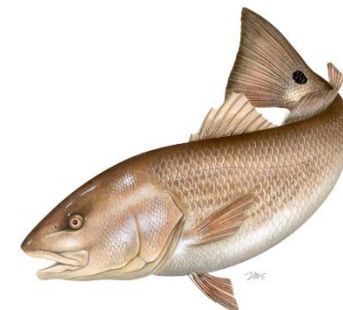
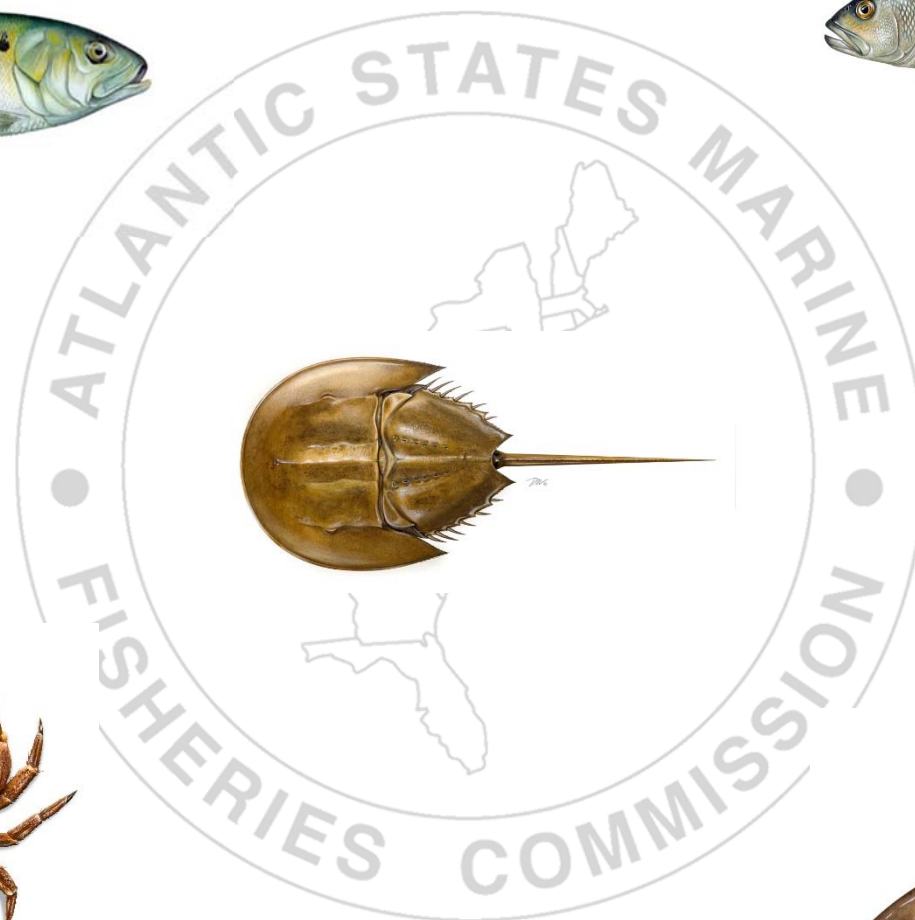
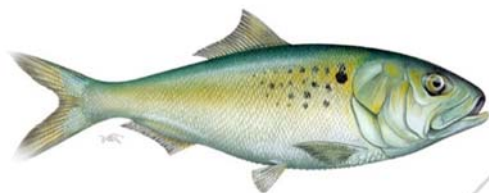


American Eel  
American Lobster  
Atlantic Croaker  
Atlantic Herring  
Atlantic Menhaden  
Atlantic Striped Bass  
Atlantic Sturgeon  
Black Drum  
Black Sea Bass  
Bluefish  
Coastal Sharks  
Cobia  
Horseshoe Crab  
Jonah Crab  
Northern Shrimp  
Red Drum  
Scup  
Shad & River Herring  
Spanish Mackerel  
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 26 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.*

January 2017











*Vision: Sustainably Managing Atlantic Coastal Fisheries*

# Quick Guide to ASMFC Species Stock Status

(Current as of January 2017)









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

STATUS/ TRENDS	SPECIES		OVERFISHED	OVERFISHING	REBUILDING STATUS & SCHEDULE
↓		American Eel	Depleted	Unknown	Harvest restrictions adopted for glass, yellow, and silver eel fisheries in response to 2012 benchmark assessment
√		Gulf of Maine (GOM)/ Georges Bank (GBK)	Not Depleted	N	GOM/GBK stock rebuilt  Board approved 10% reduction in exploitation on the SNE stock in 2012 as well as trap reductions in Areas 2 & 3.
↓		Southern New England (SNE)	Depleted	N	Board initiated Addendum XXV to consider additional restrictions for SNE in response to 2015 benchmark assessment.
↓		American Shad	Depleted	Unknown	Depleted on coastwide basis; Amendment 3 established 2013 moratorium unless river-specific sustainability can be documented
?		Atlantic Croaker	Unknown	N	Overfished status unknown; however, biomass has been increasing & age structure has been expanding since late 1980s; benchmark assessment scheduled for completion in 2017
√		Atlantic Herring	N	N	Rebuilt; 2015 stock assessment update indicated SSB is above the target and F is below the threshold
√		Atlantic Menhaden	N	N	2017 TAC set at 200,000 mt, a 6.45% increase from 2016 TAC
*		Atlantic Striped Bass	N	N	Rebuilt since 1995. Management action triggered in 2013; harvest reductions implemented in 2015. F estimated below target level in 2015, but female SSB continues to decline towards the threshold
?		Atlantic Sturgeon	Y	N	40+ year moratorium; to be rebuilt by ~2038; listed in 2012

# Quick Guide to ASMFC Species Stock Status

(Current as of January 2017)











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

√		Black Drum	N	N	under the ESA; benchmark assessment scheduled for 2017
*		Black Sea Bass	N	N	FMP approved in 2013; status based on 2015 benchmark assessment which found 2012 median biomass well above median biomass that produces MSY Benchmark assessment completed in 2016; stock status may change pending release of assessment results in 2017
√		Bluefish	N	N	Biomass above threshold but below target
*		Coastal Sharks	Varies by species & species complex		
√		Cobia	N	N	FMP scheduled for approval in 2017; SEDAR research track assessment scheduled for 2019 and SEDAR 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

# Quick Guide to ASMFC Species Stock Status

(Current as of January 2017)

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

↔	Red Drum 	Northern Region	Unknown	N	SPR above target and threshold SPRs; benchmark assessment under review, scheduled for completion in 2017
↓		Southern Region	Unknown	N	SPR above threshold SPR; benchmark assessment under review, scheduled for completion in 2017
√	River Herring 	River Herring	Depleted	Unknown	Depleted on coastwide basis; Amendment 2 established 2012 moratorium unless river-specific sustainability can be documented
√	Scup 	Scup	N	N	Rebuilt
√	Spanish Mackerel 	Spanish Mackerel	N	N	Rebuilt
√	Spiny Dogfish 	Spiny Dogfish	N	N	Rebuilt since 2008
?	Spot 	Spot	Unknown	Unknown	Traffic light approach adopted to assess stock trends & initiate management response; benchmark assessment scheduled for completion in 2017
?	Spotted Seatrout 	Spotted Seatrout	Unknown	Unknown	Omnibus Amendment includes measures to protect spawning stock & establishes 12" minimum size limit
*	Summer Flounder 	Summer Flounder	N	Y	2016 assessment update shows biomass trending downward since 2010 and 2015 F exceeded threshold by 26%
*	Tautog 	Tautog	Y	Varies by region	Overfished on a coastwide basis and regionally based on 2016 assessment update; Board has initiated amendment to address regional stock units and reference points.

# Quick Guide to ASMFC Species Stock Status

(Current as of January 2017)

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

↓		Weakfish	Depleted	N	6-year rebuilding period if spawning stock biomass < threshold level; Board approved further harvest restrictions in 2009
*		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	Current biomass at 23% of SSB target based on 2015 assessment update; recruitment continues to decline

## 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.

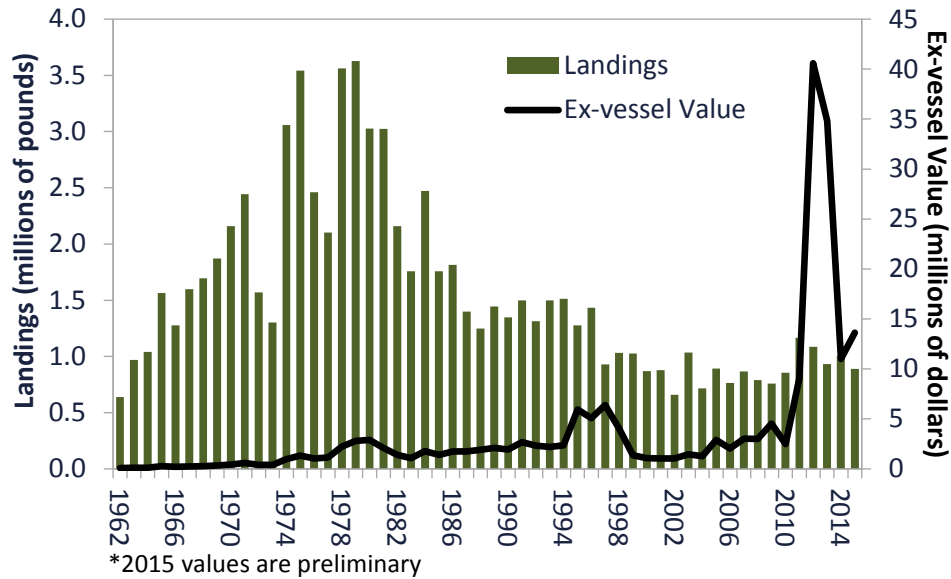
**Benchmark stock assessment** - A full analysis and review of stock condition, focusing on the consideration of new data sources and newer or improved assessment models. This assessment is generally conducted every 3-5 years and undergoes a formal peer review by a panel of independent scientists who 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*

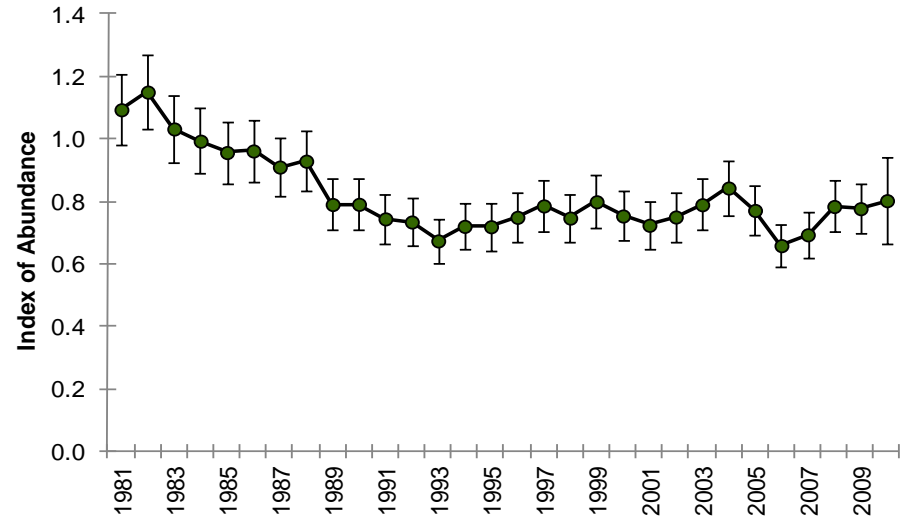
**American Eel Commercial Landings and Ex-Vessel Value**

Source: ACCSP Data Warehouse, 2016



**30-Year Index of Abundance for Yellow-phase American Eels along the Atlantic Coast (error bars represent standard errors about the estimates).**

Source: ASMFC American Eel Benchmark Stock Assessment Report, 2012



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

**Management Considerations:**

**Condition:** Depleted

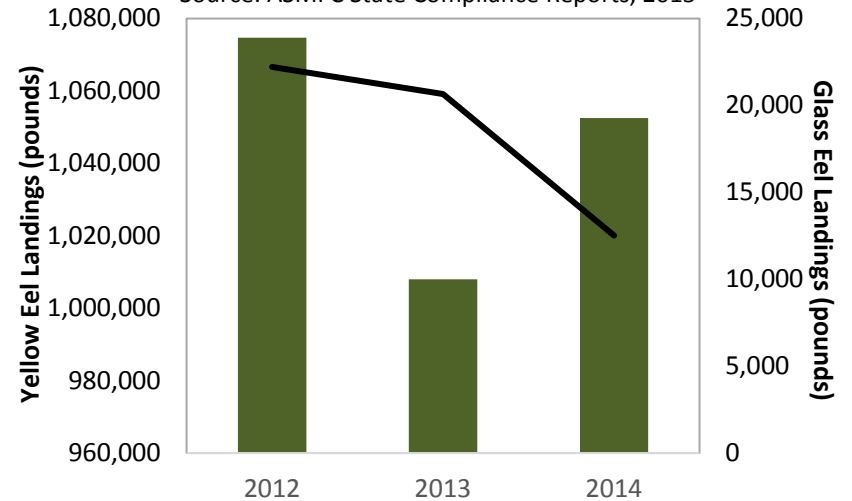
**FMP Stock Rebuilding Goals:** Protect and enhance the abundance of American eel in inland and territorial waters of the Atlantic states and jurisdictions, contribute to the viability of the American eel spawning population, and provide for sustainable fisheries by preventing overharvest.

**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

**American Eel Landings by Fishery**

Source: ASMFC State Compliance Reports, 2015



## **Overview of Stock Status** **American Eel, *Anguilla rostrata***

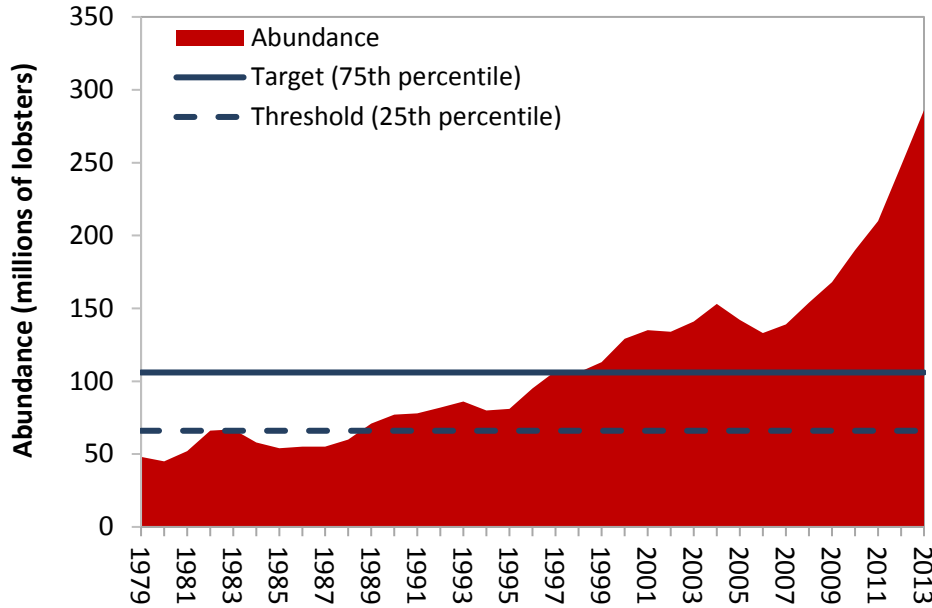
(2014) seek to reduce mortality and increase conservation of American eel stocks across all life stages. Addendum III establishes new management measures for both the commercial (glass, yellow, and silver) and recreational eel fisheries, and implements fishery-independent and -dependent monitoring requirements. Addendum IV establishes a 907,671 pound coastwide quota for yellow eel fisheries, reduces Maine's glass eel quota to 9,688 pounds (2014 landings), and allows for the continuation of New York's silver eel weir fishery in the Delaware River.

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

## Overview of Stock Status American Lobster, *Homarus americanus*

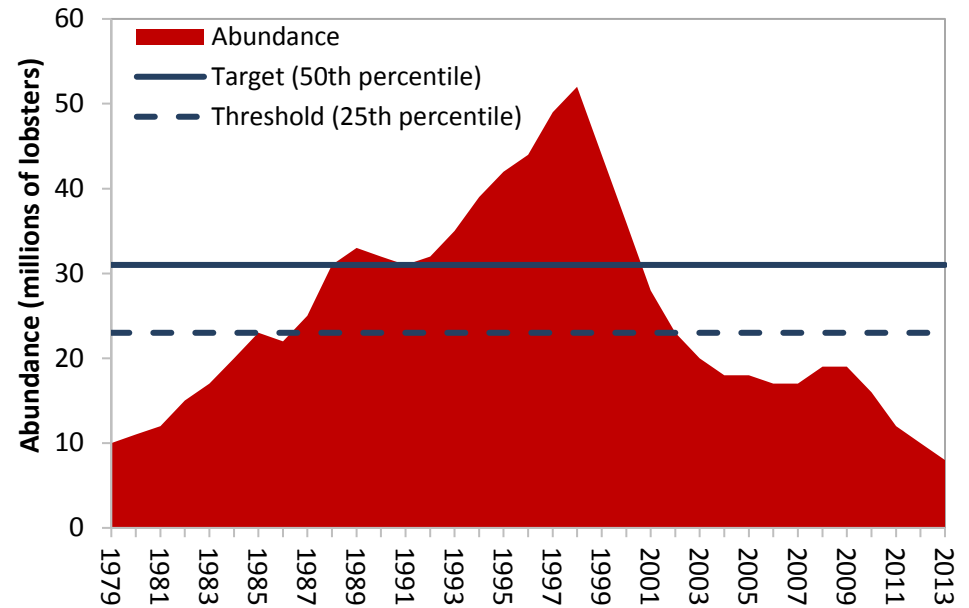
### American Lobster Abundance for the Gulf of Maine and Georges Bank Stock Unit

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:**

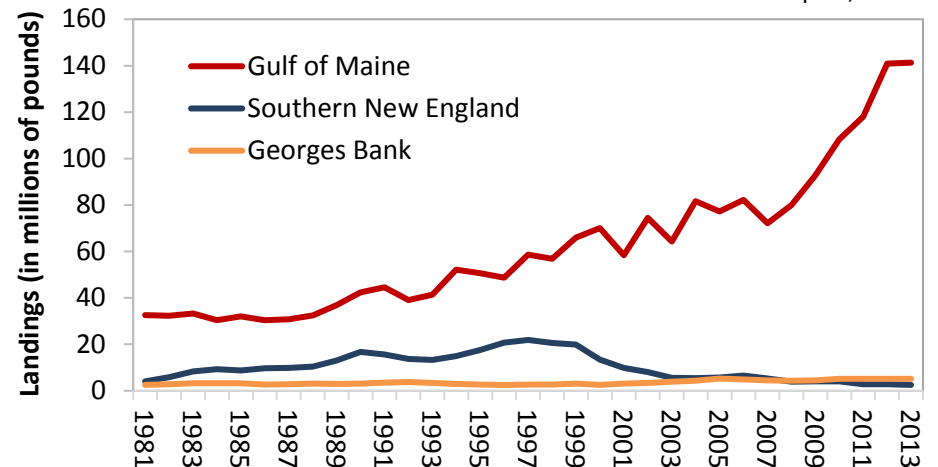
Gulf of Maine/Georges Bank – Not depleted and not experiencing overfishing  
Southern New England – Depleted and not experiencing overfishing. Abundance is below threshold; Board action is required to rebuild stock

##### **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





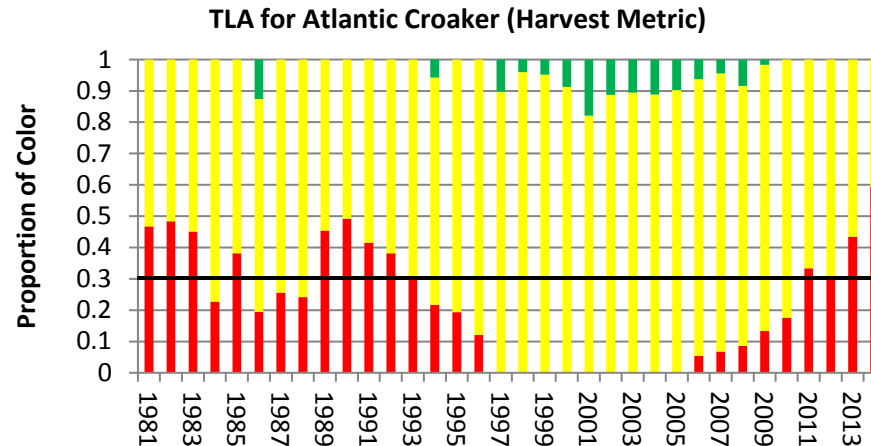
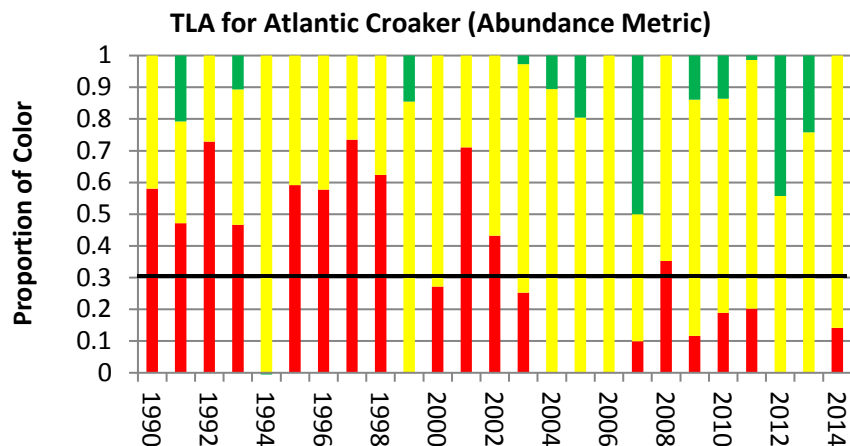
**FMP Status:**

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 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:** The Board is considering approval of Draft Addendum XXV to respond to the depleted condition of the SNE stock while preserving a functional portion of the lobster fishery in this area. The document will present a suite of management measures to increase egg production and lower fishing mortality through a combination of management tools including lobster size and escape vent changes, season closures, and trap limits and reductions.

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

## Overview of Stock Status Atlantic Croaker, *Micropogonias undulatus*



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:** Not experiencing overfishing. Although model estimates of spawning stock biomass (SSB) were too uncertain to be used to precisely determine overfished stock status, biomass has been increasing and the age-structure of the population has been expanding since the late 1980s. Next benchmark assessment scheduled for 2017.

### **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:**

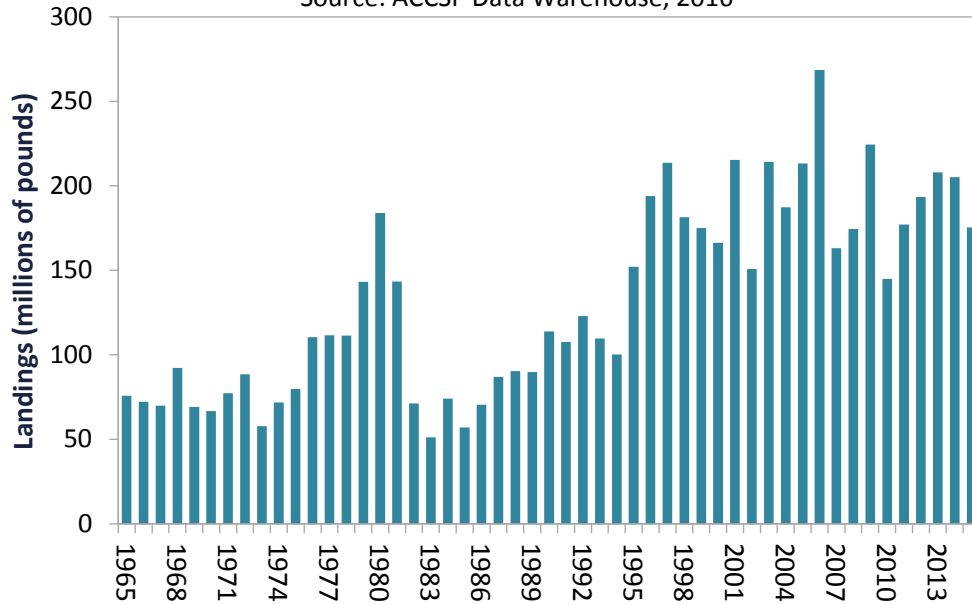
Amendment 1 revised FMP goals and objectives and established biological reference points. Addendum I revised the management area to assess the stock on a coastwide basis and adopted biological reference points. Addendum II established the traffic light approach to assess stock trends and initiate management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

**Primary Management Measures:** Amendment 1 established biological reference points for the Mid-Atlantic region and established a benchmark stock assessment to be conducted every five years. In each non-assessment year, the Atlantic Croaker Technical Committee uses the traffic light approach 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 Commerical Landings

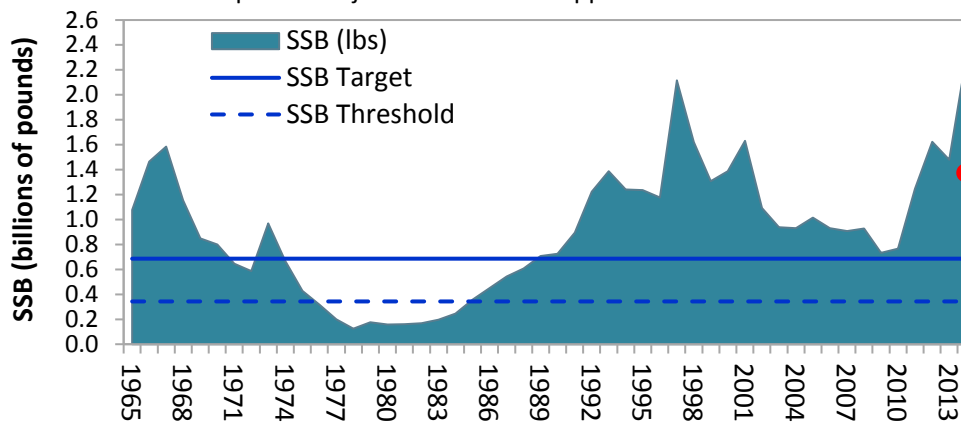
Source: ACCSP Data Warehouse, 2016



### 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.



### 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:

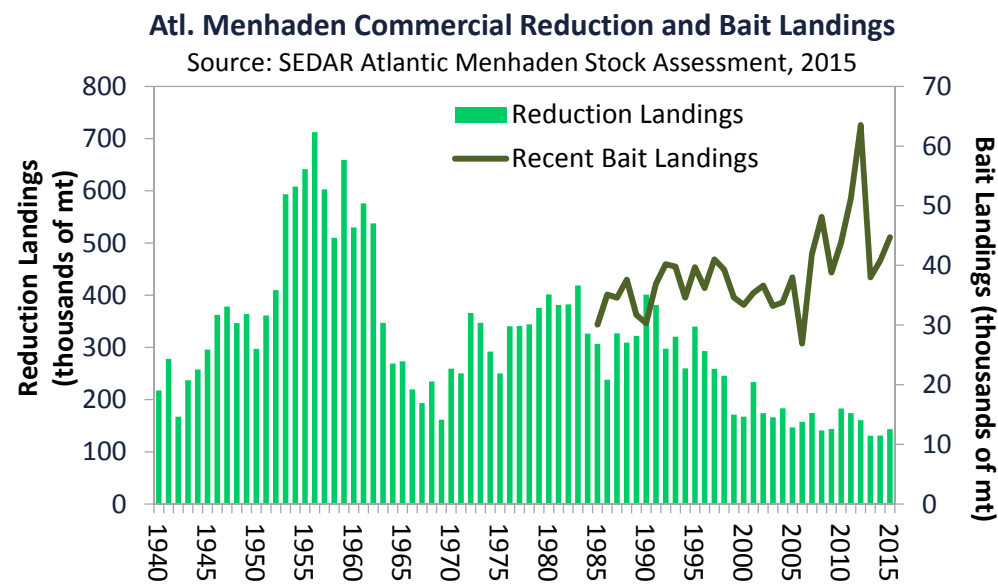
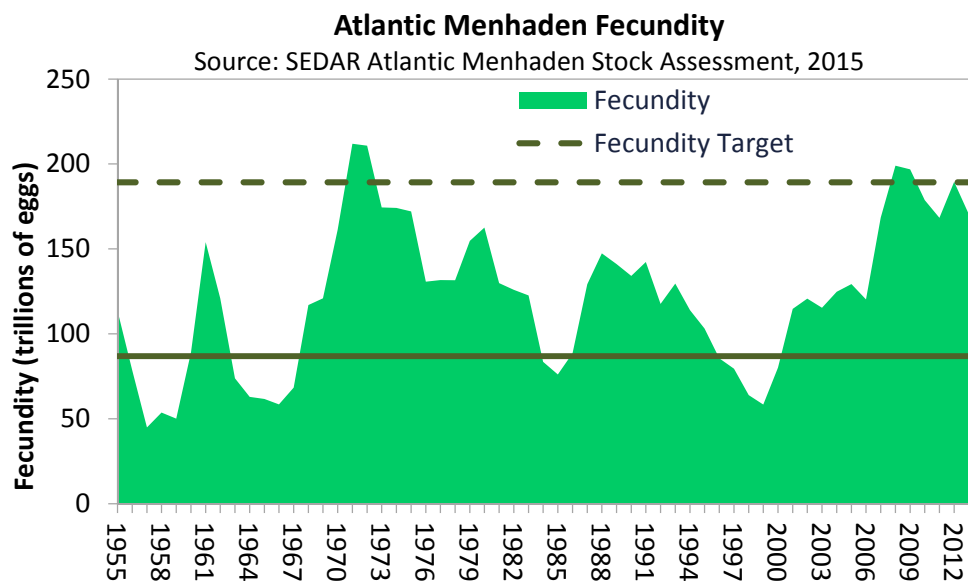
Amendment 2 was developed to achieve optimum yield on a continuing basis for the US fishery and to prevent overfishing. Technical Addendum I clarifies zero tolerance spawning closures. Addendum I gives the Section the flexibility to distribute the Area 1A quota seasonally. Addendum II modifies the process and definitions used to set specifications. Addendum V is a comprehensive addendum which refines and clarifies spawning regulations. Addendum VI complements the federal Atlantic Herring FMP's Framework 2 by allowing consistent measures for the four management areas: seasonal splitting of annual catch limit sub-components, up to 10% carry-over of unused sub-ACLs, triggers to close directed fisheries, and using the specifications process to set triggers. The Section approved Amendment 3 in February 2016. It 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.

### 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)

## 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)

### Management Considerations

**Condition:** Not overfished and not experiencing overfishing (2015 benchmark stock assessment)

### **FMP Stock Rebuilding Goals:**

Fecundity Target ( $FEC_{57\%MSP}$ ) = 189 trillion maturing or ripe eggs

Fecundity Threshold ( $FEC_{26\%MSP}$ ) = 86.8 trillion maturing or ripe eggs

Current Fecundity (2013) = 170 trillion maturing or ripe eggs

Fishing Mortality Target ( $F_{57\%MSP}$ ) = 0.38

Fishing Mortality Threshold ( $F_{26\%MSP}$ ) = 1.26

Current Fishing Mortality (2013) = 0.22

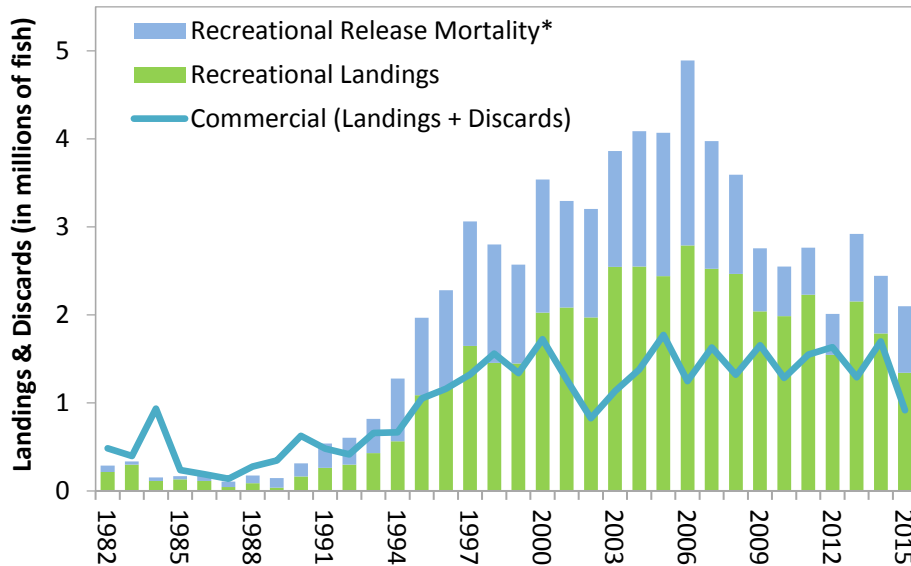
**FMP Status:** Addendum I established new biological reference points (BRPs) and changed the assessment frequency to every 3 years. Addendum II initiated a research program to assess menhaden status the Chesapeake Bay. Addendum III set a harvest cap for the Chesapeake Bay reduction fishery, allowing annual adjustments for harvest overages and underages; these provisions were extended by Addendum IV through 2013. Addendum V established new fishing mortality reference points based on maximum spawning potential (MSP). Amendment 2 established a 170,800 MT TAC beginning in 2013, representing a 20% reduction from averaged landings of 2009-2011 and an approximately 25% reduction from 2011 landings. Amendment 2 also established new BRPs for biomass based on MSP. Addendum I modifies Amendment 2's bycatch provision. Draft Amendment 3 was initiated in May 2015 to establish ecological based reference points and consider changes to the current state-by-state allocation scheme.

**Primary Management Measures:** The TAC was increased 6.45% to 200,000 MT in 2016. It is allocated to each state based on the state's landings history from 2009-2011. States must close their fisheries when the state-specific portion of the TAC has been reached; any overages must be paid back the following year. Technical Addendum I, approved in 2013, further clarifies Amendment 2's provisions for episodic events.

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

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

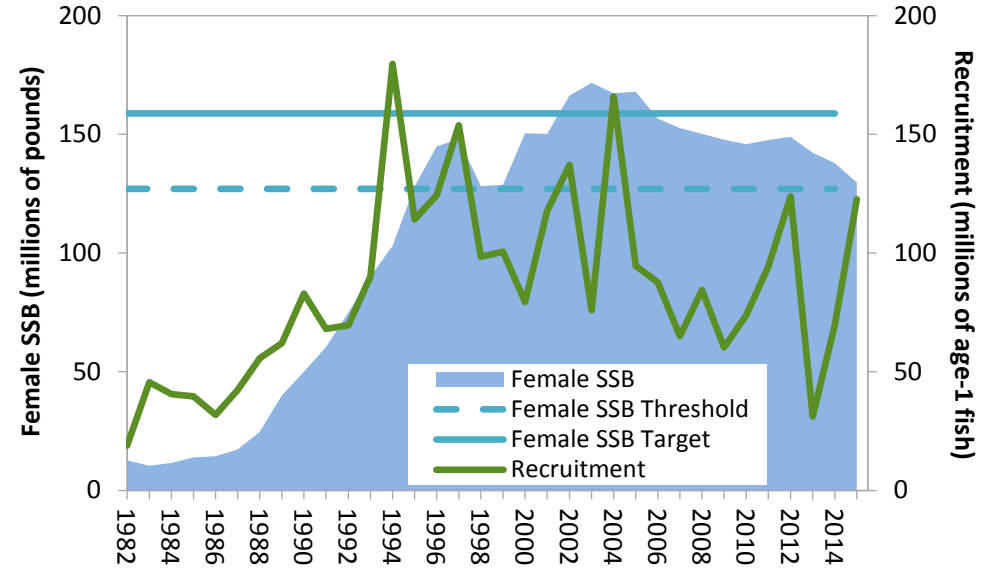
Source: ASMFC Atlantic Striped Bass Stock Assessment, 2016



\*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

$F = 0.16$

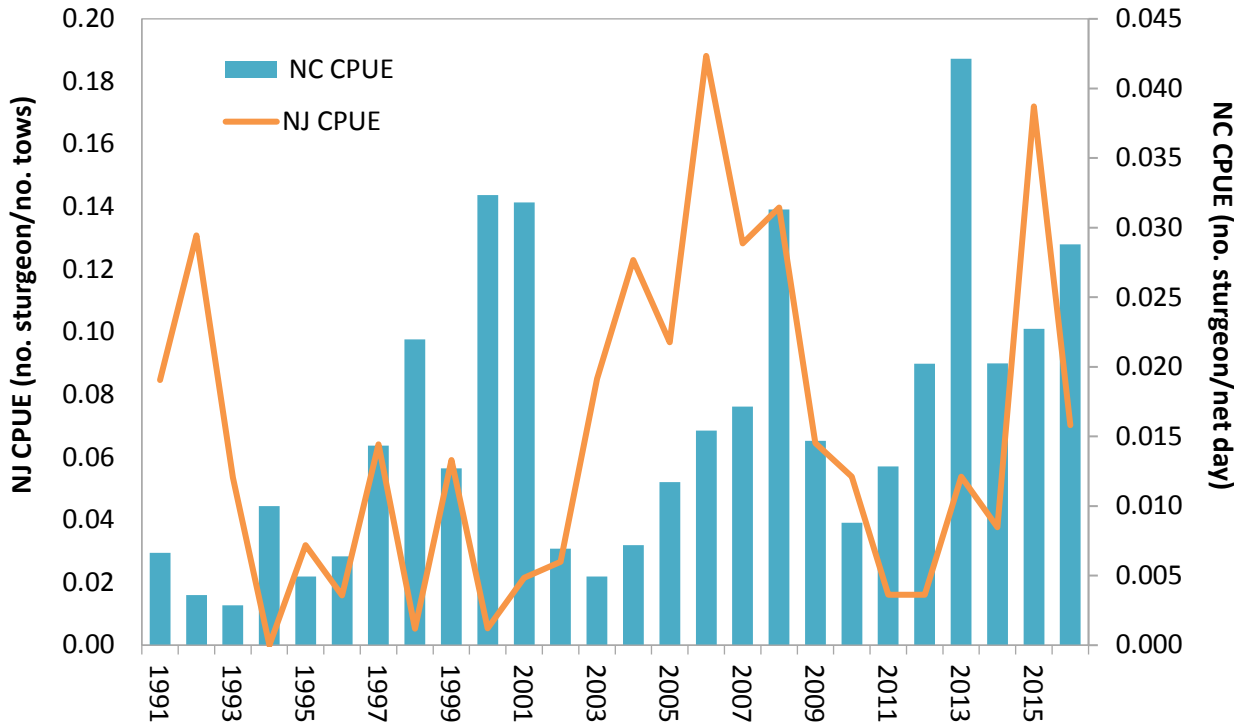
**FMP Status:** Amendment 6 (2003) established new biological reference points and triggers for Board action. Addendum I (2007) established a data collection program to increase accuracy of discard and discard mortality estimates and recommended an angler education program to reduce discard mortality. 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 Atlantic Sturgeon, *Acipenser oxyrinchus*

### Fishery-independent Catch Per Unit of Effort in NJ Coastal Waters and NC Albermarle Sound

Source: NJ Division of Fish and Wildlife and NC Division of Marine Fisheries, 2016



\*2016 data are preliminary

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

#### **Management Considerations:**

**Condition:** Overfished; NOAA Fisheries listed Atlantic sturgeon under the Endangered Species Act in 2012. Benchmark assessment scheduled for 2017.

**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.

#### **Primary Management Measures:**

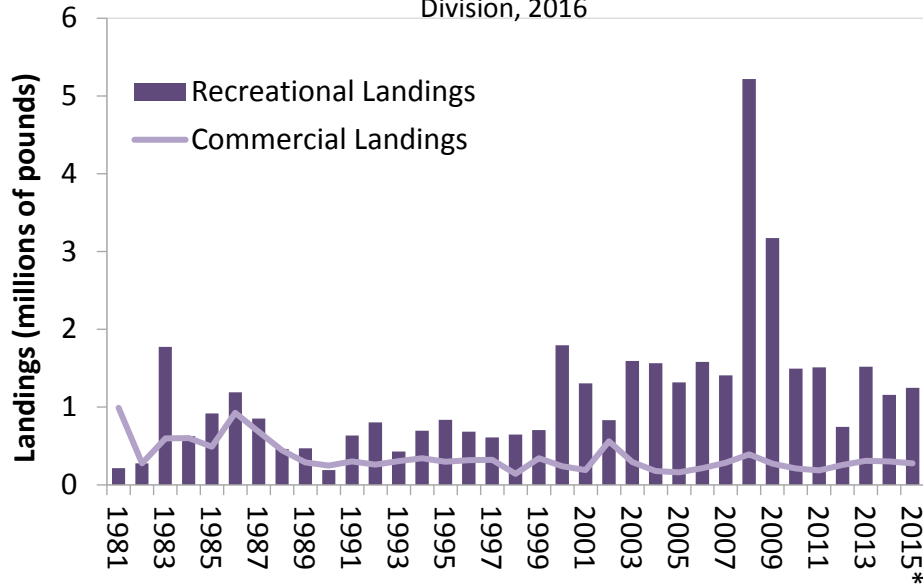
Amendment 1 mandated all Atlantic coastal states to enact a moratorium on harvest and possession of Atlantic sturgeon. Exemptions to the moratorium on possession are detailed in the FMP.

## Overview of Stock Status Black Drum, *Pogonias cromis*

### Black Drum Commercial & Recreational Landings

Source: ACCSP Data Warehouse and NMFS Fisheries Statistics

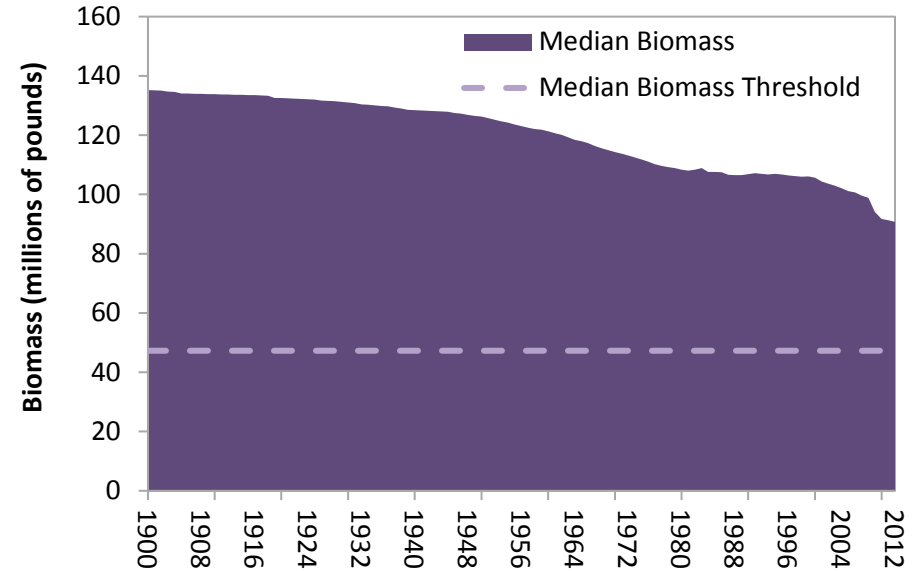
Division, 2016



\* 2015 data are preliminary

### Black Drum Biomass

ASMFC Black Drum Benchmark Assessment, 2015



### Management Considerations

**Condition:** Not overfished and not experiencing overfishing

**FMP Stock Rebuilding Goals:** None

**FMP Rebuilding Schedule:** None

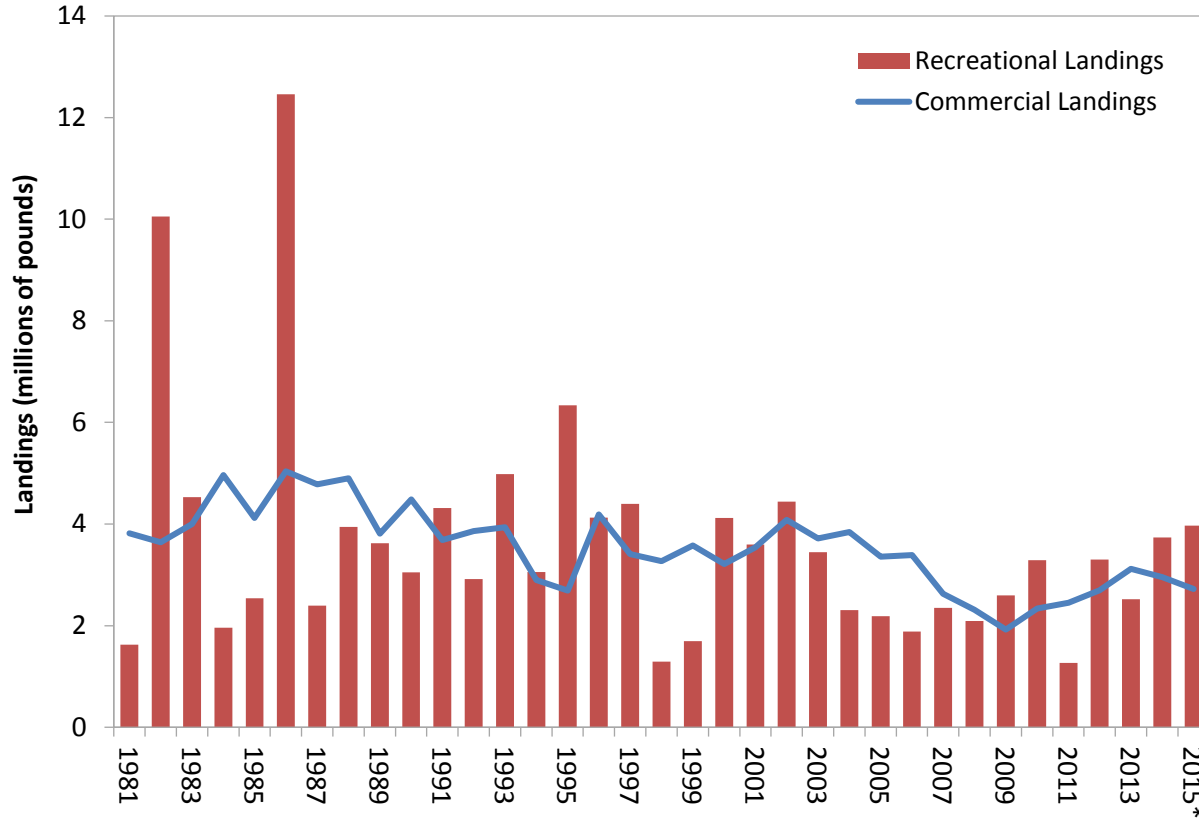
**FMP Status:** The South Atlantic State/Federal Fisheries Management Board approved the Black Drum FMP in June 2013.

**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 Commercial & Recreational Landings

Source: ACCSP Data Warehouse and NMFS Fisheries Statistics Division, 2016



\* 2015 data are preliminary

**Timeline of Management Actions:** FMP (1996); Amendment 10 (1997); Amendment 11 (1998); Amendment 12 (1999); Amendment 13 (2002); Addenda XII & XIII (2004); Addendum XVI (2005); Addendum XIX (2007); Addendum XX (2009); Addendum XXI (2011); Addendum XXII (2012); Addendum XXIII (2013); Addendum XXV (2014); Addendum XXVII (2016)

### 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 2012 assessment indicates the resource is neither overfished nor experiencing overfishing, with biomass estimated at 102% of the biomass target. Next benchmark assessment will be approved for management use in 2017.

### **FMP Biological Reference Points:**

SSB Target = 24 million pounds

Fishing Mortality Threshold = 0.44

SSB Threshold = 12 million pounds

### **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 XXIII & XXV allow for the use of regional management measures for the recreational fishery.

### **Primary Management Measures:**

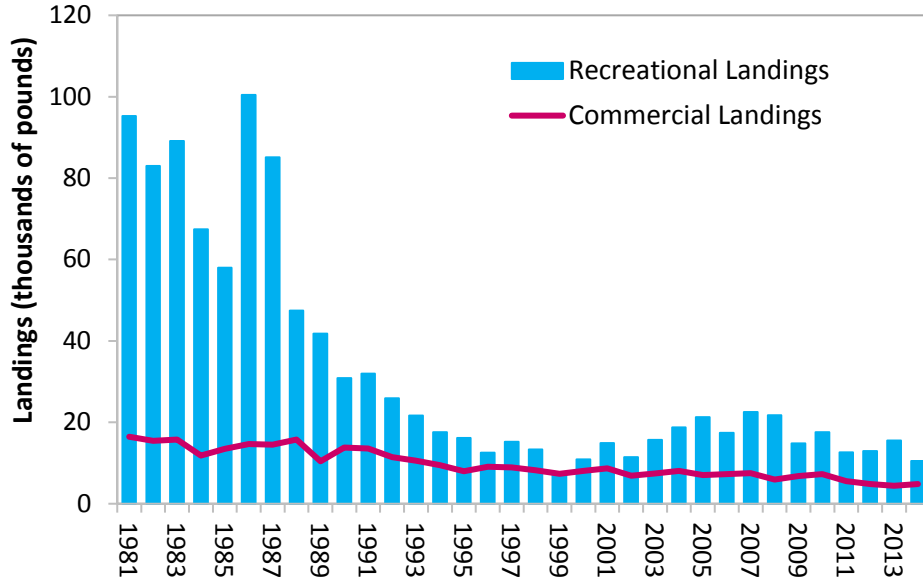
Annual total allowable landings (TAL) divided into a state-by-state commercial quota (49% of TAL) and recreational harvest limit (51% of TAL). Coastwide commercial management measures include minimum fish and mesh sizes, as well as pot/trap specifications. In 2011, the Commission and the MAFMC set state-by-state 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*

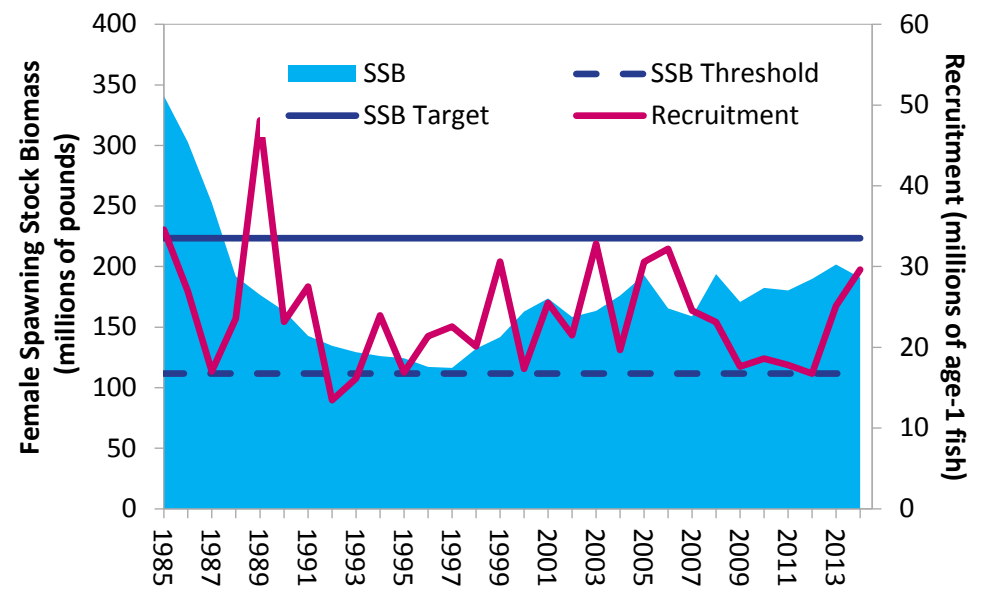
### Bluefish Recreational and Commercial Landings

Source: Northeast Regional Stock Assessment Workshop, 2015



### 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 Biomass<sub>2014</sub> = 191 million lbs

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

Fishing Mortality<sub>2014</sub> = 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.

**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 m 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) 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 a size limit. In addition, recreational anglers can only harvest sharks caught with a handline or rod & reel.

Species or Complex	Stock Status		References/Comments
	Overfished	Overfishing	
<b>Pelagic</b>			
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	
<b>Aggregated Large Coastal Sharks (LCS)</b>			
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
<b>Non-Blacknose Small Coastal Sharks (SCS)</b>			
Atlantic Sharpnose	No	No	SEDAR 34 (2013)
Bonnethead	Unknown	Unknown	SEDAR 34 (2013)
Finetooth	No	No	SEDAR 13 (2007)
<b>Hammerhead</b>			
Scalloped	Yes	Yes	SEFSC Scientific Review by Hayes et al. (2009) Hayes, et al. (2009): Rebuilding ends in 2023
<b>Blacknose</b>			
Blacknose	Yes	Yes	SEDAR 21 (2010); Rebuilding ends in 2043 (HMS Am. 5a)
<b>Smoothhound</b>			
Atlantic	No	No	SEDAR 39 (2015)
<b>Research</b>			
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.

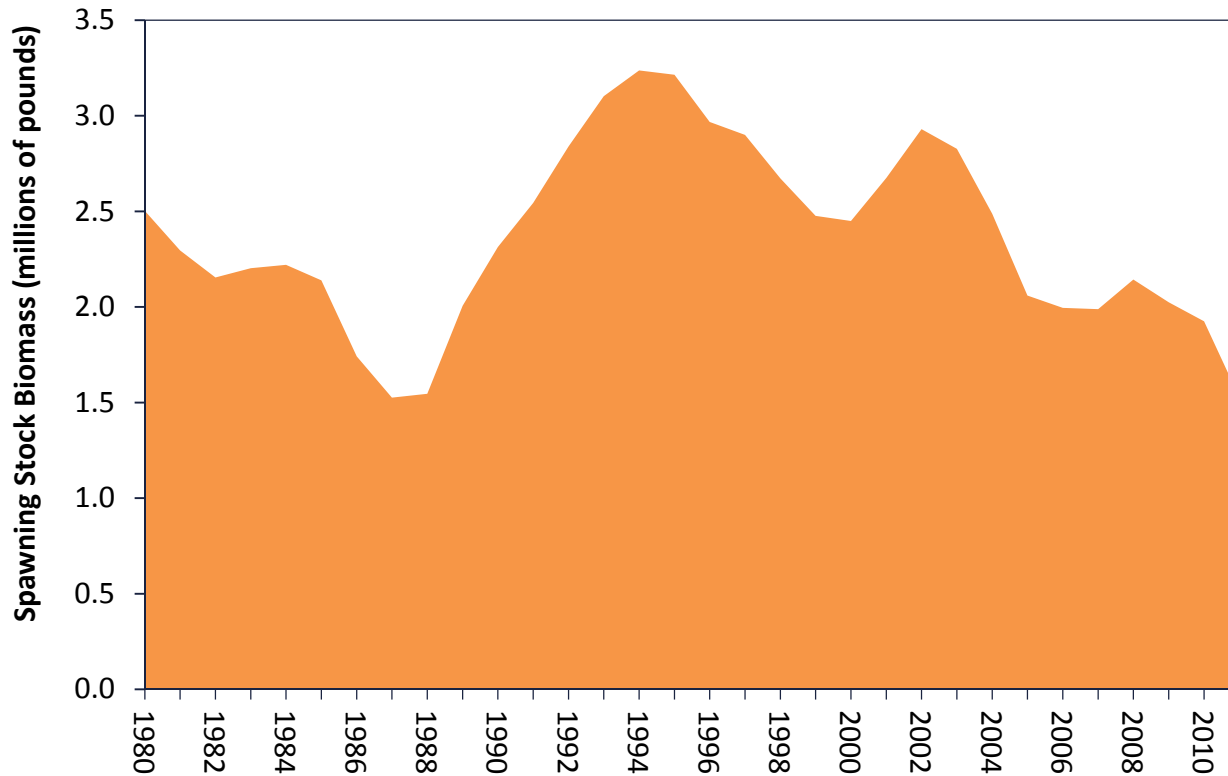
Prohibited			
Dusky	Yes	Yes	SEDAR 21 (2016); Rebuilding ends in 2107 (HMS)
Basking		No	Campana (2008)
Night		No	Carlson et al (2008)
Sand Tiger		No	Carlson et al (2008)
White		No	Curtis et al (2014)
Bigeye Thresher		No	Young et al (2016)
All other	Unknown	Unknown	

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



### 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.

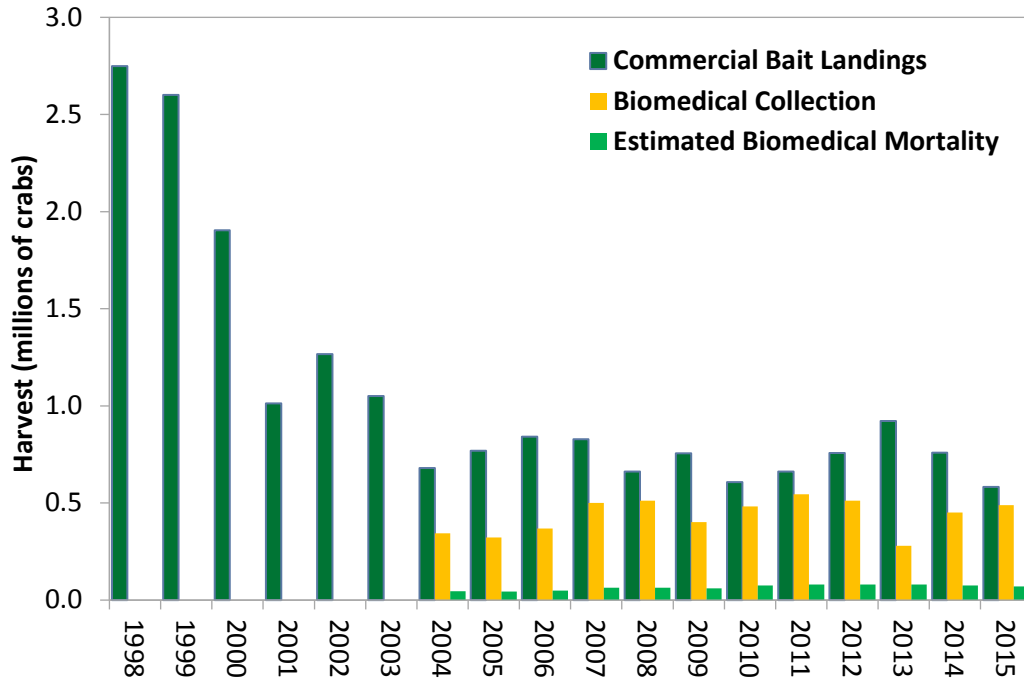
### **Primary Management Measures:**

The fishery is managed through an ACL, combined with possession and minimum size limits. The 2016 ACL totaled 670 thousand pounds, split 92% recreational and 8% commercial to accommodate the largely recreational fishery. Currently, cobia along the Atlantic is managed by the South Atlantic

Fishery Management Council and NOAA Fisheries under the Coastal Migratory Pelagic FMP, and the Commission is in the process of developing an interstate fishery management plan to complement federal SAFMC management; final plan scheduled for approval in early 2017.

## Overview of Stock Status Horseshoe Crab, *Limulus polyphemus*

**Horseshoe Crab Bait Landings and Biomedical Collection**  
ASMFC State Compliance Reports, 2016



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 2013-2015 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).

**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**

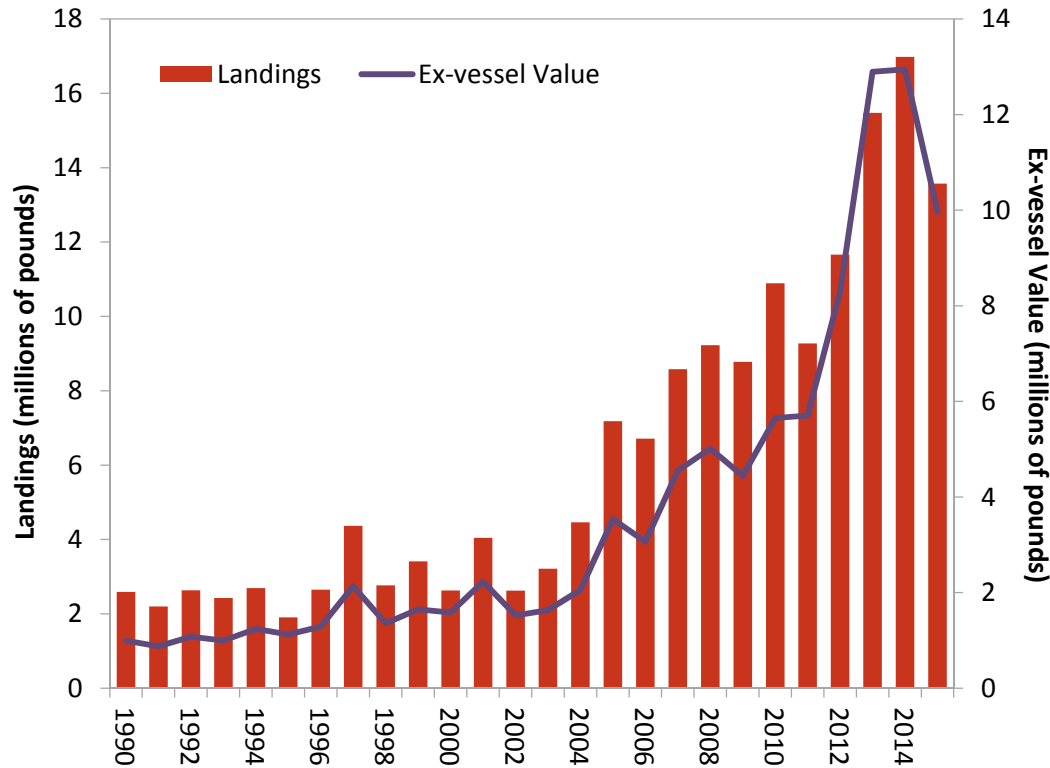
**Condition:** Unknown

**FMP Stock Rebuilding Goals & Schedule:** None

## Overview of Stock Status Jonah Crab, *Cancer borealis*

### Jonah Crab Landings and Ex-vessel Value

Source: ACCSP Data Warehouse, 2016



\*2015 values are preliminary

**Timeline of Management Actions:** FMP (2015); Addendum I (2016)

### Management Considerations:

**Condition:** Unknown

**FMP Stock Rebuilding Goals:** None.

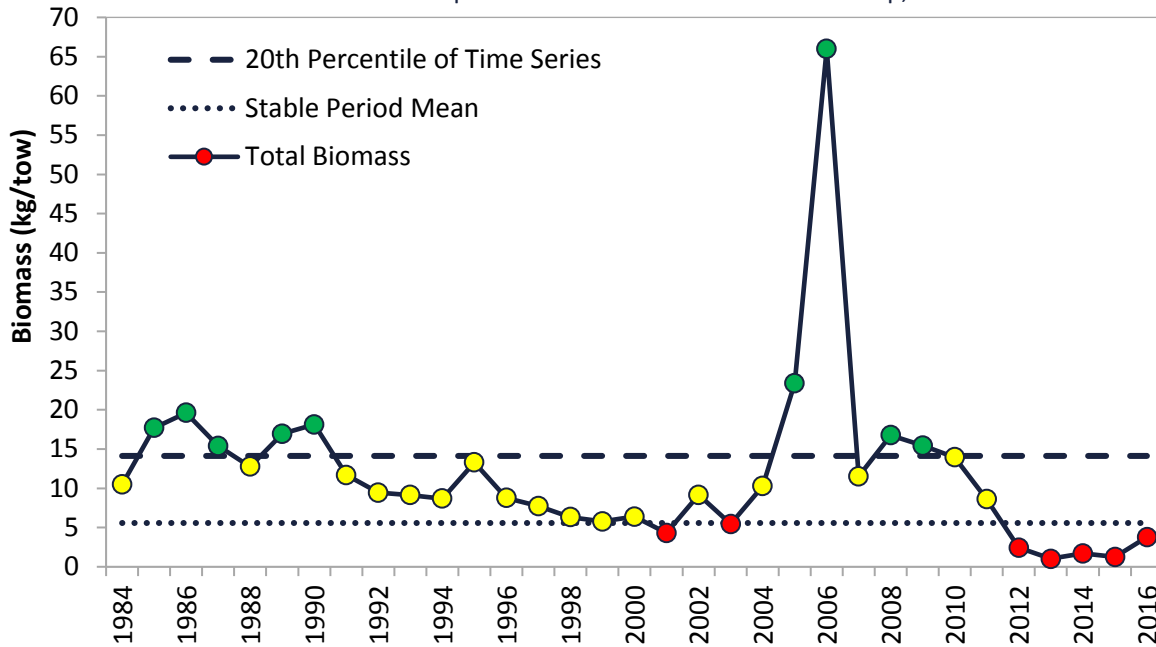
**FMP Status:** The goals of the Interstate FMP (approved by the American Lobster Management Board in August 2015) are to promote conservation, reduce the possibility of recruitment failure, and allow full utilization of the resource by the industry. The plan lays out specific management measures in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

Stock Status Report for Gulf of Maine Northern Shrimp, 2016



The graph represents the annual biomass index relative to the reference period (dashed line) and to the 20th percentile of the time series (dotted 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)

#### **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 2 includes a suite of management tools, such as trip limits, trap limits, and days out of the fishery, to control catch rates. The Amendment also modifies the fishing mortality reference points to include a threshold level, includes a more timely and comprehensive reporting system, and allows for the initiation of a limited entry program through the adaptive management addendum process. Addendum I, approved in November 2012, clarifies the annual specification process, and allocates the TAC with 87% for the trawl fishery and 13% for the trap fishery based on historical landings by each gear type.
- A moratorium was instituted for the 2014-2017 fishing seasons to protect the remaining spawning population and reduce pressure on the collapsed stock.
- The Section has been working on a new amendment to consider limited entry in the fishery.

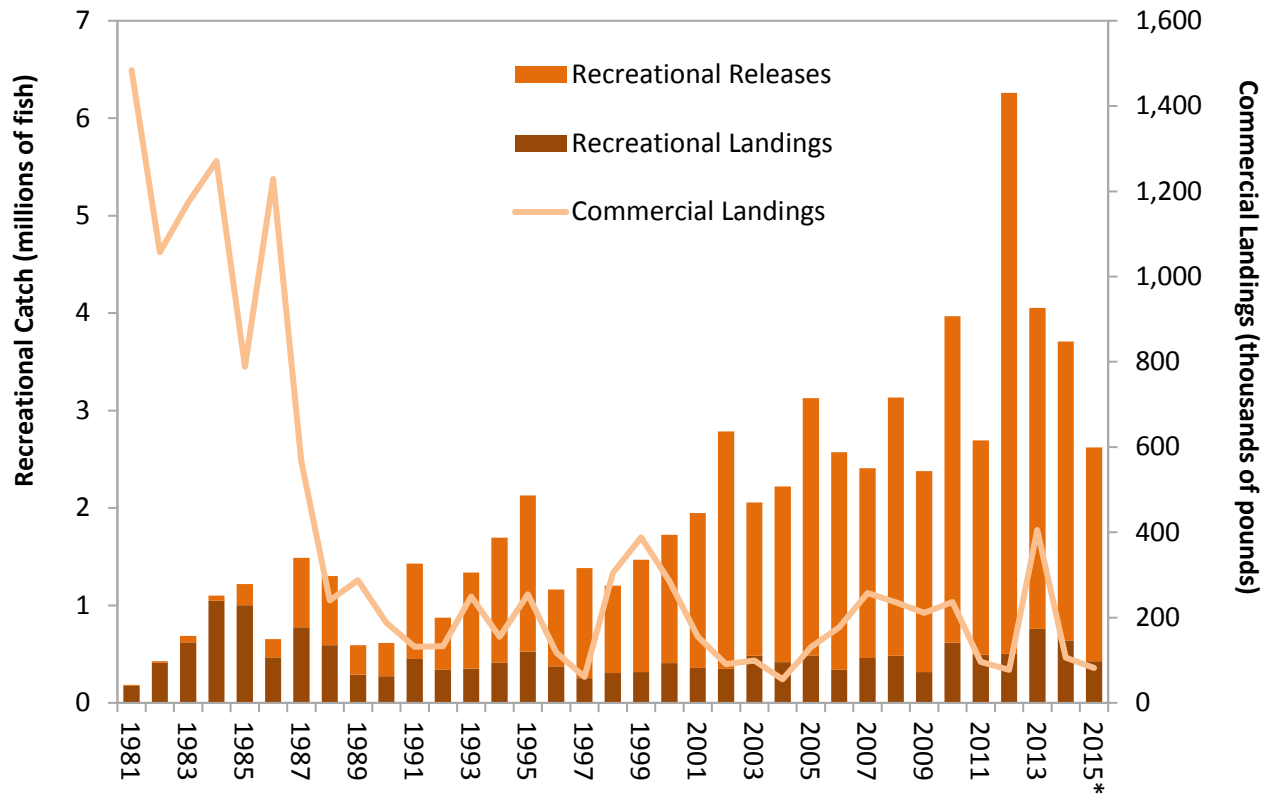
#### **Primary Management Measures:**

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 Commercial Landings and Recreational Catch

Source: ACCSP Data Warehouse and NMFS Fisheries Statistics Division, 2016



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

### Management Considerations

**Condition:** Overfishing is likely not occurring; benchmark assessment scheduled for completion in 2017.

### **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 (2002), which aims to achieve a sufficient escapement rate and restore the age and size structure of the Atlantic coast population. Addendum I (2013) outlines habitat needs and concerns of the species.

### **Primary Management Measures:**

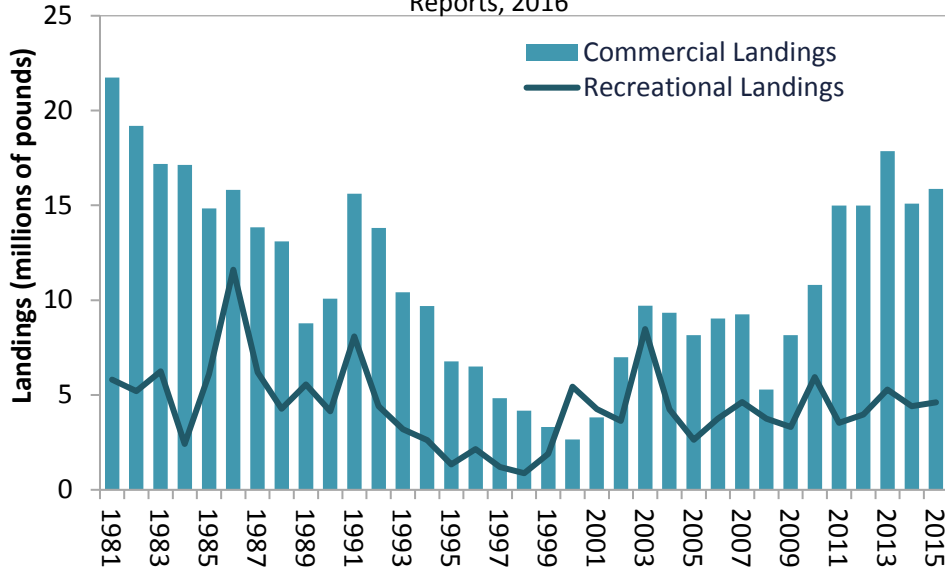
All states have implemented recreational bag and size limits to attain the management goal of 40% SPR, and a maximum size limit of 27 inches total length or less for all red drum fisheries. All states must also maintain current or more restrictive commercial fishery regulations for red drum.



## Overview of Stock Status Scup, *Stenotomus chrysops*

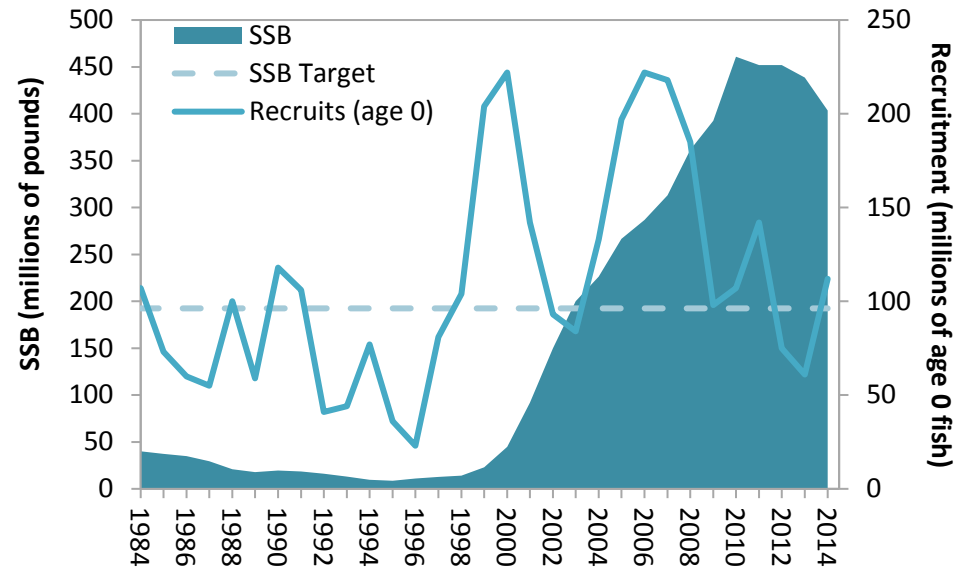
### Scup Commercial and Recreational Landings

Sources: ACCSP Data Warehouse and ASMFC State Compliance Reports, 2016



### 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)

#### **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

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

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

Fishing Mortality<sub>2014</sub> = 0.127

Spawning Stock Biomass<sub>2014</sub> = 403.6 million pounds

#### **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) provided commercial quota transfer provisions in the summer months.

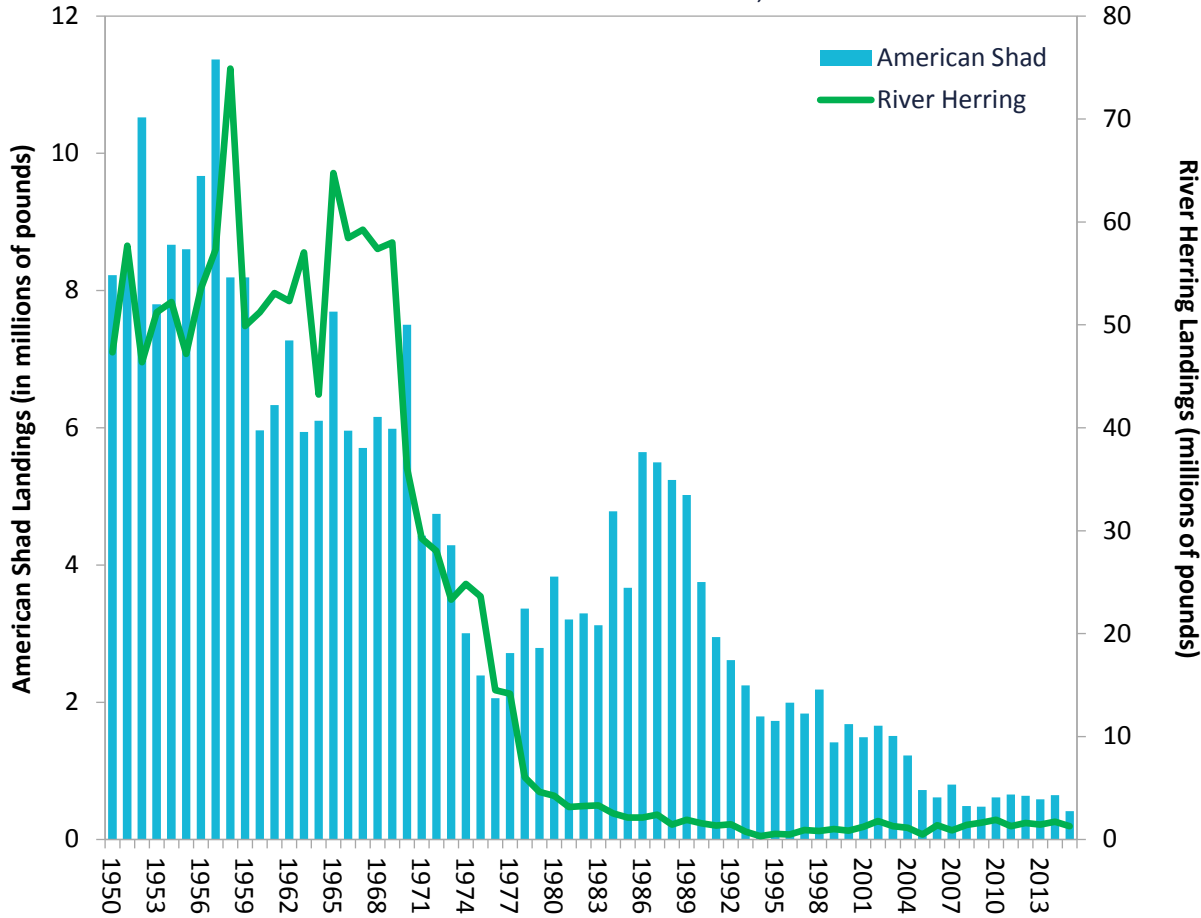
#### **Primary Management Measures:**

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 (November-April), while state-by-state quotas regulate the summer period (May-October). 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: ACCSP Data Warehouse, 2016



**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 moratorium unless sustainability can be documented.

**Primary Management Measures:**

Shad - Amendment 3 establishes 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 2012 moratorium unless sustainability can be documented.

## Overview of Stock Status Shad & River Herring

**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
NC	Rappahannock	Stable	Stable
	Albemarle Sound	Stable	
	Roanoke	Stable	
	Tar-Pamlico	?	
	Neuse	?	
	Cape Fear	?	
SC	Winyah Bay	Stable	
	Waccamaw	?	
	Great Pee Dee	?	
	Santee	?	Increasing
	Cooper	Stable	
	Combahee	?	
SC & GA	Edisto	Declining	Stable
	Savannah	Stable	
GA	Altamaha (+ Ocmulgee)	Declining	Increasing
FL	Ogeechee		
	St. Johns	Stable	

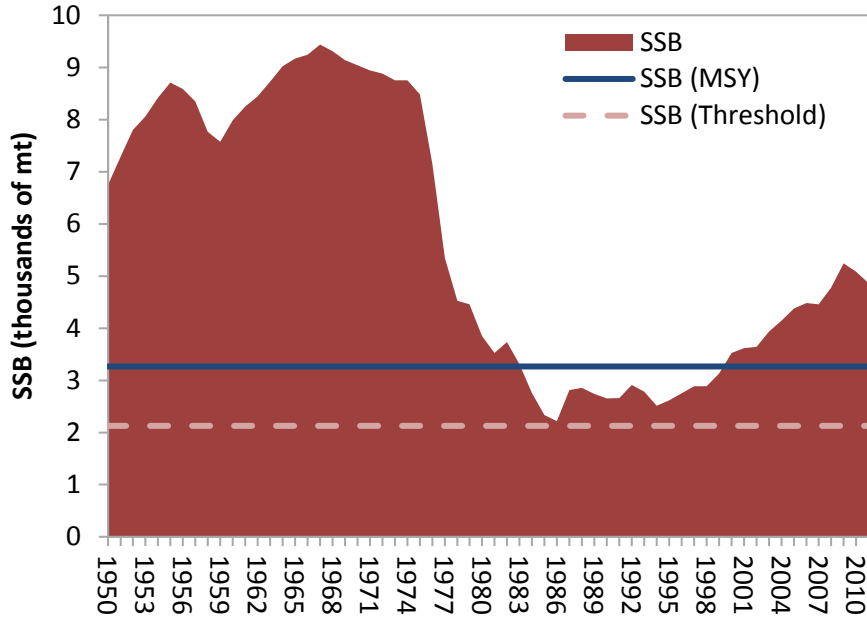
**Status of Select Alewife and Blueback Herring Stocks along the Atlantic coast.** Status relative to historic levels is pre-1970. Recent trends reflect last ten years of data. A = Alewife only; B= Blueback herring only; A,B = Alewife and blueback herring by species. Source: ASMFC River Herring Benchmark Stock Assessment Report, 2012.

State	River**	Status Relative to Historic Levels / Recent Trends*
ME	Damariscotta	Depleted <sup>A</sup> , Stable <sup>A</sup>
	Union	Increasing <sup>A</sup> , Stable <sup>A</sup>
NH	Cocheco	Unknown <sup>A,B</sup> , Stable <sup>A,B</sup>
	Exeter	Depleted <sup>A</sup> , Increasing <sup>A</sup>
	Lamprey	Depleted <sup>A</sup> , Unknown <sup>A</sup>
	Oyster	Depleted <sup>B</sup> , Stable <sup>B</sup>
	Taylor	Depleted <sup>B</sup> , Decreasing <sup>B</sup>
	Winnicut	Depleted <sup>A,B</sup> , Unknown <sup>A,B</sup>
MA	Mattapoissett	Depleted <sup>A</sup> , Unknown <sup>A</sup>
	Monument	Depleted <sup>A</sup> , Unknown <sup>A</sup>
	Parker	Depleted <sup>A</sup> , Unknown <sup>A</sup>
	Stony Brook	Depleted <sup>A</sup> , Unknown <sup>A</sup>
RI	Buckeye	Depleted <sup>A</sup> , Unknown <sup>A</sup>
	Gilbert	Depleted <sup>A</sup> , Decreasing <sup>A</sup>
	Nonquit	Depleted <sup>A</sup> , Decreasing <sup>A</sup>
CT	Connecticut	Depleted <sup>B</sup> , Decreasing <sup>B</sup>
NY	Hudson	Depleted <sup>A,B</sup> , Stable <sup>A,B</sup>
MD, DE	Nanticoke	Depleted <sup>A,B</sup> , Decreasing <sup>A,B</sup>
VA, MD, DC	Potomac	Depleted <sup>A,B</sup> , Unknown <sup>A,B</sup>
NC	Chowan	Depleted <sup>A,B</sup> , Stable <sup>A,B</sup>
SC	Santee-Cooper	Depleted <sup>B</sup> , Increasing <sup>B</sup>

## Overview of Stock Status Spanish Mackerel, *Scomberomorus maculatus*

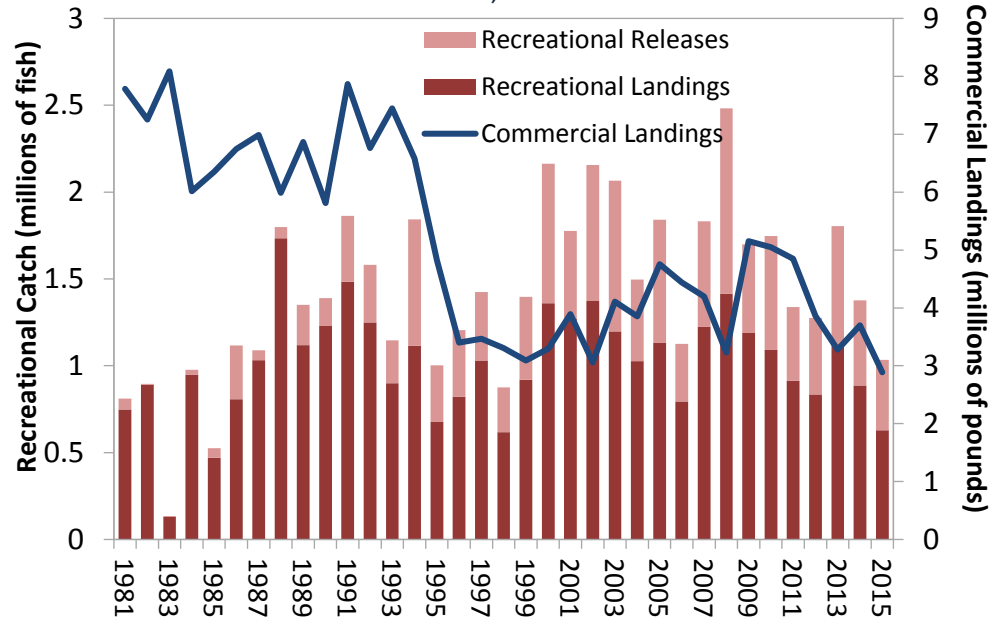
### Spawning Stock Biomass (SSB)

Source: SouthEast Data, Assessment, and Review, 2012



### Commercial Landings and Recreational Catch

Source: ACCSP Data Warehouse and NMFS Fisheries Statistics  
Division, 2016



#### **Management Considerations:**

**Condition:** Rebuilt; Not overfished and overfishing is not occurring

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

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:**

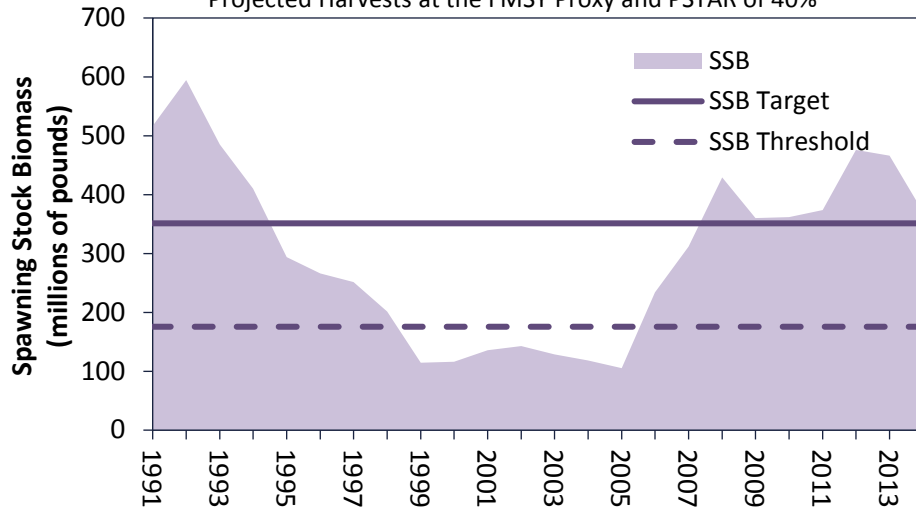
The annual catch limit (ACL) was set at 5.29 million pounds in the most recent Amendment 18 to the Federal FMP. The ACL is allocated on a 55/45 basis between the commercial and recreational fisheries. The commercial fishery is controlled mainly through an annual quota and trip limits, while the recreational 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*

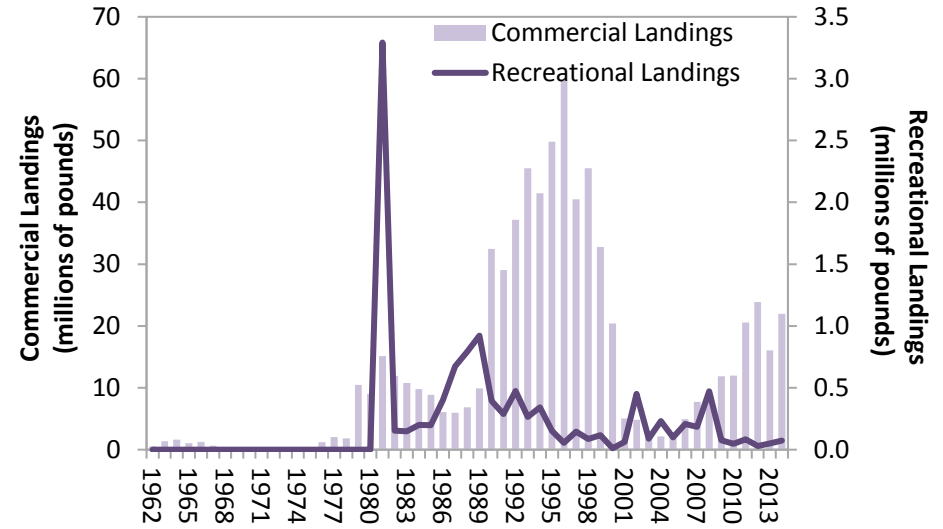
### Spiny Dogfish Spawning Stock Biomass (SSB) (>=80 cm)

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



### Spiny Dogfish Landings

Source: NMFS Fisheries Statistics Division, 2015



**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/overfishing 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, 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 ( $F_{\text{MSY}}$ ) = 0.207

#### **FMP Status:**

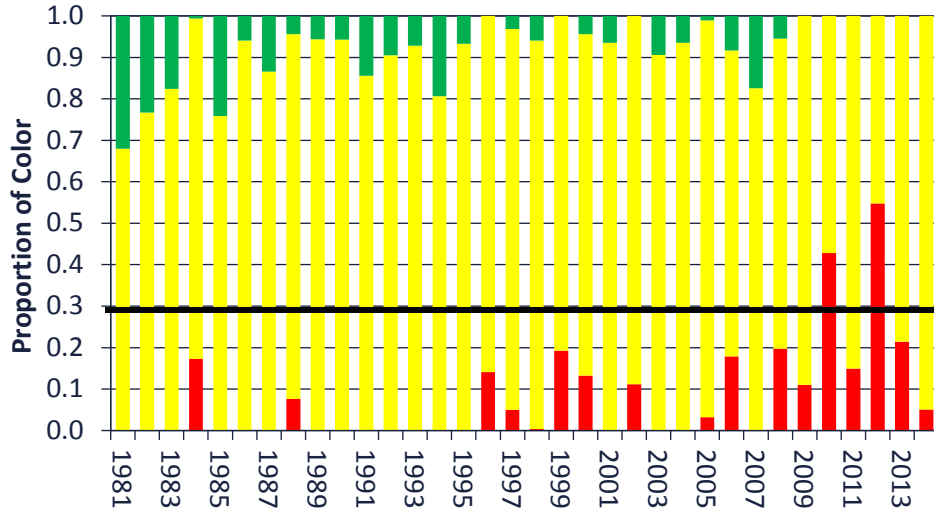
The 2002 FMP established the annual quota and possession limit system; Addendum I (2005) allowed the Board to set multi-year specifications; Addendum II (2008) established regional allocation of the annual quota with 58% to states from ME – CT; Addendum III established state shares for New York – North 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:**

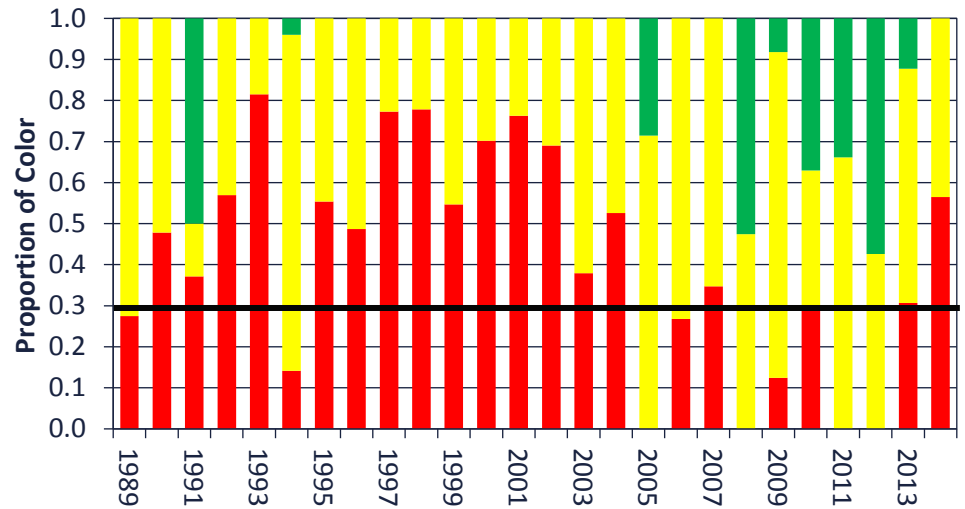
Spiny dogfish is managed under an annual quota with possession limits for the commercial fishery only. The ASMFC Spiny Dogfish Board approved a 40.3 million pound quota for 2016/2017 (May 1-April 30), and a 2017/2018 quota of 39.1 million pounds, with a maximum possession limit of 6,000 pounds per day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

## Overview of Stock Status Spot, *Leiostomus xanthurus*

**Traffic Light Analysis of Spot Commercial and Recreational Harvest**  
(Solid line represents 30% threshold)



**Traffic Light Analysis of Spot Fishery-independent Survey Indices**  
(Solid line represents 30% threshold)



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; benchmark assessment scheduled for review in 2017.

**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).

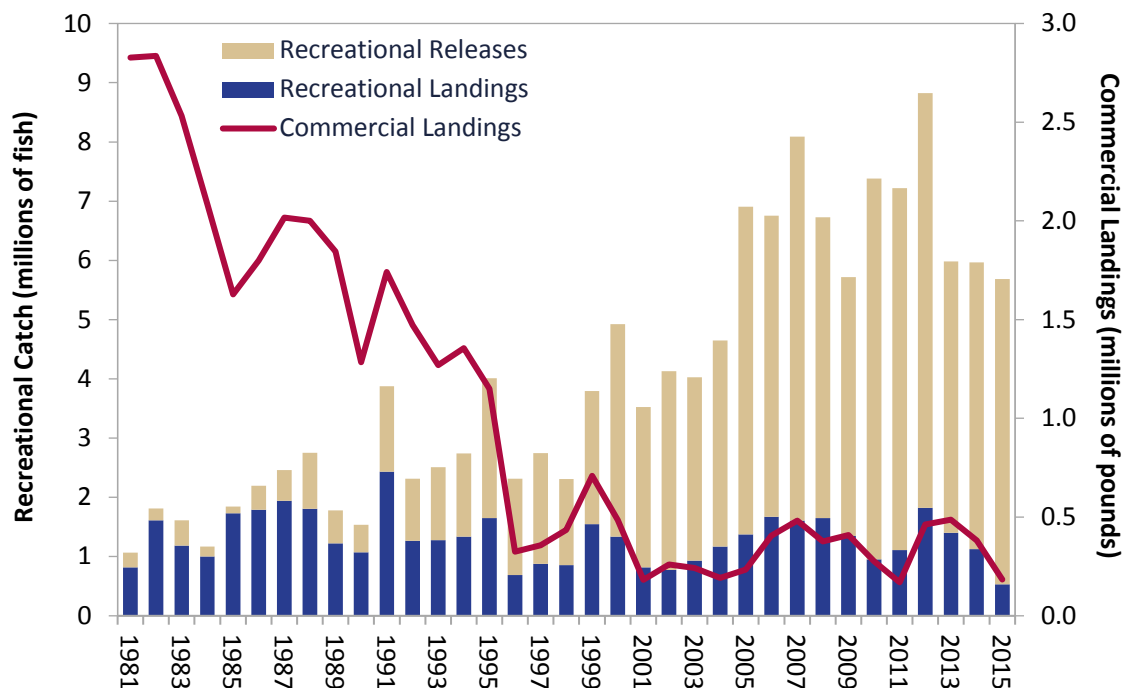
**Primary Management Measures:** Addendum I established traffic light approach to assess stock trends and initiate management response.

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

## Overview of Stock Status Spotted Seatrout, *Cynoscion nebulosus*

### Spotted Seatrout Commercial Landings and Recreational Catch

Source: ACCSP Data Warehouse and NMFS Fisheries Statistics Division, 2016



**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

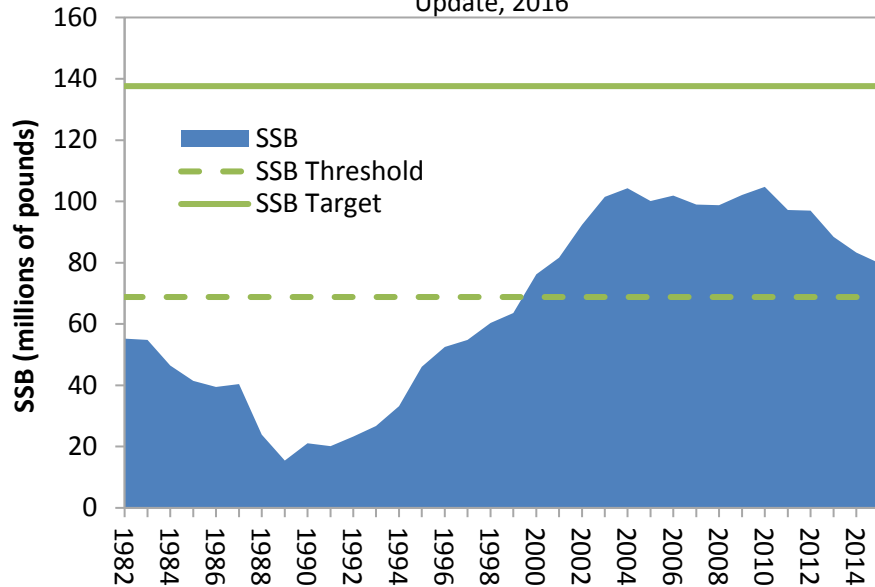
**FMP Status:** FMP approved in 1984; Amendment I approved in 1991. The Omnibus Amendment to the Interstate Fishery Management Plans (FMPs) for Spanish Mackerel, Spot, and Spotted Seatrout, approved in August 2011, updates the Spotted Seatrout FMP with compliance measures and Commission standards that 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*

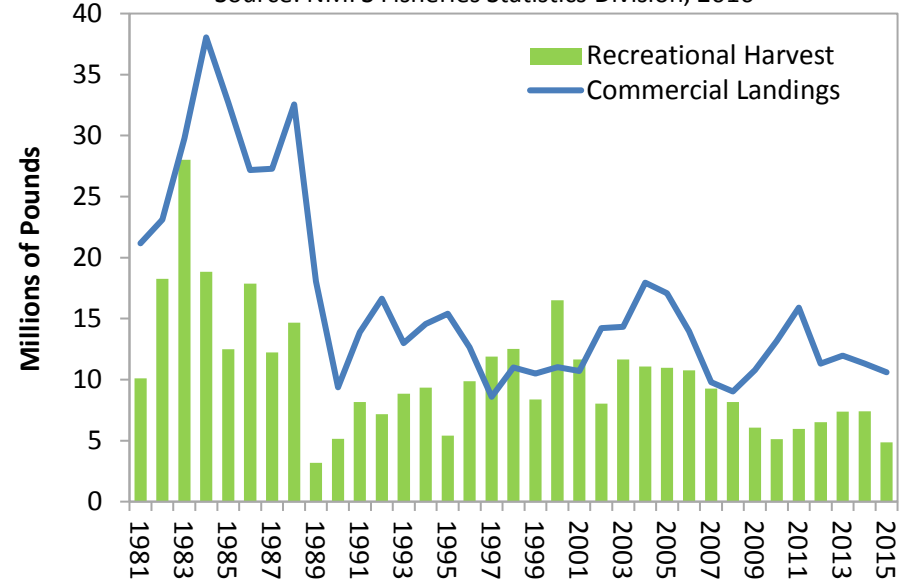
### Summer Flounder Spawning Stock Biomass (SSB)

Source: Northeast Fisheries Science Center Stock Assessment  
Update, 2016



### Summer Flounder Commercial Landings & Recreational Harvest

Source: NMFS Fisheries Statistics Division, 2016



**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 (2014); Addendum XXVI (2015); Addendum XXVII (2016)

**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. The Board and MAFMC initiated the development of a Comprehensive Summer Flounder Amendment in August 2014 to reconsider all aspects of summer flounder management.

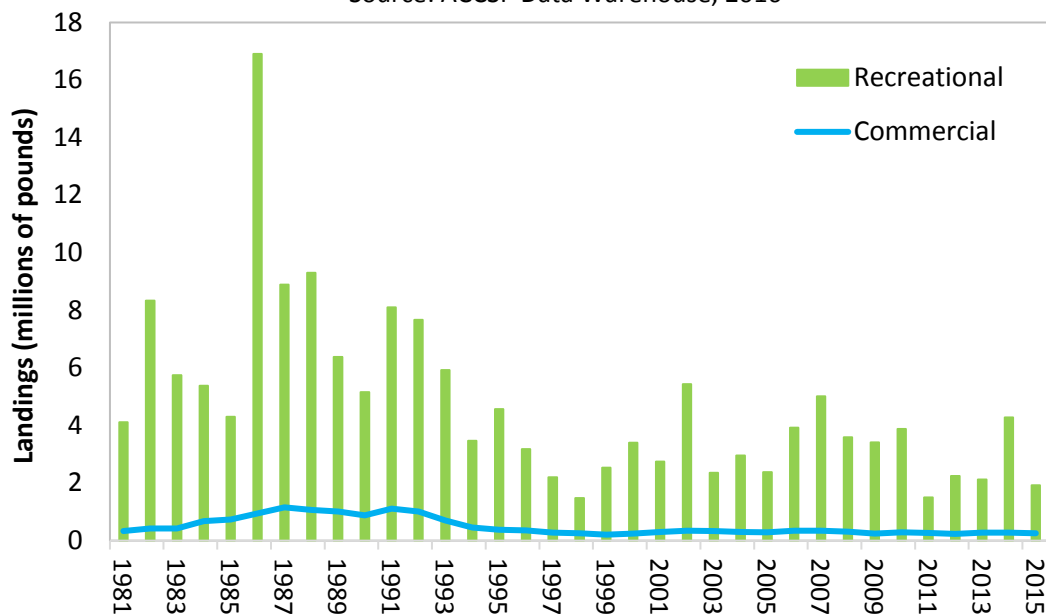
**Primary Management Measures:** Annual total allowable landings (TAL) divided into a state-by-state commercial quota (60% of TAL) and recreational harvest limit (40% of TAL). Coastwide commercial management measures include minimum fish and mesh sizes. Recreational bag/size limits and seasons are determined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



## Overview of Stock Status *Tautog, Tautoga onitis*

### Tautog Recreational and Commercial Landings

Source: ACCSP Data Warehouse, 2016



### 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. In May 2015, the Board initiated Draft Amendment 1 to solicit public comment on the proposed regional management areas and evaluate the illegal harvest of undersized and unreported tautog. Draft Amendment 1 for Public Comment will be presented to the Board in 2017.

### **FMP Stock Rebuilding Goals (2016 coastwide update):**

SSB target = 14,944 mt (32.9 million pounds)  
 SSB threshold (75% target) = 11,208 mt (24.7 million pounds)  
 SSB = 6,014 mt (13.3 million pounds)  
 Fishing Mortality  $F_{\text{target}} = 0.17$        $F_{\text{threshold}} = 0.24$        $F_{3\text{yravg}} = 0.38$

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

**FMP Status:** Addendum VI established a new  $F_{\text{target}} = 0.15$  for 2012 and beyond. All states in the management unit were required to implement measures to achieve  $F = 0.15$  by January 2012, which is estimated to be a 39% reduction relative to the 2008-2009 average total harvest. The Board reduced the target  $F$  in response to the 2011 assessment update findings. SSB has remained at low levels for the last decade and continues to be overfished and experiencing overfishing; therefore, the Technical Committee recommends a regional management approach.

**Pending Action:** Board considering new plan amendment to establish regional management.

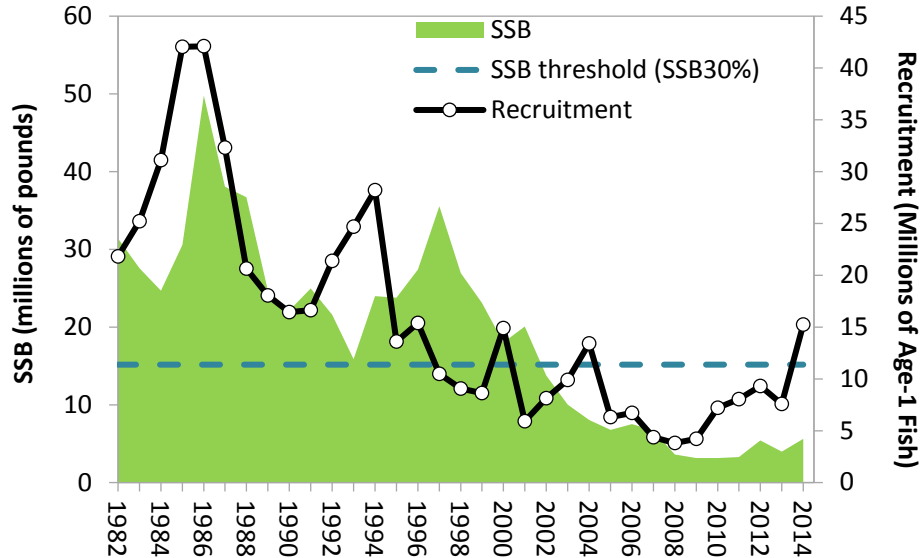
### **Primary Management Measures:**

Tautog is managed as a single coastwide stock, although the Board is evaluating regional management alternatives. The FMP requires a fishing mortality rate of 0.15 to be controlled by recreational and commercial possession limits, size limits (minimum size limit varies at 15-16 inches depending on state), and seasonal closures.

## Overview of Stock Status Weakfish, *Cynoscion regalis*

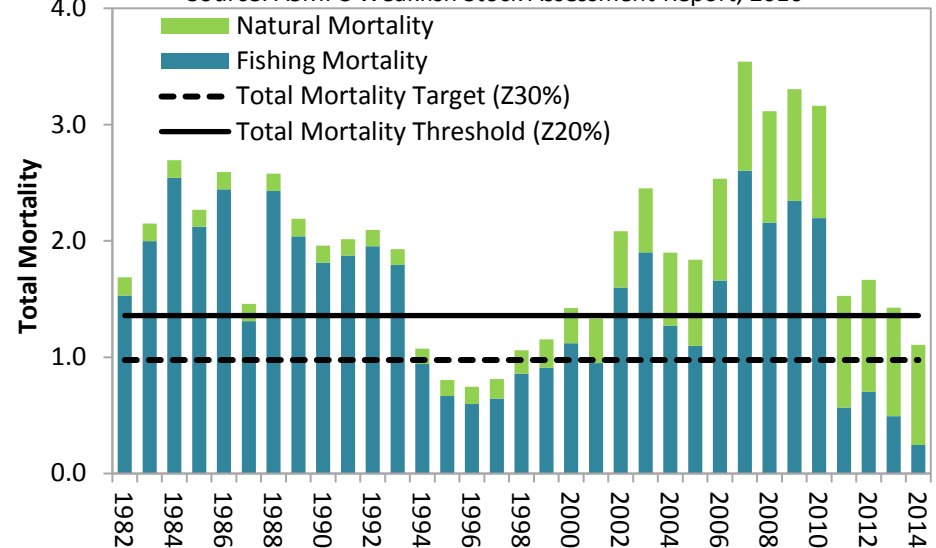
### Weakfish Spawning Stock Biomass and Recruitment

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)

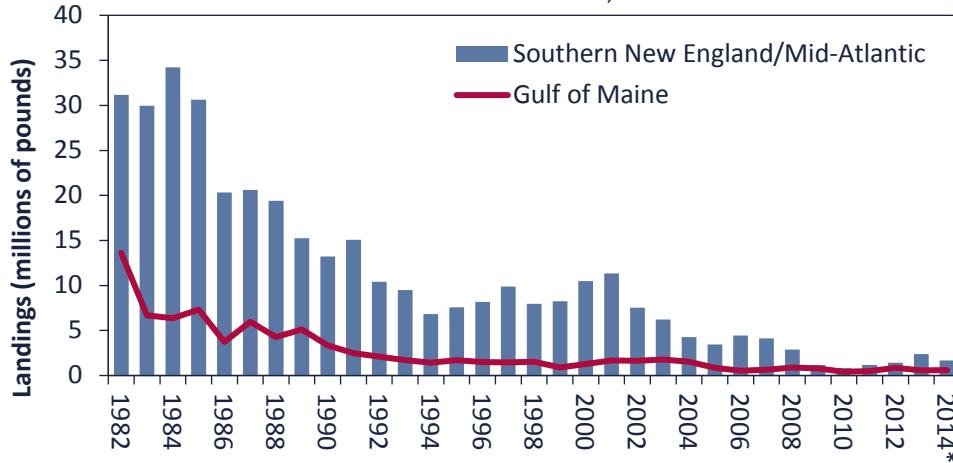
**FMP Rebuilding Schedule:** 6-year rebuilding period if SSB falls below the threshold level in any given year.

**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 Landings by Stock Unit**  
Northeast Fisheries Science Center, 2015



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

#### Management Considerations:

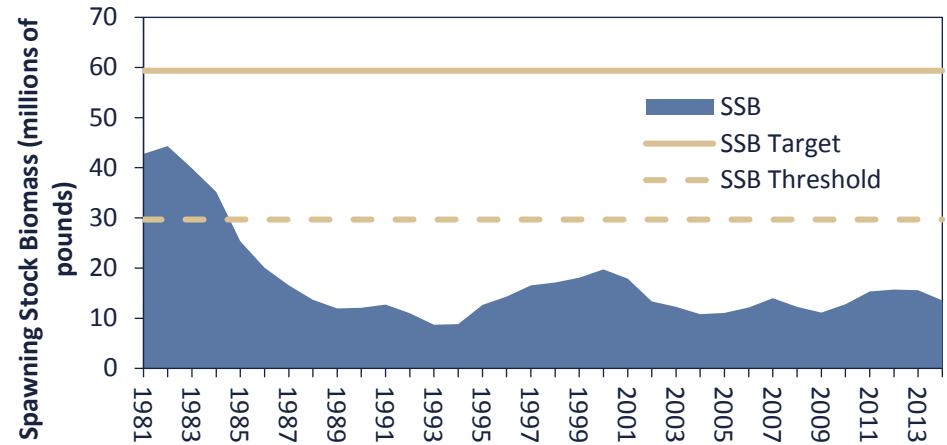
**Condition:** Overfished and overfishing is not occurring. Stock is at 23% of target SSB.

#### 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

**SNE/MA Winter Flounder Spawning Stock Biomass**

Source: Groundfish Assessment Review Meeting Update, 2015



### GULF OF MAINE STOCK (GOM)

#### Management Considerations:

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

#### FMP Stock Rebuilding Goals:

\* The SAW/SARC 52 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.