



FISHERY MANAGEMENT PLANS

STOCK OVERVIEW REPORT

2020 FISHERY MANAGEMENT PLAN REVIEW

AMENDMENT 3 TO THE SOUTHERN FLOUNDER FMP



ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

KATHY B. RAWLS
Director

July 30, 2021

MEMORANDUM

TO: N.C. Marine Fisheries Commission
FROM: Lee Paramore, Biological Review Team Chair
SUBJECT: 2021 Species Stock Overview Report

Issue

Memo is to inform the Marine Fisheries Commission of the 2021 Species Stock Overview Report (based on 2020 data).

Findings

- The Division of Marine Fisheries 2021 Species Stock Overview Report summarizes available information by species stock to determine the overall condition of North Carolina's fishery resources. It is available on the division website at <https://deq.nc.gov/about/divisions/marine-fisheries/public-information-and-education/managing-fisheries/fmp>.
- The report provides information for each species stock based on data through 2020.
- To better inform the public on management responsibility, the report continues to partition the 13 species or species groups managed solely by North Carolina from the 21 species or species groups managed by the Atlantic States Marine Fisheries Commission, the South Atlantic Fishery Management Council, and the Mid-Atlantic Fishery Management Council.
- The online report provides a short summary of management or stock status changes for each state managed species or species group while also providing a direct link to the more comprehensive and informative annual Fishery Management Plan Review.
- For each species stock where a peer-reviewed stock assessment is available, assignment of stock status is based on the overfishing and overfished/depleted determination. For species stocks without overfished/overfishing determinations, information on abundance trends and management is provided.
- In 2020, some sampling effort and surveys were impacted by restrictions implemented due to the COVID pandemic. Impacts are noted in each report.

Action Needed

For informational purposes only, no action is needed.

Overview

The annual Stock Overview Report was released to the public via the division website on July 28, 2021. The report links the public directly to the Fishery Management Plan Update for each species and supports the division effort to aid in public understanding of management for all commercially and recreationally significant species or fisheries that comprise state marine or estuarine resources.

Highlights of this year's stock overview for state managed species include:

- **Estuarine Striped Bass** – A 2020 peer-reviewed benchmark stock assessment using data through 2017 found the Albemarle-Roanoke estuarine striped bass stock is overfished and overfishing is occurring. This triggered stricter harvest restrictions in the Albemarle Sound and Roanoke River Management Areas that took effect Jan. 1, 2021. No stock status is available for the Central Southern Management Area; however, a population model indicates the stock is depressed to a level where sustainability is unlikely. Amendment 2 to the N.C. Estuarine Striped Bass Fishery Management Plan is being jointly developed with the N.C. Wildlife Resources Commission.
- **Shrimp** – Development of the Shrimp Fishery Management Plan Amendment 2 is nearing completion and focuses on further reducing bycatch of non-target species and minimizing ecosystem impacts.
- **Blue Crab** – Amendment 3 to the Blue Crab Fishery Management Plan was approved in February 2020, and management measures were implemented to address the overfished and overfishing status of the stock based on results from the peer reviewed 2018 benchmark stock assessment. Amendment 3 also contained the framework for establishing criteria for Diamondback Terrapin Management Areas where terrapin excluder devices are required. Two Diamondback Terrapin Management Areas were established in May 2020 in Masonboro Sound and the lower Cape Fear River, and beginning in Mar. 2021, all pots used in these areas were required to have an approved excluder device in each funnel from Mar. 1 to Oct. 31.
- **Southern Flounder** – Commercial and recreational seasons implemented in 2020 reduced landings but did not fully meet reductions required by the Southern Flounder Fishery Management Plan Amendment 2. Development of the Southern Flounder Fishery Management Plan Amendment 3 is under way. Amendment 3 will examine more robust management strategies, such as quotas, slot limits, size limit changes, gear changes, and species-specific management for the recreational fishery.



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July 30, 2021

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Corrin Flora, Fishery Management Plan Coordinator
Fisheries Management Section

SUBJECT: Fishery Management Plan Update and Schedule Review

Issue

Update the N.C. Marine Fisheries Commission on the status of North Carolina fishery management plans.

Action Needed

The commission is scheduled to **vote on preliminary approval of the “N.C. Fishery Management Plan Review Schedule (July 2021-June 2026)”**.

Overview

2020 Fishery Management Plan Review

The briefing materials include a separate publication entitled “[2020 Fishery Management Plan Review](#).” This document is a compilation of annual updates for state-managed, federally-managed, and Atlantic States Marine Fisheries Commission-managed species for which North Carolina has fishery management plans. The updates are based on data through the previous calendar year. The document is provided to the commission annually at its August business meeting. It is a useful resource for fishery management plan schedule recommendations as well as comprehensive research recommendations for all fishery management plans.

The 2020 Fishery Management Plan Review is a reference document on the latest status of fisheries occurring in North Carolina. It is organized into two primary sections: state-managed species and interstate-managed species. The latter section is further divided into species with and without North Carolina indices. North Carolina indices means North Carolina data were used by the federal management councils or the Atlantic States Marine Fisheries Commission in their respective plans.

Each update in the Fishery Management Plan Review contains information about the:

- History of the plan;
- Management unit;

- Goal and objectives;
- Description of the stock, including biological profile and, when applicable, stock status;
- Description of the fishery, including current regulations and commercial and recreational landings;
- Monitoring program data, including fishery-dependent and fishery-independent data;
- Research needs;
- Management strategy; and
- Recommendation on the timing for the next review of state plans.

Five-year Fishery Management Plan Review Schedule

Recommendations included in the state-managed species annual updates inform the draft “N.C. Fishery Management Plan Review Schedule (July 2021-June 2026)” presented for the commission’s consideration and preliminary approval. The schedule reflects the status of the individual plans regarding statutorily mandated plan reviews. Per N.C. General Statute 113-182.1(d), each plan shall be reviewed at least once every five years. Upon the commission’s approval, the schedule will be forwarded to the secretary of the Department of Environmental Quality for final approval, per G.S. 113-182.1(d).

The schedule is introduced by a short summary of the status of the fishery management plans. Staff provides this document to the commission annually at its August business meeting. The document provides background information on the authority and process for fishery management plans as well as the status of each individual plan.

Annual Fishery Management Plan Update
N.C. Division of Marine Fisheries and Marine Fisheries Commission
July 30, 2021

Authority and Process

The Fisheries Reform Act of 1997 and its subsequent amendments established the requirement to create fishery management plans (FMPs) for all of North Carolina's commercially and recreationally significant species or fisheries. The contents of the plans are specified, advisory committees are required, and reviews by the Department of Environmental Quality (DEQ) secretary, Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources, Joint Legislative Commission on Governmental Operations, and legislative Fiscal Research Division are mandated.

All initial FMPs identified on the priority list have been developed. Annually, the division reviews all state FMPs, as well as all federally-managed FMPs for which the state is represented at the regional Fishery Management Councils and Atlantic States Marine Fisheries Commission (ASMFC)-managed species for which there are FMPs for North Carolina. Upon review, amendment of a state plan is required when changes to management strategies are necessary. An information update for a plan, which includes changes in factual and background data only, may be completed if there are no management changes.

Status of State FMPs

The review of six of 13 state plans is currently underway. These plans are the Shrimp, Southern Flounder, Estuarine Striped Bass, Spotted Seatrout, Striped Mullet FMPs, and N.C. FMP for Interjurisdictional Fisheries.

The development of the **Shrimp FMP** Amendment 2 began in 2019. A scoping period was held in January 2020. The MFC received a summary of the public input from the scoping period at its February 2020 meeting, provided input to the division on management strategies, and approved the goal and objectives. The division drafted Amendment 2, which was informed by input from the Shrimp FMP advisory committee (AC). The MFC received a comprehensive review of the draft plan at its May 2021 business meeting and sent it out for public and MFC AC review. Public comment and MFC AC meetings were held in June 2021. The MFC is scheduled to select its preferred management options at its August 2021 meeting and vote to send the draft plan for review by the DEQ secretary. Amendment 2 is scheduled for adoption by the MFC at its November 2021 meeting.

The division is continuing development of the **Southern Flounder FMP** Amendment 3, which may modify management strategies but will not restart the rebuilding timeframe identified through Amendment 2 in August 2019. A scoping period for Amendment 3 was held in December 2019. The MFC received a summary of the public input from the scoping period at its February 2020 meeting, provided input to the division on management strategies, and approved the goal and objectives. The division drafted Amendment 3, which was informed by input from the Southern Flounder FMP AC. At its March 2020 special meeting, the MFC voted to amend allocation between the commercial and recreational fisheries. Due to this change, the timeline was adjusted to accommodate inclusion of the new allocation strategy, management options, and additional input by the Southern Flounder FMP AC. Amendment 3 is expected to be completed in 2022.

The division is continuing with the development of the **Estuarine Striped Bass FMP** Amendment 2, which is jointly developed with the N.C. Wildlife Resources Commission. Results from the 2020 peer-reviewed stock assessment indicates the Albemarle-Roanoke (A-R) stock is overfished and overfishing is occurring. No stock status is available for the Central Southern Management Area; however, a population model indicates the stock is depressed to a level where sustainability is unlikely. The November 2020 revision to Amendment 1 immediately addressed concerns with the A-R stock while the amendment process is underway. Additionally, in November 2020, a scoping period for Amendment 2 was held. The

MFC received a summary of the public input from the scoping period at its February 2021 meeting, provided input to the division on management strategies, and approved the goal and objectives. The division is considering input from the scoping period and the MFC while drafting Amendment 2. An Estuarine Striped Bass FMP AC will be appointed and the division will work with them to further develop draft Amendment 2 later this year.

A stock assessment for the **Spotted Seatrout FMP** is underway coinciding with the scheduled FMP review. The prior stock assessment from 2014 indicated the stock is not overfished and is not experiencing overfishing. The division included data through February 2020 in the stock assessment to be more reflective of recent fishing activity.

A stock assessment for **Striped Mullet FMP** is underway coinciding with the scheduled FMP review. The terminal year of the stock assessment is 2019. The 2013 stock assessment indicated overfishing was not occurring, but it could not determine the overfished status. Though commercial landings and abundance from independent indices in 2017 were near historic lows, an update of the 2013 stock assessment model with data through 2017 indicated overfishing is not occurring.

The division continues development of the N.C. **FMP for Interjurisdictional Fisheries** Amendment 2. The goal of the FMP for Interjurisdictional Fisheries is to adopt FMPs, consistent with N.C. law, approved by the federal Councils or the ASMFC by reference and implement corresponding fishery regulations in North Carolina to provide compliance or compatibility with approved FMPs and amendments, now and in the future. Amendment 2 is expected to be completed in 2022.

The N.C. **River Herring FMP** Amendment 2 was adopted by the MFC in 2015. An Atlantic coast-wide stock assessment update for river herring was completed in August 2017, with data through 2015, by the ASMFC. Results indicate river herring remain depleted and at near historic lows on a coast-wide basis. The division recommends the next review of the River Herring FMP begin in 2022, one year later than previously planned. This will provide time to evaluate the need to preserve both a state and ASMFC river herring plan, the potential for achieving efficiencies by addressing any redundancy in management, and the possibility of retiring the state FMP while continuing to manage river herring via the N.C. FMP for Interjurisdictional Fisheries and the ASMFC Interstate FMP for Shad and River Herring.

The **Hard Clam FMP** Amendment 2 and the **Eastern Oyster FMP** Amendment 4 were approved in February 2017 with implementing rules in effect May 1, 2017. Stock assessments cannot be conducted due to limited data; therefore, population size and the rate of removals from each population are unknown. For the Hard Clam FMP, harvest fluctuates, often in response to changes in demand, improved harvesting methods, and increases in polluted shellfish area closures. For the Oyster FMP, commercial landings from public bottom have been variable, and landings from private bottom in the past few years have increased significantly due to more interest in aquaculture. Work is underway with N.C. State University and the Nature Conservancy to develop methodologies to survey eastern oysters. The next review of both FMPs will begin in 2022.

The management program currently in place for the N.C. **Red Drum FMP** has resulted in a stock that has met ongoing management targets. Therefore, at its August 2017 business meeting, the MFC approved the 2016 annual FMP update to fulfill the scheduled review of the N.C. Red Drum FMP. All management strategies that have led to management targets being met will be maintained as outlined in both the state FMP and the ASMFC FMP. The division recommends the next review of the Red Drum FMP begin in 2024, two years later than originally planned. This will provide time for the completion of the red drum stock assessment by the ASMFC, which will inform management. Stock conditions will be monitored and reported through each subsequent annual FMP update and the MFC will continue to receive the FMP review schedule annually.

The **Blue Crab FMP** Amendment 3 was approved in February 2020 to address the overfished status and end overfishing, as was determined by the 2018 stock assessment. An update to the 2018 stock assessment will begin no sooner than 2023 and will include data through the previous year. The next scheduled review of this plan will begin in 2025.

Bay scallop abundances have remained at historically low levels since the last scheduled review. Therefore, at its August 2020 business meeting the MFC approved the 2020 annual FMP update to fulfill the scheduled review of the **Bay Scallop FMP**. All management strategies that have been in place will be maintained as outlined in the state FMP. Stock conditions will be monitored and reported through each subsequent annual FMP update and the MFC will continue to receive the FMP review schedule annually. The next scheduled review of this plan will begin in 2025.

The management program currently in place for the N.C. **Kingfishes FMP** has resulted in a stock that has met ongoing management targets. Therefore, at its August 2020 business meeting, the MFC approved the 2020 annual FMP update to fulfill the scheduled review of the Kingfishes FMP. All management strategies that have been in place will be maintained as outlined in the state FMP. Stock conditions will be monitored and reported through each subsequent annual FMP update and the MFC will continue to receive the FMP review schedule annually. The next scheduled review of this plan will begin in 2025.

DRAFT DOCUMENT – SUBJECT TO CHANGE

DRAFT N.C. FISHERY MANAGEMENT PLAN REVIEW SCHEDULE (July 2021 – June 2026) Revised July 30, 2021					
SPECIES (Date of Last Action)	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
SOUTHERN FLOUNDER (8/19) †*					
SHRIMP (2/15) †					
ESTUARINE STRIPED BASS (5/13) †					
INTERJURISDICTIONAL (11/15)					
SPOTTED SEATROUT (2/12)					
STRIPED MULLET (11/15)					
RIVER HERRING (2/15) **					
HARD CLAM (2/17)					
OYSTER (2/17)					
RED DRUM (8/17)***					
BLUE CRAB (2/20)					
BAY SCALLOP (8/20)					
KINGFISHES (8/20)					

† The schedule assumes no rulemaking is required to implement the amendment.
 * Adoption of Amendment 2 included the immediate development of Amendment 3 to implement more comprehensive, long-term management measures based on the 2019 coast-wide stock assessment update that determined the stock is overfished and overfishing is occurring.
 ** The schedule reflects a one-year delay to provide additional time to evaluate the need to preserve both a state and ASMFC river herring plan.
 *** The schedule reflects a two-year delay to provide time for the ASMFC to complete the benchmark stock assessment.



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ELIZABETH S. BISER
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KATHY B. RAWLS
Director

July 30, 2021

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Michael S. Loeffler and Anne L. Markwith Southern
Flounder Fishery Management Plan co-leads

SUBJECT: Amendment 3 to the N.C. Southern Flounder Fishery Management Plan

Issue

Development of Amendment 3 to the N.C. Southern Flounder Fishery Management Plan (FMP) is continuing. Following the March MFC special business meeting, the draft FMP is being revised to incorporate the MFC decision to amend the sector allocations to 70% commercial and 30% recreational in 2021 and 2022, 60% commercial and 40% recreational in 2023, and 50% commercial and 50% recreational in 2024. Updates are provided for the adjusted Amendment 3 timeline, impacts to the plan based on the amended allocation decision, and a summary of additional management suggestions from the MFC.

Action Needed

No action needed at this time.

Overview

Southern flounder is a commercially and recreationally important fishery. The southern flounder found in North Carolina waters are part of a larger regional stock ranging from North Carolina to the east coast of Florida. A multi-state stock assessment found the southern flounder stock to be overfished and overfishing was occurring. To implement management measures to address the stock status, the MFC moved quickly to implement Amendment 2 to the Southern Flounder FMP. Amendment 2 implemented shortened commercial and recreational flounder harvest seasons that were projected to achieve the necessary harvest reductions to end overfishing and rebuild the stock. In addition, adoption of Amendment 2 authorized the immediate development of Amendment 3 and more robust, long-term management strategies. Management of the southern flounder stock will remain under Amendment 2 until adoption of Amendment 3.

Following the actions by the MFC in March establishing graduated sector allocations and additional management suggestions in May, draft Amendment 3 was revisited by the division and staff anticipate presenting the revised draft to the MFC at its November 2021 business meeting. At that time the MFC may vote to send draft Amendment 3 out for public comment and MFC advisory committee's review. Staff are evaluating the effects of the updated allocations on the management measures in the Sustainable Harvest, Increased Recreational Access, and

Adaptive Management issue papers. In addition, the division has evaluated management suggestions provided by the MFC and incorporated the suggestions with updates to the Inlet Corridor Issue Paper and two new issue papers: Changes to Size Limits and Phasing Out Large-Mesh Gill Nets. Consequently, a Southern Flounder FMP Advisory Committee/Plan Development Team workshop is scheduled for August 10, 2021, to allow the Southern Flounder FMP Advisory Committee to inform new items incorporated in the draft plan.

Below is further information to address the MFC management suggestions in the revised draft Amendment 3.

Considering slot limits that would decrease the minimum size to 12 or 13 inches

A new issue paper addressing the impacts of changing size limits for flounder can be found in the draft plan as Appendix 4.6: Implementing a Slot Limit in the Southern Flounder Fishery.

Phase out large mesh gill nets

A new issue paper examining the impacts of large mesh gill nets in the southern flounder fishery can be found in the draft plan as Appendix 4.7: Phasing out Anchored Large-Mesh Gill Nets in the North Carolina Southern Flounder Fishery.

Additional options for inlet corridors

The Inlet Corridors Issue Paper is being updated with additional options for consideration by the MFC.

Alternative management measures to allow the MFC to make annual adjustments to TAL

This issue is addressed in Appendix 4.4: Adaptive Management Strategy for the North Carolina Southern Flounder Fishery which outlines management measures to manage the southern flounder fishery annually.

Have a plan to fast-track the opening of the ocean fishery

This issue is addressed in Appendix 4.2: Increased Recreational Access by Managing Southern Flounder Separately from other Flounder Species. Options are included to address the ocean flounder fishery.

Observer program for the pound net fishery

Development of an observer program for the southern flounder pound net fishery is a research recommendation by the division currently included in draft Amendment 3.

Recreational reporting app to track landings in real time

The division is collaborating on a citizen science app that is aimed at capturing real-time data on the recreational fishery. This project is in the very early stages of development, and it will be several years before full implementation and data collection can begin.

Addressing unreported SCFL/RSCFL landings

The Trip Ticket Program forms have been updated to allow dealers to collect information about personal consumption, but no law exists to require SCFL/RSCFL holders to report all commercial landings to a licensed seafood dealer.

Addressing shrimp trawl bycatch of southern flounder

Shrimp trawl bycatch management is addressed directly in the Shrimp FMP, which the MFC will review and select its preferred management options at the August 2021 business meeting.