DECISION DOCUMENT

Spotted Seatrout Fishery Management Plan

Amendment 1

This document was developed by the Division of Marine Fisheries to help the Marine Fisheries Commission track previous activity and prepare for upcoming actions for the Spotted Seatrout FMP Amendment 1.

February 2025

Summary

At their November 2024 Business Meeting, the Marine Fisheries Commission (MFC) selected their preferred management options for Amendment 1 to the Spotted Seatrout Fishery Management Plan (FMP). The draft FMP was revised to include these selected options and then provided to the Secretary of the North Carolina Department of Environmental Quality for their review. The Secretary made no revisions and submitted the draft FMP to the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources (AgNER) for their 30-day review period (N.C. General Statute § 113-182.1(e)). The AgNER made no revisions. The draft FMP will be provided to the MFC for their vote on final adoption of Amendment 1 at their February 2025 Business Meeting.

This revised Decision Document includes the MFC preferred management options selected at the November 2024 Business Meeting and the suite of management options and rationale behind them that were provided to the MFC for their consideration at that meeting.

Background

The 2022 stock assessment indicated the Spotted Seatrout stock in North Carolina and Virginia waters is not overfished but overfishing is occurring. The North Carolina Fishery Reform Act of 1997 requires a Fishery Management Plan to specify a timeframe not to exceed two years from the date of adoption of the plan to end overfishing (G.S. 113-182.1).

Amendment 1 to the Spotted Seatrout Fishery Management Plan is being developed to address overfishing in the Spotted Seatrout fishery. Although the 2022 stock assessment covers spotted seatrout in both North Carolina and Virginia waters, the management unit covered by Amendment 1 is limited to all Spotted Seatrout within the Coastal and Joint Fishing Waters of North Carolina. A harvest reduction of 19.9% is required to reach the F20% threshold while a harvest reduction of 53.9% will reach the F30% target. A harvest reduction of at least 19.9% meets the statutory requirement to end overfishing.

The Spotted Seatrout fishery is primarily a recreational fishery, with recreational harvest accounting for 86% of total harvest since 2012. Commercial harvest has accounted for 14% of total Spotted Seatrout harvest over the same period. However, harvest in both sectors increased sharply in 2019 and has remained high through 2022. As such, management measures to achieve sustainable harvest focus on both sectors.

Amendment Timing

(gray indicates completed step)

March 2023	DMF holds public scoping period
May 2023	MFC approves goal and objectives of FMP
May 2023 – March 2024	DMF drafts FMP
April 2024	DMF held workshop to review and further develop draft FMP with the Spotted Seatrout FMP Advisory Committee
May – July 2024	DMF updates draft plan
August 2024	MFC Reviews draft and votes on sending draft FMP for public and AC review
October 2024	MFC Regional and Standing Advisory Committees meet to review draft FMP and receive public comment
November 2024	**MFC selects preferred management options**
December 2024 – January 2025	DEQ Secretary and Legislative review of draft FMP
You Are Here: February 2025	MFC votes on final adoption of FMP
TBD	DMF and MFC implement management strategies

Goal and Objectives

The goal of this plan is to manage the Spotted Seatrout (*Cynoscion nebulosus*) fishery to maintain a self-sustaining population that provides sustainable harvest based on science-based decision-making processes. The following objectives will be used to achieve this goal:

1. Implement management strategies within North Carolina that end overfishing and maintains the Spotted Seatrout spawning stock abundance and recruitment potential.
2. Promote restoration, enhancement, and protection of critical habitat and environmental quality in a manner consistent with the Coastal Habitat Protection Plan, to maintain or increase growth, survival, and reproduction of the Spotted Seatrout stock.
3. Monitor and manage the fishery in a manner that utilizes biological, socioeconomic, fishery, habitat, and environmental data.
4. Promote outreach and interjurisdictional cooperation regarding the status and management of the Spotted Seatrout stock in North Carolina and Virginia waters, including practices that minimize bycatch and discard mortality.

Management Measures

Management Carried Forward in Amendment 1

There are management measures from the original FMP to carry forward into Amendment 1 unless otherwise changed in Amendment 1. Management measures from the original Spotted Seatrout FMP that will be carried forward into Amendment 1 are listed below:

- It is unlawful to set gill nets in Joint Fishing Waters from 12:01 A.M. on Saturday to 12:01 A.M. on Monday except in Albemarle and Currituck sounds.
- It is unlawful for a commercial fishing operation to possess more than the recreational bag limit of Spotted Seatrout per person per day taken by hook-and-line.
- It is unlawful to take more than the recreational bag limit of Spotted Seatrout per person per day for recreational purposes.
- 75-fish commercial trip limit (excluding for the stop net fishery and spotted seatrout taken by hook-and-line)

MFC Selected Management Measures

Outlined below are the preferred management options selected by the MFC for Amendment 1 to the Spotted Seatrout Fishery Management Plan (FMP). For those options that were different than the DMF recommendation, a super-majority of votes was needed. The selected options are estimated to result in an approximately 28.0% overall harvest reduction (27.0% Recreational, 38.0% Commercial) to end overfishing with a greater than 70% probability of keeping spawning stock biomass (SSB) above the target.

Recreational Fishery

- 3-fish recreational bag limit (*Appendix 2: Sustainable Harvest Issue Paper)*
- 14- to 20-inch recreational slot limit with allowance for one fish >26 inches (*Appendix 2: Harvest Issue Paper*)
- Eliminate the captain/crew allowance on for-hire trips with no broader vessel limit (*Amendment 3: Supplemental Management Issue Paper*)

Commercial Fishery

- 14- to 22-inch commercial slot limit
- Saturday through Sunday commercial Spotted Seatrout harvest closure from January through September (*Appendix 2: Sustainable Harvest Issue Paper)*
- Saturday through Monday commercial Spotted Seatrout harvest closure from October through December (*Appendix 2: Sustainable Harvest Issue Paper)*
- Formalize the Stop Net Management detailed in the plan *(Appendix 2: Sustainable Harvest Issue* Paper)

General

Adaptive Management

- Adopt the Adaptive Management Framework detailed in the plan with the caveat that adaptive management measures for sustainable harvest must be brought to the Commission for review prior to implementation. (*Appendix 2: Sustainable Harvest Issue Paper)*

Cold Stun Management

- Extend harvest closure by 15 days, to June 30, following a cold stun (*Appendix 4: Cold Stun Management Issue Paper*)
- Adopt the Cold Stun Adaptive Management Framework detailed in the plan (*Appendix 4: Cold Stun Management Issue Paper*)

Suite of Management Options Presented

Rationale for Division of Marine Fisheries Recommendations

It is important to remember that spotted seatrout are *not overfished*; however, *overfishing is occurring* in the fishery. N.C. General Statute 113-182.1 states that fishery management plans shall specify a time period not to exceed two years from the date of adoption of the plan to end overfishing. This distinction shapes the management approach: since the stock does not require rebuilding, *the goal is to reduce fishing effort and harvest*.

The 2020 Spotted Seatrout Stock Assessment showed a significant increase in harvest and total removals in biological year 2019 compared to previous years. While biological year 2019 was originally an outlier, *recent harvest trends show it is not*. Biological years 2019, 2020, 2021, and 2022 represent the four highest years of harvest and total removals in the entire timeseries (1991–2023) with total removals in 2020 replacing 2019 total removals as the timeseries high. Biological year 2023 experienced a small decline in harvest and total removals; however, recreational harvest through Wave 4 of biological year 2024 is on track to reach a new time series high for both harvest and total removals. Fishing effort, measured by the number of trips, has also increased recreationally and commercially.

The spotted seatrout fishery has faced unprecedented levels of harvest and total removals since 2019. While the population level effects of increased harvest in these years cannot be determined outside of an updated stock assessment, it is DMF's position that management of the spotted seatrout stock proceed with a precautious management approach. N.C. General Statute 113-182.1 states that fishery management plans shall specify a time period not to exceed two years from the date of adoption of the plan to end overfishing. Taking precautionary actions now helps ensure the long-term sustainability of the stock under higher fishing effort. Proactive management reduces the likelihood of more drastic measures or management strategies being necessary in years to come and is projected to maintain the stock at current levels of high spawning stock biomass. The DMF sustainable harvest recommendations are estimated to result in an approximately 40.0% overall harvest reduction (40.0% recreational, 40.0% commercial).

Recreational Recommendations

Slot Limit

A slot limit as a standalone measure does nothing to address increased fishing effort. As more anglers enter the fishery, management that does not account for increased effort is unlikely to succeed long-term.

Implementing a spotted seatrout slot limit as a standalone measure is also unlikely to achieve the harvest reduction needed to end overfishing. On paper, it is technically possible to end overfishing through implementation of a slot limit given the slot is narrow enough. A 16”–20” slot with an allowance for one fish >24” was suggested at the Spotted Seatrout Advisory Committee Workshop and was the recreational management option recommended by the Finfish Advisory Committee. While a slot limit may initially reduce harvest levels, the effectiveness will likely diminish over time. In the short term, fewer fish will be harvested because individuals that are too small or too large will not be harvested. However, size limit increases rarely result in long term harvest reductions but instead act to delay harvest of those newly sublegal fish until they grow back into the fishery. The realized reduction will then be lower than intended.

Implementing a maximum size limit as part of a slot limit likely provides a longer-term reduction in harvest. However, introducing a trophy allowance could counter this benefit because more larger fish will be available within trophy limits. Additionally, implementing a recreational slot limit without a size limit change in the commercial fishery may result in more larger fish being harvested commercially undermining the goal of reducing overall harvest through a slot limit alone.

A slot limit as a standalone measure fails to address the issue of increased fishing effort. Without additional strategies to decrease fishing effort and harvest, any reduction from a narrow slot limit will likely be undermined by increased fishing pressure. Considering the public’s desire for a slot limit, spotted seatrout biology, and input received from the Spotted Seatrout Advisory Committee Workshop, DMF developed the recommended 14”-20” slot with an allowance for 1 fish >26” in combination with other management strategies (3-fish bag limit, January-February season closure). The slot limit was combined with other management strategies due to concerns discussed above and in the sections that follow. Combining these measures enhances the prospect of harvest reductions being realized and ending overfishing.

Bag Limit

To more effectively address overfishing, a 3-fish bag limit is recommended alongside a slot limit and season closure. This measure directly reduces the number of fish each angler can harvest per day, which directly decreases harvest.

Season Closure

In addition to a slot limit and a bag limit, DMF recommends a January-February season closure to further reduce fishing effort and harvest. Throughout development of Amendment 1, recreational anglers have indicated a strong preference for not managing the spotted seatrout fishery using a season closure. In many cases, a caveat was included that if a season closure is implemented, it should be as short as possible. Every member of the Spotted Seatrout Advisory Committee who spoke about season closures expressed a preference for not having a closure but wanted as short a

closure as possible if such management was deemed necessary, with one member suggesting a season closure of less than 90 days would be most palatable if necessary.

The most effective period to close a fishery is at the end of the fishing year or when most removals occur. The spotted seatrout fishery is historically most active during the fall and early winter months with most landings occurring from October-December. However, the fishing or biological year is from March through February of the following year, meaning a closure in the fall and early winter would not occur at the end of the fishing year allowing for recoupment of harvest after the season reopens. Additionally, the public and the Spotted Seatrout Advisory Committee expressed the importance of maintaining access to the fishery during this period. Considering input received, the timing of the biological year, and balancing the desire for a short season closure while maintaining the effectiveness of that season closure, DMF recommends a January-February closure.

To account for the unprecedented levels of spotted seatrout harvest and total removals since the stock assessment, the high potential for harvest recoupment with other management strategies, and unchecked effort increases in recent years, DMF considers a season closure to be the most effective and efficient management option to reduce effort and harvest as more anglers enter the fishery. A winter season closure provides additional benefits including:

- Protection of spawning capable spotted seatrout while they are aggregated and susceptible to increased harvest and cold stuns.

- A larger harvest reduction in a shorter amount of time as opposed to a longer season closure during the spring and summer months to achieve the same harvest reduction.

During the season closure, increased catch-and-release activity may result in increased dead discards. However, the discard mortality rate will likely be lower during the winter closure compared to other seasons due to higher dissolved oxygen levels and cooler water temperatures. Additionally, the number of dead discards will be lower than the number of fish that would have otherwise been harvested had a season closure not been implemented. The DMF will continue Ethical Angling outreach which includes education on best handling and fishing practices that can increase the survival of released fish.

Commercial Recommendations

Slot Limit

Neither a size limit increase nor a slot limit would be an effective form of management in the commercial spotted seatrout fishery. Additionally, a size or slot limit in the commercial fishery does not address increasing effort. The DMF does not recommend changing the minimum size limit or implementing a slot limit in the commercial spotted seatrout fishery.

Trip Limit

Achieving the necessary harvest reductions through lowering the commercial spotted seatrout trip limit alone is not realistic. Additionally, a more restrictive trip limit in the commercial fishery does not address increasing effort. The DMF does not recommend changing the current 75-fish trip limit in the commercial spotted seatrout fishery. In 2014, the Finfish Advisory Committee voted to include in the next FMP update a discussion of allowing two commercial license holders fishing one set of gear on a single boat to harvest two commercial limits of spotted seatrout. This discussion is included in

Amendment 1; however, such a change to the spotted seatrout trip limit is likely to increase commercial harvest. As management measures in Amendment 1 are designed to reduce harvest, DMF does not recommend allowing multiple commercial trip limits per vessel.

Season Closure

Throughout development of Amendment 1, input from the public and Advisory Committees has consistently shown interest in aligning spotted seatrout and striped mullet management. The shared seasonality and use of similar gear types in both fisheries make this alignment desirable to stakeholders as it could simplify regulations, reduce user conflict, and reduce discards. Spotted seatrout are the most common incidental catch in the striped mullet fishery and vice versa. However, spotted seatrout life history would limit the effectiveness of aligning the two closures completely. In the late fall and early winter, as striped mullet begin to move into the ocean to spawn, spotted seatrout begin aggregating in the upper estuary. In other words, striped mullet migration patterns in the late fall and early winter allow for escapement while spotted seatrout migration patterns during this same time make them more susceptible to harvest. A shift in commercial effort to weekdays would likely lead to a high degree of recoupment in the spotted seatrout fishery with the potential to greatly decrease the expected reductions from matching the weekend closures in Amendment 2 to the Striped Mullet FMP. A January–February closure reduces fishing pressure while spotted seatrout are aggregated and more vulnerable to harvest.

Additionally, a January-February commercial closure aligns with the recommended closure in the recreational fishery and balances the most effective management with minimal disruption to the fishery. Should the commercial spotted seatrout fishery not close in January-February, reductions from a recreational closure will likely not meet the necessary reductions to end overfishing.

Adaptive Management

Adaptive Management would be a valuable tool for the management of the spotted seatrout fishery, offering a more responsive and proactive approach compared to the traditional Fishery Management Plan (FMP) review process. One common concern is that the current process of conducting a full FMP review takes too long, which can delay necessary adjustments to management strategies. Adaptive Management provides a solution by allowing the DMF to adjust management measures between full FMP reviews through the Director's proclamation authority. This flexibility is driven by science-based metrics, including both fishery-independent and fishery-dependent data.

If science-driven metrics indicate that current management measures are not achieving sustainable harvest goals, Adaptive Management would allow the Director to make timely changes to management strategies such as season and day of week closures, trip and bag limits, size and slot limits, and gear regulations, all within the scope defined by Amendment 1. The ability to adjust management between full FMP reviews enables the DMF to address issues before they become critical, preventing the need for more drastic and disruptive measures during the next review cycle. By incorporating Adaptive Management, the DMF can proactively respond to shifting fishery conditions, maintaining sustainable harvest goals and ensuring the long-term viability of the spotted seatrout population. This approach not only increases the resilience of fishery management but also reinforces science-based, flexible management practices that benefit both the fishery and its stakeholders. The DMF recommends adopting the Adaptive Management Framework.

Management Options by Issue Paper

(Options recommended by DMF are outlined in blue)

Sustainable Harvest (Appendix 2)

These management options attempt to strike a balance between access to the fishery for both sectors, the necessary harvest reduction to end overfishing, accounting for potential harvest recoupment, and maintaining the current abundance of Spotted Seatrout. Additionally, management in the recently adopted Amendment 2 to the Striped Mullet Fishery Management Plan was considered as there is a high degree of overlap in the seasonality and gear types used in the commercial Striped Mullet and Spotted Seatrout fisheries. These options are predicted to reduce harvest of Spotted Seatrout in ways that are quantifiable using existing data.

A 19.9% reduction in total harvest relative to 2019–2022 total harvest is required to reach the fishing mortality threshold and meet the statutory requirement to end overfishing while a harvest reduction of 53.9% is required to reach the fishing mortality target. Because of spikes in effort across both sectors in recent years and the potential for harvest recoupment from some management measures, the DMF recommends a precautionary approach to increase the likelihood of achieving sustainable harvest.

Option 1: Size Limits

(Refer to pp. 50-55 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

Changing the current Spotted Seatrout minimum size of 14” is unlikely to reach the needed harvest reduction to meet statutory requirements. Additionally, the reduction from increasing the minimum size is most likely to be achieved in the short term while the long term harvest reduction is lower with some portion of harvest being recouped. A delay in harvest could provide non-quantifiable benefits by allowing more fish to spawn prior to harvest. However, Spotted Seatrout growth rates would likely minimize these non-quantifiable benefits as sub-legal fish grow quickly back into the fishery. Harvest reduction from a slot limit is more likely to be realized in the long term as Spotted Seatrout would grow out of the fishery relatively quickly. Implementing a slot limit for the commercial sector would likely increase dead discards. Pairing a slot limit with corresponding changes to allowable mesh sizes could prove ineffective at reducing dead discards due to the lack of size selectivity across various mesh sizes (Page 30 of Draft Amendment 1). A very narrow slot limit, even if implemented for just the recreational sector, could theoretically reduce total harvest more than the 19.9% reduction needed to reach $F_{Threshold}$ (Page 53 of draft Amendment 1, Table 2.3). However, size limit changes alone will not address the potential for increased dead discards, the high recoupment potential if commercial harvest shifted toward larger fish, and the recent trend of increased effort in both sectors. For a full discussion of size limits, see pp. 50–55 in draft Amendment 1.

a. Status Quo – no change to commercial size limit. Consider recreational size limit changes as a part of the overall management strategy to achieve sustainable harvest but not as a single solution option

b. Recreational 16”–20” slot limit with allowance for one fish over 24” and commercial 16” minimum size limit

Option 2: Seasonal Closures

(Refer to pp. 55-59 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

Seasonal closures can be an effective way of limiting harvest, especially when closures are at the end of the biological year to prevent recoupment of harvest. It is possible to end overfishing through a closure that spans the spawning season (p. 57 of draft Amendment 1, Table 2.4), however; it is likely some amount of recoupment would occur after the season closure. A spawning season closure would also have to be longer than a winter closure (i.e., a closure at the end of the biological year) to reduce harvest to a level that will meet management objectives. Closures not at the end of the biological year should be extended or paired with other management options to increase the likelihood of reaching management objectives. Day of the week closures are a type of season closure and could be used for the commercial sector to reduce harvest. Similar to other seasonal closure options not at the end of the biological year, there is the potential for harvest recoupment if commercial effort shifts to days when the fishery is open. Day of the week closures could be considered in tandem with other management measures to ensure management objectives are met. See pp. 55-59 of draft Amendment 1 for a full discussion of seasonal closures.

a. Status Quo – manage fishery without seasonal harvest closure

b. Dec 16 – Feb 28/29 harvest closure (both sectors)

c. 11:59 p.m. Friday–12:01 a.m. Tuesday commercial harvest closure October 1–December 31 and January 1–February commercial harvest closure. Consider recreational seasonal closures as a part of the overall management strategy to achieve sustainable harvest but not as a single solution option.

d. Nov 1 – February 28/29 harvest closure (both sectors)

Option 3: Bag and Trip Limits

(Refer to pp. 59-61 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

It is possible to reduce total Spotted Seatrout harvest to reach the $F_{Threshold}$ by decreasing the recreational bag and commercial trip limits, but it is not possible to reduce total harvest to reach the F_{Target} through changes to the bag or trip limits alone (draft Amendment 1 pp. 59 and 61, Tables 2.5 and 2.6). Any recreational bag or commercial trip limit would be a daily limit. Recreational bag and commercial trip limit changes could be accompanied by gear changes or limits to allowable gear (See Amendment 1, Appendix 1 and Appendix 3) to minimize the probable increase in dead discards caused by bag or trip limit changes. For a full discussion of bag and trip limit options, see pp. 59-61 of draft Amendment 1.

a. Status Quo – manage fishery without changes to current commercial trip limit and consider recreational bag limit changes as a part of the overall management strategy to achieve sustainable harvest but not as a single solution option.

b. Reduce recreational bag limit to 2 fish and commercial trip limit to 45 fish

Option 4: Stop Nets

(Refer to pp. 61-62 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

The stop net fishery is a modification of a traditional beach seine that primarily targets Striped Mullet and is unique to Bogue Banks. The 2012 Spotted Seatrout FMP implemented a 75 fish trip limit, but the MFC tasked the DMF Director with addressing the stop net fishery outside the 2012 FMP. Since 2012, the Bogue Banks stop net fishery has opened and closed by proclamation and operates with a 4,595 lb. Spotted Seatrout quota with various reporting requirements outlined in a Memorandum of Agreement (MOA) signed by a party of the fishery and the DMF Fisheries Management Section Chief. Due to the strict existing management of this fishery, the potential for additional harvest reduction from the recently adopted Amendment 2 to the Striped Mullet FMP, and the low contribution to Spotted Seatrout landings under current management, additional harvest restrictions may not be necessary for the stop net fishery. However, formalizing current management of the stop net fishery should be considered in this amendment. See Spotted Seatrout FMP Amendment 1 pp. 61–62 for a full discussion of stop net management.

a. Status Quo – 4,595 lb. season quota with terms and conditions of stop net fishery and responsibilities of the stop net crew outlined in Memorandum of Agreement.

b. Stop nets are restricted to the Atlantic Ocean on Bogue Banks and maintain a 4,595 lb. Spotted Seatrout season quota. The season will open no sooner than October 15 and close no later than the sooner of December 31 or when the Spotted Seatrout quota is reached. Any weekend closures to commercial harvest implemented in Option 2 will also apply to the Bogue Banks stop net fishery. Stop net crews must contact N.C. DMF Marine Patrol Communication each time a stop net is set and at least two hours prior to each time a stop net is fished. The same day a stop net is fished and the catch is landed at the fish house, a representative of the stop net crew must contact DMF Fisheries Management Section to report the daily total of Spotted Seatrout harvest in pounds as it appears on the trip ticket. Same day reporting is required even if zero Spotted Seatrout are harvested. Failure to follow reporting requirements will result in an immediate closure of the stop net fishery. The stop net fishery will be managed by proclamation consistent with but not limited to previous proclamations

Option 5/6: Combination Management Measures

(Refer to pp. 62-65 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

Combining multiple strategies to achieve management goals is common in fisheries management. Multiple management measures rather than a single, standalone management measure allow for more specific, targeted management to account for a variety of factors including species life history and biology, differences in the fishery (e.g., industry, regional, etc.), or competing interests in the fishery, and better minimize recoupment. As there are few standalone management measures to end overfishing in the Spotted Seatrout fishery, combination measures will help ensure management is realistic and management objectives are more likely to be achieved. See pp. 62–65 of the Spotted Seatrout FMP Amendment 1 for a full discussion of combination management measures.

Combination Management Measures

Table 2.7. Combination management measures for the recreational fishery to end overfishing and achieve sustainable harvest. The Total % Reduction column shows the total percent reduction if no changes to commercial management are implemented. Unless otherwise noted, season closures or bag limit reductions include the entirety of the month. *Total reduction does not reduce F to the 19.9% threshold (options 5.A and 5.B). Harvest reduction in pounds is based on 2019–2022 average recreational harvest. Option 5.I, outlined in a blue rectangle, represents the DMF recommendation.

OPTION #	SEASON CLOSURE	BAG LIMIT (NUMBER OF FISH)	SIZE LIMIT	RECREATIONAL REDUCTION (LB)	RECREATIONAL REDUCTION (%)	TOTAL % REDUCTION
5.A	Jan-Feb	Oct-Dec 3 fish	-	738,113	22.1	18.9*
5.B		Nov-Feb 3fish	16” minimum	741,453	22.2	19.0*
5.C	-	Oct-Feb 3 fish	14-20”, 1 over 26”	824,950	24.7	21.1
5.D	Jan 16-Feb	-	14-20”, 1 over 26”	935,166	28.0	23.9
5.E	Dec 16-Feb	3 fish	-	1,015,323	30.4	26.0
5.F	Jan-Feb	-	14-20”, 1 over 26”	1,078,781	32.3	27.6
5.G	Jan-Feb	Oct-Dec 3 fish	14-20”, 1 over 26”	1,205,696	36.1	30.9
5.H	Apr-Jun	3 fish	14-20”, 1 over 26”	1,292533	38.7	33.1
5.I	Jan-Feb	3 fish	14-20”, 1 over 26”	1,319,252	39.5	33.8
5.J	Dec 16-Feb	3 fish	14-20”, 1 over 26”	1,436,148	43.0	36.7
5.K	Apr-Jul	3 fish	14-20”, 1 over 26”	1,439,488	43.1	36.8
5.L	Dec-Feb	2 fish	14-20”, 1 over 26”	1,923,770	57.6	49.2

Table 2.8 Combination commercial management measures to end overfishing and achieve sustainable harvest. The Total % Reduction column shows the total percent reduction if no recreational management changes are implemented. No management options applied solely to the commercial sector reduce *total* harvest to a level where F meets the 19.9% threshold. Unless otherwise noted, seasonal closures include the entirety of the month. Harvest reduction in pounds is based on 2019–2022 average commercial harvest. The DMF recommendation for the commercial fishery is a standalone measure Option 2.c, which is not represented in this table of combination measures.

OPTION #	SEASON CLOSURE	TRIP LIMIT (NUMBER OF FISH)	SIZE LIMIT	COMMERCIAL REDUCTION (LB)	COMMERCIAL REDUCTION (%)	TOTAL % REDUCTION
6.A	Jan 16-Feb	60	-	131,210	23.1	3.4
6.B	Jan-Feb	65	-	145,979	25.7	3.7
6.C	Jan-Feb	-	16” min	149,955	26.4	3.8
6.D	Feb	45	-	164,155	28.9	4.2
6.E	Jan 16-Feb	45	-	193,124	34.0	4.9
6.F	Jan-Feb	50	-	197,100	34.7	5.0
6.G	Dec 16-Feb	60	-	202,780	35.7	5.2
6.H	Dec-Feb	40	-	314,110	55.3	8.0

Option 7: Adaptive Management

(Refer to pp. 65-66 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

The current Spotted Seatrout adaptive management framework needs to be updated. Adaptive management is a structured decision-making process when uncertainty exists, with the objective of reducing uncertainty through time with monitoring. Adaptive management provides flexibility to incorporate new information and accommodate alternative and/or additional actions.

1. The adaptive management framework allows for adjusting management measures outside of an updated stock assessment to ensure compliance with and effectiveness of management strategies adopted in Amendment 1 and is a tool to respond to concerns with stock conditions and fishery trends. Upon evaluation by the DMF, if the management strategy implemented to achieve sustainable harvest (either through Amendment 1 or a subsequent revision) is not achieving the intended purpose, management measures may be revised or removed and replaced using adaptive management; provided it conforms to part 2.
2. Management measures that may be adjusted using adaptive management include:
    a. Season closures
    b. Day of week closures
    c. Trip and vessel limits
    d. Size limits
    e. Bag and vessel limits
    f. Gear restrictions in support of the measures listed in a-e

Supplemental Management (Appendix 3)

As a result of the popularity of Spotted Seatrout as a targeted species; (MFC), MFC Advisory Committee members, and the public have mentioned a wide variety of potential recreational and commercial management strategies that could benefit the Spotted Seatrout stock but the scope of which are not immediately quantifiable. The increase in recreational trips targeting Spotted Seatrout and increased total Spotted Seatrout harvest in recent years combined with the presence of a dedicated catch and release segment of the recreational fishery suggest that even management measures lacking immediately quantifiable benefits are worth exploring. Additionally, there are management measures that could provide supplementary benefits when paired with sustainable harvest measures discussed in Appendix 2 of the draft FMP.

Option 1: Recreational Vessel Limits

(Refer to pp. 75-76 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

Limiting the harvest of fish through a vessel limit less than the sum of individual bag limits when multiple anglers are on a vessel or by eliminating the allowance for captain and crew to keep a recreational limit when on for-hire trips are common practices in many state and federal fisheries. For a full discussion of vessel limits, see pp. 75–76 of draft Amendment 1.

a. Status Quo – Manage fishery without changes to the recreational vessel limit or for-hire captain/crew allowance

b. Eliminate captain/crew allowance for Spotted Seatrout on for-hire trips with no broader recreational vessel limit

c. Implement 8 fish Spotted Seatrout recreational vessel limit with captain/crew allowance on for-hire trips counted as part of vessel limit

Option 2: Commercial Vessel Limits

(Refer to pp. 80-81 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

At their April 2014 meeting, the MFC Finfish Advisory Committee (AC), while acting as the Striped Mullet AC, passed a motion to recommend allowing two commercial fishing license holders fishing from the same vessel using one set of gear to harvest two commercial limits of spotted seatrout. At their May 2014 business meeting, the MFC voted to include discussion of the Finfish AC recommendation in the next scheduled Spotted Seatrout FMP rather than reopening the plan for an amendment. It is very likely that adopting the 2014 Finfish recommendation would increase harvest in the Spotted Seatrout fishery. For a full discussion of commercial vessel limits, see pp. 80–81 of draft Amendment 1.

a. Status Quo – Maintain current management of one 75 fish trip limit per vessel per day.

b. Allow two commercial license holders fishing on one boat with one set of gear to harvest two commercial limits of Spotted Seatrout

Cold Stun Management (Appendix 4)

Spotted Seatrout are susceptible to periodic cold stun events which occur when water gets so cold that it slows down a fish's body functions, making them sluggish or unable to move. In North Carolina, Spotted Seatrout are more likely than other commercially and recreationally important fish species to experience population-level effects from these events. Cold stun events can occur because of snow and ice melt following a winter storm or by sudden and-or prolonged periods of cold temperatures. At their February 2012 business meeting, the MFC directed the DMF to remain status quo regarding spotted seatrout cold stun management, with the assumption that in the event of a "catastrophic" cold stun the director would use proclamation authority to enact a temporary closure. The objective of a spotted seatrout harvest closure after a cold stun event is to allow surviving fish an opportunity to spawn during their spring spawning season, potentially increasing recruitment the following year. Cold stun management options include size limits (draft Amendment 1 pp. 88–89), recreational bag and commercial trip limits (draft Amendment 1 pp. 89–90), seasonal closures (draft Amendment 1 pp. 87), area closures (draft Amendment 1 pp. 90), and an adaptive management framework (draft Amendment 1 pp. 91).

Option 1: Season Closures

(Refer to pp. 87 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

a. Status Quo – fishery closed until June 15 following a cold stun

b. Extend harvest closure until June 30 following a cold stun

c. Extend harvest closure until October 15 following a cold stun

Option 2: Size Limits

(Refer to pp. 88-89 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

a. Status Quo – no size limit change following a cold stun

b. Temporary adjustment of size and-or slot limits following a cold stun

Option 3: Bag and Trip Limits

(Refer to pp. 89-90 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

a. Status Quo – no recreational bag or commercial trip limit changes following a cold stun

b. Temporary adjustment of recreational bag or commercial trip limits following a cold stun

Option 4: Adaptive Management Framework

(Refer to pp. 91 in the Draft Spotted Seatrout FMP Amendment 1 for additional details)

1. If a severe cold stun event occurs the Director will close the spotted seatrout fishery statewide through the date adopted in this Amendment
2. Temporary measures that may be implemented through adaptive management to aid in stock recovery after the standard closure period following a cold stun event include:
    a. recreational bag limit
    b. commercial trip limit
    c. size limit changes
    d. seasonal closure
    e. gill net yardage restrictions
    f. Use of adaptive management to further aid in stock recovery once the fishery reopens following a cold stun event is contingent on approval by the Marine Fisheries Commission.

Next Steps

The MFC selected their preferred management options at their November 2024 Business Meeting. The Amendment was then reviewed by the DEQ Secretary and the appropriate legislative bodies. At the February 2025 business meeting, the MFC will be presented any comments from the review and will vote on adoption of Amendment 1.