Atlantic States Marine Fisheries Commission

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MEMORANDUM

January 28, 2020

To: **Atlantic Striped Bass Management Board**

From: **Atlantic Striped Bass Technical Committee**

RE: **Technical Review of Addendum VI State Implementation Plans and Conservation Equivalency Proposals**

States implementation plans and conservation equivalency (CE) proposals for Addendum VI were due November 30, 2019 for technical review. The Atlantic Striped Bass Technical Committee (TC) met December 17-18, 2019 to review technical merit of state implementation plans and CE proposals, and to ensure the accepted criteria outlined in M19-084 were followed. The following TC members and proxies were in attendance:

Nicole Lengyel Costa, RI, Chair
Kevin Sullivan, NH, Vice-Chair
Alex Aspinwall, VA
Jessica Best, NY-Hudson
Jason Boucher, DE
Mike Celestino, NJ
Bryan Chikotas, PA
Ellen Cosby, PRFC
Sean Darsee, NC
Angela Giuliano, MD
Kurt Gottschall, CT
Brendan Harrison, NJ
Carol Hoffman, NY
Luke Lyon, DC
Steve Minkkinen, U.S. FWS
Gary Nelson, MA
Alexei Sharov, MD

Some additional analysis was requested and reviewed via conference call on January 15, 2020. Below is a list of analytical uncertainties and caveats pertaining to all state implementation plans that should be considered when reviewing state-specific management options for 2020. This is followed by a summary of the proposed management options and technical reviews by state. Finally, summary tables of TC accepted measures are provided (these tables replace those provided in Briefing Materials). Please see respective state implementation plans for more information, which are provided in Briefing Materials.

Uncertainties, Caveats, General Comments, and Recommendations

- 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.

- 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).

- The predicted coastwide reduction in total removals may be different than 18% after accounting for conservation equivalency measures. The TC has not evaluated the expected impact of the combined management scenarios.

- The TC notes, based on state proposals, there is some potential for consistent recreational regulations along the coast (with certain caveats) or almost no consistency. There is little potential for regulatory consistency in the Chesapeake Bay recreational fishery.

- The TC stresses that predicted savings from a "no targeting" provision are highly uncertain due to current data limitations. While the TC supports the use of closed seasons to reduce effort and discard mortality, determining a reasonable assumption to predict the level of savings that could be expected under a "no targeting" provision remains a challenge. Furthermore, the TC recommends the Board consider providing guidance for similar decisions in the future.

- 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.

- The TC was unable to review proposed circle hook requirements at this time. Most states are using 2020 for scoping and to develop angler education programs and outreach materials and, therefore, have not drafted regulatory language yet. The TC recommends states resubmit implementation plans for circle hook provisions, including draft regulatory language, later in 2020 for review by the Plan Review Team. Implementation plans should justify any proposed exemptions to the provision through quantitative analysis (e.g., how many anglers are estimated to be exempt, and how does that translate to striped bass interactions in terms of numbers of fish caught and released?).

Summary of Proposed Measures for 2020 and Technical Reviews by State

All proposed measures were accepted unless stated otherwise

Maine

Recreational

- Addendum VI measure (1 fish at 28" to < 35"); no TC Comment

Commercial

- No commercial fishery; no TC comment.

New Hampshire

Recreational

- Addendum VI measure; no TC Comment

Commercial

- No commercial fishery; no TC comment.

Massachusetts

Recreational

- Addendum VI measure; no TC comment.

Commercial

- Proposed suite of quota options based on:
    - Different size limits
    - Methods (SPR vs. Target F)
    - Baseline quota assumptions (see proposal for details).
- TC accepted options using the SPR method and a baseline quota under current minimum size limit
- TC does not support getting credit for implementing more conservative measures under previous management programs.

Rhode Island

Recreational

- 3 options that follow the TC criteria including:
    - Addendum VI measure
    - Higher slot size option, and
    - An option with separate measures for the private/shore and for-hire sector.
- The TC expressed concern regarding enforcement of different sector measures.
- Also considering regional management with NY and CT (see below)

Commercial

- 18% reduction in quota; no TC comment

Connecticut

Recreational

- Proposed suite of options to provide potential for consistent regulations, including the Addendum VI measure
- All options achieve less than an 18% reduction.
- TC empathized with CT but could not endorse the other options per Board direction (i.e., CE proposals must demonstrate an 18% reduction in total removals relative to 2017 levels)
- Considering regional management with RI and NY (see below)

Commercial

- No commercial fishery, and discontinued recreational bonus fish program
- 18% reduction in quota; no TC comment

New York

Recreational

- Proposes a suite of measures for the ocean fishery including:
    - Minimum size limit or slot size limit
    - 4 ocean options have an Apr 15 – Dec 15 season. There are also options with a May 1 – Nov 30 season including the same 4 options, and several others
    - All May 1 season options include the option to add a 31" minimum size for the for-hire sector
    - 3 options for the Hudson River and 1 option for the Delaware River; achieves 18% reduction when combined with any ocean fishery option
    - Some ocean options were not accepted because they do not meet an 18% reduction after accounting for both Hudson River and Delaware River removals, and are not included in NY's final implementation plan
    - Also considering regional management with RI and CT (see below).
- The TC expressed similar concerns regarding enforcement challenges with sector-specific regulations.

Commercial

- Proposed suite of quota options based on:
    - Different size limits
    - Methods (SPR vs. Target F)
- TC accepted the SPR-based options which is consistent with prior decisions (e.g., MA).

Region Proposal (Rhode Island – Connecticut – New York)

Recreational

- Proposes consistent regulations across within Long Island Sound and around Block Island.
- 3 options that follow the TC criteria including:
    - Addendum VI measure
    - Higher slot size option, and
    - An option with separate measures for the private/shore and for-hire sector.
    - Performed analysis to address concerns with MRIP live releases (B2) estimates in CT
- The TC determined the methods are appropriate and accepted the proposed measures.

Commercial

- 18% reduction in all active commercial fisheries; no TC comment
    - RI and NY to implement an 18% reduction in quota (see above)
    - CT does not have a commercial fishery (see above)

New Jersey

- Combines recreational and "bonus program" measures, and time/area closures to achieve the required reductions (most notably for Raritan Bay).

Recreational

- Proposes 5 options including:
    - The Addendum VI measure
    - Another slot size option developed following the TC criteria
    - 1 minimum size limit
    - 2 smaller slot sizes following an SPR approach and using state logbook data
    - Catch rates are assumed to remain constant during the closed season
    - Predicted reductions account for proposed changes in "bonus program" quota (see below)
- The TC accepted the proposal, but noted the high contribution of NJ removals to total coastwide removals and that the CE measures would achieve less reduction than the Addendum VI measure would.

Commercial

- No reduction in quota; 18% reduction achieved entirely through the recreational sector
    - No commercial fishery; quota allocated to a recreational "bonus program"
    - Commercial quota heavily underutilized
    - Managed via permit system to ensure the quota is not exceeded
- Proposes 7 options developed following the recreational methods described above
    - Options 4-7 are a slot size limit and a limited number of trophy fish permits

Pennsylvania

Recreational

- Addendum VI measure and reducing the spring slot limit by 1"; no TC Comment

Commercial

- No commercial fisheries; no TC comment.

Delaware

Recreational

- Option 1 is 18% reduction; 1 fish at 28" to < 38"
- Option 2 is 20% reduction; Addendum VI measure
- No TC comment

Commercial

- Option 1 is an 18% reduction in quota
- Option 2 is a 1.8% reduction in quota and recreational sector takes a 20% reduction
- No TC comment

Maryland

- Proposes a 1.8% reduction in commercial quota and a 20.6% reduction to the recreational sector to make up the difference

Recreational

- Addendum VI measure for ocean fishery; no TC comment
- Proposes 5 options for Chesapeake Bay which include:
    - Spring trophy fishery: 1 fish at 35" from May 1 – 15.
    - Summer/fall fishery: 2 fish at 19" minimum size (only one fish can be > 28")
        - Bag limit drops to 1 fish during August (and September for some options)
    - Charter captains and crew cannot keep fish for personal consumption
    - Closed season from Jan 1 – Apr 30
    - Additional closed season during summer fishery (e.g., July and/or Aug)
    - Targeting prohibited during part of the spring and/or summer closures
    - For "no targeting," the analysis assumes that some trips that previously targeted striped bass will still occur and continue to encounter striped bass at a lower non-target release rate
- The TC supports the use of closed seasons to reduce effort and dead discards, but stresses that the predicted savings, particularly from a "no targeting" provision, are highly uncertain due to current data limitations and predicting changes in angler behavior.

Commercial

- 1.8% reduction in quota for the ocean and Chesapeake Bay; no TC comment

Potomac River Fisheries Commission

- Proposes a 1.8% reduction in commercial quota and a 20.5% reduction to the recreational sector to make up the difference

Recreational

- Proposes 4 options that include:
    - Spring trophy fishery: 1 fish at 35" from May 1 – 15.
    - Summer/fall fishery: 2 fish at 20" minimum size
    - No targeting during July and August closure (option 1 only)
- The TC accepted the proposal but reiterates the same concerns regarding uncertainty in the calculations from predicting changes in angler behavior.

Commercial

- 1.8% reduction in quota for the ocean and Chesapeake Bay; no TC comment

District of Columbia

Recreational

- Addendum VI measure (1 fish at 18" minimum size); no TC Comment

Commercial

- No commercial fisheries; no TC comment.

Virginia

Recreational

- Proposes status quo measures:
    - 1 fish at 20"- 36" slot (inclusive) for Chesapeake Bay
    - 1 fish at 28"- 36" slot (inclusive for the ocean.
    - Achieves a 23.4% reduction to achieve an 18% reduction overall.
    - Discontinued its spring trophy fisheries.
    - The option to include a 1 fish >36" per person per year to provide anglers opportunity to harvest a trophy fish.
    - The TC accepted the proposal; proposal demonstrates reductions through a reduction in bag limit, not via changes in size limit.

Commercial

- Proposes a 9.8% and a 7.7% reduction to the ocean and Chesapeake Bay quota, respectively

North Carolina

Recreational

- Addendum VI measure; no TC Comment

Commercial

- 18% reduction in quota; no TC comment.

Circle Hooks

The Board set a January 2021 implementation schedule for circle hook provisions to provide time to explore appropriate regulations. Therefore, most states were unable to provide draft regulatory language at this time, although regulatory development and outreach processes were described. Accordingly, the TC recommends states resubmit implementation plans for circle hook provisions by August 1 for review and approval at Annual Meeting 2020.

The TC notes that if a state is considering exemptions to the circle hook requirement (e.g., any sector or group of anglers that would not be required to use circle hooks) it should include quantitative analysis to justify the exemption. For example, how many anglers are estimated to be exempt, and how does that translate to striped bass interactions in terms of numbers of fish caught and released?

Implementation Timelines

States are required to implement commercial and recreational fishery regulations by April 1, 2020 (circle hook requirements by January 1, 2021). All states indicated that regulations would be implemented by that date, or earlier. MD indicated that due to the "no targeting provisions, regulations for the Chesapeake Bay summer/fall season including closed days and bag limits will have to be scoped but should be in place by July 1, 2020. The TC noted that the summer/fall season is to start May 16th under all options. MD said they would look into whether the state could pursue emergency action (or a similar action) to alleviate that concern.

Table 1. Proposed 2020 recreational fishery regulations for Atlantic striped bass by state. No predicted reduction calculated if implementing the Addendum VI measure. Numbering of options matches the convention used in state implementation plans for cross referencing, when possible.

Option	Predicted Reduction	Mode/Region	Size Limit	Bag Limit	Open Season	Other
Maine						
ME-1	Add VI	All	28" to < 35"	1	All Year	
New Hampshire						
NH-1	Add VI	All	28" to < 35"	1	All Year	
Massachusetts						
MA-1	Add VI	All	28" to < 35"	1	All Year	
Regional Proposal (Rhode Island/Connecticut/New York)						
REG-A	-20.9%	All	28" to < 35"	1	All Year	Predicted reductions account for Hudson/ Delaware River removals from New York.
REG-B	-20.1%	All	30" to < 40"	1	All Year	
REG-C	-20.0%	Private/Shore	30" to < 40"	1	All Year	
		For Hire	28" to < 37"	1	All Year	
Rhode Island						
RI-A	Add VI	All	28" to < 35"	1	All Year	
RI-B	-25.7%	All	32" to < 40"	1	All Year	
RI-C	-19.0%	Private/Shore	32" to < 40"	1	All Year	
		For Hire	30" to < 40"	1	All Year	
Connecticut						
CT-A	Add VI	All	28" to < 35"	1	All Year	

Table 1, continued. Proposed 2020 recreational fishery regulations for Atlantic striped bass by state.

* NY-10 is any NY option plus a 31" min size for the for-hire sector where captain and crew may no longer keep a fish.

^ NJ-R1 and NJ-R2 achieve at least a 35.9% and 34.9% reduction depending on which bonus program measure is selected. Additional closure days added for Raritan Bay to achieve required reduction in some cases (see New Jersey proposal for details).

Option	Predicted Reduction	Mode/Region	Size Limit	Bag Limit	Open Season	Other
***New York Ocean**						
NY-1	Add VI	All	28" to < 35"	1	5.1 - 11.30	Predicted reductions account for Hudson and Delaware River removals. Also considering NY-1 and NY-3 with no season change (4.15 – 12.15). This results in a 22.2% reduction for NY-3.
NY-2	-21.0%	All	28" to < 38"	1	5.1 - 11.30	
NY-3	-25.5%	All	30" to < 40"	1	5.1 - 11.30	
NY-4	-20.0%	All	30" to < 42"	1	5.1 - 11.30	
NY-5	-27.0%	All	32” to < 40"	1	4.15 - 12.15	
NY-6	-21.7%	All	32" to < 44"	1	5.1 - 11.30	
NY-7	-20.3%	All	28" to < 35" or > 44"	1	5.1 - 11.30	
NY-8	-19.9%	All	34" min	1	5.1 - 11.30	
NY-9	-19.7%	All	35" min		4.15 - 12.15	
NY-10	-18.7%	For Hire	31" min	1	5.1 - 11.30	
New York Hudson River - North of George Washington Bridge (River Mile 12)						
NYH-1	-5.2%	Hudson River	18" to < 28"	1	4.1 - 11.30	Achieves at least 18% reduction when combined with any ocean measure
NYH-2	-6.6%	Hudson River	18" to < 28" or > 44"	1	4.1 - 9.30	
NYH-3	-6.7%	Hudson River	18" to < 28"	1	4.1 - 9.30	
New York Delaware River						
NYD-1	-	Delaware River	28" to < 35"	1	All Year	See note above
^ New Jersey						
NJ-R1	-35.9%	All	24" to < 28"	1	All Year^	Closed 1.1 - 2.28 in all waters except Atlantic Ocean and 4.1 - 5.31 in the lower DE River and tributaries
NJ-R2	-34.9%	All	24" to < 29"	1	All Year^	
NJ-R3	Add VI	All	28" to < 35"	1	All Year	
NJ-R4	-46.0%	All	28" to < 34"	1	All Year	
NJ-R5	-27.0%	All	35" min	1	All Year	

Table 1, continued. Proposed 2020 recreational fishery regulations for Atlantic striped bass by state.
† Charter captains cannot keep a fish for personal consumption under all of Maryland's proposed measures.

Option	Predicted Reduction	Mode/Region	Size Limit	Bag Limit	Open Season	Other
Pennsylvania - Delaware Estuary and River						
PA-1	Add VI	DE Estuary	28" to < 35"	1	1.1 - 3.31, 6.1 - 12.31	
	-19.0%	DE Estuary	21" to < 24"	2	4.1 - 5.31	
	Add VI	DE River (NonTidal)	28" to < 35"	1	All Year	
Delaware						
DE-1	-18.0%	Ocean	28" to < 38"	1	All Year	Catch and release only on spawning grounds 4.1 -5.31
DE-2	-20.0%	Ocean	28" to < 35"	1	All Year	
DBAY-1	-	Bay, River, Tribs	20" to < 25"	1	7.1 - 8.31	
Maryland Ocean						
MD-1	Add VI	Ocean, All	28" to < 35"	1	All Year	Achieves reduction when combined with any Bay option
† Maryland Chesapeake Bay						
MD-2a	-20.8%	All	35" min	1	5.1 - 5.15	No targeting March - April and during July closure
		All	19" min; only 1 fish > 28"	2	5.16 - 7.4, 9.1 - 12.6	
		All	19" min	1	8.1 - 8.31	
MD-2b	-20.6%	All	35" min	1	5.1 - 5.15	No targeting during July closure
		All	19" min; only 1 fish > 28"	2	5.16 - 7.4, 9.1 – 11.30	
		All	19" min	1	8.1 - 8.31	
MD-2c	-20.7%	All	35" min	1	5.1 - 5.15	No targeting April and during July closure
		All	19" min; only 1 fish > 28"	2	5.16 - 7.9, 10.1 - 12.6	
		All	19" min	1	8.1 - 9.30	
MD-2d	-20.7%	All	35" min	1	5.1 - 5.15	No targeting April and during August closure
		Private/Shore	19" min	1	5.16 - 8.16, 9.1 - 12.10	
		For-hire	19" min; only 1 fish > 28"	2		

Table 1, continued. Proposed 2020 recreational fishery regulations for Atlantic striped bass by state.

Option	Predicted Reduction	Mode/Region	Size Limit	Bag Limit	Open Season	Other
District of Columbia						
DC-1	Add VI	All	18" min	1	5.16 - 12.31	
Potomac River Fisheries Commission						
TROPHY-1	20.5%	Spring	35" min	1	5.1 - 5.15	Downstream of Rt. 301 bridge
PRFC-1	20.5%	Fall	20" min	2	5.16 - 7.6, 8.21 - 12.31	No direct targeting during closed July and August closure
PRFC-2	20.5%	Fall	20" min	2	5.16 - 6.30, 9.1 - 12.31	
PRFC-3	20.5%	Fall	20" min	2	8.8 - 12.31	
PRFC-4	20.5%	Fall	20" min	2	5.16 - 6.6, 11.18 - 12.31	
Virginia						
VA-1	-23.4%	Ocean	28" to <= 36"	1	1.1 - 3.31, 5.16 - 12.31	Also considering allowing 1 fish/ person/year @ >36" in all areas (does not affect calculations).
		Bay	20" to <= 36"	1	5.16 - 6.15, 10.4 - 12.31	
North Carolina						
NC-1	Add VI	Ocean	28" to < 35"	1	All Year	

Table 2. Proposed 2020 commercial ocean fishery regulations for Atlantic striped bass by state. Numbering of options matches the convention used in state implementation plans for cross referencing, when possible. H&L = hook and line; GC = general category; FFT = floating fish trap.

Option	Proposed Change in Quota	Gear/Region	Size Limit	Quota (pounds)	Open Season	Other
Maine, New Hampshire, Connecticut, Pennsylvania, District of Columbia						
No commercial fishery, no reallocation of commercial quota						
Massachusetts						
MA-2a	Add VI	H&L	34" min	713,246	6.23 - 12.31 or until quota reached. Mon and Thurs only. 2-fish or 15-fish limit depending on permit.	
MA-2c-1(a)	-18%	H&L	28" min	658,260		
MA-2c-2(a)	-18%	H&L	35" min	735,240		
MA-2c-3(a)	-18%	H&L	28" to < 35"	454,027		
Rhode Island						
A	-18%	GC	34" min	90,822	5.20 - 6.30, 7.1 - 12.31	61% of state quota
		FFT	26" min	58,067	4.1 - 12.31	39% of state quota
New York						
NY-A	Add VI	All	28" to < 38"	652,552	6.1 - 12.15 or until quota reached. Limited entry permit only. 6-8" stretched mesh for GN	
NY-D1	-18%	All	24" to < 36"	622,122		
NY-D2	-18%	All	26" to < 38"	640,718		
New Jersey (no commercial fishery, reallocate quota to recreational sector)						
NJ-C1	0%	H&L	24" to < 28"	215,912	1 fish/permit. Opening 5.15 or 9.1. Limited number of permits issued to ensure quota not exceeded	
NJ-C2	0%	H&L	24" to < 29"	218,464		
NJ-C3	0%	H&L	35" min size	459,898		
NJ-C4	0%	H&L	24" to < 28" OR >= 43"	215,912		500 trophy permits
NJ-C5	0%	H&L	24" to < 28" OR >= 43"	215,912		1000 trophy permits
NJ-C6	0%	H&L	24" to < 29" OR >= 43"	218,464		500 trophy permits
NJ-C7	0%	H&L	24" to < 29" OR >= 43"	218,464		1000 trophy permits

Table 2, continued. Proposed 2020 commercial ocean fishery regulations for Atlantic striped bass by state. H&L = hook and line; GN = gill net; TRL = trawl.

Option	Proposed Change in Quota	Gear/Region	Size Limit	Quota (pounds)	Open Season	Other
Delaware						
DE-1	-18%	GN	28" min	113,021	2.15 - 5.31 (Nanticoke River closes 3.30), 11.15 - 12.31	Drift nets only 2.15 - 2.28, 5.1 - 5.31; no fixed nets in DE River. No trip limit.
		GN (Spring)	20" min			
		H&L	28" min	5,948	4.1 - 12.31	200 lbs/day trip limit
DE-2	-1.8%	GN	28" min	135,350	2.15 - 5.31 (Nanticoke River closes 3.30), 11.15 - 12.31	Drift nets only 2.15 - 2.28, 5.1 - 5.31; no fixed nets in DE River. No trip limit.
		GN (Spring)	20" min			
		H&L	28" min	7,124	4.1 - 12.31	200 lbs/day trip limit
Maryland						
MD-3a	-1.8%	TRL, GN	24" min	89,094	1.1 - 5.31, 10.1 - 12.31	
Virginia						
VA-1	-9.8%	Ocean	28" min	125,034	1.16 - 12.31	9" max mesh size for GN
North Carolina						
NC-1	-18%	Ocean	28" min	295,495	12.1 - 11.30	

Table 3. Proposed 2020 commercial Chesapeake Bay fishery regulations for Atlantic striped bass by state. When possible, numbering of options matches the convention used in state implementation plans for cross referencing. H&L = hook and line; GN = gill net; HS = haul seine; PN = pound net.

Option	Proposed Change in Quota	Gear/Region	Size Limit	Quota (pounds)	Open Season	Other
Maryland Chesapeake Bay						
MD-4a	-1.8%	GN	18" to < 36"	1,445,394	1.1 - 2.29, 12.1 - 12.31	
		H&L, HS			6.1 - 11.30	
		PN			6.1 - 12.31	
Potomac River Fisheries Commission						
PRFC-1	-1.8%	GN	18" min	349,405	1.1 - 3.25, 9.9 - 12.31	36" max, 2.15 - 3.25
		PN		127,748	2.15 -3.25, 6.1 - 12.15	
		H&L		81,959	1.1 - 3.25. 6.1 - 12.31	
		Misc.		13,749	2.15 -3.25, 6.1 - 12.15	
Virginia Chesapeake Bay						
VA-1	-7.7%		18" min	983,393	1.16 - 12.31 (28" max 3.15 - 6.15)	7" max mesh size for GN