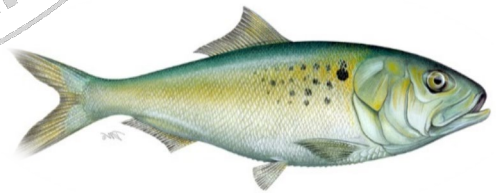
- American Eel
- American Lobster
- Atlantic Croaker
- Atlantic Herring
- Atlantic Menhaden
- Atlantic Striped Bass
- Atlantic Sturgeon
- Black Drum
- Black Sea Bass
- Bluefish
- Coastal Sharks
- Cobia
- Horseshoe Crab
- Jonah Crab
- Northern Shrimp
- Red Drum
- Scup
- Shad & River Herring
- Spanish 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.

March 2020



Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Quick Guide to ASMFC Species Stock Status

(Current as of March 2020)

√ = 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)	Not Depleted	N	GOM/GBK stock abundance has increased since the 1980s.
↓		Southern New England	Depleted	N	SNE stock has collapsed and is experiencing recruitment failure.
↓		American Shad	Depleted	Unknown	Depleted on coastwide basis; Amendment 3 established 2013 moratorium unless river-specific sustainability can be documented; benchmark assessment scheduled for 2020.
?		Atlantic Croaker	Unknown	Unknown	Status unknown; TLA indicates relatively low harvest in 2018; no management action triggered
*		Atlantic Herring	N	N	2018 stock assessment indicates declines in total biomass, SSB, and recruitment over the past 5 years.
√		Atlantic Menhaden	N	N	2020 TAC set at 216,000 mt.
↑/⇔		Atlantic Striped Bass	Y	Y	Overfished and overfishing occurring on a coastwide basis; Addendum VI requires states implement measures in 2020 to achieve an 18% reduction in total removals
↓		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

Quick Guide to ASMFC Species Stock Status

(Current as of March 2020)

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

STATUS/ TRENDS	SPECIES		OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
√		Black Drum	N	N	2015 benchmark assessment found 2012 median biomass well above median biomass that produces MSY.
√		Black Sea Bass	N	N	Operational assessment found SSB was 240% of the target in 2018 and overfishing was not occurring; After a record peak in 2016, biomass has slightly declined.
*		Bluefish	Y	N	Operational assessment found that while bluefish did not experience overfishing in 2018, stock has experienced overfishing, relative to the updated reference points, since 1985.
*		Coastal Sharks	Varies by species & species complex		
√		Cobia	N	N	2020 benchmark stock assessment indicates stock is not overfished nor experiencing overfishing relative to new $F_{40\%}$ and $SSB_{F40\%}$ reference points.
*		Horseshoe Crab	Unknown	Unknown	2019 benchmark assessment found NE region and DE Bay stocks are neutral; NY region stock is poor; and the SE region stock is good. Coastwide abundance has fluctuated, with many surveys decreasing after 1998 but increasing in recent years. ARM Framework used since 2013 to set harvest levels for horseshoe crabs of DE Bay origin.
?		Jonah Crab	Unknown	Unknown	No range-wide assessment; Interstate FMP adopted in August 2015.

Quick Guide to ASMFC Species Stock Status

(Current as of March 2020)

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

STATUS/ TRENDS	SPECIES		OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
↓		Northern Shrimp	Depleted	N	2019 data update indicates stock remains depleted, with SSB at extremely low levels since 2013. Abundance, biomass, and SSB at new time-series lows, and recruitment 3rd-lowest in the time series. Environmental conditions continue to be unfavorable for northern shrimp. Fishing moratorium in place since 2014 to protect remaining spawning population.
↑/⇔	Red Drum 	Northern Region	Unknown	N	2017 benchmark assessment indicates sSPR above target and threshold SPRs.
		Southern Region	Unknown	N	2017 benchmark assessment indicates 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	2012 stock assessment indicates no overfishing and not overfished relative to F_{MSY} and B_{MSY} reference points. A SEDAR operational assessment is scheduled for 2021.
√		Spiny Dogfish	N	N	Rebuilt since 2008.
?		Spot	Unknown	Unknown	Status unknown; TLA indicates relatively low harvest in 2018; no management action triggered.

Quick Guide to ASMFC Species Stock Status

(Current as of March 2020)

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

STATUS/ TRENDS	SPECIES		OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
?		Spotted Seatrout	Unknown	Unknown	Omnibus Amendment includes measures to protect spawning stock & establishes 12" minimum size limit.
↑/⇔		Summer Flounder	N	N	2019 assessment update indicates in 2018 aggregate size increased and recruitment was above average.
*	Tautog 	Massachusetts – Rhode Island	N	N	Amendment 1 establishes regional stock units and reference points.
		Long Island Sound	Y	Y	
		New Jersey – New York Bight	Y	Y	
		Delaware – Maryland – Virginia	Y	N	
↓		Weakfish	Depleted	N	2019 assessment update indicates weakfish depleted since 2003; population has been experiencing very high levels of total mortality (fishing mortality plus natural mortality), preventing the stock recovery.
*	Winter Flounder 	Gulf of Maine	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	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, impacting the stock's reproductive capacity to replace fish removed through harvest, and that decline is driven primarily by fishing mortality.

Overfishing - Removing fish from a population at a rate that exceeds the threshold established in the FMP, impacting the stock's reproductive capacity to replace fish removed through harvest.

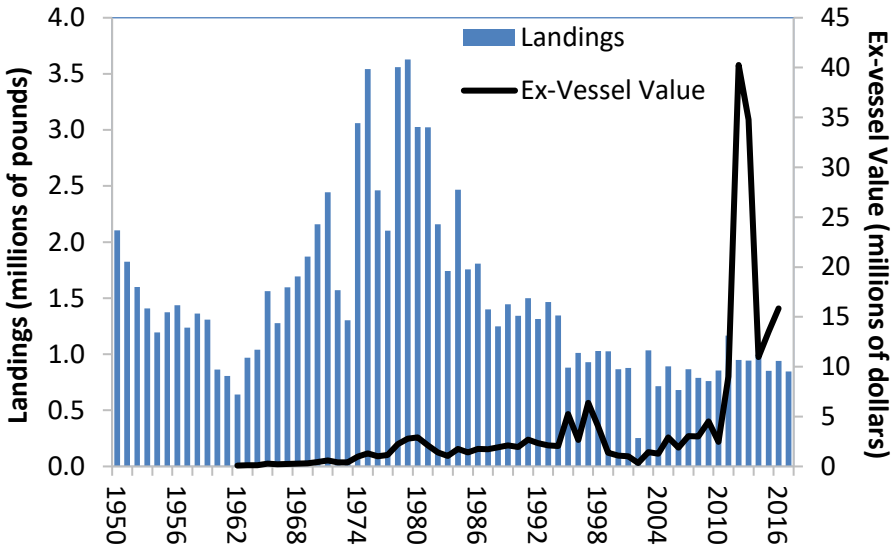
Stable/ Unchanged - Stock biomass has been consistent in recent years.

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.

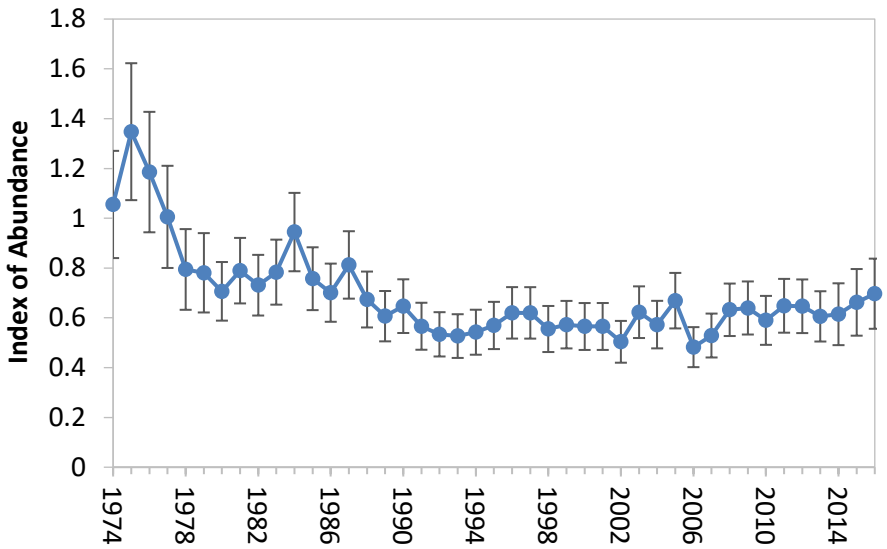
Stock assessment update - Incorporates data from the most recent years into a peer-reviewed assessment model to determine current stock status (abundance and overfishing levels)

Overview of Stock Status
American Eel, *Anguilla rostrata*

American Eel Commercial Landings and Ex-Vessel Value
Source: ACCSP Data Warehouse, 2019



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); Addendum V (2018)

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. Addendum V (2018) replaces Addendum IV's measures, increasing the yellow eel coastwide cap starting in 2019 to 916,473 pounds, adjusting the method (management trigger) to reduce total landings to the coastwide cap when the cap has been exceeded, and removing the implementation of state-by-state allocations if the management trigger is met. The Addendum also maintains Maine's glass eel quota of 9,688 pounds.

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

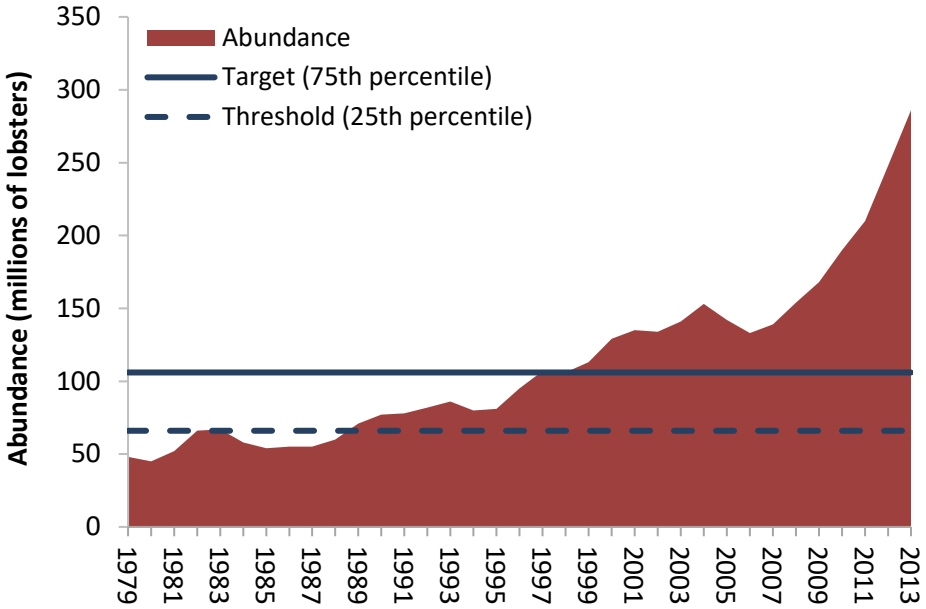
Region	Life Stage	Time Period	2012 Trend	2017 Trend
Gulf of Maine	YOY	2001–2016	NS	NS
Southern New England	YOY	2000–2016	NS	NS
	Yellow	2001–2010	NS	-
Hudson River	YOY	1974–2009	↓	-
	Yellow	1980–2016	↓	↓
Delaware Bay/ Mid-Atlantic Coastal Bays	YOY	2000–2016	NS	NS
	Yellow	1999–2016	NS	NS
Chesapeake Bay	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*

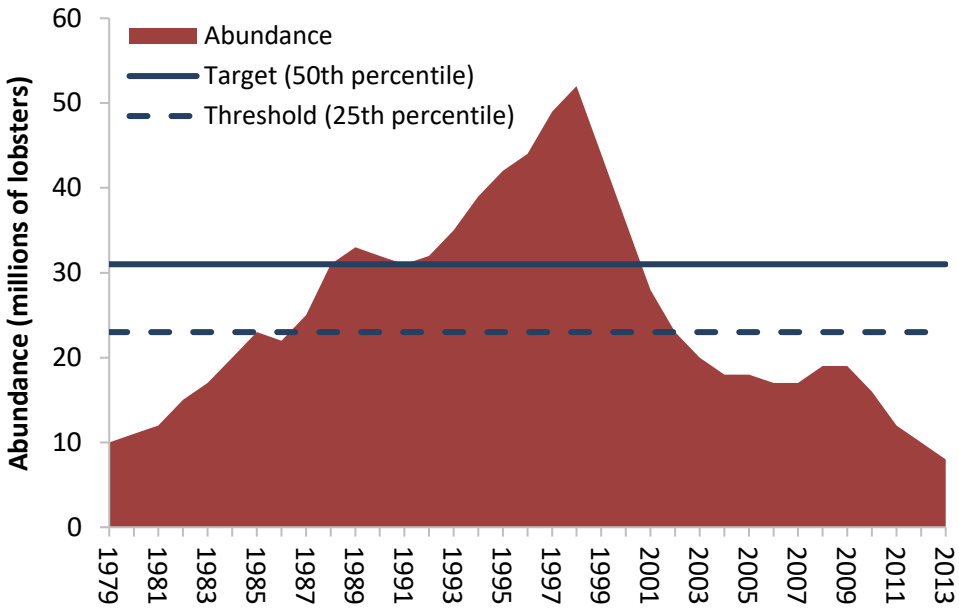
American Lobster Abundance for the Gulf of Maine and Georges Bank Stock Unit

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, XIV & XV (‘09); Addendum XVI (‘10); Addenda XVII & XVIII (’12); Addenda XIX – XXII (’13); Addendum XXIII (’14); Addendum XXIV ('15); Addendum XXVI (’18)

<u>Management Considerations:</u>

Condition:

Gulf of Maine/Georges Bank – Not depleted and not experiencing overfishing

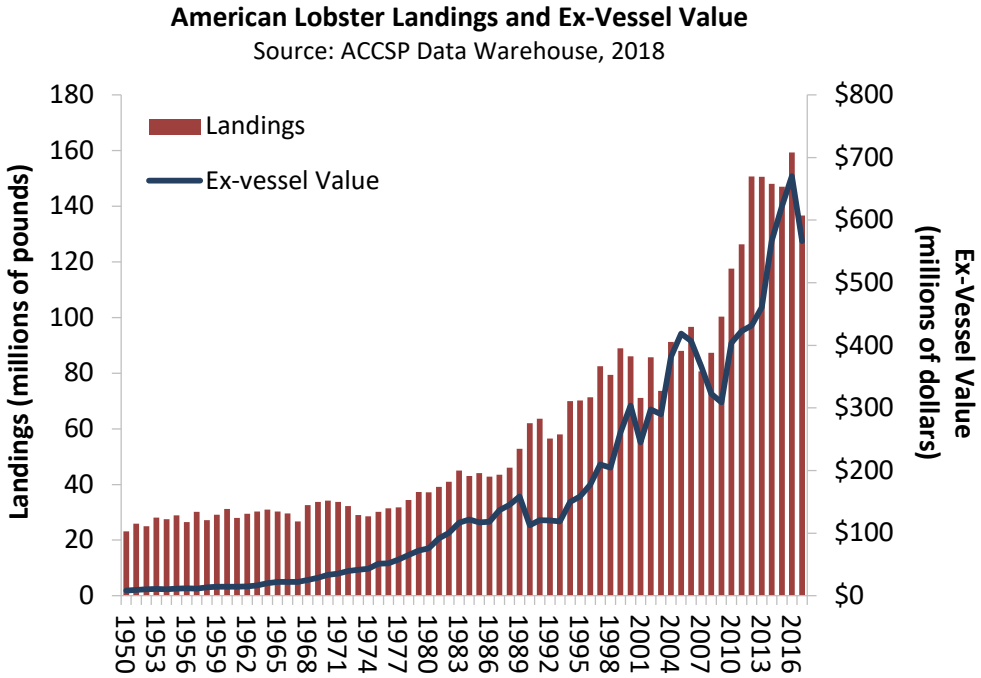
Southern New England – Depleted and not experiencing overfishing. Abundance is below threshold.

Stock Rebuilding Goals:

The 2015 benchmark stock assessment established new abundance and exploitation reference points (see figures). The next benchmark stock assessment is scheduled for 2020.

March 2020

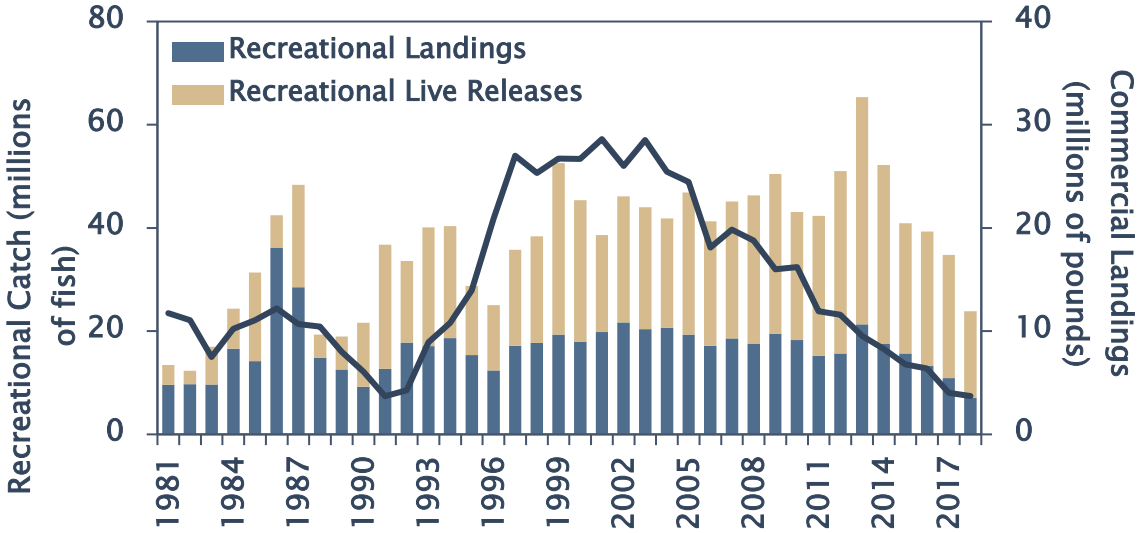
FMP Status:
Amendment 3 and Addenda I – XXVI established 7 management areas and specific management measures to meet the rebuilding schedule by 2022. Addendum XII establishes guidelines for areas implementing a transferable trap program. Addendum XIII finalizes the Outer Cape Cod's effort control plan. 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. Addendum XXVI expands the mandatory harvester reporting data elements, improves the spatial resolution of harvester data, establishes a 5-year timeline for implementation of 100% harvester reporting, and prioritizes the development of electronic harvester reporting, as well as improves biological sampling requirements by establishing a baseline of ten sampling trips per year in the American lobster/Jonah crab fishery.



Pending Action:
In February 2019, the Board initiated Draft Addendum XXVIII to Amendment 3. The Draft Addendum considers reducing the number of vertical lines in the water in response to concerns about the North Atlantic right whale population and the potential impacts of whale conservation measures on the conduct of the lobster fishery. The Board noted reductions will consider ongoing state and federal management actions, including trap reductions and trap caps, which have already reduced vertical lines. Given the significant conservation benefits expected from the recommended Atlantic Large Whale Take Reduction Team (ALWTRT) measures, in May 2019, the Board paused development of the Draft Addendum until NOAA has determined if a jeopardy finding will be avoided by the ALWTRT actions.

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*



Timeline of Management Actions: FMP (1987); Amendment 1 (2005); Addendum I (2011); Addendum II (2014); Addendum III (2020)

Management Considerations:

Condition: Unknown. The 2017 Traffic Light Analysis (TLA) shows red proportions of greater than the 60% threshold for the harvest metric and 0% for the abundance metric, indicative of relatively low harvest and high abundance in 2017. Due to the uncertainty in this TLA, the 2017 stock assessment was not recommended for management use. Addendum III modified the TLA by establishing base management measures with the goal of reducing fishing impacts to not exacerbate periods of low abundance.

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.

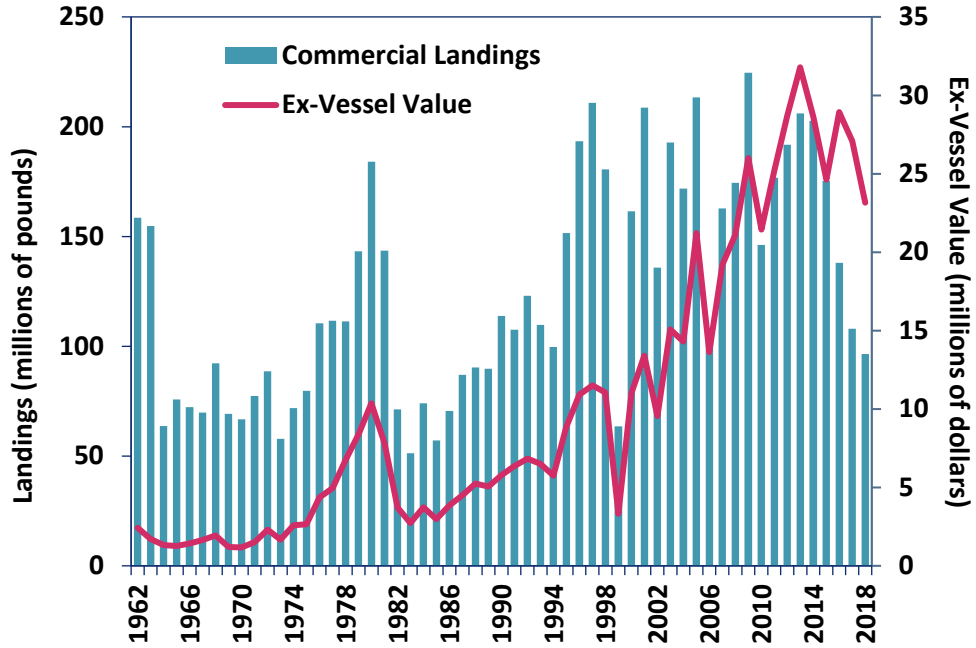
FMP Status: Amendment 1 revised FMP goals and objectives and established biological reference points. Addendum I revised the management area to assess the stock on a coastwide basis and adopted biological reference points. Addendum II established the TLA to assess stock trends and initiate management response. Addendum III updates the TLA's management trigger mechanism, management responses to TLA triggers, and evaluation of the fishery's response to measures implemented if triggers occur.

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. The TLA will continue to be conducted annually, although the updated analysis will be used, starting in 2020.

Overview of Stock Status
Atlantic Herring, *Clupea Harengus*

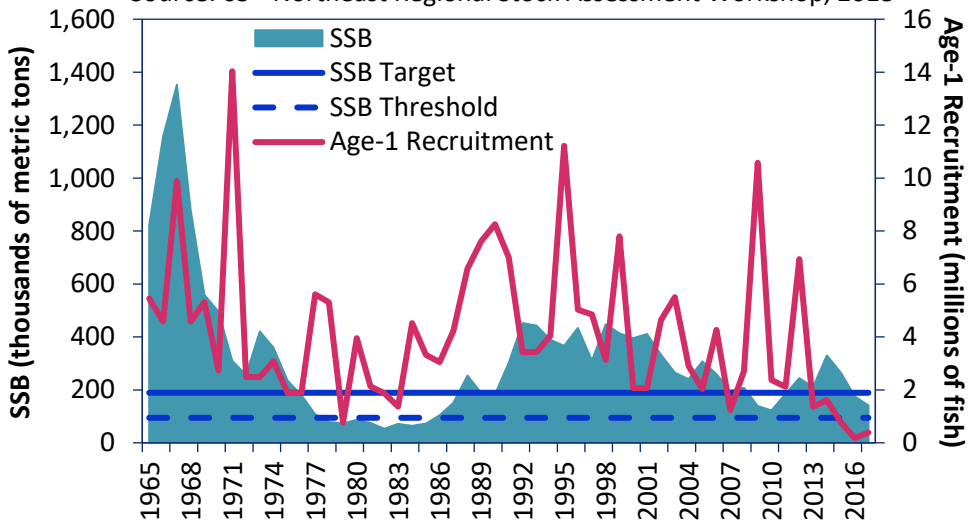
Atlantic Herring Commercial Landings

Source: 65th Northeast Regional Stock Assessment Workshop, 2019



Atlantic Herring Spawning Stock Biomass & Recruitment

Source: 65th Northeast Regional Stock Assessment Workshop, 2018



Management Considerations:

Condition: Not overfished and overfishing is not occurring.

FMP Reference Points and Current Values:

SSB Target = 189,000 mt); SSB Threshold = 94,500 mt; 2017 SSB = 141,473 mt
Fishing Mortality Threshold (F_{MSY}) = 0.51; 2017 F = 0.45
2017 Recruitment = 392 million fish (below average of 4,163 million fish)

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. Addendum II to Amendment 3 strengthens spawning protections in Area 1A (inshore Gulf of Maine) by initiating a closure when a lower percentage of the population is spawning, extending the closure for a longer time, and modifying the trigger level necessary to reclose the fishery.

Primary Management Measures:

Due to concerns regarding projected declines in herring biomass, the NEFMC and ASMFC set the ACL for the 2019 fishing season at 33.2 million pounds (15,065 metric tons). The ACL is further subdivided as follows: Area 1A = 9.6 million pounds, Area 1B = 1.43 million pounds, Area 2 = 9.2 million pounds, and Area 3 = 12.96 million pounds. After adjusting for the research set-aside, the 39 mt fixed gear set-aside, and the 8% buffer (Area 1A closes at 92% of the sub-ACL), the Area 1A sub-annual catch limit (sub-ACL) is 8.489 million pounds (3,850 mt). For 2019, the Area 1A sub-ACL is further distributed among four quota periods as follows: Period 1 – June (16.1%); Period 2 – July-August (40.1%); Period 3 – September-October (34.0%); and Period 4 – November-December (9.5%). Directed fisheries within a management area close when 92% of the sub-ACL has been harvested, and the stock-wide fishery closes when 95% of the ACL is projected to be reached.

Pending Action:

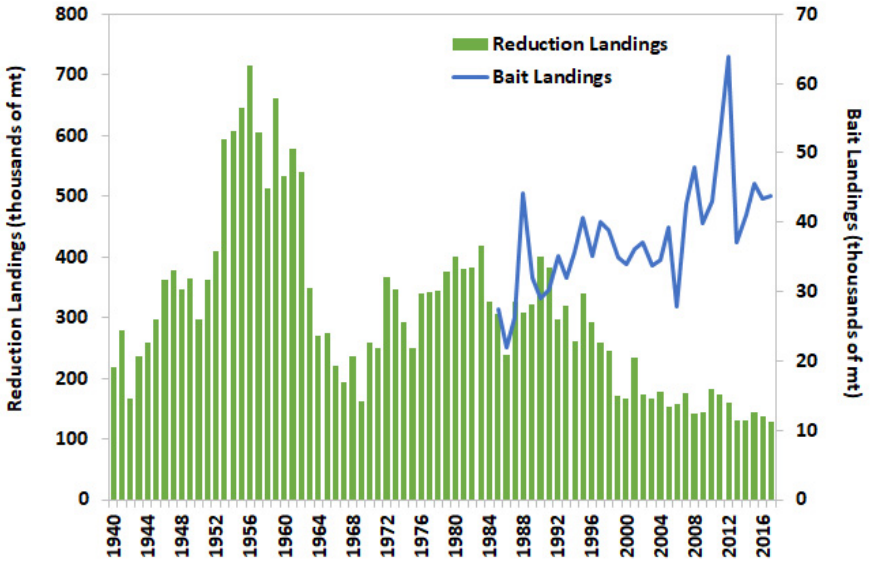
In October 2019, the Board initiated an addendum to consider new approaches for managing the Area sub-ACL under low quota scenarios for the 2020 fishing season. The draft addendum will also consider expanding landing provisions for permit holders within the days out program. The Board will consider approval of the draft addendum for public in February 2020.

December 2019

Overview of Stock Status
Atlantic Menhaden, *Brevoortia tyrannus*

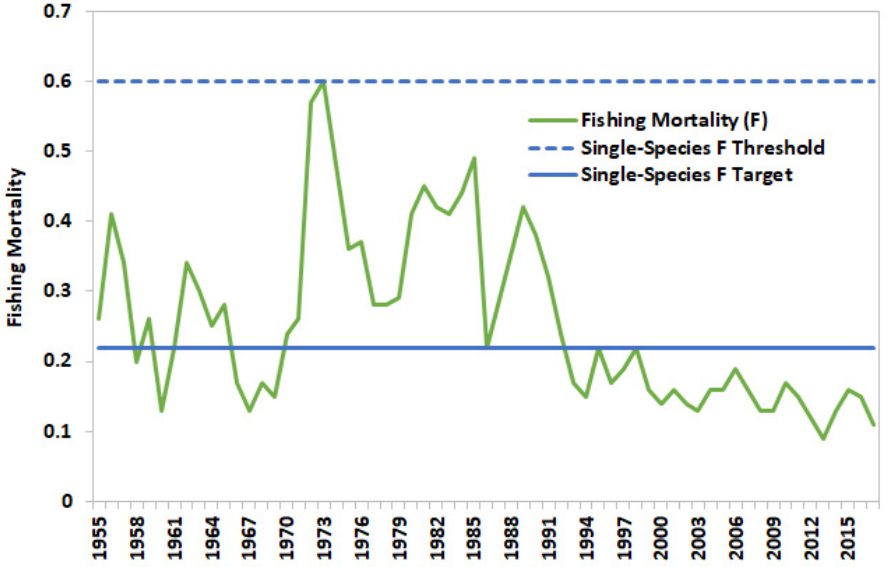
Atlantic Menhaden Bait and Reduction Landings

Source: ASMFC Atlantic Menhaden Single-Species Benchmark Stock Assessment, 2020



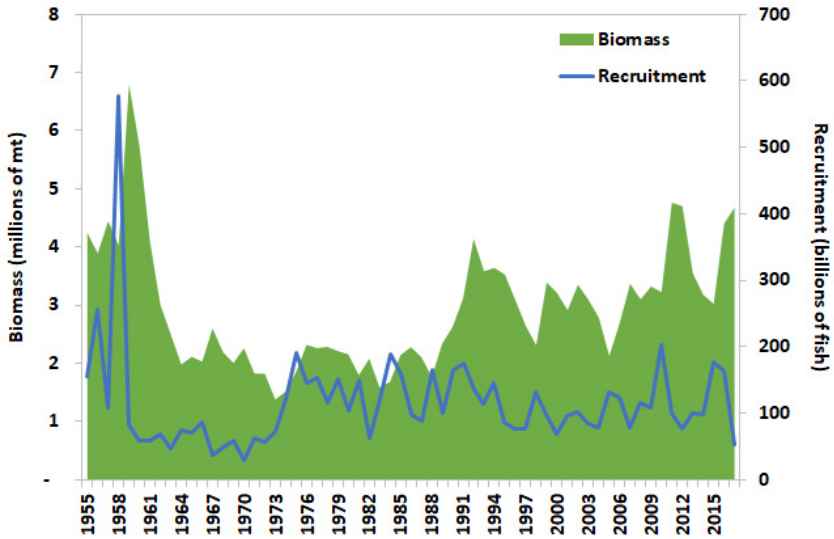
Atlantic Menhaden Fishing Mortality (Ages 2-4)

Source: ASMFC Atlantic Menhaden Single-Species Benchmark Stock Assessment, 2020



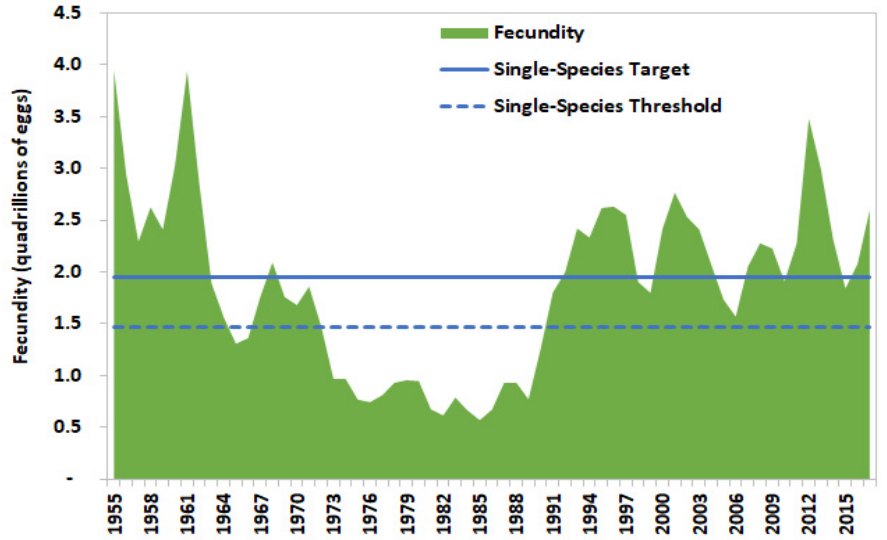
Atlantic Menhaden Biomass and Recruitment

Source: ASMFC Atlantic Menhaden Single-Species Benchmark Stock Assessment, 2020



Atlantic Menhaden Fecundity

Source: ASMFC Atlantic Menhaden Single-Species Benchmark Stock Assessment, 2020



March 2020

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)

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

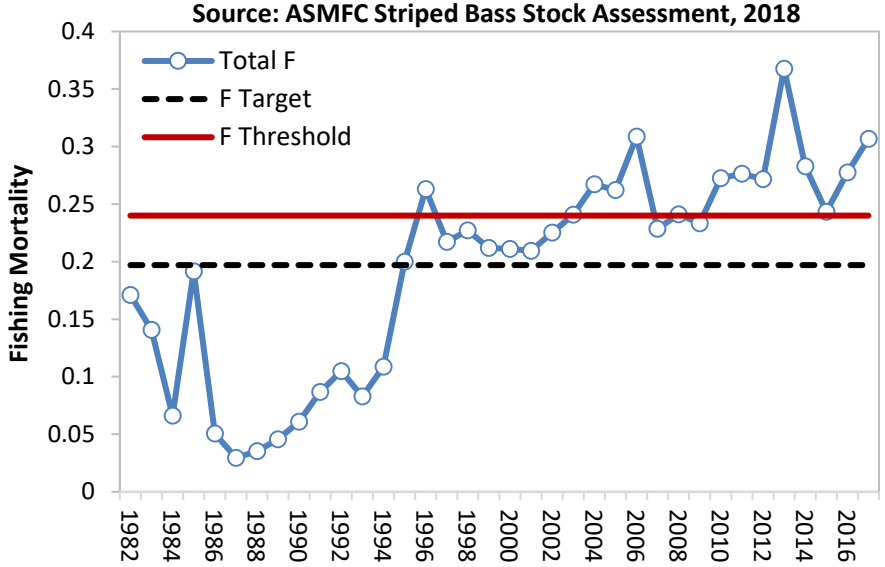
Fishing Mortality Target ($F_{36\%MSP}$) = 0.8
Fishing Mortality Threshold ($F_{21\%MSP}$) = 1.85
Current Fishing Mortality (2013) = 0.51

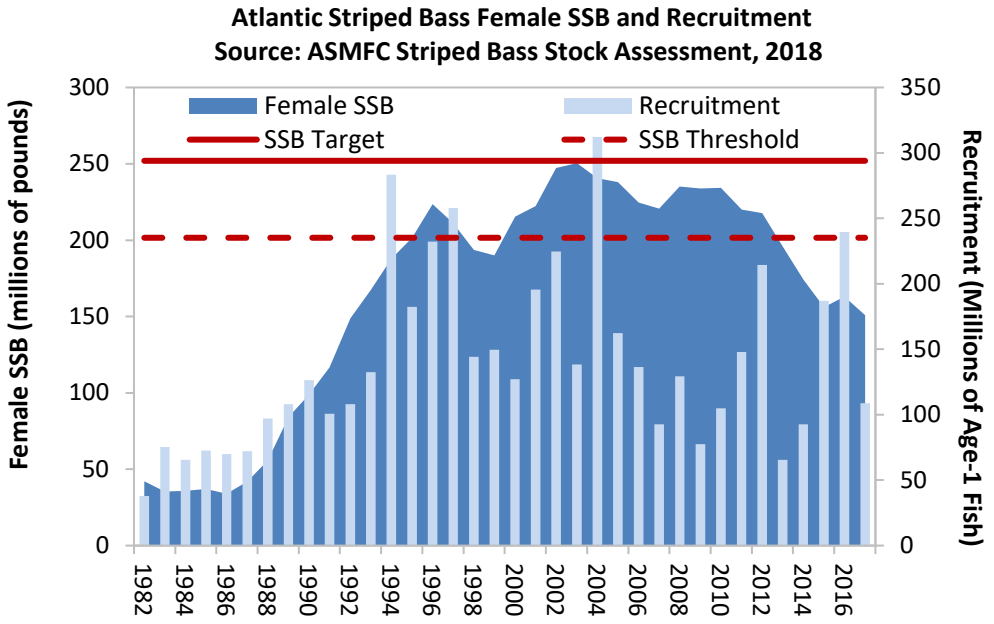
FMP Status: Amendment 3, approved in November 2017, maintains the single-species biological reference points through 2019, and addresses allocation, quota transfers, quota rollovers, incidental catch, the episodic events set aside program, and the Chesapeake Bay reduction fishery cap. Amendment 3 also 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 that 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. This management program will be maintained until the Board decides adopts the ecological reference point assessment (ERP) which evaluates the health of the stock in an ecosystem context.

Primary Management Measures: The 2020 TAC is 216,000 MT. The Board agreed to revisit the 2020 TAC following review of the single-species and ERP assessment reports later in the year. 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%

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





Timeline of Management Actions: FMP (1981); Amendment 6 (2003); Addendum I (2007); Addendum II (2010); Addendum III (2012); Addendum IV (2014); Addendum VI (2019)

Management Considerations

Condition: Overfished and overfishing occurring (2018 Benchmark Stock Assessment and Peer Review)

FMP Stock Control Rules:

SSB_{target} = 252 million pounds	F_{target} = 0.197
$SSB_{threshold}$ = 202 million pounds	$F_{threshold}$ = 0.240
SSB = 151 million pounds	F = 0.307

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. 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 and 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. Addendum VI (2019) reduces all state commercial quotas by 18%, and implements a 1 fish bag limit and a 28"-35" recreational slot limit for ocean fisheries and a 1 fish bag limit and an 18" minimum size limit for Chesapeake Bay recreational fisheries. The measures are designed to achieve at least an 18% reduction in total removals at the coastwide level, and apply the reduction equally (proportionally) to both sectors. Since catch and release practices contribute significantly to overall fishing mortality, the Addendum mandates the use of circle hooks when fishing with bait to reduce release mortality in recreational striped bass fisheries by January 1, 2021. States are required to submit Addendum VI implementation plans (and conservation equivalency proposals) by November 30, 2019 for review by the Technical Committee and approval by the Board in February 2020. With the exception of circle hooks, all other provisions of Addendum VI must be implemented by April 1, 2020.

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
Atlantic Sturgeon, *Acipenser oxyrinchus*

Management Considerations:

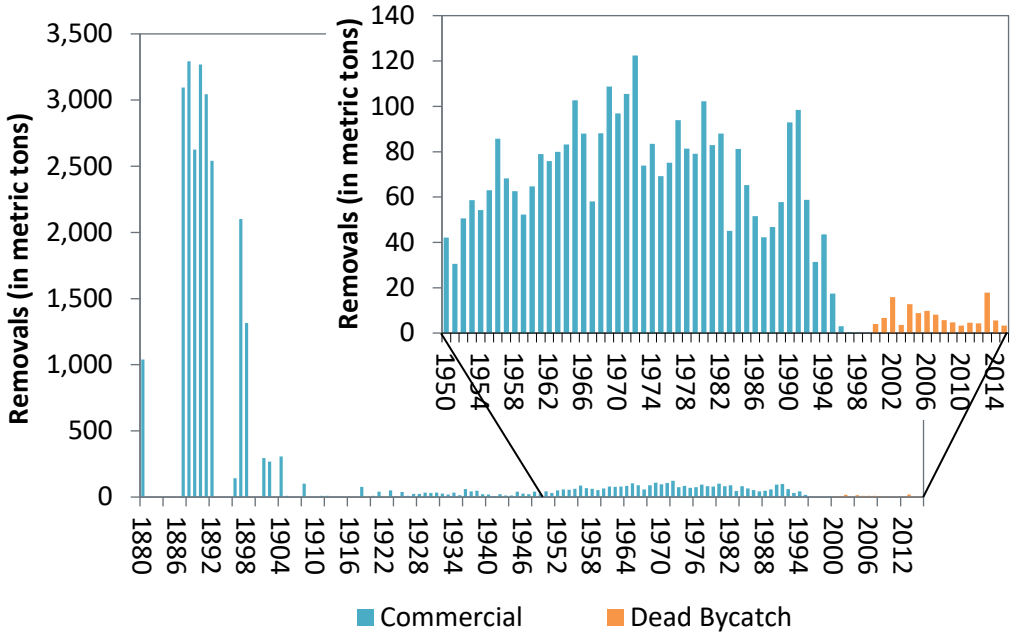
Condition:
Depleted (ASMFC Benchmark Stock Assessment 2017); NOAA Fisheries listed Atlantic sturgeon under the Endangered Species Act in 2012.

FMP Stock Rebuilding Goals:
To have at least 20 protected age classes of females in each spawning stock.

FMP Rebuilding Schedule:
Approximately 20 to 40 years from initiation of Amendment 1 (1998), depending on a number of factors, including individual spawning stock's maturity rate; longevity; geographic area; and length of prior fishery closures.

FMP Status:
FMP approved in 1990 and Amendment 1 approved in 1998 to initiate a moratorium. Addendum I was approved in 2001; Addendum II in May 2005; Addendum III in November 2006. Combined, all three Addenda permit the importation of non-indigenous Atlantic sturgeon as well as the development of private Atlantic sturgeon aquaculture facilities in Florida and North Carolina. Addendum IV, approved in 2012, updates habitat information and identifies areas of concern and research needs.

Coastwide Atlantic Sturgeon Commercial Landings and Dead Bycatch, 1880–2014
Inserted graph provides same information but for a more recent timeframe, 1950–2014
Source: ASMFC Atlantic Sturgeon Benchmark Stock Assessment, 2017



Timeline of Management Actions: FMP (1990); Amendment 1 (1998); Addendum I (2001); Addendum II (2005); Addendum III (2006); Addendum IV (2012)

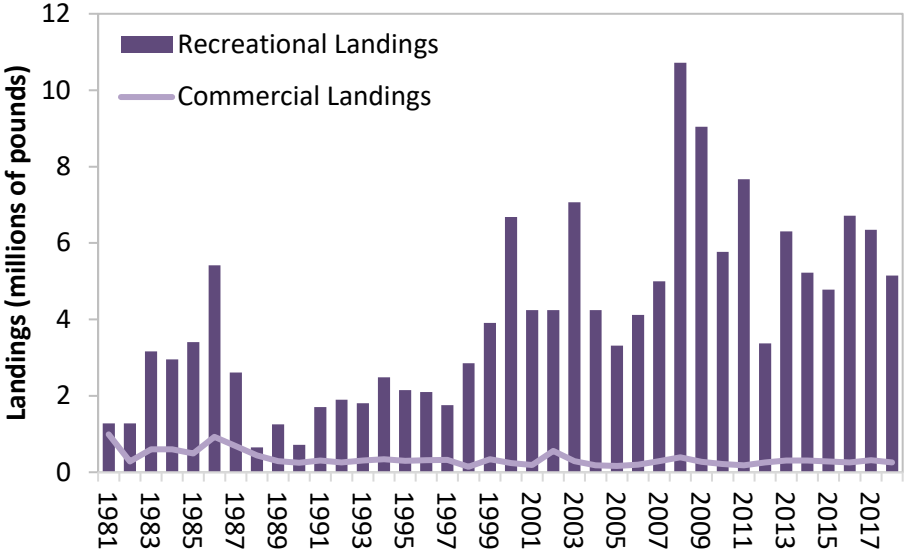
Primary Management Measures:
Amendment 1 mandated all Atlantic coastal states enact a moratorium on harvest and possession of Atlantic sturgeon. Exemptions to the moratorium on possession are detailed in the FMP.

	Mortality Status	Biomass/Abundance Status	
Population	**Probability that Z > $Z_{50\%EPR}$ 80%**	**Relative to Historic Levels**	**Average probability of terminal year of indices > 1998* value**
Coastwide	7%	Depleted	95%
Gulf of Maine	74%	Depleted	51%
New York Bight	31%	Depleted	75%
Chesapeake Bay	30%	Depleted	36%
Carolina	75%	Depleted	67%
South Atlantic	40%	Depleted	Unknown (no suitable indices)

Overview of Stock Status
Black Drum, *Pogonias cromis*

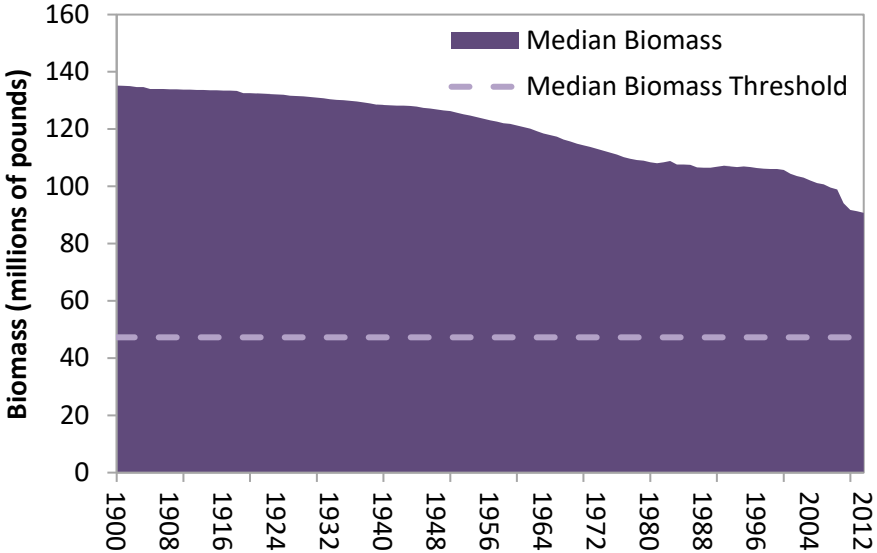
Black Drum Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2019



Black Drum Biomass

ASMFC Black Drum Benchmark Assessment, 2015



Timeline of Management Actions: FMP (2013); Addendum I (2018)

Management Considerations

Condition: Not overfished and not experiencing overfishing

FMP Stock Rebuilding Goals: None

FMP Rebuilding Schedule: None

FMP Status: The Black Drum FMP was approved in June 2013. Addendum I allows Maryland to reopen its black drum commercial fishery in the Chesapeake Bay with a daily vessel limit of up to 10 fish and a 28-inch minimum size.

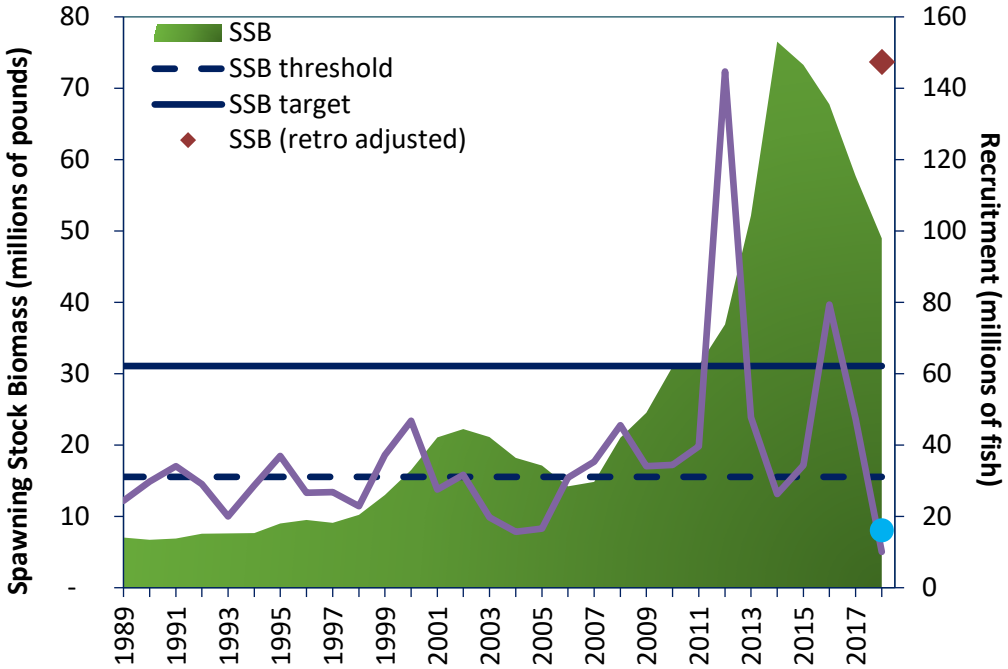
Primary Management Measures: The FMP requires all states to maintain current regulations for black drum and to implement a maximum possession limit and a minimum size limit of no less than 14 inches. The FMP also establishes a management framework to address future concerns or changes in the fishery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

February 2020

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

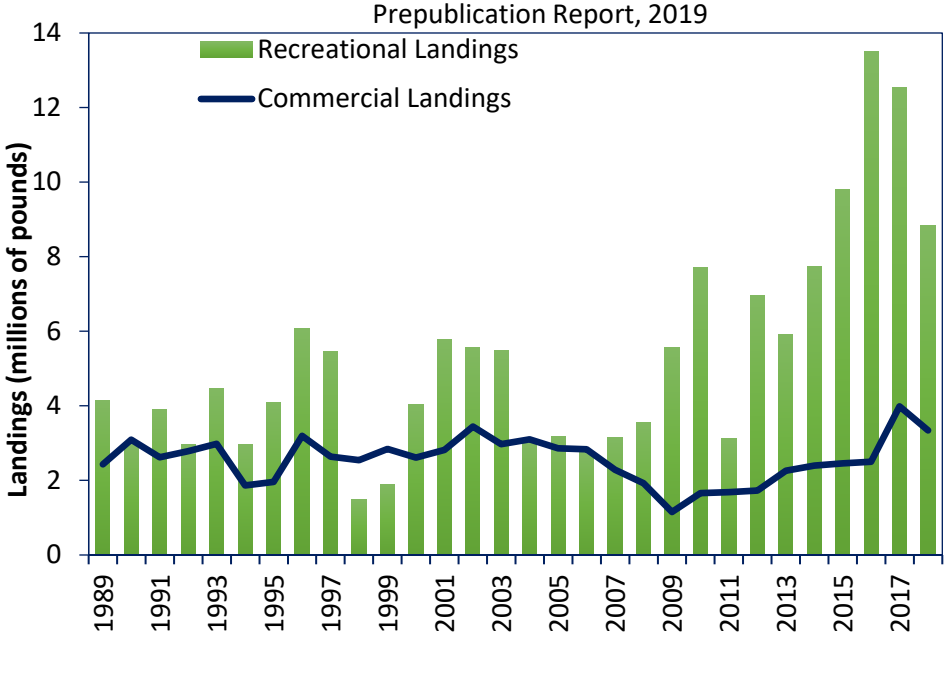
Black Sea Bass Spawning Stock Biomass and Recruitment

Source: NEFSC Operational Assessment
Prepublication Report, 2019



Black Sea Bass Commercial and Recreational Landings

Source: NEFSC Operational Assessment
Prepublication Report, 2019



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 XXX ('18); Addendum XXXI ('18); Addendum XXXII ('18)

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 2019 operational assessment indicates the resource is neither overfished nor experiencing overfishing.

FMP Biological Reference Points:

SSB Target = 31.07 million pounds
SSB Threshold = 15.53 million pounds
Fishing Mortality Threshold = 0.46

January 2020

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 for 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. Addendum XXVII (2016) continues use of regional management measures for the recreational fishery. Addendum XXX (2018) establishes a regional allocation of the coastwide Recreational Harvest Limit (RHL) using a combination of exploitable biomass information and historical harvest. Addendum XXXI (2018) allows the use of conservation equivalency for recreational management starting in 2020 and recommended NOAA Fisheries implement transit provisions in Block Island Sound, allowing non-federally permitted recreational and commercial vessels to transit federal waters while in possession of black sea bass legally harvested from state waters. Addendum XXXII (2018) establishes an annual specifications process for developing recreational management measures.

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. The recreational fishery allocates the coastwide Recreational Harvest Limit (RHL) to the three management regions of Massachusetts through New York (61.35% of RHL), New Jersey (30.24%), and Delaware through North Carolina (8.41%).

Pending Actions:
Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocations Amendment
In October 2019, the Board and the Council initiated the development of a joint amendment to reevaluate the FMP's commercial and recreational allocations. This action aims to address the allocation-related impacts of the revised recreational catch and landings data provided by MRIP. The Commission and Council have begun preparing analyses to guide development of a Public Information Document and scoping process. The Board and Council will discuss this issue during their next joint meeting in December 2019.

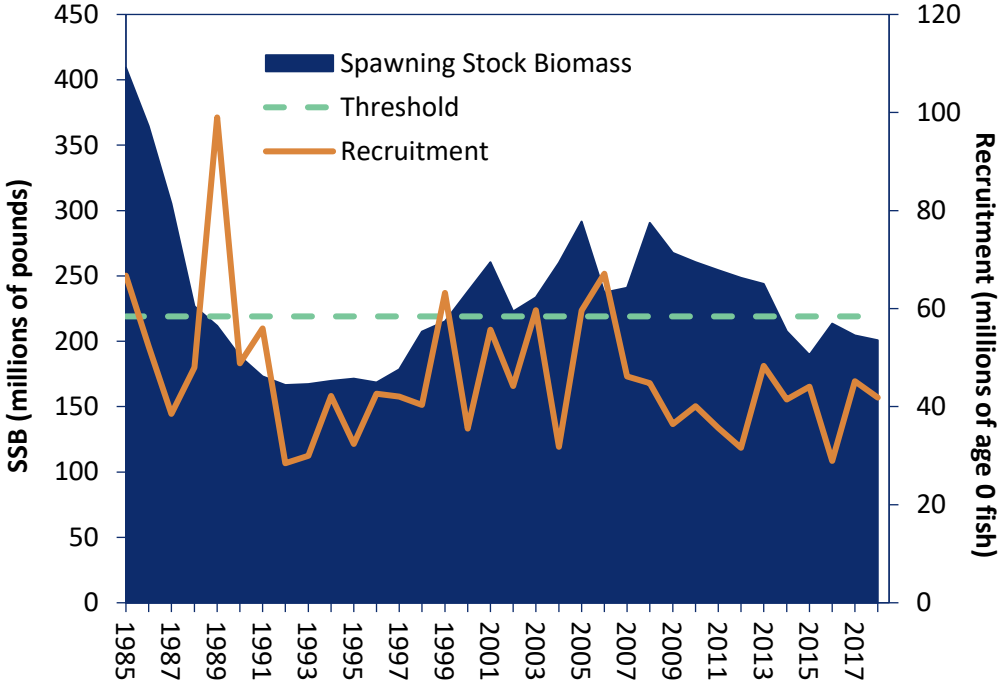
Black Sea Bass Commercial Addendum
In October 2019, the Board initiated an addendum to consider changes to black sea bass commercial state allocations. This action will consider the current distribution and abundance of black sea bass as one of several adjustment factors to achieve more balanced access to the resource. The Plan Development Team is in the process of preparing a draft document for Board consideration in early to mid-2020.

January 2020

Overview of Stock Status
Bluefish, *Pomatomus saltatrix*

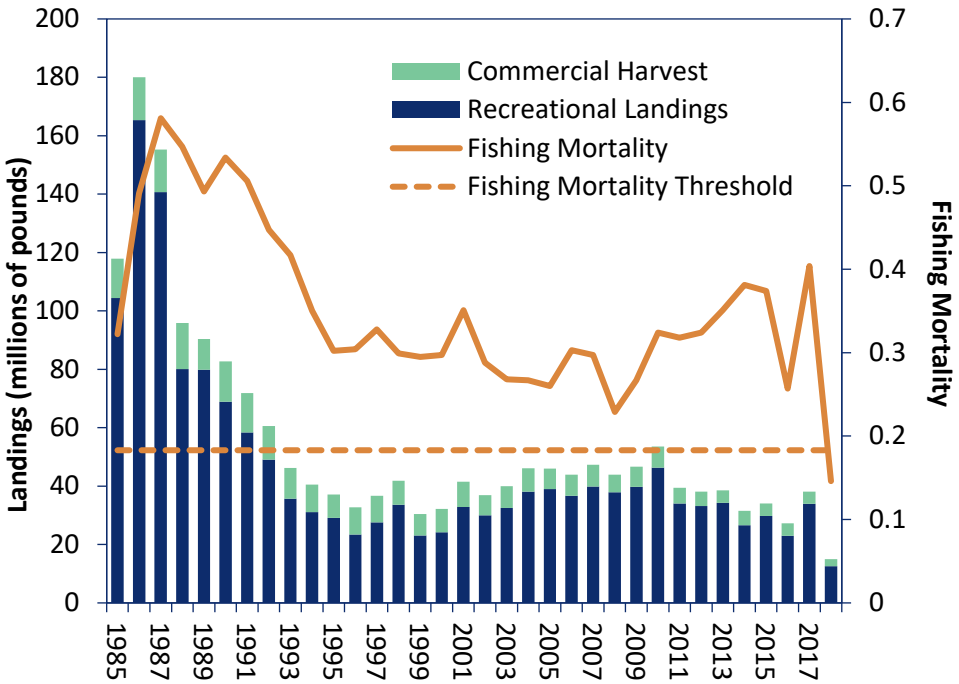
Bluefish Spawning Stock Biomass (SSB) and Recruitment

Source: Bluefish Operational Stock Assessment, 2019



Bluefish Commercial and Recreational Landings

Source: Bluefish Operational Stock Assessment, 2019



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

Management Considerations

Condition: Overfished and not experiencing overfishing

Biological Reference Points from 019 Operational Assessment:

Spawning Stock Biomass threshold = 219 million lbs

Spawning Stock Biomass$_{2018}$ = 201 million lbs

Fishing Mortality Threshold ($F_{MSY\ PROXY=}\ F_{35\%\ SPR}$) = 0.183

Fishing Mortality$_{2018}$ = 0.146

FMP Status: Joint management with the MAFMC. Addendum I establishes a coastwide sampling program to improve the quantity and quality of information available for use in future bluefish stock assessments. The Commission and MAFMC are continuing work on the development of a rebuilding plan as part of the Bluefish Allocation and Rebuilding Amendment, which will consider revising the FMP goals and objectives, allocations between sectors and states, and the quota transfer process.

January 2020

Overview of Stock Status
Bluefish, *Pomatomus saltatrix*

Management Measures: Annual total allowable landings (TAL) are divided into a commercial quota (17% of TAL) and a recreational harvest limit (83% of TAL). The commercial fishery is controlled through state-by-state quotas based on historic landings from 1981-1989. The recreational fishery is managed under a coastwide 3-fish bag limit for private anglers and shore-based fishermen, and a 5-fish bag limit for for-hire fishermen.

January 2020

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); Addendum V (2018)

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 updates species groupings to ensure consistency with NOAA Fisheries and increases 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. Addendum V allows the Board to respond to changes in the stock status of coastal shark populations and adjust regulations through Board action rather than an addendum, ensuring greater consistency between state and federal shark regulations.

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. Additionally, in April 2019, the Board approved minimum size

Coastal Sharks Stock Status Information by Species and Species Groups

Species or Complex Name	Stock Status		References/Comments
	Overfished	Overfishing	
Pelagic			
Porbeagle	Yes	No	Porbeagle Stock Assessment, ICCAT Standing Committee on Research and Statistics Report ('09); Rebuilding ends in 2108 (HMS Am. 2)
Blue	No	No	ICCAT Standing Committee on Research and Statistics Report ('15)
Shortfin Mako	Yes	Yes	ICCAT Standing Committee on Research and Statistics Report ('17)
All other	Unknown	Unknown	
Aggregated Large Coastal Sharks (LCS)			
Atlantic Blacktip	Unknown	Unknown	SEDAR 11 ('06)
Aggregated Large Coastal Sharks Atlantic Region	Unknown	Unknown	SEDAR 11 ('06); difficult to assess as a species complex due to various life history characteristics/lack of available data
Non-Blacknose Small Coastal Sharks (SCS)			
Atlantic	No	No	SEDAR 34 ('13)
Bonnethead	Unknown	Unknown	SEDAR 34 ('13)
Finetooth	No	No	SEDAR 13 ('07)
Hammerhead			
Scalloped	Yes	Yes	SEFSC Scientific Review by Hayes et al. ('09); Rebuilding ends in 2023 (HMS Am. 5a)
Blacknose			
Blacknose	Yes	Yes	SEDAR 21 ('10); Rebuilding ends in 2043 (HMS Am. 5a)
Smoothhound			
Atlantic Smooth	No	No	SEDAR 39 ('15)
Research			
Sandbar	Yes	No	SEDAR 21 ('10)
Prohibited			
Dusky	Yes	Yes	SEDAR 21 ('16); Rebuilding ends in 2107 (HMS Am. 5b)
All other	Unknown	Unknown	

limits for shortfin mako (5.92' fork length size for males, 6.92' fork length size for females) to be consistent with regulations set in federal waters in response to the 2017 stock assessment that found the resource is overfished and experiencing overfishing. Recreational anglers can only harvest sharks caught with a handline or rod & reel.

Coastal Shark Management Groups	
Species Group	**Species within Group**
Prohibited	Sand tiger, bigeye sand tiger, whale, basking, white, 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

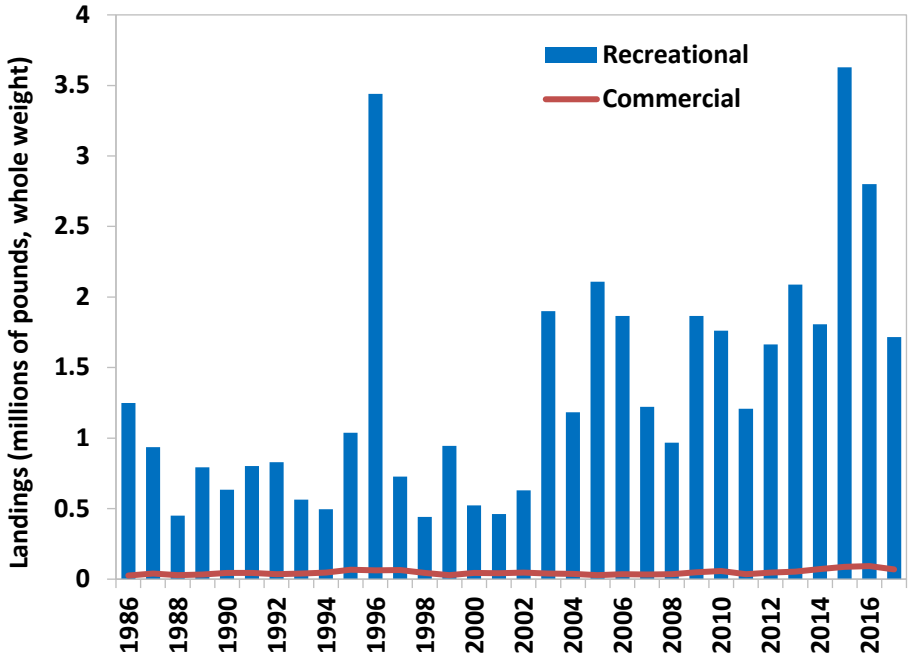
The commercial fishery is managed based on MSY using quotas and possession limits to control harvest level and effort. Sharks are split into eight commercial species groups based on fisheries, biology, and stock status — prohibited, research, small coastal, blacknose, aggregated large coastal, hammerhead, 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.

Overview of Stock Status
Cobia, *Rachycentron canadum*

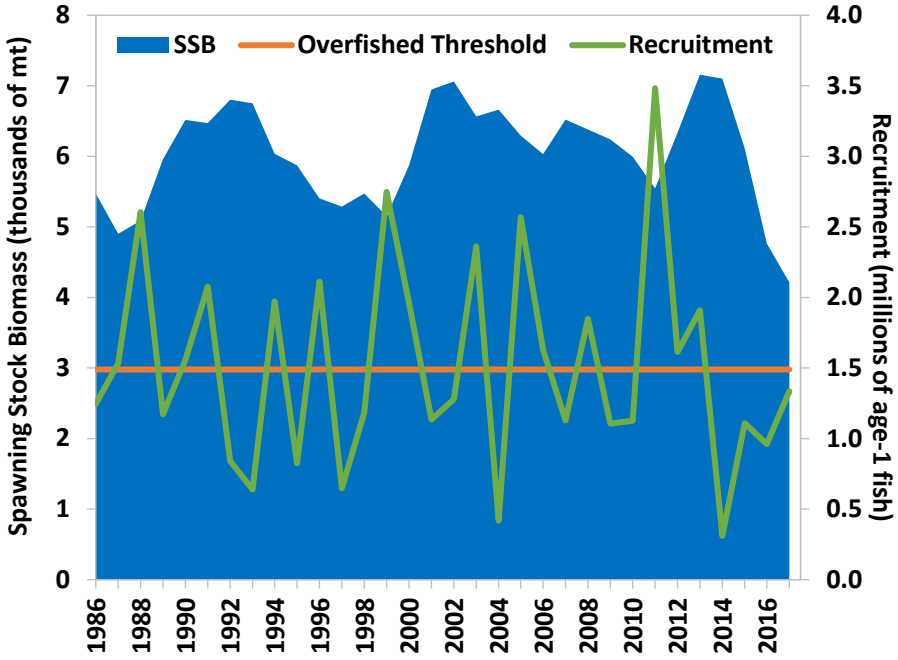
Atlantic Cobia Recreational and Commercial Landings

Source: NOAA Fisheries, Fisheries Statistics Division, 2019; ACCSP Data Warehouse, 2019



Atlantic Cobia Spawning Stock Biomass & Recruitment

Source: SouthEast Data, Assessment and Review 28, 2019



Management Considerations

Condition: Not overfished and overfishing not occurring. The 2019 SEDAR Benchmark Assessment utilized $SSB_{F40\%}$ as the overfished threshold and $F_{40\%}$ as the overfishing threshold. SSB remains above the overfished threshold, but the fishing mortality rate has not exceeded the overfishing threshold.

Biological Reference Points from 2019 SEDAR Benchmark Assessment:

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 for implementation starting in the 2018 fishery.

January 2020

Overview of Stock Status
Cobia, *Rachycentron canadum*

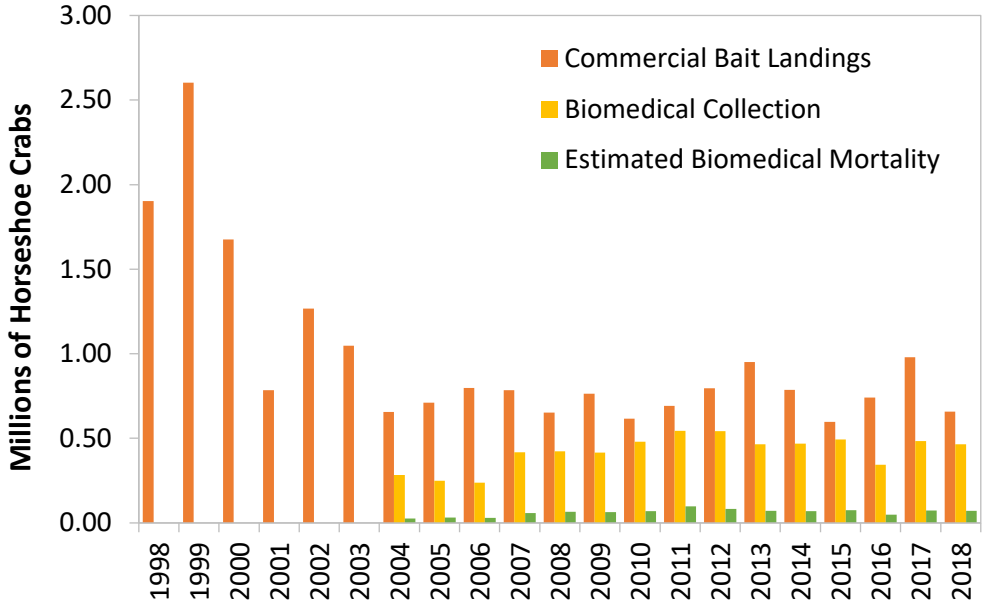
Primary Management Measures:

Amendment 1 (2019) establishes management measures that transition the FMP from complementary management with the Councils to sole management by the Commission. Amendment 1 establishes mechanisms to set harvest quotas and sector allocations, define stock status criteria, and recommend management measures to be implemented by NOAA Fisheries in federal waters. Due to the re-calibration of recreational data used in the 2019 assessment, the Board initiated an addendum to reevaluate allocation and *de minimis* measures.

Overview of Stock Status
Horseshoe Crab, *Limulus polyphemus*

Horseshoe Crab Bait Landings & Biomedical Collection

Source: State Compliance Reports, 2019



Please note the following details regarding biomedical collection numbers:

* Biomedical collection numbers, which are annually reported to the Commission include all horseshoe crabs brought to bleeding facilities except those that were harvested as bait and counted against state quotas.
* Most of the biomedical crabs collected 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

Number of Surveys Below the Index-based 1998 Reference Point in the Terminal (Final) Year of ARIMA Model

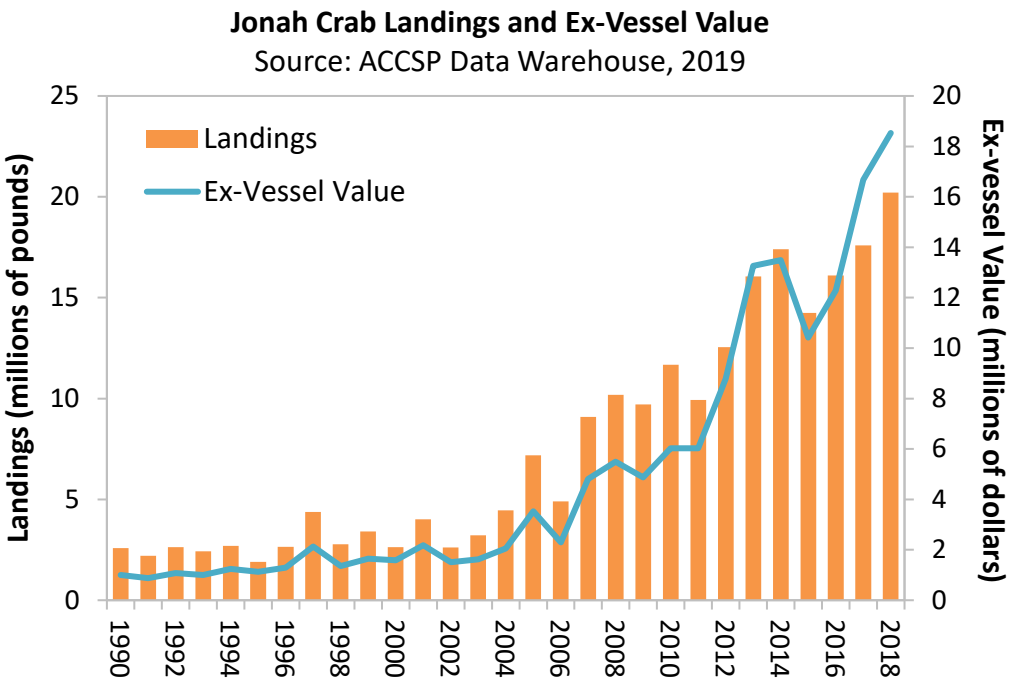
Region	2009 Benchmark	2013 Update	2019 Benchmark	2019 Stock Status
Northeast	2 out of 3	5 out of 6	1 out of 2	Neutral
New York	1 out of 5	3 out of 5	4 out of 4	Poor
Delaware Bay	5 out of 11	4 out of 11	2 out of 5	Neutral
Southeast	0 out of 5	0 out of 2	0 out of 2	Good
Coastwide	7 out of 24	12 out of 24	7 out of 13	Neutral

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 2013-2020 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).

January 2020

Overview of Stock Status
Jonah Crab, *Cancer borealis*



Timeline of Management Actions: FMP ('15); Addendum I ('16); Addendum II ('17); Addendum III ('18)

Management Considerations:

Condition: Unknown

FMP Stock Rebuilding Goals: None.

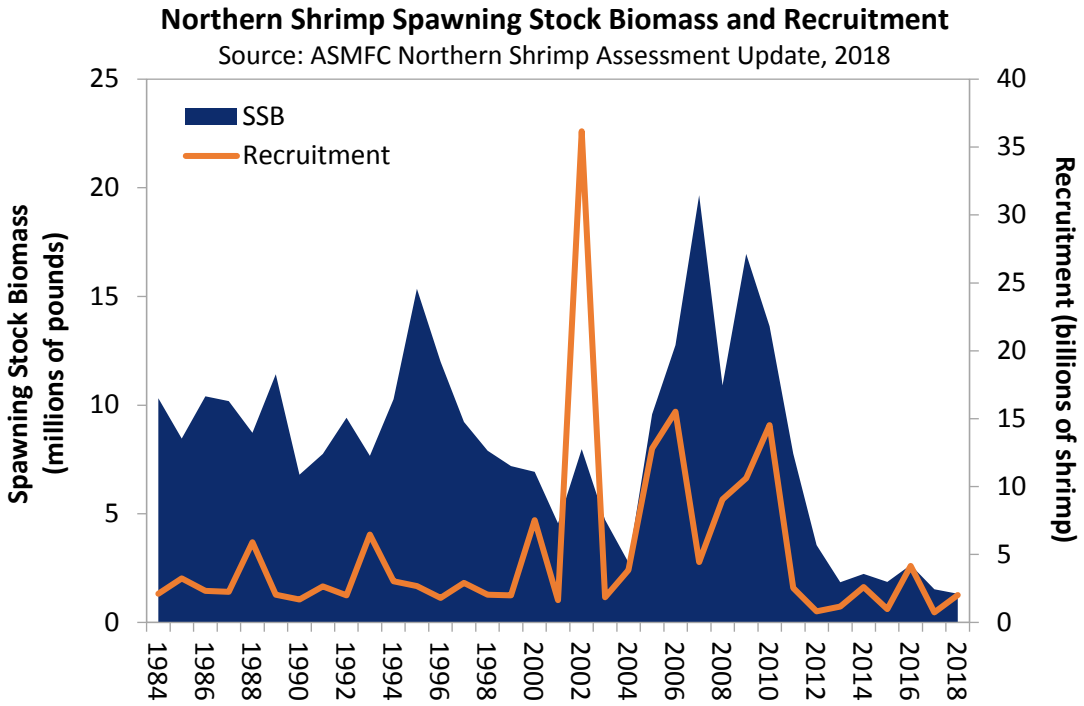
FMP Status: The goals of the Interstate FMP (approved by the American Lobster Management Board in August 2015) are to promote conservation, reduce the possibility of recruitment failure, and allow full utilization of the resource by the industry. The plan lays out specific management measures in the 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.

Addendum II establishes a coastwide standard for claw harvest to respond to concerns regarding the equity of the claw provision established in the FMP. The Addendum also establishes a definition of bycatch based on a percent composition of catch in order to minimize the expansion of a small-scale fishery under the bycatch allowance.

Addendum III addresses concerns regarding deficits in existing reporting requirements by expanding the mandatory harvester reporting data elements, improving the spatial resolution of harvester data, establishing a 5-year timeline for implementation of 100% harvester reporting, and prioritizing the development of electronic harvester reporting. In addition, the Addendum improves biological sampling requirements by establishing a baseline of ten sampling trips per year in the American lobster/Jonah crab fishery, and encourages states with more than 10% of coastwide landings in either the lobster or Jonah crab fisheries to conduct additional sampling trips.

Overview of Stock Status
Northern Shrimp, *Pandalus borealis*



Timeline of Management Actions: FMP (1986); Amendment 1 (2004); Amendment 2 (2011); Addendum I (2012); Amendment 3 (2017); Addendum I (2018)

Management Considerations:

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

FMP Stock Rebuilding Goals: None

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. Addendum I provides states the authority to allocate their state-specific quota between gear types in the event the fishery reopens.

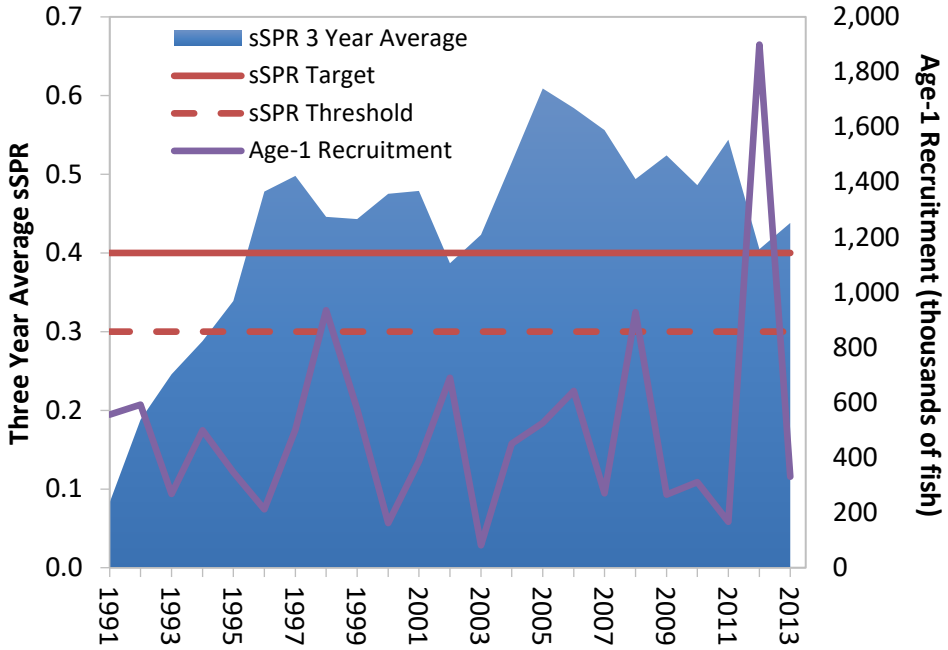
A moratorium was instituted for the 2014-2018 fishing seasons to protect the remaining spawning population and reduce pressure on the collapsed stock. The Section extended the fishing moratorium through 2021 with the understanding that should recruitment improve, it would take several years for those shrimp to be commercially harvestable.

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*

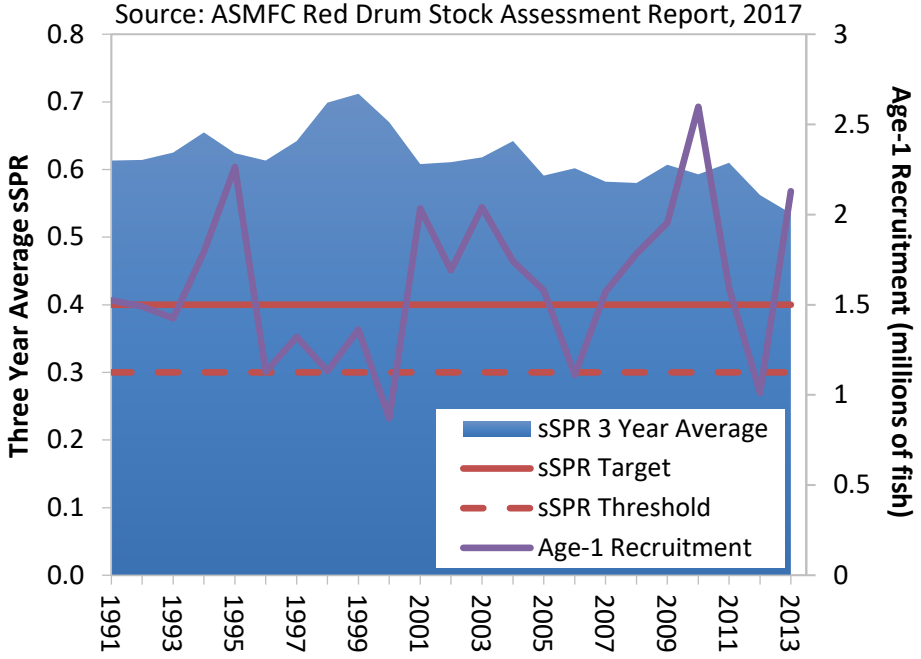
Red Drum Northern Stock 3-Year Average sSPR & Age -1 Recruitment

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); 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

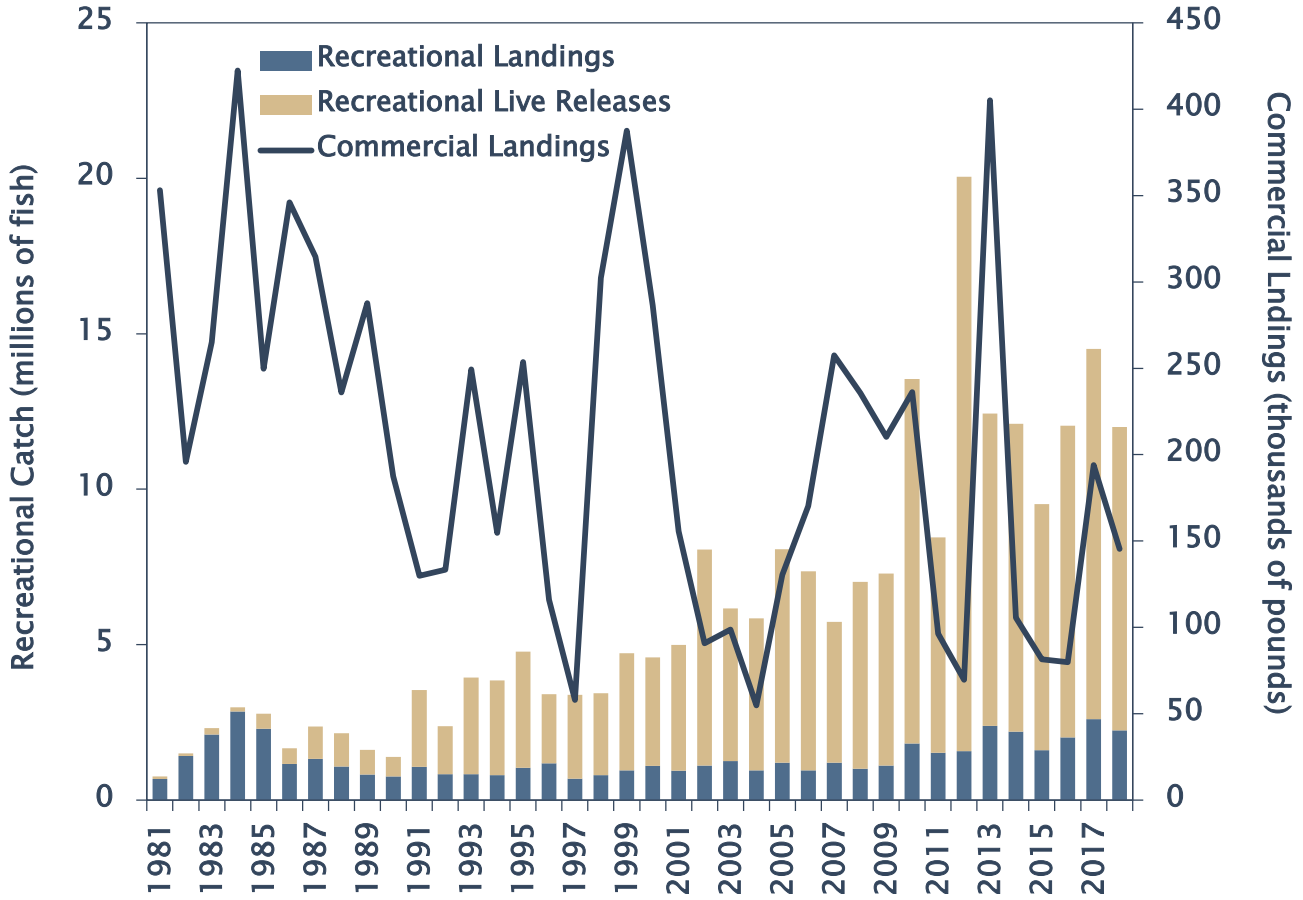
FMP Status: SAFMC transferred management authority of red drum through Amendment 2, which aims to achieve a sufficient escapement rate and restore the age and size structure of the Atlantic coast population. Addendum I outlines habitat needs and concerns of the species.

July 2019

Overview of Stock Status
Red Drum, *Sciaenops ocellatus*

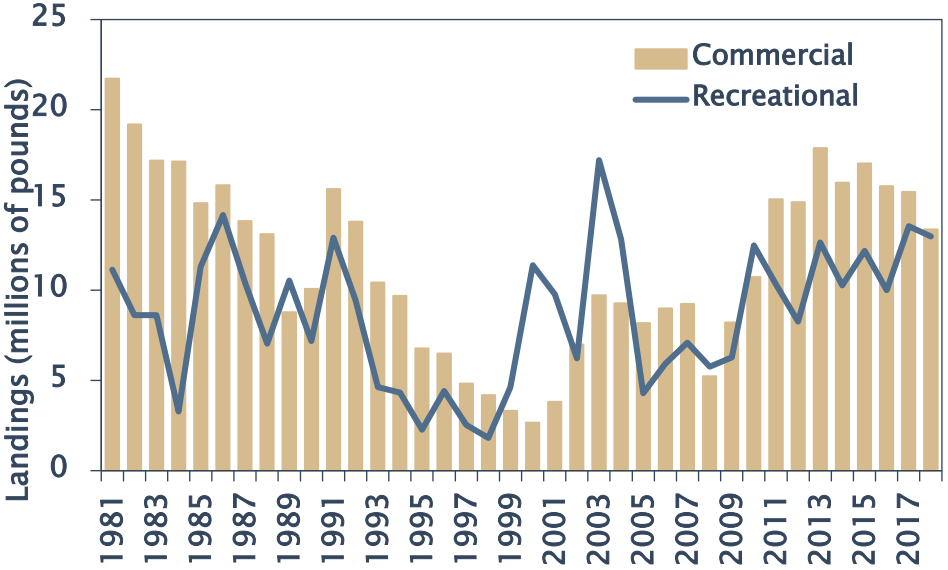
Primary Management Measures: All states have implemented recreational bag and size limits to attain the management goal of 40% SPR, including a maximum total length of 27 inches for all fisheries. States must maintain current or more restrictive commercial fishery regulations.

Red Drum Recreational Catch and Commercial Landings
Source: ACCSP Data Warehouse, 2019

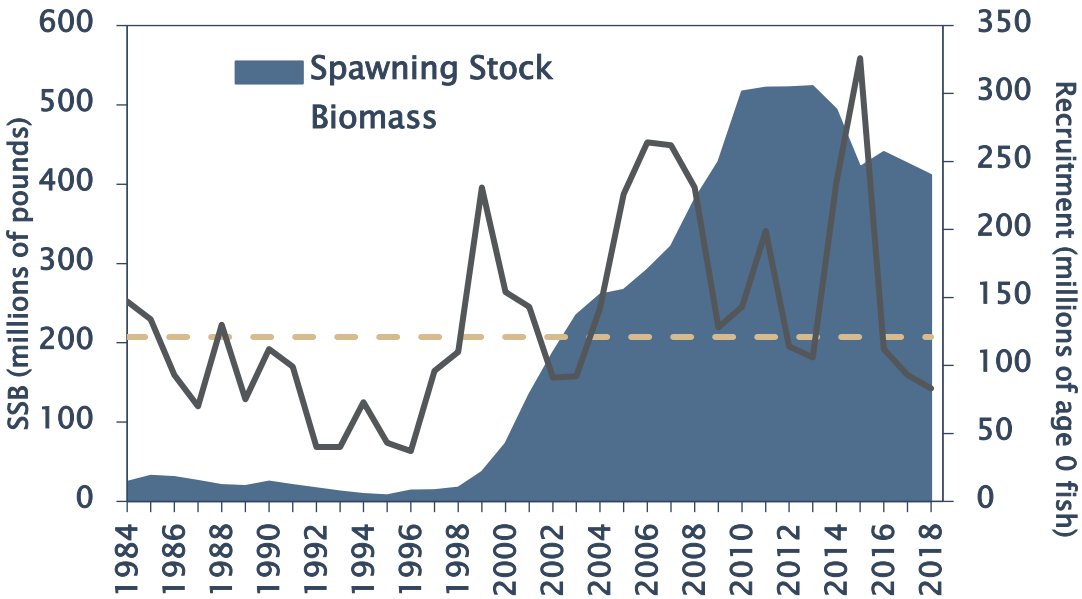


Overview of Stock Status
Scup, *Stenotomus chrysops*

Scup Commercial & Recreational Landings
Source: Scup Operational Stock Assessment, 2019



Scup Spawning Stock Biomass (SSB) and Recruitment
Source: Scup Operational Stock Assessment, 2019



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); Addendum XXXI (2018); Addendum XXXII (2018).

Management Considerations:

Condition: The 2019 scup operational assessment concluded that the scup stock was not overfished, and overfishing was not occurring in 2018 relative to the updated biological reference points calculated through the assessment.

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
$Spawning\ Stock\ Biomass_{2016}$ = 397 million pounds

Fishing Mortality Threshold ($F_{MSY\ PROXY}$=$F_{40\%}$) = 0.220
$Fishing\ Mortality_{2016}$ = 0.139

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. Through Addendum XXXI (2018), the Commission

recommended NOAA Fisheries implement transit provisions in Block Island Sound. Additionally, the Addendum expands the suite of tools available for managing summer flounder, scup and black sea bass, and reduces inconsistencies between state and federal regulations.

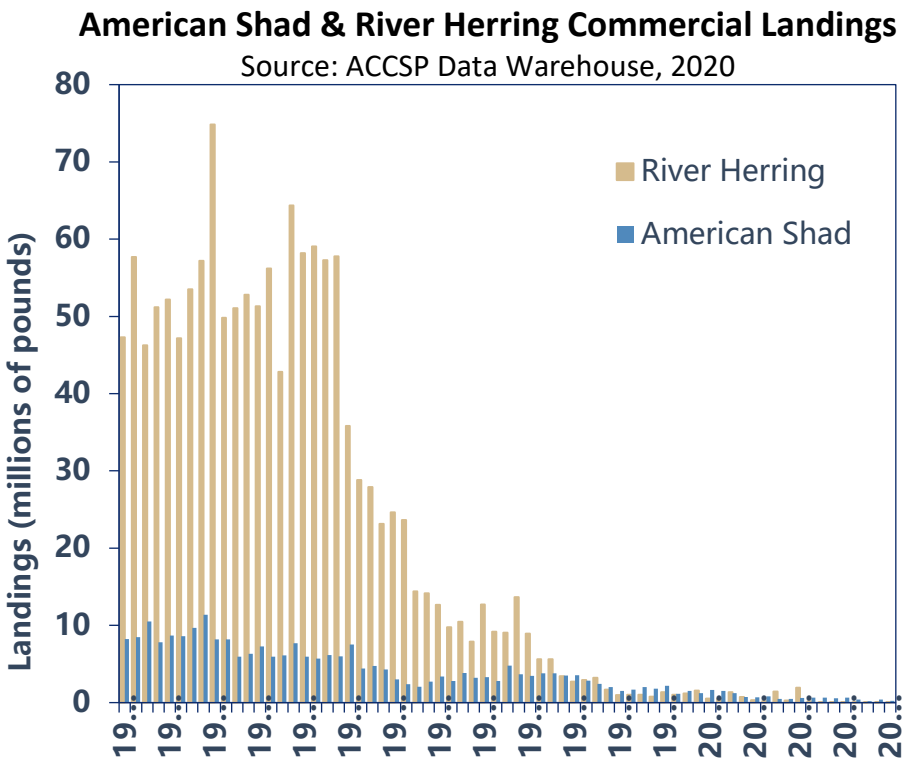
Primary Management Measures: Total annual quotas are divided between the recreational fishery (22%) and the commercial fishery (78%). Recreational fishery management measures are developed annually and include a combination of minimum size limits, bag limits, and fishing seasons. A coastwide quota regulates 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.

Pending Actions:

Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocations Amendment

In October 2019, the Board and the Council initiated the development of a joint amendment to reevaluate the FMP's commercial and recreational allocations. This action aims to address the allocation-related impacts of the revised recreational catch and landings data provided by MRIP. The Commission and Council have begun preparing analyses to guide development of a Public Information Document and scoping process. The Board and Council will discuss this issue during their next joint meeting in December 2019.

Overview of Stock Status
Shad & River Herring



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.

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

March 2020

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	

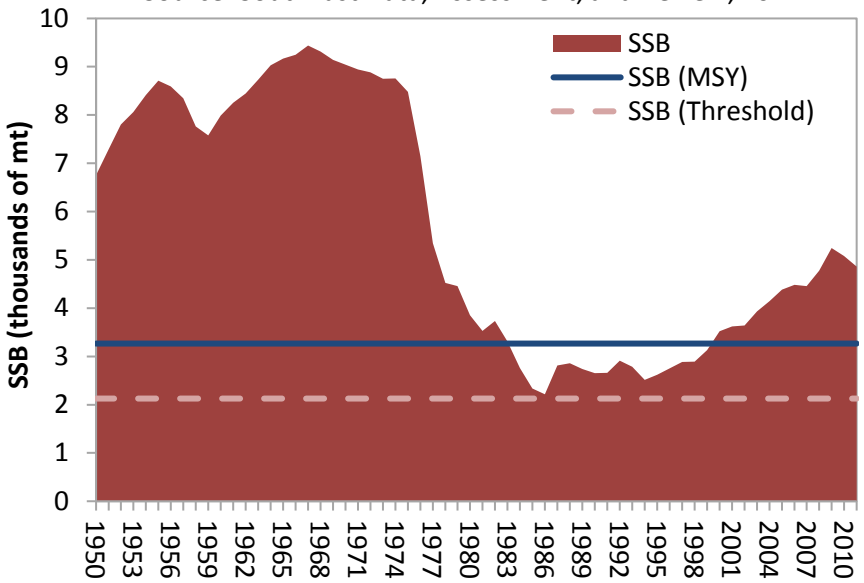
State	River	Benchmark Trends (2001-2010)	Updated Recent Trends (2006-2015)
NE U.S. Continental Shelf (NMFS Bottom Trawl)^		NA	Increasing[A,B]
ME	Androscoggin	Unknown[A]	Increasing[A]
	Kennebeck	Unknown[RH]	Increasing[RH]
	Sebasticook	Unknown[A]	Increasing[RH]
	Damariscotta	Stable[A]	Increasing[A]
	Union	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	Mattapoisett	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]

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*

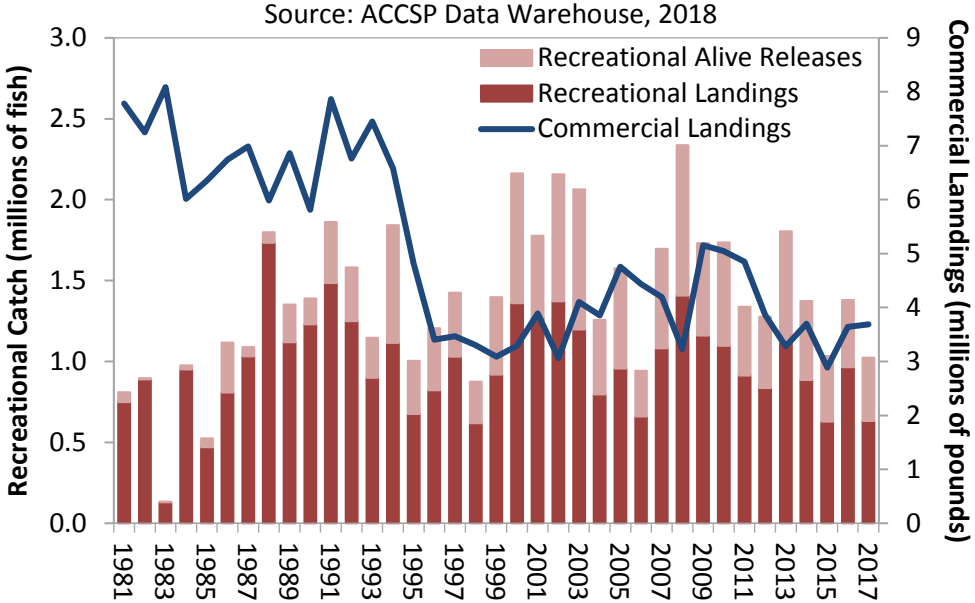
Spanish Mackerel Spawning Stock Biomass (SSB)

Source: SouthEast Data, Assessment, and Review, 2012



Spanish Mackerel Commercial Landings and Recreational Catch

Source: ACCSP Data Warehouse, 2018



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.

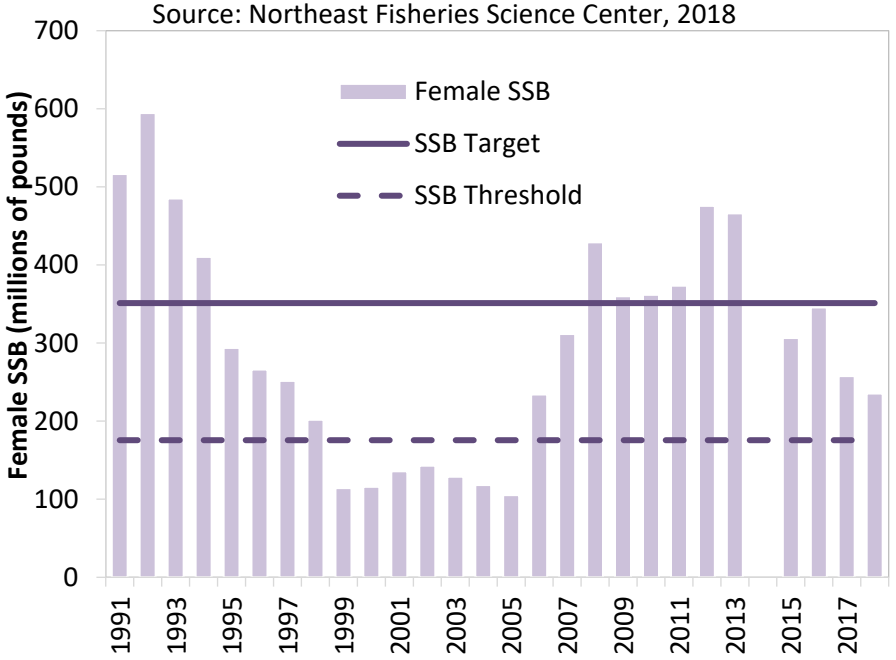
Timeline of Management Actions: FMP (1990); Omnibus Amendment (2011); Addendum I (2013)

February 2019

Overview of Stock Status
Spiny Dogfish, *Squalus acanthias*

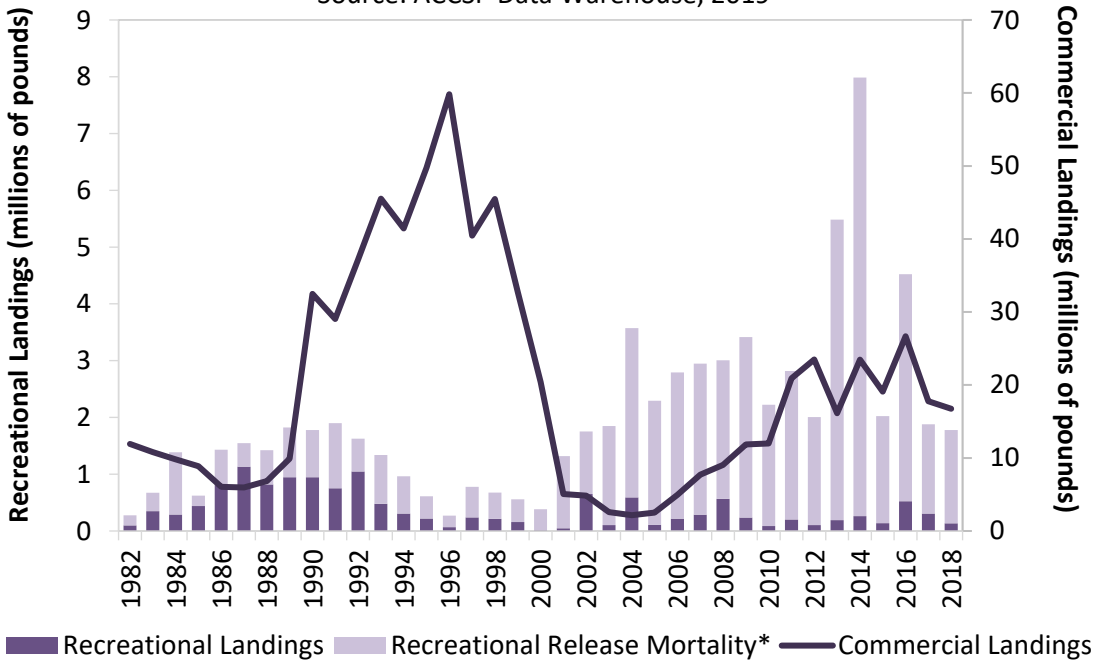
Spiny Dogfish Female Spawning Stock Biomass

Source: Northeast Fisheries Science Center, 2018



Spiny Dogfish Commercial & Recreational Landings

Source: ACCSP Data Warehouse, 2019



*Recreational release mortality assumes 20% of the fish released alive die.

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. Spawning stock biomass is estimated to be at 67% of the target at 235 million pounds.

FMP Reference Points:

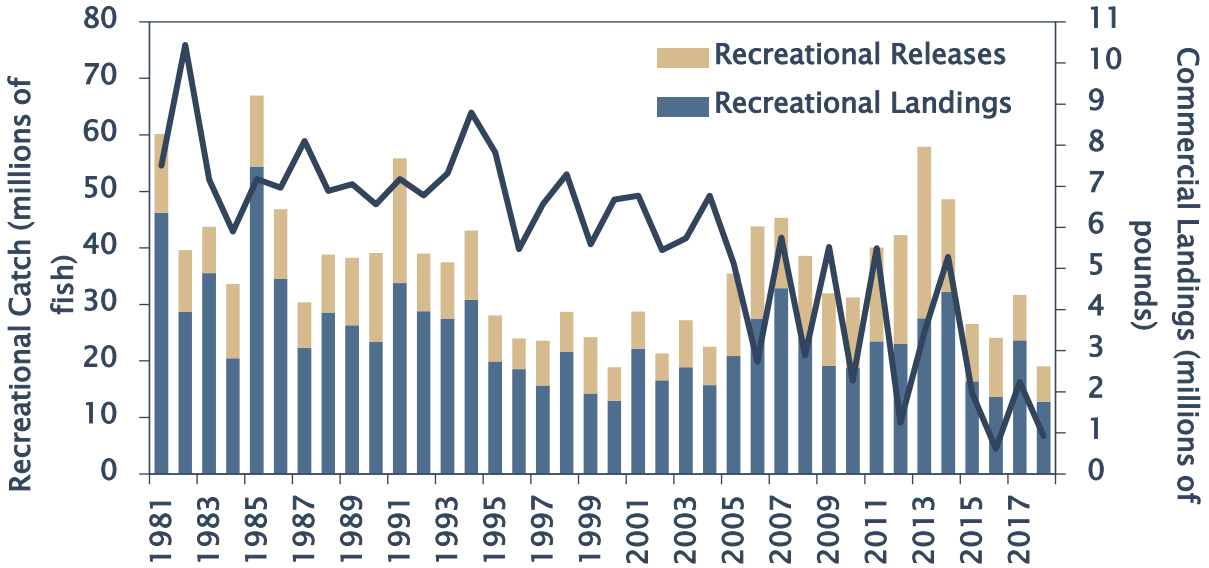
Female SSB threshold (1/2 SSB max) = 79,644 mt (175 million pounds)
Female SSB target (100% SSB max) = 159,288 mt (351 million pounds)
Fishing Mortality Threshold ($F_{threshold}$) = 0.2439
Fishing Mortality Target (F_{MSY}) = 0.2439

FMP Status: The 2002 FMP established annual quota and possession limit system; Addendum I allowed Board to set multi-year specifications; Addendum II established regional allocation of the annual quota with 58% to states from ME–CT; Addendum III established state shares for NY–NC; Addendum IV aligned the F threshold definition with the federal plan; and Addendum V 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, with, a 2020/2021 quota of 23.2 million pounds, and a 2021/2022 quota of 27.4 million pounds, with a maximum possession limit of 6,000 pounds per day for the northern region states (ME-CT).

January 2020

Overview of Stock Status
Spot, *Leiostomus xanthurus*



Timeline of Management Actions: FMP (1987); Omnibus Amendment (2011); Addendum I (2014); Addendum III (2020).

Management Considerations

Condition: Unknown; The TLA was recently updated in 2020 to incorporate additional fishery-independent surveys, age and length information, an updated reference period, regional characteristics, and an updated management trigger mechanism. These changes will better represent trends in adult abundance of spot than previous methods.

FMP Stock Rebuilding Goals and Rebuilding Schedule: None

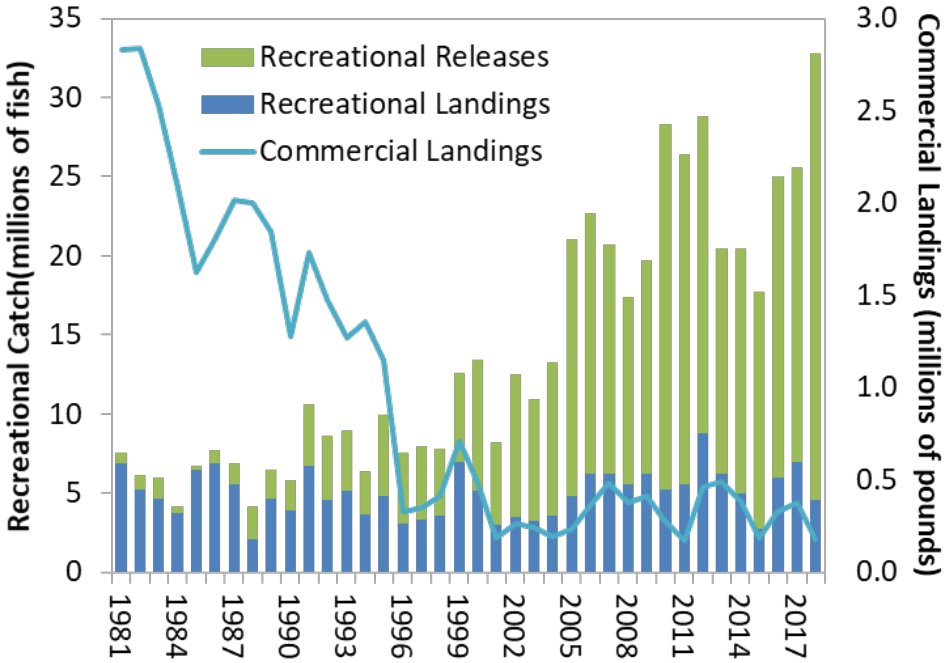
FMP Status: FMP approved in 1987. The Omnibus Amendment to the FMPs for Spanish Mackerel, Spot, and Spotted Seatrout (2011) updates the Spot FMP with compliance measures and Commission standards that were developed in response to the Atlantic Coastal Fisheries Cooperative Management Act (e.g., adaptive management, *de minimis* criteria). Addendum III updates the TLA's management trigger mechanism, management responses to TLA triggers, and evaluation of the fishery's response to measures implemented if triggers occur. Coastwide management actions are triggered if both characteristics (harvest and abundance) in either region exceed threshold levels of red for 2 of the 3 most recent years.

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

Overview of Stock Status
Spotted Seatrout, *Cynoscion nebulosus*

Spotted Seatrout Commercial Landings & Recreational Catch

Source: ACCSP Data Warehouse, 2019



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

Management Considerations

Condition: Unknown

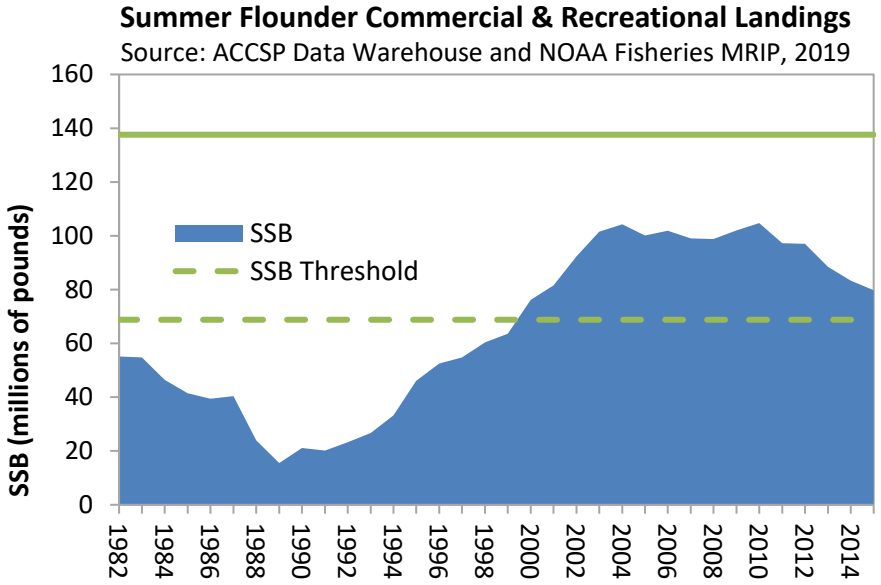
FMP Stock Rebuilding Goals: Maintaining Spawning Potential Ratio (SPR) of at least 20%

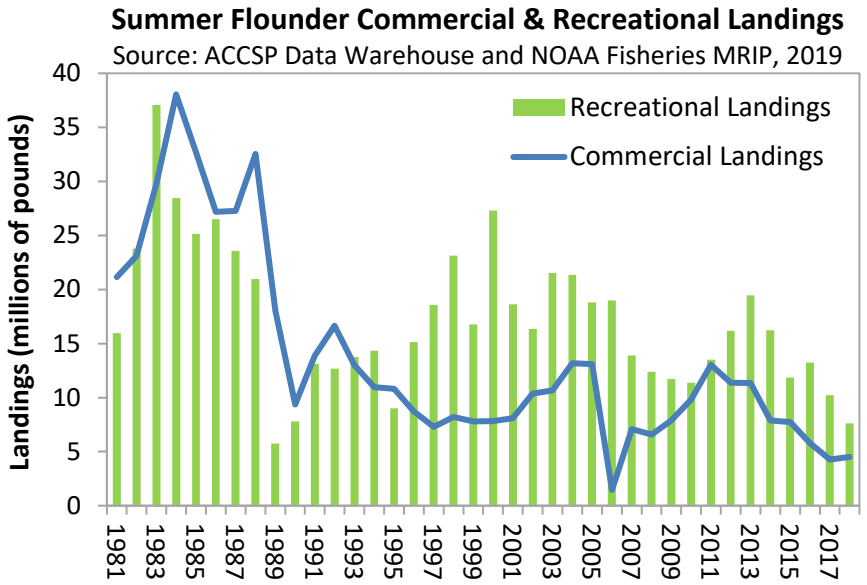
FMP Rebuilding Schedule: None

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*





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); Addendum XXXI (’18); Addendum XXXII (’18); Summer Flounder Commercial Issues Amendment (’19)

Management Considerations:

Condition: Rebuilt; not overfished but overfishing is occurring. Currently, F = 0.39; SSB = 79.9 million pounds (2018)

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. 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. Addendum XXXI (2018) recommends NOAA Fisheries implement transit provisions in Block Island Sound. Addendum XXXII (2018) establishes an annual specifications process for developing recreational management measures. The Summer Flounder Commercial Issues Draft Amendment revises the management program’s goals and objectives for summer flounder and implements new state-specific commercial allocations.

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.

July 2019

Overview of Stock Status
Summer Flounder, *Paralichthys dentatus*

Pending Actions:

Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocations Amendment

In October 2019, the Board and the Council initiated the development of a joint amendment to reevaluate the FMP's commercial and recreational allocations. This action aims to address the allocation-related impacts of the revised recreational catch and landings data provided by MRIP. The Commission and Council have begun preparing analyses to guide development of a Public Information Document and scoping process. The Board and Council will discuss this issue during their next joint meeting in December 2019.

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.

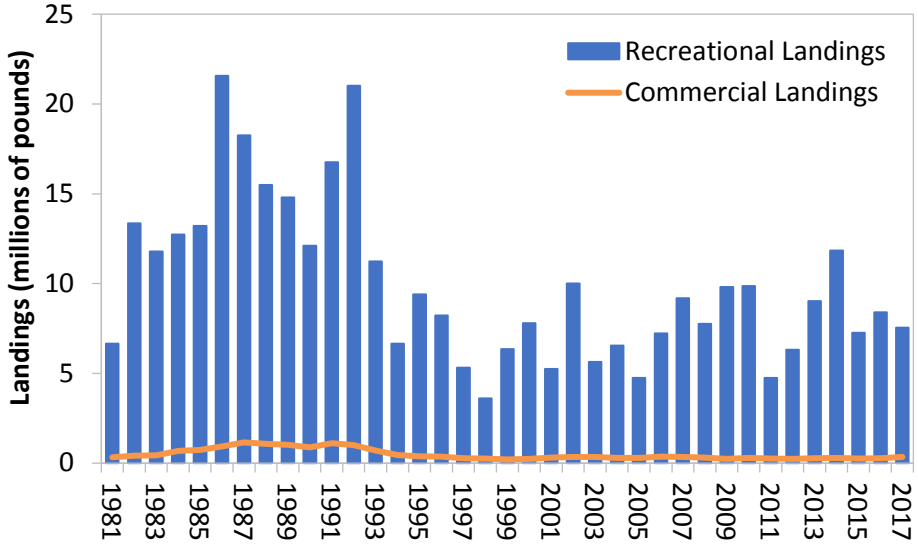
FMP Stock Rebuilding Goals (as proposed by 2016 assessment update and used in Amendment 1): See accompanying table

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 states will implement the commercial tagging program by January 1, 2020.

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 Commercial and Recreational Landings

Source: ACCSP Data Warehouse, 2018



Timeline of Management Actions: FMP (1996); Addendum I (1997); Addendum II (1999); Addendum III (2002); Addenda IV & V (2007); Addendum VI (2011); Amendment 1 (2017)

Tautog Biological Reference Points and Stock Status by Region

Source: ASMFC Stock Assessment Update, 2016

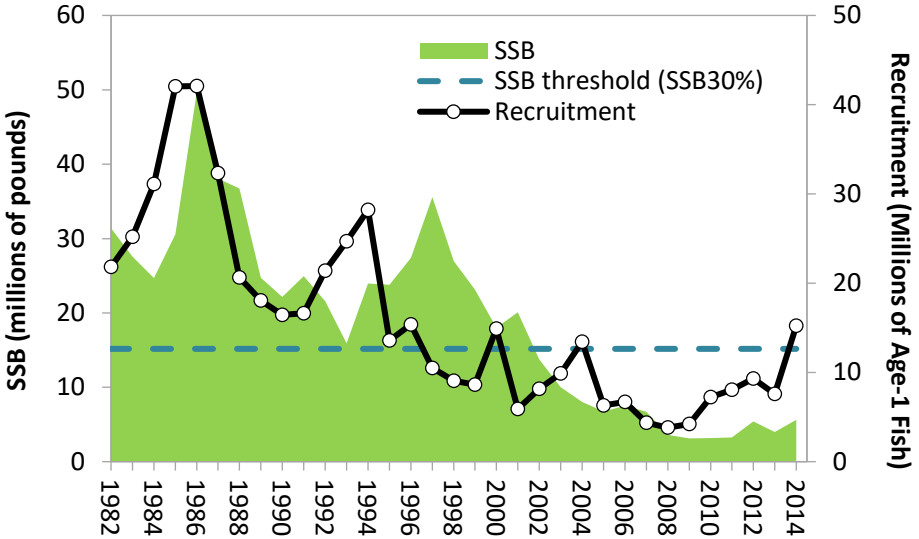
Region	Fishing Mortality			Spawning Stock Biomass (mt)			MSY or SPR	Status
	Target	Threshold	3-Year Average	Target	Threshold	SSB_{2015}		
Massachusetts – Rhode Island	0.28	0.49	0.23	2,684	2,004	2,196	SPR	Not overfished, overfishing not occurring
Long Island Sound	0.28	0.49	0.51	2,865	2,148	1,603	MSY	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

February 2019

Overview of Stock Status
Weakfish, *Cynoscion regalis*

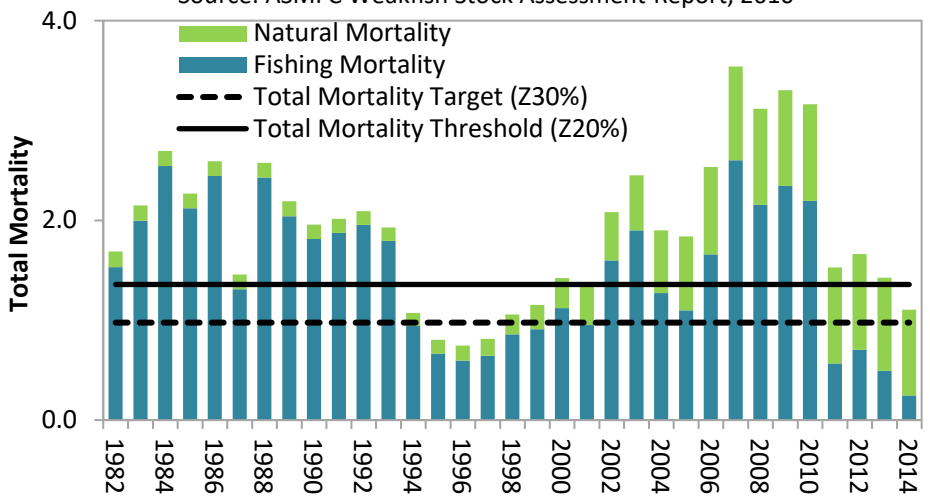
Weakfish Spawning Stock Biomass and Recruitment

Source: ASMFC Weakfish Stock Assessment Report, 2016



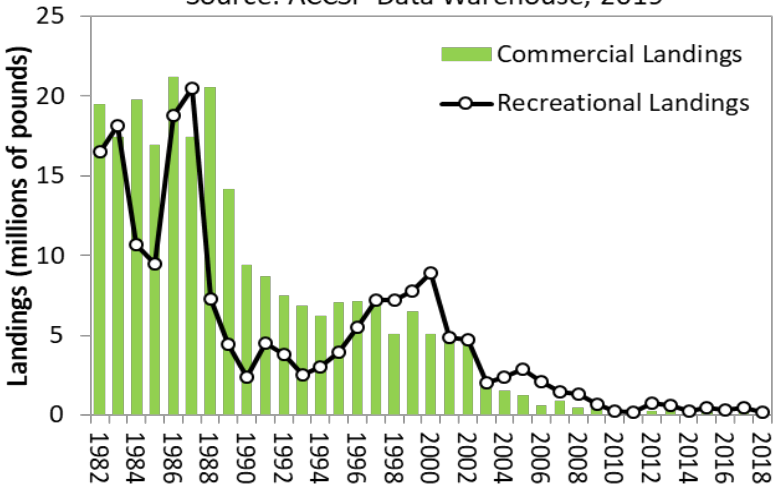
Contributions of Fishing and Natural Mortality to Weakfish Total Mortality

Source: ASMFC Weakfish Stock Assessment Report, 2016



Weakfish Commercial and Recreational Landings

Source: ACCSP Data Warehouse, 2019



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.

FMP Status: Amendment 4 (2002) 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 (2007) 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.

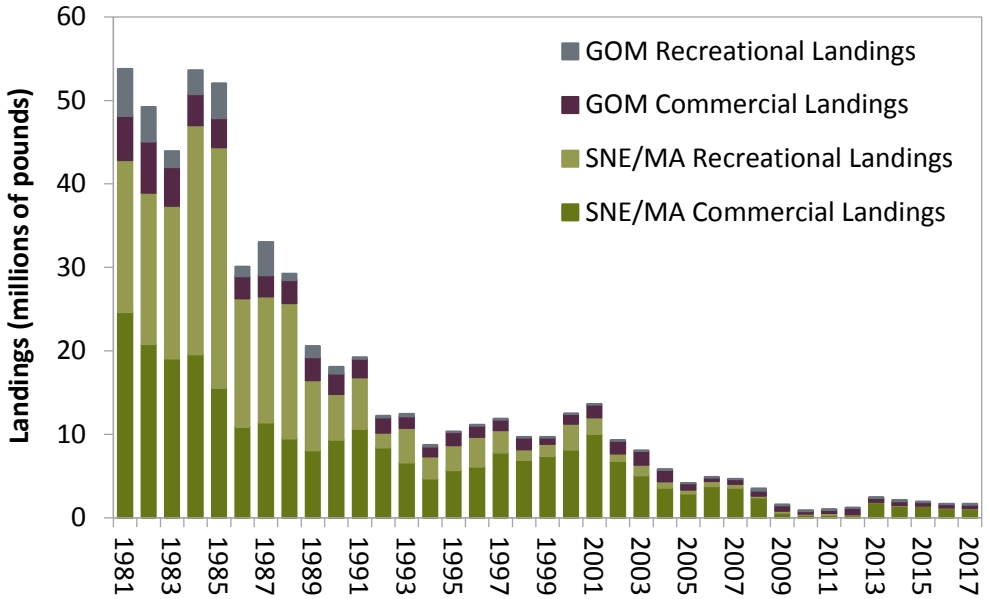
Primary Management Measures: The commercial fishery is controlled through minimum size limit, trip limit, closed season, closed area, mesh size, bycatch limit, and bycatch reduction device requirements. The recreational fishery is managed through bag limit and minimum size limit requirements.

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)

Overview of Stock Status
Winter Flounder, *Pseudopleuronectes americanus*

Winter Flounder Commercial & Recreational Landings by Stock Unit

Source: Northeast Fisheries Science Center, 2018



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

Management Considerations:

Condition: Overfished and overfishing is not occurring. Stock is at 18% of target SSB.

FMP Stock Rebuilding Goals:

F Target (75%F_{MSY}) = 0.255 F Threshold (F_{MSY}) = 0.34 F = 0.21

SSB Target (B_{MSY}) = 54.4 million pounds

SSB Threshold (½SSB_{MSY}) = 27.2 million pounds

SSB = 9.6 million pounds

GULF OF MAINE STOCK (GOM)

Management Considerations:

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

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.