



Mid-Atlantic Fishery Management Council

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MEMORANDUM

Date: January 15, 2021
To: Chris Moore, Executive Director
From: Julia Beaty, staff
Subject: Next steps for Recreational Reform Initiative Framework/Addendum and Amendment

Introduction

The Mid-Atlantic Fisheries Management Council (Council) and the Atlantic States Marine Fisheries Commission (Commission) have discussed improvements to management of jointly managed recreational fisheries since 2018. In 2019 they formed a joint steering committee to develop strategies to increase management flexibility and stability in recreational management measures for summer flounder, scup, black sea bass, and bluefish.

In October 2020, the Council and the Commission's Policy Board passed the following motion initiating two management actions to address several prioritized topics associated with the Recreational Reform Initiative:

Move to initiate a joint framework/addendum to address the following topics for summer flounder, scup, black sea bass, and bluefish, as discussed today:

- *Better incorporate MRIP uncertainty into management*
- *Develop guidelines for maintaining status quo measures*
- *Develop a process for setting multi-year measures*
- *Consider changes to the timing of federal waters measures recommendations*
- *Harvest control rule*

and to also initiate an amendment to address recreational sector separation and recreational catch accounting such that scoping for the amendment would be conducted during the development of the framework/addendum.

Each topic is described in more detail on pages 6-18. Note that "better incorporate MRIP uncertainty into management" includes three specific topics, as described in more detail later in this document.

During the February 2021 joint meeting, the Council and Policy Board will discuss next steps for these actions, including their priority level compared to other ongoing actions for these four species. As an immediate next step, staff recommend formation of a working group to further develop the topics listed above under the framework/addendum (including those that may be

moved to a technical guidance document) prior to the next joint meeting of the Council and Policy Board. The working group could be tasked with further evaluating the following:

- Compliance of prioritized topics with Magnuson-Stevens Fishery Conservation and Management Act requirements. For example, can multi-year management measures and the Harvest Control Rule comply with the requirement for annual evaluation of catch limit overages?
- Which topics currently in the framework/addendum would not require changes to the Fishery Management Plans (FMPs) and therefore could instead be accomplished through a technical guidance document? A staff recommendation for technical guidance document topics is summarized below; however, additional consideration is needed regarding which topics may warrant consideration of changes to the accountability measures (AMs) or other parts of the FMPs and therefore would require a framework/addendum.
- If a wholesale change in management such as the Harvest Control Rule is identified as the highest priority for the Council and Policy Board, would this eliminate the need for some of the other prioritized topics? If so, should some topics not be further developed?
- Plans for further technical analysis and development of alternatives.

Working group membership could include Council, Commission, and Greater Atlantic Regional Fisheries Office (GARFO) staff and leadership, as well as additional individuals with expertise in Magnuson Act requirements, methodologies used by the Marine Recreational Information Program (MRIP), and federal and state management of these recreational fisheries.

During the next joint meeting of the Council and Policy Board, potentially in May 2021, the two groups could review progress made by the working group and further refine priorities and the planned timelines for completion of these actions.

To assist in the discussion in February, this document provides rationale for developing some topics through a technical guidance document rather than a framework/addendum, as well as example timelines and background information on all topics prioritized in October 2020.

Types of Management Actions

Staff recommend that some of the prioritized topics be developed through a technical guidance document, rather than a framework/addendum. Some topics are highly technical in nature and may not require changes to the FMPs, depending on the specific changes desired by the Council and Board. For example, guidelines for appropriate use of data could be adopted through a technical guidance document. However, a framework/addendum may be required if specific management responses to the data are considered, or if changes in how the data are used require changes to the AMs. Table 1 shows an example of which topics could potentially be addressed through a technical guidance document; however, this grouping may need to be revised after further evaluation of these topics to determine which topics may require or warrant a change to the FMPs. This grouping could be revisited during the next joint meeting of the Council and Policy Board.

Table 1: Example grouping of the prioritized Recreational Reform Initiative topics into three types of management actions. The grouping of the technical guidance document and framework/addendum topics may be revisited after further consideration of which topics may require or warrant a change to the FMPs.

Technical Guidance Document	Framework/Addendum	Amendment
<ul style="list-style-type: none"> • Develop a process for identifying and smoothing outlier MRIP estimates.* • Evaluate the pros and cons of using preliminary current year MRIP data.* • Develop guidelines for maintaining status quo measures. 	<ul style="list-style-type: none"> • Envelope of uncertainty approach for determining if changes to recreational management measures are needed.* • Develop process for setting multi-year recreational management measures. • Consider changes to the timing of recommending federal waters measures. • Harvest Control Rule proposal put forward by 6 recreational organizations. 	<ul style="list-style-type: none"> • Recreational sector separation. • Recreational catch accounting.

*When the Council and Board passed the motion on page 1, it was understood that “better incorporate MRIP uncertainty into management” addressed these topics.

Draft Timeline for Next Steps

Table 2 lists draft timelines for development of a technical guidance document, a joint framework/addendum, and a joint amendment to address the prioritized Recreational Reform Initiative topics. These timelines assume the Council and Board will develop some topics through a technical guidance document, rather than a joint framework/addendum. If this recommendation is not approved, then those topics would be developed through the framework/addendum and the timeline for the framework/addendum is likely to extend beyond that listed below.

The timelines in Table 2 also assume that the technical guidance document and framework/addendum are high priorities for the Council and Board over the next few years and the Recreational Reform amendment is a lower priority. The timeline for the amendment will depend on the refined scope of the action, which will be determined after the scoping period.

The timelines take into consideration other ongoing priority actions for these species and are feasible for Council staff. However, Commission and GARFO staff have raised concerns about their ability to meet these timelines given staff capacity and other priority actions for these four species.

Table 2: Draft timeline for next steps for development of a technical guidance document, joint framework/addendum, and joint amendment to address all prioritized Recreational Reform Initiative topics. These timelines assume the Council and Board develop some topics in a technical guidance document, rather than a framework/addendum, otherwise the timeline for the framework/addendum will likely be longer than that listed below. Bold text indicates a potential joint meeting. All dates are subject to change.

Date	Technical Guidance Document	Framework/Addendum	Amendment¹
Feb 2021	Council/Board discuss next steps. Working group formed to assist with analysis and development of topics.	Council/Board discuss next steps. Working group formed to assist with analysis and development of alternatives.	Council/Board discuss next steps and priority level.
Mar-Apr 2021	Working group further develops and analyzes topics.	Working group further develops and analyzes topics, considers plan for scoping. ²	--
May 2021	Council/Board review working group progress, refine list of topics in technical guidance document if necessary.	Council/Board review working group progress and refine list of topics in framework/addendum if necessary.	Council/Board review priority level for this action. FMAT/PDT formed (assuming action remains a priority.)
Jun-July 2021	Further technical development.	FMAT/PDT develops draft scoping document. ²	FMAT/PDT develops draft scoping document.
Aug 2021	Council/Board review progress.	Council/Board approve scoping document. ²	Council/Board approve scoping document and scoping plan.
Sep-Oct 2021	Working group completes development of draft document.	Scoping. ²	Scoping.

¹ This timeline assumes this amendment remains a high priority after further Council and Policy Board discussion in February and May 2021. If this amendment is not a high priority, the timeline would be extended.

² The Council and Board do not typically hold scoping periods for frameworks and addenda; however, the Harvest Control Rule, as proposed, requires extensive stakeholder input. See pages 10-11 for details. Specific management alternatives would not be developed prior to scoping. The intent of scoping would be to gather public input to help refine the scope of the action and to inform development of the alternatives, with an emphasis on the Harvest Control Rule. Additional public input on all alternatives in the framework/addendum will be sought after the complete range of alternatives is finalized.

Date	Technical Guidance Document	Framework/Addendum	Amendment¹
Nov 2021	MC considers for use in development of 2022 recreational measures, pending Council/Board approval in December.	FMAT/PDT reviews scoping comments and provides initial recommendations for types of alternatives to be further developed.	FMAT/PDT reviews scoping comments and provides initial recommendations for types of alternatives to be further developed.
Dec 2021	Council/Board consider approval of draft document.	Council/Board review scoping comments and FMAT/PDT recommendations; refine scope of action.	Council/Board review scoping comments and refine scope of action.
Early 2022	TC considers in development of state waters 2022 rec. measures.	FMAT/PDT further develops range of alternatives. AP meeting to review FMAT/PDT progress and recommend final range of alternatives.	FMAT/PDT develops alternatives.
Spring 2022	--	Council/Board approve final range of alternatives and draft addendum for public comment. Public hearings, if desired by states.	Council/Board review FMAT/PDT progress and provide guidance on further development of alternatives. FMAT/PDT further develops alternatives.
Summer 2022	--	FMAT/PDT and AP meetings to develop recommendations for final action. Council/Board take final action.	AP meeting to review FMAT/PDT progress and recommend final range of alternatives. Council/Board approve final range of alternatives.
Fall 2022	MC/TC and Council/Board consider for use in development of 2023 recreational management measures.	Framework/addendum documents completed by staff. Framework document submitted to NMFS for approval and implementation.	FMAT/PDT develops draft public hearing document and draft Commission amendment for public hearings.
Late 2022	recreational management measures.	Federal rulemaking process.	Council/Board approve documents for public hearings.
Early 2023			Public hearings.
Spring 2023	--	Potential federal implementation.	FMAT/PDT and AP meetings to develop recommendations for final action.
Summer 2023	--	--	Council/Board take final action.

Date	Technical Guidance Document	Framework/Addendum	Amendment ¹
Fall 2023	MC/TC and Council/Board consider for use in development of 2024 recreational management measures.	MC/TC and Council/Board consider for use in development of 2024 recreational management measures.	Staff complete amendment documents. Council document submitted to NMFS for approval and implementation
Early 2024			Federal rulemaking process.
Mid 2024	--	--	
Late 2024 or Jan 2025	--	--	Potential federal implementation.

Technical Guidance Document Topics

As described above, the following three topics could be further developed through a technical guidance document, pending further consideration of the specific changes desired. Each of these topics are described in more detail below.

- Develop a process for identifying and smoothing outlier MRIP estimates (part of the prioritized topic of “better incorporate MRIP uncertainty into management”).
- Evaluate the pros and cons of using preliminary current year MRIP data (part of the prioritized topic of “better incorporate MRIP uncertainty into management”).
- Develop guidelines for maintaining *status quo* recreational management measures.

Adopt a Process for Identifying and Smoothing Outlier MRIP Estimates

In recent years, the Commission’s Summer Flounder, Scup, and Black Sea Bass Technical Committee identified two MRIP black sea bass harvest estimates as outliers (i.e., New York 2016 wave 6 for all modes and New Jersey 2017 wave 3 private/rental mode only) and replaced them with smoothed estimates when developing state waters recreational management measures. These smoothed estimates have not been used in other parts of the management process, including the stock assessment, recreational harvest limit (RHL) and annual catch limit (ACL) overage evaluations, and the setting of federal waters recreational management measures.

The Monitoring and Technical Committees have not used statistical methods to identify potential outlier estimates for the other three species; however, they have addressed variability in the data for all four species in other ways such as using averages of multiple previous years when predicting future harvest under different management measures

The Council and Board agreed that it would be beneficial to adopt a standardized process for identifying and adjusting (if needed) outlier MRIP estimates. This process would be applied to both high and low outlier estimates as appropriate and could be used for all four species.

The Technical Committee used the Modified Thompson’s Tau approach to identify the two outlier black sea bass estimates. They used two different methods to smooth those estimates. They agreed that the appropriate method may vary on a case by case basis. If guidelines are adopted for standardizing the process of identifying and smoothing outlier MRIP estimates, it will be important for the Monitoring and Technical Committees to maintain the discretion to deviate from this process if they provide justification for doing so.

The process currently used by the Monitoring and Technical Committees to recommend recreational management measures is not codified in the FMPs; therefore, a change to this method would not require an FMP framework/addendum or amendment.

Evaluate the Pros and Cons of Using Preliminary Current Year Data

Each fall, Council staff develop projections of recreational harvest of summer flounder, scup, and black sea bass in the current year to compare against the upcoming year's RHL. These projections combine preliminary current year harvest estimates through wave 4 (i.e., through August) with the proportion of harvest by wave in one or more past years.³ The Monitoring Committee recommends the appropriate methodology in any given year. The data used (e.g., one or multiple previous years) varies on a case by case basis.

A different process is used for bluefish. Historically, expected bluefish recreational harvest has been evaluated when considering a recreational to commercial transfer. Expected bluefish harvest was typically based on the previous year or a multiple year average and did not account for preliminary current year data.

These different methodologies were developed based on Monitoring Committee guidance. The FMPs do not prescribe which data should be used to develop recreational management measures, beyond requiring use of the best scientific information available. The Council and Board wish to evaluate the appropriateness of using preliminary current year data and data from one or multiple previous years to project harvest for comparison against the upcoming year's RHL. If the Council and Board wish to provide guidance to the Monitoring and Technical Committees on which data to use, then this could be considered through a technical guidance document. However, if they wish to place restrictions on the use of certain types of data (e.g., preliminary current year data), then an FMP framework/addendum may be necessary.

Develop Guidelines for Maintaining Status Quo Recreational Management Measures

The Council and Board wish to consider standardized guidelines for comparing both recreational harvest data (all considerations described above related to outliers and preliminary data could apply) and multiple stock status metrics (biomass, fishing mortality, recruitment) when deciding if measures should remain unchanged. For example, poor or declining stock status indicators could require changes when status quo would otherwise be preferred. These guidelines would take into account existing FMP requirements, such as the accountability measures.⁴

The idea behind this concept is to establish a pre-determined, standardized checklist of metrics to evaluate when determining if recreational management measures can remain unchanged, should be more restrictive, or can be liberalized. For example, if projected recreational harvest falls within a pre-defined range above or below the next year's RHL (see next page), if recruitment and biomass trends are stable or increasing, if fishing mortality trends are stable or decreasing, and if fishing effort trends are stable or decreasing, then status quo management measures could be justified. Alternatively, if projected recreational harvest exceeds a pre-determined range above and below the RHL, if recruitment or biomass trends are declining, if fishing mortality is

³ In December 2020, MRIP announced new standards related to the dissemination of recreational catch and harvest estimates. Instead of publishing wave-level estimates, the estimates will now be published as cumulative estimates every two months. Wave-level estimates will continue to be available by request; therefore, this will not require a change to how the Monitoring Committee has typically projected current year harvest for summer flounder, scup, and black sea bass. More information is available at: <https://www.fisheries.noaa.gov/feature-story/noaa-fisheries-establishes-recreational-fishing-survey-and-data-standards>.

⁴ The summer flounder, scup, and black sea bass accountability measures are summarized in this document: https://www.mafmc.org/s/AMs-description_SF_scup-BSB_Dec2020.pdf.

above the target level, or if fishing effort shows increasing trends, then more restrictive management measures may be needed. Decisions related to future management measures will be more complicated when these indicators show a mix of positive and negative signals. Therefore, the Monitoring and Technical Committees should have the discretion to deviate from the pre-determined guidelines based on annual considerations and should provide justification for their recommendations.

The Recreational Reform Steering Committee referred to this as the “sign posts” method and drafted a preliminary example which was discussed at the October 2019 joint Council/Board meeting.⁵ However, other examples could be considered.

As previously noted, the FMPs do not prescribe which data should be used to develop recreational management measures, beyond requiring use of the best scientific information available. If the Council and Board wish to adopt guidelines on how to evaluate the available data, then this could be considered through a technical guidance document.

Framework/Addendum Topics

The following four topics could be further developed through a joint framework/addendum. Each of these topics are described in more detail below.

- Envelope of uncertainty approach for determining if changes to recreational management measures are needed (part of the prioritized topic of “better incorporate MRIP uncertainty into management”).
- Develop process for setting multi-year recreational management measures.
- Consider changes to the timing of federal waters measures recommendations.
- Harvest Control Rule proposal put forward by 6 recreational organizations.

Depending on the specific changes desired, it is possible that the envelope of uncertainty approach could be developed through a technical guidance document, rather than a framework/addendum. The working group may also determine that some of the items currently listed under the technical guidance document may require a framework/addendum. The Council and Board can further evaluate the scope of the framework/addendum based on the working group’s evaluation at a future joint meeting.

Envelope of Uncertainty Approach for determining if Changes to Recreational Management Measures are Needed

Under this approach, a pre-defined range above and below the projected harvest estimate (e.g., based on percent standard error) would be compared against the upcoming year’s RHL. If the RHL falls within the pre-defined range above and below the projected harvest estimate, then no changes would be made to management measures.

In some recent years, the Monitoring and Technical Committees have recommended maintaining status quo measures for black sea bass and summer flounder based on percent standard error (PSE) values associated with MRIP estimates. The intent behind the envelope of uncertainty approach is to develop a standard, repeatable, and transparent process to be used each year, rather than an ad hoc process. The Monitoring and Technical Committees would maintain the discretion to deviate from this process if they saw sufficient justification to do so.

This approach could be used in combination with other topics listed in this document, such as the process for identifying and smoothing outlier MRIP estimates, considerations related to the use

⁵ See the briefing materials, presentation, and webinar recording available at: <https://www.mafmc.org/briefing/october-2019>.

of preliminary current year data, and considerations related to the timing of the recommendation for federal waters management measures.

The 2013 Omnibus Recreational Accountability Measures Amendment considered a similar approach using confidence intervals around catch estimates to determine if the recreational ACL had been exceeded; however, that amendment proposed using only the lower bound of the confidence interval, rather than the upper and lower bounds. For this reason, that portion of the amendment was disapproved by NOAA Fisheries.

Develop Process for Setting Multi-Year Recreational Management Measures

The FMPs allow recreational catch and harvest limits to be set for up to three years at a time. However, each year the Council and Board consider recent data on recreational catch and harvest as well as updated stock status information, if available, before determining if the recreational possession limits, fish size limits, and open/closed seasons should be modified to ensure that the following year's RHL can be met but not exceeded. These annual considerations can result in frequent adjustments to the recreational management measures. Some Council and Board members have called this "chasing the RHL." This can be especially frustrating to stakeholders when availability is high and there is not a perceived conservation need to adjust the measures.

To address these issues, the Council and Board wish to further develop and evaluate a process for setting recreational management measures that would be in place for two years at a time, with a strong commitment among all state and federal managers to making no changes in the interim year. This would include restricting the use of conservation equivalency to make adjustments to management measures through the Commission process in the interim year. This would also include not reacting to new data that would otherwise allow for liberalizations or require restrictions. The Council and Board would react to these data when developing new recreational management measures for the following two years. The considerations described in the previous section regarding guidelines for maintaining status quo measures would not apply in the interim year. The Recreational Reform Steering Committee drafted a preliminary example process which was discussed at the October 2019 joint Council/Board meeting.⁶

An FMP framework/addendum would be required to allow for the use of multi-year recreational management measures in this way. For example, changes to the current accountability measure regulations would be needed. Additional considerations are needed regarding the Magnuson Act requirements for annual ACL overage evaluation.

Consider Changes to the Timing of Recommendations for Federal Waters Recreational Management Measures

Table 3 lists the timeline for development and implementation of recreational management measures for summer flounder, scup, and black sea bass in recent years. The timeline for bluefish has differed as preliminary current year data have not typically been used for bluefish.

The Council and Board wish to further evaluate the pros and cons of adopting federal waters recreational management measures in December (as is current practice for summer flounder, scup, and black sea bass), as opposed to earlier in the year, such as October or August. If the approach described above for multi-year management measures is used, these decisions would be made every other August, October, or December, rather than every year.

⁶ See the briefing materials, presentation, and webinar recording available at: <https://www.mafmc.org/briefing/october-2019>.

The current process of recommending federal waters measures for the upcoming year in December can pose challenges for implementing needed changes in both federal and state waters in a timely and coordinated manner. It also limits how far in advance for-hire businesses can plan their trips for the upcoming year.

In recent years, changes to the federal recreational measures for summer flounder, scup, and/or black sea bass have not been implemented until May-July of the year in which the changes are needed. Adopting recommendations for federal waters measures in August or October could allow for changes to be implemented earlier in the year; however, less information on current year fishery performance would be available for consideration.

The current regulations associated with the recreational management measures for these species do not specify the time of year at which these decisions must be made. However, a change to this timeline would impact certain parts of the FMPs which are not defined in regulations. For example, Frameworks 2, 6, and 14 to the Summer Flounder, Scup, and Black Sea Bass FMP include annual timelines for using conservation equivalency to consider if the federal waters recreational management measures for summer flounder (Frameworks 2 and 6) and/or black sea bass (Framework 14) should be waived in favor of state waters measures. For this reason, any changes to the timing of the federal waters measures recommendation should be done through a framework/addendum and cannot be addressed through a technical guidance document.

Table 3: Timeline for development and implementation of state and federal waters recreational management measures for summer flounder, scup, and black sea bass in recent years.

Month	Action
August	Council/Board set or review next year’s recreational catch and harvest limits.
November	Monitoring Committee uses preliminary current year MRIP data through wave 4 to project the full current year’s harvest for comparison against the next year’s RHL. The Monitoring Committee recommends changes to recreational management measures, if needed.
December	Council/Board adopt federal waters recreational management measures for the following year and agree on the overall level of reduction or liberalization (if any) to be achieved by the combination of all state and federal waters measures in the following year.
January - April	States develop and Board reviews and approves state waters recreational management measures for the current year.
May - July	Changes to federal waters measures implemented.

Harvest Control Rule

Six recreational fishing organizations submitted a proposal called a Harvest Control Rule through the scoping period for the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment.⁷ This was originally put forward as an allocation proposal; however, after considering the advice of the FMAT and the Recreational Reform Steering Committee, the Council and Board agreed that the allocation aspects of this proposal are not feasible under the Magnuson Act. They expressed an interest in further considering the aspects of the proposal which address the setting of recreational management

⁷ The full proposal can be found on pages 147-152 of this document: https://www.mafmc.org/s/Tab02_SFSBSB-ComRec-Allocation-Amd_2020-05.pdf.

measures, considered independently from the commercial/recreational allocation aspects of the proposal. Specifically, they wished to further evaluate the proposal's recommendation for pre-determined recreational management measure "steps" associated with different biomass levels.

The conceptual idea behind this part of the proposal is to determine a range of pre-defined management measures which would be used at different biomass levels. The upper and lower bounds of these management measure "steps" would be informed by input from recreational stakeholders. The proposal states that the most liberal step would include the most liberal set of measures preferred by anglers when biomass is high. The proposal suggests that beyond a certain level, anglers do not "need" a smaller minimum fish size, higher bag limit, or longer open season. The most conservative step would include the most restrictive measures which could be tolerated without major loss of businesses such as bait and tackle shops and party/charter businesses. The proposal also suggests that there is a point at which making measures more restrictive no longer has a conservation benefit. These ideas are conceptual at this stage and have not been fully developed or analyzed. Fully developing these concepts would require extensive stakeholder input to meet the intent of the proposal.

The Magnuson Act requires that ACLs be set each year in pounds or numbers of fish, and that each ACL have associated AMs to prevent exceeding the ACL and to trigger a management response if an ACL is exceeded. The FMP must define a way to measure total removals (total dead catch) and to evaluate performance relative to an ACL set in numbers of fish or pounds. This does not mean it is impossible to start with preferred measures and translate those into catch, but managers are still required to demonstrate that catch associated with the measures is not expected to exceed the ACL. Ultimately, managers must demonstrate that measures are expected to prevent overfishing.

To comply with these Magnuson Act requirements, each set of recreational measures should be clearly associated with projected catch levels. One concern with this approach is the feasibility of accurately predicting catch levels at each of the management measure steps. Even when recreational measures have remained similar across years, the resulting MRIP estimates have sometimes varied significantly. Total dead catch can vary substantially with external factors such as changing total and regional availability, recruitment events, or changing effort based on factors other than management measures. For these reasons, the pre-determined management measure steps, especially the upper and lower bounds, would be a starting point for consideration and would need to be regularly re-evaluated. The Council and Board could not commit to maintaining recreational management measures within a pre-determined range; however, the range could be put forward as a target.

The proposal suggests that higher levels of biomass correspond to higher levels of access, which could allow for liberalization of recreational measures. However, under current recreational fishery capacity, effort and catch can scale with biomass and availability, in some cases even under highly restrictive recreational measures. This complicates the assumption that recreational measures can liberalize when biomass increases. In addition, changes in the recreational fishery over time (e.g., general effort increases, species-specific effort changes, legal/policy constraints, and improved technology for targeting fish) further complicate the assumption that past recreational measures can be used to estimate expected future catch.

However, there are benefits to the transparency provided by a tiered management approach with clearly defined measures at each level. Additional exploration of the relationship between the effectiveness of recreational management measures and estimated biomass would also be worthwhile.

Amendment Topics

Recreational Sector Separation

Recreational sector separation would entail managing the for-hire components of the recreational fisheries separately from anglers fishing on private or rental boats and from shore.

Recreational sector separation could be considered through either separate allocations to the for-hire sector and private anglers (including anglers fishing from private or rental boats and from shore), or as separate management measures for the two recreational sectors without a fully separate allocation, as summarized below.

Sub-Allocation of the Recreational Annual Catch Limit or RHL

This option would specify within the FMP a percentage allocation to the for-hire recreational sector of either the ABC, the recreational ACL, or the RHL. There are several potential ways in which a separate allocation could be created as described below and illustrated in Figure 1. The differences between some options are nuanced, and the pros and cons of each approach should be further explored.

- A. Current FMPs:** The ABC is divided into the recreational ACL and the commercial ACL for summer flounder, scup, and black sea bass and the recreational ACT and commercial ACT for bluefish. Projected recreational discards are removed from the recreational ACL/ACT to derive the RHL. Both the private and for-hire recreational sectors are held to a single combined ACL/ACT and RHL. Evaluation of potential overages, and consequences for those overages, are considered for all recreational modes combined.
- B. Separate ACLs:** Under this approach, the ABC would be allocated three ways: into a private recreational ACL, a for-hire recreational ACL, and a commercial ACL. This method would require development of these three allocations, as well as separate AMs for the private recreational and for-hire sectors. The FMAT for the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment does not recommend this approach as it would impact the commercial allocation.
- C. Recreational Sub-ACLs:** Under this approach, the ABC would remain divided into the recreational ACL and commercial ACL based on the allocation approach defined in the FMPs. The recreational ACL would be further allocated into private and for-hire sub-ACLs. This would require development of separate AMs for the private recreational and for-hire sectors. The FMAT for the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment recommended further development of this approach as it would maintain separation of the recreational sectors from the commercial sector, it allows for consideration of different discard trends by each recreational sector, and it allows for the full separation of accountability for overages (as opposed to separate RHLs, described below).
- D. Separate RHLs:** Under this approach, the private and for-hire sectors would remain managed under a single recreational ACL. Separate RHLs could be developed for each sector for the purposes of determining management measures. Accountability under this option would likely be partially at the RHL level as performance to the RHL could be evaluated for each recreational sector for the purposes of adjusting future management measures to constrain harvest to the RHL, and partially at the ACL level (in the sense that AMs must be established at the ACL level). This approach includes separate management of harvest only; dead discards are not included in RHLs and would be accounted for at

the ACL level. Separation at the RHL level does not represent full separation and would need to include joint accountability to a combined recreational ACL, which could be problematic if one sector contributes more to an overage than the other.

Note that any approach creating separate ACLs or sub-ACLs would require the development of corresponding separate AMs.

In addition to determining where sector separation occurs, consideration should be given to which data sources and methods to use for sector allocation, including:

- How to use MRIP and/or VTR data in the allocations;
- Whether to allocate using catch (landings and dead discards) or harvest (related to the question of whether to allocate at the ACL or RHL level);
- Whether to allocate in numbers of fish or pounds;
- The base years or other method of evaluating this recreational sector data.

Many scoping comments expressed an interest in sector separation to make better use of for-hire VTR data, which some stakeholders perceive as being more accurate than the MRIP for-hire estimates since vessels with federal for-hire permits are required to submit VTRs for every trip. However, there are also concerns about the accuracy of self-reported VTR data. In addition, VTR data include estimates of numbers of fish, but not weight of fish, so incorporating VTR data into allocations would require either establishing allocations in numbers of fish, developing a method to estimate weights of harvested and discarded fish from the numbers reported on VTRs, or adding a required data field for weight to VTRs. On average, for-hire VTR harvest is lower than the MRIP for-hire estimates since 1995 (Figure 2).

Most states do not require state-only permitted vessels to submit VTRs and data from these groups would be missing if VTRs were used to determine for-hire allocations. Data from some state-specific VTR programs (e.g., New York) are incorporated into the MRIP estimates of for-hire effort; however, they are not incorporated into the MRIP estimates of catch as they have not been validated.

The FMAT for the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment noted that there is currently some "borrowing" of data between the private angler and for-hire fisheries in the MRIP estimation process. For-hire estimation by MRIP incorporates some information from VTRs. While separate estimates for each recreational sector could serve as a basis for managing them separately, if the sectors were split completely, improvements would likely be needed in the sampling efforts for both sectors. Currently, much of the for-hire sampling for summer flounder, scup, and black sea bass is focused on discards, which provides information on the length of discarded fish that contributes to the discard estimates for the entire recreational fishery. Many of the length measurements for landings come from private anglers, which influences the mean weight of landed fish used to generate recreational harvest estimates.

Separate dead discard estimates in weight are not currently available by recreational sector. Technically it would be possible to generate these estimates, but it may not be entirely defensible. Calculation of sub-allocation options could use total dead catch in numbers of fish (for catch-based allocations for separate ACLs or sub-ACLs), or total harvest in numbers of fish or pounds (for harvest-based allocations for separate RHLs). Example allocations based on harvest in numbers of fish are shown in Table 4.

The uncertainty in the recreational data by mode is an important consideration when determining if sector separation is appropriate. Because the uncertainty in the MRIP data increases as it is

broken down by wave, state, and mode, the Council and Board would need to consider whether the benefits of sector separation outweigh the drawback of increased uncertainty when using mode-specific data to set and evaluate catch limits and recreational measures. Considerations related to identifying and smoothing outlier MRIP estimates, as described earlier in this document, could also apply to this topic.

As an example, MRIP percent standard errors (PSEs) were queried for the North and Mid-Atlantic regions (Maine through Virginia) for all for-hire modes combined and private/rental/shore modes combined for summer flounder, scup, and black sea bass. Table 5 shows that the PSEs increase for the for-hire mode when separated from the combined mode data. PSEs for the private/shore modes combined are slightly higher than those for all modes combined, but there is less of a difference from the combined modes PSEs given that private and shore estimates account for most harvest of these species. PSEs also vary by species.

There are no comparable estimates of uncertainty for VTR data because these data are not an expanded estimate associated with sampling uncertainty.

Separate Management Measures for For-Hire vs. Private/Rental and Shore Modes Without Separate Allocations

Rather than creating a separate allocation for the for-hire sector, a degree of sector separation could be achieved by setting different management measures to account for the differing priorities and data for for-hire vs. private anglers (including the private/rental and shore modes).

Separate management measures by recreational sector are currently used in the bluefish fishery in federal and state waters and in a limited manner in state waters for scup and black sea bass. Massachusetts, Rhode Island, Connecticut, and New York use different scup possession limits for the for-hire sector at certain times of year. Connecticut has a different black sea bass possession limit for for-hire vessels during a certain time of the year.

It could be beneficial to develop a policy for how sector-specific measures should be developed, how accountability should be evaluated, and how adjustments would be applied to both recreational sectors. Such a policy could clarify the process for stakeholders and managers, reducing process uncertainty and increasing transparency when setting recreational measures.

Creating a policy for separate measures for for-hire vs private anglers does not require an amendment. This could possibly be done through specifications, or if not, through a framework/addendum. If separate allocations were created (see previous section), describing the process for setting separate recreational measures would be an inherent part of that option.

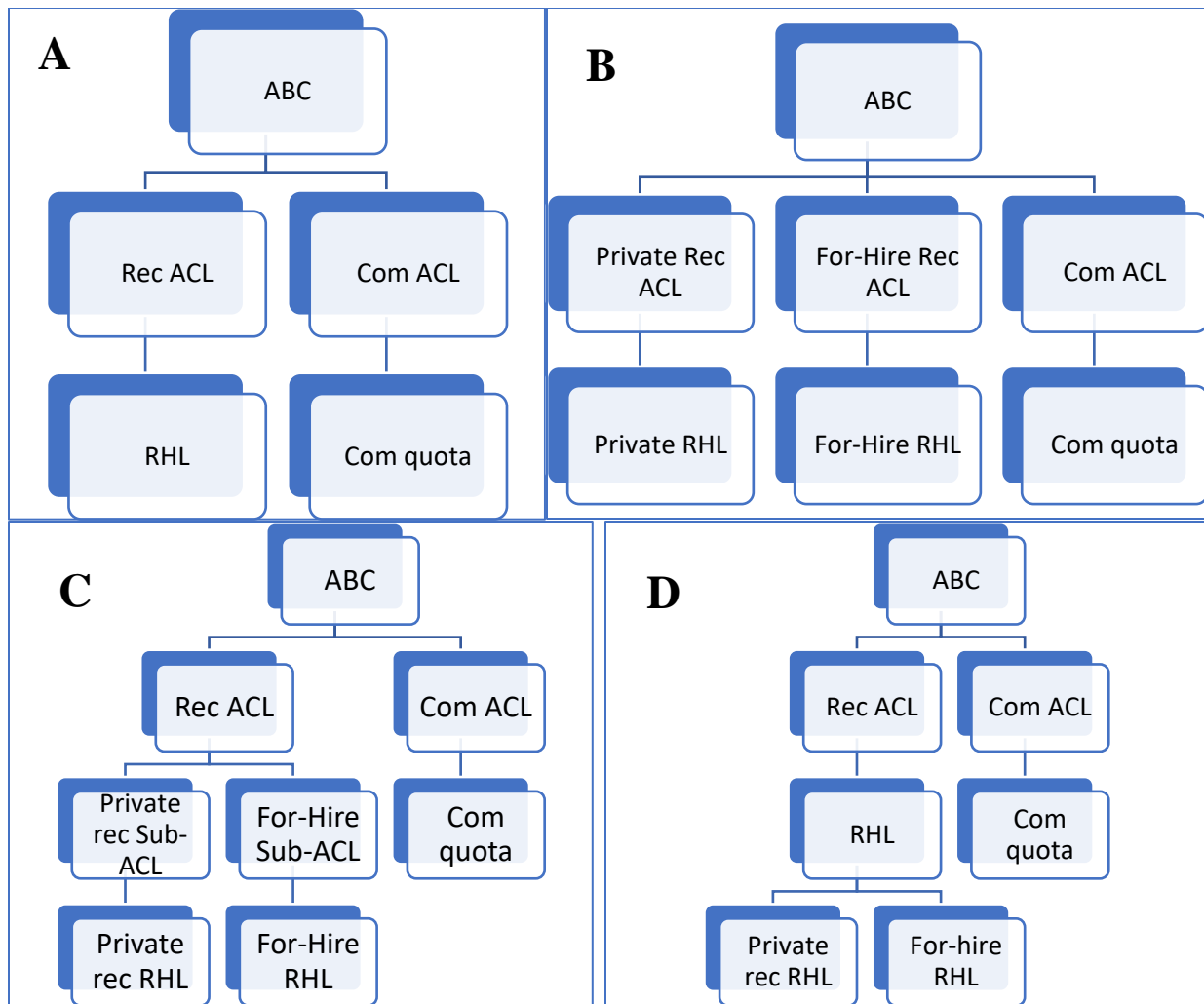


Figure 1: Conceptual flowcharts of potential recreational sector separation configurations including A) status quo, B) separate ACL allocations, C) sub-ACL allocations, and D) separate RHLs. This figure is based on the current management program for summer flounder, scup, and black sea bass. The commercial/recreational allocation for bluefish currently occurs at the ACT level.

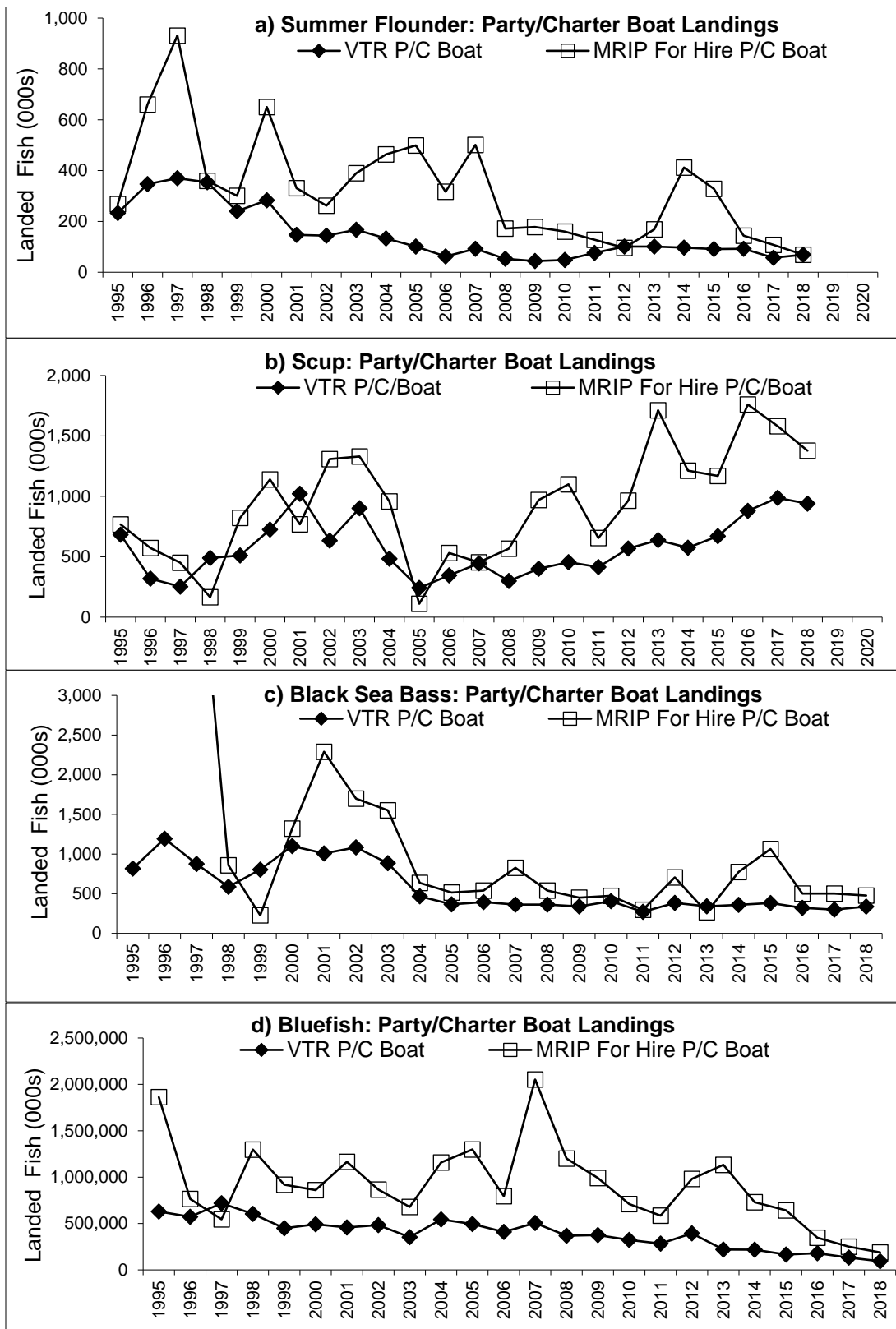


Figure 2: Comparison of federal party/charter vessel VTR estimates of landed fish vs. MRIP estimated for-hire landed fish, 1995-2018, for a) summer flounder, b) scup, c) black sea bass, and d) bluefish.

Table 4: Example approaches for calculating separate sub-allocations to private (i.e., private/rental and shore mode) and for-hire sectors, based on harvest in numbers of fish.

Species	Approach	Years	Private	For-Hire
Summer Flounder	5 most recent years through 2018	2014-2018	94%	6%
	10 most recent years through 2018	2009-2018	95%	5%
	15 most recent years through 2018	2004-2018	95%	5%
Scup	5 most recent years through 2018	2014-2018	89%	11%
	10 most recent years through 2018	2009-2018	88%	12%
	15 most recent years through 2018	2004-2018	88%	12%
Black Sea Bass	5 most recent years through 2018	2014-2018	86%	14%
	10 most recent years through 2018	2009-2018	87%	13%
	15 most recent years through 2018	2004-2018	82%	18%
Bluefish	5 most recent years through 2018	2014-2018	97%	3%
	10 most recent years through 2018	2009-2018	96%	4%
	15 most recent years through 2018	2004-2018	95%	5%

Table 5: MRIP PSEs for total catch in numbers of fish, North and Mid-Atlantic (Maine through Virginia) for summer flounder, scup, and black sea bass by mode, 2004-2019.

Year	Summer Flounder			Scup			Black Sea Bass		
	All For-Hire	Private/Shore	All modes	All For-Hire	Private/Shore	All modes	All For-Hire	Private/Shore	All modes
2004	13.8	5.9	5.7	28.4	15.4	14.4	19.7	16.3	14.2
2005	11.3	7.4	7.1	27.1	19.6	19.1	16.9	12.4	11
2006	16.8	8	7.7	18.1	16.1	15.4	15.3	11.1	9.8
2007	10.9	6.7	6.4	16.5	15.3	14.3	10.4	10.9	9.2
2008	10.1	6.5	6.3	16.8	11.6	10.5	9.5	15.7	14.4
2009	10.1	5.8	5.7	15.1	11.5	10.6	10.3	10.2	9.3
2010	12.6	6.8	6.7	24.8	10.4	9.8	12.0	23.2	21.8
2011	9.3	6.6	6.5	18.8	15.2	14.5	12.4	10.5	9.7
2012	9.9	11.3	11.1	16.4	12.3	11.3	10.1	9.7	9.1
2013	12.9	8.2	8.0	7.9	11.7	10.6	6.8	9	8.5
2014	18.2	8.6	8.2	17.8	10.5	9.7	13.5	8.4	7.6
2015	12.2	8	7.7	14.0	15.6	14.8	12.0	10.2	9.1
2016	8.5	8	7.8	10.6	10.5	10.0	7.1	8.5	7.9
2017	13.5	10.7	10.4	8.0	13.5	12.7	6.6	11.8	11.1
2018	8.7	6.6	6.4	9.2	8.6	8.1	9.6	6.3	5.7
2019	12.6	8.8	8.6	10.7	6.7	6.1	8.7	6.5	5.9
AVG	11.9	7.7	7.4	16.6	13.2	12.4	11.5	11.6	10.6

Recreational Catch Accounting

The theme of improved recreational catch accounting was prominent in many scoping comments for the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment. Examples of changes recommended through scoping are listed below. The intent behind these recommendations is to reduce uncertainty in the recreational data. It is worth noting that MRIP is currently considered the best scientific information available for the recreational fisheries and will continue to be used for stock assessments and catch limit evaluations for the foreseeable future. MRIP is a national-level program and the Council and Commission have a very limited ability to influence changes to the MRIP estimates.

- **Private angler reporting:** Private angler reporting has been explored in specific fisheries in other regions, and as of August 2020 is required in this region for bluegill and golden tilefish. Consideration could be given to the feasibility of private angler reporting for summer flounder, scup, black sea bass, and bluefish given that these fisheries take place in state and federal waters, from shore and from private and for-hire vessels, and that there are millions of directed trips per year for each species (e.g., an estimated 8.7 million angler trips for which summer flounder was the primary target, 2.7 million for which scup was the primary target, 1.4 million for which black sea bass was the primary target, and 5.3 million for which bluefish was the primary target in 2019). Given the scale of these recreational fisheries, mandatory private angler reporting may be a challenge to implement. Thorough consideration should be given to the potential levels of non-compliance and how this may impact the resulting data. Lessons learned from other private angler reporting programs should be evaluated and considered.
- **Tagging programs:** A few scoping comments suggested that anglers be issued tags for a specific number of fish each year. Tagging programs are used in some recreational fisheries, but they may be more appropriate for species with much lower harvest levels than summer flounder, scup, black sea bass, and bluefish. Consideration should be given to the pros and cons of moving forward with this approach compared to a traditional possession limit, especially considering the millions of targeted recreational trips for these species. Ensuring that the program is fair and equitable is a challenge. For example, consideration would need to be given to who receives tags, how they are distributed, and how the program is administered.
- **Mandatory tournament reporting:** A few scoping comments recommended mandatory catch reporting for recreational fishing tournaments. During the May 2020 joint meeting, one Council/Board member questioned the value of mandatory reporting for tournaments given that tournament catch likely constitutes a very small percentage of total catch. An evaluation of summer flounder, scup, black sea bass, and bluefish catch in tournaments has not been performed and may be complicated by the lack of a centralized list of tournaments which would catch these species. Tournament catch of these species is included in the MRIP estimates, but is not specifically designated as tournament catch.
- **Enhanced VTR requirements:** A few scoping comments recommended additional VTR requirements, such as requiring VTRs for for-hire vessels that do not have federal permits and reinstating “did not fish” reports for federal permit holders to better understand fishing effort.