Summary of Public Comment on the Cobia Draft Amendment I Public Information Document

The Public Comment period for the Cobia Draft Amendment I Public Information Document (PID) closed on October 10, 2018 and 39 comments were received.

In September, 2018, Public Hearings were held to discuss management options for topics presented in the Public Information Document (PID) for Cobia Draft Amendment 1. Hearings were held for Maryland (MD) jointly with the Potomac River Fisheries Commission (PRFC), Virginia (VA), North Carolina (NC) (two hearings), and South Carolina (SC) jointly with Georgia (GA). An additional hearing was held by state staff in New Jersey, and the summary of that hearing is included in this report as well.

No public attended hearings in Morehead City, NC, and Colonial Beach, VA (joint MD-PRFC hearing). Across all six hearings held, a total of ten public individuals attended.

The majority of comments submitted were from members of the Virginia Saltwater Sportfishing Association. Most comments supported continuation of current recreational minimum size and bag limits, 3-year average methods for evaluation of compliance with recreational targets, a coastwide commercial quota, and state-specific season and vessel limits to adhere to state recreational harvest targets. Additionally, most comments supported use of multi-year commercial regulatory periods, recreational management by numbers of fish rather than pounds, stable regulations that would not allow for in-season regulatory changes, commercial permitting through individual states, and biological sampling only if conducting on a voluntary basis.

While most comments from throughout the management area supported continuation of several current coastwide recreational measures, recreational management based on numbers of fish, and voluntary biological sampling programs, some comments varied by region. In general, public comments from the southern portion of the management area (provided at the joint Georgia-South Carolina hearing) expressed more support for lowering the coastwide vessel limit to 3 fish and managing in federal waters by implementing regulations of adjacent state waters (essentially extending state boundaries by latitude into federal waters). Public comments from further north (Virginia and North Carolina via written and spoken comments) expressed more support for maintaining the current coastwide recreational vessel limit of 6 fish and managing federal waters according to regulations of the landing state.

Comments provided in writing and at public hearings are summarized and written comments are provided below.

Written Comment Summary

<u>Issue 1: Recommended Management for Federal Waters</u>

Thirty-six (36) comments support federal regulations based on state of landing.

<u>Issue 2: Harvest Specification Process</u>

Thirty-six (36) comments support a recreational per person limit of 1 fish.

Thirty-six (36) comments support using 3-year time periods to evaluate the recreational fishery.

Thirty-six (36) comments support management of the recreational fishery by numbers of fish rather than pounds.

Thirty-five (35) comments support a recreational minimum size of 36 inches fork length (40 inches total length).

Thirty-five (35) comments support maintaining a coastwide commercial quota.

Thirty-five (35) comments support the states' abilities to set season and [vessel]¹ limits to adhere to allocated harvest targets.

Thirty-five (35) comments support recreational state allocations based on historical landings.

Thirty-five (35) comments expressed desire for stability and do not support management options that would allow in-season changes to regulations.

Thirty-four (34) comments support a recreational vessel limit of 6 fish.

Thirty-four (34) comments support commercial permitting through individual states, but not through a federal process.

Thirty-four (34) comments support the use of multi-year periods for the commercial fishery.

One (1) comment supports keeping regulations the same as in 2018.

One (1) comments support a recreational minimum size of 37 inches total length, with one fish over 50 inches.

One (1) comment supports a recreational vessel limit of 3 fish.

One (1) comment supports the current allocation strategy used for the recreational fishery.

One (1) comment supports payback or a one-year moratorium in the case of overfishing.

¹ Comments from the Virginia Saltwater Sportfishing Association state "bag limit", but later correspondence with President, Mike Avery, confirmed that "vessel limit" was intended.

One (1) comment does not support consideration of management without a coastwide harvest limit.

One (1) comment does not support the use of multi-year periods for the commercial fishery.

One (1) comment supports management using soft annual catch targets.

One (1) comment states that current Virginia regulations seem fair.

<u>Issue 3: Biological Sampling Requirements</u>

Thirty-five (35) comments support voluntary, but not required, state biological sampling of the recreational fishery.

Thirty-four (34) comments state that states should establish their own sampling programs based on available resources.

Thirty-four (34) comments support biological monitoring of both the recreational and commercial sectors but only if conducted on a voluntary basis.

One (1) commenter stated they would participate in a freezer donation program.

One (1) commenter stated they would participate in a weigh-in station program.

Other Comments

Thirty-five (35) comments support establishment of cobia regulations in all states throughout the management area (New York – Georgia).

Thirty-five (35) comments state that some of the cobia quota from the Atlantic coast of Florida should be shifted to the ISFMP's management area (New York – Georgia).

Thirty-four (34) comments support changing the commercial per license holder limit to a per person limit.

Two (2) comments stated that the management jurisdiction of the Cobia Interstate FMP and any associated annual quota should include cobia from the Atlantic coast of Florida.

One (1) comment supported fishery monitoring through a mandatory reporting program in the fashion of the Virginia Marine Resources Commission.

One (1) comment supported use of smoothing methods on MRIP catch estimates for evaluating compliance with the FMP in the fashion of those being used for black sea bass.

One (1) comment supported fair and equitable access in the form of equivalent regulations across states.

One (1) comment stated that Rudee Inlet in Virginia Beach, VA, had a great season. This comment also stated that while improvements could be made to the Virginia reporting system, the technology of the current system is useful.

One (1) comment stated concern with the depletion of menhaden as a forage fish for cobia and other species and requested lower quotas for the reduction fishery.

One (1) comment stated hearing of significant commercial dead discards of cobia by the menhaden reduction fishery and asked if this will be investigated.

Cobia Draft Amendment 1 Public Information Document Public Hearing Summary (NJ; state-held)

Galloway, NJ September 6, 2018 6 Attendees

Staff: 5 New Jersey Department of Environmental Protection Staff

Attendees: Kevin Wark

Management in Federal Waters

• Have the federal regulations mirror the state regulations.

Harvest Specification Process

- Prefers evaluations in numbers of fish.
- Suggests a state permit system which would allow for better monitoring.

Additional Comments

- Supports the use of VTRs to provide full documentation of fishing activity and to establish fishing history for the vessel/fisherman.
- Observed cobia are attracted to structures uncovered by sand mining with the result that people are starting to target cobia in waters off NJ.
- Observed that with warmer water, there are higher numbers of cobia.
 - o The fish come closer to shore in August and September but are gone in October.
- Observed that net fishermen don't normally high-grade their cobia catches.
- NJ should have either a small bag limit or have specifications to include incidental cobia catch.
- Even though NJ has relatively small cobia landings, they should have some allotment/recognition in the management plan.
- Don't force the commercial fishermen to dump/waste their cobia catches.
 - Fishermen don't direct their activity to harvest cobia but would like to sell their incidental catches even late in the season when the "directed" fishery is closed (NJ fishermen are still encountering the cobia at that time).
- States should define who is commercial versus recreational for accountability with quotas.

Cobia Draft Amendment 1 Public Information Document Public Hearing Summary (VA) Newport News, VA September 19, 2018 6 Attendees

Staff: Dr. Michael Schmidtke (ASMFC), Pat Geer (VA), Alex Aspinwall (VA) Attendees: Mike Avery (Virginia Saltwater Sportfishing Association), Craig Freeman, Dr. Andrew Scheld (Virginia Institute of Marine Science)

Management in Federal Waters

 Avery and Freeman supported regulations for federal waters determined by state of landing.

Harvest Specification Process

- Avery: Suggested adding cobia to the commercial Greater Atlantic Regional Fisheries Office
 to monitor commercial harvest in federal waters. Any additional permit to provide
 additional monitoring of commercial harvest in federal waters should be free.
- Avery: Would prefer streamlining of reporting process. Report catch to single agency then share data among different users.
- Avery: Recreational stakeholders want stability in the season. Once season and limits are decided, don't want mid-season changes or closures. Prefer multi-year but at least annual setting of season then allow season to play out.
 - o Freeman supported.
- Avery: Happy with process of state allocation then allowing states to set own regulations to adhere to quota/target. Fine with current management structure but not with current allocation due to the exclusion of Florida east coast from the FMP's jurisdiction. If east coast of Florida were included with Atlantic stock, 2015 and 2016 recreational harvests would not have been overages.
- No specified preference on numbers vs. pounds for recreational harvest.
- Avery: Would be nice to have some form of benefit for trophy fish provision (1 fish over 50 in total length)

Biological Monitoring

- Avery: Don't want to see additional requirements that would become burdensome for fishers.
- Freeman: Any station or freezer needs to be conveniently located for adequate participation.

Additional Comments

- Freeman: Current commercial regulations, particularly the possession limit of 2 fish per license holder (VA-specific), resulting in decline in commercial harvest to the point that commercial fishery is not viable.
- Freeman and Avery: Would like to remove the per license holder provision (which is VAspecific) to the coastwide 2 fish per person possession limit.
- Freeman: Commercial limit in VA should not be less than the recreational (effectively is if only 1 license holder on a vessel)
- Avery: Does not accept results of the SEDAR 58 Stock ID Workshop or that they should be
 applied in management jurisdictions. Thinks that Commission management should include
 east coast of Florida, and quota allocations for that region should be added to quota from
 Georgia north then allocated to states along the Atlantic coast.
- Freeman: Changes to commercial regulations in 2018 did have a significant economic impact on commercial fishery.

Cobia Draft Amendment 1 Public Information Document Public Hearing Summary (GA, SC) Pooler, GA September 24, 2018

Staff: Dr. Michael Schmidtke (ASMFC), Doug Haymans (GA), Dawn Franco (GA), Chris Kalinowsky (GA), Robert Boyles (SC)

Attendees: Frank Gibson (SC), Daniel Utley (SC), Collins Doughtie (SC), Al Stokes (SC)

Management in Federal Waters

6 Attendees

- Doughtie: State jurisdictional boundaries should be extended by latitude into federal waters.
 - Stokes supported. Would help law enforcement as well.
 - Utley supported.

Harvest Specification Process

- Doughtie: Supports Board ability to make quick regulation changes. Supports increased use of webinars to gather public comment more quickly.
- Stokes: Supports recreational management using numbers of fish.
- Stokes: Concern about difference in commercial and recreational per person limits.
 Recreational fishermen would get commercial licenses, catch under commercial regulations, and then sell directly to restaurants. Were able to continue fishing outside of recreational season. Would like to have similar regulations between commercial and recreational.
- Doughtie: Would support gamefish status extended into federal waters off SC.

Biological Monitoring

Doughtie: Don't think weigh-in stations would work. Freezers already set up in SC.

Additional Comments

- Doughtie: Should consider lowering recreational coastwide vessel limit to 2 fish per vessel per day.
 - o Utley supported.
- Doughtie: Observed a lot of small fish in 2018; anticipating fairly large cobia harvest in 2019, but don't want fishing so much as to make population crash.
- Doughtie: Trophy fish regulation, similar to Virginia's for hook and line, could be considered for other areas. Should not be too large because female fecundity may regress at the oldest ages/largest sizes. Should be research-informed. Potential drawback is measurement of a large cobia that's close to limit could be difficult/dangerous.

Cobia Draft Amendment I Public Information Document

Atlantic States Marine Fisheries Commission September 24, 2018 Georgia/South Carolina

-- PLEASE PRINT CLEARLY --

Michael Schnidtke David Utlar David Utlar David Schnidtke	Company/Organization ASMFC Rec & Man De De M Tishing Charles Charles, Cach Charles, Ca	Artinaton, VA 15 a FF tow Sc 15 a FF tow Sc 13 luf Flore, 5 C

Cobia Draft Amendment 1 Public Information Document Public Hearing Summary (NC) Manteo, NC September 26, 2018 4 Attendees

Staff: Chris Batsavage (NC), Bruce Crostic (Marine Patrol)

Attendees: Bill Gorham, Travis Kemp

Management in Federal Waters

- Kemp: Federal recreational regulations should be based on state where the fish is landed.
- Gorham: Maintain most liberal recreational regulations in federal waters (1/person & 6/vessel) or restrict harvest to state of landing

Harvest Specification Process

Harvest Limits

- Kemp: Do not manage under current ACL.
- Gorham: A coastwide harvest limit should cover the documented migratory range of Atlantic cobia, which includes northeast Florida; if not, then do not manage under an ACL; another option is to set the harvest limit at a percentage above the peak harvest (or a percentage over a time series average) to allow for more management flexibility, especially during times of high cobia abundance.
- Gorham and Kemp: Flexibility in management to achieve stability in the regulations is key; do not want to see the harvest limit drastically reduced—there isn't much more NC can do with the regulations to reduce harvest

Recreational Management Options

- Gorham and Kemp: All recreational management options except for gear restrictions (ex. Circle hooks, no live bait, etc.) should be considered in the specification process.
- Gorham: Should be at least a 5-year time period for evaluating recreational harvest against management targets or reset the recreational harvest limit after the next stock assessment—stable regulations are needed.
- Gorham: Number of fish should be used instead of weight to manage recreational fishery—how would that be done (calculated, implemented)? Number of fish would provide a level playing field among the states and provide more stable regulations.

Commercial Management Options

Gorham: Anything that preserves the commercial cobia fishery should be explored.
 Better communication is needed among the agencies to avoid early commercial closures. Commercial discards (in the fall) when the fishery is closed is a concern.

Commercial quota is very small, especially compared to cobia aquaculture. Maybe stateby-state commercial allocations, but overall commercial allocation very small.

Biological Monitoring

- Gorham and Kemp: Data collection (biological monitoring) should be required by the states in order to ensure that it happens.
- Gorham: supports NC's carcass collection program and is willing to help the process
 (collecting more cobia samples, stakeholder buy-in); carcass collection freezers are needed
 at charter boat marinas to collect more samples; life history information is really needed;
 concerned that size limit (36") may bias carcass samples toward female fish and impact this
 could have on the cobia population long term

Additional Comments/Questions

- Who pays for biological monitoring? State-funded, not typically funded by ASMFC; cost of monitoring not typically paid for by fishermen in state.
- NC has a spring pulse fishery of variable length; a summer/early fall pier fishery, a shorter
 pulse fishery in the fall as well as a commercial bycatch fishery in the fall and VA has cobia in
 their waters for 6 months—how can we manage based on migratory patterns of the species
 among the states and in the states?
- Kemp: Small cobia are very abundant now. A lot of small cobia were caught during a recent surf fishing tournament on Hatteras Island; has cleaned more male cobia this year compared to other years.
- Gorham: Cobia fishery in VA is very large (larger than last stock assessment); doesn't want to see small ACL reduce harvest even further.
- Kemp: Very little directed cobia effort by private boat anglers in NC after possession limit decreased to 1 per vessel on June 1.
- Gorham: Better accounting of anglers targeting cobia in NC is needed to get a better idea of effort and harvest.
- Kemp: Mandatory reporting of cobia in VA doesn't seem to be a problem up there; compliance seems like it's good.
- Gorham: Speaks on behalf of a lot of anglers, which is why many people don't come to hearings. Calls fishermen along the NC coast to get their thoughts and feedback before coming to meetings.
- Gorham and Kemp: Have a private Facebook page where anglers can provide questions and comments to us and we provide comments to the managers. Will survey anglers on the Facebook page.

Date: 9/26/18 . Location: Mante	ONC.
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Public Information Document on Amendment to the Cobia Fishery Management Plan for Public Comment

Atlantic States Marine Fisheries Commission

PLEASE PRINT CLEARLY --

Bill Garhan	Rec Industry	Moyock, NC

Tina Berger

From: LG Shaw <lg@waveridingvehicles.com>
Sent: Friday, September 07, 2018 6:32 PM

To: Comments Subject: Cobia PID

Aloha,

Sorry for the response after the posted deadline via email but I thought I'd share my thoughts anyway. It seemed like a great season out of Rudee Inlet in Virginia Beach. Most of the folks I know that targeted Cobia had at least one keeper this year and some of the more experienced fishermen I know had one every few weeks. The regulations seemed fair. Both the quantity and sizing rules were straight forward and easy to follow. The VA permit website was easy enough to operate but the user interface could be improved. I'm sure that's no short order on the budget side. It was nice being able to log trips and catches via your cell phone browser, it reduced the odds of forgetting by the time you got home and relaxed (read; beer in hand). Thank you for doing your best to maintain a healthy fishery for us and generations to come.

LG Shaw

Operations Manager Wave Riding Vehicles 1900 Cypress Ave Virginia Beach VA 23451 757-422-0423 office 757-428-6328 fax



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RESPONSE TO COBIA PID, SEPT, 2018

- 1. What types of regulations should the Commission recommend be implemented into federal waters, e.g. quota, bag limits, seasons, size limits? We should retain the 36-inch fork length or 40-inch total length size limits for the coast-wide areas. We believe the federal coast-wide recreational bag limit should remain at one cobia per person per day, or six cobia per vessel per day, whichever is more restrictive. The issue of bag limits and seasons should be left to the individual states based on the allocation as cobia migrate differently for each state. Should vessels fishing in federal waters be subject to cobia regulations of their state of landing? For simplicity and clarity to avoid confusion there should only be one set of regulations (for each state) that cover both state and federal waters. While fishing for cobia it is not uncommon to -cross both state and federal waters. Having a single regulation for each state would make management and enforcement less confusing. Should state jurisdictional boundaries be extended by latitude to apply federal regulations in sectioned areas of federal waters? We believe the best management option should simply be the port of departure and return. Sometimes a boat may not be targeting cobia but find themselves geographically just over a state line and catch a cobia but will return to the port they departed from. Where ever the port the cobia is landed should be the regulation that applies to that trip. Should a separate set of regulations be developed specifically for fishing in federal waters? No (see above). Should the Commission consider some other strategy? See responses above.
- 2. Harvest Specification Process for both Commercial and Recreational Fisheries... If a coast wide limit continues to be considered, how should it be set? The commercial quota is so small we recommend that management continue as a coast-wide stock. Attempting to divide the small commercial quota among the states would result in very small individual quotas and management would be difficult. For recreational management, we should retain the 36 inch fork length or 40 inch total length size limits for the coast-wide areas. We believe the federal coast-wide recreational bag limit should remain at one cobia per person per day, or six cobia per vessel per day, whichever is more restrictive. The issue of bag limits and seasons should be left to the individual states as cobia migrate differently for each state. There should be a fair allocation for each state and each state should determine how it stays within that allocation with seasons and bag limits. Please note, the current allocation of 620,000 lbs. for GA-NY is unfair and the process used to determine that is deeply flawed. Even if ASMFC accepts the results of SEDAR 58 to continue management separation at the GA/FL line, the allocations given to East Florida compared to the rest of the Atlantic coast is completely unfair and biased. We strongly recommend ASMFC work with SAFMC and the Gulf Council to ensure the allocation remains fair, balanced, and unbiased. Allowing a single state (Florida) to have an unfair, larger allocation for both their Atlantic Coast and Gulf Coasts is simply not right and unfair. We ask for fair allocations with no advantages and biases given to any single state or coast. As such, we would expect to see the Atlantic allocation increase to reflect fair allocations. How should it be allocated? Percentages to states based on historical landings. To the commercial and recreational sectors? See above and below. To the states? See above and below. What options should be considered if the stock status is overfished or overfishing is occurring or if harvest limits/quotas/targets are exceeded? Stability is what is desired by anglers and charter captains. We strongly believe we should not put management options in place that allow the commission to make in season changes. Sticking with the 3-year averages should be enough to manage the stocks. Stability is what is desired the most.
- 3. Should management regimes without coast wide harvest limits be considered? If so, what could those look like? Every year the cobia seem to migrate farther north. We believe every state from GA to NY should have regulations in place to manage cobia. For the Recreational Fishery What recreational management options should be allowed for consideration in the specification process? We should retain the 36-inch fork length or 40-inch total length size limits for the coast-wide areas. We believe the recreational bag limit should remain at one cobia per person per day, or six cobia per vessel per day, whichever is more restrictive. The issue of bag limits and seasons should be left to the individual states as cobia migrate differently for each state. There should be a fair allocation for each state and each state should determine how it stays within that allocation with seasons and bag limits. As such, we should expect to see the Atlantic allocation increase to reflect fair allocations. The state allocation should be based on a fair percentage based on historical landing.

4. Should the current 3-year time period for evaluating recreational harvests against management targets be reduced? No!!!! Should recreational harvests be evaluated in numbers of fish or pounds? We would like to see numbers of fish used to estimate overall catch. The MRIP estimate process is flawed as all it takes is one large fish that gets intercepted to grossly overstate the catch estimates. Allocation by poundage would be awkward at best.

Finally, I want to add that recreational anglers are deeply concerned about the continued depletion of menhaden bait fish in many areas such as the Chesapeake Bay. These fish are critical forage for Cobia and other species. We urge you or other bodies to protect Menhaden by significantly lowering the quotas for the reduction industry.

Thank you for the opportunity to respond to this important fisheries matter.

Sincerely,

Steve Atkinson

Midlothian, VA

Tina Berger

From: Virginia Saltwater Sportfishing Association VSSA [ifishva@gmail.com]

<mike@averys.net>

Sent: Monday, October 01, 2018 6:34 PM

To: Comments
Cc: Mike Avery
Subject: VSSA - Cobia PID

Name	Mike Wills
Street Address	3841 Jefferson Blvd
City, State, Zip Code	23455
Text	mwills98@yahoo.com
Phone Number	7574986276
My Comments to the Atlantic Cobia	ISSUE 1: Recommended Management for Federal Waters
Amendment 1 PID	What types of regulations should the Commission recommend be implemented into federal waters, e.g. quota, bag limits, seasons, size limits?

We should go back to 37" total length size limits for the coast-wide areas. We believe the recreational bag limit should remain at one cobia per person per day, or 3 cobia per vessel per day, whichever is more restrictive, with only one fish over 50". The issue of bag limits and seasons should be left to the individual states based on the allocation as cobia migrate differently for each state.

Should vessels fishing in federal waters be subject to cobia regulations of their state of landing?

For simplicity and clarity to avoid confusion there should only be one set of regulations (for each state) that cover both state and federal waters. While fishing for cobia it is not uncommon to crisscross both state and federal waters. Having a single regulation for each state would make management and enforcement less confusing.

Should state jurisdictional boundaries be extended by latitude to apply federal regulations in sectioned areas of federal waters?

We believe the best management option should simply be the port of departure and return. Sometimes a boat may not be targeting cobia but find themselves geographically just over a state line and catch a cobia but will return to the port they departed from. Where ever the port the cobia is landed should be the regulation that applies to that trip.

Should a separate set of regulations be developed specifically for fishing in federal waters?

No (see above).

Should the Commission consider some other strategy?

See responses above.

ISSUE 2: Harvest Specification Process

For Both Commercial and Recreational Fisheries

If a coastwide limit continues to be considered, how should it be set?

The commercial quota is so small we recommend that management continue as a coast-wide stock. Attempting to divide the small commercial quota among the states would result very small individual quotas and management would be difficult.

For recreational management, we should use 37" inch total length size limits for the coast-wide areas. We believe the overall coast-wide Atlantic recreational bag limit should remain at one cobia per person per day, or 3 cobia per vessel per day, whichever is more restrictive, with only one over 50. The issue of bag limits and seasons should be left to the individual states as cobia migrate differently for each state. There should be a fair allocation for each state and each state should determine how it stays within that allocation with seasons and bag limits.

Please note, the current allocation of 620,000 lbs. for GA-NY is unfair and the process used to determine that is deeply flawed. Even if ASMFC accepts the results of SEDAR 58 to continue management separation at the GA/FL line, the allocations given to East Florida compared to the rest of the Atlantic coast is completely unfair and biased. We strongly recommend ASMFC work with SAFMC and the Gulf Council to ensure the allocation remains fair, balanced, and unbiased. Allowing a single state (Florida) to have an unfair, larger allocations for both their Atlantic Coast and Gulf Coasts is simply not right and unfair. We ask for fair allocations with no advantages and biases given to any single state or coast. As such, we should expect to see the Atlantic allocation increase to reflect fair allocations.

How should it be allocated?

Percentages to states based on historical landings.

To the commercial and recreational sectors?

See above and below.

To the states?

See above and below.

What options should be considered if the stock status is overfished or overfishing is occurring or if harvest limits/quotas/targets are exceeded?

Stability is what is desired by anglers and charter captains. Once a season is established there should be no changes to that current season. Charter captains plan out the year for expenses, bills, etc. and if seasons change or shut down could result in such disruptions in income it could shut them down completely as small business operator. We strongly believe we should not put management options in place that allow the commission to make in season changes. Sticking with the 3-year averages should be enough to manage the stocks. Stability is what is desired the most.

Should management regimes without coastwide harvest limits be considered? If so, what could those look like?

Every year the cobia seem to migrate farther north. We believe every state from GA to NY should have regulations in place to manage cobia.

For the Recreational Fishery

What recreational management options should be allowed for consideration in the specification process. we should use 37" inch total length size limits for the coast-wide areas. We believe the overall coast-wide Atlantic recreational bag limit should remain at one cobia per person per day, or 3 cobia per vessel per day, whichever is more restrictive, with only one over 50". The issue of bag limits and seasons should be left to the individual states as cobia migrate differently for each state. There should be a fair allocation for each state and each state should determine how is stays within that allocation with seasons and bag limits.

Please note, the current allocation of 620,000 lbs. for GA-NY is unfair and the process used to determine that is deeply flawed. Even if ASMFC accepts the results of SEDAR 58 to continue management separation at the GA/FL line, the allocations given to East Florida compared to the rest of the Atlantic coast is completely unfair and biased. We strongly recommend ASMFC work with SAFMC and the Gulf Council to ensure the allocation remains fair, balanced, and unbiased. Allowing a single state (Florida) to have an unfair, larger allocations for both their Atlantic Coast and Gulf Coasts is simply not right and unfair. We ask for fair allocations with no advantages and biases given to any single state or coast. As such, we should expect to see the Atlantic allocation increase to reflect fair allocations.

The state allocation should be based a fair percentage based on historical landing.

Should the current 3-year time period for evaluating recreational harvests against management targets be reduced? No!!!!!!!

Should recreational harvests be evaluated in numbers of fish or pounds?

We would like to see numbers of fish used to estimate overall catch. The MRIP estimate process is deeply flawed as all it takes one large fish that get intercepted to grossly over estimate the overall estimates.

For the Commercial Fishery

What commercial management options should be allowed for consideration in the specification process?

The commercial quota is so small we recommend that management continue as a coast-wide stock. Attempting to divide the small commercial quota among the states would result very small individual quotas. We recommend Amendment 1 be clarified to allow commercial crews to have only 1 commercial permit holder on the vessel with 2 per person as the limit. The current interpretation of the regulation that limits the per person limit to only 2 cobia per permit holder severely puts the commercial permit holder at such an extreme disadvantage that fishing for cobia commercially is not economically viable. If only 2 cobia are caught that barely pays the expenses for the trip. The quota is so small that the effects on the overall stocks is inconsequential.

Should commercial measures be set to remain in place for multi-year periods? Yes.

Should a coastwide landings permitting mechanism be established through the states for commercial harvest of Atlantic cobia in federal waters?

The mechanism for state landings should be the same for federal landings. There is no need to make the distinctions between state and federal waters. One set of limits should be applied to both state and federal waters.

Should the Commission recommend that NOAA fisheries require a federal permit to harvest cobia commercially in federal waters?

We don't believe a federal permit should be required as long as the state has a process to manage commercial permits.

ISSUE 3: Biological Monitoring

Should states be required by the FMP to collect biological data on cobia?

States should have programs for voluntary contributions like Virginia. Many anglers have a strong desire to contribute to such a program that you have more data that needed. We would not support any mandatory program that requires anglers to participate because the sampling stations are sometime too far away.

Should the same biological monitoring requirements be required of all states or should requirements vary based on the size of the states' fisheries (for example 1 fish length per 1,000 pounds harvested)?

Let the states establish their own program based on resources available.

Should biological monitoring be conducted for the commercial sector, recreational sector, or both?

Both but voluntary in nature.

What types of biological monitoring programs would you participate in? Examples include freezer donation or weigh-in stations.

Let the states establish their own program based on resources available.

Thank you for the opportunity to review the PID. I look forward to seeing the draft Amendment for Cobia.

Signed, Virginia Saltwater Sportfishing Association (VSSA) member or supporter.

IP Address	108.17.132.158
User-Agent (Browser/OS)	Apple Safari 11.0 / OS X
Referrer	http://joinvssa.org/action-plan/cobia/

Tina Berger

From: Virginia Saltwater Sportfishing Association VSSA [ifishva@gmail.com]

<mike@averys.net>

Sent: Wednesday, September 26, 2018 9:25 AM

To: Comments
Cc: Mike Avery
Subject: VSSA - Cobia PID

Name	Corey Skay
Street Address	102 Thornrose Dr.
City, State, Zip Code	Yorktown, Va. 23692
Text	cskay@imiallc.com
Phone Number	251-348-1443
My Comments to the Atlantic Cobia	ISSUE 1: Recommended Management for Federal Waters
Amendment 1 PID	What types of regulations should the Commission recommend be implemented into federal waters, e.g. quota, bag limits, seasons, size limits?

The regulations should stay the same as the 2018 Cobia season.

Should vessels fishing in federal waters be subject to cobia regulations of their state of landing?

For simplicity and clarity to avoid confusion there should only be one set of regulations (for each state) that cover both state and federal waters. While fishing for cobia it is not uncommon to crisscross both state and federal waters. Having a single regulation for each state would make management and enforcement less confusing.

Should state jurisdictional boundaries be extended by latitude to apply federal regulations in sectioned areas of federal waters?

We believe the best management option should simply be the port of departure and return. Sometimes a boat may not be targeting cobia but find themselves geographically just over a state line and catch a cobia but will return to the port they departed from. Where ever the port the cobia is landed should be the regulation that applies to that trip.

Should a separate set of regulations be developed specifically for fishing in federal waters?

No (see above).

Should the Commission consider some other strategy?

See responses above.

ISSUE 2: Harvest Specification Process

For Both Commercial and Recreational Fisheries

If a coastwide limit continues to be considered, how should it be set?

The commercial quota is so small we recommend that management continue as a coast-wide stock. Attempting to divide the small commercial quota among the states would result very small individual quotas and management would be difficult.

Please note, the current allocation of 620,000 lbs. for GA-NY is unfair and the process used to determine that is deeply flawed. Even if ASMFC accepts the results of SEDAR 58 to continue management separation at the GA/FL line, the allocations given to East Florida compared to the rest of the Atlantic coast is completely unfair and biased. We strongly recommend ASMFC work with SAFMC and the Gulf Council to ensure the allocation remains fair, balanced, and unbiased. Allowing a single state (Florida) to have an unfair, larger allocations for both their Atlantic Coast and Gulf Coasts is simply not right and unfair. We ask for fair allocations with no advantages and biases given to any single state or coast. As such, we should expect to see the Atlantic allocation increase to reflect fair allocations.

How should it be allocated?

Percentages to states based on historical landings.

To the commercial and recreational sectors?

See above and below.

To the states?

See above and below.

What options should be considered if the stock status is overfished or overfishing is occurring or if harvest limits/quotas/targets are exceeded?

Stability is what is desired by anglers and charter captains. Once a season is established there should be no changes to that current season. Charter captains plan out the year for expenses, bills, etc. and if seasons change or shut down could result in such disruptions in income it could shut them down completely as small business operator. We strongly believe we should not put management options in place that allow the commission to make in season changes. Sticking with the 3-year averages should be enough to manage the stocks. Stability is what is desired the most.

Should management regimes without coastwide harvest limits be considered? If so, what could those look like?

Every year the cobia seem to migrate farther north. We believe every state from GA to NY should have regulations in place to manage cobia.

For the Recreational Fishery

What recreational management options should be allowed for consideration in the specification process?

Please note, the current allocation of 620,000 lbs. for GA-NY is unfair and the process used to determine that is deeply flawed. Even if ASMFC accepts the results of SEDAR 58 to continue management separation at the GA/FL line, the allocations given to East Florida compared to the rest of the Atlantic coast is completely unfair and biased. We strongly recommend ASMFC work with SAFMC and the Gulf Council to ensure the allocation remains fair, balanced, and unbiased. Allowing a single state (Florida) to have an unfair, larger allocations for both their Atlantic Coast and Gulf Coasts is simply not right and unfair. We ask for fair allocations with no advantages and biases given to any single state or coast. As such, we should expect to see the Atlantic allocation increase to reflect fair allocations.

The state allocation should be based a fair percentage based on historical landing.

Should the current 3-year time period for evaluating recreational harvests against management targets be reduced? No!!!!!!!

Should recreational harvests be evaluated in numbers of fish or pounds?

We would like to see numbers of fish used to estimate overall catch. The MRIP estimate process is deeply flawed as all it takes one large fish that get intercepted to grossly over estimate the overall estimates.

For the Commercial Fishery

What commercial management options should be allowed for consideration in the specification process?

The commercial quota is so small we recommend that management continue as a coast-wide stock. Attempting to divide the small commercial quota among the states would result very small individual quotas. We recommend Amendment 1 be clarified to allow commercial crews to have only 1 commercial permit holder on the vessel with 2 per person as the limit. The current interpretation of the regulation that limits the per person limit to only 2 cobia per permit holder severely puts the commercial permit holder at such an extreme disadvantage that fishing for cobia commercially is not economically viable. If only 2 cobia are caught that barely pays the expenses for the trip. The quota is so small that the effects on the overall stocks is inconsequential.

Should commercial measures be set to remain in place for multi-year periods? Yes.

Should a coastwide landings permitting mechanism be established through the states for commercial harvest of Atlantic cobia in federal waters?

The mechanism for state landings should be the same for federal landings. There is no need to make the distinctions between state and federal waters. One set of limits should be applied to both state and federal waters.

Should the Commission recommend that NOAA fisheries require a federal permit to harvest cobia commercially in federal waters?

We don't believe a federal permit should be required as long as the state has a process to manage commercial permits.

ISSUE 3: Biological Monitoring

Should states be required by the FMP to collect biological data on cobia?

States should have programs for voluntary contributions like Virginia. Many anglers have a strong desire to contribute to such a program that you have more data that needed. We would not support any mandatory program that requires anglers to participate because the sampling stations are sometime too far away.

Should the same biological monitoring requirements be required of all states or should requirements vary based on the size of the states' fisheries (for example 1 fish length per 1,000 pounds harvested)?

Let the states establish their own program based on resources available.

	Should biological monitoring be conducted for the commercial sector, recreational sector, or both?
	Both but voluntary in nature.
	What types of biological monitoring programs would you participate in? Examples include freezer donation or weigh-in stations.
	Let the states establish their own program based on resources available.
	Thank you for the opportunity to review the PID. I look forward to seeing the draft Amendment for Cobia.
	Signed, Virginia Saltwater Sportfishing Association (VSSA) member or supporter.
IP Address	70.188.92.231
User-Agent (Browser/OS)	Mozilla Firefox 62.0 / Windows
Referrer	http://joinvssa.org/action-plan/cobia/

Tina Berger

From: Craig Freeman <gradingscalessportfishing@gmail.com>

Sent: Tuesday, September 25, 2018 1:14 PM

To: Comments Subject: COBIA PID

Hello,

It was good meeting you at the VMRC building for the Cobia meeting last

week. After reflecting on what was said and re reading the draft, I would like to add the following comments.

First and foremost, it is not right that the Atlantic coast of Florida gets to have its own quota and the rest of the coast have to share a quota. Florida is an Atlantic state and should be grouped with the other states. If Florida's ASMFC Cobia quota was added to the total from GA-VA, we would not be having any of these discussions as the ACL will have never been exceeded. Florida's east coast should be included with the other states. I understand that this year's draft will still separate the cobia based on the Fla/Ga line, but that is a travesty that should have never happened. (end rant)

Issue one - Federal water management - The commission should recommend the following regs for federal waters. 1. Whatever the state of landing decides should be the federal regs. Ex - If I leave from and return to a VA port. The cobia regs for VA should be applied. Same thing NC, GA, and SC. The way it is currently, I could get a ticket in VA for having over the limit. Federal regs - 6 Fish per vessel, VA 3 fish per vessel recreational and 2 fish per card holder commercially. If come back to the dock with 6 fish and the marine patrol is doing inspections I would get a ticket even though I legal in federal waters. The regs should be based on the port the fisherman leaves from and returns to.

Issue 2 - Harvest Process -For both comms and recs. Question 1 - I like the current allocations for both comms, and the recs. Question 2 - If overfishing occurs then it should be a payback situation or even a complete shutdown of the fishery. (if cobia are truly in danger of overfishing, a shut down of a year or two should solve that) QUESTION 3 - NO.

For the recreational fishery - question 1 - 36 inch fork length one per person or 6 per vessel whatever is more restrictive. Question 2 - No, leave it at three years.

Question 3 - I'm still not sure about this. Poundage is what is currently being used and what has brought us into this mess. My gut says change it to numbers, but I'm just not sure. We need more data.

For the commercial fishery - Question 1 - Current regs are fine, except they should match the state of where the fisherman leaves from and returns to. In federal waters a comm fisherman can keep 6 cobia per day. My state(VA) says only two per card holder up to 6 cobia a day. Federally I can keep 6, state says I can keep 2. Thats isn't right. I could potentially lose my commercial license by keeping 6 legal federally caught cobia when I return to port and get inspected by the marine patrol officers. The Marine patrol would say I was 4 over my limit and give a ticket even though I caught the fish in federal waters.

Question 2 - NO the current system is good, although I think reporting could be a little faster.

Question 3 - Either way. A permit isn't a big deal. Hopefully it will be free if implemented.

Issue 3 Biological Monitoring - Question 1 - Required? No, but I do think they should have a voluntary program, like the one VA has. Question 2 - Again not required but voluntary. Question 3 - definitely for the

rec sector. For the commercial sector the state already collects data through the mandatory reporting required of Comm fisherman. Question 4 - Yes, freezer donations and weigh stations.

I do have a question though. If nothing changes and ASFMC has a federal regulation and the states has a different one, which regs do I follow?

Thanks,

Craig

--

Capt. Craig Freeman
Grading Scales Sportfishing
Poquoson, VA
http://www.gradingscalessportfishing.com/

Tina Berger

From: ncpierrat1 <ncpierrat@gmail.com>
Sent: Monday, September 17, 2018 3:59 PM

To: Comments
Subject: Cobia Comment

Dear ASMFC I am Jon Worthington and I am a Recreational and Commercial Fisherman as well as Past President of the OBX Anglers Club from Camden and Southern Shores NC. Thank you for the opportunity to comment on cobia management in the Atlantic Ocean.

I am writing to the South Atlantic Board of the ASMFC to make recommendations for Amendment 1 of the ASMFC Cobia Fisheries Management Plan (FMP.) The federal management of cobia in the South Atlantic has featured numerous violations of the National Standards of the Magnuson Stevens Act, starting with the splitting of management zones, the unfair and inequitable allocation of catch quota to management zones, and the utilization of catch data estimates which do not fall within scientific standards for variation and efficacy. In order to appropriately manage this species, the issues associated with the SEDAR28 allocation must be addressed.

Cobia are a low encounter species, and their range is extending further north every single year. A large biomass of cobia winters off of the Carolina capes. Cobia are a primary charter boat catch in the Chesapeake Bay for nearly three waves (May through the middle of September each year.) None of these facts were referenced or factored into the SEDAR28 consideration.

We are hopeful that the cobia stock identification workshop will address these issues. Until those issues can be resolved, I would like to recommend the following management strategies:

1) Cobia should be managed using soft catch targets, using total number of fish instead of poundage of catch.

MRIP catch estimates, based on tiny samples, with a high level of catch data variance, and estimates of effort that can't be explained which have been rejected by every state fisheries manager, must not be utilized. the data that showed a single week (June 8-14, 2016) in a single state (Virginia) extrapolated nine interactions and two reported harvested fish into 479,000 pounds of recreational harvest. That 479,000 pounds represented 37% catch of the total harvest. When the week by week data was put into a scientific control chart (used to evaluate data quality) that single week was three sigmas outside of the standard deviation, which is a clear indication that the data collection had an error or was manipulated. There is not a single industry in the United States that would make a management decision based on data that included such significant outliers without conducting some kind of root-cause analysis to determine the cause of the outlier. Again, 2 reported harvested fish (a decent day for a good boat in Virginia waters) was turned into 479,000 pounds of catch by NOAA analysts, and we initially were told that data was good enough for management. This does not meet National Academy of Sciences standards for data quality.

The 2015 MRIP annual catch data is an even larger outlier. The 2015 MRIP annual catch (862,281 pounds in Virginia) represented a 349% increase in catch in Virginia over the average catch over the previous 7 years (192,007 pound average from 2008-2014) and a 402% increase over the previous year.

In North Carolina, the 2015 MRIP data also represented a significant outlier. The 2015 MRIP North Carolina harvest was 675,859 pounds, a 170% increase over the average harvest (250,099) from 2008-2014 and a 173% increase over the 2014 catch (247,386.)

The week to week 2015 data has not been made public to determine if their were individual outlier weeks with small sample sizes. However, the only justification for the catch increase by NOAA was an huge increase in the number of directed trips. No justification has been provided by NOAA to indicate how they determined the increase in directed trips as sampling or success rates did not significantly increase.

A different catch data measurement mechanism must be utilized.

2) Catch estimates should utilize the high sampling associated with mandated reporting. Mandates reporting should follow the Virginia Marine Resources program. A free license ensures compliance. Using this reporting mechanism, ASMFC should set catch totals based on numbers of fish.

With a low encounter species featuring small catch samples, the number of fish, rather than estimated weight, produces a much more effective measure size of the annual harvest of a species like cobia. Other species currently under complimentary management use this approach, rather than relying on total poundage which can be significantly altered based on a small number of large samples. Given the significant range of size for harvestable

cobia (a keeper fish can range from 25 pounds up to well over 100 pounds,) we ask for the Board to approve using the number of fish caught rather than poundage estimates for cobia.

- 3) For the first year of the FMP, ASFMC should utilize smoothing methods on MRIP catch estimates are being done for other fisheries like black seabass. To date, low encounter species with low sampling rates like cobia have not been subjected to smoothing methods for evaluation. Given the significant statistical variance in recent MRIP data, any decisions which do not leverage smoothing methods equate to not using best available science and scientific methods for making management decisions. We ask that you instruct NOAA staff to incorporate these methods for future review of state management plans and allocation.
- 4) Any and all decisions made by this board should ensure that fair and equitable access to the fishery is ensured, as required by federal law. The current proposals (where North Carolina recreational anglers can only harvest one fish per boat while South Carolina and Georgia will receive six per boat) do not reflect fair and equitable access to the harvest.

I am happy to provide additional data as needed.

Thank You for Your Consideration,

Jon Worthington 405 Japonica Drive Camden NC 27921 252-562-2914

228th Session Graduate



Tina Berger

From: Alan Cochran <annalan50@gmail.com>
Sent: Wednesday, September 05, 2018 9:55 AM

To: Comments **Subject:** cobia

Follow Up Flag: Follow up Flag Status: Flagged

Menhaden fleet cobia bycatch has not been addressed. According to commercial fishermen on the eastern shore, a large number of cobia are caught with the menhaden by the Omega fleet catch boats. I have not seen it for myself, but the word is that they are dumped back in the water quite dead. Will there be an inquiry to this problem?

Virginia Saltwater Sportfishing Association (VSSA) PO Box 28898

Henrico, VA 23228 www.ifishva.org



Mike Avery President

Dr. Michael Schmidtke Atlantic States Marine Fisheries Commission 1050 N. Highland Street, Suite 200 A-N Arlington VA, 22201

Curtis Tomlin Vice President

Mike Ruggles

Subject: Cobia Amendment 1 PID

October 1, 2018

Treasurer

Lanie Avery

Secretary

Thank you for the opportunity to comment on the ASMFC Cobia Amendment 1 Public Information Document (PID). We appreciate you coming to Virginia to hear our concerns in person. Our comments to individual questions are enclosed. Our main concerns are:

Board of Directors

 Have one set of regulations that are the same for both federal and state waters.

John Bello, Chairman • Let the port of departure and return determine which state regulation is followed.

Jerry Aycock, Webmaster • Give us a fair allocation of the resource for the entire Atlantic coast from Key West to New York.

Steve Atkinson

 Give us stability in regulations with no in season changes and no closures once a season starts.

Use numbers of fish (not pounds) to estimate overall catches.

Charlie Farlow

• Let the states determine their own bag limits and seasons based on the allocation using historical 3-year catch estimates.

Josh Hollins

We look forward to reviewing the draft Amendment 1 once released for comment.

Jerry Hughes

Mark Roy Sincerely.

John Satterly

Mike Avery

Kevin Smith

Mike Avery

Stan Sutliff

President



VSSA Comments to guestions for the Atlantic Cobia Amendment 1 PID

http://www.mrc.state.va.us/Notices/2018/2018-08-Cobia-PID-Hearings-Memo.pdf

ISSUE 1: Recommended Management for Federal Waters

What types of regulations should the Commission recommend be implemented into federal waters, e.g. quota, bag limits, seasons, size limits? We should retain the 36-inch fork length or 40-inch total length size limits for the coast-wide areas. We believe the federal coast-wide recreational bag limit should remain at one cobia per person per day, or six cobia per vessel per day, whichever is more restrictive. The issue of bag limits and seasons should be left to the individual states based on the allocation as cobia migrate differently for each state.

Should vessels fishing in federal waters be subject to cobia regulations of their state of landing?

For simplicity and clarity to avoid confusion there should only be one set of regulations (for each state) that cover both state and federal waters. While fishing for cobia it is not uncommon to criss-cross both state and federal waters. Having a single regulation for each state would make management and enforcement less confusing.

Should state jurisdictional boundaries be extended by latitude to apply federal regulations in sectioned areas of federal waters?

We believe the best management option should simply be the port of departure and return. Sometimes a boat may not be targeting cobia but find themselves geographically just over a state line and catch a cobia but will return to the port they departed from. Where ever the port the cobia is landed should be the regulation that applies to that trip.

Should a separate set of regulations be developed specifically for fishing in federal waters? *No (see above)*.

Should the Commission consider some other strategy? <u>See responses above.</u>

ISSUE 2: Harvest Specification Process

For Both Commercial and Recreational Fisheries



VSSA Comments to guestions for the Atlantic Cobia Amendment 1 PID

http://www.mrc.state.va.us/Notices/2018/2018-08-Cobia-PID-Hearings-Memo.pdf

If a coastwide limit continues to be considered, how should it be set? The commercial quota is so small we recommend that management continue as a coast-wide stock. Attempting to divide the small commercial quota among the states would result very small individual quotas and management would be difficult.

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Please note, the current allocation of 620,000 lbs. for GA-NY is unfair and the process used to determine that is deeply flawed. Even if ASMFC accepts the results of SEDAR 58 to continue management separation at the GA/FL line, the allocations given to East Florida compared to the rest of the Atlantic coast is completely unfair and biased. We strongly recommend ASMFC work with SAFMC and the Gulf Council to ensure the allocation remains fair, balanced, and unbiased. Allowing a single state (Florida) to have an unfair, larger allocation for both their Atlantic Coast and Gulf Coasts is simply not right and unfair. We ask for fair allocations with no advantages and biases given to any single state or coast. As such, we would expect to see the Atlantic allocation increase to reflect fair allocations.

How should it be allocated? *Percentages to states based on historical landings.*

To the commercial and recreational sectors? <u>See above and below.</u>

To the states? See above and below.

What options should be considered if the stock status is overfished or overfishing is occurring or if harvest limits/quotas/targets are exceeded? <u>Stability is what is desired by anglers and charter captains</u>. Once a season is established there should be no changes to that current season. Charter captains plan out the year for expenses, bills, etc. and if seasons change or shut down could result in such disruptions in income it could shut them down completely as small business operators. We strongly believe we should not put management options in place that allow the commission to make in season changes. Sticking with the 3-year averages should be enough to manage the stocks. Stability is what is desired the most.



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Should management regimes without coastwide harvest limits be considered? If so, what could those look like? Every year the cobia seem to migrate farther north. We believe every state from GA to NY should have regulations in place to manage cobia.

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The state allocation should be based a fair percentage based on historical landing.

Should the current 3-year time period for evaluating recreational harvests against management targets be reduced? <u>No!!!!</u>

Should recreational harvests be evaluated in numbers of fish or pounds? We would like to see numbers of fish used to estimate overall catch. The MRIP estimate process is deeply flawed as all it takes one large fish that get intercepted to grossly over estimate the overall estimates.



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We recommend Amendment 1 be clarified to allow commercial crews to have only 1 commercial permit holder on the vessel with 2 per person as the limit. The current interpretation of the regulation that limits the per person limit to only 2 cobia per permit holder severely puts the commercial permit holder at such an extreme disadvantage that fishing for cobia commercially is not economically viable. A commercial operator that can only bring in 2 cobia would barely cover the trip expenses. The quota is so small that the effects on the overall stock is inconsequential.

Should commercial measures be set to remain in place for multi-year periods? Yes.

Should a coastwide landings permitting mechanism be established through the states for commercial harvest of Atlantic cobia in federal waters?

The mechanism for state landings should be the same for federal landings. There is no need to make the distinctions between state and federal waters. One set of limits should be applied to both state and federal waters.

Or, should the Commission recommend that NOAA fisheries require a federal permit to harvest cobia commercially in federal waters?

We don't believe a federal permit should be required as long as the state has a process to manage commercial permits.

ISSUE 3: Biological Monitoring

Should states be required by the FMP to collect biological data on cobia? <u>States should have programs for voluntary contributions like Virginia</u>. <u>Many anglers have a strong desire to contribute to such a program that you have more data that needed</u>. <u>We would not support any angles have a strong desire to contribute to such a program that you have more data that needed</u>. <u>We would not support any angles have a strong desire to contribute to such a program that you have more data that needed</u>.



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mandatory program that requires anglers to participate because the sampling stations are sometime too far away.

Should the same biological monitoring requirements be required of all states or should requirements vary based on the size of the states' fisheries (for example 1 fish length per 1,000 pounds harvested)? <u>Let the states establish their own program based on resources available.</u>

Should biological monitoring be conducted for the commercial sector, recreational sector, or both? <u>Both but voluntary in nature.</u>

What types of biological monitoring programs would you participate in? Examples include freezer donation or weigh-in stations. <u>Let the states establish their own program based on resources available.</u>

Letter submitted by 31 individuals.

Tina Berger

From: Virginia Saltwater Sportfishing Association VSSA [ifishva@gmail.com]

<mike@averys.net>

Sent: Wednesday, September 26, 2018 8:06 PM

To: Comments
Cc: Mike Avery
Subject: VSSA - Cobia PID

Name	Michael Avery
Street Address	32 Mizzen Circle
City, State, Zip Code	Hampton
Text	Email Address
Phone Number	7578502149
My Comments to the Atlantic Cobia	ISSUE 1: Recommended Management for Federal Waters
Amendment 1 PID	What types of regulations should the Commission recommend be implemented into federal waters,

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For simplicity and clarity to avoid confusion there should only be one set of regulations (for each state) that cover both state and federal waters. While fishing for cobia it is not uncommon to crisscross both state and federal waters. Having a single regulation for each state would make management and enforcement less confusing.

Should state jurisdictional boundaries be extended by latitude to apply federal regulations in sectioned areas of federal waters?

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Should a separate set of regulations be developed specifically for fishing in federal waters?

No (see above).

Should the Commission consider some other strategy?

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ISSUE 3: Biological Monitoring

Should states be required by the FMP to collect biological data on cobia?

States should have programs for voluntary contributions like Virginia. Many anglers have a strong desire to contribute to such a program that you have more data that needed. We would not support any mandatory program that requires anglers to participate because the sampling stations are sometime too far away.

Should the same biological monitoring requirements be required of all states or should requirements vary based on the size of the states' fisheries (for example 1 fish length per 1,000 pounds harvested)?

Let the states establish their own program based on resources available.

Should biological monitoring be conducted for the commercial sector, recreational sector, or both?

Both but voluntary in nature.

What types of biological monitoring programs would you participate in? Examples include freezer donation or weigh-in stations.

Let the states establish their own program based on resources available.

Thank you for the opportunity to review the PID. I look forward to seeing the draft Amendment for Cobia.

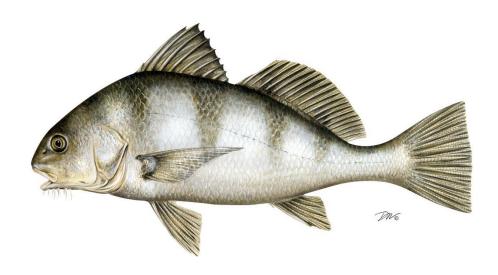
Signed, Virginia Saltwater Sportfishing Association (VSSA) member or supporter.

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2018 REVIEW OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY MANAGEMENT PLAN FOR

BLACK DRUM (Pogonias cromis)

2017 FISHING YEAR



The Black Drum Plan Review Team

Dr. Michael Schmidtke, Chair, Atlantic States Marine Fisheries Commission Jordan Zimmerman, Delaware Division of Fish and Wildlife Chris Stewart, North Carolina Division of Marine Fisheries Chris McDonough, South Carolina Department of Natural Resources

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I. Status of the Fishery Management Plan

<u>Date of FMP Approval</u>: Original FMP – June 2013

Management Areas: The entire Atlantic coast distribution of the resource from New Jersey

through the east coast of Florida

Active Boards/Committees: South Atlantic State/Federal Fisheries Management Board; Black Drum

Technical Committee, Stock Assessment Subcommittee, Plan Review

Team; South Atlantic Species Advisory Panel

The Atlantic States Marine Fisheries Commission (ASMFC) adopted an interstate Fishery Management Plan (FMP) for Black Drum in 2013. Prior to the FMP, management was state-specific, from no regulations in North Carolina to various combinations of size limits, possession limits, commercial trip limits, and/or annual commercial quotas from New Jersey to Florida. The Maryland portion of the Chesapeake Bay was closed to commercial fishing in 1998.

The FMP requires all states with a declared interest in the species to have established a maximum possession limit and minimum size limit of at least 12 inches by January 1, 2014, and to have increased the minimum size limit to at least 14 inches by January 1, 2016. The FMP also includes a management framework to adaptively respond to future concerns or changes in the fishery or population.

There are four plan objectives:

- Provide a flexible management system to address future changes in resource abundance, scientific information, and fishing patterns among user groups or area.
- Promote cooperative collection of biological, economic, and sociological data required to
 effectively monitor and assess the status of the black drum resource and evaluate
 management efforts.
- Manage the black drum fishery to protect both young individuals and established breeding stock.
- Develop research priorities that will further refine the black drum management program to maximize the biological, social, and economic benefits derived from the black drum population.

The management unit for black drum under the FMP is defined as the range of the species within U.S. waters of the northwest Atlantic Ocean, from the estuaries eastward to the offshore boundaries of the Exclusive Economic Zone (EEZ).

In 2018, Addendum I allowed Maryland to reopen their commercial fishery in the Chesapeake Bay, starting in the 2019 fishing year (ASMFC 2018). Prior to this addendum, a commercial moratorium was in place for these waters due to the FMP's requirement that states maintain measures in place at the time of the FMP's approval.

II. Status of the Stocks

In the 2015 Black Drum Benchmark Stock Assessment, the Stock Assessment Subcommittee (SAS) selected the Depletion-Based Stock Reduction Analysis (DB-SRA; Dick and McCall 2011) as the preferred method for estimating catch reference points. The SAS considered the Depletion-Corrected Average Catch (DCAC; McCall 2009) analysis, but ultimately rejected this method. DCAC did not incorporate removals into a population dynamics process, and uncertainty existed over how changes in the exploitation rate time series may impact the sustainable yield relative to the current stock condition.

Based on the DB-SRA results, black drum life history, indices of abundance, and history of exploitation, the black drum stock is not overfished and not experiencing overfishing (ASMFC 2015). Median biomass exhibited slow and steady decline from 135.2 million pounds in 1900 to 90.78 million pounds in 2012, though the median biomass estimate in 2012 is still well above the necessary level to produce maximum sustainable yield (B_{MSY}; 47.26 million pounds) (Figure 1). The median maximum sustainable yield (MSY) estimate is 2.12 million pounds and provides an annual catch target that can be used to sustainably manage the fishery. The median overfishing limit (OFL) estimate is 4.12 million pounds and provides a catch threshold that indicates overfishing when exceeded. The OFL is the maximum exploitation rate at the current biomass that does not lead to overfishing.

III. Status of the Fishery

This report includes updated recreational estimates from the Marine Recreational Information Program's transition to the mail-based Fishing Effort Survey (FES) on July 1, 2018. Therefore, recreational estimates will likely be different from those shown in past FMP Reviews and state compliance reports (due annually on July 1) through 2018. Figure 2 shows coastwide recreational landings including estimates using both the previous Coastal Household Telephone Survey (CHTS) and FES calibration for comparison, but other figures, tables, and text will only show data based on the FES calibration. Data based on either survey can be referenced at: https://www.st.nmfs.noaa.gov/st1/recreational/queries/.

Total black drum landings from New Jersey through the east coast of Florida are estimated at 6.6 million pounds in 2017, a 5% decrease from total harvest in 2016 (Tables 2 and 3, Figure 3). 2017 harvest is 1.7% below the previous ten-year (2007-2016) average. The commercial and recreational fisheries harvested 4.4% and 95.6% of the 2017 total, respectively.

Commercial landings of black drum span from New Jersey through Florida, excluding the Maryland portion of the Chesapeake Bay (Table 2). Coastwide commercial landings show no particular temporal trends, ranging from approximately 120,000 to 400,000 pounds annually over the last 13 years (Figure 3). Black drum commercial landings in 2017 were estimated at 294,396 pounds, a 35% decrease from those of 2016. North Carolina led commercial harvest with 62% of the landings, followed by Virginia and Florida with 15% and 14%, respectively (Table 2).

Recreational harvest of black drum peaked by weight in 2008 at 10.7 million pounds (Table 3) and by numbers of fish in 2003 at 2.3 million (Table 4). Since 2000, weight has fluctuated without trend between 3.3 and 10.7 million pounds, and numbers of fish have fluctuated between 890 thousand and 2.9 million fish (Figures 3 and 4).

Average weight (recreational harvest in pounds divided by recreational harvest in numbers) in 2017 was 3.64 pounds per fish, an 11% increase from 2016. Years that have shown large increases in coastwide average weight (i.e. increases to recreational harvest in pounds without proportional increase to recreational harvest in numbers) have typically occurred during years when Mid-Atlantic states (Virginia-New Jersey) have caught increased percentages of the coastwide recreational harvest (Tables 3 and 4).

The 2017 recreational harvest (1.7 million fish or 6.3 million pounds) represents an 8% decrease in numbers and a 2% decrease in pounds from the previous ten year (2007-2016) average. Florida anglers landed the largest share of the coastwide recreational harvest in numbers (60%), followed by North Carolina (20%) and South Carolina (14%). Since the beginning of the recreational time series (1981) anglers have released increasing percentages of caught fish, with percentages of recreational fish released exceeding 70% in each of the past 4 years. In 2017, 78% (6.1 million fish) of the recreational catch was released (Figure 4, Table 5). It is worth noting that release rates seemingly plateaued around 50% from the late 1990s through 2013, when the FMP took effect, establishing minimum sizes in every state and requiring that undersized drum be released for the first time. Recent high release rates can be attributed to these measures, as well as encouragement of catch and release practices.

IV. Status of Assessment Advice

Current stock status information comes from the 2015 benchmark stock assessment (ASMFC 2015) completed by the ASMFC Black Drum Stock Assessment Subcommittee and Technical Committee, peer reviewed by an independent panel of experts, and approved by the South Atlantic State-Federal Fisheries Management Board for use in management decisions.

The stock assessment could be improved by applying a more complex, data-rich assessment method such as a statistical catch-at-age model. Data limitations that need to be addressed to successfully make this transition are biological sampling (length and age) of recreational and commercial fisheries and a fishery-independent survey to track abundance and age structure of the mature stock. Additionally, information about commercial discards and movement of fish along coast and between water depths would improve the assessment.

V. Status of Research and Monitoring

There are no monitoring or research programs required annually of the states except for the submission of a compliance report. The following fishery-dependent (other than catch and effort data) and fishery-independent monitoring programs were reported in the 2017 reports.

Fishery Dependent Monitoring

- Delaware DFW Black Drum were sampled from the commercial fishery for total length, weight, sex, and age (2017: 63 fish).
- Maryland DNR Conducted commercial pound net survey from late spring through summer. (2017: 0 fish).
- Virginia MRC
 - Conducted a biological monitoring program to sample commercial and recreational harvest (2017 – commercial: 76 samples for length and weight, 45 for sex and age; recreational: 37 samples for length, 9 for weight, 36 for sex, and 34 for age).
 - Conducted Virginia Game Fish Tagging Program with volunteer anglers (2017: 115 fish tagged and 8 recaptured).
- North Carolina DMF Conducted commercial sampling of black drum bycatch (2017: n=549; mean total length=18 in).
- South Carolina DNR Terminated the state finfish survey and took over MRIP intercept sampling in 2013 (information reported through MRIP). Commercially reported black drum are captured through commercial monitoring program.
- Georgia CRD Collected age, length, and sex data through the Marine Sportfish Carcass Recovery Project (2017: 100 black drum, mean length 416 mm centerline length).
- Florida FWC Conducted Florida trip ticket program monitoring commercial catch and effort. Numbers of fish per trip in 2017 decreased from 2016, but were above the long-term average of the time series (1986-2017).
- NMFS Collected recreational catch, harvest, release, and effort data, as well as length measurements via MRIP.

Fishery Independent Monitoring

- New Jersey DEP
 - Ocean Trawl Survey: 30-year time series average is 0.16 (2017: 0.14).
 - o Delaware Bay Trawl: 27-year time series average is 0.16 (2017: 0.31)
 - o Delaware River Seine: 38-year time series average is 0.07 (2017: 0.23).
- Delaware DFW Conducted two finfish trawl surveys (16ft for juveniles; 30ft for adults).
 Older than young-of-year (YOY) black drum are rarely captured, and no long term trend is evident.
- Maryland DNR Conducted the Coastal Bays Fisheries Seine Survey in Maryland's coastal bay and generally catches juvenile fish. Annual mean catch per haul exhibits no trend and high variation. Annual mean catch per haul in 2017 was near the time series mean and increased for the second year following a low 2015 value.
- North Carolina DMF Conducted a gill net survey in Pamlico Sound to characterize size and age distribution, and to produce an abundance index (2017: CPUE=1.17, above the time series average of 1.01).
- South Carolina DNR Conducted an estuarine trammel net survey for subadult abundance (2017: CPUE=0.199, decrease from 2016).
- Georgia CRD –

- Conducted an estuarine trammel net survey for subadult biological data and abundance index (2017 – Altamaha: n=22, CPUE=0.22; Wassaw: n=14, CPUE=0.09).
- Conducted an estuarine gill net survey for YOY biological data and abundance index (2017 – Altamaha: n=11, CPUE=0.06; Wassaw: n=1, CPUE=0.01).
- Florida FWC-FWRI Conducted two seine surveys monthly in northeast and central southeast Florida to develop annual estimates of adult relative abundance. Declining trend is seen in the northeast, while the southeast exhibits an increasing trend.

VI. Status of Management Measures and Issues

Fishery Management Plan

The Black Drum FMP requires all states with a declared interest in the species to have established a maximum possession limit and minimum size limit of at least 12 inches by January 1, 2014, and to have increased the minimum size limit to no less than 14 inches by January 1, 2016.

De Minimis

The black drum FMP allows states to request *de minimis* status if, for the preceding three years for which data are available, their average combined commercial and recreational landings (by weight) constitute less than 1% of the average coastwide commercial and recreational landings for the same three-year period. A state that qualifies for *de minimis* will qualify for exemption in both their commercial and recreational fisheries.

De Minimis Requests

No state requested *de minimis* status through the annual reporting process.

VII. Implementation of FMP Compliance Requirements for 2014 and 2015

The PRT finds that all states have implemented the requirements of the Fishery Management Plan.

VIII. Recommendations of the Plan Review Team

Management and Regulatory Recommendations (H) = High, (M) = Medium, (L) = Low

• Develop management mechanism (e.g., traffic light analysis) to evaluate annual fishery independent and dependent indices to assess stock status and recommend management action if needed. (H)

<u>Prioritized Research and Monitoring Recommendations</u> (H) =High, (M) =Medium, (L) =Low Stock Assessment and Population Dynamics

- Update the 2015 stock assessment or conduct a new benchmark stock assessment that includes the recalibrated MRIP recreational harvest estimates based on the new, mail-based FES. (H)
- Age otoliths that have been collected and archived. (H)

- Collect information to characterize the size composition of fish discarded in recreational fisheries. (H)
- Collect information on the magnitude and sizes of commercial discards. Obtain better estimates of black drum bycatch in other fisheries, especially juvenile fish in south Atlantic states. (H)
- Increase biological sampling in commercial fisheries to better characterize the size and age composition of commercial fisheries by state and gear. (H)
- Increase biological sampling in recreational fisheries to better characterize the size and age composition by state and wave. (H)
- Obtain estimates of selectivity-at-age for commercial fisheries by gear, recreational harvest, and recreational discards. (H)
- Continue all current fishery-independent surveys and collect biological samples for black drum on all surveys. (H)
- Develop fishery-independent adult surveys. Consider long line and purse seine surveys. (H)
- Collect age samples, especially in states where maximum size regulations preclude the collection of adequate adult ages. (H)
- Conduct a high reward tagging program to obtain improved return rate estimates. Continue and expand current tagging programs to obtain mortality and growth information and movement at size data. (H)
- Conduct tagging studies using implanted radio tracking tags that are compatible with coastal tracking arrays along the Atlantic coast in order to track movement and migration of adults.
 (H)
- Conduct studies to estimate catch and release mortality rates in recreational fisheries. (H)
- Conduct reproductive studies, including: age and size-specific fecundity, spawning frequency, spawning behaviors by region, and movement and site fidelity of spawning adults. (H)
- Improve sampling of night time fisheries. (M)
- Collect genetic material (i.e., create "genetic tags") over a long time span to obtain information on movement and population structure, and potentially estimate population size. (M)
- Obtain better estimates of harvest from the black drum recreational fishery, especially in states with short seasons. (M)

IX. References

- ASMFC. 2013. Interstate Fishery Management Plan for Black Drum. Arlington, VA.
- ASMFC. 2015. Black Drum Stock Assessment for Peer Review. Atlantic States Marine Fisheries Commission, Stock Assessment Report. 352 p.
- ASMFC. 2018. Addendum I to the Black Drum Interstate Fishery Management Plan. Arlington, VA.
- Dick, E.J. and MacCall, A.D. 2011. Depletion-Based Stock Reduction Analysis: A catch-based method for determining sustainable yields for data-poor fish stocks. Fisheries Research, 110: 331-341
- MacCall, A.D. 2009. Depletion-Corrected Average Catch: a simple formula for estimating sustainable yields in data-poor situations. ICES Journal of Marine Science, 66: 2267-2271.

X. Figures

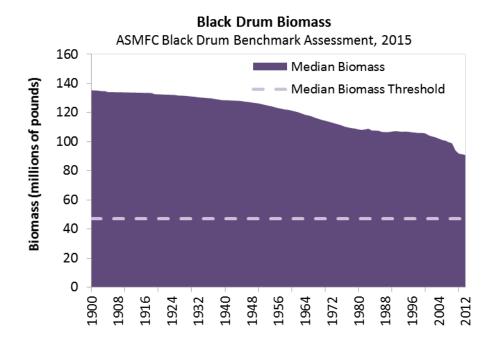


Figure 1. DB-SRA estimates of Median biomass and threshold 1900-2012 (Source: ASMFC 2015).

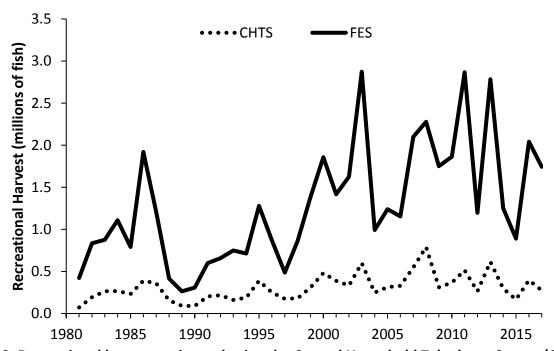


Figure 2. Recreational harvest estimated using the Coastal Household Telephone Survey (CHTS) and the mail-based Fishing Effort Survey (FES). (Source: personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

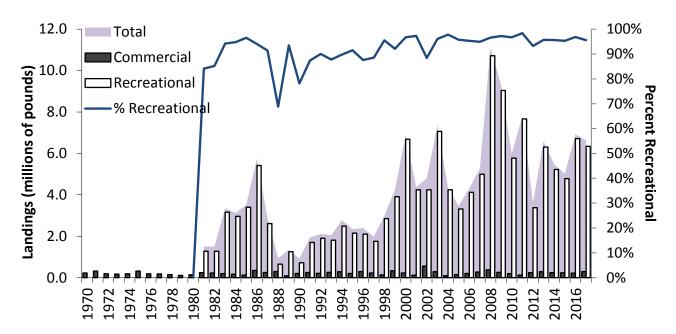


Figure 3. Commercial and recreational landings (pounds) of black drum. Recreational data not available prior to 1981. See Tables 2 and 3 for values and data sources.

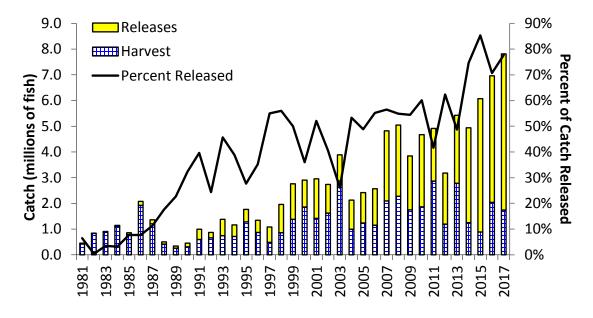


Figure 4. Recreational catch (harvest and alive releases) of black drum (numbers) and the proportion of catch that is released. See Tables 4 and 5 for values and data sources.

XI. Tables

Table 1. Black drum regulations for 2017. The states of New Jersey through Florida are required to meet the requirements in the FMP. All size limits are total length.

	Recreational		Commercia	ıl			
State	Size limit	Bag limit	Size limit	Trip Limit	Annual Quota	Notes	
ME - NY	-	-	-	-	-		
NJ	16" min	3/person/day	16" min	10,000 lbs	65,000 lbs		
DE	16" min	3/person/day	16" min	10,000 lbs	65,000 lbs		
MD	16" min	1/person/day 6/vessel (Bay)	16" min		1,500 lbs Atlantic Coast	Chesapeake Bay closed to commercial harvest. May reopen in the future due to Addendum I.	
VA	16" min	1/person/ day	16" min	1/person/ day*	120,000 lbs	*without Black Drum Harvesting and Selling Permit	
NC	14" min - 25" max; 1 fish > 25" may be retained	10/person/ day	14" min - 25" max	500 lbs			
SC	14" min - 27" max	5/person/day	14" min - 27" max	5/person/day		Commercial fishery primarily bycatch	
GA	14" min	15/person/ day	14" min	15/person/ day			
FL	14" min - 24" max; 1 fish >24" may be retained	5/person/day	14" min - 24" max	500 lbs/day			

Table 2. Commercial landings (pounds) of black drum by state, 2003-2017. (Sources: 2018 state compliance reports for 2017 fishing year; for years prior to 2017, personal communication with ACCSP, Arlington, VA [10/06/2018])

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
2003	12,624	1,686	904	113,858	148,785		*	9,511	287,368
2004	15,708	4,200	1,082	*	62,445		*	12,653	96,088
2005	1,970	*	270	95,233	44,989		*	5,249	147,710
2006	19,657	*	2,319	52,322	125,214		*	3,998	203,510
2007	1,518	37,711	318	67,730	148,231		*	12,770	268,279
2008	1,487	9,724	*	44,040	301,998	*	*	19,348	376,597
2009	6,408	30,563	198	57,249	148,994		*	15,710	259,122
2010	3,079	49,744	*	58,150	69,194		*	15,684	195,851
2011	3,130	*	*	44,620	56,083		*	22,295	126,128
2012	19,017	10,943	571	104,237	94,352	*		14,302	243,422
2013	16,251	24,640	2,145	87,235	127,170	*	*	28,460	285,901
2014	9,270	*	*	88,402	51,217			91,587	240,476
2015	6,478	39,282	*	86,947	51,073	·		50,477	234,257
2016	2,210	49,109	*	49,859	89,886	*		26,978	218,042
2017	21,248	3,800	510	44,579	182,979	*	0	41,280	294,396

^{*}indicates confidential landings because less than three dealers reported.

Table 3. Recreational harvest (pounds) of black drum by state, 2003-2017. Values shown are mail-based Fishing Effort Survey (FES)-calibrated estimates. (Sources: 2018 state compliance reports for 2017 fishing year; for years prior to 2017, personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
2003	553,944	0	70,067	108,859	1,926,671	608,714	277,998	3,517,231	7,063,484
2004	1,086,448	12,888	7,011	25,189	566,484	73,179	207,176	2,264,948	4,243,323
2005	410,302	8,254	0	63,400	509,328	157,399	107,037	2,060,267	3,315,987
2006	1,280,815	70,267	17,936	14,214	431,212	202,124	100,233	1,998,802	4,115,603
2007	446,699	51,069	0	494,671	697,822	212,103	174,273	2,918,399	4,995,036
2008	4,162,735	52,291		885,718	1,232,589	164,007	461,085	3,757,877	10,716,302
2009	2,950,869	39,864		1,704,514	421,788	103,384	83,749	3,739,378	9,043,546
2010	350,673	172,861	105,096	49,732	812,699	203,796	364,352	3,712,810	5,772,019
2011	373,639	38,043	0	1,243,692	823,423	89,482	56,361	5,043,573	7,668,213
2012	37,076	2,844	0	36,195	879,401	321,734	211,618	1,885,164	3,374,032
2013	94,636	15,668	0	112,139	2,709,269	413,455	149,094	2,813,673	6,307,934
2014	11,476	22,070	18,684	97,043	230,834	238,616	249,118	4,353,686	5,221,527
2015	443,907	16,992	16,575	25,216	780,876	82,484	88,698	3,325,410	4,780,158
2016	159,589	2,180	8,924	77,672	1,322,547	623,449	226,558	4,292,398	6,713,317
2017	406,068	22,998	3,001	81,275	856,081	681,976	187,698	4,105,686	6,344,783

Table 4. Recreational harvest (numbers) of black drum by state, 2003-2017. Values shown are mail-based Fishing Effort Survey (FES)-calibrated estimates. (Sources: 2018 state compliance reports for 2017 fishing year; for years prior to 2017, personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
2003	33,273	0	2,747	16,977	1,265,995	613,785	76,186	863,997	2,872,960
2004	20,450	1,280	1,450	4,044	296,531	71,386	61,295	536,462	992,898
2005	21,427	2,413	0	8,929	465,076	278,081	37,150	425,765	1,238,841
2006	64,963	37,951	512	1,192	276,257	272,995	54,937	444,474	1,153,281
2007	42,198	8,659	0	45,672	876,178	239,939	98,878	787,403	2,098,927
2008	117,112	20,731		71,301	925,963	97,143	168,499	877,090	2,277,839
2009	69,140	1,112		41,986	449,901	45,752	41,853	1,100,618	1,750,362
2010	13,421	3,609	6,556	4,846	650,010	85,152	138,328	961,627	1,863,549
2011	22,882	1,196	0	126,964	1,259,216	29,909	25,803	1,401,636	2,867,606
2012	1,368	110	0	7,555	556,482	91,318	42,826	496,537	1,196,196
2013	11,083	1,851	0	6,170	1,511,995	143,662	64,533	1,044,490	2,783,784
2014	482	1,052	1,690	10,676	109,307	96,967	47,807	983,582	1,251,563
2015	10,793	462	1,091	1,600	276,126	37,186	48,229	514,606	890,093
2016	6,008	138	250	5,807	459,078	256,158	96,351	1,217,913	2,041,703
2017	18,435	1,214	828	16,700	355,544	241,832	64,240	1,044,752	1,743,545

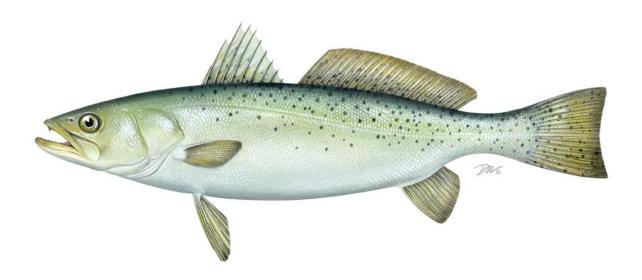
Table 5. Recreational alive releases (numbers) of black drum by state, 2003-2017. Values shown are mail-based Fishing Effort Survey (FES)-calibrated estimates. (Sources: 2018 state compliance reports for 2017 fishing year; for years prior to 2017, personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
2003	1,840	8,485	0	40,373	481,742	6,116	80,472	397,726	1,016,754
2004	0	1,658	0	27,311	255,753	37,006	56,382	757,438	1,135,548
2005	61,287	28,305	4,451	33,250	376,363	77,959	33,031	569,203	1,183,849
2006	44,606	3,275	0	202,749	265,369	76,481	83,715	742,521	1,418,716
2007	63,726	7,921	275	75,767	832,132	96,356	90,422	1,556,818	2,723,417
2008	370,945	21,115		14,161	548,931	273,001	132,787	1,409,845	2,770,785
2009	316,471	2,310		41,215	411,358	81,423	60,290	1,180,223	2,093,290
2010	47,508	4,251	9,613	64,320	427,577	66,635	72,870	2,113,308	2,806,082
2011	4,799	4	9,595	319,622	711,755	66,748	20,355	913,567	2,046,445
2012	17,092	1,653	89,193	22,236	397,155	153,799	52,722	1,246,585	1,980,435
2013	0	57,091	15,868	52,417	497,334	330,528	35,034	1,654,129	2,642,401
2014	37,364	11,243	0	269,648	1,964,749	335,600	21,581	1,047,833	3,688,018
2015	545,613	17,109	25,115	164,322	1,791,758	1,483,956	55,773	1,096,185	5,179,831
2016	9,399	361	114	46,494	2,530,596	1,268,667	54,266	1,012,670	4,922,567
2017	111,739	3,689	2,809	137,987	2,336,352	692,616	85,365	1,648,030	6,069,924

2018 REVIEW OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY MANAGEMENT PLAN FOR

SPOTTED SEATROUT (Cynoscion nebulosus)

2017 FISHING YEAR



The Spotted Seatrout Plan Review Team

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I. Status of the Fishery Management Plan

<u>Date of FMP Approval</u>: Original FMP – October 1984

<u>Amendments</u>: Amendment 1 – November 1991

Omnibus Amendment to Spanish Mackerel, Spot, and

Spotted Seatrout -- August 2011

Management Area: The Atlantic coast distribution of the resource from

Maryland through the east coast of Florida

<u>Active Boards/Committees</u>: South Atlantic State/Federal Fisheries Management Board;

Spotted Seatrout Plan Review Team; South Atlantic Species

Advisory Panel

The Atlantic States Marine Fisheries Commission (ASMFC) adopted the Fishery Management Plan (FMP) for spotted seatrout in 1984. The ISFMP Policy Board approved Amendment 1 to the FMP in November 1991. In August 2011, the South Atlantic State/Federal Management Board approved the Omnibus Amendment to the Spanish Mackerel, Spot, and Spotted Seatrout FMPs, bringing the Spotted Seatrout FMP under the authority of the Atlantic Coastal Fisheries Cooperative Management Act (Act, 1993) and the ASMFC Interstate Fishery Management Plan Charter (1995). The states of Maryland through Florida have a declared interest in the species.

The goal of the management plan is "to perpetuate the spotted seatrout resource in fishable abundance throughout its range and generate the greatest possible economic and social benefits from its harvest and utilization over time." Plan objectives include:

- 1. Attain optimum yield over time.
- 2. Maintain a spawning potential ratio of at least 20% to minimize the possibility of recruitment failure.
- 3. Promote conservation of the stocks to reduce inter-annual variation in availability and to increase yield per recruit.
- 4. Promote collection of economic, social, and biological data required to effectively monitor and assess management efforts relative to the overall goal.
- 5. Promote research that improves understanding of the biology and fisheries of spotted seatrout.
- 6. Promote harmonious use of the resource among various components of the fishery through coordination of management efforts among the various political entities having jurisdiction over the spotted seatrout resource.
- 7. Promote determination and adoption of standards of environmental quality and provide habitat protection necessary for the maximum natural protection of spotted seatrout.

The Omnibus Amendment added the following objectives to support compliance under the Act:

- 1. Manage the spotted seatrout fishery by restricting catch to mature individuals.
- 2. Manage the spotted seatrout stock to maintain sufficiently high spawning stock biomass.
- 3. Develop research priorities that will further refine the spotted seatrout management program to maximize the biological, social, and economic benefits derived from the population.

Management measures include a minimum size limit of 12 inches in total length (TL), with comparable mesh size regulations in directed fisheries, and data collection for stock assessments and monitoring of the fishery. All states with a declared interest in spotted seatrout (NJ-FL) have implemented, at a minimum, the recommended minimum size limit. In addition, each state has either initiated spotted seatrout data collection programs or modified other programs to collect improved catch and effort data. Table 1 provides the states' recreational and commercial regulations for spotted seatrout through 2017.

II. Status of the Stock

A coastwide stock assessment of spotted seatrout has not been conducted, given the largely non-migratory nature of the species and the lack of data on migration where it does occur. Instead, state-specific age-structured analyses of local stocks have been performed by several states. These stock assessments provide estimates of static spawning potential ratio (SPR), a measure of the effect of fishing pressure on the relative spawning power of the female stock. The FMP recommends a goal of 20% SPR. South Carolina and Georgia have adopted this goal while North Carolina and Florida have established a 30% and 35% SPR goal, respectively.

Spotted seatrout stock assessments have been conducted in individual states. Assessments in North Carolina, which included data from 1981-1997, and Georgia, which included data from 1986-1995, both indicated that female SPR was below the 20% goal in the terminal year (Zhao and Burns 2001, Zhao *et al.* 2001). A more recent assessment was performed in Georgia in 2002; however, it remains unpublished due to questionable results attributed to data deficiencies and changing methodologies.

North Carolina completed a peer reviewed stock assessment, which included data from 1991-2008 and included all spotted seatrout caught in North Carolina and Virginia (Jensen 2009). The assessment indicated that SPR has been below 20% in recent years. Jensen (2009) recommended management measures be implemented to account for recent increases of recreational fishing and discard mortality and to maintain a sufficiently large spotted seatrout population to buffer against future cold stun events. Based on this assessment, North Carolina approved a state FMP for spotted seatrout in April 2012.

A peer-reviewed stock assessment of spotted seatrout in Virginia and North Carolina waters was completed in 2014, incorporating data from 1991-2013 (NCDMF 2014). Results suggest

that the age structure of this stock expanded during the last decade; however, there was a sharp decline in recruitment after 2010. Similarly, spawning stock biomass (SSB) declined after a peak in 2007. These declines may be attributed to cold stun events. In 2012, SSB exceeded the currently defined threshold, suggesting the stock is not overfished. Additionally, fishing mortality is below the threshold, suggesting the stock is not experiencing overfishing.

The South Carolina Department of Natural Resources packaged several state-specific assessments into a report in 2001, though these were not peer reviewed. The initial assessment covering 1986-1992 indicated that female SPR was just above the 20% goal in the terminal year (Zhao and Wenner 2001), leading to a minimum size limit increase and a creel limit reduction. A more recent assessment was conducted for the period 1981-2004 (de Silva, Draft 2005). Two modeling approaches were used, and both models indicated that the current SSB is below the requirement to maintain 20% SPR.

Florida conducted separate stock assessments for the northern and southern populations on their Atlantic coast. Average transitional SPR estimates during 2007-2009 were 0.67 in the northern region and 0.45 in the southern region (Murphy et al. 2011), leading to some relaxation in Florida's management of the resource (Table 1). A new statewide assessment was completed in 2018 (http://www.myfwc.com/media/4500170/sst-assessment-2016.pdf) (Addis et al. 2018). This assessment includes stock synthesis models constructed for each of Florida's four management regions (NW, SW, NE, and SE). The results indicate that the spotted seatrout stock in northeast Florida is above the biomass threshold but below the biomass target and overfishing is not likely occurring. They also indicate that the stock in southeast Florida is above the biomass target and overfishing is not likely occurring.

III. Status of the Fishery

This report includes updated recreational estimates from the Marine Recreational Information Program's transition to the mail-based Fishing Effort Survey (FES) on July 1, 2018. Therefore, recreational estimates will likely be different from those shown in past FMP Reviews and state compliance reports (due annually on September 1) through 2018. Figure 1 shows coastwide recreational landings including estimates using both the previous Coastal Household Telephone Survey (CHTS) and FES calibration for comparison, but other figures, tables, and text will only show data based on the FES calibration. Data based on either survey can be referenced at: https://www.st.nmfs.noaa.gov/st1/recreational/queries/.

Spotted seatrout is regularly caught both commercially and recreationally from Maryland through the east coast of Florida. In South Carolina, spotted seatrout has been declared a gamefish and can only be taken by recreational means. Landings from states north of Maryland are minimal and/or inconsistent from year to year. All catch estimates in this section include those in the management area only (MD-FL). Total recreational landings have surpassed total commercial landings every year since recreational landings were first recorded in 1981 (Figure 2). A coastwide (VA, NC, and SC) winter mortality event in 2000/2001 likely contributed to the sudden decline in commercial and recreational landings in 2001 and 2002.

Commercial Fishery

Commercial harvest statistics were obtained from the Atlantic Coastal Cooperative Statistics Program (ACCSP) for years prior to 2017 and from state compliance reports for 2017. Atlantic coast commercial landings of spotted seatrout (1960-2017) have ranged from 156,000 pounds to 1.38 million pounds (Figure 2). Historically, commercial landings primarily came from North Carolina and Florida, with Virginia, South Carolina, and Georgia accounting for a small portion of the total. From 1960 to 1976, annual commercial landings of spotted seatrout averaged 1.07 million pounds, followed by a decline due to increased regulation and possible declines in abundance. Significant changes to regulations include the 1987 designation of spotted seatrout as a gamefish in South Carolina, and the 1995 prohibition on the use of entangling nets in Florida's coastal waters. From 2007 to 2016, commercial landings averaged approximately 340 thousand pounds. In 2017, commercial landings totaled 371,279 pounds, a 25% increase from 2016. North Carolina, Virginia, and Florida accounted for 81%, 15%, and 4% of the total commercial landings, respectively.

Recreational Fishery

Recreational harvest statistics were obtained from the Marine Recreational Information Program (MRIP) for years prior to 2017 and from state compliance reports for 2016. Over the last 33 years, recreational catch of spotted seatrout (kept and released) has shown an upward trend, increasing from 4.3 million fish in 1981 to over 26 million fish in 2010. In 2017, recreational catch totaled 22.7 million fish, nearly identical to the catch in 2016 (Figure 3). Recreational harvest has remained relatively stable throughout the time series with an average of 3.5 million fish. Recreational harvest in 2017 was 4.1 million fish (a 10% increase from 2016), with North Carolina (30%), Georgia (26%), and Florida (24%) responsible for the largest shares. Due in part to recreational size and creel limits and closed seasons, as well as the encouragement of catch and release practices, the percentage of caught fish being released has increased throughout the time series, with the most recent 10-year average (2008-2017) at 82%. In 2017, the release percentage declined slightly from the 2016 value (84%) to 82%. Rod and reel is the primary recreational gear, but some spotted seatrout are taken by recreational nets and by gigging, where these methods are permitted. Most recreational fishing is conducted from private boats and the majority of the catch is taken from nearshore waters.

IV. Status of Assessment Advice

A coastwide stock assessment of spotted seatrout has not been conducted and the Plan Review Team (PRT) does not recommend that one be completed due to the life history of the fish and the availability of data. Several states have performed age-structured analyses on local stocks, and recent stock assessments provide divergent trends on the status of the species. The 2005 stock assessment in South Carolina indicated an increasing population trend but a status level that is still below target spawning stock biomass levels (de Silva 2005). The 2014 North Carolina and Virginia stock assessment showed declines in recruitment since 2010. The 2016 Florida stock assessment indicated that the spotted seatrout stock in northeast Florida is above the biomass threshold but below the biomass target and overfishing is not likely occurring (Addis et

al. 2018). It also indicated that the stock in southeast Florida is above the biomass threshold but below the biomass target and overfishing is not likely occurring. The PRT supports the continuation of state-specific assessments, yet recognizes the difficulty most states face to attain sufficient data of assessment quality and personnel who can perform the necessary modeling exercises.

The lack of biological and fisheries data for effective assessment and management of the resource was recognized in the 1984 FMP and continues to be a hindrance. Some states are increasing their collection of biological and fisheries data, which will provide insight on stock status over time.

V. Status of Research and Monitoring

In addition to commercial and recreational fishery-dependent data collected and/or compiled through the NMFS Fisheries Statistics Division, some states have implemented fishery-independent or additional fishery-dependent monitoring programs.

Maryland

MD DNR samples commercial pound nets weekly in the Potomac River and Chesapeake Bay from May through September (2017 n=3, 464 mm TL).

A few juvenile spotted seatrout are encountered in the coastal bays seine survey and the Chesapeake Bay blue crab trawl survey, indicating seatrout utilize these areas as nursery habitat (2017 seine n=6, trawl n=53).

Virginia

The VMRC Biological Sampling Program collects commercial and recreational fishery-dependent biological data. In 2017, the VMRC collected 1,389 commercial lengths and weights, determined the sex of 303 individuals, and aged 222 individuals. In 2017, the VMRC collected lengths of 105 and sex of 35 recreationally caught seatrout.

North Carolina

Commercial fish houses are sampled monthly for fishery-dependent length, weight, and age data. Very little variation is seen throughout sampling years. In 2017, gill nets were responsible for 93% of the catch and gigs for 5.5%.

A fishery-independent Estuarine Trawl Survey is conducted to measure annual juvenile recruitment for many species. The Catch per Unit Effort (CPUE) index for the current 10-year time series has not shown significant trends in CPUE over that time span, although CPUE has shown a declining trend since the most recent peak in 2012. The CPUE of age-0 spotted seatrout for 2017 was 0.79 fish per tow, below the most recent 10-year average but above the 2016 value.

A fishery-independent gill net survey is conducted to measure age composition and develop indices of age 1+ abundance for many species. Seatrout age 1+ abundance index varies very little annually, averaging 0.56±0.06 seatrout per set, but low CPUEs in 2011 and 2015

correspond to known cold stun mortality events. The CPUE of adult spotted seatrout for 2017 was 1.05 fish per set, above both the most recent 10-year mean and the 2016 value.

The NCDMF Age Lab ages otoliths collected from several fishery-dependent and independent sources. A total of 870 spotted seatrout were aged by otoliths in 2017 with a maximum age of 7 and a modal age of 1.

South Carolina

The State Finfish Survey collects fishery-dependent catch, effort, and length data from private boat anglers in January and February. In 2017, 22% of 198 interviewed parties primarily targeted spotted seatrout (2017 n=183, mean catch rate of 1 fish per targeted fishing hour).

A mandatory trip reporting system for the charter boat fishery has been in place since 1993. In 2017, 990 (6%) interviewed trips targeted seatrout (2017 mean catch rate of 1.52 fish per targeted fishing hour).

The Freezer Drop-Off and the Fishing Tournament programs gather biological information like size, sex, maturity, and age. In 2017, these programs gathered biological information from 81 spotted seatrout.

South Carolina conducts two fishery-independent data collection programs. The Trammel Net Survey covers 7 monthly and 2 quarterly strata. Spotted seatrout is consistently one of the top three most abundance species encountered. The 2017 statewide mean CPUE was similar to 2016 and above the long-term average. The Electrofishing survey covers 5 monthly strata, and catches relatively low numbers of mostly YOY seatrout. Statewide catch rate by the electrofishing survey have been low since 2010.

Georgia

A Marine Sportfish Carcass Recovery Program collects recreational fishery-dependent size and age data (2017 n=2,431 spotted seatrout, average length of 387 mm, 315-521 mm range).

The Marine Sportfish Population Health Study trammel net survey samples monthly from September to November since 2003 in the Wassaw and Altamaha Sounds to collect fishery-independent age- and sex-specific estimates of relative abundance (2017: Wassaw CPUE (geometric mean): 0.67; Altamaha CPUE: 1.40). Gillnet sampling also occurs through this study, often encountering seatrout (2017: Wassaw CPUE: 0.29; Altamaha CPUE: 0.45).

Florida

Fishery-dependent sampling includes commercial trip-ticket information and biostatistical sampling of commercial and recreational catch. A voluntary angler logbook program was implemented in 2002 to record lengths of spotted seatrout released alive by anglers. In 2011, this program changed to a 'postcard' program, enlisting anglers encountered during MRIP angler intercept interviews.

A juvenile finfish monitoring program is conducted in the northern Indian River Lagoon (since 1990) and in the estuarine St. Johns, St. Marys, and Nassau Rivers (since 2001). Florida also conducts a 183-m haul seine survey in the Indian River (since 1997) and northeast Florida (Jacksonville/St. John's River) (since 2001). Southeast (Indian River/Tequesta) coast YOY abundance in 2017 declined from 2016. Northeast coast YOY abundance in 2017 increased slightly from 2016. Adult abundance (>200 mm SL) decreased in the southeast but increased slightly in the northeast from 2016 values.

VI. Status of Management Measures and Issues

Changes to State Regulations None.

De Minimis Requests

A state qualifies for *de minimis* status if its previous three-year average combined commercial and recreational catch is less than 1% of the previous three-year average coastwide combined commercial and recreational catch. Those states that qualify for *de minimis* are not required to implement any monitoring requirements, as none are included in the plan.

The states of New Jersey and Delaware request continuation of *de minimis* status. The PRT notes these states meet the requirements of *de minimis*.

VII. Implementation of FMP Compliance Requirements for 2017

The PRT notes that all states have met the compliance requirements.

VIII. Recommendations of Plan Review Team

Management and Regulatory Recommendations

- Consider approval of *de minimis* requests by New Jersey and Delaware.
- Maintain observer coverage in states that have a commercial fishery for spotted seatrout.

Prioritized Research Recommendations

High Priority

- Conduct state-specific stock assessments to determine stock status relative to the plan objective of maintaining a spawning potential of at least 20%.
- Collect data on the size or age of spotted seatrout released alive by anglers and the size or age of commercial discards.
- Research release mortality and how this changes with factors such as season, habitat (e.g., depth, temperature, salinity), fish life history (e.g., size, age) and fishing methods (e.g., gear types).
- Monitor the size, age and reproductive condition of recreationally harvested fish (e.g. freezer drop off and tournament monitoring programs).
- Research into links between spawning activity, environmental conditions, trophic interactions and recruitment.

- Continue work to examine the stock structure of spotted seatrout on a regional basis (e.g., genetics, use of advanced tagging techniques).
- Research effects of winter severity on the population.
- Utilize telemetry technology to better understand life history characteristics.
- Conduct additional research on the significance of age-specific fecundity changes (i.e., environmental impacts on spawning output of population)
- Develop state-specific juvenile abundance indices.

Medium Priority

- Identify essential habitat requirements.
- Initiate collection of social and economic aspects of the spotted seatrout fishery.

IX. References

- De Silva JA. 2005. Draft. Stock assessment of spotted seatrout, *Cynoscion nebulosus*, in South Carolina with recommendations on the management of the recreational fishery. South Carolina Department of Natural Resources, Marine Research Institute, Charleston (SC).
- Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute. 2013. Species Profile: Spotted Seatrout. In: R.H. McMichael, editor. Fisheries-independent monitoring program, 2012 annual data summary report, St. Petersburg (FL).
- Addis D, Mahmoudi B, O'Hop J, Muller R. 2018. The 2016 stock assessment of Spotted Seatrout, *Cynoscion nebulosus*, in Florida. Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute, St. Petersburg, (FL).
- Jensen CC. 2009. Stock status of spotted seatrout, *Cynoscion nebulosus*, in North Carolina, 1991-2008. Morehead City (NC): North Carolina Division of Marine Fisheries. 89 p.
- Moravec F, de Buron I, Roumillat WA. 2006. Two new species of Philometra (Nematoda: Philometridae) parasitic in the perciform fish *Cynoscion nebulosus* (Sciaenidae) in the estuaries of South Carolina, USA. Folia Parasitologica, 53: 63-70
- Murphy MD, Chagaris D, Addis D. 2011. An assessment of the status of spotted seatrout in Florida waters through 2009. Florida Fish and Wildlife Conservation Commission Fish and Wildlife Research Institute. In-House Report 2011-002, St. Petersburg (FL).
- North Carolina Division of Marine Fisheries. 2014. Stock assessment of spotted seatrout, *Cynoscion nebulosus*, in Virginia and North Carolina waters. North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries, Morehead City (NC).
- Roumillat WA, Brouwer MC. 2004. Reproductive dynamics of female spotted seatrout (*Cynoscion nebulosus*) in South Carolina. Fisheries Bulletin, 102: 473-487
- Zhao B, Burns B. 2001. Stock assessment of the spotted seatrout, *Cynoscion nebulosus*, on the North Carolina coast, 1981-1997. In: South Carolina Department of Natural Resources. Cooperative Research on the Biology and Assessment of Nearshore and Estuarine Fishes along the Southeast Coast of the U.S: Part III. Spotted Seatrout, *Cynoscion nebulosus*. Charleston (SC): SC DNR. Final Report, Grant NA77FF0550.
- Zhao B, Wenner C. 2001. Stock assessment of the spotted seatrout, *Cynoscion nebulosus*, on the South Carolina coast, 1986-1992. In: South Carolina Department of Natural Resources. Cooperative Research on the Biology and Assessment of Nearshore and Estuarine Fishes along the Southeast Coast of the U.S: Part III. Spotted Seatrout, *Cynoscion nebulosus*. Charleston (SC): SC DNR. Final Report, Grant NA77FF0550.

Zhao B, Wenner C, Nicholson N. 2001. Stock assessment of the spotted seatrout, *Cynoscion nebulosus*, on the Georgia Coast, 1986-1995. In: South Carolina Department of Natural Resources. Cooperative Research on the Biology and Assessment of Nearshore and Estuarine Fishes along the Southeast Coast of the U.S: Part III. Spotted Seatrout, *Cynoscion nebulosus*. Charleston (SC): SC DNR. Final Report, Grant NA77FF0550.

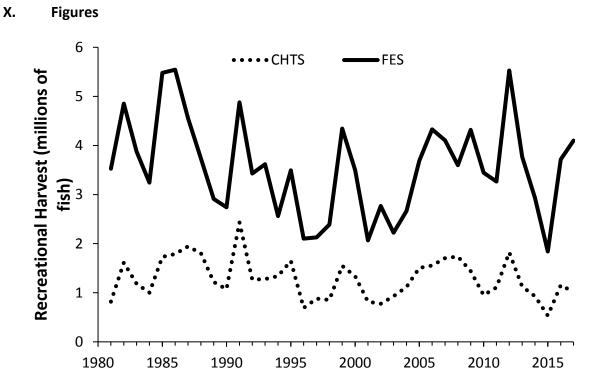


Figure 1. Recreational harvest estimated using the Coastal Household Telephone Survey (CHTS) and the mail-based Fishing Effort Survey (FES). (Source: personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

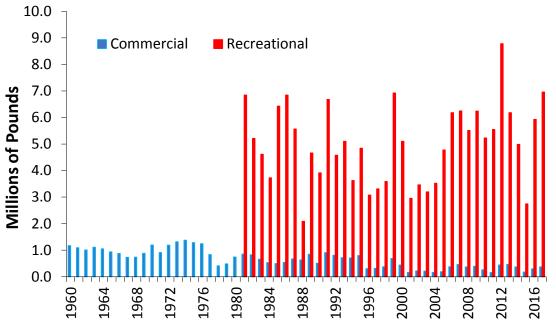


Figure 2. Commercial landings (1960-2017) and recreational landings (1981-2017), in pounds, from Maryland to Florida (See Tables 2 and 4 for values and sources). Recreational data not available prior to 1981.

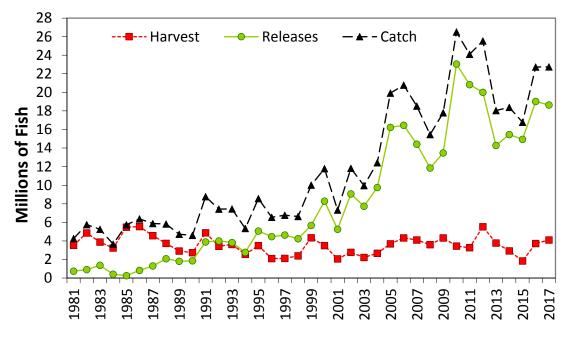


Figure 3. Recreational catch, harvest, and releases (numbers), 1981-2017, from Maryland to Florida (See Tables 3 and 5 for values and sources).

XI. Tables

Table 1. Summary of state regulations for spotted seatrout in 2017.

State	Recreational	Commercial
New Jersey	13" TL; 1 fish	Gill net, trawl, and pound net: 13"; 100 lb/vessel/day possession and bycatch limit; seasonal closures; monthly reporting. Trawl and gill net mesh size restrictions. Hook & line fishermen must follow rec limits.
Delaware	12" TL	12" TL
Maryland	14" TL; 4 fish	14" TL. 150 lb limit per day or trip (whichever is longer). Trawl and gill net mesh size restrictions.
PRFC	14" TL; 10 fish	14" TL
Virginia	14-24" TL; 1 fish >24" allowed; 5 fish; closed season March-July.	14" TL; pound nets/seines allowed 5% by weight less than 14". Hook & line fishermen must follow rec limits. Quota: 51,104 lbs (Sept-Aug). After 80% reached, 100 lb/vessel/day possession and bycatch limit.
North Carolina	14" TL; 4 fish	14" TL; 75 fish limit. Unlawful to possess or sell Friday 12:00am-Sunday 12:00am.
South Carolina	14" TL; 10 fish. Gig March- Nov.	Gamefish status since 1987; native caught fish may not be sold.
Georgia	14" TL; 15 fish	14" TL; 15 fish. BRD requirement for trawl; gear mesh regulations.
Florida	15-20" TL slot; 1 fish >20" allowed; northeast 6 fish; northwest 5 fish; south 4 fish; hook & line/cast net only.	15-24" TL; Season varies by region; 75 fish limit or 150 fish limit with two or more licensed fishermen on board; hook & line/cast net only.

Note: A commercial fishing license is required to possess spotted seatrout for sale in all states with a fishery.

Table 2. Commercial landings (pounds) of spotted seatrout by state, 2008-2017 (Source: ACCSP for years prior to 2016 and State Compliance Reports for 2016). Starred boxes represent confidential data.

Year	MD	VA	NC	SC	GA	FL	Total
2008	290	43,512	304,430		*	20,887	369,119
2009	*	26,350	320,247		*	46,297	392,894
2010	*	20,870	200,822		*	39,374	261,066
2011	640	17,315	75,239		*	63,592	156,787
2012	*	116,767	265,016			61,676	443,460
2013	*	42,086	367,610		*	58,288	467,984
2014	*	90,051	242,245		*	37,710	370,006
2015	*	7,942	128,752			39,226	175,920
2016	*	18,483	253,965	*		23,105	295,553
2017	23	55,224	299,875			16,157	371,279

Table 3. Recreational harvest (numbers of fish) of spotted seatrout using the FES effort calibration, by state, 2008-2017. (Source: MRIP for years prior to 2017 and State Compliance Reports for 2017)

Year	MD	VA	NC	SC	GA	FL	Total
2008		278,345	1,372,973	283,127	1,048,367	616,807	3,599,619
2009	20,285	67,687	1,857,890	370,370	1,363,056	639,102	4,318,390
2010	9,684	77,068	630,748	406,781	1,135,113	1,187,103	3,446,497
2011	11,042	644,074	723,502	193,487	762,304	931,353	3,265,762
2012	21,323	392,484	1,602,836	622,205	1,206,654	1,682,942	5,528,444
2013	0	153,706	1,107,957	440,751	937,046	1,122,151	3,761,611
2014	21,560	84,537	725,086	260,321	724,411	1,111,177	2,927,092
2015	11,619	23,062	249,260	311,106	740,932	504,137	1,840,116
2016	10,092	163,529	978,624	311,168	1,290,220	962,946	3,716,579
2017	24,255	172,288	1,217,834	647,679	1,060,493	977,797	4,100,346

Table 4. Recreational harvest (pounds of fish) of spotted seatrout using the FES effort calibration, by state, 2008-2017. (Source: MRIP for years prior to 2017 and State Compliance Reports for 2017)

Year	MD	VA	NC	SC	GA	FL	Total
2008		673,026	2,114,130	435,317	1,224,085	1,063,032	5,509,590
2009	23,031	132,635	2,878,160	508,657	1,576,285	1,121,118	6,239,886
2010	19,623	137,095	1,277,174	598,963	1,310,371	1,883,653	5,226,879
2011	11,181	1,450,980	1,353,388	327,349	894,796	1,509,893	5,547,587
2012	36,380	690,821	2,720,028	1,002,364	1,231,246	3,097,576	8,778,415
2013	0	379,399	1,881,881	717,402	1,125,802	2,075,929	6,180,413
2014	46,870	166,182	1,451,592	382,155	825,903	2,111,818	4,984,520
2015	23,546	48,477	430,579	462,498	794,861	984,940	2,744,901
2016	20,024	341,977	1,724,492	475,749	1,740,513	1,625,597	5,928,352
2017	48,624	342,463	2,157,198	992,938	1,403,646	2,011,777	6,956,646

2018 Spotted Seatrout FMP Review

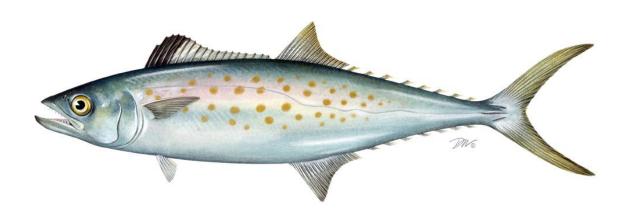
Table 5. Recreational releases (number of fish) of spotted seatrout using the FES effort calibration, by state, 2008-2017. (Source: MRIP for years prior to 2017 and State Compliance Reports for 2017).

Year	MD	VA	NC	SC	GA	FL	Total
2008		910,967	2,226,578	1,220,429	1,149,386	6,351,756	11,860,702
2009	160,644	549,846	4,462,890	1,001,740	2,125,707	5,177,671	13,480,869
2010	300,919	2,530,405	7,657,503	1,167,472	1,676,201	9,717,723	23,050,609
2011	21,353	3,462,963	7,420,553	743,581	1,348,499	7,839,264	20,836,213
2012	259,437	1,257,157	4,916,356	1,761,694	2,196,920	9,610,576	20,006,019
2013	22,780	738,474	4,278,671	2,190,796	1,320,699	5,722,715	14,282,174
2014	74,250	1,059,287	3,949,284	1,407,310	1,687,540	7,279,660	15,460,257
2015	242,150	834,028	4,824,088	1,147,982	1,763,638	6,131,007	14,943,497
2016	133,223	3,708,969	6,475,193	1,791,072	2,113,253	4,783,644	19,028,477
2017	107,611	3,154,997	5,147,567	1,949,554	2,436,867	5,845,559	18,642,226

2018 REVIEW OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY MANAGEMENT PLAN FOR

SPANISH MACKEREL (Scomberomorus maculatus)

2017 FISHING YEAR



Prepared by the Spanish Mackerel Plan Review Team

Dr. Michael Schmidtke, Chair, Atlantic States Marine Fisheries Commission Randy Gregory, North Carolina Division of Marine Fisheries BJ Hilton, Georgia Department of Natural Resources Dustin Addis, Florida Fish and Wildlife Conservation Commission Christina Wiegand, South Atlantic Fishery Management Council

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Addendum I- August 2013

Management Area: The Atlantic coast distribution of the resource from New

York through the east coast of Florida

<u>Active Boards/Committees</u>: South Atlantic State/Federal Fisheries Management Board;

Spanish Mackerel Plan Review Team; South Atlantic

Species Advisory Panel

The Fishery Management Plan (FMP) for Coastal Migratory Pelagic Resources (1983 and subsequent amendments) and the Interstate Fishery Management Plan for Spanish Mackerel (1990) manage Atlantic group Spanish mackerel in federal and state Atlantic waters from New York through the east coast of Florida. All states in that range, excluding Pennsylvania, have a declared interest in the Interstate FMP for Spanish mackerel. The South Atlantic State/Federal Fisheries Management Board serves to manage Spanish mackerel for the Commission. The Interstate FMP for Spanish mackerel is a flexible document intended to track the federal FMP; thus, the South Atlantic Fishery Management Council (SAFMC) has the lead on Atlantic group Spanish mackerel management.

The SAFMC manages Atlantic group Spanish mackerel based on guidance from its Scientific and Statistical Committee (SSC). The SAFMC determines needed adjustments to regulatory measures, including allowable catch, bag limits, size limits, and trip limits. The SAFMC deliberations are assisted by a Mackerel Cobia Committee that includes representatives from the Mid-Atlantic Fishery Management Council, and an Advisory Panel with South Atlantic and Mid-Atlantic industry representation. Since the Coastal Migratory Pelagic Resources FMP is a joint plan with the Gulf of Mexico Fishery Management Council (GMFMC), any amendments to this FMP must be approved by both Councils.

The SAFMC and GMFMC approved Amendment 18 to the Coastal Migratory Pelagic Resources FMP in December 2011 which established a new Allowable Biological Catch (ABC) based on the SSC recommendation of using median landings of the last 10 years (2001-2011). With this change, the ABC was set equal to the Annual Catch Limit (ACL) and Optimum Yield (OY) [ABC=ACL=OY] at approximately 5.29 million lbs. With this the commercial ACL was 3.13 million lbs and the recreational ACL was 2.56 million lbs. For the 2015/2016 fishing season, the full quota was increased to 3.33 million pounds following CMP Framework Amendment 1 (See Section VI).

Under the federal FMP, the 2017-2018 fishing year ran from March 1, 2017 to February 28, 2018. The 2018-2019 fishing year began on March 1st, 2018. The federal FMP divides the commercial fishery into a quota system between the Atlantic and Gulf migratory groups. Within the Atlantic

migratory group, there are two zones- the Northern (consisting of the states from New York through North Carolina) and the Southern (South Carolina to Florida). For the Atlantic migratory group in the 2017/2018 year, in accordance with CMP Framework Amendment 1, the full quota was 3.33 million pounds with an adjusted Southern quota of 2,417,330 pounds. The adjusted quota was used to determine trip limit reductions off the Florida east coast.

The federal commercial trip limit was a year-round 3,500 pound daily possession/landings limit for the states from New York through Georgia, with Florida's commercial trip limit varying depending on the percent of quota remaining. Following the implementation of Amendment 20B and CMP Framework Amendment 2, the federal trip limit for the Southern zone (SC through FL) decreases as quota is caught. When 75% of the "adjusted" Southern Zone quota¹ (1,812,998 pounds ww) is caught, the trip limit is reduced from 3,500 pounds to 1,500 pounds. When 100% of the adjusted Southern Zone quota (2,417,330 pounds ww) is caught, the commercial trip limit is further reduced to 500 pounds. When 100% of the Southern Zone quota is met, harvest is prohibited for the remainder of the fishing year. In both the Northern and Southern zones, the recreational bag limit is set at 15 fish. The minimum size limit for both fisheries is 12" fork length or 14" total length. For the 2017-2018 fishing year, a transfer of 100,000 pounds from the Southern to the Northern zone was approved, lowering the full Southern quota to 2,567,330 pounds and increasing the Northern zone quota to 762,670 pounds (FB17-064).

The goals of the interstate FMP are to complement federal management in state waters, to conserve the Atlantic group Spanish mackerel resource throughout its range, and to achieve compatible management among the states that harvest Spanish mackerel. In accordance with the 2011 Omnibus Amendment, the updated FMP's objectives are to: (1.) Manage the Spanish mackerel fishery by restricting fishing mortality to rates below the threshold fishing mortality rates to provide adequate spawning potential to sustain long-term abundance of the Spanish mackerel populations. (2.) Manage the Spanish mackerel stock to maintain the spawning stock biomass above the target biomass levels. (3.) Minimize endangered species bycatch in the Spanish mackerel fishery. (4.) Provide a flexible management system that coordinates management activities between state and federal waters to promote complementary regulations throughout Spanish mackerel's range which minimizes regulatory delay while retaining substantial ASMFC, Council, and public input into management decisions; and which can adapt to changes in resource abundance, new scientific information and changes in fishing patterns among user groups or by area. (5.) Develop research priorities that will further refine the Spanish mackerel management program to maximize the biological, social, and economic benefits derived from the Spanish mackerel population. See Table 1 for state Spanish mackerel regulations in 2017-2018.

II. Status of the Stocks

The resource is not overfished, nor experiencing overfishing (SEDAR 2012). The SEDAR 28 Stock Assessment Report estimates current stock biomass at $SSB_{2011}/MSST=2.29$, and current fishing level (exploitation rate) at $F_{2009-2011}/F_{MSY}=0.526$, with $F_{2011}/F_{MSY}=0.521$. The overfished ratio (B/B_{MSY}) shows that high fishing mortality caused a decline in biomass, though biomass has increased in recent years and remains above B_{MSY} (Figure 1). The overfishing ratio (F/Fmsy) shows that

¹ The adjusted quota is the Southern Zone quota minus 250,000 lbs.

fishing mortality increased from the late 1970s through 1994 but has since declined (Figure 2). Fishery-dependent data also indicate increasing biomass, excepting the decline seen over the last four years. The current fishing mortality rate does not seem to be inhibiting stock growth.

III. Status of the Fishery

On July 1, 2018, the Marine Recreational Information Program recalibrated recreational harvest estimates from the Coastal Household Telephone Survey (CHTS) to the mail-based Fishing Effort Survey (FES). Estimates used in this report are those of the CHTS, but Figure 3 shows a comparison of CHTS and FES estimates. FES estimates will be incorporated into management after the next stock assessment. Data based on either survey can be referenced at: https://www.st.nmfs.noaa.gov/st1/recreational/queries/.

Spanish mackerel are an important recreational and commercial fishery in South Atlantic waters, with limited and sporadic recreational landings north of Maryland (Tables 2 and 4). Trip limits implemented in state and federal waters continue to prevent premature closure of the commercial fishery. Total landings of Spanish mackerel in 2017 are estimated at 4.2 million pounds (compared to the 6.057 million pound ACL). The commercial fishery harvested approximately 80% of the total, and the recreational fishery about 20%.

From 1950 to 2017, commercial landings of Atlantic coast Spanish mackerel have ranged between 1.8 and 11.1 million pounds, although only 4 years in that timespan have exceeded 6 million pounds. Since 1981, commercial landings have averaged 3.6 million pounds. Coastwide commercial landings have generally been below 4 million pounds since 1995 (exception of 2010 and 2011; landings of 4.52 and 4.35 million pounds, respectively); this coincided with the entanglement net ban in Florida. Gill nets were the dominant commercial gear in Florida prior to the ban. After the ban was instituted, the use of cast nets increased. The 2017 commercial landings were 3.45 million pounds (Figure 4), of which 2.61 million pounds (76% of coastwide commercial harvest) were landed in Florida and approximately 816,000 pounds (24%) were landed in North Carolina (Table 2).

Recreational anglers harvested 631,957 Spanish mackerel (751,053 pounds) in 2017, a decrease from the 966,419 fish caught in 2016 (Tables 3 and 4). The number of recreationally harvested fish appears to show a cyclical trend, with low harvests in the early to mid-80s and mid to late 90s, interspersed with higher harvests (Figure 5). Florida and North Carolina have historically accounted for the majority of recreational landings in both number and weight. In 2017, Florida harvested 22% and North Carolina harvested 70% of recreational fish. The number of recreational releases of Spanish mackerel has generally increased over time, reaching a peak of over 930,000 fish in 2008 (Table 5, Figure 5). Recreational releases in 2017 were 390,862 fish, decreased from 415,635 fish in 2016.

IV. Status of Assessment Advice

The most recent stock assessment was completed in 2012 through the Southeast Data, Assessment, and Review (SEDAR) process (SEDAR, 2012). The input data (through 2011) were applied to two assessment models, with the primary model being a statistical catch at age model called the Beaufort Assessment Model (BAM); while a secondary surplus-production model

(ASPIC) provided a comparison of model results. The Review Panel concluded that the statistical catch at age model was the most appropriate model to characterize the stock status for management purposes.

The SSC reviewed the assessment during its December 2012 meeting and accepted the SEDAR 28 Spanish mackerel stock assessment as best available science. The SSC concurred with the Review Panel's conclusion that the stock is not experiencing overfishing and the stock is not overfished.

The next stock assessment is currently scheduled to be conducted through the SEDAR process in 2020. This assessment will incorporate FES recreational harvest estimates.

V. Status of Research and Monitoring

The National Marine Fisheries Service (NMFS) Southeast Fisheries Science Center (SEFSC) continues to monitor length and weight at age and size frequencies, fishing mortality, and migration; collect age data and catch per unit effort by area, season, fishery, and gear; monitor shrimp trawl bycatch; investigate methods to predict year class strength; calculate estimates of recruitment, and develop conservation gear to reduce bycatch. The NMFS is also collecting discard data through a bycatch logbook in the mackerel and snapper-grouper fisheries. The Gulf and South Atlantic Fisheries Development Foundation and several states (North Carolina, South Carolina, Georgia, and Florida) have evaluated finfish bycatch in the southeastern shrimp trawl fishery, including bycatch of Spanish mackerel. The South Atlantic component of the Southeast Area Monitoring and Assessment Program (SEAMAP) collects Spanish mackerel data in its coastal trawl survey from Cape Hatteras to Cape Canaveral. Additionally, the Northeast Area Monitoring and Assessment Program (NEAMAP) began regular spring and fall surveys between Martha's Vineyard and Cape Hatteras in the fall of 2007.

Abundance trends continue to be monitored primarily through fishery-dependent sources. The states and the SEFSC monitor catch data through the cooperative commercial statistics collection program and the recreational fisheries survey. Commercial trip reports are tallied more frequently in the winter and early spring by the state of Florida and NMFS as the commercial quota is approached.

North Carolina also conducts fishery independent monitoring. Three fishery independent gill net surveys were initiated by the North Carolina Division of Marine Fisheries in May of 2001, 2003 and 2008, respectively. These surveys utilize a stratified random sampling scheme designed to characterize the size and age distribution for key estuarine species in Atlantic Ocean and Pamlico Sound as well as the Pamlico, Pungo, Neuse, Cape Fear and New rivers. The overall Spanish mackerel CPUE from these surveys was extremely low and therefore lacks the desired precision and confidence needed for the data to be used for management purposes.

VI. Status of Management Measures

2008 Framework Adjustment (Federal)

In February 2008, NOAA Fisheries finalized a framework adjustment to change the beginning date for trip limits in the Atlantic Spanish mackerel fishery off the east coast of Florida. The 3,500

pound trip limit begins March 1 each year to correspond with the beginning of the fishing year (as changed in Amendment 15).

Omnibus Amendment (Interstate)

In August 2011, the Management Board approved an amendment to the Spanish Mackerel FMP to address three issues: compliance measures, consistency with federal management in the exclusive economic zone, and alignment with Commission standards. Through the Omnibus Amendment, the following fisheries management measures are required for states within the management unit range;

Recreational Fishery

- 12" Fork Length (FL) or 14" Total Length (TL) minimum size limit
- 15 fish creel limit
- Must be landed with head and fins intact
- Calendar year season
- Prohibited gear: Drift gill nets prohibited south of Cape Lookout, NC
- Decrease in the recreational quota the following year via reduced bag limits if the Total Annual Catch Limit (ACL) is exceeded and stock is overfished.

Commercial Fishery

- Prohibited: purse seines; drift gill nets south of Cape Lookout, NC
- 12" FL or 14" TL minimum size limit
- March 1 end of February season
- Trip limits (per vessel, per day)

NY-GA: 3500 lbs

FL: 3500 lbs, 3/1-11/30;

3500 lbs Mon-Fri & 1500 lbs Sat-Sun, 12/1 until 75% adjusted quota taken; 1500 lbs, when 75% adjusted quota taken until 100% adjusted quotas taken; 500 lbs after 100% of adjusted quotas taken (the adjusted quota compensates for estimated catches of 500 lbs per vessel per day to the end of the season)

 Commercial quotas decreased the following year if Total ACL is exceeded and stock is overfished

Amendment 18 (Federal)

In August 2011, the Gulf of Mexico and South Atlantic, Fishery Management Councils approved Amendment 18 to the joint FMP for Coastal Migratory Pelagics. The primary action under consideration established Annual Catch Limits (ACLs) and Accountability Measures (AMs) for the cobia, king mackerel, and Spanish mackerel. The amendment designates ACLs and Annual Catch Targets (ACTs) for each of the two migratory groups of Spanish mackerel (Atlantic and Gulf). For the Atlantic migratory group, the commercial sector ACL is set equivalent to the commercial sector quota of 3.13 million pounds. The AM for the commercial sector is that the commercial sector will close when the commercial quota is reached or projected to be reached. In addition, current trip limit adjustments will remain in place. When the commercial sector closes, harvest and possession of Spanish mackerel would be prohibited for persons aboard a vessel for which a commercial permit for Spanish mackerel has been issued.

For the recreational sector, the ACT is set to 2.32 million pounds, while the ACL is set at 2.56 million pounds. Regarding the AM, if the stock ACL is exceeded in any year, the bag limit will be reduced the next fishing year by the amount necessary to ensure recreational landings achieve the recreational ACT, but do not exceed the recreational ACL in the following fishing year. A payback will be assessed if the Atlantic migratory group Spanish mackerel is determined to be overfished and the stock ACL is exceeded. The payback will include a reduction in the sector ACL for the following year by the amount of the overage by that sector in the prior fishing year.

Addendum I

In August 2013, the Commission's South Atlantic State-Federal Fisheries Management Board approved Addendum I to the Omnibus Amendment to for Spanish mackerel, Spot, and Spotted Seatrout.

Addendum I to the Omnibus Amendment establishes a pilot program that would allow states to reduce the Spanish mackerel minimum size limit for the commercial pound net fishery to 11 ½ inches during the summer months of July through September for the 2013 and 2014 fishing years only. The measure is intended to reduce waste of these shorter fish, which are discarded dead in the summer months, by converting them to landed fish that will be counted against the quota.

The Addendum responds to reports about the increased incidence of Spanish mackerel ¼ to ½ inch short of the 12 inch fork length minimum size limit in pound nets during the summer months. While the fish are alive in the pound, once the net is bunted and bailing commences, they die before being released. This may be due to a combination of temperature, stress and crowding. While individual fishermen have experimented with different wall or panel mesh sizes depending on the target species, there is no consistent use of cull panels. Those who have used cull panels have noted the difficulty and lack of success in being able to release the undersized fish quickly enough to prevent dead discards during this time of year.

The measures in Addendum I only applied for the 2013 and 2014 fishing seasons. In August 2015, the South Atlantic Board formally extended the provisions of Addendum I for the 2015 and 2016 fishing seasons. Reports by North Carolina, the only state to reduce their minimum size, will be reviewed annually.

Amendment 20A (Federal)

Effective July 2014, this Amendment addresses the sale of bag limit caught Spanish mackerel. The amendment rose from concerns that the recreational sales of bag limit caught fish, which are counted toward commercial quotas, are contributing to early closures of the commercial sector. In addition potential double counting of these fish could be causing erroneous landings estimates. In response, the Amendment prohibits bag limit sales with the exception of recreationally caught fish from state permitted tournaments in the South Atlantic region. This amendment also included an action to remove income requirements for federal CMP permits.

South Atlantic CMP Framework Action (Federal)

Effective December 2014, this action allows Spanish mackerel, harvested with gillnet gear in the South Atlantic EEZ off Florida (north of the Miami-Dade/Monroe County line) that is in excess of

the trip limit, to be transferred to another federally permitted vessel that has not yet harvested the trip limit. The Framework stipulates that the transfer can only occur if: 1) allowable gillnet gear was used to harvest Spanish mackerel; 2) the transfer takes place in federal waters between vessels with valid commercial permits; 3) the receiving vessel does not have more than 3 gillnets aboard after the transfer; 4) all fish remain entangled in the meshes of the net until the transfer; 5) the quantity of the fish transferred does not exceed the daily trip limit; and 6) there is only one transfer per vessel per day.

CMP Framework Amendment 1 (Federal)

This Framework Amendment, effective December 2014, increases the Atlantic Spanish mackerel ACL to 6.063 million pounds. The modification to the ACL followed the 2013 stock assessment which concluded that the stock is not overfished and overfishing is not occurring. The Amendment divides the ACL between the commercial sector (3.33 million pounds) and the recreational sector (2.727 million pounds).

Amendment 20B (Federal)

Effective March 2015, this Amendment separates commercial quotas of Atlantic Spanish mackerel between a Northern zone (north of NC/SC line) and a Southern zone (South of NC/SC line). The Amendment rose from concerns that the commercial quota could be filled by fishermen in one state before fish are available to fishermen in another state. In order to prevent this from happening, a zone is closed when its respective quota is met. Quota for each zones was based on landings from 2002/2003-2011/2012.

CMP Framework Amendment 2 (Federal)

Implemented July 2015, this Amendment modifies the commercial trip limit system in the Southern zone. The rule establishes a trip limit of 3,500 lbs for Spanish mackerel in Federal waters offshore of South Carolina, Georgia, and Florida. When 75% of the adjusted southern zone commercial quota is caught, the commercial trip limit is reduced to 1,500 lbs. When 100% of the adjusted southern zone commercial quota is met, the commercial trip limit is further reduced to 500 lbs. This limit remains until the end of the year or the quota is met.

CMP Framework Amendment 5 (Federal)

Implemented August 2017, this Framework Amendment allows commercially permitted vessels to operate as private recreational vessels when the commercial season is closed for Spanish or king mackerel.

VII. Implementation of FMP Compliance Requirements for 2016

All states must implement the requirements specified in section 5 (5.1 Mandatory Compliance Elements for States; 5.1.1 Mandatory Elements of State Programs; 5.1.1.1 Regulatory Requirements). The PRT finds all states in compliance.

De Minimis Requests

A state qualifies for *de minimis* status if its previous three-year average combined commercial and recreational catch is less than 1% of the previous three-year average coastwide combined

commercial and recreational catch. Those states that qualify for *de minimis* are not required to implement any monitoring requirements, as none are included in the plan.

The states of New Jersey, Delaware, and Georgia request *de minimis* status. The PRT notes that all three states meet the requirements of *de minimis*.

Regulation Changes

No state regulatory changes were reported for 2017. In 2017, Framework Amendment 5 to the Fishery Management Plan for Coastal Migratory Pelagics in the Gulf of Mexico and Atlantic Regions was approved by the SAFMC and GMFMC. This Framework Amendment allows commercially permitted vessels to operate as private recreational vessels when the commercial season is closed for Spanish or king mackerel.

VIII. Recommendations of the Plan Review Team

Research and Monitoring Recommendations

High Priority

- Length, sex, age, and CPUE data are needed for improved stock assessment accuracy.
 Simulations on CPUE trends should be explored and impacts on VPA and assessment results determined. Data collection is needed for all states, particularly from Virginia north.
- Evaluation of weight and especially length at age of Spanish mackerel.
- Development of fishery-independent methods to monitor stock size of Atlantic Spanish mackerel (consider aerial surveys used in south Florida waters).
- More timely reporting of mid-Atlantic catches for quota monitoring.
- Provide better estimates of recruitment, natural mortality rates, fishing mortality rates, and standing stock. Specific information should include an estimate of total amount caught and distribution of catch by area, season, and type of gear.
- Develop methodology for predicting year class strength and determination of the relationship between larval abundance and subsequent year class strength.
- Commission and member states should support and provide the identified data & input needed to improve the SAFMC's SEDAR process.
- The full implementation of ecosystem-based management and the implementation of monitoring/research efforts needed to support ecosystem-based management needs should be conducted.
- Consider extending management measures into the New England region as catches and anecdotal sightings of Spanish mackerel have increased in this area. Also determine whether more northerly fish are of the same stock as fish further south.

Medium Priority

- Yield per recruit analyses should be conducted relative to alternative selective fishing patterns.
- Determine the bycatch of Spanish mackerel in the directed shrimp fishery in Atlantic Coastal waters (partially met: Branstetter, 1997; Ottley et al., 1998; Gaddis et al., 2001; Page et al., 2004).
- Evaluate potential bias of the lack of appropriate stratification of the data used to generate age-length keys for Atlantic and Gulf Spanish mackerel.

- Evaluate CPUE indices related to standardization methods and management history, with emphasis on greater temporal and spatial resolution in estimates of CPUE.
- Consideration of MRFSS add-ons or other mechanisms for collection of socioeconomic data for recreational and commercial fisheries.
- Determine normal Spanish mackerel migration routes and changes therein, as well as the climatic or other factors responsible for changes in the environmental and habitat conditions which may affect the habitat and availability of stocks.
- Determine the relationship, if any, between migration of prey species (i.e., engraulids, clupeids, carangids), and migration patterns of the Spanish mackerel stock.

Low Priority

- Final identification of Spanish mackerel stocks through multiple research techniques.
- Complete research on the application of assessment and management models relative to dynamic species such as Spanish mackerel.
- Delineation of spawning areas and areas of larval abundance through temporal and spatial sampling.

IX. References

- Branstetter, S. 1997. Final implementation of high-priority objectives of a bycatch reduction research program for the Gulf of Mexico and South Atlantic shrimp fishery. NMFS 93-SER-059.
- Gaddis, G., D. Haymans, J.L. Music, Jr., and J. Page. 2001. Interstate fisheries management planning and implementation. Final Report. Award No. NA86FG0116. USDOC/NOAA/NMFS. Atlantic Coastal Fisheries Management Act (P.L. 103-206).
- GMFMC (Gulf of Mexico Fishery Management Council)/SAFMC (South Atlantic Fishery Management Council). 2011. Amendment 18 to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions. Available at: http://safmc.net/Library/pdf/Final CMP Amend18.pdf
- GMFMC (Gulf of Mexico Fishery Management Council)/SAFMC (South Atlantic Fishery Management Council). 2013. Amendment 20A to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions. Available at:
 - http://sero.nmfs.noaa.gov/sustainable_fisheries/gulf_sa/cmp/2014/am20a/documents/pdfs/cmp_am20a_ea.pdf
- GMFMC (Gulf of Mexico Fishery Management Council)/SAFMC (South Atlantic Fishery Management Council). 2014. Amendment 20B to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions. Available at:
 - http://sero.nmfs.noaa.gov/sustainable_fisheries/gulf_sa/cmp/2014/am20b/documents/pdfs/cmp_a20b_ea.pdf
- Mackerel Stock Assessment Panel (MSAP). 2003. 2003 Report of the Mackerel Stock Assessment Panel. Award No. NA17FC2203 and NA17FC1053. Gulf of Mexico Fishery Management Council, Tampa, Florida & South Atlantic Fishery Management Council, Charleston, South Carolina. 31 pp.

- Ottley, A., C.N. Belcher, B. Good, J.L. Music, Jr., and C. Evans. 1998. Interstate fisheries management planning and implementation. Final Report. Award No. NA57FG0170. USDOC/NOAA/NMFS. Atlantic Coastal Fisheries Management Act (P.L. 103-206).
- Page, J., D. Haymans, and P. Geer. 2004. Interstate fisheries management planning and implementation. Final Report. Award No. NA16FG1219. USDOC/NOAA/NMFS. Atlantic Coastal Fisheries Management Act (P.L. 103-206).
- SAFMC (South Atlantic Fishery Management Council). 2013. South Atlantic Coastal Migratory Pelagics Framework Action 2013 for the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions. Available at: http://safmc.net/sites/default/files/Resource%20Library/pdf/CMPFramework_Decision Doc_Sept2013_draft.pdf
- SAFMC (South Atlantic Fishery Management Council). 2014. Framework Amendment 1 to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions. Available at:

 http://safmc.net/sites/default/files/Resource%20Library/pdf/CMP%20Am/CMPFrameworkAmendment1 29May2014 FINAL.pdf
- SAFMC (South Atlantic Fishery Management Council). 2014. Framework Amendment 2 to the fishery management plan for coastal migratory pelagic resources in the Gulf of Mexico and Atlantic regions. Available at:

 http://sero.nmfs.noaa.gov/sustainable-fisheries/gulf-sa/cmp/2014/framework-am2/d-ocuments/pdfs/cmp-frameworka2-ea.pdf
- SEDAR. 2012. SEDAR 28- South Atlantic Spanish Mackerel Stock Assessment Report. SEDAR, North Charleston SC. 438 pp. available online at:

 http://www.sefsc.noaa.gov/sedar/Sedar Workshops.jsp?WorkshopNum=28

X. Figures

Figure 1. Estimated total biomass (metric tons) at start of year. Horizontal dashed line indicates B_{MSY} (SEDAR, 2012).

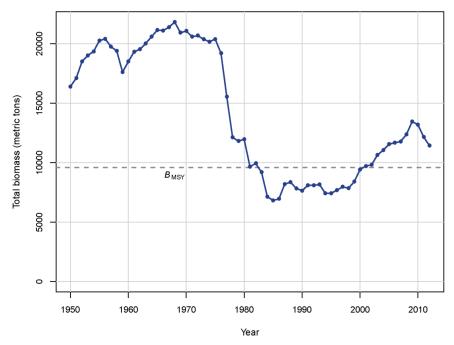


Figure 2. Estimated time series of Atlantic group Spanish mackerel fishing mortality rate (F) relative to F_{MSY} benchmark. Solid line indicates estimates from base run of the Beaufort Assessment Model; gray error bands indicate 5th and 95th percentiles of the Monte Carlo Bootstrap analysis trials (SEDAR, 2012).

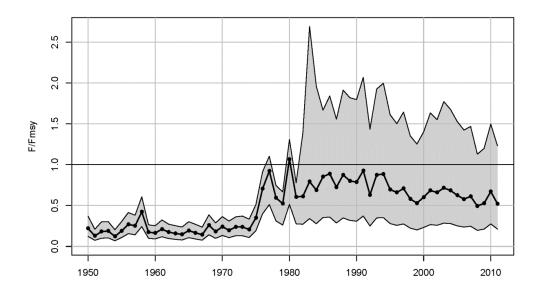


Figure 3. Recreational harvest in pounds, estimated using the Coastal Household Telephone Survey (CHTS) and the mail-based Fishing Effort Survey (FES). (Source: personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

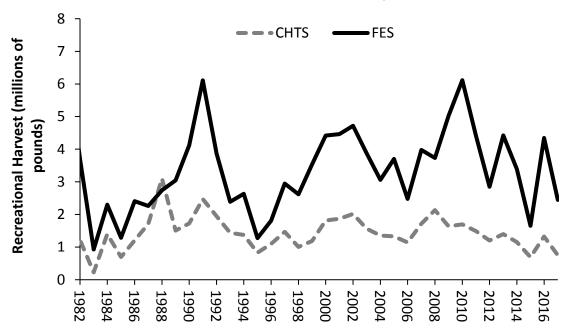


Figure 4. Commercial and recreational harvest (pounds) of Spanish mackerel, 1950-2017. (Recreational data available from 1981-present only; see Tables 2 and 4 for values and sources)

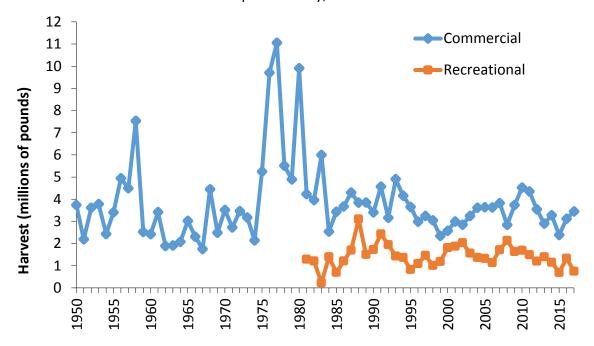
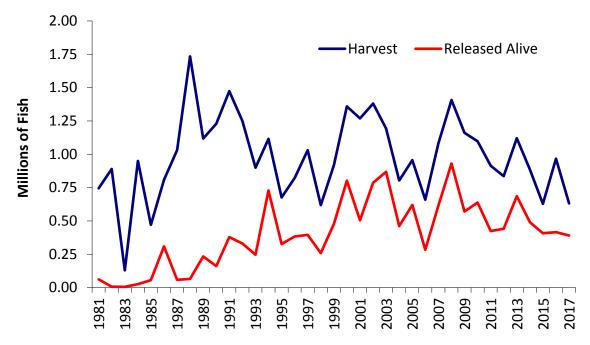


Figure 5. Recreational harvest and releases (numbers of fish) of Spanish mackerel, 1981-2017. (See Tables 3 and 5 for values and sources)



XI. Tables

Table 1. Summary of state regulations for Spanish mackerel in 2016.

Notes: A commercial license is required to sell Spanish mackerel in all states; other general gear restrictions apply to the harvest of Spanish mackerel. Purse seines and drift gill nets are prohibited south of Cape Lookout, NC.

State	Recreational	Commercial
NY	14" TL, 15 fish	14" TL. 3,500 lb trip limit.
NJ	14" TL, 10 fish	14" TL. 3,500 lb trip limit.
DE	14" TL, 15 fish	14" TL. 3,500 lb trip limit.
MD	14" TL, 15 fish	14" TL. 3,500 lb trip limit. March-Feb.
PRFC	14" TL, 15 fish	14" TL. Closure if/when MD and VA fisheries close.
VA	14" TL, 15 fish	14" TL. 3,500 lb trip limit. Closure if/when federal waters
		close.
NC	12" FL, 15 fish	12" FL; 11.5" FL in pound net fishery July 4 th – Sept 30 th ,
		2016. 3,500 lb trip limit for combined Spanish and king
		mackerel landings.
SC	12" FL, 15 fish	12" FL. 15 fish. 3,500 lb trip limit. March-Feb. Closure
		if/when federal waters close.
GA	12" FL, 15 fish	12" FL. 3,500 lb trip limit.
FL	12" FL or 14" TL,	12" FL or 14" TL. Trip limits: April 1 until Nov. 30 - 3500
	15 fish. Cast nets	lb; Dec. 1 until 75% of adjusted quota reached – 3500 lb
	less than 14' and	Mon-Fri. & 1500 lb Sat-Sun; >75% adjusted quota until
	beach or haul	quota filled -1500 lb; > 100% of adjusted quota - 500 lb.
	seines within 2"	Restricted Species Endorsement Required
	stretched mesh	Allowed gear: beach or haul seine, cast net, hook and
	allowed	line, or spearing.

Table 2. Commercial landings (pounds, calendar year) of Spanish mackerel by state, 2008-2017. (Source: ACCSP for 2015 and earlier for all jurisdictions, except PRFC; annual compliance reports for 2016 and for all PRFC years. Starred values are confidential. Total values adhere to the ACCSP rule of 3, i.e. totals are reflective of the true total if 0 or at least 3 states' data are confidential in a given year. Otherwise, they are sums of non-confidential data. Data dating back to 1950 are available upon request to ACCSP.)

Year	NY	ИЛ	DE	MD	PRFC	VA
2008	2,512	1,210	*	6,912	3,253	150,547
2009	3,463	3,324	*	*	494	137,573
2010	3,712	829		4,939	68	47,373
2011	1,147	305		5,088	675	35,601
2012	2,293	2,806		3,634	270	18,047
2013	4,467	265		2,395	302	7,602
2014	2,550	292		1,632	12	7,859
2015	1,357	2,746		2,222	6	14,493
2016	813	1,997	*	16,205	548	32,682
2017	989	462	0	811	4,704	21,585
Year	NC	SC	GA	FL	Т	otal
Year 2008	NC 415,405	SC	GA *	FL 2,262,504		otal 12,342
		SC			2,84	
2008	415,405	*		2,262,504	2,8 ² 3,73	12,342
2008 2009	415,405 961,811			2,262,504 2,629,343	2,84 3,73 4,52	12,342 36,009
2008 2009 2010	415,405 961,811 911,866			2,262,504 2,629,343 3,551,357	2,84 3,73 4,52 4,34	12,342 36,009 20,144
2008 2009 2010 2011	415,405 961,811 911,866 871,217			2,262,504 2,629,343 3,551,357 3,432,932	2,84 3,73 4,52 4,34 3,54	12,342 36,009 20,144 16,965
2008 2009 2010 2011 2012	415,405 961,811 911,866 871,217 916,439			2,262,504 2,629,343 3,551,357 3,432,932 2,596,917	2,84 3,73 4,52 4,34 3,54 2,90	12,342 36,009 20,144 16,965 10,407
2008 2009 2010 2011 2012 2013	415,405 961,811 911,866 871,217 916,439 620,752	*		2,262,504 2,629,343 3,551,357 3,432,932 2,596,917 2,265,390	2,84 3,73 4,52 4,34 3,54 2,90 3,22	12,342 36,009 20,144 46,965 40,407 01,172
2008 2009 2010 2011 2012 2013 2014	415,405 961,811 911,866 871,217 916,439 620,752 673,974	*		2,262,504 2,629,343 3,551,357 3,432,932 2,596,917 2,265,390 2,585,281	2,84 3,73 4,52 4,34 3,54 2,90 3,22 2,39	12,342 36,009 20,144 46,965 40,407 01,172 71,599

Table 3. Recreational harvest (numbers) of Spanish mackerel by state, state, 2008-2017. State values shown were estimated using effort information from the Coastal Household Telephone Survey (CHTS). Coastwide totals are also shown as recalibrated estimates using effort information from the mail-based Fishing Effort Survey (FES). (Source: personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

[10/06/2018])							
Year	NY	NJ	DE	MD	٧	Α	NC
2008	0	344	0	7,515	83,9	903	744,139
2009	0	215	0	19,901	16,4	451	677,787
2010	0	0	0	5,580	20,5	524	483,956
2011	0	0	0	10,554	35,0)54	367,086
2012	0	0	0	2,962	11,8	347	491,238
2013	0	0	31	2,905	61,2	260	497,329
2014	0	0	0	5,494	15,	776	398,398
2015	0	0	0	11,366	12,0	072	388,157
2016	0	0	9	11,465	75,0	068	424,341
2017	0	3,188	27	14,613	12,6	509	439,654
Year	SC	GA	FL	CHTS To	tal	FI	ES Total
Year 2008	SC 52,725	GA 14,682	FL 503,398	CHTS To 1,406,7			ES Total 639,732
					06	2,	
2008	52,725	14,682	503,398	1,406,7	06 56	2,	639,732
2008	52,725 73,611	14,682 4,476	503,398	1,406,70 1,161,0	06 56 61	2, 3, 3,	639,732
2008 2009 2010	52,725 73,611 70,351	14,682 4,476 4,955	503,398 368,615 512,295	1,406,70 1,161,00 1,097,60	06 56 61 7	2, 3, 3, 2,	639,732 261,707 698,224
2008 2009 2010 2011	52,725 73,611 70,351 87,109	14,682 4,476 4,955 7,486	503,398 368,615 512,295 406,068	1,406,70 1,161,00 1,097,60 913,35	06 56 61 7	2, 3, 3, 2,	639,732 261,707 698,224 757,220
2008 2009 2010 2011 2012	52,725 73,611 70,351 87,109 80,204	14,682 4,476 4,955 7,486 2,119	503,398 368,615 512,295 406,068 246,866	1,406,70 1,161,03 1,097,60 913,35 835,23	06 56 61 7 6	2, 3, 3, 2, 2,	639,732 261,707 698,224 757,220 062,107
2008 2009 2010 2011 2012 2013	52,725 73,611 70,351 87,109 80,204 22,414	14,682 4,476 4,955 7,486 2,119 1,299	503,398 368,615 512,295 406,068 246,866 534,923	1,406,70 1,161,00 1,097,60 913,35 835,23 1,120,10	06 56 61 7 6 61 8	2, 3, 3, 2, 2, 3,	639,732 261,707 698,224 757,220 062,107 897,654
2008 2009 2010 2011 2012 2013 2014	52,725 73,611 70,351 87,109 80,204 22,414 80,935	14,682 4,476 4,955 7,486 2,119 1,299 1,903	503,398 368,615 512,295 406,068 246,866 534,923 381,902	1,406,70 1,161,03 1,097,60 913,35 835,23 1,120,10 884,40	06 56 61 7 6 61 8	2, 3, 3, 2, 2, 2, 3,	639,732 261,707 698,224 757,220 062,107 897,654 650,497

Table 4. Recreational harvest (pounds) of Spanish mackerel by state, state, 2008-2017. State values shown were estimated using effort information from the Coastal Household Telephone Survey (CHTS). Coastwide totals are also shown as recalibrated estimates using effort information from the mail-based Fishing Effort Survey (FES). (Source: personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

	[10/06/2018])						
Year	NY	NJ	DE	MD	V	Α	NC
2008	0	513	0	11,558	113,	127	968,108
2009	0	302	0	37,284	22,2	131	824,225
2010	0	0	0	11,383	27,5	503	565,830
2011	0	0	0	22,630	41,3	325	470,541
2012	0	0	0	5,223	17,8	306	665,201
2013	0	0	43	6,949	68,2	165	625,035
2014	0	0	0	12,440	17,5	597	449,709
2015	0	0	0	16,820	10,7	746	431,082
2016	0	0	8	18,995	71,8	369	411,353
2017	0	3,516	42	17,379	16,4	182	459,982
Year							
	SC	GA	FL	CHTS To	tal	FE	S Total
2008	84,244	GA 36,154	FL 919,711	2,133,4			731,878
					14	3,	
2008	84,244	36,154	919,711	2,133,4	14 71	3, ² 5,0	731,878
2008 2009	84,244 96,827	36,154 6,910	919,711 651,494	2,133,4 1,639,1	14 71 18	3, ² 5,(6,:	731,878 022,464
2008 2009 2010	84,244 96,827 103,956	36,154 6,910 5,383	919,711 651,494 983,764	2,133,4 1,639,1 1,697,8	14 71 18 62	3, ² 5,0 6,2 4,4	731,878 022,464 115,450
2008 2009 2010 2011	84,244 96,827 103,956 73,605	36,154 6,910 5,383 9,439	919,711 651,494 983,764 873,222	2,133,4 1,639,1 1,697,8 1,490,7	14 71 18 62 16	3, 5,0 6,3 4,4	731,878 022,464 115,450 420,710
2008 2009 2010 2011 2012	84,244 96,827 103,956 73,605 98,316	36,154 6,910 5,383 9,439 4,536	919,711 651,494 983,764 873,222 411,935	2,133,4 1,639,1 1,697,8 1,490,7 1,203,0	14 71 18 62 16 86	3, 5, 6, 6, 2, 4, 4	731,878 022,464 115,450 420,710 847,807
2008 2009 2010 2011 2012 2013	84,244 96,827 103,956 73,605 98,316 50,866	36,154 6,910 5,383 9,439 4,536 2,159	919,711 651,494 983,764 873,222 411,935 648,471	2,133,4 1,639,1 1,697,8 1,490,7 1,203,0 1,401,6	14 71 18 62 16 86 30	3, 5, 6, 6, 4, 4, 4, 4, 4, 4, 3, 3, 3, 5	731,878 022,464 115,450 420,710 847,807 422,624
2008 2009 2010 2011 2012 2013 2014	84,244 96,827 103,956 73,605 98,316 50,866 126,345	36,154 6,910 5,383 9,439 4,536 2,159 2,356	919,711 651,494 983,764 873,222 411,935 648,471 544,883	2,133,4 1,639,1 1,697,8 1,490,7 1,203,0 1,401,6 1,153,3	14 71 18 62 16 86 30	3,7 5,6 6,7 4,4 2,8 4,4 3,7	731,878 022,464 115,450 420,710 847,807 422,624 386,462
2008 2009 2010 2011 2012 2013 2014 2015	84,244 96,827 103,956 73,605 98,316 50,866 126,345 108,423	36,154 6,910 5,383 9,439 4,536 2,159 2,356 1,879	919,711 651,494 983,764 873,222 411,935 648,471 544,883 124,199	2,133,4 1,639,1 1,697,8 1,490,7 1,203,0 1,401,6 1,153,3 693,15	14 71 18 62 16 86 30 60 26	3, 5,0 6, 4,4 2,8 4,4 3,3 1,0 4,4	731,878 022,464 115,450 420,710 847,807 422,624 386,462 654,337

Table 5. Recreational releases (numbers) of Spanish mackerel by state, state, 2008-2017. State values shown were estimated using effort information from the Coastal Household Telephone Survey (CHTS). Coastwide totals are also shown as recalibrated estimates using effort information from the mail-based Fishing Effort Survey (FES). (Source: personal communication with NOAA Fisheries, Fisheries Statistics Division. [10/06/2018])

Year	NY	NJ	DE	MD	V	4	NC
2008	0	0	0	6,951	37,8	350	449,095
2009	0	26,741	0	3,630	20,9	980	313,030
2010	0	0	0	0	33,1	.03	294,350
2011	0	0	0	0	28,5	26	170,926
2012	0	0	0	0	17,1	.50	234,905
2013	0	0	94	0	5,5	83	289,216
2014	0	0	0	881	3,4	50	240,731
2015	0	0	0	357	4,2	24	216,011
2016	0	0	213	0	14,0	72	187,878
2017	0	4,440	0	3,029 4,93		11	228,851
Year	SC	GA	FL	CHTS To	otal	F	ES Total
2008	67,686	5,300	363,542	930,42	24	2,	255,086
2009	55,600	982	149,825	570,78	38	1,	713,051
2010	28,200	65	282,252	637,97	70	2,	285,503
2011	67,144	10,131	147,399	424,12	26	1,	471,139
2012	98,371	1,724	88,592	440,74	12	1,	196,851
2013	24,862	0	365,405	685,16	50	2,	723,231
2014	36,082	851	208,529	490,52	24	1,	899,889
2015	00 520	466	0-0-0	40C F	-1	1	OCT 210
	99,530	466	85,973	406,561 415,635		1,	065,319
2016	69,882	466 137	85,9 <i>7</i> 3 143,453	415,63			129,707



Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201 703.842.0740 • 703.842.0741 (fax) • www.asmfc.org

MEMORANDUM

October 15, 2018

To: South Atlantic State/Federal Fisheries Management Board

From: Tina Berger, Director of Communications

RE: Advisory Panel Nomination

Please find attached a nomination to the South Atlantic Species Advisory Panel – Glenn Skinner, a commercial gillnetter and member of the North Carolina Fisheries Association. Please consider approval of this nomination at the next Board meeting.

SOUTH ATLANTIC SPECIES ADVISORY PANEL

Bolded names await approval by the South Atlantic State-Federal Fisheries Management Board Bolded and italicized name denotes Advisory Panel Chair October 15, 2018

Delaware

Daniel T. Dugan (rec)
20 South Woodward Avenue
Wilmington, DE 19805
Phone: (302)636-9300
dtdugan@verizon.net
Appt. Confirmed 11/1/07
Appt Reconfirmed 10/18/16

New Jersey

Jeffrey Reichle (comm.)

PO Box 830

Cape May, NJ 08204

Phone: (day): (609)884-7600 Phone (eve): (609)884-0661

FAX: (609)884-0664 jreichle@lundsfish.com Appt. Confirmed 11/1/07

Chris McCurdy (for-hire)

10 Birch Drive

Swainton, NJ 08210

Phone (day): (609)463-6760 Phone (cell): (609)374-4604 capt.curd@verizon.net Appt. Confirmed 11/1/07

Expertise: Red drum, black drum, Atlantic

croaker

Maryland

Vacancy (rec & comm)

Virginia

Vice-Chair, Thomas J. Powers (rec)

311 Hunts Neck Road Poquoson, VA 23662 Phone: 757-269-7660 powers@jlab.org Appt. Confirmed 11/1/07

Expertise: Atlantic croaker

Craig Freeman (rec/for-hire/comm)

118 Messick Road Poquoson, VA 23662 Phone: (757)871-9246

Gradingscalessportfishing@gmail.com

Expertise: Cobia

Appt. Confirmed 8/9/18

North Carolina

Glenn Skinner (commercial gillnetter)

296 Cyprus Pollard Road Newport, NC 28570 Phone: 252.646.7742 glennskinner@ncfish.org

Expertise: spot, spotted seatrout, Spanish

mackerel

Charles Bernard (Bernie) McCants, Jr (rec)

2325 Windy Woods Drive

Raleigh, NC 27607

Phone (day): 919.602.4516 Phone (evening): 919.602.4516

FAX: 919.668.7064

bernie.mccants@duke.edu Appt Confirmed 8/9/12

Expertise: Red drum, black drum

Aaron Kelly (for-hire) 112 Jimmy Court

Kill Devil Hills, NC 27948 Phone (day): 252.202.6046 Phone (eve): 252.441.6575 info@rocksolidfishing.com

Expertise: Cobia

Appt Confirmed 10/25/16

South Carolina

Captain Bill Parker (rec fishing guide)

28 Eagle Claw Dr. Hilton Head, SC 29926 Phone: 843.384.6511 runfish1@roadrunner.com

Expertise: Cobia

Appt Confirmed 10/25/16

Glenn Ulrich (rec) 684 Ritter Drive Charleston, SC 29412

843.793.8712

<u>ulrichg@bellsouth.net</u> Expertise: Mixed species

SOUTH ATLANTIC SPECIES ADVISORY PANEL

Bolded names await approval by the South Atlantic State-Federal Fisheries Management Board Bolded and italicized name denotes Advisory Panel Chair October 15, 2018

Appt Confirmed 10/25/16

Georgia

Lee Southard (rec fishing guide)
222 Crosswind Drive
Richmond Hill, GA 31324
Phone: 912.727.3402; 912.312.1210
leesouthard1801@comcast.net

Expertise: Mixed species
Appt Confirmed 10/25/16

Florida

James R. Stockton, Jr. (guideboat) P.O. Box 1069 Ponte Vedra Beach, FL 32004

Phone: (904)285-4884 Appt. Confirmed 11/1/07 Expertise: Red drum

William R. Bird, Jr. (rec)

P.O. Box 2809 Orlando, FL 32802

Phone (day): 407-418-6237 Phone (eve): (407) 257-7480

Fax: 407-843-4444

bill.bird@lddkr.com and wbird2@cfl.rr.com

Appt. Confirmed 11/1/07

Expertise: Red drum and black drum

Tim Adams (Sp. Mackerel comm.)

426 S.W. Maple St. Sebastian, FL 32958

Phone (eve): (772) 589-9846 Phone (cell): (772)473-6580 Appt. Confirmed 11/1/07 Expertise: Spanish Mackerel

THE STATES OF THE STATES OF THE STATES COMMENCED IN COMME

ATLANTIC STATES MARINE FISHERIES COMMISSION

Advisory Panel Nomination Form

This form is designed to help nominate Advisors to the Commission's Species Advisory Panels. The information on the returned form will be provided to the Commission's relevant species management board or section. Please answer the questions in the categories (All Nominees, Commercial Fisherman, Charter/Headboat Captain, Recreational Fisherman, Dealer/Processor, or Other Interested Parties) that pertain to the nominee's experience. If the nominee fits into more than one category, answer the questions for all categories that fit the situation. Also, please fill in the sections which pertain to All Nominees (pages 1 and 2). In addition, nominee signatures are required to verify the provided information (page 4), and Commissioner signatures are requested to verify Commissioner consensus (page 4). Please print and use a black pen.

Form	submitted	by Chris Batsavage (your name)	State: <u>N.C.</u>
		ee: Glenn Skinner	
Addre	ess:2	296 Cyrus Pollard Rd.	
City, S	State, Zip:_	Newport NC 28570	
		the appropriate numbers where the nominee can be reach	ned:
Phone	e (day): <u>2</u>	252 (<u>a46 7742</u> Phone (evening):	7/ All de la
FAX:		Email: <u>alennsk</u>	innerancfish.org
1.	1 2	st, in order of preference, the Advisory Panel for which you South Atlantic Board	u are nominating the above person.
	3 4		
2.		nominee been found in violation of criminal or civil federal elony or crime over the last three years?	fishery law or regulation or convicted
	□yes	⊠no	
3.	Is the no	ominee a member of any fishermen's organizations or club	os?
	⊠ yes	□no	

f "yes	s," please list them below by name.
	North Carolina Fisheries Association
	What kinds (appaies) of fish and/or shallfish has the pomines fished for during the past year?
	What kinds (species) of fish and/or shellfish has the nominee fished for during the past year? Blue Crab Spot
	·
	Striped Mullet Southern Flounder Spanish Markerel Spotted Seatrout
	What kinds (species) of fish and/or shellfish has the nominee fished for in the past?
OR (COMMERCIAL FISHERMEN:
	How many years has the nominee been the commercial fishing business? $30 +$
	Is the nominee employed only in commercial fishing? ☐ yes ☐ no
	What is the predominant gear type used by the nominee?
OR (CHARTER/HEADBOAT CAPTAINS:
	How long has the nominee been employed in the charter/headboat business?
	ls the nominee employed only in the charter/headboat industry? ☐ yes ☐ no
	If "no," please list other type(s) of business(es) and/occupation(s):
	How many years has the nominee lived in the home port community? years
	If less than five years, please indicate the nominee's previous home port community.

<u>FOF</u>	RECREATIONAL FISHERMEN:
1.	How long has the nominee engaged in recreational fishing? years
2.	ls the nominee working, or has the nominee ever worked in any area related to the fishing industry? ☐ yes ☐ no
	lf "γes," please explain.
<u>FOF</u>	R SEAFOOD PROCESSORS & DEALERS:
1.	How long has the nominee been employed in the business of seafood processing/dealing? years
2.	Is the nominee employed only in the business of seafood processing/dealing?
	□yes □no If "no," please list other type(s) of business(es) and/or occupation(s):
3.	How many years has the nominee lived in the home port community? 45 years
	if less than five years, please indicate the nominee's previous home port community.
FO	R OTHER INTERESTED PARTIES:
1.	How long has the nominee been interested in fishing and/or fisheries management? years
2.	is the nominee employed in the fishing business or the field of fisheries management? \Box yes \Box no
	If "no," please list other type(s) of business(es) and/or occupation(s):

FOR ALL NOMINEE	S:
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In the space provided below, please provide the Commission with any additional information which you feel would assist us in making choosing new Advisors. You may use as many pages as needed.

Aside from my commercial fishing experience I was also employed as a technician at the North Carolina Division of Marine Fisheries for 3 years and am currently the Executive Director of the North Carolina Fisheries Association.

Nominee Signature: 4 Ann & Dhimmen In	Date: 7 51 18
vame John Glenn Skinner Jr. (please print)	-
COMMISSIONERS SIGN-OFF (not required for non-trad	itional stakeholders)
State Director - Ongolny Proxy	State Legislator
Governor's Appointee	