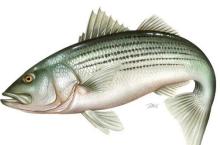
# INTERSTATE FISHERIES MANAGEMENT PROGRAM OVERVIEW Atlantic Striped Bass

# Species Range

St. Lawrence River in Canada to the St. John's River in Florida

# Management Unit



Maine through North Carolina (The Albemarle-Roanoke stock in North Carolina is managed separately by the State of North Carolina under the auspices of the ASMFC.)

## Stock Status

On a regular basis, female spawning stock biomass (SSB) and fishing mortality rate (F) are estimated and compared to target and threshold levels (i.e., biological reference points) in order to assess the status of the stock. The 1995 estimate of female SSB is currently used as the SSB threshold because many stock characteristics, such as an expanded age structure, were reached by this year, and this is also the year the stock was declared recovered. The female SSB target is equal to 125% female SSB<sub>1995</sub>. To estimate the associated F threshold and target, population projections were made by using a constant F and changing the value until the SSB threshold or target value was achieved. The reference point values were updated for the 2022 Stock Assessment Update. The female SSB threshold was estimated at 85,457 mt (188 million pounds) with a female SSB target of 106,820 mt (235 million pounds). The F threshold was estimated at 0.20 and the F target was estimated at 0.17. The updated fishing mortality reference points took into account the period of low recruitment the stock has experienced in recent years.

The 2022 stock assessment update estimated female SSB in 2021 at 143 million pounds, which is below the SSB threshold, indicating the stock remains overfished. Fishing mortality in 2021 was estimated at 0.14, which is below the F threshold, indicating the stock is not experiencing overfishing. The assessment uses the approved peer-reviewed model from the 2018 Benchmark Stock Assessment. Data through 2021 were added to the model, and the model structure was adjusted for 2020-2021 to account for the regulation changes implemented through Addendum VI to Amendment 6. The assessment model was able to handle missing data due to COVID-19, but overall, COVID-19 increased uncertainty in the 2020 and 2021 data.

The next stock assessment for striped bass is an assessment update expected in October 2024 with a terminal year of 2023.

## **Involved States and Jurisdictions**

ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, NMFS, USFWS

# **Active Boards/Committees**

Atlantic Striped Bass Management Board, Technical Committee, Stock Assessment Subcommittee, Tagging Subcommittee, Plan Review Team, Plan Development Team, Advisory Panel

# <u>Chairs</u>

Board, Chair – Megan Ware (1/2024); Vice-Chair – Vacant Technical Committee, Chair – Nicole Lengyel Costa (8/2022); Vice-Chair – Tyler Grabowski Advisory Panel, Chair – Louis Bassano (10/2016); Vice-Chair – Kelly Place Stock Assessment Subcommittee, Chair – Mike Celestino (8/2018) Tagging Subcommittee, Chair – Angela Giuliano (1/2019)

# Staff Lead

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# **Management Plan History**

1973 – Commercial striped bass landings peaked and then declined steadily and precipitously to record low levels. This prompted the Emergency Striped Bass Study (1979), which funded state and federal research programs to identify factors contributing to the striped bass decline, monitor stock status, and assess the economic consequences of the decline. Completed annually from 1980 to 1994, the initial report concluded that major reductions in fishing mortality were required for the species to recover.

The Interstate Fishery Management Plan (FMP) for Atlantic Striped Bass (October 1981), Amendment 1 (1984), and Amendment 2 (1984) provide recommended regulations (i.e., size limits, gear restrictions, spawning closures) to reduce fishing mortality. Unable to require compliance from states, the management program did not have the desired results.

# The Atlantic Striped Bass Conservation Act (1984)

The Atlantic Striped Bass Conservation Act, the precursor to the Atlantic Coastal Fisheries Cooperative Management Act, gives the Atlantic coastal states the necessary tools to cooperatively and more effectively conserve and manage striped bass stocks. The Commission was enabled to recommend to the Secretary of Commerce a moratorium on harvest if a state did not implement the FMP.

## Amendment 3 (October 1985)

Amendment 3 requires the states to prevent directed fishing mortality on at least 95% of the 1982 year-class females, and females of all subsequent year-classes of Chesapeake Bay stock, until 95% of the females of these year-classes have an opportunity to reproduce at least once. The objective is to be enforced until the 3-year running average of the Maryland young of the year index attains 8.0. States implemented stringent regulations, including moratoria on all harvest in numerous states.

## Amendment 4 (October 1989)

Amendment 4 and its five addenda implemented regulations for the reopening of the fishery (because the trigger set in Amendment 3 was reached). Under an interim F target of 0.25, regulations are required to conserve and preserve the resource, rather than maximize yield.

## Amendment 5 (March 1995)

The Commission declared Atlantic coastal striped bass stocks fully recovered, and as a result Amendment 5 was implemented. The Amendment implements an F target of 0.33 (after two years the F is to increase to 0.40) and provides the preferred recreational and commercial regulatory program to achieve the F target, although states are allowed to submit proposals for alternative regulations that will be conservationally equivalent. From 1997-2000, a series of five addenda to Amendment 5 were implemented to respond to the latest stock status information.

#### Amendment 6 (February 2003)

Amendment 6 modified the F targets and thresholds, and introduced a new set of biological reference points based on female spawning stock biomass (SSB), as well as a list of management triggers based on the BRPs. The coastal commercial quotas for striped bass are restored to the states' historical average landings during the 1972-1979 base period. In the recreational fisheries, all states are required to implement a two fish bag limit with a minimum size limit of 28 inches, except for the Chesapeake Bay fisheries, Albemarle-Roanoke fisheries, and states with approved conservation equivalency proposals. The Chesapeake Bay and Albemarle-Roanoke regulatory programs are predicated on a more conservative F target than the coastal migratory stock, which allows these jurisdictions to implement separate seasons, harvest caps, and size and bag limits as long as they remain under that target. Five Addenda to Amendment 6 were approved from 2007 – 2019.

## Addendum I (November 2007)

The Addendum establishes a bycatch monitoring and research program to increase the accuracy of data on striped bass discards and also recommends development of a web-based angler education program. New estimates of the biological reference points established in Amendment 6, as well as improved estimates of female spawning stock biomass for 1982-2006, were approved. Stock status (overfished, overfishing not occurring) did not change.

#### Addendum II (November 2010)

The Addendum revises the definition of juvenile recruitment failure to be a value that is below 75% of all values in a fixed time series appropriate to each juvenile abundance index (JAI). If any JAI shows recruitment failure for three consecutive years, the Technical Committee recommends appropriate action to the Striped Bass Management Board. The Management Board also considered increases to the coastal commercial quota but decided to maintain the status quo for several reasons, including a 66% decline in estimated recreational catch from 2006 to 2009; a 25% decline in estimated striped bass abundance from 2004 to 2008; and several years of below-average production of fish from the Chesapeake Bay. The 2011 assessment update was used to help indicate whether these trends are short- or longterm, and if corrective action is necessary to maintain the spawning stock biomass above the target level.

# Addendum III (August 2012)

The Addendum establishes a mandatory commercial tagging program for all states and jurisdictions with commercial striped bass fisheries and recommends increasing penalties for illegally harvested fish. The tagging program includes requirements for timely catch reporting, increased accounting of unused tags, improved standardization of tag type, and the use of biological metrics for determining state/jurisdiction tag quantity. These measures are intended to prevent commercial striped bass quota overages and the illegal harvest of striped bass. Both undermine the sustainability of striped bass populations, as well as reduce the economic opportunities of commercial and recreational fishermen who legally participate in the fishery.

## Addendum IV (October 2014)

The Addendum establishes new F reference points as recommended by the 2013 benchmark assessment. The assessment also indicated a steady decline in female SSB and that F was estimated to be above the target in the terminal year. In order to reduce F to a level at or below the new target, the Addendum requires a 25% reduction in removals for coastal fisheries (compared to 2013 harvest levels) and a 20.5% reduction in removals for Chesapeake Bay fisheries (compared to 2012 harvest levels).

To achieve this for the commercial sector, coastal commercial quotas as defined in Amendment 6 were reduced by 25% and the Chesapeake Bay commercial quota was frozen at 20.5% less than the 2012 harvest estimate. For the recreational sector, states implemented a 28" minimum size limit and a one fish bag limit per person per day along the coast, and Chesapeake Bay jurisdictions implemented regulations through the conservation equivalency process. States may implement alternative regulations through the conservation equivalency process described in the addendum (and Amendment 6). However, both the Board and the Law Enforcement Committee recommend that neighboring states and jurisdictions work together to implement consistent management measures, and reminded states there is greater certainty in the percent reductions of simple management measures (i.e., changes in bag or size limits) relative to more complex measures (e.g., slot/trophy fish and mode-specific options).

Additionally, given the Albemarle Sound/Roanoke River (A/R) stock of striped bass contributes minimally to the coastwide complex when compared to the Chesapeake Bay, Delaware, and Hudson stocks, Addendum IV defers management of this stock to the State of North Carolina using stock-specific biological reference points. These stock-specific reference points, which have been approved by the Board, result in a separate quota that is set to maintain F for the A/R stock at its target level.

# Draft Addendum V (withdrawn from consideration)

In February 2017, the Board initiated Draft Addendum V to consider liberalizing commercial and recreational regulations, coastwide. The Board's action responds to concerns raised by Chesapeake Bay jurisdictions regarding continued economic hardship endured by its

stakeholder since the implementation of Addendum IV and information from the 2016 assessment update indicating F is below the target level. The Draft Addendum proposed alternative measures to increase total removals by approximately 10% relative to 2015 to achieve F target in 2017. However, 2016 harvest estimates increased without changing regulations and raised concerns that changing that relaxing regulations could result in F exceeding the target. Additionally, the Technical Committee commented that fish from the 2011 year class, which was the largest recruitment event since 2004, would become increasingly available to ocean fisheries in the coming years, possibly resulting in further increases to harvest along the coast. Based on these concerns, the <u>Board chose to not advance</u> <u>Draft Addendum V for public comment</u>. Instead, it decided to wait until the release of the results of the 2018 benchmark stock assessment before it considered making changes to the management program.

#### Addendum VI (October 2019)

The Addendum was initiated in response to the 2018 Benchmark Stock Assessment which indicated that striped bass are overfished and experiencing overfishing. The Addendum aimed to reduce total removals by 18% relative to 2017 levels in order to achieve F target in 2020. The Addendum's measures were designed to apply the needed reductions equally (proportionally) to both the commercial and recreational sectors. Specifically, the Addendum reduced all state commercial quotas by 18%, and implemented a 1 fish bag limit and a 28"-35" slot limit for ocean fisheries and a 1 fish bag limit and an 18" minimum size limit in Chesapeake Bay to reduce total recreational removals by 18% in both regions. States were allowed to submit alternative regulations through conservation equivalency to achieve an 18% reduction in total removals relative to 2017 levels. Since catch and release practices contribute significantly to overall fishing mortality, the Addendum required the mandatory use of circle hooks when fishing with bait to reduce release mortality in recreational striped bass fisheries. States are encouraged to promote the use of circle hooks through various public outreach and education platforms to garner support and compliance with this important conservation measure.

States submitted implementation plans and conservation equivalency proposals for Addendum VI in November 2019 for Technical Committee (TC) review. The Board reviewed TC accepted measures in February 2020, and approved management options for 2020 on a state-by-state basis. States implemented final Addendum VI measures by April 1, 2020. In October 2020, the Board approved state implementation plans for circle hook requirements but did not permit any exemptions to the requirements. The mandatory circle hook requirements were implemented January 1, 2021. In response to questions and comments from the public about differing interpretations of the circle hook requirement, the Board created an ad hoc committee in February 2021 to develop a definition of bait and methods of fishing that would require the use of circle hooks, as well as how to handle incidental catch. After considering the ad hoc committee's recommendations in March 2021, the Board approved a clarification on the definition of bait and methods of fishing that require circle hooks and approved a clarification on the definition of bait and methods of fishing that require circle hooks and approved guidance on how to handle incidental catch of striped bass when targeting other species with non-circle hooks with bait attached (see here for more details).

## Amendment 7 (May 2022)

Amendment 7 was <u>approved in May 2022</u> and it consolidates Amendment 6 and its associated addenda into a single document. Amendment 7 establishes new requirements for the following components of the FMP: management triggers, conservation equivalency, additional measures to address recreational release mortality, and the stock rebuilding plan. This Amendment builds upon the Addendum VI to Amendment 6 action to address overfishing and initiate rebuilding in response to the overfished finding from the last stock assessment, requiring the Board to rebuild the stock by 2029. Amendment 7 strengthens the Commission's ability to reach the rebuilding goal by implementing a more conservative recruitment trigger, providing more formal guidance around uncertainty in the conservation equivalency process, and implementing measures intended to increase the chance of survival after a striped bass is released alive in the recreational fishery. All provisions of Amendment 7 are effective May 5, 2022 except for gear restrictions. States must implement new gear restrictions by January 1, 2023.

Amendment 7 also maintains the same recreational and commercial measures specified in Addendum VI to Amendment 6, which were implemented in 2020. As such, all approved Addendum VI conservation equivalency programs and state implementation plans are maintained until such measures are changed in the future. A stock assessment update is expected in October 2022, which will determine whether management measures need to be changed to achieve stock rebuilding by the 2029 deadline.

The updated recruitment trigger in Amendment 7, which determines when the Board is required to make management adjustments based on striped bass young-of-the-year data, is more sensitive to low recruitment than the previous trigger, and it requires a specific management response to low year class strength. The response requires reevaluation of the fishing mortality management triggers to account for low recruitment. If one of those triggers trips after reevaluation, the Board is required to take action to reduce fishing mortality.

Amendment 7 also updates the spawning stock biomass triggers by establishing a deadline for implementing a rebuilding plan. The Board must implement a rebuilding plan within two years of when a spawning stock biomass trigger is tripped.

For conservation equivalency (CE), which provides states the flexibility to tailor management measures, Amendment 7 does not allow CE to be used for most recreational striped bass fisheries when the stock is overfished. Amendment 7 also provides constraints around the use of Marine Recreational Information Program data for CE proposals and defines the overall percent reduction/liberalization a proposal must achieve, including required uncertainty buffers. These restrictions are intended to minimize the risks due to uncertainty when CE is used for non-quota managed striped bass fisheries.

To further address release mortality in the recreational fishery, Amendment 7 establishes a new gear restriction which prohibits gaffing striped bass when fishing recreationally. This new restriction, along with the existing circle hook requirement when fishing recreationally with bait, are intended to increase the chance of survival after a striped bass is released alive.

Additionally, Amendment 7 requires striped bass caught on any unapproved method of take (e.g., caught on a J-hook with bait) must be returned to the water immediately without unnecessary injury. This provision, which is related to incidental catch, was previously a recommendation in Addendum VI to Amendment 6.

For stock rebuilding, Amendment 7 addresses the upcoming 2022 stock assessment and how it will inform efforts to meet the 2029 stock rebuilding deadline. Given concerns about recent low recruitment and the possibility of continued low recruitment, Amendment 7 requires the 2022 stock assessment's rebuilding projections to use a low recruitment assumption to conservatively account for that future possibility. Amendment 7 also establishes a mechanism for the Board to respond more quickly to the 2022 assessment results if action is needed to achieve stock rebuilding by 2029.

## Addendum I (May 2023)

Addendum I was approved in May 2023 and allows for the voluntary transfer of striped bass ocean commercial quota between jurisdictions that have ocean commercial quota, contingent on stock status. After deciding that changes to the commercial quota system would not be considered during the then ongoing development of Amendment 7, the Board initiated this addendum to consider providing some relief to states seeking additional quota. The Addendum allows for voluntary ocean quota transfers contingent on stock status. When the stock is overfished, no quota transfers will be allowed. When the stock is not overfished, the Addendum enables the Board to decide every one to two years whether it will allow voluntary transfers of ocean commercial quota. The Board can also set criteria for allowable transfers, including a limit on how much and when quota can be transferred in a given year, and the eligibility of state to request a transfer based on its landings.

# Emergency Action (May 2023)

On May 2, 2023, the Board approved an emergency action to implement a 31-inch maximum size limit for striped bass recreational fisheries, effective immediately for 180 days (through October 28, 2023). This action responded to the unprecedented magnitude of 2022 recreational harvest, which was nearly double that of 2021, and new stock rebuilding projections, which estimated the probability of the spawning stock rebuilding to its biomass target by 2029 drops from 97% under the lower 2021 fishing mortality rate to less than 15% if the higher 2022 fishing mortality rate continues each year.

The Board implemented the emergency 31-inch maximum size limit for 2023 to reduce harvest of the strong 2015-year class. The 31-inch maximum size limit applied to all existing recreational fishery regulations where a higher (or no) maximum size applies, excluding the May Chesapeake Bay trophy fisheries which already prohibit harvest of fish less than 35 inches. All bag limits, seasons, and gear restrictions remained the same. Jurisdictions were required to implement the required measure as soon as possible but no later than July 2, 2023. In August 2023, the Board extended the emergency action through October 28, 2024 or until the implementation of Addendum II to Amendment 7 of the Interstate Fishery Management Plan, whichever comes first. The extension of the emergency action provided the Board time to develop and finalize Addendum II, which was approved in January 2024 with an implementation date of May 1, 2024. Therefore, Addendum II will replace the emergency action upon its implementation by the states by May 1, 2024.

# Addendum II (January 2024)

Addendum II to Amendment 7 was approved in January 2024 to reduce fishing mortality in 2024 and support stock rebuilding. For the ocean recreational fishery, the Addendum implements a 28" to 31" slot limit, 1-fish bag limit, and maintains 2022 season dates for all fishery participants; this maintains the same ocean recreational measures adopted under the 2023 emergency action. For the Chesapeake Bay recreational fishery, the Addendum implements a 19" to 24" slot limit, 1-fish bag limit, and maintains 2022 season dates for all fishery participants. For the commercial fishery, the Addendum reduces commercial quotas by 7% in both the ocean and Chesapeake Bay. To address concerns about recreational filleting allowances and compliance with recreational size limits, the Addendum establishes two requirements for states that authorize filleting of striped bass: racks must be retained and possession limited to no more than two fillets per legal fish. Finally, to enable an expedited response process to upcoming stock assessments, the Addendum establishes a mechanism allowing the Board to respond to a stock assessment via Board action if the stock is not projected to rebuild by 2029. All Addendum II measures are required to be implemented by the states no later than May 1, 2024.

# Annual Events

- Striped bass compliance reports are due June 15th each year. State compliance is reported in the annual Fishery Management Plan Review produced by the PRT.
- Striped Bass Commercial Tagging Program Monitoring Reports are due 60 days prior to the start of the first commercial fishery in that state or jurisdiction.
- Stock assessment updates are completed biennially. Benchmark stock assessments are completed approximately every five years. On non-assessment years, the Technical Committee, Stock Assessment Subcommittee, and Tagging Subcommittee meet as necessary.
- The PRT annually reviews juvenile abundance indices per the recruitment trigger criteria in Amendment 7.
- The Advisory Panel receives an update after each Board meeting.