



Atlantic States
Marine Fisheries
COMMISSION

2025 Tautog Stock Assessment Update

K. Drew, ASMFC

October 27, 2028

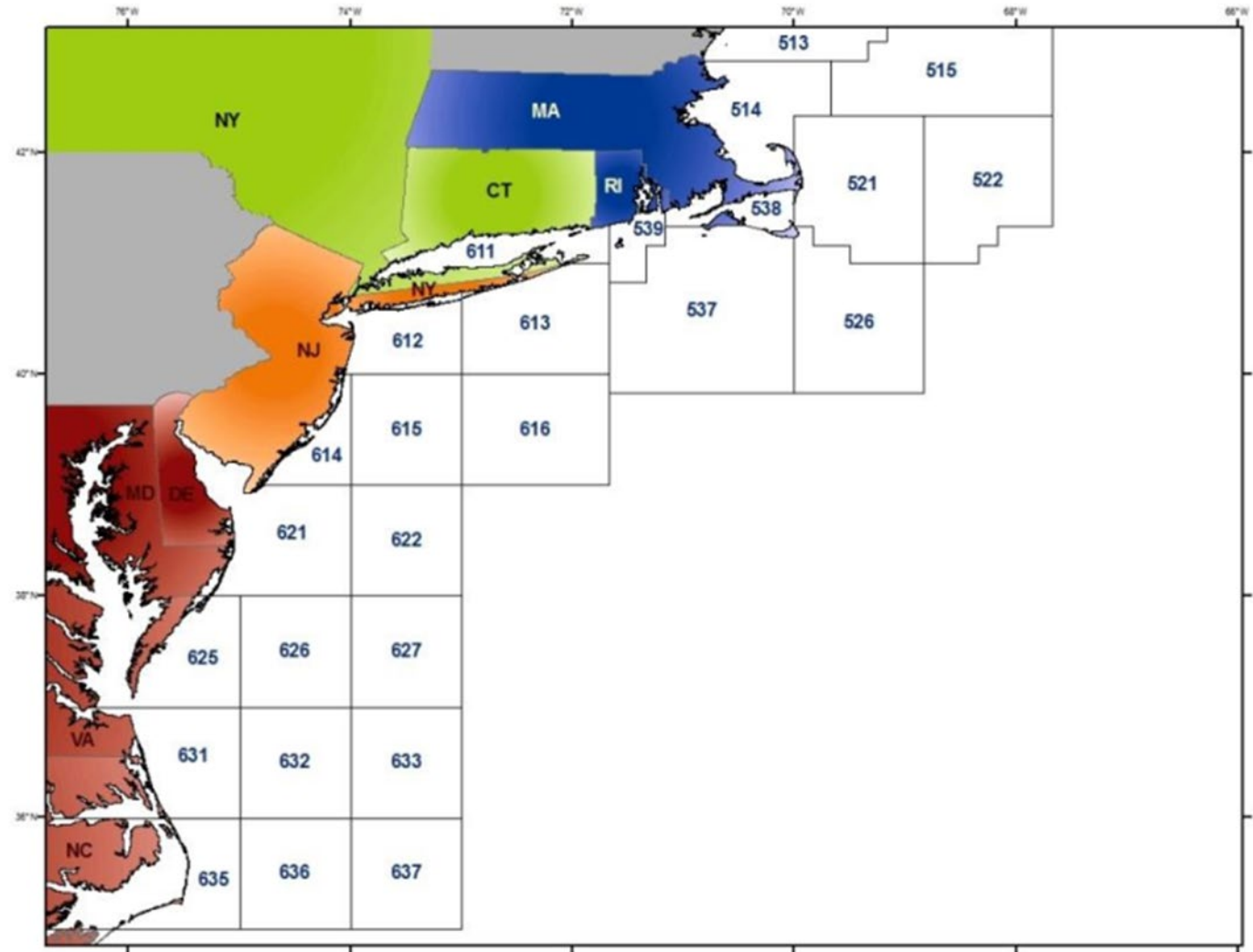
Technical Committee

- Sandra Dumais, Chair, New York State Department of Environmental Conservation
- Nichole Ares, Rhode Island Division of Fish and Wildlife
- Conor Davis, New Jersey Division of Fish and Wildlife
- David Ellis, Connecticut Department of Energy and Environmental Protection
- Shakira Goffe, Virginia Marine Resources Commission
- Elise Koob, Massachusetts Division of Marine Fisheries
- Craig Weedon, Maryland Department of Natural Resources
- Colton Williamson, Delaware Division of Fish and Wildlife

Stock Assessment Subcommittee

- Nichole Ares, Rhode Island Division of Fish and Wildlife
- Jessica Gorzo, New Jersey Division of Fish and Wildlife
- Elise Koob, Massachusetts Division of Marine Fisheries
- Kelli Mosca, Connecticut Department of Energy & Environmental Protection
- Alexei Sharov, Maryland Department of Natural Resources
- Ben Wasserman, Delaware Division of Fish and Wildlife
- Katie Drew, Atlantic States Marine Fisheries Commission
- Samara Nehemiah, Atlantic States Marine Fisheries Commission
- James Boyle, Atlantic States Marine Fisheries Commission

- Added 4 years of data to the 2021 assessment update (2021-2024)
- 4 separate regional assessments
 - MARI
 - LIS
 - NJ-NYB
 - DMV



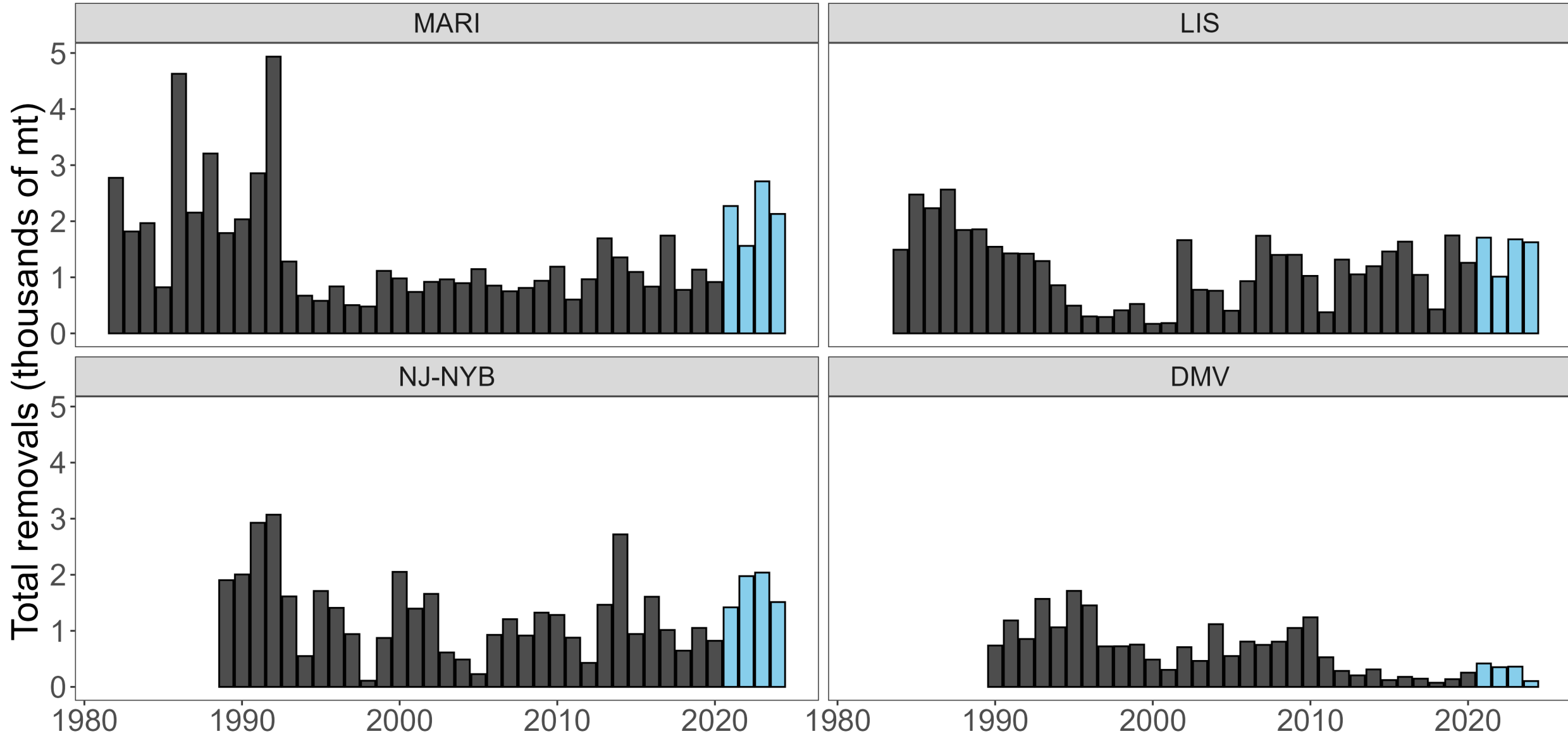
- TOR 1: Fishery-dependent data
- TOR 2: Fishery-independent data
- TOR 3: Life history information and model structure
- TOR 4: Population estimates
- TOR 5: Stock status
- TOR 6: Projections
- TOR 7: Research Recommendations

TOR 1: Fishery-Dependent Data

- Total removals
 - Recreational harvest
 - Recreational release mortality (2.5%)
 - Commercial harvest
- MRIP CPUE
 - Species-guild approach using the same species guilds as the benchmark

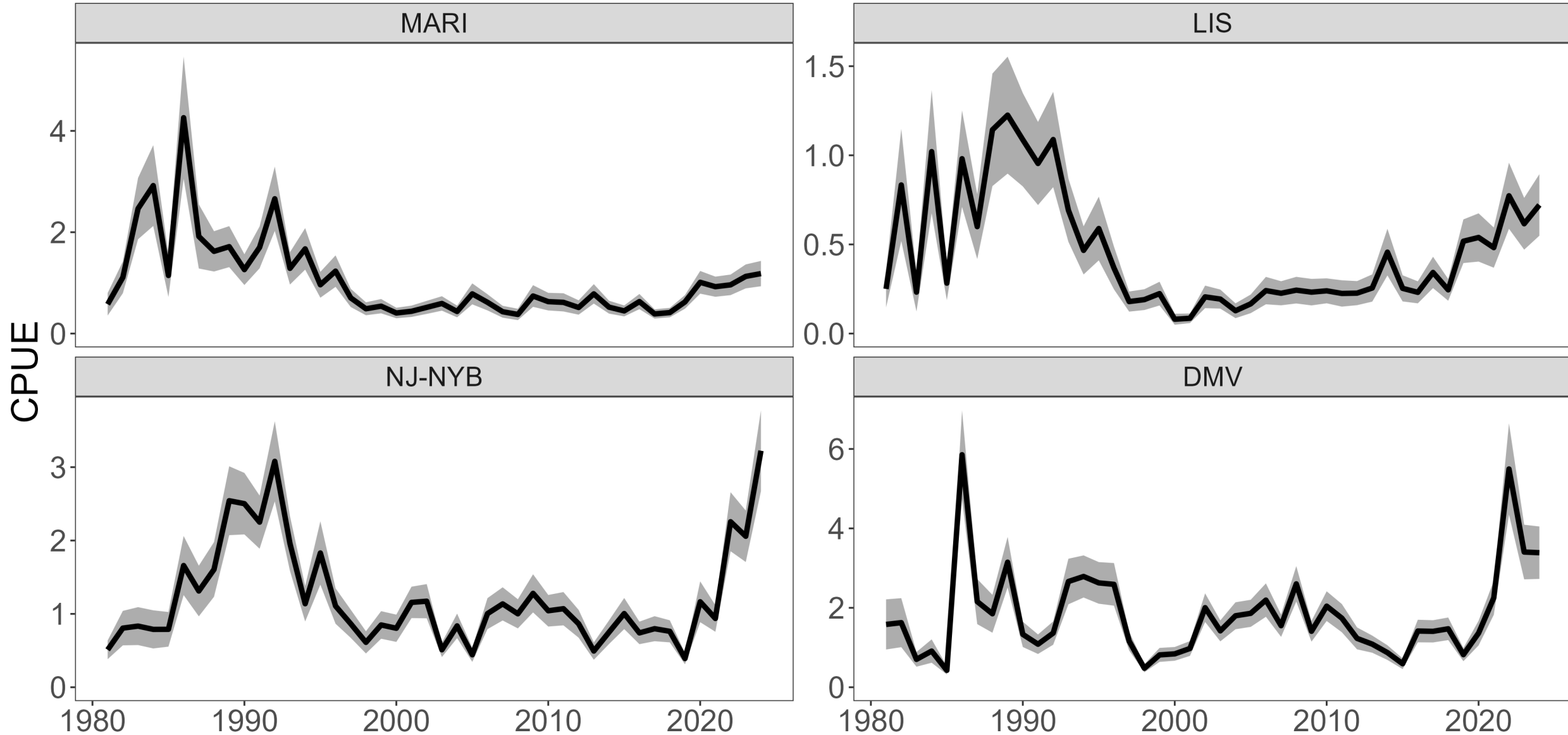


TOR 1: Total Removals





TOR 1: MRIP CPUE



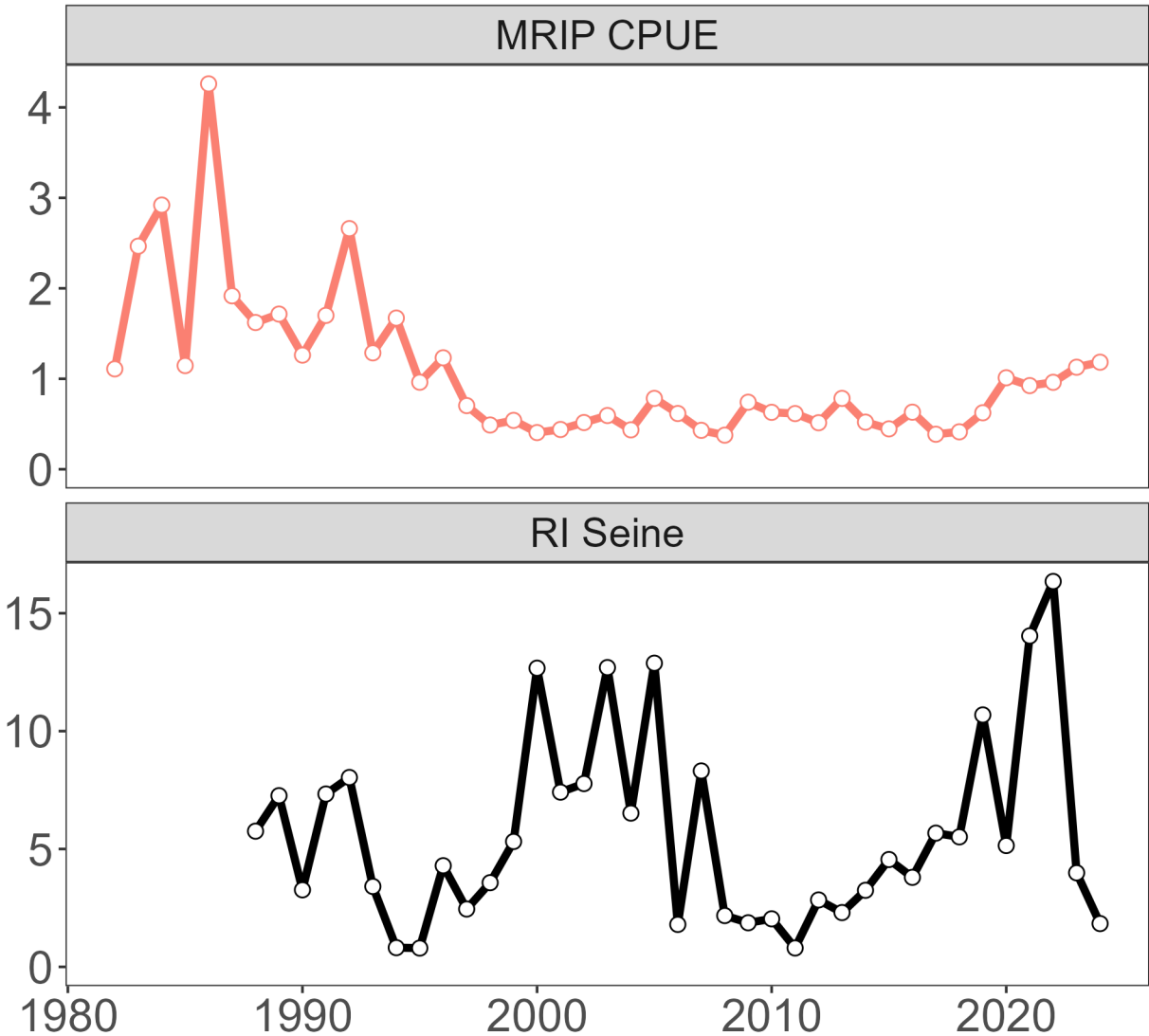
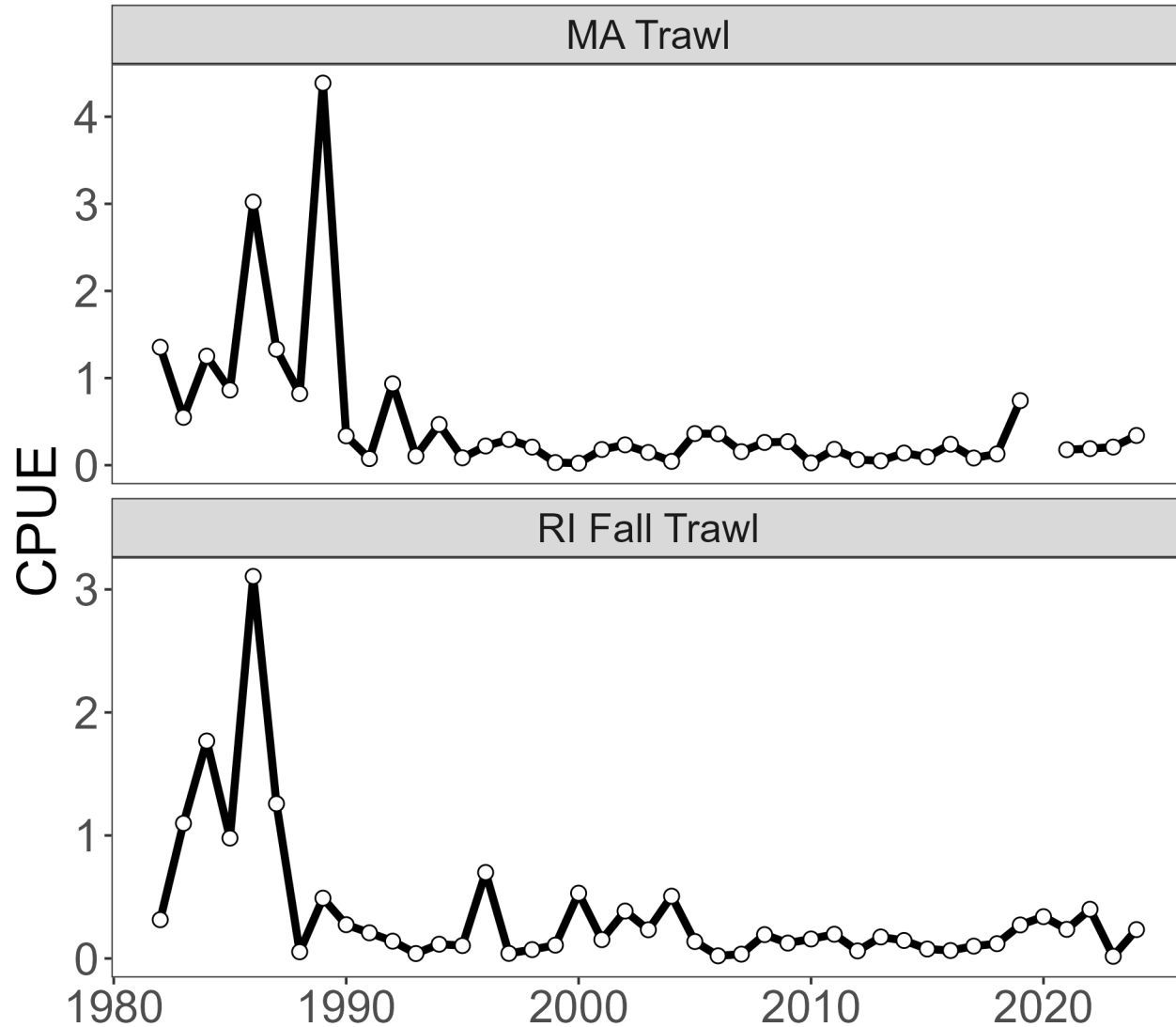
TOR 2: Fishery-Independent Data

- MARI
 - MA Trawl (Age 2+)
 - RI Trawl (Age 2+)
 - RI Seine (YOY)
- LIS
 - CT LISTS (Age 1+)
 - NY PB Trawl (Age 1)
 - NY Seine (YOY)
- NJ-NYB
 - NJ Ocean Trawl (Age 1+)
 - NY Seine (YOY)
- DMV
 - No FI indices



TOR 2: Fishery-Independent Data

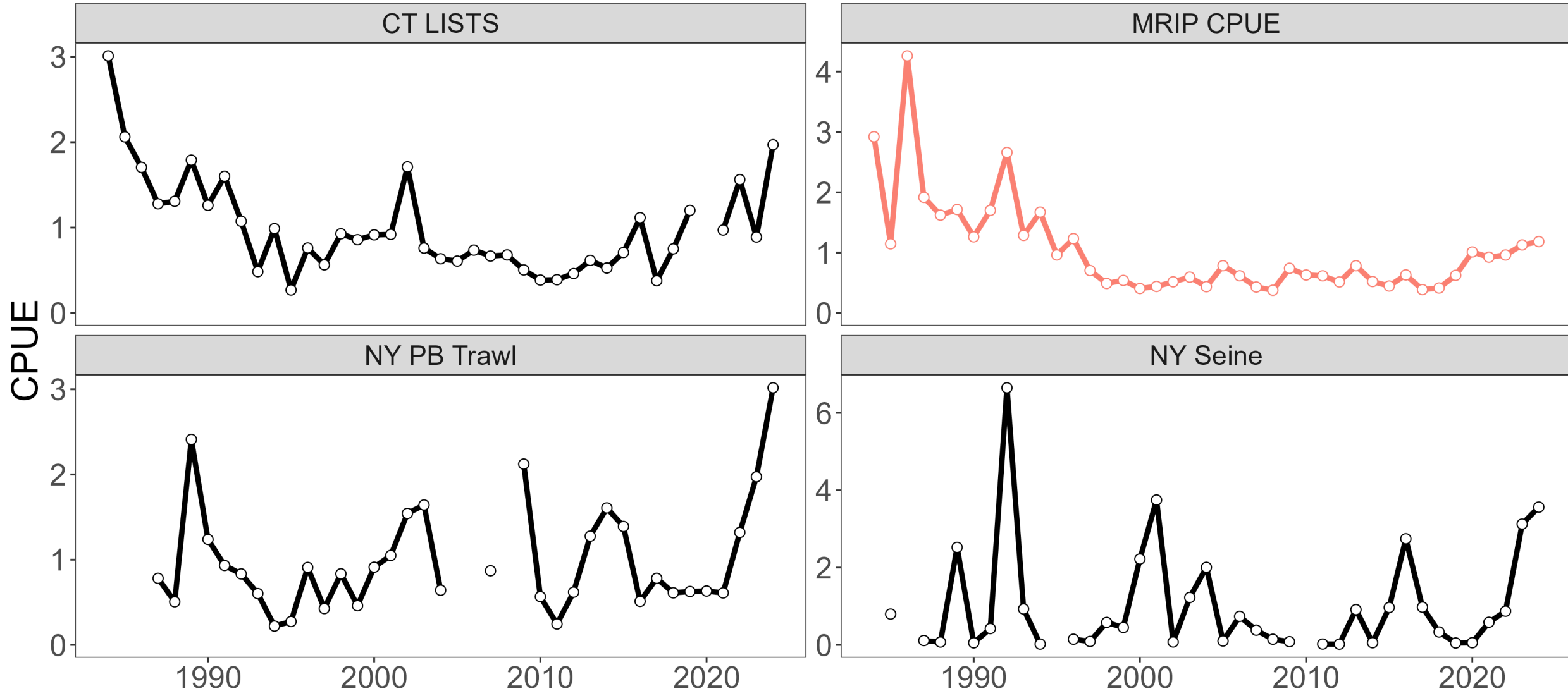
MARI





TOR 2: Fishery-Independent Data

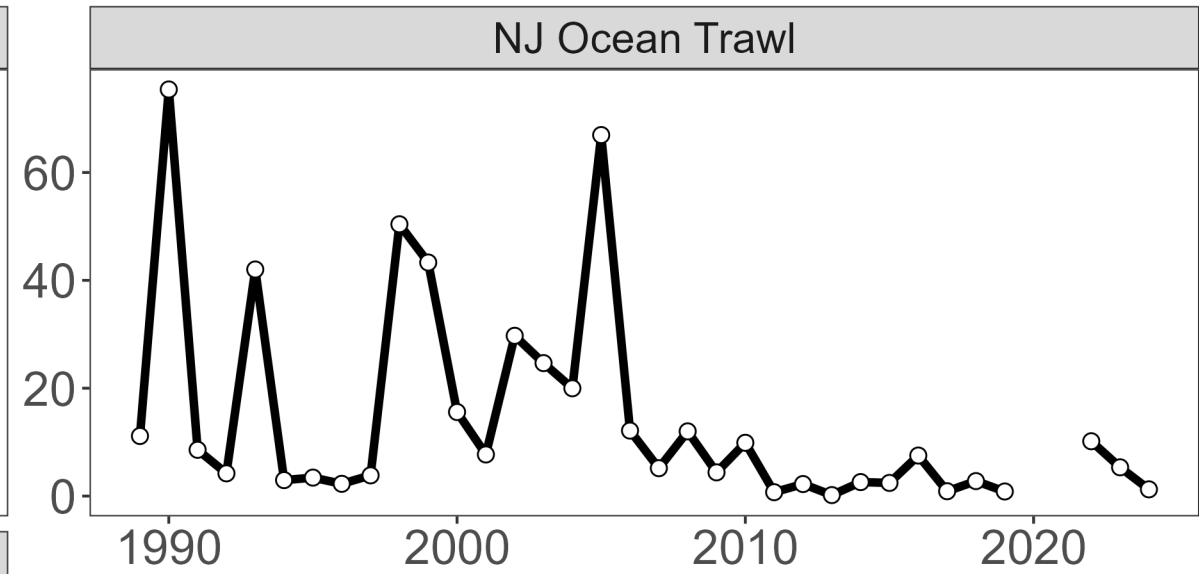
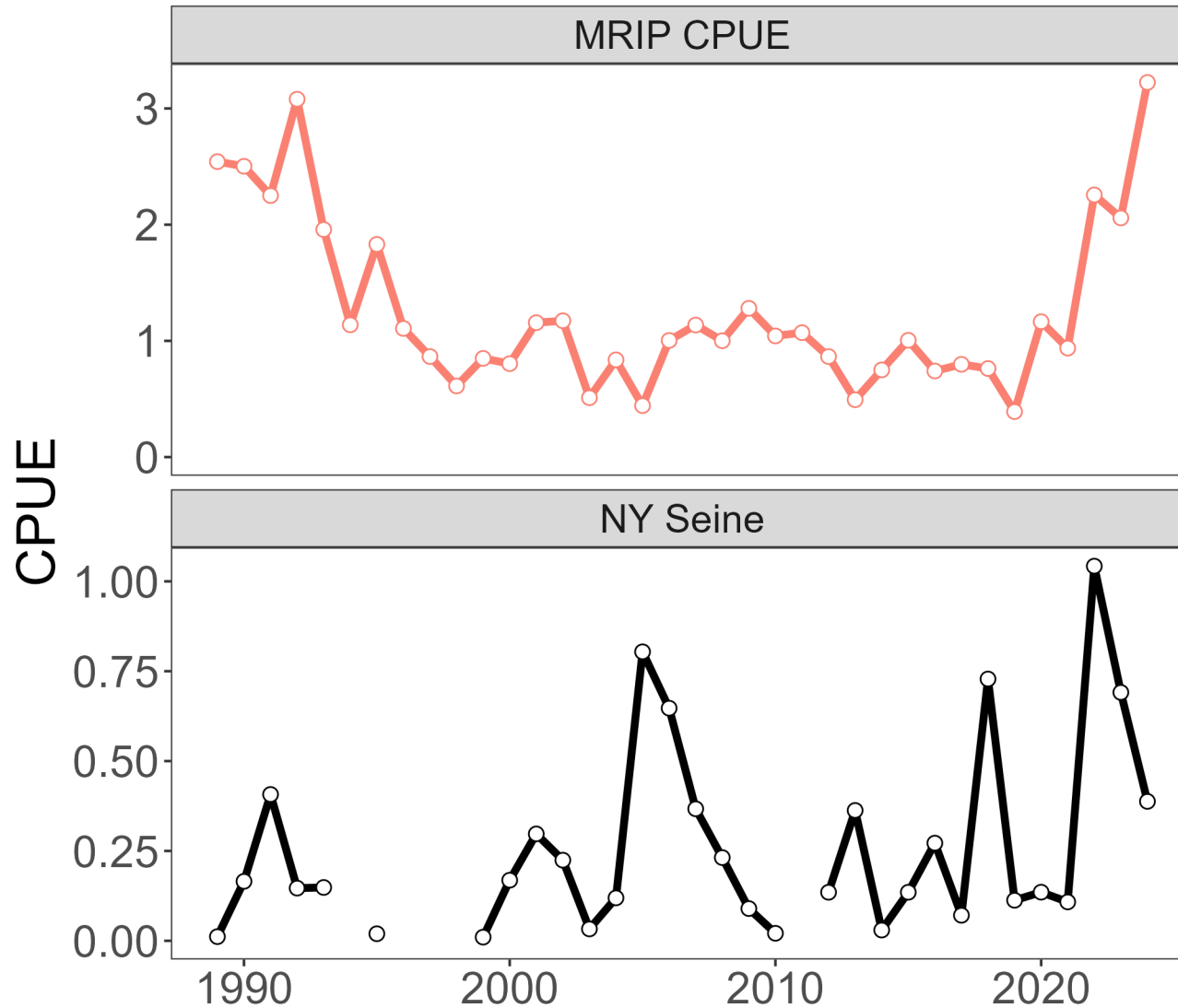
LIS





TOR 2: Fishery-Independent Data

NJ-NYB



TOR 3: Model Structure

- Updated the ASAP models approved during the last benchmark assessments
- Same model structure and life history information for all regions

TOR 4: Model Results

- All models showed a significant retrospective pattern, which seemed to have worsened since the last update
- Applied ASMFC's Guidance Document to determine whether to apply a retrospective adjustment
 - Is Mohn's rho outside the recommended bounds?
 - Is the adjusted estimate outside the 90% CIs of the unadjusted estimate?
 - Is the terminal year of each peel outside the CI of the base run?
 - Is the terminal year of the last assessment outside the CI of the current base run?

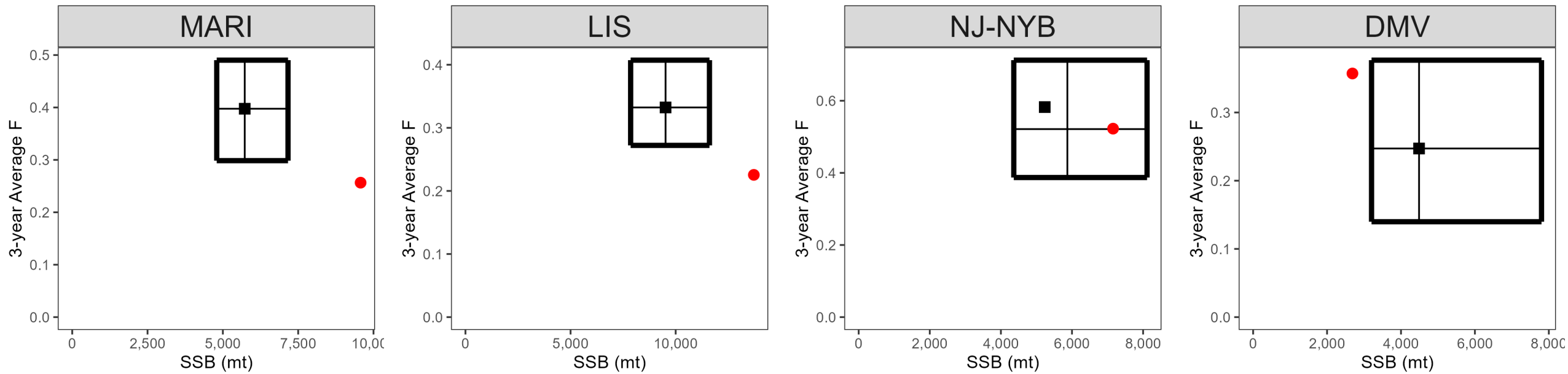
TOR 4: Model Results

Recommended acceptable bounds for a long-lived species: -0.15 – 0.20

Region	Metric	Mohn's rho	Outside Bounds?	Direction
MARI	3-year avg. F	0.55	Yes	Overestimate F
	SSB	-0.40	Yes	Underestimate SSB
LIS	3-year avg. F	0.56	Yes	Overestimate F
	SSB	-0.31	Yes	Underestimate SSB
NJ-NYB	3-year avg. F	0.18	No	Overestimate F
	SSB	-0.26	Yes	Underestimate SSB
DMV	3-year avg. F	-0.32	Yes	Underestimate F
	SSB	0.67	Yes	Overestimate SSB

→ Rho outside the bounds for F and SSB for all regions, except for F in NJ-NYB

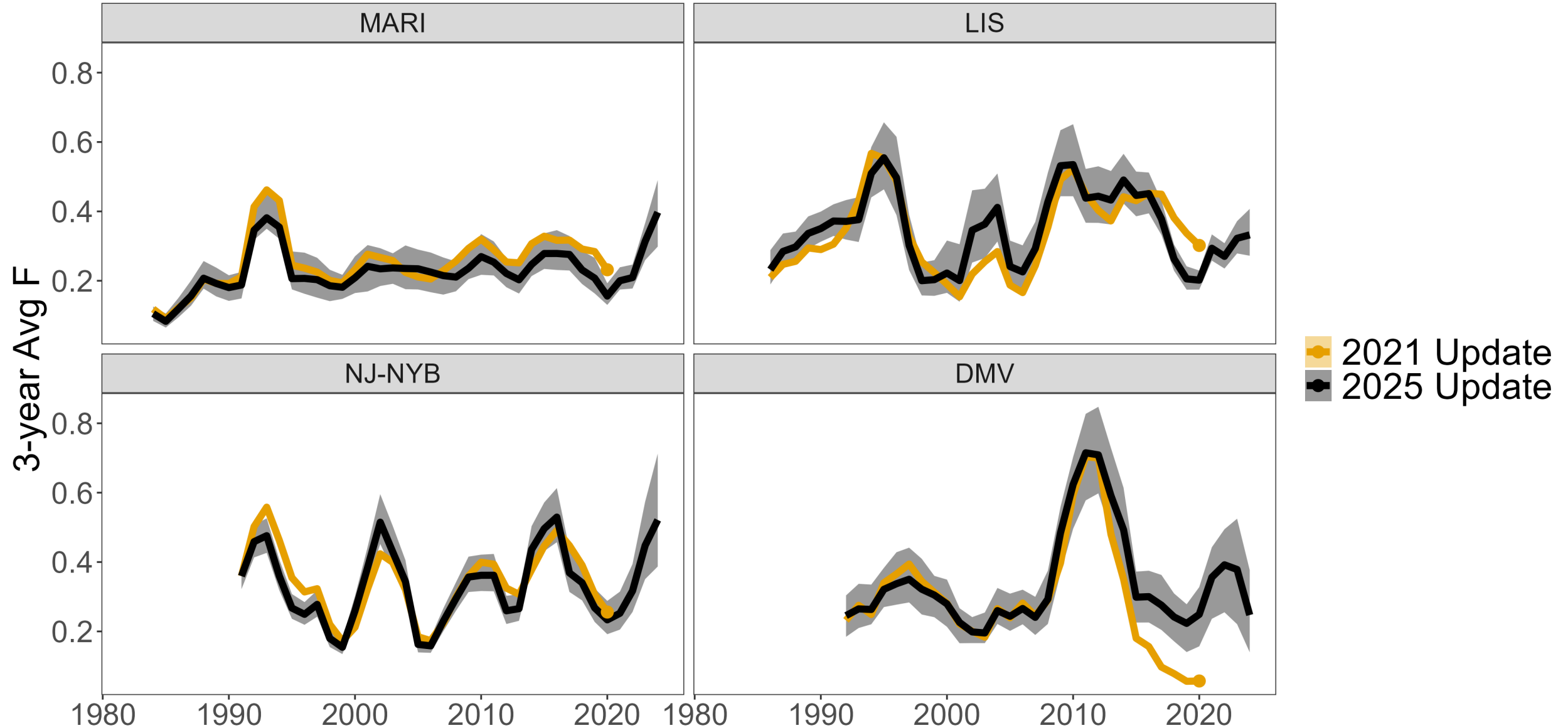
TOR 4: Model Results



→ The retro-adjusted value of F and SSB in the terminal year is outside the 90% confidence intervals of the unadjusted values for all regions except NJ-NYB

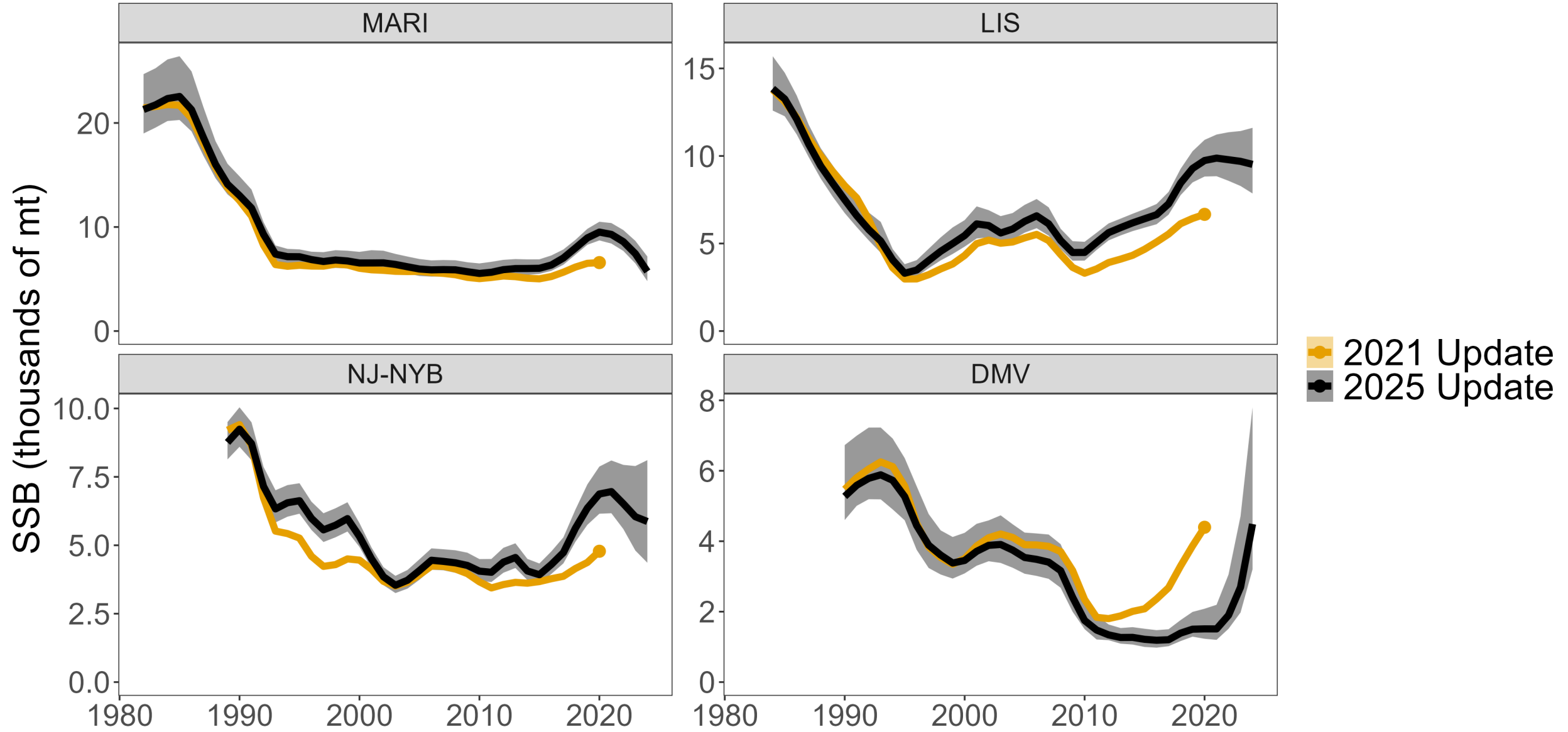


TOR 4: Model Results





TOR 4: Model Results



TOR 4: Model Results

- Based on the factors in the ASMFC Retrospective Guidance Document, all regions exhibited a significant retrospective pattern for SSB and all regions except the NJ-NYB region exhibited a significant retrospective pattern for F
- Therefore, a retrospective adjustment was applied to evaluate stock status and to conduct projections

TOR 5: Stock Status

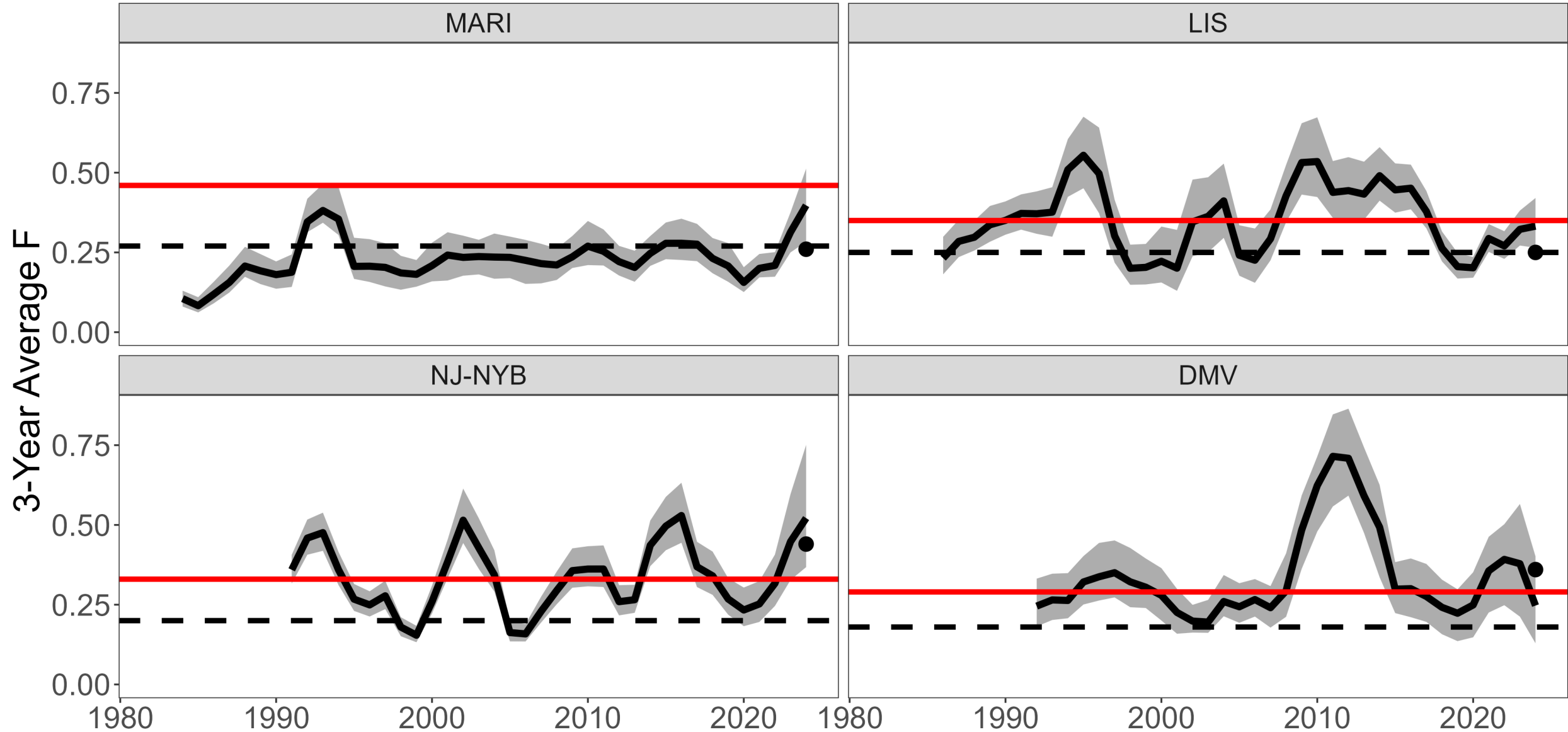
- Reference point definitions

Region	Fishing Mortality		SSB	
	Target	Threshold	Target	Threshold
MARI, NJ-NYB, DMV	$F_{40\%SPR}$	$F_{30\%SPR}$	Equilibrium SSB when fished at F target	Equilibrium SSB when fished at F threshold
LIS	F_{MSY}	F required to reach the SSB threshold	SSB_{MSY}	75% SSB_{MSY}

→ The F reference point for each region is compared to the running 3-year average of F (e.g., the 2024 value of F is the average of F in 2022, 2023, and 2024)

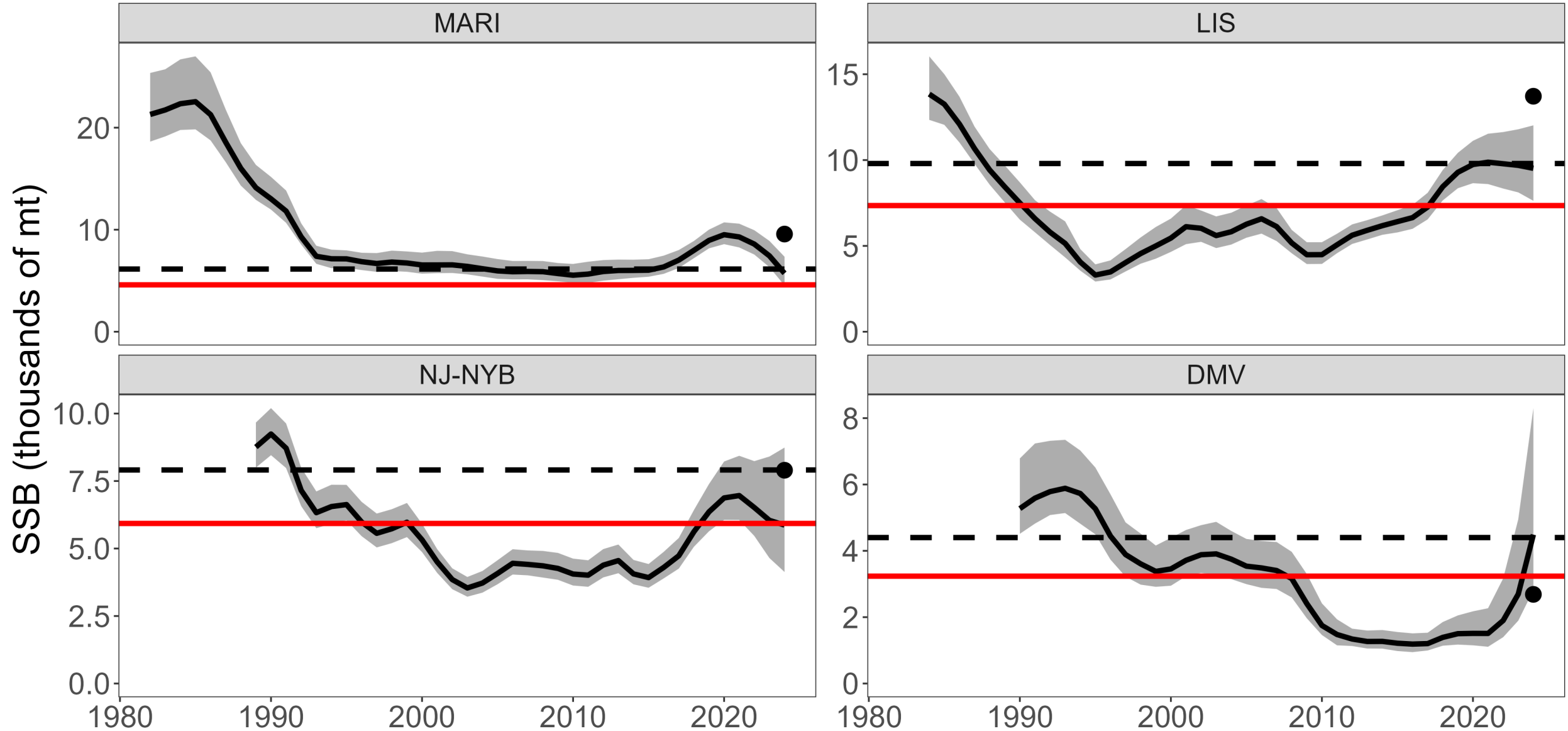


TOR 5: Stock Status





TOR 5: Stock Status



TOR 5: Stock Status

Region	F Status	SSB Status	Change from 2021?
MARI	Not overfishing	Not overfished	No
LIS	Not overfishing	Not overfished	No
NJ-NYB	Overfishing	Not overfished	Yes
DMV	Overfishing	Overfished	Yes

TOR 6: Projections

- Projected the population forward 3 years using the most recent 3-year average of removals
- A retrospective adjustment was applied to the initial numbers-at-age for all regions, based on the age-specific Mohn's rho value for each region

TOR 6: Projections

Region	Probability of being at or above F threshold in 3 years	Probability of being at or below SSB threshold in 3 years
MARI	26%	0%
LIS	0%	0%
NJ-NYB	88%	19%
DMV	22%	97%

TOR 7: Research Recommendations

- TC/SAS recommends conducting a benchmark assessment with a peer review scheduled for 2029 and work starting in 2027
- This will allow the TC/SAS to investigate and resolve the retrospective issues and incorporate several new fishery-independent surveys, including pot-and-trap surveys and a YOY index for the DMV region



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Questions

Amendment 1 on F Rate

- If the current F exceeds the regional threshold level (overfishing), the Board must initiate corrective action, via a management document, within one year of receiving the overfishing stock status. Alternative management measures must be implemented in the second year.
- Measures will be developed based on at least a 50% probability of achieving F Target.
- The Board will provide the Technical Committee with a timeframe in which F must be brought down to the regional target level using harvest reductions when it initiates a harvest reduction response. The Technical Committee will then develop short-term projection scenarios to determine the constant harvest levels necessary to achieve the regional F target within a time frame specified by the Board.

Amendment 1 on SSB

- If the current SSB is below the regional threshold level, the Board may take steps to increase SSB to the regional target level.
- The Board can initiate a regional SSB rebuilding plan via an addendum.



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Questions