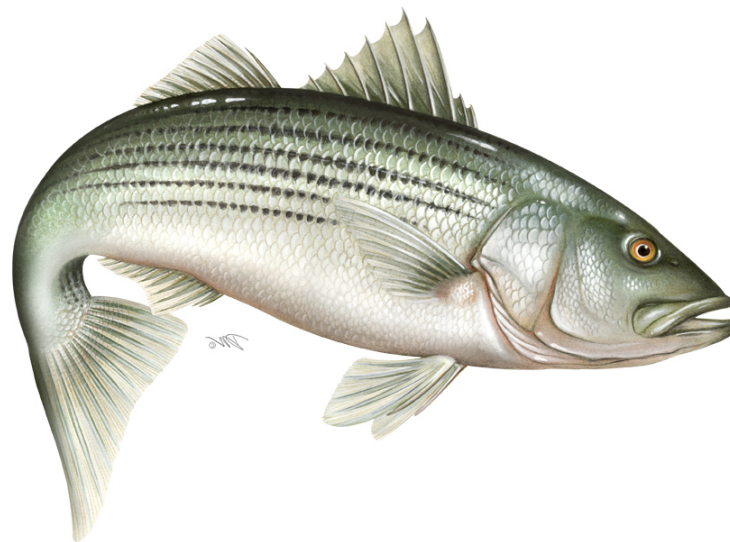


2019 FMP Review



Striped Bass Management Board
August 3, 2020

Overview



1. Status of the Stock
2. Status of the FMP
3. Status of the Fishery
4. Status of Management Measures
5. PRT Comments



Status of the Stock



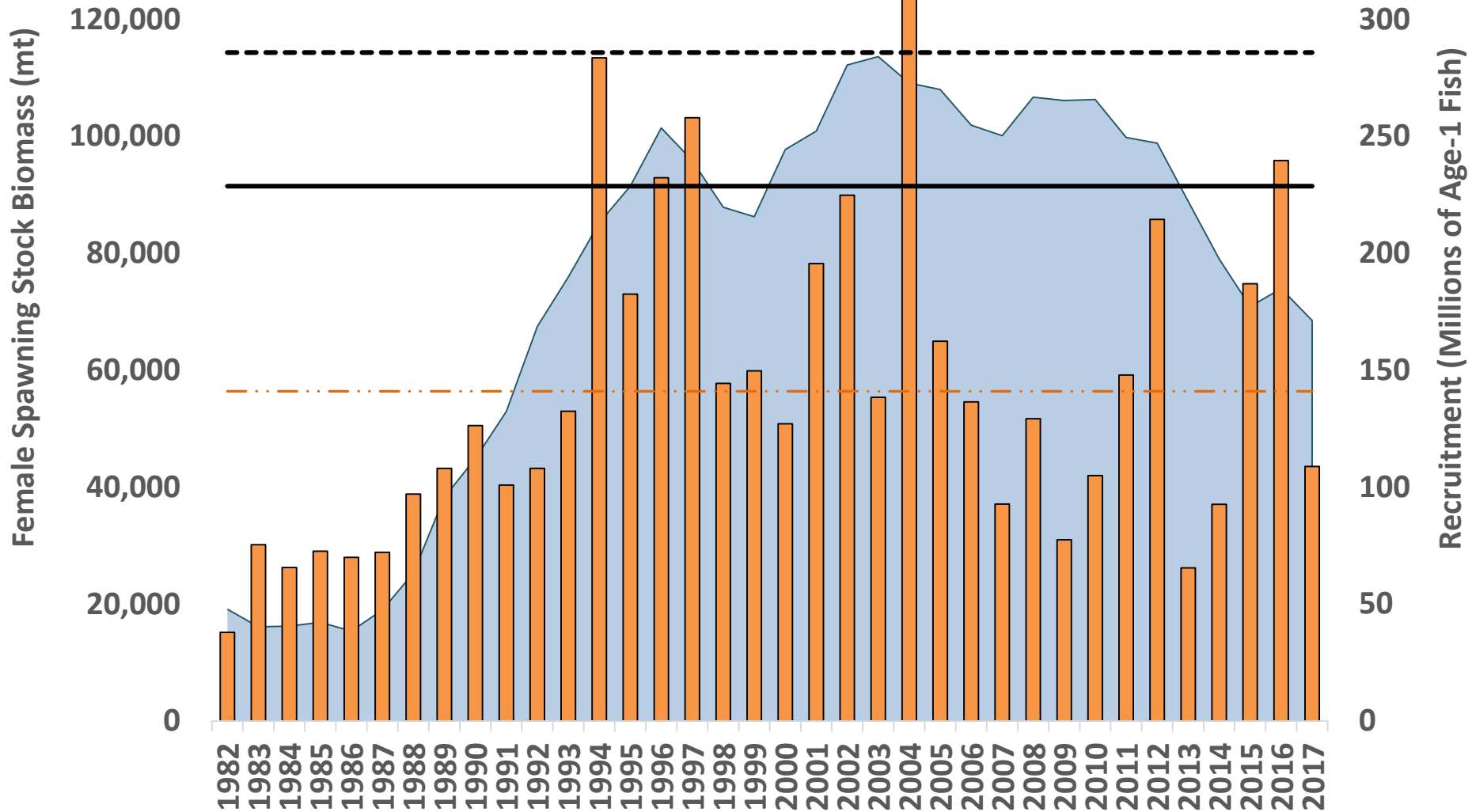
- The Atlantic striped bass stock is overfished and overfishing is occurring
 - Based on results of the 2018 benchmark
 - Data through 2017, including new MRIP estimates

| | <i>SSB (MT)</i> | <i>F</i> |
|-------------------------|------------------------|-----------------|
| 2017 | 68,476 | 0.31 |
| <i>Threshold</i> | 91,436 | 0.20 |
| <i>Target</i> | 114,295 | 0.24 |

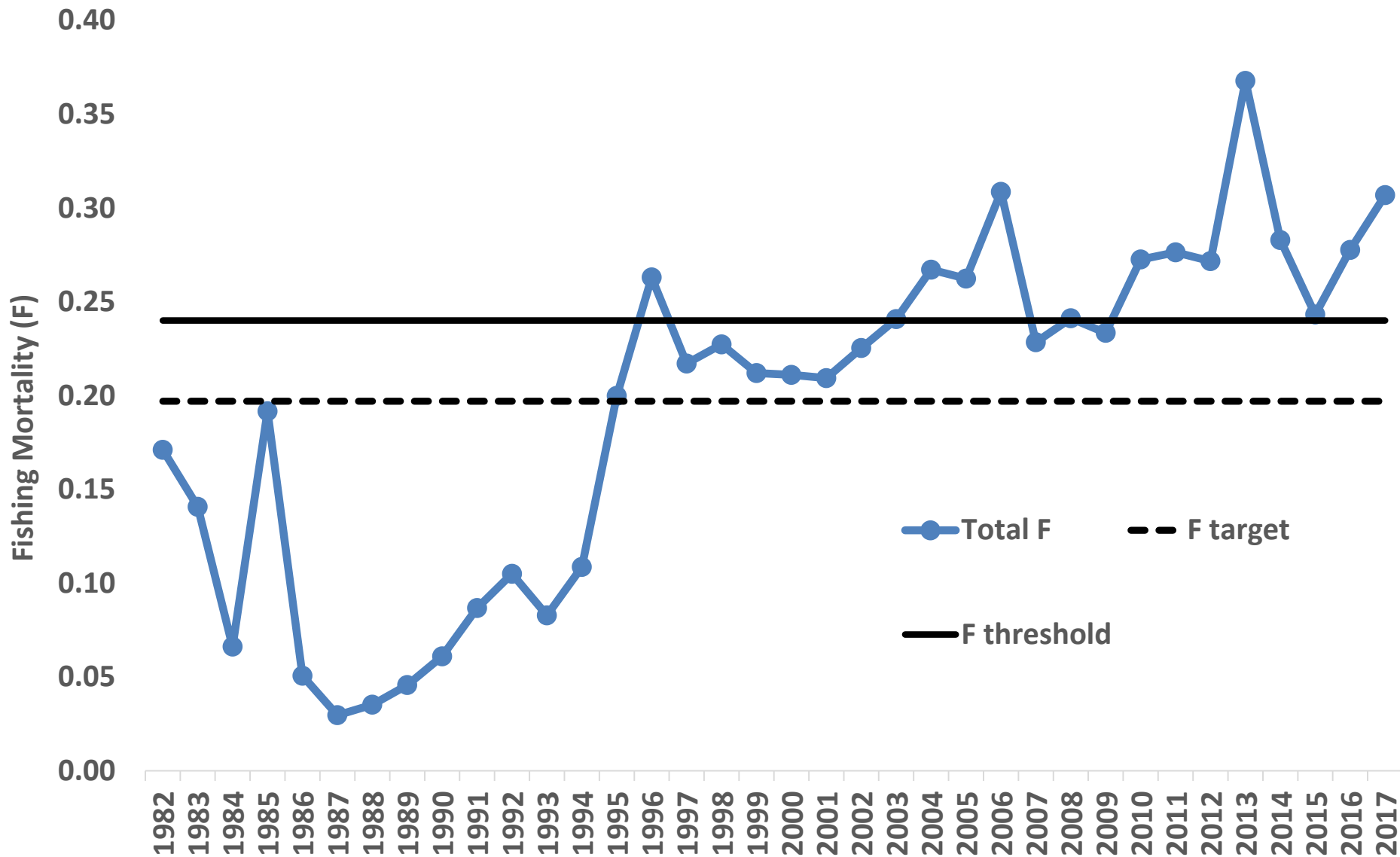
Status of the Stock



Female SSB Recruitment SSB target SSB threshold Average Recruitment



Status of the Stock



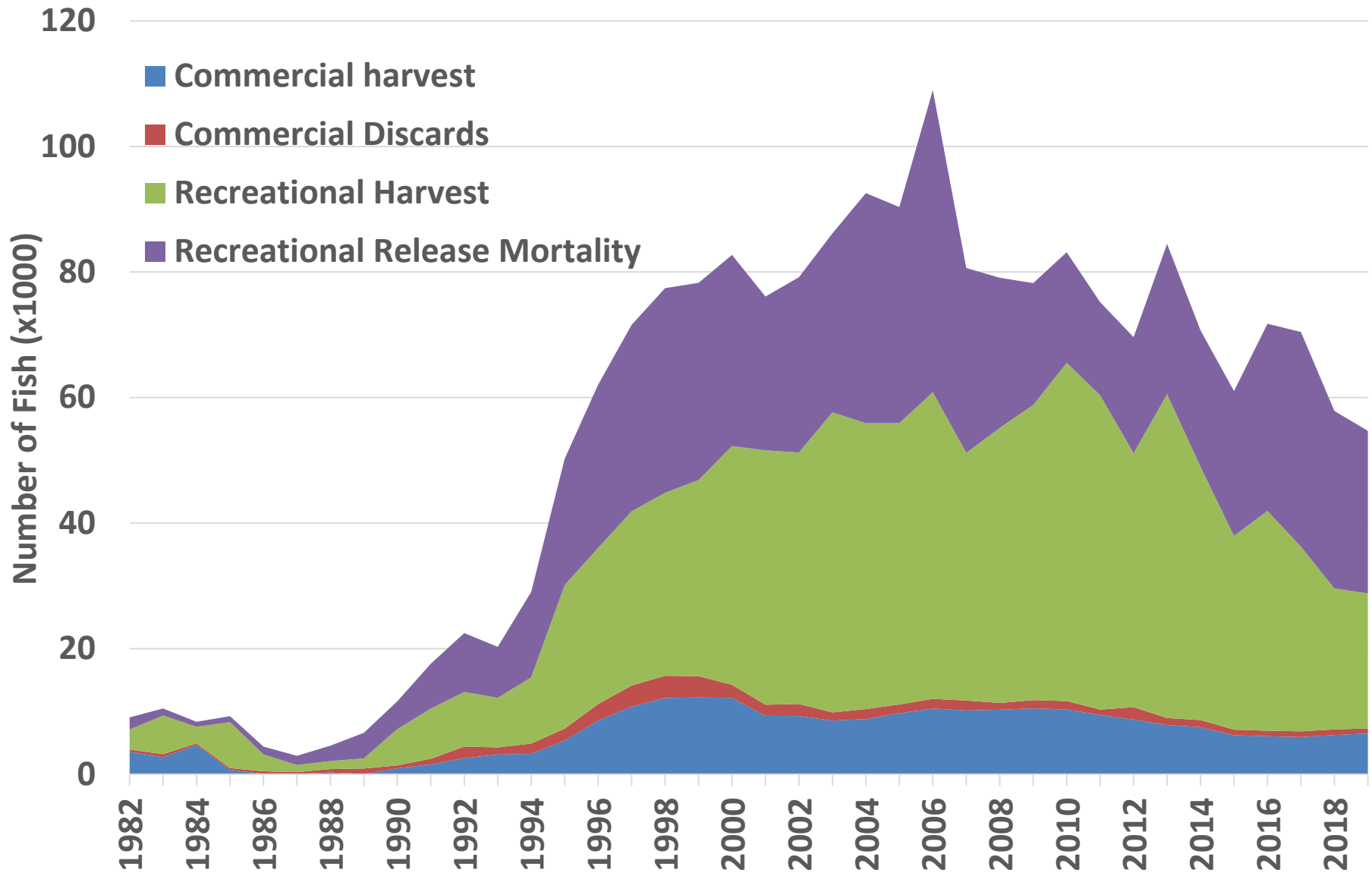
Status of the FMP



- Amendment 6 and its Addenda I-IV set the management program in 2019
- Addendum VI was approved in October 2019
 - States implemented final measures April 1
- Pending action to initiate an amendment to consider addressing a suite of management issues



Status of the Fishery



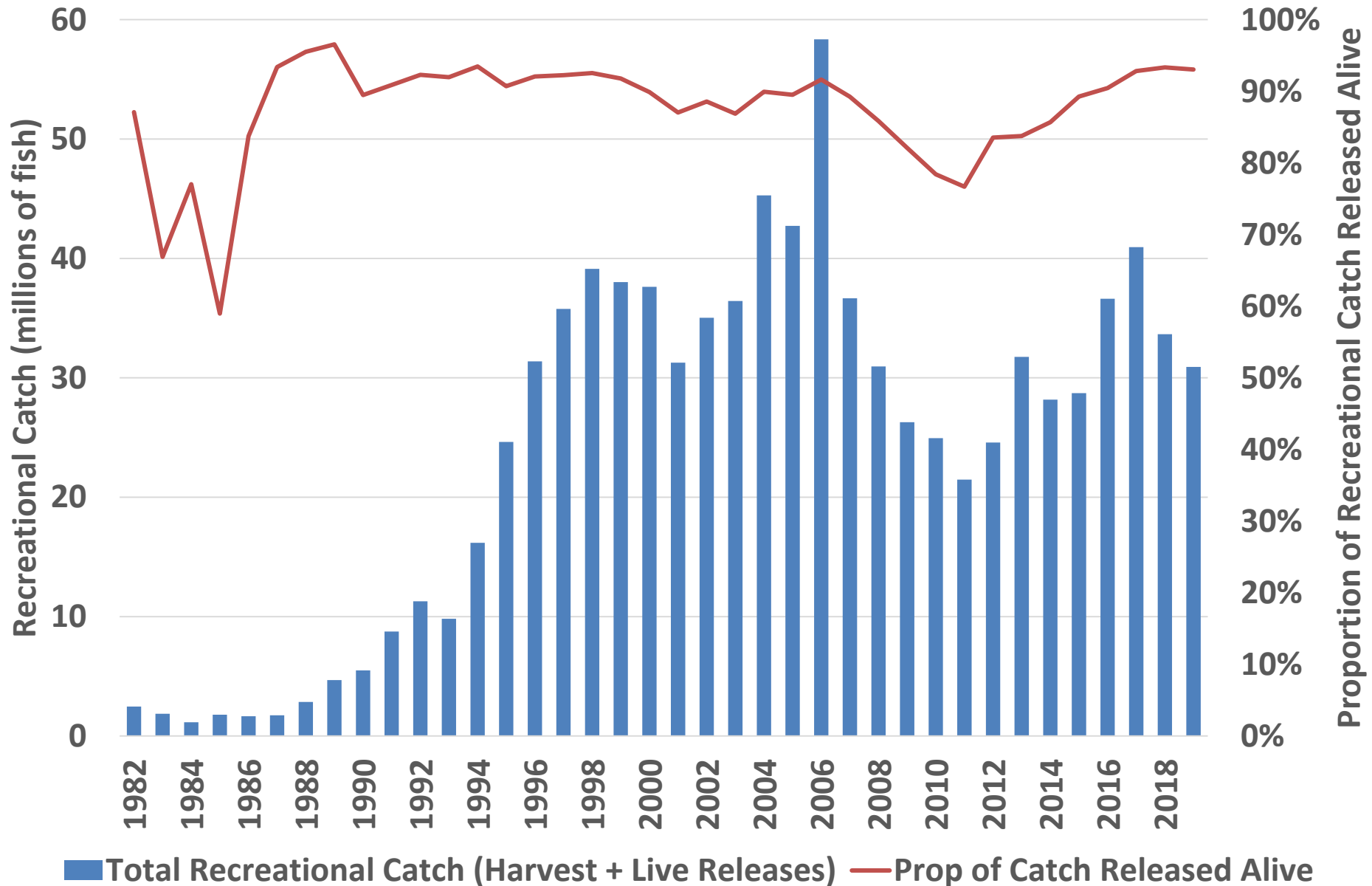
Status of the Fishery - 2019



- Total removals = 5.47 million fish (-5%)
- Commercial
 - Harvest = 650,511 fish (+4%); 4.20 million lbs. (-12%)
 - High catch of sub-legal size fish reported in ocean
 - Chesapeake Bay accounted for 66% by weight
 - Discards = 78,990 fish (<2% of total)
- Recreational
 - Harvest = 2.15 million fish (-4%)
 - Releases = 28.8 million fish (-8%)
 - Release mortality = 2.60 million fish (47% of total)
 - See Page 7 for fishery performance by region



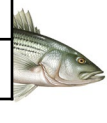
Status of the Fishery

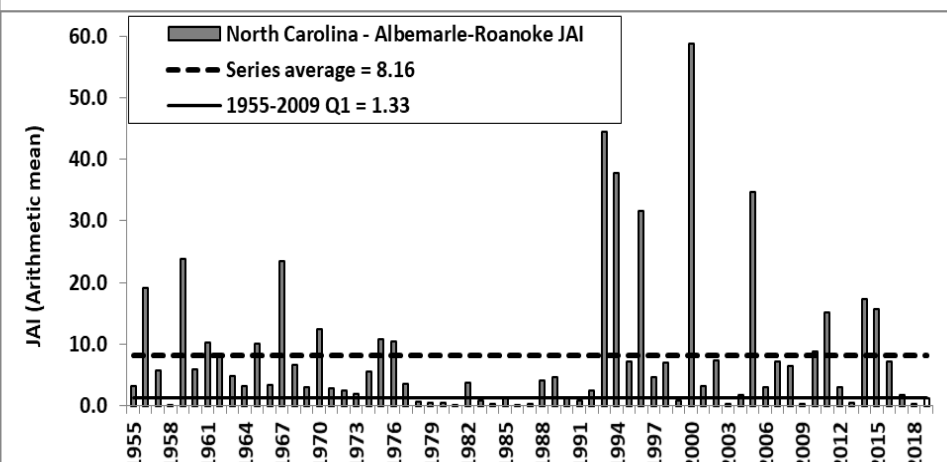
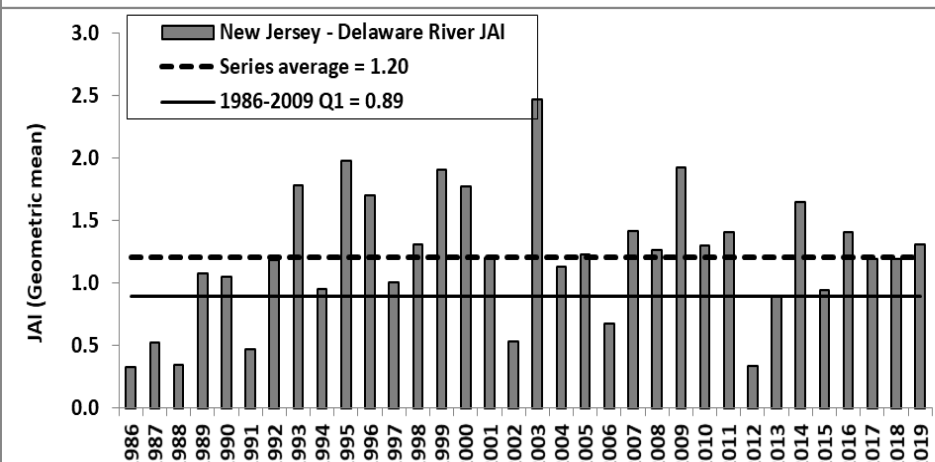
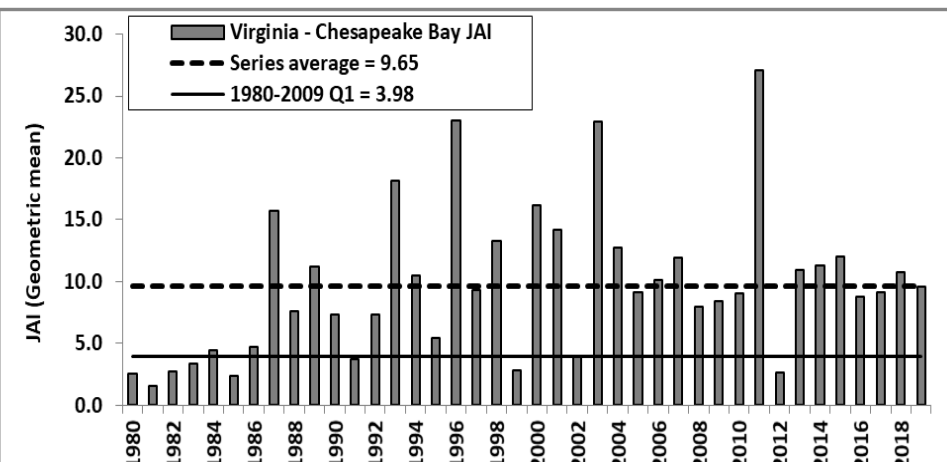
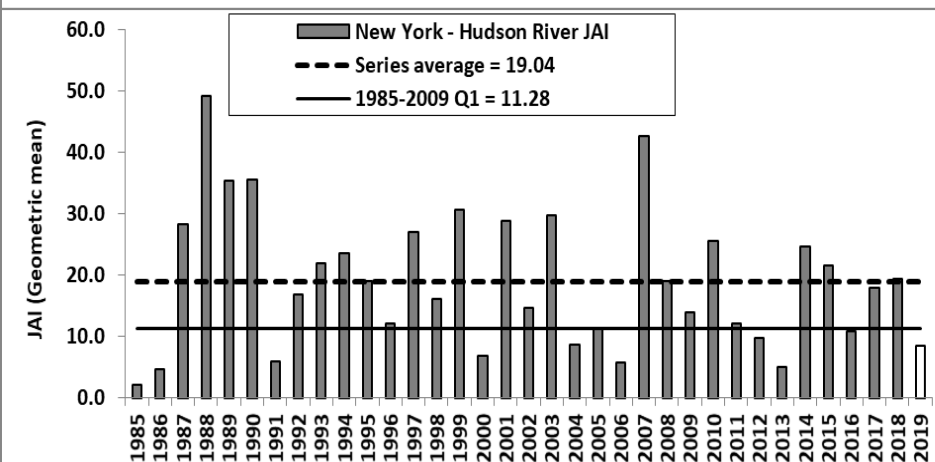
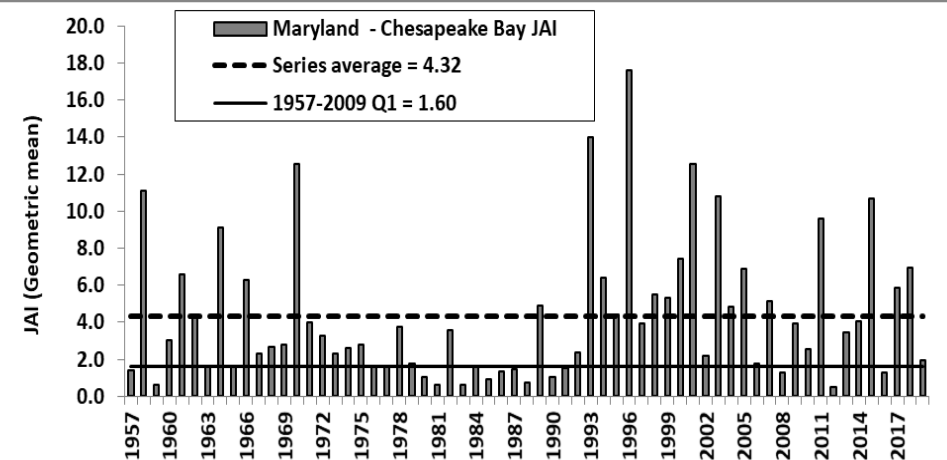
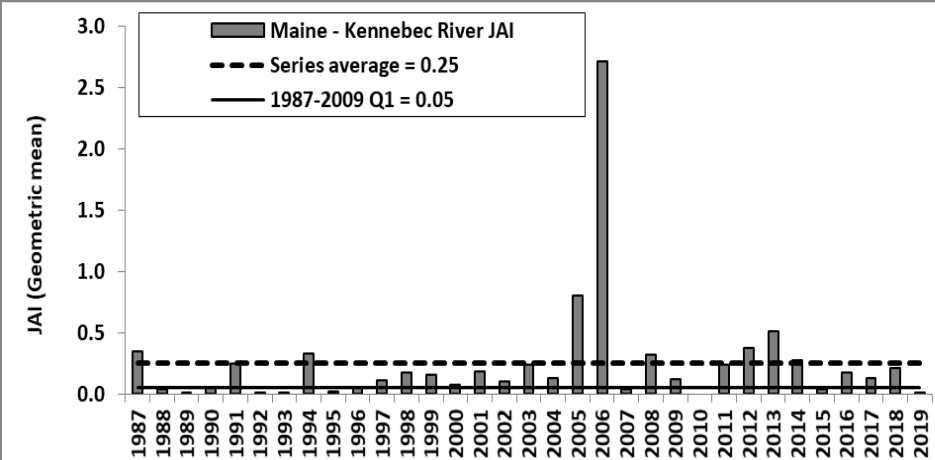


Commercial Quota



| State | 2019 Quota | 2019 harvest | overage | 2020 Base Quota (Add VI) | 2020 Final Quota^ |
|-----------------------|------------------|------------------|--------------|--------------------------|-------------------|
| Ocean | | | | | |
| Maine* | 188 | - | - | 154 | 154 |
| New Hampshire* | 4,313 | - | - | 3,537 | 3,537 |
| Massachusetts | 869,813 | 584,743 | 0 | 713,247 | 735,240 |
| Rhode Island | 181,572 | 144,227 | 0 | 148,889 | 148,889 |
| Connecticut** | 17,813 | - | - | 14,607 | 14,607 |
| New York | 795,795 | 358,943 | 0 | 652,552 | 640,718 |
| New Jersey** | 215,912 | - | - | 197,877 | 215,912 |
| Delaware | 135,142 | 132,602 | 0 | 118,970 | 142,474 |
| Maryland | 90,727 | 82,753 | 0 | 74,396 | 89,094 |
| Virginia | 138,640 | 119,191 | 0 | 113,685 | 125,034 |
| North Carolina | 360,360 | 0 | 0 | 295,495 | 295,495 |
| Ocean Total | 2,810,275 | 1,422,459 | 0 | 2,333,409 | 2,411,154 |
| Chesapeake Bay | | | | | |
| Maryland | 1,471,888 | 1,475,162 | 3,274 | 2,588,603 | 1,442,120 |
| Virginia | 1,064,997 | 948,412 | 0 | | 983,393 |
| PRFC | 583,362 | 353,468 | 0 | | 572,861 |
| Bay Total | 3,120,247 | 2,777,042 | 3,274 | | 2,998,374 |





PRT Comments



- In 2019, all states implemented regulatory and monitoring programs consistent with the requirements of the FMP (Table 12)
- No requests for *de minimis* status
- In 2020, NY and DE implement rec measures that permit harvest of fish equal to the maximum size limit



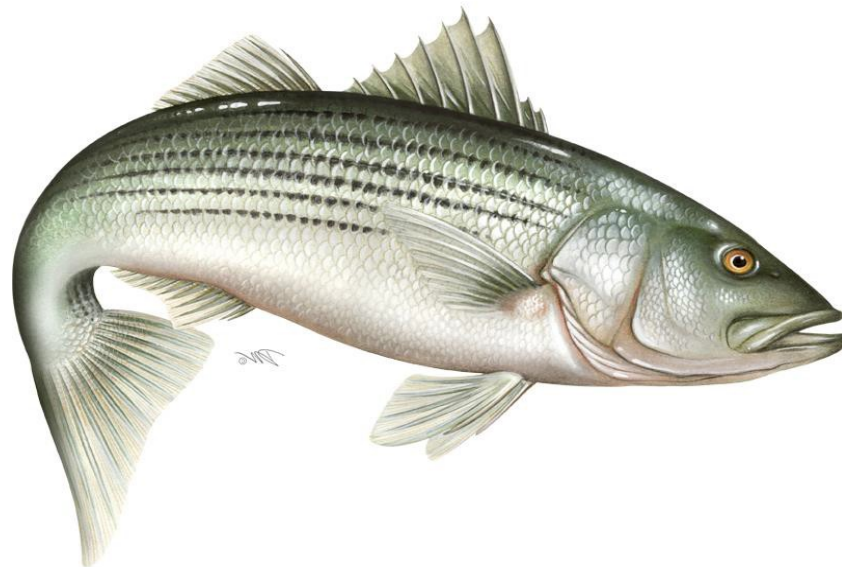


Questions?





Striped Bass Work Group Report

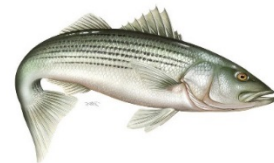


Striped Bass Management Board
August 3, 2020

Work Group Task



- To discuss issues related to concerns with the current mgmt. of striped bass that could be included in a future mgmt. document
- The WG did not focus on developing mgmt. alternatives, rather identifying:
 - Challenges or concerns with the current FMP
 - Potential areas of improvement
 - Pros and cons of differing management strategies
 - Questions for the Board and areas for feedback from public



Challenges Impacting Mgmt.



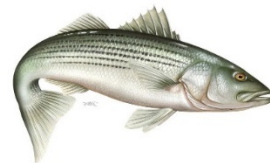
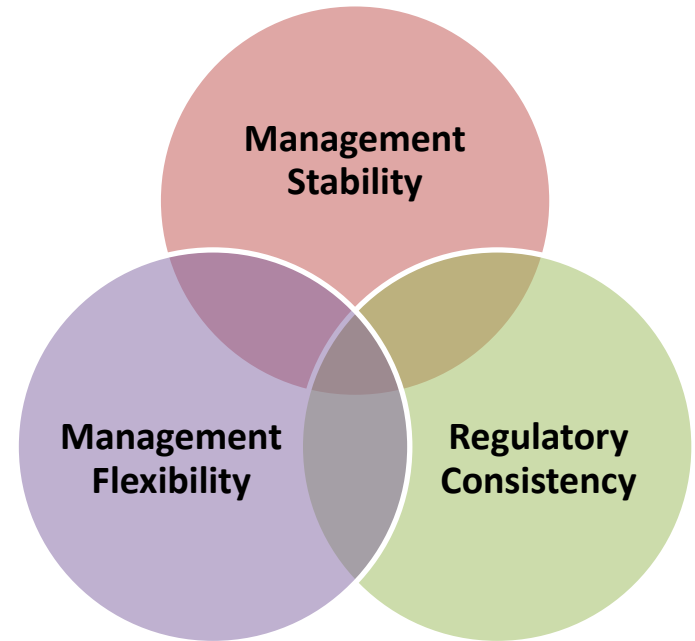
- 2018 benchmark dramatically changed our understanding of stock status
- Fishery is extremely complex
- This complexity is hard to reflect in the modeling of the stock
- Geographically disparate and conflicting goals and objectives
- Regionally different fisheries
- F-rates are variable from year to year even under a single mgmt. regime
- MRIP estimates, especially at finer scales, have a lot of uncertainty and variability



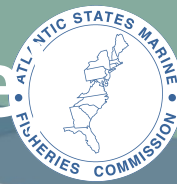
Emerging Themes



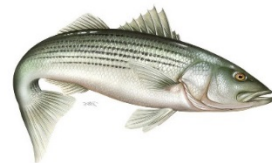
- Emerging themes of
 - (1) Stability
 - (2) Flexibility
 - (3) Consistency
- Consider integrating these principals in future goals and objectives
- There are elements of harmony and conflict between them, which makes it difficult to attain sufficient balance



1. Stock Rebuilding (target/schedule)



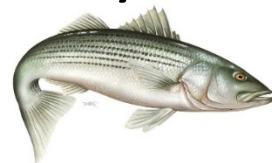
- SSB in 2029 is projected to be 97% of SSB target; 41% chance SSB will be at or above SSB target in 2029
- WG Discussion Points:
 - Inherent uncertainty in projections
 - How do we account for known variability in mgmt. decisions, and how we should evaluate mgmt. success?
 - 10-year rebuilding timeframe is long but may be appropriate considering the biology of striped bass
 - Stock rebuilding closely tied to management triggers, and reference points



2. Management Triggers



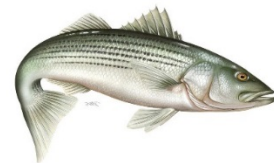
- Amendment 6 includes 5 management triggers tied to F, SSB, and recruitment
- WG Discussion:
 - There was strong support to revisit the triggers
 - Differing timeframes required by the triggers conflict with the goal of management stability
 - The triggers require constant change without recognizing annual variability in F
 - The degree of required action and its effects on stakeholders should be considered more carefully



3. Reference Points



- Current reference points are based on historical stock performance (1995) and are applied to a single stock
- WG Discussion:
 - Current model does not account for varying removal rates from the different stocks, which can lead to poor management decisions
 - Strong support for continued development of 2-stock model and regional reference points
 - Also support to revisit the reference points
 - 1995 may not be an appropriate reference year anymore given new understanding of historical stock performance
 - Stock has never reached its current SSB-target, but F has generally been above the F -threshold
 - Regional F reference points can be pursued under current assessment framework; what is the appropriate allocation of F between the ocean and Bay fisheries?



4. FMP Goals and Objectives



- Goals and objectives vary depending on where and how anglers interact with the resource
- The WG did not suggest eliminating existing goals and objectives, and instead offered the following which may be missing from the current FMP:
 - Reflecting stock complexity in the assessment science
 - Consistent management and monitoring
 - Recognizing potential impacts of climate change
 - Improving catch accounting for the rec sector
 - Promoting “responsible fishing” practices and stewardship



5. Commercial Allocation



- Amendment 6 restored commercial allocations to 100% of average catch from 1972-1979 (except DE); many mgmt. changes since then
- WG Discussion:
 - Commercial quotas are poundage (not %) so not inherently linked to the status of the stock
 - Different states subject to different timeframes for quota
 - Questioning the accuracy of harvest data during 1972-1979 base period
 - Some states underutilizing quota due to changes in availability; possible impact of climate change?
 - Commercial fishery accounts for ~10% of removals and is subject to strict effort controls



6. Conservation Equivalency



- WG reflections on Addendum VI CE process
 - Pros include flexible mgmt. and the ability for single FMP to consider regional differences in fishery
 - Cons include reduced consistency between states; greater imprecision in data used to craft measures; and potential to fall short of the overall target
- Could better define purpose of CE and how CE can be applied, including:
 - Restrictions during periods of stock rebuilding?
 - Greater guidelines on the measures that can be used?
 - Limit the number of CE proposals submitted for review?



7. Regional Management



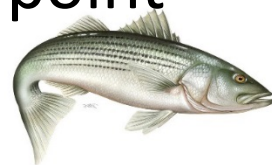
- Producer vs. coastal regions
 - Unique considerations of producer areas due to availability of smaller fish
 - Producer vs. coastal area mgmt. with distinct reference points is still a goal for this species
- Latitudinal regions
 - Overlapped with CE discussions as CE proposal can create disparate measures in a region
 - Perhaps a place for regional mgmt. in CE discussion



8. Recreational Accountability



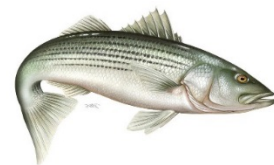
- Harvest and catch varies due to availability of fish and angler effort
 - Managers unable to predict effort
 - Effort tends to increase exponentially with availability
- Should be thought through carefully due to challenges associated with MRIP
 - Accountability to what and at what scale?
 - MRIP estimates are generally less accurate at finer scales
 - Concerns with accountability based on MRIP point estimates



9. Recreational Dead Discards



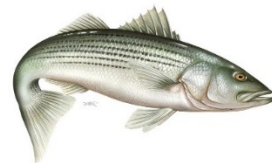
- Recreational dead discards accounted for 48% of overall mortality in 2017
- WG Discussion
 - Some commented it is the most important issue
 - Dead discards correlated with availability and effort
 - Ways to address dead discards may include regulatory change (e.g. hook requirements) and angler education
 - Continued efforts to improve science on release mortality rates for assessment purposes
 - Geographic scope makes addressing dead discards a daunting challenge, but efforts are worthy of the time and resources invested
 - Including the topic in future mgmt. doc could raise awareness of the issue



10. Protect Larger, Older Fish



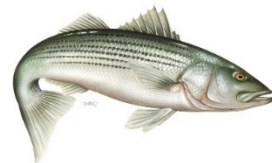
- Larger fish produce more eggs and thus more recruits
- Addendum VI implemented max sizes in many states, but it also created slot limits
- Discussion on broad age structure vs. protecting older fish
 - All about fishing effort on a cohort
- General agreement from WG to bring this up before Board for further discussion



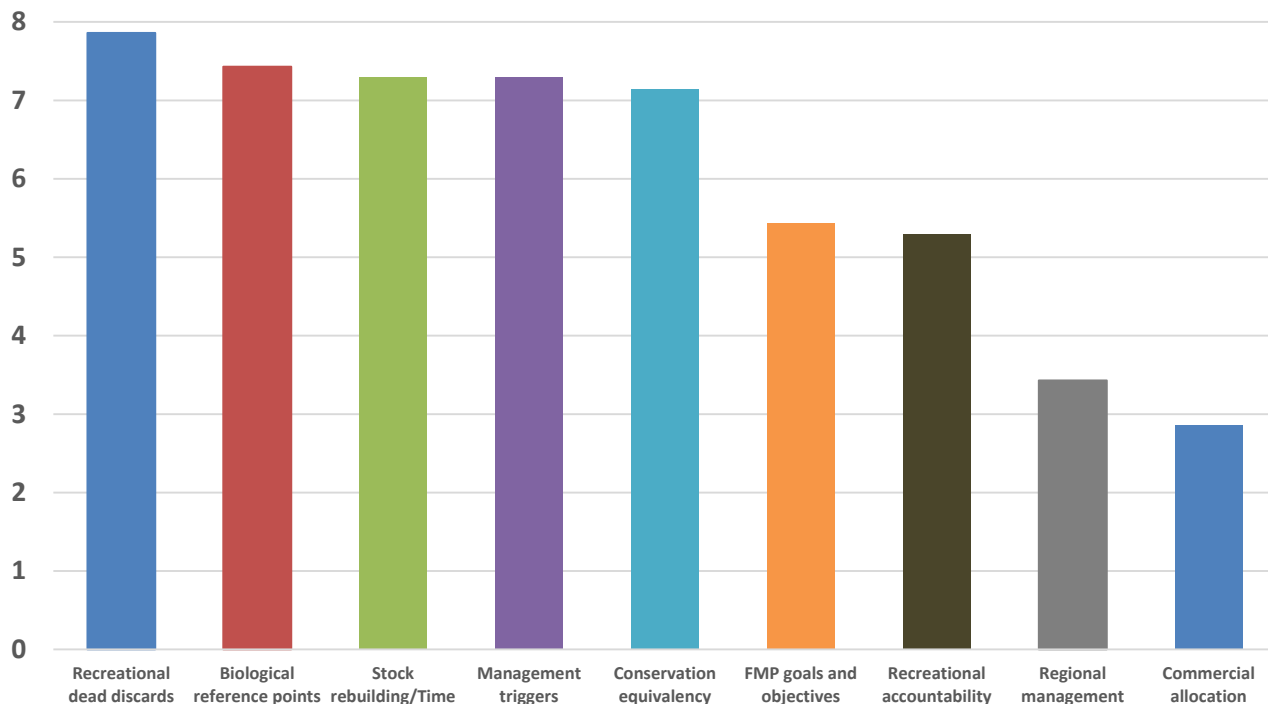
Prioritization Survey



- The scope of the issues discussed by the WG may prove to be a formidable challenge to address comprehensively in a single document.
- As a result, the WG had discussed prioritizing the issues to provide the Board with a sense of what issues might be combined, or addressed by different processes.



12. Prioritization Survey Results



| Management Topics | Overall Ranking | Individual Responses | | | | | | | | |
|-----------------------------|-----------------|----------------------|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Recreational dead discards | 1 | 2 | 2 | | 1 | 1 | | 1 | | |
| Biological reference points | 2 | 2 | | 1 | 2 | 1 | | 1 | | |
| Stock rebuilding/Time frame | 3 | 1 | 1 | 2 | 1 | 1 | | | 1 | |
| Management triggers | 4 | | 3 | 1 | 1 | | 1 | 1 | | |
| Conservation equivalency | 5 | 2 | 1 | 1 | | | 2 | | 1 | |
| FMP goals and objectives | 6 | | | | 2 | 2 | 2 | | | 1 |
| Recreational accountability | 7 | | | 2 | | 1 | | 3 | 1 | |
| Regional management | 8 | | | | | | 2 | 1 | 2 | 2 |
| Commercial allocation | 9 | | | | | 1 | | | 2 | 4 |



QUESTIONS??

Thank you WG members

-Mike Armstrong

-Mike Luisi

-Ritchie White (Dennis Abbott proxy)

-Joe Cimino

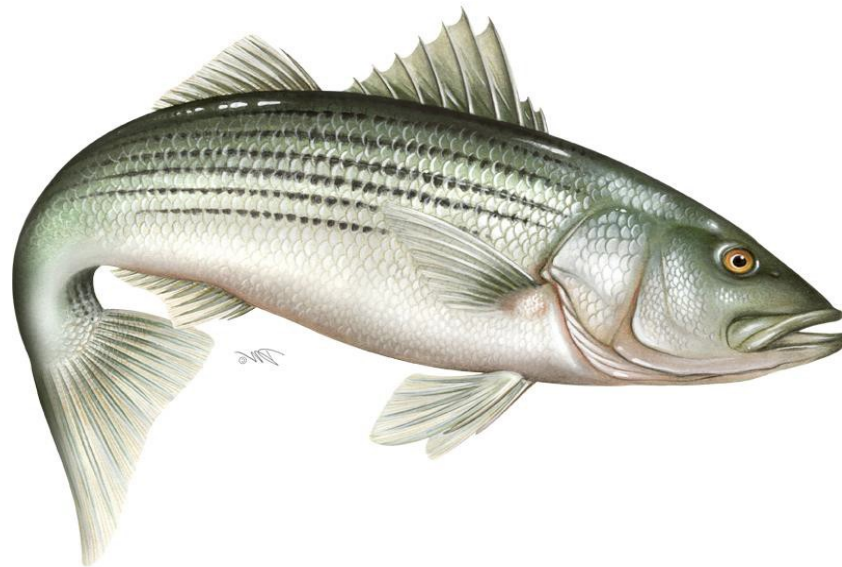
-Marty Gary

-Megan Ware





Next Steps for Striped Bass Management



Striped Bass Management Board
August 3, 2020

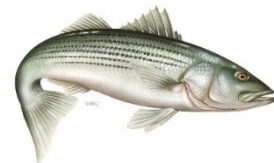
Postponed Motions



Postponed Motion from April 2019:

Main Motion: Move to initiate an Amendment to the Atlantic Striped Bass Fishery Management Plan to address the needed consideration for change on the issues of fishery goals and objectives, empirical/biological/spatial reference points, management triggers, rebuilding biomass, and area-specific management. Work on this amendment will begin upon the completion of the previously discussed addendum to the management plan.

Motion to Amend: Move to amend to add reallocation of commercial quota between states.



Postponed Motion



Postponed motion from February 2020:

Move to task the Plan Review Team to review state reductions in the Fishery Management Plan Review of the 2020 fishing year. If a state is below their predicted target reduction, the Board may direct a state to modify measures for the following fishing year to achieve the target reduction.

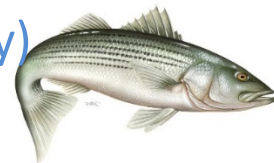


Amendment vs. Addendum



Measures subject to change under adaptive management

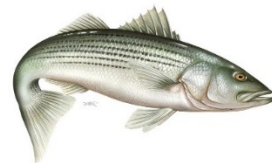
1. Overfishing definition; (1. reference points)
2. Rebuilding targets and schedules; (2. stock rebuilding/timeline)
3. Recreational management program, including: (a) mandatory use of circle hooks; (b) prohibition of the use of treble hooks; (c) prohibition of bait fishing in spawning areas; (d) closure during warm weather periods; (3. accountability, 4. dead discards)
4. Commercial management program; (5. comm. allocation)
5. Monitoring programs;
6. State reporting requirements;
7. Bycatch monitoring and reductions provisions;
8. Law enforcement reporting requirements;
9. Implementation schedule;
10. Any other management measures currently included in Amendment 6. (6. mgmt. triggers, 7. regional mgmt., 8. conservation equivalency)



Amendment Timeline



| Timeline | Action |
|--------------------|--|
| August 2020 | Initiates development; PDT established |
| October 2020 | Consider approving Draft PID for Public Comment |
| Fall 2020 | Public Hearings |
| Winter 2021 | Reviews public comment and directs PDT to develop Draft Amendment |
| Summer-Fall 2021 | Consider approving Draft Amendment for Public Comment; Public Hearings |
| Winter-Summer 2022 | Reviews public comment, selects final measures; Commission approval |



Board Considerations



- Anything wrong or missing from the WG report?
- Which issues to include in the next management document?
- What kind of feedback to solicit from the public?

