



# Harvest Control Rule Draft Addenda/Framework

ASMFC Spring Meeting  
May 5, 2022



# Outline



1. Background
2. Harvest Control Rule Options
3. Target Metric for Setting Measures
4. Conservation Equivalency
5. Accountability Measures
6. Preliminary Summary of Public Comment—*Hearings Only*
7. Next Steps



# Background and Timeline



- **February 2022:** Policy Board approved HCR Draft Addenda for public comment. Council approved range of options for Framework. They also tasked the SSC with providing a qualitative evaluation of the five primary alternatives.
- **March/April 2022:** Public hearings held March 16 - April 13, 2022. Written comments accepted through April 22, 2022.

# Statement of the Problem



- The Commission & Council's current recreational measures setting process faces several challenges
  - Concerns related to uncertainty and variability in the recreational fishery data
  - Need to change measures (sometimes annually) based on those data
  - Perception that measures are not reflective of current stock status
  - Management measures have not always had their intended effect on overall harvest.



# Goal Statement



Establish process for setting recreational measures that:

- prevents overfishing,
- is reflective of stock status,
- appropriately accounts for uncertainty in the recreational data,
- takes into consideration angler preferences, and
- provides an appropriate level of stability and predictability in changes from year to year.



# Management Options for Setting Measures



- 5 possible approaches for setting bag, size, season limits.
- Key differences include:
  - Information, such as expected harvest, stock size, or fishing mortality, considered when setting measures
  - Circumstances under which measures would change
- Each option defines a process for establishing measures.
- None of the options implement specific measures. Measures would be established and modified through separate future specifications actions.

# Management Options for Setting Measures



- **Option: A No Action**
- **Option B: Percent Change**
- **Option C: Fishery Score**
- **Option D: Biological Reference Point**
- **Option E: Biomass Based Matrix**

# Option A: No Action (Current Recreational Measures Setting Process)



## Information Used:

Expected harvest	Stock Biomass	Fishing mortality	Recruitment	Biomass trend
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- Expected harvest under status quo measures compared to future recreational harvest limits

Measures reviewed annually



# Option B: Percent Change Approach



## Information Used:

Expected harvest	Stock Biomass	Fishing mortality	Recruitment	Biomass trend
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- Recent MRIP harvest estimates compared to future recreational harvest limits
- Stock size (biomass relative to biomass target)

Measures set for two years

# Option B: Percent Change Approach




Row	Information Used		
	Estimated harvest compared to future limits	Stock Size ( $B/B_{MSY}$ )	
A	Harvest expected to be below the upcoming recreational harvest limits		
B	Harvest expected to be close to the upcoming recreational harvest limits		
C	Harvest expected to be higher than the upcoming recreational harvest limits		




# Option B: Percent Change Approach



Row	Information Used		
	Estimated harvest compared to future limits	Stock Size ( $B/B_{MSY}$ )	
A	Harvest expected to be below the upcoming recreational harvest limits		
B 	Harvest expected to be close to the upcoming recreational harvest limits	Very high (at least 150% of the target stock size)	
		High (between the target and 150% of the target stock size)	
		Low (below the target stock size)	
C	Harvest expected to be higher than the upcoming recreational harvest limits		

# Option B: Percent Change Approach



Row	Information Used		Target Change in Harvest	
	Estimated harvest compared to future limits	Stock Size ( $B/B_{MSY}$ )		
A	Harvest expected to be below the upcoming recreational harvest limits			
B	Harvest expected to be close to the upcoming recreational harvest limits			
		Low 		Small reduction: 10%
C	Harvest expected to be higher than the upcoming recreational harvest limits			

# Option B: Percent Change Approach




Row	Information Used		
	Estimated harvest compared to future limits		
A	Harvest expected to be below the upcoming recreational harvest limits		
B	Harvest expected to be close to the upcoming recreational harvest limits		
C	Harvest expected to be higher than the upcoming recreational harvest limits		




# Option B: Percent Change Approach



Row	Information Used		
	Estimated harvest compared to future limits	Stock Size ( $B/B_{MSY}$ )	
A			
B			
C	Harvest expected to be higher than the upcoming recreational harvest limits 	Very high (at least 150% of the target stock size)	
		High (between the target and 150% of the target stock size)	
		Low (below the target stock size)	

# Option B: Percent Change Approach



Row	Information Used		Sub-options for Target Change in Harvest	
	Estimated harvest compared to future limits			
A				
B				
C	Harvest expected to be higher than the upcoming recreational harvest limits	Very high 	Sub-Option B-2A: Small reduction: 10%	Sub-Option B-2B: No liberalization or reduction

# Option B: Percent Change Approach



Row	Information Used		Target Change in Harvest	
	Estimated harvest compared to future limits	Stock Size ( $B/B_{MSY}$ )		
A	Harvest expected to be below the upcoming recreational harvest limits	Very high (at least 150% of the target stock size)	Sub-Option B-1A: Liberalization amount based on difference between expected harvest and RHL	Sub-Option B-1B: Large liberalization: 40%
		High (between the target and 150% of the target stock size)	Sub-Option B-1A: Liberalization amount based on difference between expected harvest and RHL	Sub-Option B-1B: Medium liberalization: 20%
		Low (below the target stock size)	Sub-Option B-2A: Small liberalization: 10%	Sub-Option B-2B: No liberalization or reduction
B	Harvest expected to be close to the upcoming recreational harvest limits	Very high (at least 150% of the target stock size)	Small liberalization: 10%	
		High (between the target and 150% of the target stock size)	No liberalization or reduction	
		Low (below the target stock size)	Small reduction: 10%	
C	Harvest expected to be higher than the upcoming recreational harvest limits	Very high (at least 150% of the target stock size)	Sub-Option B-2A: Small reduction: 10%	Sub-Option B-2B: No liberalization or reduction
		High (between the target and 150% of the target stock size)	Sub-Option B-1A: Reduction amount based on difference between expected harvest and RHL	Sub-Option B-1B: Medium reduction: 20%
		Low (below the target stock size)	Sub-Option B-1A: Reduction amount based on difference between expected harvest and RHL	Sub-Option B-1B: Large reduction: 40%



# Option C: Fishery Score Approach



Combine four metrics into one fishery score:

Expected harvest	Stock Biomass	Fishing mortality	Recruitment	Biomass trend
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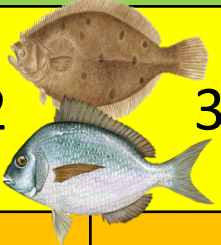
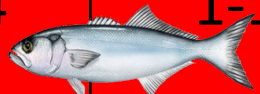
- Recent MRIP harvest estimate compared to future recreational harvest limits
- Stock size; i.e., biomass relative to biomass target
- Fishing mortality
- Recent recruitment

Each metric weighted depending on importance

Measures set for two years and predetermined

# Option C: Fishery Score Approach



Bin	Fishery Score	Stock Status and Fishery Performance Outlook	Measures
1 	4-5	Good	Most Liberal
2 	3-3.99	Moderate	Liberal
3	2-2.99	Poor	Restrictive
4 	1-1.99	Very Poor	Most Restrictive

# Option D: Biological Reference Point Approach



## Information Used:

Expected harvest	Stock Biomass	Fishing mortality	Recruitment	Biomass trend
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### Primary information used:





- Stock size; i.e., biomass relative to biomass target
- Fishing mortality

### Secondary information used:

- Expected harvest compared to RHL
- Recent recruitment
- Biomass trend

# Option D: Biological Reference Point Approach



Stock Biomass Compared to Target Level	Overfishing is Not Occurring Fish are being harvested sustainably	Overfishing is Occurring Too many fish are being removed through fishing														
<p><b>Very High</b> At least 150% of the target stock size</p>	<p><b>2015</b> </p> <p>R↑      R↓</p> <table border="1" data-bbox="641 425 1008 525"> <tr> <td>B↑</td> <td>liberal</td> <td>liberal</td> </tr> <tr> <td>B↓</td> <td>default</td> <td>default</td> </tr> </table> <p><b>2013</b>  1</p>	B↑	liberal	liberal	B↓	default	default	<p><b>2017</b> </p> <p>R↑      R↓</p> <table border="1" data-bbox="1066 382 1858 482"> <tr> <td>Recent harvest limits <b>have not</b> been exceeded</td> <td>B↑ B↓</td> <td>default restrictive</td> <td>restrictive restrictive</td> </tr> <tr> <td>Recent harvest limits <b>have</b> been exceeded</td> <td>B↑ B↓</td> <td colspan="2">restrictive and re-evaluate measures</td> </tr> </table> <p><b>2019</b>  4</p>	Recent harvest limits <b>have not</b> been exceeded	B↑ B↓	default restrictive	restrictive restrictive	Recent harvest limits <b>have</b> been exceeded	B↑ B↓	restrictive and re-evaluate measures	
B↑	liberal	liberal														
B↓	default	default														
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Recent harvest limits <b>have</b> been exceeded	B↑ B↓	restrictive and re-evaluate measures														
<p><b>High</b> Above the target, but below 150% target stock size</p>	<p>R↑      R↓</p> <table border="1" data-bbox="641 739 1008 839"> <tr> <td>B↑</td> <td>liberal</td> <td>liberal</td> </tr> <tr> <td>B↓</td> <td>default</td> <td>default</td> </tr> </table> <p>2</p>	B↑	liberal	liberal	B↓	default	default	<p>R↑      R↓</p> <table border="1" data-bbox="1066 688 1858 882"> <tr> <td>Recent harvest limits <b>have not</b> been exceeded</td> <td>B↑ B↓</td> <td>default restrictive</td> <td>restrictive restrictive</td> </tr> <tr> <td>Recent harvest limits <b>have</b> been exceeded</td> <td>B↑ B↓</td> <td colspan="2">restrictive and re-evaluate measures</td> </tr> </table> <p>5</p>	Recent harvest limits <b>have not</b> been exceeded	B↑ B↓	default restrictive	restrictive restrictive	Recent harvest limits <b>have</b> been exceeded	B↑ B↓	restrictive and re-evaluate measures	
B↑	liberal	liberal														
B↓	default	default														
Recent harvest limits <b>have not</b> been exceeded	B↑ B↓	default restrictive	restrictive restrictive													
Recent harvest limits <b>have</b> been exceeded	B↑ B↓	restrictive and re-evaluate measures														
<p><b>Low</b> Below the target stock size, but more than 50% of the target stock size</p>	<p>R↑      R↓</p> <table border="1" data-bbox="641 1045 1008 1145"> <tr> <td>B↑</td> <td>default</td> <td>restrictive</td> </tr> <tr> <td>B↓</td> <td>restrictive</td> <td>restrictive</td> </tr> </table> <p>3</p>	B↑	default	restrictive	B↓	restrictive	restrictive	<p>R↑      R↓</p> <table border="1" data-bbox="1066 996 1858 1190"> <tr> <td>Recent harvest limits <b>have not</b> been exceeded</td> <td>B↑ B↓</td> <td>default restrictive</td> <td>restrictive restrictive</td> </tr> <tr> <td>Recent harvest limits <b>have</b> been exceeded</td> <td>B↑ B↓</td> <td colspan="2">restrictive and re-evaluate measures</td> </tr> </table> <p>6</p>	Recent harvest limits <b>have not</b> been exceeded	B↑ B↓	default restrictive	restrictive restrictive	Recent harvest limits <b>have</b> been exceeded	B↑ B↓	restrictive and re-evaluate measures	
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B↓	restrictive	restrictive														
Recent harvest limits <b>have not</b> been exceeded	B↑ B↓	default restrictive	restrictive restrictive													
Recent harvest limits <b>have</b> been exceeded	B↑ B↓	restrictive and re-evaluate measures														
<p><b>Overfished (Too Low)</b> Less than 50% of the target stock size</p>	<p><b>MOST RESTRICTIVE/REBUILDING PLAN</b></p> <p>7</p>															

# Option E: Biomass Based Matrix Approach



## Information Used:

Expected harvest	<b>Stock Biomass</b>	Fishing mortality	Recruitment	<b>Biomass trend</b>
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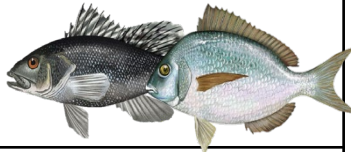


- Stock size; i.e., biomass relative to biomass target
- Stock size (biomass) trend

Measures set for two years

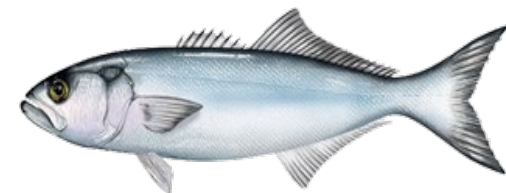
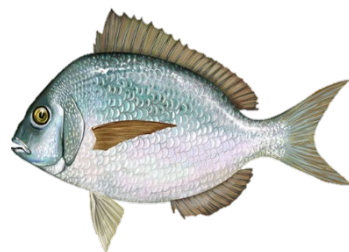
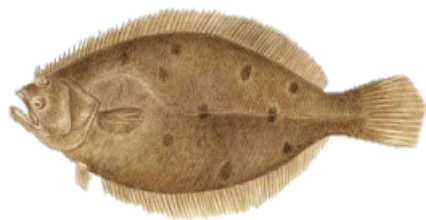
Measures would be pre-determined

# Option E: Biomass Based Matrix Approach



Stock Size (i.e., biomass compared to target level)	Stock Size (Biomass) Trend		
	Increasing	Stable	Decreasing
<b>Very High:</b> At least 150% of target stock size	Bin 1 		
<b>High:</b> Above the target, but below 150% target stock size	Bin 1	Bin 2	
<b>Low:</b> Below the target stock size, but more than 50% of the target stock size	Bin 3 	Bin 4	
<b>Overfished (Too Low):</b> Less than 50% of the target stock size	Bin 5	Bin 6 	

# Target Metric for Setting Measures



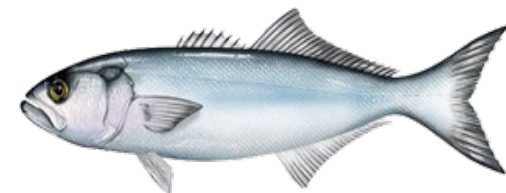
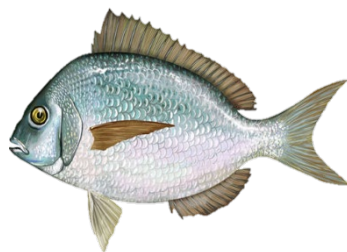
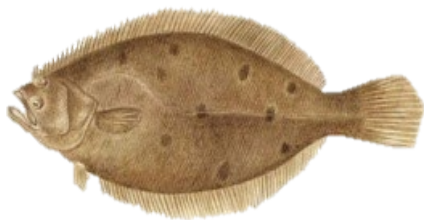
# Target Metric for Setting Measures



- Relevant to options with bins and associated pre-defined measures.
- Specify whether measures in each bin achieve a target level of:
  - Option 3.2A **Harvest**
  - Option 3.2B **Recreational dead catch** (harvest plus dead discards)
  - Option 3.2C **Fishing mortality**



# Conservation Equivalency

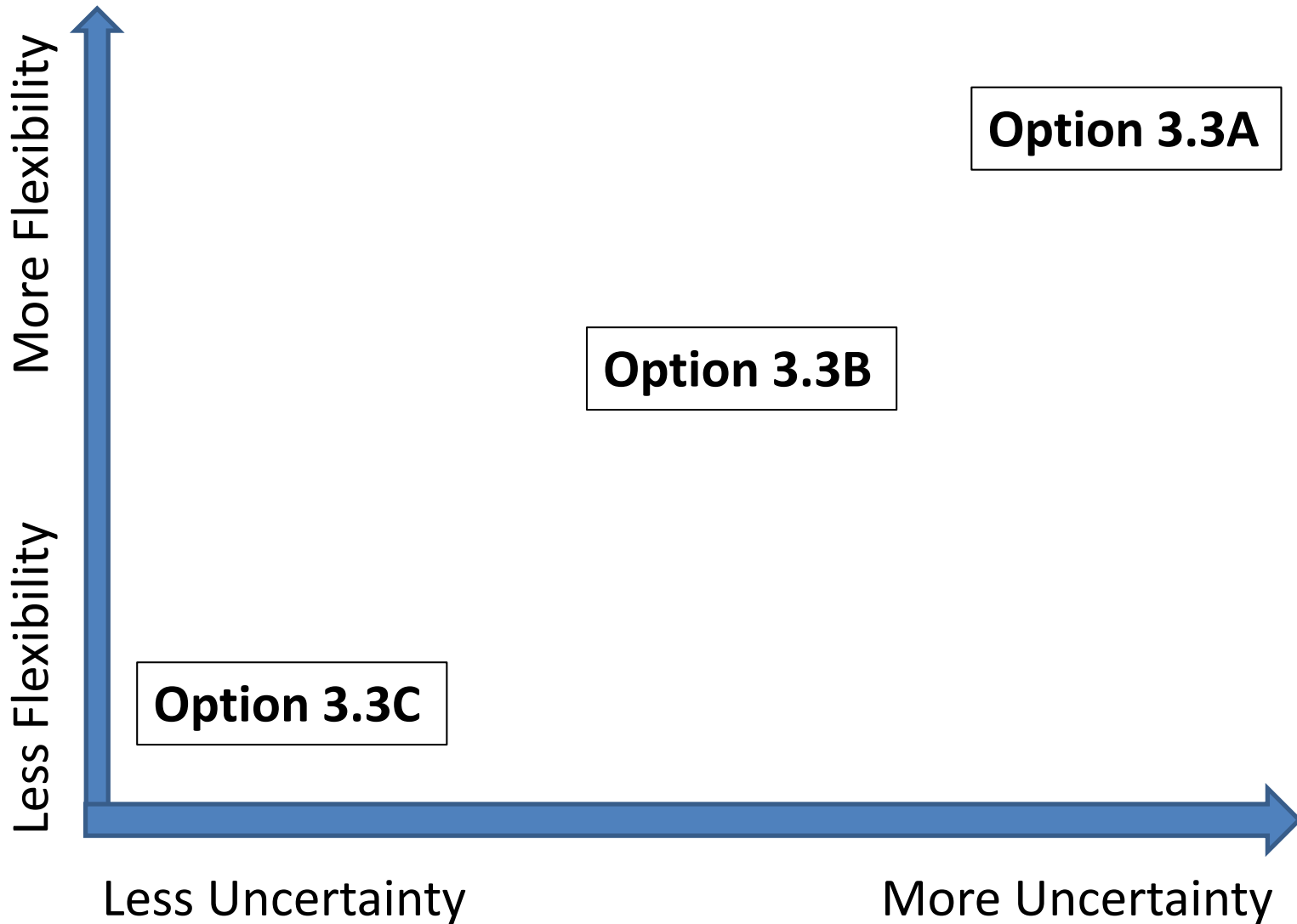


# Conservation Equivalency Options

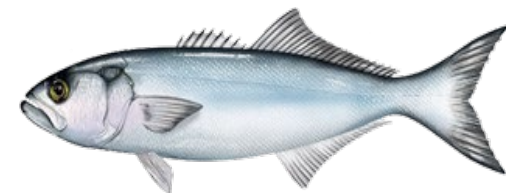
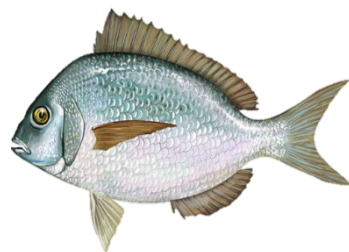


- Defines the level of flexibility states have in proposing alternative measures **after the specifications process**
  - Option 3.3A Allows individual states to adjust measures
  - Option 3.3B Allows grouping of states within a region to adjust measures
  - Option 3.3C Does not allow states or regions to adjust measures
- Under all Harvest Control Rule approaches, states and regions are able to provide input **during the specifications process**

# Comparison of Conservation Equivalency Options



# Accountability Measures



# Accountability Measures



- Accountability measures aim to
  - Prevent catch limit overages
  - Correct or mitigate for overages when they do occur
- A required component of the federal management program.
- When catch limits have been exceeded, all options in the addenda require re-evaluation of measures to prevent future overages.
- Some sub-options consider if the response to an overage should be driven by whether or not the overage resulted in overfishing.

# Preliminary Summary of Public Comment Webinar Hearings Only



- 8 webinar hearings held March 16-April 13, 2022
- Webinar attendance (excluding Commission/Council staff) ranged from 9 to 63 people per hearing
- Written comments are still being tallied. A final public comment summary will be available with the briefing materials for the June Council/Policy Board meeting.
- The following summary of comments is based only on verbal public comments given at the hearings

# Preliminary Summary of Public Comment Webinar Hearings Only



- Comments on preferred options
  - Most people who spoke in favor of a specific option during a webinar hearing favored option B.
  - Many felt uncomfortable with C, D, and E due to current uncertainty in what management measures would be assigned to each bin.
  - No verbal comments provided during the hearings supported option A, status quo.

# Preliminary Summary of Public Comment Webinar Hearings Only



- Several comments on the lack of confidence in MRIP data, and how we should stop using MRIP data or consider other information, such as biomass, when making management decisions.
- For those who commented on conservation equivalency, the no action conservation equivalency option (states retain ability to propose conservation equivalent measures) was the preferred option.

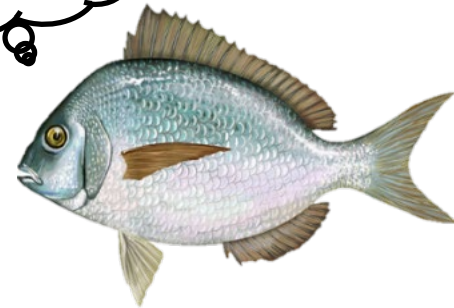


# Next Steps



- **May 10, 2022:** SSC meeting to discuss their review of HCR
- **May 25, 2022:** AP meeting
- **Late May 2022** (date TBD): FMAT/PDT meeting
- **May 27, 2022:** Most briefing materials for final action posted (including final SSC report and full summary of public comment period)
- **June 7, 2022:** Council/Policy Board meeting - **final action**
- **June – Dec 2022:** Development, review, and finalization of FW document; federal rulemaking process
- **Fall 2022:** Recreational Economic Demand Model and Recreational Fleet Dynamics Model available for use for one or more species
- **Fall – Winter 2022:** Use preferred HCR alternative to set rec measures for 2023

# Questions?



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