

Atlantic States Marine Fisheries Commission

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MEMORANDUM

July 28, 2020

To: Atlantic Striped Bass Management Board

From: Striped Bass Work Group

RE: Discussion on Issues that Could be Considered in the Next Management Action

At its May 2020 meeting, the Atlantic Striped Bass Management Board (Board) agreed to form a work group (WG) of Board members to begin exploring issues that could be included in a public information document should the Board initiate a management action in August. The following volunteers participated on the WG, and were selected to create a balance of different backgrounds, perspectives, and regional representation. Membership changed from the May 20th memo sent to the Board; however, a balance of different perspectives was maintained on the WG.

WG Membership: Martin Gary (PRFC, Co-Chair), Megan Ware (ME, Co-Chair), Ritchie White (NH – Dennis Abbott, proxy), Michael Armstrong (MA), Joe Cimino (NJ), Michael Luisi (MD)

The WG was tasked with compiling and discussing a list of issues related to current concerns with the management of striped bass, with the WG reporting back to the Board in August. An initial list of issues that had been raised during previous Board meetings were compiled, and included: stock rebuilding timeframe, management triggers, biological reference points, fishery goals and objectives, commercial allocation, conservation equivalency, regional management, recreational accountability, and recreational dead discards.

The WG met four times in June and July via webinar to discuss these and any other issues that could be considered in a future management document. Recognizing the WG is not a decision-making body and that management action has not yet been initiated, the WG acknowledged the difference between the WG task and a Plan Development Team, which would be responsible for developing management alternatives. Accordingly, WG discussions focused on identifying challenges or concerns with the current FMP, potential areas of improvement, pros and cons of differing management strategies, and identifying potential areas for feedback from the public.

This memo provides a summary of the WG's discussions, followed by individual meeting summaries organized by meeting date and management topic.

Striped Bass Work Group Report

Executive Summary

In the post moratorium era (ending 1990), the management of Atlantic Striped Bass has largely been a story of success. The species was declared recovered in 1995 and the fishery experienced relative stability well into the 2000's. However, several years of poor recruitment coupled with declining spawning stock biomass beginning around 2006 raised concerns, and resulted in the implementation of coastwide reductions to fishing mortality in 2015 through Addendum IV to the interstate Fisheries Management Plan (FMP). More recently, concerns for the well-being of the stock have been brought forward after the 2018 benchmark stock assessment indicated the stock was overfished and overfishing was occurring. The adoption of Addendum VI to the interstate FMP further reduced fishing mortality coastwide.

Currently, striped bass are managed through Amendment 6 to the FMP (2003). Managers and stakeholders have discussed revising and updating the FMP for a long time as fishery goals and objectives may have changed, new management challenges have emerged, and research has filled many knowledge gaps. Most prominently, the 2018 benchmark stock assessment dramatically changed our understanding of stock status due to the change in MRIP estimates (i.e., recreational catch and harvest estimates are much higher than previously thought, which scaled biomass up, but also resulted in higher fishing mortality estimates throughout the time series and a steeper decline in SSB in recent years). Some other challenges facing striped bass management include an extremely complex fishery due to unequal contributions of the primary stocks (i.e., Hudson River, Delaware Bay, and Chesapeake Bay) to the mixed stock fishery along the Atlantic coast; current data and modeling techniques which limit the Board's ability to implement biologically, socially, and economically sound regulations for all stakeholders; geographically disparate and often conflicting goals and objectives, depending upon where and how fishermen interact with the resource; fisheries which are executed very differently depending on the size and availability of fish, and regional culture; fishing mortality rates which are variable from year to year due to a predominantly recreational fishery with limited effort controls; and challenges associated with MRIP given that, although it provides best available recreational catch estimates on a coastwide scale, state-level and finer scale estimates are uncertain and variable, and limit the Board's ability to execute a flexible management program while maintaining accountability and transparency with the angling public.

The Striped Bass Work Group (WG) discussed a suite of nine issues that have been previously identified by the Board, along with other management topics raised during a series of four meetings. Those issues and topics are described in detail below. Three themes which emerged from the WG's discussion included management stability, flexibility, and regulatory consistency. 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 a discussion on prioritizing the issues to provide the Board with a sense of what issues might be combined, or addressed by different processes.

Striped Bass Work Group Meeting Summaries

Meeting #1, June 12

Stock Rebuilding (Target and Schedule)

Due to overfished status of the stock, the Board is required to take action to rebuild spawning stock biomass (SSB) to the target level. The FMP requires that the rebuilding timeline cannot exceed 10-years. Based on latest projections, there is a 41% probability of being at or above SSB target in 2029. An assessment update is scheduled for 2021 with data through 2020.

The WG began its discussion with a question regarding the evaluation of management success: how do we incorporate known variability into management decisions and our view of success? Many striped bass management decisions are rooted in stock projections, the results of which are taken at face value. Establishing management regimes that achieve a particular stock condition based on projections is therefore misleading because those decisions don't often recognize their uncertainty. The concept of management uncertainty was first raised during this discussion and was brought up under other topics as well. Comments were made about the Board being criticized for not letting management strategies or regimes play out over long enough periods of time before taking action.

As a result, the theme of management stability emerged on this call. The WG noted that management stability should be thought of as a two-way street where management stays the course in good and bad years (i.e., avoid knee-jerk reactions if fishing mortality (F) goes above or below target for 1-year). The WG also noted that the idea of success is different for many managers and stakeholders. As a result, it is important for the Board to identify sound goals and objectives to define management success.

In its discussion on the rebuilding timeframe, some WG members indicated that a 10-year rebuilding timeframe is a long time, but it may be appropriate considering the biology of striped bass (i.e., late maturing, long lived species, and recruitment is variable and dependent on favorable environmental conditions). Also, when thinking about initiating an amendment, the WG noted the challenge of discussing stock rebuilding, management triggers, and reference points separately since they are all interconnected. If one of these issues is to be part of the amendment, it may be prudent for all three to be included.

Management Triggers

There are five management triggers in Amendment 6. Four are tied to the F and SSB targets and thresholds, and one is based on recruitment failure. If any trigger is reached, the Board is required to take appropriate action. The management triggers are paraphrased below:

- 1. If F threshold is exceeded, the Board must act to reduce F to F target within 1-year.
- 2. If SSB is below threshold, the Board must act to rebuild SSB to SSB target (rebuilding timeline not to exceed 10-years).

- 3. If F target is exceeded for two consecutive years, and SSB is below target in either of those years, the Board must act to reduce F to F target within 1-year.
- 4. If SSB falls below target for two consecutive years, and F exceeds F target in either of those years, the Board must act to rebuild SSB to SSB target (rebuilding timeline not to exceed 10-years).
- 5. If any juvenile abundance index (JAI) shows recruitment failure (per Addendum II), the Board will review the cause and determine appropriate action.

There was strong support from WG members to revisit the management triggers. The concept of management stability was the focal point of this discussion. The triggers require constant change, although this frequent action does not recognize that F can be variable under the same management regime. Several WG members commented that management triggers should be developed which require less frequent change, striking a balance between management stability and accountability. Some felt that incorporating more flexibility to the management triggers could give managers the ability to make adjustments that make sense while still being accountable for their management actions.

The differing timeframes that are required by the triggers also generated discussion. For example, there is a 1-year response required for exceeding the F-threshold, while other triggers are based on two consecutive years of SSB and F estimates, and a 3-year timeframe for recruitment failure. These different timeframes are in conflict with the goal of management stability and make the current triggers complicated. Some stakeholders support the 1-year requirement for change while others believe that it promotes 'knee-jerk' reactions that may not always be necessary. It was discussed that there could be a goal to find balance that promotes conservation while also considering the impacts that changes in regulations have on commercial and recreational industries.

Lastly, it was acknowledged that the new MRIP numbers changed the Commission's understanding of stock status, and given the shift in magnitude of removals, the degree of required action and its effects on stakeholders should be considered carefully. Other Board members and the public weighed in at the conclusion of the discussion and asked the following questions:

- What's more important, rebuilding the stock quickly, or mitigating impacts to fishers?
- How should the Board balance the magnitude of change in an action vs. the time to get our targets?

Biological Reference Points

Current biomass reference points are based on historical stock performance. The 1995 estimate of SSB is used as the threshold, and the target is set at 125% of the threshold. The F reference points were redefined in the 2013 benchmark assessment and are designed to achieve the SSB target and threshold, respectively, over the long term. Model-based reference points, such as MSY or SPR, are not available due to current data and modeling limitations, although other

empirical reference points can be considered. The SAS is developing a 2-stock model that incorporates stock composition and migration information, which could produce reasonable SPR-based reference points. However, the model is not ready for management use at this time. The current statistical catch-at-age (SCAA) model does separate removals into two fleets; an <u>ocean fleet and a Chesapeake Bay fleet</u>. These fleet components could be used to explore regional F targets and threshold for the respective regions, although this raises a number of policy and management issues that need to be thought through carefully (e.g., regional management triggers, and the appropriate allocation of F between the Bay and ocean regions).

There was support by several WG members to revisit the reference points, and WG members noted that reference points have been a core issue in striped bass management for a long time. Some WG members acknowledged that 1995 may have been an appropriate reference year at the time; however, improved data and advancements in assessment modeling over the years has changed our understanding of historical stock performance, and 1995 may not be an appropriate reference year anymore (i.e., 2018 benchmark indicates the SSB target has never been achieved). That said, the WG acknowledged that the SSB target may not have been achieved because the F target has not been maintained for a significant period of time (i.e., F is variable, and has been above threshold most years going back to the early 2000s).

The WG discussed challenges of implementing an equitable management program for all regions and user groups due to ongoing data and modeling limitations (i.e., management is currently operating under a coastwide assessment model, but in reality there are multiple stocks, each with unique biological characteristics and contributions to the coastwide population). The current assessment fails to capture the complexities of stock structure and varying rates of removals from the different stocks, thus adding uncertainty to aspects of striped bass management and modeling work. This can lead to inefficient and possibly faulty management decisions. Accordingly, the WG strongly supported continued development of the 2-stock assessment model and regional reference points. Lastly, WG members commented that reference points for striped bass should reflect clear management goals and objectives.

Торіс	Pros	Cons				
Current Reference Points	Represent the middle ground of conflicting management goals and objectives (i.e., the middle of who/what we are managing for)	The SSB target may not be achievable based on current state of ecosystem and understanding of past stock performance				
	Empirical-based reference points are based on verifiable observation or experience rather than theory	Hard to manage separate stocks of the population and achieve different				

Pros and Cons of different reference point strategies were discussed under this topic and are summarized below:

	Appears to meet the goals of certain recreational angler communities that see 1995 reference year as an appropriate target level	regional goals under a coastwide reference point			
2-Stock Model	Incorporates stock composition and migration information and can provide a tool for regional management	Not currently available for management use, and will require a lot of time and resources to fully develop			
	Allows to manage more accurately, but perhaps less conservatively as well				
2-fleet, non- migration model	Improvement over previous 3-fleet model; models removals from the ocean and Chesapeake Bay fisheries separately	F doesn't capture true complexity of the fisheries and population dynamics			
	Provides a tool for regional management	Regional management raises challenging questions about how to allocate F between the two fleets			

Meeting #2, June 21

Goals and Objectives

As a part of considering fishery goals and objectives, the WG reviewed existing goals and objectives in Amendment 6 as well as results from a Board and Advisory Panel (AP) questionnaire, or survey in 2018. The primary goal of the survey was to solicit guidance from the Board regarding the type of reference points to pursue for the 2018 benchmark, but also to solicit Board and AP member satisfaction with the existing management program and understand what is most valued in the striped bass fishery (e.g. economically viable fisheries, broad age structure, maintaining SSB at or above the target, etc). Results of the survey were split, and there was no clear majority in terms of satisfaction with striped bass fishery.

In light of the survey results, the WG discussed that a potential goal of the Striped Bass FMP should be to improve relationships between the various groups, whether that be between the commercial and recreational sectors or between the coastal states and the Chesapeake Bay region. Others noted that while striped bass is currently managed as a single stock, it is important to recognize the regional differences in the fishery which results in different visions,

priorities, and management practices. As a result, management goals and objectives should be broad and not constraining over time.

The WG also brainstormed several goals and objectives which may be missing from the existing list in Amendment 6. These included:

- Reflecting stock complexity in the assessment science
- Consistent management and monitoring
- Recognizing potential impacts of climate change
- Improving catch accounting for the recreational sector
- Promoting "responsible fishing" practices and stewardship (through things such as circle hooks)

The WG did not highlight any existing goals and objectives in Amendment 6 which should be eliminated and instead noted that many are still relevant. These include the reference to maintaining essential habitat in the Amendment 6 goal, the aim of management stability (Objective 6), and the desire to balance coastwide consistency with flexibility (Objective 3).

Commercial Allocation

As part of the WG's discussion on commercial allocation, ASMFC staff provided a retrospective on striped bass commercial allocations. This included a review of Amendment 6 which restored coastal commercial allocations to 100% of average landings from 1972-1979, except for Delaware which was maintained at its 2002 level. In contrast, Amendment 6 set the Chesapeake Bay commercial allocations based on F so that quotas scaled annually with biomass. Since then, commercial allocations have been reduced in Addenda IV and VI, with the Chesapeake Bay allocations switching to a poundage value (as opposed to being based on an Frate).

WG members expressed concern that commercial allocations are a poundage not a percentage, and as a result are not inherently linked to the status of the stock. This means that changes to the commercial allocations must occur through an Addendum or Amendment. In contrast, WG members noted that other FMPs allocate commercial quotas as a percentage of a total allowable catch or annual catch limit, which means that allocations scale as biomass increases or decreases. One WG members noted that the Chesapeake Bay region originally had a commercial allocation based on an F-rate in Amendment 6 but that this was lost in Addendum 4 when quota reductions were implemented as a 20.5% cut from catch in a single year (2012). This WG member noted that, as a result, they lost the ability to manage based on exploitable biomass, which means making reductions when biomass is low but also providing for increases when stock biomass is high.

WG members also noted that different criteria have been applied to different regions and states. For example, Delaware's quota is based on a different time-period than other states. Further, while the 1972-1979 time period has been used for a long time, there were questions as to whether this is still an appropriate timeframe, especially given potential concerns about

the accuracy of striped bass harvest reporting during this time. The WG noted that, should an Amendment be initiated, it would be helpful to understand when states required reporting in the striped bass commercial fishery and the degree of confidence in historical landings records.

The WG also discussed potential influence of climate change on the stock and how this could impact commercial allocations. Some WG members noted that not all states are meeting their quotas and that could be indicative of climate change impacts. Others noted that populations seem to be shifting into federal waters and this may be impacting state's ability to fully harvest their quotas.

Finally, WG members noted that a general challenge with the commercial fishery is that it only accounts for ~10% of total annual removals. However, it is subject to some of the stricter effort controls. This speaks to the ability to control catch and effort in the striped bass fishery as a whole.

Conservation Equivalency

The WG identified some pros and cons of conservation equivalency (CE) programs. Pros included having the flexibility for states to craft regulations that match its fishery and needs, and the ability for a single FMP to consider the regional differences in the fishery. Cons included reduced consistency between states; greater imprecision in the data used to evaluate the impact of bag limits, size limits, and seasons; and (in Addendum VI) a decrease of the overall percent reduction.

During its discussion, the WG reflected on the Addendum VI process. Some WG members noted that the result of the Addendum VI CE approval process was that the sum of the parts did not equal the whole; this likely reflected the Board's decision to require CE proposals to achieve an 18% reduction as opposed to the reduction projected to be achieved by states under the coastwide measures. Other WG members commented that Addendum VI resulted in several states taking on the brunt of the reduction and so CE was a way for states to remedy a situation where they felt they were being unfairly limited. Others noted that the Addendum VI CE process resulted in a one-way valve, where states (through CE) ultimately adopted regulations which resulted in smaller reductions as opposed to other states also using it to implement measures that were more restrictive than the FMP. As a note, a CE proposal and Board action is not required for a state to be more restrictive than the FMP.

Moving forward, one WG member said that it was critical for the purpose of CE to be identified, including a better definition of how and when CE is applied. This WG member felt that a clear biological benefit should be demonstrated in a CE proposal. Other WG members felt it was important to modify but not end the CE program, as a way to increase trust in the program. This could include greater guidelines on the CE program or a different structure. Some ideas included:

• Restricting CE proposals to certain times, abundances, or stock status, and not allowing CE during a period of stock rebuilding

- Greater boundaries on the management tools that can be used, and whether reductions in the recreational and commercial can be "swapped" within a state
- Different guidelines for the recreational and commercial sector given differences in the data uncertainty and accountability measures
- Limit the number of CE options a state can submit for technical review and Board approval

The WG also talked about accountability with implemented CE programs. One WG member thought that a CE program should be amended so that if, after the first year, the CE measures do not achieve the expected outcome, an accountability measure is tripped. Another WG member noted that accountability is hard because the CE process moves away from coastwide accounting to state-by-state accounting, which results in increased imprecision in the data and greater uncertainty in the anticipated outcome. Another WG member asked how accountability would work if year class strength and availability differ from year to year and between regions. This WG member also noted that all states should be held accountable to the management program, not just CE states.

Meeting #3, July 12

Regional management

The WGs discussion on regional management touched upon several different ideas: regional management which is supported by stock specific reference points, regional management that looks at producer vs. coastal areas, and regional management in which latitudinal areas have uniform regulations.

The WG recognized that regional management with distinct reference points is still a goal for this species. As noted previously, the SAS developed a 2-stock model during the 2018 benchmark, which brought the concept of multiple reference points further along than the previous assessment, but data limitations prevented peer review endorsement for management purposes. Therefore, the WG discussed regional management approaches with one set of coast-wide biological reference points continuing into the near future.

The WG and several members of the audience discussed the importance of producer areas and their unique consideration in management due to the smaller size of fish. Some noted that Delaware Bay and the Hudson River are also producer areas; however, they are managed differently than the Chesapeake Bay. There were questions as to why this is. Other WG members commented that they consider regional management to be focused on a grouping of states rather than producer vs. coastal areas and perhaps regional management doesn't have a place in striped bass management.

Next, the WG discussed regional management in terms of discrete areas having matching regulations. For example, while some areas have achieved regulatory consistency via Addendum VI, other areas such as Delaware Bay and Chesapeake Bay have disparate measures

across jurisdictions. This lead into a discussion about the connection between consistent regulations and the current CE program. One WG member noted that when a state implements a CE measure, it has an impact on adjacent states. As a result, regional management may have a place in the striped bass fish through the CE process. Others noted that if CE is something the Board wishes to include in an amendment, there can be a review of the regional approach to regulations (compared to one coastwide measure).

Recreational accountability

At the onset of the discussion, it was acknowledged that some members of the Board and public may be using the terms 'accountability' and 'accounting' interchangeably. There is widespread, perhaps universal, desire for more accurate recreational harvest estimates. Recreational harvest accounts for 90% of annual removals, and harvest varies year to year based on availability and effort. Harvest estimates are also subject to variability in the MRIP survey, making it difficult to parse out what impact management efforts may have when regulations are changed as the variabilities are confounded.

Regarding accountability, the WG noted that in other species' FMPs, this topic has been discussed mainly as payback for overages of an annual harvest target. Several members of the WG expressed deep concern over doing this based on point estimates provided by MRIP, especially at the state level where uncertainty in the data is higher. As a result, one WG member noted that if recreational accountability is pursued, it should be at a regional or aggregate level to reduce uncertainty in the data. There was also discussion that striped bass management should not follow in the footsteps of federal FMPs such as summer flounder and black sea bass where there are regulatory changes every year to try to match harvest targets. It was noted that this was also a concern expressed at several public hearings for Addendum VI.

WG members expressed concern over the lack of precision of MRIP estimates and questioned what modifications would be needed to achieve greater precision. One WG member noted that PRFC and DC do not have MRIP estimates, which could complicate discussions on recreational accountability. The WG did not put forward the notion that better accounting (e.g., mandatory recreational reporting) should be pursued at this time but did acknowledge the challenges associated with MRIP estimates. The WG also discussed impacts of year class strength on catch and harvest, and managers' inability to predict or control effort. One WG member noted that it is difficult to have fishermen follow the rules and then be faced with further reductions. Another WG member noted that we need to improve the incorporation of year class strength, and associated changes in effort, in our estimates.

Recreational Dead Discards

Multiple members of the WG indicated that recreational dead discards may be the single most important issue at this time, and addressing (or reducing discards) is the most important action

that can be taken going forward. Many WG members pointed to the fact that recreational discards accounted for just under 50% of the fishing mortality as basis for the critical need to address this issue. Others noted that, particularly in states with primarily catch and release fisheries, the Board is running out of ways to control removals in the fishery.

The WG acknowledged that angler behavior varies significantly on both a local and regional level. In some parts of New England, many fish are released, while in Chesapeake Bay, anglers often wish to keep their allowable catch. The WG also touched on the possibility of determining regional differences in release mortality, and the need to collect better data on this topic.

There was a lengthy discussion on what addressing discard mortality could mean. Some noted that other regulatory measures (in addition to the use of circle hooks) may still exist such as banning gaffing or the use of treble hooks. The WG also discussed potential benefits of reaching out to gear manufacturers. Many WG members pointed to the importance of angler education, and how to communicate with the recreational sector to apply best practices and emerging research. While there was an acknowledgement that angler education is not necessarily a regulation, including the topic of recreational dead discards in a future management document raises angler awareness of the issue.

Overall, while the scale and geographic scope of this issue makes addressing it a daunting challenge, the WG clearly felt that the pursuit to lower recreational dead discards would be worthy of the time and resources invested.

Meeting #4, July 21, 2020

Management Stability, Flexibility, and Regulatory Consistency

At the WG's last meeting, the group discussed three themes which emerged through previous discussion: management stability, flexibility, and regulatory consistency. The WG acknowledged that there are inherent elements in these themes which are in harmony with one another, and others which are in conflict. For example, regulatory consistency and stability can be easily linked (regulatory steadiness in both space and time) while flexibility is a somewhat conflicting theme. That said, using an analogy of a Venn diagram, the WG acknowledged there is likely a point of balance between all of these elements; it is the amount of overlap between these three elements which makes attaining that balance more or less difficult. WG members also acknowledged that these themes are not unique to striped bass; several other species management boards and the federal Councils are also grappling with how to balance these themes.

When speaking of flexibility, one WG member noted that because the striped bass FMP is not jointly managed with a federal Council, there is more opportunity for flexibility in the management of the species. This WG member felt it was important not to lose sight of this opportunity for flexibility outside of a federal FMP. Another WG member noted that flexibility

can be incorporated into a stable and consistent regulatory program by including flexibility as part of a management action, as opposed to allowing for flexibility after a management decision (akin to how CE currently works).

Overall, the WG felt that the themes of stability, flexibility, and consistency could be guiding principles for future management changes.

Other Topic: Protecting Larger, Older Fish

The WG also used the last meeting to discuss any topics which were not included in the specific list of items developed by the Board. One WG member brought up the topic of protecting larger, older striped bass. This WG member noted that stakeholders often talk about the need to protect older striped bass since they can produce more eggs and thus more recruits, and that larger fish are often "revered" in the fishery. He noted that many states did not have a maximum size limit until the latest management action (Addendum VI). He also noted that an objective of Amendment 6 is to ensure a broad age structure in the striped bass population and wondered if this conflicts with the desire to also protect older fish.

The WG discussed whether having a broad age structure and protecting older fish are compatible objectives. One WG member noted that the maximum size limit in Addendum VI provides greater protection to older, larger fish but that the creation of a slot limit can also result in fewer striped bass reaching a larger size. It was also noted that discard mortality, which is almost half of fishing mortality, is pervasive across all sizes of striped bass. The WG asked Stock Assessment Team Lead, Dr. Katie Drew, about the tension between a broad age structure and the protection of older fish from both a regulatory and stock assessment perspective. She noted that the two topics are linked because it is hard to protect older, larger fish without a broad age structure; however, achieving a large number of older fish is all about fishing effort and protecting a given cohort through time until it reaches older ages (e.g., you cannot create new age-10 fish; the number of age-10 fish in a population reflects the fishing effort placed on that cohort throughout its life).

Several WG members supported continued discussion on this topic by the Board. One WG member noted that, in northern New England, many anglers seem to support the maximum size limit as a way to protect these older fish. Another WG member noted that under Addendum VI, most states now have a maximum size limit and considering a protection for older fish across all states would get at the theme of regulatory consistency.

Prioritization of Topics in a Potential Management Document

Next, the WG discussed potentially prioritizing the list of management topics discussed over the first three webinars. This conversation was prompted by the recognition that including nine complex and controversial topics in a single management document may result in a slow and complicated regulatory process. As a result, it may behoove the Board to break up the topics into different management documents.

To help prompt this discussion, WG members decided to anonymously rank the nine topics discussed using Survey Monkey. Given the topic of 'protecting older, larger fish' was discussed on the fourth call, it was not included in the ranking. WG Co-Chairs noted that giving a topic a lower ranking does not mean it is not important. Further, it was noted that the ranking was not intended to be decisional, merely a way to facilitate a conversation.

Results of the anonymous ranking were shown to the WG on the webinar (Figure 1, Table 1). Topics with a higher value in Figure 1 were given a higher overall ranking by the WG. When looking at the results, it is important to note that respondents only included WG members, so the sample size is small.

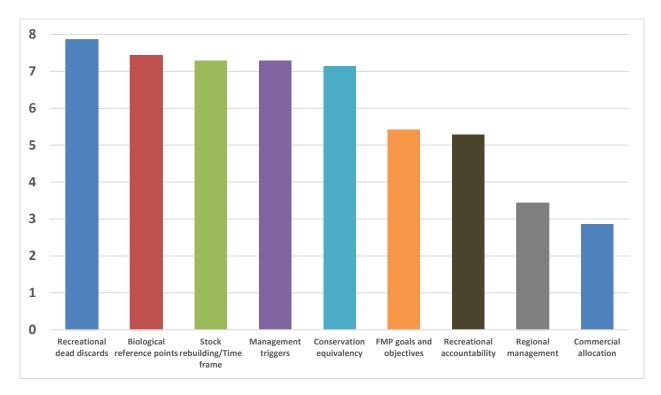


Figure 1: Results of the prioritization survey by WG members. Topics with a higher value (i.e. those on the left) received a higher overall ranking.

Table 1: Results of the prioritization survey by WG members. The table shows how WG members ranked each of the different topics. For example, reading across the first row, two WG members ranked recreational dead discards as the highest priority, two WG members ranked it as the second highest priority, one WG member ranked it as the fourth highest priority, one WG member ranked it as the fourth highest priority, and one WG member ranked it as the seventh highest priority.

Management Topics	Overall	Individual Responses								
Management ropics	Ranking	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

Overall, the survey results show the WG ranked recreational dead discards as the highest priority, followed closely by reference points, stock rebuilding, management triggers, and conservation equivalency. FMP goals and objectives and recreational accountability were ranked in the middle, and regional management and commercial allocation received the lowest rankings. Table 1 shows that there was variability among individual WG member responses. Several WG members commented that all the topics are important but that WG conversations had impacted their ranking. Others noted that while FMP Goals and Objectives were ranked sixth, perhaps because it is not as "glamorous" a topic, it is still critically important to review these if a management document is initiated. Others noted that some topics are related and can be combined. For example, regional management may be linked to conservation equivalency.

Finally, the WG had a brief discussion on which management topics can be completed in an addendum versus an amendment. Commission staff indicated that except for goals and objectives, all of the topics discussed can be addressed in an addendum. However, an amendment can sometimes be more appropriate if the topics are controversial and/or if there are a large number of topics being addressed. Generally, WG members commented that given the breadth of issues, an amendment was potentially a better fit because it provides more opportunity for public discourse, and more time to think through the issues. However, it was also noted that an amendment is a slower regulatory process than an addendum. The WG did not provide a recommendation on whether an amendment or an addendum is more appropriate given this was not part of their specific charge.