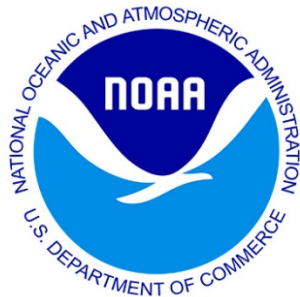


Atlantic Cod Management Workshops



New England
Fishery Management
Council



**New England Fishery Management Council
Northeast Fisheries Science Center
University of New Hampshire/NH Sea Grant**

Atlantic Cod Workshops

PHASE 1: *Atlantic Cod Stock Structure Working Group*

Five distinct biological stocks, instead of the two that are currently managed

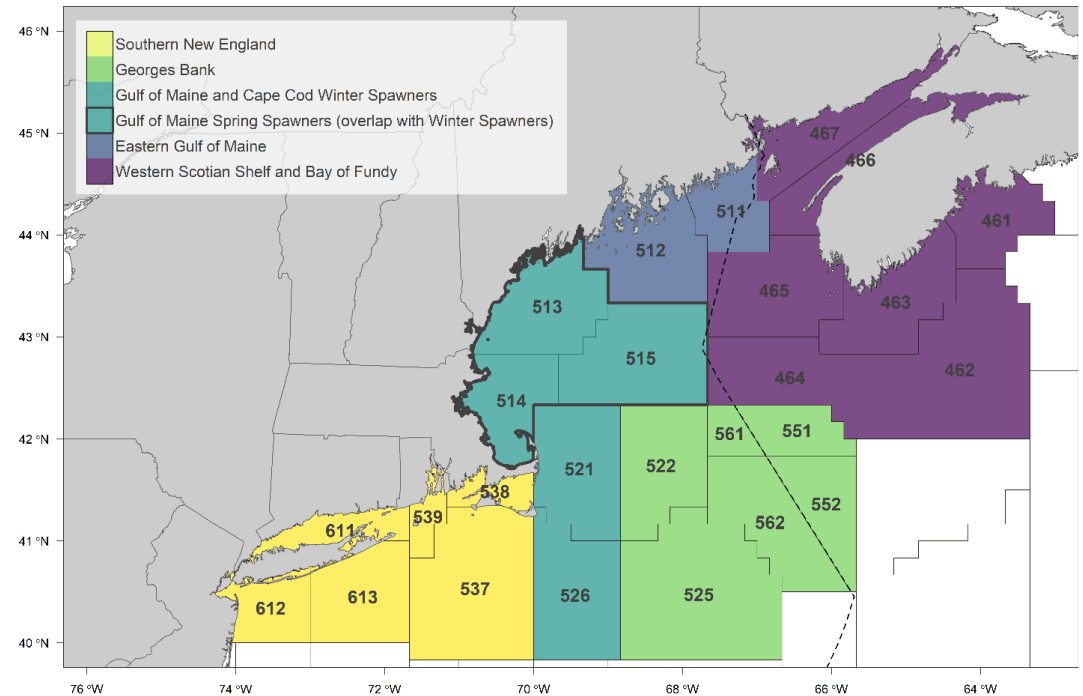
Re-thinking of the **current science** and **management approaches** to the fishery.

Two-pronged approach developed to incorporate new stock definitions into existing science and management structures.

PHASE 2: Workshops

(a) Science/Assessment Prospects

(b) Management.



Focus: Gathering input on potential management changes and possible economic and social impacts

What we are not doing during the Management Workshops

- Scoping a management action – *that's a Council/NMFS process*
- Making formal recommendations – *this forum is for gathering perspectives*

Atlantic Cod Management

Northeast Multispecies (Groundfish) Fishery Management Plan

- 13 species, 20 stocks, and 2 management units
- Complex management system
 - Atlantic Cod
 - 2 stocks: Georges Bank Cod and Gulf of Maine Cod
 - Transboundary Management Unit US/Canada – Eastern Georges Bank Cod
- Commercial (sectors and common pool) and recreational catches
 - Limits – catch limits and associated management measures
 - Closures – protection, spawning, and habitat closures

Atlantic Cod Management

Stock Status and Rebuilding

- Stock assessments for the Gulf of Maine cod stock and the Georges Bank cod stock generally occur every two years.
- Eastern Georges Bank cod management unit is assessed annually.
- Based on 2019 assessments, the Gulf of Maine cod and Georges Bank cod stocks are overfished with overfishing occurring, and subject to rebuilding plans with rebuild by dates of 2024 and 2026, respectively.
- The stock status of cod in the Eastern Georges Bank management unit is poor and subject to a rebuilding plan in Canada.

Atlantic Cod Management

Sectors

- Majority of the commercial fishery
- System of quotas and sector allocations
- Leasing/trading
- Accountability measures
- Gulf of Maine cod protection closures
- Spawning closures
- Reporting and Monitoring- ASM and NEFOP
- Gear and mesh restrictions
- Minimum fish sizes (19 in for cod)

GARFO
Summary Table
Sector
Catch Monitoring

Report run on: August 12 2021
 For data reported August 10 2021
 through: 2021
 Quota Period: May 1, 2021 to April 30,
 Quota Period Dates: 2022

Stock	Cumulative Kept (mt)	Cumulative Discard (mt)	Cumulative Catch (mt)	Sub-ACL** (mt)	Percent Caught
GB Cod East	16.9	0.9	17.7	182.1	9.7
GB Cod	133.0	3.5	136.5	1045.2	13.1
GOM Cod	32.0	1.4	33.4	262.2	12.7

Atlantic Cod Management

Common Pool

- System of trimester quotas
- Trip limits
- Area base restrictions and closures in-season
- Gulf of Maine cod protection closures
- Spawning closures
- Reporting and Monitoring- NEFOP
- Gear and mesh restrictions
- Minimum fish sizes (19 in for cod)

Common Pool Trimester Total Allowable Catch Area Closures

Stock	Statistical Area	Gear
Gulf of Maine (GOM) cod	513, 514	Trawl, gillnet, longline/hook
Georges Bank (GB) cod	521, 522, 525, 561	Trawl, gillnet, longline/hook

Atlantic Cod Management

Recreational

- Angler and For-Hire (party/charter)
- Bag limits
- Seasons
- Minimum fish size
- Spawning closure
- For-Hire Reporting
- MRIP

In Gulf of Maine Regulated Mesh Area

Open season:

- Private Anglers - September 15-30; April 1 - 14
- Party/Charter Anglers - September 8 - October 7; April 1 - 14

Minimum size: 21 inches

Possession limit:

- Private Anglers - 1 fish per day.
- Party/Charter Anglers - 1 fish per day

Outside of Gulf of Maine Regulated Mesh Area

Open season: All year

Minimum size: 21 inches

Possession limit:

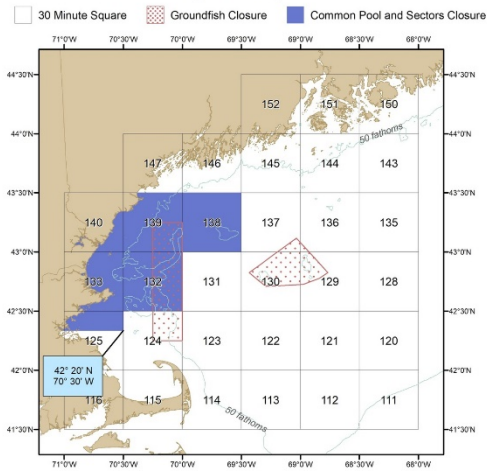
- Private Anglers - 10 fish per day.
- Party/Charter Anglers - 10 fish per day

Atlantic Cod Management

Sectors & Common Pool

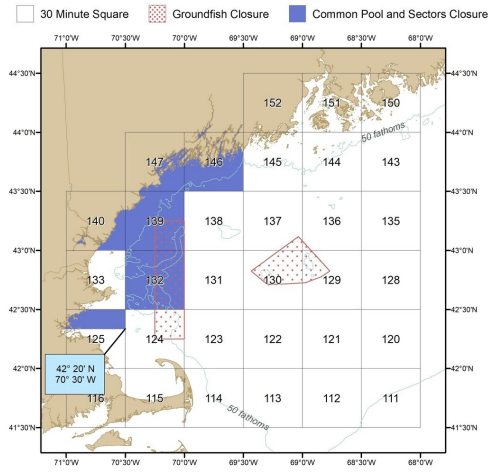
GOM Cod Protection Closure I

May 1 - May 31



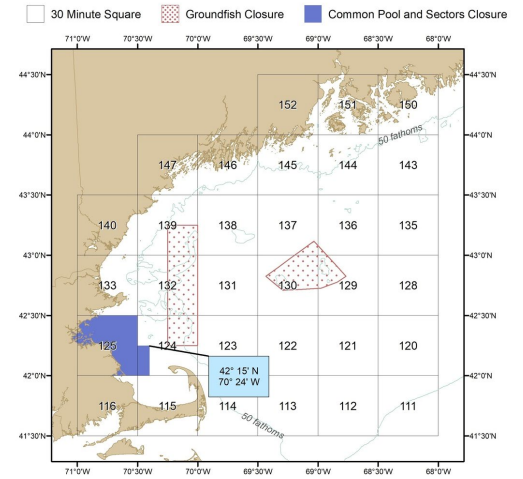
GOM Cod Protection Closure II

June 1 - June 30



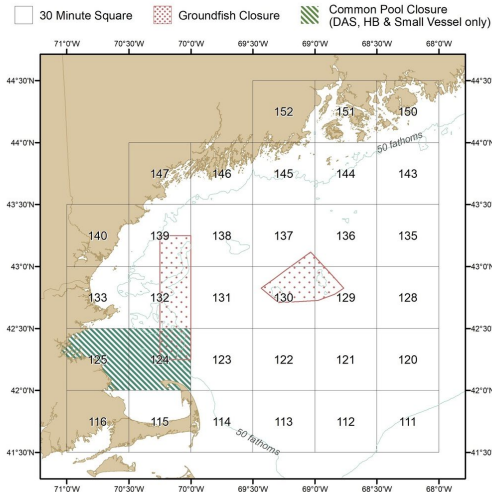
GOM Cod Protection Closure III

November 1 - January 31



GOM Cod Protection Closure IV

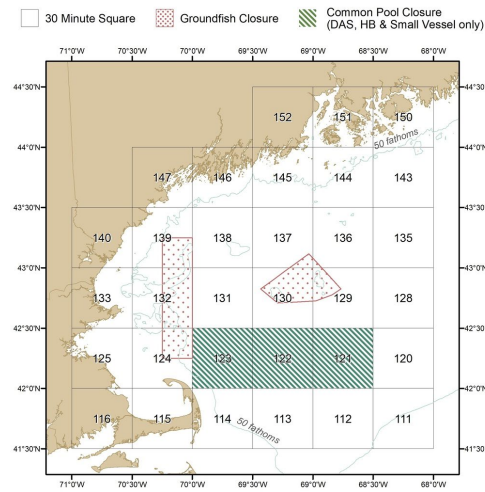
October 1 - October 31



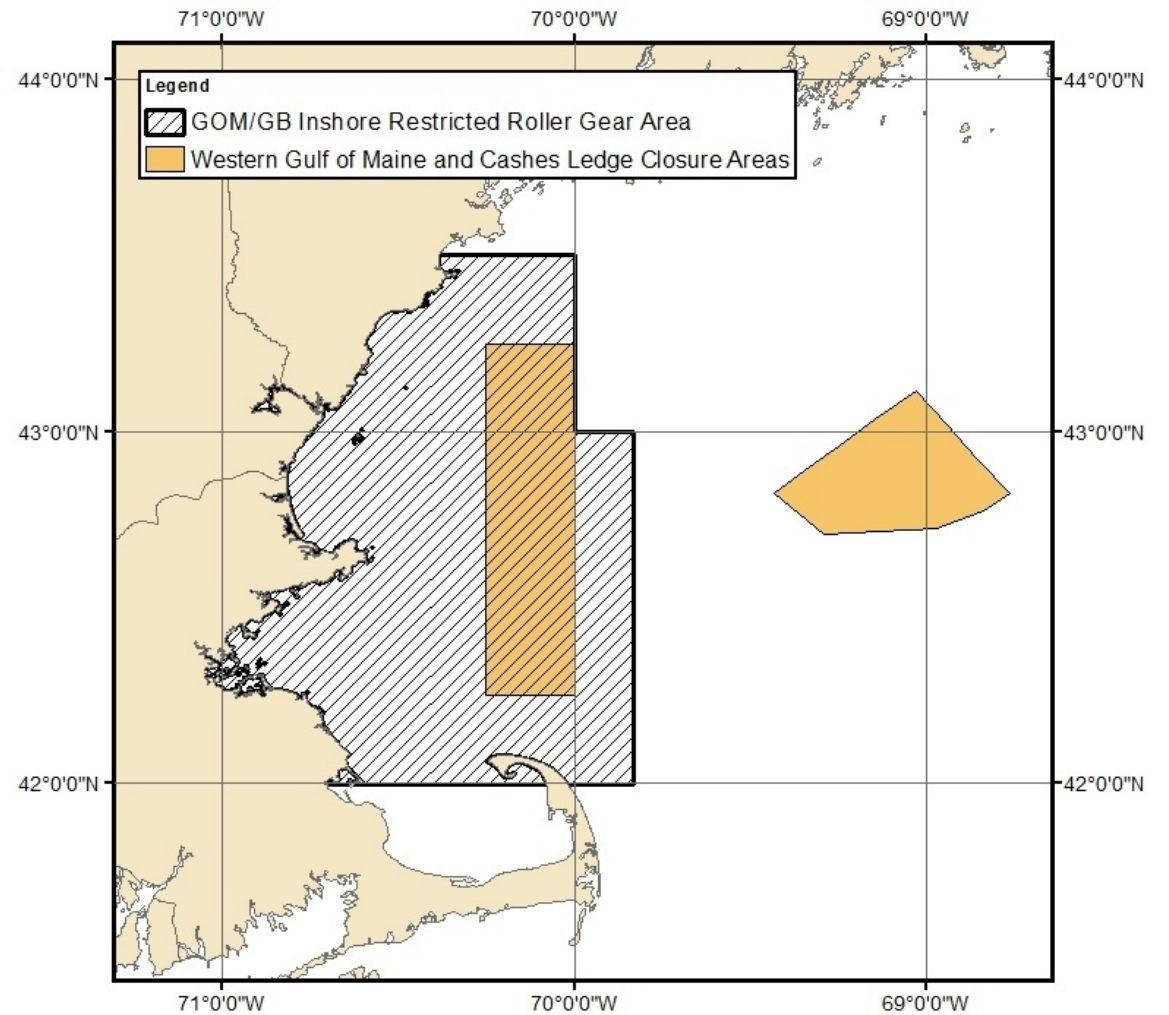
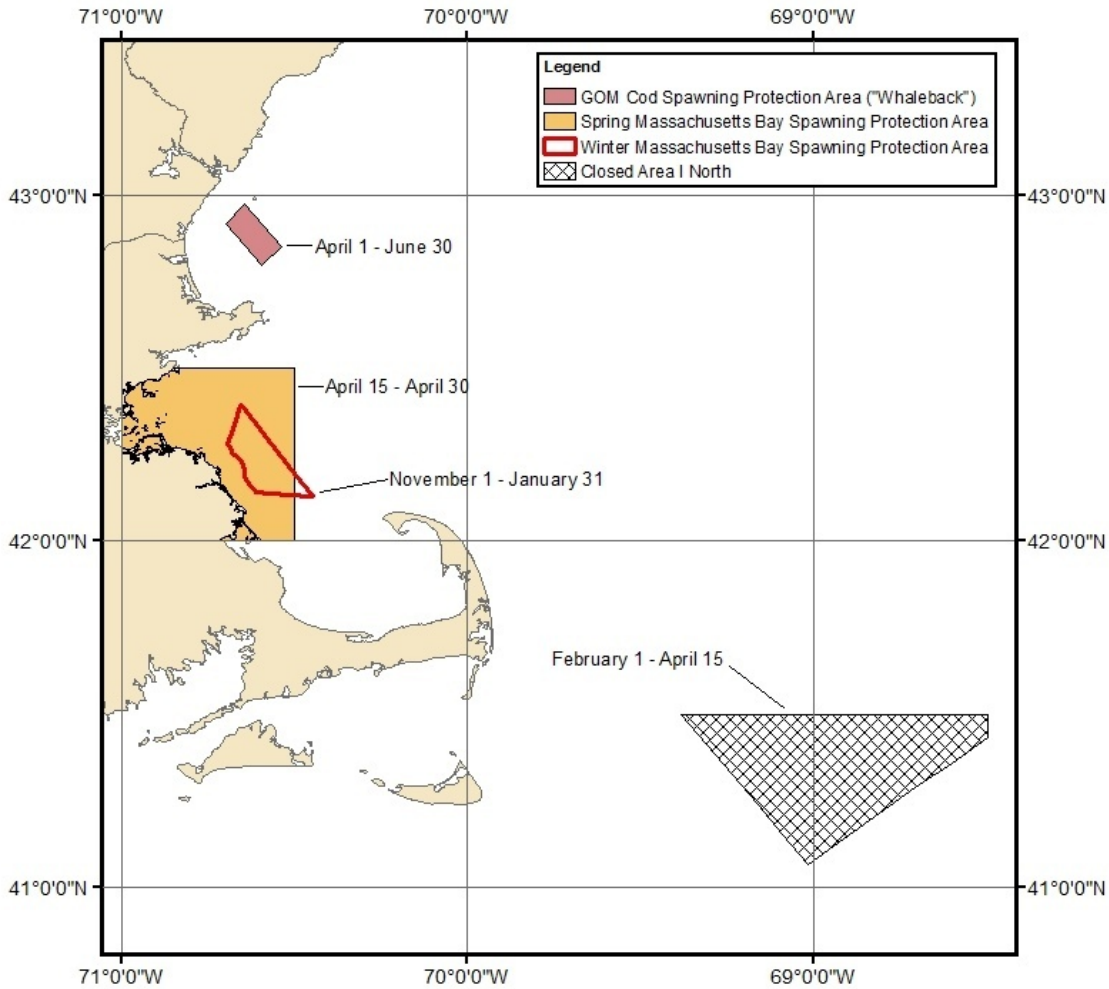
Common Pool

GOM Cod Protection Closure V

March 1 - March 31



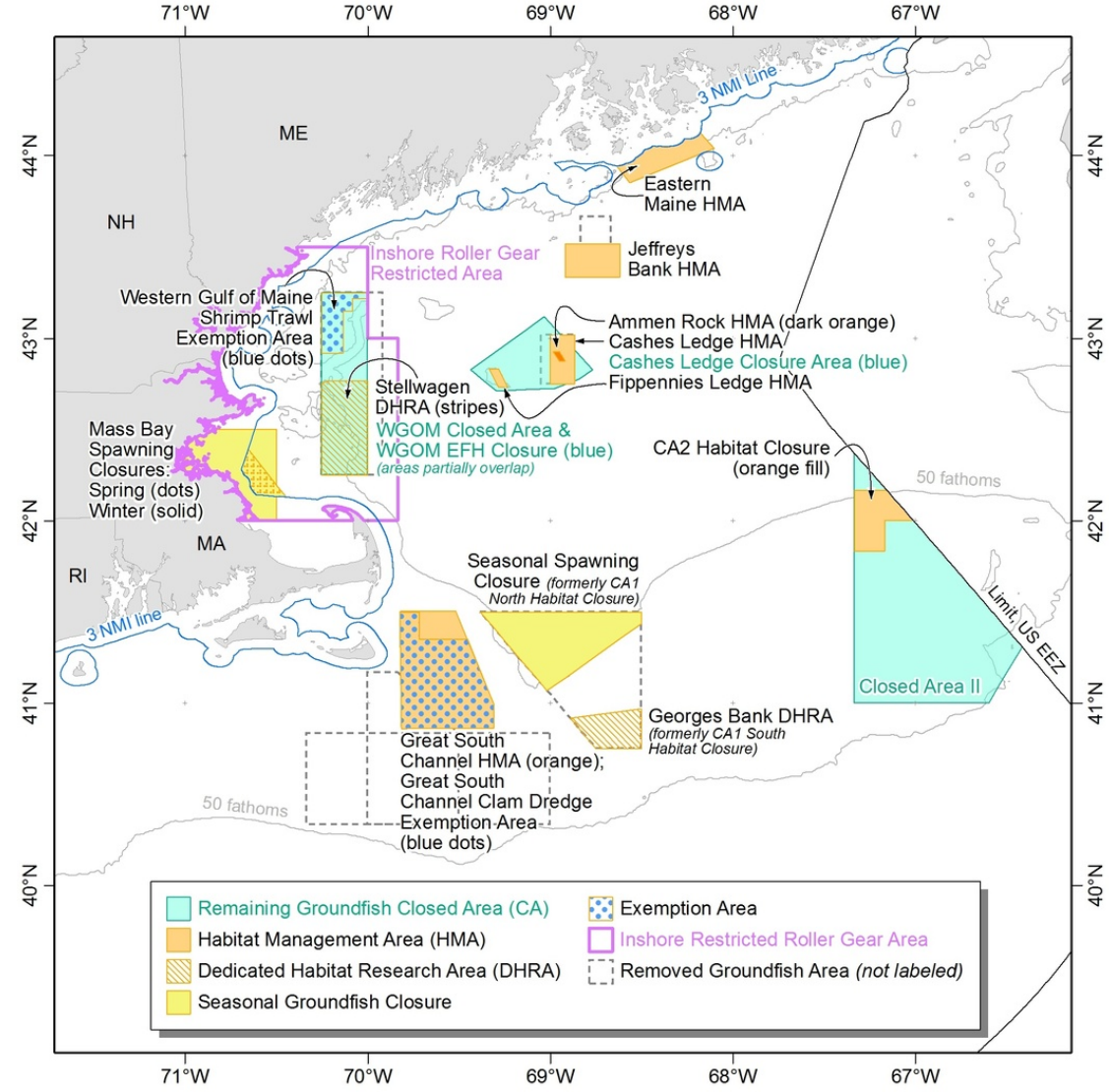
Atlantic Cod Management



For all trawl vessels fishing in the GOM/GB Inshore Restricted Roller Gear Area, the maximum diameter of any part of the trawl footrope, including discs, rollers or rockhoppers, may not exceed 12 inches.

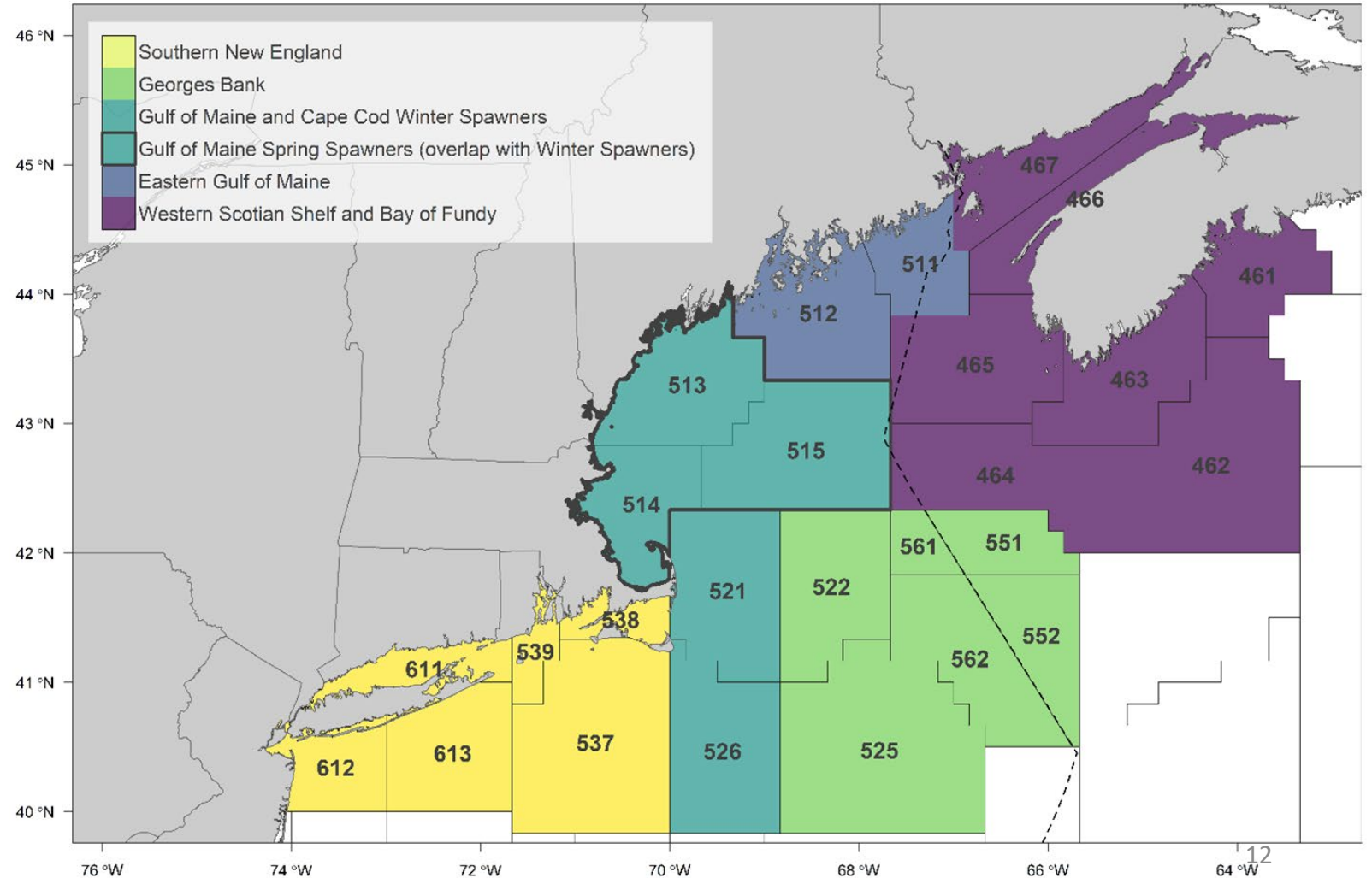
Atlantic Cod Management

Habitat/Spawning



Atlantic Cod Management Workshops

Thank you.
Questions?



Extra Slides

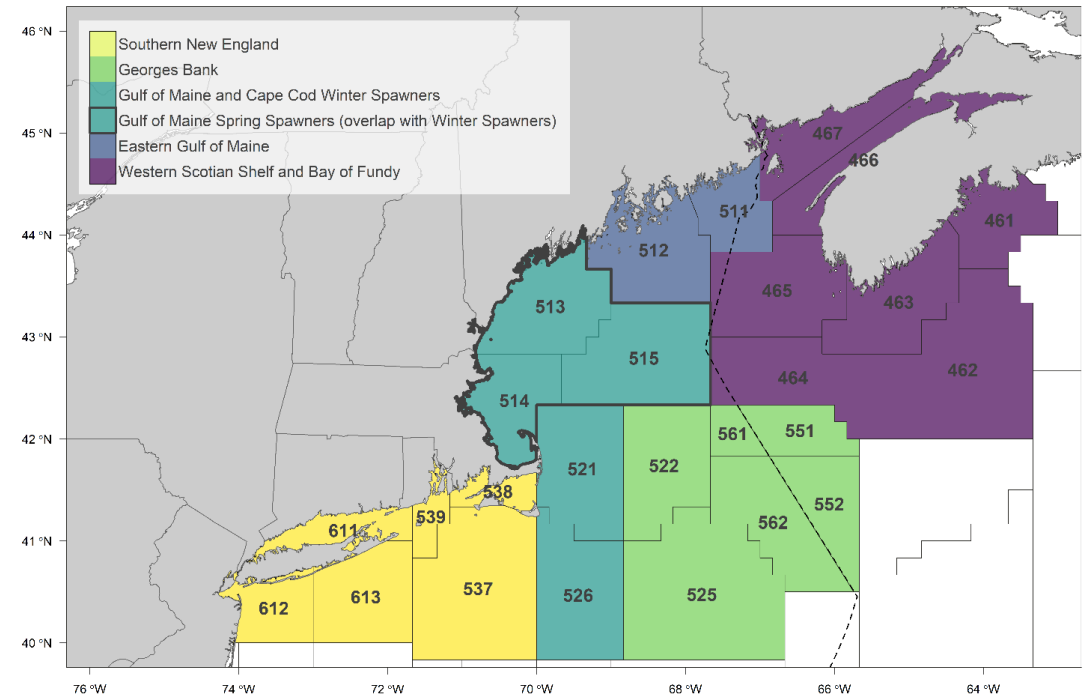
Atlantic Cod Management Workshops: Focus and Objectives

Focus on gathering input on potential management changes and possible economic and social impacts of those management changes.

OBJECTIVES

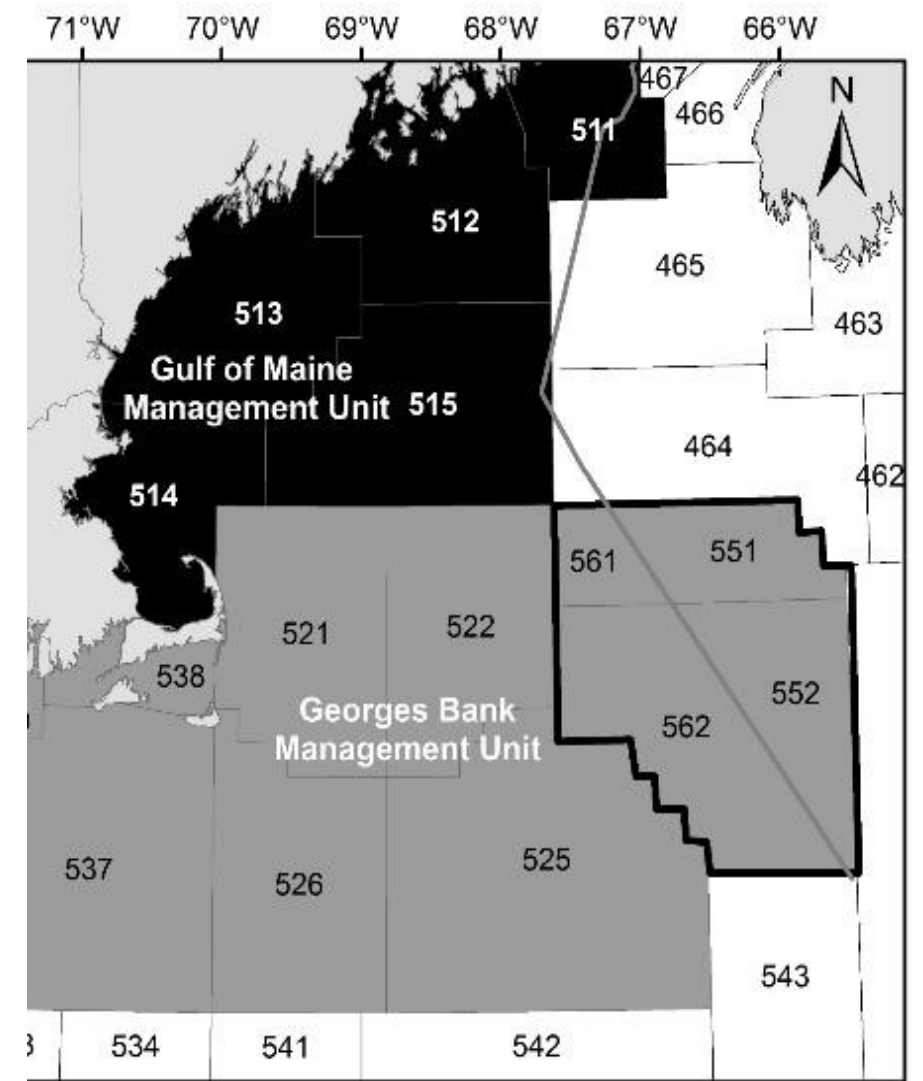
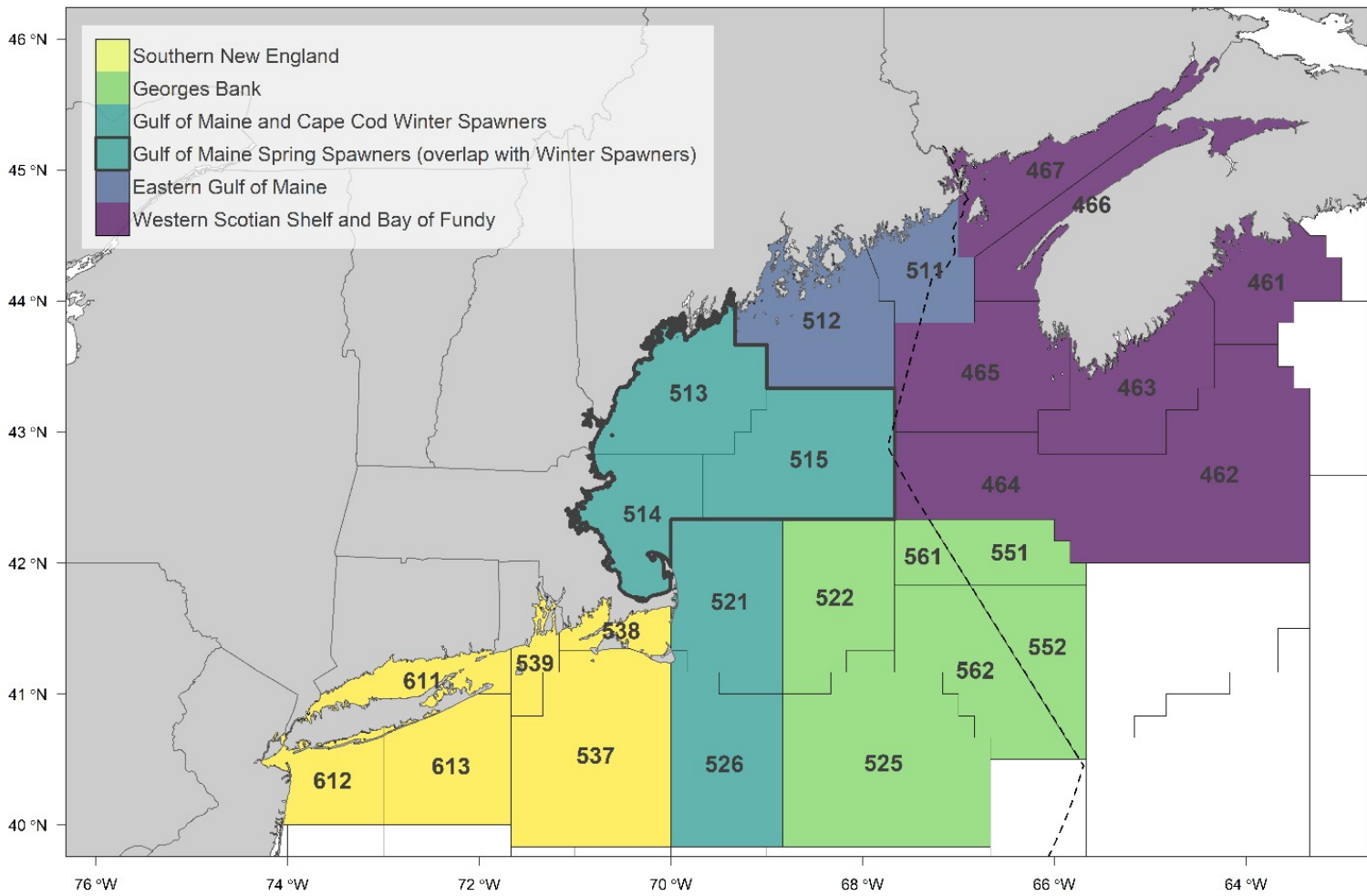
Based on the new understanding of the biological stock structure of Atlantic cod and outcomes of the Science and Assessment workshops:

1. Identify potential options for management measures.
2. Examine the advantages and disadvantages of the options.
3. Identify socioeconomic impacts that should be evaluated.



Atlantic Cod Stock Structure & Stock Assessment Timeline

	Stock Structure Working Group (ACSSWG)	Science/Assessment and Management Working Groups	Research Track Stock Assessment
2018	ACSSWG Formed		
2019	ACSSWG Report Completed		
2020	ACSSWG Peer Review (May)		
2021		Science/Assessment Workshops (June) Management Workshops (Aug-Sept)	Research Track Working Group Formed (August)
2022			Research Track Working Group conducts the Stock Assessment
2023			Research Track Peer Review (March)



Case Study – River Herring & Shad –Time/Area Management

Summary of American Shad Stock & Habitat Conditions				
System	Historic Riverine Habitat Currently Unobstructed	Abundance Trends (2005-2017)	Adult Status*	
			Total Mortality Rate	Abundance
Merrymeeting Bay	50.02%	YOY: No trend Adults: No data	Unknown	Unknown
Merrimack	17.83%	YOY: No data Adults: Increasing trend	Unknown	Unknown
Pawcatuck	19.21%	YOY: No data Adults: Increasing trend	Unknown	Unknown
Connecticut	45.19%	YOY: No trend Adults: Conflicting trends between indices (1 increasing, 1 no trend)	Unsustainable	Unknown
Hudson	89.24%	YOY: No trend Adults: No trend	Sustainable	Depleted
Delaware	72.05%	YOY: No trends (2 indices) Adults: Conflicting trends between indices (1 increasing, 1 no trend)	Unsustainable	Unknown
Nanticoke	100%	YOY: Declining trend Adults: No trends (2 indices)	Unknown	Unknown
Susquehanna & Upper Chesapeake	4.38%	YOY: No trend Adults: No trends (2 indices)	Unknown	Unknown
Patuxent	100%	YOY: No data Adults: No trend	Unknown	Unknown
Potomac	90.02%	YOY: No trend Adults: No trends (2 indices)	Unsustainable	Unknown
Rappahannock	95.98%	YOY: Increasing trend Adults: No trends (2 indices)	Sustainable	Unknown
York	87.42%	YOY: Conflicting trends between indices (1 increasing, 2 no trends) Adults: No trend	Sustainable	Unknown
James	72.77%	YOY: No trend Adults: No trends (2 indices)	Unknown	Unknown
Albemarle Sound	58.92%	YOY: Increasing trend Adults: Conflicting trends between indices (2 no trends, 1 increasing)	Sustainable	Not overfished
Tar-Pamlico	75.68%	YOY: No data Adults: No trend	Unknown	Unknown
Neuse	90.05%	YOY: No data Adults: Conflicting trends between indices (1 increasing, 1 no trend)	Sustainable	Unknown
Cape Fear	46.59%	YOY: No data Adults: Increasing trends (2 indices)	Unknown	Unknown
Winyah Bay	73.13%	YOY: No data Adults: Conflicting trends (1 increasing, 2 no trend)	Unknown	Unknown
Santee-Cooper	20.95%	YOY: No data Adults: Conflicting trends between indices (1 increasing, 2 no trend)	Unknown	Unknown
ACE Basin	82.28%	YOY: No data Adults: No trend	Unknown	Unknown
Savannah	59.19%	YOY: No data Adults: No trends (2 indices)	Unknown	Unknown
Altamaha	82.24%	YOY: No data Adults: Conflicting trends between indices (1 increasing, 1 no trend)	Unknown	Unknown
St Johns	90.04%	YOY: No trend Adults: Increasing trend	Unknown	Unknown
Coastwide	55.42%	YOY: NA Adult: Conflicting trends between indices	Unknown	Depleted

* The status determinations identified in the table for total mortality and abundance are for adults only. System-specific data on juvenile American shad as they transition from young-of-the-year (YOY) to mature spawning adults are unavailable, which can impact overall status determinations.



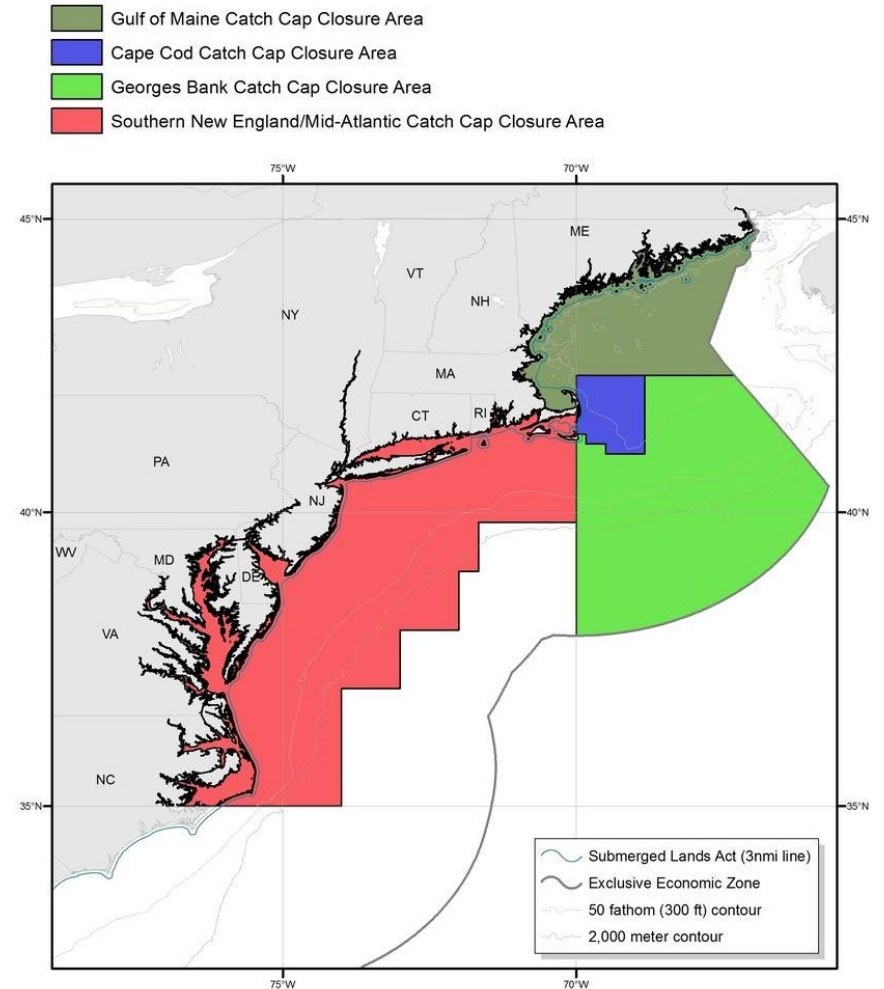
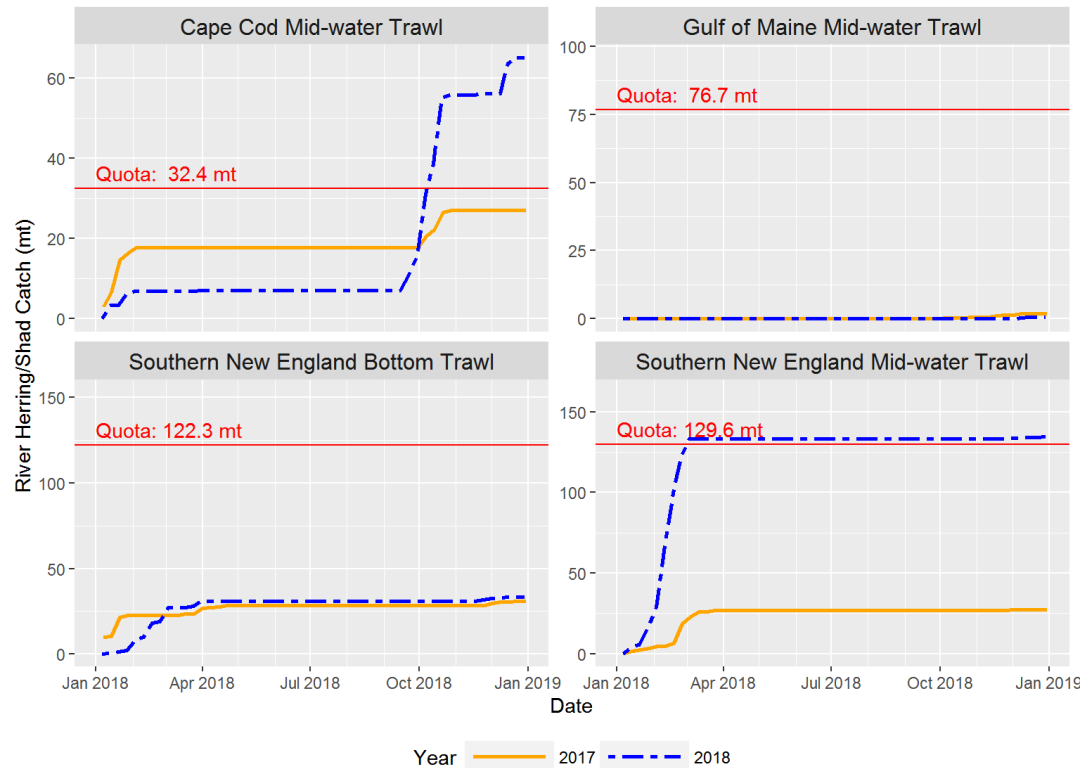
Delaware River Shad <https://www.outdoorlife.com/>



River herring run www.noaa.gov

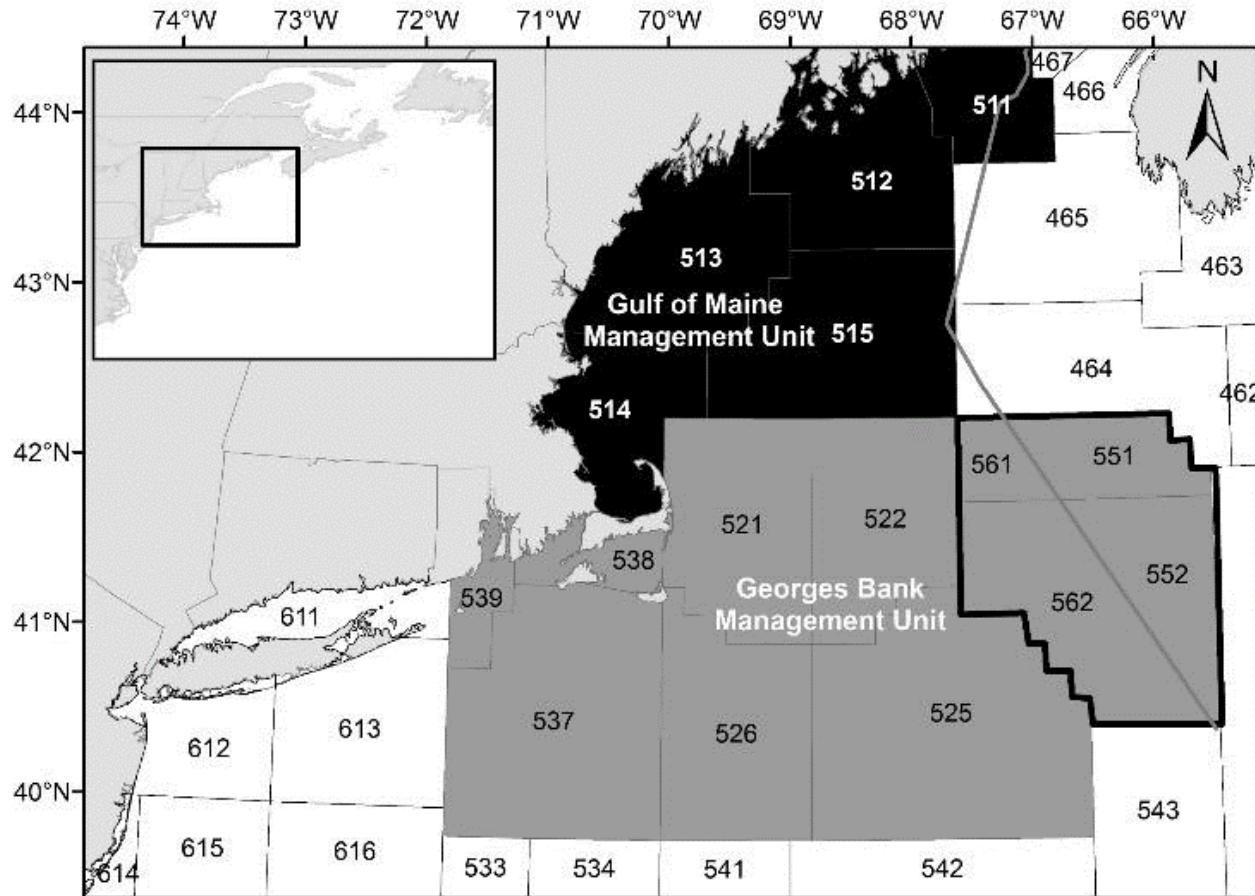
Case Study – River Herring & Shad –Time/Area Management

The river herring and shad (RH/S) catch caps are monitored based on the Atlantic herring fishing year (January 1-December 31). Once a RH/S catch cap is harvested, a 2,000 pound Atlantic herring possession limit goes into effect for that Catch Cap Area and gear type for the remainder of the fishing year. Trips landing greater than 6,600 lb of herring will be included in the catch cap monitoring program.



Catch Cap Areas – Atlantic Herring FMP, map: GARFO

Case Study – George Bank Cod – Annual Allocation



- Quota set for entire GB cod area
- Annual total allowable catches in US/CA management area
- Allocation occurs each year to the eastern and western management areas
- Prior to FY2016, quota assigned to each management area and only fished within the respective area.

Case Study – George Bank Cod – Annual Allocation

Since FY2016, transfer of quota east to west is permitted under certain conditions, one-way transfer

Sector GB Cod ACE Conversions - EGB cod to WGB cod	
Pounds, Live Weight	
Fishing Year	Pounds
2016	105,657
2017	160,758
2018	164,447
2019	18,510
2020	5,857
Through 8/16/21	
GARFO	
August 17, 2021	

Atlantic Cod Management

International – United States and Canada

Eastern Georges Bank Cod Management

