



SEDAR 96: Southeastern U.S. Yellowtail Snapper

SAFMC Meeting

June 12, 2025

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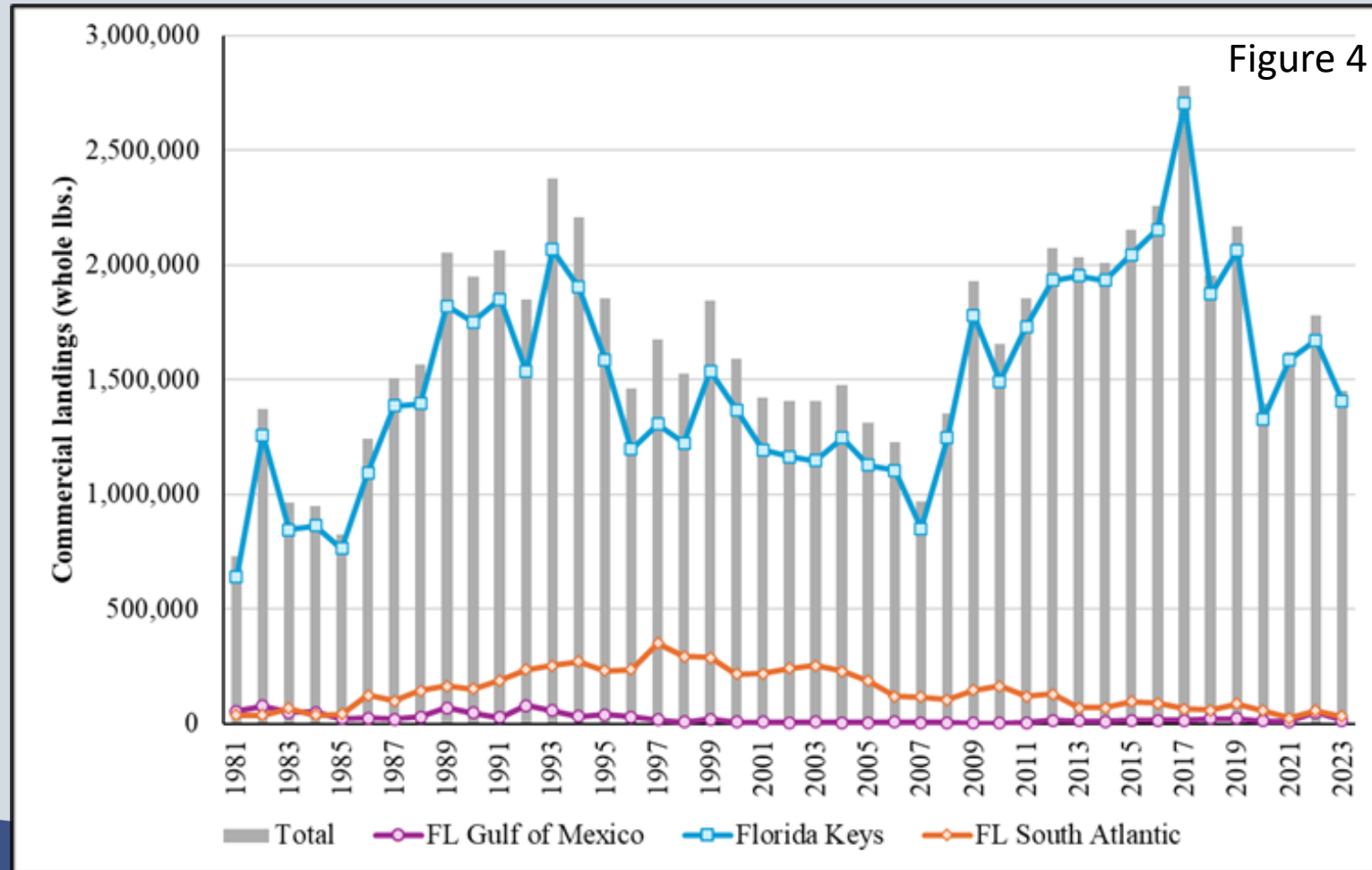




SEDAR 96: Yellowtail Snapper Data

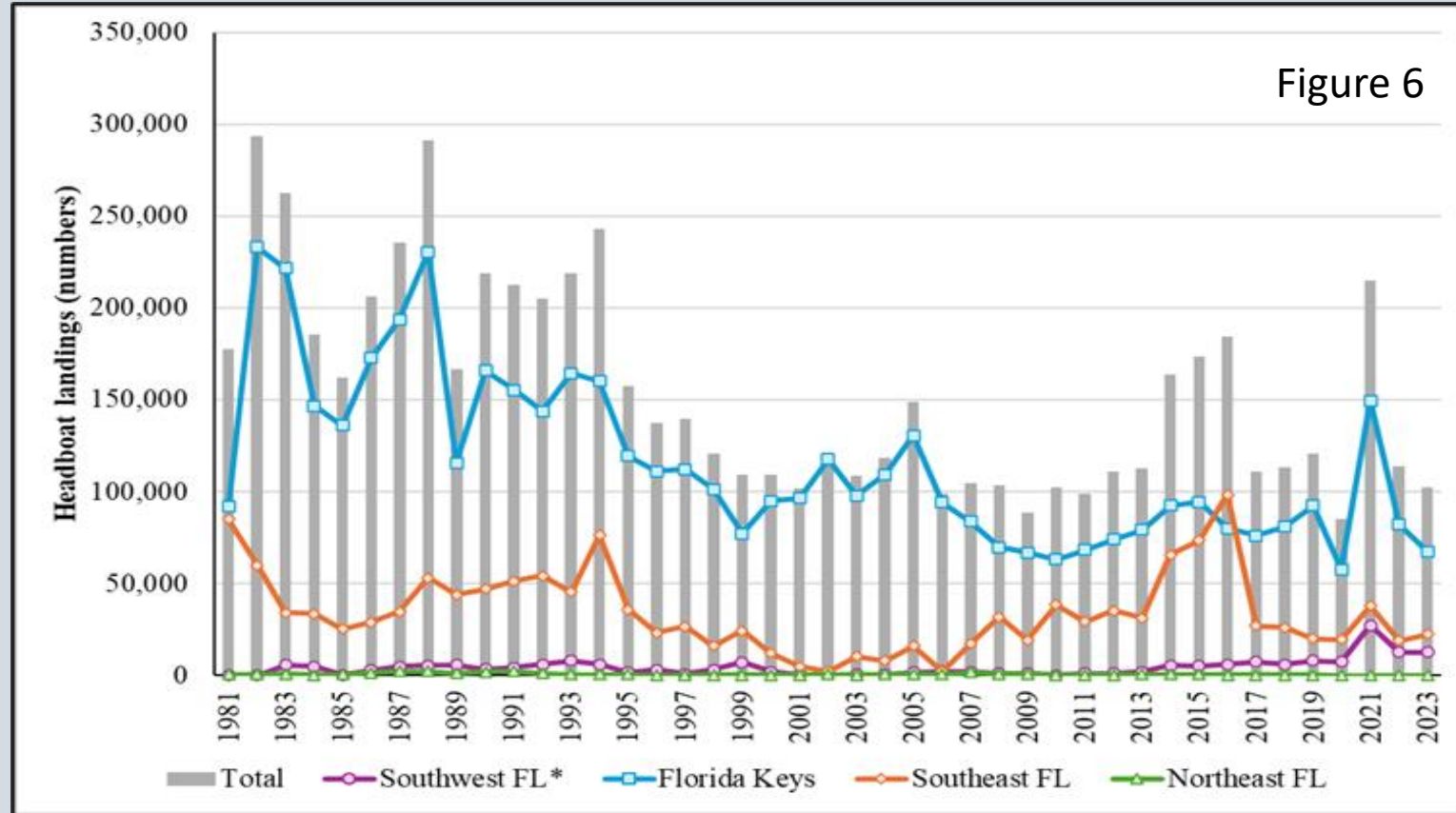
Updated Commercial Landings

- NMFS ALS (1981 – 1985); FL TTK (1986 – 2023)
- Predominantly hook and line gear
- Decreasing trend since timeseries high in 2017
- Chiefly from Florida Keys
 - 2021 – 2023: 97.9%, 94.0%, 96.8%
- South Atlantic region < 5%
- CV = 0.05 (1986 – 2023)



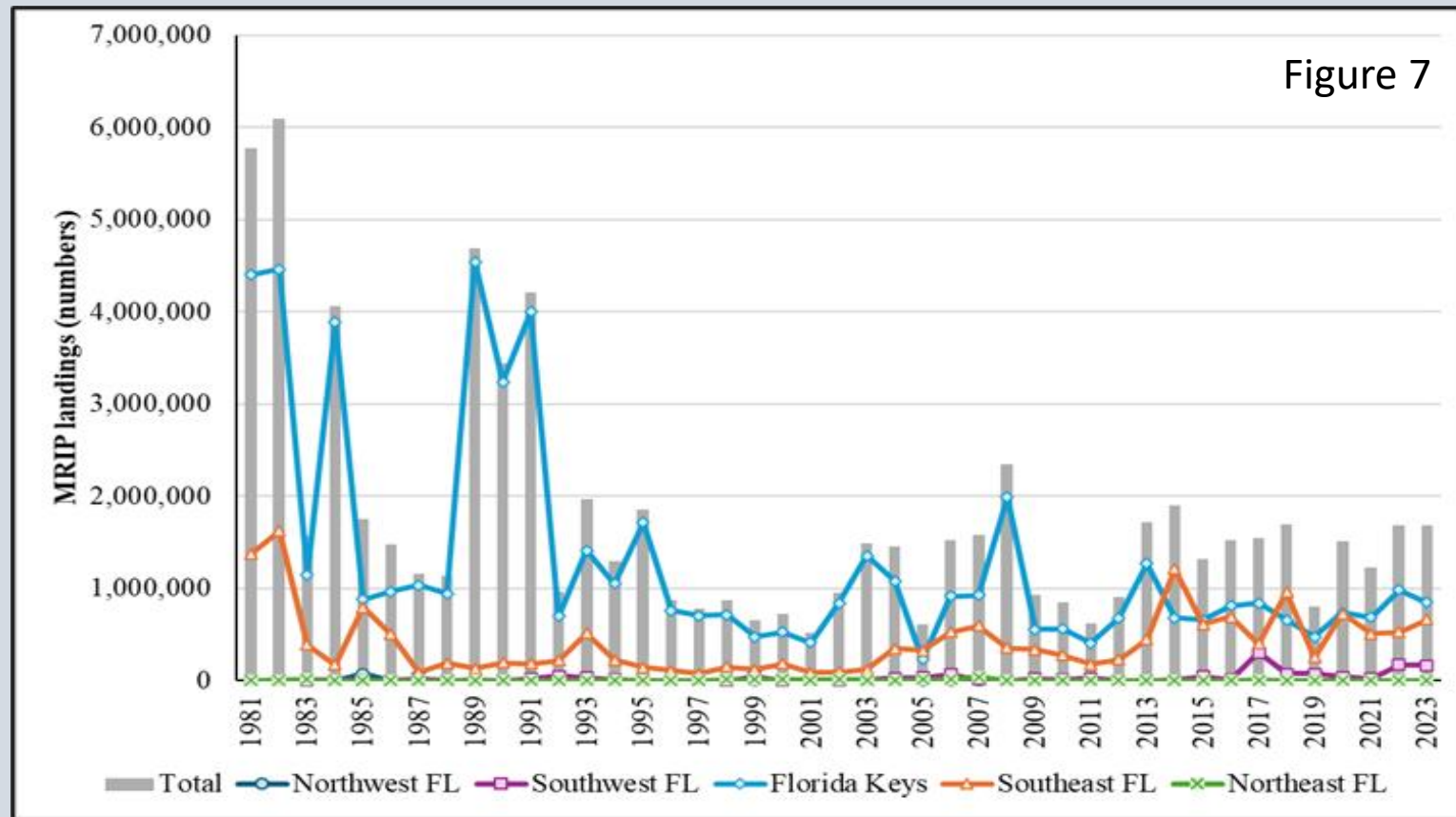
Updated Headboat Landings

- SRHS (1981 – 2023); MRIP HB mode (1981 – 1985)
- Hook and line gear
- Variable but stable trend
- Chiefly from Florida Keys (Avg. 64%)
 - Southeast FL: Avg. 19%
- Recent increases in southwest FL region
- CV = 0.05



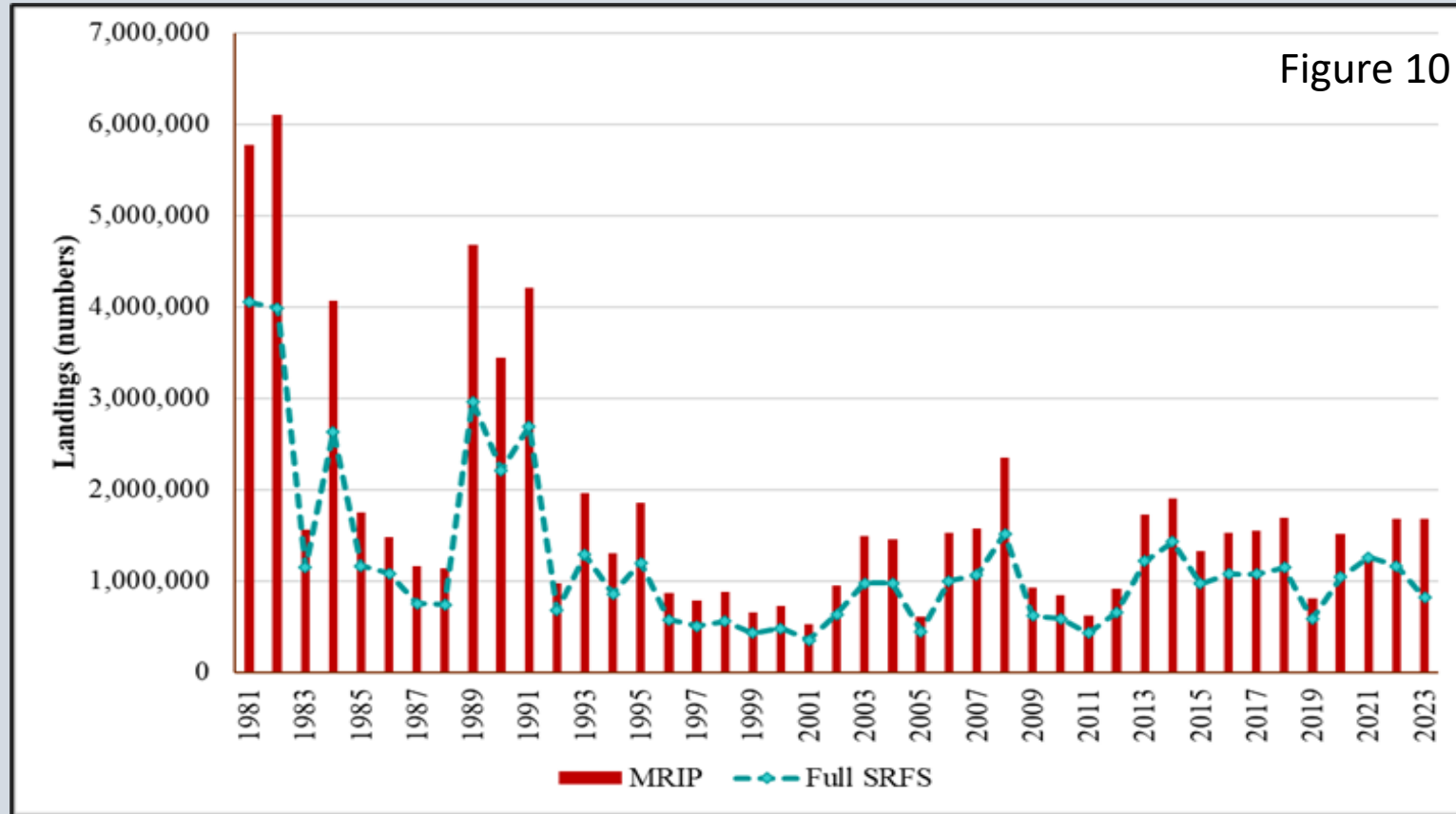
Updated MRIP Landings

- MRIP-FES (1981 – 2023)
 - A + B1 fish
- Primarily hook and line gear
- Variable but stable trend
- Florida Keys and southeast FL regions
 - Similar since 2014
 - 98%, 90%, 90% (2021 – 2023)
- Private mode
 - Avg. 80%
- Avg. CV = 0.24 (1992 – 2023)



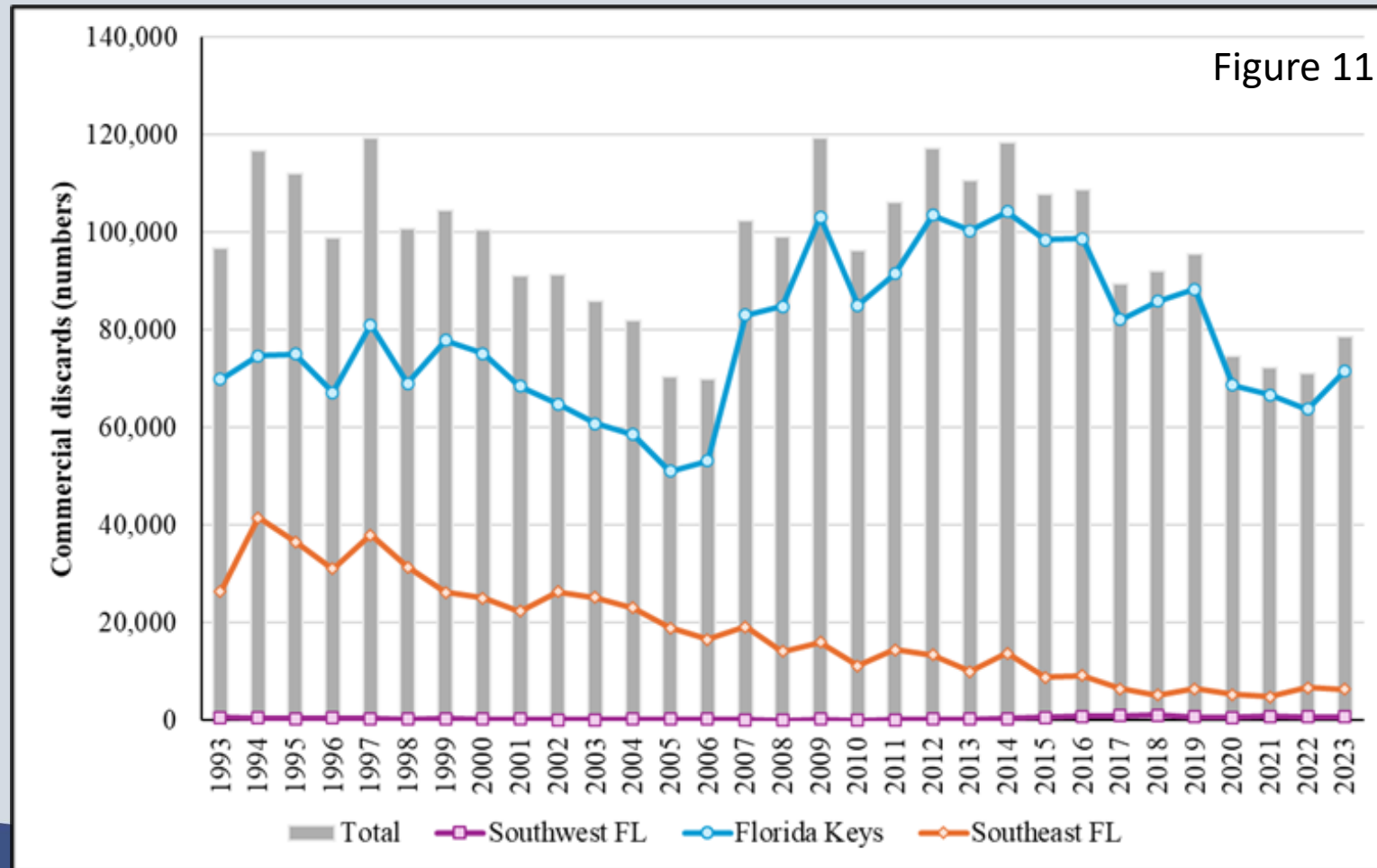
Comparison: Full SRFS and MRIP Landings

- State Reef Fish Survey (SRFS)
 - Ramsay et al. (2024)
 - 2021 – 2023
 - Avg. CV = 0.12
- Ratio-based calibration on historic MRIP private mode
 - 1981 – 2020
 - 0.625323 (numbers)
 - Avg. CV = 0.26 (1992 – 2020)
- ‘Full SRFS’ = SRFS and SRFS-calibrated + MRIP charter + MRIP shore



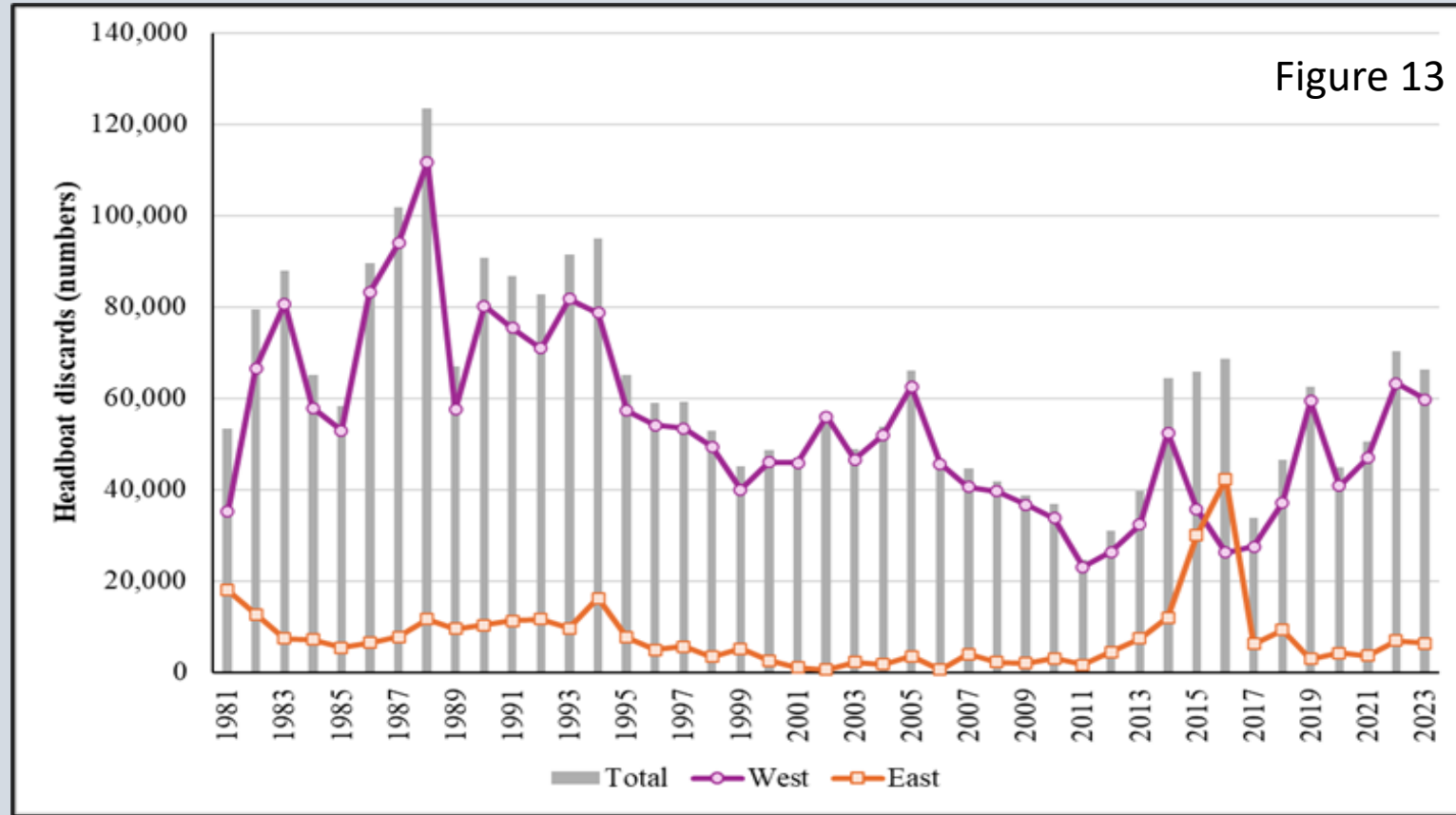
Updated Commercial Discards

- Alhale et al. (2024)
 - No longer recommend discard logbook data for estimating discards for SEDAR
- Discards
 - Discard rate (RFOP)
 - Total fishing effort (CFLP)
- Two methods
 - Florida Keys
 - SE and SW FL (data-limited)
- Avg. CV = 0.51



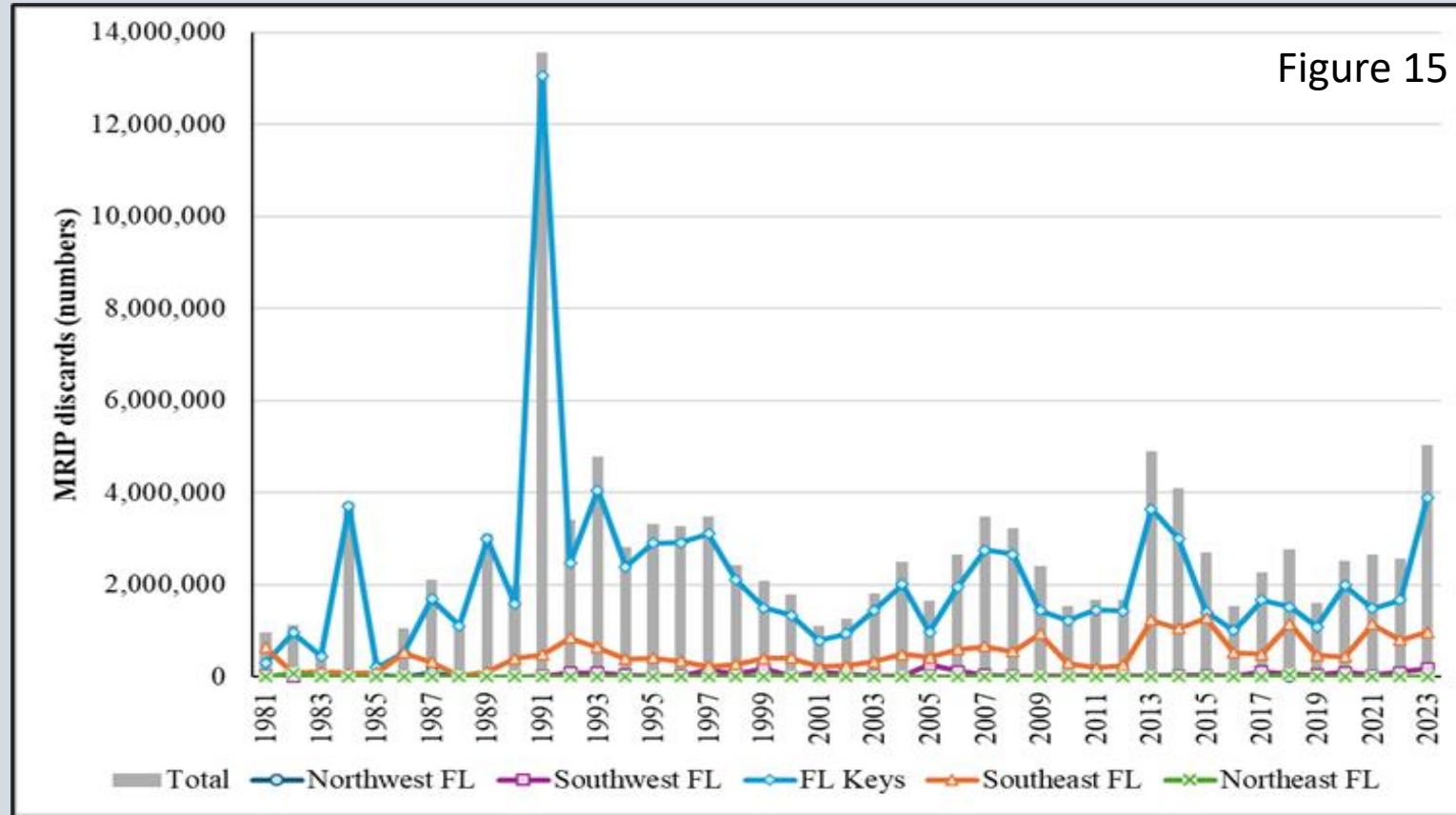
Updated Headboat Discards

- SRHS logbook
 - 2008 – 2023 (reliable)
 - 1981 – 2007 (proxy)
- ‘Super-ratio’ vs. ‘SRHS-Mean’ approach
 - Super-ratio influenced by unrepresentative trend from MRIP
 - SRHS-Mean recommended
- West region: 92.8%, 90.1%, 90.4% (2021 – 2023)
- CV = 0.5



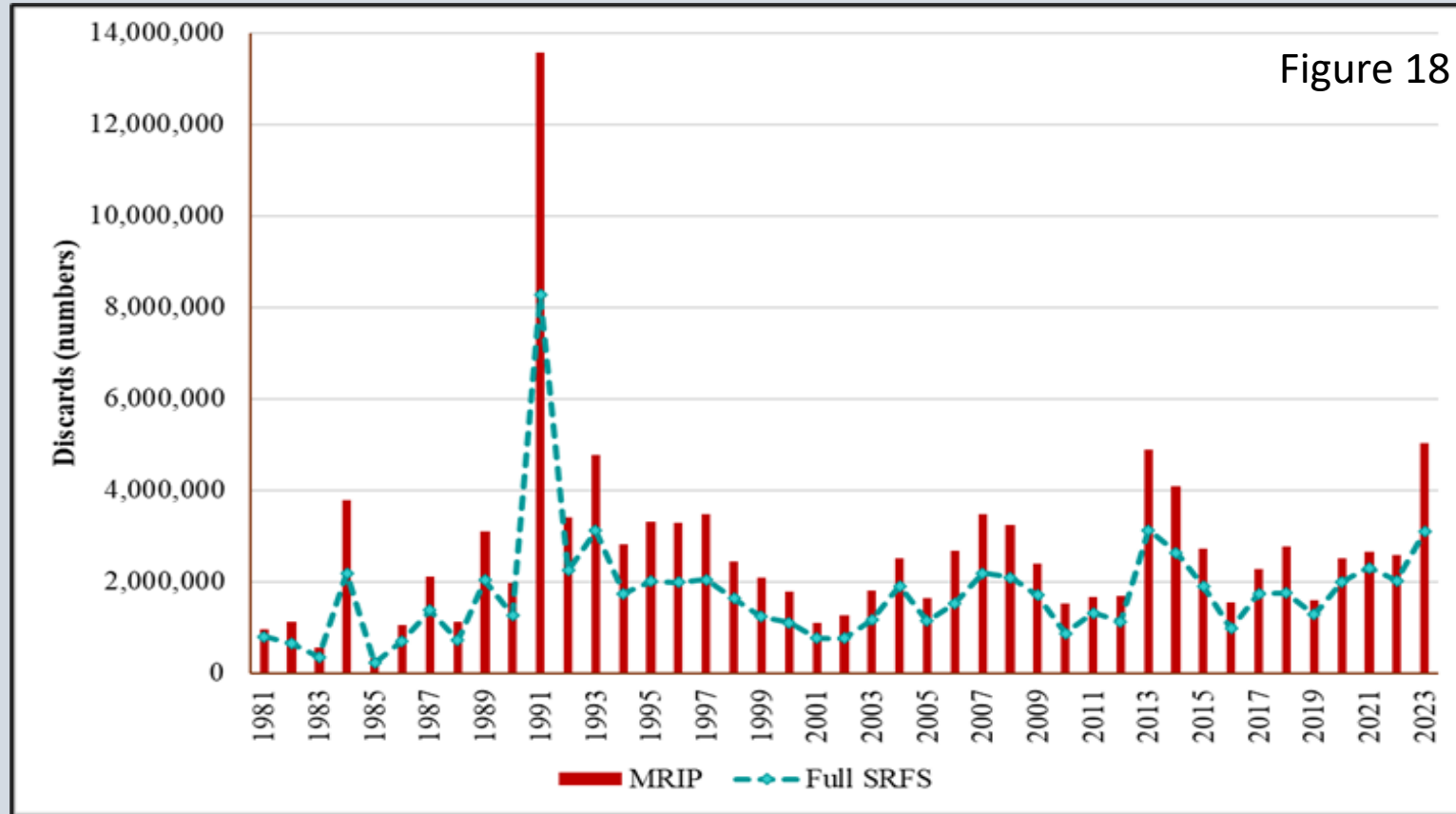
Updated MRIP Discards

- MRIP-FES (1981 – 2023)
 - B2 fish (live releases)
- Avg. ~65% of total catch (A+B1+B2) since 2017
- 5.035 million fish in 2023
- Largely from Florida Keys and southeast FL regions
 - Avg. 97% (2021 – 2023)
- Private mode
 - Avg. 58%
- Avg. CV = 0.21 (1992 – 2023)



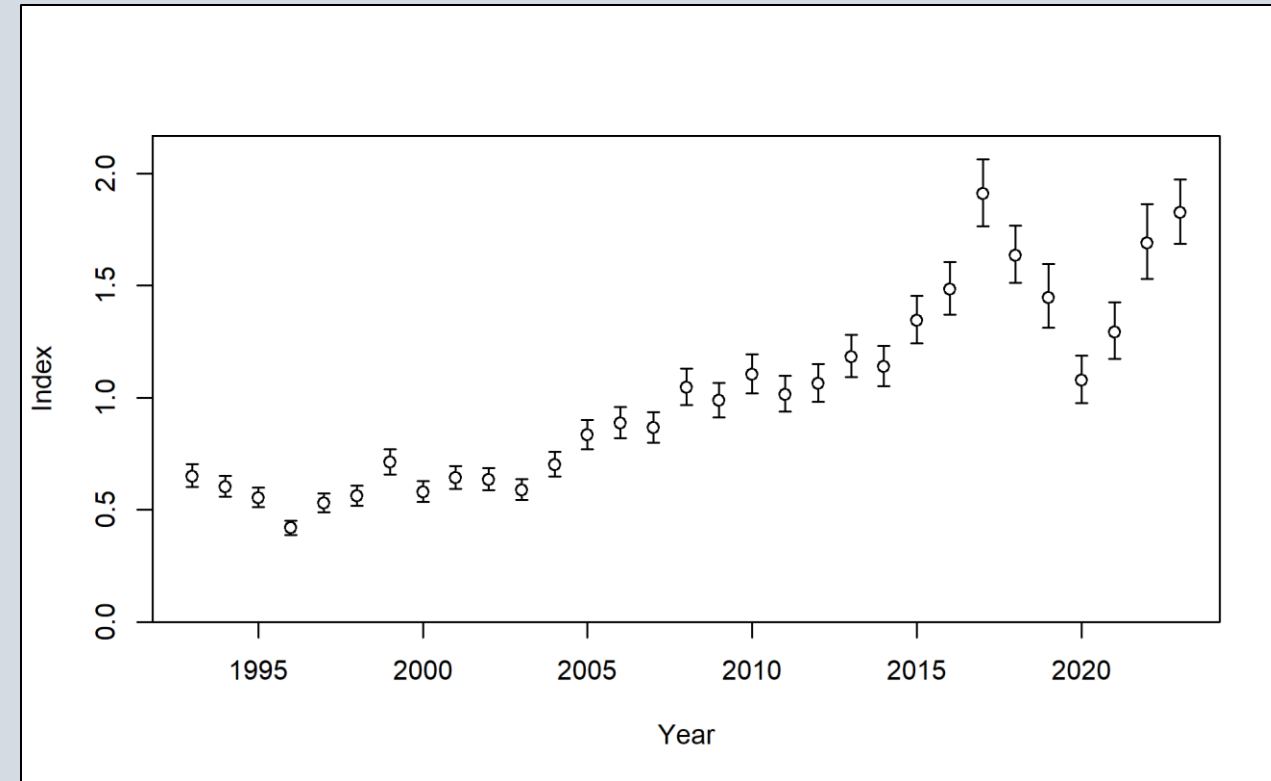
Comparison: Full SRFS and MRIP Discards

- State Reef Fish Survey (SRFS)
 - Ramsay et al. (2024)
 - 2021 – 2023
 - Avg. CV = 0.12
- Ratio-based calibration on historic MRIP private mode
 - 1981 – 2020
 - 0.547875 (numbers)
 - Avg. CV = 0.24 (1992 – 2020)
- ‘Full SRFS’ = SRFS and SRFS-calibrated + MRIP charter + MRIP shore



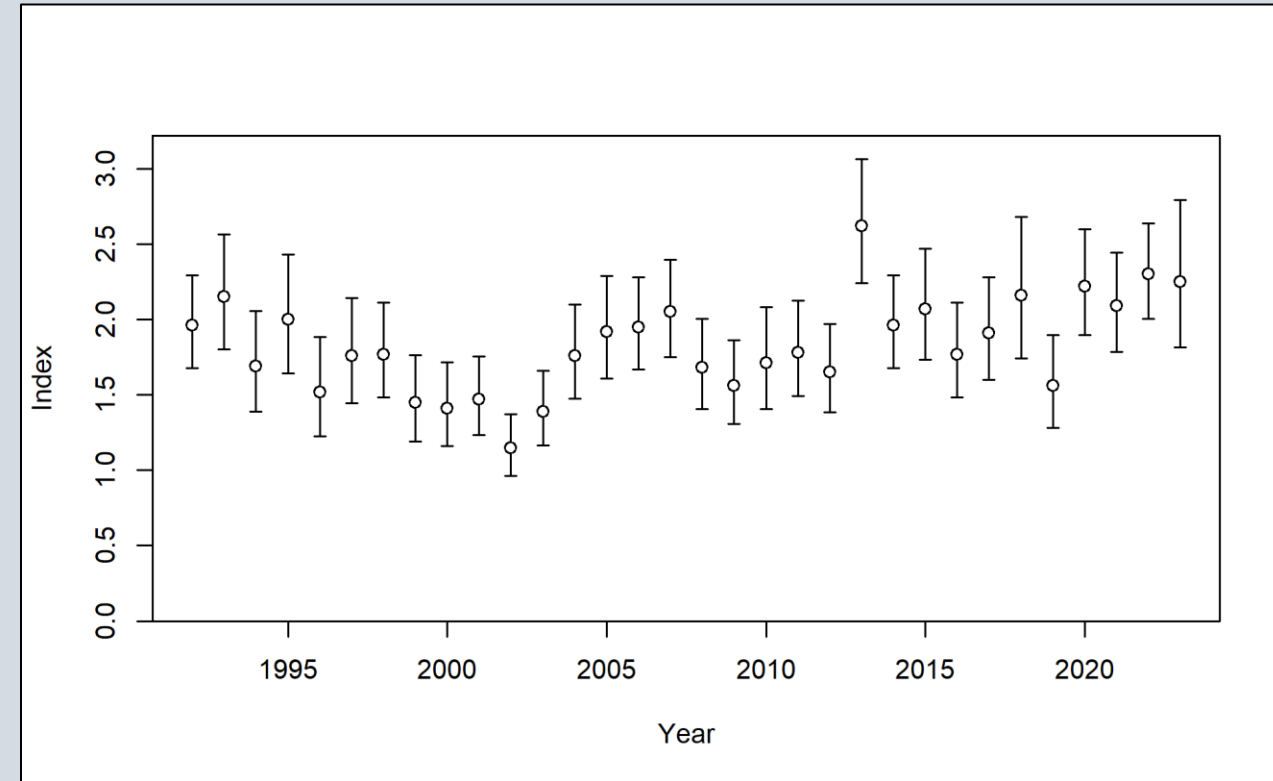
Updated Commercial CPUE

- Coastal Fisheries Logbook Program (CFLP)
 - 1993 – 2023
- Vertical line trips in southern Florida
 - Excludes trips in months during fishery closures (e.g., 2015, 2017, 2018)
- Stephens and MacCall subsetting
- Delta-glm (binomial, gamma)
 - Retained catch per hook-hr
 - Avg. CV = 0.04
- Linked to the commercial fleet

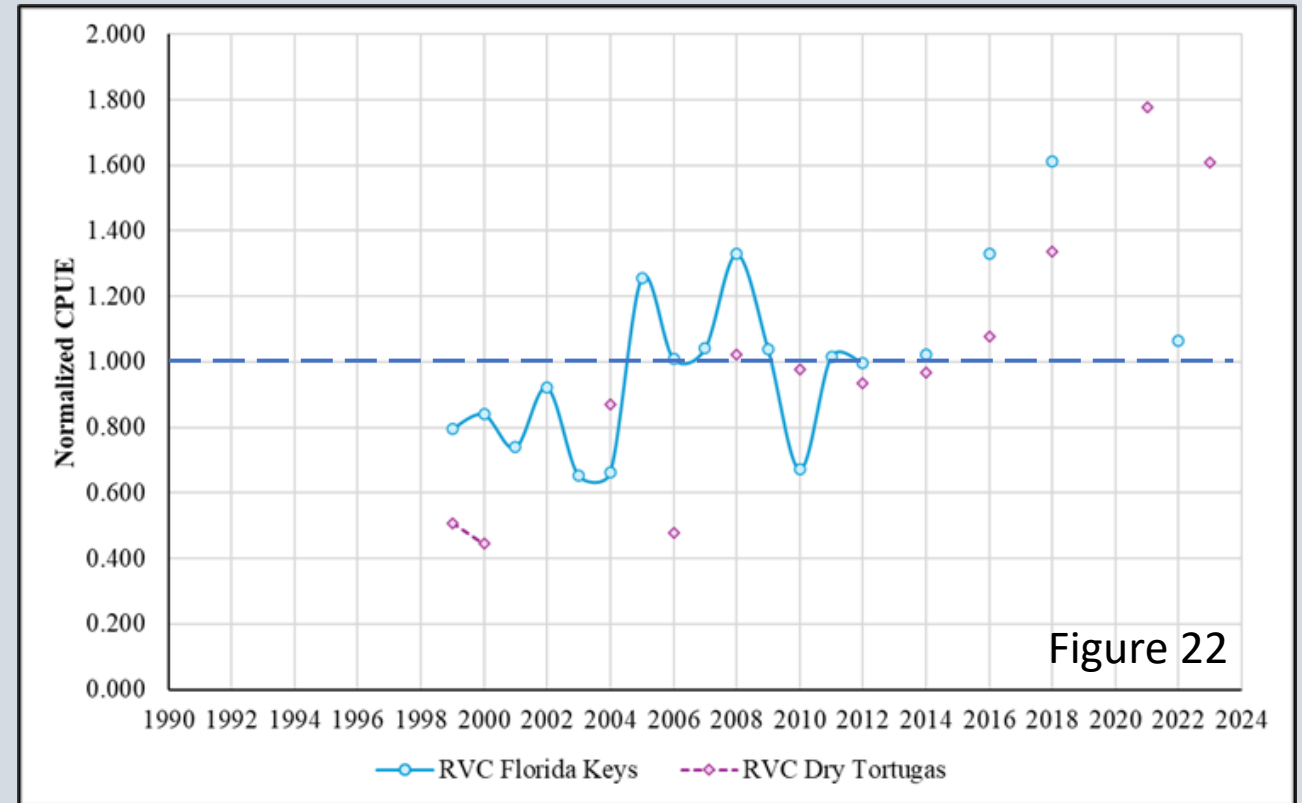
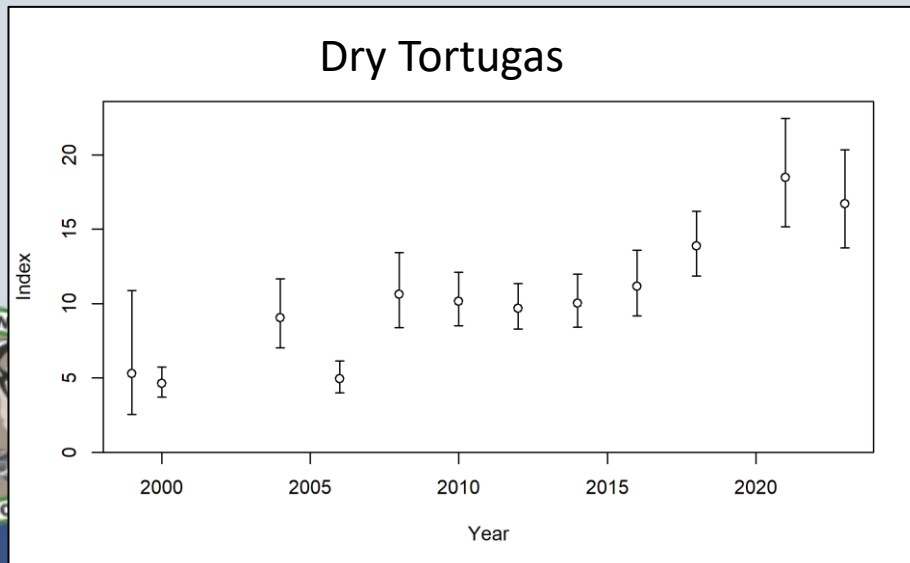
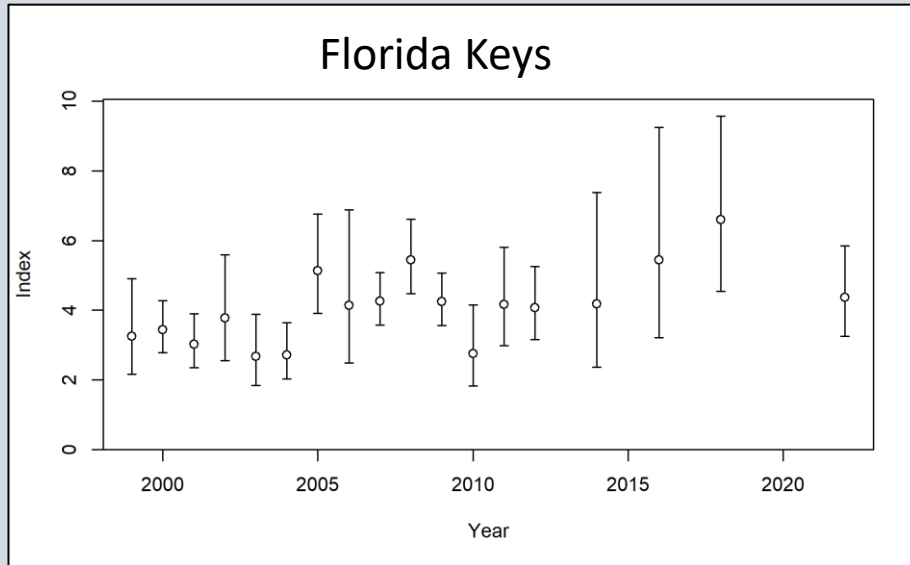



Updated MRIP CPUE

- MRIP total catch (A+B1+B2)
 - 1991(2) – 2023
 - Avg. CV = 0.09
- Hook and line trips in southern Florida
 - Florida Keys (Monroe)
 - Southeast FL (Palm Beach, Broward, Miami-Dade)
- Hierarchical clustering analysis (Shertzer and Williams 2008)
- Delta-lognormal glm
 - Total catch per trip



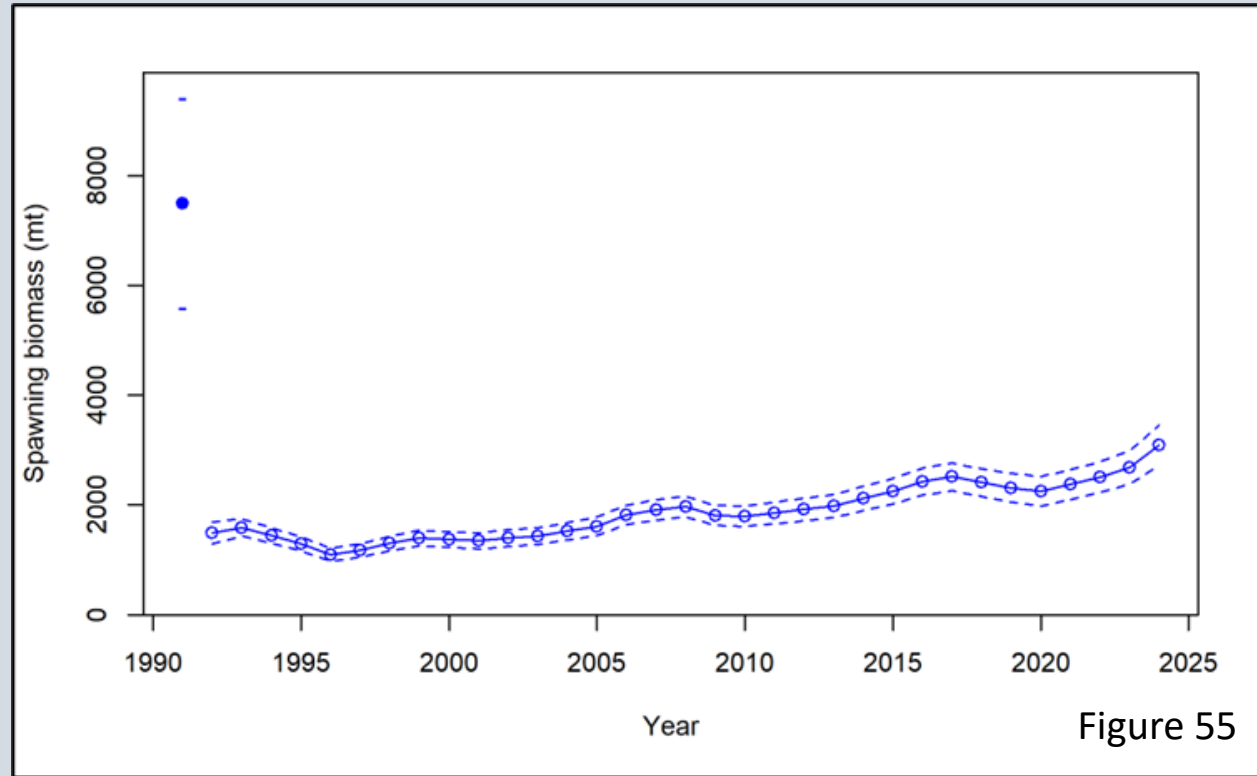
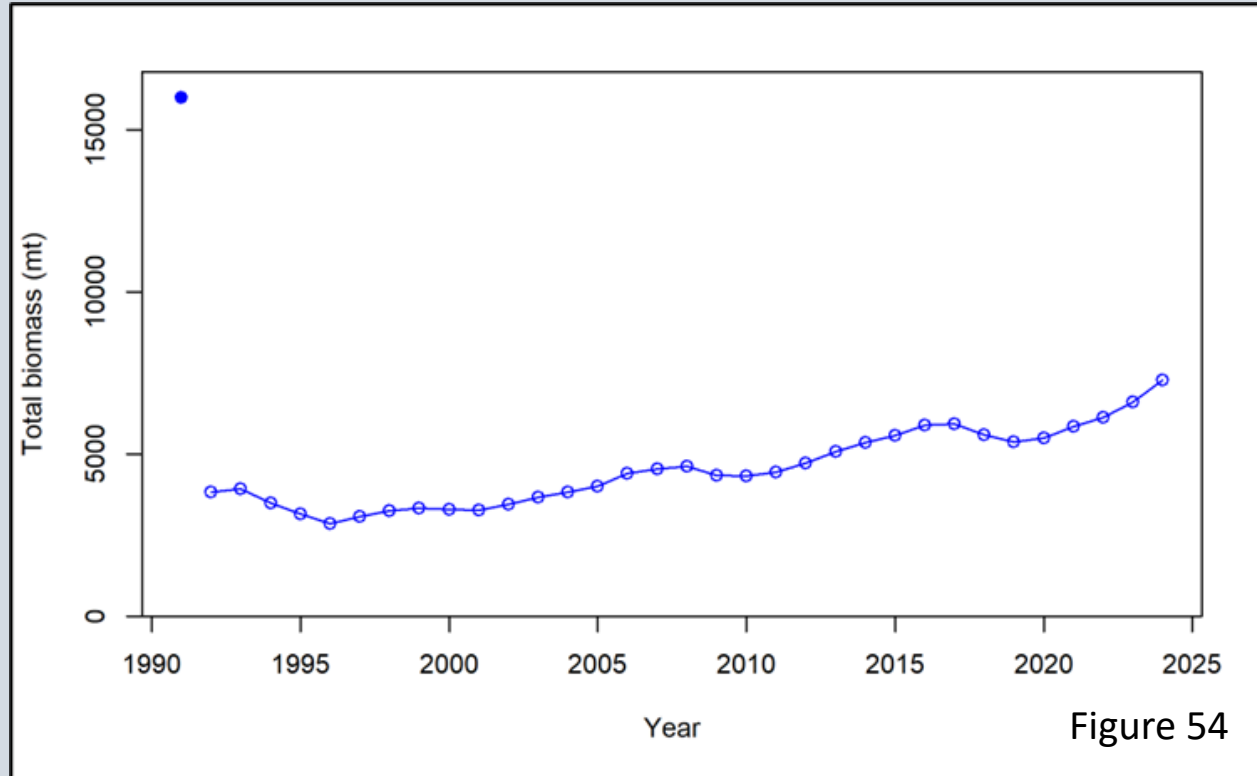
Updated Reef Fish Visual Census (RVC)



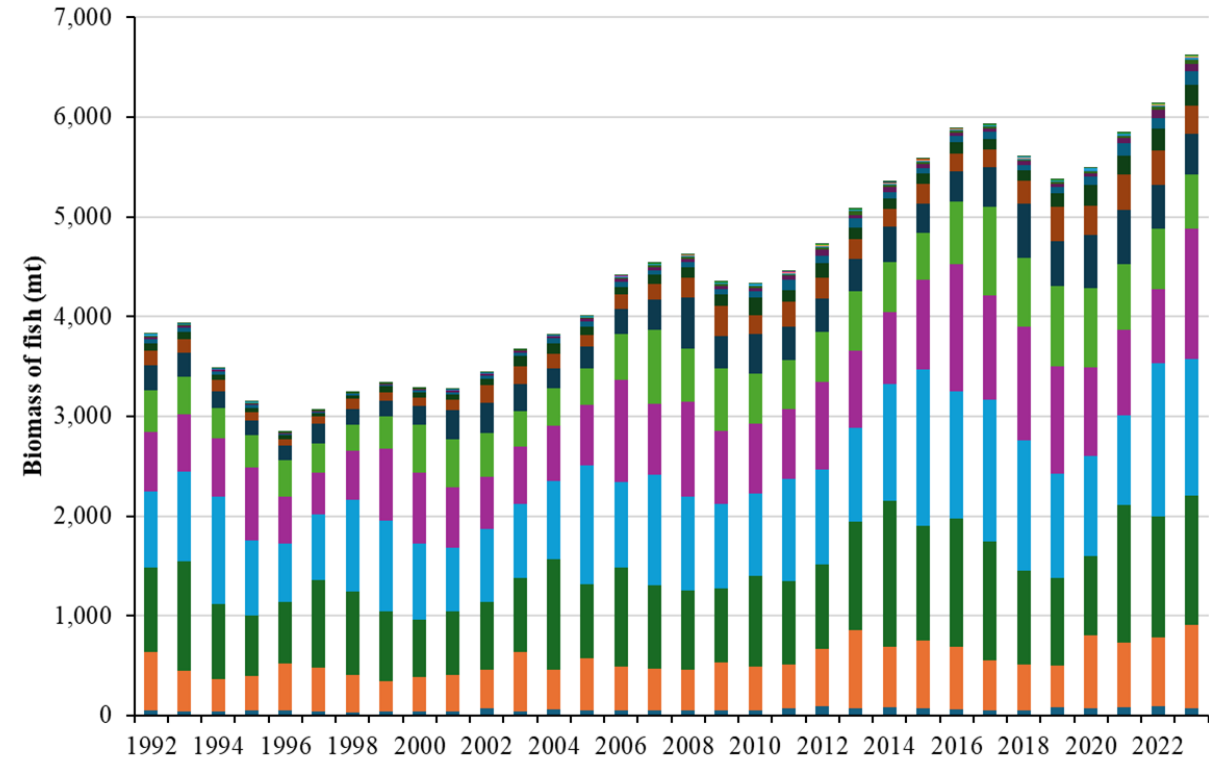
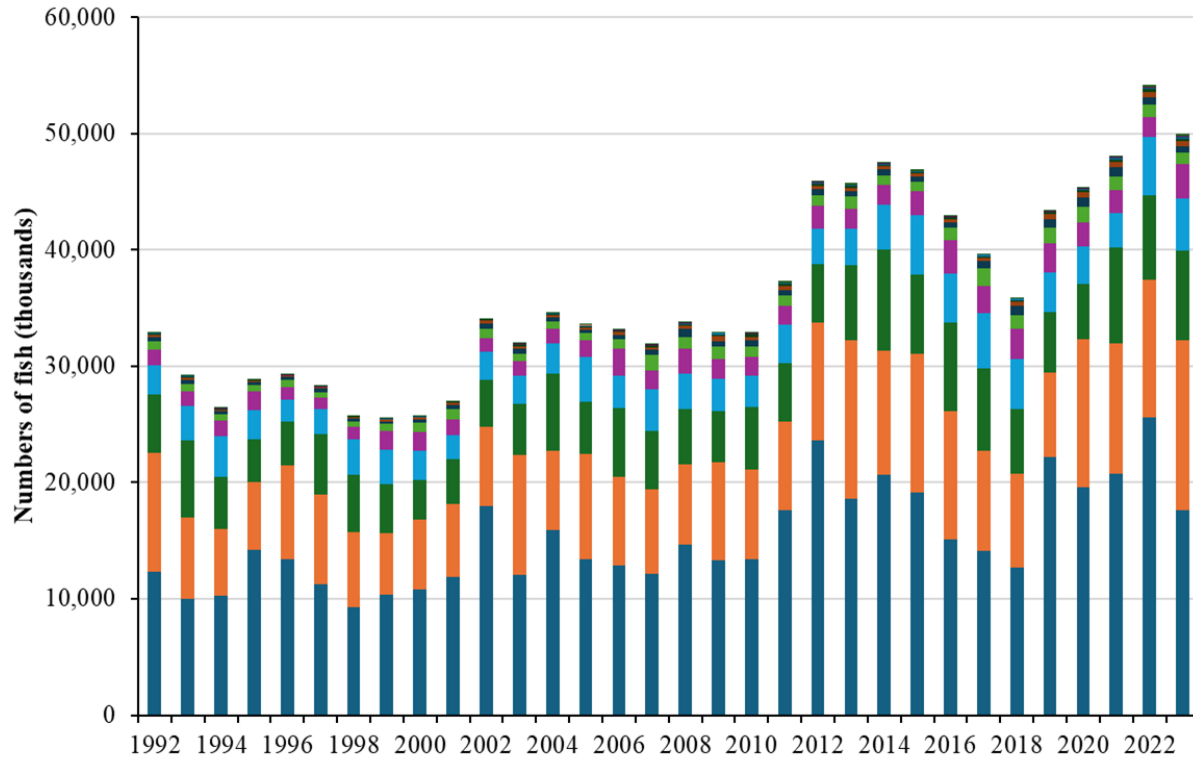
A school of yellowtail snappers swimming in clear blue water. The fish have silver bodies with prominent yellow vertical stripes and yellow tails. They are swimming in various directions, creating a sense of movement.

SEDAR 96: Yellowtail Snapper Base Model Results

Total and Spawning Stock Biomass

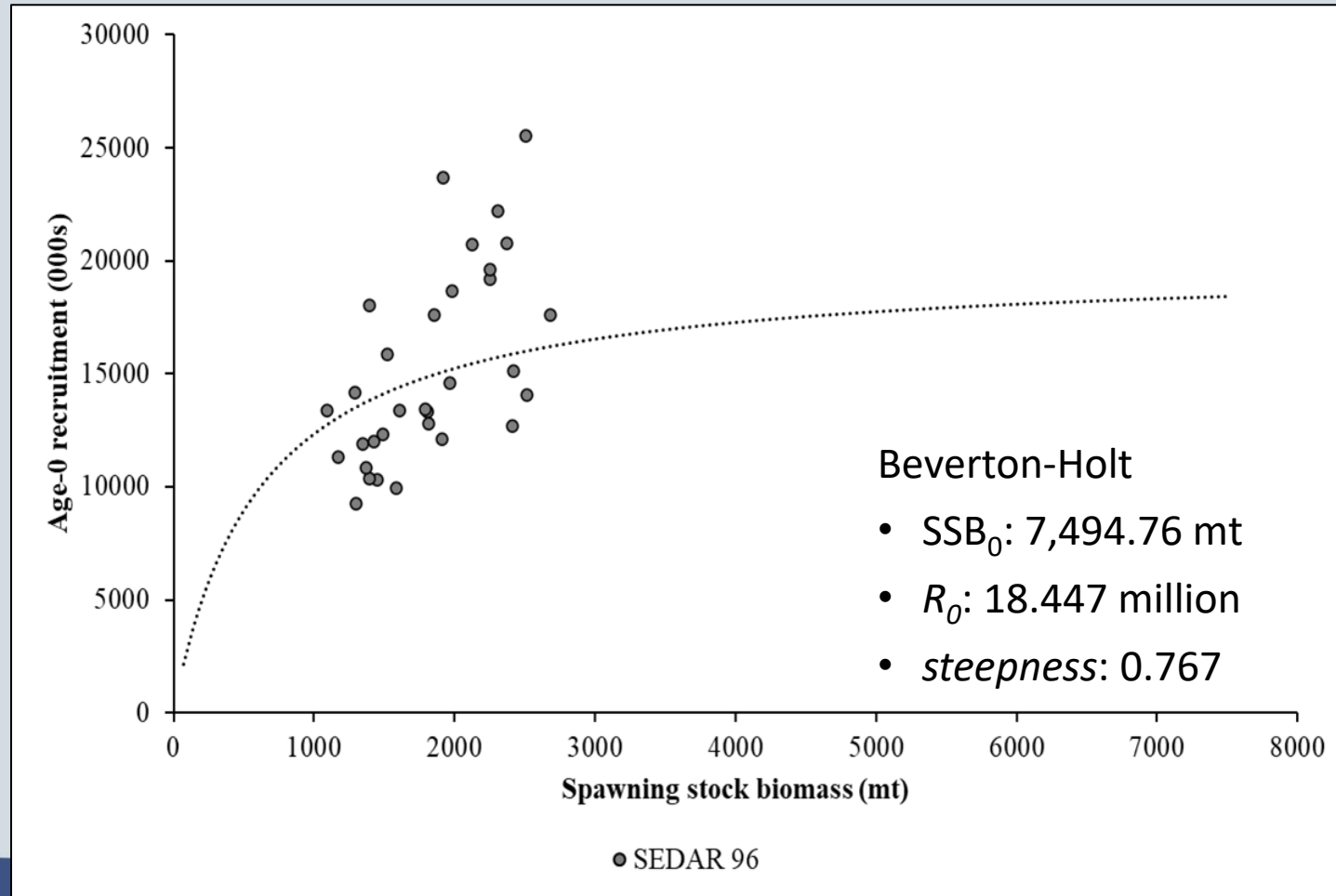


Numbers- and Biomass-at-Age

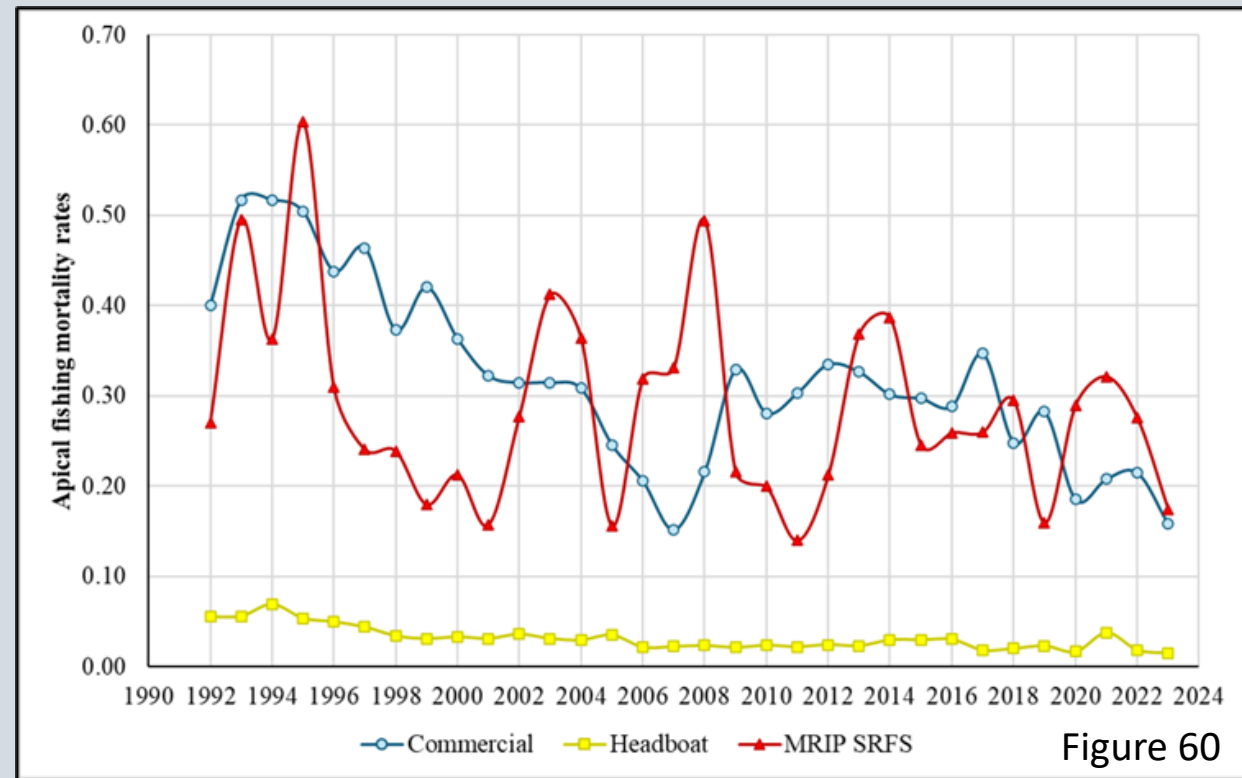
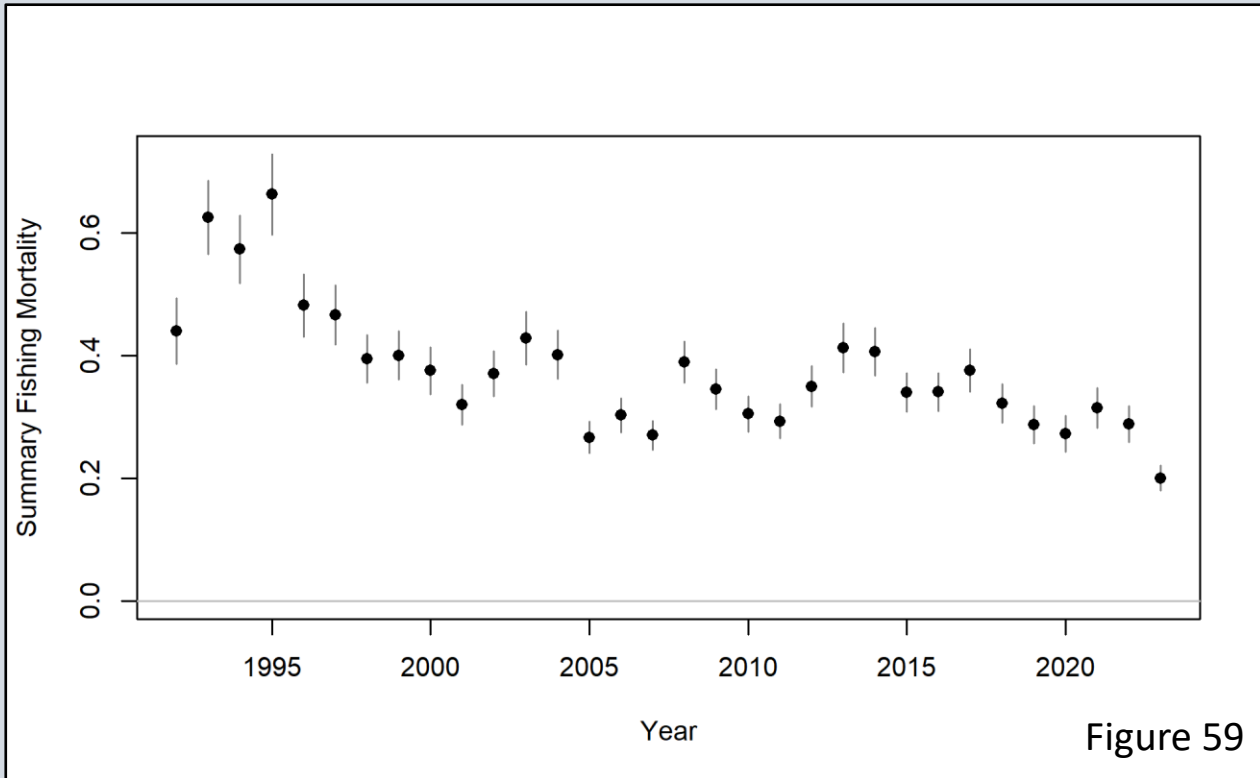


Age-0 Age-1 Age-2 Age-3 Age-4 Age-5 Age-6 Age-7

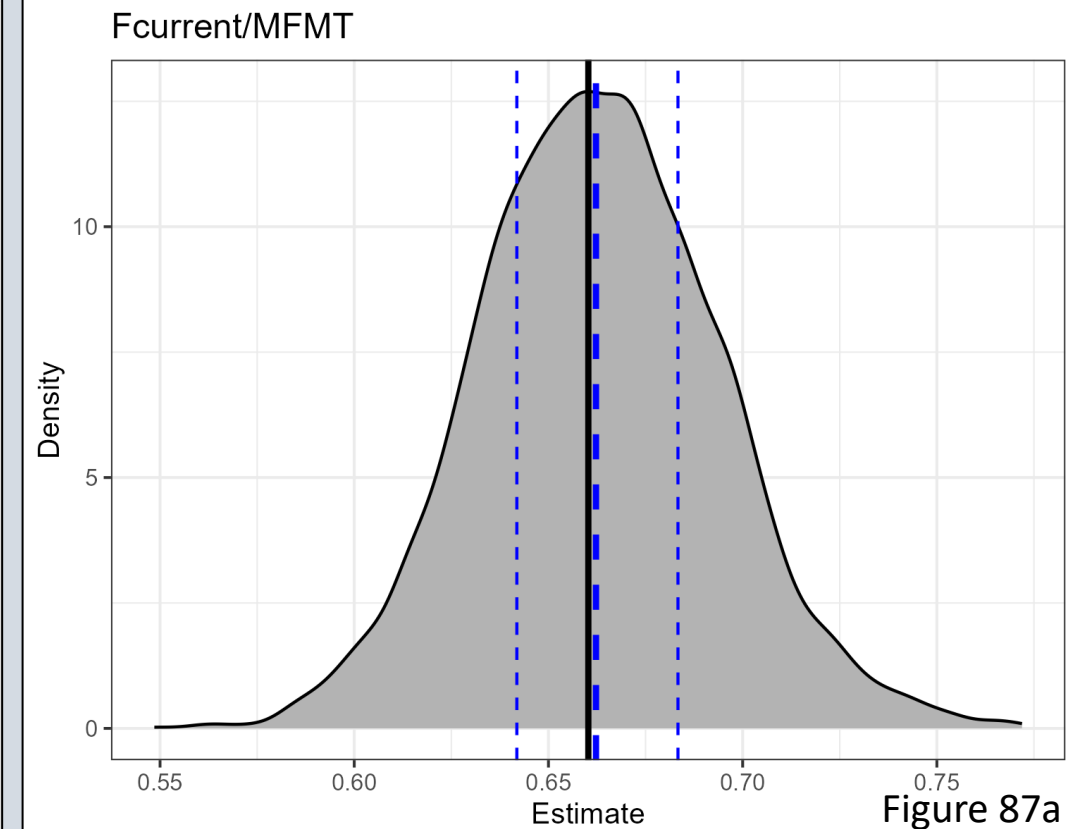
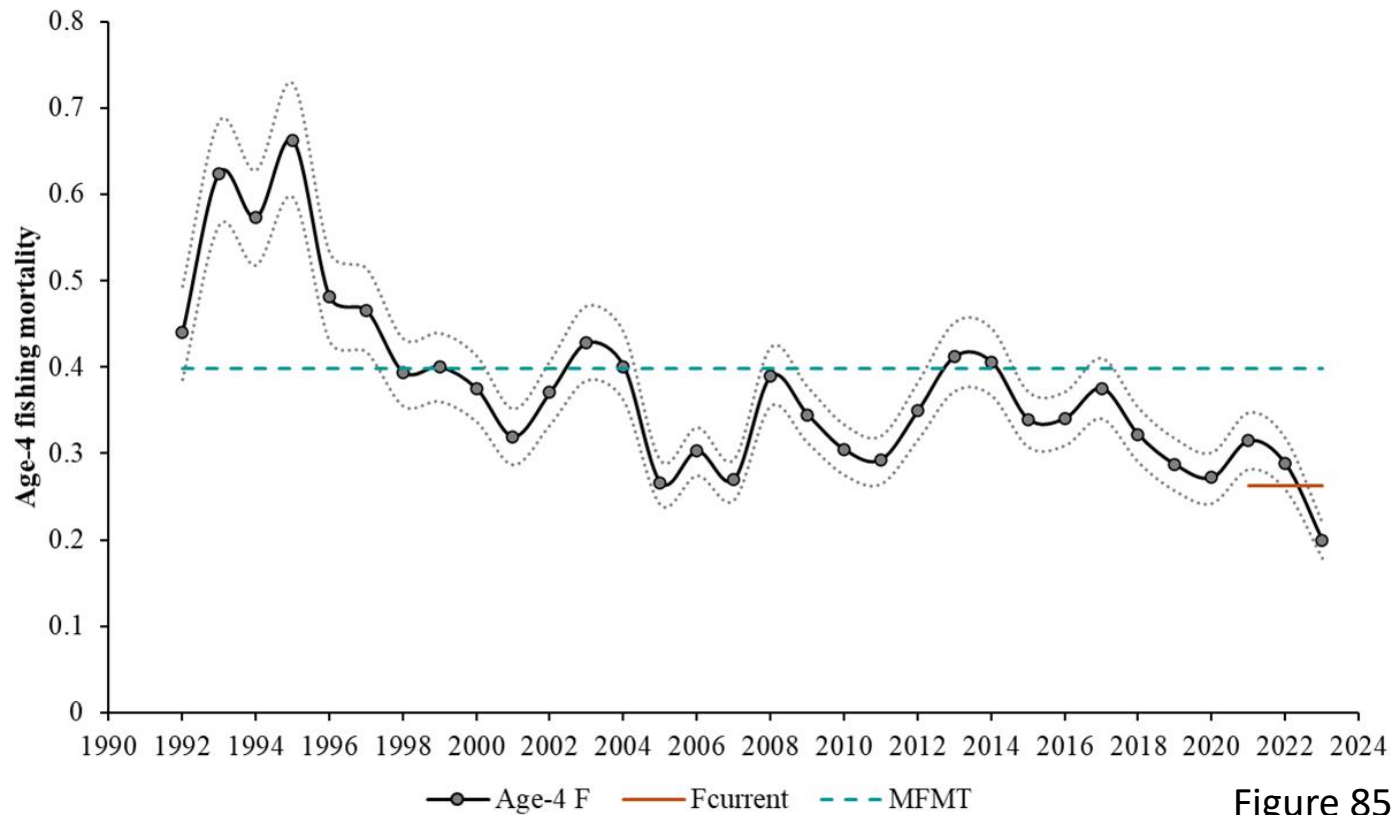
Stock-recruitment



Fishing Mortality Rates



Stock Status: Not undergoing overfishing



Stock Status: Not overfished

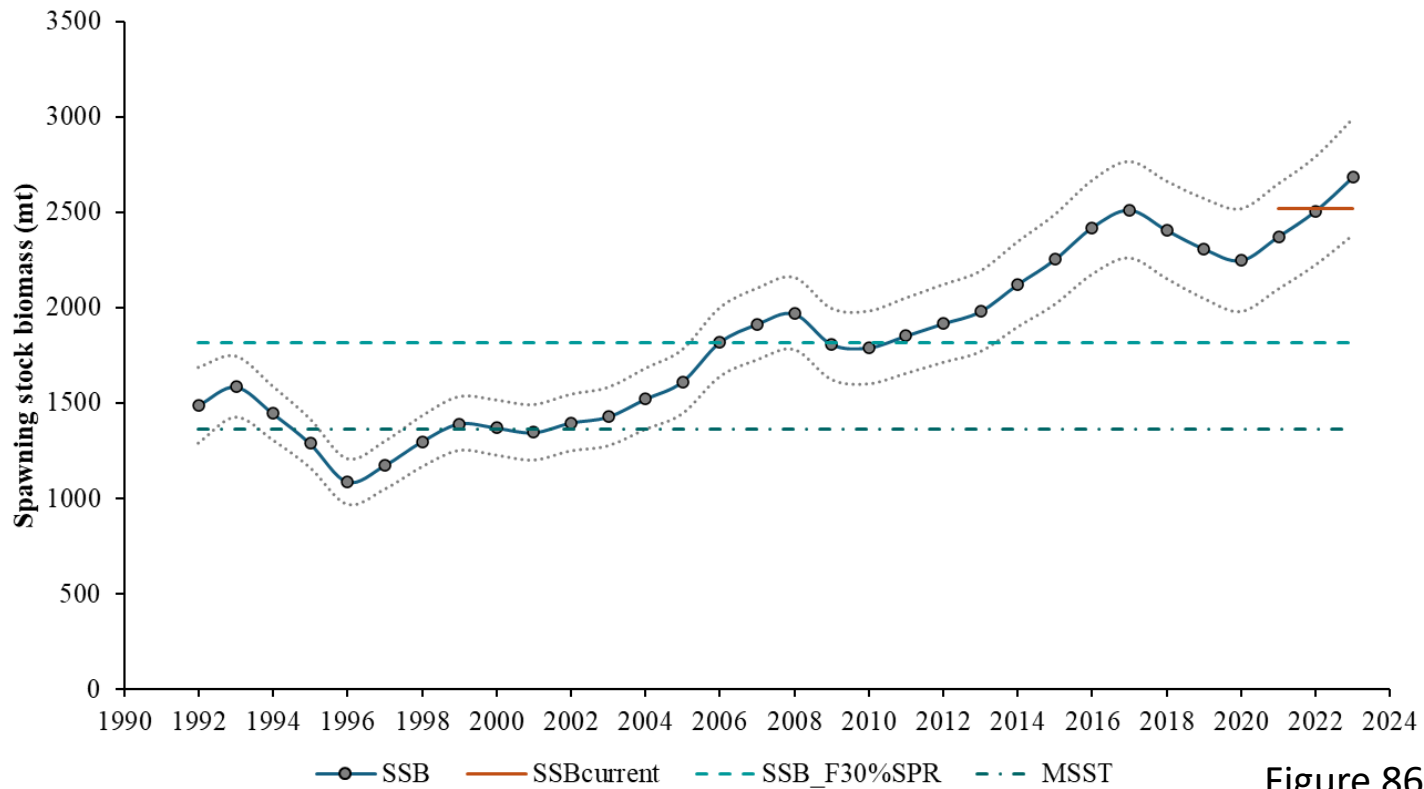


Figure 86

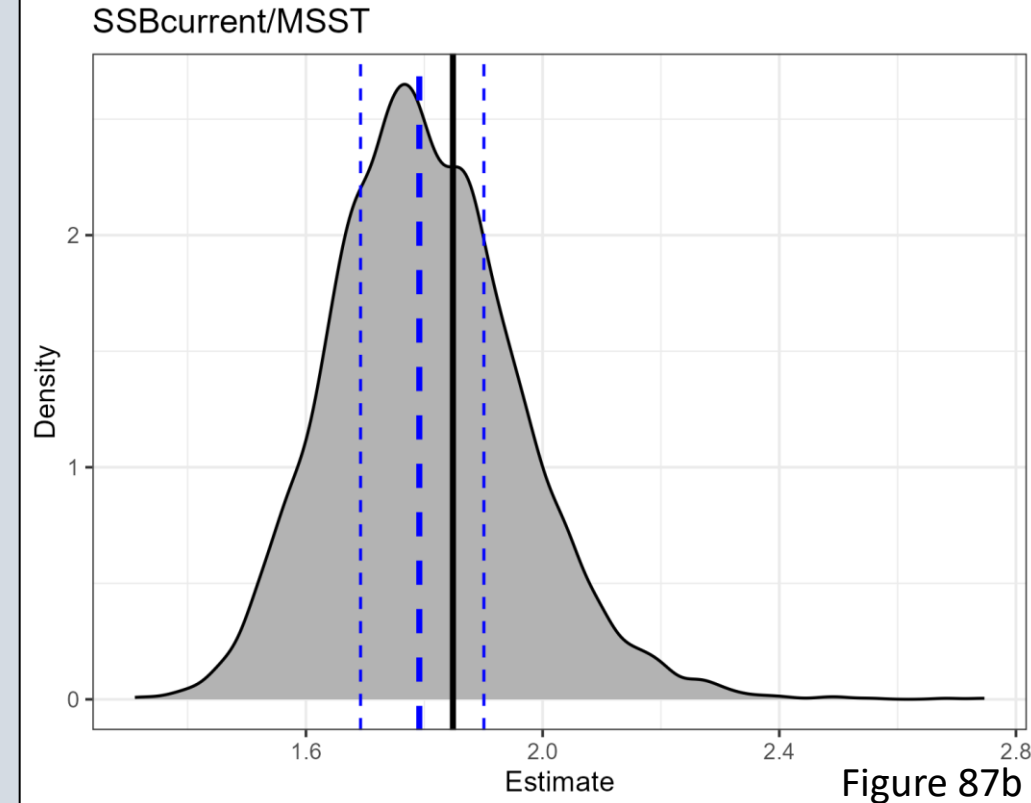
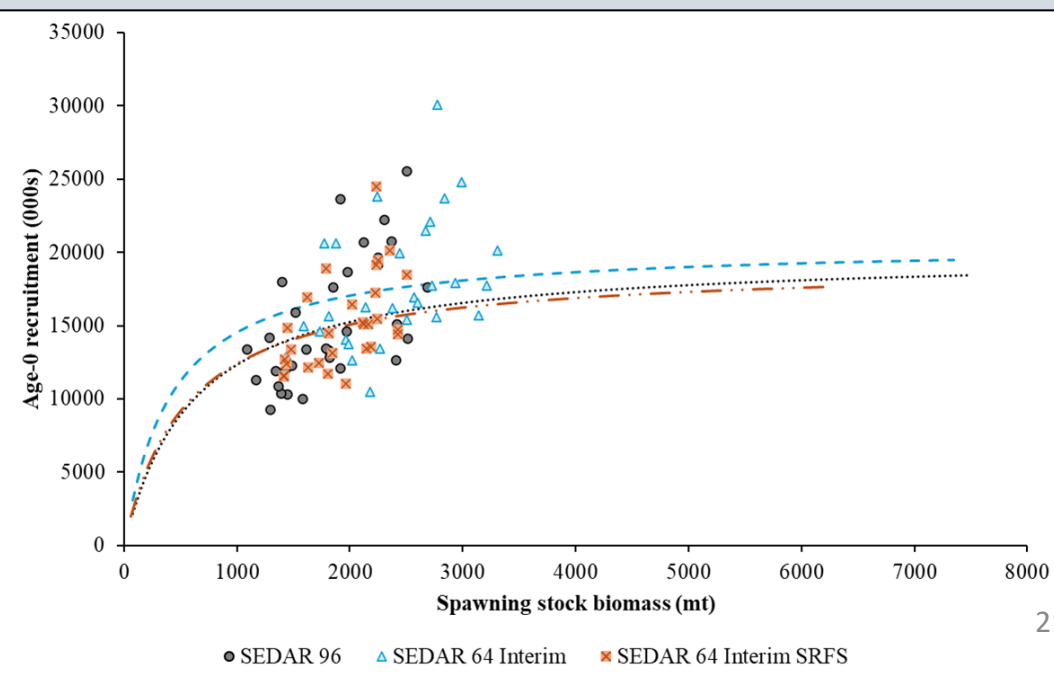
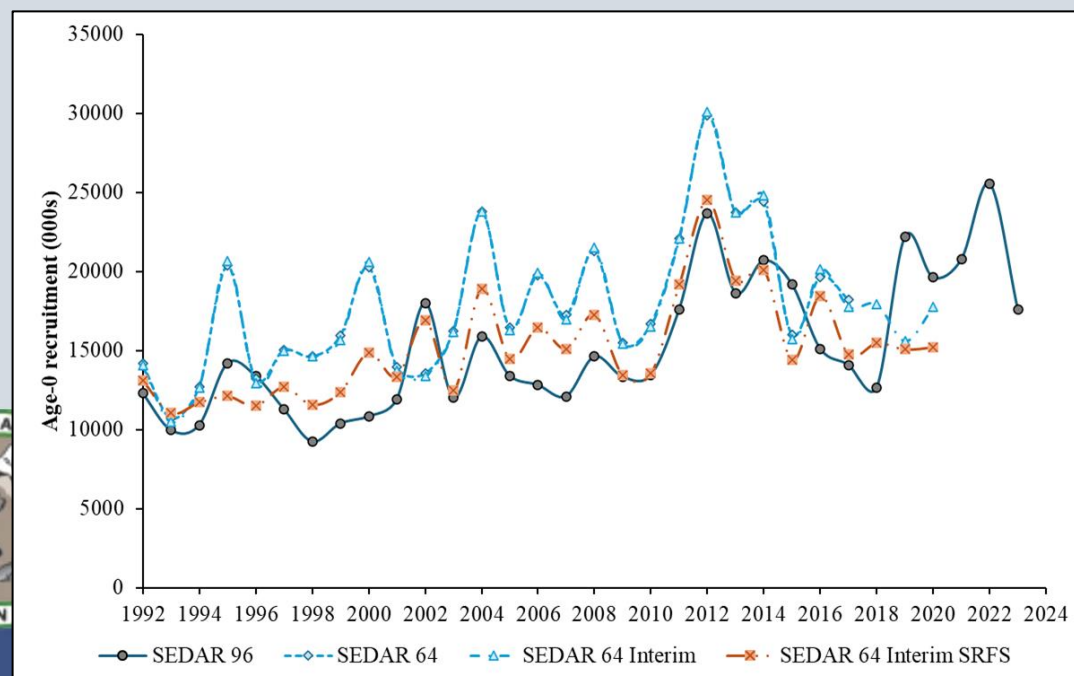
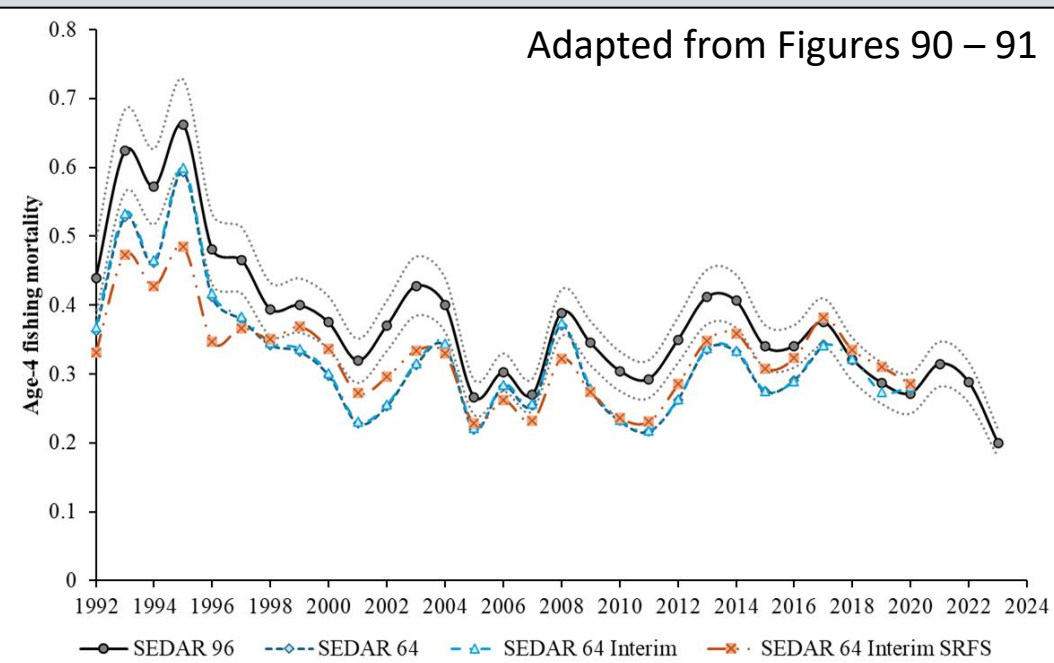
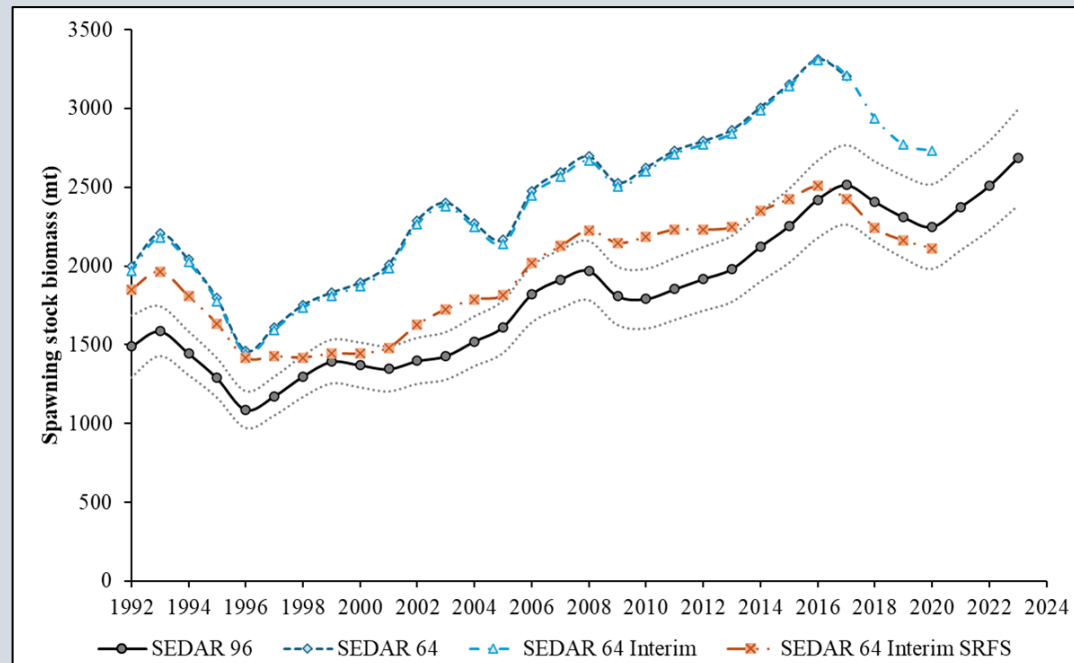


Figure 87b



Adapted from Figures 90 – 91



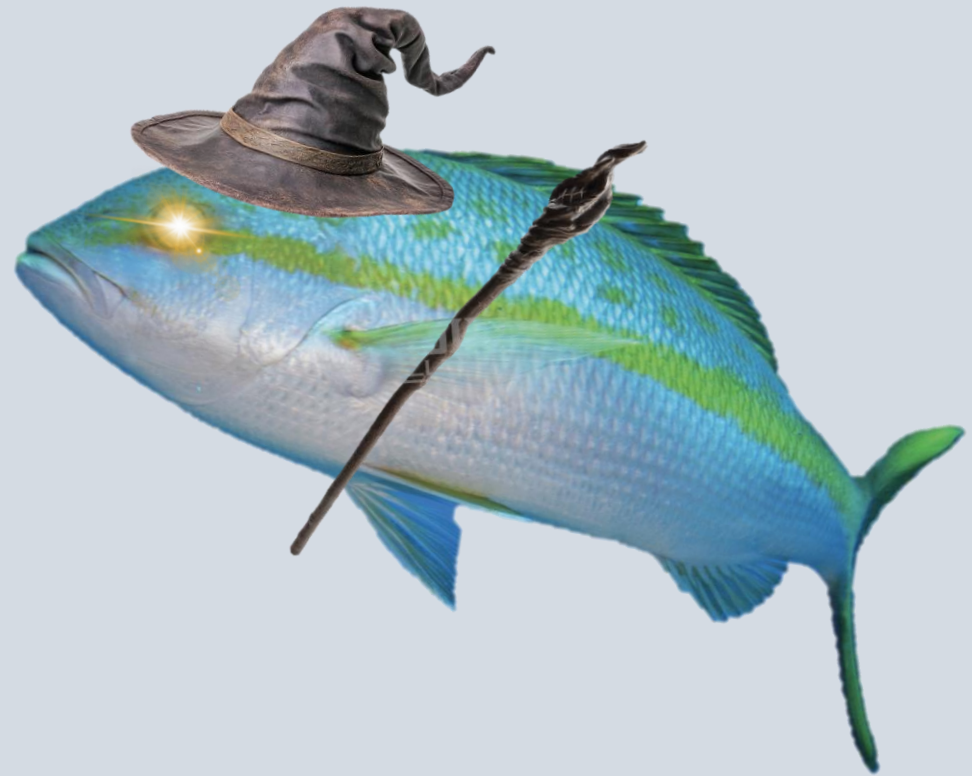
A large school of yellowtail snappers swimming in clear blue water near the surface. The fish are silvery with prominent yellow horizontal stripes and yellow tails. They are densely packed in the center and foreground, with many individuals visible. The water is bright blue with some ripples on the surface. The text 'SEDAR 96: Yellowtail Snapper Projections' is overlaid in the top right corner.

SEDAR 96: Yellowtail Snapper Projections

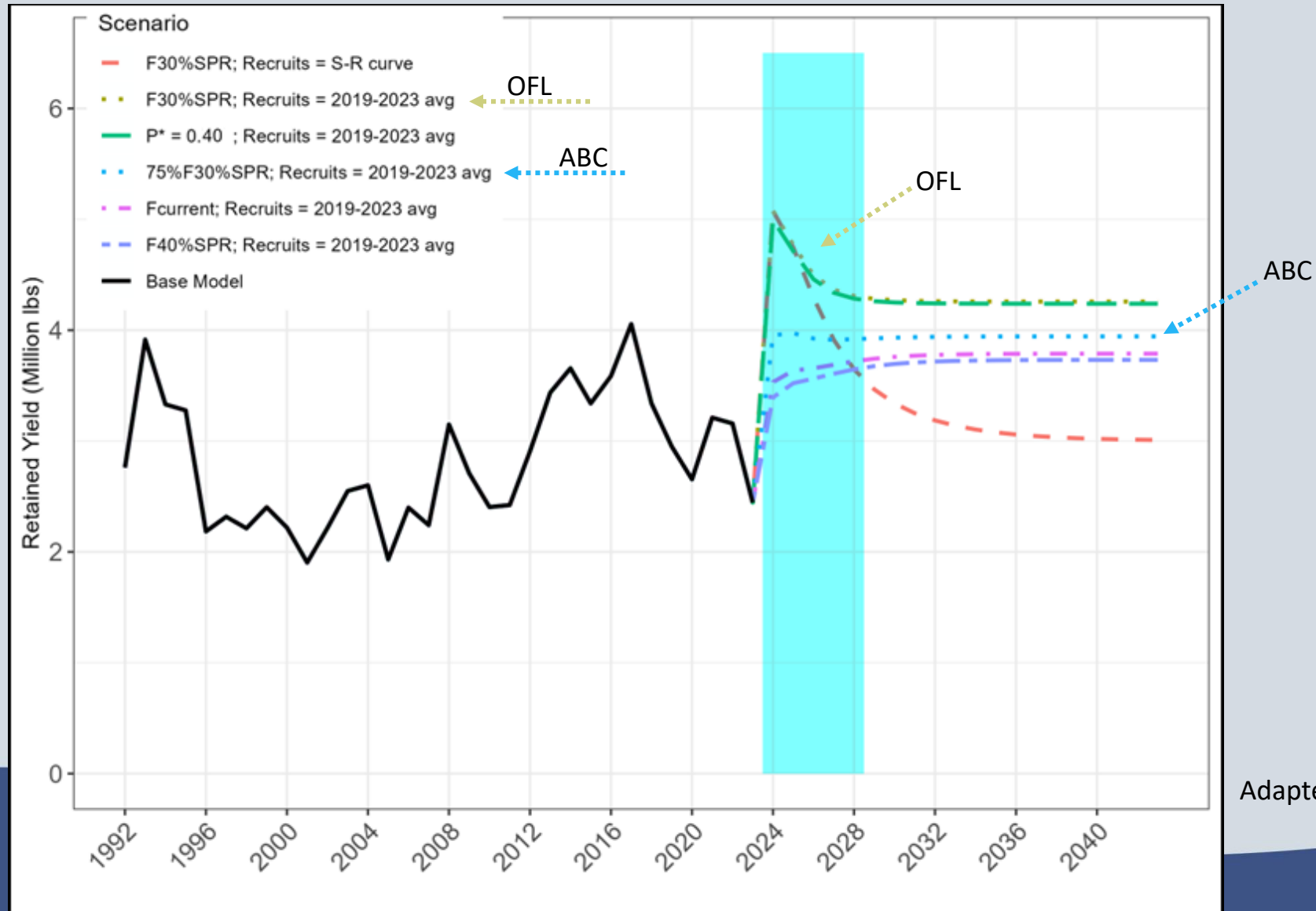
Projection Scenarios

- *Annually for five years using constant F*

- $F_{30\%SPR} = 0.392 \text{ yr}^{-1}$
- $F_{P^* = 0.40} = 0.386 \text{ yr}^{-1}$
- $F_{\text{current}} = 0.263 \text{ yr}^{-1}$
- $F_{75\%_F30\%SPR} = 0.294 \text{ yr}^{-1}$
- $F_{40\%SPR} = 0.248 \text{ yr}^{-1}$



Constant F Scenarios: Retained Yield (lbs.)



Adapted from Figure 93

GMFMC and SAFMC Standing SSC Meeting Summary February 25 – 26, 2025

SSCs Consensus: The SSCs selected an alternative approach from the P* approach in the ABC in the SAFMC control rule because of differences of how the uncertainty of OFL is characterized.

SSCs Consensus: The SSC used the arithmetic mean of the most recent five years of recruitment (2019-2023) for informing OFL and ABC projections. Using the arithmetic mean for recruitment can be interpreted to indicate a regime shift; however, for yellowtail snapper, the SSCs do not think a regime shift has occurred.

The OFL is set at $F_{30\%SPR}$, and the ABC is set at 75% of $F_{30\%SPR}$, for the years 2026-2028, as derived from the provided projections for 2024-2028.

	OFL ($F_{30\%SPR}$)	ABC (75% of $F_{30\%SPR}$)
2024	5,076,490	3,955,300
2025	4,767,230	3,973,088
2026	4,495,187	3,925,031
2027	4,364,600	3,913,426
2028	4,307,856	3,918,634

Catch limits are in lb ww.





Thank You!