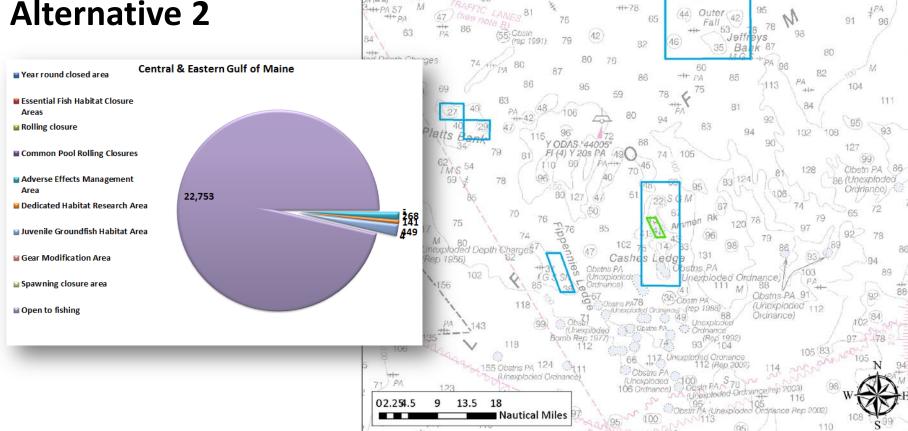
62 Newfound

Ground

#### Central GOM Alternative 2

- Cashes Ledge, Fippennies Ledge, Platts Bank, Jeffreys Bank, and Ammen Rock adverse effects minimization areas.
- The Jeffreys Bank (northernmost) and Cashes Ledge (easternmost) areas would be modifications of existing habitat closures.
- Ammen Rock which lies entirely with the Cashes Ledge area and would be closed to all fishing gears that can be managed by the Council.

# **Central GOM Alternative 2**



Legend

Platts Bank AEMA

Fippennies Ledge AEMA

Cashes Ledge AEMA
Ammen Rock AEMA

Jeffreys Bank AEMA

EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

92

62 Newfound Ground MG

87

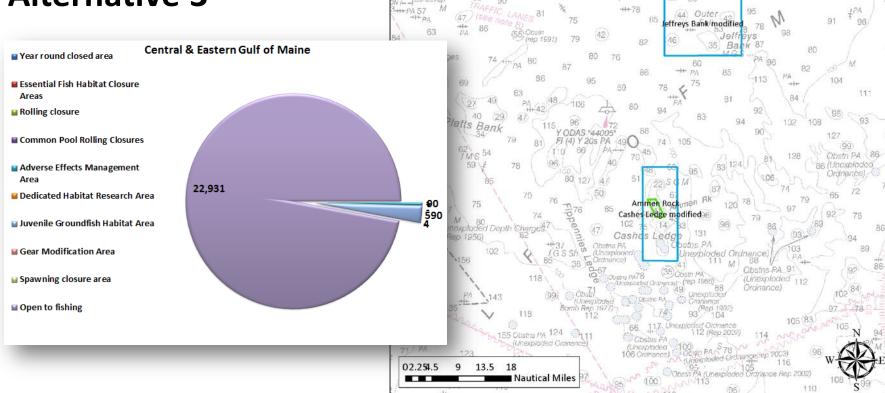
88

AEMA - adverse effects habitat area GMA - gear modification area

#### Central GOM Alternative 3

- Cashes Ledge, Jeffreys Bank, and Ammen Rock adverse effects minimization areas.
- Ammen Rock which lies entirely with the Cashes Ledge area and would be closed to all fishing gears that can be managed by the Council.

# **Central GOM Alternative 3**



Central Gulf of Maine Alternative 3

Cashes Ledge AEMA

Ammen Rock AEMA

Jeffreys Bank AEMA

Legend

EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

83 102 ewfound Ground 95 PA M G

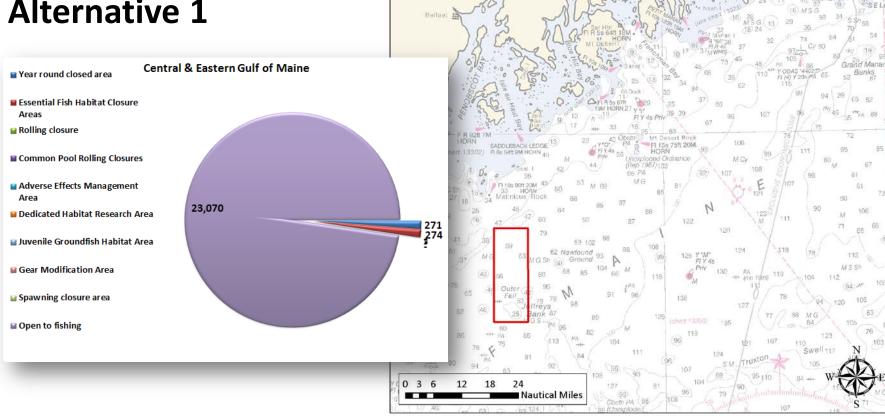
88 87

AEMA - adverse effects habitat area GMA - gear modification area

## Eastern GOM Alternative 1

- Jeffreys Bank habitat closure
- Note that Jeffreys Bank is also listed with the Central Maine alternatives and should be assigned to a single region unless the central and eastern Maine alternatives are recombined.

## **Eastern GOM Alternative 1**



Eastern Gulf of Maine Alternative 1 - No Action

Jeffreys Bank EFH

N

Legend

EFH - current habitat area

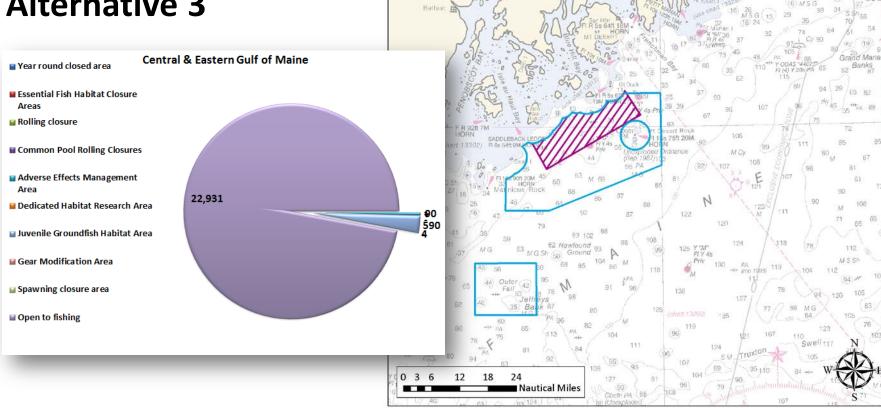
JGHA - juvenile groundfish habitat area

AEMA - adverse effects habitat area GMA - gear modification area DHRA - dedicated habitat research area

#### Eastern GOM Alternative 3

- West to east, Jeffreys Bank adverse effects minimization area and the Eastern Maine and Machias juvenile groundfish habitat areas, outside of state waters.
- The smaller hatched area within the Eastern Maine JGHA would also be designated as a DHRA.

## **Eastern GOM Alternative 3**



Eastern Gulf of Maine Alternative 3

Jeffreys Bank AEMA

N

E Maine JGHA 1

Machias

E Maine DHRA

Legend

EFH - current habitat area

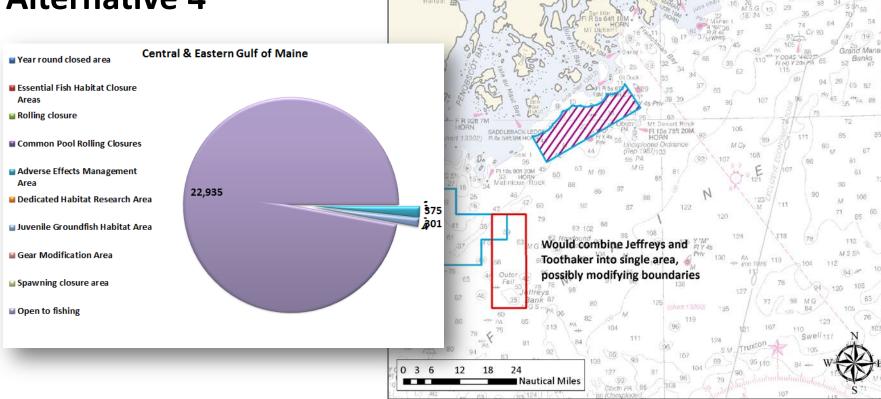
JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

#### Eastern GOM Alternative 4

- West to east, the Jeffreys Bank habitat closed area (red outline) and the Toothaker Ridge, Eastern Maine and Machias juvenile groundfish habitat areas.
- A single Toothaker/Jeffreys Bank area has been discussed but no boundaries have been developed yet.
   All areas would be designated outside of state waters.
- The smaller hatched area within the Eastern Maine JGHA would also be designated as a DHRA.

## **Eastern GOM Alternative 4**



Eastern Gulf of Maine Alternative 4

E Maine DHRA

Jeffreys Bank EFH

Toothaker Ridge JGHA

Eastern Maine JGHA 2 Machias JGHA

N

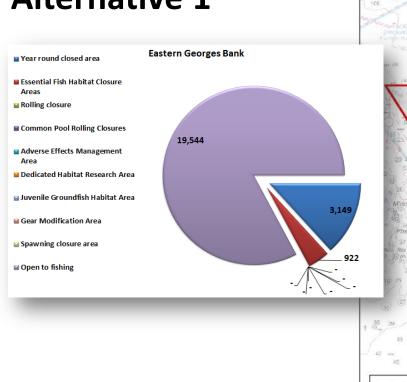
Legend

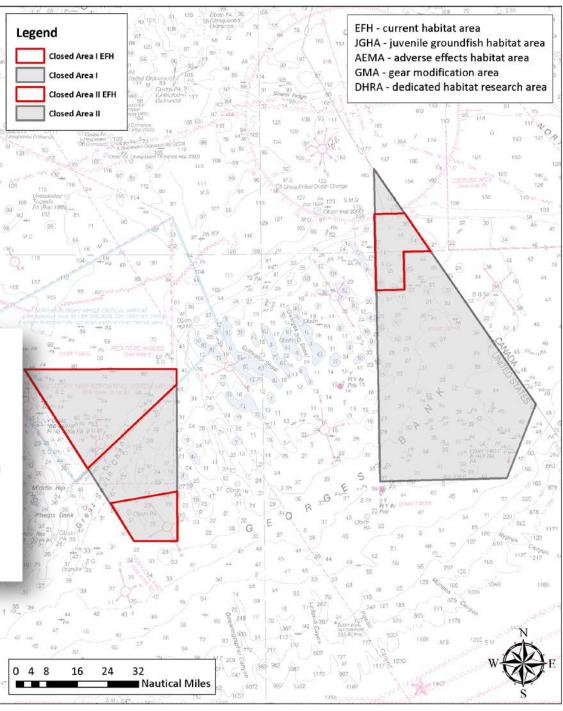
EFH - current habitat area

JGHA - juvenile groundfish habitat area

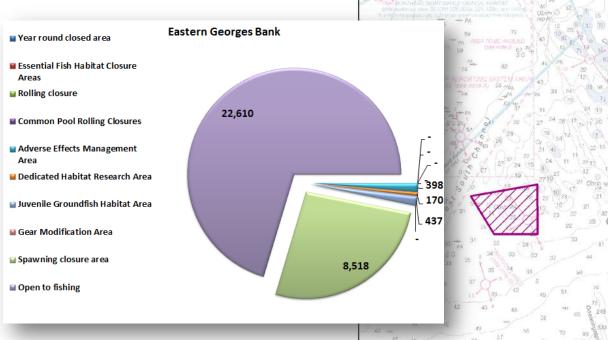
DHRA - dedicated habitat research area

- The existing Closed Area I and Closed Area II habitat closed areas, which are closed to mobile bottom tending gears, and
- The existing Closed Area I and Closed Area II groundfish closed areas, which are generally closed to gear capable of catching groundfish, with various exemptions and access programs.



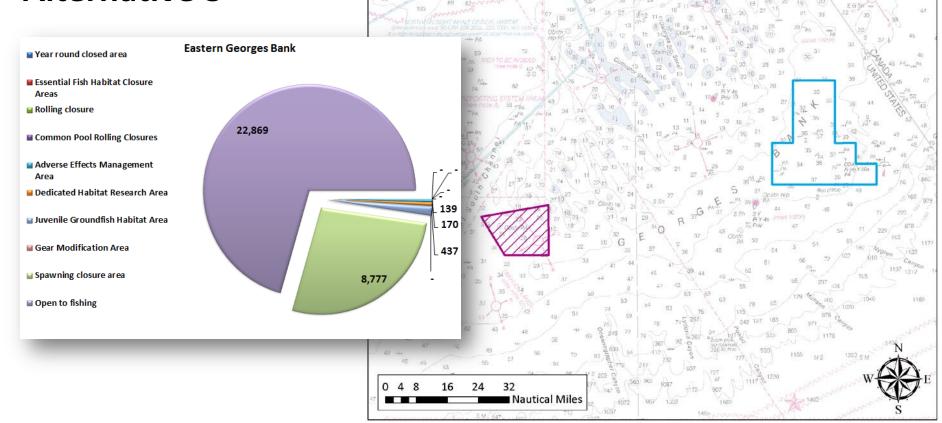


- The Northern Edge adverse effects area (north) and the Southeast Part juvenile groundfish habitat area (south).
- The hatched area would be designated as a DHRA.



EFH - current habitat area Legend JGHA - juvenile groundfish habitat area Northern Edge 1 AEMA AEMA - adverse effects habitat area GMA - gear modification area Southeast Part JGHA DHRA - dedicated habitat research area Georges Bank DHRA 24 32 ■ Nautical Miles

- A smaller version of the Northern Edge adverse effects area (north) and the Southeast Part juvenile groundfish habitat area (south).
- The hatched area would be designated as a DHRA.



Legend

Northern Edge 2 AEMA

Southeast Part JGHA

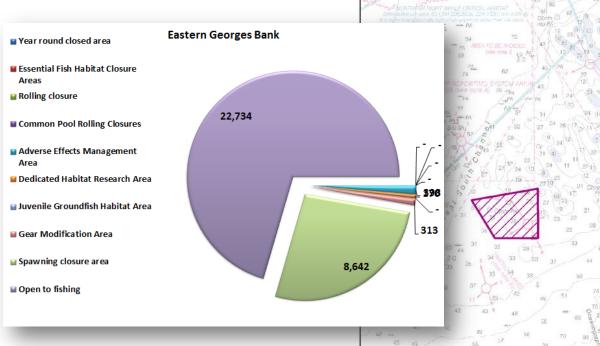
Georges Bank DHRA

EFH - current habitat area

JGHA - juvenile groundfish habitat area

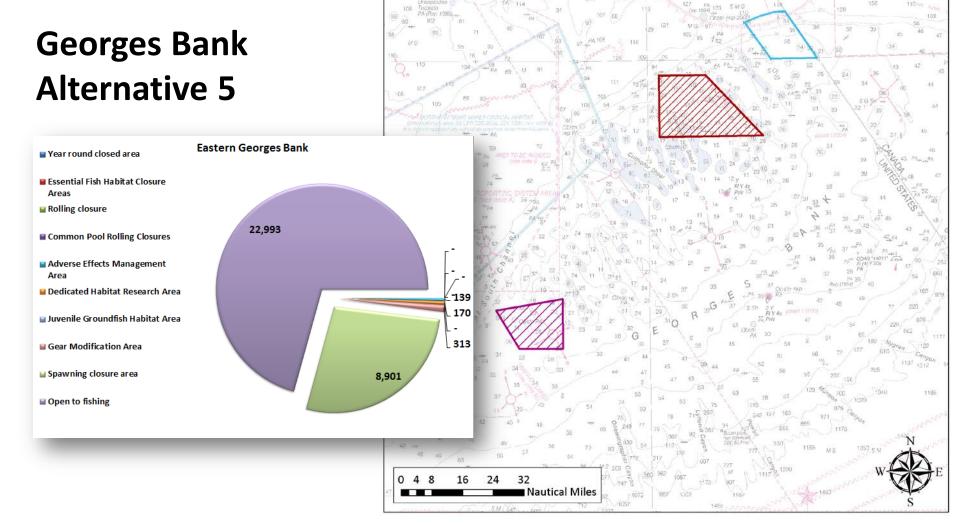
DHRA - dedicated habitat research area

- The Northern Edge adverse effects area (east) and the Georges Shoal gear modification area (west). The former would be closed to mobile bottom tending gears, and the latter would include restrictions on trawl gears. These could include a prohibition on ground cables with bridle lengths capped at 30 fathoms, or a requirement to raise ground cables off the seabed with elevating disks at 5 fathom spacing with a cap on ground cable length of 45 fathoms. Measurements are per side.
- The Georges Shoal GMA (recommended by the Committee on 5/17) is similar to an area called Georges Shoal West. A potential MBTG area south of this GMA is not included in this alternative by the PDT/CATT, as the habitat types are less vulnerable to impact than those within the Northern Edge area.
- The hatched area would be designated as a DHRA.



EFH - current habitat area Legend JGHA - juvenile groundfish habitat area Northern Edge 1 AEMA AEMA - adverse effects habitat area GMA - gear modification area Georges Shoal GMA DHRA - dedicated habitat research area Georges Bank DHRA Nautical Miles

- A smaller version of the Northern Edge adverse effects area (east) and the Georges Shoal gear modification area (west). The former would be closed to mobile bottom tending gears, and the latter would include restrictions on trawl gears. These could include a prohibition on ground cables with bridle lengths capped at 30 fathoms, or a requirement to raise ground cables off the seabed with elevating disks at 5 fathom spacing with a cap on ground cable length of 45 fathoms. Measurements are per side.
- The Georges Shoal GMA (recommended by the Committee on 5/17) is similar to an area called Georges Shoal West. A potential MBTG area south of this GMA is not included in this alternative by the PDT/CATT, as the habitat types are less vulnerable to impact than those within the Northern Edge area.
- The hatched area would be designated as a DHRA.



Legend

Northern Edge 2 AEMA

Georges Shoal GMA

Georges Bank DHRA

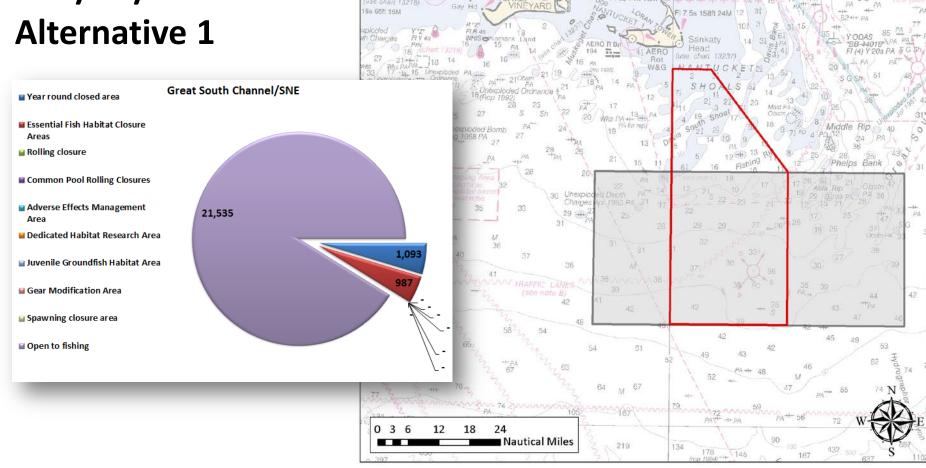
EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

- The existing Nantucket Lightship habitat closed area, which is closed to mobile bottom tending gears, and
- The existing Nantucket Lightship groundfish closed area, which is generally closed to gear capable of catching groundfish, with various exemptions.

## **GSC/NS/SNE**



Legend

Nantucket Lightship EFH

Nantucket Lightship

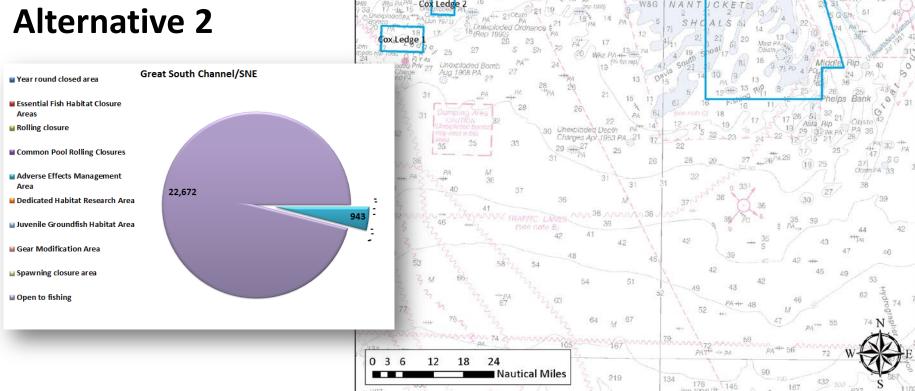
EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

- An adverse effects area in the Great South Channel region (east) and the Cox Ledge adverse effects areas (west). The GSC area would either be closed to mobile bottom tending gears, or would have gear restrictions on trawls.
- The Committees recommended considering an exemption for surfclam/ocean quahog hydraulic dredges in the case of a MBTG closure.
- The boundaries of this particular GSC area include a core area identified by industry members, and six extensions of that area identified by Habitat PDT analysis.

# **GSC/NS/SNE Alternative 2**



Legend

**Great South Channel East AEMA** 

NANTUCKET SOUND

Cox Ledge AEMA

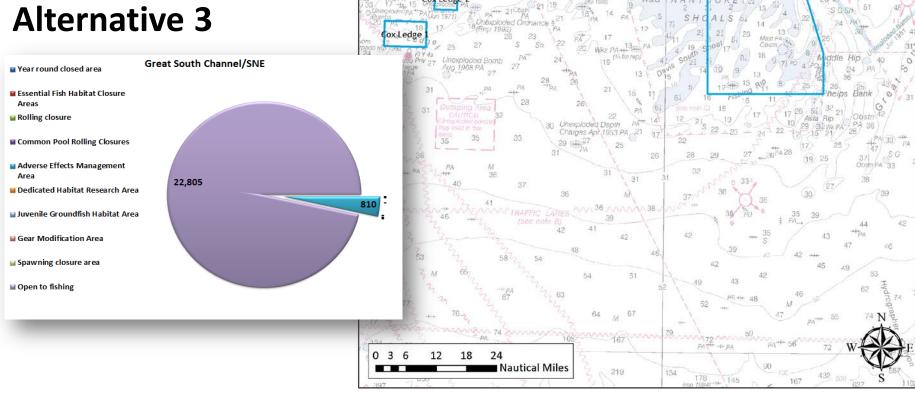
EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

- An adverse effects area in the Great South Channel region (east) and the Cox Ledge adverse effects areas (west).
- The Committees recommended considering an exemption for surfclam/ocean quahog hydraulic dredges in the case of a MBTG closure.
- The boundaries of this particular GSC area include a core area identified by industry members, and four of six extensions of that area identified by Habitat PDT analysis.

# **GSC/NS/SNE Alternative 3**



Legend

**Great South Channel 2 AEMA** 

FIR 5s 43ft 15M 16

NANTUCKET SOUND

Cox Ledge AEMA

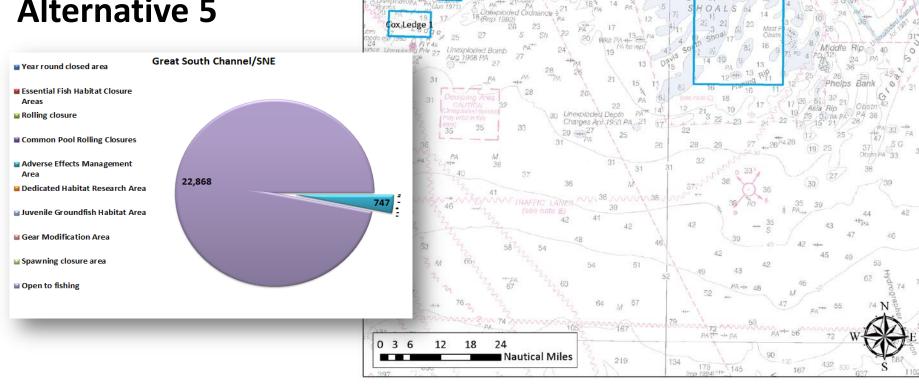
EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

- An adverse effects area in the Great South Channel region (east) and the Cox Ledge adverse effects areas (west).
- The Committees recommended considering an exemption for surfclam/ocean quahog hydraulic dredges in the case of a MBTG closure.
- The boundaries of this particular GSC/Nantucket Shoals area were identified by the Committee on 5/17. They include a western boundary of 69° 50'.

# **GSC/NS/SNE Alternative 5**



Legend

Nantucket Shoals AEMA

FIR 5s 43ft 15M '6

SOUND

Cox Ledge AEMA

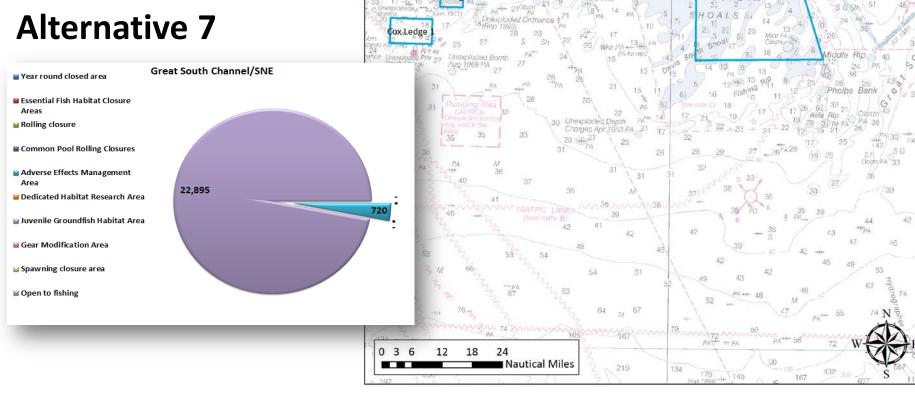
EFH - current habitat area

JGHA - juvenile groundfish habitat area

DHRA - dedicated habitat research area

- An adverse effects area in the Great South Channel region (east) and the Cox Ledge adverse effects areas (west).
- The Committees recommended considering an exemption for surfclam/ocean quahog hydraulic dredges in the case of a MBTG closure.
- The boundaries of this particular GSC/Nantucket Shoals area were identified by the Committee on 6/11. They include a western boundary of 69° 50′ and an eastern boundary that runs to the edge of the original core area.

# **GSC/NS/SNE**



Legend

5s 65ft 16M

NantucketShoals + Core Area AEMA

FIR 5s 43ft 15M "6

Cox Ledge AEMA

EFH - current habitat area

NAUGET BEACH

NANTUCKET SOUND

GMA - gear modification area

JGHA - juvenile groundfish habitat area AEMA - adverse effects habitat area

DHRA - dedicated habitat research area

## **GSC/NS/SNE**Alternative 7 revised

