



# Draft Addendum VI for Public Comment



Striped Bass Management Board  
August 8, 2019

# Where's Draft Addendum V?

- The Board initiated Draft Addendum V in 2017
- The Board withdrew the addendum from consideration
- However, Draft Addendum V does exist on record, therefore.... **Draft Addendum VI**



# Addendum Timeline



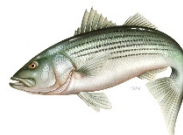
- August 2019: Consider Draft Addendum VI for Public Comment
- August-September 2019: Public comment period
- October 2019: Board Reviews Public Comment
  - Select measures, and final approval
- January 2020: Implement Addendum measures



# Draft Addendum VI Outline



- Statement of the problem
- Background
  - Status of the Stock, the FMP, and Fishery
  - Performance of Addendum IV
  - Socioeconomic Impacts
  - Management program equivalency
- Proposed Management Options
  - Recreational and commercial fishery options
  - Circle hook provision
- Compliance Schedule
- Questions



# 2.1 Statement of the Problem



- 2018 benchmark indicates the stock is overfished and is experiencing overfishing
- Draft Addendum VI initiated to address overfishing status
  - other issues will be addressed in a subsequent management document (re postponed motion)
- The high proportion of total removals attributed to release mortality



## 2.2.1 Status of the Stock

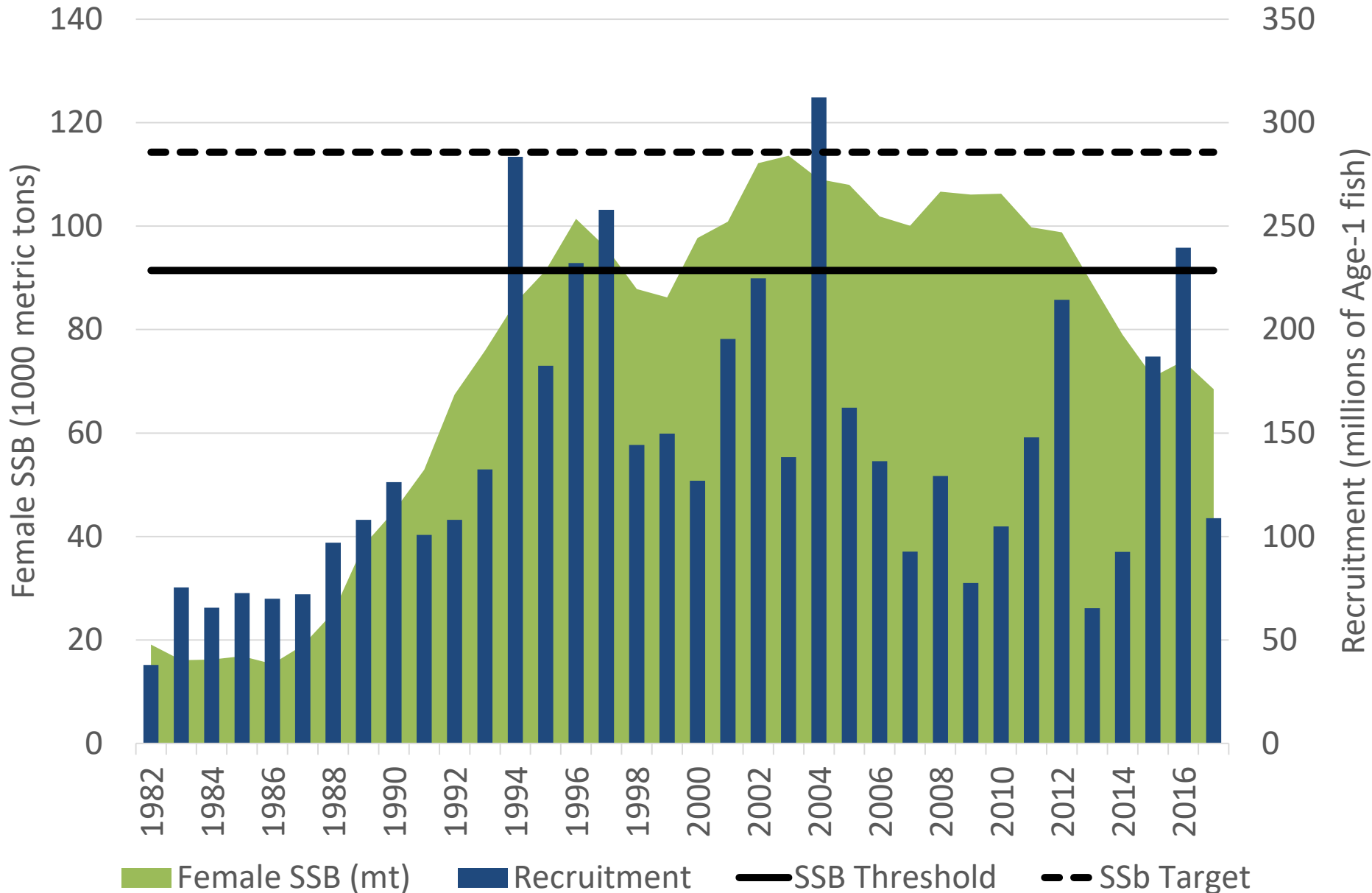


- BRPs for striped bass are currently based on the 1995 estimate of female SSB

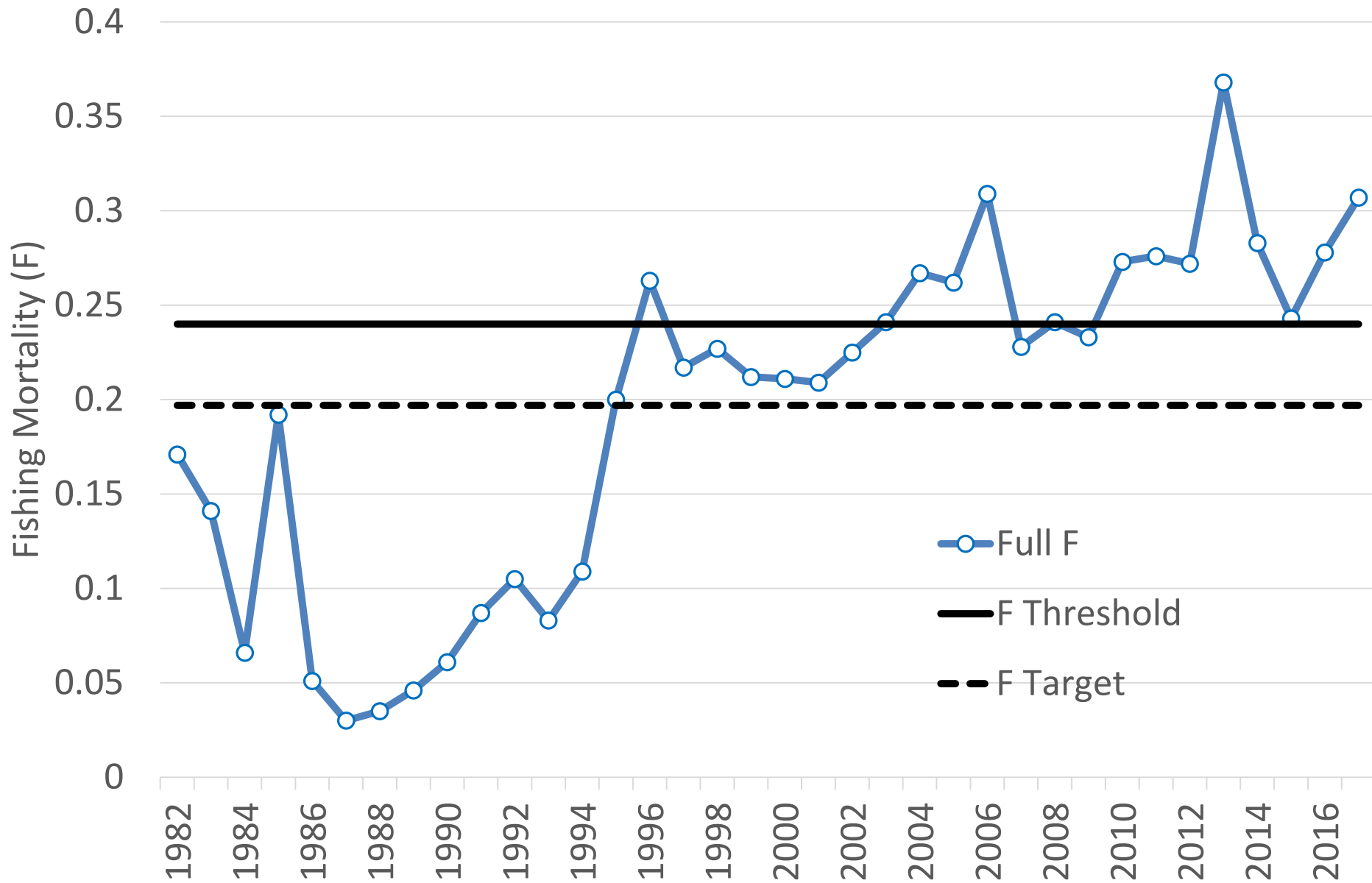
Reference Point	Definition	Value
SSB threshold	1995 estimate of female SSB	91,436 mt
SSB target	125% of SSB threshold	114,295 mt
F threshold	The level of F that achieves the SSB reference points	0.24
F target		0.20



# Figure 1. Female SSB, Recruitment



# Figure 2. Fishing Mortality





## 2.2.2 History of the FMP



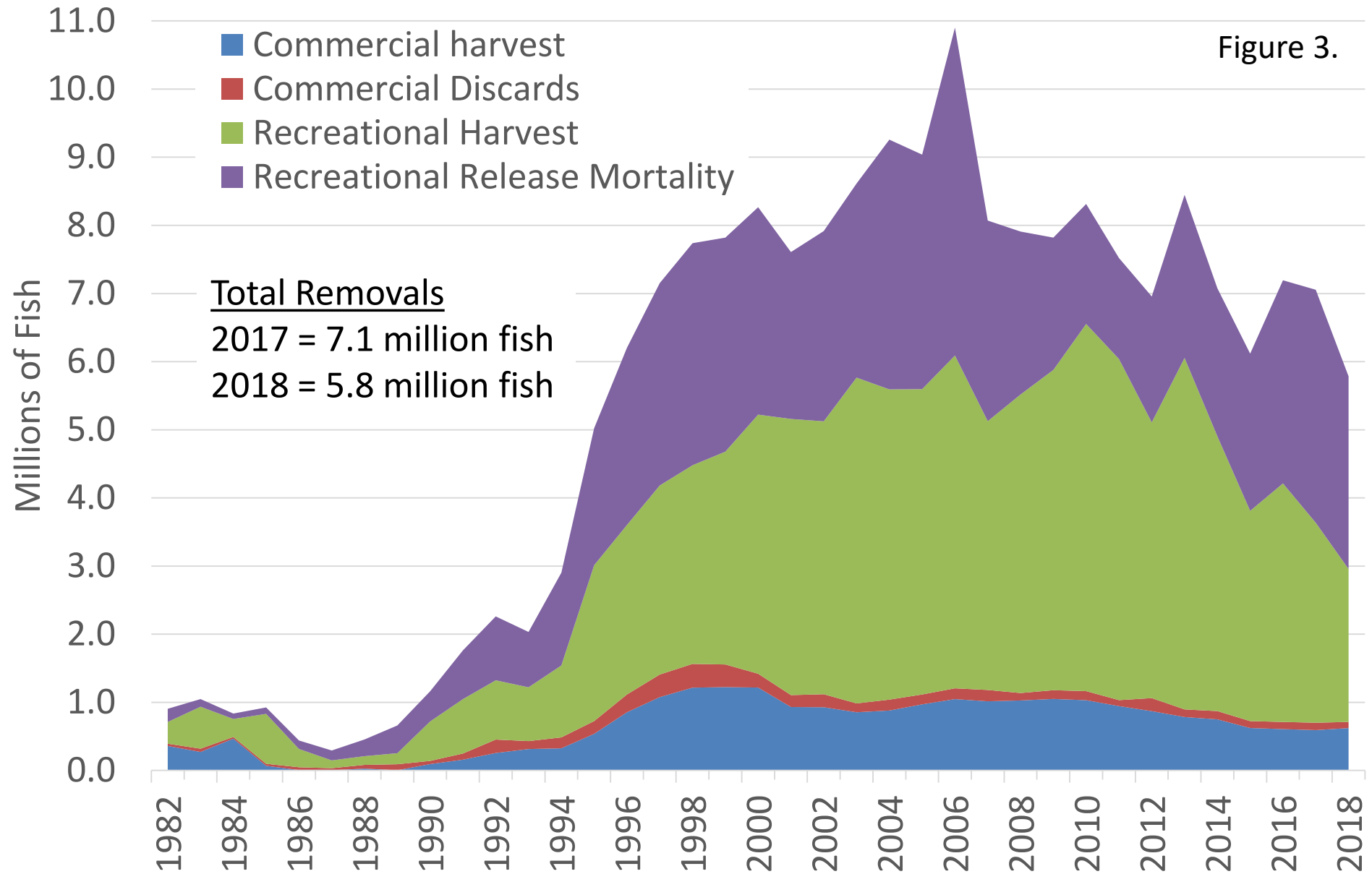
- Striped bass currently managed under Amendment 6 and its addenda I-IV
- Addendum IV sets the regulatory program
  - Initiated in response to 2013 benchmark findings
  - Established new F reference points that link to the SSB reference points
  - Implemented harvest reductions to achieve the new F target (25% in the ocean; 20.5% in Chesapeake Bay)
- The EEZ has been closed to striped bass fishing, harvest, and possession since 1990
  - NOAA Fisheries is directed to review the moratorium



# 2.2.3 Status of the Fishery



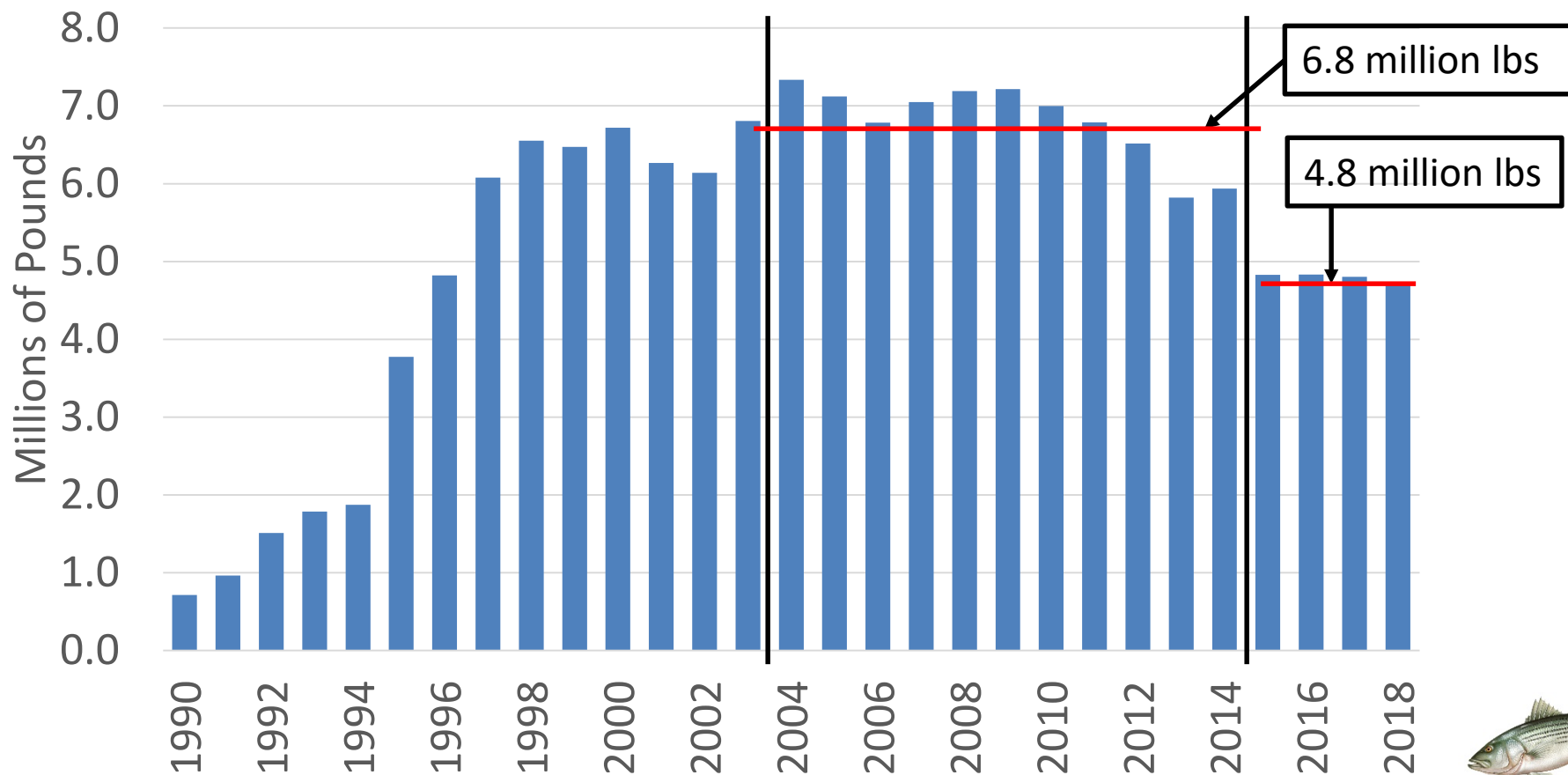
Figure 3.



## 2.2.3 Status of the Fishery - commercial



- Managed via quota system; stable landings
  - 60% by weight from Chesapeake Bay (80% by number)
  - Commercial dead discards account for 2% of total removals



## 2.2.3 Status of the Fishery - commercial



### Commercial Sector continued:

- Ocean commercial fishery regularly underutilizes the quota
- Underage from striped bass game fish status in states
- Migratory striped bass have not been available to North Carolina

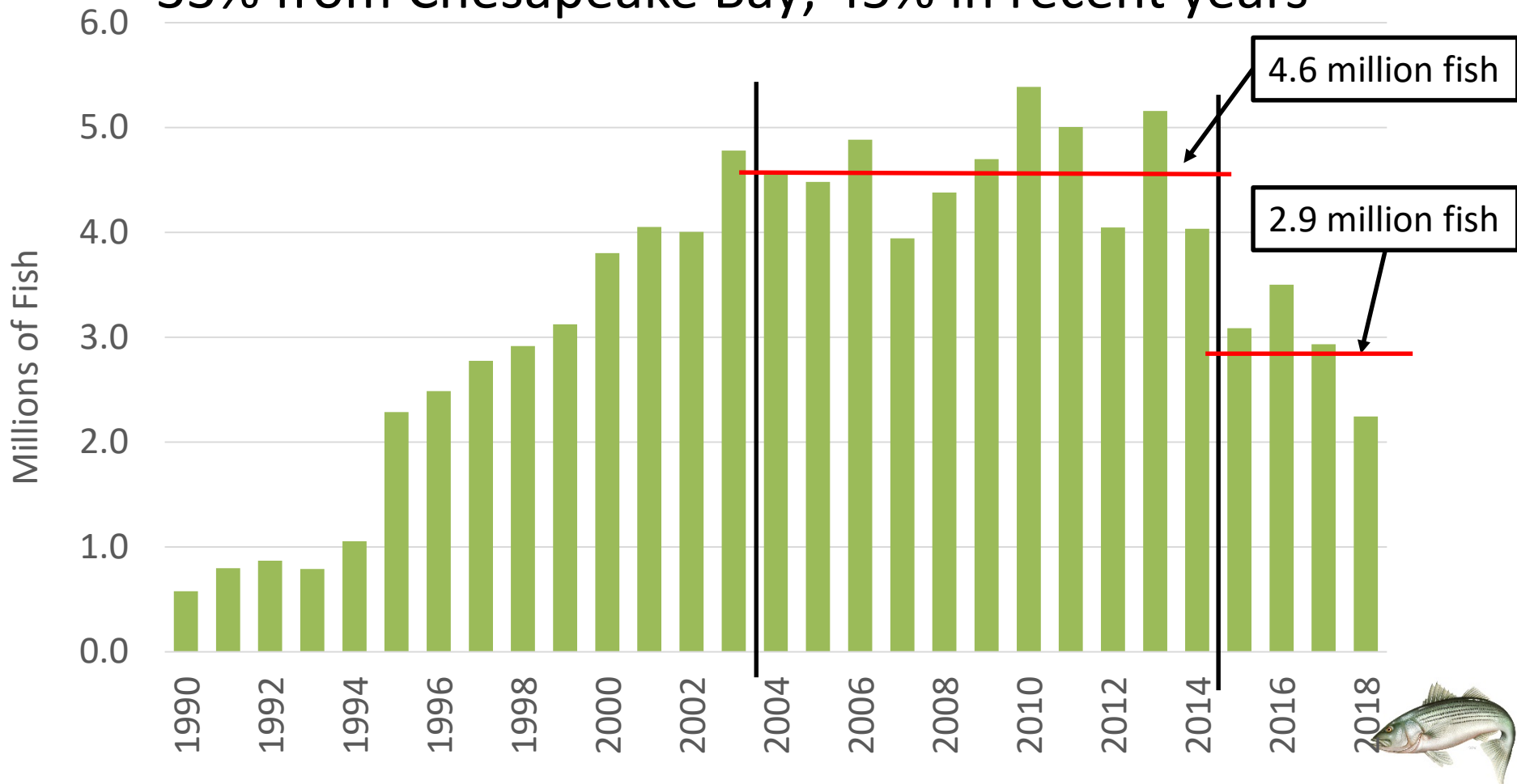


## 2.2.3 Status of the Fishery - recreational



- Managed via bag limits and size limits; allows removals to change from year to year

— 33% from Chesapeake Bay; 45% in recent years



## 2.2.3 Status of the Fishery - recreational



- Recreational dead releases make up a large portion of total removals because most of the catch is released.

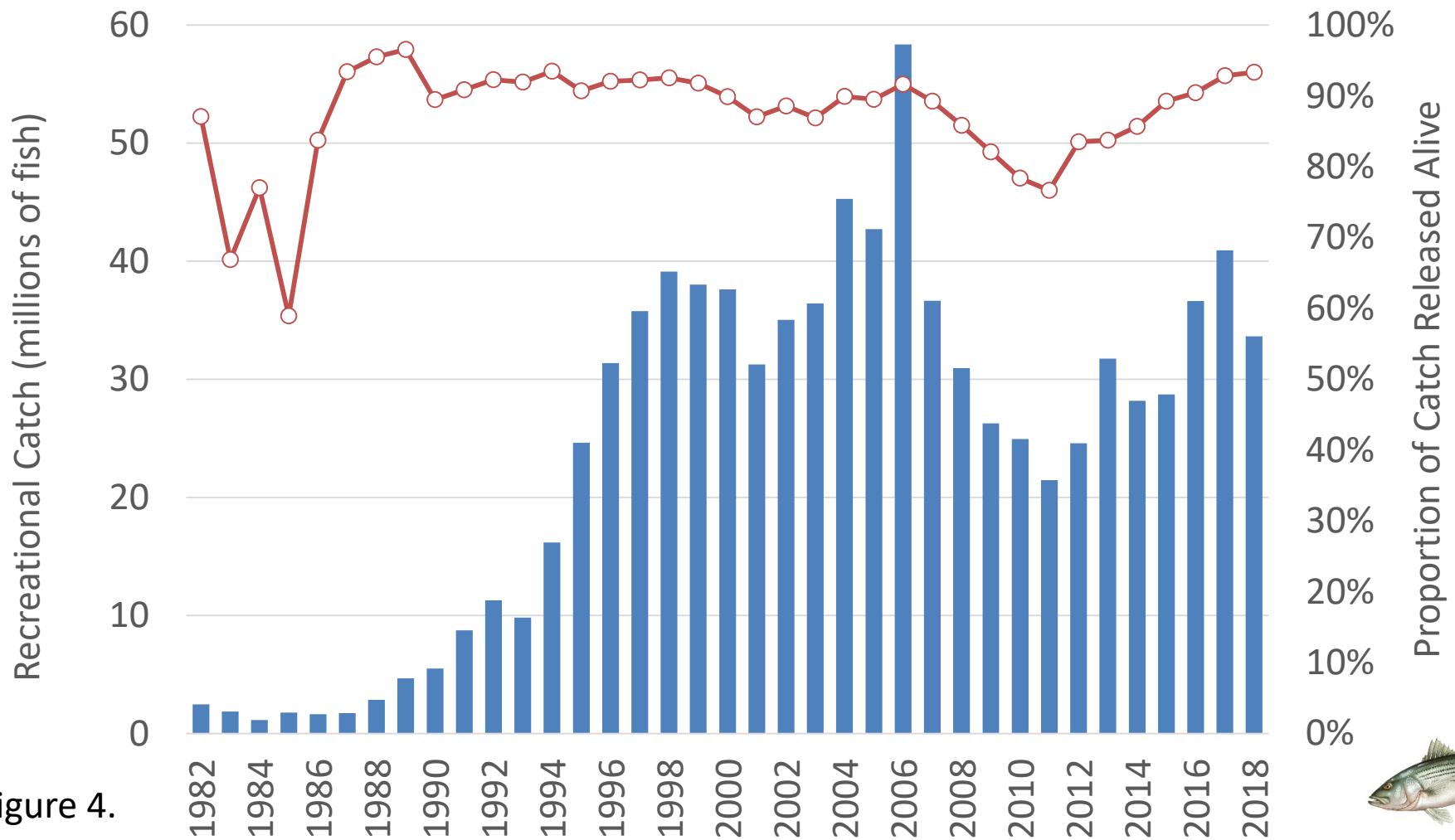
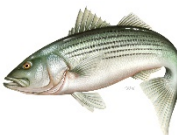


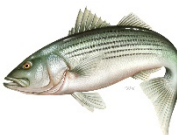
Figure 4.



## 2.2.4 Performance of Addendum IV



- Harvest reductions to bring F down to the new target; a 25% reduction in the ocean fishery, and a 20.5% reduction in Chesapeake Bay.
- The reductions came in the form of reduced quota for the commercial sector, and changes in bag limits and minimum size limits for the recreational sector.
- New measures were implemented prior to 2015 fishing seasons



## 2.2.4 Performance of Addendum IV



- In 2016, the PRT evaluated whether the reductions needed to bring F back down to target had been achieved
  - Observed reduction in 2015 was nearly the same as the predicted reduction on a coastwide level
  - Commercial reduction was very close to predicted
  - Recreational reduction in the ocean and Chesapeake Bay fisheries diverged significantly from the predicted values
  - Changes in effort, and changes in the size, age structure, and distribution of 2011 year class





## 2.2.4 Performance of Addendum IV



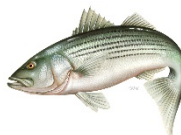
- 2011 year class was the largest since the early 2000s
- In 2016 and 2017, under the same management program, recreational removals increased by 18% and 15% (relative to 2015)
- In 2018, recreational removals decreased due to decreased effort (18% relative to 2017; 5% to 2015)
- These annual fluctuations in catch (and F) under constant regulations highlight the effect of changes in effort and strong YCs on future catch, and the level of uncertainty associated with bag and size limit analyses.



## 2.2.5 Socioeconomic Impacts



- Harvest reductions are expected to have different social and economic impacts to each sector
- In general, the harvest reductions will likely have negative impacts on the regional economy and angler welfare in the short term
- However, positive long-term economic impacts associated with stock recovery and subsequent catch increases will likely outweigh the short-term impacts.



## 2.2.6 Management Program Equivalency



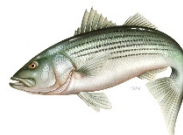
- “Conservation equivalency or CE” allows states to develop alternative measures that address specific state or regional differences while still achieving the same level of conservation for the resource
- Several states currently use conservation equivalency for striped (e.g., closed seasons to implement lower minimum size limits)
- Draft Addendum VI maintains the flexibility to pursue alternative measures through conservation equivalency



# Draft Addendum VI Outline



- Statement of the problem
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  - Status of the Stock, the FMP, and Fishery
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  - Socioeconomic Impacts
  - Management program equivalency
- **Proposed Management Options**
  - Recreational and commercial fishery options
  - Circle hook provision
- **Compliance Schedule**



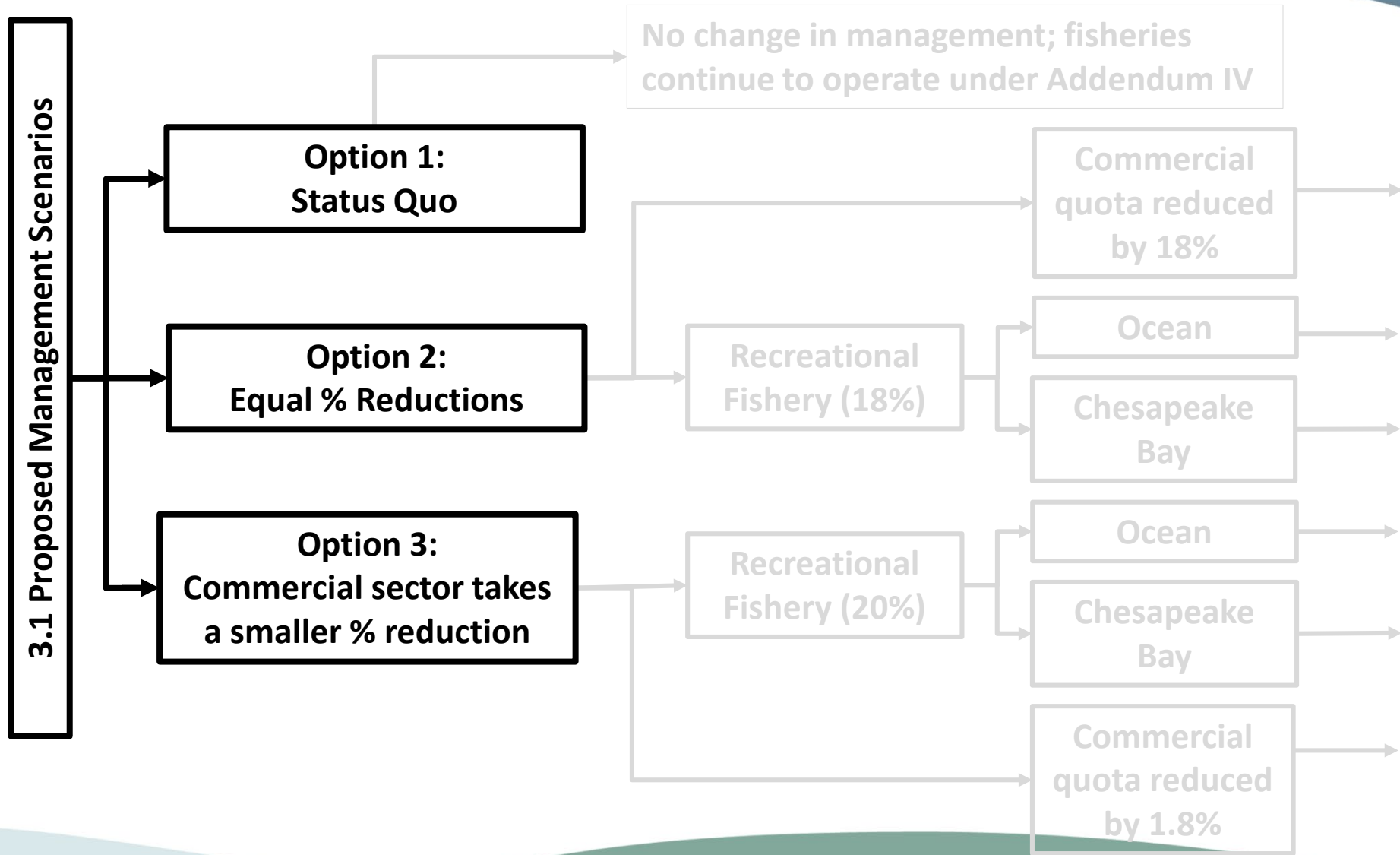
# 3.0 Proposed Management Options



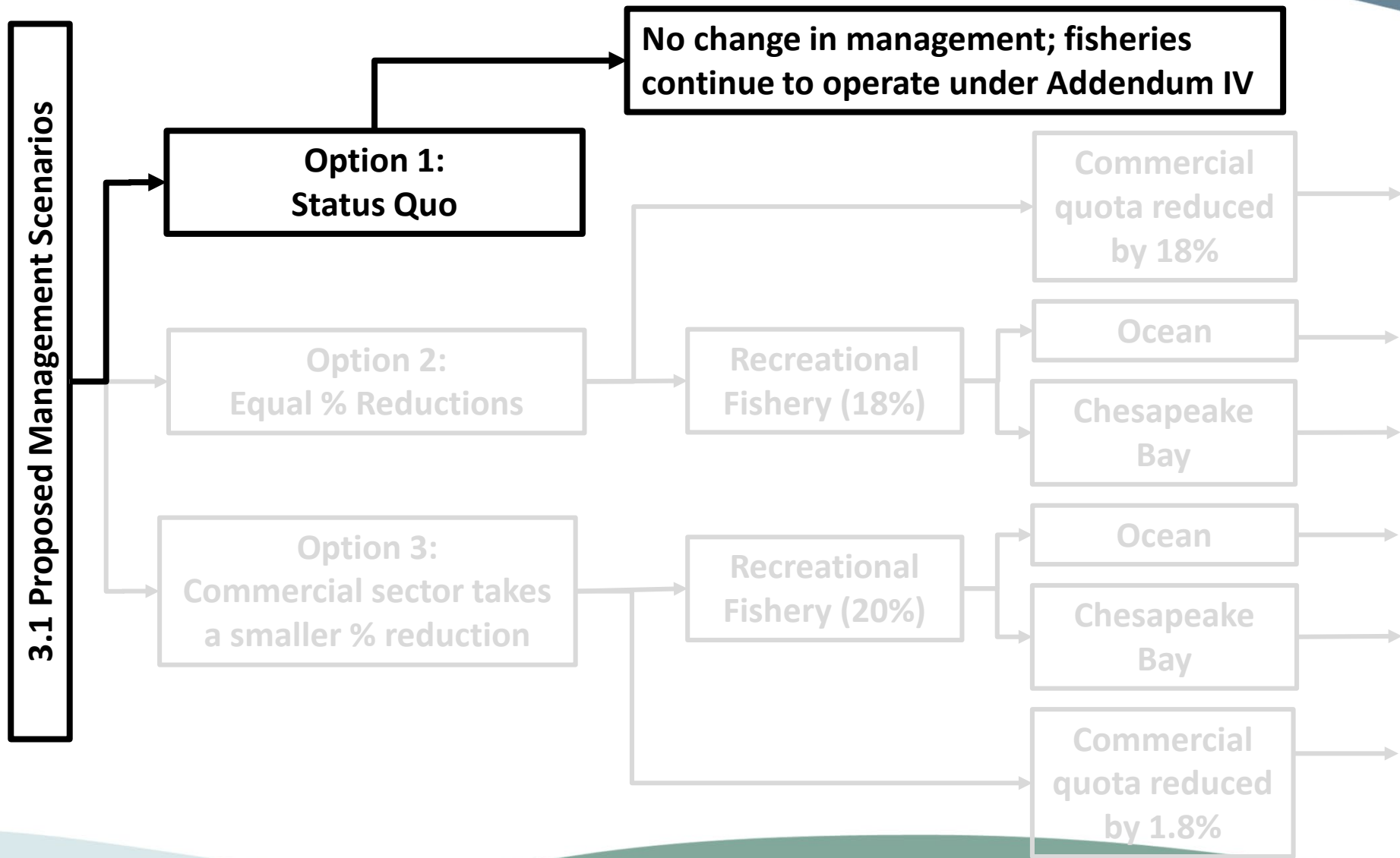
- Harvest projections to estimate the removals needed to achieve F target (0.20) in 2020 with a 50% probability, and to identify the percent reduction from 2017 levels.
- 18% reduction from 2017 levels is needed to achieve F target in 2020
  - Final 2018 removals estimates
  - 2019 removals = average removals from 2016-2018 to account for interannual variability
  - Additional reductions may be needed to achieve the female SSB target in 10 years



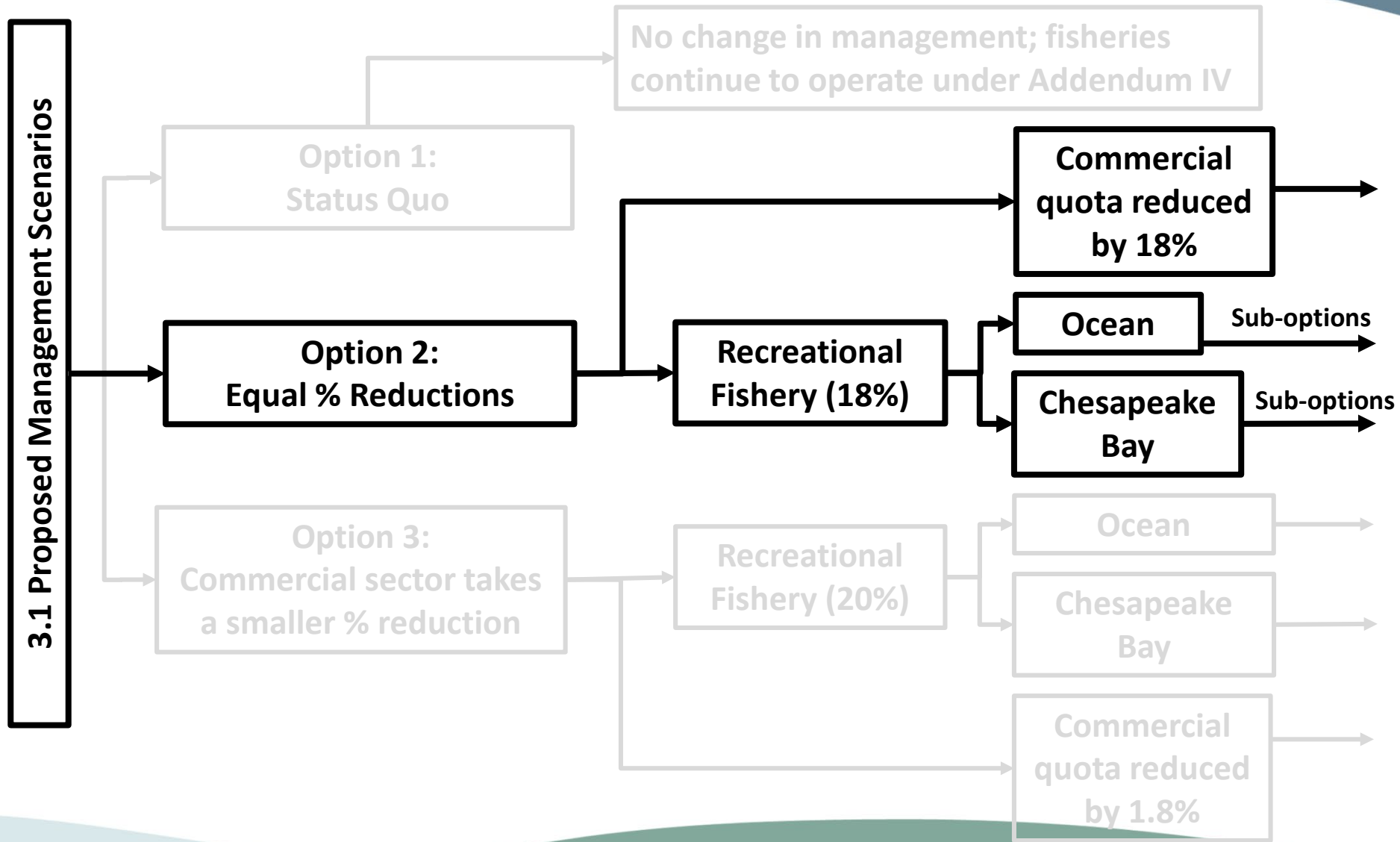
# 3.1 Proposed Management Scenarios



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# Option 2: Equal Percent Reduction (18%)



<b>Ocean Commercial Quota</b>			
<b>State</b>	<b>Addendum IV Quota</b>	<b>2017 Harvest</b>	<b>18% Reduction</b>
<b>Maine<sup>*</sup></b>	188	-	154
<b>New Hampshire<sup>*</sup></b>	4,313	-	3,537
<b>Massachusetts</b>	869,813	823,409	713,247
<b>Rhode Island<sup>^^</sup></b>	182,719	175,312	148,889
<b>Connecticut<sup>**</sup></b>	17,813	-	14,607
<b>New York</b>	795,795	701,216	652,552
<b>New Jersey<sup>**^^</sup></b>	241,313	-	177,048
<b>Delaware</b>	145,085	141,800	118,970
<b>Maryland<sup>^^</sup></b>	98,670	80,457	74,396
<b>Virginia</b>	138,640	133,874	113,685
<b>North Carolina</b>	360,360	-	295,495
<b>Ocean Total</b>	<b>2,854,706</b>	<b>2,056,068</b>	<b>2,312,579</b>

# Option 2: Equal Percent Reduction (18%)



<b>Chesapeake Bay Commercial Quota<sup>^</sup></b>			
<b>State</b>	<b>Addendum IV Quota</b>	<b>2017 Harvest</b>	<b>18% Reduction</b>
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
<b>Chesapeake Bay Total</b>	<b>3,120,247</b>	<b>2,740,327</b>	<b>2,558,603</b>

<sup>^</sup>Jurisdiction-specific quotas are based on the 2017 allocation of the Bay-wide quota.



# Option 2: Equal Percent Reduction (18%)



- Recreational Fishery Sub-Options:
  - Marine Recreational Information Program (MRIP)
  - 2016-2017 catch-at-length data to characterize the catch in 2020 (account for year class strength)
  - Non-compliance; the proportion of harvest of undersized fish in 2016-2017 will be the same in 2020



# Option 2: Equal Percent Reduction (18%)



**Sub-Option 2-A: Ocean Recreational Fishery; all jurisdictions would implement**

Sub-Option	Bag Limit	Size Limit	Season and Trophy Fish/Season	% reduction from 2017 removals
<b>2-A1</b>	1	35" min	Same seasons and trophy season as 2017	18%
<b>2-A2</b>	1	28"-34" slot		19%
<b>2-A3<sup>^</sup></b>	1	32"-40" slot		21%

<sup>^</sup>under sub-option 2-A3, trophy fisheries in the ocean would be capped with a 40" maximum size limit.



# Option 2: Equal Percent Reduction (18%)



## Exceptions to Sub-Options 2-A:

- DE could maintain 2-fish bag limit at 20"-25" slot (July 1 – Aug 31) in Delaware Bay
- CT's and NJ's bonus program: size limits would stay the same but the number of tags/permits reduced to match its new commercial quotas
- Catch from PA and the Hudson River is not covered by MRIP
  - NY would submit a proposal that achieves an 18% reduction for the Hudson River
  - PA would submit a proposal that achieves an 18% reduction in its state waters



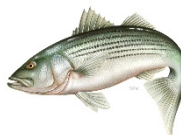
# Option 2: Equal Percent Reduction (18%)



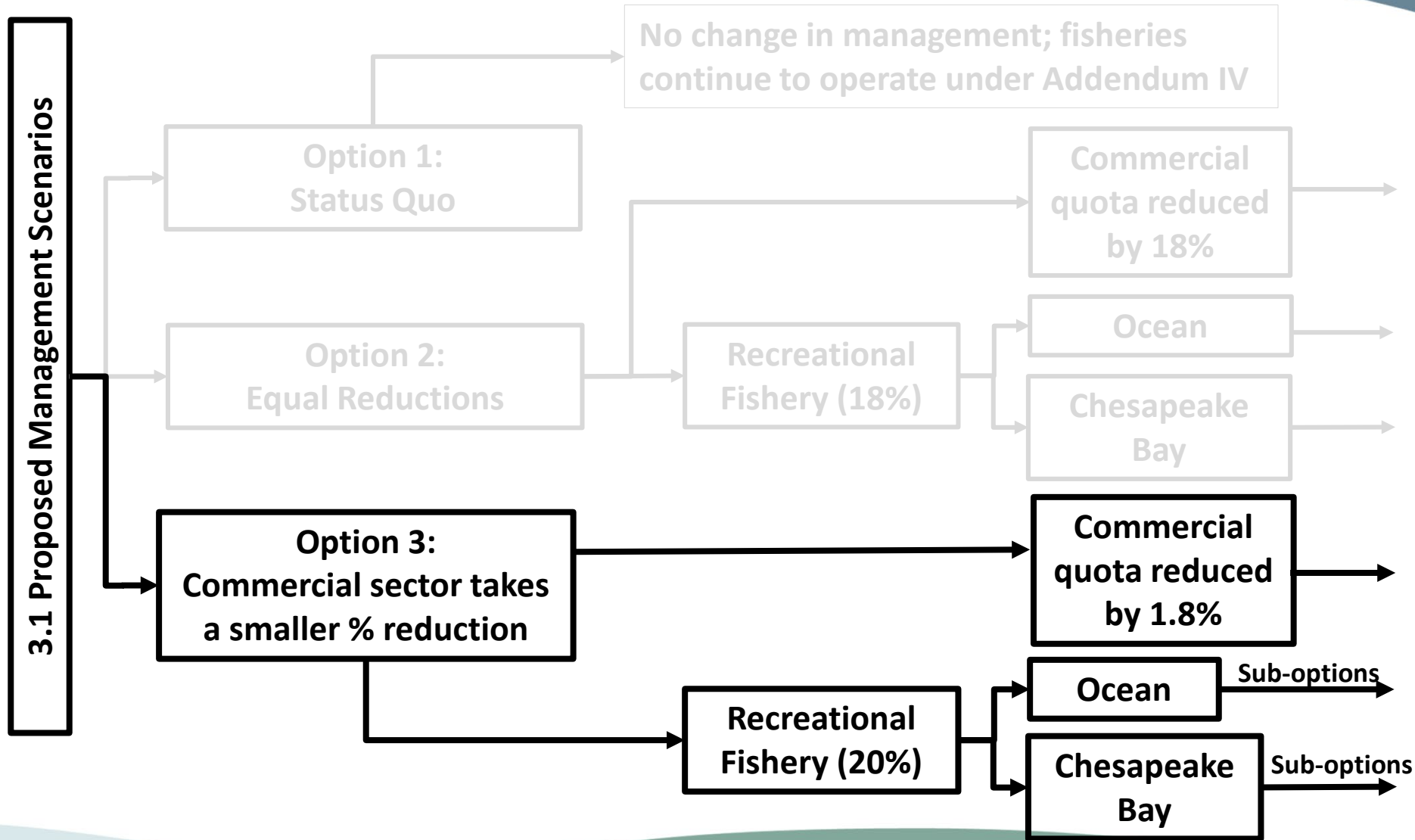
**Sub-Option 2-B:** Chesapeake Bay Recreational Fishery; MD, PRFC, DC and VA would implement

Sub-Option	Bag Limit	Size Limit	Season and Trophy Fish/Season	% reduction from 2017 removals
<b>2-B1</b>	1	18" min	Same seasons and trophy season as 2017	20%
<b>2-B2</b>	2	22" min		18%
<b>2-B3<sup>^</sup></b>	2	18"-23" slot	Same seasons as 2017 but <u>without</u> trophy fish season	19%
<b>2-B4<sup>^</sup></b>	2	20"-24" slot		19%

<sup>^</sup>Under sub-options 2-B3 and 2-B4, states would be required to submit for conservation equivalency to reinstate a trophy fish season.



# 3.1 Proposed Management Scenarios



# Option 3: commercial quota reduced by 1.8%



<b>Ocean Commercial Quota</b>			
<b>State</b>	<b>Addendum IV Quota</b>	<b>2017 Harvest</b>	<b>1.8% Reduction</b>
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
<b>Ocean Total</b>	<b>2,854,706</b>	<b>2,056,068</b>	<b>2,769,454</b>





# Option 3: commercial quota reduced by 1.8%



<b>Chesapeake Bay Commercial Quota<sup>^</sup></b>			
<b>State</b>	<b>Addendum IV Quota</b>	<b>2017 Harvest</b>	<b>1.8% Reduction</b>
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
<b>Chesapeake Bay Total</b>	<b>3,120,247</b>	<b>2,740,327</b>	<b>3,064,083</b>

<sup>^</sup>Jurisdiction-specific quotas are based on the 2017 allocation of the Bay-wide quota.



# Option 3: rec removals reduced by 20%



## Recreational Fishery Sub-Options



# Option 3: rec removals reduced by 20%

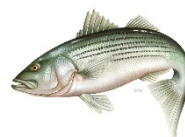


**Sub-Option 3-A: Ocean Recreational Fishery; all jurisdictions would implement\*\***

Sub-Option	Bag Limit	Size Limit	Season and Trophy Fish/Season	% reduction from 2017 removals
<b>3-A1</b>	1	36" min	Same seasons and trophy season as 2017	20%
<b>3-A2</b>	1	28"-33" slot		22%
<b>3-A3<sup>^</sup></b>	1	32"-40" slot		21%

<sup>^</sup>under sub-option 3-A3, trophy fisheries in the ocean would be capped with a 40" maximum size limit.

\*\*same caveats regarding DE (Delaware Bay), CT & NJ (bonus programs), and PA & NY (lack of MRIP coverage) apply

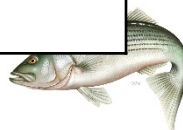


# Option 3: rec removals reduced by 20%



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

Sub-Option	Bag Limit	Size Limit	Season and Trophy Fish/Season	% reduction from 2017 removals
<b>3-B1<sup>^</sup></b>	1	MD: 19" min PRFC, DC, VA: 20" min	Same seasons and trophy season as 2017	29%
<b>3-B2</b>	1	18" min		20%
<b>3-B3</b>	2	23" min	Same seasons as 2017 <u>except</u> the trophy season starts no earlier than May 1	20%
<b>3-B4</b>	2	18"-22" slot		21%
<b>3-B5</b>	2	20"-23" slot		20%
<b>3-B6</b>	2	22"-40" slot	Same seasons as 2017; same trophy season and minimum sizes <u>except</u> with a 40" max size limit	21%



# 3.1 Proposed Management Program



- Note for recreational fishery sub-options:
  - Designed to reduce harvest and overall removals; not to address effort and release mortality
  - The proposed measures are projected to increase releases
  - To reduce both harvest and release mortality, additional effort controls should be considered to reduce the number of fishing trips that encounter striped bass.
  - The conservation benefits of implementing slot limits may not be realized if effort is concentrated on fish within the slot limit





# Circle Hook Provision



## 3.2 Circle Hook Provision



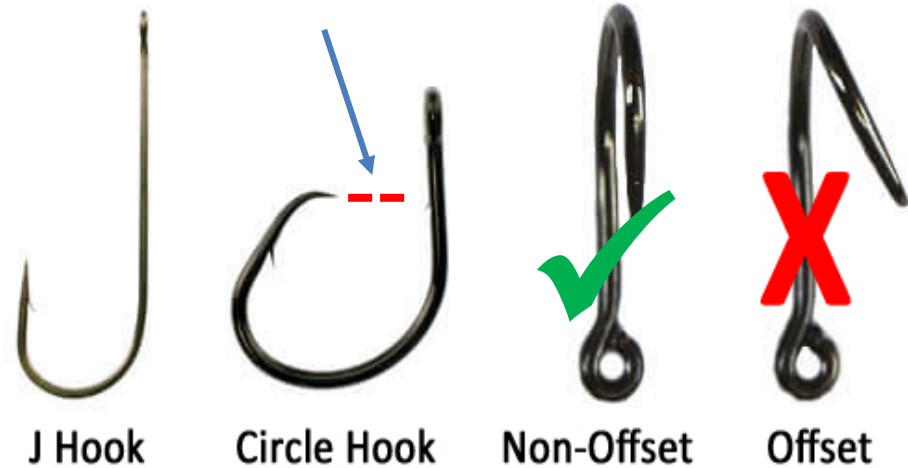
- Recreational release mortality accounts for a considerable amount of removals in the striped bass fishery
- The use of circle hooks has been identified as a method to reduce the discard mortality of striped bass in recreational fisheries
- The Board request this addendum consider options regarding the mandatory use of circle hooks when fishing with bait to reduce discard mortality



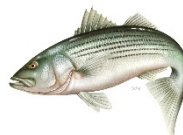
## 3.2 Circle Hook Provision



- The ASMFC defines circle hooks as “a non-offset hook where the point is pointed perpendicularly back towards the shank”  
– ASMFC Special Report No. 77 (2003)
- The term “non-offset” means the point and barb are in the same plane as the shank



\*Image from Maryland DNR

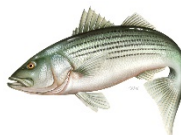




## 3.2 Circle Hook Provision



- factors other than hook type can also affect the release mortality rate
  - water temperature, air temperature, salinity, hook size, fish length, hooking location, others?
- Additionally, it is unknown how many anglers currently use circle hooks, resulting in uncertainty on how many additional fish could be saved if mandatory circle hook measures are put in place.
- Enforcement issues must all be taken into account when developing strategies to improve release mortality



## 3.2 Circle Hook Provision



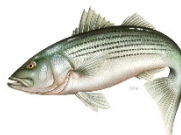
- **Option A:** Status Quo; states are recommended to promote the use of circle hooks to reduce discard mortality
- **Option B:** States/jurisdictions would be required to implement regulations requiring the use of circle hooks, as defined above, with the intent of reducing striped bass discard mortality in their recreational fisheries.
- **Option C:** States/jurisdictions would be required to promote the use of circle hooks by developing public education and outreach campaigns on their benefits. States/jurisdictions must provide updates on public education and outreach efforts in annual state compliance reports.



# 4.0 Compliance Schedule



- If approved, states must implement Addendum IV according to the following schedule to be in compliance with the Atlantic Striped Bass ISFMP
- **Nov 30, 2019** : States submit implementation plans
- **February 2020** : Board review and approval
- **[Month, Day] 2020** : States implement regulations



# Questions?

