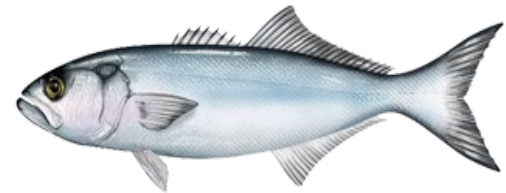
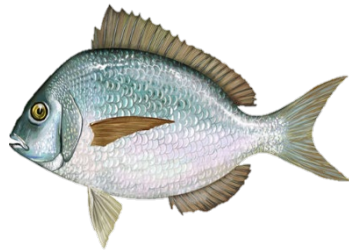
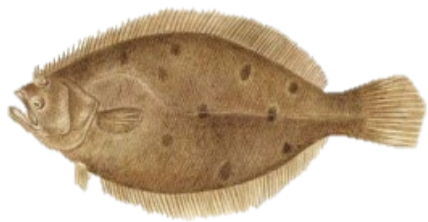


Recreational Measures Setting Process Framework/Addenda



SSC Meeting
September 12, 2023

- Overview of framework/addenda.
- Potential SSC engagement.
- Timeline for next steps.
- Recreational demand model and summer flounder MSE analysis to support this action.



- **Harvest Control Rule Framework/Addenda**
 - Council and ASMFC.
 - Modified the process for setting recreational bag, size, and season limits for the four jointly managed recreational species.
 - Implemented the Percent Change Approach, starting with 2023 measures.
 - Will sunset at the end of 2025 with the goal of using a new approach for 2026 measures.
- **Recreational Measures Setting Process Framework/Addenda**
 - Follow on action to consider the appropriate replacement for the Percent Change Approach.
 - Will include further development of several alternatives from previous action.

Challenges with previous approach of aiming to achieve but not exceed the RHL:

- Concerns related to uncertainty and variability in the recreational fishery data.
- Need to change measures (sometimes annually) based on those data.
- Perception that measures were not reflective of stock status.
- Management measures did not always have their intended effect on overall harvest.

As approved and implemented:

RHL vs Harvest Estimate

Future 2-year avg RHL >
upper bound of harvest
estimate CI (harvest
expected to be lower than
RHL)

Future 2-year avg RHL
within harvest estimate CI
(harvest expected to be
close to RHL)

Future 2-year avg RHL <
lower bound of harvest
estimate CI
(harvest expected to exceed
RHL)

As approved and implemented:

RHL vs Harvest Estimate	B/B_{MSY}
Future 2-year avg RHL > upper bound of harvest estimate CI (harvest expected to be lower than RHL)	Very high ($\geq 150\%$)
	High (100 – 150%)
	Low ($< 100\%$)
Future 2-year avg RHL within harvest estimate CI (harvest expected to be close to RHL)	Very high ($\geq 150\%$)
	High (100 – 150%)
	Low ($< 100\%$)
Future 2-year avg RHL < lower bound of harvest estimate CI (harvest expected to exceed RHL)	Very high ($\geq 150\%$)
	High (100 – 150%)
	Low ($< 100\%$)

As approved and implemented:

RHL vs Harvest Estimate	B/B_{MSY}	Change in Harvest
Future 2-year avg RHL > upper bound of harvest estimate CI (harvest expected to be lower than RHL)	Very high ($\geq 150\%$)	Liberalization % = difference between harvest estimate and 2-yr avg RHL, <u>not to exceed 40%</u>
	High (100 – 150%)	Liberalization % = difference between harvest estimate and 2-yr avg RHL, <u>not to exceed 20%</u>
	Low ($< 100\%$)	10% liberalization
Future 2-year avg RHL within harvest estimate CI (harvest expected to be close to RHL)	Very high ($\geq 150\%$)	10% liberalization
	High (100 – 150%)	No change
	Low ($< 100\%$)	10% reduction
Future 2-year avg RHL < lower bound of harvest estimate CI (harvest expected to exceed RHL)	Very high ($\geq 150\%$)	10% reduction
	High (100 – 150%)	Reduction % = difference between harvest estimate and 2-yr avg RHL, <u>not to exceed 20%</u>
	Low ($< 100\%$)	Reduction % = difference between harvest estimate and 2-yr avg RHL, <u>not to exceed 40%</u>

- Further development will include:
 - Greater consideration of fishing mortality.
 - E.g., Assigning a recreational fishing mortality target/threshold
 - Re-evaluation of the 10%, 20%, and 40% cutoffs for liberalizations and reductions.
 - Starting point for measures.



Biological Reference Point Approach

Biomass Based Matrix Approach

- A range of possible stock status and fishery performance indicators grouped into bins.
- Measures assigned to all bins the first time the approach is used through specifications.
- Bins with positive indicators have more liberal measures than bins with negative indicators.
- Measures would be set for two years at a time.

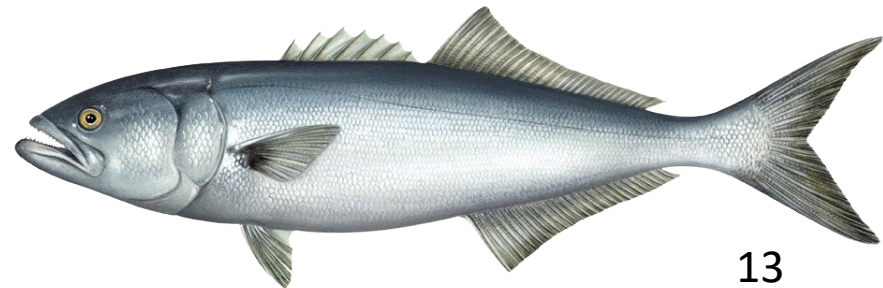
Biological Reference Point Approach

Biomass Compared to Target Level	Overfishing is Not Occurring	Overfishing is Occurring
<p>Very High At least 150% of the target level</p>	<p>R↑ R↓</p> <p>B↑ liberal B↓ default</p> <p>1</p>	<p>R↑ R↓</p> <p>RHLs not exceeded B↑ default B↓</p> <p>RHLs exceeded B↑ restrictive B↓</p> <p>4</p>
<p>High At least the target, but below 150% of the target level</p>	<p>R↑ R↓</p> <p>B↑ liberal B↓ default</p> <p>2</p>	<p>R↑ R↓</p> <p>RHLs not exceeded B↑ default B↓</p> <p>RHLs exceeded B↑ restrictive B↓</p> <p>5</p>
<p>Low Below the target level, but at least 50% of the target level</p>	<p>R↑ R↓</p> <p>B↑ default restrictive B↓</p> <p>3</p>	<p>R↑ R↓</p> <p>RHLs exceeded B↑ default restrictive B↓</p> <p>RHLs exceeded B↑ restrictive B↓</p> <p>6</p>
<p>Overfished Less than 50% of the target level</p>	<p>Most restrictive/rebuilding plan</p> <p>7</p>	

B/Bmsy	Biomass Trend		
	Increasing	Stable	Decreasing
Very High ≥ 150%	Bin 1 (most liberal measures)		
High 100-150%	Bin 1		Bin 2
Low 50-100%	Bin 3		Bin 4
Overfished <50%	Bin 5		Bin 6 (most restrictive measures)

- Use bin thresholds as triggers for changing measures, without pre-defining measures.
- Starting point for measures.

- Under all alternatives, stocks under an approved rebuilding plan would be subject to the requirements of that rebuilding plan.
- None of the alternatives replace rebuilding plan measures.
- In some cases, measures implemented through the alternatives may be used as temporary measures until a rebuilding plan is implemented.
 - Can be up to 2 years after the stock is declared overfished.



- Issue raised by the SSC in their discussions of the HCR addenda/framework.
- Implications of rec. management approaches for the commercial sector.
- From SSC Report: *If constraining one sector is more challenging, and leads to larger deviations from the specified catch targets, the patterns of allocation may be substantially different to those specified in the policy. This can lead to effective “borrowing” of quota from the more controlled sector, and thus to increased levels of contention in the fishery management process.*

- Council has expressed support for SSC involvement in new management action but has not yet defined terms of reference.
 - SSC may wish to form a new sub-group to support this work, with membership finalized after terms of reference have been defined.



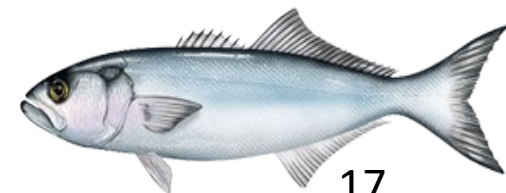
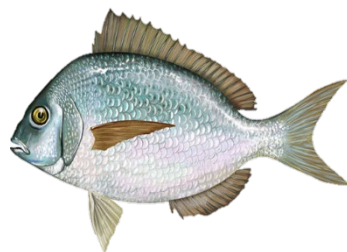
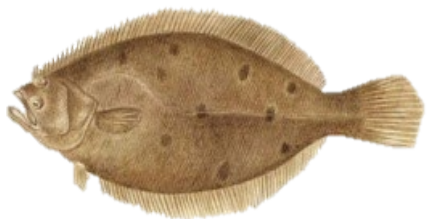
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Next Steps

Fall 2023	<ul style="list-style-type: none"> Continued development of alternatives. AP meeting to review progress, provide input.
December 2023	<ul style="list-style-type: none"> Council/Policy Board mtg to review progress, discuss next steps, and provide additional guidance.
Early 2024 - Summer 2024	<ul style="list-style-type: none"> Continued development of alternatives and development of draft document for public hearings.
August 2024	<ul style="list-style-type: none"> Council/Policy Board approve final range of alternatives and draft document for public hearings.
Fall 2024	<ul style="list-style-type: none"> Public hearings.
Late 2024/Early 2025	<ul style="list-style-type: none"> FMAT/PDT and AP meetings to provide input to Council and Policy Board prior to final action.
April 2025	<ul style="list-style-type: none"> Council/Policy Board final action.
Spring-December 2025	<ul style="list-style-type: none"> Development, review, and revisions of framework/addenda documents. Federal rulemaking. MC/TC use new process to set 2026 recreational measures.
Late 2025 or early 2026	<ul style="list-style-type: none"> Effective date of implemented changes.



Discussion





Backup Slides



- One set of measures for a range of conditions.
- Bins based on multiple factors.
- Options were considered for measures for each bin to achieve a target level of harvest, catch, or F.
- Target level for each bin could be based on B/Bmsy.

Example B/Bmsy to define target level of harvest, catch, or F	
Biological Ref. Point	Biomass Based Matrix
Bin 1: 200%	Bin 1: 150%
Bin 2: 140%	Bin 2: 100%
Bin 3: 75%	Bin 3: 75%
Bin 4: 100%	Bin 4: 60%
Bin 5: 75%	Bin 5: 40%
Bin 6: 60%	Bin 6: 20%
Bin 7: 25%	