



Risk & Uncertainty Policy: Tautog

Presented to the Tautog
Management Board

August 3, 2021

Background



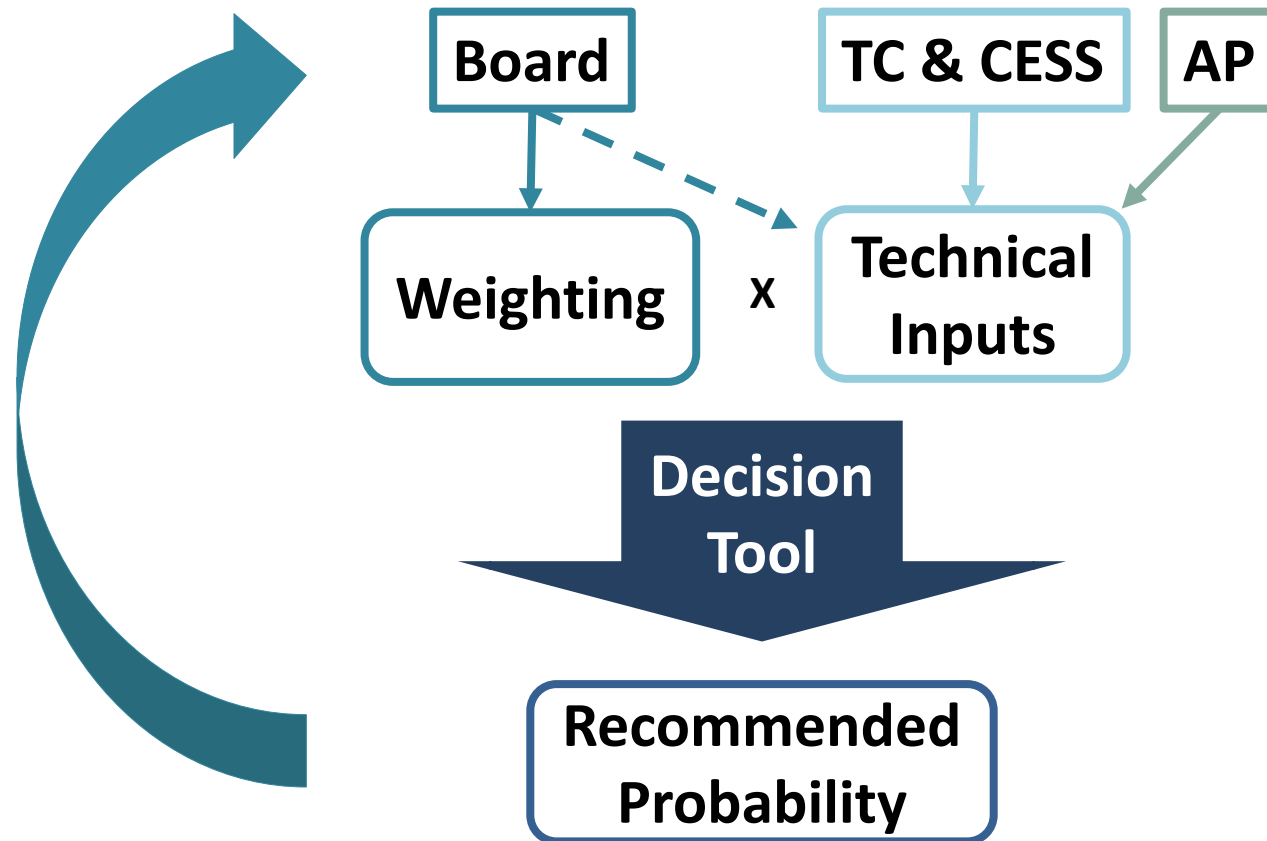
- The purpose of the Risk & Uncertainty (R&U) Policy is to provide a consistent yet flexible mechanism to account for risk and uncertainty in the Commission's decision-making processes, including:
 - Protecting all Commission-managed stocks from the risk of overfishing
 - Minimizing any adverse social, economic, or ecosystem effects
- The R&U Work Group was tasked with developing the policy and process

Background



- The R&U WG developed a decision tool, which...
 - incorporates different information related to the risk and uncertainty for a species (**technical inputs**)
 - and combines it with the relative importance of the information (**weighting**)
 - to arrive at one value, a **recommended probability** of achieving the reference points
- The recommended probability will then be used with projections to develop management options for the species

R&U Decision Tool

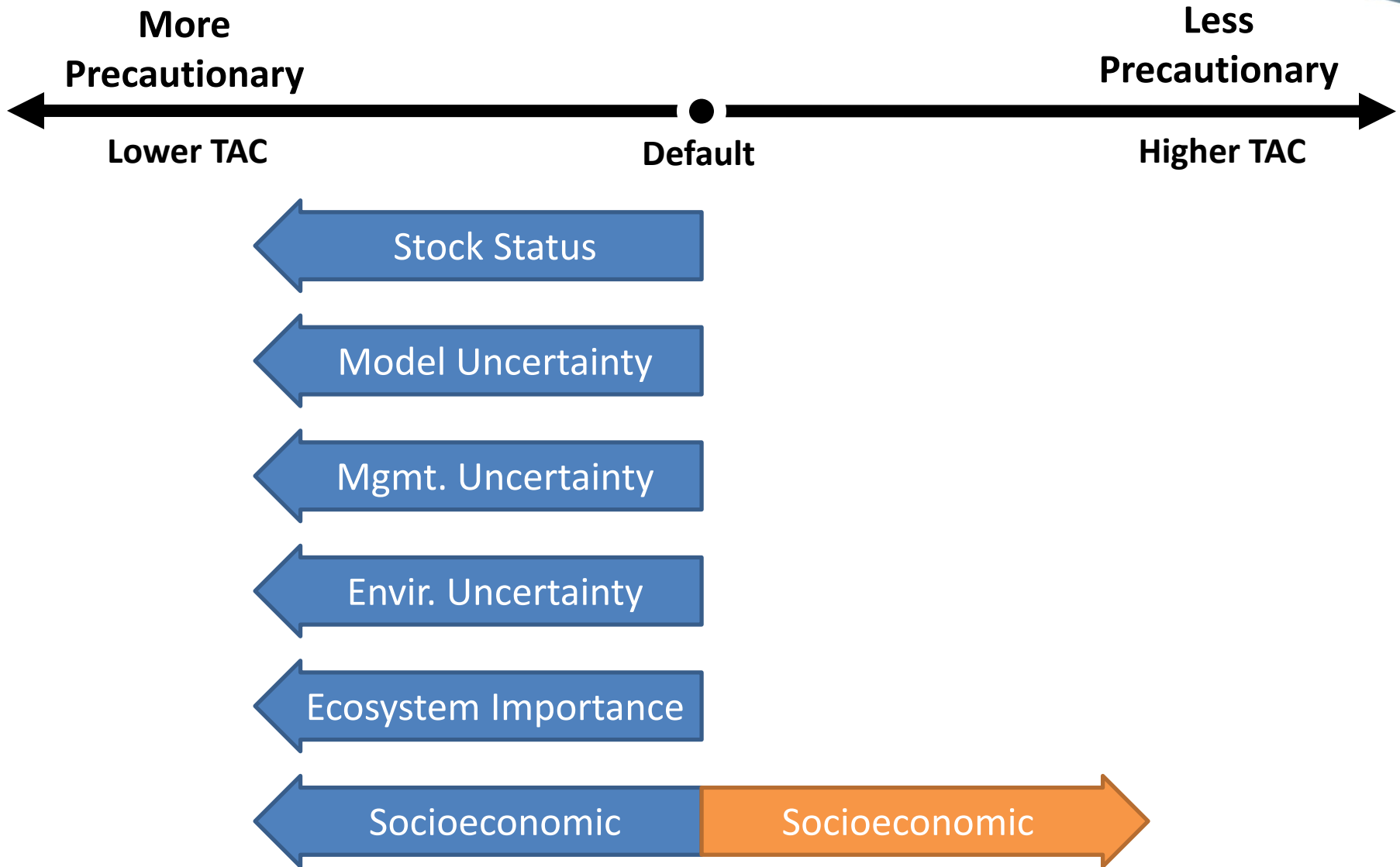


R&U Decision Tool

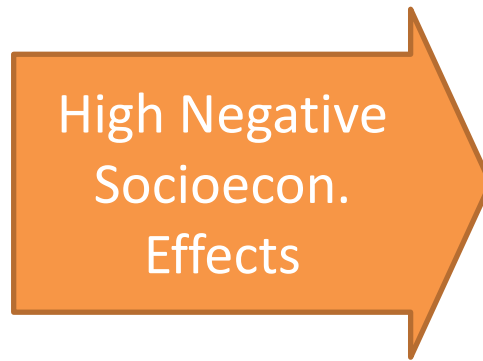
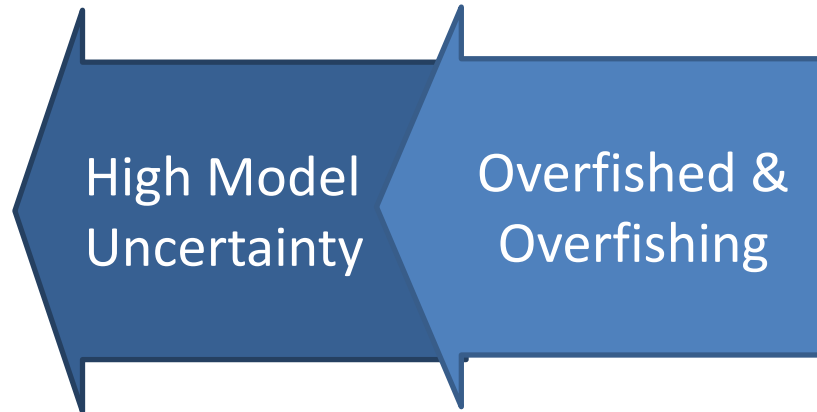
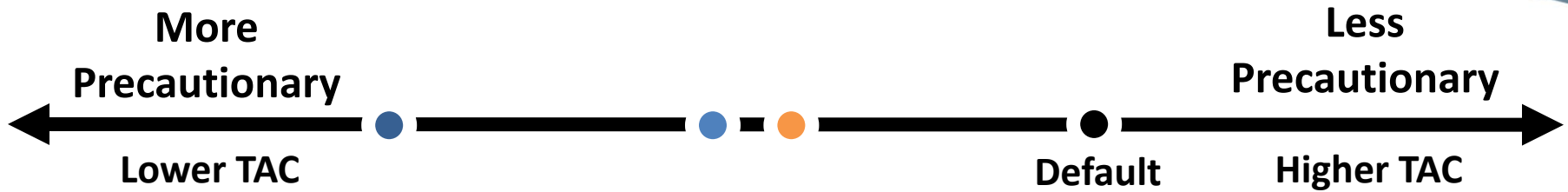


Category	Decision Tool Question
Stock Status	Is overfishing occurring?
	Is F above the target?
	Is the stock overfished?
	Is biomass below the target?
Additional Uncertainty	How much model uncertainty is there?
	How much management uncertainty is there?
	How much environmental uncertainty is there?
Additional Risk	How important is the species to other key species or the ecosystem?
Socioecon.	What are the short-term commercial socioeconomic effects?
	What are the long-term commercial socioeconomic effects?
	What are the short-term recreational socioeconomic effects?
	What are the long-term recreational socioeconomic effects?

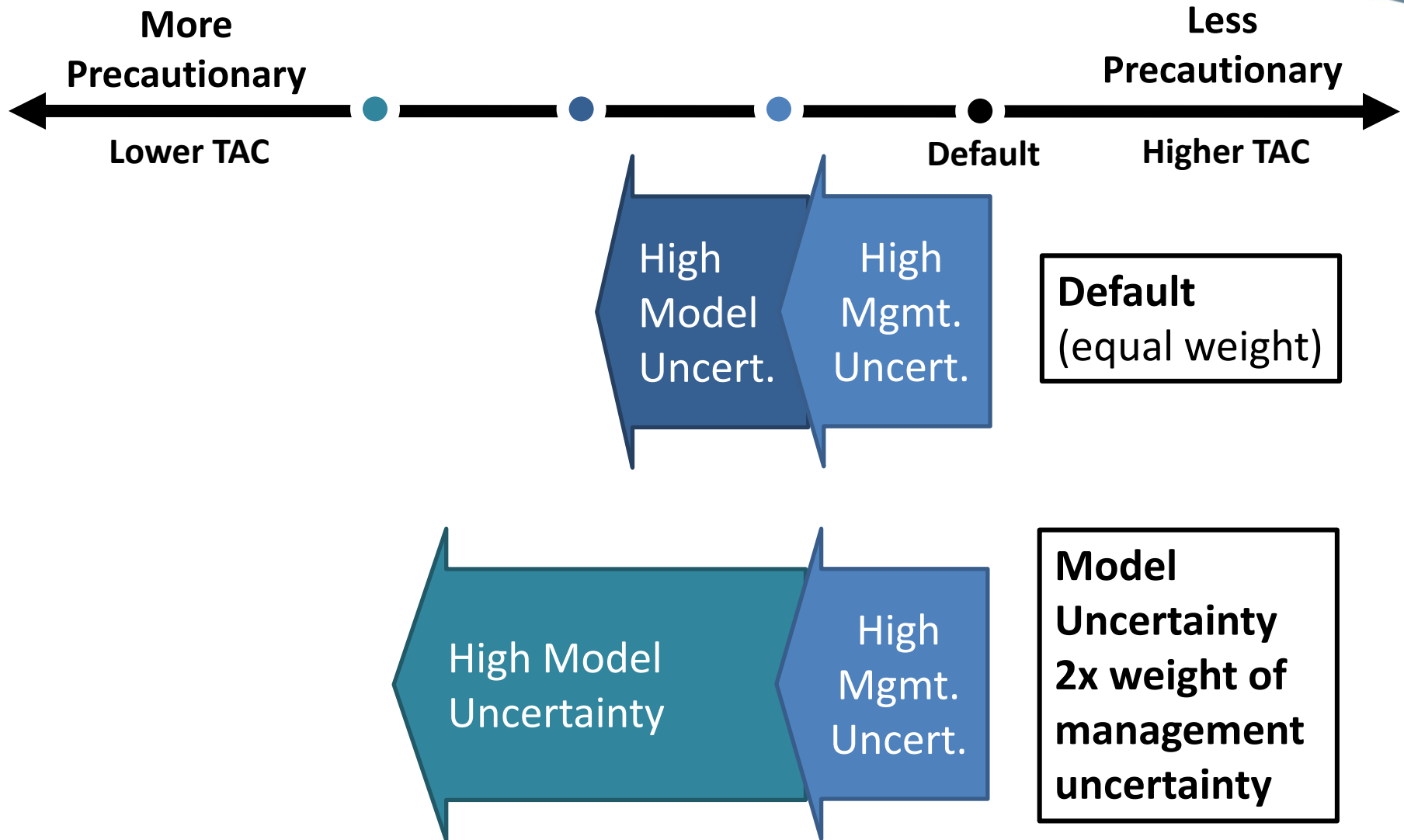
R&U Decision Tool



R&U Decision Tool Example



R&U Decision Tool Example



Continued Development



- The Striped Bass TC & CESS developed a striped bass example using the decision tool
- However, this was not a full implementation of the risk and uncertainty process
- At the 2021 ASMFC Winter Meeting, the ISFMP Policy Board supported the continued development of the policy and the idea to use tautog as a pilot case
 - Full implementation of the process, while still allowing flexibility & ability to make changes as needed

Tautog R&U Process



- The Tautog TC, AP, and CESS are providing input on the technical components
- The first step for the Board will be to provide input on the weightings, i.e., the relative importance of different components of the decision tool
 - A survey will be used to gather Board input
 - There will be a webinar to walk through the survey & answer questions (August/September)
 - Survey responses will be averaged to produce weightings
- A draft R&U report for each region will be presented to the Board for review after the assessment is complete (Annual Meeting)
 - The reports will include preliminary weightings, technical inputs and justifications, and a preliminary recommended probability of achieving the reference points



Any questions?



2020 Fishery Management Plan Review for Tautog



Tautog Management Board

August 3, 2021

Overview



- Status of the FMP
- Status of the stock
- Status of the fishery
- Compliance requirements for 2020
- Tagging Program Implementation
- Questions

Status of the FMP



Managed under Amendment 1 (2017)

- No change in commercial or recreational size limit or possession measures
- Changes from previous years:
 - Implementation of the Commercial Harvest Tagging Program
 - Massachusetts and Rhode Island exceeded their commercial quotas by 1% and 2.5% respectively

Status of the Stock



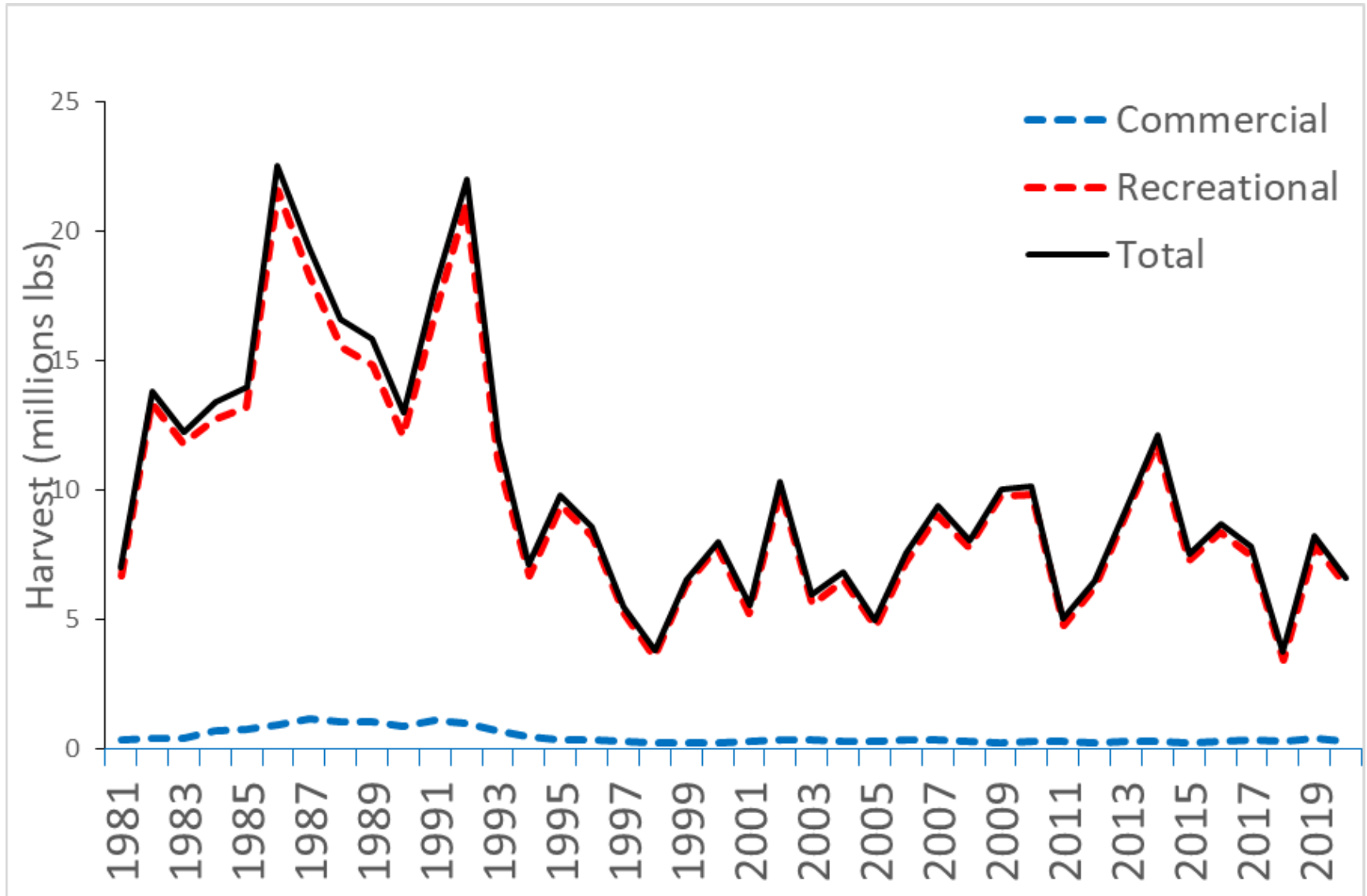
- 2016 Stock Assessment Update
 - Four regions
 - Massachusetts-Rhode Island (MARI)
 - Long Island Sound (LIS)
 - New Jersey-New York Bight (NJ-NYB)
 - Delaware, Maryland, and Virginia (DelMarVa)

Tautog Biological Reference Points and Stock Status by Region

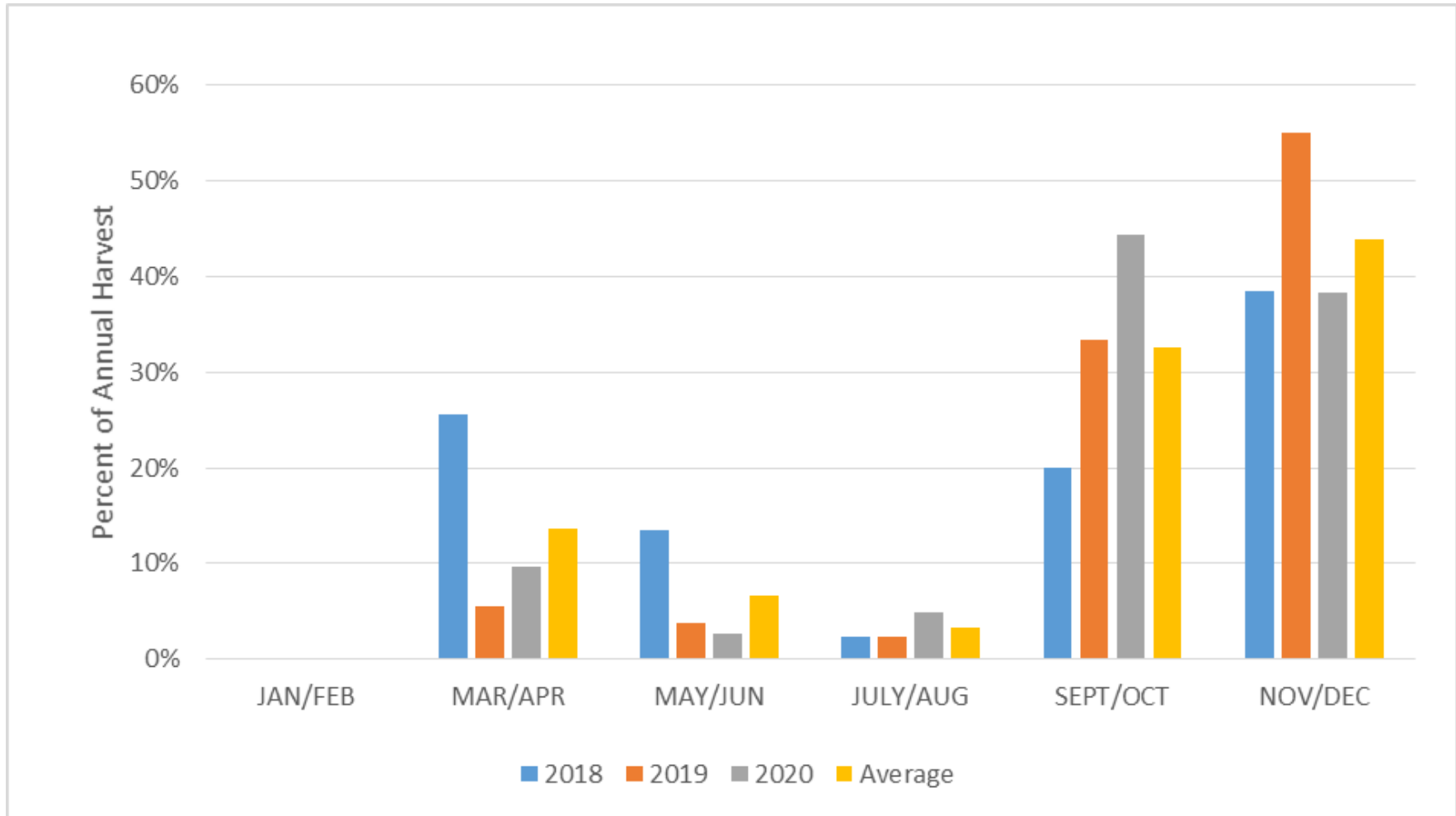
Source: ASMFC Stock Assessment Update, 2016

Region	Fishing Mortality			Spawning Stock Biomass (mt)			MSY or SPR	Status
	Target	Threshold	3-Year Average	Target	Threshold	SSB ₂₀₁₅		
Massachusetts – Rhode Island	0.28	0.49	0.23	2,684	2,004	2,196	SPR	Not overfished, overfishing not occurring
Long Island Sound	0.28	0.49	0.51	2,865	2,148	1,603	MSY	Overfished, overfishing
New Jersey – New York Bight	0.20	0.34	0.54	3,154	2,351	1,809	SPR	Overfished, overfishing
Delaware – Maryland – Virginia	0.16	0.24	0.16	1,919	1,447	621	SPR	Overfished, overfishing not occurring

Status of the Fishery



Status of the Fishery cont'd



Commercial Tagging Program



- Summary
 - All states with the exception of CT and NY implemented the program in 2020
 - Participants in the fishery vary significantly between MARI and other states
 - More feedback on tagging program will be covered in later presentations

Biological Sampling



- Connecticut, New Jersey, Delaware, and Virginia were unable to meet the 200 age sample requirement in 2020
- State reported COVID-19 pandemic impacted sample collection
- The PRT recommends the Board find all states in compliance with the sampling requirements of the FMP

State	2020 Samples
MA	364 lengths; 211 ages
RI	251 lengths; 249 ages
CT	0 ages
NY	285 lengths and ages
NJ	185 lengths and ages
DE	161 lengths and ages
MD	202 lengths and ages
VA	109 lengths and ages



De minimis

- Criteria: state landings in the most recent year of data does not exceed 10,000 pounds or 1% of the regional commercial landings
- Both Maryland and Delaware requested De Minimis status and meet the criteria

Board Action for Consideration



- Move to accept the 2020 Tautog FMP Review and state compliance reports and approve *de minimis* status for Delaware and Maryland.



Questions?



Tautog Tagging Program Implementation: Technical Committee Report



Tautog Management Board

August 3, 2021

Background



- Technical Committee (TC) met in early July to provide feedback on tagging program implementation
 - Report included in briefing materials
- TC members provided feedback on implementation in their State based on questions
- TC developed recommendations for Board consideration

State-by-state Implementation



Virginia

- Implementation of tagging program went well
 - Initial challenges in distributing tags due to COVID-19 pandemic
 - Recommend that SAFIS include field for inputting tag information
 - Landings increased slightly and primary go to fresh market, not live market

State-by-state Implementation



Maryland

- No issues with implementation of tagging program
 - Only one participant in 2020

Delaware

- No issues with implementation in 2020, also very small fishery
 - Reduced tags ordered for 2021 fishing season

State-by-state Implementation



New Jersey

- No significant issues
 - Limited entry fishery, active participants much lower than total permitted harvesters
 - No reported issues with applying tags
 - Live market was impacted by COVID-19 pandemic
 - NJ DFW staff plan to use a postcard system to aid with data collection in 2022

State-by-state Implementation



New York

- A number of challenges with 2021 implementation
 - Harvesters have increased (doubled) and requested additional tags for this year
 - Many have reached out to NYSDEC staff with concerns, primarily around application of tags and mortality attributed to tagging
 - Anecdotal reports of tagging the fish in the tag
 - Substantial live market, mortality impacting price
 - NYSDEC staff recommends exploring trials of other tag types, such as Floy tag

State-by-state Implementation



Connecticut

- Implementation in 2021 with few issues
 - Small fishery relative to neighboring states (RI and NY)
 - Half of the tags (3,000) have been distributed and anticipating greater demand for fall fishery
 - Low mortality associated with tagging

State-by-state Implementation



Rhode Island

- Increase in participation since implementation
 - From approx. 250 up to 295 participants; concern about being excluded from the fishery
 - Change in participation impacting tag request and biological metric
 - No complaints about mortality associated with tagging

State-by-state Implementation



Massachusetts

- Tagging program implementation has gone well
 - Moved from open access to limited entry
 - From approx. 2,000 participants to 218 license holders
 - Some challenges noted in tag application
 - Not all participants initially purchased applicator from manufacturer
 - Few complaints about mortality associated with tagging
 - Landings primarily sold to live market

TC Recommendations



- Address SAFIS reporting challenge
 - Additional field for inputting tag information
- Potentially consider additional research and trials of tag types
 - If pursued, a evaluation of tags in a variety of settings and whether they can be tampered with once applied should be prioritized

TC Recommendations



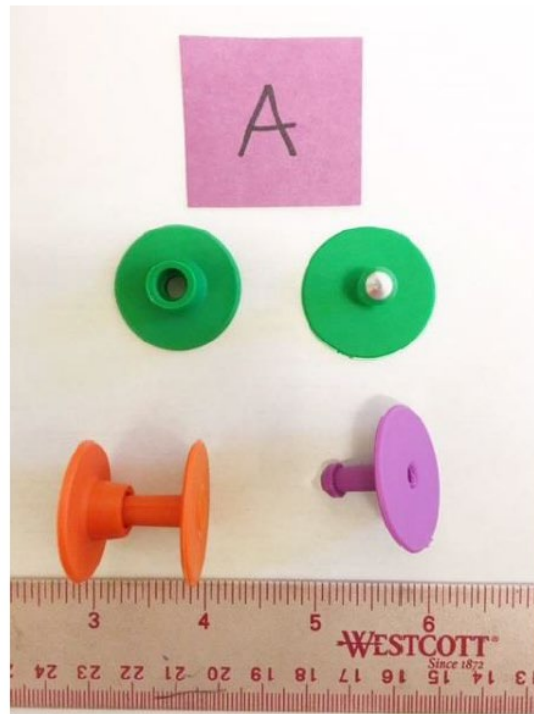
- Consult with Law Enforcement Committee (LEC) on the enforceability of tag placement
 - Anecdotal reports tags applied in the tail. LEC can confirm whether they have encountered any issues.
- Define participants as number of harvesters issued tags
 - TC was in agreement on all participants should be reported out in annual reports; not just active participants
- 2020 fishing year may not be reliable for future tag requests
 - COVID-19 pandemic complicates participation and market dynamics; consider this when requesting tags for 2022 fishing season



Timeline for Selecting Tag Type

- Oct 2015: LEC Subcommittee convened to respond to public comment on Amendment 1 regarding illegal harvest
- Jan 2016: LEC Subcommittee outlined objectives for a commercial harvest tagging program, as well as potential tag vendors and tagging trials
- May 2016: LEC Subcommittee selected three tag types to test- 1. button tag, 2. strap tag (**current tag type**), 3. rototag
 - Floy tags were considered, but not selected for testing
 - Concerns were raised about affecting the meat and being easy to tamper
 - NY and Mass both conducted tag trials with the three selected tag current strap tag

Button Tag



Strap Tag (current tag)



Rototag



Timeline for Selecting Tag Type



- Summer 2016: NY 30 day tag study conducted by NYSDEC staff and Stony Brook University was completed
 - The three tags identified were tested
 - Research team indicated that National Band strap tag would be the most appropriate
 - Report was completed in December 2016 and presented to the Board in February 2017
- 2017: MA DMF staff also conducted similar tagging trial



Questions?



Tautog Tagging Program Implementation: Industry Report



Tautog Management Board

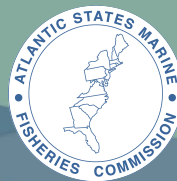
August 3, 2021

Background



- Advisory Panel (AP) was polled to schedule call in June
 - Only one participant, provided no comment
- Staff reached out to the AP via email with questions to answer
 - Poor response rate
- Report outlines feedback provided from four AP members, but not the group as a whole
- States should consider whether to change their current AP member

Questions



How has the commercial harvest tagging program gone so far?

- Mixed reviews
 - One AP member: Frustration with when the commercial fishing season occurs in VA
 - Learning curve for some in applying the tags
 - Some mortality, affecting ability to sell to the live market

Questions



Any change in the number of commercial harvesters due to implementation?

- Some states have seen an increase in participation due to concern about being excluded from the fishery
- Massachusetts has moved to the limited entry fishery, reducing participants.

Questions



Were there enough tags in your state in 2020?

- Generally, yes. Some states either ordered more tags or distributed more later in the season to address rising needs.
- AP member from NJ indicated that the number of tags was a limiting factor in their landings. If given more tags, they could land more fish.

Questions



Challenges with applying the tags?

- Yes, three out of four AP members indicated challenges. Issues included:
 - Applying tags while out at sea presents challenges.
 - Its time consuming and requires additional deck hands to help.
 - Anecdotal reports of people applying tags at fish houses, after leaving vessel.

Questions



Was there any change in the market price compared to previous years? If so, what would you attribute the price change was caused by?

- COVID-19 pandemic created challenges in selling to live markets. Was not a normal year, tough to compare against pre-pandemic
- One AP member noted that dealers offered lowered prices, possible in part to many restaurants being closed
- One AP member noted competition for other live, invasive species has lowered the price per pound

Questions



Do you think the tagging program has reduced, or will eventually reduce, the illegal harvest sold into commercial markets?

- Generally, AP members indicated that illegal harvest has continued and will do so into the future if there is enough incentive
- Those illegally harvesting and selling to markets and restaurants will continue to work outside of the legal, permitted system
- Indicated the need for more law enforcement on the water and in markets

Questions



Any recommendations or considerations for managers in continuing the tagging program?

- AP member from VA indicated VMRC staff need to continue to engage with commercial harvesters
- AP member from DE was supportive of moving to an individual quota for harvesters
- AP member from MA questioned whether managers thought the program was worth the additional work
 - Mortality from Tagging can affect harvesters revenue



Questions?



Tautog Commercial Harvest Tagging Program: LEC Feedback on Implementation



Tautog Management Board
August 3, 2021

Outline



- Background
- Questions posed and feedback from LEC member

Background



- October 2018
 - Implementation of Tagging Program postponed until January 1, 2020
- Fall 2019
 - All states received orders by December 2019
- Implementation was expected for many states starting January 2020
 - COVID-19 pandemic
 - MA, RI, NJ-VA all implemented the Tagging Program
 - NY and CT decided to postpone implementation until 2021
- 2021: All states have implemented Tagging Program

Questions



How has the commercial harvest tagging program gone so far?

- Generally successful.
- Some initial issues with distribution of tags due to COVID-19 pandemic, but those issues have been addressed.
- Some issues with application of tags, fish getting damaged in storage, and higher mortality due to warming waters this year (2021)

Questions



Does your state have regulations in place?

- A majority of states put in place regulations for 2020.
- New Jersey does not have official regulations currently, which has presented challenges for enforcing tagging.

Questions



Any change in the number of commercial tautog commercial harvesters following implementation of the tagging program?

- Yes, for a few states. Massachusetts went to a limited entry fishery (over 2,000 down to approx. 200)
- 2021 is first year for New York, and there is the chance that number of active harvesters may increase during the fall fishery

Questions



Were there enough tags in your state in 2020?

- Yes for most states. A few states (Mass, Rhode Island) had to order additional tags

Questions



Challenges with applying the tags?

- Most indicated there wasn't significant issues with apply the tags
- Some LEC members did note there were challenges initially. Feedback as to why there was challenges included not using the recommended applicator presented issues

Questions



Do you think the tagging program has reduced, or will eventually reduce, the illegal harvest sold into commercial markets?

- Generally, LEC members indicated that the tagging program should reduce illegal harvest.
- The tagging program is in early stage, it may take time to assess whether illegal harvest has been reduced-and if so, by how much

Questions



What was the level of enforcement or monitoring of commercial harvesters and live fish markets (for those states that have them)?

- Generally LEC indicated that there has not been additional patrols or monitoring with the implementation of the tagging program.
- One LEC member noted the issue that due to the COVID-19 pandemic staff capacity to monitor was reduced.

Questions



Any recommendations or considerations for managers in continuing the tagging program?

- One LEC member indicated some state regulatory language leave too much ambiguity on when fish need to be tagged- prior to offloading from the boat or at the time of harvest
- One LEC member indicated that a different style of tag or tagging location may be helpful for fishermen.



Questions?