

American Eel
American Lobster
Atlantic Croaker
Atlantic Herring
Atlantic Menhaden
Atlantic Striped Bass
Atlantic Sturgeon
Black Drum
Black Sea Bass
Bluefish
Coastal Sharks
Cobia
Horseshoe Crab
Jonah Crab
Northern Shrimp
Red Drum
Scup
Shad & River Herring
Spanish Mackerel
Spiny Dogfish
Spot
Spotted Seatrout
Summer Flounder
Tautog
Weakfish
Winter Flounder

ASMFC Stock Status Overview

This document provides an overview of stock status for the Commission's 27 managed species or species groups. Graphs contain the most recent information available and have been vetted through the relevant species technical committee. Where biomass data is lacking, other fishery indicators are used (i.e., landings, fishing mortality rates). Time frames differ based on data availability.

July 2018











Vision: Sustainably Managing Atlantic Coastal Fisheries

Quick Guide to ASMFC Species Stock Status

(Current as of June 2018)









√ = Rebuilt/Sustainable ⇔/↑ = Recovering/Rebuilding ↓ = Depleted ? = Unknown * = Concern

STATUS/ TRENDS	SPECIES	OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
↓	 American Eel	Depleted	Unknown	2017 stock assessment update indicates resource remains depleted
√	 American Lobster	Gulf of Maine/ Georges Bank (GOM/GBK)	N	GOM/GBK stock rebuilt
↓		Southern New England	N	
↓	 American Shad	Depleted	Unknown	Depleted on coastwide basis; Amendment 3 established 2013 moratorium unless river-specific sustainability can be documented
?	 Atlantic Croaker	Unknown	Unknown	Status unknown; TLA indicates relatively low harvest in 2016; no management action triggered
√	 Atlantic Herring	N	N	Rebuilt; 2015 stock assessment update indicated SSB is above the target and fishing mortality is below the threshold
√	 Atlantic Menhaden	N	N	2018 TAC set at 216,000 mt
↑/⇔	 Atlantic Striped Bass	N	N	Rebuilt; harvest reductions implemented in 2015; fishing mortality estimated below target level in 2015, but female SSB continues to decline towards the threshold; benchmark assessment scheduled for 2018
↓	 Atlantic Sturgeon	Depleted	N	40+ year moratorium implemented in 1998; listed in 2012 under the ESA; 2017 benchmark assessment indicates stock is depleted coastwide though slow recovery has been occurring since 1998 and total mortality is sustainable

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STATUS/ TRENDS	SPECIES		OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
√		Black Drum	N	N	FMP approved in 2013; status based on 2015 benchmark assessment, which found 2012 median biomass well above median biomass that produces MSY
√		Black Sea Bass	N	N	Improved recruitment and declining fishing mortality rates since 2007 have led to steady increases in SSB
√		Bluefish	N	N	Biomass above threshold but below target
*		Coastal Sharks	Varies by species & species complex		
√		Cobia	N	N	FMP approved in 2017; SEDAR research track assessment scheduled for 2019 and SEDAR operational stock assessment scheduled for 2020
*		Horseshoe Crab	Unknown	Unknown	2013 assessment update found New England & NY stocks to have declined, while DE Bay & Southeast stocks have increased over time series. ARM Framework has been used since 2013 to set harvest levels for horseshoe crabs of DE Bay origin; benchmark assessment scheduled for 2018
?		Jonah Crab	Unknown	Unknown	No range-wide assessment; Interstate FMP adopted in August 2015
↓		Northern Shrimp	Depleted	N	Abundance & biomass indices lowest on record; recruitment indices also very low; fishery moratorium in place from 2014 to 2017 to protect remaining spawning population

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STATUS/ TRENDS	SPECIES		OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
⇔	Red Drum 	Northern Region	Unknown	N	sSPR above target and threshold SPRs
↓		Southern Region	Unknown	N	sSPR above target and threshold SPRs, though high uncertainty
		River Herring	Depleted	Unknown	2017 assessment update indicates stock remains depleted on coastwide basis; Amendment 2 established 2012 moratorium unless river- specific sustainability can be documented
√		Scup	N	N	Rebuilt
√		Spanish Mackerel	N	N	Rebuilt
√		Spiny Dogfish	N	N	Rebuilt since 2008
?		Spot	Unknown	Unknown	Status unknown; TLA indicates relatively low harvest in 2016; no management action triggered
?		Spotted Seatrout	Unknown	Unknown	Omnibus Amendment includes measures to protect spawning stock & establishes 12” minimum size limit
*		Summer Flounder	N	Y	2016 assessment update shows biomass trending downward since 2010; benchmark stock assessment scheduled for 2018
		Massachusetts – Rhode Island	N	N	Overfished on a coastwide basis and regionally based on 2016 assessment update; Amendment 1 establishes regional stock units and reference points
	Tautog 	Long Island Sound	Y	Y	
		New Jersey – New York Bight	Y	Y	
*		Delaware – Maryland – Virginia	Y	N	

Quick Guide to ASMFC Species Stock Status

(Current as of June 2018)

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STATUS/TRENDS	SPECIES	OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
↓		Depleted	N	6-year rebuilding period if spawning stock biomass < threshold level; restricted harvest since 2009; Stock assessment update scheduled for 2019
*	Winter Flounder 	Unknown	N	Stock biomass is unknown; unknown why stock is not responding to low catches and low exploitation rates
↓	South New England/ Mid-Atlantic	Y	N	Current biomass at 18% of SSB target based on 2017 operational assessment

What Does a Status Mean?

Rebuilt/Sustainable - Stock biomass is equal to or above the biomass level established by the FMP to ensure population sustainability. When between benchmark assessments, a stock can still be considered rebuilt/sustainable if it drops below the target but remains above the threshold.

Recovering/Rebuilding - Stocks exhibit stable or increasing trends. Stock biomass is between the threshold and the target level established by the FMP.

Unknown - There is no accepted stock assessment to estimate stock status.

Depleted - Reflects low levels of abundance though it is unclear whether fishing mortality is the primary cause for reduced stock size

Concern - Those stocks developing emerging issues, e.g., increased effort, declining landings, or impacts due to environmental conditions.

Overfished - Occurs when stock biomass falls below the threshold established by the FMP, significantly reducing the stock's reproductive capacity to replace fish removed through harvest.

Overfishing - Occurs when fish are removed from a population at a rate that exceeds the threshold established in the FMP, which over the long-term will lead to declines in the population. A stock that is experiencing overfishing is having fish removed at a rate faster than the population can sustain in the long run, which will lead to declines in the population.

Stable/ Unchanged - Stock biomass has been consistent in recent years.

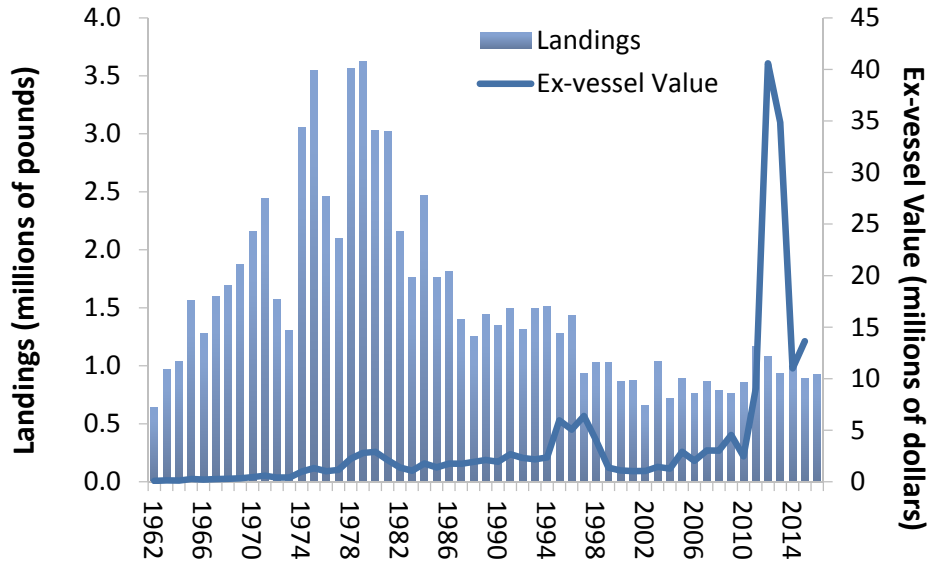
Benchmark stock assessment - A full analysis and review of stock condition, focusing on the consideration of new data sources and newer or improved assessment models. This assessment is generally conducted every 3-5 years and undergoes a formal peer review by a panel of independent scientists who evaluate whether the data and the methods used to produce the assessment are scientifically sound and appropriate for management use.

Stock assessment update - Incorporates data from the most recent years into a peer-reviewed assessment model to determine current stock status (abundance and overfishing levels)

Overview of Stock Status American Eel, *Anguilla rostrata*

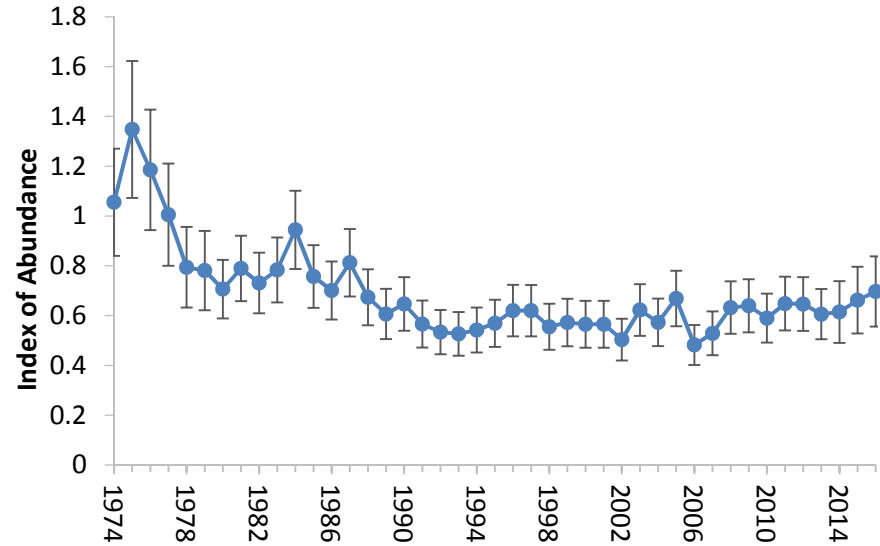
American Eel Commercial Landings and Ex-Vessel Value

Source: ACCSP Data Warehouse, 2017



40+ Year Index of Abundance of Yellow American Eel along the Atlantic Coast, 1974-2016.

Source: ASMFC American Eel Stock Assessment Update, 2017



Timeline of Management Actions: FMP (1999); Addendum I (2006); Addendum II (2008), Addendum III (2013); Addendum IV (2014)

Management Considerations:

Condition: Depleted

FMP Stock Rebuilding Goals: Protect and enhance the abundance of American eel in inland and territorial waters of the Atlantic states and jurisdictions, contribute to the viability of the American eel spawning population, and provide for sustainable fisheries by preventing overharvest.

FMP Status:

FMP approved in 2000. Addendum I (2006) requires mandatory reporting of catch and effort data. Addendum II (2008) advocates for increased emphasis on improving upstream and downstream passage for American eel. Addenda III (2013) and IV (2014) seek to reduce mortality and increase conservation of American eel stocks across all life stages. Addendum III establishes new management measures for both the commercial (glass, yellow, and silver) and recreational eel fisheries, and implements fishery-independent and -dependent monitoring requirements. Addendum IV (2014) established a 907,671 pound coastwide quota for yellow eel fisheries, reduced Maine’s glass eel quota to 9,688 pounds (2014 landings), and allowed for the continuation of New York’s silver eel weir fishery in the Delaware River. The Board maintained Maine’s glass eel quota of 9,688 pounds for the 2018 fishing season, and initiated an addendum to consider alternative allocations, management triggers, and coastwide caps relative to the current management program for both the yellow and glass eel commercial fisheries starting for the 2019 fishing season.

Overview of Stock Status American Eel, *Anguilla rostrata*

Primary Management Measures: Recreational fisheries are managed by minimum size limits and possession limits. Commercial fisheries are managed by quotas.

Trend Analysis of Regional and Coastwide Indices of American Eel Abundance by Young-of-the-year (YOY) and Yellow Eel Life Stages

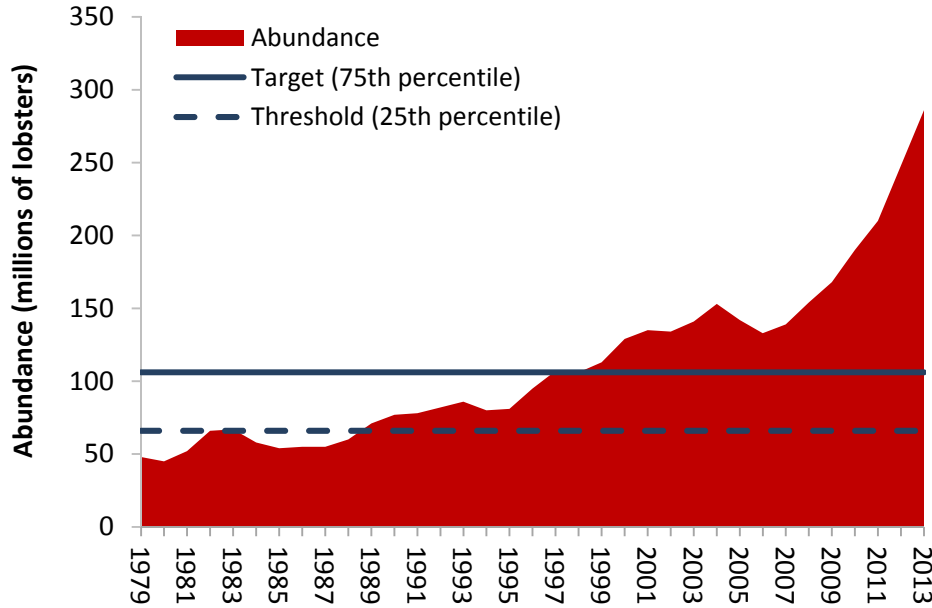
Region	Life Stage	Time Period	2012 Trend	2017 Trend
Gulf of Maine	YOY	2001–2016	NS	NS
Southern New England	YOY	2000–2016	NS	NS
	Yellow	2001–2010	NS	-
Hudson River	YOY	1974–2009	↓	-
	Yellow	1980–2016	↓	↓
Delaware Bay/ Mid-Atlantic Coastal Bays	YOY	2000–2016	NS	NS
	Yellow	1999–2016	NS	NS
Chesapeake Bay	YOY	2000–2016	NS	NS
	Yellow	1990–2009	↑	↑
South Atlantic	YOY	2001–2015	NS	↓
	Yellow	2001–2016	↓	↓
Atlantic Coast	YOY (short-term)	2000–2016	NS	NS
	YOY (long-term)	1987–2013	NS	NS
	Yellow (40+ year)	1974–2016	NS	↓
	Yellow (30-year)	1987–2016	↓	↓
	Yellow (20-year)	1997–2016	NS	NS

The arrows indicate the direction of the trend if a statistically significant trend was detected (P-value < α ; $\alpha = 0.05$). NS = no significant trend detected. A dash (-) = indices that data were not updated.

Overview of Stock Status American Lobster, *Homarus americanus*

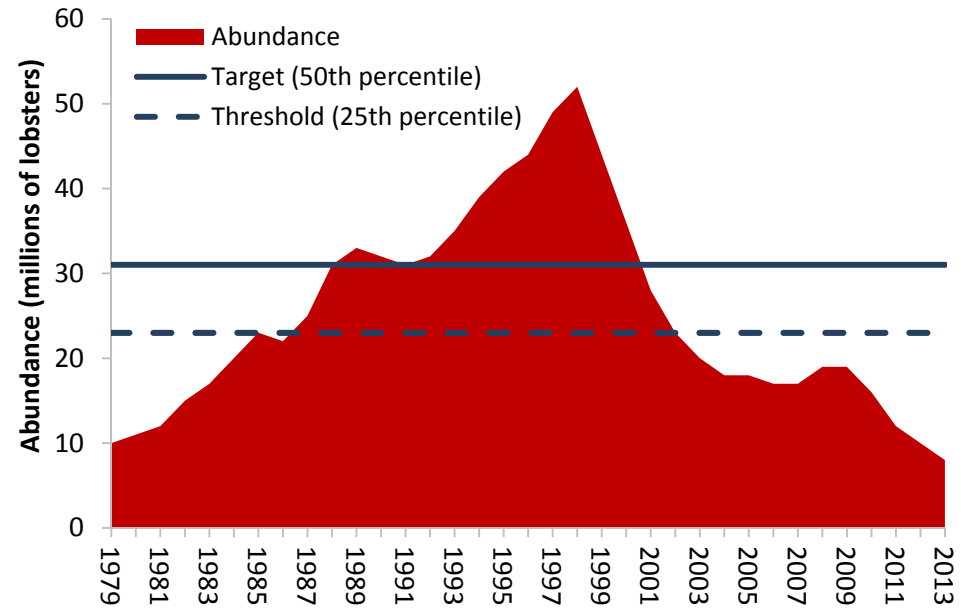
American Lobster Abundance for the Gulf of Maine and Georges Bank Stock Unit

Source: ASMFC American Lobster Benchmark Stock Assessment Report, 2015



American Lobster Abundance for the Southern New England Stock Unit

Source: ASMFC American Lobster Benchmark Stock Assessment Report, 2015



Timeline of Management Actions: Amendment 3 ('97); Addendum I ('99); Addendum II ('01); Addendum III ('02); Addenda IV & V ('04); Addenda VI & VII ('05); Addenda VIII & IX ('06); Addenda X & XI ('07); Addendum XIII ('08); Addendum XII – XV ('09); Addendum XVI ('10); Addenda XVII & XVIII ('12); Addenda XIX – XXII ('13); Addendum XXIII ('14); Addendum XXIV ('15)

Management Considerations:

Condition:

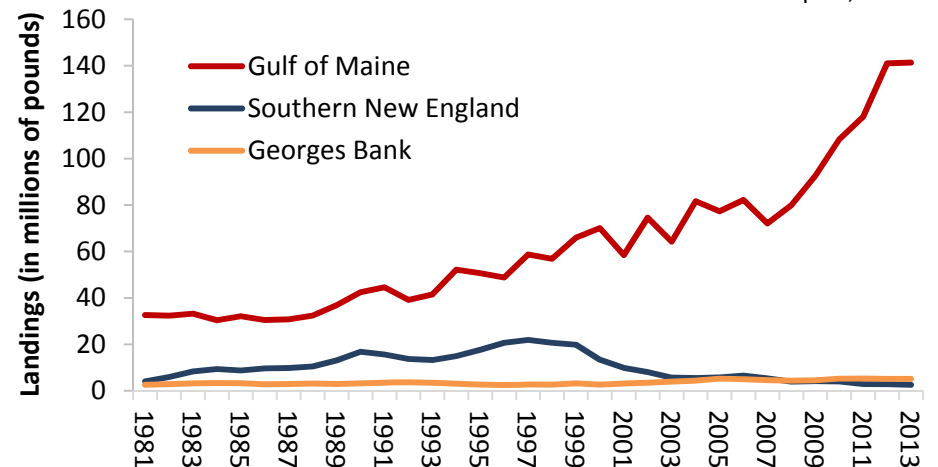
Gulf of Maine/Georges Bank – Not depleted and not experiencing overfishing
Southern New England – Depleted and not experiencing overfishing. Abundance is below threshold; Board action is required to rebuild stock

Stock Rebuilding Goals:

The 2015 benchmark stock assessment established new abundance and exploitation reference points. Board will consider new management measures for SNE in response to assessment findings through Draft Addendum XXV.

American Lobster Landings by Area

Source: ASMFC American Lobster Benchmark Stock Assessment Report, 2015



FMP Status:

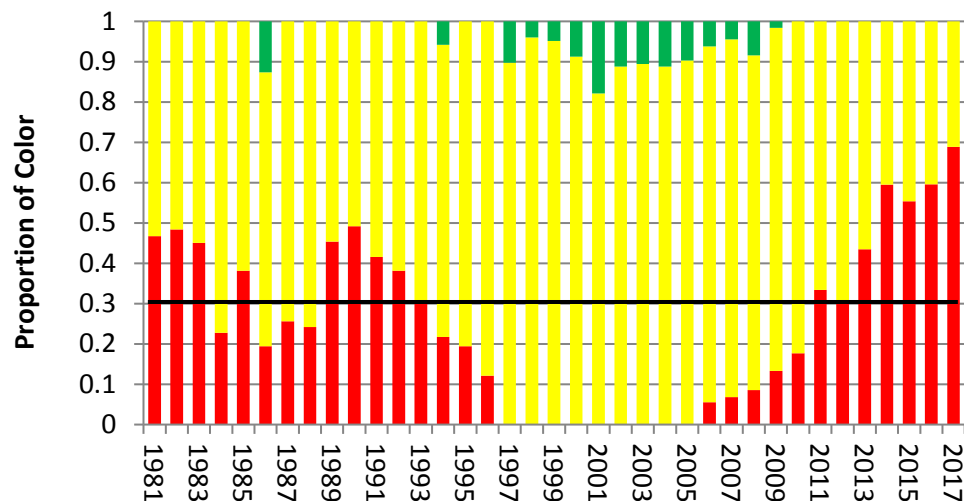
Amendment 3 and Addenda I – XXIV established 7 management areas and specific management measures to meet the rebuilding schedule by 2022. Addendum XII establishes guidelines for areas implementing a transferable trap program. Addendum XIII finalizes the Outer Cape Cod’s effort control plan. Addendum XIV alters the LCMA trap transfer program. Addendum XV establishes limited entry for LCMA 1 federal water fishermen. Addendum XVI establishes new biological reference points to determine stock status for three stock units. Addendum XVII institutes a 10% reduction in exploitation by all fishing sectors and all gear types starting January 1, 2013 as the first phase in the Board’s efforts to rebuild the Southern New England stock. Addenda XVIII and XIX address the second phase of rebuilding efforts by proposing area-specific measures to scale the scope of the Southern New England fishery to the size of the resource. Addendum XX establishes bottom-sharing in Closed Area 2 in order to protect large concentrations of egg-bearing females and prevent gear conflicts. Addenda XXI and XXII implement changes to the trap transferability program for Areas 2 and 3. Addendum XXIII addresses habitat considerations and Addendum XXIV addresses inconsistencies between federal and Commission regulations on transfers.

Pending Action: In October 2017, the Board approved Draft Addendum XXVI, packaged in the same document as Draft Addendum III for Jonah Crab, for public comment. The addendum aims to improve harvester reporting and biological data collection in state and federal waters, asking three main questions for public comment: (1) what percentage of harvesters should be required to report in the fisheries; (2) should current data elements be expanded to collect a greater amount of information in the fisheries; and (3) at what scale should spatial information be collected. The document is out for public comment through January 22, 2018.

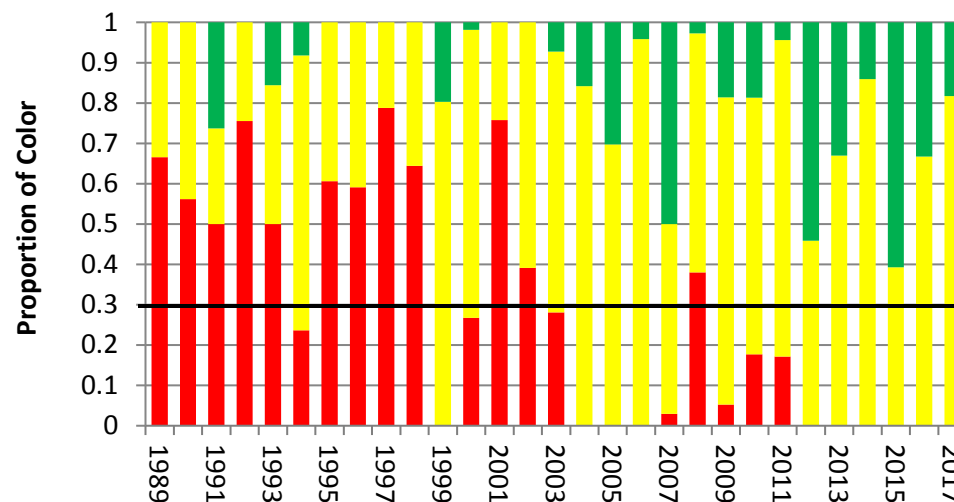
Primary Management Measures: Lobster is managed through 7 specific management areas. Each area has unique regulations that can include minimum/maximum size limits, trap limits, and v-notching definitions.

Overview of Stock Status Atlantic Croaker, *Micropogonias undulatus*

**Atlantic Croaker TLA Harvest Metric
(Recreational and Commercial Landings)**



**Adult Atlantic Croaker TLA Abundance Metric
(NMFS and SEAMAP Surveys)**



Management response triggered when proportion of red exceeds the 30% threshold level for three consecutive years in both harvest and abundance metrics.

Timeline of Management Actions: FMP (1987); Amendment 1 (2005); Addendum I (2011); Addendum II (2014)

Management Considerations:

Condition: Unknown. The 2016 TLA shows red proportions of greater than the 30% threshold for the harvest metric and 0% for the abundance metric, indicative of relatively low harvest and high abundance in 2016. Since thresholds were not exceeded for both metrics over the last three years, no management response is necessary for Atlantic croaker.

FMP Stock Rebuilding Goals (Addendum I):

Fishing Mortality Rate (F) Threshold = F_{MSY} (or a reasonable proxy thereof)
 F Target (F_{target}) = a fraction of the F threshold. F target is the rebuilding rate. Exceeding F threshold constitutes overfishing.

Biomass target = B_{MSY} (or a reasonable proxy thereof)
 B target is the rebuilt level.
 Biomass threshold = a fraction of the biomass target.
 Falling below B threshold constitutes overfished.

FMP Status:

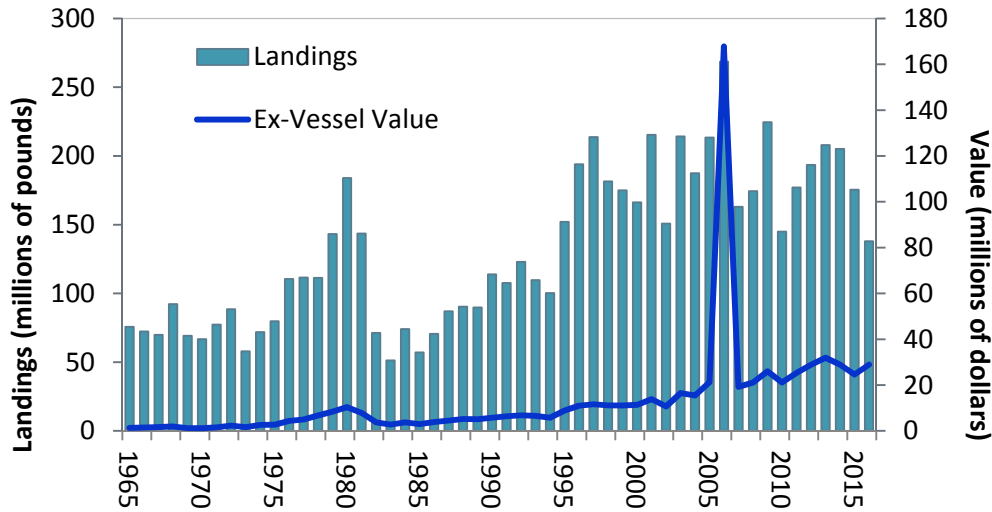
Amendment 1 revised FMP goals and objectives and established biological reference points. Addendum I revised the management area to assess the stock on a coastwide basis and adopted biological reference points. Addendum II established the traffic light analysis (TLA) to assess stock trends and initiate management response.

Primary Management Measures: In each non-assessment year, the Atlantic Croaker Technical Committee uses the TLA to evaluate changes in stock trends and the fishery. Although the plan does not require states to implement specific management measures, some states have implemented size and bag limits.

Overview of Stock Status Atlantic Herring, *Clupea Harengus*

Atlantic Herring Commercial Landings and Ex-Vessel Value

Source: ACCSP Data Warehouse, 2017



Management Considerations:

Condition: Not overfished and overfishing is not occurring. SSB rebuilt.

FMP Reference Points and Current Values:

SSB Target = 311,145 mt (685 million lbs)
 SSB Threshold = 155,573 mt (342 million lbs)
 2014 SSB = 623,000 mt
 Fishing Mortality Threshold (F_{MSY}) = 0.24
 2014 F = 0.16

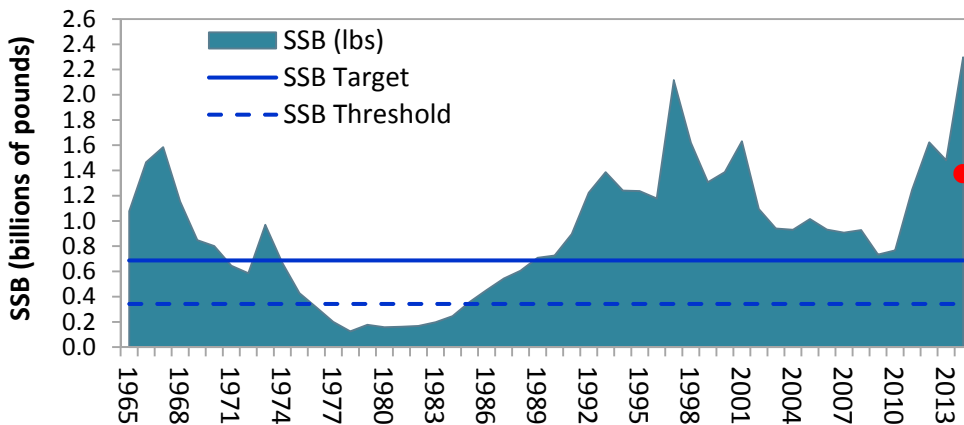
FMP Status:

Amendment 3, approved in February 2016, refines the spawning closure monitoring system and modifies the fixed gear set-aside. The Amendment consolidates prior amendments (and associated addenda), and recent management decisions into a single document; it is now the guiding management document for the Area 1A Atlantic Herring fishery. Addendum I to Amendment 3 includes management measures to stabilize the rate of catch in Area 1A and distribute the seasonal quota throughout Trimester 2 (June through September), which has 72.8% of the annual allocation.

Atlantic Herring Spawning Stock Biomass (SSB)

Source: Northeast Regional Stock Assessment Update, 2015

The red dot represents the 2014 retrospective adjusted value, retrospective adjustments are not applied to the entire time series.

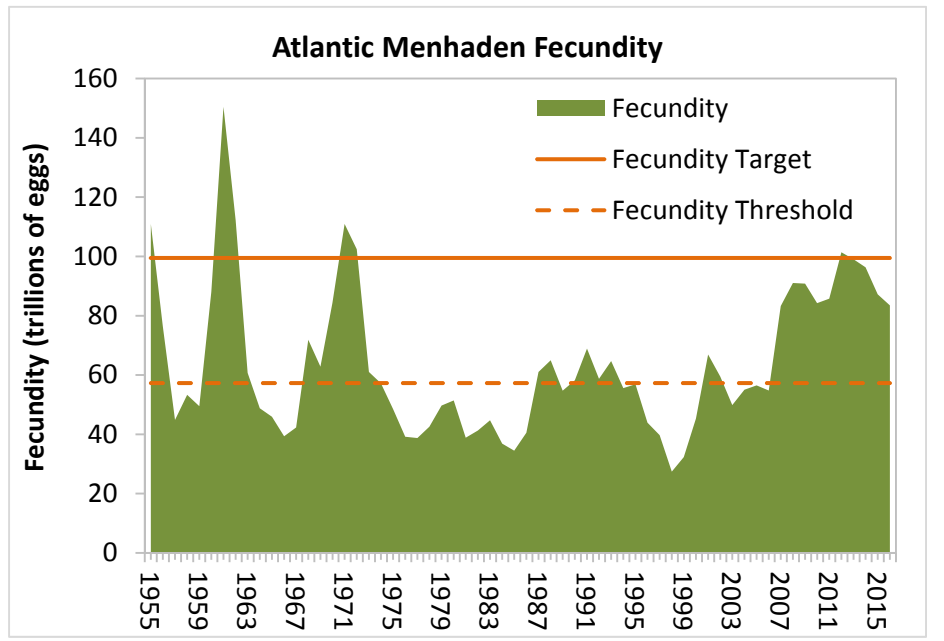
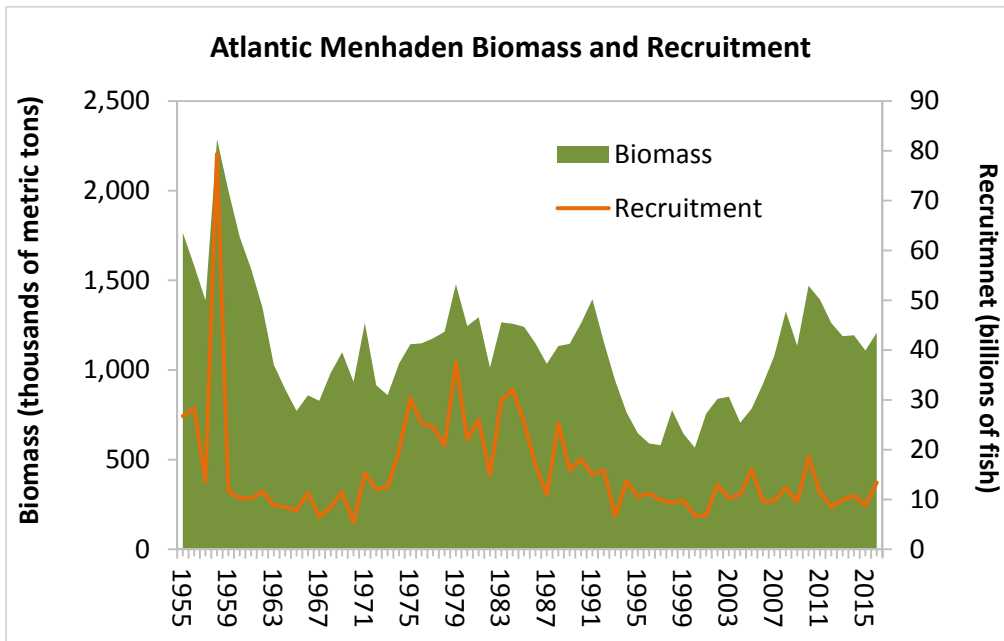
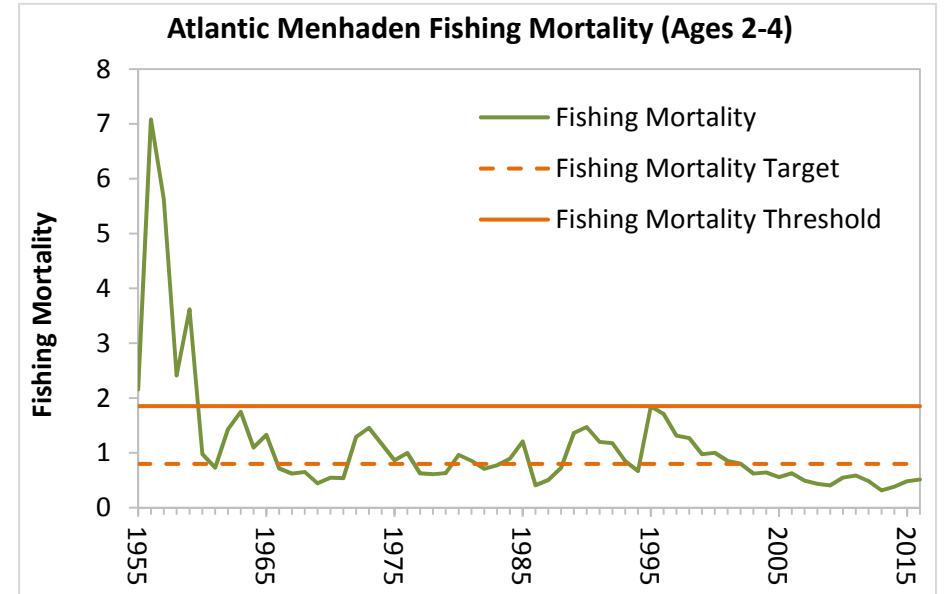
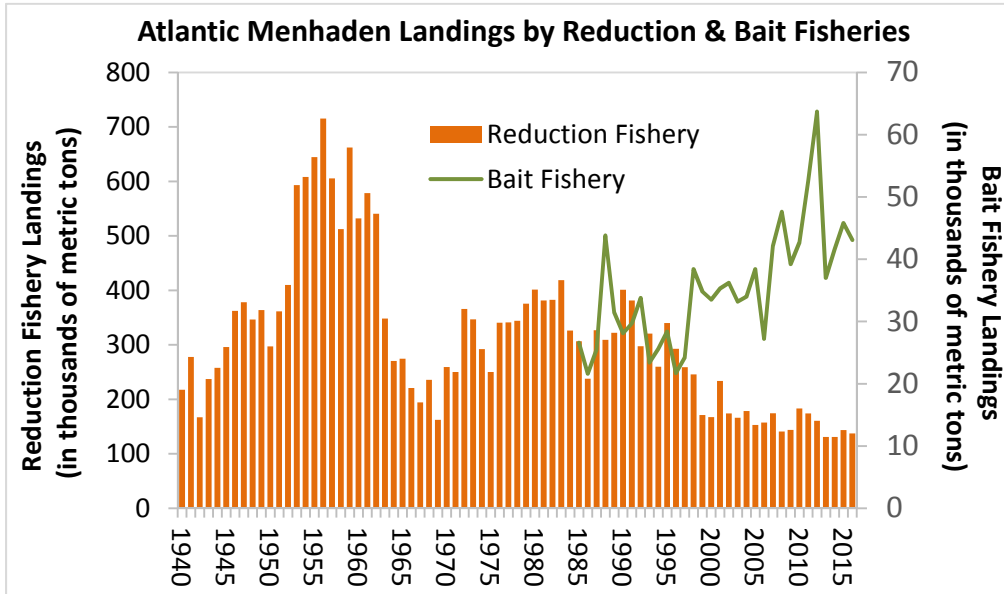


Primary Management Measures:

The annual catch limit (ACL) is determined based on the optimum yield of the coastal stock complex and divided between 4 management areas. Effort is controlled by selecting 'days out' of the fishery, on which fishermen cannot land more than a bycatch allowance of 2,000 lbs; area closures during spawning events; and closure of a directed fishery when 92% of the sub-quota is projected to be reached, and when 95% of the stockwide ACL is projected to be reached. The Section set specifications for the 2016-2018 fishing seasons through consultation with NEFMC.

Timeline of Management Actions: FMP (1993); Amendment 1 (1999); Amendment 2 (2006); Technical Addendum I (2006); Addendum I (2009); Addendum II (2010); Addendum V (2012); Addendum VI (2013); Amendment 3 (2016); Addendum I (2017)

Overview of Stock Status Atlantic Menhaden, *Brevoortia tyrannus*



Timeline of Management Actions: FMP (1981); FMP Revision (1991); Amendment 1 (2001); Addendum I (2004); Addendum II (2005); Addendum III (2006); Addendum IV (2009); Addendum V (2011); Amendment 2 (2012); Technical Addendum I (2013); Addendum I (2016); Amendment 3 (2017)

Overview of Stock Status Atlantic Menhaden, *Brevoortia tyrannus*

Management Considerations

Condition: Not overfished and not experiencing overfishing (2017 stock assessment update)

FMP Stock Rebuilding Goals:

Fecundity Target ($FEC_{36\%MSP}$) = 99,467 billion maturing or ripe eggs

Fecundity Threshold ($FEC_{21\%MSP}$) = 57,295 billion maturing or ripe eggs

Current Fecundity (2016) = 83,486 billion maturing or ripe eggs

Fishing Mortality Target ($F_{36\%MSP}$) = 0.8

Fishing Mortality Threshold ($F_{21\%MSP}$) = 1.85

Current Fishing Mortality (2013) = 0.51

FMP Status: Amendment 3, approved in November 2017, maintains the single-species biological reference points through 2019, and addresses a suite of commercial management measures, including allocation, quota transfers, quota rollovers, incidental catch, the episodic events set aside program, and the Chesapeake Bay reduction fishery cap. Amendment 3 also changes fishery allocations in order to strike an improved balance between gear types and jurisdictions. The Amendment allocates a baseline quota of 0.5% to each jurisdiction, and then allocates the rest of the TAC based on historic landings between 2009 and 2011 (see accompanying table). This measure provides fishing opportunities to states which currently have little quota while still recognizing historic landings in the fishery. The Board also agreed to maintain the quota transfer process, prohibit the rollover of unused quota, maintain the 6,000 lb trip limit for non-directed and small-scale gears following the closure of a directed fishery, and set aside 1% of the TAC for episodic events in the states of New York through Maine.

Primary Management Measures: The 2018 TAC is 216,000 MT in 2016. See accompanying table for state percent shares of the TAC. States must close their fisheries when the state-specific portion of the TAC has been reached.

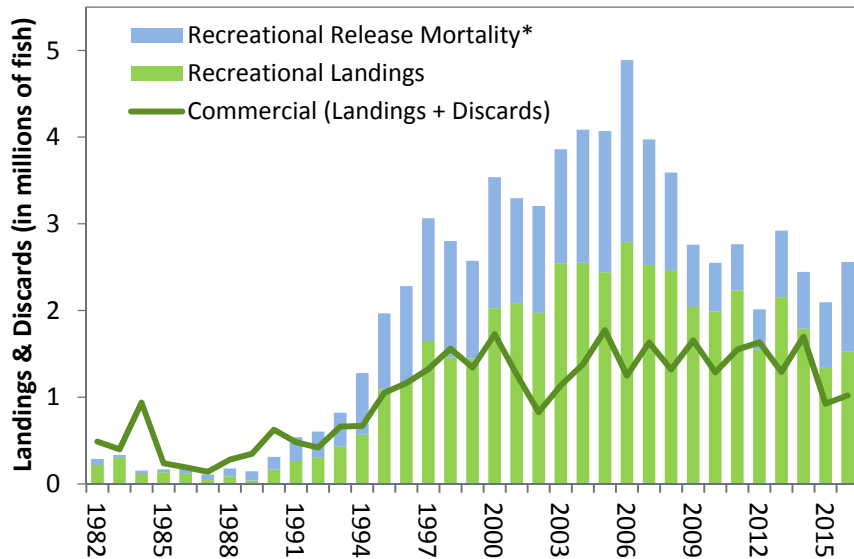
Amendment 3 Quota Allocations	
State	Allocations (%)
Maine	0.52%
New Hampshire	0.50%
Massachusetts	1.27%
Rhode Island	0.52%
Connecticut	0.52%
New York	0.69%
New Jersey	10.87%
Pennsylvania	0.50%
Delaware	0.51%
Maryland	1.89%
Potomac River Fisheries Commission	1.07%
Virginia	78.66%
North Carolina	0.96%
South Carolina	0.50%
Georgia	0.50%
Florida	0.52%
Total	100%

Timeline of Management Actions: FMP (1981); FMP Revision (1991); Amendment 1 (2001); Addendum I (2004); Addendum II (2005); Addendum III (2006); Addendum IV (2009); Addendum V (2011); Amendment 2 (2012); Technical Addendum I (2013); Addendum I (2016); Amendment 3 (2017)

Overview of Stock Status Atlantic Striped Bass, *Morone saxatilis*

Atlantic Striped Bass Commercial Landings and Discards & Recreational Landings and Release Mortality

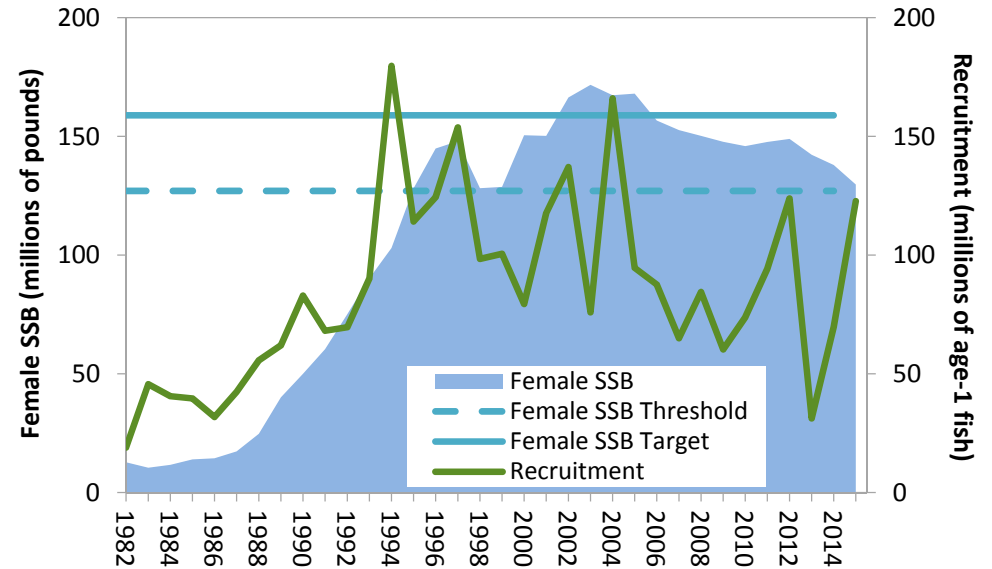
Source: ASMFC Atlantic Striped Bass Stock Assessment, 2016



*Recreational release mortality assumes that 9% of fish released alive die.

Atlantic Striped Bass Female Spawning Stock Biomass and Recruitment

Source: ASMFC Atlantic Striped Bass Stock Assessment, 2016



Timeline of Management Actions: FMP (1981); Amendment 6 (2003); Addendum I (2007); Addendum II (2010); Addendum III (2012); Addendum IV (2014)

Management Considerations

Condition: Not overfished and overfishing is not occurring.

FMP Stock Control Rules:

$SSB_{target} = 159$ million pounds

$F_{target} = 0.18$ (0.27 in Chesapeake Bay and Albemarle/Roanoke)

$SSB_{threshold} = 127$ million pounds

$F_{threshold} = 0.219$

$SSB = 129$ million pounds

$F = 0.16$

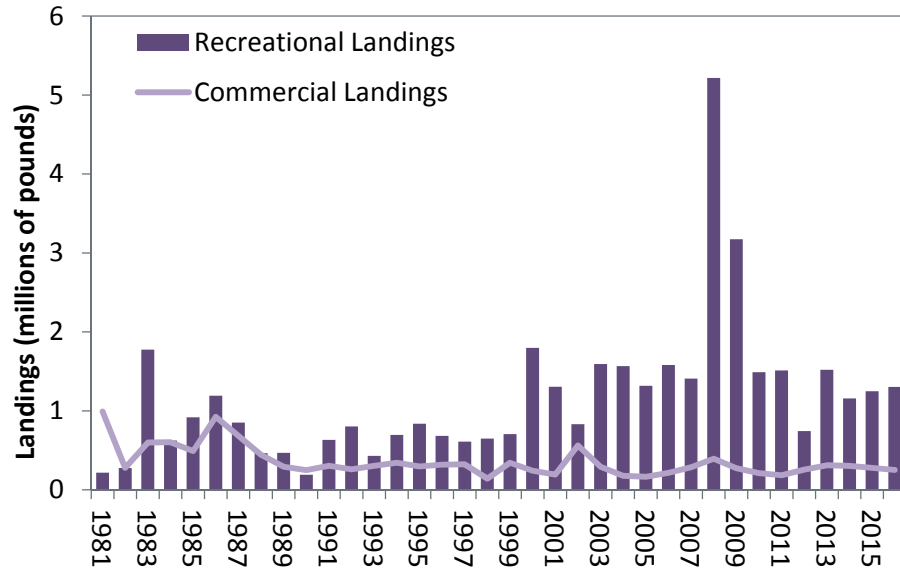
FMP Status: Amendment 6 (2003) established new biological reference points and triggers for Board action. Addendum I (2007) established a data collection program to increase accuracy of discard and discard mortality estimates and recommended an angler education program to reduce discard mortality. Addendum III (2012) established a mandatory commercial tagging program for all states and jurisdictions with commercial striped bass fisheries and recommended increasing penalties for illegally harvested fish. Addendum IV (2014) established new fishing mortality reference points. To reduce F to a level at or below the new target, Addendum IV required coastal states to implement a 25% harvest reduction from 2013 levels, and Chesapeake Bay states/jurisdictions to implement a 20.5% harvest reduction from 2012 levels.

Primary Management Measures: The commercial fishery is controlled through state-by-state quotas (for coastal and bay fisheries), minimum size limits, and seasons. The recreational fishery is managed through bag and size limits.

Overview of Stock Status Black Drum, *Pogonias cromis*

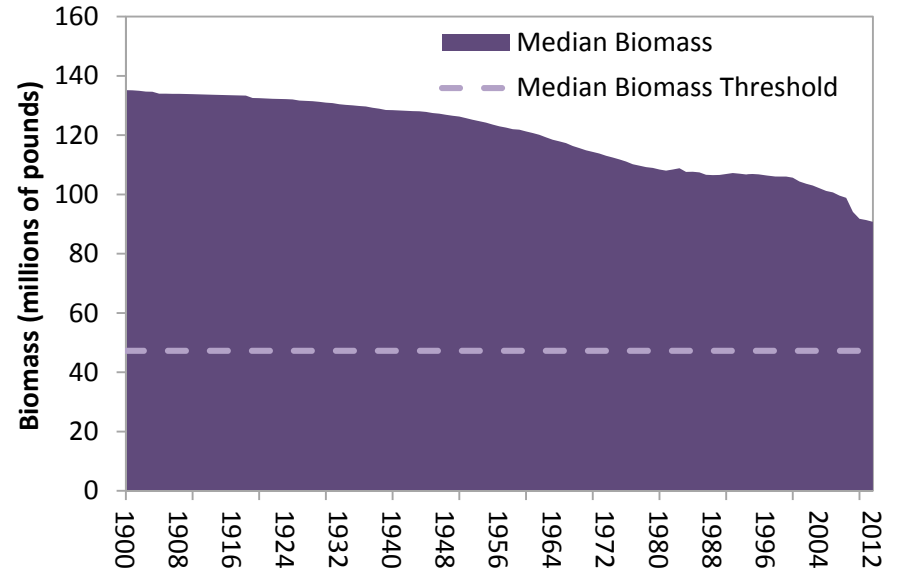
Black Drum Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2017



Black Drum Biomass

ASMFC Black Drum Benchmark Assessment, 2015



* 2016 data are preliminary

Management Considerations

Condition: Not overfished and not experiencing overfishing

FMP Stock Rebuilding Goals: None

FMP Rebuilding Schedule: None

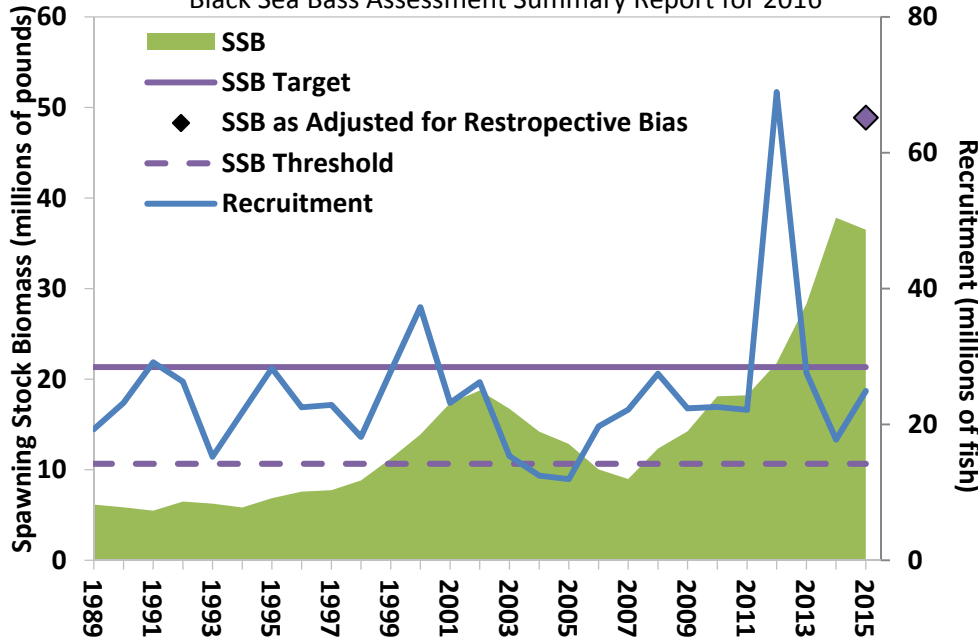
FMP Status: The South Atlantic State/Federal Fisheries Management Board approved the Black Drum FMP in June 2013.

Primary Management Measures: The FMP requires all states to maintain current regulations for black drum and to implement a maximum possession limit and a minimum size limit of no less than 14 inches. The FMP also establishes a management framework to address future concerns or changes in the fishery or population.

Overview of Stock Status Black Sea Bass, *Centropristis striata*

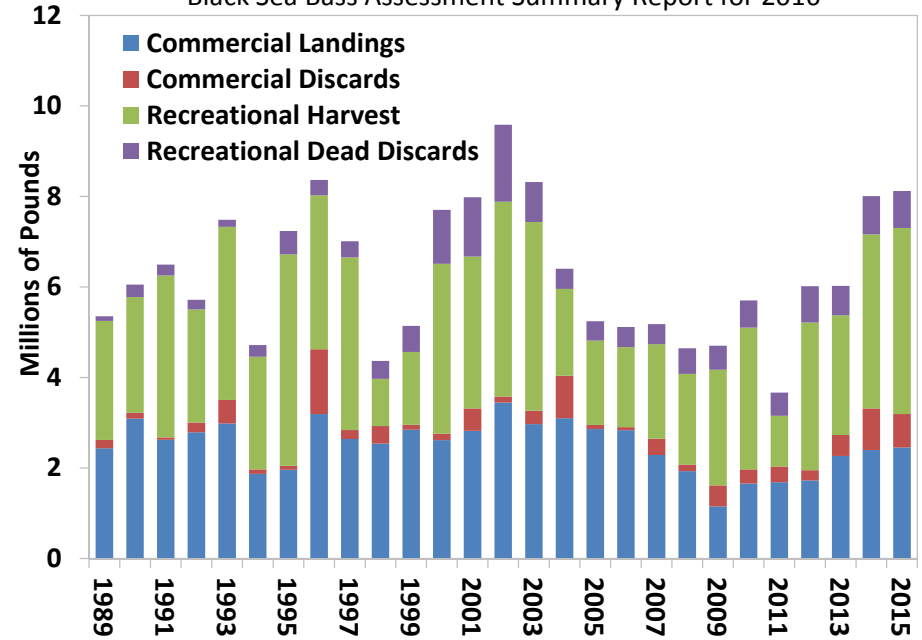
Black Sea Bass Spawning Stock Biomass and Recruitment

Source: 62nd Northeast Regional Stock Assessment Workshop
Black Sea Bass Assessment Summary Report for 2016



Black Sea Bass Fishery Removals

Source: 62nd Northeast Regional Stock Assessment Workshop for
Black Sea Bass Assessment Summary Report for 2016



Timeline of Management Actions: FMP ('96); Amendment 10 ('97); Amendment 11 ('98); Amendment 12 ('99); Amendment 13 ('02); Addenda XII & XIII ('04); Addendum XVI ('05); Addendum XIX ('07); Addendum XX ('09); Addendum XXI ('11); Addendum XXII ('12); Addendum XXIII ('13); Addendum XXV ('14); Addendum XXVII ('16); Addendum XXVIII ('17)

Management Considerations:

Condition: Although the resource was declared rebuilt in 2009, black sea bass' unique life history characteristics (e.g., the species changes sex from female to male) contributes to some level of uncertainty about the size of the stock and the species' response to exploitation. The 2016 assessment indicates the resource is neither overfished nor experiencing overfishing.

FMP Biological Reference Points:

SSB Target = 21 million pounds

SSB Threshold = 15 million pounds

Fishing Mortality Threshold = 0.44

Overview of Stock Status

Black Sea Bass, *Centropristis striata*

FMP Status:

Joint management with Mid-Atlantic Fishery Management Council (Council). Addendum XIII (2004) allows the TAL to be set up to three years in a given year. Addendum XIX (2007) sets the current state-by-state shares for the commercial fishery. Addendum XXII (2012) modifies the management measures for the 2012 recreational black sea bass fishery. Addenda XXVIII continues use of regional management measures for the recreational fishery. Draft Addendum XXX, approved for public comment in December 2017, considers regional management approaches for the recreational fishery, including options for regional allocation of the recreational harvest limit (RHL) based on historical harvest and exploitable biomass.

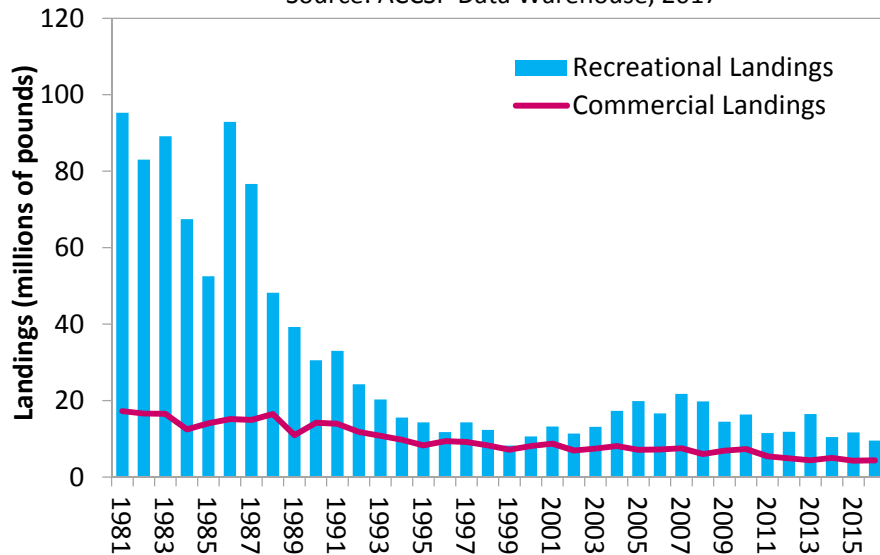
Primary Management Measures:

Annual total allowable landings (TAL) divided into a state-by-state commercial quota (49% of TAL) and recreational harvest limit (51% of TAL). Coastwide commercial management measures include minimum fish and mesh sizes, as well as pot/trap specifications. In 2011, the Commission and the MAFMC set state-by-state recreational regulations for the first time. The states of MA-NJ implement ad-hoc recreational management annually, while DE-NC adopt federal regulations.

Overview of Stock Status Bluefish, *Pomatomus saltatrix*

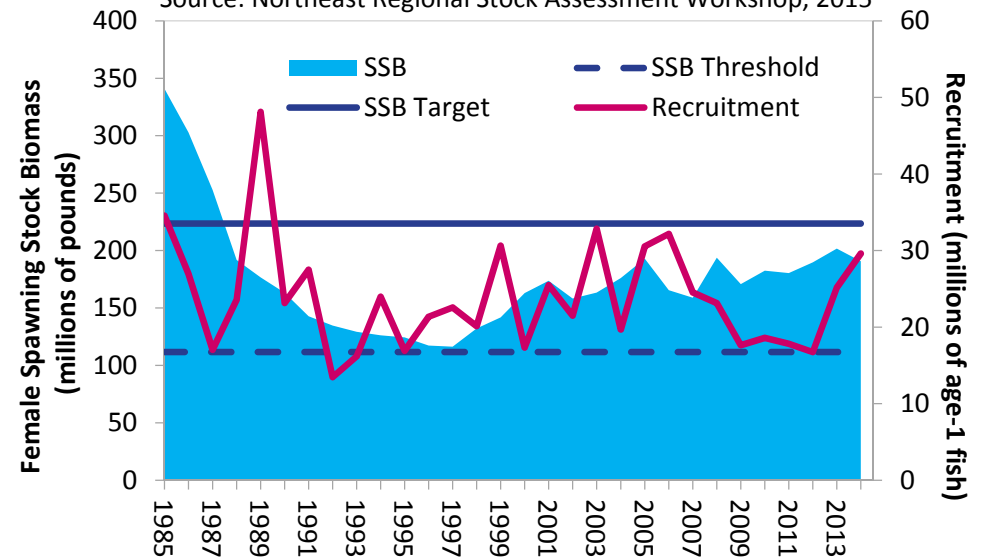
Bluefish Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2017



Bluefish Spawning Stock Biomass and Recruitment

Source: Northeast Regional Stock Assessment Workshop, 2015



Management Considerations

Condition: Rebuilt; not overfished and overfishing is not occurring

Biological Reference Points from SAW/SARC 60 (2015):

Spawning Stock Biomass threshold ($1/2 SSB_{MSY\ PROXY}$) = 112 million lbs

Spawning Stock Biomass target ($SSB_{MSY\ PROXY}$) = 223 million lbs

Spawning Stock Biomass₂₀₁₄ = 191 million lbs

Fishing Mortality Threshold ($F_{MSY\ PROXY} = F_{35\% SPR}$) = 0.19

Fishing Mortality₂₀₁₄ = 0.157

FMP Status:

Joint management with the Mid-Atlantic Fishery Management Council; FMP implemented in 1989, Amendment I in 1998. The last benchmark stock assessment was reviewed and approved by SAW/SARC in June 2015. Addendum I (2012) establishes a coastwide sampling program to improve the quantity and quality of information available for use in future bluefish stock assessments. In December 2017, ASMFC and MAFMC initiated a new amendment to review and possibly revise commercial/recreational allocation of the resource, as well as the distribution of the commercial quota among the states.

Primary Management Measures: Annual total allowable landings (TAL) are divided into a commercial quota (17% of TAL) and recreational harvest limit (83% of TAL). Commercial trip limits and seasons are determined on a state-by-state basis. The coastwide recreational bag limit is 15 fish.

Timeline of Management Actions: FMP (1980); Amendment 1 (1998); Addendum I (2012)

Overview of Stock Status

Coastal Sharks

Management Considerations

Condition: See accompanying table for stock status information by species and species group.

Timeline of Management Actions: FMP (2008); Addendum I (2000); Addenda II & III (2013); Addendum IV (2016)

Primary Management Measures

Commercial and recreational fishermen are prohibited from possessing silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead shark species from May 15 – July 15 from VA-NJ to protect pupping females. All fishermen, with the exception of commercial fishermen who land smooth dogfish, are required to keep fins attached to the carcass through landing. Addendum I modifies the FMP to allow commercial fishermen to process (remove the fins from) smooth dogfish at sea from March – June of each year but requires a 5-95% fin-to-carcass ratio for all dressed smooth dogfish carcasses. Addendum II modifies the FMP to allow commercial fishermen to process smooth dogfish year round but requires a 12-88% fin-to-carcass ratio. Addendum III updated species groupings to ensure consistency with NOAA Fisheries and increased the recreational size limit for hammerhead sharks. Addendum IV requires smooth dogfish carcasses to be landed with corresponding fins attached if the trip does not meet the 25% catch composition requirement.

Recreational fishermen are prohibited from harvesting any species that is illegal to land in federal waters. Recreational fishing is controlled through minimum size limits with a 6.5' fork length size limit for the hammerhead species group; and a 4.5' fork length size limit for all other species except for Atlantic sharpnose, finetooth, blacknose, smooth dogfish, and bonnethead which do not have size limits. In addition, recreational anglers can only harvest sharks caught with a handline or rod & reel.

Species or Complex	Stock Status		References/Comments
	Overfished	Overfishing	
Pelagic			
Porbeagle	Yes	No	Porbeagle Stock Assessment, ICCAT Standing Committee on Research and Statistics Report (2009); Rebuilding ends in 2108 (HMS Am. 2)
Blue	No	No	ICCAT Standing Committee on Research and Statistics Report (2015)
Shortfin Mako	No	No	ICCAT Standing Committee on Research and Statistics Report (2012)
All other	Unknown	Unknown	
Aggregated Large Coastal Sharks (LCS)			
Atlantic	Unknown	Unknown	SEDAR 11 (2006)
Aggregated Large Coastal Sharks	Unknown	Unknown	SEDAR 11 (2006); difficult to assess as a species complex due to various life history characteristics/ lack of available data
Non-Blacknose Small Coastal Sharks (SCS)			
Atlantic Sharpnose	No	No	SEDAR 34 (2013)
Bonnethead	Unknown	Unknown	SEDAR 34 (2013)
Finetooth	No	No	SEDAR 13 (2007)
Hammerhead			
Scalloped	Yes	Yes	SEFSC Scientific Review by Hayes et al. (2009) Hayes, et al. (2009): Rebuilding ends in 2023
Blacknose			
Blacknose	Yes	Yes	SEDAR 21 (2010); Rebuilding ends in 2043 (HMS Am. 5a)
Smoothhound			
Atlantic	No	No	SEDAR 39 (2015)
Research			
Sandbar	Yes	No	SEDAR 21 (2010)

Overview of Stock Status Coastal Sharks

The commercial fishery is managed based on MSY using quotas and possession limits to control harvest level and effort. Sharks are split into eight commercial species groups based on fisheries, biology, and stock status — prohibited, research, small coastal, blacknose, aggregated large coastal, hammerhead, pelagic, and smoothhound (see table for species by species grouping). ASMFC does not set quotas for the blacknose, hammerhead, SCS, LCS, or pelagic species groups but rather opens and closes the fishery in response to the federal quota. As of 2016, smooth dogfish are subject to the state-share allocation, developed under Addendum II. Fishing effort for the smoothhound, blacknose, hammerhead, SCS, LCS, and pelagic species groups is controlled through possession limits; fishermen may harvest species within these groups as long as the fishery is open and all sharks are caught according to the regulations contained in the FMP.

Commercial fishermen must have a general state commercial fishing license or permit to harvest sharks. Dealers are required to hold a federal Commercial Shark Dealer permit to buy and sell sharks. Federal dealer permits are required in order to monitor the quota as efficiently as possible and reduce the chance of quota overages. Fishermen may use handlines, gillnets, trawl nets, shortlines, pound nets/fish traps, and weirs to harvest sharks commercially. Captains and vessel owners must use circle hooks and attend a Protected Species Safe Handling, Release, and Identification Workshop offered by NOAA Fisheries in order to harvest sharks using shortlines.

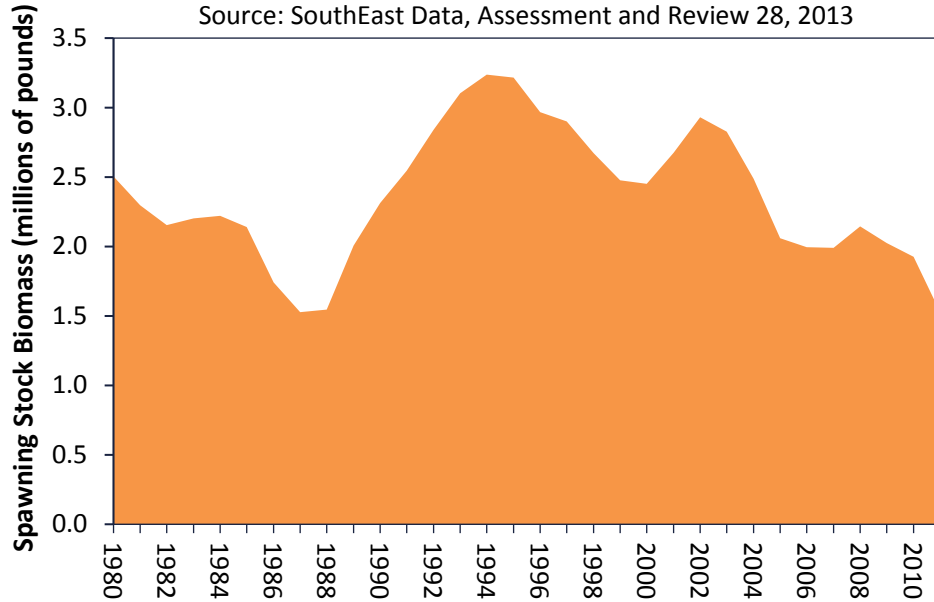
Prohibited			
Dusky	Yes	Yes	SEDAR 21 (2016); Rebuilding ends in 2107 (HMS Am. 5b)
Basking		No	Campana (2008)
Night		No	Carlson et al (2008)
Sand Tiger		No	Carlson et al (2008)
White		No	Curtis et al (2014)
Bigeye Thresher		No	Young et al (2016)
All other	Unknown	Unknown	

Coastal Shark Management Groups	
Species Group	Species within Group
Prohibited	Sand tiger, bigeye sand tiger, whale, basking, while, dusky, bignose, Galapagos, night, reef, narrowtooth, Caribbean sharpnose, smalltail, Atlantic angel, longfin mako, bigeye thresher, sharpnose sevengill, bluntnose sixgill, bigeye sixgill
Research	Sandbar
Non-blacknose Small Coastal	Atlantic sharpnose, finetooth, bonnethead
Blacknose	Blacknose
Aggregated Large Coastal	Silky, tiger, blacktip, spinner, bull, lemon, nurse
Hammerhead	Scalloped hammerhead, great hammerhead, smooth hammerhead
Pelagic	Shortfin mako, porbeagle, common thresher, oceanic whitetip, blue
Smoothhound	Smooth dogfish, Florida smoothhound

Overview of Stock Status *Cobia, *Rachycentron canadum**

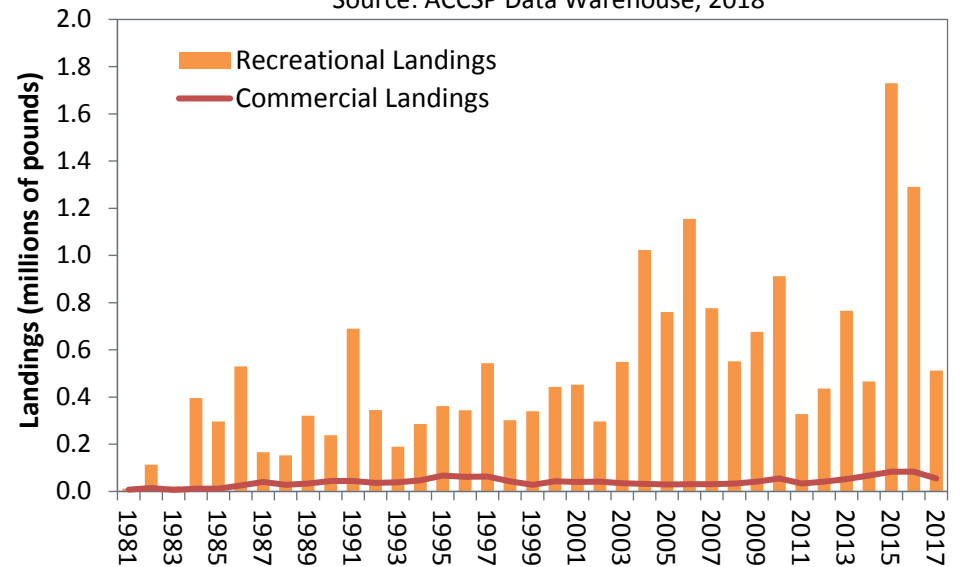
Cobia Atlantic Migratory Group Spawning Stock Biomass

Source: SouthEast Data, Assessment and Review 28, 2013



Cobia Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2018



Timeline of Management Measures: FMP (2017)

Management Considerations

Condition: Not overfished and overfishing not occurring

Stock Status:

Two cobia stocks are currently recognized off the Atlantic coast; the Atlantic Migratory Group (Atlantic cobia) occurring from New York to Georgia, and the Gulf of Mexico Migratory Group (Gulf cobia) occurring throughout the Gulf of Mexico and extending to Florida’s east coast. Annual catch limits (ACL) for the two stocks were established as a precautionary measure to prevent the stocks from reaching an overfished status. Spawning stock biomass has experienced general decline since 2002, and recreational landings have increased. Due to significant overages of the coastwide ACL in 2015 and 2016, resulting in federal closures, disrupting fishing opportunities, and jeopardizing the health of the stock, ASMFC approved an Interstate FMP for Atlantic cobia to be implemented for the 2018 fishery.

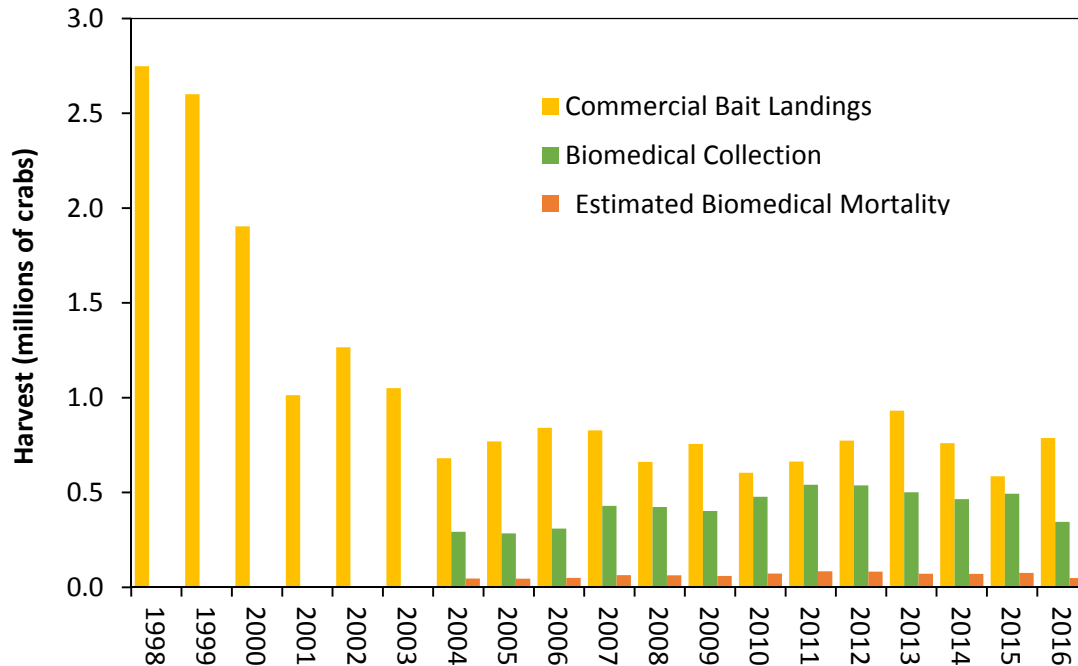
Primary Management Measures:

In June 2018, in response to the Commission’s request on transferring management authority, the South Atlantic and Gulf of Mexico Fishery Management Councils approved Amendment 31 to the Coastal Migratory Pelagic FMP for Secretarial approval. If approved by the Secretary of Commerce, the Amendment removes AMG cobia from the current federal management plan and transfers sole management responsibility of the resource to the Commission. In anticipation of this action, the South Atlantic Board has initiated an amendment to the Interstate FMP, which would reflect the transfer in management responsibility, modify the use of a federal ACL to manage the fishery, and recommend management measures to be implemented by NOAA Fisheries for federal waters.

Overview of Stock Status Horseshoe Crab, *Limulus polyphemus*

Horseshoe Crab Bait Landings and Biomedical Collection

ASMFC State Compliance Reports, 2017



Please note the following details regarding biomedical collection numbers:

- * Annually reported biomedical collection numbers include all crabs brought to bleeding facilities except those harvested as bait and counted against state quotas.
- * Most collected biomedical crabs are returned to the water after bleeding; a 15% mortality rate is estimated for all bled crabs.

Timeline of Management Actions: FMP (1998); Addendum I (2000); Addendum II (2001); Addendum III (2004); Addendum IV (2006); Addendum V (2008); Addendum VI (2010); Addendum VII (2012)

Management Considerations

Condition: Unknown

FMP Stock Rebuilding Goals & Schedule: None

Regional Trends in Horseshoe Abundance		
Source: ASMFC Horseshoe Crab Stock Assessment Update, 2013		
Region	Time series duration of longest dataset	Conclusion about population change
New England	1978 - 2008	Declined
New York	1987 - 2008	Declined
Delaware Bay	1988 - 2008	Increased
Southeast	1993 - 2009	Increased

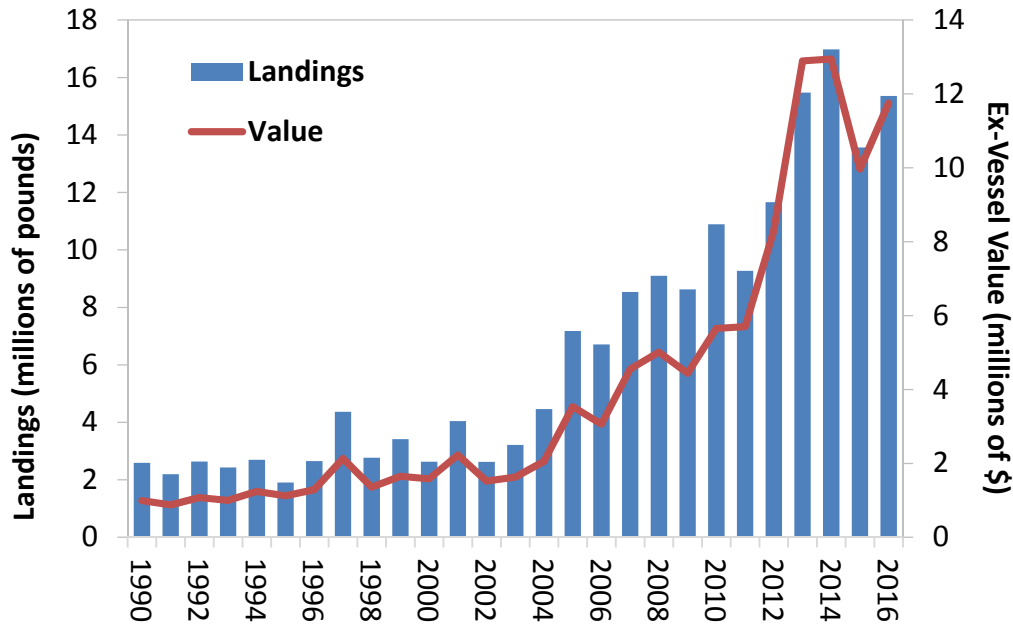
FMP Status: FMP approved in 1998. Addendum I (2000) required states to cap harvest at 25% below the 1995-1997 levels and encouraged retention of more restrictive measures. Addendum II (2001) allowed state-to-state quota transfers. Addendum III (2004) capped annual harvest in NJ and DE at 150,000 crabs/state and set MD’s annual quota at its 2001 landings level (170,653 crabs); these states also prohibited bait harvest and landings from May 1 to June 7. Addendum IV (2006) established a male-only harvest of up to 100,000 crabs annually from June 8 to December 31 through September 2008 in NJ and DE, and set an annual closed season in MD waters from January 1 through June 7 through 2008. Addendum IV further restricted VA’s ocean harvest to no more than 40% of its quota and required that the sex ratio of the harvest comprise at least 2 to 1 males to females. Its provisions were extended to April 2013 through Addenda V & VI. Addendum VII (2012) implements the Adaptive Resource Management (ARM) framework that incorporates both shorebird and horseshoe crab abundance levels when considering the optimized horseshoe crab harvest level for the Delaware Bay area.

Primary Management Measures: Using the ARM Framework, the Board approved a 500,000 male-only crab harvest for the 2013-2018 fishing seasons. The harvest limit is allocated by state quota to the states which harvest horseshoe crabs of Delaware Bay origin (NJ, DE, MD, and VA).

Overview of Stock Status Jonah Crab, *Cancer borealis*

Jonah Crab Landings and Ex-Vessel Value

Source: ACCSP Data Warehouse, 2017



Timeline of Management Actions: FMP ('15); Addendum I ('16); Addendum II ('17)

Management Considerations:

Condition: Unknown

FMP Stock Rebuilding Goals: None.

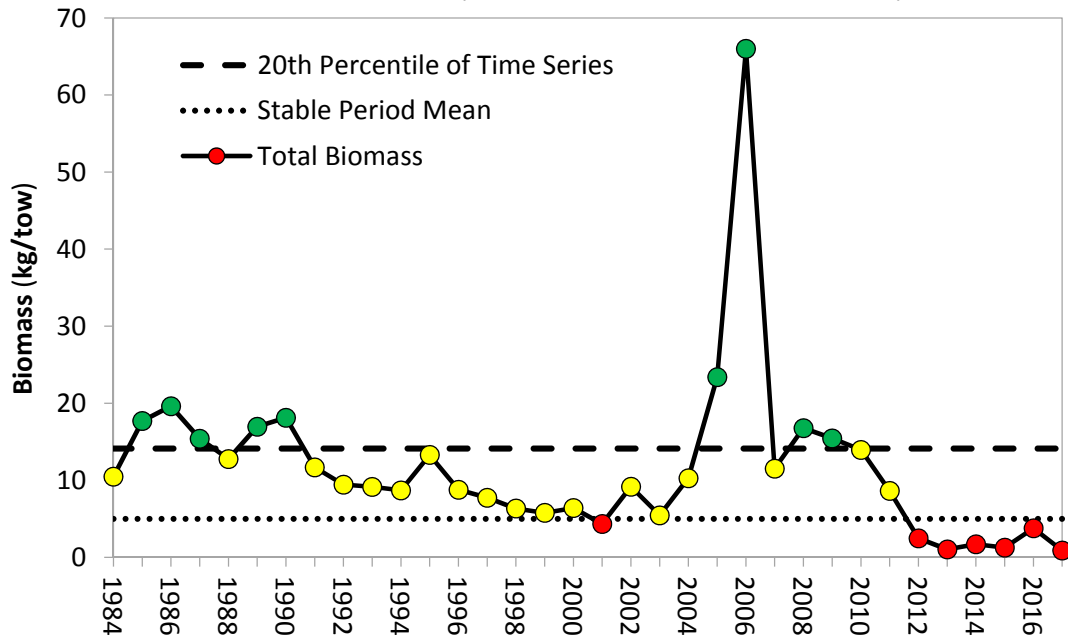
FMP Status: The goals of the Interstate FMP (approved by the American Lobster Management Board in August 2015) are to promote conservation, reduce the possibility of recruitment failure, and allow full utilization of the resource by the industry. The plan lays out specific management measures in the commercial fishery, including a 4.75" minimum size with zero tolerance and a prohibition on the retention of egg-bearing females. The FMP also specifies the fishery be strictly whole crab except for those individuals who can prove a history of claw landings in the states of New Jersey through Virginia. To prevent the fishery from being open access, the FMP states that participation in the trap fishery is limited to lobster permit holders or those who can prove a history of crab-only pot fishing. All others must obtain an incidental permit. In the recreational fishery, the FMP sets a possession limit of 50 whole crabs per person per day and prohibits the retention of egg-bearing females. To address a lack of data on the Jonah crab fishery, the FMP implements fishery-dependent data collection. The Plan requires both harvester and dealer reporting along with port and sea sampling.

Addendum I, approved in May 2016, establishes a bycatch limit of 1,000 crabs per trip for non-trap and non-lobster trap gear. In doing so, the Addendum caps incidental landings of Jonah crab across all non-directed gear types with a uniform bycatch allowance.

Overview of Stock Status Northern Shrimp, *Pandalus borealis*

Total Biomass of Northern Shrimp from the Gulf of Maine Summer Shrimp Survey

Source: Stock Status Report for Gulf of Maine Northern Shrimp, 2017



The graph represents the annual biomass index relative to the reference period (dotted line) and to the 20th percentile of the time series (dashed line). The reference period (1985-1994) is the time period during which the fishery experienced stable landings and value. Green dots are values that are equal to or above the stable period mean (SPM); red dots are values that are equal to or below the 20th percentile of the time series; yellow dots are values between the SPM and the 20th percentile.

Timeline of Management Actions: FMP (1986); Amendment 1 (2004); Amendment 2 (2011); Addendum I (2012); Amendment 3 (2017)

Management Considerations:

Condition: Abundance and biomass indices lowest on record; recruitment indices also very low

FMP Stock Rebuilding Goals:

Fishing Mortality Target = 0.38

Fishing Mortality Threshold = 0.48

FMP Rebuilding Schedule: None. Management action triggered when fishing mortality exceeds $F = 0.48$ or biomass falls below threshold.

FMP Status:

Amendment 3 is designed to improve management of the northern shrimp resource in the event the fishery reopens. The Amendment refines the FMP objectives and provides the flexibility to use the best available information to define the status of the stock and set the total allowable catch (TAC). Additionally, it implements a state-specific allocation program to better manage effort in the fishery; 80% of the annual TAC will be allocated to Maine, 10% to New Hampshire, and 10% to Massachusetts; however, the Section anticipates exploring alternative measures through the adaptive management process that would allow states to modify allocation between gear types on an annual basis.

A moratorium was instituted for the 2014-2018 fishing seasons to protect the remaining spawning population and reduce pressure on the collapsed stock.

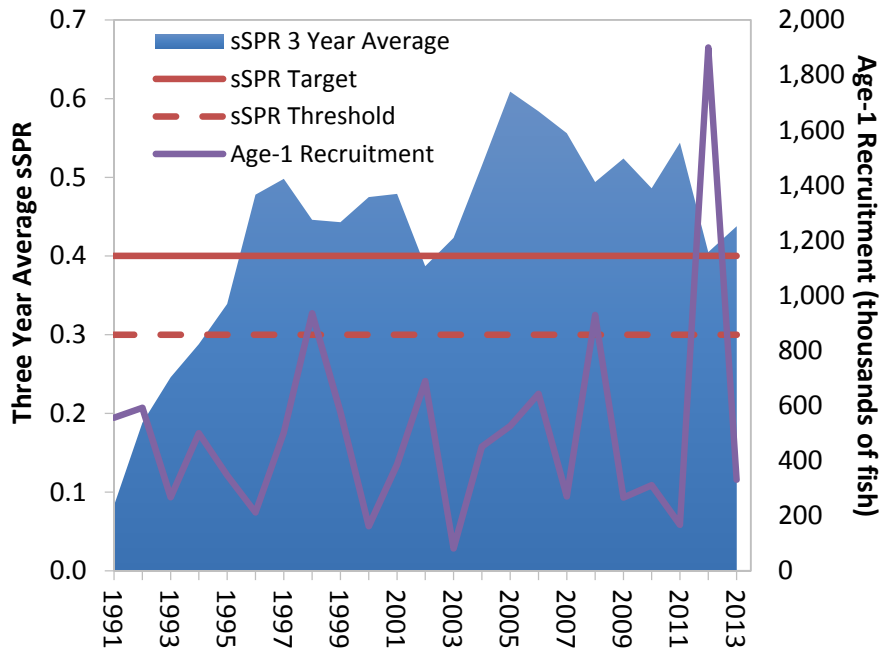
Primary Management Measures:

Fishery specifications are set annually and primarily consist of seasonal closures, gear restrictions, and catch controls.

Overview of Stock Status Red Drum, *Sciaenops ocellatus*

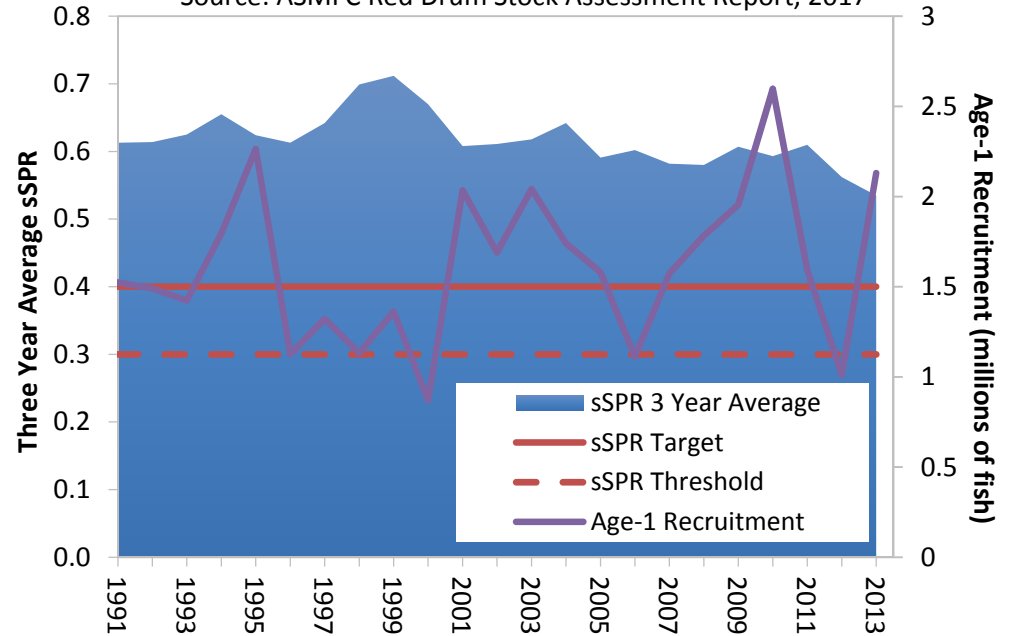
Red Drum Northern Stock 3-Year Average sSPR & Age -1 Recruitment

Source: ASMFC Red Drum Stock Assessment Report, 2017



Red Drum Southern Stock Three Year Average Static Spawning Potential Ratio (sSPR) & Age-1 Recruitment

Source: ASMFC Red Drum Stock Assessment Report, 2017



Timeline of Management Actions: FMP (1984); Amendment 1 (1991); and Amendment 2 (2002); Addendum I (2013)

Management Considerations

Condition: Northern (NJ-NC) and southern (SC-FL) stocks are assessed separately. Overfishing is not occurring in either stock, and no overfished status could be estimated due to data limitations on older fish.

FMP Stock Rebuilding Goals:

Fishing Mortality Threshold = F at 30% static spawning potential ratio (SPR)

Fishing Mortality Target = F at 40% static SPR

FMP Rebuilding Schedule: None

FMP Status: SAFMC transferred management authority of red drum through Amendment 2, which aims to achieve a sufficient escapement rate and restore the age and size structure of the Atlantic coast population. Addendum I outlines habitat needs and concerns of the species.

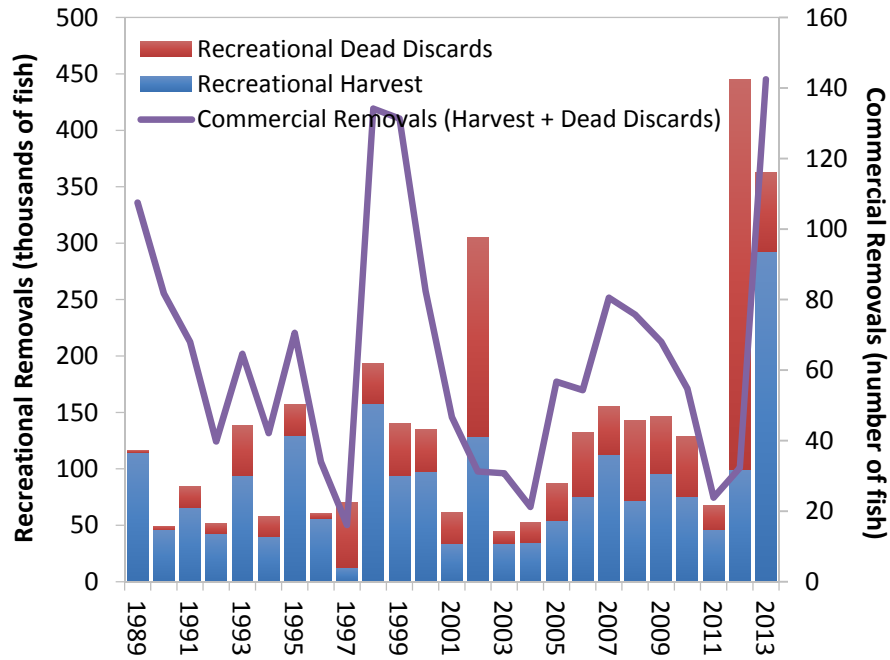
Overview of Stock Status Red Drum, *Sciaenops ocellatus*

Primary Management Measures:

All states have implemented recreational bag and size limits to attain the management goal of 40% SPR, including a maximum total length of 27 inches for all fisheries. States must maintain current or more restrictive commercial fishery regulations.

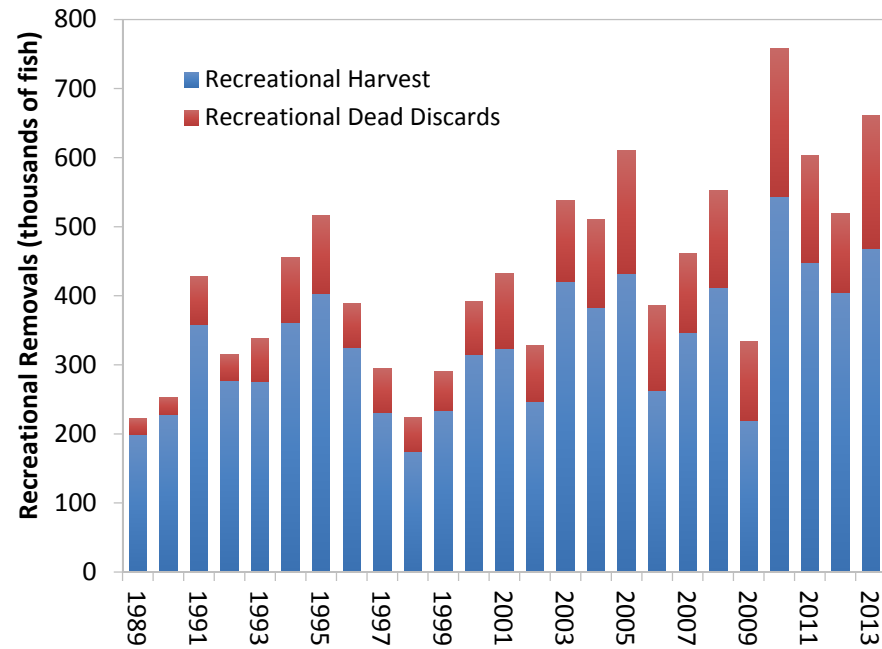
Red Drum Northern Stock Fishery Removals

Source: ASMFC Red Drum Stock Assessment Report, 2017



Red Drum Southern Stock Fishery Removals

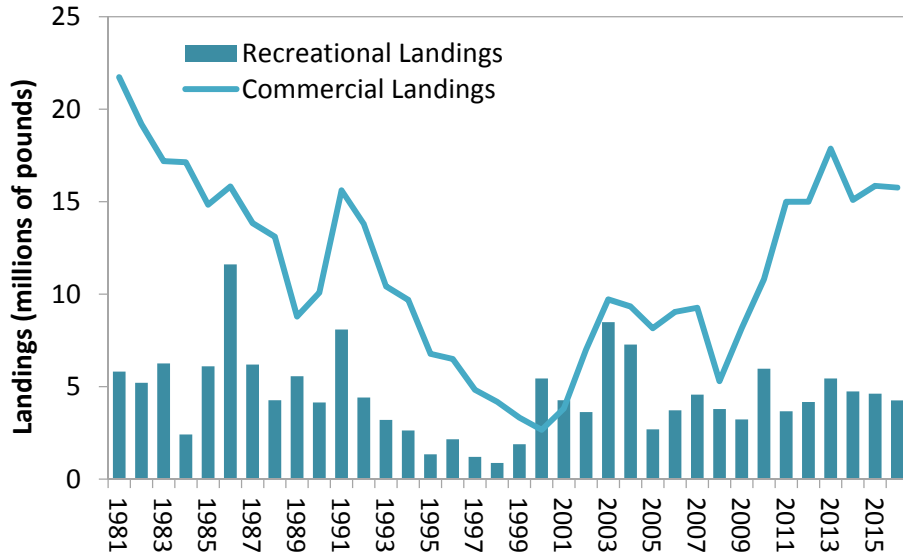
Source: ASMFC Red Drum Stock Assessment Report, 2017



Overview of Stock Status Scup, *Stenotomus chrysops*

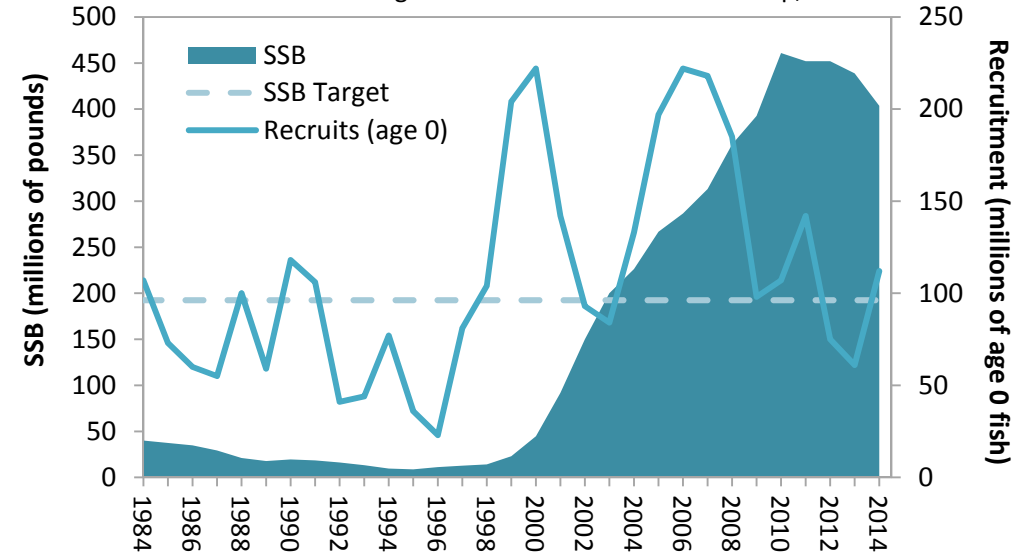
Scup Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2017



Scup Spawning Stock Biomass (SSB) and Recruitment

Source: Northeast Regional Stock Assessment Workshop, 2015



Timeline of Management Actions: FMP (1996); Amendment 13 (2002); Addendum IX (2003); Addenda XI & XIII (2004); Addendum XVI (2005); Amendment 14 (2007); Addendum XX (2009); Addendum XXIX (2017)

Management Considerations:

Condition: Rebuilt; overfishing not occurring.

Biological Reference Points from SAW/SARC 60 (2015):

Spawning Stock Biomass threshold ($1/2 SSB_{MSY\ PROXY}$) = 96.23 million pounds

Spawning Stock Biomass target = $SSB_{MSY} = SSB_{40\%} = 192.47$ million pounds

Spawning Stock Biomass₂₀₁₄ = 403.6 million pounds

Fishing Mortality Threshold ($F_{MSY\ PROXY} = F_{40\%}$) = 0.220

Fishing Mortality₂₀₁₄ = 0.127

FMP Status:

Joint management with MAFMC through Amendment 13 (2002). Addendum XIII (2004) allows TALs to be set for up to 3 years without annual review. Amendment 14 (2007) set a rebuilding plan for scup. Addendum XX (2009) provides commercial quota transfer provisions in the summer months. Addendum XXIX (2017) shortens the length of the commercial scup summer period and extends the length of the winter II period.

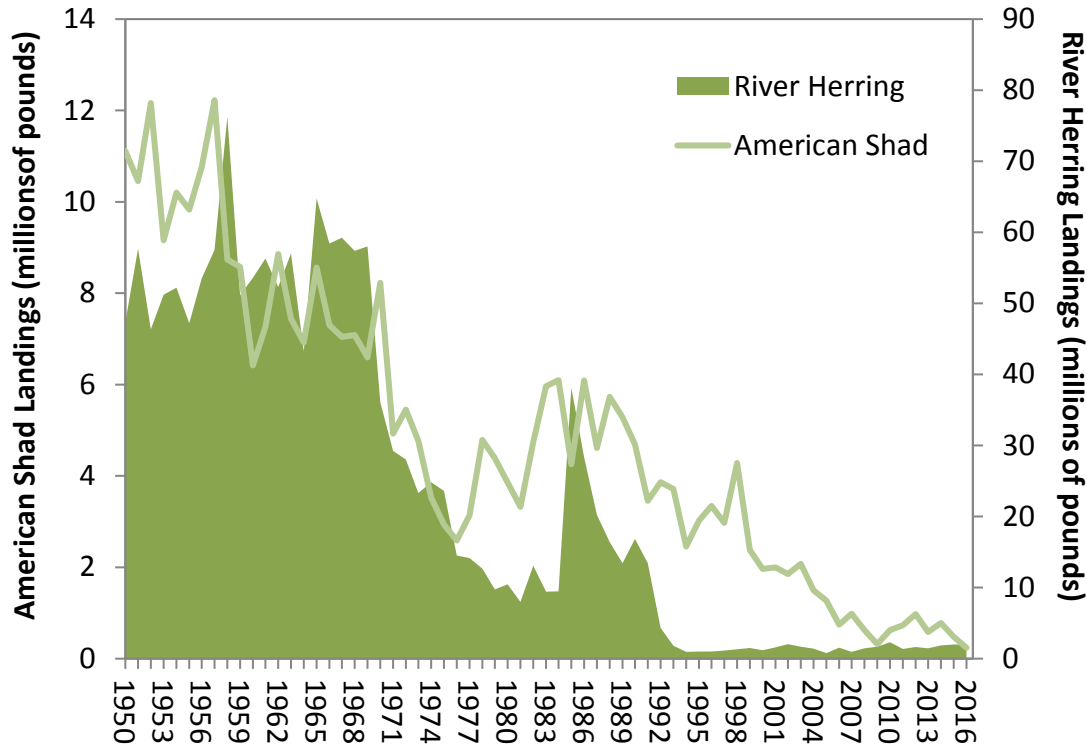
Primary Management Measures:

Total annual quotas are divided between the recreational fishery (22%) and the commercial fishery (78%). Recreational fishery management measures are developed annually and include a combination of minimum size limits, bag limits, and fishing seasons. A coastwide quota regulates the winter period (October-April), while state-by-state quotas regulate the summer period (May-September). Specific management measures for the commercial fishery include minimum size limits, minimum mesh requirements for trawls, and closed seasons.

Overview of Stock Status Shad & River Herring

American Shad & River Herring Commercial Landings

Source: ASMFC Compliance Reports 2017



* 2016 data are preliminary

Timeline of Management Actions: FMP (1985); Amendment 1 (1999); Amendment 2 – River Herring (2009); Amendment 3 – American Shad (2010)

Management Considerations:

Condition: Depleted on a coastwide basis, overfishing status unknown

FMP Stock Rebuilding Goals: Protect, enhance, and restore East Coast migratory spawning stocks of American shad, hickory shad, and river herring in order to achieve stock restoration and maintain sustainable levels of spawning stock biomass.

FMP Rebuilding Schedule: None.

FMP Status: Amendments 2 (River Herring Management) & 3 (American Shad Management) establish 2012 and 2013 moratoria unless sustainability can be documented.

Primary Management Measures:

Shad - Amendment 3 establishes a 2013 moratorium unless sustainability can be documented. Commercial ocean-intercept fishery for American shad is closed. Limited ocean bycatch of American shad is permitted. All jurisdictions shall not exceed an aggregate 10 fish daily creel limit in the recreational fisheries for hickory shad.

River Herring – Amendment 2 establishes a 2012 moratorium unless sustainability can be documented.

Trends in Stock Status of American Shad Populations from the 2007 and 1998 Benchmark Assessments. A “?” indicates either insufficient data or various data analyses gave conflicting indications of trend.

Source: ASMFC American Shad Stock Assessment Report, 2007

State	River	2007 Status Trend	1998 Status Trend
ME	Merrymeeting Bay	Declining	
	Kennebec		
	Androscoggin		
	Saco		
NH	Exeter	Declining	
MA	Merrimack	Stable	Stable
RI	Pawcatuck	Declining	Stable
CT & MA	Connecticut	Stable	Stable
NY	Hudson	Declining	Declining
NY, PA, NJ, DE	Delaware River & Bay	Stable	Stable
MD	Nanticoke	Stable	Increasing
PA & MD	Susquehanna River & Flats	Declining	
MD, DC, VA	Potomac	Increasing	
VA	York	Increasing	Declining
	James	Declining	Stable
	Rappahannock	Stable	Stable
NC	Albemarle Sound	Stable	
	Roanoke	Stable	
	Tar-Pamlico	?	
	Neuse	?	
	Cape Fear	?	
SC	Winyah Bay	Stable	
	Waccamaw	?	
	Great Pee Dee	?	
	Santee	?	Increasing
	Cooper	Stable	
	Combahee	?	
	Edisto	Declining	Stable
SC & GA	Savannah	Stable	
GA	Altamaha (+ Ocmulgee)	Declining	Increasing
	Ogeechee		
FL	St. Johns	Stable	

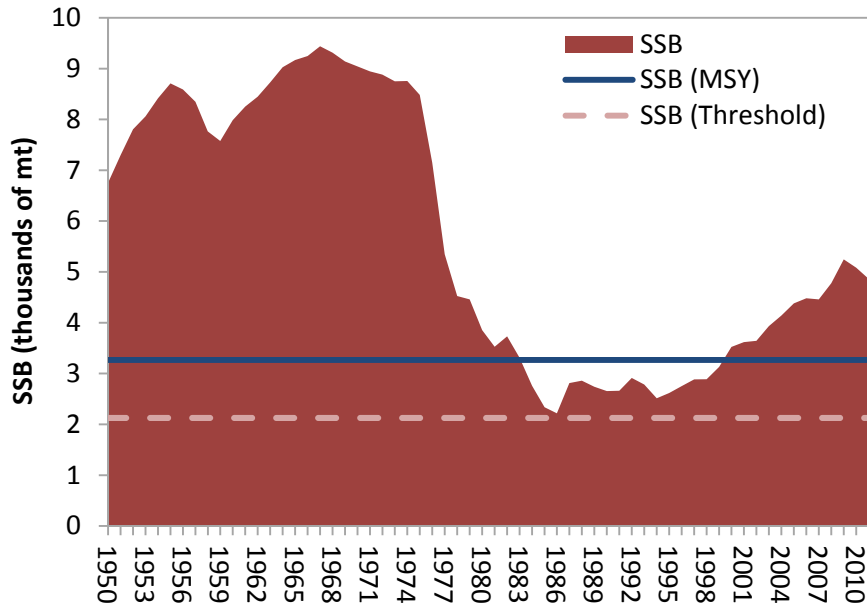
State	River	Benchmark Trends (2001-2010)	Updated Recent Trends (2006-2015)
NE U.S. Continental Shelf (NMFS Bottom Trawl)^		NA	Increasing ^{A,B}
ME	Androscoggin	Unknown ^A	Increasing ^A
	Kennebec	Unknown ^{RH}	Increasing ^{RH}
	Sebasticook	Unknown ^A	Increasing ^{RH}
	Damariscotta	Stable ^A	Increasing ^A
	Union	Stable ^A	No Trend ^A
NH	Cocheco	Stable ^{A,B}	Increasing ^{A,B}
	Exeter	Unknown ^{A,B}	Stable ^{RH}
	Lamprey	Increasing ^A	Increasing ^{RH}
	Oyster	Stable ^B	Decreasing ^{RH}
	Taylor	Decreasing ^B	No Returns ^{RH}
	Winnicut	Unknown ^{A,B}	Unknown ^{A,B}
MA	Mattapoissett	Unknown ^A	Increasing ^A
	Monument	Unknown ^A	Increasing ^{A,B}
	Nemasket	Unknown ^A	Increasing ^A
	Parker	Unknown ^A	Stable ^A
	Stony Brook	Unknown ^A	Unknown ^A
RI	Buckeye	Unknown ^A	Increasing ^A
	Gilbert	Decreasing ^A	Stable ^A
	Nonquit	Decreasing ^A	Decrease ^A
CT	Bride Brook	Unknown ^A	Increasing ^A
	Connecticut	Decreasing ^B	Stable ^B
	Farmington	Unknown ^{A,B}	Unknown ^{A,B}
	Mianus	Unknown ^{A,B}	No Trend ^A , Increasing ^B
	Mill Brook	Unknown ^A	No Trend ^A
	Naugatuck	Unknown ^{A,B}	Unknown ^{A,B}
	Shetucket	Unknown ^{A,B}	No Trend ^A , Stable ^B
NY	Hudson	Stable ^{A,B}	Increasing ^{RH}
NJ, DE,PA	Delaware	Unknown ^{A,B}	No Trend ^{A,B}
MD, DE	Nanticoke	Decreasing ^{A,B}	Stable ^A , No Trend ^B
VA, MD, DC	Potomac	Unknown ^{A,B}	Stable ^A , Unknown ^B
VA	James	Unknown ^{A,B}	Unknown ^{A,B}
	Rappahannock	Unknown ^{A,B}	No Trend ^A , Increasing ^B
	York	Unknown ^{A,B}	Unknown ^{A,B}
NC	Alligator	Unknown ^{A,B}	Unknown ^{A,B}
	Chowan	Stable ^{A,B}	No Trend ^A , Stable ^B
	Scuppernog	Unknown ^{A,B}	Unknown ^{A,B}
SC	Santee-Cooper	Increasing ^B	No Trend ^B
FL	St. Johns River	NA	Unknown ^B

Abundance trends of select alewife and blueback herring stocks along the Atlantic coast from the 2012 benchmark assessment and the 2017 assessment update. ^NE shelf trends are from the spring, coastwide survey data which encounters river herring more frequently than the fall survey. A = Alewife only; B= Blueback herring only; A,B = Alewife and blueback herring by species; RH = alewife and blueback herring combined.

Overview of Stock Status Spanish Mackerel, *Scomberomorus maculatus*

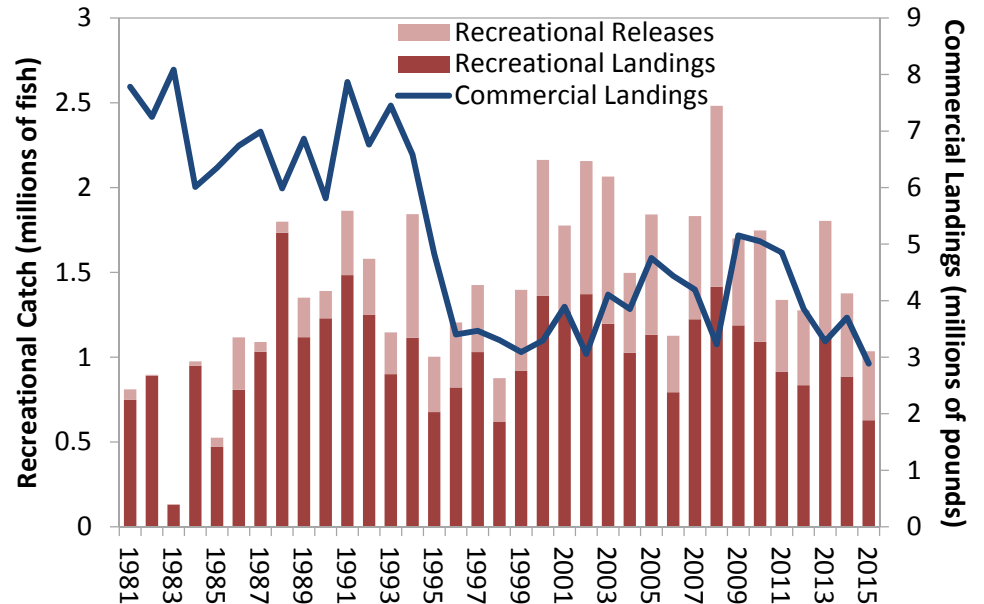
Spanish Mackerel Spawning Stock Biomass (SSB)

Source: SouthEast Data, Assessment, and Review, 2012



Spanish Mackerel Commercial Landings and Recreational Catch

Source: ACCSP Data Warehouse, 2017



Management Considerations:

Condition: Rebuilt; Not overfished and overfishing is not occurring

FMP Stock Rebuilding Goals: Biomass threshold = $(1-M) * B_{MSY}$

Fishing mortality threshold = $F_{30\%SPR}$

FMP Status:

Complementary management with the SAFMC; FMP approved in 1990. The Omnibus Amendment to the FMPs for Spanish Mackerel, Spot, and Spotted Seatrout (2011) updates the Spanish Mackerel FMP with compliance measures and Commission standards, as well as modifies the Commission's management program to be consistent with federal management in the exclusive economic zone. The plan also provides mechanisms to review and track federal management changes. Addendum I (2013) modifies minimum size for select gear types and seasons.

Primary Management Measures:

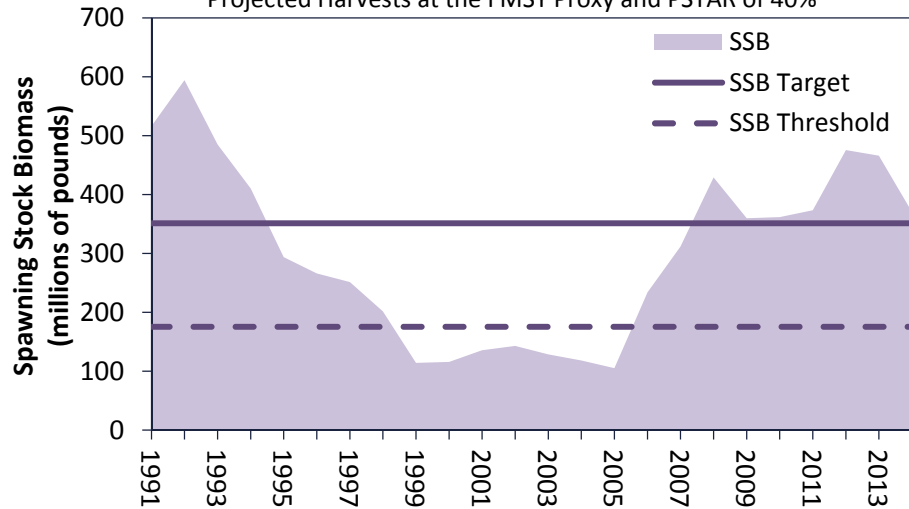
The annual catch limit (ACL) was set at 5.29 million pounds in the most recent Amendment 18 to the Federal FMP. The ACL is allocated on a 55/45 basis between the commercial and recreational fisheries. The commercial fishery is controlled mainly through an annual quota and trip limits, while the recreational fishery is primarily managed through a maximum bag limit of 15 fish and at least a minimum size limit of 12" fork length (between NY and FL and consistent with federal measures) or 14" total length. In addition, both Amendment 18 and the Omnibus Amendment include accountability measures for payback of overages if the total ACL is exceeded and the stock is overfished.

Timeline of Management Actions: FMP (1990); Omnibus Amendment (2011); Addendum I (2013)

Overview of Stock Status Spiny Dogfish, *Squalus acanthias*

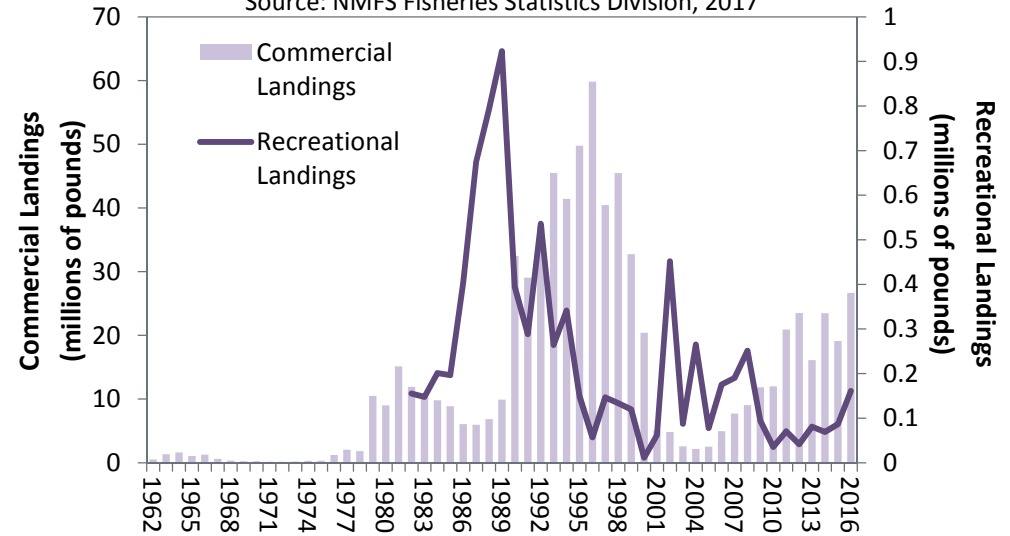
Spiny Dogfish Spawning Stock Biomass (SSB) (≥ 80 cm)

Source: NEFSC Update on the Status of Spiny Dogfish in 2015 and Projected Harvests at the FMSY Proxy and PSTAR of 40%



Spiny Dogfish Commercial & Recreational Landings

Source: NMFS Fisheries Statistics Division, 2017



Timeline of Management Actions: Emergency Action ('00); FMP ('03); Addendum I ('05); Addendum II ('08); Addendum III ('11), Addendum IV ('12); Addendum V ('14)

Management Considerations

Condition: Rebuilt; not overfished and overfishing is not occurring

FMP Reference Points:

Female SSB threshold (1/2 SSB max) = 79,644 mt (175 million pounds)

Female SSB target (100% SSB max) = 159,288 mt (351 million pounds)

Spiny dogfish were determined to be rebuilt in 2008. SSB is estimated to be 370 million pounds. The revised 2015 stock assessment update indicates spiny dogfish are not overfished and not experiencing overfishing. Spawning stock biomass is estimated to be at 106% of the target.

Fishing Mortality Threshold ($F_{\text{threshold}}$) = 0.325

Fishing Mortality Target (F_{MSY}) = 0.207

FMP Status:

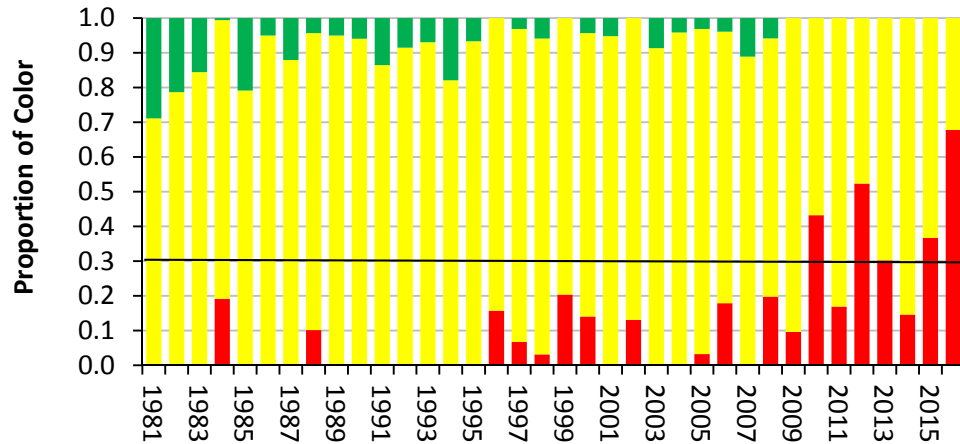
The 2002 FMP established the annual quota and possession limit system; Addendum I (2005) allowed the Board to set multi-year specifications; Addendum II (2008) established regional allocation of the annual quota with 58% to states from ME – CT; Addendum III established state shares for New York – North Carolina; Addendum IV (2012) aligned the fishing mortality threshold definition with the federal plan; and Addendum V (2014) prohibits processing at-sea, including the removal of fins.

Primary Management Measures:

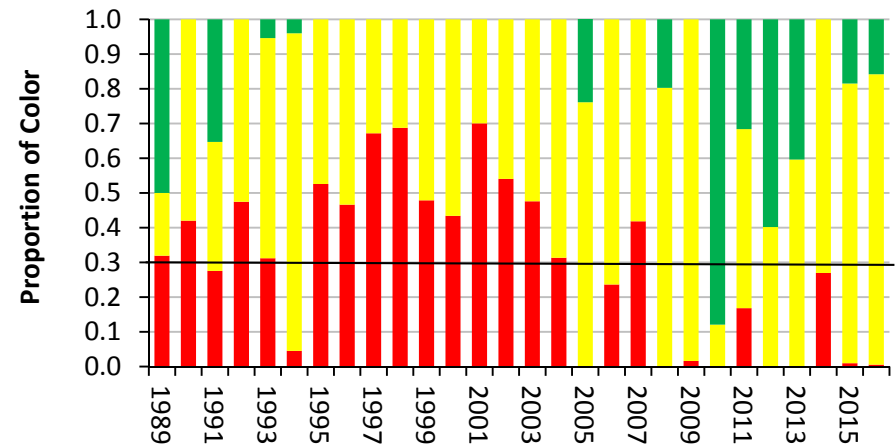
Spiny dogfish is managed under an annual quota with possession limits for the commercial fishery only. The ASMFC Spiny Dogfish Board approved a 40.3 million pound quota for 2016/2017 (May 1-April 30), and a 2017/2018 quota of 39.1 million pounds, with a maximum possession limit of 6,000 pounds per day for the northern region states (ME-CT).

Overview of Stock Status Spot, *Leiostomus xanthurus*

**Spot TLA Harvest Metric
(Commercial and Recreational Landings)**



**Spot TLA Adult Abundance Metric
(NMFS and SEAMAP Surveys)**



Management response is triggered when proportion of red exceeds the 30% threshold level for two consecutive years in both fishery characteristics (landings and fishery-independent survey indices).

Management Considerations

Condition: Unknown; the 2016 TLA shows red proportions of greater than the 30% threshold for the harvest metric and 0% for the abundance metric, indicative of relatively low harvest and high abundance in 2016. Since thresholds were not exceeded for both metrics over the last two years, no management response is necessary for spot.

FMP Stock Rebuilding Goals and Rebuilding Schedule: None

FMP Status: FMP approved in 1987. The Omnibus Amendment to the FMPs for Spanish Mackerel, Spot, and Spotted Seatrout (2011) updates the Spot FMP with compliance measures and Commission standards that were developed in response to the Atlantic Coastal Fisheries Cooperative Management Act (e.g., adaptive management, *de minimis* criteria).

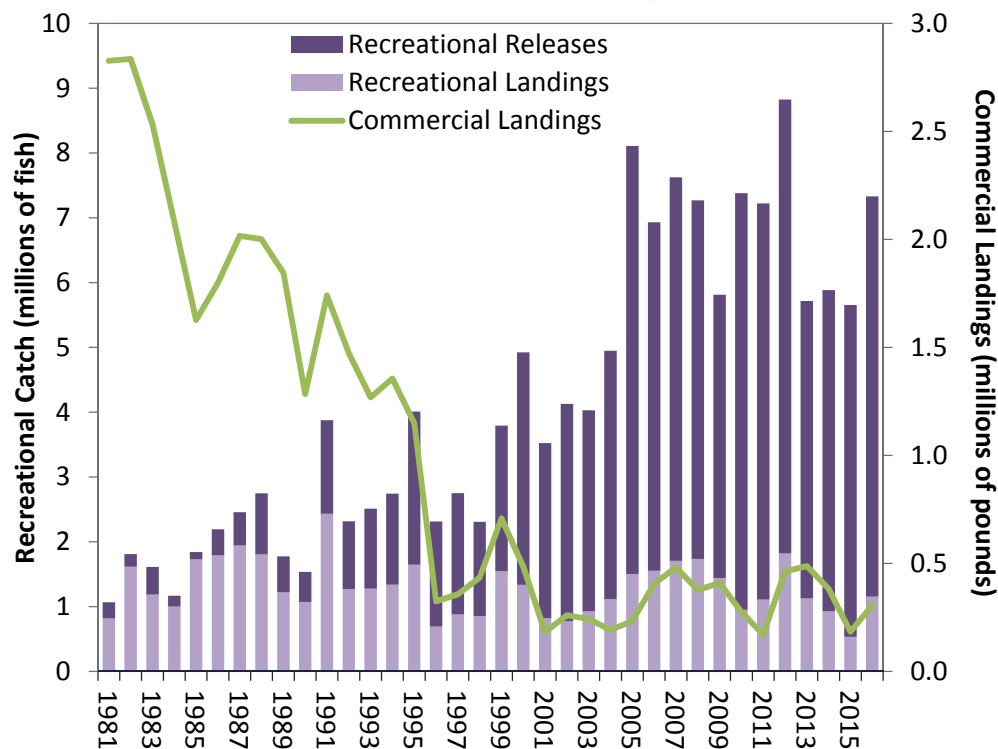
Primary Management Measures: Addendum I established the traffic light approach to assess stock trends and initiate management response.

Timeline of Management Actions: FMP (1987); Omnibus Amendment (2011); Addendum I (2014)

Overview of Stock Status Spotted Seatrout, *Cynoscion nebulosus*

Spotted Seatrout Commercial Landings & Recreational Catch

Source: ACCSP Data Warehouse and
NMFS Fisheries Statistics Division, 2017



Timeline of Management Actions: FMP (1985); Amendment 1 (1991);
Omnibus Amendment (2011)

Management Considerations

Condition: Unknown

FMP Stock Rebuilding Goals: Maintaining Spawning Potential Ratio (SPR) of at least 20%

FMP Rebuilding Schedule: None

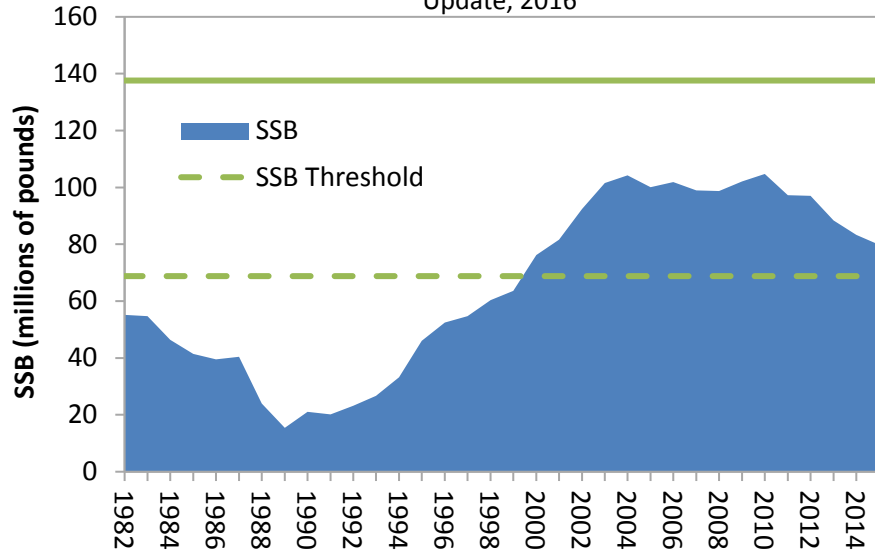
FMP Status: FMP approved in 1984; Amendment I approved in 1991. The Omnibus Amendment to the Interstate Fishery Management Plans (FMPs) for Spanish Mackerel, Spot, and Spotted Seatrout, approved in August 2011, updates the Spotted Seatrout FMP with compliance measures and Commission standards that were developed in response to the Atlantic Coastal Fisheries Cooperative Management Act (e.g., adaptive management, *de minimis* criteria).

Primary Management Measures: Coastwide management measures, adopted in the Omnibus Amendment and implemented in July 2012, include a coastwide minimum size of 12 inches total length and comparable mesh size requirements. The Omnibus Amendment retained the goal of a 20% SPR. Florida's Spotted Seatrout FMP has a goal of 35% SPR, while North Carolina, South Carolina, and Georgia have adopted the ASMFC's recommended goal of 20% SPR.

Overview of Stock Status Summer Flounder, *Paralichthys dentatus*

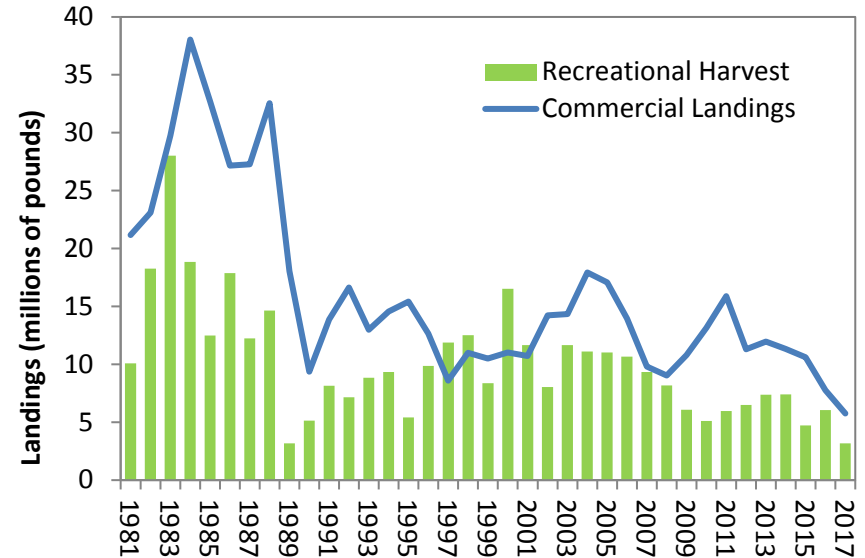
Summer Flounder Spawning Stock Biomass (SSB)

Source: Northeast Fisheries Science Center Stock Assessment
Update, 2016



Summer Flounder Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2018



Timeline of Management Actions: FMP ('82); Amendment 13 ('03); Addenda VIII & XV ('04); Addenda XVI & XVII ('05); Addendum XVIII ('06); Addendum XIX ('07); Addendum XXV ('14); Addendum XXVI ('15); Addendum XXVII ('16); Addendum XXVIII ('17)

Management Considerations:

Condition: Rebuilt; not overfished but overfishing is occurring. Currently, $F = 0.39$; SSB = 79.9 million pounds (2015)

FMP Stock Rebuilding Goals:

SSB Target = 137.6 million pounds Fishing Mortality Threshold = 0.309

SSB Threshold = 68.8 million pounds

FMP Status: Joint management with Mid-Atlantic Fishery Management Council through Amendment 13 (1998). Addendum VIII (2004) outlines state-specific recreational allocation strategy. Addendum XVII (2005) provides additional management strategies in setting recreational regulations. Addendum XVIII (2006) allows states to voluntarily maintain their 2005 recreational management measures in order to transfer savings to states facing severe reductions. Addendum XXVII (2016) approves continuation of the 2016 recreational fishery with a modification to summer flounder regions. Addendum XXVIII (2017) maintains regional management for the 2017 recreational fishery, including a one-inch increase in size limit and reduced possession limits to stay within the 2017 recreational harvest limit. The Board and MAFMC initiated the development of a Comprehensive Summer Flounder Amendment in August 2014 to reconsider all aspects of summer flounder management.

Primary Management Measures: Annual total allowable landings (TAL) divided into a state-by-state commercial quota (60% of TAL) and recreational harvest limit (40% of TAL). Coastwide commercial management measures include minimum fish and mesh sizes. Recreational bag/size limits and seasons are determined on a state-by-state basis using conservation equivalency.

Overview of Stock Status Tautog, *Tautoga onitis*

Management Considerations:

Condition: The stock is overfished and overfishing is occurring coastwide (based on the 2016 stock assessment update). The Technical Committee also conducted assessment updates in four regions to account for limited north-south migration and regional harvest patterns of the species.

FMP Stock Rebuilding Goals (as proposed by 2016 assessment update and used in Amendment 1): See accompanying table

FMP Status: Amendment 1 established regional F_{target} for 2018 and beyond. All states in the management unit are required to implement measures to achieve their respective F_{target} , though there is no consistent schedule required to achieve those targets. However, if the current fishing mortality exceeds the regional threshold, the Board must initiate corrective action within one year. A stock rebuilding schedule can be established via an addendum. All measures within Amendment 1 must be implemented by April 1, 2018, with the exception of the commercial tagging program which must be implemented by January 1, 2019.

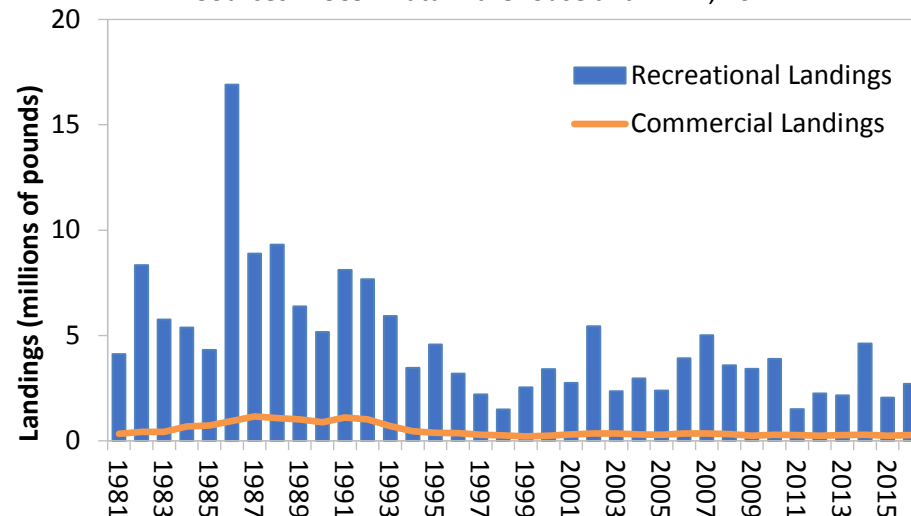
Primary Management Measures:

Tautog is managed as four regional stocks: Massachusetts – Rhode Island, Long Island Sound, New Jersey – New York Bight, and Delaware – Maryland – Virginia. Under

Amendment 1, the four regions will implement measures to achieve the regional fishing mortality target with at least a 50% probability. Additionally, the Amendment establishes a commercial harvest tagging program to address an illegal, unreported and undocumented fishery.

Tautog Recreational and Commercial Landings

Sources: ACCSP Data Warehouse and MRIP, 2017



Timeline of Management Actions: FMP (1996); Addendum I (1997); Addendum II (1999); Addendum III (2002); Addenda IV & V (2007);

Tautog Biological Reference Points and Stock Status by Region

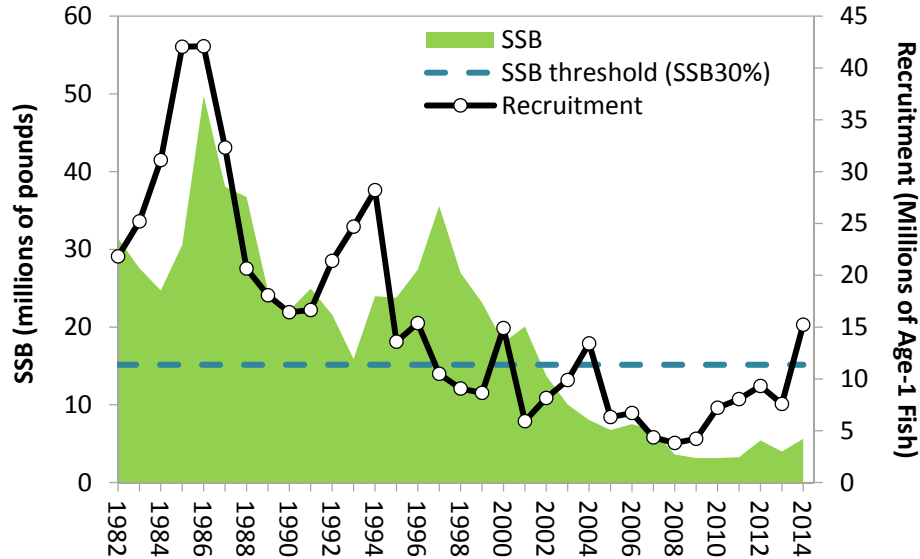
Source: ASMFC Stock Assessment Update, 2016

Region	Fishing Mortality			Spawning Stock Biomass (mt)			MSY or SPR	Status
	Target	Threshold	3-Year Average	Target	Threshold	SSB ₂₀₁₅		
Massachusetts – Rhode Island	0.28	0.49	0.23	2,684	2,004	2,196	SPR	Not overfished, overfishing not occurring
Long Island Sound	0.28	0.49	0.51	2,865	2,148	1,603	MSY	Overfished, overfishing
New Jersey – New York Bight	0.20	0.34	0.54	3,154	2,351	1,809	SPR	Overfished, overfishing
Delaware – Maryland – Virginia	0.16	0.24	0.16	1,919	1,447	621	SPR	Overfished, overfishing not occurring

Overview of Stock Status Weakfish, *Cynoscion regalis*

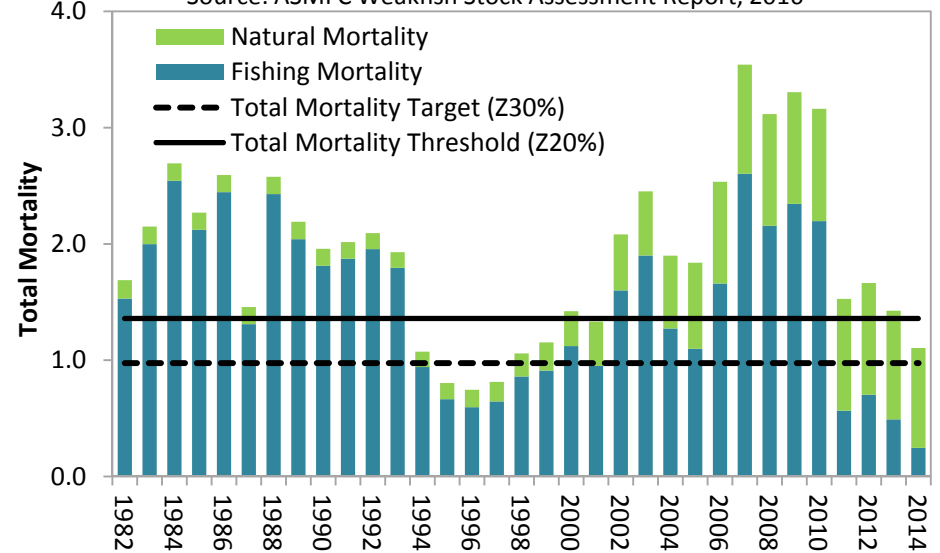
Weakfish Spawning Stock Biomass and Recruitment

Source: ASMFC Weakfish Stock Assessment Report, 2016



Contributions of Fishing and Natural Mortality to Weakfish Total Mortality

Source: ASMFC Weakfish Stock Assessment Report, 2016



Timeline of Management Actions: FMP (1985); Amendment 1 (1992); Amendment 2 (1994); Amendment 3 (1996); Amendment 4 (2002); Addendum I (2005); Addenda II & III (2007); Addendum IV (2009)

Management Considerations:

Condition: Depleted, overfishing not occurring

FMP Stock Control Rules:

SSB Threshold = 20% Maximum Spawning Potential (MSP; i.e., SSB that is 20% of an unfished stock)

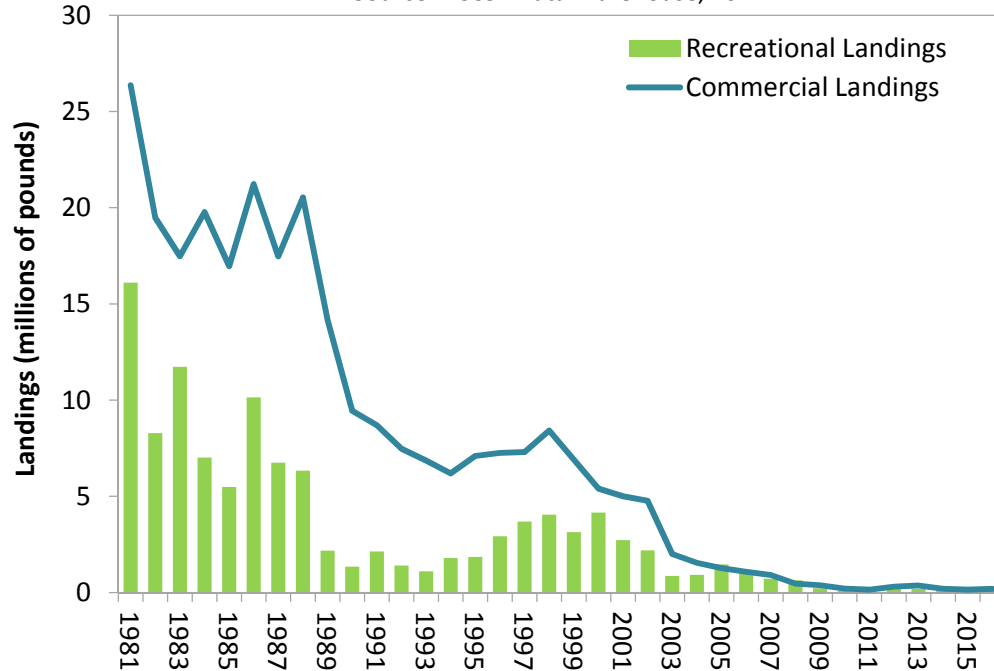
SSB Target = 30% MSP (i.e., SSB that is 30% of an unfished stock)

FMP Rebuilding Schedule: 6-year rebuilding period if SSB falls below the threshold level in any given year.

Overview of Stock Status Weakfish, *Cynoscion regalis*

Weakfish Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2017



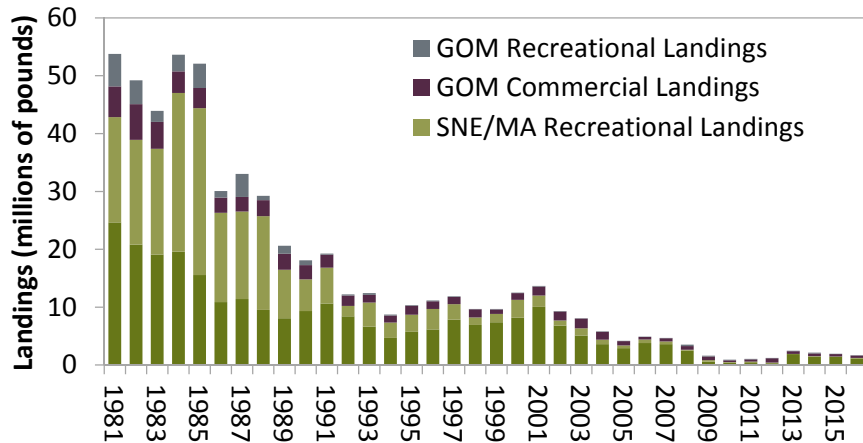
FMP Status: Amendment 4 (2003) established overfishing and overfished definitions, provided alternative recreational management options, and increased the commercial bycatch limit. Addendum I (2005) replaced Amendment 4's biological sampling program. Addendum II (2007) implemented several measures (i.e., reduced creel and bycatch limits, landings triggers) to control expansion of the fishery in the event that stock status improved. Addendum III altered the bycatch reduction device certification requirements for consistency with the SAFMC's Shrimp FMP. In response to the 2009 stock assessment, Addendum IV (2009) implemented a one fish recreational creel limit, 100 pound commercial trip and bycatch limits, and a 100 undersized fish allowance for finfish trawls, in addition to all previous measures. The addendum also replaced the fishing mortality reference points with percentage-based spawning stock biomass reference points.

Primary Management Measures: The commercial fishery is controlled through minimum size limit, trip limit, closed season, closed area, mesh size, bycatch limit, and bycatch reduction device requirements. The recreational fishery is managed through bag limit and minimum size limit requirements.

Overview of Stock Status Winter Flounder, *Pseudopleuronectes americanus*

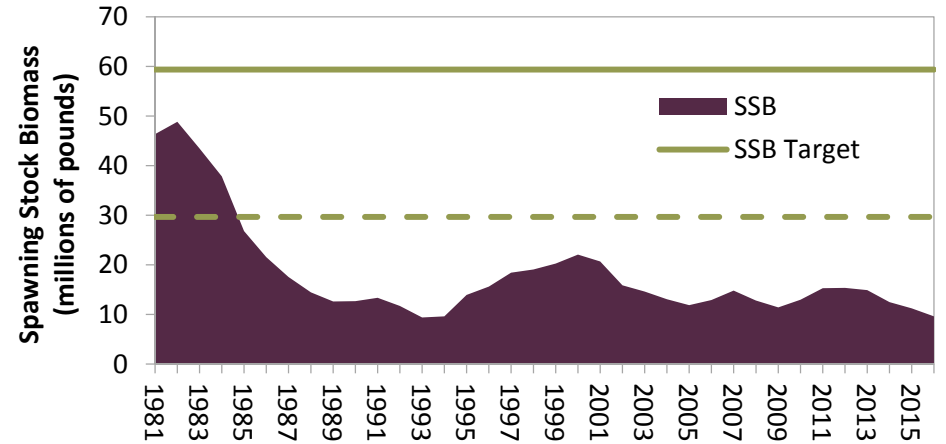
Winter Flounder Commercial & Recreational Landings by Stock Unit

Source: NEFSC Operational Assessment of 19 Groundfish Stocks, 2017



Winter Flounder Southern New England/Mid-Atlantic Spawning Stock Biomass

Source: NEFSC Operational Assessment of 19 Groundfish Stocks, 2017



SOUTHERN NEW ENGLAND/MID-ATLANTIC STOCK (SNE/MA)

Management Considerations:

Condition: Overfished and overfishing is not occurring. Stock is at 23% of target SSB.

FMP Stock Rebuilding Goals:

F Target ($75\%F_{MSY}$) = 0.24 F Threshold (F_{MSY}) = 0.325 F = 0.16

SSB Target (B_{MSY}) = 59.4 million pounds

SSB Threshold ($\frac{1}{2}SSB_{MSY}$) = 29.7 million pounds

SSB = 13.6 million pounds

GULF OF MAINE STOCK (GOM)

Management Considerations:

Condition: Stock biomass status is unknown and overfishing is not occurring*

FMP Stock Rebuilding Goals:

* The GOM analytical assessment model was not accepted due to concerns with a large retrospective pattern, BMSY and FMSY are unknown, and consequently the F and SSB targets could not be generated. A proxy F Threshold was derived from a length-based yield per recruit analysis. The overfishing status is based on the ratio of catch to survey-based swept area estimate of biomass exceeding 30 cm in length.

Timeline of Management Actions: FMP & Addendum I ('92); Addendum II ('98); Amendment 1 ('05); Addendum I ('09); Addendum II ('12); Addendum III ('13)

Primary Management Measures:

Winter flounder are managed as two separate stocks in state waters: Southern New England/Mid-Atlantic (SNE/MA) and Gulf of Maine (GOM), with commercial and recreational specifications set annually by the Board (Addendum III, 2013). In 2016, the Board maintained commercial and recreational management measures for the GOM and SNE/MA stocks. Currently, the possession limit for non-federally permitted commercial fishermen is 500 lbs per trip in the GOM (Addendum II, 2012) and 50 lbs or 38 fish in SNE/MA. Gear requirements mandate use of a minimum 6.5" square or diamond mesh in the cod-end. Recreational measures include possession limits and seasons. In the GOM, recreational measures include an eight fish bag limit and 12" size limit. Recreational measures for the SNE/MA include a two fish bag limit and a 12" size limit, with an open season March-December.