

# Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment

## Draft Range of Alternatives and FMAT Recommendations, July 2020

The Fishery Management Action Team (FMAT) met on July 15, 2020 to recommend specific draft alternatives based on the approaches retained for consideration by the Council and Board at their June 2020 meeting. At their August 12 meeting, the Council and Board plan to approve a range of alternatives for inclusion in a public hearing document.

FMAT-recommended alternatives, as well as comments and considerations for each category, are described below for 1) modified commercial/recreational allocation percentages, 2) recreational sector separation, 3) transfer provisions, and 4) framework provisions. The basis for the approaches included here are described in more detail in the summary of the May 2020 FMAT meetings, available at [https://www.mafmc.org/s/Tab03\\_SFSBSB-ComRecAllocationAmd\\_2020-06.pdf](https://www.mafmc.org/s/Tab03_SFSBSB-ComRecAllocationAmd_2020-06.pdf).

Additional potential configurations of alternatives considered by the FMAT but not recommended for the range of alternatives are listed in Appendices B-D.

### 1) Modified Commercial/Recreational Allocation Percentages

#### a) Summer Flounder

The FMAT recommends consideration of the following specific alternatives for revised commercial/recreational summer flounder allocation percentages. Some alternatives use allocations at the catch level (acceptable biological catch or ABC), while others allocate at the landings level (total allowable landings or TAL). Appendix A includes additional information about catch vs. landings based allocations. The current allocations for summer flounder are landings-based. Under landings-based alternatives, discards would continue to be split by sector based on recent discard trends after considering Monitoring Committee (MC) recommendations. Under catch based allocations, discards are accounted for in the allocations. **Because discards would be split differently under catch vs. landings based approaches, the percentages under these two categories of approaches are not directly comparable** in terms of their resulting catch and landings limits (see Appendix A for additional details).

The alternatives in this section are mutually exclusive, meaning the Council and Board can only choose one of the alternatives from 1a-1 through 1a-7.

#### i) Summer Flounder Catch Based Percentages

Alternative	Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)
1a-1: <b>44%</b> commercial, <b>56%</b> recreational	2004-2018 base years
1a-2: <b>43%</b> commercial, <b>57%</b> recreational	Supported by multiple approaches (i.e., 2009-2018 base years, approximate status quo harvest per sector compared to 2017/2018, and average of other approaches approved by Council/Board in June 2020)
1a-3: <b>40%</b> commercial, <b>60%</b> recreational	2014-2018 base years

*ii) Summer Flounder Landings Based Percentages*

<b>Alternative</b>	<b>Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)</b>
1a-4: <b>60%</b> commercial, <b>40%</b> recreational	No action/status quo (1980-1989)
1a-5: <b>55%</b> commercial, <b>45%</b> recreational	Same base years, new data (1981-1989; 1980 data unavailable)
1a-6: <b>45%</b> commercial, <b>55%</b> recreational	Multiple approaches: 2009-2018 and 2004-2018 base years
Alt 1a-7: <b>41%</b> commercial, <b>59%</b> recreational	(2014-2018 base years)

**b) Scup**

The FMAT recommends consideration of the following specific alternatives for revised commercial/recreational scup allocation percentages. As described above, both catch and landings based options are considered. The percentages under these options are not directly comparable due to differences in how discards are addressed under catch based allocations and landings based allocations. The current allocation for scup is catch based.

The alternatives in this section are mutually exclusive, meaning the Council and Board can only choose one of the alternatives from 1b-1 through 1b-7.

*i) Scup Catch Based Percentages*

<b>Alternative</b>	<b>Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)</b>
Alt 1b-1: <b>78%</b> commercial, <b>22%</b> recreational	No action/status quo
Alt 1b-2: <b>65%</b> commercial, <b>35%</b> recreational	Same base years, new data (1988-1992)
Alt 1b-3: <b>61%</b> commercial, <b>39%</b> recreational	Multiple approaches: 2009-2018 base years and average of other approaches approved by Council/Board in June 2020
Alt 1b-4: <b>59%</b> commercial, <b>41%</b> recreational	Approximate status quo harvest per sector compared to 2018/2019

*ii) Scup Landings Based Percentages*

<b>Alternative</b>	<b>Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)</b>
Alt 1b-5: <b>57%</b> commercial, <b>43%</b> recreational	Multiple approaches: Same base years, new data; 2014-2018 base years; 2009-2018 base years
Alt 1b-6: <b>56%</b> commercial, <b>44%</b> rec	2004-2018 base years
Alt 1b-7: <b>50%</b> commercial, <b>50%</b> recreational	Approximate status quo harvest per sector compared to 2018/2019

**c) Black Sea Bass**

The FMAT recommends consideration of the following specific alternatives for revised commercial/recreational black sea bass allocation percentages. As described above, both catch and landings based options are considered. The percentages under these options are not be directly comparable due to differences in how discards are addressed under catch based allocations and landings based allocations. The current allocation for black sea bass is landings based.

The alternatives in this section are mutually exclusive, meaning the Council and Board can only choose one of the alternatives from 1c-1 through 1c-7.

*i) Black Sea Bass Catch Based Percentages*

<b>Alternative</b>	<b>Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)</b>
Alt 1c-1: <b>32%</b> commercial, <b>68%</b> recreational	Attempt to maintain close to status quo harvest per sector compared to 2018/2019
Alt 1c-2: <b>28%</b> commercial, <b>72%</b> recreational	2004-2018 base years
Alt 1c-3: <b>24%</b> commercial, <b>76%</b> recreational	2009-2018 base years

*ii) Black Sea Bass Landings Based Percentages*

<b>Alternative</b>	<b>Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)</b>
Alt1c-4: <b>49%</b> commercial, <b>51%</b> recreational	No action/status quo
Alt 1c-5: <b>45%</b> commercial, <b>55%</b> recreational	Same base years, new data (1983-1992)
Alt 1c-6: <b>29%</b> commercial, <b>71%</b> recreational	Attempt to maintain close to status quo harvest per sector compared to 2018/2019 and average of other approaches approved by Council/Board in June 2020
Alt 1c-7: <b>22%</b> commercial, <b>78%</b> recreational	2009-2018 and 2014-2018 base years

**FMAT Comments for Allocation Percentages for All Three Species**

The FMAT agreed that the percentage allocation alternatives taken out to public hearings should define a reasonable range and should also include specific options from within that range. The FMAT did not think it would be appropriate to include only a high and low option with the understanding that the Council and Board could choose any final allocation percentages from within that range. They agreed that each alternative taken out to public hearings should have a clearly stated basis. This would not preclude public comments from recommending other allocation percentages and it would not prevent the Council and Board from choosing a different option from within the range with appropriate justification. It would, however, make it clear which alternatives are supported by a justification discussed by the FMAT.

One FMAT member noted that some of the retained alternatives for catch and landings-based allocations have the same basis. The FMAT agreed that this could be beneficial, but it is not necessary to retain the same basis for each category when determining the final range of alternatives.

The FMAT agreed that it would be helpful to include an appendix in the public hearing document showing examples of how the commercial quotas and RHLs could be impacted under each retained alternative. This would allow for easier comparisons across alternatives, especially between catch and landings-based alternatives which are not directly comparable when considering only the allocation percentages. However, translating the allocations into a commercial quota and RHL will require assumptions about how total and sector-specific discards are projected.

The FMAT was generally in agreement that **catch-based allocations are preferable to landings-based allocations**. Under catch-based allocations, discards in one sector do not directly impact the catch or landings limits in the other sector. One FMAT member noted that the ABC and ACLs include discards, and accountability measures also must consider dead discards. As such, discards are already an important consideration in management and catch-based allocations would therefore be more consistent with these other aspects of the management process. However, the stock assessment projections cannot currently project commercial and recreational discards separately, so assumptions and recent trends would still need to be used in the projection of sector specific discards under both catch and landings based approaches. Revising the projection methodology would be a major undertaking, most appropriate for a peer-reviewed process such as a research track assessment.

#### d) Phase-in Allocation Changes Over a Set Number of Years

If the Council and Board approve modifications to any of the commercial/recreational allocations, they could also choose to phase in changes over a set number of years by adopting one of the alternatives below. As currently structured, these phase-in alternatives could apply to any or all of the three species. The Council and Board could apply different phase-in alternatives to different species if desired.

<b>Alternative</b>
Alt 1d-1: No phase-in (no action/status quo)
Alt 1d-2: Allocation change evenly spread over 2 years
Alt 1d-3: Allocation change evenly spread over 3 years
Alt 1d-4: Allocation change evenly spread over 5 years

The impacts of these phase-in alternatives on the magnitude of allocation changes per year will depend on the specific allocation change for each species. Based on the current FMAT-recommended range of alternatives for allocation percentages across the three species, the commercial and recreational sector allocations could change by as much as 13.5% per year, or as little as 0.8% per year under the above phase-in timeframes of 2-5 years. Examples of how these phase-in alternatives would function under the largest and smallest possible allocation changes could be provided in a public hearing document based on the range of alternatives selected by the Council and Board.

#### *FMAT Comments for Phase-in Allocation Changes*

The FMAT agreed that the alternatives listed above are more straightforward than designating a maximum percent change per year. They also agreed that 2, 3, and 5 years were an appropriate range of alternatives under this approach. One FMAT member added that 5 years is usually considered the reasonably foreseeable future timespan for NEPA cumulative effects analyses and felt it was an appropriate maximum number of years to phase-in allocation changes. Another FMAT member noted that the largest change in allocations listed in section 1A-1C above would be a 27% shift in allocation. If this were to be selected, a 5 year phase-in approach could help reduce the annual change in allocation to a

more reasonable 5% change per year. One FMAT member cautioned that the reason for this action is to resolve a pressing management issue, and a longer phase-in period would likely mean a delay in fully addressing these issues.

The FMAT also discussed that the Council and Board may choose to select different phase-in alternatives for different species so example outcomes by species under different allocation changes may be useful to include in the public hearing document.

## 2) Recreational Sector Separation Alternatives

FMAT-recommended alternatives for recreational sector separation are listed below. All these draft alternatives are based on sector separation at the sub-ACL level, meaning that a single recreational ACL would be further sub-divided into for-hire and private/shore sub-ACLs. Each sub-ACL would have separate accountability for their catch, including harvest and dead discards. The FMAT's rationale for this recommended structure is described below. Additional discussion of the differences between potential recreational sector separation structures, as well as additional options considered by the FMAT for allocations between recreational sectors, are described in Appendix D.

### a) Summer Flounder

<b>Alternative</b>	<b>Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)</b>
Alt 2a-1: No sector separation for summer flounder	No action/status quo
Alt 2a-2: Separate rec. sub-ACLs with <b>96%</b> of rec. ACL to private/shore, <b>4%</b> to for-hire	2009-2018 and 2004-2018 MRIP dead catch in numbers of fish
Alt 2a-3 Separate rec. sub-ACLs with <b>94%</b> of rec. ACL to private/shore, <b>6%</b> to for-hire	1981-2018 MRIP dead catch in numbers of fish

### b) Scup

<b>Alternative</b>	<b>Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)</b>
Alt 2b-1: No sector separation for scup	No action/status quo
Alt 2b-2: Separate rec. sub-ACLs with <b>91%</b> of rec. ACL to private/shore, <b>9%</b> to for-hire	1981-2018 and 2014-2018 MRIP dead catch in numbers of fish
Alt 2b-3: Separate rec. sub-ACLs with <b>90%</b> of rec. ACL to private/shore, <b>10%</b> to for-hire	2004-2018 MRIP dead catch in numbers of fish

### c) Black Sea Bass

Alternative	Basis (refer to <a href="#">May FMAT Meeting Summary</a> for more detail)
Alt 2c-1: No sector separation for black sea bass	No action/status quo
Alt 2c-2: Separate rec. sub-ACLs with <b>90%</b> of rec. ACL to private/shore, <b>10%</b> to for-hire	2009-2018 MRIP dead catch in numbers of fish
Alt 2c-3: Separate rec. sub-ACLs with <b>87%</b> of rec. ACL to private/shore, <b>13%</b> to for-hire	2004-2018 MRIP dead catch in numbers of fish

## FMAT Comments and Recommendations on Sector Separation

### **Sector Separation Structure**

The FMAT considered three different structures for recreational sector separation, as discussed at the June 2020 Council/Board meeting and summarized in Appendix D. These included sector separation at the ACL level (creating three separate ACLs for the commercial, for-hire recreational, and private/shore recreational sectors), sub-ACL level (maintaining separate recreational and commercial ACLs, and subdividing the recreational ACL into for-hire and private/shore sub-ACLs), and RHL level (maintaining separate recreational and commercial ACLs, with no sub-ACLs, but dividing the RHL into for-hire and private/shore sub-RHLs).

**The FMAT recommends including only options for the sub-ACL approach to recreational sector separation in a public hearing document.** Sector separation at the catch limit level (vs. landings limit level) is consistent with the FMAT's support for moving toward catch-based allocations. The FMAT noted that separation at the RHL level allows for separate management measures but 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. Separation at the catch limit level allows for consideration of different discard trends by sector and for the full separation of accountability for overages.

The FMAT recommended the sub-ACL approach over ACL separation, first because it would allow the commercial/recreational allocation to be determined separately from the for-hire/private allocation, rather than creating a three-way allocation that would complicate the other decisions in this document. In addition, it maintains a structure which acknowledges that both the for-hire and private/shore modes are recreational fisheries and still may require shared management strategies at some level, as reflected in many scoping comments. It also maintains a greater separation between the commercial and recreational fisheries than separation at the ACL level.

### **Data Uncertainty**

The FMAT noted that the uncertainty in the recreational data by mode is an important consideration when determining if separate management by recreational sector is appropriate. Because the uncertainty in the MRIP data increases as it is broken down by wave, state, and mode, the Council and Board will 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.

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. Table 1

demonstrates that the PSEs do 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 of the harvest for these three species. PSEs also vary by species, with summer flounder having the lowest PSEs, followed by black sea bass and scup.

The FMAT considered the possible use of VTR data in these options (see the allocation options discussion below), but ultimately recommended against incorporating VTR data into these alternatives. The FMAT notes that there are not comparable estimates of uncertainty for VTR data because these data are not an expanded estimate associated with sampling uncertainty.

**Table 1: 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.**

	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
<b>AVG</b>	<b>11.9</b>	<b>7.7</b>	<b>7.4</b>	<b>16.6</b>	<b>13.2</b>	<b>12.4</b>	<b>11.5</b>	<b>11.6</b>	<b>10.6</b>

### ***Recreational Sector Allocation Options***

The FMAT recommends using data on dead catch in numbers of fish as the basis for determining allocations to the for-hire and private recreational sectors. This is consistent with the FMAT recommendation of sector separation at the catch limit level, as opposed to at the landings limit level. At their previous meeting, the FMAT noted that separate dead discard estimates in weight are not currently available by recreational sector, and that while it would be technically possible to generate these estimates, it may not be entirely defensible given the extensive “borrowing” of data between the sectors when generating estimates of catch in weight.

The FMAT identified the alternatives listed in the tables above as reasonable options for an allocation basis given recent trends in the fisheries. For scup and summer flounder, many of the different time series considered resulted in the same or very similar percentages. For black sea bass, the percentage allocation options varied more widely depending on the time frame evaluated. The FMAT did not believe it was appropriate to include an allocation option for black sea bass using the full time series (i.e., 1981-2018), because catch trends by recreational sector show private/shore catch increasing over the time series and for-hire catch decreasing. Therefore, for black sea bass, the full time series average proportions are not reflective of recent fishery conditions. Using the full time series for summer flounder and scup does not appear to have the same issue since the proportions by mode from 1981-2018 are identical to or closely match those of more recent years.

The FMAT discussed the possibility of basing for-hire allocations on Vessel Trip Report (VTR) data rather than MRIP data. This was in response to many scoping comments that requested managers make better use of existing VTR data, and/or noted that the for-hire sector should be managed using VTR data instead of MRIP data. The FMAT reviewed example allocation options using VTR data in place of MRIP data for the for-hire sector and found that for all three species, this resulted in lower allocation to the for-hire sector for most base years considered. A major issue with this approach is that while all federally permitted for-hire vessels are required to report electronically via eVTRs, not all states require VTRs for state-only permitted vessels. This means that the estimates of catch and harvest from VTR data underrepresent harvest from the for-hire mode.

In addition, the FMAT had some general concerns about mixing VTR and MRIP data as the basis for allocations, as well as concerns about the accuracy of self-reported VTR data, and potentially higher bias in the reported discard data in particular. Another FMAT member said discards reported on VTRs are supposed to be best estimates and captains should be reporting discards to the best of their ability, just like landings. FMAT members noted that sector separation could provide an incentive for improved for-hire data collection and validation which would allow the for-hire sector to operate more independently from MRIP data. The FMAT agreed that while sector separation could be considered now based on MRIP data, greater use of for-hire VTR data in management could be possible in the future if VTR data collection is expanded to additional vessels and/or if additional validation work is carried out.

### 3) Alternatives for Transfers between Sectors

#### 3) Alternatives for Transfers between Sectors

##### a) No action/status quo

**Alt 3a: Do not modify the FMP to allow transfers of annual quota between the commercial and recreational sectors.**

##### b) Options for sector transfers (assuming no recreational sector separation)

**Alt 3b-1: Allow for bi-directional transfers through specifications process with pre-defined guidelines and process.**

Under this alternative, the Board and the Council would have the ability to recommend that a portion of the total ABC be transferred between the recreational and commercial sectors in the form of a landings limit transfer. The need for a sector transfer would be assessed annually through the specifications process and considered by the Council and Board when annual catch and landings limits are adopted (typically at the August joint meeting).

Prior to the meeting, the Monitoring Committee (MC) would develop projections of next year's landings for both the recreational and the commercial sectors using considerations such as catch in prior years, recent or expected changes in management measures (e.g., possession limits, minimum size limits, seasons, quotas), trends in fishery effort, and changes in abundance and biomass levels. Projected commercial and recreational landings would be compared to the initial proposed sector landings limits (RHL and quota) for the upcoming fishing year. If, based on this comparison, one sector appears likely to substantially under-harvest its limit in the coming year, and the other sector is expected to exceed its limit, the MC and Council/Board may recommend that a portion of the landings limit be transferred to the other sector up to a maximum percentage of the ABC (see Transfer Caps). For the purposes of maintaining accurate accounting and accountability at the ACL level, both sector's ACLs would be adjusted to reflect the transfer at the landings limit level. If both sectors are projected to harvest at or below their respective landings limits for that year, then no transfer is recommended. It is worth noting that if landings limits were to increase above recent levels, it may be challenging to predict if one or both sectors will have an underage. Transfers would not occur if the stock is overfished or overfishing is occurring.

Based on the Council and Board's catch limit and transfer recommendations, NOAA Fisheries would implement specifications in December for the new fishing year. Given that recreational measures are typically adopted in December (usually before the specifications final rule has published), recreational measures would need to be developed based on the expected adjusted (post-transfer) RHL.

If transfers between the commercial and recreational sectors are an option, some changes to the accountability measures (AMs) may also need to be considered. For example, AMs could specify that if the MC determines that a too-liberal transfer caused the donating fishery's ACL, or the combined ABC, to be exceeded, the transfer amount could be deducted from the receiving fishery in a subsequent year.

**Alt 3b-2: Allow for bi-directional transfers through specifications process as needed, up to a maximum percent with limited pre-determined guidelines.**

This alternative would allow for transfers between the commercial and recreational sectors through

specifications on an as-needed basis, based on the recommendations of the Council and Board after considering the advice of the MC. Rather than using the more prescriptive process outlined above for projecting and evaluating expected commercial and recreational landings relative to their limits, the MC and Council/Board could take into account any relevant factors regarding the needs of each fishery sector, including recent data and performance, effort dynamics, market factors, data changes, recruitment dynamics, or other factors. Some FMAT members expressed concern about this option as it is likely to be challenging for the MC to recommend a specific transfer amount without pre-determined guidelines, making the decision more of a policy determination. However, other FMAT members thought this alternative was important to retain as it allows for flexibility to address unforeseen circumstances or circumstances other than a projected underage in one sector. Under this alternative, as with alternative 3b-1, transfers would not occur if the stock is overfished or overfishing is occurring.

### c) Transfer Caps

These alternatives would only be selected if transfer provisions were adopted under alternative set 3b above, and would specify a maximum percent of the ABC that could be transferred from one sector to another in the form of a landings limit transfer.

**Alt 3c-1:** No transfer cap specified; the Council and Board can recommend any amount of transfer between fisheries.

**Alt 3c-2:** Maximum transfer amount set at 5% of the ABC.

**Alt 3c-3:** Maximum transfer amount at 10% of the ABC.

**Alt 3c-4:** Maximum transfer amount set at 15% of the ABC.

### FMAT Comments and Recommendations on Transfer Provisions

The FMAT discussed (via email) a number of questions related to configuration of potential transfer provisions as described below.

#### ***Are transfer provisions needed for these fisheries?***

Transfers are a management tool that offer the potential for increased fishing opportunities in the commercial or recreational sectors for these fisheries. The summer flounder and black sea bass fisheries however have tended to achieve high quota (ACL & RHL) in both the commercial and recreational sectors, making it unclear how often transfers may be useful for these fisheries in the future. The scup fishery has seen both sectors under-harvest in recent years when evaluated using old MRIP data. FMAT members noted that under higher revised MRIP estimates, there could be utility in allowing transfer from the commercial to the recreational sector for scup; however, if allocations are revised, this situation may change. Future utilization rates for all three species are difficult to predict, given the recent changes in MRIP data and the fact that in most prior years, recreational performance can only be evaluated using old data. In addition, potential allocation changes should ideally minimize the near-term need for transfers.

Existing recreational to commercial transfers in the bluefish FMP have not often had to account for expected changes in the recreational measures from year to year, as bluefish recreational management measures prior to 2020 had remained very stable. For summer flounder, scup, and black sea bass, there is typically a desire to revisit the recreational management measures annually and liberalize them where possible (especially for summer flounder and black sea bass in recent years). Recreational stakeholders

are unlikely to approve of a transfer from the recreational to the commercial sector unless recreational measures are liberalized to an extent where a bag limit increase or a minimum size reduction is no longer sought after. This is unlikely to occur within the black sea bass and summer flounder fishery in the foreseeable future (and perhaps in the future for scup). For this reason, a transfer from the recreational sector to the commercial sector seems unlikely to be recommended in the foreseeable future.

In addition, transfers from the commercial fishery to the recreational fishery are likely to be contentious unless persistent underages are occurring within each state's commercial fishery. Even if the commercial fishery is underachieving its coastwide quota on an annual basis, there may still be several states that are maximizing use of their state quotas. To transfer away from the sector as a whole will have disparate impacts across states. As noted below, the timing of a commercial to recreational transfer may also not align with the timing of recreational specifications, meaning it's possible that recreational measures may not be able to be adjusted based on a transfer to the recreational fishery, meaning the benefit would primarily be a lower likelihood of exceeding the recreational limits.

These concerns should all be carefully considered when the Council and Board consider any specific transfer amounts in a given year, if alternatives 3b-1 or 3b-2 are approved.

***What is the timing and process for the transfer process?***

In the alternatives described above, the Council and Board would likely need to determine the transfer amount in August (or the equivalent meeting where catch and landings limits are set). The transfer would be implemented with the final specifications rule in December. **The FMAT expressed some concern about the availability and timing of data that would be used to support a transfer. In mid-August, there is limited data available from the current fishing year to project the following year's expected landings.** It is likely that additional data would need to be used such as from the most recent complete fishing year. For the recreational fishery, this may result in a disconnect between projected recreational landings assumed in mid-August (when current year data is available through only wave 2) and projected recreational landings used to set recreational measures in December (current year data available through wave 4 or 5). However, waiting to determining the transfer amount until December is likely to create stakeholder confusion given that one set of limits would be adopted in August, followed by a possible revision in December at approximately the same time the final rule would be published for the original recommendations. **Using prior year or earlier data may create difficulties accounting for changes in management measures and may set up a situation where overages are more likely to occur due to transfer amounts that may be inappropriate for the next year's conditions.**

The FMAT considered whether a post-implementation adjustment process could be used for these fisheries similar to what is done for bluefish early in the relevant fishing year based on an evaluation of more complete prior year data.<sup>1</sup> However, the FMAT concluded that **this is unlikely to be feasible under the current specifications timing for summer flounder, scup, and black sea bass**, in particular the timing of the recreational measures process. Recreational measures are considered in December, followed by any necessary adjustments to state measures typically in February/March of the following year. Federal recreational measures are often not finalized in the regulations until May or June. Due to this timing,

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<sup>1</sup> For bluefish (recreational to commercial transfer), once preliminary prior year MRIP estimates are available (usually in February), NOAA Fisheries compares the estimate of recreational harvest for the previous year to the recreational RHL to make any necessary adjustments before finalizing the amount of landings transferred.

under a commercial to recreational transfer, **recreational measures would likely not be able to be adjusted to account for any transfers**, which would eliminate most of the benefit of this transfer type.

Based on this information, the FMAT determined that a post-implementation adjustment process is not feasible for this FMP if transfers are adopted.

***At what level should the transfer occur?***

If the Council and Board want to retain transfer provisions in this action, the FMAT proposes projecting and transferring based on landings, with corresponding adjustments to the sector ACLs for catch accounting purposes. Consideration was given to projections and transfers at the catch limit level, but catch projections would likely be associated with increased uncertainty and potential data timing challenges associated with projecting dead discards by fishery. Currently, discards are projected at the combined commercial and recreational level and separated by sector based on the allocation (for scup) or recent trends in discards by sector (for summer flounder and black sea bass). Projecting discards by sector has proven difficult especially when trying to account for changes in quotas, other regulatory changes, year class strength, and recruitment events.

***How should a transfer cap be determined?***

The transition from old (pre-calibration) MRIP data to revised MRIP data makes it difficult to analyze an appropriate transfer cap for future years, since past performance can only be evaluated using old MRIP data. Past performance is also based on the existing allocation splits which could be modified through this action, potentially decreasing the need for transfers. The recommended transfer cap options (5%, 10%, and 15% of the ABC) are determined based on what the FMAT considered a reasonable range of options for this type of transfer. The FMAT does not recommend transfer caps higher than this due to the potential to create large fluctuations in the allocation from year to year, and the fact that larger changes in the specified allocation may need to be longer-term and taken up through a framework or addendum.

**The FMAT noted some concerns with the combination of no transfer cap (alternative 3c-1) with alternative 3b-2 (limited guidelines for transfers through specifications) and recommends that the Council and Board not adopt these two options together.** The group noted that this combination would impose difficult policy decisions on the MC that would need to be made each year with a larger range of possible outcomes, which could result in regular proposals for larger transfers that need to be evaluated and justified.

***When should transfers be prohibited?***

The FMAT recommends that no transfers be allowed when a stock is in an overfished condition or undergoing overfishing.

The FMAT also discussed whether it would be appropriate to prohibit transfers when a stock is under a rebuilding plan but no longer overfished. The FMAT acknowledged that transfers have the potential to add management uncertainty given the use of projections, and could impact the rebuilding timeline if they cause ACLs to be exceeded. However, under a rebuilding plan, catch limits will be set using a lower tolerance for risk of overfishing, and allowing sectors to achieve (but not exceed) their limits would not be expected to negatively impact the stock.

***How could transfers be handled under recreational sector separation?***

The FMAT discussed how transfer provisions could be incorporated under a sector separation

management structure, if adopted by the Council and Board (see alternative set 2). The FMAT's general consensus is that recreational sector separation greatly complicates the development of transfer options, at least when attempting to develop these approaches simultaneously. **The FMAT's recommendation is that if sector separation is adopted, the Council and Board wait until sector separation is implemented before determining if transfer provisions are needed and how they would operate under sector separation.** Transfer provisions under sector separation could potentially be developed through a separate future framework/addendum.

Other options considered by the FMAT include:

- **Tri-directional transfers occur between all three sectors:** The FMAT strongly recommends against this option at this time given that it greatly complicates the specifications process with the need to address additional considerations such as which direction transfers should occur, in which order, and based on which criteria. The development of this option would require that projections be conducted for each sector individually. Recreational projections are already uncertain and challenging. Projections based on further separation of the MRIP data into state, mode, and wave will result in the use of estimates with high PSEs (high uncertainty). If this option is desired, the FMAT would need substantially more time to evaluate its feasibility.
- **Transfers occur only between the commercial fishery and the combined recreational fishery sector level (at recreational ACL or total RHL level):** While this approach is simpler than the one above, it would be difficult to account for situations where one of the recreational sectors is expected to substantially under-harvest while the other is projected to meet or exceed their limit (i.e., transfers may be driven by one sector but impact both sectors). The same concerns about misuse of MRIP data apply here as well, as projections would likely need to occur by mode and then be combined into a recreational fishery projection, in order to evaluate projected recreational sector-specific overages/underages and determine whether a transfer would be problematic for one recreational sector.

#### 4) Framework/Addendum Alternatives

Alternative
Alt 4a: No action/status quo (changes to commercial/recreational allocations must be made through an amendment)
Alt 4b: Allow changes to commercial/ recreational allocations and other measures included in this amendment including recreational sector separation and corresponding allocations, sector transfers, and triggers to be made through framework actions/addenda

The FMAT did not discuss this category of alternatives at their July meeting. Their previous recommendation in May 2020 was to keep this option in for consideration. The Council and Board could narrow the list of measures under alternative 4b during final action if desired. In addition, the Council and Board could recommend splitting this alternative into separate sub-alternatives for public hearings to facilitate separate consideration of different types of frameworkable measures.

## 5) Appendices

### Appendix A: Catch vs. Landings Based Approaches

Both catch and landings-based allocation approaches are described in this document. This appendix provides additional clarification of the differences in those approaches.

Under the current **catch-based** allocation for scup, the ABC is divided into a commercial and recreational ACL based on the allocation percentages defined in the FMP. Sector-specific expected discards are subtracted from the sector-specific ACLs to derive a commercial quota and a recreational harvest limit.

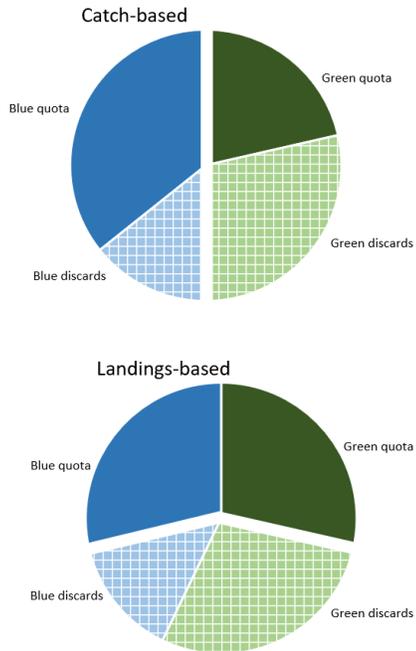
Under the current process for **landings-based** allocations for summer flounder and black sea bass, the ABC is first divided into expected landings and expected discards based on recent trends in the fisheries and the advice of the MC. The sector allocations are applied to the landings portion of the ABC. The sector-specific ACLs are equal to the landings-based allocations plus the expected discards by sector. Under this system, higher expected discards in one sector can result in a reduced ACL in the other sector. Under a catch-based allocation (as for scup), expected discards in one sector do not impact the ACL in the other sector.

In addition, if discards are included directly in the allocation (i.e., a catch-based allocation), there may be a greater incentive for each sector to reduce discards in order to increase their allowable landings. This was part of the rationale for creating a catch-based allocation for scup. Commercial scup discards were a concern at the time of development of Amendment 8 which implemented the current allocations.

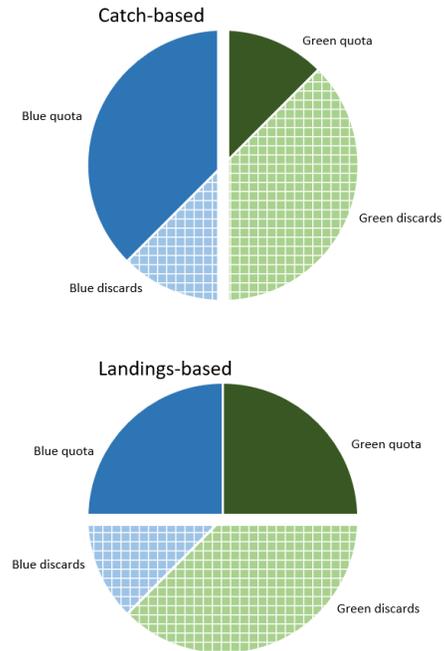
**Figure 1** below demonstrates this concept through a comparison of a hypothetical catch-based 50/50 allocation and a landings-based 50/50 allocation for the "blue" and "green" sectors. In this example both sectors have equal expected landings but the green sector has higher expected dead discards than the blue sector. Under a landings-based 50/50 allocation, the green sector will have a higher ACL than the blue sector due to its greater expected discards. Under a catch-based 50/50 allocation, both sectors will have equal ACLs. The blue sector will have a higher quota than the green sector due to its lower expected discards.

The reliability and timeliness of discard estimates should be considered when assessing catch- versus landings-based allocations. Depending upon the methodology and data used, recreational discard estimates can be quite variable. MRIP does not provide weight estimates for recreational releases, and thus the method used for stock assessments by the Northeast Fisheries Science Center has previously been used to develop estimates of dead discards in pounds of fish. Dead discards estimates are integral to both catch- and landings-based allocations.

**Equal landings by sector, expected green discards 2x blue discards**



**Equal landings by sector, expected green discards 3x blue discards**



**Figure 1: Comparison of hypothetical catch-based 50/50 allocation and landings based 50/50 allocation for the "blue" and "green" sectors under two different scenarios for expected landings and discards.**

## Appendix B: Other Options Considered for Percentage Change Allocations

Percentage allocation options considered by the FMAT but not recommended for inclusion in a public hearing document are listed below for each species. These options were not recommended because they resulted in very similar outcomes to other recommended options, fell within the range of other options, and/or were supported by only one rationale.

### *Summer Flounder Allocation Percentages*

Category	Alternative	Basis
<b>i. Summer flounder landings-based percentages</b>	<b>46%</b> commercial, <b>54%</b> recreational	Average of other approaches approved by Council/Board in June 2020
	<b>43%</b> commercial, <b>57%</b> recreational	Approximate status quo harvest per sector compared to 2017/2018

### *Scup Allocation Percentages*

Category	Alternative	Basis
<b>i. Scup catch-based percentages</b>	<b>62%</b> commercial, <b>38%</b> recreational	2014-2018 base years
	<b>60%</b> commercial, <b>40%</b> recreational	2004-2018 base years
<b>ii. Scup landings-based percentages</b>	<b>55%</b> commercial, <b>46%</b> recreational	Average of other approaches approved by Council/Board in June 2020

### *Black Sea Bass Allocation Percentages*

Category	Alternative	Basis
<b>i. BSB catch-based percentages</b>	<b>27%</b> commercial, <b>73%</b> recreational	Average of other approaches approved by Council/Board in June 2020
	<b>25%</b> commercial, <b>75%</b> recreational	2014-2018 base years
<b>ii. BSB landings-based percentages</b>	<b>27%</b> commercial, <b>73%</b> recreational	2004-2018 base years

### *Phase in Allocation Options*

As described in section 1d, the FMAT also considered specifying options for a phase in using a maximum percent allocation shift in each year rather than a number of years. Ultimately the FMAT thought this may be more complicated, as well as more difficult to determine appropriate options at this stage of amendment development. A set number of years (with an appropriate range of years to select from) would accomplish the same goal in a more straightforward manner.

## Appendix C: Trigger Allocation Approaches

### *General FMAT comments and recommendations*

The FMAT discussed example allocation approaches which would allocate total allowable catch or landings up to and including a pre-defined trigger value based on the current allocations. Any surplus amount would be allocated differently. The FMAT did not recommend these approaches for further development. Trigger approaches have been considered in other allocation contexts (e.g., the commercial state allocations for summer flounder and black sea bass), with the goal of providing socioeconomic stability by using status quo allocations up to a pre-determined trigger value. However, the FMAT noted that status quo commercial/recreational allocations do not allow for stability in the scup or black sea bass recreational fisheries due to the mismatch between the revised MRIP data and the current allocations.<sup>2</sup> For this reason, trigger approaches are not appropriate in this context, and the FMAT struggled to identify the benefits or purpose of this approach in the context of the amendment objective. They also noted that, depending on the details, the trigger approach process could be challenging for stakeholders to understand, and could lead to larger changes in management measures in years when the ABC changes in a manner that shifts it above or below the trigger, given the need to respond to both a change in catch limit and a change in allocation.

If the Council and Board wish to further consider trigger approaches, the FMAT suggested further development of the following options for trigger values and for allocating any surplus amount above the trigger. They emphasized that if the Council and Board wish to further consider trigger alternatives, more time is needed to fully analyze them to ensure that any options put forward for public hearings have a supportable justification.

### *FMAT comments and recommendations for trigger value*

The FMAT agreed that if a trigger approach is used, it would be more appropriate to set the trigger at the ABC level than at the landings limit level. The ABC is more reflective of the fishery and stock status as a whole and is not impacted by assumptions about discards to the same extent as the landings limits. In addition, in response to a public comment, the FMAT noted that setting the trigger at the ABC level, rather than the landings limit level, avoids consideration of past sector-specific ACL overages.

The FMAT noted that triggers based on recent ABCs could make it more likely that there will be surplus available in the future for summer flounder compared to scup and black sea bass. This is because summer flounder is currently below the biomass target and the ABCs would be more likely to increase in the future as measures bring the stock closer to the biomass target, while scup and black sea bass biomass levels (and thus the ABCs) are high but declining from recent peaks. One FMAT member said the purpose of the trigger is to maintain some level of stability in the catch and landings limits for each sector, especially when biomass is at lower levels; therefore, the trigger should not be set too low.

One FMAT member said it may not be appropriate from a scientific perspective to combine years before the most recent stock assessments incorporating the revised MRIP data with years after this transition when calculating the trigger values based on past ABCs. However, other FMAT members noted that the main goal of the trigger approach is to provide stability from a socio-economic standpoint and stability in

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<sup>2</sup> This concept has been explained in many previous documents associated with this amendment. For example, see the scoping document ([https://www.mafmc.org/s/SFSBSB\\_allocation\\_scoping\\_PID\\_Jan2020\\_final.pdf](https://www.mafmc.org/s/SFSBSB_allocation_scoping_PID_Jan2020_final.pdf)) and the summary of the May 2020 FMAT meetings ([https://www.mafmc.org/s/Tab03\\_SFSBSB-ComRecAllocationAmd\\_2020-06.pdf](https://www.mafmc.org/s/Tab03_SFSBSB-ComRecAllocationAmd_2020-06.pdf)).

this sense is dependent on the commercial quota and RHL, regardless of the basis for those landings limits. In this sense, it could be appropriate to consider the ABCs over longer time periods. One FMAT member said the appropriate level of stability is a policy call better left to the Council and Board rather than the FMAT. She suggested consideration of triggers based on the most recent three year average ABC and a percentage of that, for example 80%. The FMAT agreed that these options could be put forth for further consideration if the Council and Board wish to further evaluate trigger approaches (see Table A-1 and Figures A-1 through A-3). They emphasized that the recommendation for an option based on 80% of the three year average ABC, rather than a different percentage, is not based on a technical analysis.

*FMAT comments and recommendations for distribution of surplus ABC above the trigger*

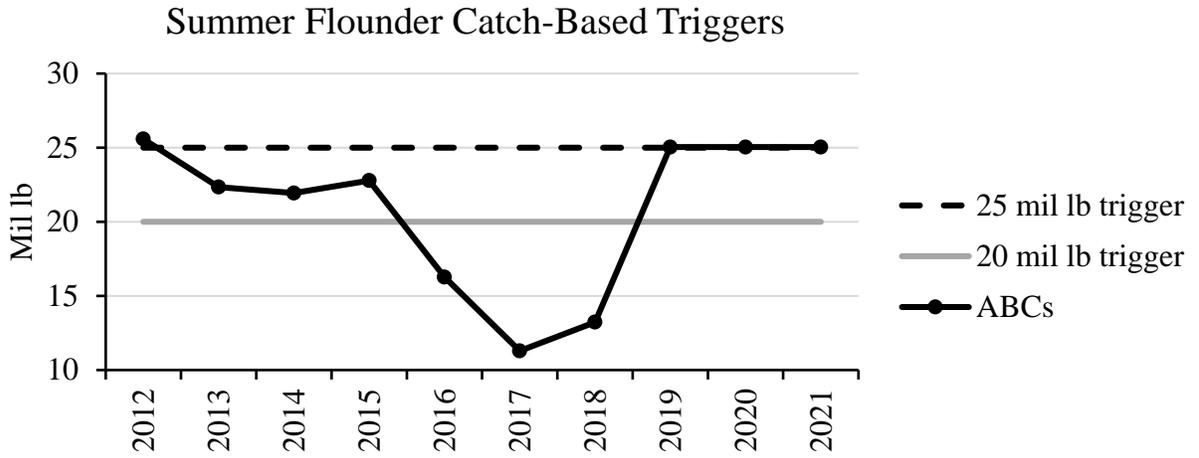
The FMAT discussed two example alternatives for how to allocate any surplus ABC above the trigger.

Under the first example, the surplus would be evenly distributed between the commercial and recreational sectors. The FMAT noted that this may be more appropriate for summer flounder and scup than for black sea bass. The current allocation for black sea bass is 49% commercial and 51% recreational; therefore, this option would not result in a meaningful change in the black sea bass allocations.

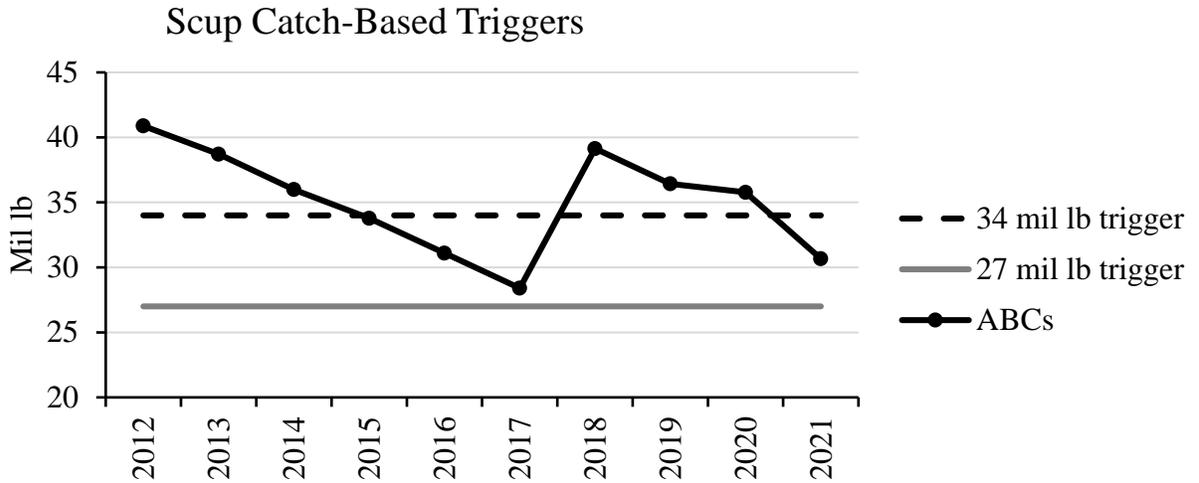
Under the second example, the surplus would be distributed among the commercial and recreational sectors based on the average proportion of total catch by sector over the most recent three years for which information is available, including all discards, not just dead discards (e.g., see Table A-2). If recreational sector separation is adopted, the recreational surplus would be further split into private and for-hire components using the same method (i.e., average proportion of total catch by sector over the past three years). The intent behind considering both live and dead discards is to account for how the commercial and recreational sectors respond differently to availability. For example, if the recreational sector catches more fish than the commercial sector when availability is high, then this option would account for that and would allocate them a greater proportion of the surplus ABC above the trigger value. The FMAT did not reach consensus on whether or not this approach is appropriate. They agreed that if the Council and Board wish to further pursue this approach, more time is needed to fully evaluate it.

**Table A-1:** Example trigger values suggested by the FMAT for further development if the Council and Board wish to further consider trigger approaches. All values should be updated based on any pending revisions to the 2021 ABC.

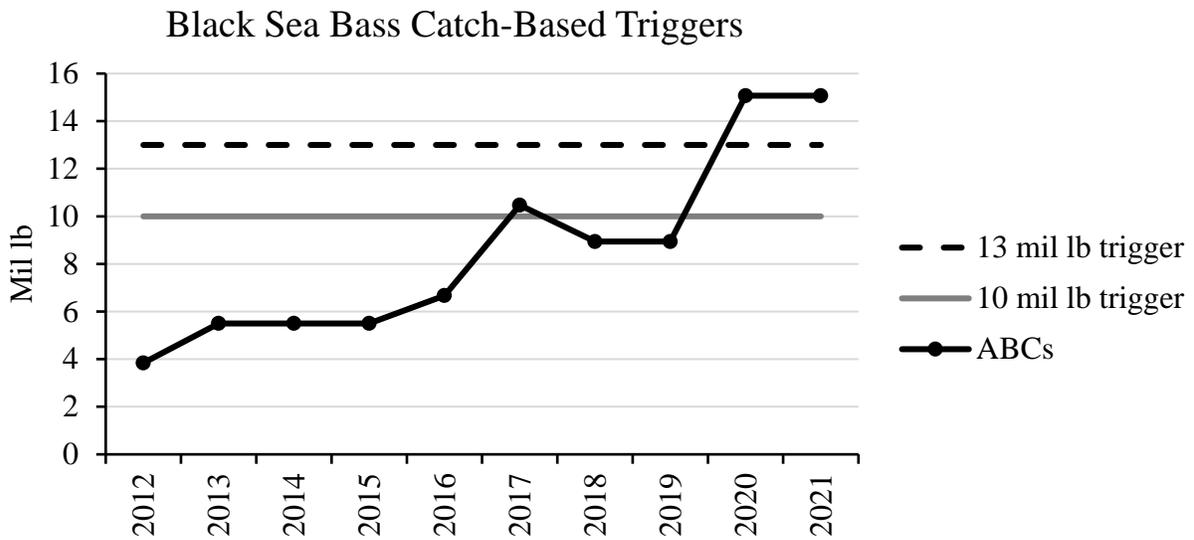
Species	Trigger value	Basis
Summer flounder	25 mil lb	Average 2019-2021 ABC
	20 mil lb	80% of above
Scup	34 mil lb	Average 2019-2021 ABC
	27 mil lb	80% of above
Black sea bass	13 mil lb	Average 2019-2021 ABC
	10 mil lb	80% of above



**Figure A-1:** Comparison of potential catch-based trigger values shown in Table A-1 to the summer flounder ABCs over the past 10 years.



**Figure A-3:** Comparison of potential catch-based trigger values shown in Table A-1 to the scup ABCs over the past 10 years.



**Figure A-5:** Comparison of potential catch-based trigger values shown in Table A-1 to the black sea bass ABCs over the past 10 years.

**Table A-2:** Average percentage of total catch in weight (including landings and both live and dead discards) of summer flounder, scup, and black sea bass from the commercial and recreational sectors, 2010-2018 based on data provided through the most recent stock assessments. Dead discard estimates were scaled up to account for total discards based on the discard mortality rates (i.e., 80% commercial summer flounder, 10% recreational summer flounder, 100% commercial scup, 15% recreational scup, 100% commercial trawl black sea bass, 15% commercial non-trawl black sea bass, and 15% recreational black sea bass).

Year	Summer flounder		Scup		Black sea bass	
	Com	Rec	Com	Rec	Com	Rec
2010	20%	80%	41%	59%	10%	90%
2011	21%	79%	50%	50%	21%	79%
2012	19%	81%	49%	51%	8%	92%
2013	18%	82%	50%	50%	15%	85%
2014	18%	82%	51%	49%	15%	85%
2015	21%	79%	50%	50%	13%	87%
2016	18%	82%	49%	51%	12%	88%
2017	16%	84%	47%	53%	15%	85%
2018	23%	77%	48%	52%	18%	82%
<b>2016-2018 avg</b>	<b>19%</b>	<b>81%</b>	<b>48%</b>	<b>52%</b>	<b>15%</b>	<b>85%</b>

## Appendix D: Recreational Sector Separation Structure Considerations and Data

### *Recreational Sector Separation Structure*

Recreational sector separation could be achieved through separate allocations at the ACL, sub-ACL, or RHL level (Figure B-1).

#### **Catch Limit Sector Separation (ACLs or sub-ACLs):**

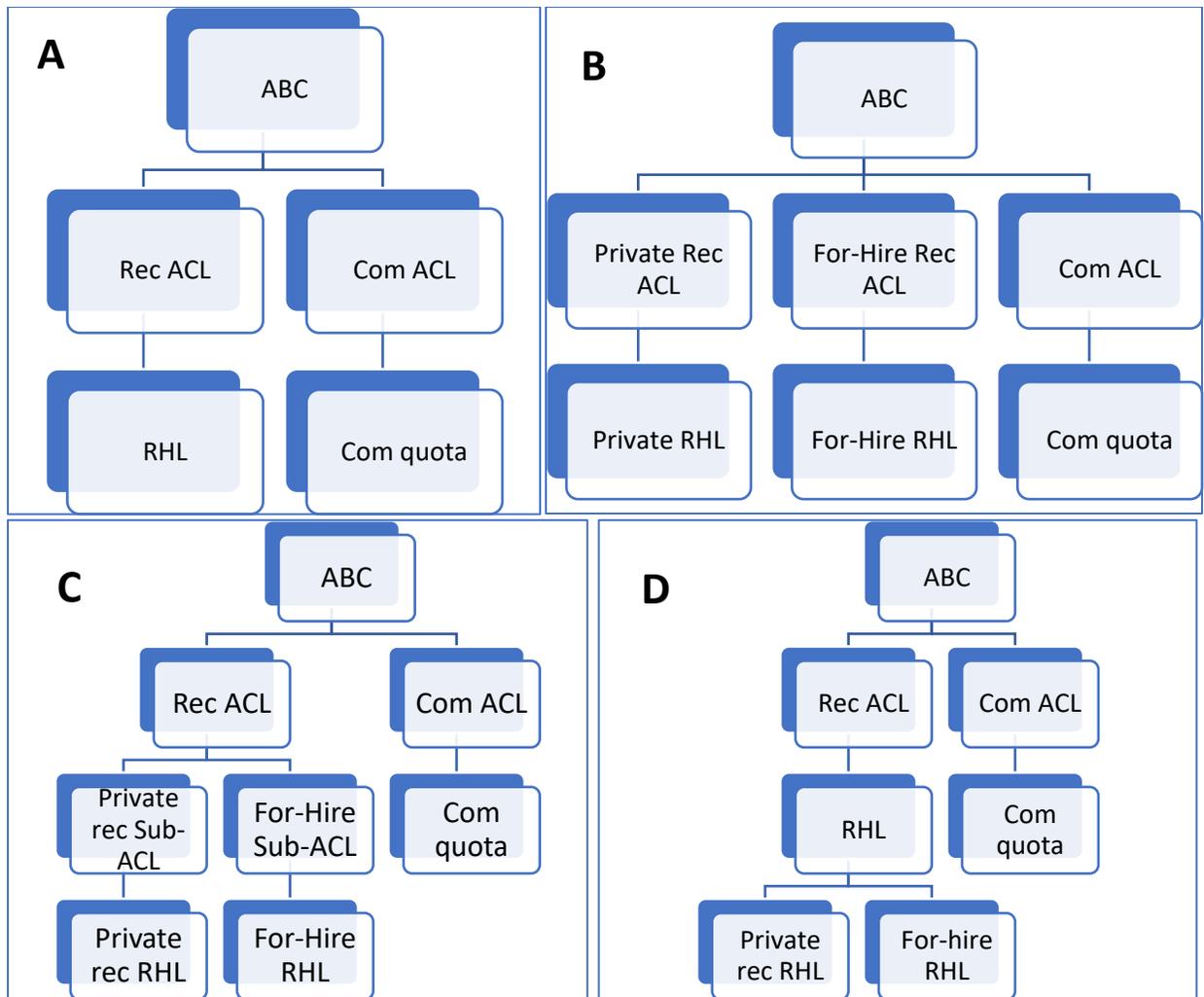
- The FMAT agreed that for-hire and private recreational **sub-ACLs are preferred to separate private and for-hire ACLs** as sub-ACLs would allow the commercial/recreational allocation to be determined separately from the for-hire/private allocation.
- Each sector (i.e., commercial, private recreational, and for-hire) would have separate accountability for their entire catch, including harvest and dead discards.
- The uncertainty in the recreational data for each sector should be considered as this method includes separation of both harvest and discards, as well as fully separate accountability.

#### **RHL Sector Separation:**

- Accountability may be more complex given different landings limits but shared catch limit.
  - Each sector would be accountable for harvest relative to their RHL. Management measures would be modified for each sector to prevent RHL overages in the upcoming year.
  - Accountability measures would still be needed at the ACL level, meaning that the recreational sectors would be jointly accountable for preventing and responding to ACL overages. This could result in shared consequences for overages primarily caused by one sector (as is the case currently).

#### **Considerations Applicable to Either Approach:**

- As previously noted by the FMAT, there is currently some "borrowing" of data between the private angler and for-hire fisheries in the estimation process (e.g., most discard length frequency information comes from the for-hire sector). The FMAT noted that if the sectors were split completely, additional biological sampling would likely be needed for both sectors.
  - If widely varying recreational measures are developed as the result of sector separation, it may no longer be appropriate to "borrow" data by sector given potential changes in the size distribution of discards and landings, but this is difficult to predict.



**Figure B-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.**

### *Recreational Sector Separation Allocation Options*

The FMAT-recommended allocation options shown in section 2 were calculated using MRIP dead catch in numbers of fish. As described in section 2, the FMAT also considered but did not recommend allocation options that substituted federal VTR data for the for-hire MRIP estimates. The basis for the FMAT-recommended options listed in section 2, as well as additional options not recommended, is described below.

**Table B-1:** Example approaches for calculating separate sub-allocations to private and for-hire sectors, based on a) MRIP dead catch in numbers of fish, b) MRIP harvest in numbers of fish, and c) federal VTR for-hire data and MRIP private/shore data for harvest in numbers of fish. Cells in green are those included in the FMAT-recommended alternatives discussed in section 2. Where percentages are identical, they are merged into one alternative in section 2.

<b>a)</b>		<b>Dead catch (numbers of fish)</b>		
	<b>Approach</b>	<b>Years</b>	<b>Private %</b>	<b>For-Hire %</b>
<b>Summer flounder</b>	Entire Time Series	1981-2018	94%	6%
	Base years (no data for 1980)	1980-1989	91%	9%
	5 most recent years	2014-2018	95%	5%
	10 most recent years	2009-2018	96%	4%
	15 most recent years	2004-2018	96%	4%
<b>Scup</b>	Entire Time Series	1981-2018	91%	9%
	Base years	1988-1992	92%	8%
	5 most recent years	2014-2018	91%	9%
	10 most recent years	2009-2018	89%	11%
	15 most recent years	2004-2018	90%	10%
<b>Black sea bass</b>	Entire Time Series	1981-2018	72%	28%
	Base years	1983-1992	65%	35%
	5 most recent years	2014-2018	89%	11%
	10 most recent years	2009-2018	90%	10%
	15 most recent years	2004-2018	87%	13%
<b>b)</b>		<b>Harvest (numbers of fish)</b>		
	<b>Approach</b>	<b>Years</b>	<b>Private %</b>	<b>For-Hire %</b>
<b>Summer flounder</b>	Entire Time Series	1981-2018	93%	7%
	Base years (no data for 1980)	1980-1989	91%	9%
	5 most recent years	2014-2018	94%	6%
	10 most recent years	2009-2018	95%	5%
	15 most recent years	2004-2018	95%	5%
<b>Scup</b>	Entire Time Series	1981-2018	90%	10%
	Base years	1988-1992	92%	8%
	5 years post rebuilt declaration	2010-2014	87%	13%
	5 most recent years	2014-2018	89%	11%
	10 most recent years	2009-2018	88%	12%
	15 most recent years	2004-2018	88%	12%
<b>Black sea bass</b>	Entire Time Series	1981-2018	66%	34%
	Base years	1983-1992	61%	39%
	5 most recent years	2014-2018	86%	14%
	10 most recent years	2009-2018	87%	13%
	15 most recent years	2004-2018	82%	18%

c)	Harvest in numbers, using federal VTR data for for-hire portion			
<b>Summer flounder</b>	Entire Time series	1995-2018	98%	2%
	5 most recent years	2014-2018	98%	2%
	10 most recent years	2009-2018	98%	2%
	15 most recent years	2004-2018	98%	2%
<b>Scup</b>	Entire Time series	1995-2018	93%	7%
	5 most recent years	2014-2018	93%	7%
	10 most recent years	2009-2018	93%	7%
	15 most recent years	2004-2018	94%	6%
<b>Black sea bass</b>	Entire Time series	1995-2018	79%	21%
	5 most recent years	2014-2018	92%	8%
	10 most recent years	2009-2018	91%	9%
	15 most recent years	2004-2018	87%	13%

#### Appendix E: FMAT Meeting Attendance

FMAT webinar meeting attendance from July 15, 2020, 9AM-12PM:

**FMAT members:** Greg Ardini (NEFSC), Julia Beaty (MAFMC staff), Karson Coutre (MAFMC staff), Kiley Dancy (MAFMC staff), Marianne Ferguson (GARFO), Emily Keiley (GARFO), Dustin Colson Leaning (ASMFC staff), Caitlin Starks (ASMFC staff), Mark Terceiro (NEFSC)

**Others:** Rick Bellavance, Maya Drzewicki, James Fletcher, Jeff Kaelin, Adam Nowalsky, Mike Waine