



Atlantic States Marine Fisheries Commission

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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:

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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.

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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.

		Predicted/required reduction in harvest	
		Separate modes mode_fx = 3,4,5,7	Aggregate modes mode_fx=(4,5) & (3,7)
a)	State		
	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%