Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201
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MEMORANDUM

TO: **Bluefish Board and Bluefish Technical Committee**

FROM: **Toni Kerns, ISFMP Director**

DATE: **December 19, 2019**

SUBJECT: **Bluefish Conservation Equivalency Criteria and Proposal Template**

The Bluefish Technical Committee (TC) met via conference call on December 16, 2019 to establish criteria for the development of conservation equivalency proposals for the coastwide 2020 bluefish recreational measures. The criteria developed are below. A template for proposals is on page 3 of this memo.

Conservation Equivalency Criteria

1. All reductions should be calculated in terms of pounds of fish.

2. Analysis should use recreational data from 2016-2018

- MRIP is the preferred dataset but if a state has concerns about the MRIP data (e.g., outliers, low sample size, etc), the state could present an analysis using an alternative dataset. The alternative dataset would be subject to review and approval by the TC. There would need to be strong justification for using data other than MRIP and it must be a robust data set. The data must be from recreational fishery dependent data and the proposal must give a full description of the data set.

3. When calculating the reduction: calculate the reduction for each individual year (2016, 2017, 2018) then take the average of those 3 reductions to determine the final reduction. If the PSE in your state is high (above 50) then the state could pool the data over the three years and then calculate the reduction. If pooling, then provide justification of why pooling is a better approach.

4. Proposals may split measures by mode. In the MRIP data, if the PSE for a proposed mode is higher than 50 the proposal should highlight the PSE value and use the pooling approach described above. The proposal analysis should show how these splits would produce the predicted total harvest reduction for the state.

5. If a state proposes a seasonal adjustment, closures would need to be for an entire wave.

6. Non-compliant harvest should be kept as part of the data in the analysis. I.e., all previous non-compliant harvest is assumed to still occur under the new regulations.

7. Interactions between combinations of regulatory changes (e.g., a higher size limit and a lower bag limit) should be accounted for using the same approach used in summer flounder:

the expected harvest reduction is the sum of the percent reductions for each measure minus the product of the 2 reductions.

For example, if the higher size limit is expected to reduce harvest by 20% and the lower bag limit is expected to reduce harvest by 15%, then the final expected reduction is:

$$Total\ Reduction = 20\% + 15\% - (20\% * 15\%)$$

All proposals are due on January 17th by COB.

Table 1. State Reductions

State	%Reduction (pounds)
MAINE	0.00%
NEW HAMPSHIRE	0.00%
MASSACHUSETTS	-20.08%
RHODE ISLAND	-43.81%
CONNECTICUT	-25.25%
NEW YORK	-26.26%
NEW JERSEY	-27.68%
DELAWARE	-20.01%
MARYLAND	-29.80%
VIRGINIA	-26.19%
NORTH CAROLINA	-32.80%
SOUTH CAROLINA	-36.69%
GEORGIA	-8.13%
FLORIDA	-18.65%

Bluefish Conservation Equivalency Proposal Template

CE Proposals are due January 17, 2020

Please use the following template when submitting proposals. Please be as concise as possible and use bullets to ensure inclusion of all important information. This template references data standards established by the Technical Committee above.

Summary of Proposed Measures

Recreational Fishery

State	Size Limits	Bag Limits	Other	Open Season

Coastwide Recreational Fishery

1a.) A 3 fish bag limit for the shore/private mode and a 5 fish bag limit for the for-hire modes. The same size and season as in 2019 is required.

OR

1b.) A conservation equivalency (CE) proposal that achieves the percent reduction in pounds for your state as listed in table 1 from 2016-2018 levels following the criteria established by the TC (see TC memo). If selecting this option, further analysis is required.

If submitting CE, please address the following questions,

- What is your state proposing for a conservation equivalency measure?
- Does your proposal meet the data standards established by the TC?
- What data sources are used in the analysis (include mode or season specific if applicable)?
- Sample size summary by mode, season, or state and/or data source as applicable.
- Describe in a few sentences how you did the analysis
- Provide a table of results with your analysis.
- Clearly identify how your states' reduction is achieved.

Note: Whether implementing 1a or 1b, please indicate the open and close dates of a season. Also specify if regulations are different by geographical area if applicable (e.g., ocean, bay, river) and the specific season dates of those areas. Also, more conservative regulations may be implemented without pursuing CE.

Timeline for Implementation

Briefly describe the timeline for implementation of management measures as well as the start of your state's fisheries relative to your proposed implementation date.

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MEMORANDUM

January 28, 2020

To: **Bluefish Management Board**

From: **Bluefish Technical Committee**

RE: **Review of Conservation Equivalency Proposals for the 2020 Recreational Bluefish Fishery**

Technical Committee Members: Michael Celestino (NJ DEP – Chair), Sam Truesdell (MA DMF – Vice-Chair) Amy Zimney (SC DNR), Sandra Dumais (NY DEC), Eric Durell (MD DNR), Jim Gartland (VA VIMS), Kurt Gottschall (CT DMF), BJ Hilton (GA DNR), Nicole Lengyel (RI DEM), Joseph Munyandorero (FL FWC) Lee Paramore (NC DENR), Melissa Smith (ME DMR), Kevin Sullivan (NH FGD), Richard Wong (DE DFW), Tony Wood (NEFSC), Matt Seeley (MAFMC), Dustin Colson Leaning (ASMFC)

The Bluefish Technical Committee (TC) met via conference call on Thursday, January 23, 2020 to review conservation equivalency (CE) proposals from Rhode Island, Connecticut, New Jersey, and Georgia proposing alternative measures for the 2020 recreational bluefish fishery. The Commission's CE Policy allows states to submit proposals for alternative measures in state waters that achieve the same reduction in recreational landings that would have been achieved under the coastwide regulations approved by the Board in December 2019. The coastwide regulations include a 5-fish bag limit for the for-hire sector and a 3-fish bag limit for shore-based anglers and private fishermen. Below is a summary of the three proposals, including TC feedback and recommendations.

Georgia Proposal for the 2020 Recreational Bluefish Fishery

The Georgia (GA) proposal intends to maintain 2019 measures with a bag limit of 15 fish and a minimum size of 12 inches with the exception of a seasonal adjustment to account for its required reduction percentage. GA proposes closing wave 2, which begins March 1st and ends on April 30, 2020. The closure is projected to achieve a 13.10% reduction in landings using 2016-2018 as base years. This meets the necessary reduction of 8.13% set by the TC in the guidance memo. Seasonal closures of up to 6 months can be put into place through an administrative order by the state commissioner. Pending approval, this expedited process provides ample time for Georgia to implement the closure following the Bluefish Board meeting on February 4th, 2020.

The TC agreed that the proposal relies upon sound methodology and recommends approval of Georgia's proposal for the 2020 recreational bluefish fishery. However, the TC did note that even when recreational data were pooled across three years, the percent standard error (PSE) value exceeded 50%. PSE is a measure of precision and the Marine Information Program (MRIP) indicates that large PSE's above 50 indicate a very imprecise estimate. Georgia represents a very small proportion of coastwide annual recreational harvest, registering well below 1% in each of the last three fishing years.

New Jersey Proposal for the 2020 Recreational Bluefish Fishery

The New Jersey (NJ) proposal included 8 options for the TC to consider (Table 1). The options utilize size limits, slot limits, bag limits, and seasonal closures to achieve NJ's required reduction of 27.68%. Three year (2016-2018) average reductions were used to estimate NJ's 2020 projected reductions except where the PSEs were greater than 50%. In these cases, a pooled data approach was used to bring the pooled PSEs below 50%. NJ plans to implement the Board approved option by the implementation date specified at the February 4th, 2020 meeting, but no later than April 1st 2020.

Table 1. Proposed 2020 recreational bluefish fishery regulations for New Jersey

Option	Size Limit	Bag Limit	Mode	Season
1	-	3	Private/shore	Open All Season
	-	5	For-hire	
2	-	3	All modes	Open All Season
3	-	8	All modes	Closure Sept 1 – Oct 31
4	15" min	4	All modes	Open All Season
5	≥ 9" and < 36"	10	All modes	Open All Season
6	-	5	All modes	Closure March 1 – April 30 & Sept 1 – Oct 31
7	15" min	6	All modes	Closure July 1 – Aug 31 & Nov 1 – Dec 31
8	-	8	Private/shore	Closure Sept 1 – Oct 31
	-	15	For-hire	

Overall, the TC agreed that the proposal's methodology met the CE criteria as specified in the guidance memo. A few TC members voiced concerns regarding options 5 and 8. While the CE options pass the litmus test of reductions in weight, there were concerns that these approaches may not achieve as great of a reduction in numbers of fish. The analysis indicated that a very large reduction occurs from the 36" maximum size limit under option 5, which could have been influenced by smaller sample sizes in these very large size categories. The TC suggested that the Board take into consideration the stock's overfished status when considering these two options from a risk analysis perspective. One TC member was concerned that non-sequential wave closures could lead to non-compliance issues. In response, other TC members remarked that discontinuous seasonal closures have been implemented successfully in other fisheries, such as Tautog. Overall, the TC recommends approval of New Jersey's proposal for the 2020 recreational bluefish fishery.

Rhode Island – Connecticut Regional Proposal for the 2020 Recreational Bluefish Fishery

Rhode Island (RI) and Connecticut (CT) jointly submitted a proposal for regional measures. RI-CT propose maintaining the Board approved coastwide measures of a 5-fish bag limit for the for-hire sector and a 3-fish bag limit for private/rental boats, with the exception of the shore mode by specifying an 8 fish bag limit, with only 2 of the 8 fish allowed to be greater than 12 inches.

The proposal justifies the higher bag limit for shore-based anglers by demonstrating that the average adult fish (>12 in.) caught from the shore is roughly equivalent in weight to 17 snappers (<12 in.) caught from the shore. Additionally, the analysis demonstrates that snappers comprise less than 9% of total

bluefish harvest by weight from 2016-2018 in CT and RI. If approved, the implementation timeline for both states relies upon each state's regulatory process, and new regulations for 2020 will be in place as soon as these processes allow.

The TC is not able to provide a formal recommendation to the Board until further analysis is conducted to support RI-CT's regional bluefish CE proposal. Some TC members expressed that conducting a more traditional size and bag limit reduction analysis for the proposal would be more appropriate to demonstrate the anticipated reduction as well as the implications the proposed measures might have on the fishery. One critique was that the proposal did not demonstrate that the measures would achieve the reduction specified by the criteria in the CE guidance memo. One TC member thought it important to consider the effect that the proposed regulations might have on the fish stock's ability to recover from its overfished status. RI and CT agreed to conduct additional analysis to demonstrate that the proposed measures achieve their region's pooled reduction specified in the guidance memo. Due to time constraints, this analysis will be presented at the Board meeting on February 4th, 2020.

General Comments on the Conservation Equivalency Process

The TC maintains that there is a high level of uncertainty in the percent reductions calculated due to the effect of changes in angler behavior (effort) and the size structure and distribution of the population (availability of legal and sub-legal fish). These changes are difficult to account for and cannot be accurately quantified. Additionally, there is greater certainty in the percent reductions calculated for simple management measures (changes in bag limits or minimum size limits) relative to more complex measures (slot limits, trophy fish options, and sector-specific regulations). Lastly, enforcement of proposed regulations needs to be considered including, but not limited to, slot limits and how they may be interpreted by states and enforcement officers and the potential to have differing regulations in neighboring states.

Through the course of evaluating proposals, the TC discovered that when analyses were conducted on disaggregated MRIP modes (e.g., splitting private/rental boats and shore mode into separate modes), the expected reduction in harvest from the coastwide measures (3 fish for private/rental boat and shore modes, and 5 fish for for-hire sector) was less than anticipated from analyses in which modes were aggregated. The discrepancy appears related to differences in the scale of snapper fisheries (and concomitant effect on average fish weight) among modes and states. Table X provides the range of anticipated predicted reductions for states resulting from various approaches. Harvest in 2020 needs to be reduced by 28.56% in order to not exceed the RHL. Table X also raised the question as to which state-specific required reduction states are held (i.e., reductions as estimated via calculations from separate vs aggregated modes). The difference is especially dramatic in some states (see for example reductions for RI in Table 2).

Table 2. a) Predicted state- and coastwide reductions in harvest by implementing coastwide measures of 3 fish for private/rental boats and shore mode, and 5 fish for for-hire mode. For conservation equivalency, states were required to reduce harvest by the amount under the aggregate modes column. The TC explored required reductions when modes were dis-aggregated (separate modes column). b) Predicted coastwide reductions in harvest by implementing the single coastwide measure from a variety of estimation methods: coastwide (state-specific avg wt) = uses state- and mode- specific avg fish wt; coastwide (avg wt by mode) = uses mode-specific avg fish wt (across all states grouped together); coastwide (all states combined) = methods as presented to MAFMC/ASMFC at December 2019 meeting.

a)

	Predicted/required reduction in harvest	
State	Separate modes mode_fx = 3,4,5,7	Aggregate modes mode_fx=(4,5) & (3,7)
CONNECTICUT	-16.5%	-23.8%
DELAWARE	-16.6%	-18.7%
FLORIDA	-20.0%	-18.6%
GEORGIA	-8.2%	-8.1%
MARYLAND	-16.2%	-16.6%
MASSACHUSETTS	-11.4%	-19.0%
NEW HAMPSHIRE	0.0%	0.0%
NEW JERSEY	-27.2%	-27.7%
NEW YORK	-23.4%	-26.3%
NORTH CAROLINA	-32.7%	-32.8%
RHODE ISLAND	-15.6%	-43.8%
SOUTH CAROLINA	-34.8%	-36.5%
VIRGINIA	-27.4%	-26.2%

b)

Coastwide (state-specific avg wt)	-23.9%	-25.3%
Coastwide (avg wt by mode)	-27.1%	
Coastwide (all states combined)	-27.5%	-28.6%

Bluefish Conservation Equivalency Proposal
Regional – (Rhode Island, Connecticut)

Introduction

The states of Rhode Island and Connecticut are submitting a regional conservation equivalency (CE) proposal in the interest of maintaining 1) the shore based "snapper" fishery (bluefish less than 12") and 2) regional consistency for recreational bluefish regulations. This regional proposal is only relative to the recreational sector.

The 2020 recreational management measure for Bluefish as recommended by the council (Mid-Atlantic Fishery Management Council) and commission (Atlantic States Marine Fisheries Commission) specifies a 3 fish bag limit for private and shore anglers and a 5 fish bag limit for the for-hire sector. The shore based snapper fishery is very important for the northern states by affording a unique saltwater experience to children and also as a source of sustenance for many families. We feel that the reduced bag limit of 3 fish will have a great impact on this fishery and contribute to an overall increase in dead discards. We are proposing to increase the number of snappers and limit the number of adult bluefish shore based anglers are allowed to keep by showing that shore based snappers comprise less than 9% of total bluefish harvest by weight and that on average a single adult bluefish is equivalent to ~30 snappers overall (all modes combined).

Summary of Proposed Measures

Recreational Fishery

State	Size Limits	Bag Limits	Other	Open Season
Regional: RI/CT	**N/A**	**5 fish**	**For-Hire**	**1/1 – 12/31**
Regional: RI/CT	**N/A**	**3 fish**	**Private**	**1/1 – 12/31**
Regional: RI/CT	**6 @ <12", 2 @ >12"**	**8 fish**	**Shore**	**1/1 – 12/31**

Regional Recreational Fishery Options- Rhode Island and Connecticut

1a.) A 3 fish bag limit for the shore/private mode and a 5 fish bag limit for the for-hire modes. The same size and season as 2019.

OR

1b.) A conservation equivalency (CE) proposal regional approach including two states; Rhode Island and Connecticut, implementing a five fish bag limit for the for-hire mode, a three fish bag limit for private anglers, and an eight fish bag limit for shore anglers with only two of those fish being greater than 12".

- Our proposal uses 2016-2018 MRIP data as specified by the TC.
- State specific reductions could not be calculated due to PSE's being too high when drilling MRIP data down to the state, year, and mode. As a result, an alternative was presented that we feel demonstrates an increase harvest by weight will not occur compared to the council and commission recommended measure.

- Our analysis used raw MRIP .csv files for the states of RI and CT for 2016-2018. The analysis shows that for the two states, on average 1 adult bluefish is equivalent to 30 snappers by weight (Table 1). When looking at just the Private and shore modes, a single fish over 12" on average equates to about 17 snappers (Table 2). Our analysis also shows that snappers for the three states comprise less than 9% of total bluefish harvest by weight from 2016-2018 (Table 3). Therefore, we propose that allowing shore anglers to trade a single adult for 6 snappers is thought to have a minimal impact on overall total weight of harvest and the state specific reductions.

Table 1. Adult to snapper bluefish equivalency using average weight from MRIP.

State	Avg weight of Fish (kg) < 12"	Avg weight of Fish (kg) > 12"
CT	0.09	2.02
RI	0.13	4.34
TOTAL	0.10	3.04

1 ADULT = 3.04/0.10 = 30.79 SNAPPERS

Table 2. Adult to snapper bluefish equivalency using average weight from MRIP by mode.

Mode	Avg weight of Fish (kg) < 12"	Avg weight of Fish (kg) > 12"
For-Hire	0.09	3.80
Private/Shore	0.10	1.67
TOTAL	0.10	3.04

Private/Shore only: 1 ADULT = 1.67/0.10 = 16.90 SNAPPERS

Table 3. Percent Contribution of recreational bluefish harvest by weight of snappers and adults.

	Adults	Snappers	Total
Shore	6.76%	8.47%	15.24%
For-Hire	4.56%	0.00%	4.56%
Private	68.62%	0.34%	68.96%

Timeline for Implementation

Both Rhode Island and Connecticut will have to go through their regulatory process to implement changes to the recreational fishery for 2020. New 2020 regulations will be in place as soon as these processes allow.

Bluefish Conservation Equivalency Proposal Template

CE Proposals are due January 17, 2020

Please use the following template when submitting proposals. Please be as concise as possible and use bullets to ensure inclusion of all important information. This template references data standards established by the Technical Committee above.

Summary of Proposed Measures

Recreational Fishery

State	Option	Size Limits	Bag Limits	Other	Open Season
NJ	**NJ-1**	**-**	**3**	**Private/shore**	**1.1 – 12.31**
		-	**5**	**For hire**	**1.1 – 12.31**
NJ	**NJ-2**	**-**	**3**	**All modes**	**1.1 – 12.31**
NJ	**NJ-3**	**-**	**8**	**All modes**	**1.1-8.31 & 11.1-12.31**
NJ	**NJ-4**	**15" min**	**4**	**All modes**	**1.1 – 12.31**
NJ	**NJ-5**	**≥ 9" and < 36"**	**10**	**All modes**	**1.1 – 12.31**
NJ	**NJ-6**	**-**	**5**	**All modes**	**1.1-2.28/29, 5.1-8.31, & 11.1-12.31**
NJ	**NJ-7**	**15" min**	**6**	**All modes**	**1.1-6.30 & 9.1-10.31**
NJ	**NJ-8**	**-**	**8**	**Private/shore**	**1.1-8.31 & 11.1-12.31**
		-	**15**	**For hire**	**1.1-8.31 & 11.1-12.31**

Coastwide Recreational Fishery

1a.) A 3 fish bag limit for the shore/private mode and a 5 fish bag limit for the for-hire modes. The same size and season as in 2019 is required.

OR

1b.) A conservation equivalency (CE) proposal that achieves the percent reduction in pounds for your state as listed in table 1 from 2016-2018 levels following the criteria established by the TC (see TC memo). If selecting this option, further analysis is required.

If submitting CE, please address the following questions,

- What is your state proposing for a conservation equivalency measure?
    - NJ's CE measures are provided in the table above.
- Does your proposal meet the data standards established by the TC?
    - Yes.
- What data sources are used in the analysis (include mode or season specific if applicable)?
    - MRIP data only.
- Sample size summary by mode, season, or state and/or data source as applicable.
    - See spreadsheets: MRIP_2016_2018_NJ.xlsx and Bag Limit by Mode_NJ.xlsx, and seasons_NJ.xlsx.
- Describe in a few sentences how you did the analysis

    - We followed the same methods as used for the coastwide analysis (spreadsheets attached). Briefly, we used the same SAS code as was used for coastwide analyses to query and summarize NJ MRIP data for bag limit analyses. For size limit analyses, we used the same data (subset to NJ only) as was used for coastwide analyses. Three-year average reductions were used to estimate NJ's bag and season reductions except where PSEs > 50%. As specified in the guidance memo, where PSEs > 50% we pooled data across the three years (after which pooled PSEs < 50%).
- Provide a table of results with your analysis.
    - See table above, Table 1 (below), and Summary_NJ.xlsx.
- Clearly identify how your states' reduction is achieved.
    - NJ achieves the required 27.68% reduction through use of or combinations of bag limit reductions, implementation of minimum sizes, and/or implementation of seasons. See Table 1 (below) and supporting files (especially Summary_NJ.xlsx) for details.

Note: Whether implementing 1a or 1b, please indicate the open and close dates of a season. Also specify if regulations are different by geographical area if applicable (e.g., ocean, bay, river) and the specific season dates of those areas. Also, more conservative regulations may be implemented without pursuing CE.

- See Table 1 (below) for open and closed dates. All proposed measures apply to all geographical areas of NJ.

Timeline for Implementation

Briefly describe the timeline for implementation of management measures as well as the start of your state's fisheries relative to your proposed implementation date.

- NJ will attempt to implement a Board/Council approved option by the implementation date specified at their February 4th 2020 meeting, but no later than April 1st 2020.

Table 1. Summary of proposed management measures submitted for consideration. NJ's required reduction = 27.68%

Option	Mode	Bag Limit	Size (inches)	Open season	Closed season	Open season	Closed season	Reduction
1	Private/Shore	3	0	All year	0	All year	None	net =
	For hire	5	0	All year	0	All year	None	27.74%
2	All	3	0	All year	0	All year	None	27.85%
3	All	8	0	Waves 1-4 & 6	- wv 5	1.1-8.31 & 11.1-12.31	9.1-10.31	28.77%
4	All	4	15"	All year	0	All year	None	28.84%
5	All	10	>= 9" & < 36"	All year	0	All year	None	27.88%
6	All	5	0	Waves 1 & 3-5	- wvs 2 & 6	1.1-2.28/29, 5.1-8.31, & 11.1-12.31	3.1-4.30 & 11.1-12.31	30.65%
7	All	6	15"	Waves 1-3 & 4-5	- wvs 4 & 6	1.1-6.30 & 9.1-10.31	7.1-8.31 & 11.1-12.31	28.07%
8	Private/Shore	9	0	Waves 1-4 & 6	- wv 5	1.1-8.31 & 11.1-12.31	9.1-10.31	28.00%
	For hire	15	0	Waves 1-4 & 6	- wv 5	1.1-8.31 & 11.1-12.31	9.1-10.31	36.50%

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MARK WILLIAMS
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January 17, 2020

Chairman Chris Batsavage
Bluefish Management Board
FMP Coordinator
Atlantic States Marine Fisheries Commission
1050 N. Highland St., Suite 200 A-N
Arlington VA, 22201

Dear Chairman Batsavage,

This letter serves as Georgia's proposal for addressing the regulatory changes to the recreational Bluefish fishery approved by the Mid-Atlantic Fishery Management Council and the Atlantic States Marine Fisheries Commission at their joint December meeting. Georgia is submitting for conservation equivalency in lieu of the recommended bag limit changes.

Georgia's recreational Bluefish fishery is not a substantial component of Georgia's overall recreational fishery. Directed trips where Bluefish were identified as the primary target species account for less than 0.5% of the total recreational trips in each of the last three fishing years (2016 - 2018). Georgia's annual recreational harvest levels have been well below 1%, ranging from 0.01% to 0.53%, of the coastwide recreation harvest during each of the last ten years. Georgia implemented management measures in 1998 which included an additional level of conservation by including a size limit (12-inch fork length). Georgia would like to request a management exemption, however, without a *de minimis* definition for the recreational fishery, we do not have formal grounds to make such a request.

Georgia examined the effects of a change in bag limit, specifically a 3 fish limit for all sectors of the fishery, and an in-season closure. The results of the bag reduction analysis showed that reducing the limit from 15 to 3 fish resulted in a 5.5% reduction in harvest weight which did not meet the required 8.13%. An in-season closure was examined by year and wave initially. Because all resulting PSEs exceeded 50, the percent reductions were calculated by wave for pooled harvest data representing 2016-2018. Closing the recreational Bluefish harvest during Wave 2 (March/April) would result in an estimated 13.1% reduction in harvest weight.

Georgia respectfully requests that the Bluefish Management Board revisit the *de minimis* definition for the recreational fishery. Until the Management Board can review our request and determine whether defining *de minimis* for the recreational fishery will be considered, Georgia will implement the seasonal closure as an interim measure.

Summary of Proposed Measures:

Recreational Fishery

State	Size Limits	Bag Limits	Other	Open Season
Georgia	12-inch Fork Length	15		Closed: 3/1 – 4/30

Georgia's proposed measures meet the conservation equivalency criteria outlined in the memo submitted by Toni Kerns on behalf of the Bluefish Technical Committee. Below are Georgia's responses to the clarification questions provided in the Conservation Equivalency Proposal Template.

What is your state proposing for a conservation equivalency measure?

Georgia is proposing a two-month seasonal closure during Wave 2 (March/April).

Does your proposal meet the data standards established by the TC?

Yes. The current MRIP estimates (in pounds) for Georgia's 2016 – 2018 recreational fishing years were used for this analysis. Landings data were pooled across modes because many PSEs exceeded 50 and also because Georgia is not proposing separate management recommendations for differing fishing modes. No data were excluded from the analysis. Combinations of regulatory changes were not considered for Georgia.

What data sources are used in the analysis (include mode or season specific, if applicable).

Georgia does not have any additional recreational fishery data sources for Bluefish.

Sample size summary by mode, season, or state and/or data source as applicable.

N/A

Describe in a few sentences how the analysis was conducted.

The percentage of annual harvest attributed to individual wave was calculated for 2016, 2017, and 2018. Because of the high PSEs associated with waves and years, the data were pooled across years and the individual wave percentages were calculated from the pooled harvest. See attached table.

Clearly identify how your states reduction is achieved.

Georgia is suggesting a two-month season closure based on the harvest analysis described above. Georgia is recommending a seasonal closure during Wave 2 (March 1 through April 30) to meet the requested reduction of 8.13%. The calculated percent reduction associated with this closure is 13.10%

Timeline for implementation:

A Bluefish season closure would be implemented at the start of the 2021 fishing season.

If additional information is needed or if you have any questions, please contact me via email (carolyn.belcher@dnr.ga.gov) or by phone (912) 264-7218.

Sincerely,

Carolyn N Belcher, PhD

Carolyn N. Belcher, PhD
Marine Fisheries Section, Chief

Cc: Doug Haymans
Spud Woodward
Dustin Leaning
Toni Kearns

Georgia's analysis of Bluefish harvest reductions by wave and year for the 2016 -2018 harvest statistics (Source: MRIP data portal).

	2016			2017			2018			All Years Combined	
Wave	Harvest (lbs)	PSE	% of Total Harvest	Harvest (lbs)	PSE	% of Total Harvest	Harvest (lbs)	PSE	% of Total Harvest	Harvest (lbs)	% of Total Harvest
March/April (Wave 2)	810	77.6	16.89%	0	.	0.00%	9,603	68.2	13.66%	10,413	13.10%
May/June (Wave 3)	1,646	98.6	34.33%	4,018	57.9	91.59%	25,668	89.2	36.52%	31,332	39.43%
July/August (Wave 4)	118	91.0	2.46%	219	118.7	4.99%	228	108.9	0.32%	565	0.71%
September/October (Wave 5)	2,221	52.9	46.32%	123	103.8	2.80%	2,857	74.8	4.06%	5,201	6.54%
November/December (Wave 6)	0	.	0.00%	27	106.6	0.62%	31,929	83.2	45.43%	31,956	40.21%
Total Harvest	4,795	43.8		4,387	53.4		70,285	50.9		79,467	

Atlantic States Marine Fisheries Commission

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Law Enforcement Committee Recommendations on the Enforceability of Measures in the Bluefish and Striped Bass Conservation Equivalency Proposals

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The Law Enforcement Committee (LEC) met via conference call to review conservation equivalency proposals in the striped bass and bluefish fisheries, specifically to discuss the enforceability of proposed management measures. The LEC addressed several concerns regarding specific types of management programs. In general, voluntary compliance for the casual or infrequent angler (the most common type) is tied to regulatory simplicity; more complex regulations become more difficult to enforce and increases the likelihood of violations. The following bullets present consensus recommendations and comments from the call.

Slot Limits

- Slot limits are enforceable, but may increase unintentional violations particularly in states or regions where slot limits have not been used previously. This is because anglers are not used to having this type of regulation, and education becomes an integral component to garner compliance.
- A slot limit creates additional compliance challenges because now there is potential for illegal harvest both under and over the slot limit, as opposed to just sublegal harvest.
- The narrower the slot the likelihood of violations increases because it is more difficult to find a legal-sized fish.

No Targeting Provisions

- Absent of a definition of "targeting" (including provisions for gear type, tackle and bait) it is impossible to enforce this measure. This may be particularly difficult to define when anglers use the same (or similar) fishing methods to target species other than striped bass (e.g., bluefish)
- Officers may not prioritize enforcement of certain FMP regulations if they know it is not enforceable and will not stand in court.

Differing Regulations by Mode

- The more divided recreational fishing modes are (for-hire vs private), the more difficult it is to adequately enforce any restrictions.
- A single size and bag limit for all recreational anglers is preferred to ensure the greatest enforceability on the water, dockside or on land.

- Creating separate size or bag limits for the for-hire and private mode presents significant additional enforcement challenges at marinas or dockside where the two types of anglers are likely to co-mingle.
- For a field officer on land, having sector-specific regulations is difficult to enforce because officers often don't know if a boat offshore is private or for-hire.
- Anglers may "switch modes" mid trip depending on regulations and the size of the catch and (i.e., if a charter trip catches a fish that is legal size for private anglers only, it may claim to be fishing privately to keep the fish).
- References to "private" and "shore" angler modes are a concern if these distinctions point to a possibility of separate regulations for private boat anglers vs. private shore anglers. The onus is on the officer to do his due diligence to figure out what type of fishing was occurring (private, shore, charter). One size limit across modes keeps enforcement simple. Introduction of size limits that differ across modes pose enforcement challenges

Season Closures (specific to multiple season closures)

- When there are multiple closures within a fishing year, fishermen are often caught off guard which can lead to unintentional violations.
- When establishing season closures, have them in place for several years. If closures change year-to-year, the likelihood of unintentional violations increases. Education takes time to set in.

Enforcement of Shared Water Bodies or Neighboring States

- Enforcement is not an issue, but compliance in closely adjoining states would be greatly enhanced if the regulations are consistent. Different regulations between two neighboring states (e.g., NY and CT) presents special enforcement challenges, and are often confusing to anglers.
- Officers tend to enforce strict possession, i.e., anglers are held to the regulations in force at the location where they are stopped by an officer.
- Inconsistent seasons poses a problem between neighboring states (e.g. NY and NJ), especially when fishermen unintentionally pass into another states waters.
- Catching a fish in one state's waters and traveling through another poses problems in possession enforcement.
- Consistency of regulations for shared water bodies is important for enforcement, e.g. consistency within the Chesapeake Bay among the jurisdictions of MD, VA, PRFC and DC would greatly enhance enforceability and compliance.

General Comments on Regulation Changes

- Adds education/outreach effort to enforcement.
- Frequent regulatory changes lowers compliance.
- Officers issue more warnings than citations following a change in regulation.