Outline of Management Options and Figures for Draft Addendum VI for Atlantic Striped Bass**

Public Comment Process and Proposed Timeline

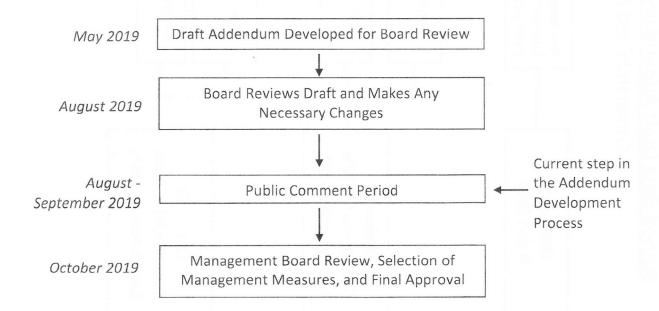
In May 2019, the Atlantic Striped Bass Management Board (Board) initiated the development of an addendum to Amendment 6 to the Interstate Fishery Management Plan for Atlantic Striped Bass to consider changes to coastwide commercial and recreational regulations to address overfishing. This Draft Addendum presents background on the Atlantic States Marine Fisheries Commission's (Commission) management of striped bass; the addendum process and timeline; and a statement of the problem. This document also provides management options for public consideration and comment.

The public is encouraged to submit comments regarding this document at any time during the public comment period. The final date comments will be accepted is **October 7, 2019 at 5:00 p.m.** Comments may be submitted at state public hearings or by mail, email, or fax. If you have any questions or would like to submit comment, please use the contact information below. Organizations planning to release an action alert in response to this Draft Addendum should contact Max Appelman at 703.842.0740.

Mail: Max Appelman, FMP Coordinator Atlantic States Marine Fisheries Commission 1050 North Highland Street Suite 200A-N Arlington, VA 22201 Email: comments@asmfc.org

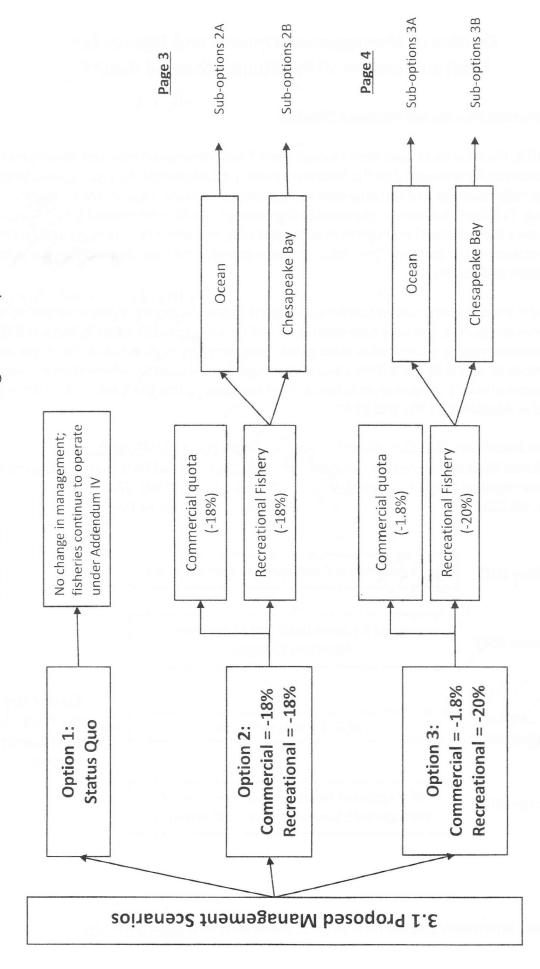
(Subject: Striped Bass Draft Addendum VI)

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^{**} For more information, please refer to Draft Addendum VI at www.asmfc.org

Striped Bass Draft Addendum VI: Decision Tree and Management Options Commercial and Recreational Management Options



Option 2 (18% reduction for commercial and recreational sectors)

Sub-Option 2-A: Ocean Recreational Fishery (All jurisdictions would implement)

Sub-	Bag	Size	Season and	%	change from 20	017
Option	Limit	Limit	Trophy Fish/Season	Harvest	Release Mortality	Total Removals
2-A1	1	35" min	Same and the burney	-43%	+3%	-18%
2-A2	1	28"-35" slot	Same seasons and trophy	-46%	+3%	-19%
2-A3	1	30"-38" slot	season as 2017 [^]	-44%	+3%	-18%
2-A4	1	32"-40" slot	(see Appendix 1)	-49%	+4%	-21%

[^] Ocean trophy fish fisheries would be capped with a 38" and 40" maximum size limit, respectively.

Sub-Option 2-B: Chesapeake Bay Recreational Fishery (MD, PRFC, DC and VA would implement)

Sub-	Pag	Size	Season and	%	change from ?	2017
Option	Bag Limit	Limit	Trophy Fish/Season	Harvest	Release Mortality	Total Removals
2-B1	1	18" min	Same seasons and trophy	-40%	+4%	-20%
2-B2	2	22" min	season as 2017 (see Appendix 1)	-34%	+4%	-18%
2-B3	2	18"-23" slot	Same seasons as 2017 but	-36%	+5%	-19%
2-B4	2	20"-24" slot	without trophy fish season	-35%	+5%	-19%

[^] States would be required to submit for conservation equivalency to reinstate a trophy fish season.

State	Addendum IV Quota	2017 Harvest	18% Reduction
Chesapeake Bay Comme	ercial Quota [^]		
Maryland	1,471,888	1,439,760	1,206,948
PRFC	583,362	472,719	478,357
Virginia	1,064,997	827,848	873,298
Chesapeake Bay Total	3,120,247	2,740,327	2,558,603
Ocean Commercial Quot	ta		
Maine*	188	-	154
New Hampshire*	4,313	-	3,537
Massachusetts	869,813	823,409	713,247
Rhode Island^^	182,719	175,312	148,889
Connecticut**	17,813	-	14,607
New York	795,795	701,216	652,552
New Jersey**^^	241,313	-	177,048
Delaware	145,085	141,800	118,970
Maryland ^{^^}	98,670	80,457	74,396
Virginia	138,640	133,874	113,685
North Carolina	360,360	-	295,495
Ocean Total	2,854,706	2,056,068	2,312,579

^{*}Commercial harvest/sale prohibited, <u>with no</u> re-allocation of quota to the recreational fishery. **Commercial harvest/sale prohibited, <u>with</u> re-allocation of quota to the recreational fishery. ^Jurisdiction-specific quotas for Chesapeake Bay are based on the 2017 allocation of the Bay-wide quota. ^^Addendum IV quota reduced through conservation equivalency for RI (181,572 lbs), NJ (215,912 lbs), and MD (90,727 lbs). An 18% reduction is calculated relative to these reduced quota.

Option 3 (Recreational: 20% Reduction)

Sub-Option 3-A: Ocean Recreational Fishery (All jurisdictions would implement)

Sub-	Pag	Size	Season and	9	6 change from 2	2017
Option	Bag Limit	Limit	Trophy fish/season	Harvest	Release Mortality	Total Removals
3-A1	1	36" min	Communication and translation	-48%	+4%	-20%
3-A2	1	28"-34" slot	Same seasons and trophy season as 2017 [^]	-52%	+4%	-22%
3-A3	1	30"-37" slot	(see Appendix 1)	-51%	+4%	-21%
3-A4	1	32"-40" slot	(see Appendix 1)	-49%	+4%	-21%

[^] Ocean trophy fish fisheries would be capped with a 37" and 40" maximum size limit, respectively.

Sub-Option 3-B: Chesapeake Bay Recreational Fishery (MD, PRFC, DC and VA would implement)

			And I make make a res	% (change from	2017
Sub- Option	Bag Limit	Size Limit	Season and Trophy Fish/Season	Harvest	Release Mortality	Total Removals
3-B1 [^]	1	MD: 19" min PRFC, DC, VA: 20" min	Same seasons and trophy season as 2017	-48%	+4%	-29%
3-B2	1	18" min	(see Appendix 1)	-40%	+4%	-20%
3-B3	2	23" min	Same seasons as 2017	-42%	+6%	-20%
3-B4	2	18"-22" slot	except the trophy season	-48%	+6%	-21%
3-B5	2	20"-23" slot	starts no earlier than May 1	-47%	+6%	-20%
3-B6	2	22"-40" slot	Same seasons as 2017; same trophy season and minimum sizes <u>except</u> with a 40" max size limit	-39%	+5%	-21%

[^]Sub-option 3-B1 drops the bag limit to 1-fish but maintains 2018 size limits. The PDT notes that a higher percent reduction is projected relative to 2017 size limits (i.e., when all fisheries were at a 20" minimum)

(COMMERCIAL FISHERY MANAGEMENT OPTION FOR OPTION 3 ON NEXT PAGE)

Option 3 (1.8% Reduction Commercial)

State	Addendum IV Quota	2017 Harvest	1.8% Reduction
Chesapeake Bay Commo	ercial Quota [^]		
Maryland	1,471,888	1,439,760	1,445,394
PRFC	583,362	472,719	572,861
Virginia	1,064,997	827,848	1,045,827
Chesapeake Bay Total	3,120,247	2,740,327	3,064,083
Ocean Commercial Quo	ta		
Maine*	188		185
New Hampshire*	4,313	_	4,235
Massachusetts	869,813	823,409	854,156
Rhode Island^^	182,719	175,312	178,304
Connecticut**	17,813	-	17,492
New York	795,795	701,216	781,471
New Jersey**^^	241,313		212,026
Delaware	145,085	141,800	142,473
Maryland ^{^^}	98,670	80,457	89,094
Virginia	138,640	133,874	136,144
North Carolina	360,360	-	353,874
Ocean Total	2,854,706	2,056,068	2,769,454

^{*}Commercial harvest/sale prohibited, <u>with no</u> re-allocation of quota to the recreational fishery. **Commercial harvest/sale prohibited, <u>with</u> re-allocation of quota to the recreational fishery. ^Jurisdiction-specific quotas for Chesapeake Bay are based on the 2017 allocation of the Bay-wide quota. ^^Addendum IV quota reduced through conservation equivalency for RI (181,572 lbs), NJ (215,912 lbs), and MD (90,727 lbs). A 1.8% reduction is calculated relative to these reduced quota.

Circle Hook Provision

3.2 Circle Hook Provision

This section proposes options regarding the use of circle hooks when fishing with bait to reduce striped bass discard mortality in recreational fisheries.

If Option B or Option C is selected, the Board must specify an implementation schedule. The schedule should consider state legislative and regulatory/public outreach development processes, including consultation with its stakeholders and user groups.

Option A. Status Quo

The language from Amendment 6, Section 5.3.1 would remain in place:

The states/jurisdictions are <u>recommended to encourage the use of circle hooks</u> to reduce the mortality associated with hooking and releasing striped bass. A number of studies have been conducted that have demonstrated that release mortality is decreased significantly with the use of circle hooks. In order to promote the use of circle hooks, states are encouraged to develop public relations/education campaigns on their benefits.

Option B. States/jurisdictions would be <u>required to implement regulations</u> requiring the use of circle hooks, as defined above, with the intent of reducing striped bass discard mortality in their recreational fisheries when fishing with bait. States have the flexibility to develop regulations that address specific needs of their fisheries. In order to promote the use of circle hooks, states are encouraged to develop public education and outreach campaigns on their benefits when fishing with bait.

Option C. States/jurisdictions would be <u>required to promote the use of circle hooks</u> by developing public education and outreach campaigns on their benefits when fishing with bait. States/jurisdictions must provide updates on public education and outreach efforts in annual state compliance reports.

6.0 Tables and Figures

Table 1. Total removals (harvest and discards/release mortality) of Atlantic striped bass by sector in <u>pounds</u>, 2004-2018. Note: Harvest is from ACCSP/MRIP, dead discards and release mortality is from ASMFC. Estimates exclude inshore catch and harvest from North Carolina.

	Comm	ercial	Recr	reational	Total
Year	Harvest	Dead Discards	Harvest	Release Mortality	Removals
2004	7,335,116	1,262,136	54,091,836	14,307,082	76,144,795
2005	7,121,319	1,078,391	53,031,074	14,412,620	79,581,675
2006	6,785,006	1,333,235	57,421,174	16,303,942	74,333,557
2007	7,047,195	1,181,533	50,674,431	12,680,939	63,054,061
2008	7,190,685	953,364	42,823,614	12,436,713	76,637,612
2009	7,216,792	1,076,465	56,665,318	11,236,287	73,903,661
2010	6,996,713	920,564	54,411,389	10,833,398	80,236,228
2011	6,789,792	809,577	61,431,360	7,569,260	74,729,834
2012	6,516,868	1,411,621	59,592,092	8,046,178	69,269,469
2013	5,819,678	901,326	53,256,619	10,731,891	82,432,216
2014	5,937,949	1,167,696	65,057,289	8,177,402	63,484,692
2015	4,830,124	1,031,887	47,948,610	11,621,265	57,294,717
2016	4,831,442	1,085,060	39,898,799	11,655,870	61,229,668
2017	4,803,867	1,110,833	43,671,532	15,818,534	59,392,844
2018	4,714,661	870,348	37,896,549	12,343,941	40,997,978

Table 2. Total removals (harvest and discards/release mortality) of Atlantic striped bass by sector in <u>numbers of fish</u>, 2004-2018. Note: Harvest is from ACCSP/MRIP, dead discards and release mortality is from ASMFC. Estimates exclude inshore catch and harvest from North Carolina.

	Comm	nercial	Rec	reational	Total
Year	Harvest	Dead Discards	Harvest	Release Mortality	Removals
2004	879,768	160,196	4,553,027	3,665,234	9,258,224
2005	970,403	145,094	4,480,802	3,441,928	9,038,227
2006	1,047,648	158,260	4,883,960	4,812,332	10,902,201
2007	1,015,226	166,397	3,944,679	2,944,253	8,070,556
2008	1,027,837	108,962	4,381,186	2,391,200	7,909,184
2009	1,049,959	128,191	4,700,222	1,942,061	7,820,433
2010	1,031,430	133,064	5,388,440	1,760,759	8,313,693
2011	944,777	87,924	5,006,358	1,482,029	7,521,088
2012	870,606	191,577	4,046,299	1,847,880	6,956,361
2013	784,379	112,097	5,157,760	2,393,425	8,447,661
2014	750,263	121,253	4,033,747	2,172,342	7,077,604
2015	623,313	101,343	3,085,725	2,307,133	6,117,515
2016	607,084	105,119	3,500,434	2,981,430	7,194,066
2017	592,670	108,475	2,934,293	3,419,651	7,055,089
2018	622,451	90,092	2,244,766	2,826,667	5,783,976

Figure 1. Female spawning stock biomass (SSB) and recruitment (age-1 fish), 1982-2017. Source: 2018 benchmark stock assessment for Atlantic striped bass.

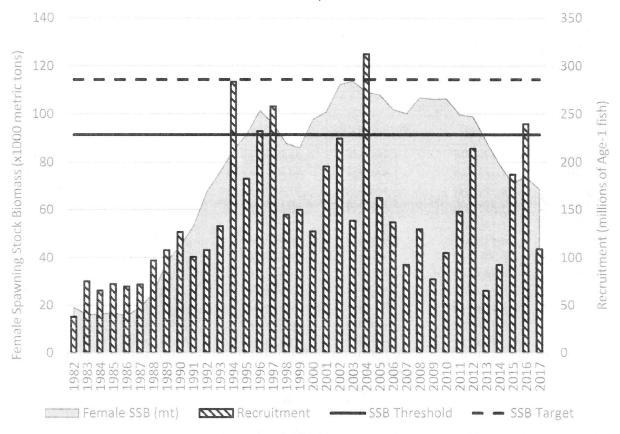


Figure 2. Total fishing mortality (F), 1982-2017. Source: 2018 benchmark stock assessment for Atlantic striped bass.

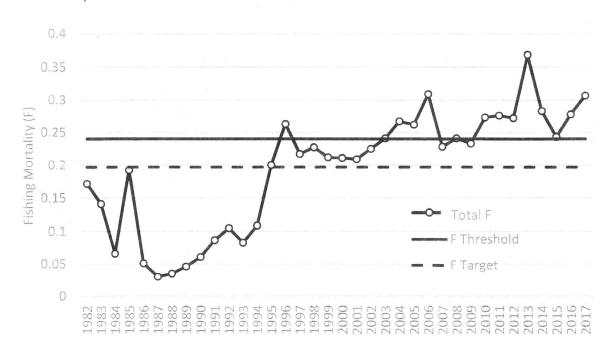


Figure 3. Total striped bass removals by sector in numbers of fish, 1982-2018. Note: Harvest is from ACCSP/MRIP, dead discards and release mortality is from ASMFC. Estimates exclude inshore catch and harvest from North Carolina.

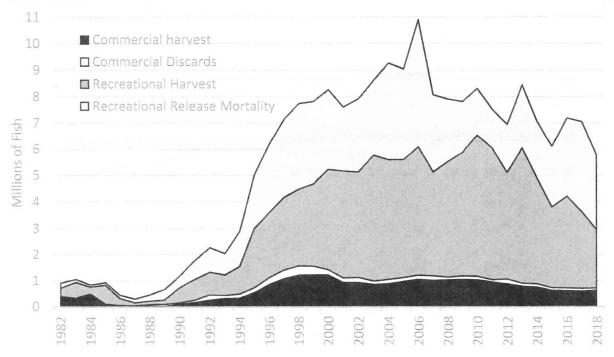


Figure 4. The proportion of recreational fish caught and released alive, 1982-2018. Source: MRIP. Excludes inshore catch from North Carolina.

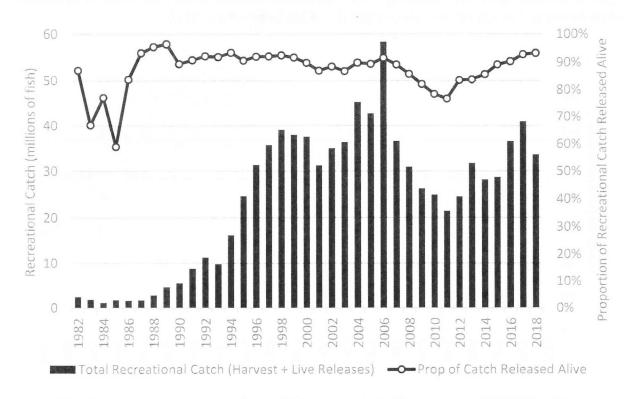


Figure 5. Projected fishing mortality and 95% confidence intervals if total removals in 2020 equal an 18% reduction from 2017 removals, plotted with the F target, F threshold, and F in 2017.

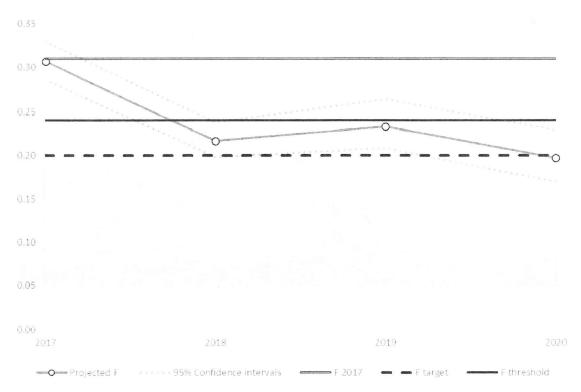
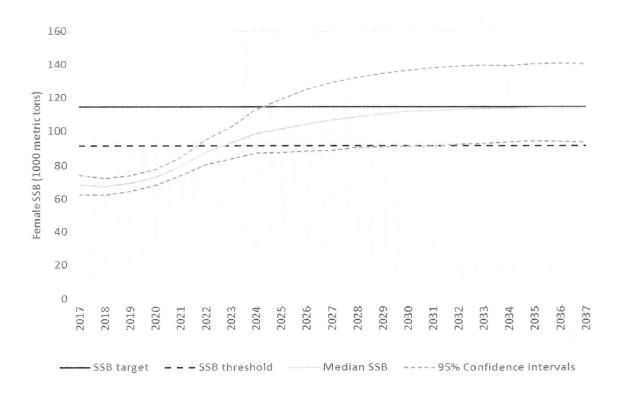


Figure 6. Projecting female spawning stock biomass (SSB) forward until SSB target is achieved while fishing at the fishing mortality target (F = 0.20) beginning in 2020.



Appendix 1. Summary of Atlantic striped bass recreational regulations in 2017. Source: 2018 State Compliance Reports. Minimum size limits and slot size limits are in total length (TL). C&R = catch and release.

STATE	SIZE LIMITS	BAG LIMIT	GEAR RESTRICTIONS	OPEN SEASONS
M	28" minimum size	1 fish/day	Hook & line only; circle hooks	All year, except spawning areas are closed 12.1
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I	78" minimum size	I fish/day	Gaffing and culling prohibited	All year
MA	28" minimum size	1 fish/day	Hook & line only; no high-grading	All year
<u>~</u>	28" minimum size	1 fish/day	None	All year
CT	28" minimum size	1 fish/day	Spearing and gaffing prohibited	All year
×	Ocean and Delaware River: 28" minimum size Hudson River: 18"-28" slot limit, or >40"	1 fish/day	Angling only. Spearing permitted in ocean waters. Catch and release only during closed season.	Ocean: 4.15 – 12.15 Hudson River: 4.1 – 11.30 Delaware River: All year
2	1 fish at 28″ to < 43″, and 1 fish ≥ 43″	sh ≥ 43″	Circle hooks required while fishing with natural bait during springtime spawning ground closure.	Ocean: All year All other waters: 3.1 – 12.31, except spawning ground closure from 4.1 – 5.31 in the lower Delaware River and tributaries
РА	Upstream from Calhoun St Bri Downstream from Calhoun St	dge: 1 fish at ≥ Bridge: 1 fish a 2 fish at	Upstream from Calhoun St Bridge: 1 fish at ≥ 28" minimum size, year round Downstream from Calhoun St Bridge: 1 fish at ≥ 28" minimum size, 1.1 – 3.31 and 6.1 – 12.31 2 fish at 21″-25″ slot size limit, 4.1 – 5.31	16.1 – 12.31
DE	28" minimum size, no harvest 38-43" (inclusive)	2 fish/day	Hook & line, spear (for divers) only. Circle hooks required in spawning season.	All year except 4.1-5.31 in spawning grounds (C&R allowed). In Del. River, Bay & tributaries, may only harvest 20-25"slot from 7.1-8.31

Appendix 1, recreational regulations in 2017 (continued). Source: 2018 State Compliance Reports. Minimum size limits and slot size limits are in total length (TL). C&R = catch and release.

STATE	SIZE LIMITS	BAG LIMIT	ОТНЕК	OPEN SEASON
MD	Ocean: 28"-38" slot limit or ≥44" CB Spring Trophy: 35" minimum CB Summer/Fall^: 20" minimum and only one fish can be >28"	Ocean: 2 fish/day CB Spring Trophy: 1 fish/day See compliance report CB Summer/Fall^: 2 fish/day for specifics.	See compliance report for specifics.	Ocean: All year CB: C&R only 1.1-4.14^ CB Spring Trophy: 4.15-5.15 CB Summer/Fall: 5.16-12.20
PRFC	Spring Trophy: 35" minimum Summer/Fall: 20" minimum and only 1 fish can be >28"	Trophy: 1 fish/day Summer/Fall: 2 fish/day	No more than two hooks or sets of hooks for each rod or line	Spring Trophy: 4.15 -5.15 Summer/Fall: 5.16-12.31
DC	20" minimum and only one fish can be >28"	2 fish/day	Hook & line only	5.16-12.31
VA	Ocean: 28" minimum Ocean Trophy: 36" minimum CB Trophy: 36" minimum CB Spring: 20"-28" (with 1 fish >36") CB Fall: 20" minimum and only one fish can be >28"	Ocean: 1 fish/day Ocean Trophy: 1 fish/day Bay Trophy: 1 fish/day Bay Spring: 2 fish/day Bay Fall: 2 fish/day	Hook & line, rod & reel, hand line only. Gaffing is illegal in Virginia marine waters. No possession in the spawning reaches of the Bay during trophy season	Ocean: 1.1-3.31, 5.16-12.31 Ocean Trophy: 5.1-5.15 CB Trophy: 5.1-6.15 CB Spring: 5.16-6.15 CB Fall: 10.4-12.31
NC	Ocean: 28" minimum	Ocean: 1 fish/day	No gaffing allowed.	Ocean: All year

^in Susquehanna Flats and Northeast River: C&R only from 1.1-5.3 and 1 fish/day at 20-26" slot size limit from 5.16-5.31