

**MARINE FISHERIES COMMISSION SPECIAL MEETING**  
**The Beaufort Hotel, Beaufort, N.C.**  
**June 6, 2019**

*N.C.G.S. 138A-15(e) mandates at the beginning of any meeting of a board, the chair shall remind all members of their duty to avoid conflicts of interest under Chapter 138. The chair also shall inquire as to whether there is any known conflict of interest with respect to any matters coming before the board at that time.*

*N.C.G.S. 143B-289.54.(g)(2) states a member of the Marine Fisheries Commission shall not vote on any issue before the Commission that would have a "significant and predictable effect" on the member's financial interest. For purposes of this subdivision, "significant and predictable effect" means there is or may be a close causal link between the decision of the Commission and an expected disproportionate financial benefit to the member that is shared only by a minority of persons within the same industry sector or gear group. A member of the Commission shall also abstain from voting on any petition submitted by an advocacy group of which the member is an officer or sits as a member of the advocacy group's board of directors. A member of the Commission shall not use the member's official position as a member of the Commission to secure any special privilege or exemption of substantial value for any person. No member of the Commission shall, by the member's conduct, create an appearance that any person could improperly influence the member in the performance of the member's official duties.*

*Commissioners having questions about a conflict of interest or appearance of conflict should consult with counsel to the Marine Fisheries Commission or the secretary's ethics liaison. Upon discovering a conflict, the commissioner should inform the chair of the commission in accordance with N.C.G.S. 138A-15(e).*

**June 6**

- |           |   |
|-----------|---|
| 1 p.m.    | Call to Order*  |
|           | Moment of Silence and Pledge of Allegiance  |
|           | Conflict of Interest Reminder   |
|           | Roll Call   |
|           | <b>Approval of Agenda**</b>   |
| 1:15 p.m. | Public Comment Period   |
| 2:45 p.m. | Southern Flounder Fishery Management Plan Amendment 2   |
|           | <ul style="list-style-type: none"><li>• Public Comment Summary</li><li>• Review Management Options</li><li>• Review Recommendations from Advisory Committees and the Division of Marine Fisheries</li><li>• <b>Vote to Select Preferred Management Options**</b></li><li>• <b>Vote to Send Draft Plan to the Department of Environmental Quality for Review and Comment**</b></li></ul> |
| 4:30 p.m. | Adjourn   |

*\* Times indicated are merely for guidance. The commission will proceed through the agenda until completed.*

*\*\*Potential Action Items*





ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

STEPHEN W. MURPHEY  
*Director*

June 6, 2019

## MEMORANDUM

**TO:** N.C. Marine Fisheries Commission

**FROM:** Michael S. Loeffler and Anne L. Markwith, Southern Flounder Fishery Management Plan Co-Leads

**SUBJECT:** Southern Flounder Fishery Management Plan Amendment 2

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### Issue

The draft Southern Flounder Fishery Management Plan (FMP) Amendment 2 containing the Department of Environmental Quality, Division of Marine Fisheries, FMP Advisory Committee, and Finfish, Northern, and Central Advisory Committee positions is ready to be presented to the N.C. MFC for their consideration. In addition, public comment received from May 23, 2019 through June 3, 2019 are included in a summarized format. The division and advisory committees have developed management measures for the commission's consideration to meet statutory requirements to achieve a sustainable harvest\* in the southern flounder fishery, to end overfishing by 2021 and rebuild the spawning stock biomass\* (SSB) by 2028.

### Findings

- The most recent coast-wide stock assessment determined the stock\* is overfished\* and overfishing\* is occurring.
- Reductions in **total coast-wide removals\*** are necessary to end overfishing within two years and recover the stock from an overfished state within a 10-year period.
- To reach the fishing mortality\* (*F*) threshold\* and end overfishing, a 31% reduction in total coast-wide removals is necessary, while a 51% reduction is necessary to reach the fishing mortality target\*. Neither of these levels of reduction would rebuild the spawning stock biomass (SSB) by 2028.
- For the SSB to reach the threshold by 2028 and end the overfished status a 52% reduction in total coast-wide removals will be required. To reach the SSB target by 2028 a 72% reduction in total coast-wide removals will be required.
- Static quota, dynamic quota, slot limits, changes in the size limit, and gear changes related to size limit changes are not considered feasible options to address sustainable harvest in draft Amendment 2 due to the accelerated timeline and the need to implement management measures before the fall 2019 fishing season.

### Action Needed

At their June 6, 2019 meeting, the MFC is scheduled to receive a presentation summarizing public comment, to select their preferred management strategies, and to vote for Draft Amendment 2 to be sent to the department secretary for review.

## Overview

Southern flounder is a commercially and recreationally important fishery currently managed under Amendment 1 and Supplement A to Amendment 1, as modified by the Aug. 17, 2017 settlement agreement, of the N.C. Southern Flounder FMP.

### *Amendment 2 Goal and Objectives*

The goal and objectives for draft Amendment 2 to the N.C. Southern Flounder FMP were reviewed and approved by the commission at its May 17, 2019 meeting. The goal and objectives for the FMP are:

#### Goal

Manage the southern flounder fishery to achieve a self-sustaining population that provides sustainable harvest using science-based decision-making processes. The following objectives will be used to achieve this goal.

#### Objectives

1. Implement management strategies within North Carolina and encourage interjurisdictional management strategies that maintain/restore the southern flounder spawning stock with multiple cohorts and adequate abundance to prevent recruitment overfishing.
2. Restore, enhance, and protect habitat and environmental quality necessary to maintain or increase growth, survival, and reproduction of the southern flounder population.
3. Use biological, environmental, habitat, fishery, social, and economic data needed to effectively monitor and manage the southern flounder fishery and its ecosystem impacts.
4. Promote stewardship of the resource through increased public awareness and interjurisdictional cooperation throughout the species range regarding the status and management of the southern flounder fishery, including practices that minimize bycatch and discard mortality.

### *Stock Assessment*

Southern flounder is assessed as a single biological unit stock occurring from North Carolina through the east coast of Florida. Based on life history information, a multi-state cooperative group performed a stock assessment with a terminal year\* of 2017 that determined the stock is overfished and overfishing is occurring.

- The stock assessment estimated biological reference points of  $F_{35\%}$  (fishing mortality target) as 0.35 and  $F_{25\%}$  (fishing mortality threshold) as 0.53. Estimated  $F$  in the terminal year of 2017 is 0.91, which is higher than the threshold and indicates overfishing is occurring.
- The stock assessment estimated an SSB target of 5,452 metric tons (approximately 12.0 million pounds) and threshold of 3,900 metric tons (approximately 8.6 million pounds). Estimated SSB in the terminal year of 2017 is 1,031 metric tons (approximately 2.3 million pounds), which is lower than the threshold and indicates the stock is overfished.

### *Statutory Requirements*

North Carolina General Statute 113-182.1 mandates that fishery management plans shall: 1) specify a time period not to exceed two years from the date of adoption of the plan to end overfishing, 2) specify a time period not to exceed 10 years from the date of adoption of the plan for achieving a sustainable harvest, and 3) must also include a standard of at least 50% probability of achieving sustainable harvest for the fishery. Sustainable harvest is defined in North Carolina General Statute



113-129 as “the amount of fish that can be taken from a fishery on a continuing basis without reducing the stock biomass of the fishery or causing the fishery to become overfished.”

In accordance with North Carolina General Statute 143B-289.52(e1) a supermajority of the Commission shall be six members. A supermajority shall be necessary to override recommendations from the Division of Marine Fisheries regarding measures needed to end overfishing or to rebuild overfished stocks.

### *Projections*

To meet statutory requirements, calculations were made to determine reductions in total coast-wide removals necessary to end overfishing within the two-year period and recover the stock from an overfished state within the 10-year period. These projections estimate necessary changes to  $F$  when compared to the 2017 terminal year fishing mortality estimates identified in the stock assessment. In addition, the projections assumed management would start in 2019 and so the 10-year rebuilding period would need to be met by 2028.

Projections assume all four states implement measures for the reductions required to rebuild SSB. In addition, projections detailing changes in SSB assume the shrimp trawl fleet removals will continue in all scenarios. However, the partial moratorium projection also assumes no removals from the commercial or recreational fisheries, whereas less restrictive scenarios account for the specified volume of removals including harvest and dead discards. These projections provide a mathematically optimistic rebuilding schedule for SSB and are unlikely to be fully achieved given the disparity of regulating commercial and recreational gear removals and without comparable management action from the other southeastern states. For further information on the interjurisdictional nature of this species, please see the *Interjurisdictional Management* sub-section found in Section VI, Management Strategies for Sustainable Harvest of Draft Amendment 2.

To reach the fishing mortality threshold and end overfishing, a 31% reduction in total removals is necessary, while a 51% reduction is necessary to reach the fishing mortality target. However, while both of these reductions are sufficient to end overfishing in two years, neither are sufficient to achieve a sustainable harvest and end the overfished status within the 10-year period.

To reach the SSB threshold and end the overfished status by 2028, as is statutorily required, a fishing mortality of 0.34 achieved via a 52% reduction in total removals is needed. To reach the SSB target by 2028, fishing mortality would need to be lowered to 0.18 by reducing total removals by 72%. All projections are associated with at least a 50% probability of success. Both scenarios for rebuilding SSB meet the requirement to end overfishing in two years.

The projections are based on coast-wide reductions (North Carolina to Florida) necessary for coast-wide rebuilding. However, in developing necessary management measures, the division has applied the reductions for total removals only to North Carolina's portion. To do this, the percent reduction was applied to the total removals for North Carolina from the 2017 terminal year of the assessment. In North Carolina, the commercial fishery accounted for 71.8% of the total removals in pounds while the recreational fishery total removals (from hook-and-line and gigs) accounted for 28.2% in 2017. In addition, commercial removals that occurred through means of “other gears,” those non-targeted flounder gear such as fyke nets, crab pots, and trawls are subtracted from the total removals prior to analysis. The impacts from these other gears are approximately 0.6% of the overall removals. While draft Amendment 2 will not impact other states' removals, continued cooperation

among the state agencies involved with the stock assessment and their willingness to enact management measures to rebuild the stock within their jurisdictional boundaries is of the utmost importance for the stock.

### *Proposed Management Options*

The list of proposed management options, including the positives and negatives for each option, can be found in Section VII, Proposed Management Options of draft Amendment 2. Department and Division recommendations are in ***bolded italicized*** font below, and additional information on these recommendations, can be found in Section VIII, Recommendations of Draft Amendment 2. The FMP advisory committee recommendations are summarized below and found in Section VIII, Recommendations of Draft Amendment 2.

The Department and the Division recognize that these reductions are significant but necessary to increase the probability of successfully rebuilding this important recreational and commercial resource.

### Commercial Fishery Options

- A. Establish seasonal closures by area for the commercial fishery to reduce  $F$  to the fishing mortality threshold (31% reduction)
- B. Establish seasonal closures by area for the commercial fishery to reduce  $F$  and allow the SSB to rebuild to the threshold (52% reduction)
- C. Establish seasonal closures by area for the commercial fishery to increase SSB between the threshold and target (62% reduction)
- D. Establish seasonal closures by area for the commercial fishery to reduce  $F$  and allow the SSB to rebuild to the target (72% reduction)
- E. Establish a partial moratorium for the commercial fishery

***Establish seasonal closures by area for the commercial fishery to reduce  $F$  and increase SSB to rebuild between the threshold and the target in 2019 (Option C, 62% reduction) and establish seasonal closures by area for the commercial fishery to reduce  $F$  and allow the SSB to rebuild to the target in 2020 (Option D, 72% reduction).***

### Recreational Fishery Options

- A. Establish a season for the recreational fishery to reduce  $F$  to the fishing mortality threshold (31% reduction)
- B. Establish a season for the recreational fishery to reduce  $F$  and allow the SSB to rebuild to the threshold (52% reduction)
- C. Establish seasonal closures by area for the recreational fishery to increase SSB between the threshold and target (62% reduction)
- D. Establish a season for the recreational fishery to reduce  $F$  and allow the SSB to rebuild to the target (72% reduction)
- E. Establish a partial moratorium for the recreational fishery

***Establish seasonal closures by area for the recreational fishery to reduce  $F$  and increase SSB to rebuild between the threshold and the target in 2019 (Option C, 62% reduction) and establish seasonal closures by area for the recreational fishery to reduce  $F$  and allow the SSB to rebuild to the target in 2020 (Option D, 72% reduction).***

### Additional Management Options: Non - Quantifiable Harvest Restrictions

These options can be implemented in conjunction with seasons to minimize the potential for overages in total removals by mitigating probable effort changes due to shortened seasons.

- A. Trip Limits
  - i. Limiting numbers per trip for the commercial gig fishery
  - ii. Limiting pounds per trip for the commercial pound net fishery
- B. Limiting days per week allowed in the Neuse River, Tar/Pamlico River and the Albemarle Sound areas that have previously been exempt from set restrictions
- C. Reducing fishing times allowed in the Neuse River, Tar/Pamlico River and the Albemarle Sound areas that have previously been exempt from time restrictions
- D. Gear Modifications
  - i. Prohibit the use of picks when harvesting fish from pound nets
  - ii. Reducing the maximum yardage allowed in the large mesh gill net fishery

***The NCDMF recommendation includes: Reducing commercial anchored large-mesh gill net soak times to single overnight soaks where nets may be set no sooner than one hour before sunset and must be retrieved no later than one hour after sunrise the next morning in the Neuse, Tar/Pamlico rivers and the Albemarle Sound areas that have previously been exempt; reducing the maximum yardage allowed in the commercial anchored large-mesh gill net fishery by 25% for each Management Unit; by allowing a maximum of 1,500-yards in Management Units A, B, and C, and a maximum of 750-yards in Management Units D and E unless more restrictive yardage is specified through adaptive management through the sea turtle or sturgeon Incidental Take Permits (ITP); and prohibiting the use any method of retrieving live flounder from pound nets that cause injury to released fish (no picks, gigs, spears, etc.).***

***Management measures from Amendment 1 and Supplement A to Amendment 1 will be incorporated into Amendment 2 (see Section VIII, Recommendations in Draft Amendment 2). Additionally, the recreational bag limit of no more than four flounder is maintained in Amendment 2.*** This bag limit is required through the N.C. FMP for Interjurisdictional Fisheries to maintain compliance with the Atlantic States Marine Fisheries Commission Summer Flounder, Scup, and Black Sea Bass FMP Addendum XXVIII. The December commercial closure period from Amendment 1 would no longer be in effect, as it is encompassed by the seasonal closure periods implemented by the adoption of Amendment 2.

***The NCDMF recommendation includes that the adoption of Amendment 2 authorizes continued development of Amendment 3 and more robust management strategies.*** Amendment 3 will be completed as quickly as possible with the ongoing contributions of the Southern Flounder FMP Advisory Committee members. This will best serve to assist the division in development of Amendment 3, by building on the knowledge, expertise, and cooperation already underway and continue the work uninterrupted from meetings that began in January 2018.

*Southern Flounder FMP Advisory Committee Recommendation*

At the June 3, 2019 Southern Flounder FMP Advisory Committee meeting, the following recommendation was approved by the committee for the 2019 and 2020 fishing year and forward. For further information, including proposed seasons, see Section VIII, Recommendations of Draft Amendment 2. The committee voted to establish a season for the commercial and recreational fisheries to reduce *F* and allow the SSB to rebuild to the threshold in 2019 (Option B, 52% reduction) with the following additional modifications.

FMP AC Management Option for 2020 and forward

Starting Jan. 1, 2019 adopt a recommendation for a 52% reduction for the commercial and recreational fisheries with the following changes for the commercial fishery, calculated by the

northern, central, and southern areas proposed by the division:

- Commercial pound net fishery, 40% reduction
- Commercial gig fishery, 40% reduction
- Commercial large-mesh gill net fishery, a reduction of approximately 71% would be needed to make up the difference to yield a 52% reduction for the commercial fishery overall. The AC recognizes that the division proposal for the Recreational Commercial Gear License large mesh gill net season of Sept. 15-Sept. 30 may be changed by this final percent reduction.

The committee recommendation also includes that management measures from Amendment 1 and Supplement A to Amendment 1, as stated above in the NCDMF recommendation, be carried forward. The recommendation also maintains regulations from the ASMFC Summer Flounder, Black Sea Bass, and Scup Addendum XXVIII for recreational size and bag limit for flounder and approves the continued development of Amendment 3.

In addition, the committee recommends prohibiting the use of picks, gaffs, gigs, and spears when removing flounder from pound nets. As of Jan. 1, 2020, the committee also recommends implementing a 1,500-yard limit for large mesh gill nets in Management Unit A, a 1,000-yard limit for large mesh gill nets in Management Units B and C, and a 750-yard limit for large mesh gill nets in Management Units D and E.

Finally, the committee recommends a 52% reduction be applied to the recreational fisheries. The season for the recreational hook-and-line and gig fisheries will be July 16 through Sept. 30.

#### *Southern Advisory Committee Recommendation*

The Southern Advisory Committee met on June 3, 2019 and failed to reach consensus on a recommendation for draft Amendment 2.

#### *Northern Advisory Committee Recommendation*

The Northern Advisory Committee met on June 3, 2019 and passed a motion supporting the NCDMF recommendation of the 62% reduction in 2019 and 72% percent reduction from 2020 forward to include management carried forward from Amendment 1 and Supplement A to Amendment 1, maintaining the size and bag limits established by the ASMFC Summer Flounder, Black Sea Bass, and Scup Addendum XXVIII, and the continued development of Amendment 3. In addition, the Northern AC passed a motion asking the MFC to consider dividing the allowable days for gill netting amongst allowable fishing months for a given area due to the Sea Turtle ITP.

#### *Finfish Advisory Committee Recommendation*

The Finfish Advisory Committee met on June 3, 2019 and recommended a reduced harvest of 52%, not to exceed 52%, until Amendment 3 is completed. This recommendation includes

management carried forward from Amendment 1 and Supplement A to Amendment 1, maintaining the size and bag limits established by the ASMFC Summer Flounder, Black Sea Bass, and Scup Addendum XXVIII, and the continued development of Amendment 3. The committee also recommended that the MFC ask the Secretary of DEQ to allow the Director of

DMF to go out of compliance with ASMFC Summer Flounder Plan and adopt a 12-inch size limit and a 4-fish bag limit for southern flounder in North Carolina waters. The committee also requested the Southern Flounder AC look at a moratorium on all southern flounder harvest from Nov. 1, 2019 to Sept. 1, 2022.

### *Summary of Public Comment*

Public comments were accepted through three formats: mail, online, and at the joint advisory committee meeting. This meeting was held on June 3, 2019 and allowed for a maximum of 90 minutes of public comment. Mail and online comments were collected from May 23 through June 3, 2019 at midnight. Eleven comments were received through the mail, all (100%) were opposed to draft Amendment 2. Two hundred and forty-one responses were received through online tools, 91 in favor and 150 opposed to draft Amendment 2. Of those that indicated support for draft Amendment 2 the most indicated option for 2019 and 2020 was for Option C (62% reduction) in 2019 (38% of responses), Option D (72% reduction) in 2020 (44% of responses). In addition, trip limits, fishing times, and gear changes received more responses than the no preference option for the additional non-quantifiable management measures (Table 1). Thirteen comments were received during the public comment period at the joint advisory committee meeting, three (23%) were in favor of and 10 (77%) were opposed to draft Amendment 2. All public comments can be found in Appendices 1-3.

### *Timeline*

#### June 6, 2019

At the Marine Fisheries Commission special meeting the division will detail advisory committee and public input and the commission will vote to select its preferred management strategy and vote to send a revised draft Amendment 2 to the Department of Environmental Quality secretary for review and comment. The secretary has 30 days to review and will forward to the appropriate legislative committees.

#### August 2019

The commission will receive any departmental and legislative input provided. The commission is scheduled to vote on final approval of Amendment 2. If approved, management measures will be implemented via the proclamation authority of the division director following the meeting.

#### \*Definitions

**Sustainable Harvest** – The amount of fish (in weight) that can be taken from a stock at a given fishing intensity and the stock biomass does not change year to year.

**Spawning Stock Biomass** – Total weight of mature females in the stock.

**Stock** – A group of fish of the same species in a given area. Unlike a fish population, a stock is defined as much by management concerns (jurisdictional boundaries or harvesting locations) as by biology.

**Overfished** – State of a fish stock that occurs when a stock size falls below a specific threshold.

**Overfishing** – Occurs when the rate that fish that are harvested or killed exceeds a specific threshold.

**Total removals** – In the commercial fishery, the sum of the landings and dead discards; in the recreational fishery, the sum of the observed harvest and dead discards.

**Fishing Mortality (F)** – Rate at which southern flounder are removed from the population due to fishing.

**Threshold** – The maximum values of fishing mortality or minimum values of the biomass, which must not be exceeded. Otherwise, it is considered that it might endanger the capacity of self-renewal of the stock.

**Target** – The level of fishing mortality or of the biomass, which permit a long-term sustainable exploitation of the stock, with the best possible catch.

**Terminal Year** – The final year of estimates being used in an analysis.

Table 1. Summary of responses from public comment on southern flounder draft Amendment 2.

Issue	Method of Public Comment Received			
	Mail	Online	Public Comment*	
	Response (number; %)	Response (number; %)	Response (number; %)	
Do you support Draft Amendment 2	Yes	0 (0%)	91 (38%)	3 (23%)
	No	11 (100%)	150 (62%)	10 (77%)
	<b>Total</b>	<b>11 (100%)</b>	<b>241 (100%)</b>	<b>13 (100%)</b>
If you support Draft Amendment 2 which option do you recommend for 2019?	Option A (31%)		8 (9%)	
	Option B (52%)		9 (10%)	
	Option C (62%)		34 (38%)	
	Option D (72%)		11 (12%)	
	Option E (Partial Moratorium)		20 (22%)	
	No Preference		7 (8%)	
	<b>Total</b>		<b>89</b>	
If you support Draft Amendment 2 which option do you recommend beginning in 2020?	Option A (31%)	N/A	N/A	N/A
	Option B (52%)		14 (16%)	
	Option C (62%)		10 (11%)	
	Option D (72%)		39 (44%)	
	Option E (Partial Moratorium)		19 (22%)	
	No Preference		6 (7%)	
	<b>Total</b>		<b>88</b>	
Do you support additional non-quantifiable measures?	Trip Limits		59 (31%)	
	Fishing Times		50 (26%)	
	Gear Changes		74 (38%)	
	None		5 (3%)	
	No Preference		5 (3%)	
	<b>Total</b>		<b>193</b>	

**FOOTNOTES**

3 instances of two entries with the same first and last name

1 instance of two entries with very similar language and almost identical first and last name

3 instances of fake first and last name

6 instances of entries indicating support of amendment 2 but did not pick any options



## Ocracoke Civic & Business Association, Inc.

P.O. Box 456, Ocracoke, NC 27960 • (252) 928-6711

www.ocracokevillage.com • info@ocracokevillage.com

May 27, 2019

North Carolina Division of Marine Fisheries:

The Ocracoke Civic & Business Association, Inc. (OCBA) wishes to go on record in support of the Ocracoke Seafood Company, ("The Fish House"), which is against the proposed Amendment 2, further restricting Southern Flounder fishing.

This proposal would severely reduce flounder landings, commercial and recreational, on Ocracoke Island and other rural areas in coastal North Carolina. Fresh, wild-caught seafood is one of the top tourist attractions on Ocracoke, adding to the \$1 billion of tourist revenues North Carolina gains yearly from the coastal region. In fact, 20% of all tourists visit the coast especially to eat locally caught seafood.

Ocracoke Seafood Company is a community-based business where commercial fishermen bring their catch and where the public can purchase fresh, wild-caught North Carolina seafood. Having this market on the island adds to Ocracoke's "Fishing Village" image, that benefits every business on Ocracoke.

All Ocracoke restaurants have contracts with local commercial fishermen to supply them with fresh fish. Flounder is one of the most prized fishes on our island tables. From September through November, Southern Flounder is our most important wholesale product.

The restrictions proposed in Amendment 2 would negatively impact the commercial fishermen's ability to catch Southern Flounder. Seasonal closures with a 62% reduction in landings would put the pound net fishermen out of business. The impact trickles down to lost jobs, decreased revenues, and ultimately, reduced state tax revenues.

Ocracoke Village would not be the same without the "Fish House". The enacting of this amendment would negatively affect all businesses on Ocracoke Island and would put Ocracoke Seafood Company in jeopardy of closing. This is unacceptable to Ocracoke.





## Ocracoke Civic & Business Association, Inc.

P.O. Box 456, Ocracoke, NC 27960 • (252) 928-6711

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We urge the Division of Marine Fisheries and State Government to propose measures that will produce long-term benefits to the Southern Flounder stocks, but recognize that coastal communities and businesses need to stay economically viable.

We encourage the DMF to adopt a measured approach to any reductions, commercial or recreational, in the Southern Flounder harvest. The negative effect of drastic reductions will be felt by all businesses that service the tourist industry and commercial fishing.

Thank you.

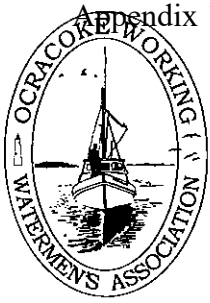
Sincerely,

A handwritten signature in dark ink, appearing to read "Rudy Austin", is written over the typed name.

Rudy Austin, President

Ocracoke Civic & Business Association, Inc.





Appendix 1. Public Comment Received Through The Mail.

May 27, 2019

To: NCDMF and NCMFC regarding Amendment 2 of Southern Flounder FMP

Subject: Public comment against Amendment 2 of Southern Flounder FMP

The Ocracoke Working Watermen's Association (OWWA) would like to submit public comment stating it is against Amendment 2, NCDMF's recommendation for a 62% reduction in southern flounder harvest in 2019 and a 72% reduction in 2020. Implementing this level of reduction in 2019 will not allow any transition time for fishermen who harvest flounder time to evolve their fishing businesses. Furthermore, Ocracoke pound net fishermen will not have a chance to recover costs to set their pound nets with a Oct. 17<sup>th</sup> closure due to late season hurricanes and late summer warm water conditions that now extend into middle Oct. The NCDMF's recommendation allows early season fisheries, like river gillnet fishery, time to operate but allows no season for pound net fishermen in Ocracoke and Hatteras. Very unfair to all pound net fishermen who live in the Central region on east side of the Pamlico Sound.

Ocracoke fishermen support the extensive work and input the Southern Flounder AC has provided the NCDMF and their recommendation for a 31% reduction in 2019 and a 52% reduction in 2020. This recommendation stops overfishing in 2 years and provides fishermen a window to evaluate their businesses, opportunity to use up supplies already purchased and make adjustments. We believe the attrition rate of fishermen after 2019 will be so significant that the reduction in harvest in 2020 will likely exceed 52%. Because of the attrition, the rebuilding of the stock has a much greater chance to rebuild in the 10-year timeframe than what is being modeled by the NCDMF and escapement will be higher than predicted.

Ocracoke fishermen have transitioned from the large mesh gillnet fishery to primarily a fall pound net fishery. A significant portion of the income received from pound nets is recycled directly back into the Ocracoke economy. Employment in the winter is almost nonexistent so fall fishing income is critical to families being able to pay taxes, buy food, make repairs to gear and pay for health care. The NCDMF recommendation will cause havoc to the Ocracoke economy. The Southern Flounder AC recommendation will not solve all the issues that cutbacks are going to cause but will allow one season for Ocracoke's fishermen to adjust their business models and family budgets.

Pound nets are the keystone gear that provides fish for the fall tourist season on Ocracoke. Every restaurant on Ocracoke has a local fishermen dealer who supplies them with fish by harvesting not only flounder but sheepshead and black drum. By forcing pound nets out of the water on Oct. 17<sup>th</sup>, access to fall species will be virtually nonexistent and will have a devastating impact on Ocracoke Seafood Company's retail and wholesale businesses, Ocracoke's tourism revenue and Hyde County's sales tax revenue.

OWWA encourages the NCDMF and NCMFC to propose measures that will produce long-term benefits to the Southern Flounder stock, but recognize that coastal communities and businesses need to stay economically viable.

Thank you,

Hardy Plyer

Hardy Plyer  
Vince O'Neal  
Bill Evans  
Farris O'Neal  
David Hilton  
Ernest Dosier  
Erick O'Neal  
Rex O'Neal  
James B. Gaskill  
Morty Gaskill  
Wade Austin  
Steve Wilson  
Jesse Spencer  
Danny Worsley  
Andy O'Neal  
John Ferrara  
Jerry Lukefahr  
Gene Ballance  
Fletcher O'Neal  
David O'Neal  
Lewis O'Neal  
Earl Gaskins  
Kenneth Tillet  
John Paul  
Monroe Gaskill  
Robbie Lewis  
Arlene Burleigh  
Jimmy O'Neal  
Ikey O'Neal  
R.T. O'Neal  
Albert O'Neal  
Dan Garrish  
Reid Robinson  
Teresa Ray  
Jordy Jenkins  
Bob Jenkins  
Logan Jenkins

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Appendix 1. Public Comment Received Through The Mail.

Marine Fisheries Advisory Board

Jonathan Robinson, Chairman

John T. Salter

Jess Hawkins

William Rice

Allyn B. Powell

Bradley Styron

Leslie "Sonny" Davis

Keith Mason

Ron McPherson

Thomas Carl McArthur, Jr.

Dean Smith



May 29, 2019

The Honorable Governor Roy Cooper  
Office of the Governor  
20301 Mail Service Center  
Raleigh, NC 27699-0301

Dear Governor Cooper:

The Carteret County Marine Fisheries Advisory Board ("CCMFAB") objects to the proposed Amendment 2 of the Southern Flounder Fishery Management Plan ("FMP"). They recommend that the MFC Advisory Committees, Secretary of the Department of Environmental Quality (Secretary), and the North Carolina General Assembly Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources (NCGA Joint Committee) not approve Amendment 2 as written. The CCMFAB recommends that the MFC not approve draft Amendment 2 of the Southern Flounder FMP as proposed.

Southern flounder supports Carteret County's and North Carolina's most economically important commercial finfish fishery and are an important recreational fishery in estuarine waters. The proposed Amendment 2 recommends a 62% reduction in fishing mortality the first year that includes the fall of 2019 and a 72% reduction the next year. These proposed reductions will have devastating impacts to the fishing economies of Carteret County. The Division of Marine Fisheries and the MFC have decided to pursue an accelerated timeline for adoption of Amendment 2 to adopt substantial reductions in commercial and recreational harvest (i.e., fishing mortality), and have chosen fishing reduction goals that are not practicable or reasonable when considering the economic impacts, biology of southern flounder, management history, and possibly environmental conditions.

Substantial reductions in fishing mortality within the first two years are due to a statutory requirement by the General Assembly (G.S. 113-182) to end overfishing within two years, when developing FMPs for North Carolina's commercially and recreationally important species. However, the General Assembly gave discretion to the DMF/MFC to not apply the two-year overfishing stoppage requirement where the biology of the particular fish, environmental conditions or lack of sufficient data make ending overfishing in two years incompatible with professional standards for fisheries manage-

## Appendix 1. Public Comment Received Through The Mail.

The Honorable Governor Roy Cooper  
Page 2 of 3  
May 29, 2019

ment. Based on the stock assessment, overfishing could be stopped in two years by a 31% reduction in fishing removals. On the other hand, to reach the FMP's overfished threshold a 52% reduction could be applied.

The stock assessments of southern flounder dated January 2017 and 2019 are technically sound and were peer-reviewed in a public setting by an outside group of reputable scientists. Still it is perplexing that stock assessment findings indicated that the biology and environmental conditions influencing the sustainability of southern flounder, plus the impacts of substantial management actions the last 15 years are confounding. A peer-reviewed assessment of southern flounder indicates that the population of southern flounder has been overfished for over 28 years and that fishing has occurred at rates too high to sustain the population during those 28 years. Yet, southern flounder live only up to eight years in age and have continued to support productive commercial fisheries for those 28 years. In addition, data does not reflect any long-term declining trend in numbers of young flounder recruiting into North Carolina waters.

Also confounding is that the recent stock assessment indicated the spawning stock continues to decline despite substantial restrictions that have been put in place. Size limits were initiated in 1979 and have been increased steadily to 15 inches in 2016. Commercial fishing efforts have been substantially reduced the last 18 years, with gill net yardage reduced, allowable fishing days reduced, reducing the number of hours gill nets can be fished, and completely closing fish areas. The majority of these measures were based on two prior stock assessments in 2001 and 2009.

The CCMFAB suggests that the stock assessment, although technically sound (i.e., appropriate statistical methods were used) that a high degree of uncertainty exists in the assessment. These uncertainties include (1) the lack of a comprehensive fishery independent index (surveys developed by the southeastern Atlantic states), (2) a lack of data for the offshore southern flounder component that are mostly older adult females, (3) a weak relationship between the spawning stock and the recruits they provide, (4) the unpredictable oceanic conditions where southern flounder spawn, (5) interannual variation in recruitment; i.e., juveniles, and (6) a recent study by North Carolina State University that indicated environmental conditions may cause changes in the proportions of males and females that further complicate the management of this species.

The proposed measures are problematic in that the estimated reductions in fishing mortality must be obtained from all the southeastern Atlantic states where southern flounder occur. North Carolina is planning on implementing significant reductions this fall, while it will be some time before states can implement similar measures or if they even choose to do so. North Carolina already has some of the most restrictive recreational fishing measures among the southeastern states.

Additionally, the DMF and MFC used 2017 (termed the terminal year) "removals" to achieve reductions. Fisheries experts recognize that the terminal year estimates contain



## Appendix 1. Public Comment Received Through The Mail.

The Honorable Governor Roy Cooper  
Page 3 of 3  
May 29, 2019

the most uncertainty. The DMF could have used an average of the most representative years.

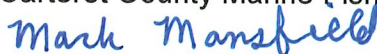
All these issues provide evidence that pursuing an accelerated version of an FMP Amendment -- that was adopted after the 1997 Fisheries Reform Act (FRA) -- does not abide by the 10-year overfishing stoppage requirements of the FRA to develop sound management strategies for the conservation of southern flounder. This should dissuade the State from proposing unreasonable accelerated fishing reductions.

The CCMFAB supports management of southern flounder that incorporates the whole body of available evidence and takes into account the biology of the fish, environmental conditions, prior management actions and uncertainties about the data, from which reasonable measures can be enacted. Measures to stop projected overfishing -- (1) a 31% reduction in the "overfishing threshold," (2) removals derived from mean or median of 1989-2017 Spawning Stock Biomass, and (3) dissuade the State from pursuing an accelerated version of the Amendment -- could be implemented and a new stock assessment performed as quickly as possible (within two years) to examine if the population responses or other factors are more at play than fishing mortality.

Sincerely,



Jonathan Robinson, Chair  
Carteret County Marine Fisheries Advisory Board



Mark Mansfield, Chairman  
Carteret County Board of Commissioners

copy: Michael Reagan, Secretary DEQ  
Representative Pat McElraft, Co-Chair Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Representative Jimmy Dixon, Co-Chair Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Senator Brent Jackson, Co-Chair Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Senator Norm Sanderson, Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Senator Toby Fitch, Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Senator Stephen Ross, Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Senator Andy Wells, Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Representative Kyle Hall, Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Representative Chuck McGrady, Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources  
Steve Murphey, Director DMF  
Rob Bizzell, Chairman MFC

**Board of Commissioners**

Earl Pugh, Jr., Chair  
Tom Pahl, Vice-Chair  
Benjamin Simmons, III  
Shannon Swindell  
James Topping

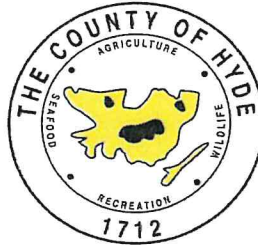
# COUNTY OF HYDE

30 Oyster Creek Road  
PO Box 188  
SWAN QUARTER, NORTH CAROLINA 27885  
252-926-4400  
252-926-3701 Fax

Kris Cahoon Noble  
County Manager

Franz Holscher  
County Attorney

Lois Stotesberry, CMC, NCCCC  
Clerk to the Board



**RESOLUTION Against Southern Flounder Amendment 2 and the North Carolina Division of Marine Fisheries Recommendation to the North Carolina Marine Fisheries Commission  
June 3, 2019**

**WHEREAS**, the Southern Flounder Amendment 2 and the North Carolina Division of Marine Fisheries are recommending to cut the southern flounder harvest by 62% in 2019 and 72% in 2020;

**WHEREAS**, the southern flounder fishery is absolutely a cornerstone of the Ocracoke and Hyde County economy;

**WHEREAS**, Ocracoke Seafood is the only fish house left on Ocracoke Island and is a fishermen owned enterprise that buys fish, oysters and clams from over 30 fishermen;

**WHEREAS**, the income generated by sales to Ocracoke Seafood Company supports fishing families, Ocracoke's local tourism economy and Hyde County's tax revenue and sustainability;

**WHEREAS**, Ocracoke's tourism economy is supported by 12 restaurants which depend on fresh, local seafood to satisfy tourists craving for fresh Ocracoke seafood;

**WHEREAS**, fresh, wild-caught seafood is one of the top tourist attractions on Ocracoke, adding to the \$1 billion of tourist revenues North Carolina gains yearly from the coastal region;

**WHEREAS**, 20% of all tourists visit the coast of North Carolina specifically to eat locally caught seafood;

**WHEREAS**, Ocracoke Seafood Company depends on the diversity of species that the pound net harvest provides throughout the fall to stock the seafood retail and an October 17th closure will remove the primary source of wholesale landings in the months of October and November;

**WHEREAS**, the recommendation by the North Carolina Division of Marine Fisheries at the North Carolina Marine Fisheries Commission meeting to cut the southern flounder harvest by 62% in 2019 and 72% in 2020 with an October 17th closure to the flounder season will make Ocracoke Seafood Company unprofitable;

**WHEREAS**, Ocracoke Seafood Company's payroll to Ocracoke fishermen averages \$600,000 annually and supports 4 full time employees;

**WHEREAS**, the income generated at Ocracoke Seafood Company is recycled into the Ocracoke economy making an exceptional impact during the winter months when jobs and tourists are non-existent;

**WHEREAS**, Hyde County is a Tier One, Economically Disadvantaged County and the second most impoverished county in the state of North Carolina generating it's sole economic survival from agriculture, commercial fishing and tourism;

## Appendix 1. Public Comment Received Through The Mail.

**WHEREAS**, the loss of Ocracoke's flounder fishery would eliminate jobs, decrease tax revenue through commercial fishing sales and erase the presence of a fish house on the Ocracoke harbor which is essential to the tourism market that has evolved from this mutually dependent relationship of tourism and fresh seafood;

**WHEREAS**, Ocracoke Village would not be the same without a fish house and enacting Amendment 2 would negatively affect all business on Ocracoke Island, endanger the presence of the fish house, and this is unacceptable to Ocracoke and Hyde County;

**WHEREAS**, the Central Region is too large and diverse in regard to flounder harvest and should be divided into two subregions to allow fishermen on the east and west sides of the Pamlico Sound equal opportunity to participate in the fall pound net fishery;

**WHEREAS**, over the last five years, setting pound nets along Ocracoke and Hatteras have been delayed due to hurricanes and until mid October the catch is primarily summer species including spade, butterfish and pompano;

**WHEREAS**, to be economically feasible, pound net fishermen need a 5-week season starting October 1st and ending after the first week of November, which allows the owner a two week period to recover the expenses of fishing and two - three weeks for the owner and crew to make a profit for the months of work it took to prepare for the fishery;

**WHEREAS**, Ocracoke Seafood Company is recognized as one of the Golden Leaf Foundation's most successful projects in eastern North Carolina and has been studied by multiple national organization and the Food and Agriculture Organization of the United Nations for its unique fishermen owned business model;

**WHEREAS**, Ocracoke Seafood Company ships seafood throughout North Carolina, specifically targets Raleigh markets and is recognized by companies and tourists who purchase seafood as one of the best examples of fresh, local North Carolina seafood;

**WHEREAS**, Amendment 2 and the current North Carolina Division of Marine Fisheries recommendation to the Marine Fisheries Commission will place all of the dedication, hard work and funding to rebuild the Ocracoke fish house over the last twelve years in dire economic jeopardy;

**WHEREAS**, the Southern Flounder Advisory Committee has recommended a 31% reduction in flounder harvest in 2019 and a 52% reduction in 2020 with that recommendation being developed through significant debate of the data and multi stakeholder input and allows commercial fishermen one year to adjust their business models that may keep a portion of the pound net fishery operational;

**WHEREAS**, the average age of a North Carolina commercial fisherman is approaching the mid 50's and those fishermen hold all of the capital and experience in the fishing industry and as they are continually pressured they will retire and move into other fisheries that creates additional stress on those fisheries as well while endangering the commercial fishing industry and damaging the coastal tourism industry;

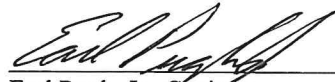
**WHEREAS**, the mainland portion of Hyde County has already lost approximately 95% of its flounder fishery, flounder fishermen, fish houses and the economy that those supported because of restrictions that have already been placed on the fishery over the past years, skewing the numbers on the mainland to create an illusion of decreased harvests and decreased stocks because regulations have reduced the number of fishermen and the effort within the fishery;

**NOW, THEREFORE, BE IT RESOLVED**, that the Hyde County Board of Commissioners unanimously recommend that Amendment 2 and the current North Carolina Division of Marine Fisheries recommendation to the Marine Fisheries Commission be voted against and that the two entities work to find a compromise that will rebuild the southern flounder stocks and end overfishing without destroying fishing families, fishing communities and the seafood infrastructure needed to get seafood to market in and outside of the Great State of North Carolina.

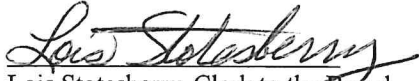
**NOW, THEREFORE, LET IT FURTHER BE RESOLVED**, the Hyde County Board of Commissioners unanimously recommend the North Carolina Division of Marine Fisheries and the Marine Fisheries Commission consider the adoption of the recommendation of the Southern Flounder Advisory Committee of a reduction of 31% in 2019 and a 52% reduction in 2020 with a 5-week season starting October 1st and ending after the first week of November.

Appendix 1. Public Comment Received Through The Mail.

Adopted this the 3rd day of June, 2019.



Earl Pugh, Jr., Chairman  
Hyde County Board of Commissioners



Lois Stotesberry, Clerk to the Board  
Hyde County Board of Commissioners





Board of Commissioners  
Mark Mansfield, Chair  
Robin Comer, Vice-Chair  
Bob Cavanaugh  
Jimmy Farrington  
Jonathan Robinson  
Bill Smith  
Ed Wheatly



County Manager  
Tommy R. Burns

Clerk to the Board  
Rachel B. Hammer

**RESOLUTION**  
**OPPOSING PROPOSED AMENDMENT 2 OF THE SOUTHERN FLOUNDER**  
**FISHERY MANAGEMENT PLAN**

**WHEREAS**, the Carteret County Board of Commissioners rely on the members of the Carteret County Marine Fisheries Board to advise them of relevant issues that would have a detrimental effect on the County's recreational and commercial fishermen; and

**WHEREAS**, members of our Marine Fisheries Advisory Board, some of whom are recreational fishermen and head boat operators familiar with the fishery of North Carolina, are greatly concerned about the proposed Amendment 2 of the Southern Flounder Fishery Management Plan; and

**WHEREAS**, the Carteret County Board of Commissioners supports the position of the Carteret County Marine Fisheries Board concerning the proposed Amendment 2 based in part on the following:

- Southern flounder supports Carteret County's and North Carolina's most economically important commercial finfish fishery and are an important recreational fishery in estuarine waters;
- The proposed Amendment 2 recommends a 62% reduction in fishing mortality the first year that includes the fall of 2019 and a 72% reduction the next year which will have devastating impacts to the fishing economies of Carteret County;
- The Division of Marine Fisheries and the MFC have decided to pursue an accelerated timeline for adoption of Amendment 2, and have chosen fishing reduction goals that are not practicable or reasonable;
- The 10-year overfishing stoppage requirement where the biology of the particular fish, environmental conditions or lack of sufficient data are incompatible with professional standards for fisheries management;
- The stock assessments of southern flounder dated January 2017 and 2019 are technically sound and were peer-reviewed in a public setting by an outside group of reputable scientists;
- Commercial fishing efforts have been substantially reduced the last 18 years, with gill net yardage reduced, allowable fishing days reduced, reducing the number of hours gill nets can be fished, from 2003 to 2015, we went from 1,000 to 300-pound nets – a 70% reduction, and completely closing fish areas;
- A high degree of uncertainty exists in the stock assessment including: (1) the lack of a comprehensive fishery independent index, (2) a lack of data for the offshore southern flounder component that are mostly older adult females, (3) a weak relationship between the spawning stock and the recruits they provide, (4) the



Appendix 1. Public Comment Received Through The Mail.

unpredictable oceanic conditions where southern flounder spawn, (5) interannual variation in recruitment; i.e., juveniles, and (6) a recent study by North Carolina State University that indicated environmental conditions may cause changes in the proportions of males and females that further complicate the management of this species;

- The DMF and MFC used 2017 (termed the terminal year) “removals” to achieve reductions. Fisheries experts recognize that the terminal year estimates contain the most uncertainty; the DMF could have used an average of the most representative years;

**WHEREAS**, these issues provide evidence that pursuing an accelerated version of an FMP Amendment, that was adopted after the 1997 Fisheries Reform Act (FRA), does not abide by the 10-year overfishing stoppage requirements of the FRA to develop sound management strategies for the conservation of southern flounder; and

**WHEREAS**, the Carteret County Board of Commissioners supports management of southern flounder that incorporates the whole body of available evidence and considers the biology of the fish, environmental conditions, prior management actions, and uncertainties about the data;

**NOW THEREFORE BE IT RESOLVED** that the Carteret County Board of Commissioners reaffirms its unwavering commitment to North Carolina’s fishing industry by supporting the position of the Carteret County Marine Fisheries Board and strongly opposes Amendment 2 or any other action that would cause continued harm to the County’s recreational and commercial fishermen.

**ADOPTED**, this the 3<sup>rd</sup> day of June 2019.

*Mark Mansfield*

Mark Mansfield, Chairman  
Carteret County Board of Commissioners

**Attest:**

*Rachel Hammer*

Rachel Hammer, Clerk to the Board



mail to: Southern Flounder Comments  
PO Box 769  
Morehead City, NC 27960

to: NCDMF Flounder Comment  
Staff.

RE: Please find two public  
Comments that we would like  
to have submitted regarding the  
NCDMF proposed southern flounder  
management measures.

- Ocracoke Seafood
- Soundwaves Seafood.

## Appendix 1. Public Comment Received Through The Mail.

### Public Comment against Southern Flounder Amendment 2 and NCDMF recommendation to the NCMFC

Ocracoke Seafood Company is a fishermen owned enterprise and is the only fish house left on Ocracoke. It represents that last location where for over 30 fishermen can sell their catch (fish, clams and oysters). Without the fish house, fishermen will have to transport their catch via vehicles to Hatteras or Wanchese. Transportation costs and logistics will make it unprofitable for fishermen to continue to fish without a fish house. NCDMF's proposed southern flounder management measures of 62% reduction in 2019 and 72% in 2020 makes Ocracoke Seafood Company's future doubtful. Ocracoke Seafood Company supports the AC recommendation of 31% reduction in flounder in 2019 and 52% in 2020.

Ocracoke Seafood Company's payroll to Ocracoke fishermen averages \$600,000 annually and supports 4 full time employees. That income is recycled into the Ocracoke's economy, especially during winter months when jobs and tourists are nonexistent. Hyde County is NC's second poorest County with few industries that can replace the loss of commercial fishing income so it cannot afford to lose Ocracoke Seafood Company's payroll, tax revenue generated by Ocracoke Seafood Company and the iconic presence of the "Fish House" on the harbor that supports tourism and Ocracoke's fishing heritage. Ocracoke is a fishing and tourist economy that is mutually dependent on each other. Ocracoke Seafood Company agrees with the Ocracoke Business and Civic Association's (quote from their public comment) assessment that "Ocracoke Village would not be the same without the "Fish House". The enacting of Amendment 2 would negatively affect all business on Ocracoke Island and would put Ocracoke Seafood Company in jeopardy of closing. This is unacceptable to Ocracoke."

To survive economically, Ocracoke Seafood Company recommends a flounder season that extends to Nov. 10<sup>th</sup>. Whatever the cutbacks are, the Central region needs to be managed equitably so the southern end gets the same opportunity to land flounder as the north end. Ocracoke is the southernmost community in the Central Region so it sees the flounder migration last and it has a high percentage of pound nets that fish off the reefs in deep water. Ocracoke Seafood Company recommends a flounder opening not before Oct. 1 and would prefer the 6<sup>th</sup> to help reach a Nov. 10<sup>th</sup> date for the closure. This allows pound netters who set in deeper water along the reefs time to catch some flounder and time to harvest some portion of the sheephead run. Without some semblance of the proposed season, Ocracoke Seafood Company will be out of business! **This is not hyperbole or drama. It is a fact!**

Thank you for your time and consideration.

Sincerely,



Hardy Plyler

Ocracoke Seafood Company Manager

mail to: Southern Flounder Comments  
PO Box 769  
Morehead City, NC 27960

to: NCDMF Flounder Comment  
Staff.

RE: Please find two public  
Comments that we would like  
to have submitted regarding the  
NCDMF proposed southern flounder  
management measures.

- Ocracoke Seafood
- Soundwaves Seafood.



## Appendix 1. Public Comment Received Through The Mail.

Public comment against Southern Flounder Amendment 2 and NCDMF recommendation to NCMFC

Soundwaves Seafood is a 20-year-old seafood company based on Ocracoke Island. The company is owned by David and Amy Hilton and employs a full time deck hand. The recommended southern flounder management measures will devastate Soundwaves Seafood, Ocracoke Seafood Company, Ocracoke's fishing families and make fresh seafood to Ocracoke citizens and tourists during the fall months nonexistent.

Soundwaves Seafood Company is against NCDMF's proposed management measures to cut southern flounder harvest by 62% in 2019 and 72% in 2020. Soundwaves Seafood Company supports the Southern Flounder AC recommendation of a 31% reduction in flounder harvest in 2019 and a 52% reduction in 2020.

Pound nets are the primary gear used by David Hilton to catch fish throughout the year. He sets up to 3 summer pound nets and up to 5 fall pounds. Pound nets are recognized as one of the most ecologically responsible forms of fishing in NC and provide some of the highest quality seafood that is harvested in NC. Even the recreational community have recognized the value of pound nets as a type of fishing gear that should be preserved.

Each pound net and corresponding lead is built by hand and it takes two vessels to fish and set the gear. A low estimate of money invested in the nets and vessels would be \$50,000 and that does not take into account the cost to establish the sets (stakes, rope, time and fuel). Attrition in the pound net fishery is going to be significant which makes NCDMF's estimate of landings, fishing effort, escapement and bycatch mortality at best overly conservative. Furthermore, the average age of a NC commercial fishermen is approaching the mid 50's or older and they own most of the pound net crews which means the capital and experience in the fishery is going to retire or move into other fisheries that are already stressed (crabs or gillnets).

To survive economically, my business needs a pound net (flounder) season that extends to Nov. 10<sup>th</sup>. Whatever the cutbacks are, the Central region needs to be managed equitably so the southern end gets the same opportunity to land flounder as the north end. Ocracoke is the southernmost community in the Central Region so it sees the flounder migration last and it has a high percentage of pound nets that fish off the reefs in deep water. I recommend a flounder opening not before Oct. 1 and would prefer the 6<sup>th</sup> to help reach a Nov. 10<sup>th</sup> date for the closure. This allows pound netters who set in deeper water along the reefs time to catch some flounder and time to harvest some portion of the sheephead run (very important part of my income now). Without some semblance of my proposed season, Ocracoke will be out of business! **This is not hyperbole or drama. It is a fact!**

Thank you for your time and consideration.

Sincerely,

David and Amy Hilton

A handwritten signature in dark ink, appearing to read "David Hilton & Amy Hilton", written in a cursive style.



May 30, 2019

To Whom it may concern,

As a life long Commercial fisherman I disagree with the Divisions take on flounder stocks. According to you landings are down. My landings have continually gone up for the last three years in a row. I have also expended less effort then in previous years. I am sure that I am not the only one. If you put the 62% reductions in place that are being proposed it will be disastrous to my botton line and my livelyhood. If you must do this I propose an individual take permit be put into place, based on each fishermans past landings. As for the Seasons they Vary from the northern area to the Southern area. One season can not cover the entire state. With these reductions I propose the season should open ~~from~~ September 15 and run through the end of November, this would cover all of the areas. Bad weather and hurrieanes must also be taken into consideration. I personally think the Division is determined to put the commercial fisherman out of business. If these reductions must be put into place. Please step up to the plate and buy us out based



on past landings and gear. Thank you  
for your time and consideration on  
this matter.

Jesse Spencer  
JESSE SPENCER

JOE E. BUNN 5/29/19  
PRESIDENT

ROCKY MOUNT CORD CO.  
P.O. DRAWER 4304  
ROCKY MOUNT, NC 27803-0304  
(252) 977-9130 • (800) 342-9130  
www.rmcord.com  
E-mail: jbunn@rmcord.com

Leave the Southern flounder  
limit as is. There are plenty  
of flounder.  
Thanks,

Joe



May 30, 2019.

TO: STEVEN MURPHEY  
Dee Jupton.  
Nancy Fish  
Kathy Rawls

All those involved with draft Amendment 2  
to the Southern Flounder Fishery Management  
Plan.

Greetings.

First I have a word for you that I  
was awakened with about one month ago.  
I sent it to the board of Commissioners  
but several did not receive it because their  
email addresses had been changed. Mind  
you, I am just the messenger.

Isaiah 10 v 1-2

"Woe to those who make unjust laws,  
to those who issue oppressive decrees, to deprive  
the poor of their rights and withhold justice  
from the oppressed of MY People..."

You all should consider carefully what you  
are planning to do.

Sincerely,

Robert McBride

P.O. Box 581 Erisco NC  
27936



May 31st

To Stephen Murphy, Dee Zuptor, Nancy Fish  
Kathy Pauls, board of Commissioners,

I am a commercial pound net fisherman from Hatteras and have fished, not only for summer fish but for flounders for the last 40 years on the backside of our reef, about 4.6 miles offshore in the Pamlico Sound. My nets have not moved at all in these years. I am fishing the same exact places for 40 years.

I've tried to pay attention to things as most fishermen do in order to better understand what I am doing. The main factor I've seen and am determined about is the fact that weather plays the major part of harvesting any species of fish and most definitely is the major determining factor with flounder. I can go through five years, having kept records, to verify what I am telling you. When there have been years of storms, fishing has fell off. Mid eighties till 1993 were fairly quiet years and fishing was good. 1993 there was a big storm and fishing was not so good. 1994-1999 fishing was great. Another storm, Floyd came and was terrific



fishing that year but the following 2 years was way off. 2003 another bad storm and fishing suffered the next 2-3 years here. ~~Study~~ Another storm in 2006 and fishing not so good. 2009 another storm and fishing was off. 2010 thru 2015 we experienced good fishing once again as the storms stayed away or were early enough not to effect things. 2016 a major storm and the worst season ~~past~~ in 12 years. Rebounding the last two seasons <sup>Storm</sup> R.B.

Storms small a factor

I give you this history because of your very limited way of determining the stock assessment. Many years fish go by and noone catches them because the weather just cooperated. The weather is the great determining factor on what is caught. You all absolutely ignore this and go on with your statistiss that are gathered from someone standing at the dock with a tape measure in their hand measuring only the fish that are brought to the dock. What a joke! In all my years of fishing, I have yet to have 1 person ride along to see how many fish didnt make it



to the dock but were tossed back because they were undersized. Amazing to me that you could have any idea what's out in the water when you spend NO Time on the water!

You make laws that regulate the size fish we can take and guess what happens? As your laws increase the size limit (from 13, to 14, to 15) the size of the fish have increased.<sup>11</sup>

Kathy Rawls told me that, in regards to the volume of fish I throw back daily, it was such a small sample in terms of the area, it couldn't determine anything conclusively? Really? I can remember when there were pound nets set from Avon all the way to Ocracoke inlet on the back of the reef and everyone discarded an abundance of fish daily, I'm quite sure the same would be true today if there were anyone out there fishing. Where at one time, 17 crews fished between Avon and Ocracoke today there are 2 of us that actually try at it.

Overfishing is NOT the problem. The weather patterns are the main factor in catching Flounder.



The 2014 Pier assessment, information your scientists produced stated conclusively that they had no idea how the stock of southern flounder remained to so healthy. They couldn't explain it. They did recommend 2 things which you have basically ignored along with the evaluation of the stock. No. 1 was to pool information from the states south of us to better understand where our fish migrate to. ~~No. 2 was an observer program.~~ I know that you are working towards this end right now. But you're going the wrong way! It is absolutely obvious as the waters have warmed, fish in general have not migrated as far N to South as they once did. In other words the fish that once may have been in South Carolina aren't here any longer because in warm months they go further north. The divers off our coasts have seen incredible numbers of flounders that winter in our area and validate what I say.

No. 2 recommendation was for an observer program to be initiated. Why



didn't you listen to the 2014 report? Why don't you actually work with the fishermen instead of against them continually?

Forty years of experience has to have some value to you when your methods of gathering information are so ridiculously limited. To make an assessment on solely what is observed and to ignore all that is not seen is ~~the~~ most naive, unless there is an agenda you're working towards. Which, I, believe, there is.

I hope someone takes the time to read this. I took the time to write it,...

Regards. Bob McBride

## APPENDIX 2

**SUMMARY OF PUBLIC COMMENTS  
DRAFT SOUTHERN FLOUNDER FISHERY MANAGEMENT PLAN AMENDMENT 2  
FINFISH, NORTHERN REGIONAL, AND SOUTHERN REGIONAL  
ADVISORY COMMITTEES JOINT MEETING  
CRYSTAL COAST CIVIC CENTER  
3505 ARENDELL STREET, MOREHEAD CITY, NC  
JUNE 3, 2019, 12 PM**

<b>Public:</b>	Approximately 40 members of the public, which included 13 individuals that provided comment
<b>Marine Fisheries Commission:</b>	Rob Bizzell, Mike Blanton, Cameron Boltes, Chuck Laughridge, Sam Romano
<b>Division of Marine Fisheries Staff:</b>	Steve Murphey, Dee Lupton, Nancy Fish, Kathy Rawls, Katy West, Tina Moore, Mike Loeffler, Anne Markwith, Laura Lee, Charlton Godwin, Dana Gillikin, Patricia Smith, Jennifer Lewis, Lee Paramore, Chris Stewart, Stephanie McInerny, Catherine Blum, Carter Witten, Jason Walker, Garland Yopp, Ashley Bishop, Michele Turner, Zach Odom, Joe Guthrie, Gina Griffin, Debbie Manley, Rachael Kelly, Kelly Odom, Brandi Salmon, Jesse Bisette, Trevor Scheffel, Alan Bianchi, Thom Tears
<b>Media:</b>	None

Marine Fisheries Commission Chairman Rob Bizzell chaired the joint meeting of the Finfish, Northern Regional, and Southern Regional advisory committees for review of the draft Southern Flounder Fishery Management Plan Amendment 2. During the meeting, a public comment period was held. Each person who wished to speak was allotted up to three minutes to provide comments.

### **Summary of Public Comment**

**Jonathan Robinson**, a Carteret County Commissioner, chairs a county marine fisheries advisory board on issues that may have a detrimental affect on the county. The panel does not support Amendment 2 to the Southern Flounder Fishery Management Plan. He said all management options in the amendment will cause extreme economic hardship. Problems with the amendment include not accounting for reduced effort in the commercial fishery, uncertainty in the stock assessment, lack of data about offshore adult female flounder, interannual variation in recruitment, and environmental conditions that affect the proportion of males and females in the southern flounder population.

## APPENDIX 2

**Charles Van Salisbury**, a commercial fisherman from the mainland side of Hyde County, said the gill net fishery is a fraction of what it once was, and effort is at an all-time low. A Sept. 15 opening for all fisheries will create a derby fishery. He hopes the reductions from the incidental take permit requirements and the effect on the market will be taken into consideration.

**Roger Harris**, from Atlantic, said to stop trying to fix everything. He said there were no regulations when he grew up and there were plenty of fish and fishermen. With regulations, both are disappearing. What is being done is not working.

**C.R. Frederick**, a commercial fisherman from Swansboro, said a 52-72% reduction on a family's income will be devastating. He said if a reduction is needed, shut the fishery down for a couple of years. Fishermen will be better able to survive that than a 72% reduction for 10 years. He said there are so many variables involved, including relying on three other states to assist in restoring the stock and the lack of control over the effect of habitat on the fishery. He said the fishery needs something, but a lot of lives depend on this.

**Glenn Skinner**, Executive Director of the North Carolina Fisheries Association, referenced an earlier comment about not being concerned with what the other three states will do. He said that is admirable, but foolish because as soon as Amendment 2 to the Southern Flounder Fishery Management Plan passes, the clock starts for the next review of the plan to occur within five years, even without action by the other states. He said all four states need to implement reductions together or North Carolina carries the burden. He said the statutory requirements for ending overfishing in two years and rebuilding the stock in 10 years do not start until the adoption of the amendment, not the completion of the stock assessment. The process needs to slow down, and work needs to focus on the management measures for Amendment 3.

**George Leone**, a seafood dealer, said Amendment 2 to the Southern Flounder Fishery Management Plan is inappropriate due to the 62% and 72% recommended reductions, especially right before the start of the fall season. There is no time to prepare. Seafood dealers, markets, restaurants, gas stations, net makers, convenience stores, and countless others will be affected. He said the risk outweighs the reward, especially if a hurricane strikes. All four states need to take an active role so that North Carolina is not punished to allow the other states to reap the benefits.

**Thomas McArthur** said he has provided public comment on fisheries for years and this issue is just more of the same. He said the most important measure to implement is a slot limit. He said he thinks a proposed 52% reduction will result in a much greater actual reduction.

**Karen Smith**, a commercial fisherman from Cedar Island, expressed concern about the financial burden on many of the fishermen in her family. She said some of the younger fishermen will not be able to sustain a 52% reduction. She questioned if the commercial fishing heritage is being valued. She emphasized the financial burden of a 52% reduction for the pound net fishery.



## APPENDIX 2

**Bert Owens**, from Beaufort, thanked the advisory committees and said their job is not easy. He said easy things do not achieve anything. Amendment 2 to the Southern Flounder Fishery Management plan is a good thing and is not expedited when you consider the stock has been overfished for 20 years. He said if we do not act, there will not be a heritage to preserve. He said to follow through with Amendment 2 and save some fish for the future.

**Jason Webb**, a commercial fisherman from Brunswick County, said there are several problems with Amendment 2 to the Southern Flounder Fishery Management Plan, including economic issues, the effect of water temperatures on the stock, and the harvest of primarily female fish due to the 15-inch minimum size limit. He said flounder in North Carolina come from here, so we do not need to worry about the other three states. He said electronic reporting of trip tickets should help process data more quickly to identify windows for fishing. Fishing guides, mechanics, and countless others will be affected by this amendment.

**Phillip Goodwin**, a commercial pound-netter for 40 years, said the pound net fishery will not survive the reductions proposed in Amendment 2 to the Southern Flounder Fishery Management Plan. Northern Core Sound used to have a pound net season from Sept. 1 until Christmas and then regulations were implemented. The size limit was increased several times, then a December closure was implemented. He said there is no more to give up and still be able to make a living. The pound net fishery is a clean fishery that has no bycatch and is turtle-friendly. He said he is against Amendment 2. Pound netters might be able to give up a few weeks of fishing at the beginning of the fall season, but they need several weeks of fishing to make a living.

**David Sneed**, Executive Director of the Coastal Conservation Association of North Carolina, said no one wants to see fisheries close. He said many people say more science-based decision-making is needed for fisheries management until they disagree with the science. He said the struggle for the advisory committees and the Marine Fisheries Commission is that we have been ignoring the science for over 20 years and we are running out of time. We have to act to save our fisheries for future generations.

**Tom Roller**, a full-time fishing guide from Carteret County, said if this meeting occurred in 2000 or 2005 there would be 400 people in attendance. With only 12 comments received, virtually no one is here because the fishery is gone. He thanked the Marine Fisheries Commission for moving forward with Amendment 2 to the Southern Flounder Fishery Management Plan.



**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments			
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference		
5/24/2019	william	Levier	NC		1																			
5/24/2019	glenwood	montgomery	NC		1																			Until someone explains to me why southern flounder stocks in NC were recovering nicely five years after the first flounder management plan was enacted and then went to h** all of a sudden from 2010 forward I can not support the proposed plan due to lack of confidence in the data. With added restriction after 2010 plus numerous restrictions added due to sea turtle permit requirements someone needs to explain to me why the sharp drop in southern flounder population. Should have seen even better improvement after 2009 stock assessment showed lots of improvement albeit not enough to be declared recovered. The 40% increase in the target levels is also cause for concern since this act alone would quarrantee that reaching the new target level would not be reached by the time the last stock assessment was carried out.
5/24/2019	sonya	Levier	NC		1																			
5/24/2019	Jeff	Smith	NC		1																			1. Until there is valid recreational catch data (WIKIP doesn't cut it), statistics for Southern Flounder are flawed and should not be used. 2. Management plan lumps in Summer Flounder in the regulations under the assumption that Southern Flounder is the dominant species being harvested, or that the public is too ignorant to determine the difference between the 2 species. I might could consider reductions in Southern Flounder, if there was a different plan for Summer Flounder.
5/24/2019	david	jarvis	NC		1																			
5/24/2019	Bernard	Kaasmann	NC		1																			Rather than recreational seasons I would support a year round 2 fish limit. Consideration should be taken for the recent 6 to 4 fish limits as well as minimum size increases. My concern is that with no possession seasons is the pressure it will put on other species, ie Black Drum and Sheepshead.
5/24/2019	Robert	Horne	NC		1																			Cuts are too drastic.











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5/31/2019	Kenneth	Broadwell	NC	1																		Amendment 2 will surely force most commercial fishermen out of business. I disagree with the seasonal approach and recommend using slot size instead. Suggest 13 to 19 inches. No creel limit on recreational. Need to clarify how this would or would not affect Summer Flounder. The current system intentionally does not distinguish because of the belief that recreational fishermen cannot distinguish between the two species. Fix that and allow summer flounder to be caught, gilled, netted, etc. recreational flounder data, numbers are too high. I never released a flounder hook and line that did not swim back down upon release. Discard number should be very low. I have little faith in the DMF scientists and the MFC that have for the past 20 plus years have used size and creel limits, gill net mesh size to manage the fish stock. Things have deteriorated to the point now that you want to use seasonal closures. What's next? End fishing like the herring?
5/30/2019	Clay	Knudsen	NC	1																		
5/30/2019	Cane	Faircloth	NC	1																		I own and operate a Fishing charter business out of Holden Beach, NC. Flounder is a key fish in our business and one of our customers favorites to eat and fish for. This management process being looked at is terrible. I urge this one to go back to the drawing board and come up with a more realistic approach. With current proposals economic interest in this fishery would be severely impacted for bogus reasons.
5/30/2019	Tara	Collins	NJ	1																		
5/30/2019	Tom	Salter	NC	1																		I'd like to see no flounder caught outside the inlets for 2yrs, commercial or recreational. Close pound nets for two years, reduce gill net harvest by a third for 2years. Apply a slot for recreational catch between 14-19" for 2years.
5/30/2019	Don	Gaskey	NC	1																		I don't understand why, when commercial fishing causes a problem, that recreational fishing has to be hit so dramatically. Recreational fishermen harvest much less, in a lifetime, than commercial fishing does in a single trip plus, they can just throw the dead undersized flounder away without any penalties.
5/30/2019	ZACHARY	WILLIS	NC	1																		I am a commercial fisherman and rely on flounder to feed my family. Limiting the number of flounder I can catch and times of year I can fish greatly affect my income and being able to take care of my family. There are plenty of flounder I do very well giggering.





**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

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6/2/2019	Steven	Giberson	NC	1																						I am a commercial fisherman and set flounder nets in section c every night that I can. In my behalf I wish I could be at this meeting but work will not allow me to attend. I believe the stock assessment is biased as to the classification of the fish in which 15 in is not available in abundance. Therefore in years past which would be in the 80s and early 90s there was an abundance caught ONLY because the size limit was at 8 in. In my argument as to what I throw back alive every night that I fish I believe that there is an extreme abundance of smaller fish but the larger class fish stay into the the ocean for a duration of time allotted to them. Thank you for listening to my opinion and hope you all very well. Regards Steven giberson
5/31/2019	Mitchell	Lassard	NC	1																						Treat everyone the same. If you close it for commercial close it for all. Including imports and farm raised fish. Close down the states making rules against N.C. what is the best thing for the flounder. Just make sure their is a problem just not knee jerk reactions like in the past. You have made too many terrible mistakes against the commercial fisherman.
5/31/2019	Robert	McBride	NC	1																						being a commercial pound net fisherman for the last 40 years, i may be somewhat qualified to give a different point of view. the pier group report for 2014 compiled by your own scientists unequivocally concluded that the southern flounder stock was healthy and they had no idea how it was so!! i appreciate that kind of honesty because they were telling the truth. if the pier group scientists were as honest as the former group they would indeed come to the same conclusion. the information used to assess the stock are so limited and incomplete they can't possibly tell the story. 40 years of fishing and not one time has an observer ever ventured into the sound. i find that amazing you can sit in a cubicle and figure out the stocks with a slide rule and some statistics ! you only consider what is brought to the dock and dismiss all that is discarded which just so happens to be the stock you are trying to assess! what foolishness. clearly you care little for the fish or the fishermen

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments				
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference			
5/31/2019	Dylan	Bennink	NC		1																				Minimizing the length of the commercial flounder season to the dates proposed in Amendment 2 will drastically affect the economy of Ocracoke, NC, as well as all of coastal NC, in a negative manner. Minus time spent acquiring a BA in Geosciences and minors in Biology and Oceanography at UNCW, I have spent all 30 years of my life on Ocracoke. For the past 5 years, I have had the privilege and honor to feed the world with fish I have caught commercially in the waters surrounding my home. Tourists, who make up the majority of our island's business, travel to our area to partake in activities, culture and cuisines that are unavailable at their places of origin. Flounder, recreational and commercial, is an enormous component of the tourist's desire to visit coastal NC and nourish its delicate economy. I make my living full time on the water. If the pound net season is shortened to the dates proposed by amendment 2, my estimated total gross annual income will be reduced by at least 30%.
6/1/2019	perry	ellis	NC		1																				marine fisheriers is only gessing because they are going on no proof of anything other than trying to get nets out of the water, the CCA is strong in money politics and our stupid DEM GOVENER
6/1/2019	Kimberly	LeMay	NC		1																				I am 47 years old and have been in the seafood business all my life. In these years I have seen so many changes in the rules and regulations set by the state of NC. Rules and regulations that absolutely make no sense whatsoever. What I have learned since I began working full time since graduating high school in 1990, is that all species go through a cycle. What may be a good year for shrimp, maybe a bad year for flounders, spots, etc. But each species will come back! That was proven last year with all the shrimp caught in Core Sound. This flounder amendment is crazy! What if we looked at each one of you that makes these rules and said the best part of your yearly income can only be made within so many days of the year and after that sorry you can't work anymore. I wish that each one of you could spend a day with one of these hardworking fishermen. See what it's like to get up before the crack of day and work till way past sunset. These are not lazy people, they want to work.
6/2/2019	Tim	Marco	NC		1																				Please allow us access to local seafood. You are killing an industry. Listen to Mr. Bruno. PLEASE





Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)

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6/2/2019	brandon	watson	NC		1																		I fish out of New River, NC. The number one fishery I participate in is large mesh gill nets. This is my primary income too support my wife and children. Not only do I catch flounder, but also many other species for profit with my large mesh gill nets such as black drum, red drum, lady fish, sheepshead. All which support my income, if this closure happens it will be almost impossible for me too continue my profession. That is not the only reason I am opposed too this amendment, the main reason is the data is not accurate, really the lack of data is what bothers me . I really think we should wait until catch totals are seen for the end of the 2019 year, I think many of you will be surprised if we are allowed too fish, this year will be the best in over a decade. The problem is not the lack of fish the problem is our inlets are jammed up providing lack of tidal flow where the fish can hardly even get in, Record numbers already fish and crabs this year because florence opened our inlets
6/2/2019	William	Fulcher	NC		1																		A lack of scientific evidence thus fails to offer support for this proposal.
6/3/2019	Michael	Padilla	NC		1																		This amendment is created and backed by sport fishermen. There is not any real scientific evidence to back these claims. Typical plot by CCA backed representative to take away commercial fisherman's livelihood.
6/3/2019	John Q	Public	NC		1																		I am a part-time commercial fisherman, full-time federal employee, and a resident in carteret county. I do not want to see this amendment passed as it is written. I think the seasonal closures are far too restrictive. I think the better approach would be a total allowable catch for each region of the state. The short flounder season will put pound netters completely out of business and will make it hard for part time gill net fisherman to justify paying the \$400 license fee each year. IF this amendment is passed as written, the commercial fishing annual license renewal fees need to be brought back down to \$200. There could be no justification from DMF why the observer program needs that much funding to observe large mesh gill nets for less than one month a year. License fees could be increased upon recovery of the flounder fishery.

Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)

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6/3/2019	Marlene	Taylor	NC		1																				<p>The common fishermen are not causing the problem or depleting the number of flounder. I live at the Point in Emerald Isle and watch the many shrimp boats sitting in the inlet to the sound. Their large nets catch everything in the water around them with no regard to species or size. This is where our flounder are going. There needs to be regulations on what the commercial fishermen can keep and how they handle their catch. The regulations on commercial fishermen that are in place must be enforced. Many species are dead by the time they are sorted. Too much lose!</p>
6/3/2019	Larry	hopkins	NC		1																				<p>I know it's a waste of time but there is no mention of what these huge numbers of skates are doing to the reduction of fish, oysters, .They are like vacuum cleaners on the bottom. As for the rest I like the rest know that this is a done deal .Follow the money. One of the reason landings are down is you have a hard time catching fish when your nets are full of skates. Nobody has set in our area in the last month because of this problem. I also see nothing about bad water. I think for these special people to catch what they want they should build themselves impoundments stock it full used golf carts to get around .It would great on the environment . No boats on the water. Good Luck</p>
6/3/2019	Morton	Gaskill	NC		1																				<p>I feel that the issue of stock status of the southern flounder is one that can't entirely be explained due to fishing. The combination of the large mesh ITP and attrition in the pound net fishery over recent years has already reduced commercial fishing effort by significant margins. In the 1990s there were over 200 flounder pound nets in operation around Ocracoke island, whereas last year there were only 43. A confluence of natural factors has also impacted the pound net seasons in recent years, chief among them being hurricanes destroying gear and delaying fishing activities which have increased escapement. Additionally the recent pattern of high water temperatures persisting in the sounds has also reduced pound net harvests in the early season due to the fact that the flounder migration is controlled by water temperatures. In conclusion if any measures are adopted I would advocate for the 31% reduction as I feel it would help the stock without absolutely decimating the industry.</p>

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6/3/2019	William	Wood	NC	1																		<p>I do not have a problem with working to restore the flounder stock my problem is I do not think the data for the Recreational Fisheries in accurate I have tried to support the NCMF checks at the landing and I do not see how they can estimate the data for Recreational dead discards and catch. Its a lot of guess work. I always felt the Recreational Fisherman gets the worst of the regulation changes. All the other states on east coast do not have netting in inshore waters it has helped them by far.</p> <p>You are going to make it so Recreational Fisherman stop fishing as much and it will hurt the local business's when they do not go as much. None of the option that the nets out so it will not work as well as you data shows if nets are not taken out of the inland waters.The Recreational Fisherman in not the problem in fish management. A Recreational Fishing season and size and limits not going to help much.Please give Recreational Fishing a better deal than in these options. Thanks, W Wood</p>
6/3/2019	a	b	BC	1																		
6/3/2019	Ryan	Speckman	NC	1																		<p>The drastic measures that are being pushed through are very troubling. I'm not convinced that the data supports these measures on this scale, and it doesn't appear that our state managers do either. This feels like more of a political move, that will have major ramifications for not only commercial fishermen, but the many fish houses, processors, distributors, restaurants, etc. that give the citizens of our state access to the resource. Many of the so called "by-catch" species that go along with the flounder fishery (e.g. red drum, black drum, sheepshead, speckled trout, etc.) are just as important as the southern flounder itself, and these new regs will greatly diminish their availability as well. Before we know it, only one user-group will have access to our tax-payer resource, and it won't be the inland consumer.</p>
6/3/2019	Kyle	Warren	NC	1																		<p>As a native of Hatteras Island this bill would have a devastating effect for not just the local commercial fisherman but also the business that buy their product. Stop targeting the small guys, go after corporations who have fleets of 100' boats that do not come home and offload their catches at sea. The local waterman you are targeting with this bill have been sustainably fishing pound nets and other methods for flounder for centuries, they are not the issue.</p>

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6/3/2019	Candy	Bohmert	NC	1																		As a Pamlico County Commissioner, I am against any quotas that are set that are not based in science. There is no plausible science that says this drastic action needs to take place. I don't support this and am requesting my state representatives not to support it either.
6/3/2019	William	Gilbert	NC	1																		
6/3/2019	colton	robinson	NC	1																		its my opinion that the flounder stock has not decreased at the rate that is trying to be said however there are a lot more people targeting the fish. its my belief that gigs and nets should be mad commercial gear and there should be a limit of how many flounder should be taken a day/night of these gears. i believe that would help more than this assessment and keep the working man able to provide food for his family this is a agriculture state that thrives off of farming and the commercial fishing industry however i cant see this from anyone all i see is people against it in the early 90s there were thousands of commercial fisherman in north Carolina with the same stats that there is today with just a fifth of the fisherman there was then so explain to me how there is a decline in the flounder population im not against recreational fishing at all but i believe there is a lot of fish killed by gigs by en experienced fisherman that cant tell the size of the fish thanks again god bless
6/3/2019	Ronald	Davis	NC	1																		Based on previous issues, I do not trust the data. Another push to cripple and eradicate the commercial fisherman.
6/3/2019	Allen	Jernigan	NC	1																		I took my gigging charter down large mesh nets last night. We saw one legal flounder and scores or undersized flounder, red drum, black drum and sheepshead. This gear needs to be addressed and outlawed. Being involved with the flounder fishery for over 25 years both recreational and commercial, I will be the first to tell you that the size and numbers are not what they once were. That being said, the recreational community is not at fault for the flounder situation. It is the continued waste from gill net discards and the unregulated catch by pound nets. The elephant in the room needs to be addressed and gill nets as a whole need to be outlawed. A quota needs to be put on pounds. Traditionally large mesh fisherman and pound netters are part time fisherman and NCDMF data reflects that statement. These new regulations are going to crush the businesses that rely on recreational fishing in our state. Also, any type of net closures for flounder is going to put more net pressure on other species



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6/3/2019	Garritt	Jernigan	NC		1																				I all for it fishing is going down hill
6/3/2019	Jacob	Ledford	NC		1																				The problem is full netting. Every state has banned it except NC. Until we address that problem you people are wasting time and contributing to the loss of a resource that won't be here for our kids. Texas, Florida, SC...all have substantially better fisheries and it's a direct result of banning gill nets.
6/3/2019	Kim	Fara	NC		1																				If you want to help the flounder population, shut down the gill nets and leave the recreational fishermen alone
6/3/2019	Brandon	Taylor	NC		1																				Of anything should be limited it should be commercial net use. As a citizen who grew up in NC, pays taxes in NC, and fishes with my family, it should be a right to fish responsibly as well as enjoy our costal waters. I think loose regulations on commercial netting has increased over fishing. Recreational fisherman have had change after change on restrictions on restrictions. I've been a charter captain for 3years now and this is part of my income chartering clients that come to our coast looking fishing and gigging charters while they are on vacation and local folks that like to get fish to take home to eat. I dont see how yall can determine how it's over fish. I think if we fall in suit with what south Carolina is doing get all gill net or shrumping out of our inland waters we will definitely see a difference in all fishing. Thanks Gene Garris Gig-A-Bite Chaters
6/3/2019	Eugene	Garris	NC		1																				I think if we fall in suit with what south Carolina is doing get all gill net or shrumping out of our inland waters we will definitely see a difference in all fishing. Thanks Gene Garris Gig-A-Bite Chaters
6/3/2019	Tim	Thompson	NC		1																				We all know that commercial fisherman pays the most In fees to one entity. But the rec fisherman is the one who pays to many different entities over a period of time equaling much more in total proceeds to various entities. However the rec fisherman is the one getting the short end of the fishing to be caught and harvested all Because the commercial fishermans overkill of all species, which then requires more stricter regulations on all species of fish. The commercial fisherman are the ONLY ones hurting and killing the fish but yet you stiffen the regulations on rec fisherman and not commercial. It does not make sense at all. You are putting restrictions on the ones not doing any harm and allowing the commercial fisherman who are doing ALL the harm to carry on. Why? Because they pay more under the table? The fishery's will get better MUCH quicker if you limit the big killers which we ALL know are the netters. Common sense 101. Stop it with the political bulls*** and use common sense ty

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

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				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference			
6/3/2019	Tommy	Dean	NC	1																					<p>You know if you banned gill nets we wouldn't have this problem. I mean if you can't see that your a idiot. We need someone from Louisiana to run our fisheries because this is nothing more than you all lining your pockets. You don't give a f*** about our fisheries. It's all about money just be honest. If none of us bought a lisenca and did what we wanted for years how bad would that affect the state. But I'm sure it will never change. Do what you want will do what we want</p>
6/3/2019	Lane	Chris	NC	1																					<p>I do not support anything that takes more away from rec anglers than it does from the comm fishery. It is time to limit by quota the pound net fishery. If you are going to close fishery to rev anglers then close it across the board. You manage our state fishery to keep regular everyday people on the loosing end and continue to keep gear in the water that other states everywhere about has banned. So if we are to have a viable flounder fishery, and they are so overfished and overfishing is occurring, close everyone out. Show some actual want to fix a fishery instead of managing it to benefit certain groups. Or jus keep it how it is. No way are you people trying to fix it.</p>
6/3/2019	Kenneth	Roe III	NC	1																					<p>Ban the gill nets and gigging of flounder. Recreational fishermen have very little to do with the over fishing of flounder.</p>
6/3/2019	Bryan	Stanton	NC	1																					<p>The vast majority of your recreational hook and line fishermen are struggling to catch flounder over the years keeper size that is , which is due to the netting in our waters, I am supremely confident in saying that the recreational anglers aren't even getting an opportunity to make a dent in the flounder population, you should have marine fisheries sitting at the ramps on the weekends and you will see. It is extremely irresponsible to put anymore limits on recreational fishermen at this time and apply Thant further amendments to the real issue, the netting of undersized flounder is what is killing our stock , that is where you will really solve the problem, if you care more about the fish than you do about the industry , that is where you will make any progress</p>

Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)

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6/3/2019	Timmy	Bryant	NC	1																	TO much money passing hands.How can anyone in their right mind claim rec.fisherman do so much harm when you have comm.fisherman literally harvesting anything and everything within range of their nets and for years have been allowed to continue while other states were smart enough to take action with them years ago.The way I see it North Carolina is the laughing stock of the east and gulf coast states and nothing I or other nc sportsman say will change anything.Just like Washington nothing will change until changes are made with leadership offials in NC.
6/3/2019	Tyler	Graybeal	NC	1																	We need to remove gill nets instead of shutting down the fishery to recreational anglers.
6/3/2019	Ben	Thigpen	NC	1																	Simply stop the netting inshore....you know its the answer. Why don't you address the elephant in the room. You've been dodging this for years...we are the only state that allows it on the East Coast.
6/3/2019	Matt	Markley	NC	1																	Gill nets need to be banned or their limits be stringently tightened. It is assured that the recreational rod and reel fisherman is in no way having such a severe impact on the flounder population that they are the cause of such a severe depletion. Commercial net fishing is not only a harm to the overall healthy stock of flounder, but also to many other species such as red drum, trout, black drum and sheepshead to name a few. Gill nets are non-selective fishing gear, and when soaked for 12-24 hours at a time, are detrimental to the bycatch and undersize fish that get caught in them. Recreational rod and reel fishing is 100% selective, and there is very rare chance for undersize kill, unless the rare chance of a deep hooked fish may occur. Furthermore, North Carolina offers poor inshore fishing in comparison to other states with gill net bans, and NC has lost the opportunity to have widespread inshore tournaments with people coming from all over the country due to the gill nets.
6/3/2019	Benjamin	Baldrige	NC	1																	I recreational gig maybe 2-3 times a month. My cousin and I usually go and get our limit which is 4 flounder each. What I don't understand is how recreational fishing even making an impact on southern flounder? Commercial that's a different story. Inshore netting is hurting our fisheries more than any other source. Why not close commercial flounder for 1 season and see what kind of difference it makes. Thank you for allowing me to voice my opinion.





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6/3/2019	Cary	Powers	NC	1																		North Carolina is the only south eastern state that still allows gill nets. The netters in the other states survived , why can't the ones in North Carolina do the same. The commercial matters blame the recreational fishermen for the decline of the fish population and the state politicians believe them. We the recreational fishermen don't have a chance, no one believes us or stands by us. Gill nets need to be permanently banned in North Carolina.
6/3/2019	Johnnie	Smith	NC	1																		We need to ban gill nets that is the main problem.
6/3/2019	Scoti	Rodriguez	NC	1																		The new amendment should not go into effect for recreational gigging and fishing of southern flounder until at the soonest Nov of 2019. Commercial fishing and netting should be stopped immediately until the numbers are acceptable. We Reside in NC and our voice should be put into consideration
6/3/2019	Harold	Reynolds	NC	1																		Stop gill nets...85% of catch from them. Quit pretending to address the issue by halting recreational fisherman.
6/3/2019	Zack	Watters	NC	1																		Instead of closing the season for the recreational flounder fishermen I am a firm believer in starting with the gill netters. That gear is outdated and causes a huge impact on our fishery. Coming from a family that ran gill nets religiously for years I have seen first hand the damage it can do. Not only to the flounder but red drum trout and other inshore/near-shore species.
6/3/2019	Raymond	Rodriguez	NC	1																		Commercial fishing and netting is putting a strain on southern flounder. Recreational fishing and gigging is minimal in comparison. I agree with the current regulations so let's not implement a new amendment until at least 2020. We are one of many families in NC that has a vacation planned this summer which includes a fishing trip. So regulate commercial fishing/netting and leave the recreational fisherman alone this summer
6/3/2019	James	Andrews	NC	1																		I do not support this amendment. It is not fair to close the fishery yet allow gill nets to stay in the water.
6/3/2019	Bryan	Smith	NC	1																		Leave recreation fishing alone and put an end to gill nets. That is where the problem is
6/3/2019	John	Hoard	NC	1																		If closing the Flounder fisheries has been determined to be the only way to stabilize the population, then close it for everyone including commercial gill nets. Thanks
6/3/2019	Dishon	Allen	NC	1																		If regulated it needs to be across the board,not just on the backs of rec anglers.
6/3/2019	Robby	Smith	NC	1																		Gill nets are what is killing our resources. Look no further than the healthy surrounding states without them .

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6/3/2019	Roger	Holt	NC	1																				I am a 1st generation commercial fisherman I am 40 years old have lived in NC my whole life. I decided I wanted to commercial fish to make a living. I have only been fishing this being my 3rd year! I need to see true facts of a decrease in fish! NO FACTS!! I hope this does not pass are it will be another nail in the coffin to end gill net fishing! You see GILL NETS are how I make my money to support my 15 year old daughter and myself! Single father trying to do what God said do in the bible! John 21:6-7 And he said unto them, Cast the net on the right side of the ship, and ye shall find.They cast therefore,and now they were not able to draw it for the multitude of fishes. Therefore that disciple whom Jesus loved said I unto Peter,it is the Lord. Amen!!
6/3/2019	Nick	Wells	NC	1																				Take the gill nets out of the water !!! They are killing all of our fisheries!!!!!!!!!!
6/3/2019	Adam	Edwards	NC	1																				Ban all nets they are killing everything nc must not care to much about are fishery. Also recreational fishing would bring in more money. They are going to make it where no one is going to want to go to the coast to fish. Do a buy out like they did with tobacco
6/3/2019	Michael	Thigpen	NC	1										1									1	Personally I dont support any of your ammendment. You consistently take away more fishing rights from recreational fishermen , but yet do nothing to the ones that are destroying the flounder population. Nets not only get legal size flounder but they kill the undersize as well . They dont only kill flounder but red drum , trout an anything else that gets caught in it . Do I think something needs to be done absolutely, but it needs to be across the board not just the Recs taking the hit.
6/3/2019	Jennifer	Rodriguez	NC	1																				Commercial netting and fishing are the problem! Don't ruin the recreational fishermen's summer.
6/3/2019	Terry	Lee	NC	1																				I'm tired of paying for license to fish and you keep cutting our quota.Yet you let those netting have no limits,it time it stops.So tired off seeing all those dead fish in nets that no one can keep. This has got to stop we should have no more knitting period. They have cut it out in the other States and we need to cut it out to. A lot of my colleagues and I say you are fixing to start a fire, not right and you know it. All we are asking is you be fair about it. Thank you for taking the time to finish reading this.



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6/3/2019	Dave	Stewart	NC		1																			we have a major problem with flounder and only way to correct is TOTAL CLOSURE - Thats what was done for rock and lets see it done for flounder - gets better look at how to manage effectively - I know the fight has been real but no finger pointing I have fished neuse, pamlico, core and atlantic for 40 years and seen the decline - it is real - lets do what we need to do to allow our kids to see some of what we have seen and hopefully more. Again - Please vote a Total Closure
6/3/2019	Lynn	Hinnant	NC		1																			Stop giving our public resource to private commercial money. Get the nets out.
6/3/2019	Steven	Brewster	NC		1																			Close the season for all until there is a surplus stock of fish. Less fish will take longer to recover so the longer we wait the worse it will be.
6/3/2019	Tony	Malay	NC		1																			Recreational fisherman are not the problem,it's commercial fisherman.
6/3/2019	Christopher	Kennedy	NC		1																			Gill nets need to be banned. Recreational fishermen have taken the blunt of change not only with flounder but most inshore species. If you truly care about a rebound of our fishery, look past the money and fix the problem. Commercial fishing can be done with hook and line just every other state except for North Carolina.
6/3/2019	Josh	King	NC		1																			Please remove the use of gill nets and put a limit on the commercial harvest. They take 85% or more of the total harvest of southern flounder and kill much of their bycatch. With the complete removal of gill nets and a pound limit for commercial harvest the flounder numbers will rapidly increase.
6/3/2019	Phil	Roberts	NC		1																			Ban ALL inshore nets and adopt a hook-and-line commercial fishery.
6/3/2019	Daniel	Riggan	NC		1																			Stop the over harvest of flounder through the gill netting and trollers inshore and close to shore and you will get a better outcome than closing a species to recreational fishermen.
6/3/2019	Morgan	Whitfield	NC		1																			As an avid angler I see no true reason why having a closure for the recreational hook and line and gig fisheries is going to benefit the flounder population. The amount of juvenile fish killed in nets far exceeds either the gig or hook and line fisheries. The amount of bycatch is also astonishing. If marine fisheries wants to save our fish population pull the nets out of the water and look at restocking programs like they use in texas and Louisiana they have come back from major devastation from pollution. bring North Carolina back to the great fishery it used to be.





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6/3/2019	Chuck	Stanley	NC		1																				The only way to address the flounder issue at hand is to eliminate the biggest reason we are here, nets and dirty fishing. The resulting bycatch of reds, black drum, croaker and undersized dead flounder is a disgrace in this state. I bought for each of my grandchildren their lifetime fishing and hunting licenses but if nets are not deemed illegal and taken out of our waters there will be nothing for them to fish for. Take the nets out, stop hurting the recs, be good stewards of ALL fisheries.
6/3/2019	Jason	Gainer	NC		1																				Please end the commercial gill nets prior to recreational fishing
6/3/2019	Gary	Cowan	NC		1																				
6/3/2019	timothy	Taramelli	NC		1																				Get the gill nets out of the waters and things will rebound,i have personally seen way too many bad netters who will kill everything in the water or who get in there way. shady netters make bad life for fish and almost every net i have ever seen in the water has had dead fish in them that have been there for hours in hot water,netters kill way more fish than any other sector even if NOT reported. i am for a closure on all harvest of flounder UNTIL they are considered viable hook and line as well as gigs. i think north carolina is WAY behind the times with doing what is right for OUR fishery and needs to just BAN gill netting all together in our inshore waters we have that is where fish GROW up.
6/3/2019	BRETT	HINSON	NC		1																				Remove the cause . Gill nets kill everything. I support a net ban in NC....
6/3/2019	Benny	Godwin	NC		1																				It's sad that us recreational anglers who catch a hand full of fish have to sit back and wait for the commercial gill netters to rape the waters that we have paid taxes to fish and we get the blame shame on all of you political junkies. If you open your eyes and close your wallets you can easily see the commercial harvest is what's killing the population y'all know and don't care cause of all the hand outs. Hopefully one day y'all get caught. Ban gill netting
6/3/2019	Wyatt	Clark	NC		1																				This is absolutely ridiculous Please think twice about screwing our fisheries any more than they are. Netting is ruining the estuaries that we have. I fish pro from east coast to Texas and see first hand the difference our coast line has. Please do something more efficient than this absurd plan above. Respectfully, Captain Wyatt A. Clark

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6/3/2019	Kyle	Hatcher	NC		1																	I know this may be a shocker but nets are the problem. It's like hunting with hand grenades. No nets in inland water. Look at Florida and Louisiana. Possibility for the state is endless. No gill nets!
6/3/2019	Richard	Edge	NC		1																	It is time for the recreational fishermen to stop getting the short end of the stick. Regulations have only gotten worse for the recreational fishermen over the last 10 years, if things need to be done to help the population it seems to me the place to start would be gill netters and commercial fishermen who don't have any limits on them.
6/3/2019	Nick	Brinkley	NC		1																	Why do you close recs with such little change to the part time gill netters using unselective gill nets killing every undersized flounder that runs into it. Sounds like some lobbyist is paying the right politician again.
6/3/2019	Chris	Moss	NC		1																	Been doing this since 1985 it's something we do as a family several times a summer the only reason I have built my boat the way I have and the only reason we have a home at the coast please do not cut back on us rec guys
6/3/2019	John	Beasley	NC		1																	It is a crying shame when a small user group taking 85% of the catch is time and time again allowed to continue and the majority user group who pump the majority of the money into the economy are punished time and time again. This part time commercial fishery, must be regulated. It doesn't take a biologist to look south and see what removing gill nets and trawlers from estuaries will do for all fish stocks. It's in your amendment. Limits of 10 and 15, size limits of 12. It's time to make the change. Gill nets are not target specific. They kill everything that swims into them. Trawlers scoop up everything and destroy bottom. It's fact. Anyone can see it. More and more rec guys are going south to fish, myself included. It's time for change. The few commercial guys left will have to adapt just like the textile workers of the 80's and the tobacco farmer of today. Look to the south for guidance. Do what is right for a change. Remove gill nets from NC inshore or we will never have a fishery
6/3/2019	Chase	Overcash	NC		1																	Ban the commercial guys from using the dirty gill nets and pound nets!
6/3/2019	Nick	Robertson	NC		1																	Commercial fishermen with pound nets and gill nets are the main problem. I have seen it first hand nets full of undersized flounder! Recreational fisherman and even commercial gigging is not the problem, every fish they harvest are legal size!





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6/3/2019	Brandon	Parker	NC		1																				Please for the sake of the North Carolina inshore gamefish.. trout, redfish, and flounder. BAN gill-nets. It's ridiculous how many dead fish, under slot fish, and lack of fish is caused by gill nets. It's out of hand and has ruined inshore fishing in N.C. I'm 95% catch and release. May keep a few here and there for the table. But seeing the gill nets loaded down with entire schools of redfish, trout, and by-catch makes me sick. I've also seen gators get wrapped up along with turtles. They are not enforced like they should and should be banned.
6/3/2019	Wade	graham	NC		1																				I think it is absolutely ridiculous to draft a management plan without removing all nets from internal coastal waters period. Its a shame to penalize rec fisherman who rather catch their fish than have to buy them. I shall not drive one single time to our coast to fish if flounder fishing and gigging is banned at all. Furthermore let it be known that our commission and board of directors and govern body has failed the citizens of North Carolina if this amendment becomes law. I personally don't believe the statistics the flounder over fishing is based on. Also if it was so over fished why has every state below us has lighter regulation on southern flounder then us. The thought process and the people behind this amendment is exactly why Donald Trump is your President.
6/3/2019	Mark	Harper	NC		1																				Please stop taking away everything from the common man and family Do your homework so you know the truth about our states waters. Go out and see all the sea life wasted everyday with nets Simply put nets don't completely pick or release prey,once in the net it's over. Please realize anglers can select prey and release what's not allowed to let fish live for another day. Open Your Eyes America before we have nothing left.
5/23/2019	Bruce	Lee	NC	1									1												The reduction in take during the moratorium needs to include ALL methods of taking flounder equally. This includes the removal of ALL types of nets from the effected areas.None allowed. Gigging, all nets, and all hook and line stop during the moratorium. Gigging in general should be outlawed as it is analogous to shining deer. It is ridiculous gigging is even allowed. The NCDMF has mismanaged our fisheries for way too many years and it is time to take a hard stance and start fixing the problems it has caused. Flounder is just one of, but a good example, of those problems the NCDMF has inflicted on our public resource. Do not squander this opportunity to start protecting our public resource!
5/23/2019	Chris	Powell	NC	1									1												Eliminate the recreations commercial gear license and eliminate flounder gigging.

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6/2/2019	Jan	Willis	NC	1				1						1			1	1	1			
5/24/2019	Rick	Sasser	NC	1					1						1		1	1				While I understand that current management constraints do not allow real-time quotas under Amendment 2, it is imperative that Amendment 2 contain an annual payback quota similar to what is used in the red drum FMP. The Division will know the prior year's harvest by May, which is plenty of time to reduce a sector's upcoming season as a means of payback. I strongly support additional measures to constrain effort such as gillnet yardage restrictions, expanding non-fishing days and less hours. The Director should be given proclamation authority to address unintended consequences of changes in effort. Thank you.
5/24/2019	Lyndia	Sasser	NC	1				1						1		1	1					I am concerned about the unintended consequences of commercial netting efforts changing that will negatively affect the projected seasonal harvest reductions by area. The Commission should consider an annual quota with payback. The Division will have prior year harvest data by April or May. There will be plenty of time to adjust an area's upcoming season to achieve a reduction for a previous year's overage. If adjusting by area is not feasible then an across the board reduction as payback is fair due to the fact that net reel boats are mobile and effort will move from a closed area to an open area. Thank you.
5/24/2019	Jonathan	Edwards	NC	1			1							1		1	1					I am concerned with the unintended consequence of additional gill netting effort when you break out different areas with different open and close dates. For example, once you close the northern area, effort will increase in the central and southern. Then once the northern and central are closed, the southern area will be hit even harder with nets. I personally believe the largest harvesters (gill and pound nets) should take the largest cuts. The retail value of this recreational fishery is huge. With short recreational seasons, many local businesses from tackle shops, hotels, restaurants, mom and pops, etc. will feel a drastic drop in revenue. There are millions of recreational anglers that travel to the coast for one thing, FLOUNDER! These anglers spend as little as \$20 on a trip all the way up to multiple hundreds of dollars a trip between fuel, vessel, lodging, meals, tackle, etc. When can we join the rest of the east coast and ban inshore gill netting and shrimp trawling?
5/24/2019	Marc	Boettger	NC	1			1							1				1				I think inshore trawling and inshore gill netting should be banned.
5/30/2019	sheldon	Montgomery	NC	1		1								1					1			

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5/24/2019	michael	ray	NC	1						1							1	1						
5/24/2019	Carlton	Pittman	NC	1				1								1	1	1						Please ban inshore commercial netting in coastal nursery areas. Too many juvenile species are killed during commercial harvests that never have a chance to reproduce. Please implement a flounder slot limit to protect breeding stocks. Please implement a seasonal closure during spawning times. Please end by-catch fisheries where non-target species are allowed to be harvested and sold commercially.
5/24/2019	John	Matthews	NC	1				1								1	1	1						There needs to be a system in place to reduce commercial netting based on prior year's data. If not not then across the board reduction that would account for a netting boat moving from a closed area to a open area. We remain the only eastern state that allows netting inshore and in nursery areas. I fish in topsail beach and haven't caught a legal flounder inshore the previous 2 years. Anybody from out of state planning a recreational flounder fishing trip would obviously go to another state instead of nc- billions of dollars annually going to other states that properly manage their fisheries resource.
5/24/2019	Christopher	Williams	NC	1			1								1	1	1							Nc needs to conform to the other states and ban netting! Stop coddling this industry.
5/24/2019	David	Rouse	NC	1				1							1	1	1							A partial season during the most likely time to catch these fish in my opinion will simply result in more fish being caught during that time than normal. Granted the short season may (and I emphasize may) reduce overall harvest but I do believe for one second that it will be anywhere near as much as predicted. Boats are going to be out in full force catching as many as possible before time runs out. Closed off areas only push the boats that fish these areas elsewhere. Leave the seasons alone, you would eliminate the mad dash of folks out at once and putting so much stress on the fish in a short time by doing so. Setting a quota would be the only guaranteed way of reducing the number of fish harvested. Fill your quota and you are done. Take an average of several years harvest and subtract 62% and set the quota for that and be done with the take as many as you want rule. And get the dang nets out of our joint waters.
5/24/2019	Hain	Ficken	NC	1				1										1						I am 68 years old and have seen the decline of all our fish. I WAS HOPING TO SEE IT IMPROVE IN MY LIFETIME TO WHERE IT WAS 40 YEARS AGO.. Please support this amendment!!! Hain Ficken

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments		
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference	
5/24/2019	John	Bowden	NC	1						1					1		1	1					I have fished and fished consistently in the Cape Fear/Carolina beach area since 2000. I have documented my trips over this period and have absolutely seen the flounder population decimated, whether it be citation fish, keeper size, small fish, total numbers of fish, etc. This is not in question. Whatever it takes we need to sacrifice. Any regulations that allow for the majority of a population of any species, much less flounder to be harvested before they are ever allowed to spawn even 1 time makes no common sense. Allowing trawling in nursery habitat makes no common sense. Please do the right thing so I can take my grandchildren fishing in 10 years.
5/28/2019	Mark	House	NC	1						1					1							1	
5/24/2019	Benjamin	James	NC	1					1						1			1					Need to eliminate gill nets, pound nets and inshore trawling Look at the bycatch that destroys many fish species just for the shrimp. Makes no sense. I also think flounder gigging should be looked at. Don't get to shoot deer with spot light why flounder? Stop out of state boats from coming into NC and destroying our resources
5/24/2019	Stuart	Creighton	NC	1						1					1		1	1	1				Moving forward, it is critical that the DMF not return to the same management measures as before. If we are going to invest ten years in rebuilding our flounder stock, then we must change the gears that are allowed in the water. Development of Amendment 3 must include a ban on gill nets. There must be strict quotas on both pound nets and gigging that include paybacks for overages. Trawlers in the Pamlico Sound also have juvenile flounder as bycatch to a significant enough degree where they should be removed from this unique nursery area. Recreational anglers should be allowed to keep two fish in a slot length of 14-20" and the use of circle or Kahle hooks should be required of all Anglers using live or cut bait. This division MUST change its current management philosophy. Our marine resources are depleted to the point that they can no longer support the status quo. Maximum harvest must be replaced with policies conducive to rebuilding stocks.
5/24/2019	Chuck	Teseneer	NC	1					1						1		1	1	1				
5/24/2019	karen	Montgomery	NC	1		1								1						1			
5/24/2019	Stuart	Davis	NC	1				1							1								
5/24/2019	PHILLIP	WOOD	NC	1				1							1		1	1					Please stop kicking the can down the road or allowing yourselves to be intimidated by a dozen legislators. I am 66 yo and don't have time for this resource to be saved 10 years from now.

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019						Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments			
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None	No Preference				
5/24/2019	Tim	Hergenrader	NC	1				1						1					1	1	1				
5/24/2019	matthew	maddox	NC	1			1							1					1	1	1				I only support a recreational reduction/closure if nets are removed from inshore waters the entire year. Please fix the root of the problem(nets). Commercial fisherman have no more of a "right" to work than I do. Their job shouldnt be protected while nearly every other NC citizens' isn't!
5/24/2019	Joseph	Wright	NC	1				1								1			1	1	1				
5/24/2019	David	Rose	NC	1				1								1			1		1				
5/24/2019	Kevin	Dewar	NC	1				1								1			1	1	1				I am concerned with the unintended consequence of additional gill netting effort when you break out different areas with different open and close dates. For example, once you close the northern area, effort will increase in the central and southern. Then once the northern and central are closed, the southern area will be hit even harder with nets. I personally believe the largest harvesters (gill and pound nets) should take the largest cuts. The retail value of this recreational fishery is huge. With short recreational seasons, many local businesses from tackle shops, hotels, restaurants, local guides, mom and pops, etc will feel a drastic drop in revenue. There are millions of recreational anglers that travel to the coast for one thing, FLOUNDER! These anglers spend as little as \$20 on a trip all the way up to multiple hundreds of dollars a trip between fuel, vessel, lodging, meals, tackle, etc. Let's get like the rest of the east coast!
5/25/2019	Thomas	West	NC	1												1			1	1	1				I am 59 years old. Use to catch all kinds of fish in the surf and sounds and coastal rivers. Not any more. Nets and shrimp trawlers destroying our sounds and spawning areas in Pamlico Sound. Not nowhere even close to what it use to be. We really need to get these huge steel hull trawlers out of our sounds, and also the trawlers that come from other states because they are NOT allowed to trawl in their internal waters. Its not about the almighty DOLLAR anymore. SOMETHING NEEDS TO CHANGE FOR THE FUTURE OF OUR FISHERIES!!!! Thank you
5/25/2019	Lewis	Williams	NC	1				1								1			1						
5/25/2019	Bobby	Norris	NC	1												1			1	1	1				I am concerned that the over harvest of flounder which has been going on for years will never end until the last flounder is harvested. North Carolina could have the greatest fisheries in the nation if it was managed properly and this would be a start.



**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments	
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference
5/26/2019	Joseph	Price	NC	1				1						1			1	1	1			The recreational sector has already been restricted at a far more aggressive pace than the commercial sector. The amendment needs to catch up this unbalanced affair and extract the needed reductions primarily from the commercial sector first.
5/25/2019	THOMAS	COLTRAIN	NC	1				1						1			1	1	1			Time for a change in good old NC. Been a long time coming and it is going to be hard on everyone because a few raped NC water for profit. Look at all the other states and see why NC is different. No Gill Nets and Inshore trawling for shrimp. WHY? MONEY -MONEY ! How can we allow boats and fishermen with gill nets to come to NC and do what they can not do in their home states? MONEY STOP IT NOW !
5/25/2019	Charles	Godwin	NC	1				1						1			1	1	1			I fully support the NCMFC Amendment 2. In order to achieve the recommended reductions to end over fishing and replenish flounder stocks, it seems it will take a combination of restraints, such as reductions of gear (such as gill nets), trip limits, and fishing times. I am assuming that fishing times will be a shorter season on the recreational and commercial take of southern flounder. Thank you for the opportunity to voice my opinion.
5/25/2019	William	Divers III	NC	1																		
6/2/2019	Jerry	Dilsaver	NC	1					1					1			1	1	1			
5/26/2019	Christopher	Naff	NC	1																		
5/26/2019	John	William	NC	1						1				1					1			One state supplying 99% of summer flounder to the rest of the country is ridiculous. Even more ridiculous is the use of gill nets. No other state caters to the commercial industry like NC, Since NC cannot lead it is time to follow SC or LA
5/26/2019	Matt	Bowen	NC	1				1						1			1	1	1			we can not continue the circle of "out of sight out of mind". NC has become a laughing stock when it pertains to Management of our Natural Resources. We allow trawling, and netting, both with generate bycatch. We should not settle for "less" bycatch, we need to get to a point where NO bycatch amount is acceptable. We should not be in the business of reducing any "non target" species to gain profit from a "targeted" species. We also need to protect those targeted species to preserve the future stock, the normal operation is to make as much money today as possible, don't worry about tomorrow.

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments			
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference		
5/26/2019	David	Drach	NC	1			1							1		1	1	1						The changes are great. Just hate to see a season for rec guys. I would be fine dropping to 2 fish all year than having 4 fish during a season. Some of our best flounder fishing happens during July 4th week and if this season takes place there will not be a need to even go to the coast and fish. Atleast with 2 fish you give people the opportunity to catch some fish during a week that is a major boost in the economy of every coastal town in the state. Please give the working people a chance to catch some flounder all year while we are on vacations and long weekends at the beach and fishing towns on the sounds and rivers.
5/27/2019	Robert	Dail	NC	1			1							1		1	1	1						
5/27/2019	Dale	Madren	NC	1						1				1		1	1	1						The Commission should consider any measures to account for any unintended consequences that allow commercial fisherman to exceed the expected harvest. Maybe there should be quotas with payback. We should be prepared for the commercial sector to attempt to thwart this critical conservation effort.
5/27/2019	David	Hilton	NC	1		1								1										I am a pound net fishermen from Ocracoke and I support the AC Advisory Board recommendations. The 31% phase in will end over fishing in two years and the 52% in 2020 will support a robust stock rebuilding plan that allows for the survival of the pound net fishery. Reducing yardage in the large mesh in all regions will reduce by catch mortality but do not support trip limits for pound nets since very difficult to estimate weight when fish are loaded in bins on the vessels. Weather windows also allow for short harvest windows so nets need to be cleared. On my vessel, there is no ability to accurately weigh fish as they come aboard. Even with the 31% phase in, there will be significant fishermen attrition in the pound net fishery and large mesh since fishery will become much less profitable. I believe reductions in harvest will be greater than expected due to regulations. The NCDMF recommendation for 62 and 72% reduction will put the entire pound net fishery out of business!!!!!!!!!!

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments							
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference						
5/27/2019	Amy	Hilton	NC	1		1							1									1					I am the wife of David Hilton (pound net fisherman on Ocracoke. Our household depends on commercial fishing to pay the bills. He has invested 20 years of his life building his gear and running a seafood business. He supports changes to the fishery that help it rebuild expeditiously but the current recommendations of 62 % in 2019 and 72% in 2020 will put him out of business. We will have to sell our house and who knows what else. What's the point of this if you drive the entire pound net fishery out of business!! It will force displaced pound net fishermen to move into other stressed fisheries like crabs, large mesh and mackerel. We are both self employed. Fishing income is critical to our economic survival. If you adopt the 62 and 72% reductions you will also put the only fish house out of business and likely the retail. Massive job loss on the island and significant economic pain to many families. Ocracoke Seafood Company payroll is very important to the island!!!!!!	
5/27/2019	terrance	best	NC	1			1								1	1	1											
5/27/2019	Everett	Pesci	NC	1						1					1	1	1										I find it ridiculous that the southern flounder population has been allowed to get so low. we need a FULL commercial harvest moratorium and a year round recreational limit of 2 fish by rod and reel with a moratorium on all giggering. That will get the destructive gear totally out of the water and stop the harvest of the largest females by giggers, while allowing recreational fishermen who accidentally catch a legal sized flounder to keep it rather than throwing it back dead. Stop punishing recreational fishermen for a problem that was entirely created by commercial overharvest of legal fish via gill nets and pound nets, and destruction of small fish by shrimp trawls.	
5/28/2019	Jeff	Sampson	NC	1			1								1	1	1										NC must start to conserve our fishery stocks. Past failures and political interference have once again destroyed the fish stocks of NC. Time to rebuild and allow the state to be the fishery it once was which may never happen at this point. Look at herring and Gray trout, spot, croaker all destroyed.	

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments				
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference			
5/28/2019	Linwood	Gordon	NC	1						1						1		1	1					in management unit E effort for southern flounder from both recreational and commercial fishing is extremely high. These fish cannot stand up to the nightly large mesh gill nets, gigging, spearfishing, and rod/reel fishing. Encountering fish >15 inches inshore has become rare, and it is clear the increased effort has impacted the stock. Another concerning issue is the lack of inshore flounder has forced much effort out to the nearshore reefs, with larger fish being harvested. These offshore fish tend to be a mix of southern and summer flounder, but the average fisherman does not discern between the two. A total moratorium is the best option for the resource.	
5/28/2019	Lee	Stone	NC	1						1									1						
5/28/2019	Mike	Moody	NC	1											1	1			1					I think these fish could/should be managed with a TAC on the commercial fishery and once it's hit the season closes. Other states have successfully used tags/permits for the recreational sector. As an unformed recreational fisherman, its seems that pound nets keep the fish and untargeted fish alive and would be the best management option. A slot on the recreational section and the encouragement of circle hooks would be very helpful.	
5/28/2019	Michael	Collins	NC	1				1							1				1						
5/28/2019	David	Ward	NC	1						1						1			1	1	1			I am submitting my support for the rather drastic cuts identified above. I am sorry the state of the fishery now requires such deep cuts, but we've waited too long. The North Carolina commercial fishery supplies the majority of all wild caught flounder and we bear a responsibility for our actions in over-fishing the species.	





**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments			
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference		
5/29/2019	Boyd	Brown	NC	1						1					1		1	1						Lifetime Carteret County, NC resident. Absent during 25 year military service. Returned to find NC inshore fisheries a depleted disaster. Avid fisherman and caught one keeper Southern flounder in 2018. It is way past time to finally see some action from our regulators. I'm 71 years old and would like to at least have some hope my grandchildren will know what I experienced growing up. I am for a total closure of the Southern flounder fishery and a removal of gill nets and trawlers from inshore waters until the stock becomes viable again. In my opinion, it is criminal that we have reached this point.
5/29/2019	Jamie	Cole	NC	1				1							1		1	1						I believe we need to make these current recommended changes in order to prevent further decline in our flounder fisheries. We have taking small steps for far too long and our stocks have continually decreased over time due to these small measures. If nothing is done now, our future generations will not have the ability to participate or enjoy the fisheries and fish we have grown up with.
5/29/2019	Bruce	Lee	NC	1						1					1		1	1						I support a complete moratorium for recreational and commercial flounder fishing until the flounder population reaches a defined and targeted level. Any and all netting and hook and line take of flounder should cease immediately. This includes any and all net types that would or could potentially take flounder whether intentionally or unintentionally. This would include gill nets, pound nets, and trawler nets in any inshore waters. Gigging should also be included in the moratorium. The results of decades of poor fisheries management practices are evident not only for the flounder population but many other fishes as well. Reduced creel limits, moratoriums, and season limits are just a few of the obvious results of mismanagement. It is long past due that the NCDMF take drastic measures to protect our public resource and increase the fish populations for all. The health of our coastal economy depends on healthy fisheries. It is way past time to fix the damage done.
5/29/2019	Philip	Cornelison	NC	1					1						1		1	1						Please listen to our Marine Fisheries Biologists. This is what we pay them for, to do the research and come up with the optimal solution!
5/29/2019	Jordan	Jernigan	NC	1				1							1		1	1						Establish quota for commercial operations.

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None	
5/29/2019	Robert	Rice	NC	1					1						1	1	1				The studies clearly show that the flounder are severely over fished and in serious danger of collapse. Action that should have been taken years ago, but was not, now necessitates drastic measures in order to protect the resource and give it a reasonable chance to recover.
5/29/2019	Gerald	Cessna	NC	1						1					1		1				Additional gear changes should be implemented to prevent bycatch of juvenile fish.
5/29/2019	Christopher	Guill	NC	1						1			1							1	I enjoy fishing for flounder and rarely keep any. I think strict limits on size and numbers should be implemented. Close it all together until a fisherie can be developed
5/29/2019	CA	Pittman	NC	1				1							1	1	1				Please end all commercial inshore netting in nursery areas during any spawning seasons. Please implement a season for flounder to allow all fish to spawn at least once. Please reduce commercial catch limits until the flounder stocks have recovered. Please implement trip ticket limits. Please END by-catch rules that allow non-target species to be kept by commercial fishermen.
5/29/2019	Kevin	Hall	NC	1						1			1		1		1				Our fishery is depleted due to all the nets in our waters. We need drastic measures to revive our fishery just like the Gulf states have done.
5/30/2019	Art	Thinguldstad	NC	1					1						1	1	1				Please do this quickly and effectively
5/30/2019	Len	Rosol	NC	1			1							1			1				The time has come for the gill net to join the whale harpoon as obsolete tools in marine museums. Please eliminate all gill nets from our waters. Pound nets can provide all the flounder that nature can spare, with much less bycatch. Also, please consider moving shrimp trawling OUTSIDE of the sounds to the open ocean. Far too much bycatch.
5/30/2019	Me	IO	NC	1																	
5/30/2019	william	fortune	NC	1			1								1		1				
6/1/2019	Thomas	Newman III	NC	1		1								1	1						Stocks need to be sustainable for the future. But the fisheries needs to remain profitable for the few remaining participants in the flounder fisheries. Rebuild the stocks but allow pound netters enough time to fish and quota to fish to remain profitable during the rebuilding years. If these fishermen are unable to maintain their gear during this rebuilding time; a low dead discard, manageable, and sustainable fisheries will cease to exist in the future. Thank you for your time.

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments						
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference					
6/1/2019	Gregory	Judy	NC	1		1						1															Since the so. flounder has been "overfished" for twenty years, yet it is still going, the DMF should impose the less restrictive options until Amend. 3 is developed. The 31% reduction this fall will allow fishermen the chance to adapt to reduced income in 2019 and prepare for the 52% reduction in 2020. All user groups should shoulder the same amount of reduction while we allow this species to recover. I think that the recovery will happen much faster than predicted by the models since there is some source of so. flounder spawning stock that is currently unidentified. If this were not true then the stock would have already crashed.
6/2/2019	Kenneth	Doyle	NC	1						1				1		1	1	1									No use of entanglement-gill nets & reductions in pound nets.!
6/3/2019	Patrick	Sasser	NC	1				1								1	1	1								Please take action as recommended by the Division for 62% and 72% harvest reductions in 2019 and 2020 respectively. Please implement measures to constrain fishing effort such as yardage restrictions, limiting days fished and removal of all commercial gears that interact with flounder once the season is closed.	
6/3/2019	Christopher	Elkins	NC	1				1								1	1	1									In Amendment 3, one should favor those gears that are least destructive and have least bycatch. In fact, elimination of large mesh gill nets should be considered. first. Also on the table for Amendment 3 should be quotas. Also the ocean flounder fishery, where a very small percentage of fish are Southern flounder. Why close that fishery during the Southern flounder closed season?. Right now comms can fish in the ocean (without a Federal permit) and I guess during the upcoming closed commercial fishing season. That is neither fair to recreational fishermen. If recs cannot fish in the ocean, comms should not be allowed to as well. I would like to thank the Division for their hard work on this contentious topic. Especially the staff. Also, I am glad you have this box for "other" comments.

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments					
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference				
6/3/2019	David	Beresoff	NC	1			1							1											Southern Flounder is very economically for the State and my income. I'm very supportive in maintaining healthy southern flounder stocks. I'm a commercial fisherman in the southern district of our state. My greatest fear is that the State goes to a short season. I use large mesh gill nets. the gear conflict that occurs if the season is short and both gear types compete at the same time the large mesh gill netter will take a beating. Have fishermen declare how they fish. Example Striped Bass Fishery. No double dipping. Open the gear seasons at different times. worst thing in the world in fisheries is to have a Gold Rush mentality. Prices for Southern Flounder are the best they have ever been. Please don't jam all the effort in one short season. Keep the price up and spread out the effort. In area E I'm allowed five nights to fish if I had to go to 2 or 3 nights that would work. Please space out the effort. Tides here do not allow us to fish even on the days we are allowed.	
6/3/2019	Melvin	Albritton	NC	1						1						1										
6/3/2019	Pete	Stafford	NC	1					1							1										Remove the nets and ALL stocks will recover. Gig, pound, and hook/line are viable ways to harvest fish
6/3/2019	Brian	Cobb	NC	1										1												Its time for NC to stop dodging the issue at hand: the true culprit in NC is rampant gill-netting and inshore trawling. Other states have recognized the damage to both their fisheries and local economies from loss of recreational fisheries and their connections to tourism and local businesses and have reined in destructive gear such as gillnets.
6/3/2019	Rob	Van houten	NC	1			1							1												Gill nets are destroying the states recreatonal fishing. Period. There must be regulations. There is zero accountability and we are destroying our marine fisheries. Please do something before it is too late.
6/3/2019	Ryan	Dolph	NC	1																						
6/3/2019	Steve	Hutchinson	NC	1										1												I think inland netting should be banned! Stocks are down due to commercial netting not from recreational anglers. Wake up Marine Fisheries!
6/3/2019	John	Gavigan	NC	1			1																			Need to get rid of the netting or drastically reduce their limit and drastically increase the oversight to prevent killing small fish and the wrong species. I've seen it first hand and it is out of control and a terrible mismanagement of our states natural resource for profit by only a few. Absolutely shameful.

**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020					Do you support additional non-quantifiable measures?					Comments				
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None		No Preference			
6/3/2019	Kenneth	Freeman	NC	1										1											It is a shame that NC is the only state left that still allows nets for commercial fishing. I am 26 year old that loves to fish and was raised fishing. It saddens me to see a decrease in the number of fish over the years and yet the only ones to pay the price are the ones trying to catch them hook and line. My family and I used to could catch our limit of fish no problem and then always enjoyed having a fish fry for the whole crowd. Now it's like we have a hard time finding good fish and when we do we can only keep enough to barley feed ourselves. I believe NC has great potential to have an awesome fishery. I vote to to take the nets out of the water. And if it comes down to money, just look at the money that comes in on the recreational side vs the commercial side. It is time to jump on board like our surrounding waters that has great fisheries. Take the nets out of the water.
6/3/2019	Darryl	Price	NC	1				1																	Get rid of the gill nets and trawlers inshore and the problem will fix itself!
6/3/2019	Steffen	Schollaert	NC	1		1						1													Ban gill nets.. should be illegal as it promotes decimation of vital ecosystems.
6/3/2019	John	Tedder	NC	1																					
6/3/2019	Jim	Ingraham	NC	1			1					1				1									Until you outlaw gill nets nothing will get better. It should be common sense that wanton waste and destruction from gill nets has no place in the modern fisheries management landscape, but as history has proven time and again real action to protect resources held in public trust usually isn't taken until the situation is truly dire and recovery uncertain. I hope that this commission will break from history's model, separate the politics from the reality of this issue and take immediate action to halt the use of commercial gears that destroy so much for such minimal gain to a select few. There was a time when market hunting ducks on the Chesapeake fell under the loophole of Heritage, but eventually rational minds determined this must be stopped regardless of the cultural implications. Those market hunters adapted to the new order of things and were able to find less destructive sources of income; please do the right thing here and send gill nets the way of the punt guns.
6/3/2019	Michael	Cisneros	NC	1																					
6/3/2019	Thomas	Roller	NC	1					1						1	1	1								This fishery is in dire shape and needs immediate emergency measures to curtail harvest, The sustainable commercial gears, pound nets and gigs, should be given less of a reduction while the unsustainable and dirty large mesh gill fishery should bear the brunt of the reductions and should be entirely closed.



**Appendix 3. Public Comment received via online option on Southern Flounder FMP Amendment 2 (6/4/2019)**

Submission Time	First Name	Last Name	State	Support Am. 2?		Seasonal Closure in 2019					Seasonal Closure Starting in 2020			Do you support additional non-quantifiable measures?				Comments				
				Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits		Fishing Times	Gear Changes	None	No Preference
<b>Totals:</b>				<b>91</b>	<b>150</b>	<b>8</b>	<b>9</b>	<b>34</b>	<b>11</b>	<b>20</b>	<b>7</b>	<b>14</b>	<b>10</b>	<b>39</b>	<b>19</b>	<b>6</b>	<b>59</b>	<b>50</b>	<b>74</b>	<b>5</b>	<b>5</b>	<b>195</b>
Submission Time	First Name	Last Name	State	Yes	No	Option A (31%)	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Option B (52%)	Option C (62%)	Option D (72%)	Option E (Partial moratorium)	No Preference	Trip Limits	Fishing Times	Gear Changes	None	No Preference	Comments

**FOOTNOTES**

- 3 instances of two entries with the same first and last name.
- 3 instances of apparent fake first and last name.
- 6 instances of entries indicating support of amendment 2 but did not pick any options.
- 4 instances of entries with no name, 1 in support and 3 opposed. No additional comments were included.

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North Carolina  
Southern Flounder (*Paralichthys lethostigma*)  
Fishery Management Plan  
Amendment 2

By  
North Carolina Division of Marine Fisheries

North Carolina Department of Environmental Quality  
Division of Marine Fisheries  
3441 Arendell Street  
Post Office Box 769  
Morehead City, NC 28557

June 2019

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Amendment 2 to the N.C. Southern Flounder Fishery Management Plan

Achieving Sustainable Harvest

June 5, 2019

**I. ISSUE**

The issue is to implement management measures to achieve sustainable harvest in the southern flounder fishery to end overfishing by 2021 and rebuild the spawning stock by 2028.

**II. ORIGINATION**

North Carolina Division of Marine Fisheries (NCDMF)

The N.C. Fishery Management Plan Review Schedule, as approved by the North Carolina Marine Fisheries Commission (NCMFC) at its August 2018 meeting, shows the review of the Southern Flounder Fishery Management Plan (FMP) is underway. As part of the review, a coast-wide stock assessment determined the stock is overfished and overfishing is occurring (Lee et al. 2018; Flowers et al. 2019). The NCDMF is proceeding with an amendment to the FMP to meet the statutory requirements to specify a time period not to exceed two years from the date of adoption of the amendment to end overfishing and a time period not to exceed 10 years from the date of adoption of the amendment for achieving a sustainable harvest.

**III. BACKGROUND**

Southern flounder supports one of the largest and most valuable commercial fisheries in North Carolina, accounting for landings of 1.39 million pounds with a dockside value of \$5.66 million in 2017. Pound nets, gill nets, and gigs have accounted for 98% of commercial southern flounder landings in North Carolina for the last 10 years (Figure 1). Historically, North Carolina has accounted for approximately 99% of annual U.S. South Atlantic coast commercial southern flounder landings since 1978 (Figure 2). North Carolina's total commercial removals (landings and dead discards; in pounds) are equivalent to approximately 38.3% of the coast-wide removals of southern flounder for the last 10 years (Figure 3). The commercial landings of southern flounder in North Carolina increased steadily in the mid-1970s, peaked in the mid-1990s at more than 4 million pounds, and have since declined to approximately 1.4 million pounds in 2017 (Figure 4). In 2017, dead discards in the North Carolina southern flounder commercial gill net fishery (the only commercial fishery with discard estimates) were the lowest they had been over the time series of the stock assessment (1989-2017), accounting for 0.3% of North Carolina's total commercial removals in 2017. Dead discards in the North Carolina commercial gill net fishery have steadily been declining from a peak in 1994. The total number of individual participants in the commercial southern flounder fishery during 2017 was 1,048 and has been variable the last 10 years ranging from 945 (2016) to 1,299 (2009). Many of the participants often use multiple gears and will fish multiple gears per trip in order to maximize effort. Commercial trips landing southern flounder have declined since 2008 primarily in the gill net and other gear categories. Pound net trips have been variable and gigs have increased (Table 1). Likewise, the number of participants landing southern flounder has declined since 2008, primarily in the gill net and other gear categories. Gig

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participants have increased and pound net trips have remained relatively constant since 2008 (Table 1).

Southern flounder, or flounder species in general, are one of the most sought-after recreational species in North Carolina. Historically, North Carolina accounted for approximately 21.1% of the total recreational removals (observed harvest and dead discards; in pounds) in the U.S. South Atlantic (Figure 5); in 2017, North Carolina accounted for 29.6% of the recreational removals coast-wide. For the last 10 years (2008-2017), North Carolina's total recreational removals (in pounds) are equivalent to approximately 19% of the total coast-wide removals (Figure 3). Southern flounder are taken by recreational fishers using hook-and-line, gigs, and through the recreational use of commercial gears such as gill nets. In the North Carolina recreational hook-and-line fishery, flounder species have been the most often reported target species in 20 of the last 37 years (Figure 6; Table 2). Species targeted during recreational angling trips are identified through interviews conducted by Marine Recreational Information Program (MRIP) agents.

The recreational harvest of southern flounder exhibits a distinct seasonality concentrated between May and October, whereas commercial harvest is concentrated between September and November (Figure 7; Figure 8). Since 2011, there has been a decrease in recreational harvest of southern flounder in the recreational hook-and-line fishery due, at least in part, from an increase to a 15-inch minimum size limit (Figure 9). Increases in the minimum size limit over time have also resulted in North Carolina having the largest recreational ratio of released to harvested flounder in the U.S. South Atlantic (Figure 10).

Additional information about stock assessments, fishery habitat and water quality considerations, and user conflicts may be found in Amendment 1 to the FMP, the 2018 FMP Review for Southern Flounder, the Coastal Habitat Protection Plan, and the 2018 updated coast-wide stock assessment for southern flounder (NCDMF 2013, 2018a; NCDEQ 2016; Flowers et al. 2019).

### *Amendment 1 Management*

Southern flounder is currently managed under Amendment 1 and Supplement A to Amendment 1 as modified by the Aug. 17, 2017 settlement agreement of the N.C. Southern Flounder FMP (NCDMF 2013, 2017a; Table 3). Actions to achieve sustainable harvest in Amendment 1 included: 1) accepting certain management measures to reduce protected species interactions as the management strategy for achieving sustainable harvest in the commercial southern flounder fishery and 2) increasing the recreational minimum size limit to 15 inches total length (TL) and decreasing the daily creel limit to six fish. Amendment 1 also set new sustainability benchmarks of 25% Spawning Potential Ratio (SPR; threshold) and 35% SPR (target).

The NCMFC took final action on Supplement A to Amendment 1 at its November 2015 business meeting. The NCMFC adopted a suite of management measures with varied effective dates ranging from Jan. 1 through Oct. 16, 2016. Management actions approved included: 1) increasing the commercial minimum size limit to 15 inches TL; 2) increasing the minimum mesh size for gill nets to six inches stretched mesh (ISM) for the harvest of southern flounder; 3) annually closing the commercial gill net and recreational fisheries on Oct. 15; 4) a 38% harvest reduction in commercial pound net harvest based on 2011–2015 average landings; 5) closing the commercial gig fishery once the commercial pound net fishery closes; and 6) increasing the minimum mesh size of escape panels in flounder pound nets to five and three-quarter inches. On Oct. 10, 2016, a

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judge issued a temporary injunction against certain management changes adopted by the NCMFC as part of Supplement A to Amendment 1. The temporary injunction remained in effect until a settlement agreement was reached on Aug. 17, 2017. Per the settlement agreement, only certain provisions of Supplement A remain in place and no new temporary management measures can be implemented until the adoption of the next amendment to the FMP. The management measures that were not implemented under the agreement were the Oct. 15 commercial gill net and recreational closure, the closure of the commercial gig fishery, and the 38% reduction in commercial pound net landings based on 2011–2015 average landings.

The current recreational bag limit of no more than four flounder per person per day is required through the N.C. Fishery Management Plan for Interjurisdictional Fisheries. This was implemented in 2017 to maintain compliance with the Atlantic States Marine Fisheries Commission (ASMFC) Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan Addendum XXVIII.

#### **IV. AMENDMENT 2 GOALS, OBJECTIVES, AND STOCK STATUS**

The goal and objectives for the FMP are as stated below.

##### Goal

Manage the southern flounder fishery to achieve a self-sustaining population that provides sustainable harvest using science-based decision-making processes. The following objectives will be used to achieve this goal.

##### Objectives

1. Implement management strategies within North Carolina and encourage interjurisdictional management strategies that maintain/restore the southern flounder spawning stock with multiple cohorts and adequate abundance to prevent recruitment overfishing.
2. Restore, enhance, and protect habitat and environmental quality necessary to maintain or increase growth, survival, and reproduction of the southern flounder population.
3. Use biological, environmental, habitat, fishery, social, and economic data needed to effectively monitor and manage the southern flounder fishery and its ecosystem impacts.
4. Promote stewardship of the resource through increased public awareness and interjurisdictional cooperation throughout the species' range regarding the status and management of the southern flounder fishery, including practices that minimize bycatch and discard mortality.

##### Stock Assessment

The biological unit stock for southern flounder inhabiting U.S. South Atlantic coastal waters includes waters of North Carolina, South Carolina, Georgia, and the east coast of Florida, and is based on multiple tagging studies (Ross et al. 1982; Monaghan 1996; Schwartz 1997; Craig and Rice 2008), genetic studies (Anderson and Karel 2012; Wang et al. 2015), and an otolith morphology study (Midway et al. 2014), all of which provide evidence of a single unit stock occurring from North Carolina through the east coast of Florida. Based on this life history

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information, a multi-state cooperative group performed a stock assessment to determine the status of southern flounder in U.S. South Atlantic waters.

To address the coast-wide nature of the southern flounder stock, a comprehensive stock assessment approach, using the Age Structured Assessment Program (ASAP) model, was applied to available data from North Carolina through the east coast of Florida to assess the status of the U.S. South Atlantic southern flounder stock from 1989 through 2017 (Flowers et al. 2019). The assessment is based on a forward-projecting, statistical catch-at-age approach using ASAP3 software (version 3.0.17; NOAA Fisheries Toolbox 2014). The model synthesized information from multiple fishery-independent and fishery-dependent data sources, tracked population dynamics, estimated critical demographic and fishery parameters such as fishing mortality ( $F$ ), and thus, provided a comprehensive assessment of southern flounder status in the U.S. South Atlantic. The model estimated overall declining trends in recruitment and female spawning stock biomass (SSB). Recruitment has decreased throughout the time-series from approximately 13 million recruits in 1989 to approximately 4 million recruits in 2017 (Figure 11). The model also predicted a decline in SSB beginning in 2007, which corresponds with an increase in  $F$  beginning in 2007 with a time-series high in 2013 (Figure 12; Figure 13).

The model estimated  $F_{35\%}$  (fishing mortality target) as 0.35 and  $F_{25\%}$  (fishing mortality threshold) as 0.53. Estimated fishing mortality in 2017 was 0.91, which is higher than the  $F$  threshold of 0.53 and indicates overfishing is occurring (Figure 12). The probability the fishing mortality in 2017 was above the threshold value of 0.53 is 96.4%, whereas there is a 100% chance fishing mortality in 2017 was above the target value of 0.35.

Amendment 2 sustainability benchmarks were calculated using projected SSB values modeled using estimates of fishing mortality associated with a SPR 25% (threshold) and SPR 35% (target) instead of using static estimates of SPR as used in Amendment 1. Static SPR estimates only reflect changes in fishing mortality not SSB. The ASAP model estimated a value of 5,452 metric tons (approximately 12.0 million pounds) for  $SSB_{35\%}$  (SSB target) and a value of 3,900 metric tons (approximately 8.6 million pounds) for  $SSB_{25\%}$  (SSB threshold). The estimate of SSB in 2017 is 1,031 metric tons (approximately 2.3 million pounds), which is lower than the SSB threshold of 3,900 metric tons and indicates the stock is overfished (Figure 13). The probability that SSB in 2017 was below the threshold and target value (3,900 and 5,452 metric tons, respectively) is 100%.

## **V. AUTHORITY**

North Carolina General Statutes

G.S. 113-134 RULES

G.S. 113-182 REGULATION OF FISHING AND FISHERIES

G.S. 113-182.1 FISHERY MANAGEMENT PLANS

G.S. 143B-289.52 MARINE FISHERIES COMMISSION – POWERS AND DUTIES

North Carolina Marine Fisheries Commission Rules

15A NCAC 03H .0103 PROCLAMATIONS, GENERAL

15A NCAC 03M .0503 FLOUNDER



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**VI. MANAGEMENT STRATEGIES FOR SUSTAINABLE HARVEST**

The management measures implemented from the original FMP (2005), Amendment 1 (2013), and Supplement A to Amendment 1 as modified by the Aug. 17, 2017 settlement agreement (2017) have not resulted in the necessary decrease in fishing mortality and increase in SSB to end the stock's overfishing or overfished status, thus further reductions are necessary (NCDMF 2005, 2013, 2017a). Management measures will be selected and implemented based on the allowable total removals (landings and dead discards) calculated related to the 2017 fishing mortality estimates of the terminal year of the stock assessment through projections.

Projections for Rebuilding and Reductions

North Carolina General Statute 113-182.1 mandates that fishery management plans shall: 1) specify a time period not to exceed two years from the date of adoption of the plan to end overfishing, 2) specify a time period not to exceed 10 years from the date of adoption of the plan for achieving a sustainable harvest, and 3) must also include a standard of at least 50% probability of achieving sustainable harvest for the fishery. Sustainable harvest is defined in North Carolina General Statute 113-129(14a) as “the amount of fish that can be taken from a fishery on a continuing basis without reducing the stock biomass of the fishery or causing the fishery to become overfished.”

To meet statutory requirements, calculations were made to determine the reductions in total coast-wide removals (all fishery removals from each of the four states) necessary to end overfishing within two years and recover the stock from an overfished status within the 10-year period. To reach the fishing mortality threshold and end overfishing within two years, a 31% reduction in removals is necessary, while a 51% reduction is necessary to reach the fishing mortality target. However, while both reductions are enough to end overfishing in two years, neither are enough to end the overfished status within the 10-year time period (Figure 14).

An additional series of projections was performed to determine the reductions in total coast-wide removals necessary to end the overfished status by reaching the SSB threshold within 10 years and reaching the SSB target within 10 years. Projections were conducted for years 2018–2050 using the AgePro software version 4.2.2 (Brodziak et al. 1998). Four scenarios were performed that would achieve a sustainable harvest:

- 1) Determine F needed to end overfished status (i.e., reach the SSB threshold) within 10 years
- 2) Determine F needed to reach the SSB target within 10 years
- 3) Determine F needed to reach a value between the SSB threshold and target within 10 years
- 4) Determine F as a result of a partial moratorium (as requested by the MFC)

Projections assume all four states implement measures for the reductions required to rebuild SSB. In addition, projections detailing changes in SSB assume the shrimp trawl fleet removals will continue in all scenarios. However, the partial moratorium projection also assumes no removals from the commercial or recreational fisheries, whereas less restrictive scenarios account for the specified volume of removals including harvest and dead discards. These projections provide a mathematically optimistic rebuilding schedule for SSB and are unlikely to be fully achieved given

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the disparity of regulating commercial and recreational gear removals and without comparable management action from the other southeastern states. For further information on the interjurisdictional nature of this species, please see the Interjurisdictional Management section below.

All projections estimate necessary changes to fishing mortality when compared to the terminal year (2017) fishing mortality identified in the stock assessment. In addition, the projections assumed management would start in 2019 and the 10-year rebuilding deadline would be 2028. The projection scenarios are constrained to the current management regulations, including size limits, creel limits, and gear requirements.

Baseline projections were performed to provide guidance on a scenario where fishing continues with no reductions in removals. Under the assumption that fishing mortality continues at recent levels ( $F_{2017}=0.91$ ) and the predicted declining trend in recruitment continues, projections indicate SSB will continue to decline (Figure 15). Other projection scenarios were carried out to determine the fishing mortality and the associated reduction in total removals (from 2017 levels and defined for the purpose of this document as the total pounds from observed harvest and dead discards within a fishery) necessary to end the overfished status (i.e., reach the SSB threshold), to reach the SSB target, and to reach a value between the SSB threshold and target within 10 years (by 2028, assuming management measures begin in 2019). The projections indicate a fishing mortality of 0.34 is needed for the SSB to reach the SSB threshold by 2028 and end the overfished status, as is statutorily required (Figure 16). This will require a 52% reduction in total removals coast wide. To reach the SSB target by 2028, fishing mortality would need to be lowered to 0.18 (Figure 17). This will require a 72% reduction in total removals coast wide. To reach a value of SSB between the threshold and the target, fishing mortality would need to be lowered to 0.26 (Figure 18). This will require a 62% reduction in total removals coast wide. All projections are associated with at least a 50% probability of achieving sustainable harvest for the fishery. These three scenarios for rebuilding SSB meet the statutory requirement to end overfishing in two years.

The Southern Flounder Stock Assessment group has developed allowable harvest levels based on coast-wide reductions (North Carolina to the east coast of Florida) necessary for coast-wide stock rebuilding. However, in developing management measures, the NCDMF has applied the reductions only to North Carolina's portion of total removals through the time series of this assessment.

For the purpose of this document total removals are defined as the total pounds of landed southern flounder plus dead discards. Dead discards are comprised of fish that were dead upon retrieval of gear and not harvested and fish that were released alive that experience delayed mortality. The discard mortality rate for recreationally released southern flounder is 9%, and for commercially released flounder from gill nets is 23% (Lee et al. 2018). Management measures specific to shrimp trawl bycatch were not included here because the estimates of discards and reductions needed could not be broken out by state as the calculations are coast-wide. The current level of discards for shrimp trawls was assumed to continue into the future and was maintained as a fleet when estimating necessary reductions. In addition, when the effects of removing shrimp trawl bycatch were analyzed during sensitivity analyses, they did not have an impact on the model results. The discussion below includes specific management measures that are quantifiable and projected to meet the reduction in southern flounder total removals needed to end overfishing within two years

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and achieve sustainable harvest within 10 years with at least a 50% probability of success as outlined in North Carolina General Statute 113-182.1. *Status quo*, or maintaining current regulations as are, does not meet the necessary reductions to end overfishing or the overfished status within the required time frame. As a result, *status quo* is not an option in Amendment 2.

Several management tools were explored to achieve North Carolina's contribution to sustainable harvest in the southern flounder fishery. Static quota, dynamic quota, slot limits, changes in size limits, and gear changes related to size limit changes, and species-specific management are not considered feasible options to address sustainable harvest in Amendment 2 due to the accelerated timeline and the immediate need to implement management measures to reduce harvest before the fall 2019 fishing season. The projections assume management would start in 2019 and the 10-year rebuilding period would need to be met by 2028; delayed implementation will further increase the magnitude of necessary reductions. Monitoring of static quotas cannot be implemented in a short time frame as they require the Division to develop permits, evaluate the existing quota monitoring system to determine if southern flounder can be included without major revision, determine if additional staff would be necessary to monitor the quota, develop a means to verify reporting requirements, and identify the level of reporting needed (daily, weekly, monthly). In addition to logistics, the quota itself would need to be finalized, accountability measures for both the commercial and recreational fisheries developed, and the NCDMF would also need to determine what percentage of the landed quota would trigger a closure.

Likewise, changes to size limits require additional analyses and updates to the projections as they are based on 2017 regulations (minimum size limits). Analysis is limited by data currently not available (fecundity estimates) to describe the value of varying sizes of southern flounder and their impact to SSB. Additionally, selectivity estimates need to be identified for various scenarios to determine impacts due to size limit changes including slot limits. If the minimum size limit is decreased, then conservation equivalencies need to be discussed with ASMFC to account for potential impacts to the summer flounder fishery. Static quota and the other options mentioned above will be explored in Amendment 3 to the FMP, which is concurrently being developed with the Southern Flounder FMP Advisory Committee.

The NCDMF recognizes the need for quick implementation of management strategies to reduce total removals stemming from the continued overfished and overfishing status of southern flounder that have remained unchanged since 1989 relative to the 2017 thresholds. Therefore, the NCDMF recommends seasonal closures by sector, with additional management options for the commercial sector to include areas and/or gears, as the best short-term management strategy to initiate reductions to address sustainable harvest in 2019 given the status of the southern flounder stock. Additionally, several non-quantifiable management strategies (i.e., trip limits, gear changes) could be considered in conjunction with seasonal closures to help ensure the required reductions are achieved by mitigating probable effort changes due to shortened seasons. Seasonal closures can be implemented in 2019 to reduce fishing mortality and begin stock rebuilding while other management strategies are further developed and considered as part of Amendment 3 offering a more long-term approach. Implementation of season closures in 2019 with adoption of Amendment 2 starts the time period required by statute to end overfishing and rebuild SSB. Management strategies through Amendment 3 would not restart the time requirements but to further meet the mandates of the statutes.

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To account for North Carolina's portion of these reductions in the recreational and commercial fisheries, the percent reduction was applied to the total removals for North Carolina from the terminal year of the assessment, which is 2017 (Figure 19). In 2017, the commercial fishery accounted for 71.8% while the recreational fishery (hook-and-line and gigs) accounted for 28.2% of the total North Carolina removals (Figure 19).

### *Identify Management Areas for the Commercial Fisheries*

Landings data for the southern flounder commercial fishery were reviewed by North Carolina Trip Ticket Program (NCTTP) waterbody locations to determine if natural breaks by area occurred (NCDMF 2017b), thereby allowing the fishery to operate independently within multiple management areas. Areas were investigated by NCTTP waterbody because of the migratory nature of southern flounder; as the fall weather begins to change southern flounder begin to migrate to the south and east then into the ocean. The migration begins in the northern and western sounds and tributaries of the state before it begins in the southern areas. A natural break in effort and landings occurs in several areas across the state; however, three areas appear to provide feasible management area options (Figure 20).

- A “northern” area that includes Albemarle, Currituck, Roanoke, and Croatan sounds and their associated rivers or waters north from a line extending across the 35° 46.3000’N latitude from Oregon Inlet across to mainland Hyde County.
- A “central” area including Pamlico Sound and the Tar-Pamlico, Neuse, Pungo, and Bay rivers and their tributaries north of a line starting at a point on Portsmouth Island 35° 0.0765’ N – 76° 7.4123’ W running westerly to Cedar Island Ferry following the shoreline to a point at Cedar Island Ferry landing 35° 1.1349’ N – 76° 18.7599’ W following Highway 12 to the intersection of Highway 70 to the Core Creek bridge.
- A “southern” area comprising all waters from the line described above south to the South Carolina border; including waters of Cape Lookout Bight.

These three management areas capture the seasonality of the commercial southern flounder fishery while providing each area an opportunity for harvest during a portion of the peak migration periods. Because the recreational fishery is not as reliant on the timing of fall migration for successful harvest by region there was no need to select management areas within the recreational fishery.

### *Identify Seasonal Time Frames*

Landings data for the southern flounder commercial and recreational fisheries were evaluated to determine how landings fluctuate during the year. This helped to identify what time periods would allow for the most productive fishery while meeting the necessary reductions in total removals. As of 2019, commercial harvest of southern flounder is allowed from Jan. 1 through Nov. 30, while recreational harvest can occur all year. Commercial landings remain low through the majority of the first half of the year and begin to increase in late summer and peak in October and early November (Figure 8). These times vary by location and gear but typically landings increase in the Albemarle Sound area (northern) in early September, Pamlico Sound (central) in mid- to late September, and Core Sound and south (southern) by October. One exception is in the southern portion of the state where the commercial gig fishery harvests flounder beginning in early summer.

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Recreational hook-and-line harvest is low in the early months of the year, begins to increase in May and June, and remains high through the summer before dropping off in October (Figure 7). The recreational gig fishery shows a similar pattern in seasonality with a peak in harvest in the summer.

Reducing discards is extremely important for rebuilding the stock and meeting the necessary reductions in total removals. Therefore, significant periods without commercial gear that interact with flounder in the water and without targeted recreational trips will be necessary in order to reduce discards. Identifying time periods when southern flounder harvest is low, and the harvest of other species will not be significantly impacted confounds identifying potential management options. Due to the large volume of landings that occur in the summer and fall along with the necessary reductions required, any fishing season selected will be very short. After reviewing commercial landings data by day, the fall fishery was identified as the most productive portion of the commercial targeted southern flounder fishery. Varying start dates can be selected but landings data show the earlier the start date the earlier the total allowable removals will be harvested. Also, with the earlier start dates, most of the harvest would come from gigs and gill nets, severely limiting harvest from pound nets. Flounder pound nets have a less protracted season and only operate in the fall. To maximize the commercial harvest period and maintain equitability across gears in the commercial fishery, the southern flounder commercial fishery would need to operate somewhere between the first of September and end of November, but the timing may need to account for variation by area or gear.

MRIP harvest data was analyzed by two-week intervals to identify appropriate recreational southern flounder fishing seasons. The recreational fishery peaks in mid-summer so to maximize opportunity and minimize discards harvest should be allowed to occur within a defined window between May and October. A large portion of the recreational harvest occurs in July, so the length of a season will be significantly reduced if that month is included in any selected season. Delaying harvest until August will maximize season length while still overlapping a portion of the peak harvest period.

### *Establish Seasonal Closures by Area for the Commercial Fishery*

North Carolina commercial harvest accounts for 38.3% of total coast-wide removals (71.8% of total North Carolina removals in 2017) (Figure 3; Figure 19). Dead discards are a minor component of the removals and accounted for 0.2% of North Carolina total commercial removals in 2017. To meet the required reductions in total removals, the NCDMF recommends separating the commercial southern flounder fishery into three management areas as described above and reducing the 2017 removals associated within each area by the necessary reduction. Total removals in pounds are comprised of the landings plus estimates of dead discards from the commercial gill net fishery.

Flounder landings reported through the NCTTP are not broken out by species. To determine the commercial landings of each species, it is assumed that all flounder harvested from internal waters are southern flounder, while all flounder taken from the ocean are summer flounder. The NCDMF determined from dependent sampling efforts of commercial fish houses that southern flounder make up less than 1% of the catch from ocean waters, while summer flounder and Gulf flounder account for approximately 2% or less of the total flounder harvested from internal waters (NCDMF unpublished data).

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Once the level of allowable removals by area was calculated, commercial removals that occurred from non-targeted flounder gear such as fyke nets, crab pots, and trawls were compiled. These “other gears” removals comprise approximately 0.6% of the overall total commercial removals. To minimize regulatory burden on the “other gear” fisheries, their removals were set at the 2017 level and subtracted from the allowable harvest. (Table 4) prior to computing the allocation for targeted commercial fisheries of gill net, pound net and gig. Daily harvest values were then summed across various time periods and averaged across a 10-year period to identify dates the fishery could operate and provide the best chance to not exceed the identified level of catch. To maximize opportunity and maintain the fishery during periods when southern flounder are the target species, a start date of Sept. 15 was selected for each area. However, additional options are available (Tables 5, 6, and 7) and will be further considered after review of committees and public comment. To meet the required reductions, it is necessary to remove gears (e.g., anchored large mesh gill nets, flounder pound nets, and large mesh RGCL gill nets) from the water during closed seasons in internal waters where southern flounder discards are likely to occur. Potential exceptions can be allowed for commercial large mesh gill net fisheries that target American and hickory shad and catfish species if these fisheries are only allowed to operate during times of the year and locations where bycatch of southern flounder is unlikely. Any additional discards created during closed periods will negatively impact expected reductions. It is important to note that any selected open season does not take precedent over gill net regulations necessary to maintain compliance through incidental take permits for sea turtles and Atlantic sturgeon, therefore the seasons for gill nets may not be open for the times identified herein if allowable takes for endangered species are reached.

### *Establish Seasonal Closures by Area for the Commercial Fishery to Reduce F to the Overfishing Threshold*

A 31% reduction in total removals is necessary to reduce fishing mortality to the threshold and end overfishing within the required two-year time period. **This does not rebuild the stock to end the overfished status.** The 31% reduction in total removals allows for 965,326 pounds of allowable commercial removals of which 8,416 pounds will be available for non-targeted “other” gears (Table 4). This reduction gives the northern area allowable removals of 224,250 pounds, the central area allowable removals of 480,473 pounds, and the southern area allowable removals of 252,187 pounds (Table 4). With a Sept. 15 start date the northern area will meet their removal level on average by Oct. 26, the central area by Nov. 11, and the southern area by Nov. 25 (Table 5; Figure 21).

### *Establish Seasonal Closures by Area for the Commercial Fishery to Increase SSB to the Threshold*

A 52% reduction in total removals is necessary to allow the SSB to increase to the threshold within the required 10-year time period. The 52% reduction in total removals allows for 671,531 pounds of allowable commercial removals of which 8,416 pounds will be available for non-targeted “other” gears (Table 4). This reduction gives the northern area allowable removals of 155,834 pounds, the central area allowable removals of 332,956 pounds, and the southern area allowable removals of 174,325 pounds (Table 4). With a Sept. 15 start date the northern area will meet their removal level on average by Oct. 17, the central area by Oct. 24, and the southern area by Nov. 15 (Table 5; Figure 21).



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### *Establish Seasonal Closures by Area for the Commercial Fishery to Increase SSB between the Threshold and Target*

A reduction of 62% in total removals will end overfishing and achieve sustainable harvest by rebuilding SSB between the threshold and target within the required 10-year time period. The 62% reduction in total removals allows for 531,629 pounds of allowable commercial removals of which 8,416 pounds will be available for non-targeted “other” gears (Table 4). This reduction gives the northern area allowable removals of 123,255 pounds, the central area allowable removals of 262,710 pounds, and the southern area allowable removals of 137,248 pounds (Table 4). With a Sept. 15 start date the northern area will meet their removal level on average by Oct. 13, the central area by Oct. 17, and the southern area by Nov. 2 (Table 5; Figure 21).

### *Establish Seasonal Closures by Area for the Commercial Fishery to Increase SSB to the Target*

A 72% reduction in total removals is necessary to allow the SSB to increase to the target within the required 10-year time period. The 72% reduction in total removals allows for 391,726 pounds of total removals of which 8,416 pounds will be available for non-targeted “other” gears (Table 4). This reduction gives the northern area allowable removals of 90,675 pounds, the central area allowable removals of 192,464 pounds and the southern area allowable removals of 100,171 pounds (Table 4). With a Sept. 15 start date the northern area will meet their removal level on average by Oct. 6, the central area by Oct. 11, and the southern area by Oct. 20 (Table 5; Figure 21).

### *Establish Seasonal Closure for the Recreational Fishery*

North Carolina recreational harvest accounts for 21.1% of the total recreational coast-wide removals (Figure 5). The recreational fishery accounts for 28.2% of the total removals in North Carolina; 26.0% of the total removals were from recreational harvest and 2.2% from recreational dead discards (Figure 19). In 2017, harvest accounted for 92% and dead discards accounted for 8% of the total North Carolina recreational removals. In the last 10 years, the proportion of dead discards in the total removals for the recreational fishery has been of a similar magnitude. North Carolina represents the largest proportion of southern flounder released by recreational anglers in the South Atlantic (Figure 10). Current regulatory measures have resulted in a ratio of nine discarded fish for every one fish harvested by hook-and line in North Carolina in 2017. Dead discards were identified at a rate of 9% of the recreational releases (discard mortality rate). Applying a weight of 0.21 pounds per released fish results in 37,597 pounds of dead discards for 2017. In 2017, the recreational hook-and-line fishery harvested 451,126 pounds of southern flounder. This added to the dead discards (37,597 pounds) results in 488,723 total pounds of southern flounder removed in the recreational hook-and-line fishery. In addition to the recreational hook-and-line fishery, the recreational gig fishery was examined to identify possible seasons to achieve necessary reductions. Gig harvest accounted for 11% of the total recreational harvest in 2017, with dead discards making up 2.6% of the total gig removals. The recreational gig fishery total removals in 2017 was 57,019 pounds. It is necessary to maintain concurrent seasons for the recreational hook-and-line and gig fisheries to keep from undermining the success of achieving necessary reductions.

Once the level of harvest for each reduction value was identified, catch from the MRIP was analyzed by two-week increments (the finest level of detail available) and summed to determine

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seasonal dates the fishery could operate while meeting the necessary reduction. When the recreational fishery is closed, recreational harvest of flounder in both internal and ocean waters will be unlawful as all flounder species (southern, summer, Gulf, etc.) are currently managed collectively in North Carolina.

*Establish Seasonal Closure for the Recreational Fishery to Reduce F to the Overfishing Threshold*

A reduction of 31% in total removals is necessary to reduce fishing mortality to the threshold and end overfishing within the required two-year time period. **This does not rebuild the stock to end the overfished status.** This equates to a total allowable removal of 337,219 pounds from the recreational hook-and-line fishery. Based on available harvest information seasonal dates that most closely meet the necessary reduction were identified as June 1 through Sept. 15 (Table 6).

Applying a 31% reduction leaves 39,343 pounds of allowable removals for the recreational gig fishery. Conducting the same two-week analysis as the hook-and-line fishery identified a 69% reduction in removals if the gig fishery operates during the same season, June 1 through Sept. 15 (Table 7).

*Establish Seasonal Closure for the Recreational Fishery to Increase SSB to the Threshold*

A reduction of 52% in total removals is necessary to allow the SSB to increase to the threshold within the required 10-year time period. This equates to a total allowable removal of 234,587 pounds from the recreational hook-and-line fishery. Based on available harvest information seasonal dates that most closely meet the necessary reduction were identified as July 16 through Sept. 30 or Aug. 1 through Sept. 30 (Table 6). It should be noted that the July 16 through Sept. 30 season will only result in a 51% reduction for the recreational hook-and-line fishery. This is the closest estimated reduction to the required 52% since MRIP estimates cannot be broken out into less than two-week windows.

Applying a 52% reduction leaves 27,369 pounds of allowable removals for the recreational gig fishery. Conducting the same two-week analysis as the hook-and-line fishery results in a 77% reduction in removals if the gig fishery operates during the July 16 through Sept. 30 season, or an 80% reduction in removals if the gig fishery operates during the Aug. 1 through Sept. 30 season (Table 7).

*Establish Seasonal Closure for the Recreational Fishery to Increase SSB between the Threshold and Target*

A reduction of 62% in total removals will end overfishing and achieve sustainable harvest by rebuilding SSB between the threshold and target within the required 10-year time period. This equates to a total allowable removal of 185,715 pounds from the recreational hook-and-line fishery. Based on available harvest information seasonal dates that most closely meet the necessary reduction were identified as Aug. 1 through Sept. 30 (Table 6).

Applying a 62% reduction leaves 21,667 pounds of allowable removals for the recreational gig fishery. Conducting the same two-week analysis as the hook-and-line fishery results in an 80% reduction in removals if the gig fishery operates during the Aug. 1 through Sept. 30 season (Table 7).

## **DRAFT DOCUMENT SUBJECT TO CHANGE**

### *Establish Seasonal Closure for the Recreational Fishery to Increase SSB to the Target*

A 72% reduction in total removals is necessary to allow the SSB to increase to the target within the required 10-year time period. This equates to a total allowable removal of 136,843 pounds for the recreational hook-and-line fishery. Based on available harvest information a single season from Aug. 16 through Sept. 30 was identified that meets the necessary reduction (Table 6).

Applying a 72% reduction leaves 15,965 pounds to be harvested in the recreational gig fishery. Conducting the same two-week analysis as the hook-and-line fishery identified an 84% reduction in removals if the recreational gig fishery operates during the same season, Aug. 16 through Sept. 30 (Table 7).

### *Establish Seasonal Closure for the Recreational Commercial Gear License (RCGL) Fishery*

Recreational use of limited commercial fishing gears is allowed in North Carolina and is subject to the same reductions as the other recreational and commercial fisheries. Calculating reductions for the RCGL fishery is not possible as collection of RCGL harvest data has not occurred since 2008. Multiple management changes have also occurred since 2008, thus reducing the reliability of the data for estimating reductions for Amendment 2. The use of commercial gears for recreational purposes is also only allowed during an open recreational and commercial fishing season that allows the specific gear, and the user is only allowed harvest that does not exceed the recreational limits. Due to these requirements, the only option available for harvest of flounder using a RCGL is during a period of time when the commercial and recreational fisheries are open simultaneously. Based on the above discussion RCGL gear used for harvesting southern flounder could operate between Sept. 15 and Sept. 30.

### *Establish a Partial Moratorium for the Commercial and Recreational Fisheries*

For Amendment 2 a partial moratorium would prohibit the use of commercial and recreational gears to target southern flounder. In addition, it does not allow for any removals including incidental discards through commercial and recreational gears not targeting southern flounder, but it does allow for removals that occur through the shrimp trawl fleet. Implementation of a partial moratorium on the commercial and recreational fisheries meets the statutory requirements to end overfishing within two years and the overfished status within the 10-year time period. A projection that incorporates both commercial and recreational reductions shows the SSB rebuilding to the threshold by 2023, earlier than any other reduction scenario (Figure 22).

### *Additional Management Strategies*

The recommendation of a seasonal approach presents some concern, as seasons do not enforce a maximum removal level on the fishery and only limit the time when targeted harvest can occur. Seasonal closure concerns include the potential to concentrate fishing effort during the open season, potentially altering fishing behaviors from previous years that were used to estimate harvest windows; that is, fishing effort may increase during the open season and lead to higher than predicted removals. To mitigate these concerns the NCDMF is evaluating additional specific quantifiable and non-quantifiable management measures, to augment the seasonal closures, that may serve to improve the overall southern flounder stock by helping to ensure total removals are reduced and southern flounder SSB and recruitment increase. In other words, incorporating management strategies in addition to seasonal closures may be necessary to make a seasonal

## **DRAFT DOCUMENT SUBJECT TO CHANGE**

closure approach more effective in constraining harvest to the anticipated levels. These additional strategies may not be quantifiable in this amendment but serve the purpose of addressing fishing behavior and changes in effort to minimize the possibility of catching southern flounder in a greater volume than predicted.

These potential additional strategies include items carried over from Amendment 1 and Supplement A as modified by the Aug. 17, 2017 settlement agreement.

### *Amendment 1 Management Carried Forward in Amendment 2*

The following management measures from Amendment 1 and Supplement A to Amendment 1 are incorporated into Amendment 2 upon its adoption.

- From the Southern Flounder FMP Amendment 1:
  - Management measures including limiting the number of fishing days per week and the amount of yardage allowed for large mesh gill nets in various areas of the state;
  - A minimum distance (area dependent) between gill net and pound net sets, per NCMFC Rule 15A NCAC 03J .0103 (d); and
  - A recreational minimum size limit of 15 inches TL.
- From Supplement A to the Southern Flounder FMP Amendment 1, as modified by the Aug. 17, 2017 settlement agreement:
  - A commercial minimum size limit of 15 inches TL;
  - A minimum mesh size of 6.0-ISM to harvest southern flounder from a gill net; and
  - A minimum mesh size of 5.75-ISM for pound net escape panels.

Additionally, the recreational bag limit of no more than four flounder per person per day will be maintained in Amendment 2. This bag limit is required through the N.C. Fishery Management Plan for Interjurisdictional Fisheries to maintain compliance with the ASMFC Summer Flounder, Scup, and Black Sea Bass FMP Addendum XXVIII. It is important to note, the December commercial closure period from Amendment 1 will no longer be in effect, as it will be encompassed by any seasonal closure periods implemented by the adoption of Amendment 2.

In addition to those items described above, the following potential options or strategies may mitigate expansion in effort due to shortened seasons and keep estimates more in line with projections.

### *Non-Quantifiable Harvest Reductions*

There are two categories of management measures: quantifiable and non-quantifiable. “Quantifiable” are those reductions, as discussed in previous sections, that can be measured in terms of the impact they will have on reducing removals of southern flounder. “Non-Quantifiable” measures are those measures that will likely reduce removals, but the magnitude of the impact can only be qualified. This does not mean that non-quantifiable measures are not important to consider in management, they merely are not able to be included in the percent reduction needed to end the overfishing/overfished status as statutorily required. If non-quantifiable measures are implemented, future stock assessments will indirectly reflect their effect on the fishery status along with the impact of the quantifiable measures. These management strategies are intended to help constrain fishing effort in order to ensure required reductions are achieved; these are needed as the

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seasons do not cap total removals as a quota would. Various non-quantifiable management options under consideration include:

- trip limits for the commercial gig and pound net fisheries;
- limiting the number of fishing days per week in the large mesh gill net fishery as a means to control effort in the fishery;
- limiting the fishing times in the large mesh gill net fishery as means to control effort in the fishery;
- yardage reductions; and
- prohibiting the use of picks when removing undersized fish from pound nets.

*Trip Limits*

As of 2019 there are no trips limits in place for the southern flounder commercial fishery. However, as seasons do not create a cap on harvest but only limit harvest to certain time periods, trip limits may enhance the effectiveness of Amendment 2. Trip limits are generally used within the confines of a quota to prevent harvesting the available amount of fish too quickly and to avoid exceeding the quota (overage). In the case of Amendment 2, the proposed seasons are meant to act in a similar capacity as a quota. NCMFC Rule 15A NCAC 03M .0503 allows for the Fisheries Director, by proclamation, to specify the quantity of flounder landed within the flounder fishery. To help ensure the required reductions are achieved, trip limits for pound nets and gigs could be recommended. To calculate the trip limits for the gig and pound net fisheries, average landings for the past 10 years by the areas proposed were reviewed in conjunction with the numbers of trips with landings in increments for each area based on the 10-year average for that fishery.

For the gig fishery, a trip limit in numbers of fish, not pounds, is needed for the restriction to be enforceable. To calculate this, the pounds harvested were converted to numbers of fish based on an average of 2.56 pounds per giggered fish as determined from commercial fish house sampling. Proposed trip limits for the commercial gig and pound net fishery have not been determined at this time, but information is available to identify the volume of trips that remove southern flounder based on various intervals (Table 8; Table 9).

With Amendment 2, trip limits for gill nets to minimize the impacts of additional discards to the total removals in 2019 are not recommended. Trips limits on gill net fisheries create additional discards, as captured fish in excess of a specified trip limit would not be retained but released with an estimated mortality of 23%. There are concerns with trip limits for the pound net fishery, particularly if set too low. Since southern flounder can be held in pound nets, it is possible for fishermen to hold southern flounder until they can be landed. Multiple people can harvest from a single operation in order to land the fish available. If the pound net trip limit is set too low, safety becomes a consideration as well and fisherman may be forced to fish their sets in unfavorable weather conditions; currently, sets are fished on good weather days, not every day.

*Fishing Times*

Pursuant to NCMFC Rule 15A NCAC 03J .0103 the Fisheries Director may, by proclamation, specify the means and methods for setting gill nets. Per proclamation it is unlawful to use gill nets with a stretched mesh length of 4.0 inches through 6.5 inches for daytime sets in Management Units B, D2, and E; only single overnight soaks are permitted where nets may be set no sooner

## **DRAFT DOCUMENT SUBJECT TO CHANGE**

than one hour before sunset and must be retrieved no later than one hour after sunrise the next morning. In Management Units D2 and E, overnight sets are allowed five out of seven days; in Management Unit B four out of seven days. Proclamation limits Management Unit A, sub unit A1 to single overnight soaks four out of seven days. The remainder of Management Unit A, which includes Albemarle Sound and its tributaries, as well as the Neuse and Tar/Pamlico rivers are currently exempt from prohibitions on the setting of gill nets and are required to actively fish net sets at least once during a 24-hour period no later than 12 noon each day. One recommendation to help ensure required reductions are achieved could be for gill nets set in the Albemarle Sound and its tributaries as well as the Neuse and Tar/Pamlico rivers to also be reduced to single overnight soaks where nets may be set no sooner than one hour before sunset and must be retrieved no later than one hour after sunrise the next morning. The number of allowable fishing days in these areas, unless otherwise stated in proclamation, could be reduced to setting Sunday night through Thursday night (five out of seven days). Changes to fishing times would bring consistency between soak times across areas of the state and limit potential discards.

### *Gear Changes*

#### Gill Nets

Pursuant to NCMFC Rule 15A NCAC 03J .0103 the Fisheries Director may, by proclamation, specify the net number and length for setting gill nets. Per proclamation it is unlawful to use large mesh gill nets more than 2,000 yards in length in Management Units A, B and C, and more than 1,000 yards in length in Management Units D1, D2 and E. Table 10 provides the average yards of large mesh gill nets fished by Management Unit for 2016-2017. These values were calculated from observer trips and responses from fishermen during fish house sampling. One recommendation to help ensure required reductions are achieved could be to further reduce the maximum yardage allowed, which could prevent fishermen from increasing the total length of large mesh gill nets set to offset the proposed shortened seasons.

#### Pound Nets

The use of puncturing devices (including fish picks, gaffs, gigs, and spears) could be prohibited when removing undersized flounder from a pound net. This would minimize additional discards to the total removals.

### *Socioeconomic Impacts to the Southern Flounder Commercial and Recreational Fisheries*

North Carolina General Statute 113-182.1(b)(1) stipulates fishery management plans will include information about the social and economic impact of the fishery to the state. Despite the negative connotation of the term “impact”, it includes benefits of the fishery as well as costs. The socio-economic information presented is about the current fishery and is not intended to be used to predict potential impacts from management changes. However, this and other information pertaining to fishery management plans is included to help inform decision-makers regarding the long-term viability of the state’s commercially and recreationally significant species or fisheries.

IMPLAN economic impact modeling software is used to generate an input-output model of economic impacts associated with recreational southern flounder fishing (IMPLAN Group, LLC. 2013. IMPLAN System, Version 3.1.1001.2. Huntersville, NC. [www.implan.com](http://www.implan.com).) Input-output modelling and analysis provide a means to examine inter-industry relationships within an economy



## **DRAFT DOCUMENT SUBJECT TO CHANGE**

and relationships between businesses and final consumers. IMPLAN is a regional input-output modeling system consisting of regional data bases and trade flow data. IMPLAN is used by several state agencies, universities and federal agencies, including the U.S. Forest Service, National Oceanic and Atmospheric Administration (NOAA) Fisheries, the U.S. Army Corps of Engineers, the National Park Service, and the Bureau of Land Management. Expenditure estimates are input into the appropriate industry sector and the model generates estimates for three types of impacts: employment, income, and output. Output is the gross sales impact from businesses within the economic region affected by an activity. Labor income impacts include personal income (wages and salaries) and proprietors generated as a result of the economic activity in a target area. Employment impacts are the estimated jobs generated from said economic activity.

Quantifying the potential economic impacts to the commercial and recreational fisheries has several uncertainties discussed below, and the commercial and recreational impact estimates cannot be directly compared due to how they are calculated. For a detailed explanation of the methodology used to estimate the economic impacts please refer to the NCDMF's License and Statistics Section Annual Report (NCDMF 2018b). Each model is estimated using the best available data to capture economic activity in each sector. However, the data and the activity being captured in each sector are not the same. The commercial fishing sector is a predefined industry in IMPLAN that can be custom tailored based on NCTTP data. It is a straightforward impact assessment because it is a single industry demand change based on the ex-vessel value of landings. IMPLAN's multipliers and inter-industry transactional data are well defined for this industry. The recreational sector does not have a defined single industry within IMPLAN. Recreational angling economic activity is measured through expenditures in a variety of industries. Angler trip expenditures (fuel, bait, ice, food, lodging, etc.) occur across a variety of industries. The recreational impact model in its nature is of larger magnitude than the commercial aspect because it is describing spending changes in a greater variety of industries. Commercial fishing is driven by inter-industry (indirect) transactions, where recreational fishing is driven by induced household spending. Typically induced impact magnitudes are higher by nature especially in rural areas because of the natural way industries are located. Household demand for lower order goods can be met with relative ease in rural areas but inputs are typically imported.

### *Commercial Impacts*

The economic impact estimates presented represent those of commercial southern flounder harvesters, dealers, and processors and are calculated via the NCDMF commercial fishing economic impact model. The model now includes contributions from wholesalers, distributors, and retailers as sourced from NOAA's most recent Fisheries Economics of the U.S. These estimates are a product of IMPLAN economic impact modeling software customized with data from the NCTTP used as the primary inputs. Output is the gross sales impact from businesses within the economic region affected by an activity. Labor income impacts include personal income (wages and salaries) and proprietors generated because of the economic activity in a target area. Employment impacts are the estimated jobs generated from said economic activity (Table 11).

Due to the reductions in landings that are required, the commercial fishery will likely see a reduction in ex-vessel value of the fishery. Decreased supply of the commercial fishery will likely cause an acute jump in the average ex-vessel price per pound. Past landings and value have fluctuated widely. Ex-vessel prices fluctuate frequently and are often influenced by other substitute

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fisheries such as the summer flounder fishery. Southern flounder have exhibited a relatively flexible price elasticity of supply; meaning that a change in the price results in a bigger proportional change in supply. The management options presented here do not propose to explicitly remove participants in the fishery moving forward, although the potential for decreased profitability from reduced landings may cause some to exit the fishery.

### *Recreational Impacts*

The economic impact estimates presented for southern flounder recreational fishing represent the economic activity generated from trip expenditures. These estimates are a product of annual trip estimations originating from the NOAA Fisheries MRIP effort data by area and by mode (i.e., shore, for-hire, private/rental vessel, and man-made), and trip expenditure estimates from the NCDMF economics program biennial socioeconomic survey of Coastal Recreational Fishing License holders (Dumas et al. 2009; Crosson 2010; Hadley 2012; Stemle and Condon 2018). Estimates for trips by charter fishing also include average charter fees and tips paid per trip, and pier trips include average pier admission costs.

Table 12 shows the economic impacts associated with recreational southern flounder fishing in North Carolina from 2009-2017. Over the past 10 years recreational trips targeting flounder have been declining slightly, approximately 3% on average every year. In turn, recreational trip expenditures and overall economic impacts have been declining slightly as well. The top industries impacted by recreational southern flounder fishing in terms of output sales and employment are retail gasoline stores, retail sporting goods stores, retail food and beverage stores, real estate, and wholesale trade businesses. It should be noted that not included in these estimates, but often presented in NCDMF overall recreational impacts models, are the durable good impacts from economic activity associated with the consumption of durable goods (e.g., rods and reels, other fishing related equipment, boats, vehicles, and second homes). Durable goods represent goods that have multi-year life spans and are not immediately consumable. Most equipment related to fishing is considered durable goods. However, the durable good expense of anglers for a given species cannot be estimated. Durable goods expenses and impacts are estimated on an annual basis and serve to supplement angler expenditures outside of trip-based estimates.

The value of the economic impacts from the recreational fishery stem from directed southern flounder trips as well as trips that caught or harvested southern flounder. Trips that caught southern flounder that were not targeted trips are likely to remain at the same level, as flounder will still be available to catch and release during these trips. However, it is expected the total directed trips will likely be reduced if a season is implemented. This will reduce the overall expenditures anglers make annually pursuing southern flounder fishing, and in turn will reduce the economic impacts generated from those expenditures. It is difficult to determine the magnitude of potential losses to angler trips and the associated economic impacts. The NCDMF currently lacks data used in choice experiment methodologies which would enable modelling of predictive behavior of anglers in response to stated management actions. Anglers may choose to target another fishery more than not to fish all together. However, if management actions are successful, the stock would be rebuilt for long-term sustainable use. While there are acute economic costs for the proposed management actions for southern flounder, action is needed to rebuild and improve the fishery to ensure the long-term viability of the stock. Short-term economic costs are expected to be mitigated by the long-term sustainability of the fishery yielding positive economic returns into the fishery overall.

## **DRAFT DOCUMENT SUBJECT TO CHANGE**

### *Interjurisdictional Management*

While Amendment 2 will not impact other states' removals, it is important to describe the complexity of southern flounder management with regards to the continued cooperation among the state agencies involved with the stock assessment and the willingness of all states to enact management measures to rebuild the stock within their respective jurisdictional boundaries. There is currently no formal agreement in place requiring cooperation among the participating agencies on this particular stock and as a result, each South Atlantic state manages southern flounder in their own waters. Most other coast-wide stocks are managed by a larger governing body, such as the ASMFC or the South Atlantic Fishery Management Council, where states have common vested interests. The identified reductions to North Carolina's southern flounder total removals alone are likely not enough to rebuild the coast-wide stock without cooperation from the other states. In addition, future updates of this coast-wide stock assessment to monitor trends post-management changes hinge on cooperation among these partners. Discussions have taken place to continue cooperation and the NCDMF is spearheading efforts to further build collaborative relationships with these partners to ensure management of the stock provides for the best chance of recovery and sustainability. At an April 1, 2019 meeting with division directors and other representatives from all four states, the directors agreed to create a working group to continue informal collaboration to work towards coast-wide reductions within the constraints of each individual state management system.

An additional component to this complex jurisdictional situation is how requirements from the ASMFC Summer Flounder, Scup, and Black Sea Bass FMP will harmonize with certain southern flounder management strategies because of the overlap in management of the flounder species. It is possible that with certain management strategies (i.e., size limit changes), North Carolina may have to apply for conservation equivalency measures for summer flounder in order to not be found out of compliance with current interstate regulations.

### *Current Regulations by State*

#### North Carolina

North Carolina's commercial flounder fishery is subject to a 15-inch TL minimum size limit in internal waters and a 14-inch TL minimum size limit in ocean waters. There is a statewide closure in internal waters from Dec. 1 through Dec. 30. All flounder pound nets are required to use escapement panels of at least 5.75-ISM. In internal waters, the use of gill nets with a stretch mesh length less than 6.0 inches is prohibited for harvesting flounder. In all estuarine areas (except Pamlico, Pungo, Bay, and Neuse rivers and the Albemarle Sound Management Area), use of large mesh gill nets is limited to four nights per week and 2,000 yards, except south of Shackleford Banks and south of the Highway 58 Bridge to the South Carolina border; this gear is allowed five nights per week with a maximum of 1,000 yards. All other areas are limited to 2,000 yards of large mesh gill net. Additionally, the gill net fishery is subject to closures and other gear restrictions by Management Unit based on interactions with sea turtles and Atlantic sturgeon, which are managed through incidental take permits issued by NOAA Fisheries under the Endangered Species Act. In crab trawls, a minimum tailbag mesh size of 4-ISM is required in western Pamlico Sound to minimize bycatch of undersized southern flounder.

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Current regulations for the recreational flounder fishery include a 15-inch TL minimum size limit in internal and ocean waters, a four-fish per person per day daily creel limit, and no closed season.

South Carolina

Regulations for the South Carolina flounder fishery in 2017 (*Paralichthys* spp.) include a 15-inch TL minimum size limit and a 10 flounder per person per day bag limit, not to exceed 20 flounder per boat per day. Bag limit and minimum size limits are applicable to both hook-and-line and gig fisheries in the state. It is unlawful to gig flounder in salt water during daylight hours (excluding spearfishing). Commercial gill netting for flounder is only permitted in the Little River Inlet, a small estuary in the north of the state (no more than one hundred yards in length with a mesh size no smaller than 3.0-ISM and up to 5.5-ISM; must be attended within 500 feet).

Georgia

Current regulations for the commercial and recreational flounder fishery in Georgia include a 12-inch TL minimum size limit and a 15-fish daily bag limit. Gill nets are prohibited except for landing shad.

Florida

Current regulations for the commercial and recreational flounder fishery in Florida include a 12-inch TL minimum size limit, daily recreational bag limit of 10 fish, and harvest is limited to the use of hook-and-line, cast net, beach seine, and gigs.

Historical regulation histories for each state can be found in Lee et al. 2018.

**VII. PROPOSED MANAGEMENT OPTIONS**

(+ Potential positive impact of action)

(- Potential negative impact of action)

The following positive and negative impacts apply to all options; specific impacts are listed with each option.

- + May increase abundance of mature females to help rebuild SSB
- + Necessary reductions come from both commercial and recreational southern flounder fisheries
- + No rule changes required
- Decreased harvest may result in economic loss to the fishery

Commercial Fishery

A. *Establish Seasonal Closures by Area for the Commercial Fishery to Reduce F to the Overfishing Threshold (31% reduction)*

- + Projected to meet the reduction needed for the commercial fishery to end overfishing, per statutory requirements
- + Season allows for equitability among gears
- Possible increase in effort due to shortened season creating a “derby fishery”

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- Will not meet the reduction in the commercial fishery needed to achieve a level of SSB for sustainable harvest within the 10-year time period, failing to meet statutory requirements
- B. *Establish Seasonal Closures by Area for the Commercial Fishery to Reduce F and Allow the SSB to Rebuild to the Threshold (52% reduction)*
- + Projected to meet the reduction needed for the commercial fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the commercial fishery needed to achieve a level of SSB equal to or greater than the threshold, per statutory requirements
  - + Season allows for equitability among gears
  - Possible increase in effort due to shortened season creating a “derby fishery”
- C. *Establish Seasonal Closures by Area for the Commercial Fishery to Increase SSB between the Threshold and Target (62% reduction)*
- + Projected to meet the reduction needed for the commercial fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the commercial fishery needed to achieve a level of SSB between the threshold and target, per statutory requirements
  - + Projections show rebuilding occurring more quickly than the minimum reduction and this increases the probability of reaching the threshold
  - + Season allows for equitability among gears
  - Possible increase in effort due to shortened season creating a “derby fishery”
- D. *Establish Seasonal Closures by Area for the Commercial Fishery to Reduce F and Allow the SSB to Rebuild to the Target (72% reduction)*
- + Projected to meet the reduction needed for the commercial fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the commercial fishery needed to achieve a level of SSB equal to the target, per statutory requirements
  - + Projections show rebuilding occurring more quickly than the minimum reduction and this increases the probability of reaching the threshold
  - + Season allows for equitability among gears
  - Possible increase in effort due to shortened season creating a “derby fishery”
- E. *Establish a Partial Moratorium for the Commercial and Recreational Fisheries*
- + Projected to meet the reduction needed for the commercial fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the commercial fishery needed to achieve a level of SSB equal to the target, per statutory requirements
  - + Projections show rebuilding occurring more quickly than the minimum reduction and this increases the probability of reaching the threshold
  - + Prioritizes stock rebuilding
  - Discards due to incidental catch when targeting other species

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Recreational Fishery

- A. *Establish a Seasonal Closure for the Recreational Fishery to reduce F to the Overfishing Threshold (31% reduction)*
  - + Projected to meet the reduction needed for the recreational fishery to end overfishing, per statutory requirements
  - Will not meet the reduction in the recreational fishery needed to achieve a level of SSB for sustainable harvest within the 10-year time period, failing to meet statutory requirements
  - Discards due to incidental catch when targeting other species
- B. *Establish a Seasonal Closure for the Recreational Fishery to Reduce F and Allow the SSB to Rebuild to the Threshold (52% reduction)*
  - + Projected to meet the reduction needed for the recreational fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the recreational fishery needed to achieve a level of SSB equal to or greater than the threshold, per statutory requirements
  - Discards due to incidental catch when targeting other species
- C. *Establish a Seasonal Closure for the Recreational Fishery to Increase SSB between the Threshold and Target (62% reduction)*
  - + Projected to meet the reduction needed for the recreational fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the recreational fishery needed to achieve a level of SSB between the threshold and target, per statutory requirements
  - + Projections show rebuilding occurring more quickly than the minimum reduction and this increases the probability of reaching the threshold
  - Discards due to incidental catch when targeting other species
- D. *Establish a Seasonal closure for the Recreational Fishery to Reduce F and Allow the SSB to Rebuild to the Target (72% reduction)*
  - + Projected to meet the reduction needed for the recreational fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the recreational fishery needed to achieve a level of SSB equal to the target, per statutory requirements
  - + Projections show rebuilding occurring more quickly than the minimum reduction and this increases the probability of reaching the threshold
  - Discards due to incidental catch when targeting other species
- E. *Establish a Partial Moratorium for the Commercial and Recreational Fisheries*
  - + Projected to meet the reduction needed for the recreational fishery to end overfishing, per statutory requirements
  - + Projected to meet the reduction for the recreational fishery needed to achieve a level of SSB equal to the target, per statutory requirements
  - + Projections show rebuilding occurring more quickly than the minimum reduction and this increases the probability of reaching the threshold



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- + Prioritizes stock rebuilding
- Discards due to incidental catch when targeting other species

Additional Management Options: Non-Quantifiable Harvest Restrictions

A. *Trip Limits*

- i. Limiting numbers per trip for the commercial gig fishery
- ii. Limiting pounds per trip for the commercial pound net fishery
  - + May ensure required reductions are achieved and alleviate concerns of a “derby fishery”
  - Some fisheries impacted more than others
  - Potential issue with enforceability for large volume pound net fishery

B. *Limiting Days per Week Allowed in the Neuse, Tar/Pamlico Rivers and the Albemarle Sound Areas that have Previously been Exempt*

- + May ensure required reductions are achieved
- + Reduce gear in the water
- + Consistency between harvest days across areas of the state
- + Limit the amount of potential discards
- Some regions impacted more than others

C. *Limiting Fishing Times Allowed in the Neuse, Tar/Pamlico Rivers and the Albemarle Sound Areas that have Previously been Exempt*

- + May ensure required reductions are achieved
- + Reduce gear in the water
- + Consistency between soak times across areas of the state
- + Limit the amount of potential discards
- Some regions impacted more than others

D. *Gear Modifications*

- i. Prohibiting the use of picks, gaffs, gigs, and spears when removing flounder from pound nets
- ii. Reducing the maximum yardage allowed in the large mesh gill net fishery
  - + May ensure required reductions are achieved
  - + Reduce gear in the water
  - + Prevent expansion of gear
  - + Limit the amount of potential discards
  - Some regions impacted more than others

**VIII. RECOMMENDATION**

*NCDMF Recommendation*

*Management Carried Forward*

Under the NCDMF recommendation, the following management measures from Amendment 1 and Supplement A to Amendment 1 will be incorporated into Amendment 2 management upon its adoption.

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- From the Southern Flounder FMP Amendment 1:
  - Management measures limiting the number of fishing days per week and the amount of yardage allowed for large mesh gill nets in various areas of the state;
  - A minimum distance (area dependent) between gill net and pound net sets, per NCMFC Rule 15A NCAC 03J .0103 (d); and
  - A recreational minimum size limit of 15 inches TL.
- From Supplement A to the Southern Flounder FMP Amendment 1, as modified by the Aug. 17, 2017 settlement agreement:
  - A commercial minimum size limit of 15 inches TL;
  - A minimum mesh size of 6.0-ISM to harvest southern flounder from a gill net; and
  - A minimum mesh size of 5.75-ISM stretched mesh for pound net escape panels.

Additionally, the recreational bag limit of no more than four flounder per person per day will be maintained in Amendment 2. This bag limit is required through the N.C. FMP for Interjurisdictional Fisheries to maintain compliance with the ASMFC Summer Flounder, Scup, and Black Sea Bass FMP Addendum XXVIII. It is important to note that the December commercial closure period from Amendment 1 will no longer in effect, as it will be encompassed by the seasonal closure periods implemented by the adoption of Amendment 2.

### *Amendment 2 Management Strategy*

In concurrence with the incorporated actions from Amendment 1 and Supplement A to Amendment 1 as modified by the Aug. 17, 2017 settlement agreement, the N.C. Department of Environmental Quality and the NCDMF recommend a management strategy be implemented in Amendment 2 to reduce fishing mortality in the commercial and recreational fisheries to a level that ends overfishing within two years and allows the SSB to increase between the threshold and the target within 10 years via a 62% reduction ( $F=0.26$ ) in total removals in 2019 and beginning in 2020, via a 72% reduction ( $F=0.18$ ) in total removals (Figure 23).

### *Adoption of Amendment 2 Includes Continued Development of Amendment 3*

Implementation of the management strategy recommended in Amendment 2 is deemed critical to successful rebuilding of the southern flounder stock, so management actions can be implemented during the 2019 calendar year and reducing harvest is not delayed while more comprehensive strategies are developed for Amendment 3. The N.C. Department of Environmental Quality and the NCDMF recommendation includes that the adoption of Amendment 2 authorizes concurrent development of Amendment 3 and more robust management strategies. Amendment 3 will be completed as quickly as possible with the ongoing contributions of the existing FMP committee appointees. This will best serve to assist the NCDMF in development of Amendment 3, by building on the knowledge, expertise, and cooperation already underway and continue the work uninterrupted from meetings that began in January 2018.

### *Amendment 2 Management Recommendations*

Management measures to implement the strategy from Amendment 2 include:

- The commercial harvest season will close by proclamation immediately following the August 2019 MFC meeting, the division will establish three commercial

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southern flounder management areas with open flounder harvest seasons during 2019 as follows:

- Northern – Sept. 15 through Oct. 13;
- Central – Sept. 15 through Oct. 17; and
- Southern – Sept. 15 through Nov. 2.
- Note: Monitoring, reporting, and closure requirements identified through the NCDMF’s sea turtle and Atlantic sturgeon incidental take permits will remain in effect and may impact dates identified.
- The recreational hook-and-line and gig flounder harvest season will close by proclamation immediately following the August 2019 MFC meeting and will not re-open until the identified season in 2020.
- Upon the closure of the recreational hook-and-line flounder harvest season, the RCGL large mesh gill net flounder harvest season will also close as the recreational and commercial seasons must both be open to allow this gear.
- Beginning in 2020, continue use of the three commercial southern flounder management areas with open flounder harvest seasons as follows:
  - Northern – Sept. 15 through Oct. 6;
  - Central – Sept 15 through Oct. 11; and
  - Southern – Sept 15 through Oct. 20.
  - Note: Monitoring, reporting, and closure requirements identified through the NCDMF’s sea turtle and Atlantic sturgeon incidental take permits will remain in effect and may impact dates identified.
- Allow an Aug. 16 through Sept. 30 recreational hook-and-line and gig fishery;
- Allow RCGL large mesh gill nets to operate from Sept. 15 through Sept. 30.

Additionally, it is necessary to remove all commercial gears targeting southern flounder from the water (e.g., commercial and RCGL anchored large mesh gill nets and gigs) or make them inoperable (flounder pound nets) in areas and during times outside of the seasons implemented. This is important, as any additional dead discards will negatively impact expected reductions in discards during periods not open for southern flounder harvest and further delay rebuilding of the stock.

Exceptions will be allowed for commercial large mesh gill net fisheries that target American and hickory shad and catfish species if these fisheries are only allowed to operate during times of the year and locations where bycatch of southern flounder is unlikely.

The NCDMF recommendation also addresses possession of southern flounder during closed seasons. During the recommended closed recreational season, it will be unlawful to possess flounder in internal and ocean waters.

During the recommended closed commercial season, it will be unlawful to possess flounder harvested from the internal waters of the state. With adoption of Amendment 2, it will also be unlawful to use any method of retrieving live flounder from pound nets that cause injury to released fish (no picks, gigs, spears, etc.).

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Additionally, to minimize the likelihood of creating derby fisheries and to make a seasonal closure more effective in constraining harvest to the anticipated levels, the NCDMF also recommends the following:

- reduce commercial anchored large-mesh gill net soak times to single overnight soaks where nets may be set no sooner than one hour before sunset and must be retrieved no later than one hour after sunrise the next morning in the Neuse, Tar/Pamlico rivers and the Albemarle Sound areas that have previously been exempt; and
- reduce the maximum yardage allowed in the commercial anchored large-mesh gill net fishery by 25% for each Management Unit; allowing a maximum of 1,500-yards in Management Units A, B, and C, and a maximum of 750-yards in Management Units D and E unless more restrictive yardage is specified through adaptive management through the sea turtle or sturgeon Incidental Take Permits (ITP).

The N.C. Department of Environmental Quality and the NCDMF recognize that these reductions are significant but necessary to increase the probability of successfully rebuilding this important recreational and commercial resource. The department and the NCDMF recommend a 62% reduction in 2019 and a 72% reduction beginning in 2020 for the following reasons:

- The projections were made with the assumptions that each state that participated in the coast-wide stock assessment would implement measures for the necessary reductions required to rebuild SSB. There are uncertainties surrounding the other states with implementing cooperative management and the timing of regulations if implemented.
- With the ability to be implemented in 2019, seasonal closures by area provide the best short-term management tool available. It is important to act quickly for the immediate benefit of the stock but not to such a degree that fisheries are eliminated.
- It is best for the resource in the short-term by significantly decreasing fishing pressure and allowing a greater abundance of spawning stock to emigrate to the ocean to spawn, which will ultimately enhance the likelihood of stock rebuilding. The proposed seasonal closures are based on past removals and behavior and assume effort will be consistent with what has been observed in the past. Compared to quotas, seasonal closures do not place a maximum removal level on the fishery, but simply limit the time when targeted harvest can occur. Seasonal closures do present some concerns such as the potential to concentrate fishing effort during the open season, potentially altering fishing behaviors from previous years that were used to estimate harvest windows; that is, fishing effort may increase during the open season and lead to higher than predicted removals.
- The lack of rebuilding success related to management implemented from the original FMP (2005), Amendment 1 (2013), and Supplement A to Amendment 1 as modified by the Aug. 17, 2017 settlement agreement (2017) has not resulted in the necessary increase in SSB to end the stock's overfished status, thus further reductions are necessary.

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Harvest of southern flounder has already been occurring during 2019 and the seasonal closures cannot be implemented until the adoption of Amendment 2. Upon adoption of Amendment 2 the director will issue a proclamation immediately closing southern flounder harvest. The director will then issue a proclamation to open the harvest season for southern flounder consistent with the MFC selected management strategy. The NCDMF will review advisory committee and public comment prior to selecting seasons to be recommended. Seasons will still allow for some reductions and increased escapement in 2019. In 2020, reductions will more likely be realized in full, as management measures will already be in place at the start of the calendar year.

Advisory Committee Recommendations (Refer to Table 13 for a comparison of recommendations)

*Southern Flounder FMP Advisory Committee*

The Southern Flounder FMP Advisory Committee recommends that starting Jan. 1, 2019 a 52% reduction ( $F=0.34$ ) be adopted with the following changes for the commercial fishery, calculated for the Northern, Central, and Southern areas:

- 40% reduction for the pound net fishery, with a start date of Sept. 15:  
Northern – Sept. 15 through Oct. 28;  
Central – Sept. 15 through Nov. 2; and  
Southern – Sept. 15 through Nov. 3.
- 40% reduction for the gig fishery, with a start date of April 1:  
Northern – April 1 through Oct. 24;  
Central – April 1 through Nov. 11; and  
Southern – April 1 through Aug. 25.
- For the large mesh gill net fishery, a reduction to make up the difference to yield a 52% reduction for the commercial fishery overall, with a start date of Sept. 15, recognizing that the NCDMF proposal for the RCGL large mesh gill net season of Sept. 15-Sept. 30 may be changed by this final percent reduction.

The percent reduction for the large mesh gill net fishery, based on the Southern Flounder FMP Advisory Committee recommendation, would be approximately 71% compared to the 2017 removals. This reduction to the large mesh gill net fishery is equal to 162,770 pounds in total removals. A start date of Sept. 15 results in the following seasons:

- Northern – Sept. 15 through Oct. 12;
- Central – Sept. 15 through Oct. 5; and
- Southern – Sept. 15 through Oct. 21.

The committee recommendation also includes that management measures from Amendment 1 and Supplement A to Amendment 1, as stated above in the NCDMF recommendation, be carried forward. The recommendation also maintains regulations from the ASMFC Summer Flounder, Black Sea Bass, and Scup Addendum XXVIII for recreational size and bag limit for flounder and approves the continued development of Amendment 3.

In addition, the committee recommends prohibiting the use picks, gaffs, gigs, and spears when removing flounder from pound nets. As of Jan. 1, 2020, the committee also recommends

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implementing a 1,500-yard limit for large mesh gill nets in Management Unit A, a 1,000-yard limit for large mesh gill nets in Management Units B and C, and a 750-yard limit for large mesh gill nets in Management Units D and E.

Finally, the committee recommends a 52% reduction be applied to the recreational fisheries. The season for the recreational hook-and-line and gill fisheries will be July 16 through Sept. 30.

After analysis of the Southern Flounder FMP Advisory Committee recommendation, the NCDMF determined the recommendation meets the statutory requirement of ending overfishing within two years. The recommendation also meets the statutory requirement of ending the overfished status within the required 10-year time period.

*Southern Advisory Committee*

The Southern Advisory Committee met on June 3, 2019 and failed to reach consensus on a recommendation for draft Amendment 2.

*Northern Advisory Committee*

The Northern Advisory Committee met on June 3, 2019 and passed a motion supporting the NCDMF recommendation of the 62% reduction in 2019 and 72% percent reduction from 2020 forward to include management carried forward from Amendment 1 and Supplement A to Amendment 1, maintaining the size and bag limits established by the ASMFC Summer Flounder, Black Sea Bass, and Scup Addendum XXVII, and the continued development of Amendment 3. In addition, the Northern AC passed a motion asking the MFC to consider dividing the allowable days for gill netting amongst allowable fishing months for a given area due to the Sea Turtle ITP.

*Finfish Advisory Committee*

The Finfish Advisory Committee met on June 3, 2019 and recommended a reduced harvest of 52%, not to exceed 52%, until Amendment 3 is completed. This recommendation includes management carried forward from Amendment 1 and Supplement A to Amendment 1, maintaining the size and bag limits established by the ASMFC Summer Flounder, Black Sea Bass, and Scup Addendum XXVII, and the continued development of Amendment 3. The committee also recommended that the MFC ask the Secretary of DEQ to allow the Director of DMF to go out of compliance with ASMFC Summer Flounder Plan and adopt a 12-inch size limit and a 4-fish bag limit for southern flounder in North Carolina waters. The committee also requested the Southern Flounder AC look at a moratorium on all southern flounder harvest from Nov. 1, 2019 to Sept 1, 2022.

*MFC Selected Management Strategy*



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**X. TABLES**

**Table 1.** Number of Commercial Trips and Participants that landed southern flounder by gear, 2008-2017.

Year	Trips				Participants			
	Gear				Gear			
	Gigs	Gill Net	Other	Pound Net	Gigs	Gill Net	Other	Pound Net
2008	1,459	23,493	2,510	1,508	140	924	413	83
2009	1,450	23,691	2,510	1,746	143	992	426	85
2010	2,283	15,134	1,384	1,610	226	837	329	84
2011	2,076	11,403	963	1,370	212	759	250	63
2012	3,001	14,713	1,462	1,754	288	855	291	84
2013	2,408	16,968	2,094	2,111	270	933	343	82
2014	2,655	11,778	1,887	1,806	316	799	373	88
2015	2,616	8,465	1,002	1,803	307	674	249	81
2016	2,657	8,422	838	1,423	323	591	227	77
2017	2,752	12,363	943	1,908	310	713	237	88
Average	2,336	14,643	1,559	1,704	254	808	314	82

Note: Participants often participate using multiple gears and fish multiple gears per trip, individuals and trips may be duplicated across gears.

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**Table 2.** Top five ranked species that are reported targeted in the North Carolina recreational hook-and-line fishery, 1981-2017. Top rank for each year is in **bold**. (Source: Marine Recreational Information Program).

Species	Trip Year																		
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Flounder	3	<b>1</b>	2	2	2	2	3	4	4	2	2	2	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
Bluefish	<b>1</b>	2	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	2	2	4	2	2	2	5
Red Drum	4	4	3	4	4	5	4	3	3	4	4	4	3	3	3	5	5	3	2
Spanish Mackerel	5	5	5	5	5	4	5	5	5	5	5	5	4	5	5	4	3	4	3
Spotted Seatrout	2	3	4	3	3	3	2	2	2	3	3	3	5	4	2	3	4	5	4

Species	Trip Year																		
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Flounder	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	2	3	3	3	3	3	
Bluefish	4	2	4	4	3	2	4	4	4	5	5	3	4	4	5	4	4	4	
Red Drum	2	3	3	3	4	5	3	2	2	3	2	4	3	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	
Spanish Mackerel	3	4	2	2	2	4	5	5	5	4	4	5	5	5	4	5	5	5	
Spotted Seatrout	5	5	5	5	5	3	2	3	3	2	3	2	<b>1</b>	2	2	2	2	2	

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**Table 3.** Management action taken as a result of Amendment 1 and Supplement A to the Southern Flounder Fishery Management Plan.

MANAGEMENT STRATEGY	OUTCOME	Source Document
<p><u>Commercial</u>: Accept management measures to reduce protected species interactions as the management strategy for achieving sustainable harvest in the commercial southern flounder fishery.</p> <p><u>Recreational</u>: Increase the minimum size limit to 15 inches and decrease the creel limit to six fish-20.2% harvest reduction</p>	<p><u>Commercial</u>: No Action Required; Specific minimum measures for the flounder gill net fishery are provided in Issue Paper 10.1.1 (Amendment 1, page 129).</p> <p><u>Recreational</u>: Proclamation FF-29-2011 (refer to Supplement A to the 2005 FMP)</p>	Amendment 1
Status quo and address research recommendations	No Action Required	Amendment 1
Status quo (implement mediation and proclamation authority to address user conflicts with large mesh gill nets)	No Action Required	Amendment 1
Status quo (minimum distance (area dependent) between pound nets and gill nets; per rule 15A NCAC 03J .0103 (d))	No Action Required	Amendment 1
Status quo and address research recommendations	No Action Required	Amendment 1
Status quo and expand research on flatfish escape devices and degradable panels under commercial conditions to other parts of the state	No Action Required	Amendment 1
Status quo and expand research on factors impacting the release mortality of southern flounder and on deep hooking events of different hook types and sizes	No Action Required	Amendment 1
<ul style="list-style-type: none"> <li>• Request funding for state observer program</li> <li>• Apply for Incidental Take Permit for large mesh gill net fishery</li> <li>• Continue gear development research to minimize protected species interactions</li> </ul>	No Action Required	Amendment 1
Status quo minimum mesh size for escape panels (5.5-inch stretched mesh) and recommend further research on 5.75-inch stretched mesh escape panels	No Action Required	Amendment 1
Status quo minimum mesh size (5.5-inch stretched mesh)	No Action Required	Amendment 1
Increase minimum mesh size to harvest southern flounder to 6.0- inch stretched mesh Increase minimum size limit for commercial fisheries to 15 inches	Proclamation FF-3-2016 (refer to Supplement A to Amendment 1 of the 2005 FMP)	Supplement A to Amendment 1
Increase minimum mesh size for escape panels to 5.75-inch stretched mesh	Proclamation M-34-2015 (refer to Supplement A to Amendment 1 of the 2005 FMP)	Supplement A to Amendment 1
Reduce daily bag limit for recreational harvest of southern flounder from 6 fish to 4 fish	Proclamation FF-4-2017 (refer to Addendum XXVIII to ASMFC Summer Flounder, Scup, Black seabass FMP)	Addendum XXVIII to the Summer Flounder, Scup, Black seabass FMP



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**Table 4.** Southern Flounder Amendment 2 total allowable removals (observed harvest and dead discards) in pounds by management area to meet the necessary reductions for the overfishing threshold and SSB threshold and target of the commercial fishery in 2019 compared to the 2017 harvest and dead discards.

Reduction	Management Area	2017 Landings Value	Dead Discards	2017 Total Catch	After Reduction	“Other” Gear Allocation	Gill Net, Pound Net, Gig Allocation
Overfishing Threshold 31%	Northern	324,779	1,014	325,793	224,797	547	224,250
	Central	700,258	2,203	702,461	484,698	3,644	480,473
	Southern	369,580	1,190	370,770	255,831	4,225	252,187
	Total	1,394,617	4,407	1,399,024	965,326	8,416	956,910
SSB Threshold 52%	Northern	324,779	1,014	325,793	156,381	547	155,834
	Central	700,258	2,203	702,461	337,181	3,644	332,956
	Southern	369,580	1,190	370,770	177,969	4,225	174,325
	Total	1,394,617	4,407	1,399,024	671,531	8,416	663,115
62%	Northern	324,779	1,014	325,793	123,802	547	123,255
	Central	700,258	2,203	702,461	266,935	3,644	262,710
	Southern	369,580	1,190	370,770	140,892	4,225	137,248
	Total	1,394,617	4,407	1,399,024	531,629	8,416	523,213
SSB Target 72%	Northern	324,779	1,014	325,793	91,222	547	90,675
	Central	700,258	2,203	702,461	196,689	3,644	192,464
	Southern	369,580	1,190	370,770	103,815	4,225	100,171
	Total	1,394,617	4,407	1,399,024	391,726	8,416	383,310

\*Other gear included gear that catch southern flounder incidentally. These gears include, but aren't limited to, crab post, trawls, peeler post, fyke nets, channel nets, and seines.

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**Table 5.** Southern Flounder Amendment 2 dates of fishery opening (formatted in **bold font**) and associated closure dates by management area necessary to meet the reductions in total removals (observed harvest and dead discards) to the overfishing threshold and SSB threshold and target **for the commercial fishery** in 2019.

Reduction	Management Area	Season Start Date						
		<b>1-Jan</b>	<b>1-Feb</b>	<b>1-Mar</b>	<b>1-Apr</b>	<b>1-May</b>	<b>1-Jun</b>	<b>1-Jul</b>
		Season End Date						
Overfishing Threshold  31%	Northern	30-Sep	30-Sep	30-Sep	1-Oct	4-Oct	7-Oct	11-Oct
	Central	23-Oct	23-Oct	24-Oct	24-Oct	25-Oct	26-Oct	28-Oct
	Southern	5-Oct	6-Oct	6-Oct	7-Oct	11-Oct	23-Oct	5-Nov
	Statewide	14-Oct	14-Oct	14-Oct	15-Oct	17-Oct	19-Oct	23-Oct
SSB Threshold  52%	Northern	10-Sep	10-Sep	11-Sep	12-Sep	16-Sep	22-Sep	1-Oct
	Central	7-Oct	7-Oct	8-Oct	8-Oct	9-Oct	11-Oct	14-Oct
	Southern	3-Sep	4-Sep	4-Sep	6-Sep	11-Sep	27-Sep	9-Oct
	Statewide	22-Sep	22-Sep	22-Sep	23-Sep	26-Sep	1-Oct	7-Oct
62%	Northern	29-Aug	30-Aug	30-Aug	31-Aug	5-Sep	12-Sep	20-Sep
	Central	29-Sep	29-Sep	29-Sep	1-Oct	2-Oct	3-Oct	6-Oct
	Southern	7-Aug	8-Aug	9-Aug	11-Aug	17-Aug	10-Sep	30-Sep
	Statewide	9-Sep	9-Sep	10-Sep	11-Sep	14-Sep	21-Sep	28-Sep
SSB Target  72%	Northern	16-Aug	17-Aug	17-Aug	18-Aug	24-Aug	1-Sep	12-Sep
	Central	17-Sep	17-Sep	17-Sep	19-Sep	21-Sep	23-Sep	28-Sep
	Southern	15-Jul	16-Jul	16-Jul	18-Jul	24-Jul	17-Aug	17-Sep
	Statewide	22-Aug	23-Aug	23-Aug	25-Aug	31-Aug	7-Sep	18-Sep

Note: Monitoring, reporting, and closure requirements identified through the NCDMF's sea turtle and Atlantic sturgeon Incidental Take Permits will remain in effect and may impact dates identified in this table.

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**Table 5.** Continued

Reduction	Management Area	Season Start Date					
		1-Aug	1-Sep	15-Sep	1-Oct	Jan. 1, mid-year closure, re-open Sept. 1	Jan. 1, mid-year closure, re-open Sept. 15
		Season End Date					
Overfishing Threshold  31%	Northern	14-Oct	18-Oct	26-Oct	11-Nov	15-Oct	22-Oct
	Central	2-Nov	7-Nov	11-Nov	21-Nov	4-Nov	7-Nov
	Southern	19-Nov	25-Nov	25-Nov	29-Nov	17-Nov	24-Nov
	Statewide	29-Oct	4-Nov	17-Nov	20-Nov	31-Oct	4-Nov
SSB Threshold  52%	Northern	6-Oct	10-Oct	17-Oct	31-Oct	5-Oct	13-Oct
	Central	18-Oct	21-Oct	24-Oct	5-Nov	19-Oct	21-Oct
	Southern	24-Oct	7-Nov	15-Nov	24-Nov	23-Oct	29-Oct
	Statewide	12-Oct	19-Oct	24-Oct	7-Nov	14-Oct	20-Oct
62%	Northern	26-Sep	2-Oct	13-Oct	27-Oct	27-Sep	10-Oct
	Central	10-Oct	14-Oct	17-Oct	26-Oct	11-Oct	14-Oct
	Southern	13-Oct	26-Oct	2-Nov	15-Nov	11-Oct	17-Oct
	Statewide	5-Oct	12-Oct	17-Oct	28-Oct	6-Oct	11-Oct
SSB Target  72%	Northern	20-Sep	27-Sep	6-Oct	22-Oct	12-Sep	21-Sep
	Central	2-Oct	8-Oct	11-Oct	19-Oct	4-Oct	8-Oct
	Southern	1-Oct	14-Oct	20-Oct	2-Nov	29-Sep	7-Oct
	Statewide	26-Sep	3-Oct	9-Oct	21-Oct	27-Sep	3-Oct

Note: Monitoring, reporting, and closure requirements identified through the NCDMF's sea turtle and Atlantic sturgeon Incidental Take Permits will remain in effect and may impact dates identified in this table.

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**Table 6.** Southern Flounder Amendment 2 seasons needed to meet the necessary reduction in total removals (observed harvest and dead discards) for the overfishing threshold and SSB threshold and target of the NC recreational hook-and-line fishery in 2019.

	Percent Reduction	Total removals (lbs)
Terminal Year	2017	488,723
Target	72%	136,843
62 percent	62%	185,715
Threshold	52%	234,587
Overfishing	31%	337,219

Season	Percent Reduction	Total removals (lbs)
no closure	0%	488,723
Apr 16 -Jul 31	57%	211,477
Apr 16 -Jul 16	66%	165,474
Apr 16 -Jun 30	76%	118,254
May 1 -Jul 31	58%	204,398
May 1 -Jul 16	68%	158,394
May 1 -Jun 30	77%	111,175
May 16 -Jul 31	61%	192,156
May 16 -Jul 16	70%	146,153
Jun 1 - Aug 16	54%	222,471
Jun 1 - Jul 31	66%	165,932
Jun 1 - Jul 16	75%	119,928
May 1 - Sept 30	18%	399,908
Jun 1 - Sept 30	26%	360,813
Jul 1 - Sept 30	41%	286,724
Jul 16 - Sept 30	51%	240,876
Aug 1 - Sept 30	60%	195,868
Aug 16 - Sept 30	72%	138,362
Jul 1 - Oct 15	35%	318,760
Jun 1 - Sept 15	33%	325,691
Jul 1 - Sept 15	48%	253,123
Jun 16 - Sept 15	40%	294,998
Jul 16 - Oct 15	44%	271,391
Aug 1 - Oct 30	49%	249,887
Jul 16 -Oct 30	40%	294,894

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**Table 7.** Southern Flounder Amendment 2 seasons needed to meet the necessary reduction in total removals (observed harvest and dead discards) for the overfishing threshold and SSB threshold and target of **the NC recreational gig fishery** in 2019.

	% Reduction	Total removals (lbs)
Terminal Year	2017	57,019
Target	72%	15,965
62%	62%	21,667
Threshold	52%	27,369
Overfishing	31%	39,343

Season	% Reduction	Total Removals (lbs)
no closure	0%	57,019
Mar 1 - Oct 15	15%	48,707
Mar 16 - Oct 31	16%	47,734
Mar 1 - Sept 30	21%	45,207
Apr 1 - Oct 31	24%	43,260
Mar 16 - Sept 30	29%	40,732
Apr 1 - Oct 15	30%	39,759
Apr 1 - Sept 30	36%	36,258
May 1 - Oct 31	40%	34,311
Apr 16 - Sept 30	44%	31,784
May 1 - Oct 15	46%	30,811
May 1 - Sept 30	52%	27,310
Jun 1 - Sept 30	63%	21,374
Jul 16 - Oct 31	64%	20,330
Jul 1 - Oct 15	67%	18,938
Aug 1 - Oct 31	68%	18,221
Jun 1 - Sept 15	69%	17,873
Jul 16 - Oct 15	70%	16,829
Jul 1 - Sept 30	73%	15,438
Jun 16 - Sept 15	74%	14,905
Jul 16 - Sept 30	77%	13,329
Jul 1 - Sept 15	79%	11,937
Aug 1 - Sept 30	80%	11,219
Aug 16 - Sept 30	84%	9,110

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**Table 8.** Southern Flounder Amendment 2 trip limit options (in pounds) for the commercial pound net fishery, including the number, % of trips, and % of harvest within each trip limit option for each management area, September through November 2008-2017.

Pounds Per Trip	Management Area					
	Northern			Central		
	Number of Trips	% of Trips	% of Harvest	Number of Trips	% of Trips	% of Harvest
<251	1,633	65.2%	8.5%	4,173	51.3%	10.5%
251-500	291	11.6%	7.8%	1,533	18.8%	13.5%
501-750	159	6.3%	7.3%	794	9.8%	11.9%
751-1,000	86	3.4%	5.7%	518	6.4%	11.0%
1,001-1,250	63	2.5%	5.2%	315	3.9%	8.7%
1,251-1,500	43	1.7%	4.5%	212	2.6%	7.2%
1,501-2,000	66	2.6%	8.3%	252	3.1%	10.7%
2,001-3,000	63	2.5%	11.4%	209	2.6%	12.4%
3,001-4,000	36	1.4%	9.8%	76	0.9%	6.4%
4,001+	66	2.6%	31.6%	59	0.7%	7.8%
Average Pounds Per Trip	539			503		

Pounds Per Trip	Management Area					
	Southern			Statewide		
	Number of Trips	% of Trips	% of Harvest	Number of Trips	% of Trips	% of Harvest
<251	1,850	65.8%	17.7%	7,656	56.9%	11.2%
251-500	420	14.9%	15.4%	2,244	16.7%	12.6%
501-750	197	7.0%	12.6%	1,150	8.5%	11.0%
751-1,000	123	4.4%	10.9%	727	5.4%	9.9%
1,001-1,250	63	2.2%	7.4%	441	3.3%	7.8%
1,251-1,500	40	1.4%	5.7%	295	2.2%	6.4%
1,501-2,000	48	1.7%	8.8%	366	2.7%	9.9%
2,001-3,000	40	1.4%	10.4%	312	2.3%	11.8%
3,001-4,000	20	0.7%	6.8%	132	1.0%	7.2%
4,001+	9	0.3%	4.4%	134	1.0%	12.3%
Average Pounds Per Trip	344			475		

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**Table 9.** Southern Flounder Amendment 2 trip limit options (in number of fish) for the commercial gig fishery, including the number, % of trips, and % of harvest within each trip limit option for each management area, 2008-2017.

Number of Fish	Equivalent pounds	Management Area					
		Northern			Central		
		Number of Trips	% of Trips	% of Harvest	Number of Trips	% of Trips	% of Harvest
25	64	77	81.9%	54.1%	859	69.4%	35.5%
50	128	14	14.9%	33.3%	268	21.6%	33.6%
75	192	2	2.1%	7.1%	75	6.1%	16.2%
100	256	1	1.1%	5.5%	24	1.9%	7.8%
125	320		0.0%	0.0%	5	0.4%	2.1%
150	384		0.0%	0.0%	1	0.1%	0.5%
175	448		0.0%	0.0%	3	0.2%	1.7%
200	512		0.0%	0.0%	3	0.2%	2.7%
Average Pounds Per Trip		41.2			57.2		

Number of Fish	Equivalent pounds	Management Area					
		Southern			Statewide		
		Number of Trips	% of Trips	% of Harvest	Number of Trips	% of Trips	% of Harvest
25	64	16,352	74.7%	44.8%	17288	74.4%	44.3%
50	128	4,222	19.3%	32.9%	4504	19.4%	33.0%
75	192	864	3.9%	11.8%	941	4.1%	12.0%
100	256	299	1.4%	5.8%	324	1.4%	5.9%
125	320	87	0.4%	2.2%	92	0.4%	2.2%
150	384	31	0.1%	1.0%	32	0.1%	0.9%
175	448	16	0.1%	0.6%	19	0.1%	0.7%
200	512	20	0.1%	1.0%	23	0.1%	1.1%
Average Pounds Per Trip		51.6			51.9		

\*used an average of 2.56 pounds per fish (2008-2017 average)



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**Table 10.** Average yards of large mesh gill net fished per trip by ITP Management Unit and season during 2016 and 2017.

Management Unit	Season	Average Yards
A	December-February	N/A
	March-May	1,464
	June-August	1,424
	September-November	1,590
B	December-February	N/A
	March-May	1,000
	June-August	921
	September-November	1,007
C	December-February	425
	March-May	951
	June-August	1,042
	September-November	964
D	December-February	600
	March-May	936
	June-August	971
	September-November	951
E	December-February	525
	March-May	586
	June-August	638
	September-November	669

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**Table 11.** Economic impacts associated with **commercial southern flounder fishing** in North Carolina, 2009-2017.

Year	Participants <sup>1</sup>	Pounds <sup>1</sup>	Ex-Vessel Value <sup>1</sup>	Economic Impacts		
				Jobs <sup>2,3</sup>	Income Impacts (thousands of dollars) <sup>3</sup>	Output Impacts (thousands of dollars) <sup>3,4</sup>
2009	1,299	2,396,240	\$4,609,932	419	\$9,908	\$17,769
2010	1,182	1,689,557	\$3,695,889	328	\$7,963	\$14,222
2011	1,039	1,247,450	\$2,753,128	246	\$5,977	\$10,669
2012	1,202	1,646,137	\$4,451,482	393	\$9,633	\$17,259
2013	1,286	2,186,391	\$5,673,190	487	\$12,347	\$21,801
2014	1,222	1,673,511	\$4,839,672	396	\$10,753	\$18,933
2015	1,029	1,202,930	\$3,823,707	300	\$8,397	\$14,722
2016	945	897,765	\$3,610,533	286	\$7,167	\$14,925
2017	1,048	1,394,552	\$5,655,489	453	\$14,660	\$21,442

*1 As reported by the North Carolina Trip Ticket Program*

*2 Represents both full-time and part-time jobs*

*3 Economic impacts calculated using the NCDMF commercial fishing economic impact model and IMPLAN economic impact modeling software. Economic impact estimates are for the state economy of North Carolina.*

*4 Represents sales impacts*

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**Table 12.** Economic impacts associated with recreational southern flounder fishing in North Carolina from 2009-2017.

Year	Trips <sup>1</sup>	Estimated Expenditures (thousands of dollars) <sup>2</sup>	Economic Impacts		
			Jobs <sup>3,4</sup>	Income Impacts (thousands of dollars) <sup>4</sup>	Output Impacts (thousands of dollars) <sup>4</sup>
2009	2,577,363	\$442,934	3,572	\$108,658	\$273,219
2010	2,900,583	\$497,196	4,052	\$124,734	\$310,591
2011	2,519,959	\$436,762	3,736	\$118,739	\$293,707
2012	2,552,146	\$444,117	3,686	\$119,177	\$294,023
2013	2,623,195	\$452,931	3,542	\$115,739	\$286,489
2014	2,685,072	\$460,707	3,486	\$115,658	\$286,196
2015	2,536,854	\$434,272	3,286	\$110,637	\$274,761
2016	2,420,326	\$415,870	3,041	\$103,370	\$254,916
2017	2,107,301	\$362,466	2,574	\$87,722	\$216,218

*1 Trip estimates from MRIP include trips in which any Flounder was targeted, harvested, or discarded*

*2 Estimated expenditures include only trip expenditures.*

*3 Includes full time and part time jobs*

*4 Economic impacts calculated using the NCDMF coastal recreational fishing economic impact model and IMPLAN economic impact modeling software. Economic impact estimates are for the state economy of North Carolina.*

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**Table 13.** Draft NCDMF and Advisory Committee recommendations for public comment in draft Amendment 2 of the Southern Flounder FMP. Recommendations will be provided by the MFC Regional and Standing Committees and public from June 2019.

Issue	NCDMF	Southern Flounder Advisory Committee	MFC Committees	Public Comment
Sustainable harvest in the commercial fishery	Establish seasonal closures by area for the commercial fishery to reduce F and increase SSB to rebuild between the threshold and the target in 2019 (Option C, 62% reduction) and establish seasonal closures by area for the commercial fishery to reduce F and allow the SSB to rebuild to the target beginning in 2020 (Option D, 72% reduction).	<p>The Southern Flounder Advisory Committee recommends that starting Jan. 1, 2019 a 52% reduction be adopted (Option B) and implemented through seasonal closures by area and major gear type with the following changes for the commercial fishery, calculated for the Northern, Central, and Southern areas:</p> <ul style="list-style-type: none"> <li>-40% reduction to the pound net fishery</li> <li>-40% reduction to the gig fishery</li> <li>71% reduction to the gill net fishery (to make the total reduction to the commercial fishery equal 52%)</li> </ul>	<p><b>Southern</b> – No recommendation</p> <p><b>Northern</b> – Supports NCDMF recommendation (Option C in 2019, Option D beginning in 2020), in addition ask the MFC to consider dividing up the allowable fishing days for gill netting amongst allowable fishing months for a given area due to Sea Turtle ITP.</p> <p><b>Finfish</b> – A reduced harvest of 52%, not to exceed 52% until Amendment 3 is completed (Option B). The committee also requested the Southern Flounder AC look at a moratorium on all southern flounder harvest from Nov. 1, 2019 to Sept 1, 2022.</p>	<p><b>Mail</b> – 5 letters received all oppose draft Amendment 2.</p> <p><b>Online</b> – 91 of 241 respondents supported draft Amendment 2. Of those that indicated support of draft Amendment 2 Option C (62% reduction) was the most selected option for 2019 and option D (72% reduction) was the most selected option for 2020.</p> <p><b>Public Comment</b> – Thirteen total comments, 3 (23%) in favor of and 10 (77%) oppose draft Amendment 2.</p>

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**Table 13.** Continued.

Issue	NCDMF	Southern Flounder Advisory Committee	MFC Committees	Public Comment
Sustainable harvest non-quantifiable harvest restrictions in the commercial fishery	<p>NCDMF recommends expanding the commercial gill net management measures by reducing to single overnight soaks where nets may be set no sooner than one hour before sunset and must be retrieved no later than one hour after sunrise the next morning in the Neuse, Tar/Pamlico rivers and the Albemarle Sound areas that have previously been exempt;</p> <p>Reduce the maximum yardage allowed in the commercial anchored large mesh gill net fishery by 25% for each Management Unit; allowing a maximum of 1,500-yards in Management Units A, B, and C, and 750-yards in Management Units D and E;</p> <p>Prohibit the use of any method of retrieving live flounder from pound nets that cause injury to released fish (no picks, gigs, spears, etc.).</p>	<p>As of Jan. 1, 2020, implement a 1,500-yard limit for large mesh gill nets in Management Unit A, a 1,000-yard limit for large mesh gill nets in Management Units B and C, and 750-yard limit for large mesh gill nets in Management Units D and E.</p> <p>Prohibit the use of any method of retrieving live flounder from pound nets that cause injury to released fish (no picks, gigs, spears, etc.).</p>	<p><b>Southern</b> – No recommendation</p> <p><b>Northern</b> – No recommendation</p> <p><b>Finfish</b> – No recommendation</p>	<p><b>Mail</b> – No respondents commented on this item.</p> <p><b>Online</b> – 183 of 193 responses supported one or more additional non-quantifiable management measures.</p> <p><b>Public Comment</b> – No respondents commented on this item.</p>

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**Table 13.** Continued.

Issue	NCDMF	Southern Flounder Advisory Committee	MFC Committees	Public Comment
Sustainable harvest in the recreational fishery	<p>Establish seasonal closures by area for the recreational fishery to reduce F and increase SSB to rebuild between the threshold and the target in 2019 (Option C, 62% reduction) and establish seasonal closures by area for the recreational fishery to reduce F and allow the SSB to rebuild to the target beginning in 2020 (Option D, 72% reduction).</p> <p>The Recreational Commercial Gear License fishery, for large mesh gill nets, will operate during the dates where the recreational and commercial seasons overlap.</p>	<p>The Southern Flounder Advisory Committee recommends that starting Jan. 1, 2019 a 52% reduction be adopted (Option B) and implemented through seasonal closures for the recreational hook-and-line and gig fisheries. The recreational gig fishery will follow the same season as the hook-and-line season.</p> <p>The Recreational Commercial Gear License large-mesh gill net season the same as NCDMF</p>	<p><b>Southern</b> – No recommendation</p> <p><b>Northern</b> – Supports NCDMF recommendation (Option C in 2019, Option D beginning in 2020).</p> <p><b>Finfish</b> – A reduced harvest of 52%, not to exceed 52% until Amendment 3 is completed (Option B). The committee also recommended that the MFC ask the Secretary of DEQ to allow the Director of DMF to go out of compliance with ASMFC Summer Flounder Plan and adopt a 12-inch size limit and a 4-fish bag limit for southern flounder in North Carolina waters. The committee also requested the Southern Flounder AC look at a moratorium on all southern flounder harvest from Nov. 1, 2019 to Sept 1, 2022</p>	<p><b>Mail</b> – No respondents commented on this item.</p> <p><b>Online</b> – 91 of 241 respondents supported draft Amendment 2. Option C (62% reduction) was the most selected option for 2019 and option D (72% reduction) was the most selected option for 2020.</p> <p><b>Public Comment</b> - No respondents commented on this item.</p>

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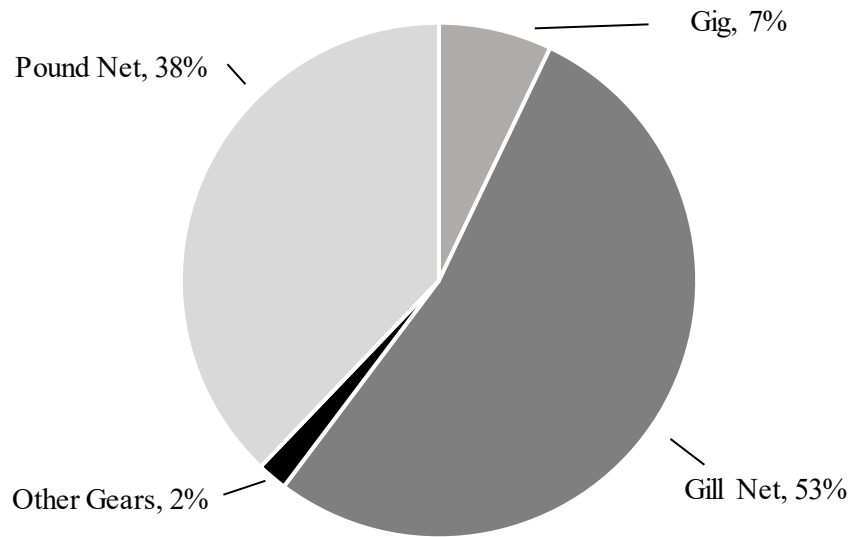
**Table 13.** Continued.

<b>Issue</b>	<b>NCDMF</b>	<b>Southern Flounder Advisory Committee</b>	<b>MFC Committees</b>	<b>Public Comment</b>
Sustainable harvest, management carried forward and Amendment 3	<p>Current management measures, including size limits, the recreational bag limit, minimum mesh size for gill nets and the pound net escape panels, the number gill net fishing days and amount of yardage allowed in various areas of the state, and minimum distance requirements between gill net and pound nets, will be carried forward in Amendment 2.</p> <p>Amendment 3 will continue to be developed with more robust management strategies.</p>	Supports NCDMF recommendation that Amendment 3 will continue to be developed with more robust management strategies	<p><b>Southern</b> – No recommendation</p> <p><b>Northern</b> – Supports NCDMF recommendation</p> <p><b>Finfish</b> – Supports NCDMF recommendation</p>	<p><b>Mail</b> – No respondents commented on this item.</p> <p><b>Online</b> – N/A</p> <p><b>Public Comment</b> - No respondents commented on this item.</p>

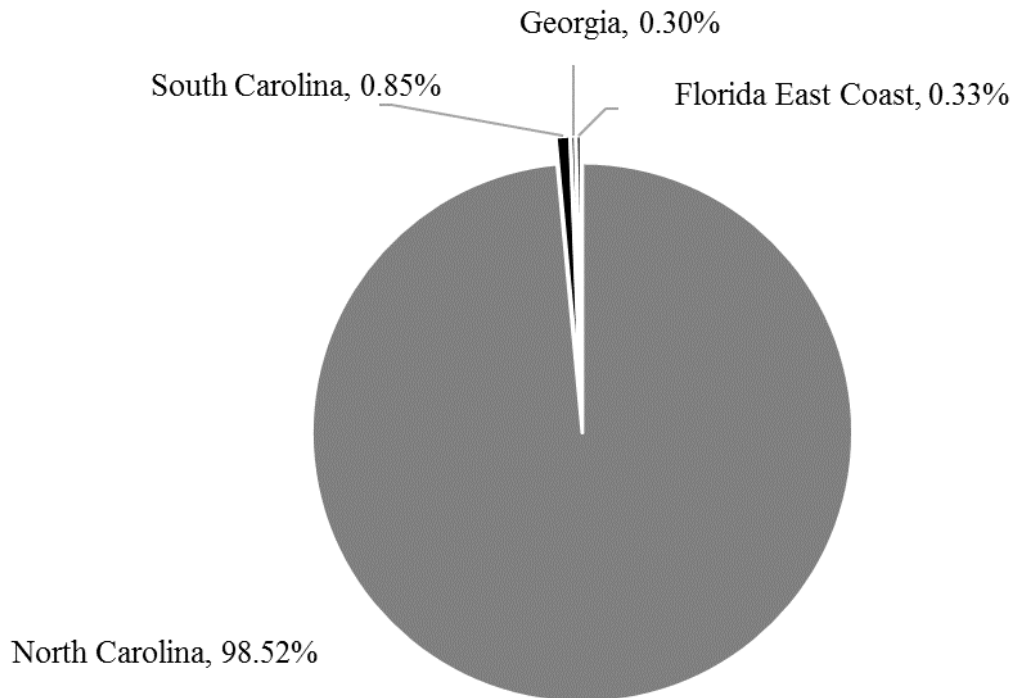


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**XI. FIGURES**

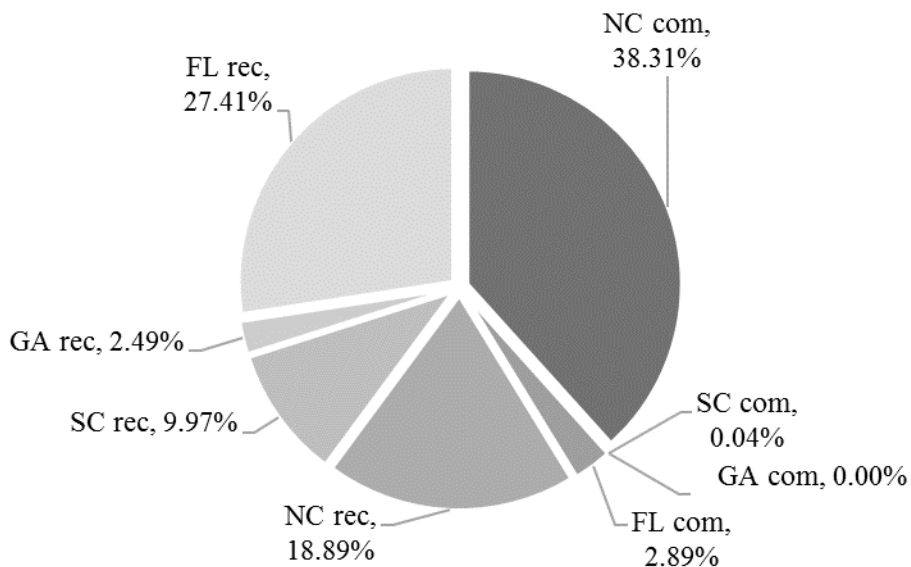


**Figure 1.** Contribution (pounds) to the North Carolina southern flounder commercial fishery total removals (observed landings and dead discards) by gear, 2008-2017. (Source: North Carolina Trip Ticket Program and North Carolina Estuarine Gill Net Observer Program).

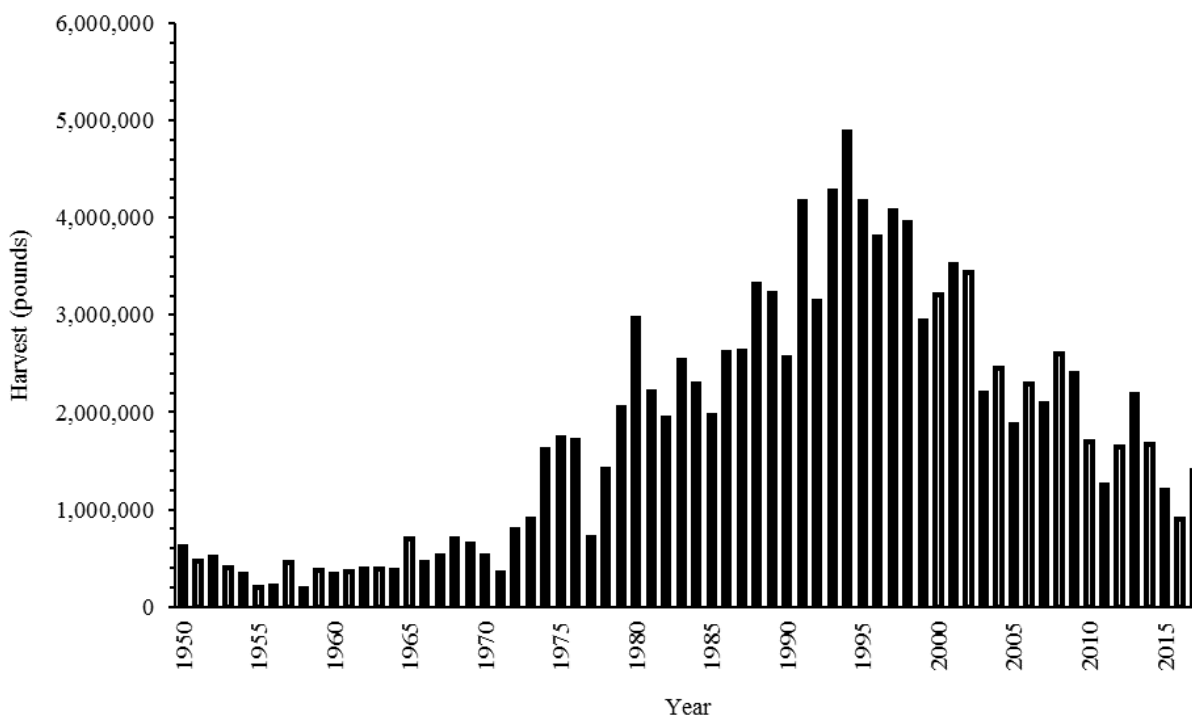


**Figure 2.** Average contribution to U.S. South Atlantic coast southern flounder commercial landings (pounds) by state, 1978-2017. (Source: NOAA Fisheries Annual Commercial Landing Statistics and North Carolina Trip Ticket Program).

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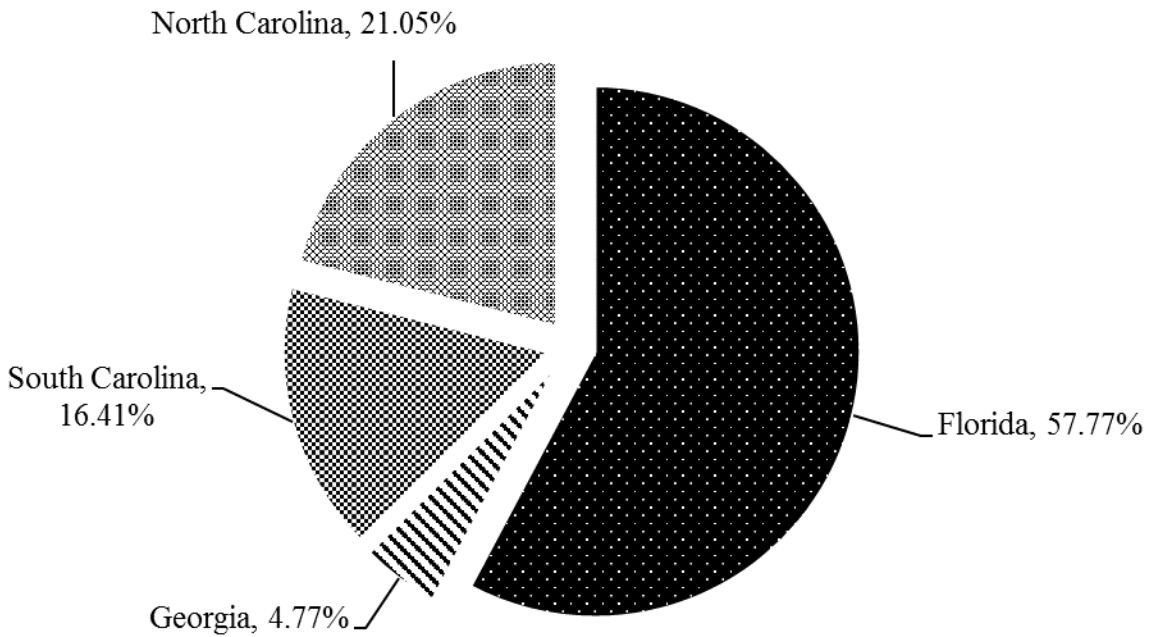


**Figure 3.** Average contribution to U.S. South Atlantic coast southern flounder commercial and recreational removals (observed harvest and dead discards) in pounds by state, 2008-2017. (Source: NOAA Fisheries Annual Commercial Landing Statistics, North Carolina Trip Ticket Program and the Marine Recreational Information Program).

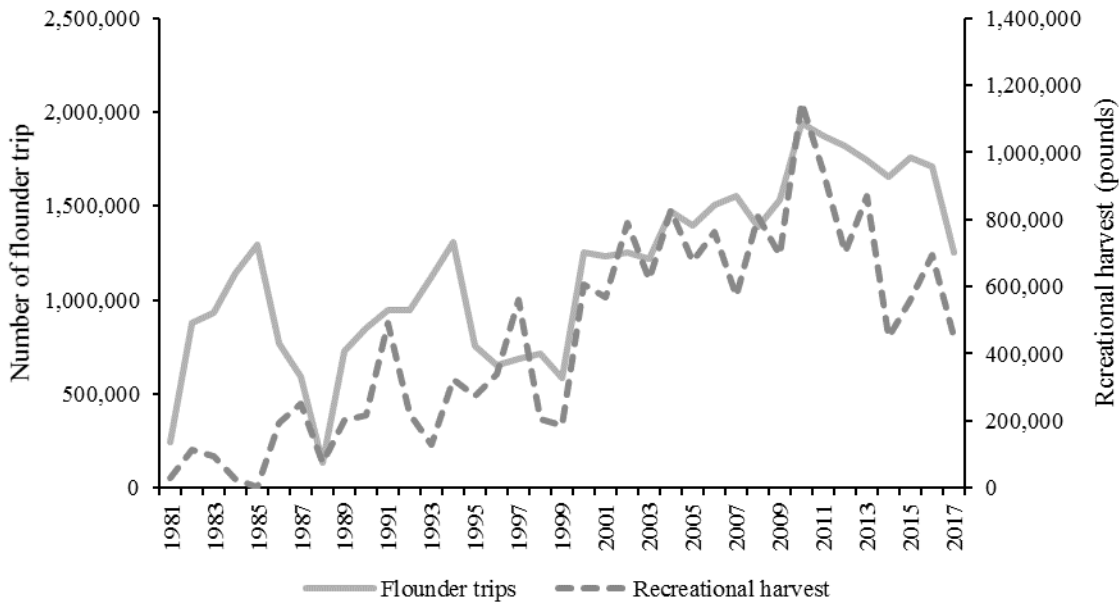


**Figure 4.** North Carolina annual southern flounder commercial harvest (pounds), 1950-2017. (Source: North Carolina Trip Ticket Program).

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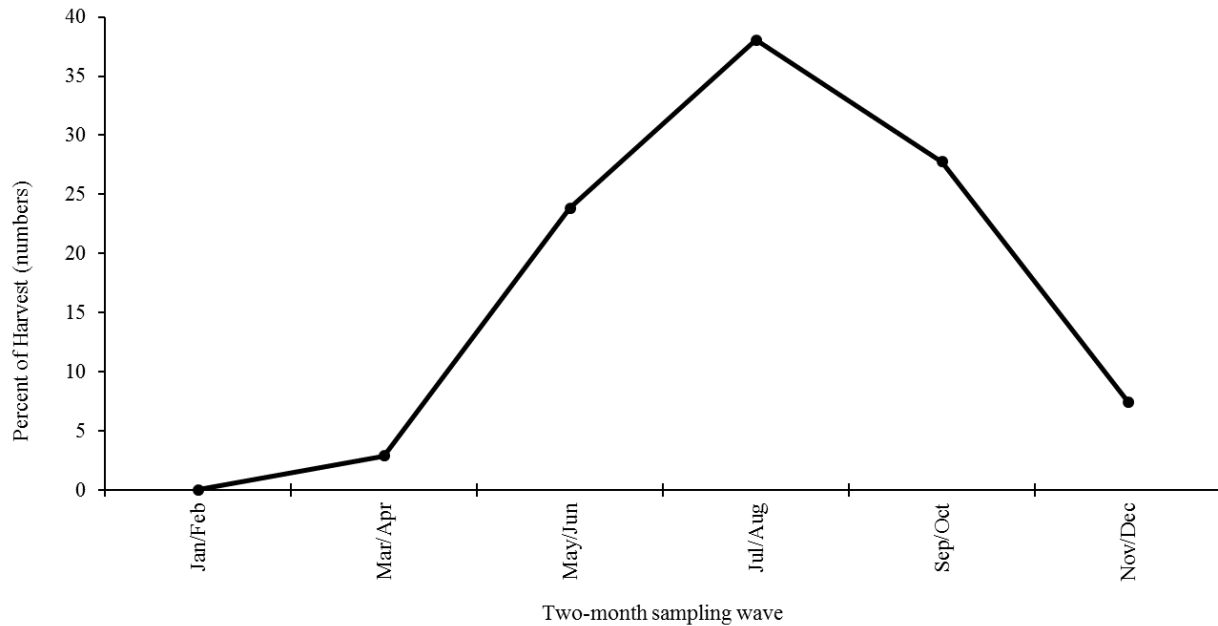


**Figure 5.** Average contribution to U.S. South Atlantic coast southern flounder recreational removals (observed harvest and dead discards; in pounds) by state, 1981-2017. (Source: Marine Recreational Information Program).

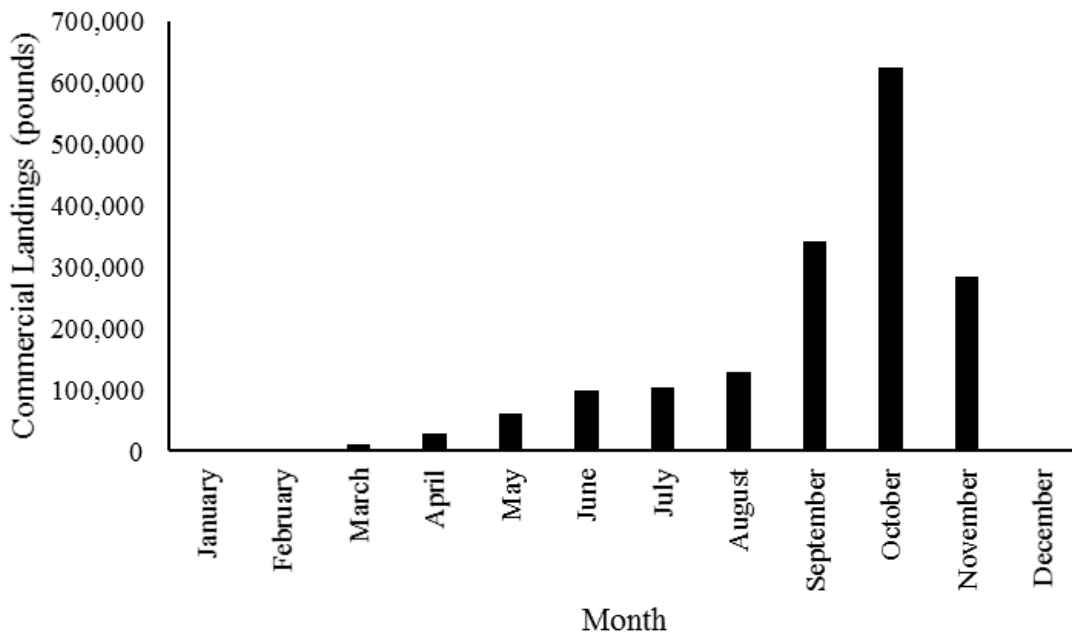


**Figure 6.** Recreational hook-and-line trips targeting flounder species in North Carolina, 1981-2017. (Source: Marine Recreational Information Program, targeted trips identified by angler interviews)

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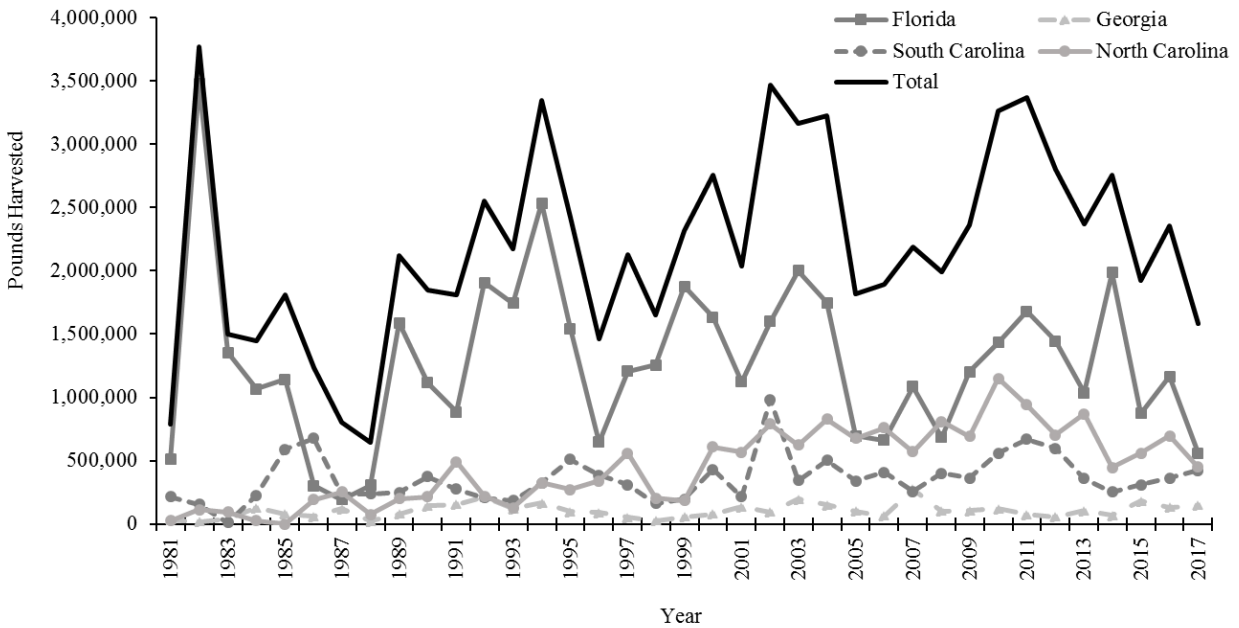


**Figure 7.** Average percent of recreational harvest (numbers of fish) of hook-and-line caught southern flounder in North Carolina by two-month wave, 1981-2017. (Source: Marine Recreational Information Program).

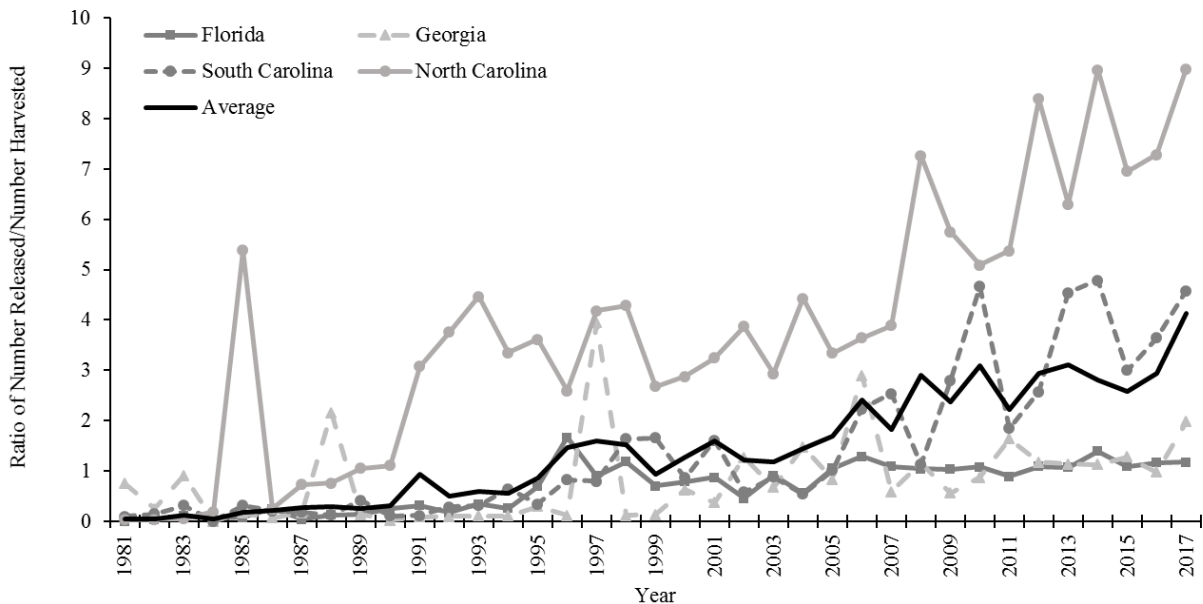


**Figure 8.** Average commercial southern flounder landings (pounds) by month in North Carolina, 2008-2017. (Source: North Carolina Trip Ticket Program).

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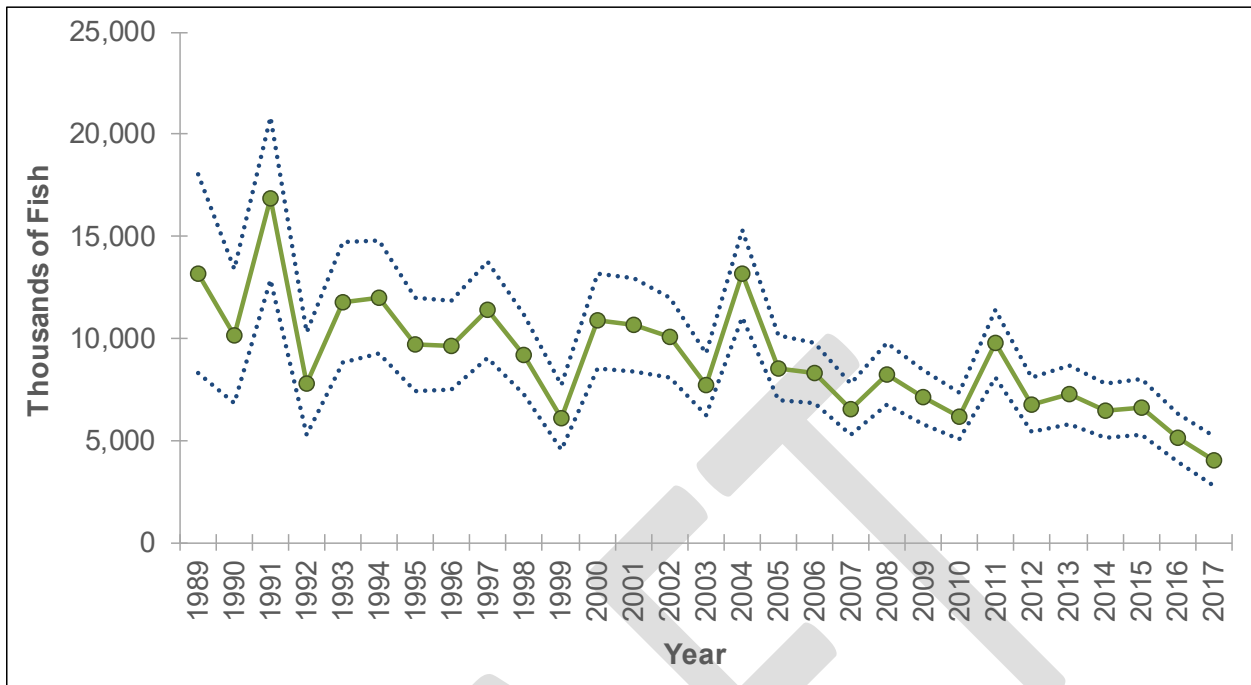


**Figure 9.** Recreational hook-and-line harvested pounds of southern flounder estimated through MRIP for North Carolina through Florida, 1981-2017. (Source: Marine Recreational Information Program).

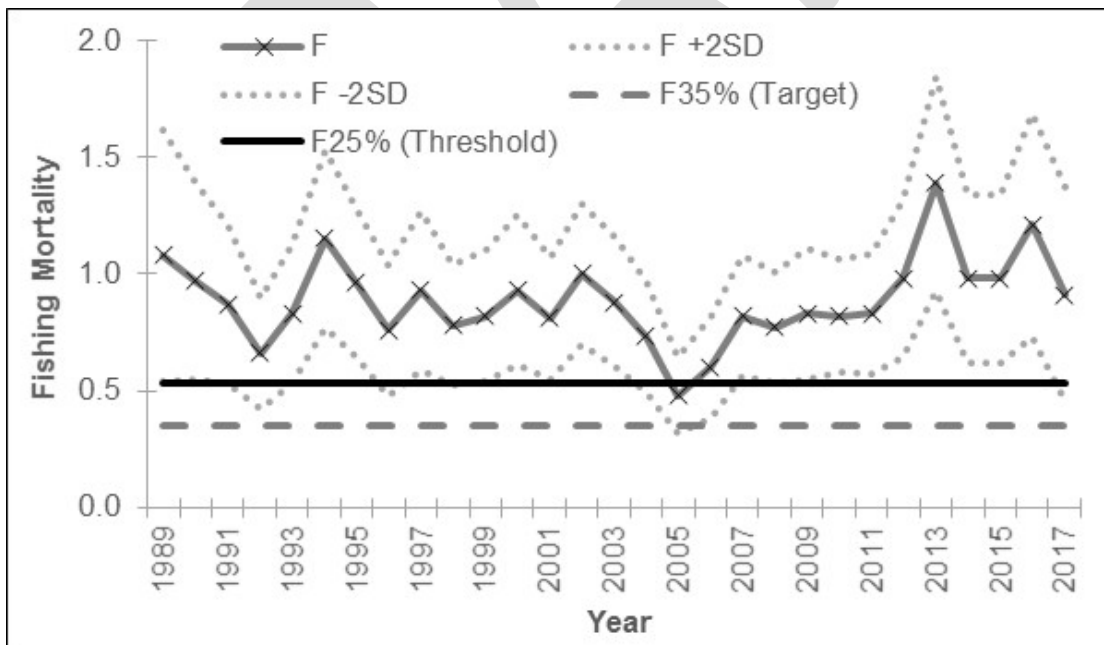


**Figure 10.** The ratio of released southern flounder compared to harvested southern flounder by number from recreational hook-and-line caught fish for North Carolina through Florida, 1981-2017. (Source: Marine Recreational Information Program).

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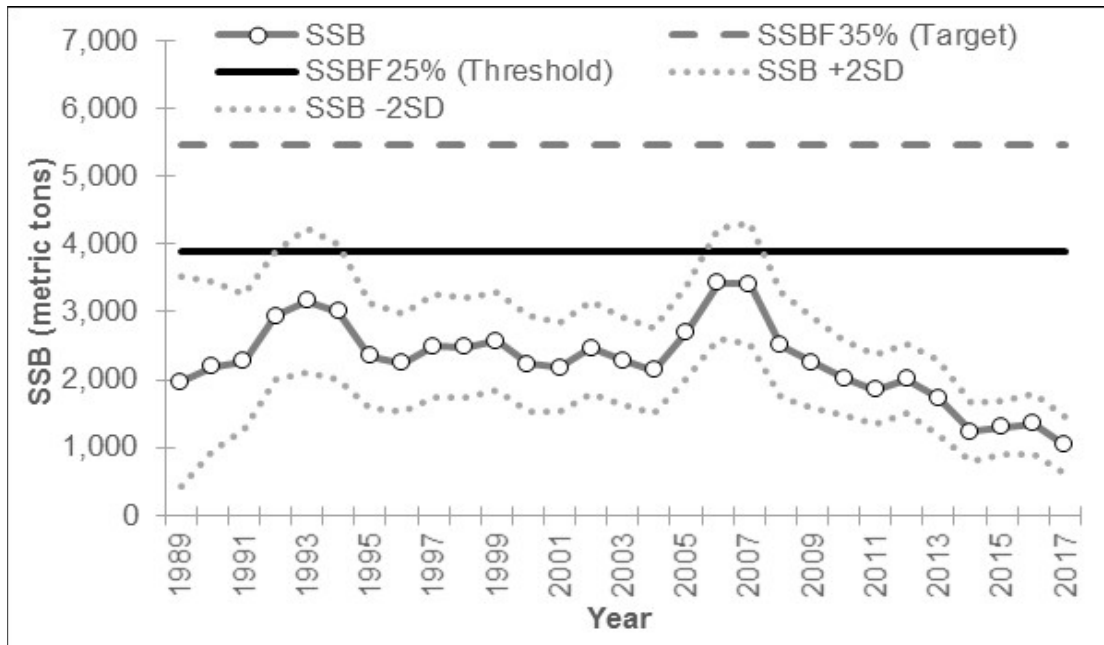


**Figure 11.** Predicted number of recruits (in thousands of fish) from the base run of the ASAP model, 1989-2017.

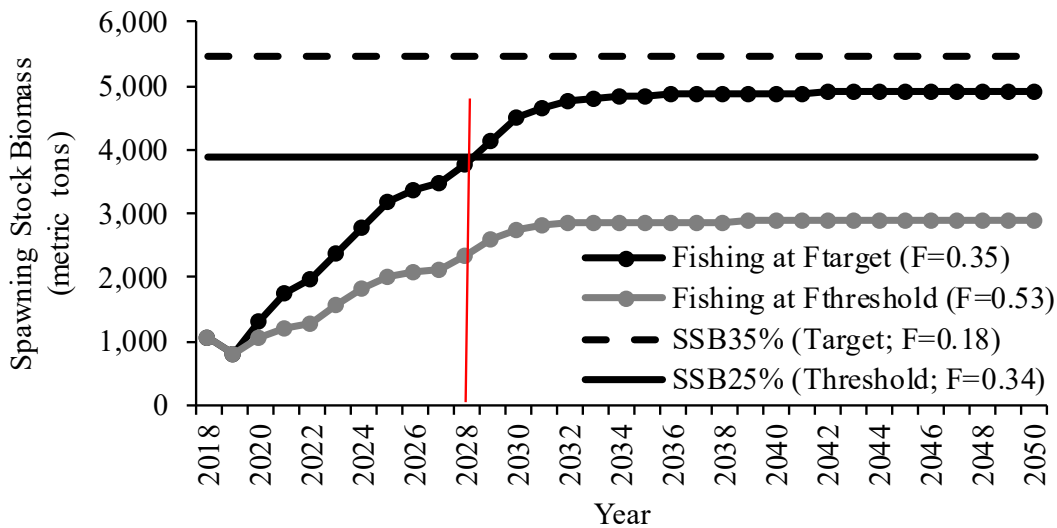


**Figure 12.** Estimated fishing mortality rates (numbers-weighted, ages 2–4) compared to established reference points, 1989–2017. (Source: Flowers et al. 2019).

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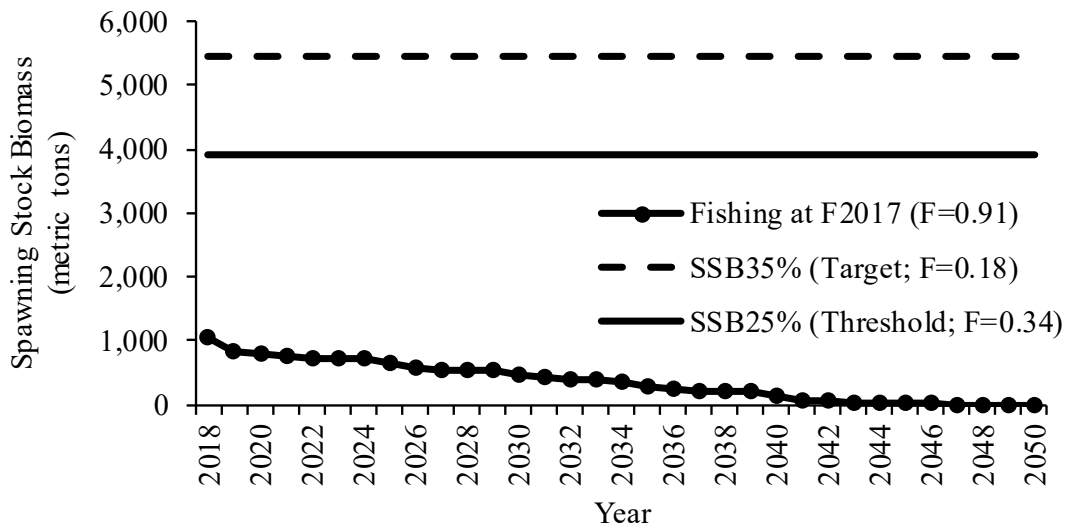
**Figure 13.** Estimated spawning stock biomass compared to established reference points, 1989–2017. (Source: Flowers et al. 2019).



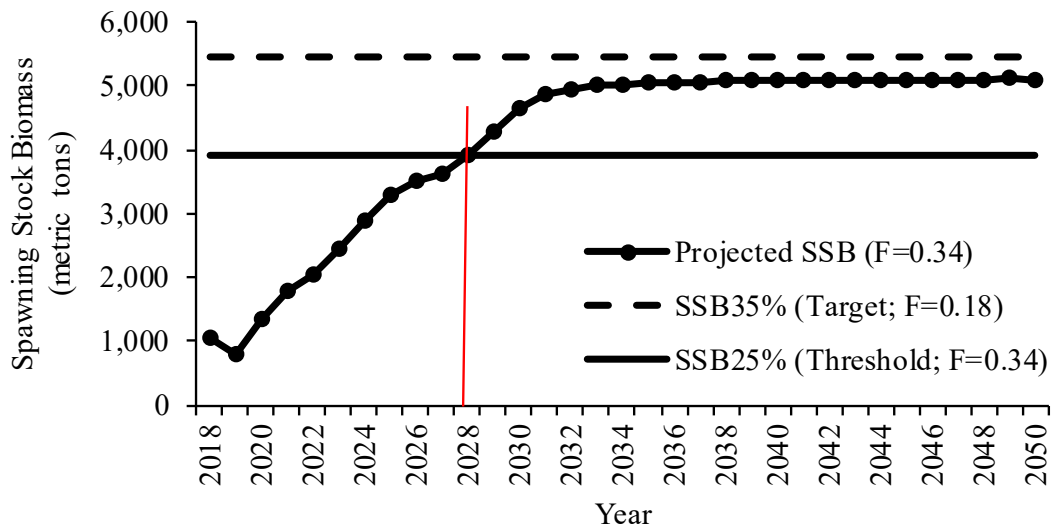
**Figure 14.** Projections of SSB related to fishing at a level to end overfishing in the required two-year time period. Fishing at  $F_{\text{threshold}}$  equates to a 31% reduction in total removals, while Fishing at  $F_{\text{target}}$  equates to a 51% reduction in total removals. (Note: SSB does not rebuild within required 10-year time period; Source: Flowers et al. 2019).



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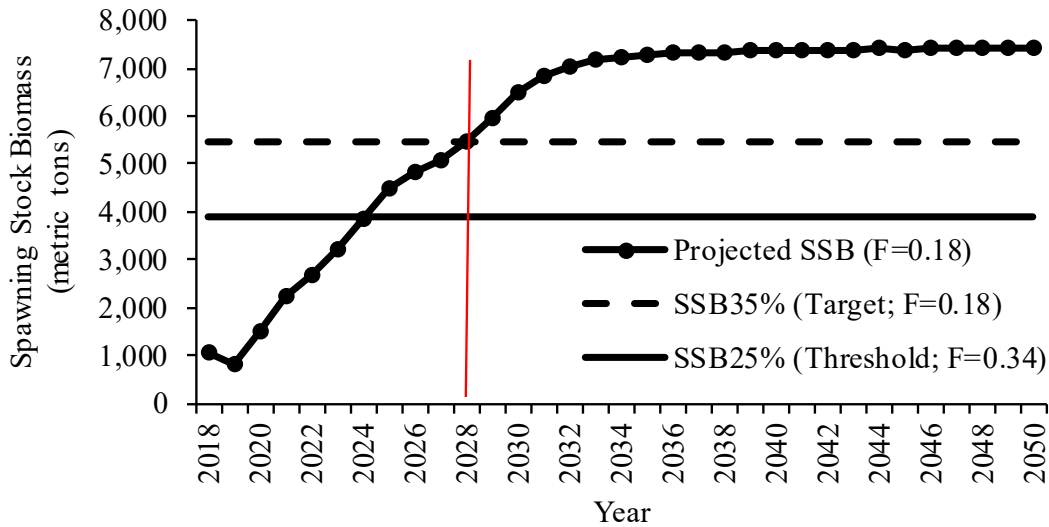


**Figure 15.** Predicted future spawning stock biomass (metric tons) assuming fishing at recent levels ( $F_{2017}=0.91$ ) and continuing decline in recruitment. (Source: Flowers et al. 2019).

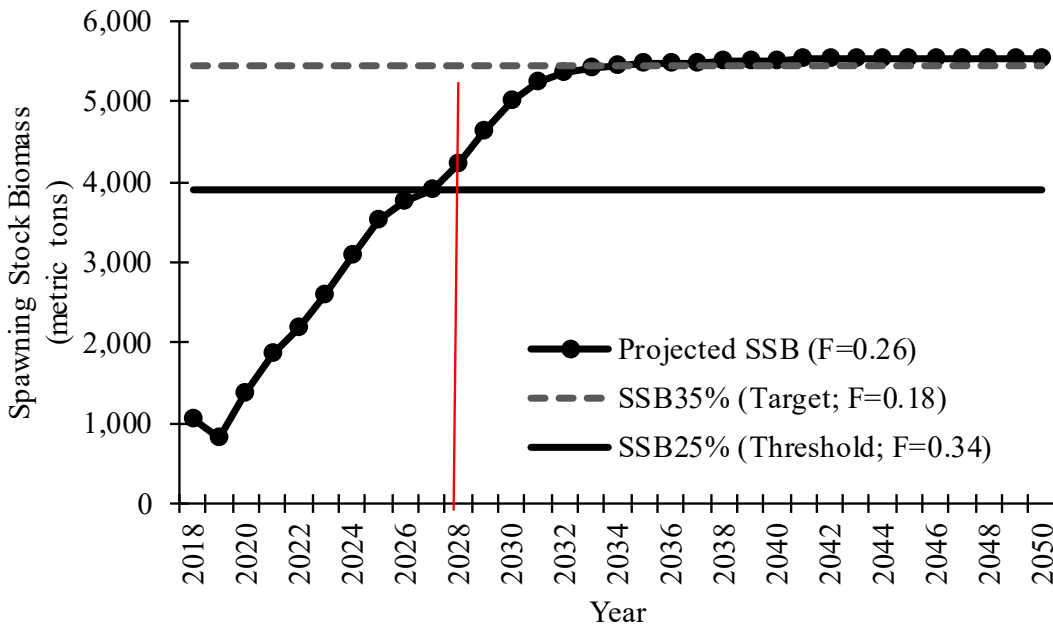


**Figure 16.** Predicted future spawning stock biomass (metric tons) assuming the fishing mortality value ( $F_{25\%} = 0.34$ ; 52% reduction in total removals) necessary to end the overfished status ( $SSB_{Threshold}$ ) by 2028. (Source: Flowers et al. 2019)

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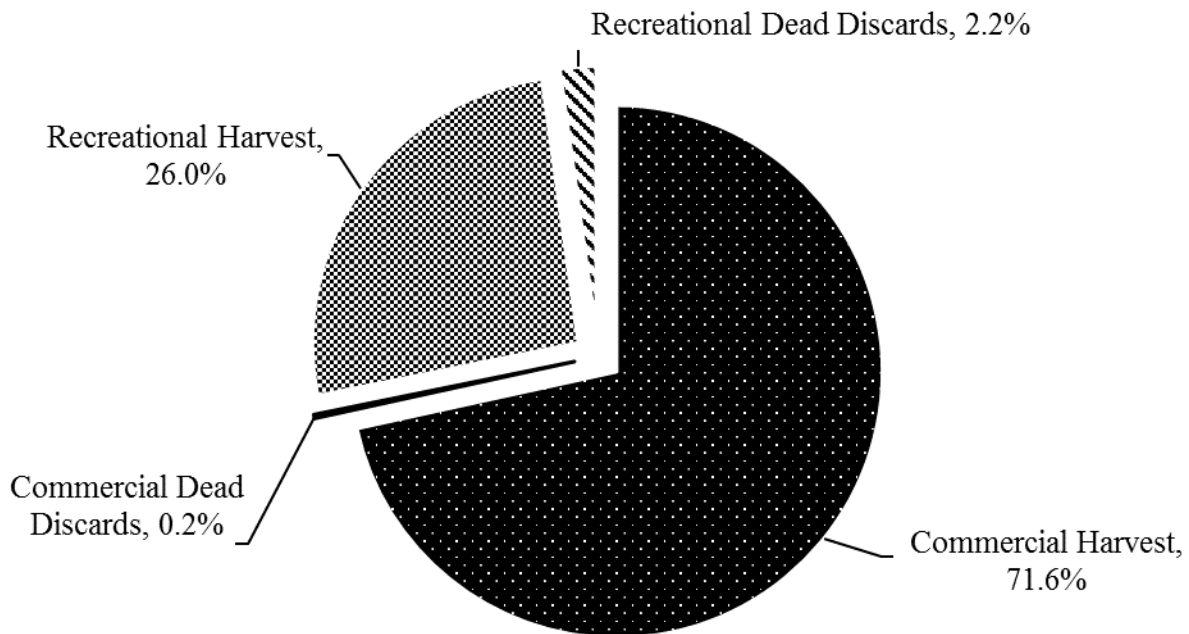


**Figure 17.** Predicted future spawning stock biomass (metric tons) assuming the fishing mortality value ( $F_{35\%} = 0.18$ ; 72% reduction in total removals) necessary to reach the  $SSB_{Target}$  by 2028. (Source: Flowers et al. 2019).



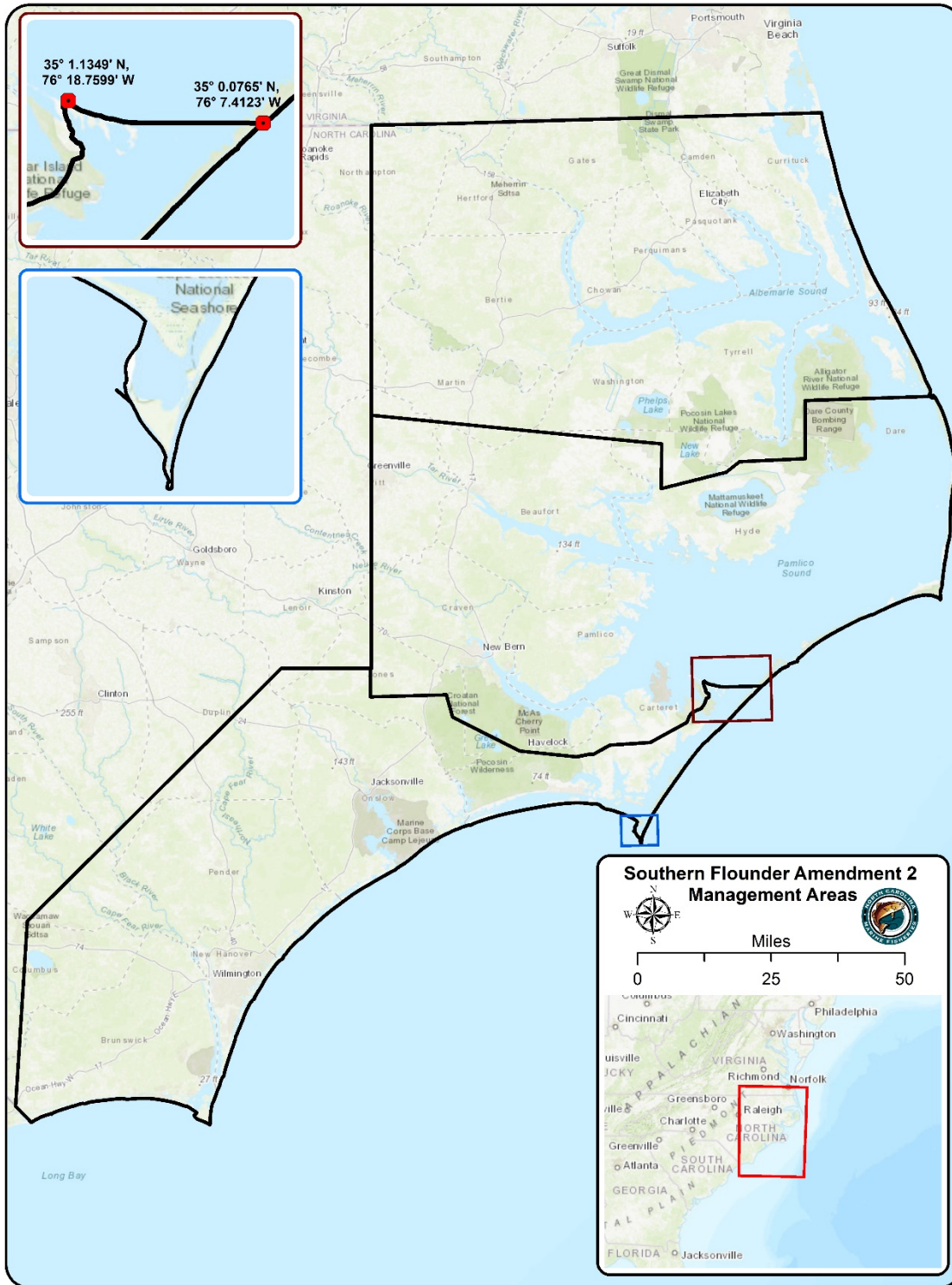
**Figure 18.** Predicted future spawning stock biomass (metric tons) assuming the fishing mortality value ( $F = 0.26$ ; 62% reduction in total removals) necessary to reach between the  $SSB_{Target}$  and  $SSB_{Threshold}$  by 2028.

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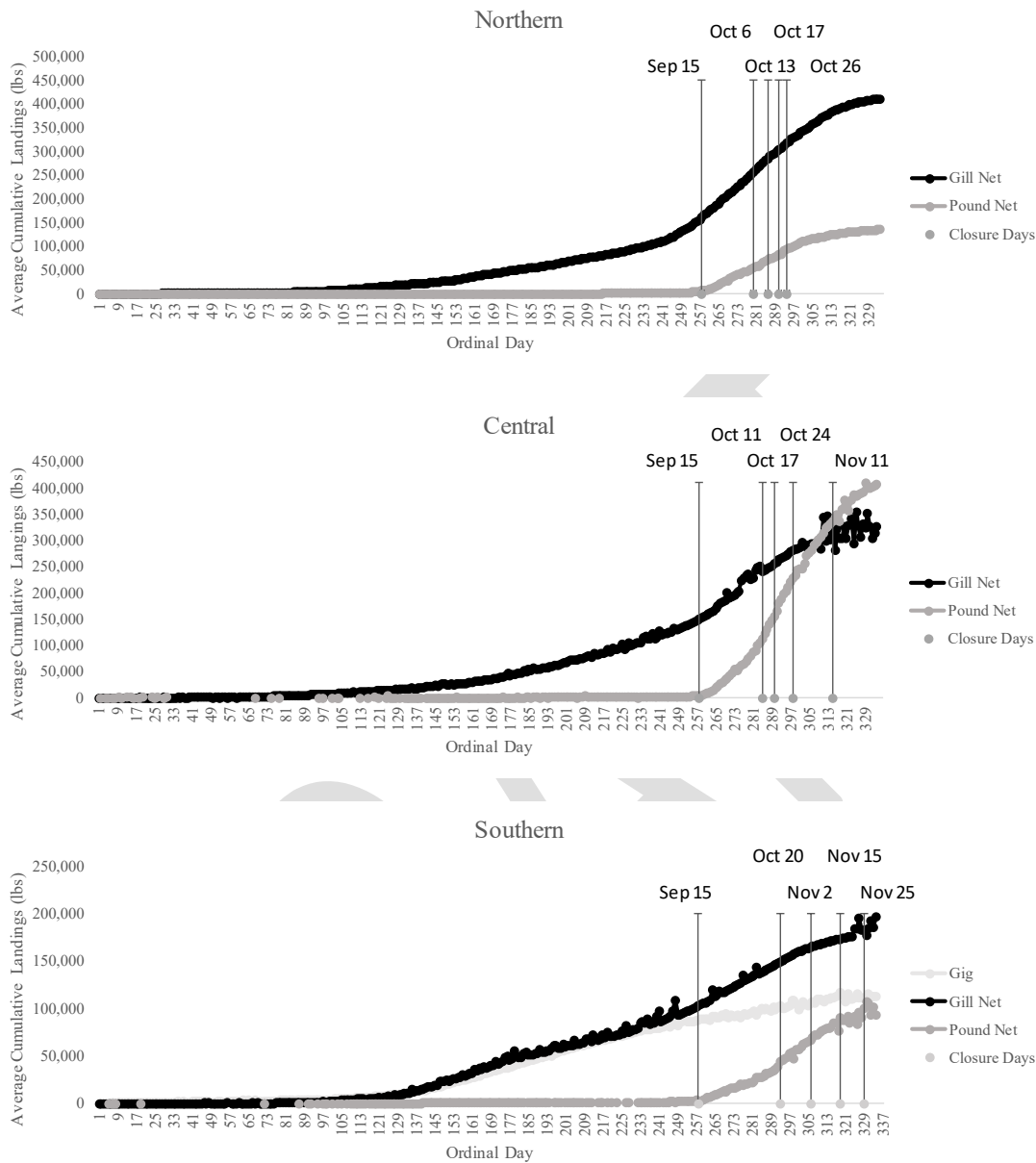
**Figure 19.** Breakdown of the total removals (observed harvest and dead discards) in % of pounds for the commercial and recreational (hook-and-line and gig) fisheries in North Carolina, 2017. (Source: North Carolina Trip Ticket Program and Marine Recreational Information Program).

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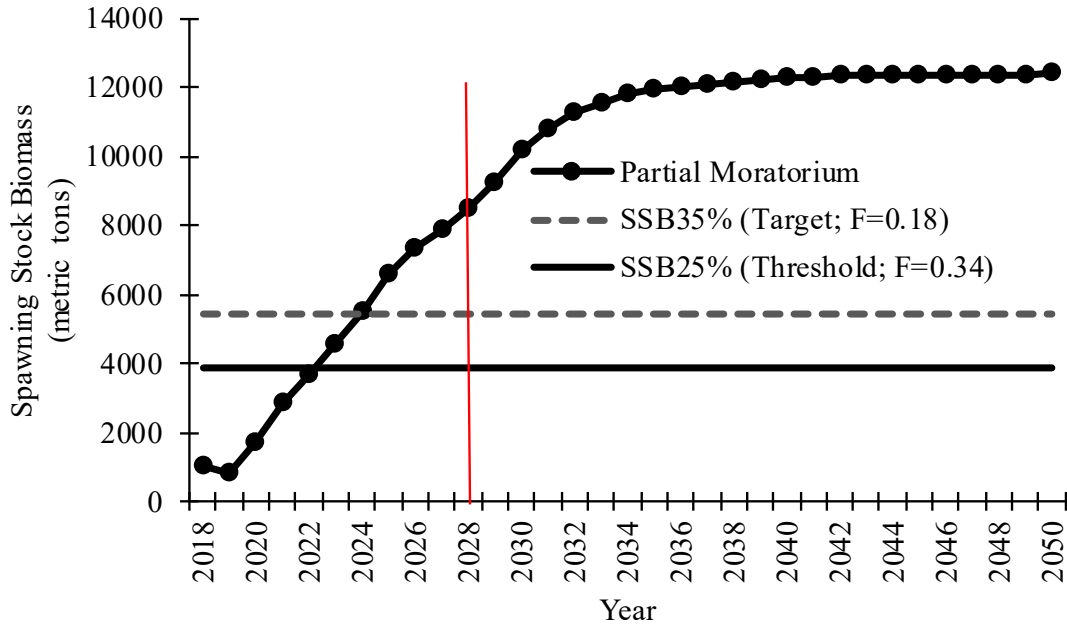
**Figure 20.** Southern Flounder Amendment 2 management areas for the commercial fishery, 2019.

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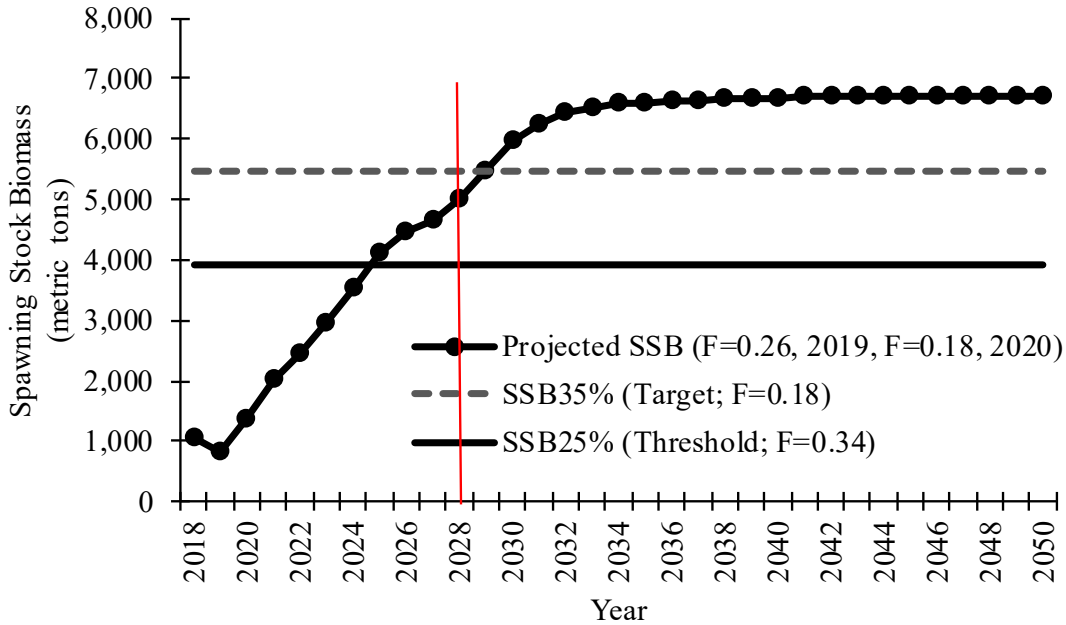


**Figure 21.** Cumulative commercial landings of the North Carolina southern flounder fishery in three proposed management areas by major gear type and proposed season needed to meet the threshold and target rebuilding reductions. (Source: North Carolina Trip Ticket Program). **\*First vertical line indicates the opening date of Sept. 15, the second vertical line indicates the date of closure based on the overfished target (72%), the third vertical line indicates the date of closure based between the threshold and target (62%), the fourth vertical line indicates the date of closure based on the overfished threshold (52%), and the fifth vertical line indicates the date of closure based on the overfishing threshold (31%).** Note: Monitoring, reporting, and closure requirements identified through the NCDMF’s sea turtle and Atlantic sturgeon Incidental Take Permits will remain in effect and may impact dates identified in this figure.

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**Figure 22.** Predicted future spawning stock biomass (metric tons) based on a partial moratorium. This projection is for a coastwide moratorium with the only removals coming from the commercial shrimp trawl fleet.



**Figure 23.** Predicted future spawning stock biomass (metric tons) based on the Department of Environmental Quality/NCDMF recommendation for a 62% reduction in 2019 ( $F=0.26$ ), and a 72% reduction beginning in 2020 ( $F=0.18$ ).

