

Red Drum Benchmark Stock Assessment Report



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Stock Assessment Sub-Committee Chair

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Marine Resources Division

Prepared By...

Underlined = Both SAS & TC

Bold = ASMFC Simulation Assessment (2022)

Italicized = SEDAR 44 (2015) / ASMFC 2017 SAS

Stock Assessment Subcommittee

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Tracey Bauer, ASMFC

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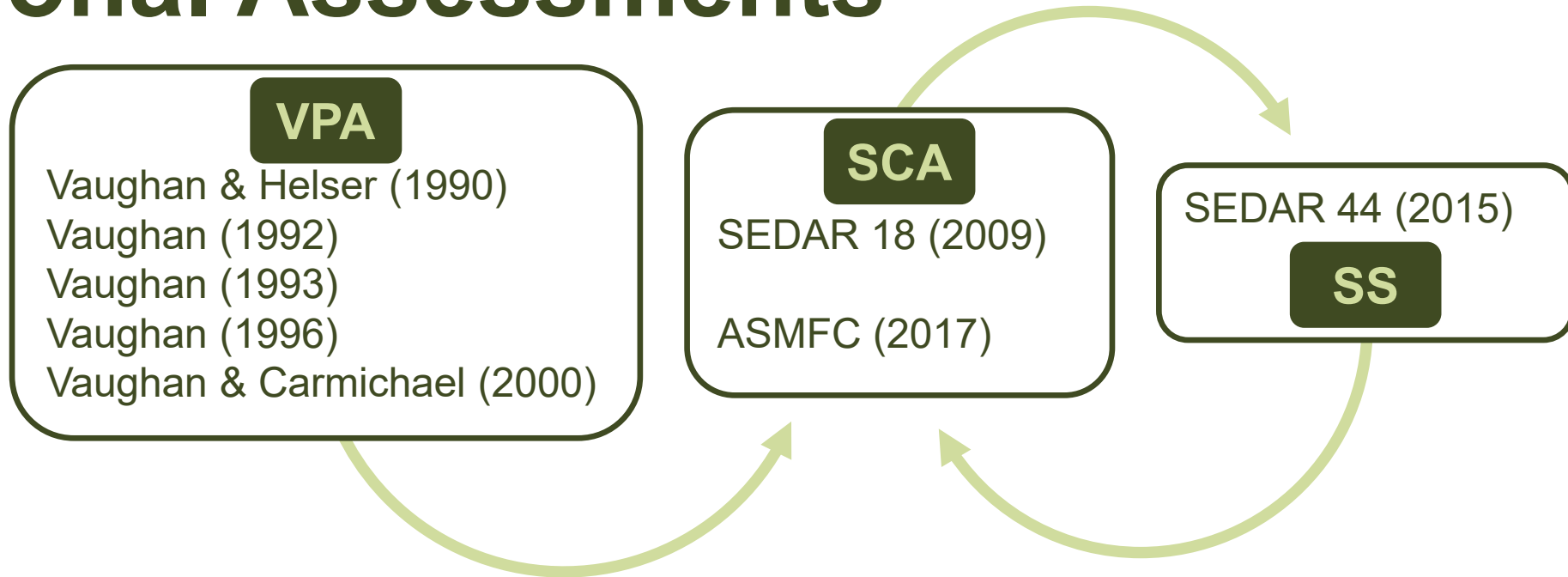
Red Drum Fisheries

Primarily recreational in nature

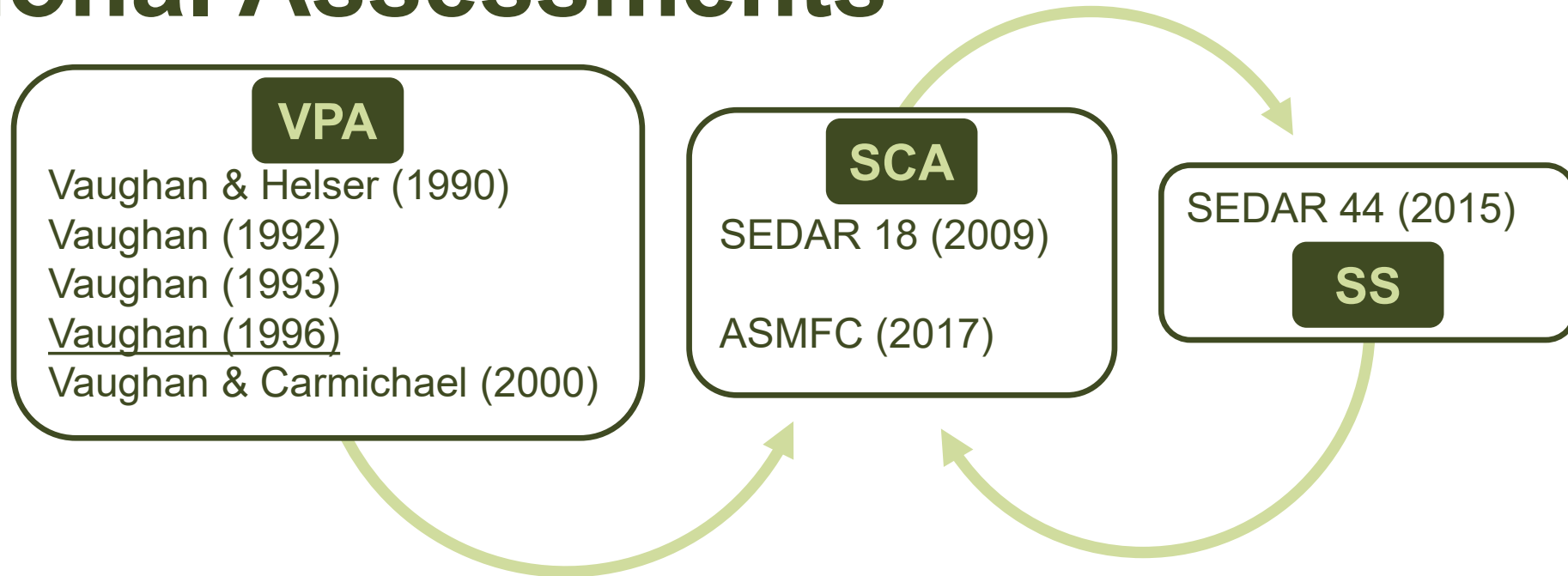
Exclusively recreational for southern population

Limited commercial catch (VA, NC) continues in northern population

Regional Assessments



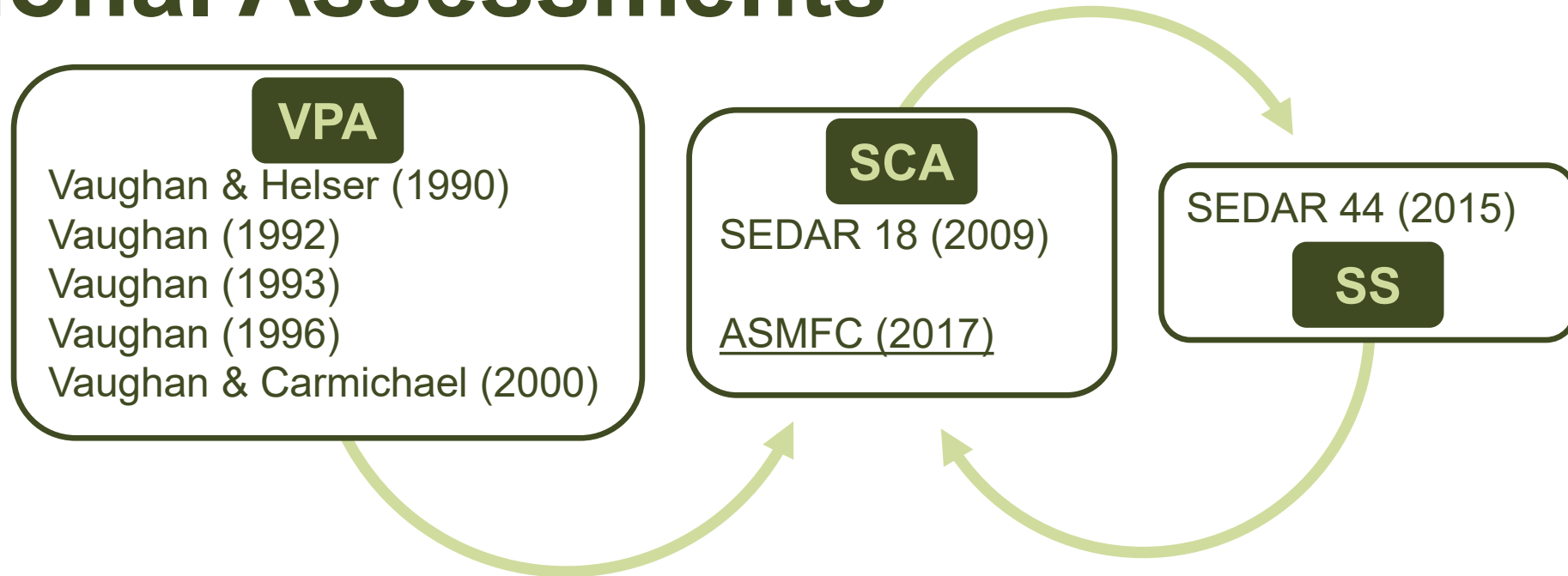
Regional Assessments



Considered one stock in early assessments

Two stocks, with break at the NC/SC border since Vaughan (1996)

Regional Assessments



Considered one stock in early assessments

Two stocks, with break at the NC/SC border since Vaughan (1996)

ASMFC (2017)

Neither stock experiencing overfishing in terminal year (2013)

Model couldn't determine SSB status (Age 7+ group in SCA)

Simulation Assessment

Three modeling frameworks

Model-free stock indicators (e.g., traffic light analysis)

Juvenile population dynamics model (e.g., SCA used in ASMFC 2017)

Integrated stock population dynamics model (e.g., stock synthesis)

Recommendations

Do not continue pursuit of custom SCA model

Model used in SEDAR 18 (2009) and ASMFC (2017) assessments

Prioritize development of stock synthesis (SS) models

Output (e.g. F, SPR, SSB) **can be** used for stock status determination

Including metrics related to **SSB and SSB status**

Develop the traffic light analysis (TLA) as a **complementary analysis**

Reference Points

Stock Synthesis & TLA

Stock Synthesis Reference Points

Overfishing – Defined in current Interstate FMP

Threshold = $SPR_{30\%}$ ($F_{30\%}$)

Target = $SPR_{40\%}$ ($F_{40\%}$)

Stock Synthesis Reference Points

Overfishing – Defined in current Interstate FMP

$$\text{Threshold} = \text{SPR}_{30\%} (F_{30\%})$$

$$\text{Target} = \text{SPR}_{40\%} (F_{40\%})$$

Overfished – Not currently defined in Interstate FMP

$$\text{Threshold} = \text{SSB}_{30\%}$$

$$\text{Target} = \text{SSB}_{40\%}$$

Stock Synthesis Reference Points

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Status Determination

Used three-year running averages...

$$\text{Overfishing} = \overline{\text{SPR}_{y-2,y-1,y}}$$

$$\text{Overfished} = \overline{\text{SSB}_{y-2,y-1,y}}$$

Terminal year status = 2019-2021 avg.

Traffic Light Analysis Reference Points & Management Triggers

Note: Reference points not defined in current Interstate FMP; reference points developed by SAS in the current assessment

Traffic Light Analysis Reference Points & Management Triggers

Overfishing

Fishery performance red in any of the past 3 years

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Traffic Light Analysis Reference Points & Management Triggers

Overfishing

Fishery performance red in any of the past 3 years

Overfished

Adult abundance red in any of the past 3 years

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Traffic Light Analysis Reference Points & Management Triggers

Overfishing

Fishery performance red in any of the past 3 years

Overfished

Adult abundance red in any of the past 3 years

Additional Management Action Triggers

Fishery performance: **yellow** any of the past 3 years & recruitment **red** for 5 consecutive years

Below average recruitment and ↑ catch and/or ↓ sub-adult abundance

Both fishery performance & adult abundance **yellow** any of the past 3 years

↑ catch and/or ↓ sub-adult abundance leading to declines in adult abundance

Recruitment **red** for 5 consecutive years & adult abundance **yellow** in any of the past 3 years

Below average recruitment representing concern for the future of the adult abundance

Note: Reference points not defined in current Interstate FMP; reference points developed by SAS in the current assessment

Southern Population

Stock Synthesis, TLA, Skate Data Limited Control Rule Method, and
Cormack-Jolly-Seber Tag-Recapture Model

Southern Population Fleets

Recreational fleets separated by state, split into a harvest and release time series

Different regulations & all contribute to the fishery

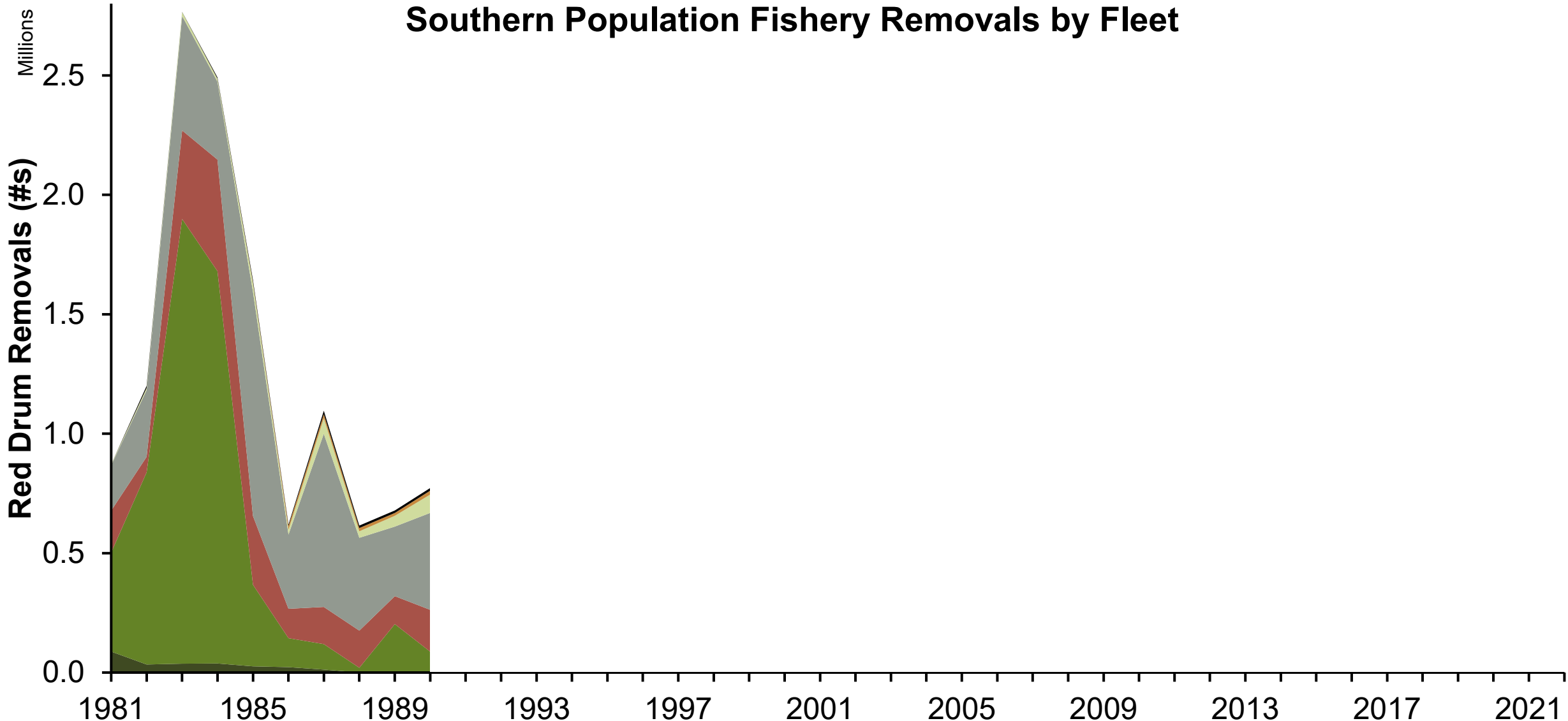
Southern Population Fleets

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Different regulations & all contribute to the fishery

Assumed an 8% discard mortality rate for released fish

Southern Population Fishery Removals by Fleet



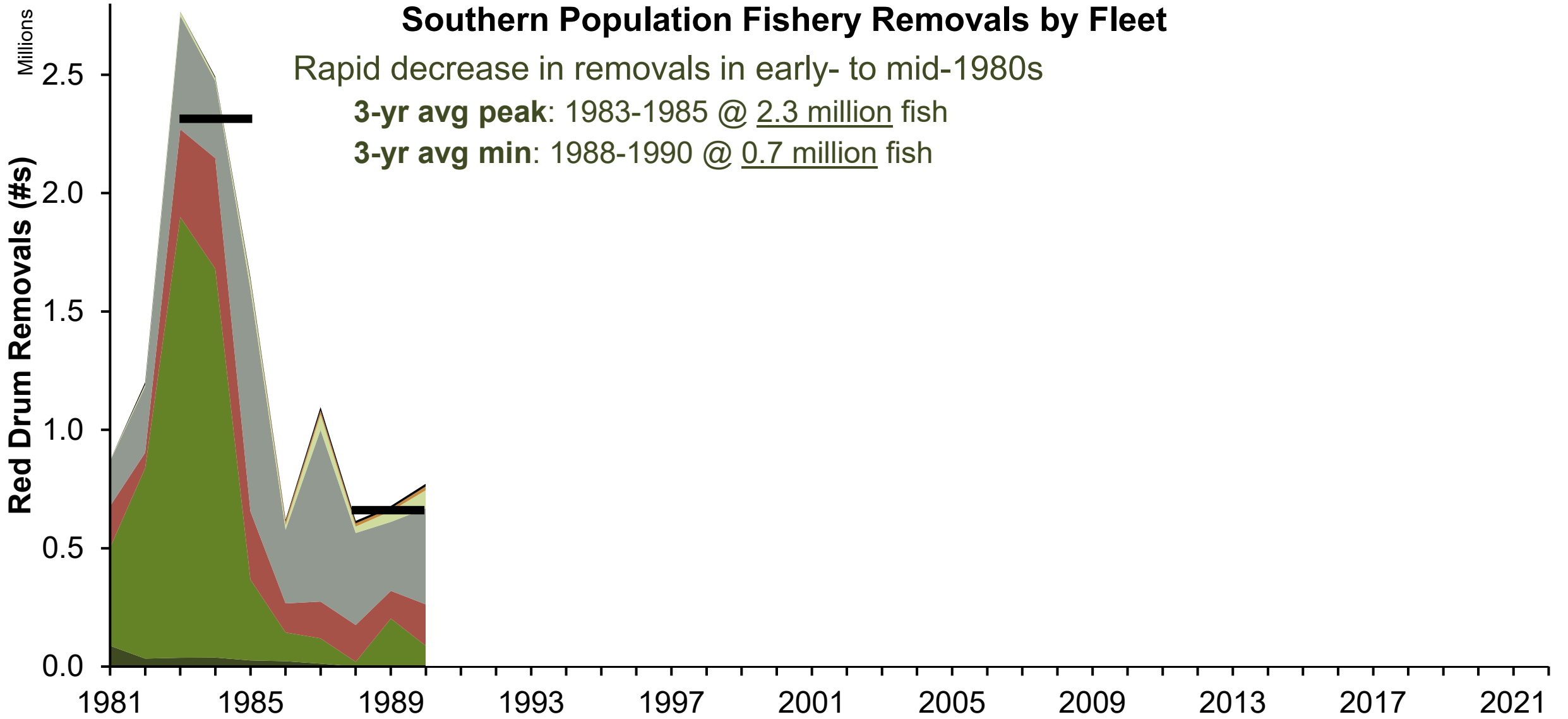
FL Commercial FL Harvest GA Harvest SC Harvest
FL Dead Discards GA Dead Discards SC Dead Discards

Southern Population Fishery Removals by Fleet

Rapid decrease in removals in early- to mid-1980s

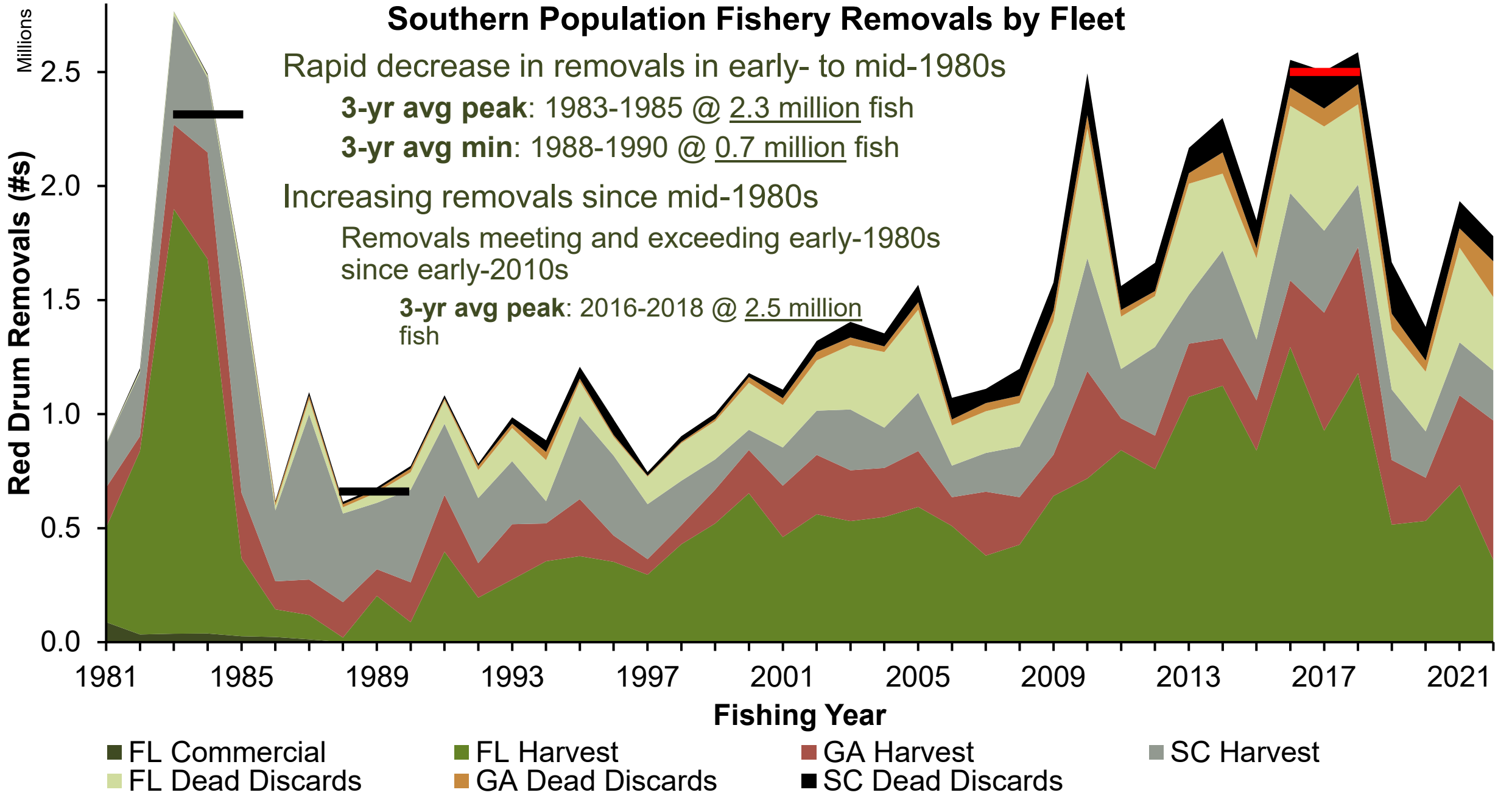
3-yr avg peak: 1983-1985 @ 2.3 million fish

3-yr avg min: 1988-1990 @ 0.7 million fish



- FL Commercial
- FL Harvest
- FL Dead Discards
- GA Harvest
- GA Dead Discards
- SC Harvest
- SC Dead Discards

Southern Population Fishery Removals by Fleet



Southern Population Fishery-Independent Indices

Considered 10 (7 in final SS model; 8 used in TLA analysis)

Recruitment Survey
Sub-Adult Survey
Adult Survey

Southern Population Fishery-Independent Indices

Considered 10 (7 in final SS model; 8 used in TLA analysis)

South Carolina

Rotenone, Stop Net, ~~Electrofishing~~, Trammel, ~~Historic Longline~~, & Contemporary Longline

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Georgia

Gill Net & ~~Longline~~

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Rotenone, Stop Net, Electrofishing, Trammel, ~~Historic Longline~~, & Contemporary Longline

Georgia

Gill Net & Longline

Florida

21.3 m Haul Seine & 183 m Haul Seine

Recruitment Survey
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Southern Population Fishery-Independent Indices

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Florida

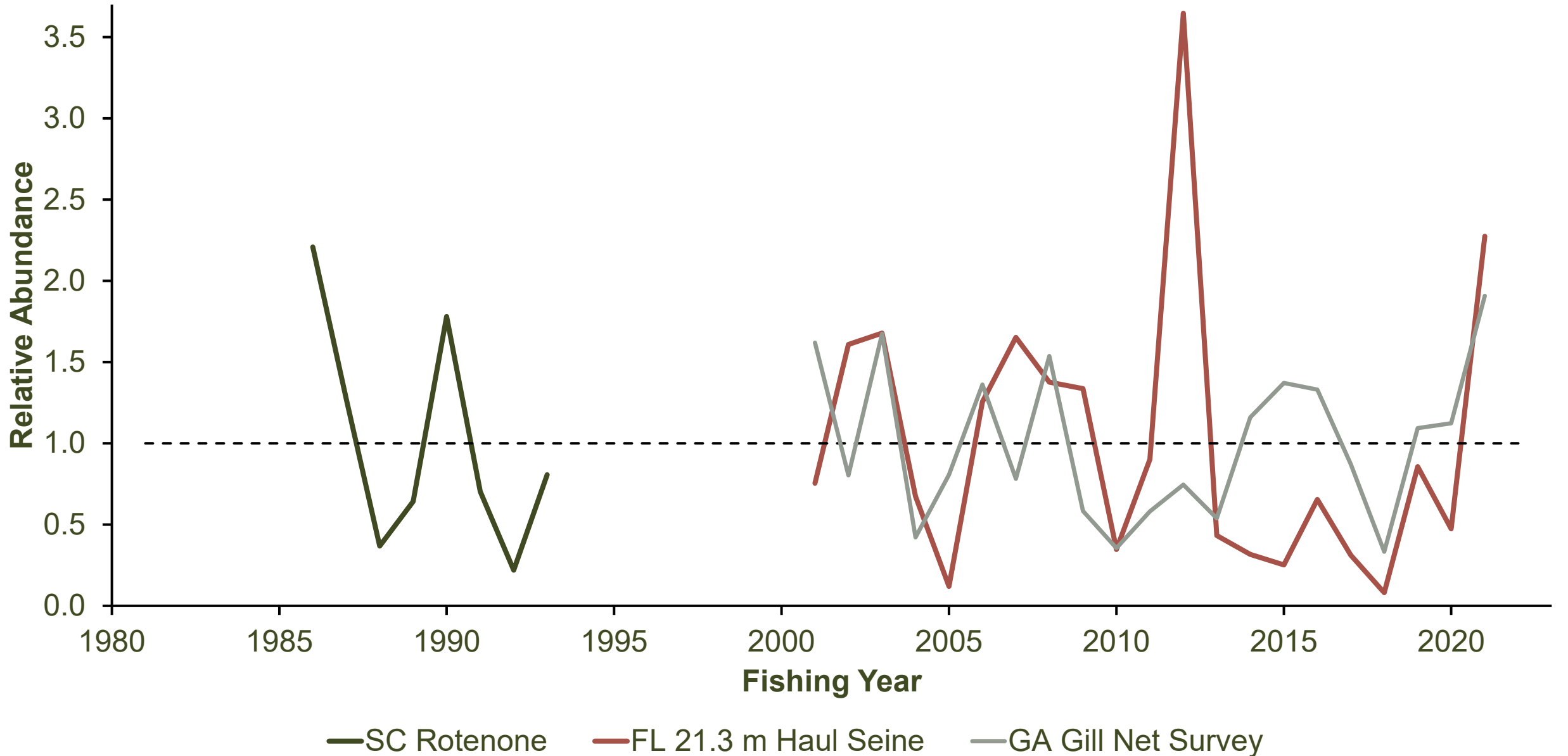
21.3 m Haul Seine & 183 m Haul Seine

Standardized indices to account for covariate(s) effect on catchability

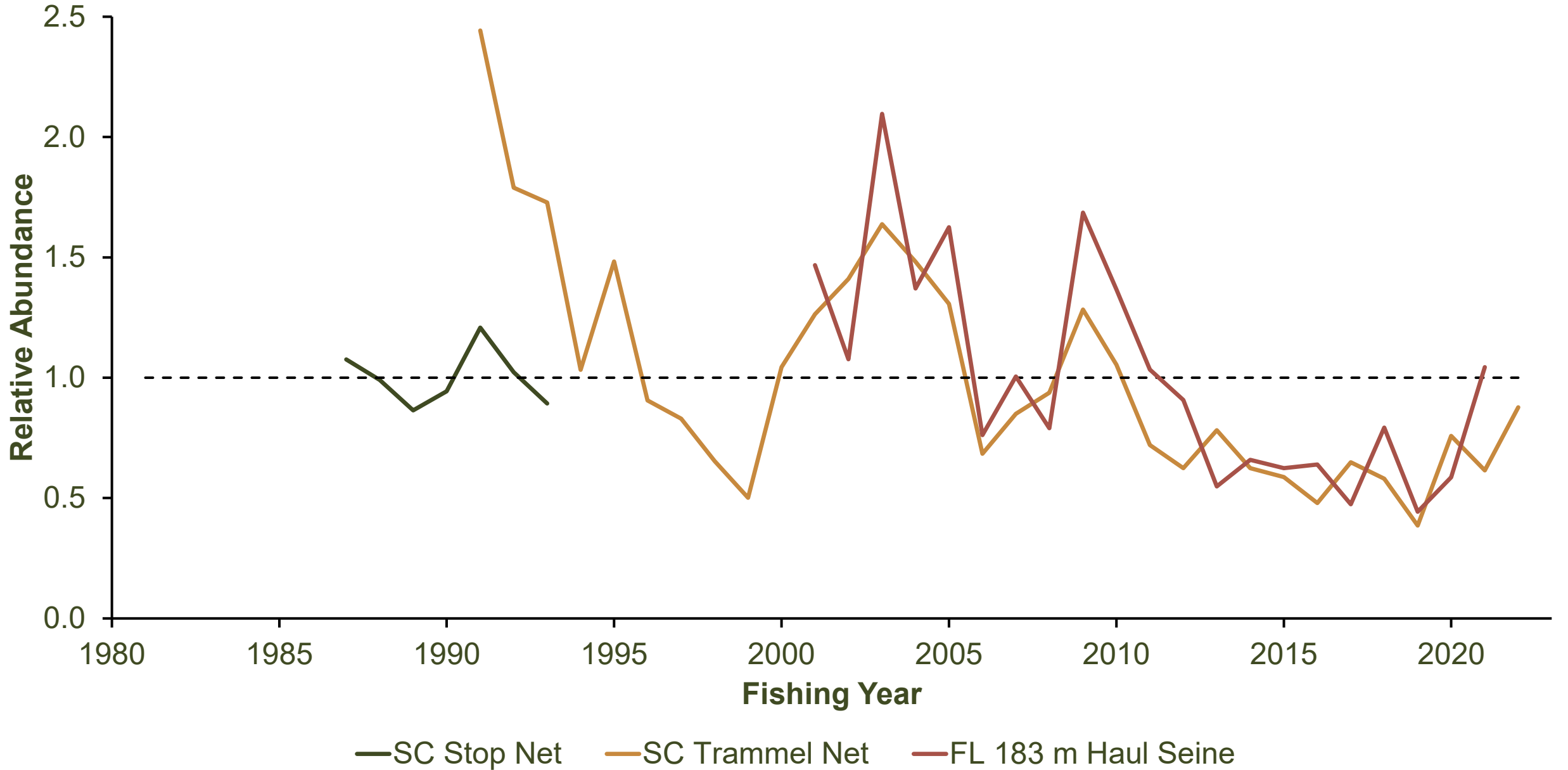
Previous assessments used nominal indices not accounting for environmental conditions effects on catchability

Recruitment Survey
Sub-Adult Survey
Adult Survey

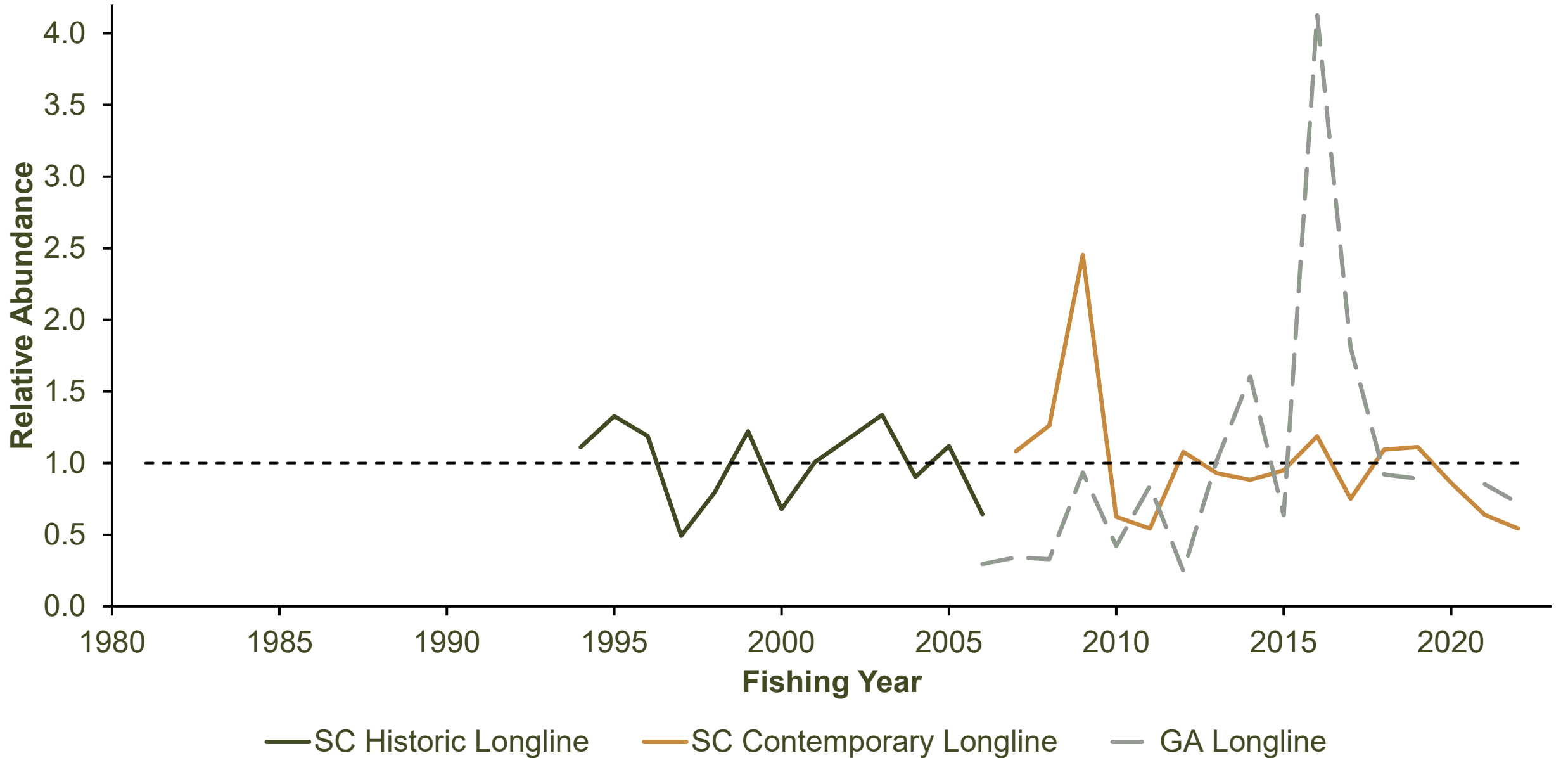
Southern Population Recruitment Indices



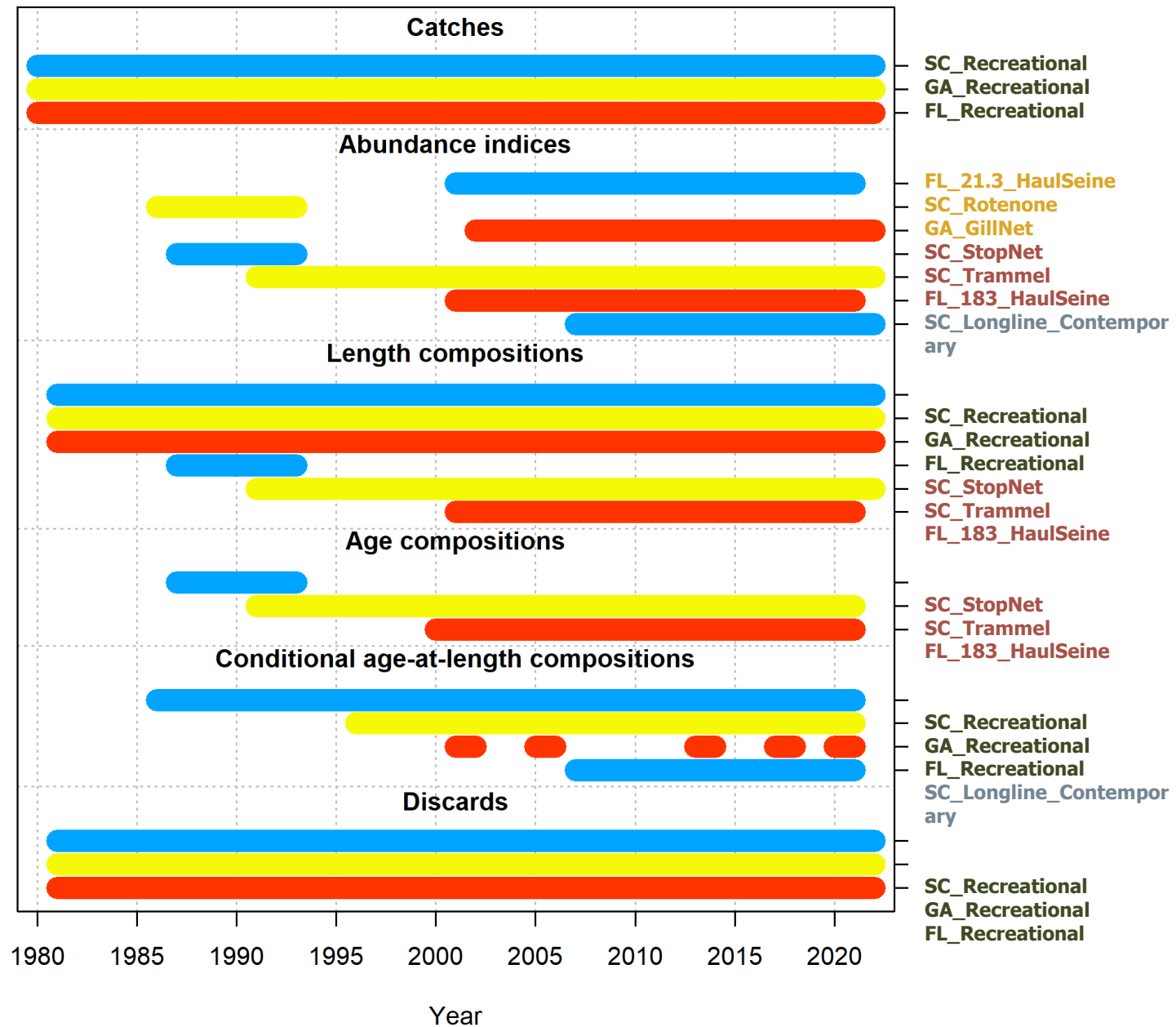
Southern Population Sub-Adult Indices



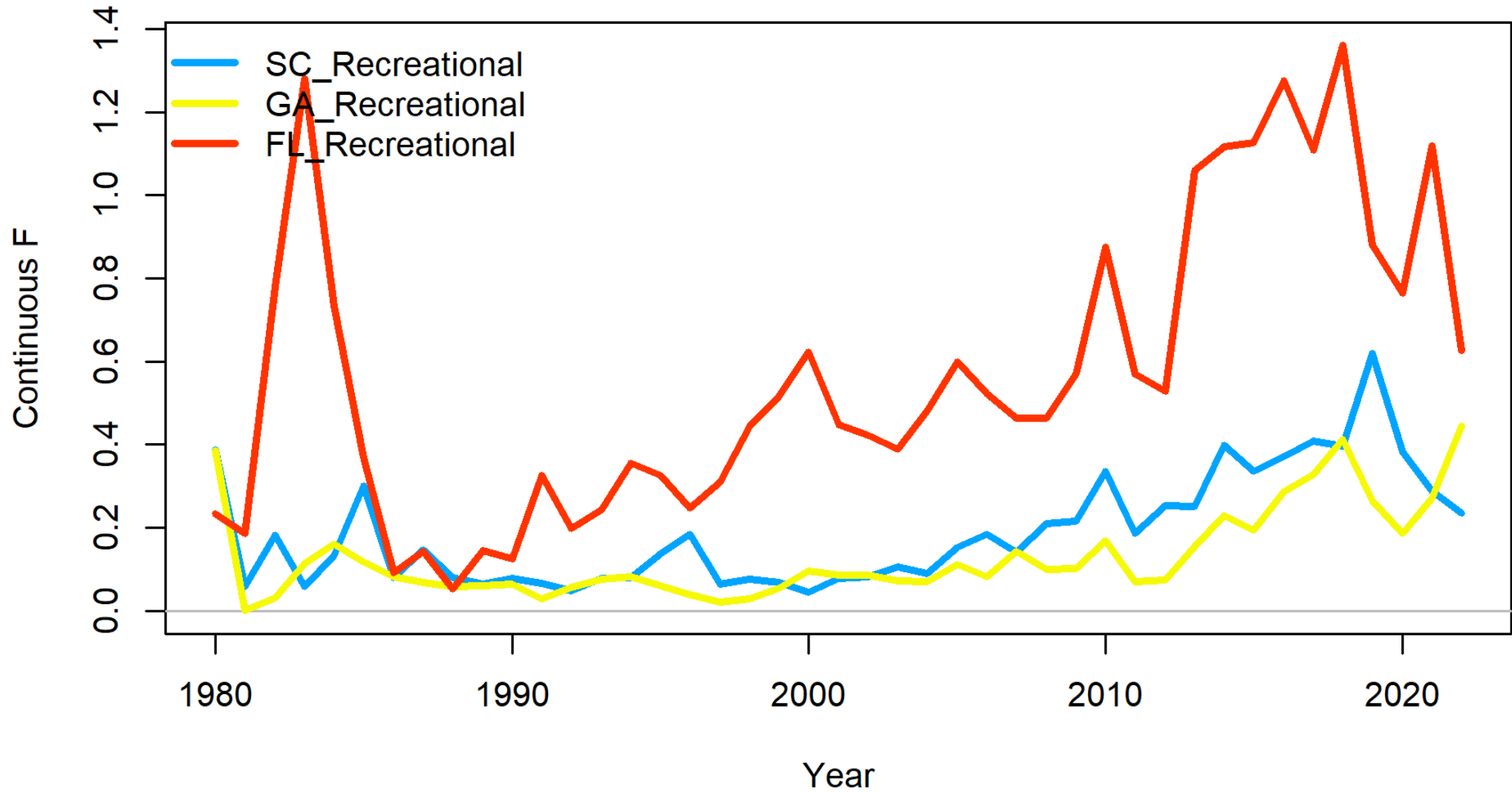
Southern Population Adult Indices



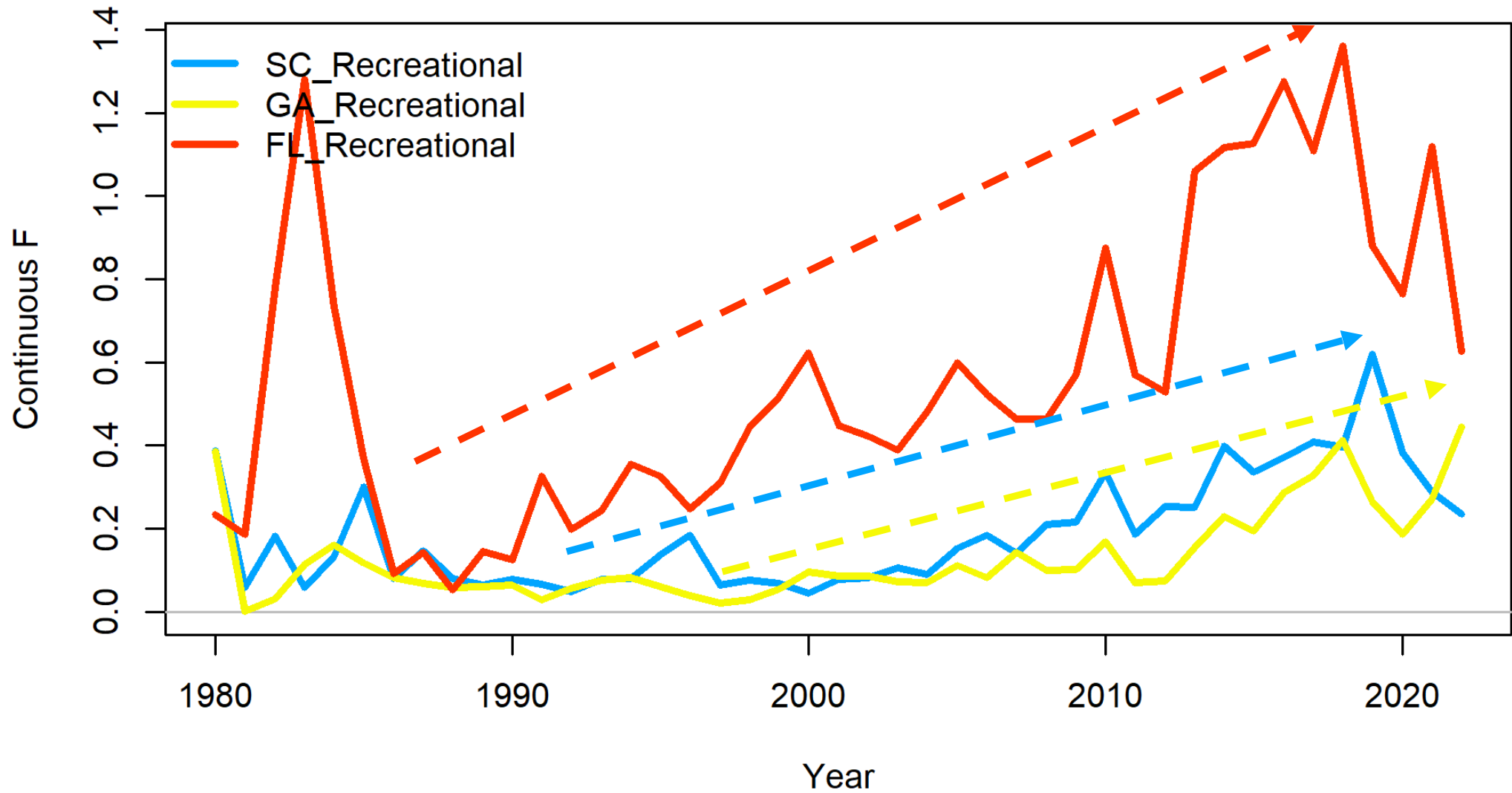
Stock Synthesis Data Inputs



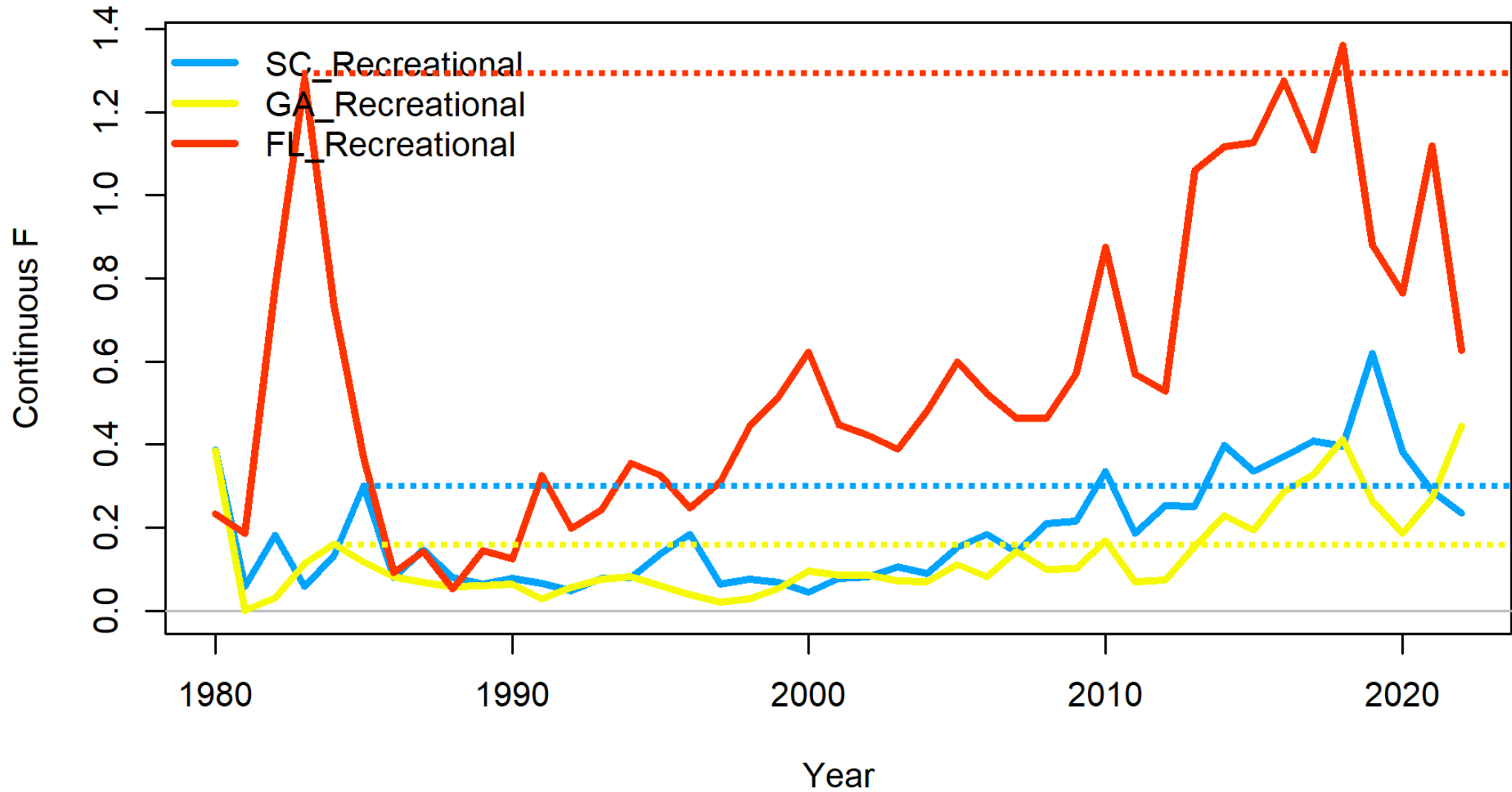
Fishing Mortality



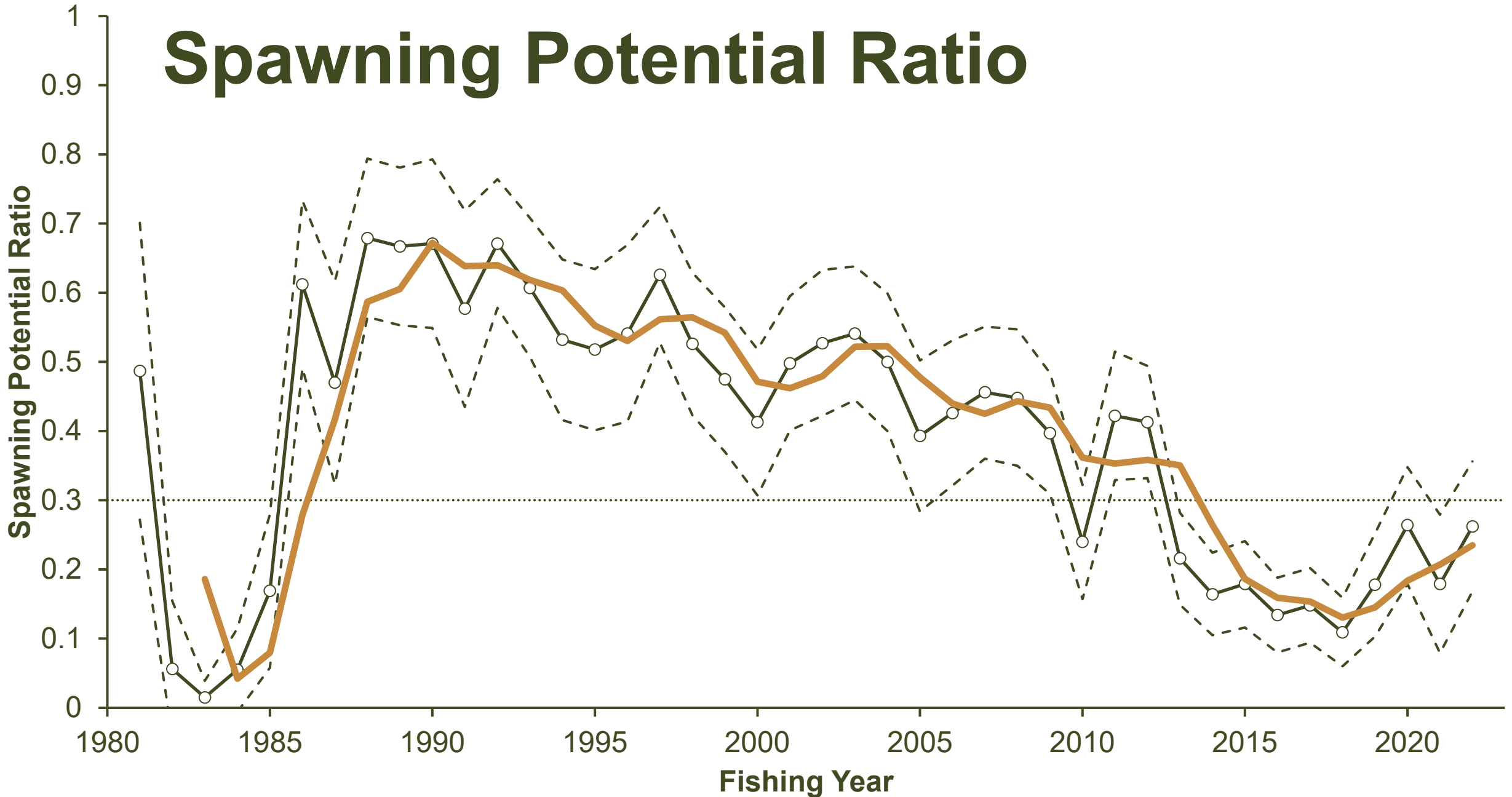
Fishing Mortality



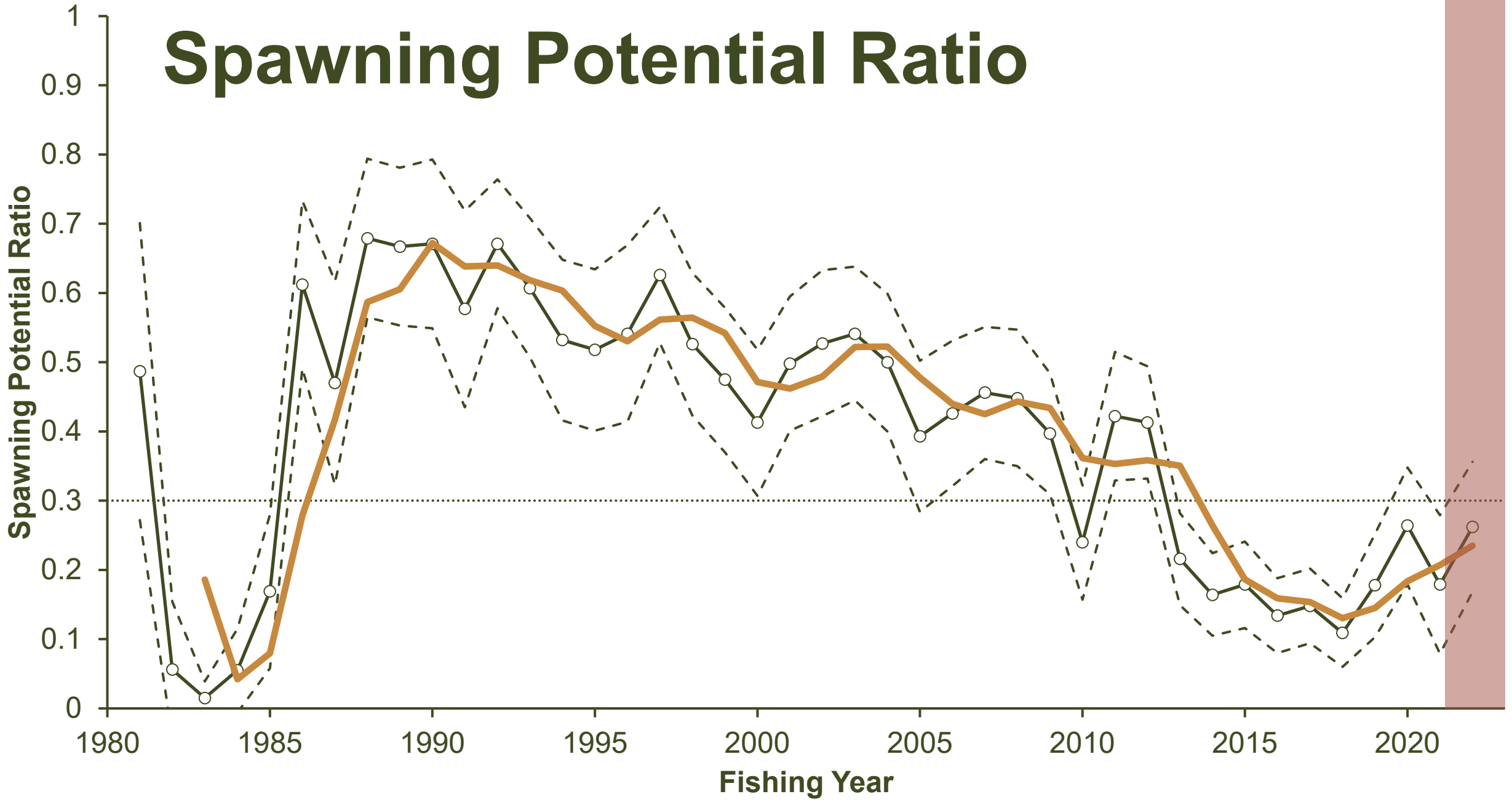
Fishing Mortality



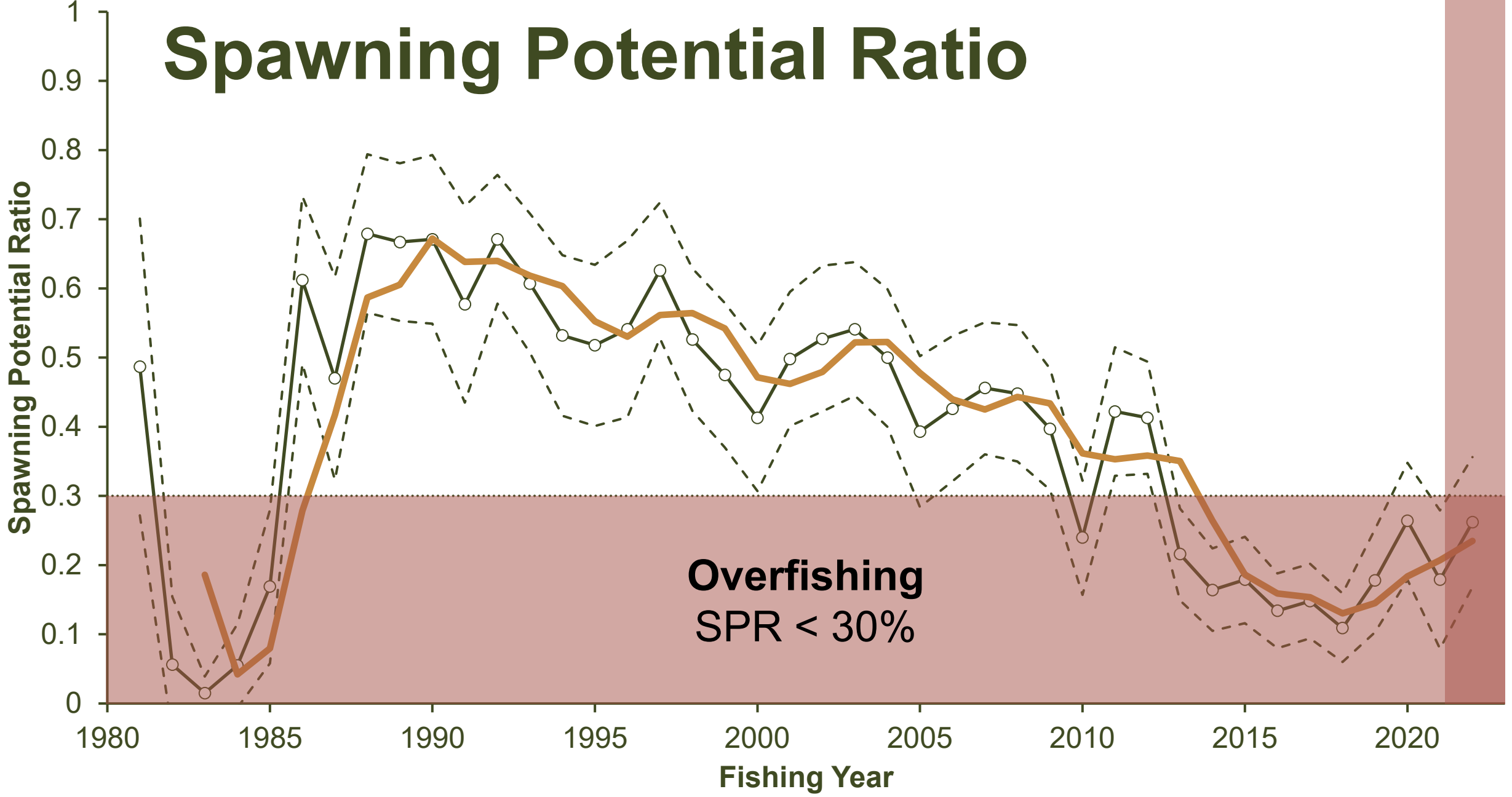
Spawning Potential Ratio



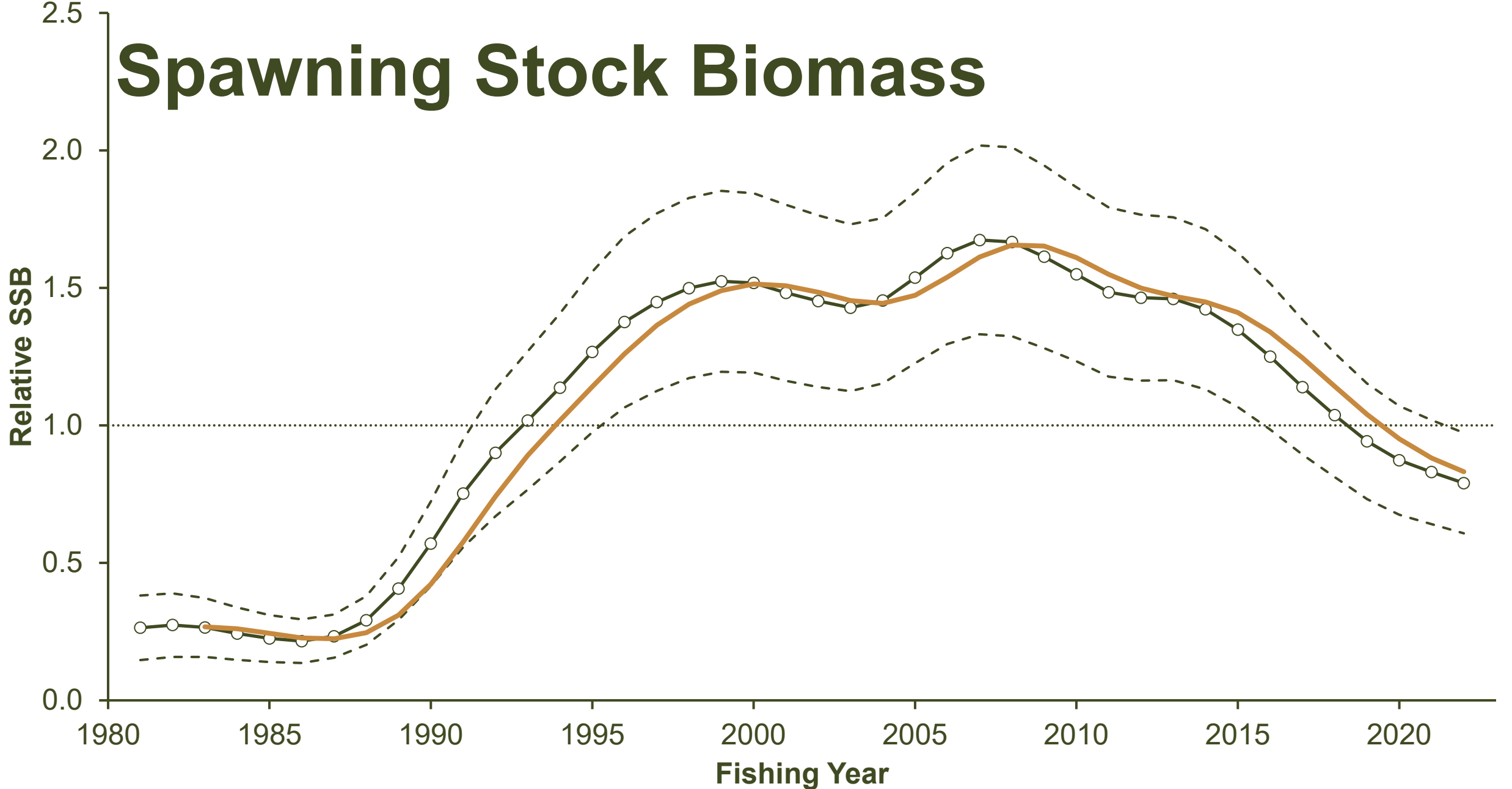
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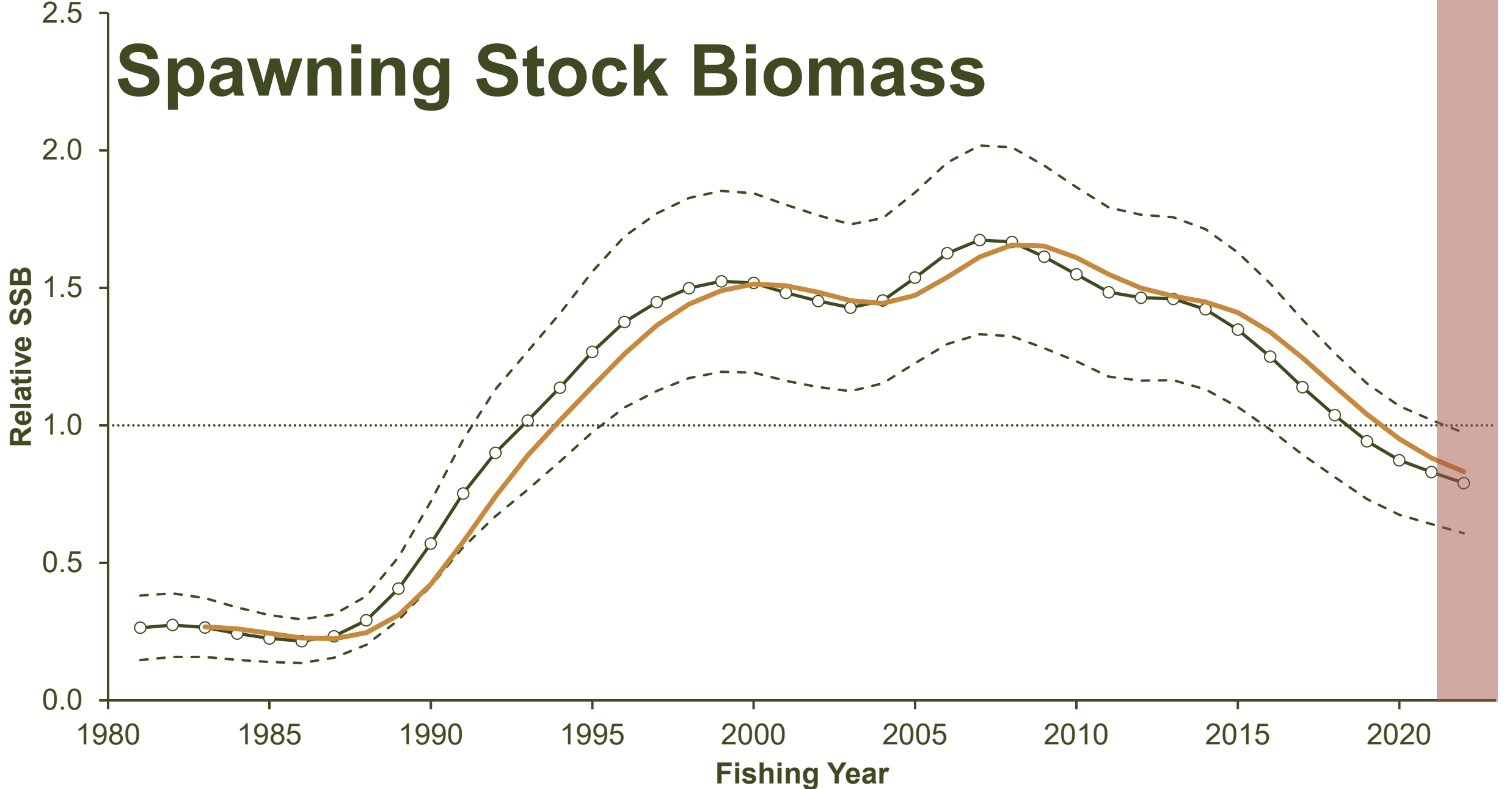
Spawning Potential Ratio



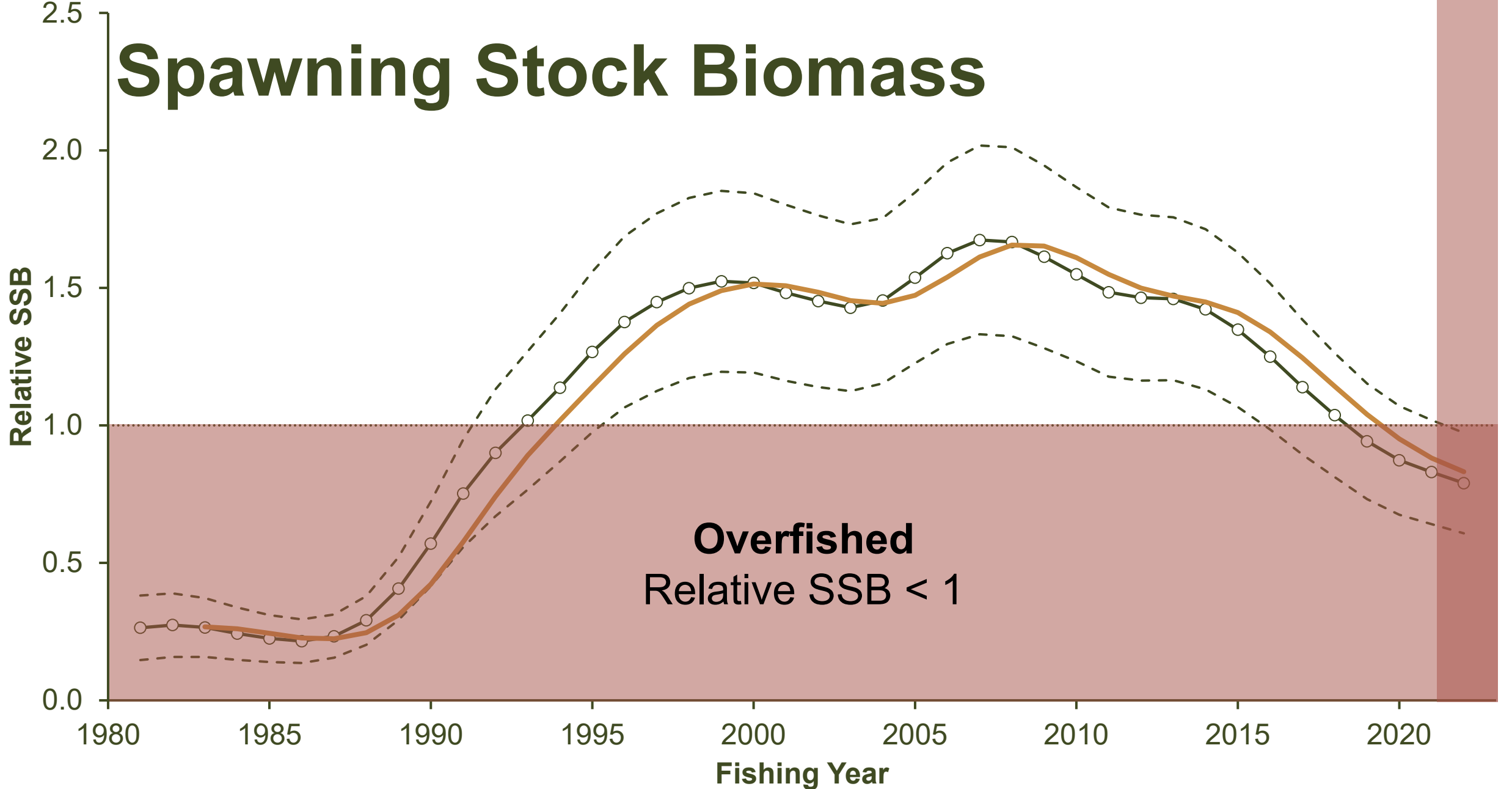
Spawning Stock Biomass



Spawning Stock Biomass

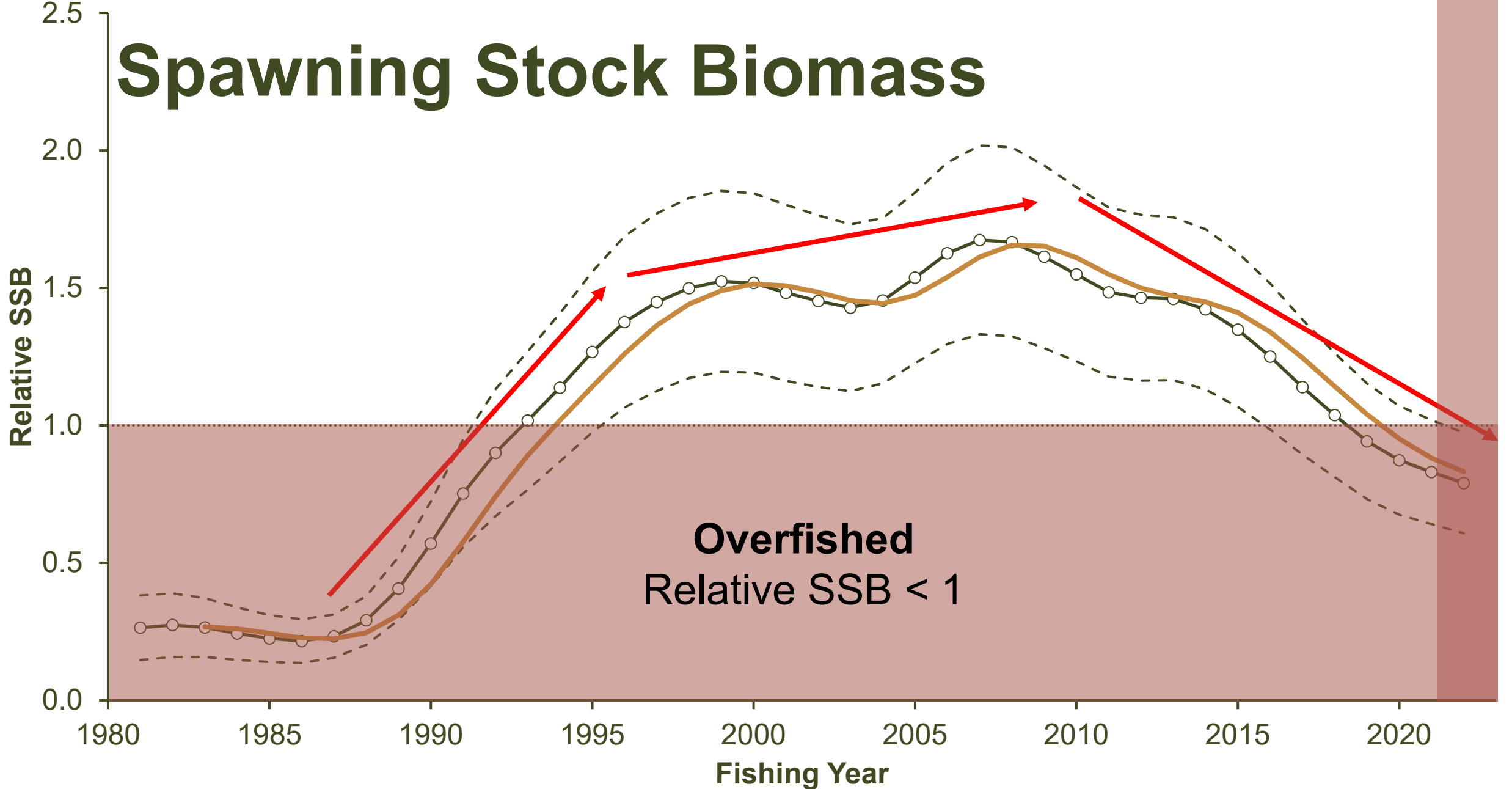


Spawning Stock Biomass



Overfished
Relative SSB < 1

Spawning Stock Biomass



Overfished
Relative SSB < 1

Sensitivity Analyses (n = 9)

Model Configuration & Assumptions

Francis re-weighting of composition data – **Reweight**

1989 start year – **1989**

4% discard mortality of recreational fleet – **4% Discard**

MRIP Catch Estimates

Imputed wave 1 catches – **Wave 1**

Recreational catches reduced by 30% - **70% Catch**

Natural Mortality

M-@-Age-2 reduced by 20% - **M – 20%**

M-@-Age-2 increased by 20% - **M + 20%**

Fixed Selectivity Parameters

Descending selectivity @ 65 cm TL – **Descend 65**

Descending selectivity @ 85 cm TL – **Descend 85**

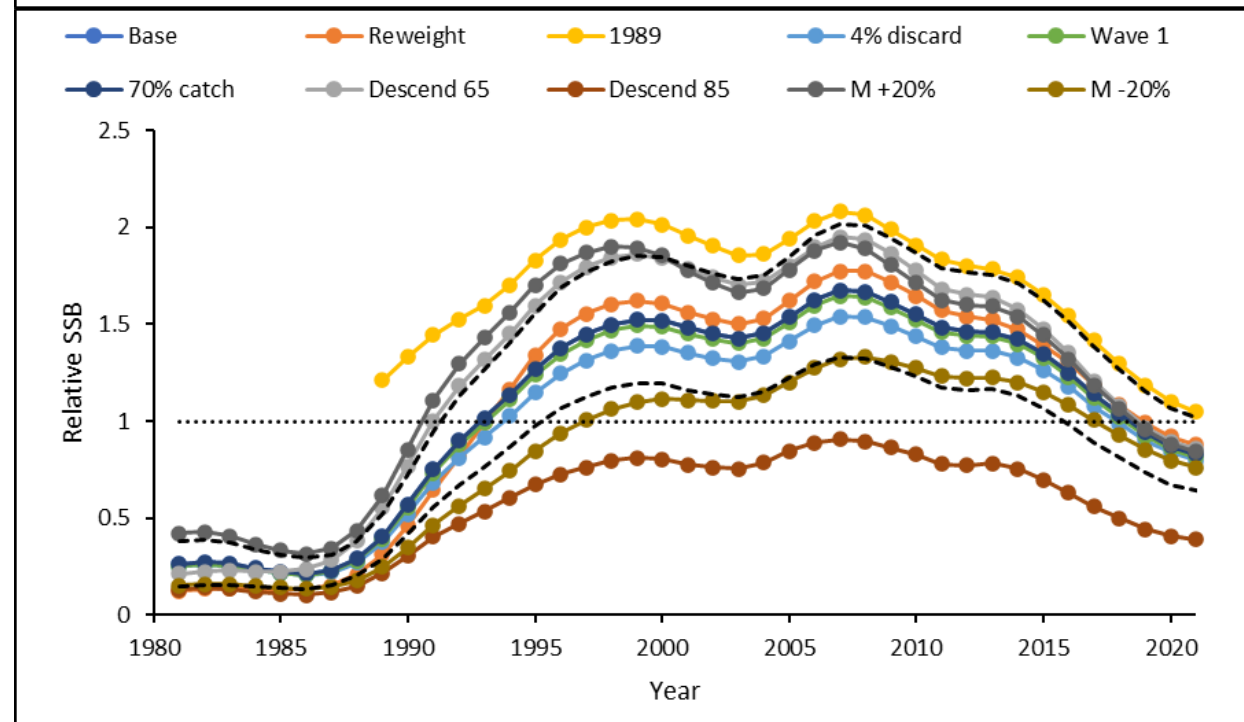
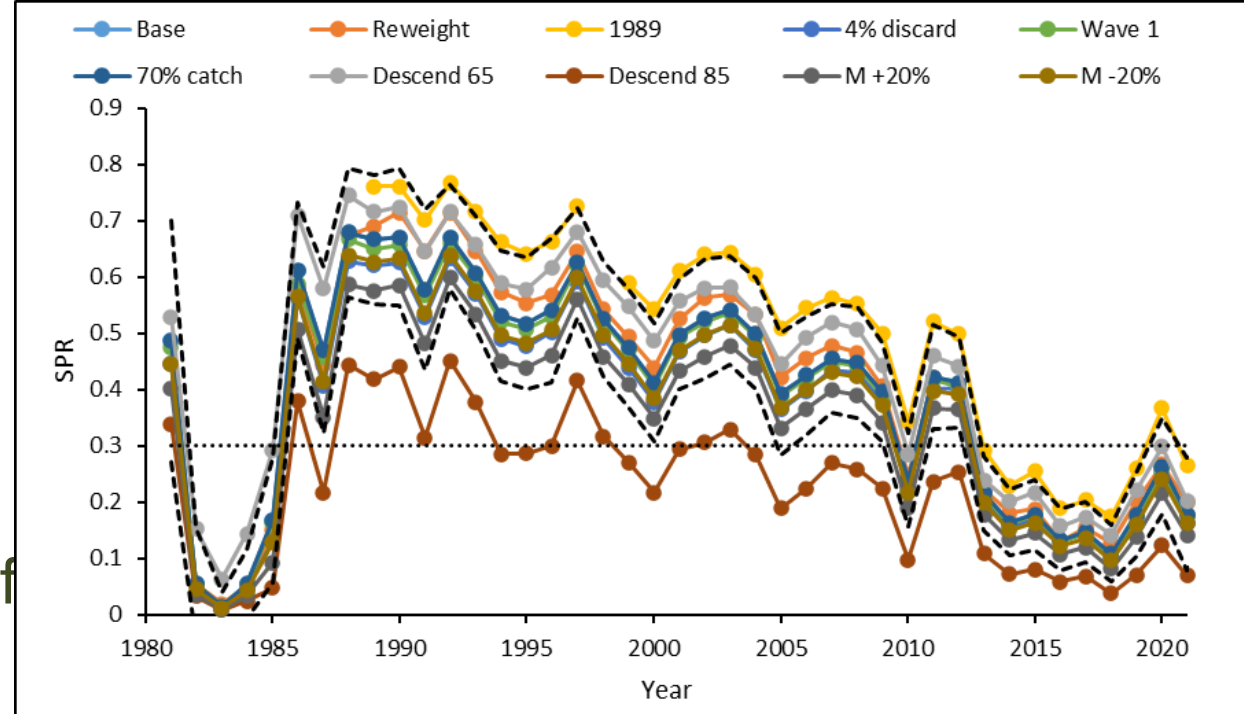
Sensitivity Analysis

Similar trends and stock status determinations

Most sensitive with regards to rebuilding of SSB

Varies from 1990 (M+20%) to 1997 (M-20%)

Terminal year SPR & SSB status insensitive

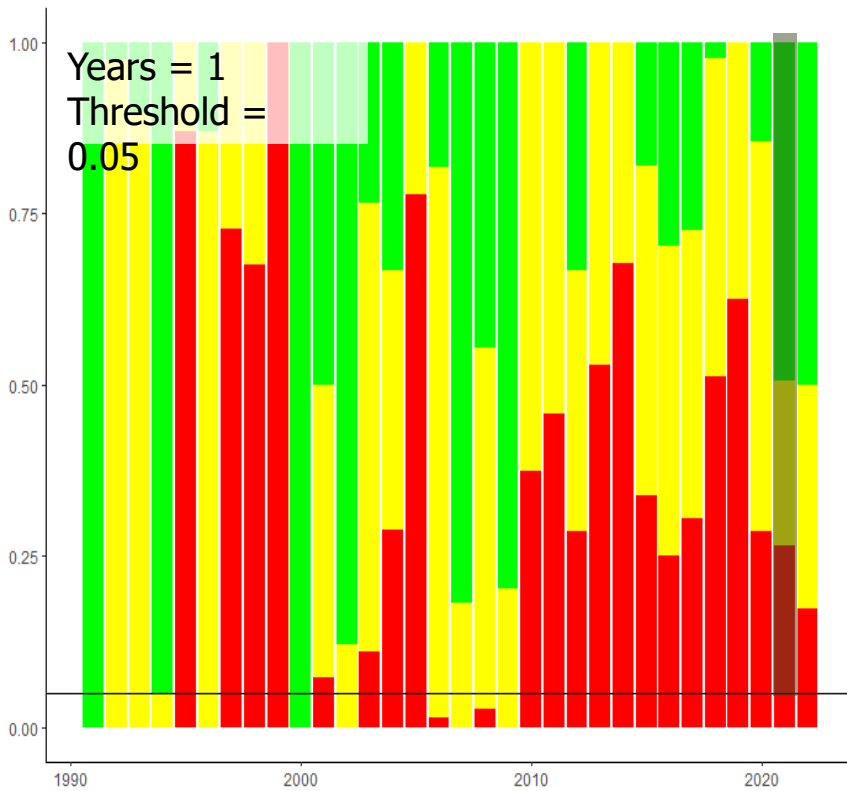


Southern Population – Traffic Light Analysis

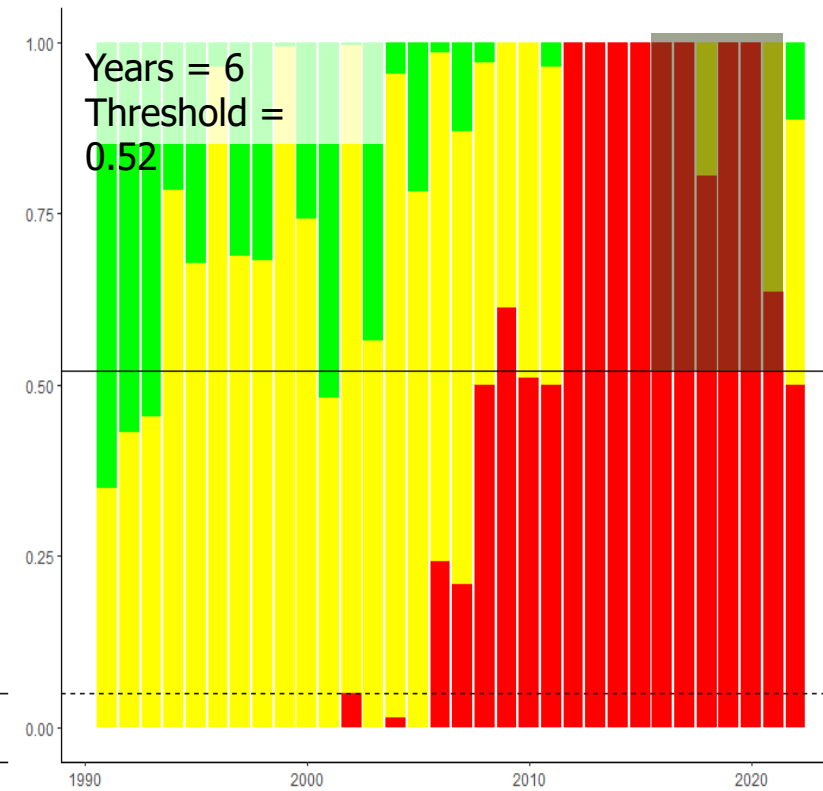
Traffic Light Analysis

- Management Trigger Time Frame
- Moderate (yellow or red in all years)
 - Elevated (red in all years)

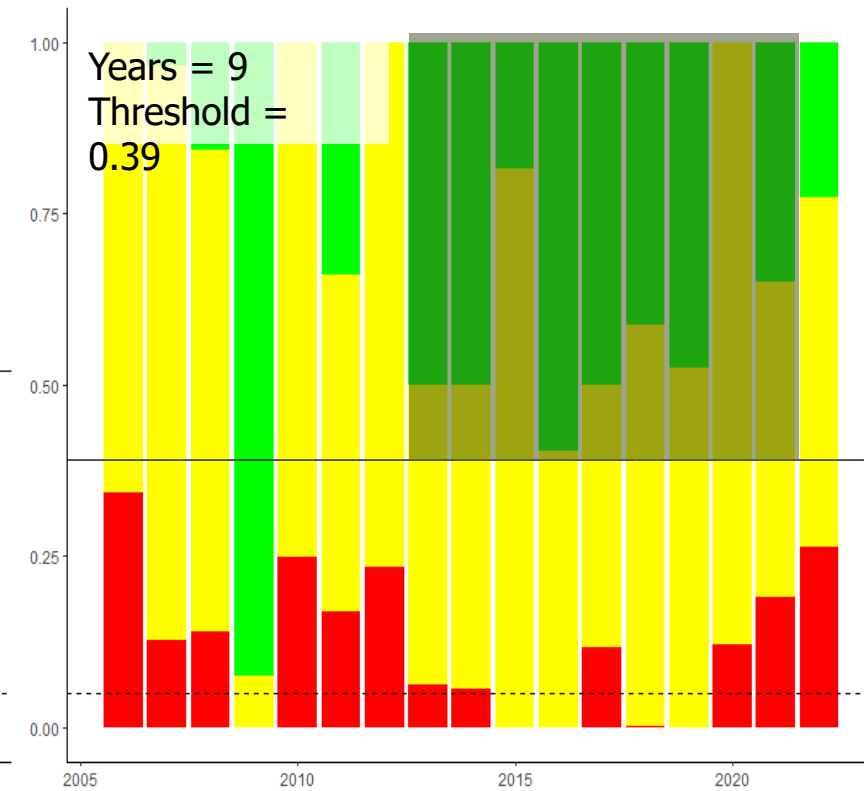
Recruitment



Fishery_Performance

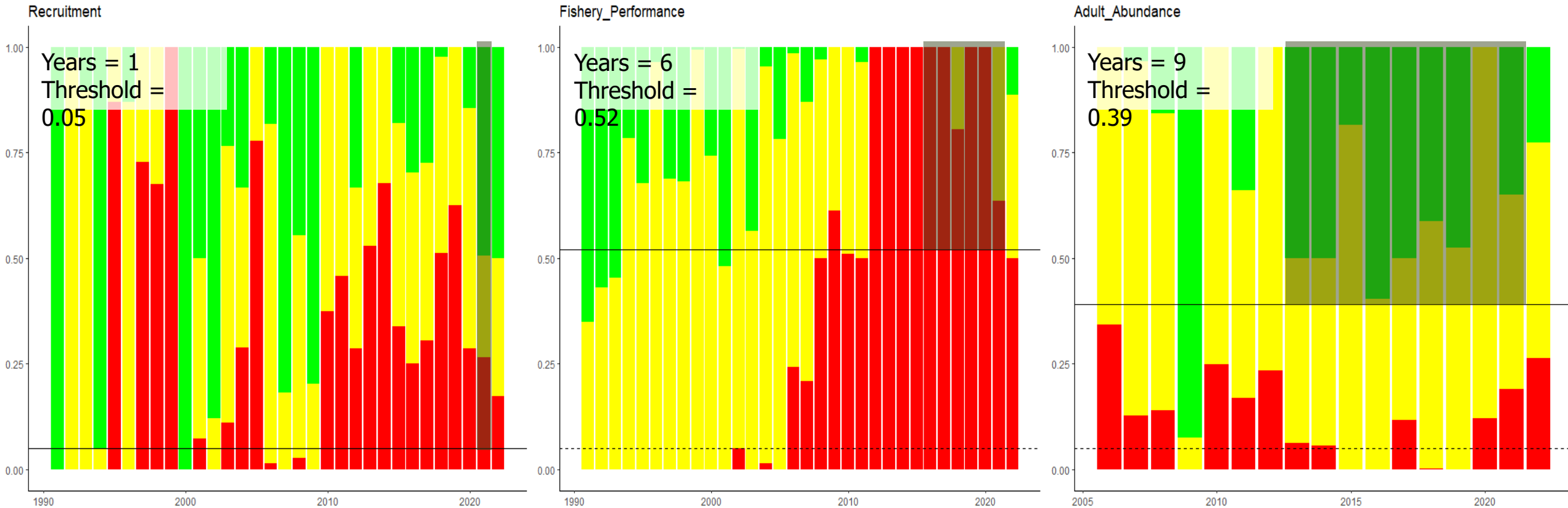


Adult_Abandance



Traffic Light Analysis

- Management Trigger Time Frame
- Moderate (yellow or red in all years)
 - Elevated (red in all years)



Note: Declining trends for all three southern stock condition characteristics

Recruitment: Red every year from 2010-2022 & 21 of 28 years since 1995

Fishery Performance: Red every year from 2013-2021; yellow or red every year since 2002

Adult Abundance: Decreasing proportion green since mid-2010s

Traffic Light Analysis

Year	Recruitment	Adult Abundance	Fishery Performance
2018	Elevated Action	Moderate Action	Elevated Action
2019	Elevated Action	Moderate Action	Elevated Action
2020	Elevated Action	Moderate Action	Elevated Action
2021	Elevated Action	Moderate Action	Elevated Action

Traffic Light Analysis

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Overfishing

Fishing performance red for at least 1 of the last 3 years

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Overfishing

Fishing performance red for at least 1 of the last 3 years

Not Overfished

Adult abundance not red for at least 1 of the last 3 years

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Overfishing

Fishing performance red for at least 1 of the last 3 years

Not Overfished

Adult abundance not red for at least 1 of the last 3 years

2 additional TLA management triggers using adult abundance triggered

Both fishery performance & adult abundance in any of the past 3 years are **yellow** (or **red**)

↑ catch and/or ↓ sub-adult abundance

Recruitment **red** for 5 consecutive years & adult abundance **yellow** in any of the past 3 years

Below average recruitment increasing chance of future declines in adult abundance

Northern Population

Stock Synthesis, TLA, and Skate Data Limited Control Rule Method

Northern Population Fleets

Commercial Fleets split into harvest (mt) and dead discards (#s of fish) where possible

- Commercial Gill Net/Beach Seine Fleet (Harvest and Dead Discards)

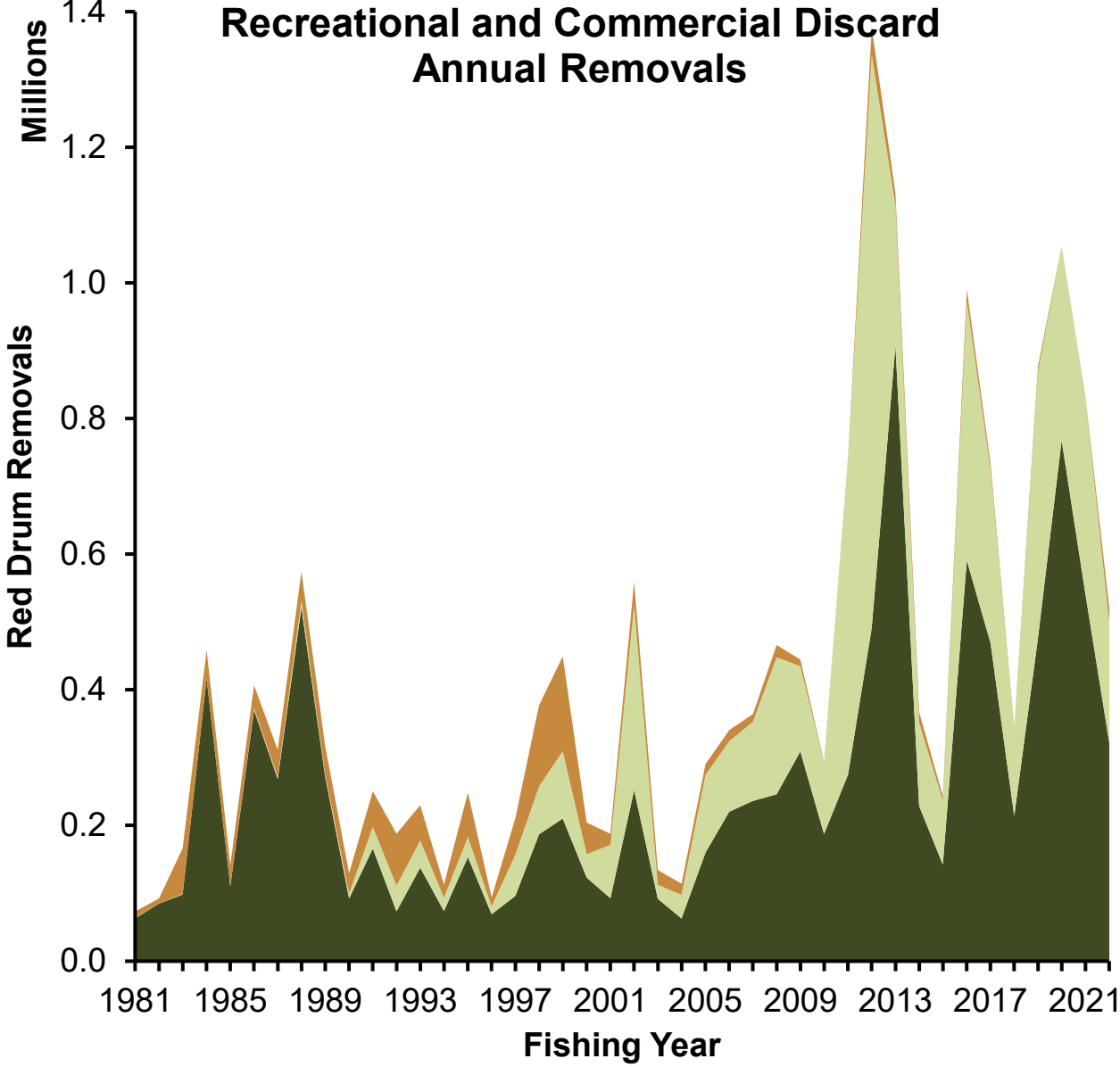
- Commercial Other Gears Fleet (Harvest Only)

 - Primarily pound net catches

Recreational fleet, split into a harvest and release time series

- Assumed an 8% discard mortality rate for released fish

Recreational and Commercial Discard Annual Removals



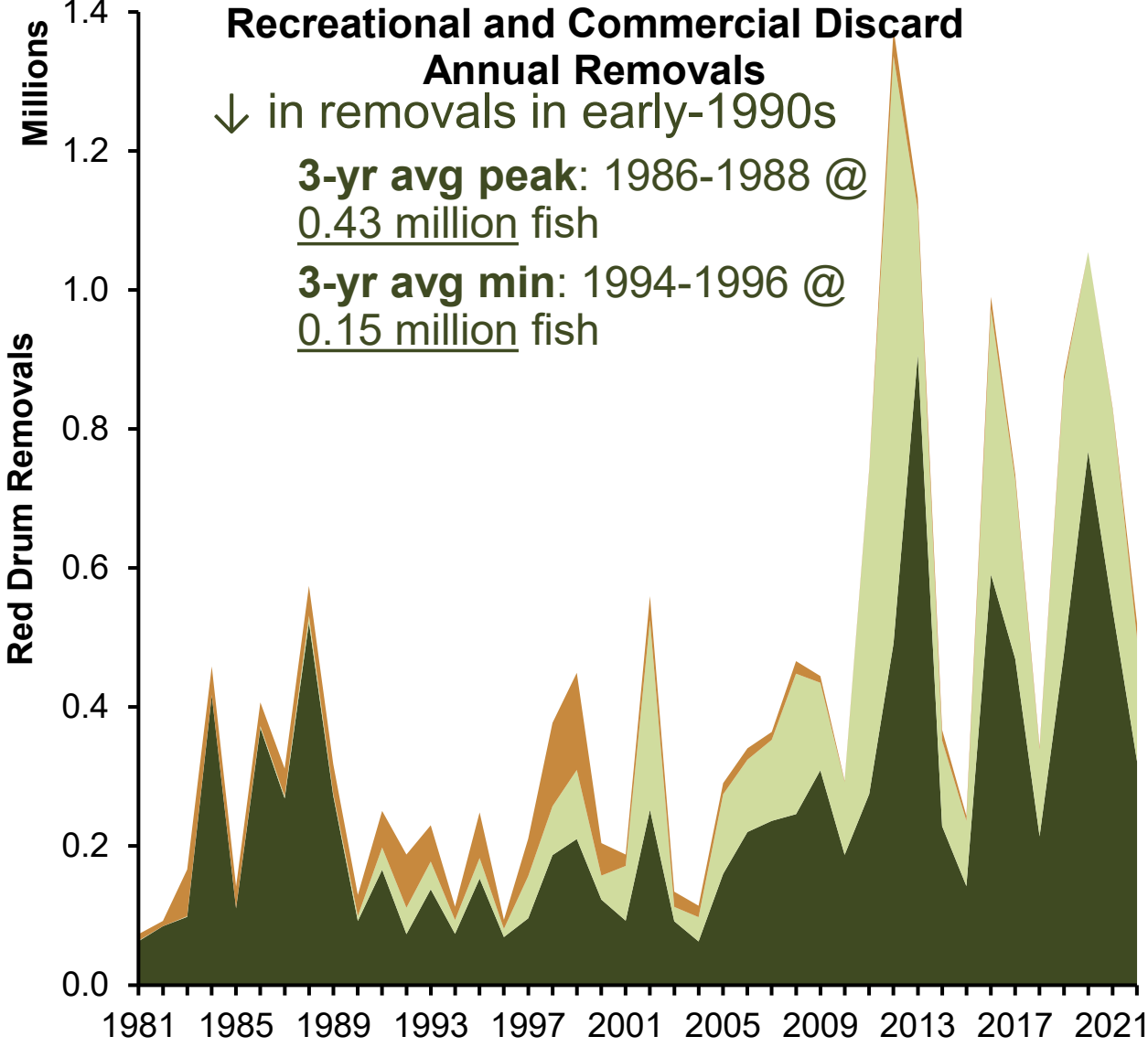
- Recreational Harvest
- Recreational Dead Discards
- Commercial Gill Net Discards

Recreational and Commercial Discard Annual Removals

↓ in removals in early-1990s

3-yr avg peak: 1986-1988 @
0.43 million fish

3-yr avg min: 1994-1996 @
0.15 million fish



■ Recreational Harvest ■ Recreational Dead Discards
■ Commercial Gill Net Discards

Recreational and Commercial Discard Annual Removals

↓ in removals in early-1990s

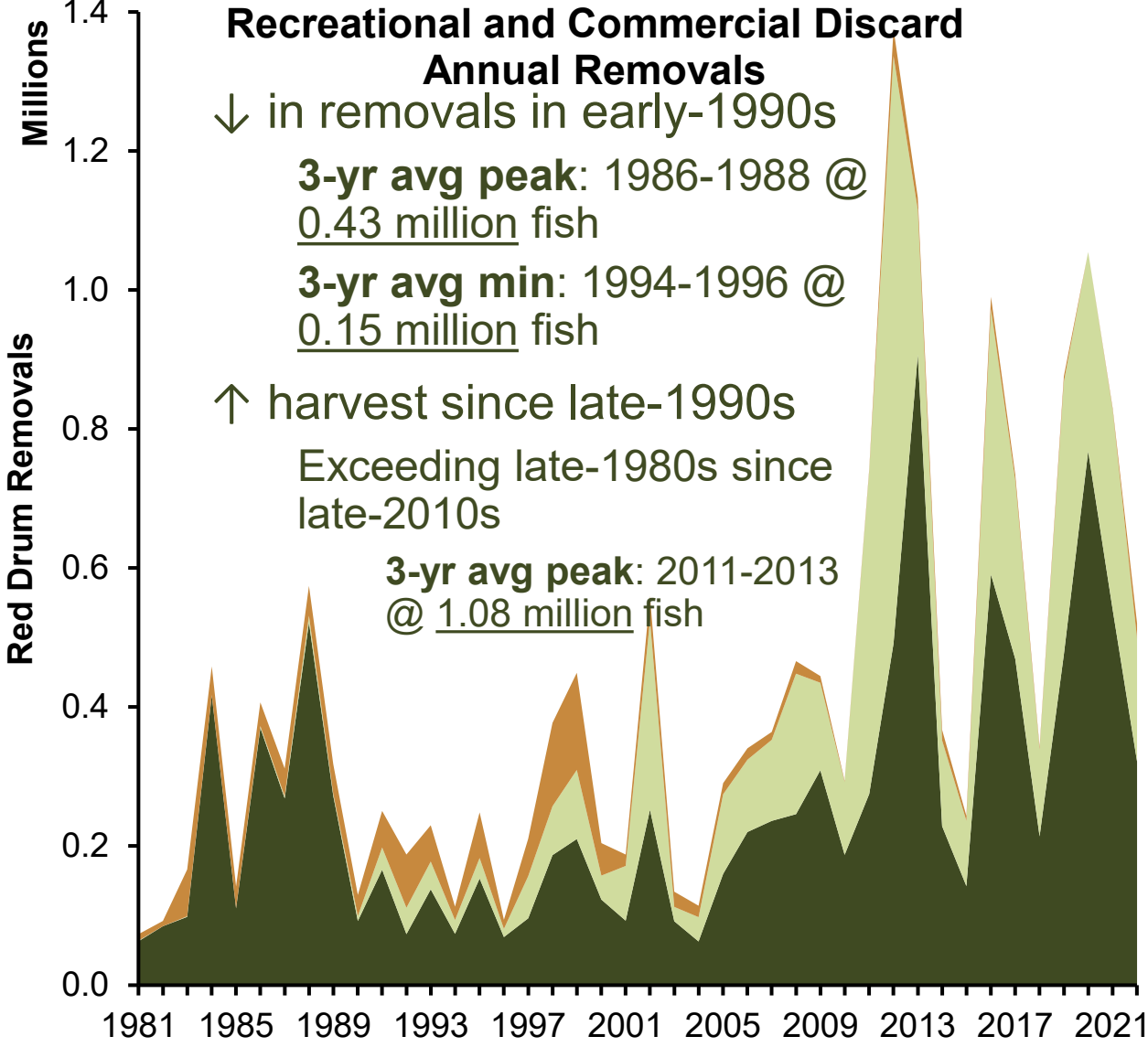
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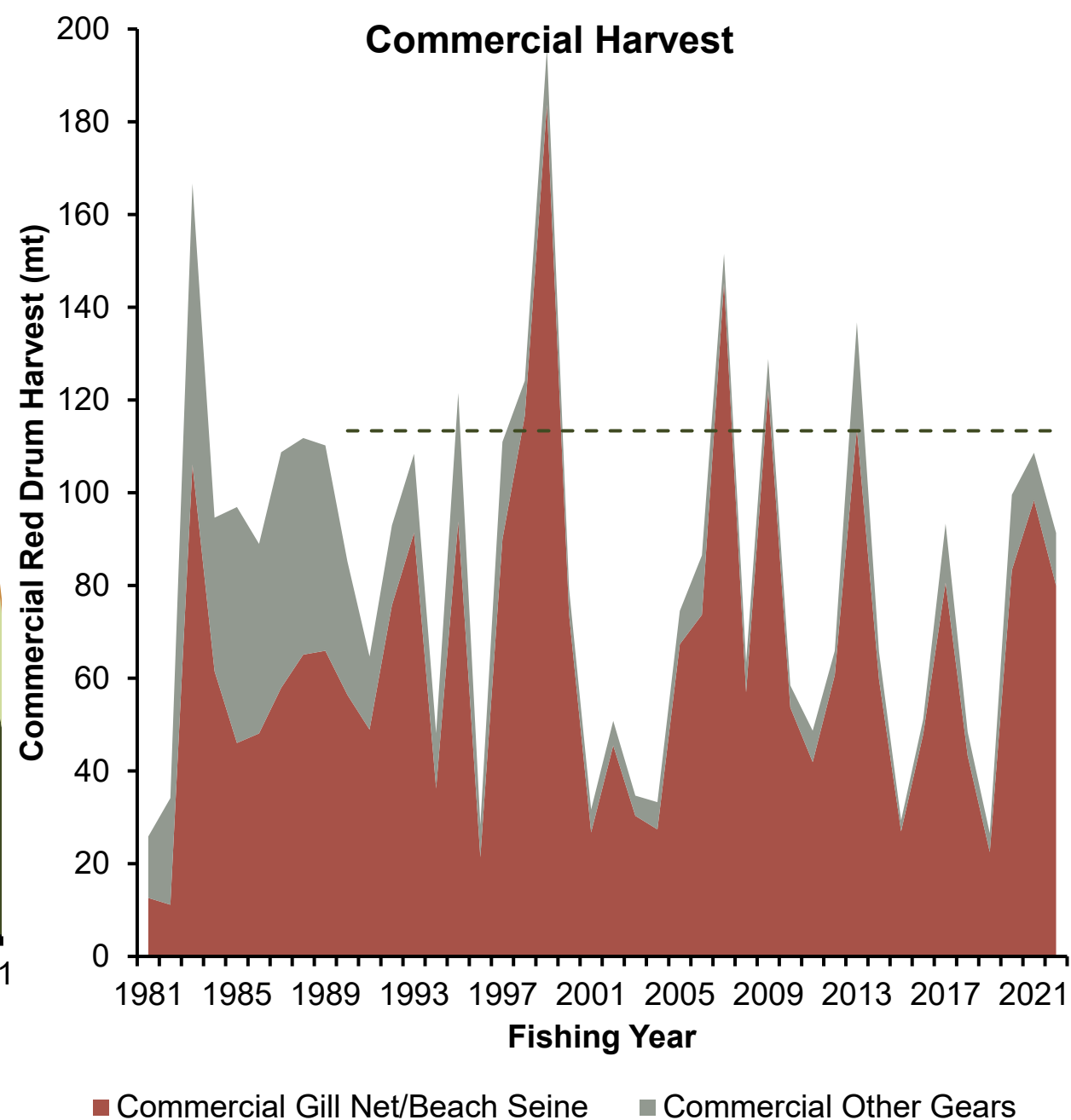
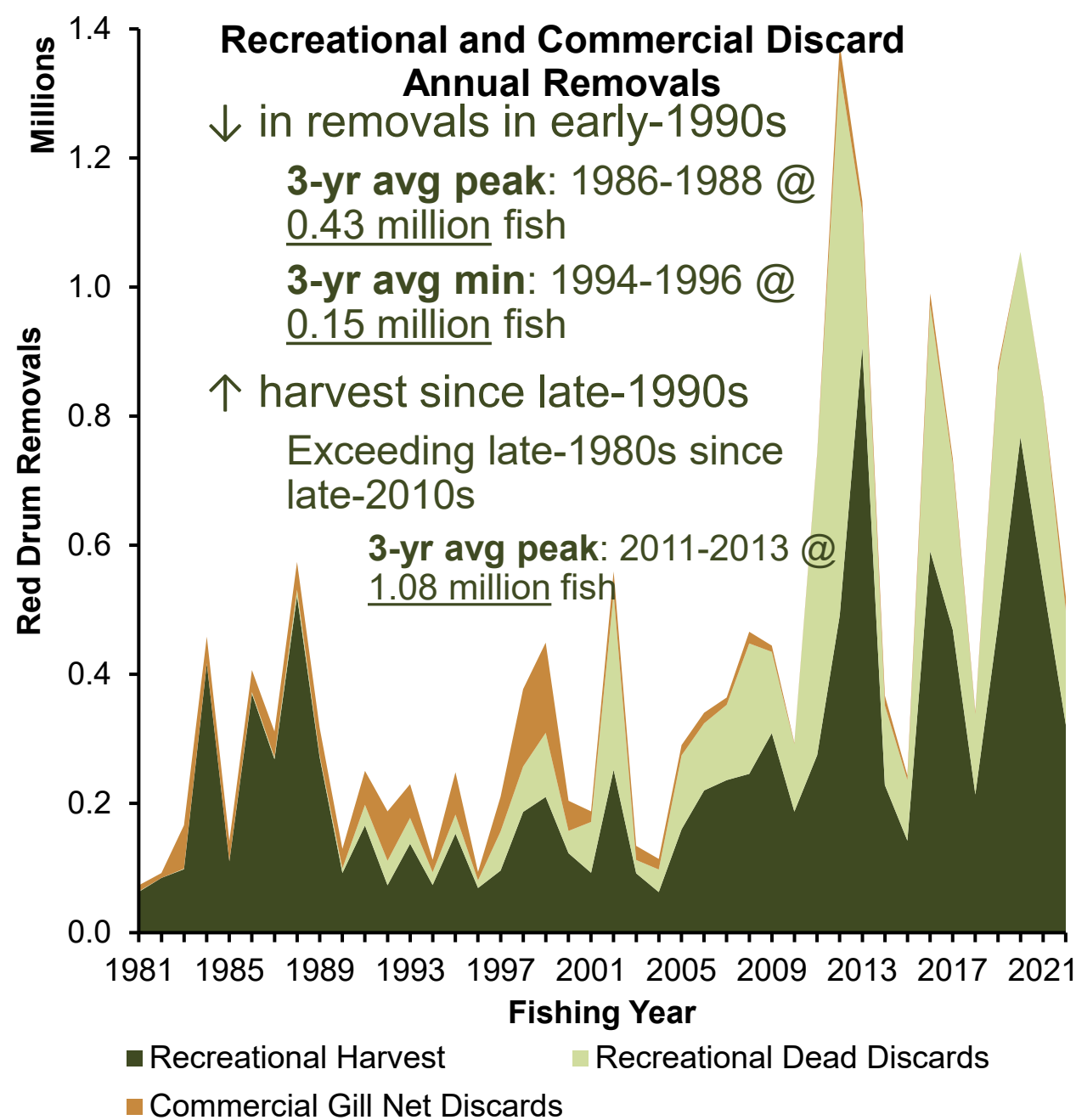
↑ harvest since late-1990s

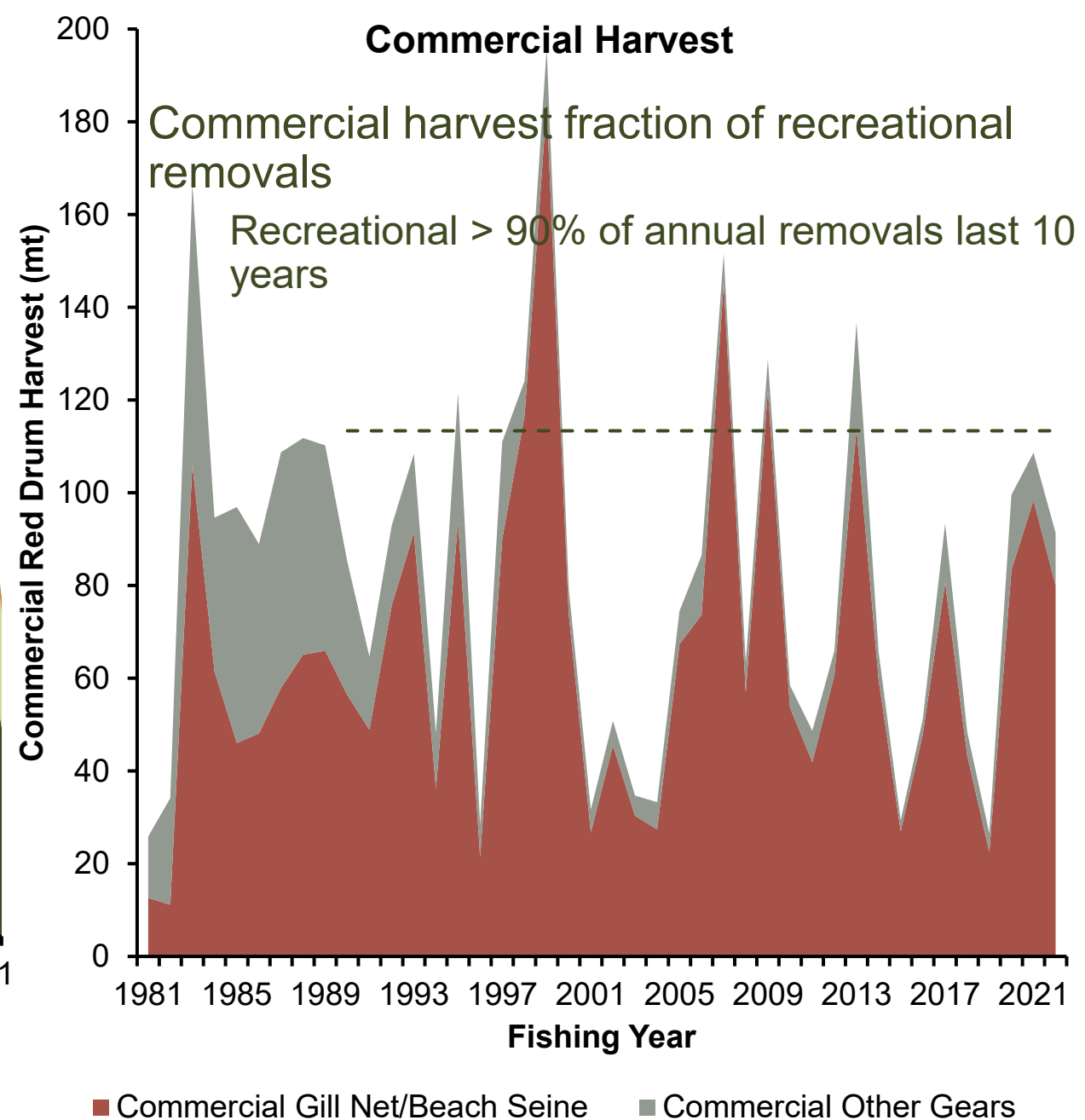
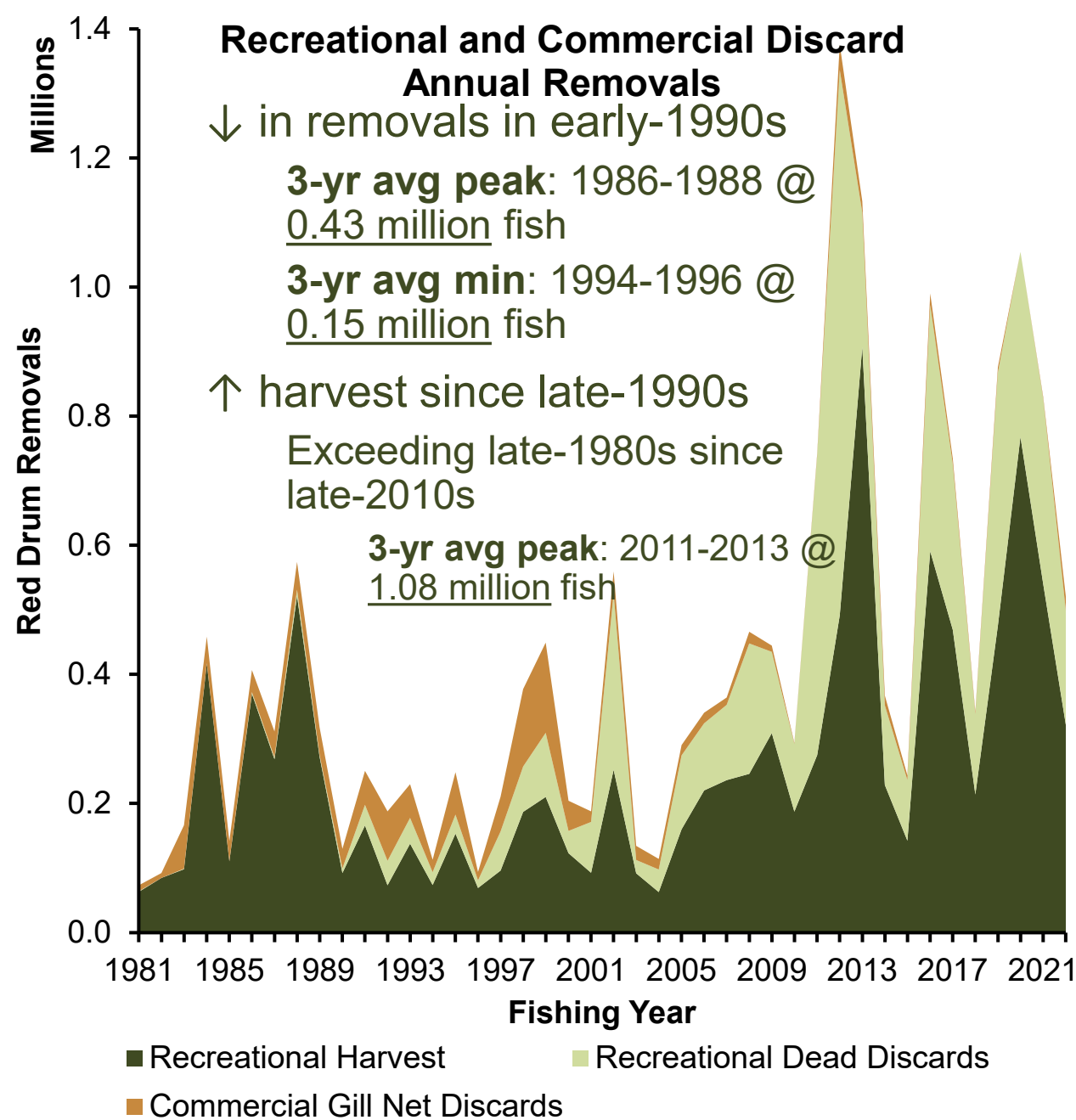
Exceeding late-1980s since
late-2010s

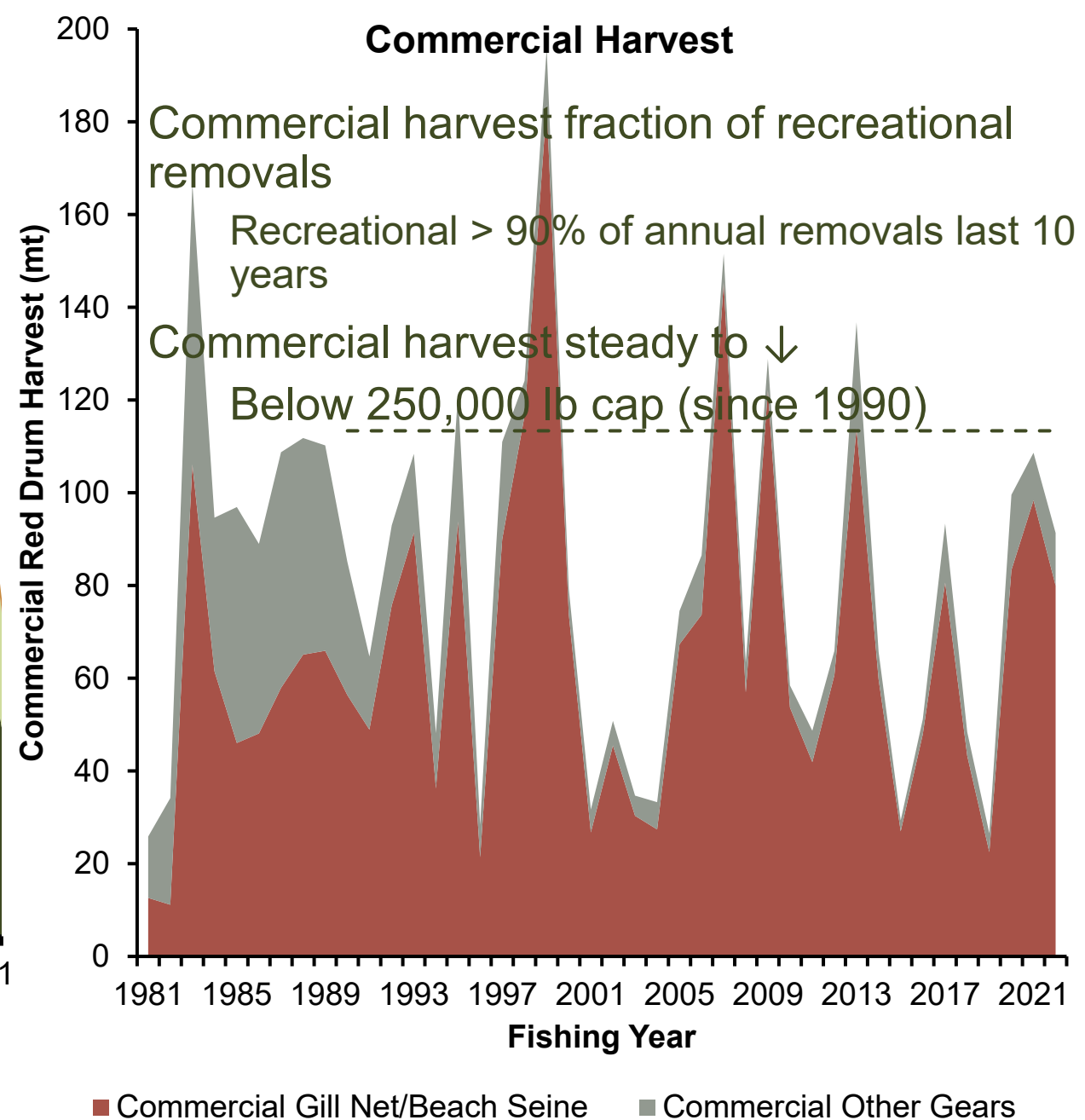
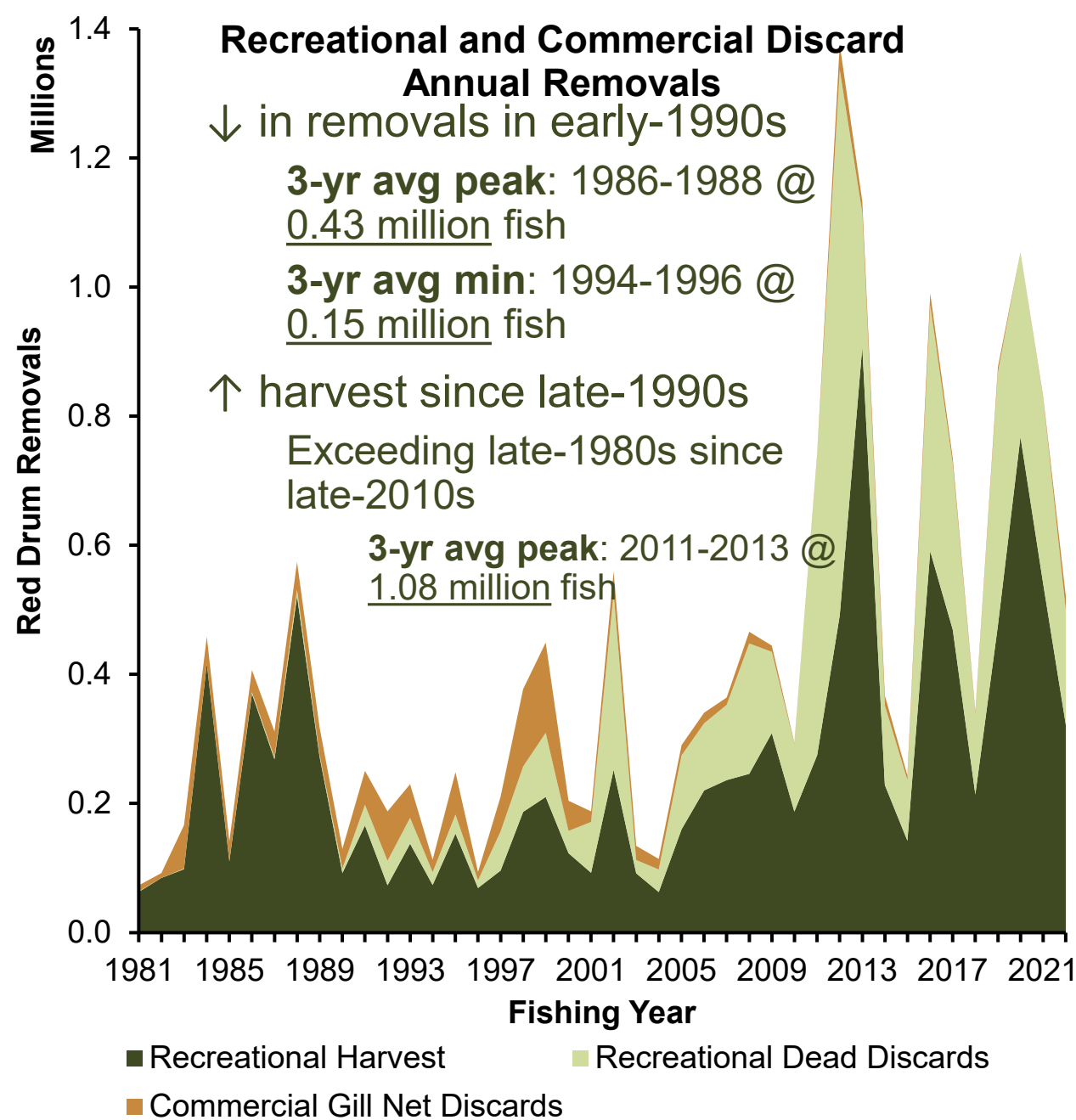
3-yr avg peak: 2011-2013
@ 1.08 million fish



- Recreational Harvest
- Recreational Dead Discards
- Commercial Gill Net Discards







Northern Population Fishery-Independent Indices

Only available from North Carolina

Bag Seine Survey

Gill Net Survey

Longline Survey

Recruitment Survey

Sub-Adult Survey

Adult Survey

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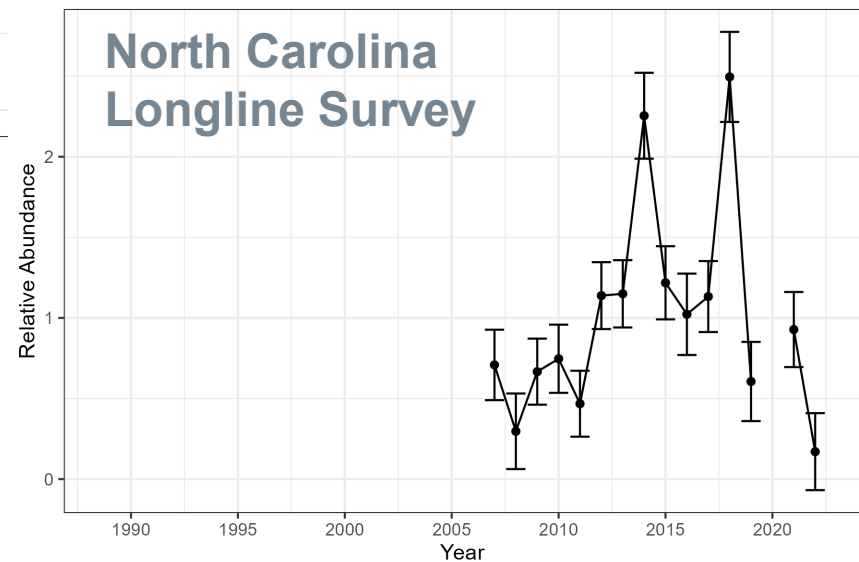
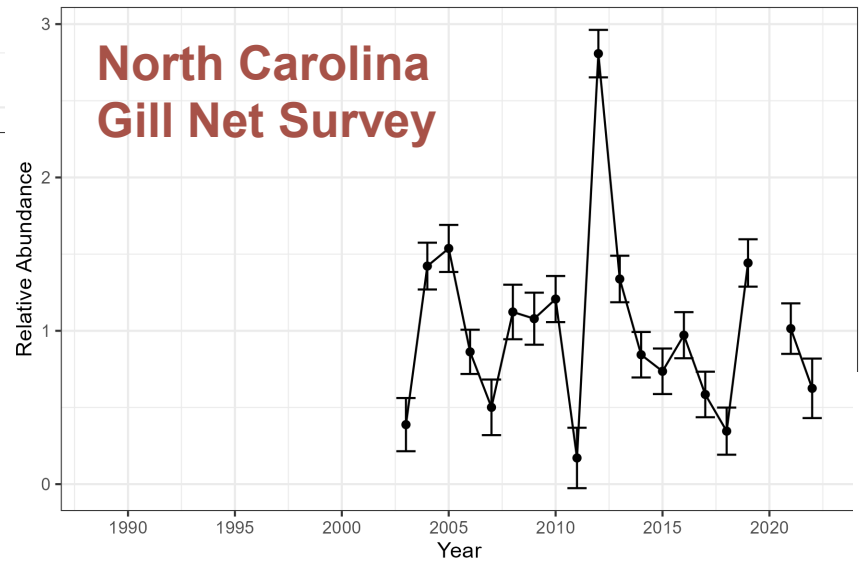
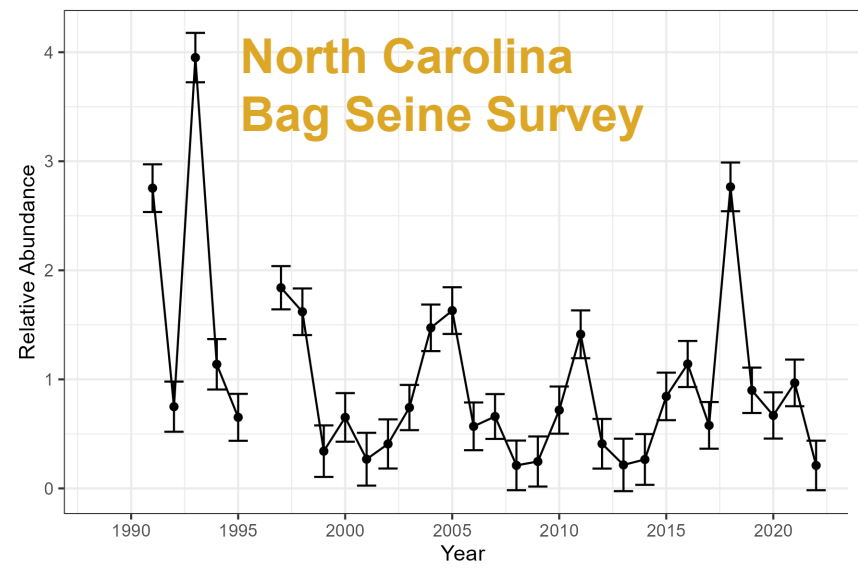
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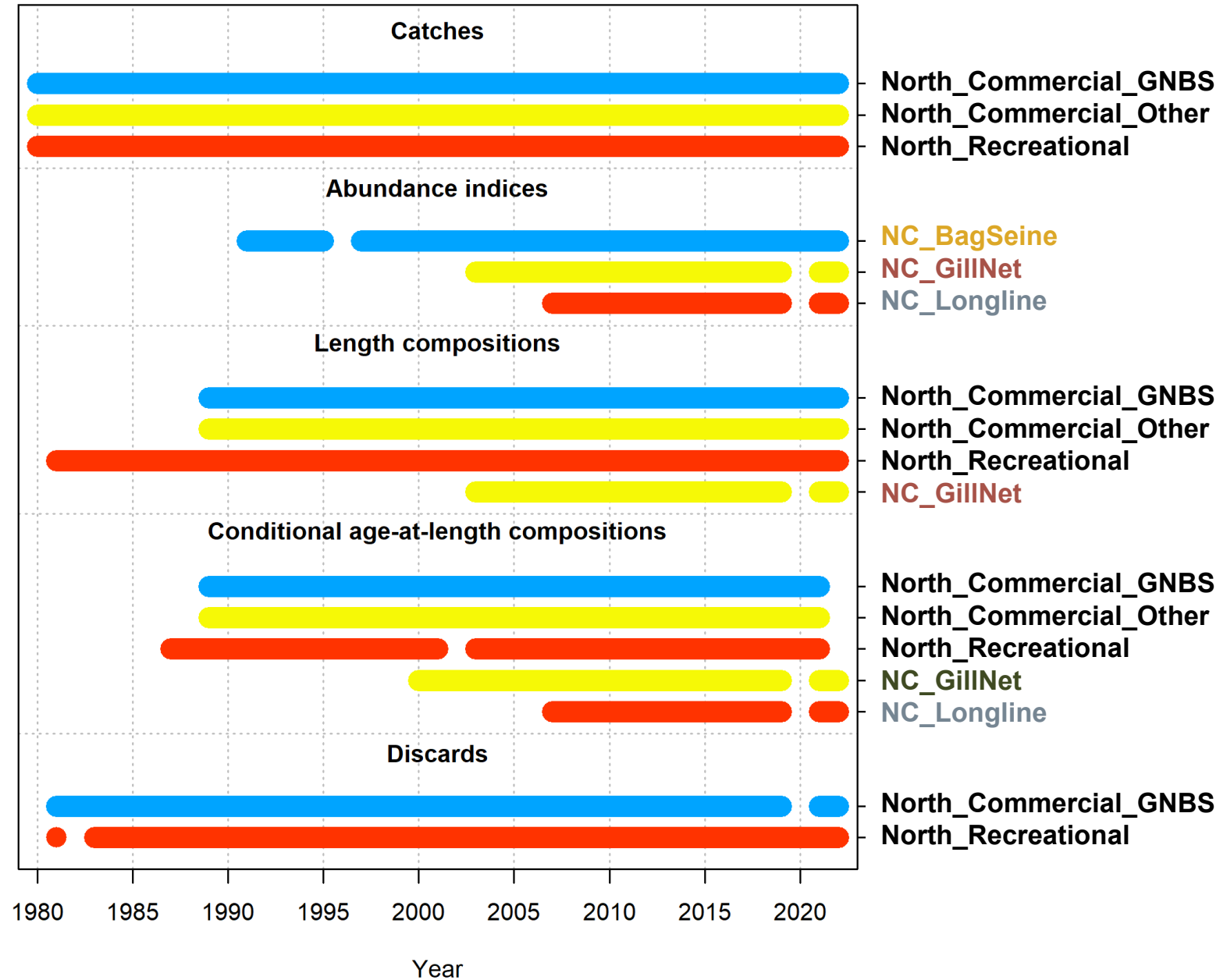
Recruitment Survey

Sub-Adult Survey

Adult Survey



SS Data Inputs



No Base Stock Synthesis Model

Due to uncertainty and instability in the northern stock SS model, the model was not deemed satisfactory for stock status determination

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Due to uncertainty and instability in the northern stock SS model, the model was not deemed satisfactory for stock status determination

Two Model Alternatives – both had some troubling diagnostics

Estimated Selectivity Model

- Narrow selectivity for rec fleet and low selectivity for larger sized fish in conflict with published literature and expert opinion

- Unstable and convergence issues

- Suggested a more productive northern population (↑ average recruitment)

Hybrid Selectivity Model

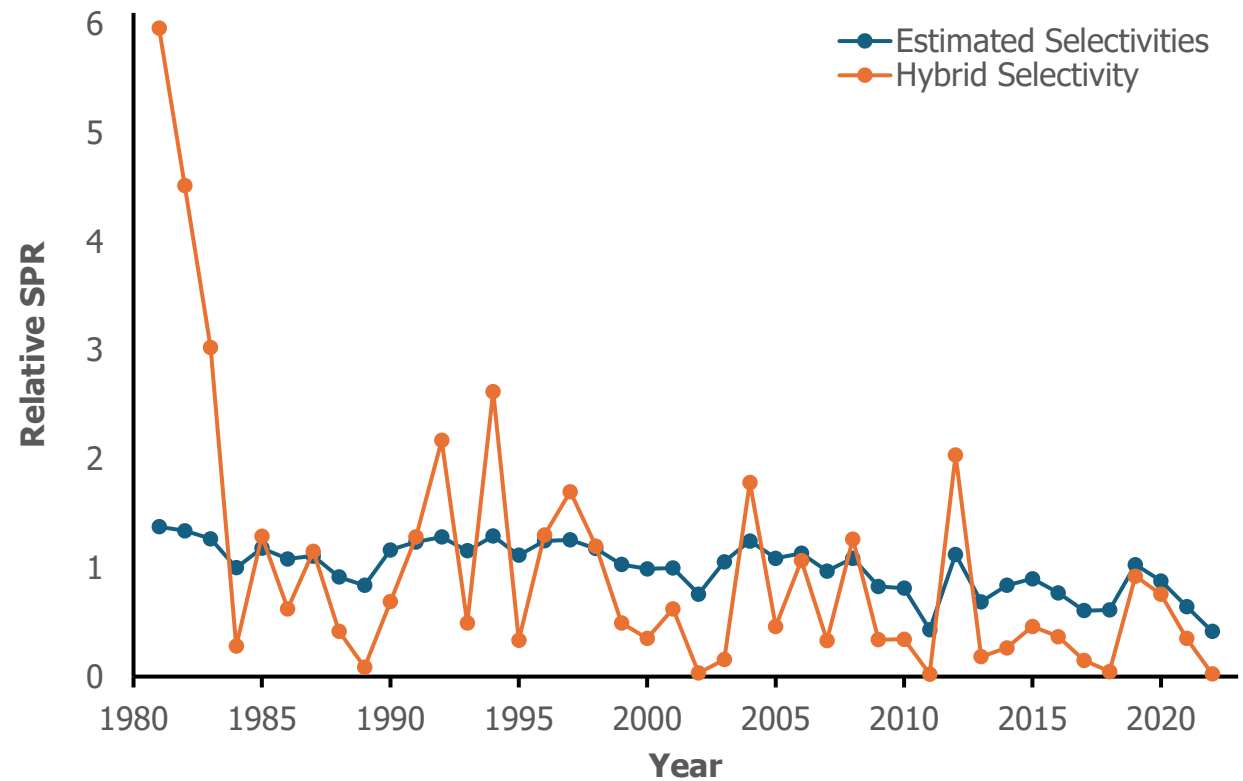
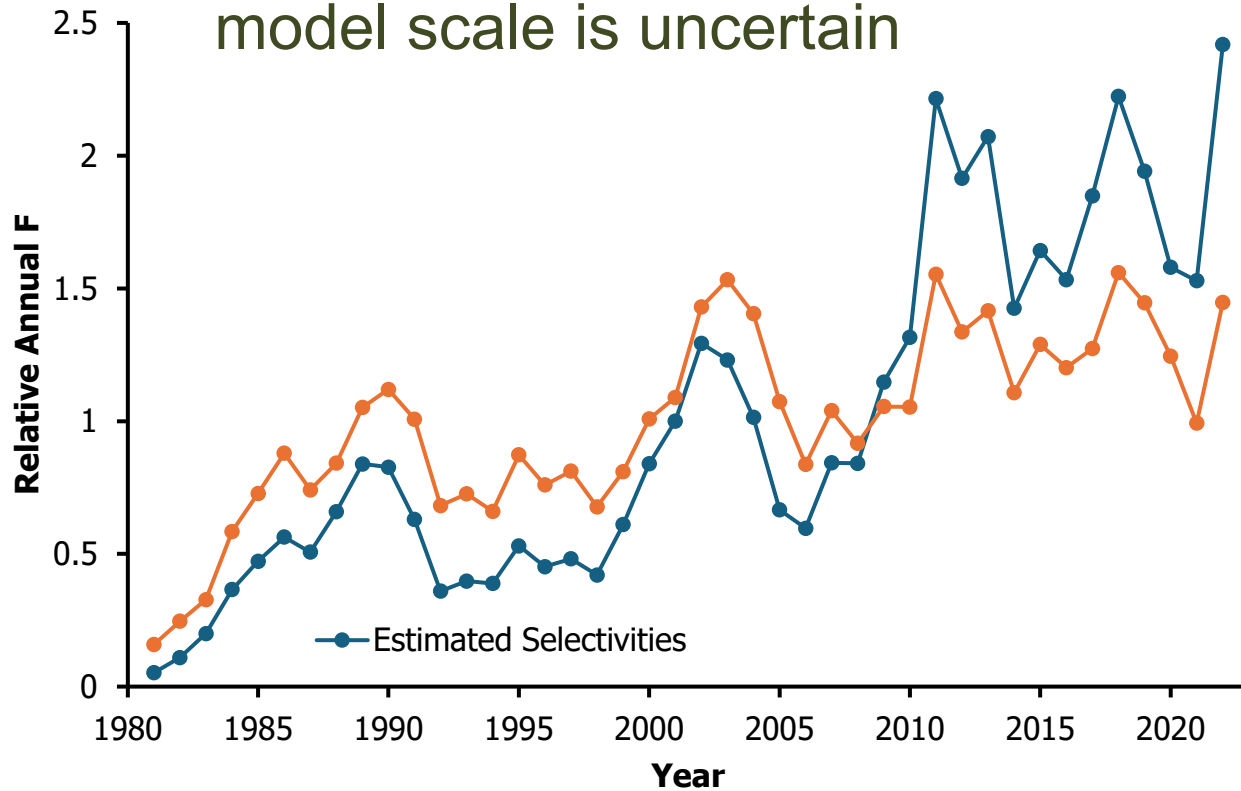
- Fixed selectivity of commercial gill net/beach seine and recreational fleets

- Suggested a less productive northern population (↓ average recruitment)

Similar Trends in F and SPR

Despite very different model scales, similar trends in F and SPR

Both models picking up on the same trend of increasing F through time even if model scale is uncertain



Traffic Light Analysis

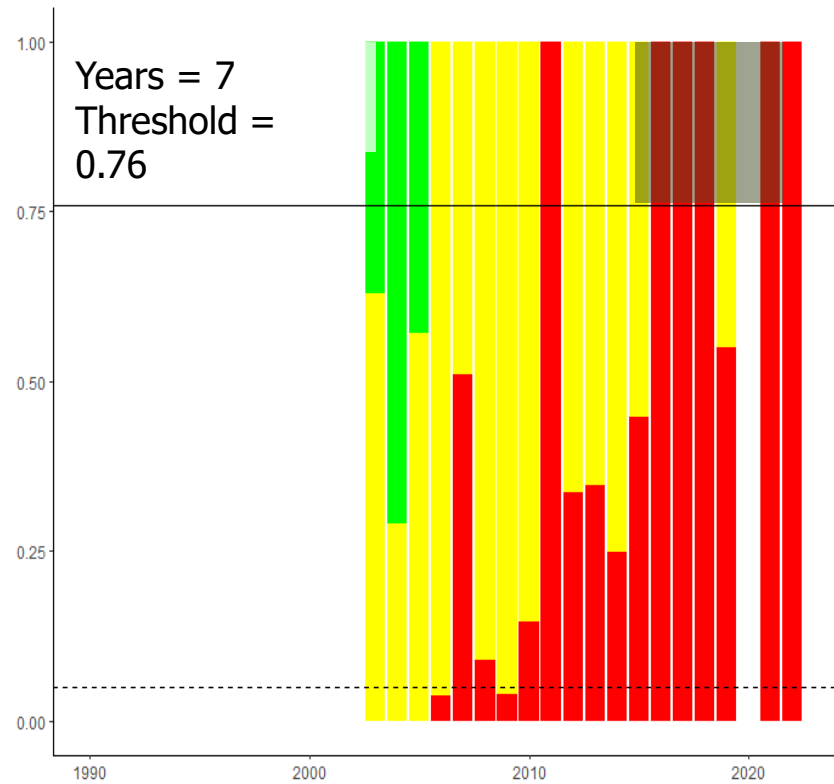
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Recruitment



Fishery_Performance

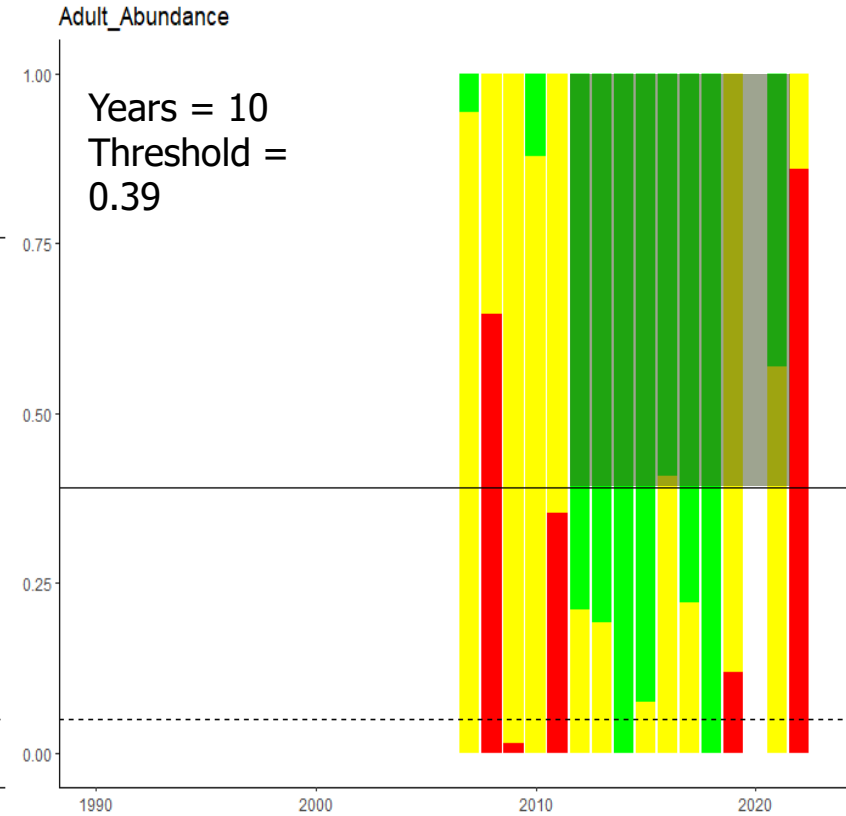
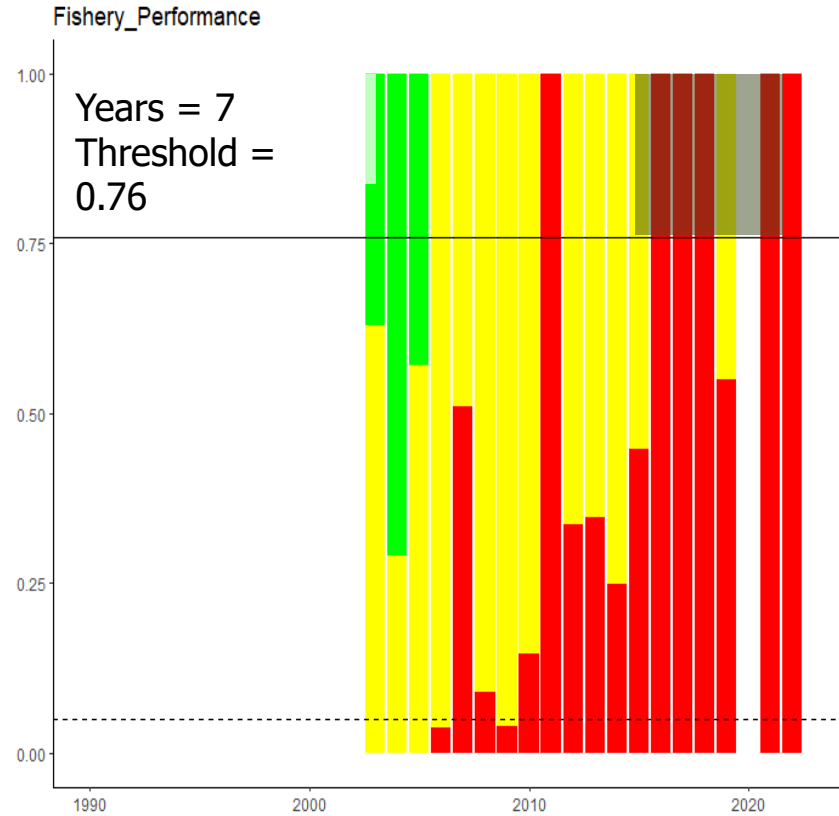


Adult_Abundance



Traffic Light Analysis

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Note: recent increase (higher proportion red) in fishery-performance

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Not Overfishing

Not Overfished

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2021	Moderate Action	No Action	Moderate Action

Not Overfishing

Not Overfished

Multiple years of yellow fishery performance and increasing frequency of yellow for recruitment are areas to watch

Future Research

Next assessment

- Benchmark in 2029 (data through 2027 fishing year)

- Update TLAs every two years between assessments

Research Recommendations

- Data on recreational discard size structure

- Expand tag-recapture analyses to states outside SC

- Develop surveys tracking sub-adults in VA and adults in FL & VA

- Studies to estimate movements rates to support spatial model



Questions

SAS Response to Review Report

SAS Response to Review Report

Conflicting advice on stock-recruit steepness, but shown not to impact stock status

Index data shown to correspond spatially and between age classes

Several requested sensitivity runs showed no impact to overfishing status, two runs showed SSB at threshold with declining trend as in base model

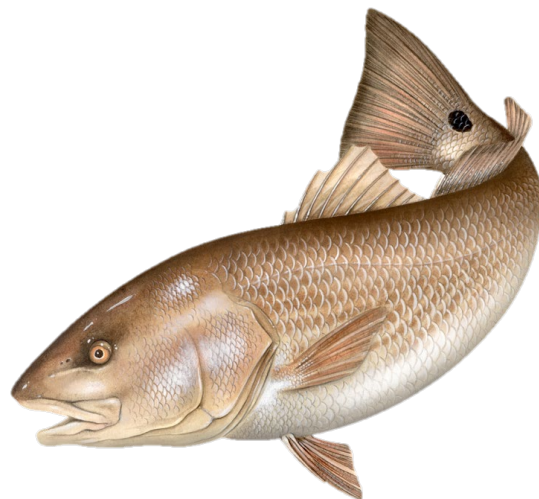
One run with SSB at threshold included alternative index with inadequate time and consideration to develop

TLA reference period based on BSIA without alternative recommended, tested with sensitivity analysis and shown to be largely insensitive

SAS does not believe 2025 assessment update will change conclusions of current assessment



Red Drum Stock Assessment Peer Review Report



Sciaenids Fishery Management Board
October 22, 2024

Stock Assessment Peer Review Process



- Red Drum Technical Committee and Stock Assessment Subcommittee developed new stock assessment
- Peer Review Workshop: August 13-16, Charleston, SC
- Scientific review of data inputs, analytical methods, results, and overall quality of stock assessment

Products

- SEDAR Stock Assessment and Review Report
- <https://sedarweb.org/assessments/sedar-93-atlantic-red-drum/>

Review Process



Scientific Review Panel

Chair + 3 additional Technical Reviewers, with expertise in

- Marine fish ecology and population dynamics models
- Recreational fisheries and tagging data
- Stock Synthesis catch-at-age models

Dr. Gavin Fay (Chair), University of Massachusetts-Dartmouth

Dr. Geoff Tingley, Sustainable Fisheries Partnership, New Zealand

Dr. Kotaro Ono, Norwegian Institute for Marine Research

Dr. Katyana Vert-Pre, Arizona State University



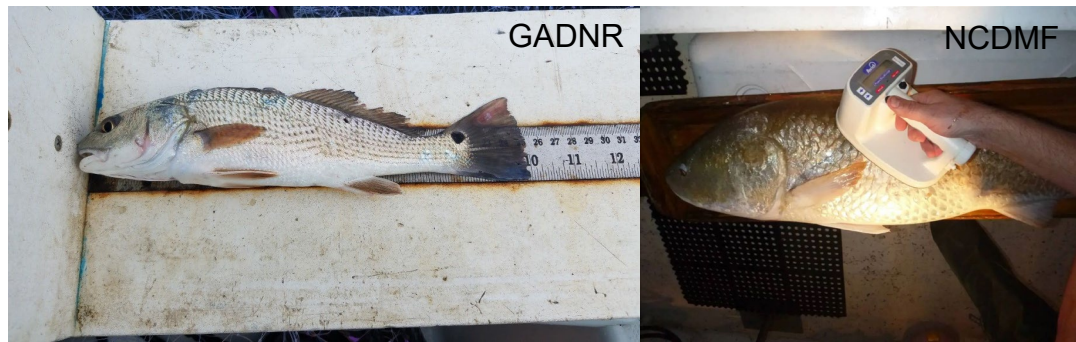
- ✓ **ToR 1:** Evaluate responses to Simulation Assessment recommendations

Conclusions

- Southern Stock Synthesis model performance encouraging, producing unbiased estimates
- Traffic Light Analysis reference points optimized using revised grid search

Recommendations (for future assessment work)

- Test SS model performance over multiple scenarios using data without observation error





✓ **ToR 2:** Evaluate the data used in the stock assessment

Conclusions

- Thorough work in gathering and vetting all available red drum fisheries-dependent and -independent data
- Valid justification for excluding select data sources
- Commended SAS on holistic thinking to include data for different life stages (recruits, sub-adults, adults)
- Rec discard length data addressed notable information gap

Recommendations (for future assessment work)

- Reconsider scale-based age data
- Index standardization: 1) incorporate survey spatiotemporal changes, 2) explore temperature, salinity influence on abundance

✓ **ToR 3:** Evaluate the assessment methods and models

Conclusions

- Stock Synthesis model specification values well justified
- Southern: SS model most appropriate for characterizing population; good choice for integrating variety of data sources
- Northern stock: TLA most appropriate, also integrating data

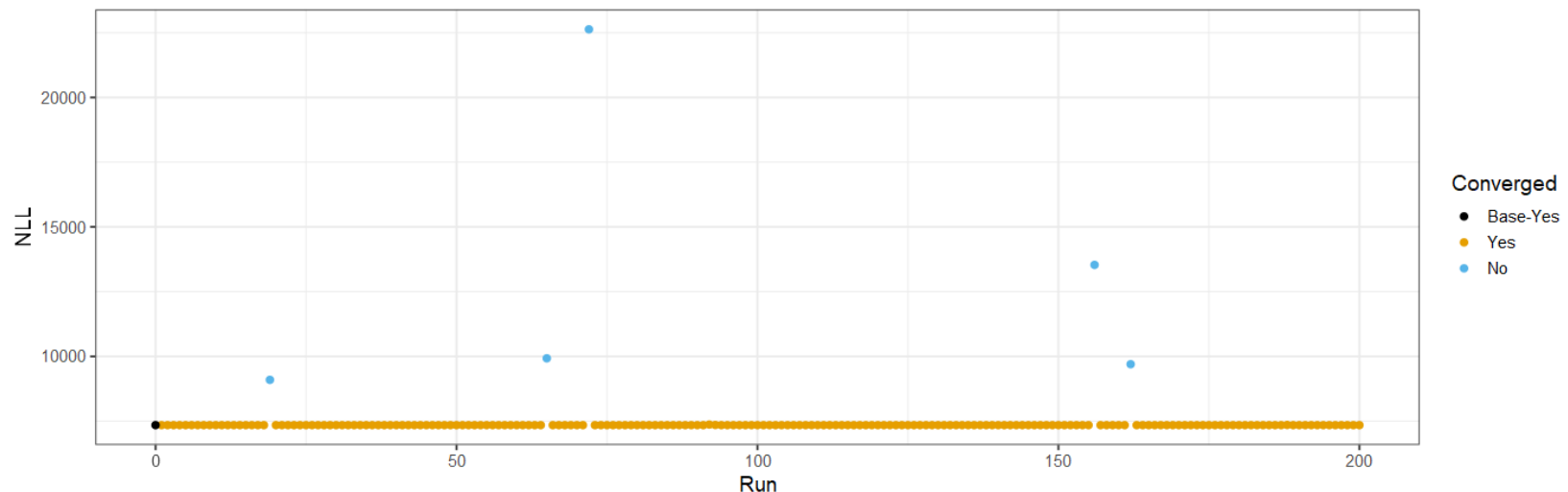
Recommendations (for future assessment work)

- Reconsider steepness value in stock-recruitment function
- Explore different reference periods for TLA
- Improve justification for TLA adult abundance threshold

- ✓ **ToR 4:** Evaluate model diagnostic analyses, including sensitivity and retrospective analyses

Conclusions

- SS diagnostic analyses comprehensive, model converged
- TLA sensitivity analyses sufficient
- Standardized indices residual patterns showed poor diagnostics
- No concerns regarding minor retrospective pattern (SSB, F , SPR)





- ✓ **ToR 5:** Evaluate the methods used to characterize uncertainty

Conclusions

- Best practices used in SS model characterization, uncertainty metrics provided → confident in results
- Southern: TLA comparison confirmed stock status
- SAS completed additional model runs requested by Panel → outputs within confidence intervals of base run

Recommendations

- Consider Management Strategy Evaluation to inform selection of TLA Ref Pts



- ✓ **ToR 7:** Recommend best estimates of stock biomass, abundance, and exploitation

Conclusions

- Southern: Stock Synthesis produced best SSB, F , SPR estimates
- Northern: no SSB or F estimates; use TLA as qualitative indicator

Recommendations

- Index standardization: 1) incorporate survey spatiotemporal changes, 2) explore temperature, salinity influence on abundance, 3) consider dropping longline survey
- Northern: continue SS model development

- ✓ **ToR 8:** Evaluate the choice of reference points and estimation methods; recommend stock status determination

Conclusions

- Southern: agree with SSB30%, F30% and SPR30% thresholds, and SSB40%, F40% and SPR40% targets
- Northern: agree with reference period-based reference points used to provide qualitative stock status determinations
- Review Panel agrees with status determinations from assessment for reach region

✓ **ToR 9:** Review and prioritize future red drum research

Top priorities for future assessments

- Index Standardization: explore adding temperature, salinity, and other ‘habitat’ variables affecting drum abundance
- Simulation Framework: a powerful tool to build on
 - Testing reference points selection
 - Value of information analysis to prioritize future data collection
- Continue tagging studies – evaluate mortality by gear types
- Evaluate seasonal population dynamics in SS models



- ✓ **ToR 10:** Recommend timing of future stock assessments
 - Next benchmark assessment in 5 years
 - Southern: consider assessment update in 2025, if index standardization explored further
 - Consider re-running Southern SS model after MRIP calibration study, if catches significantly different (e.g., 30% reduction)
 - Northern: TLA update every 2 years

Review Panel Conclusions



- New assessment represents substantial progress in accurately characterizing red drum stocks, notably SS models provision of SSB and F
- Southern: Stock Synthesis suitable for management advice; Panel agrees with Overfished status and Overfishing
- Northern: Traffic Light Analysis suitable for management advice; Panel agrees with Not Overfished and Not Overfishing
- Stock Assessment Subcommittee commended for thorough examination of all data, extensive model development, and utilization of simulation framework

A close-up photograph of a large fish, likely a blue crab or similar crustacean, being held by a metal rod. The fish has a textured, brownish-gold shell and is positioned in the lower half of the frame. The background is dark blue water with some green seaweed or grass visible.

Questions?



Risk and Uncertainty Tool Inputs

K. Drew, ASMFC

Oct. 22, 2024

Risk and Uncertainty Tool



- ASMFC is pilot testing a Risk and Uncertainty Tool with the red drum assessment
- Goals of the tool:
 - Provide a more structured framework around risk and uncertainty for Board discussions
 - Provide more transparency on the factors that go into the final management decisions

R&U Tool Inputs



- Technical Inputs: scores from the TC and CESS on key factors

- Stock status
- Assessment model uncertainty
- Management uncertainty
- Environmental uncertainty
- Ecosystem importance

TC scores
these factors

- Commercial & recreational importance
- Short- and long-term socioeconomic impacts of proposed management

CESS scores
these factors

R&U Tool Inputs



- Weightings: scores from the Board on how important each factor is when making management decisions
 - How do you balance stock status, uncertainty, and potential socioeconomic impacts when you decide on a quota or a regulation change?

R&U Tool Output



- The technical inputs are combined with the Board weights to provide a recommended risk tolerance level that management action should strive to achieve

R&U Tool Output



- For red drum in the south, overfishing is occurring, so F needs to be reduced to the F target
- How much of a reduction in removals is necessary to achieve F target next year?

R&U Tool Output



- If you take no reduction, there's a low probability that you will achieve F target: very risky!
 - If you close the fishery completely, there's a high probability that will achieve the F target: very precautionary, but significant short-term socioeconomic impacts
- Want to take a reduction with a probability of achieving F target somewhere in between those extremes

R&U Tool Output



- But what's "in between"?
 - 50%?
 - 60%?
 - 45%?
- This tool will provide a recommended probability, based on stock status, uncertainty, and socioeconomic considerations and weighted by what the Board considers more important

R&U Tool Application



- This tool is only useful for data-rich assessments with the capacity to do projections
- We can use this tool for the southern stock but not the northern stock
- Scores and weights have been compiled for both regions for comparison, but the output can't be used in the traffic light framework for the north

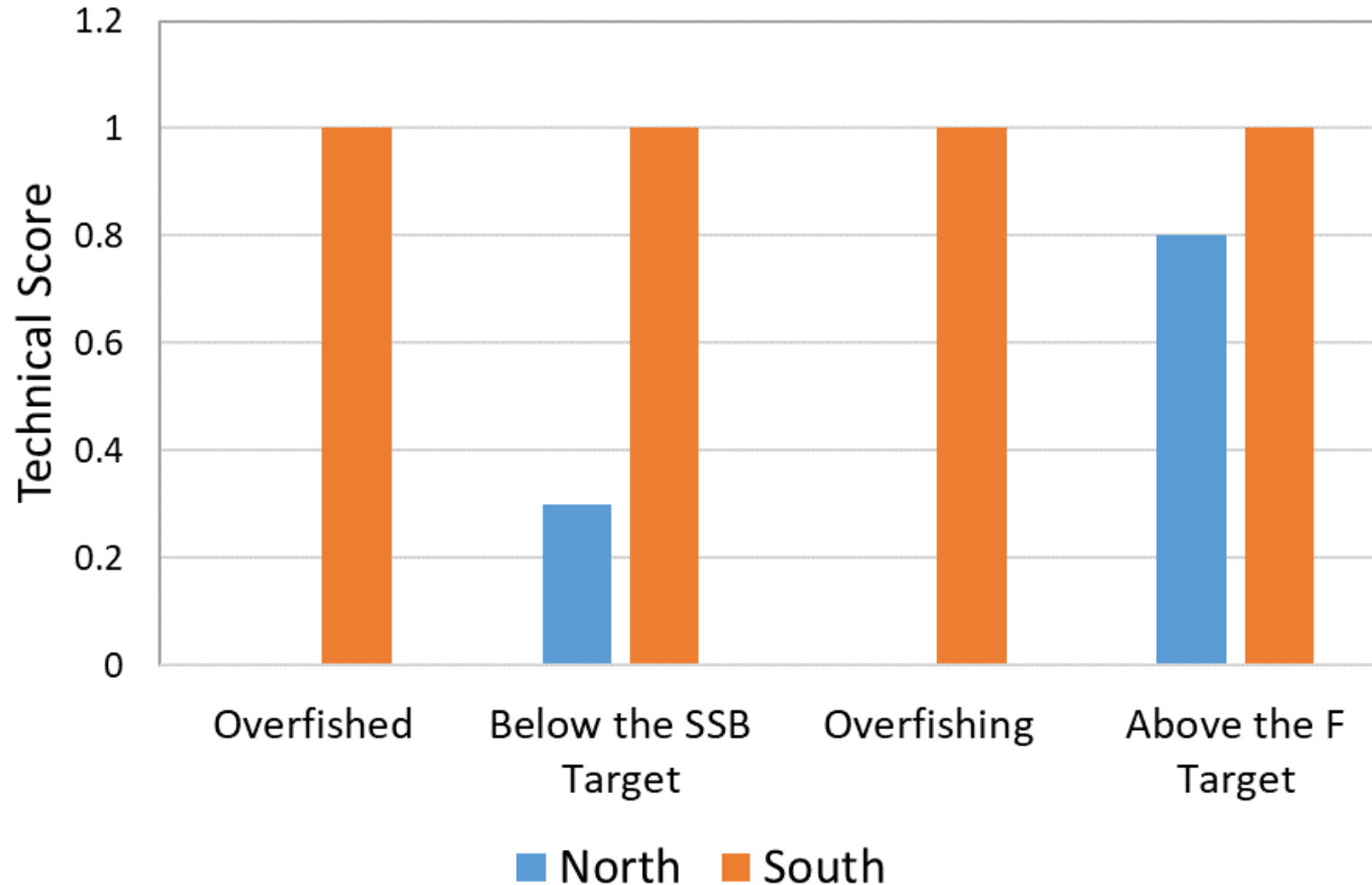


TECHNICAL INPUT SCORES

R&U Technical Input



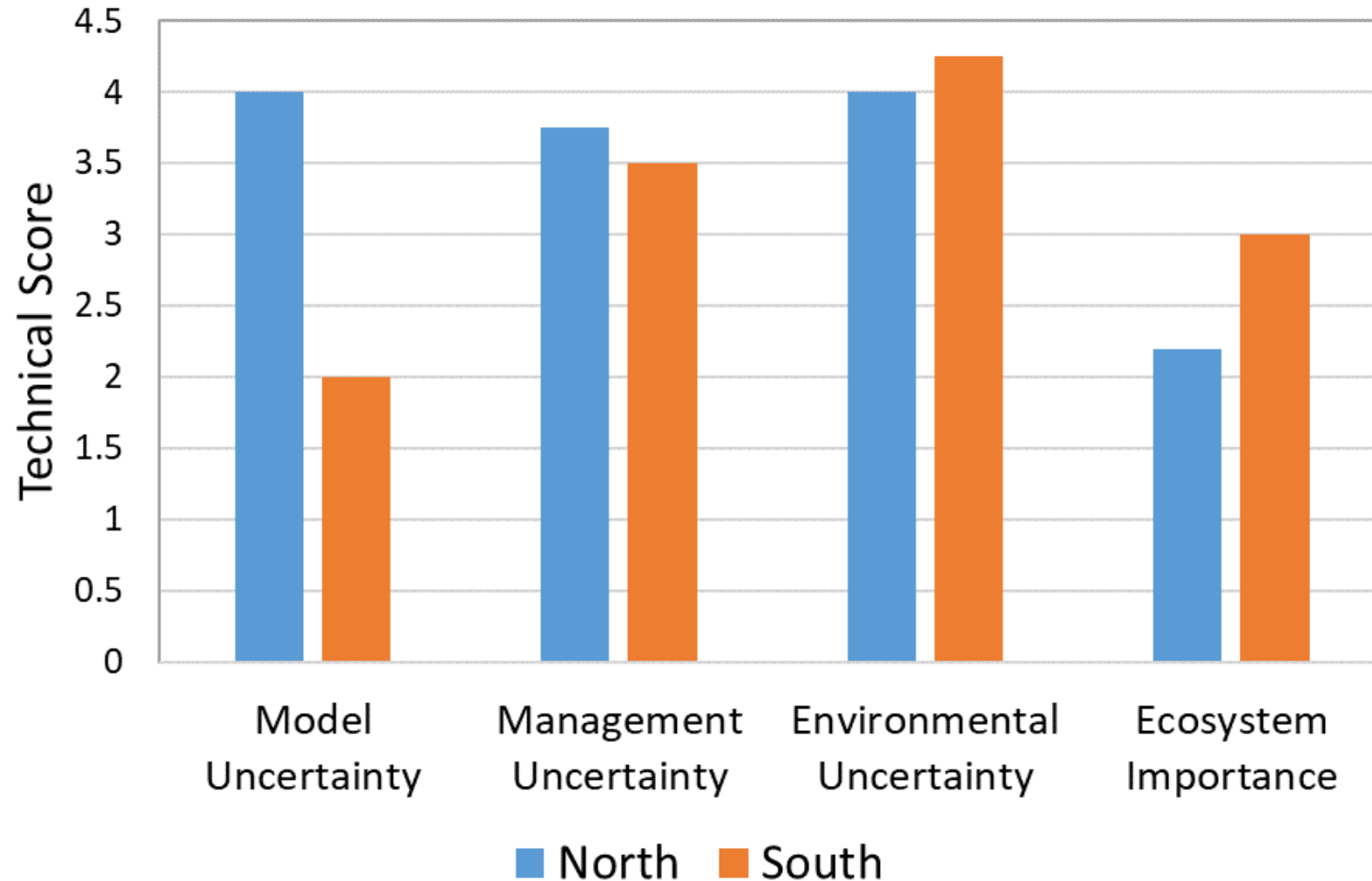
- Stock Status: from benchmark assessment



R&U Technical Input



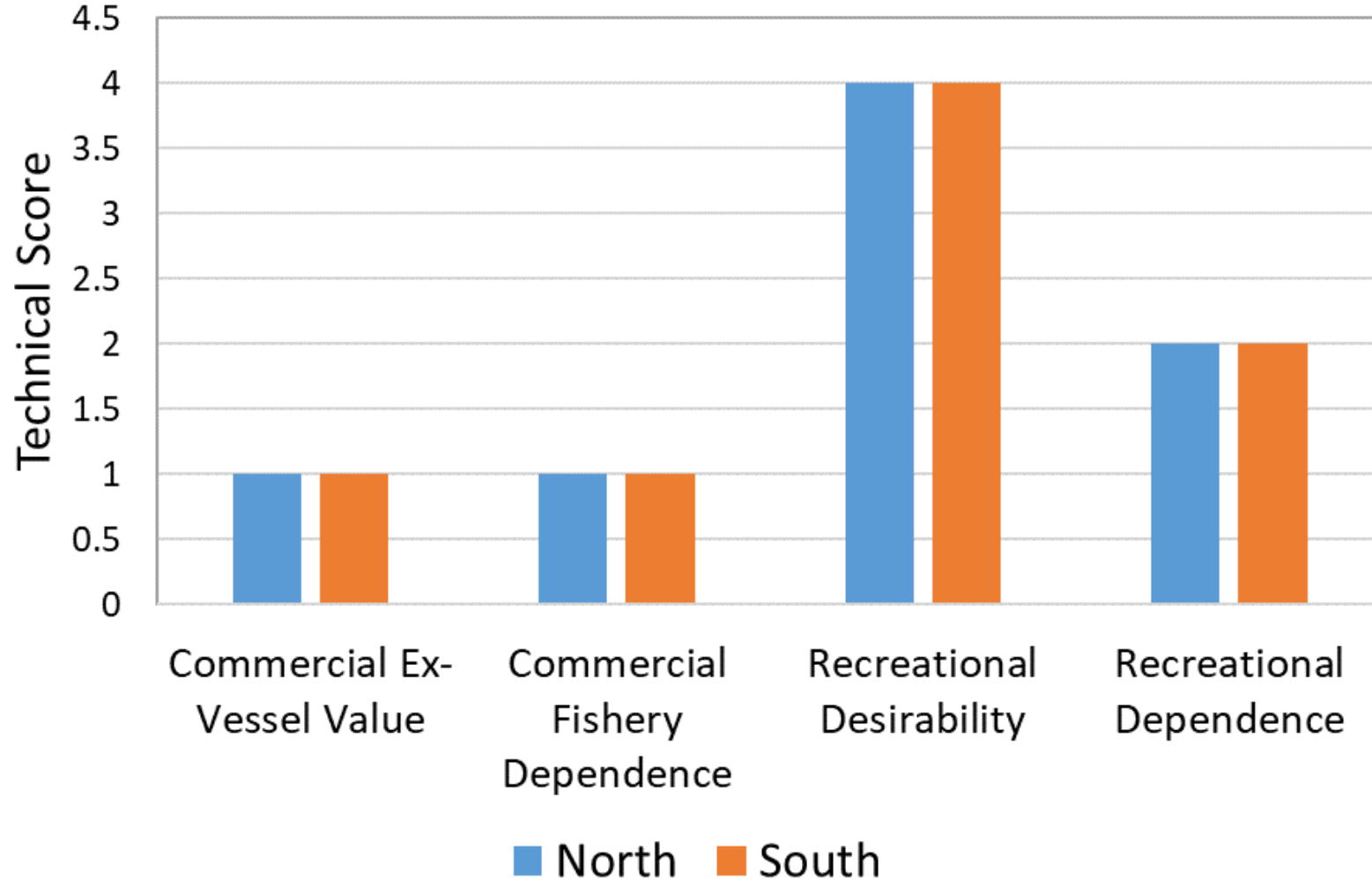
- Other uncertainty and risk factors



R&U Technical Input



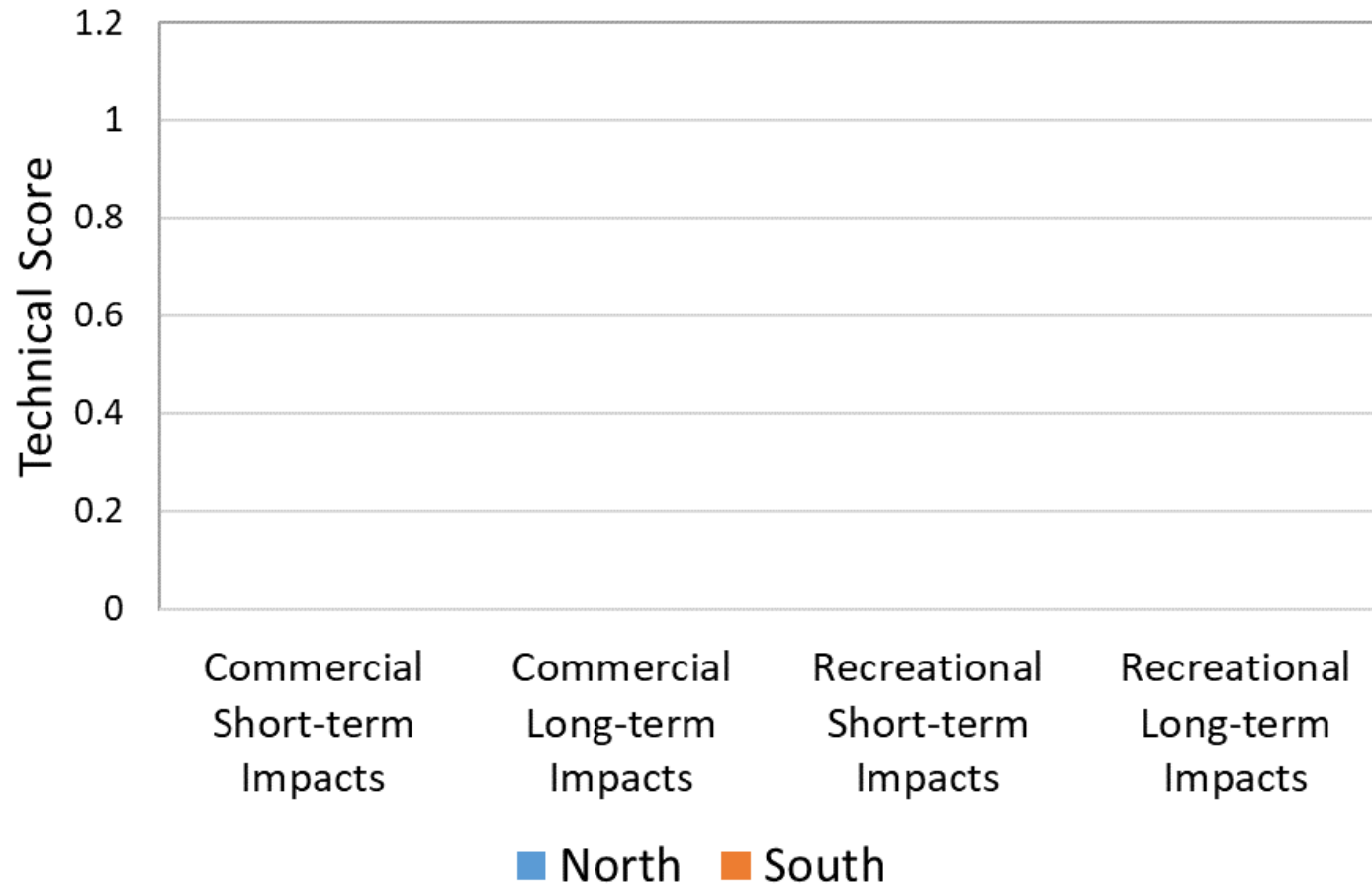
- Socioeconomic factors



R&U Technical Input



- Not available yet: socioeconomic impacts of proposed reductions





INITIAL BOARD WEIGHTINGS

R&U Weightings

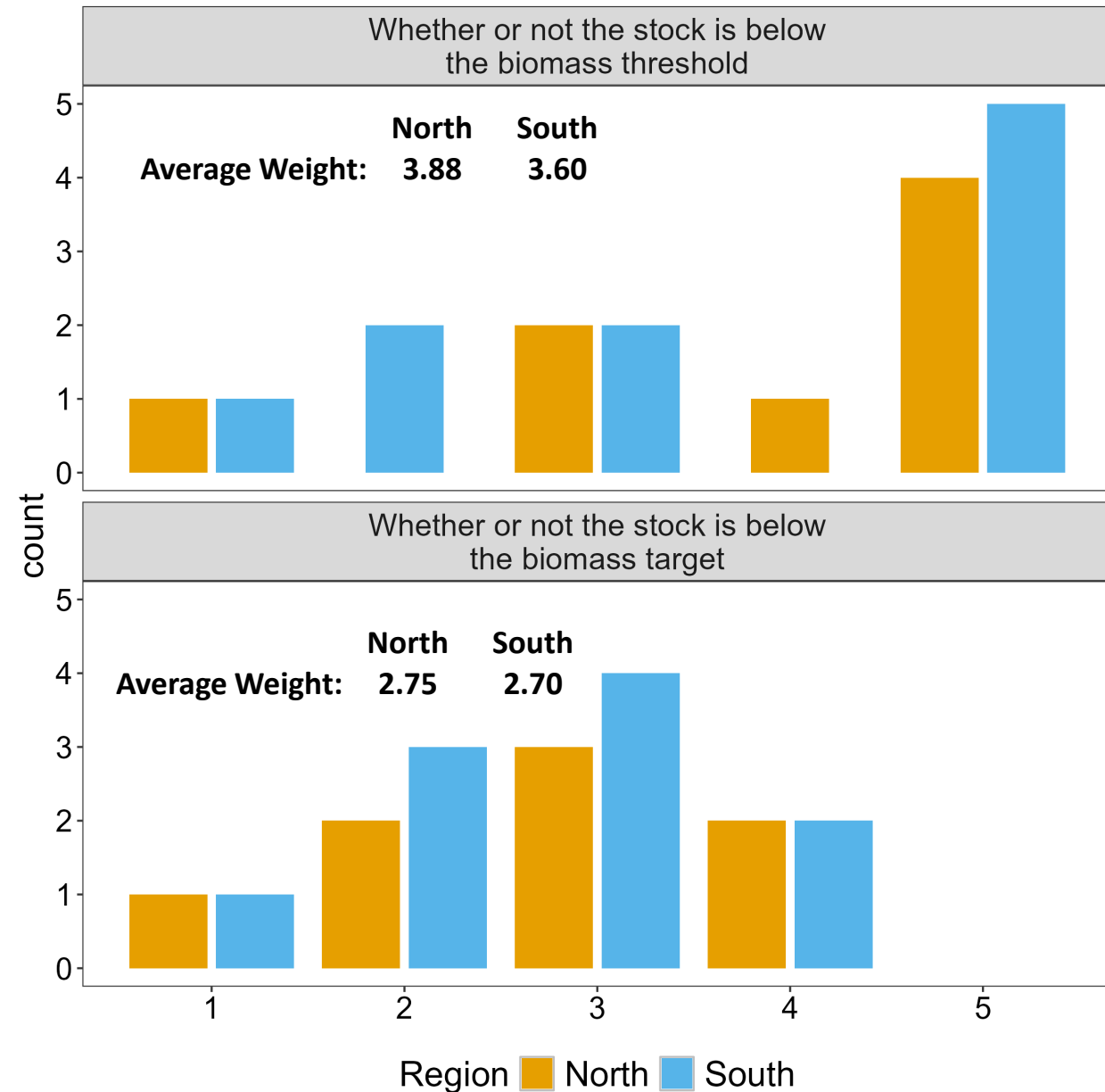


- Initial weights collected via survey of Board members
- 11 Commissioners responded
 - 4 from the southern region (SC-FL)
 - 7 from the northern region (NY-NC)

R&U Weightings: SSB Status



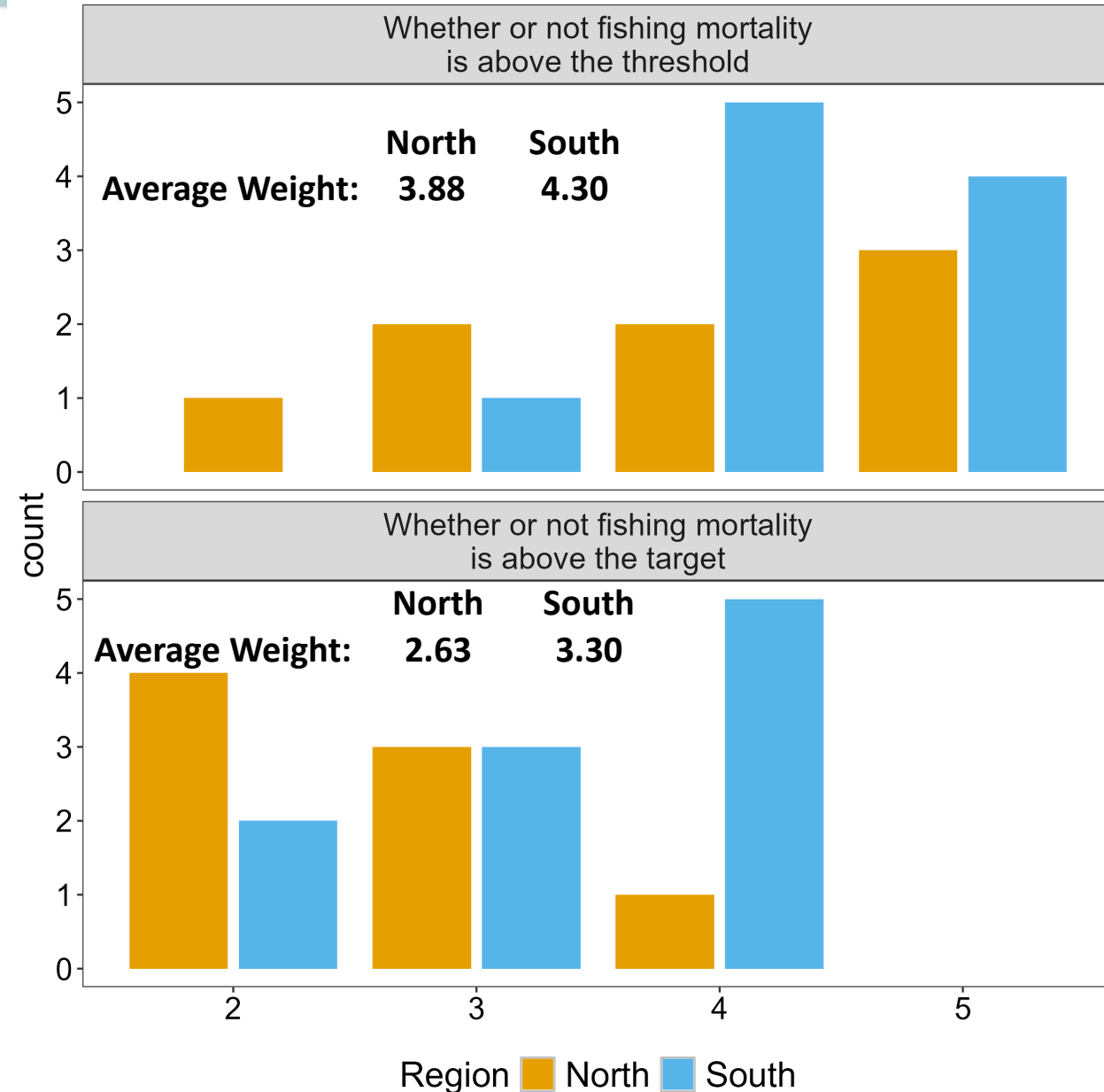
- Higher weight:
 - Important to avoid overfished state, red drum life history/management could make it difficult to rebuild
- Lower weight:
 - High uncertainty in SSB estimates/status



R&U Weightings: F Status



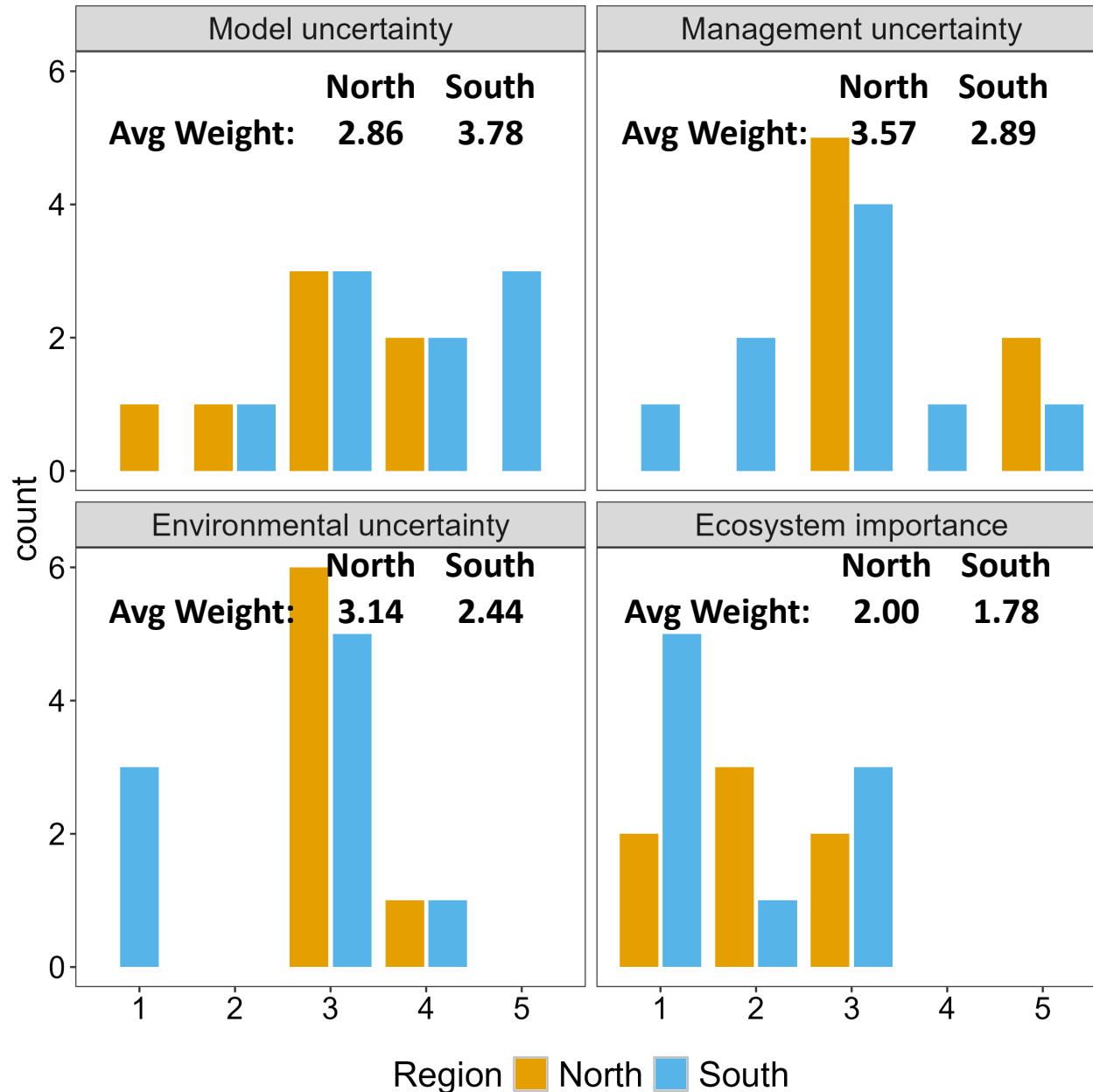
- Comments
 - Important to avoid overfishing state
 - F estimates more reliable than SSB estimates



R&U Weightings: Other Factors



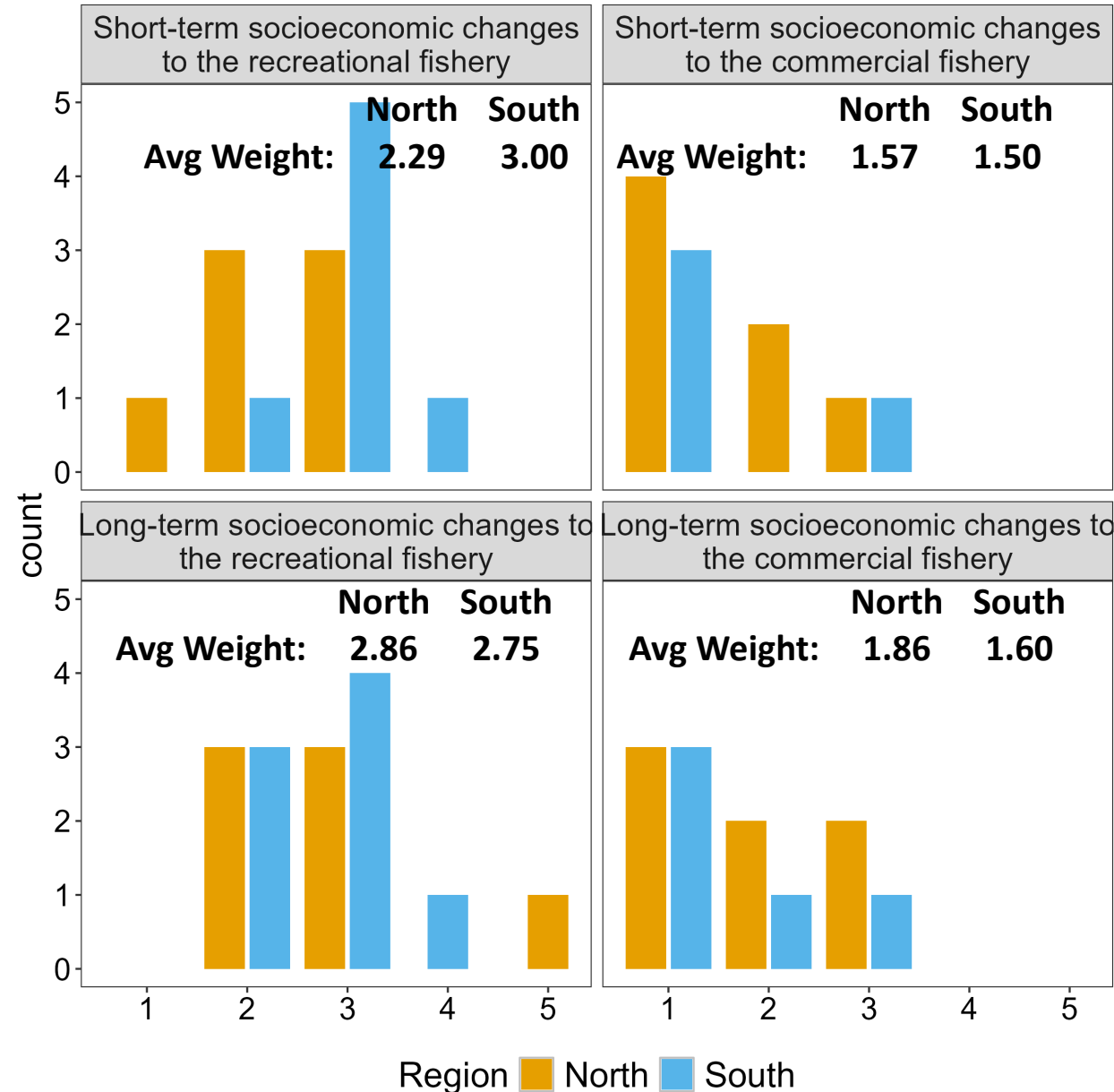
- Model: Data availability, MRIP uncertainty, cryptic SSB
- Management: sporadic availability in north, better MRIP data in south but high catch & release
- Environmental: unclear what the impact will be on the stock in either region
- Ecosystem importance: Not a keystone predator



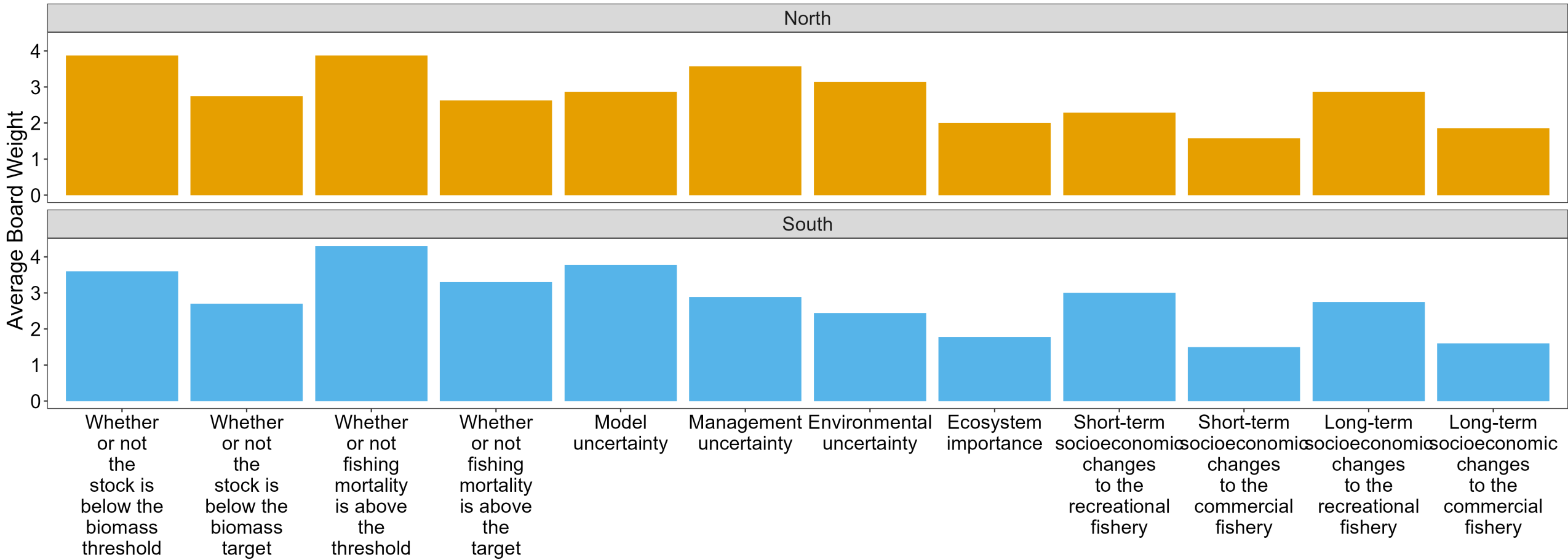
R&U Weightings: Socioeconomics



- Commercial fisheries small in both regions
- Large catch-&-release component to recreational fishery, so likely less impact on demand/trips with management changes



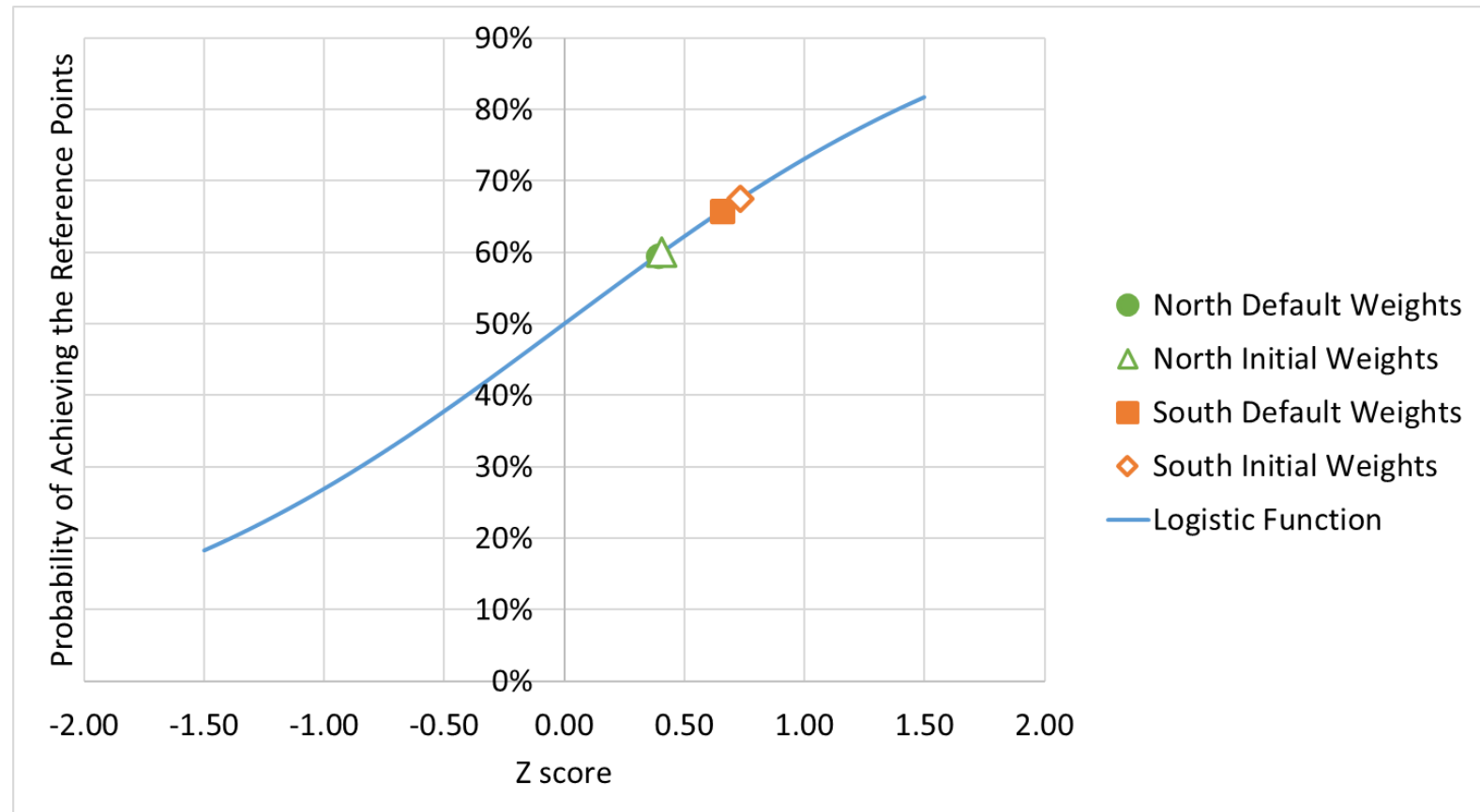
Average Weights by Region



R&U Tool Initial Output



- Due to the negative stock status and higher uncertainty, the tool recommends a reduction should have a 66-68% probability of achieving F target
- Does not include the SE criteria which will push back on that buffer



R&U Tool Next Steps



- Board discussion on weights
 - Can happen at this meeting, or can wait until the tool is updated with the final SE scores
- TC does projections with the recommended probability for the south (68%) to estimate the reduction needed
- CESS updates the SE scores with that information
- TC does another set of projections with the adjusted probability

R&U Tools Next Steps



- Board can use the recommended probability from the tool as is
 - Can adjust the weights to get a probability that is more consistent with management objectives
 - Can choose another probability without the tool
- We would like feedback on the tool at the end of the process to help the Policy Board decide how to proceed with the tool

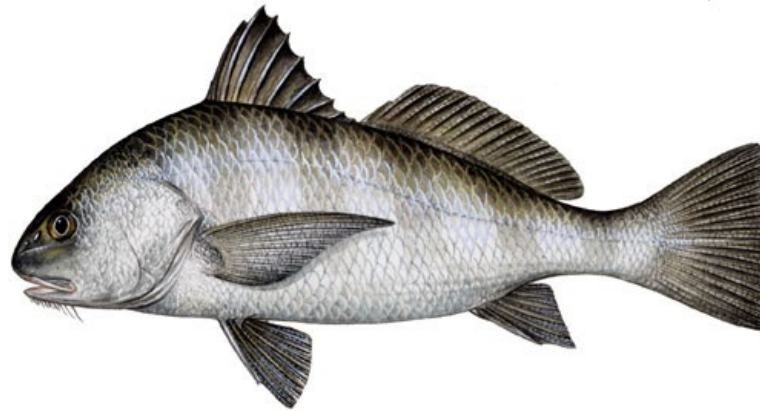


QUESTIONS



2024 Black Drum Indicator Update

October 22, 2024



Data Update Process



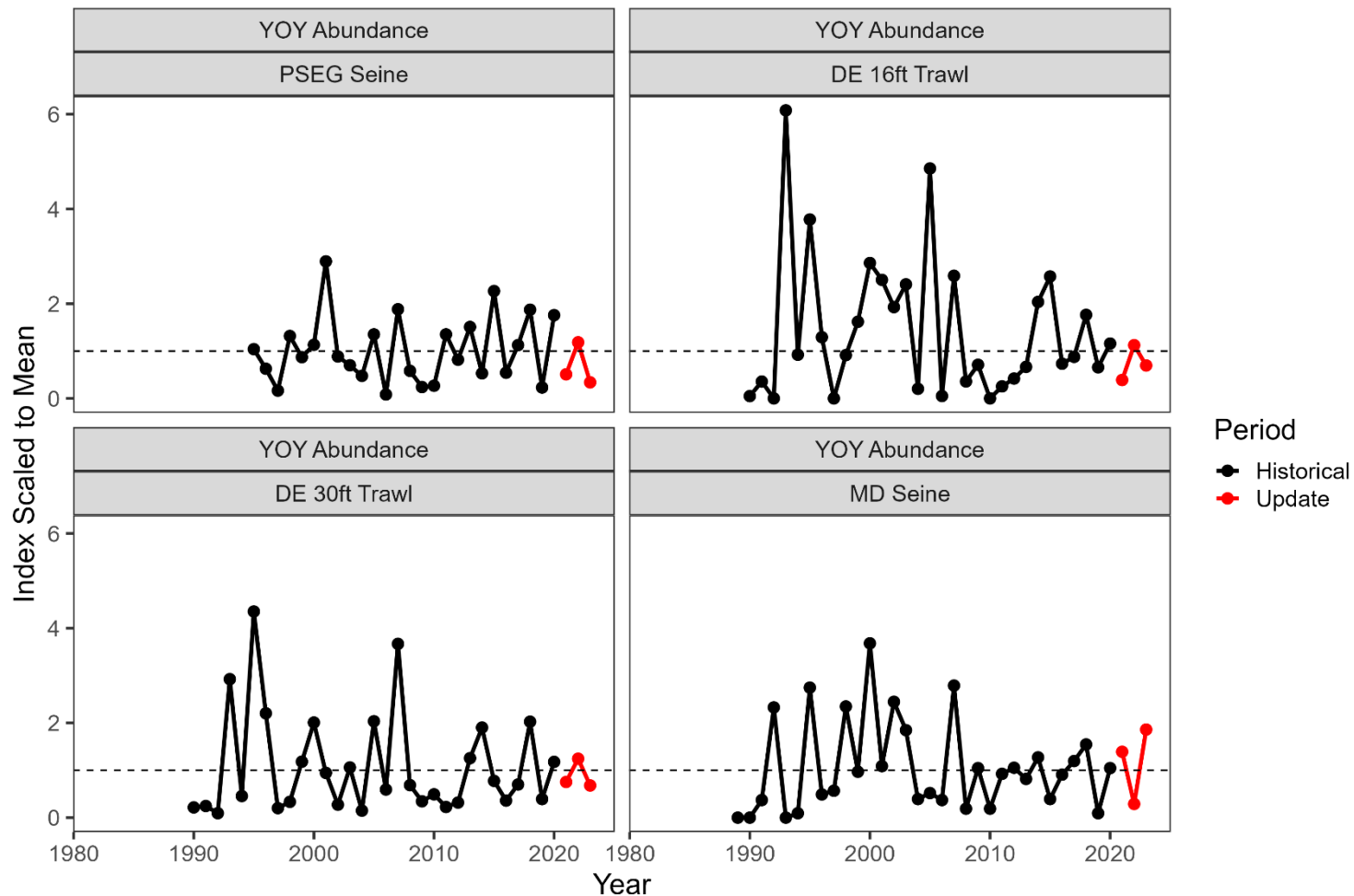
- Black drum stock determined to not be overfished nor experiencing overfishing in 2020
 - Empirical indicators overall did not appear negative
- Lack of contrast in black drum data sets coupled with high uncertainty in model-based estimates
- TC recommended monitoring of empirical stock indicators annually between stock assessments
- Next assessment in 2027, but TC may recommend expediting based on data update

Data Update Process

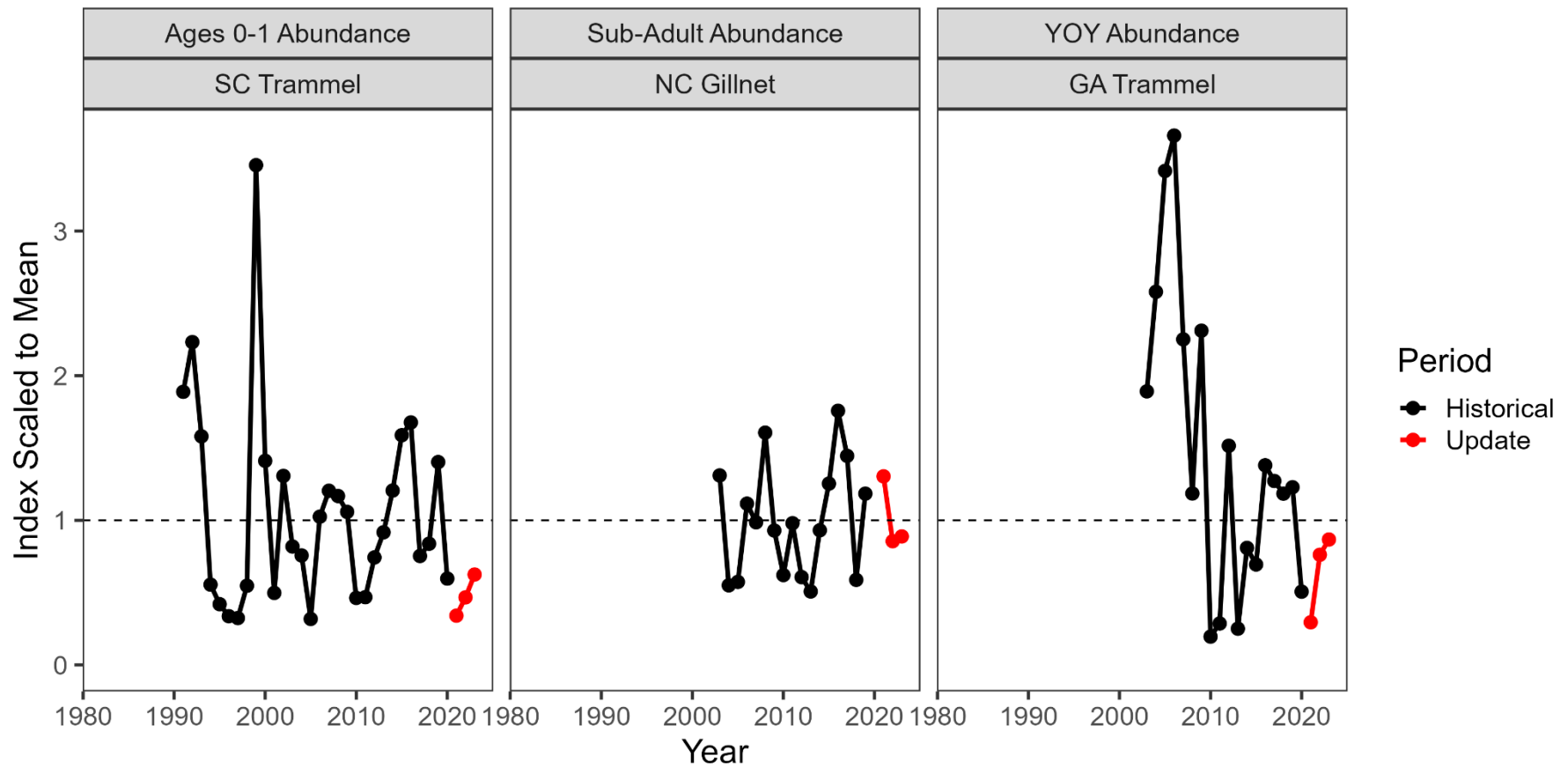


- Recommended indicators:
 - Abundance
 - YOY, age 0-1, subadult, exploitable abundance
 - Range expansion
 - Fishery catch
 - Recreational live releases
 - Recreational harvest
 - Commercial landings
 - Structured by region
- First Data Update last year with data through 2022
 - Indicators showed mixed signs of stability and declines since the assessment
 - TC not concerned with updates, recommended no change to assessment schedule
 - Sciaenids Board requested TC consider frequency of updates in future
- Current 2024 Data Update includes addition of 2023 data
- Time series mean included for reference

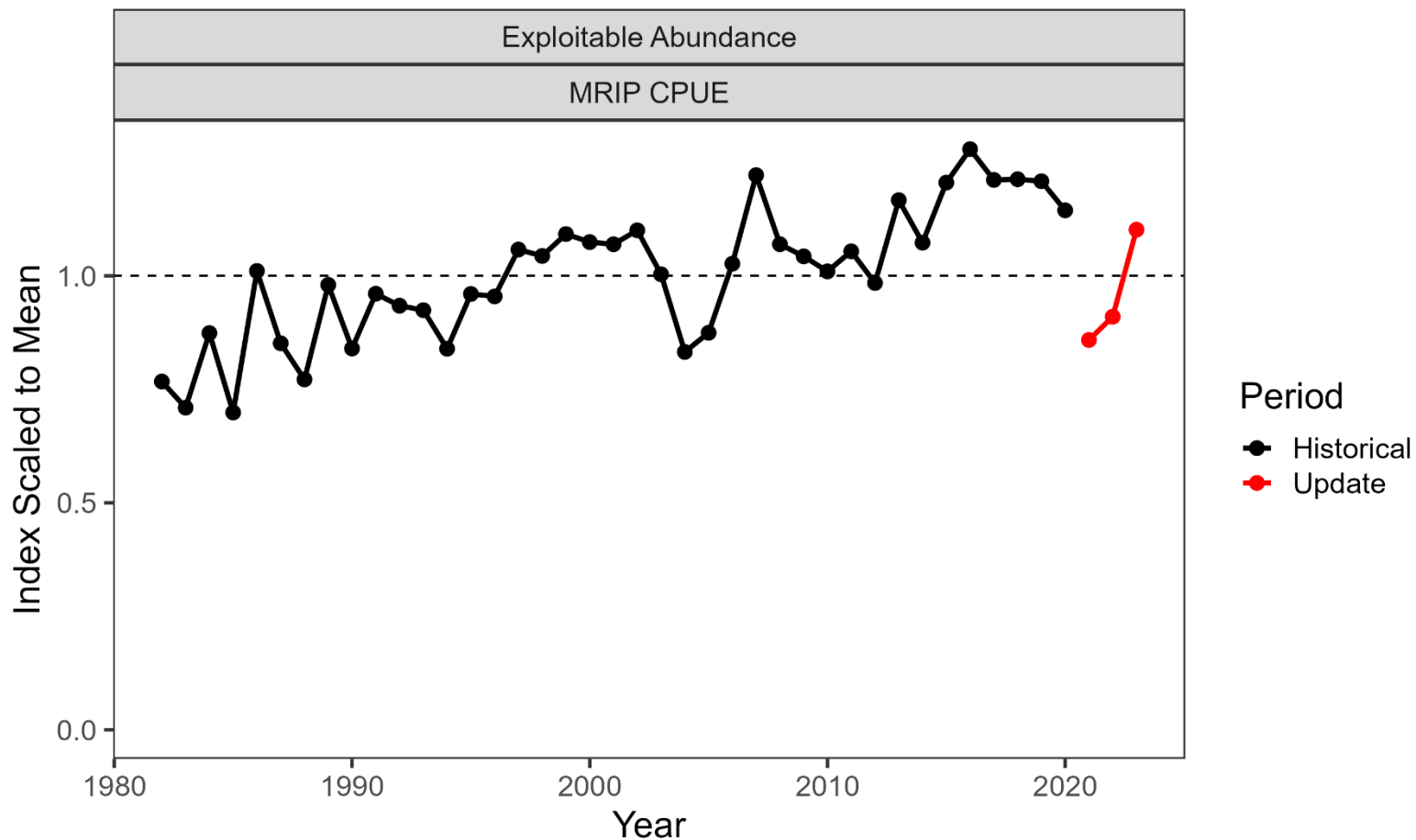
2024 Data Update – Mid-Atlantic Abundance



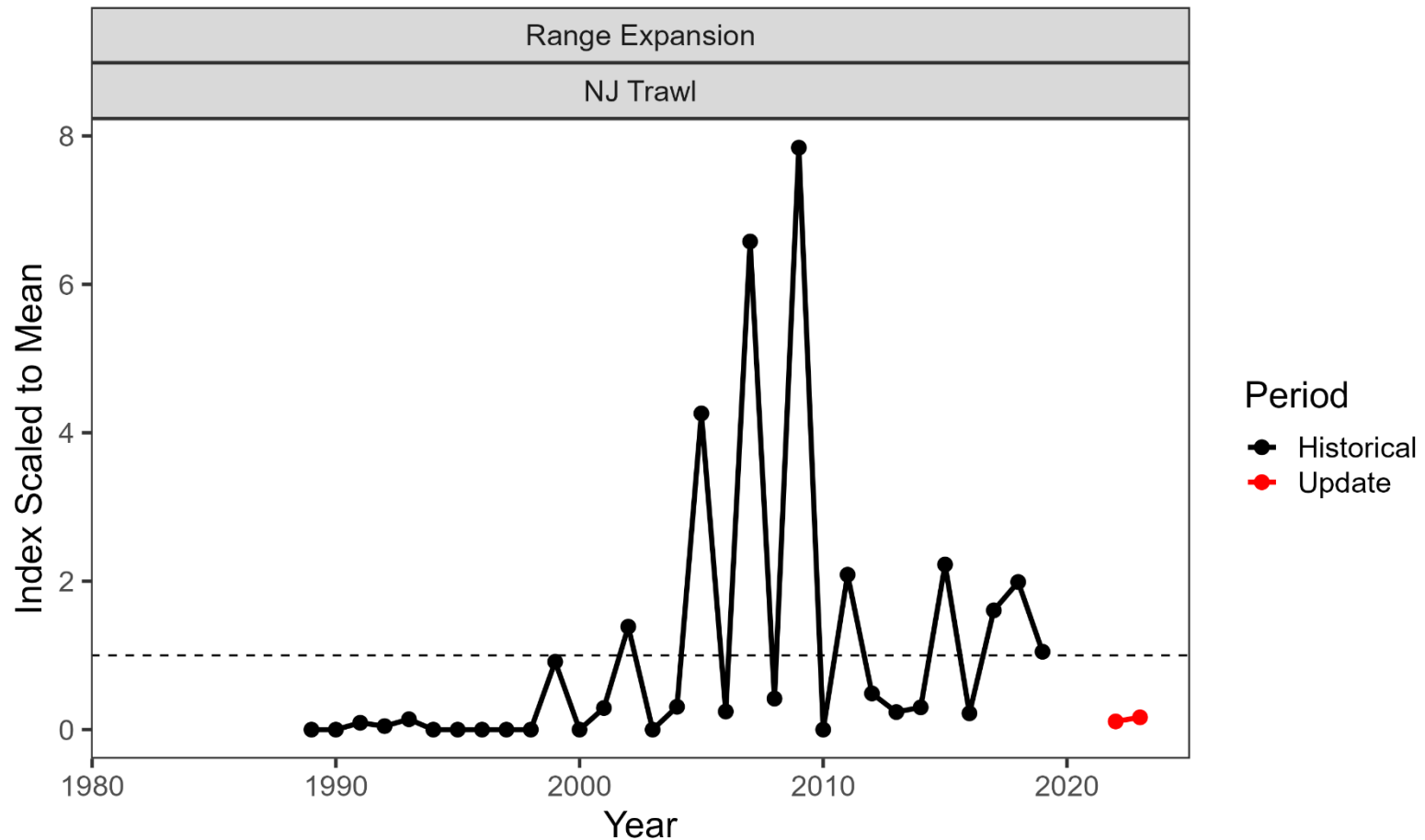
2024 Data Update – South Atlantic Abundance



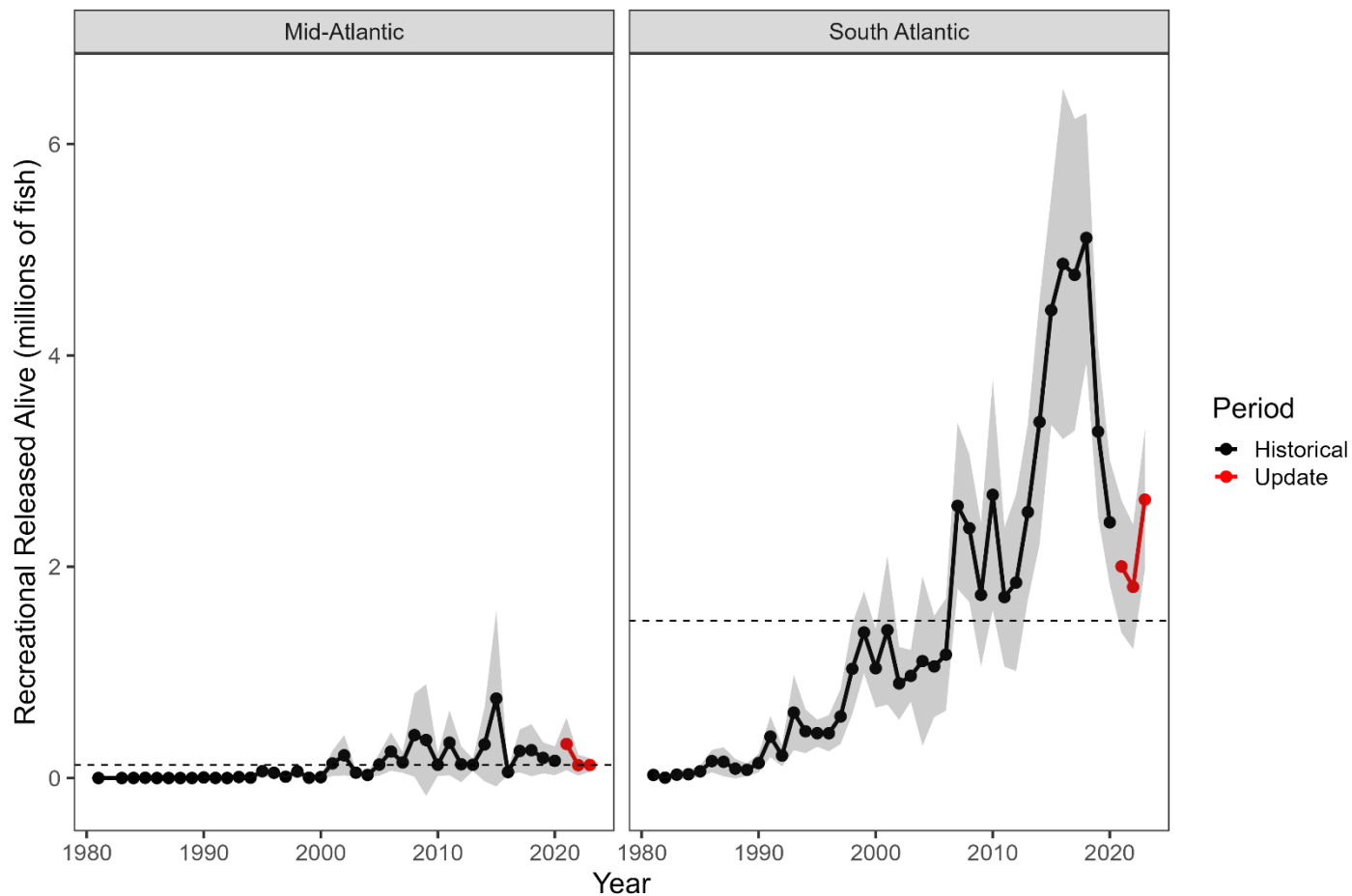
2024 Data Update – Exploitable Abundance



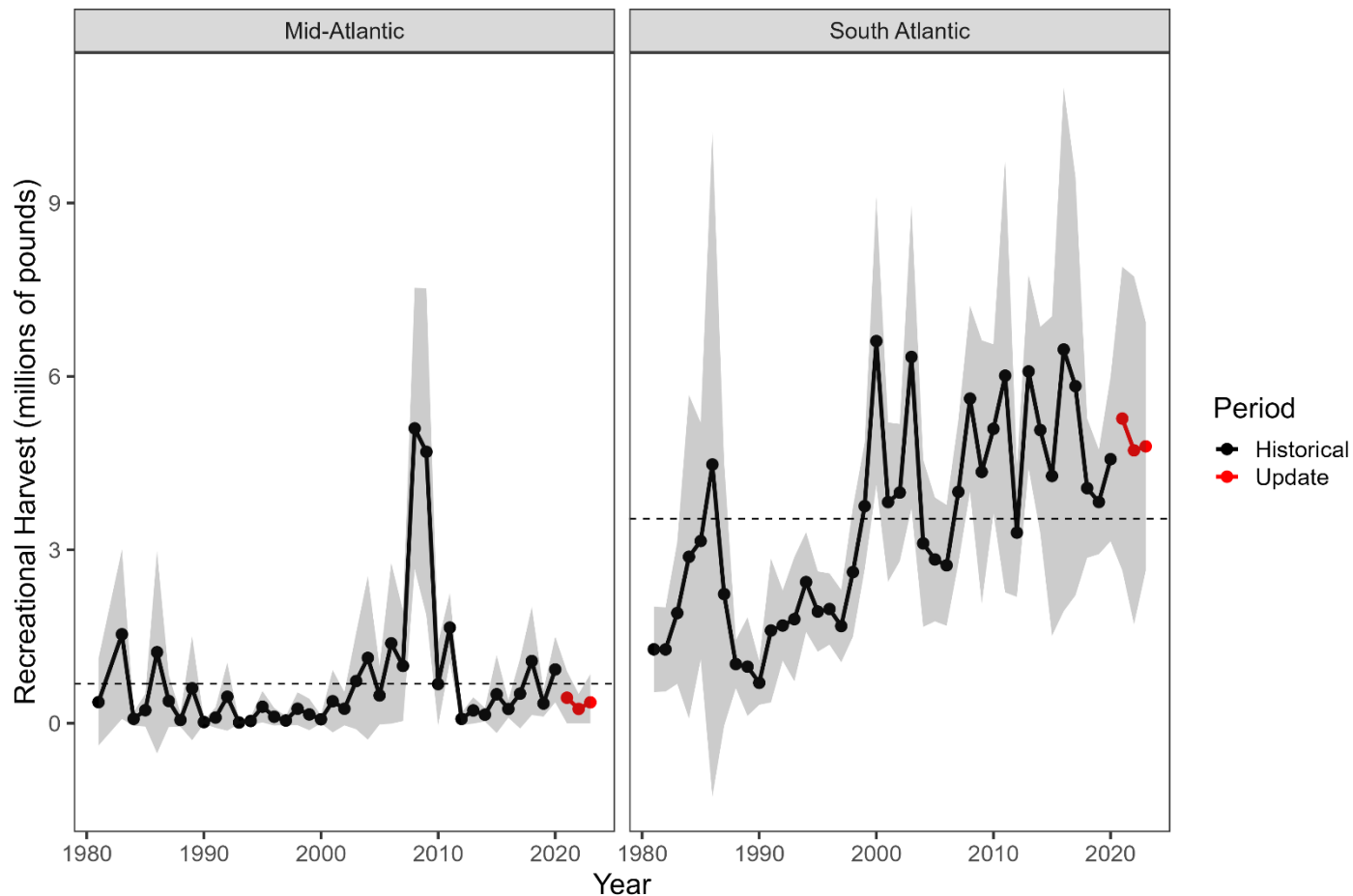
2024 Data Update – Range Expansion



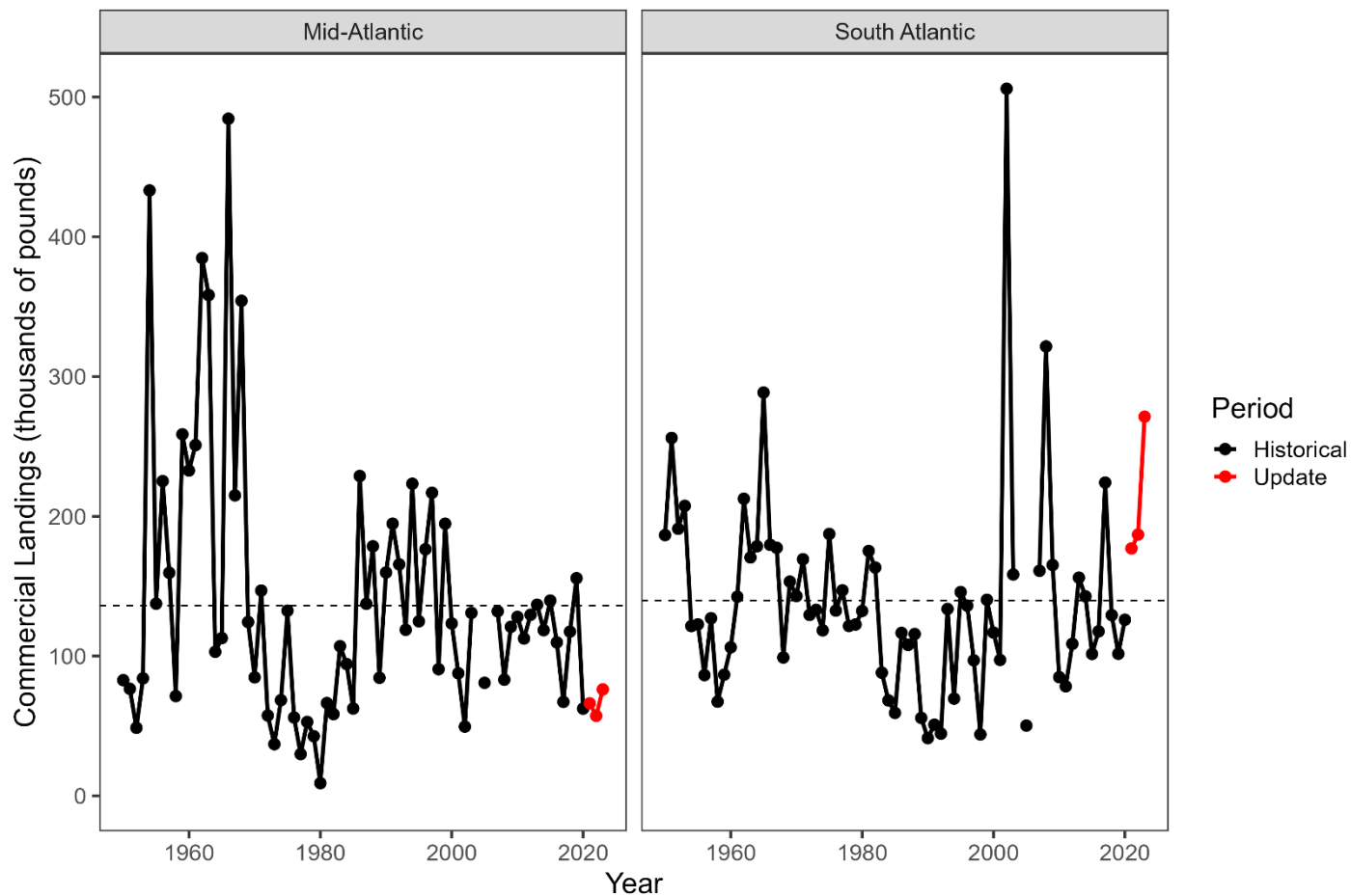
2024 Data Update – Recreational Live Releases



2024 Data Update – Recreational Harvest



2024 Data Update – Commercial Landings





2024 Data Update

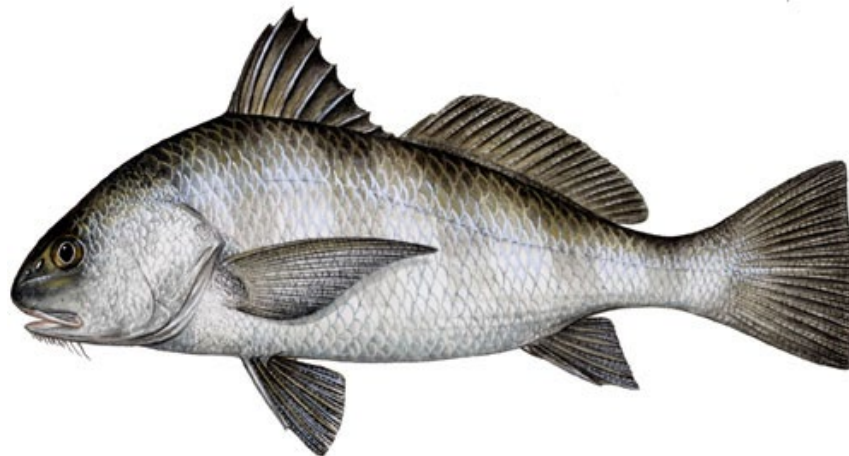
- Overall, indicators showed similar conditions to the terminal year of the assessment, with signs of increases in the South Atlantic in 2023
- Increased catch in the South Atlantic is likely driven by increased effort in response to tighter regulations on other recreational species
- Decreased commercial landings in Mid Atlantic due to reduced market demand
 - Reduced commercial harvest has led to a loss of age samples in Delaware



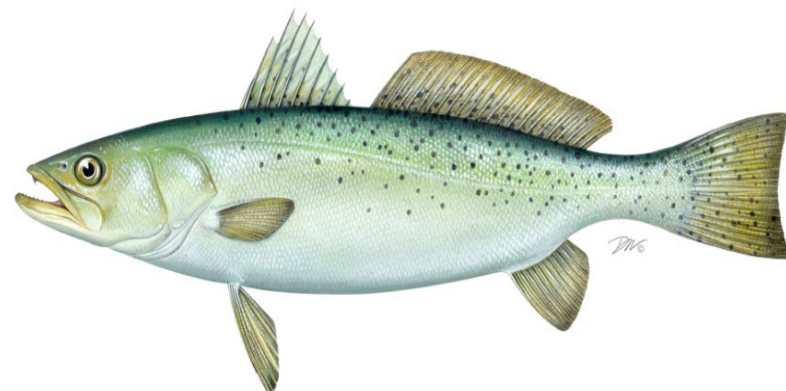
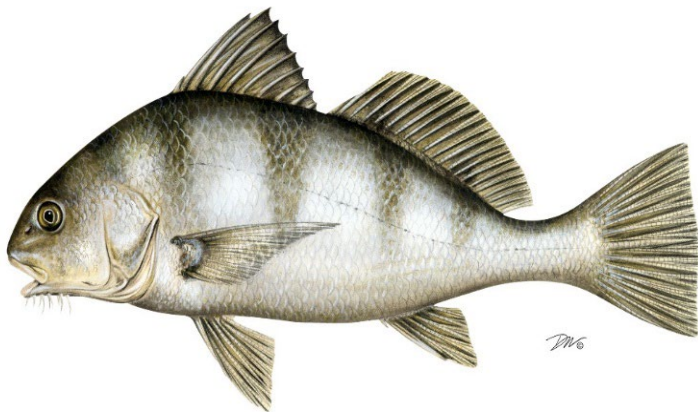
TC Recommendations

- An advanced assessment timeline is not currently needed
- The next data update should occur in 2026, with additional data from 2024 and 2025
 - Frequency of updates will be reevaluated following the next assessment
- The next stock assessment should be pushed back one year to 2028

Questions?



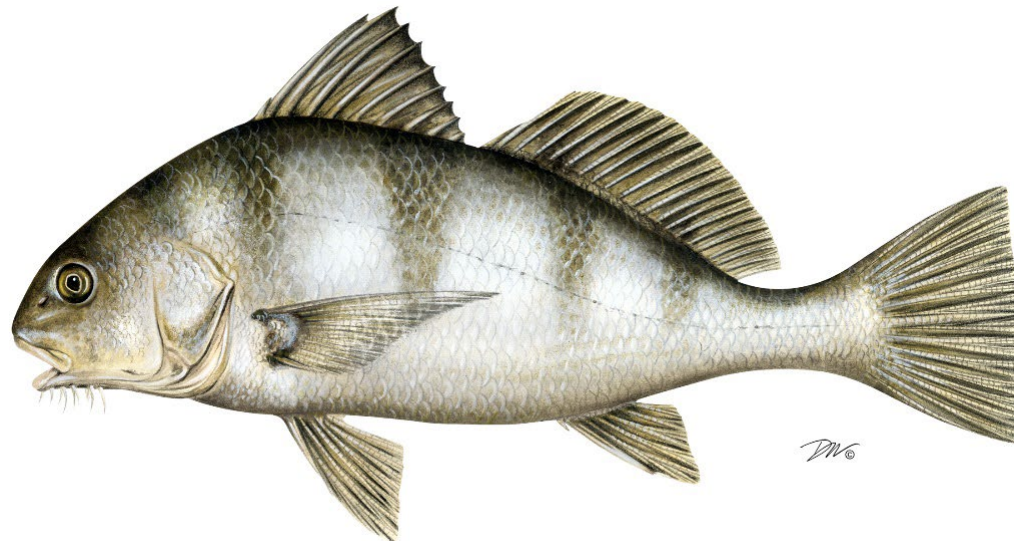
Black Drum and Spotted Seatrout Fishery Management Plan Reviews



Sciaenids Management Board
October 22, 2024

Black Drum

Fishery Management Plan Review

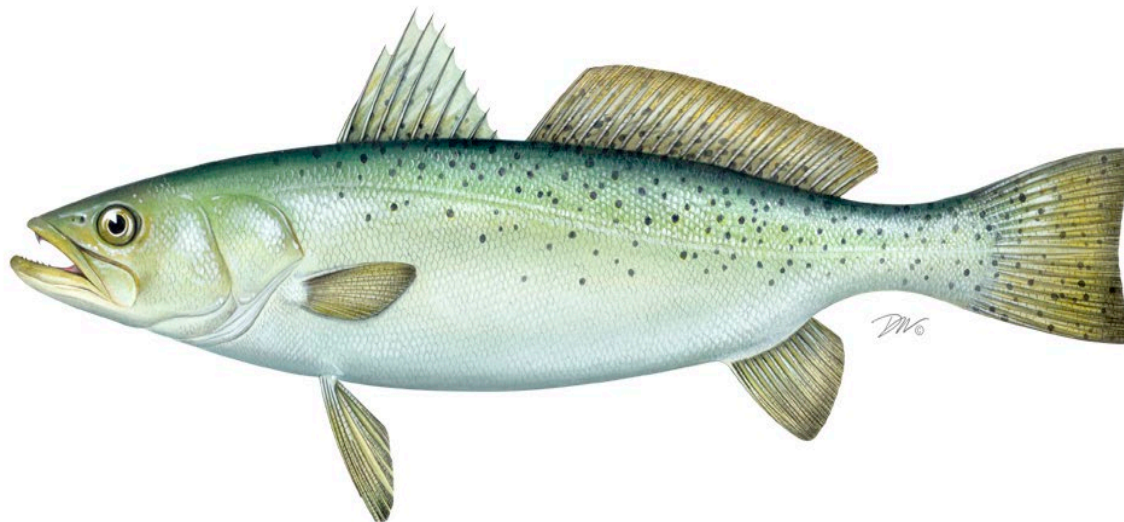


PRT Recommendations



- Found no inconsistencies from the FMP
- No *de minimis* requests
- PRT recommends the approval of state compliance reports
- Additional research/monitoring recommendations found in FMP Review document and Black Drum Assessment and Peer Review Report

Spotted Seatrout Fishery Management Plan Review



Status of the FMP



- Omnibus Amendment to the Spanish Mackerel, Spot, and Spotted Seatrout FMPs (2011)



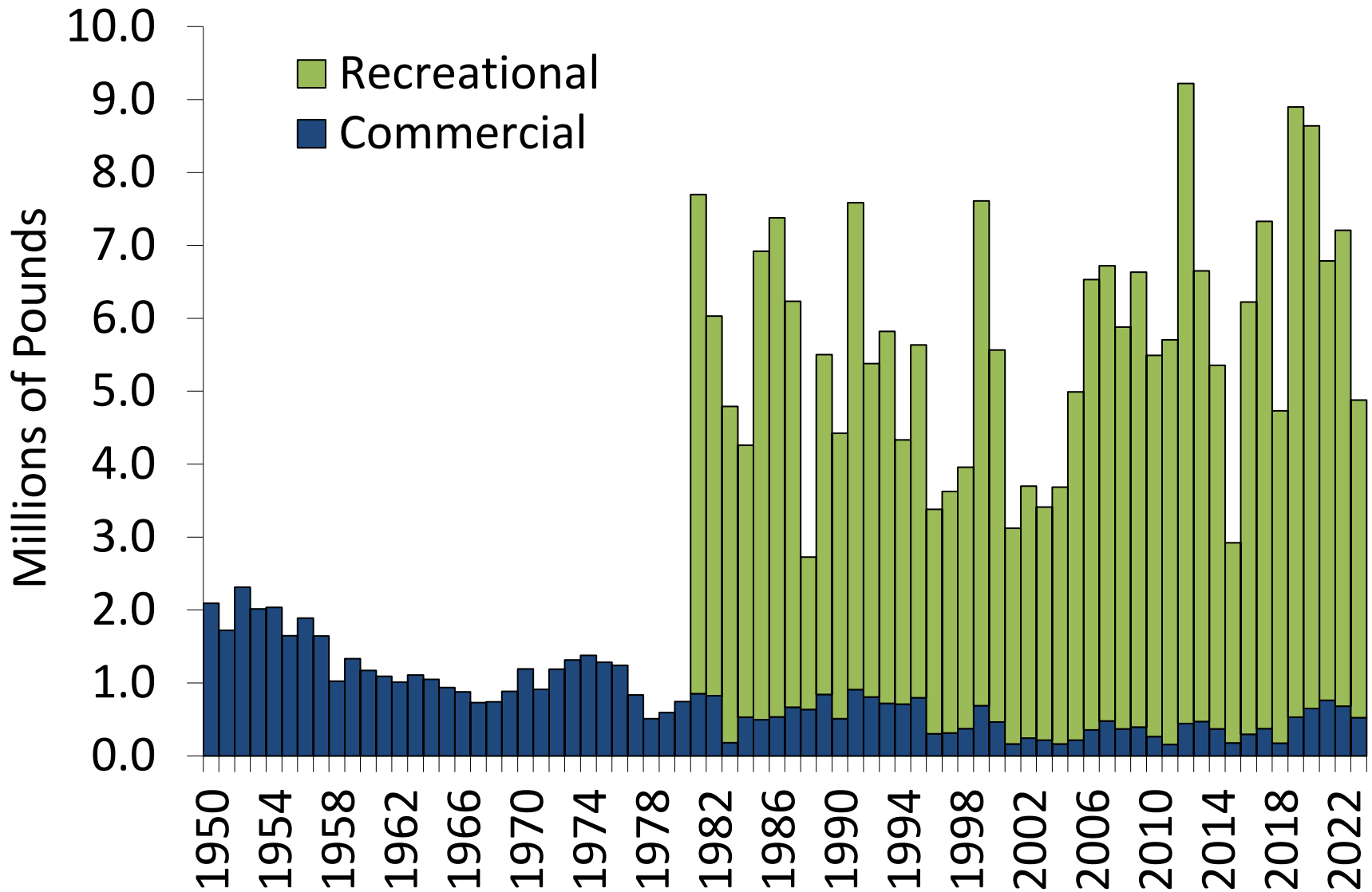
Status of the Stock



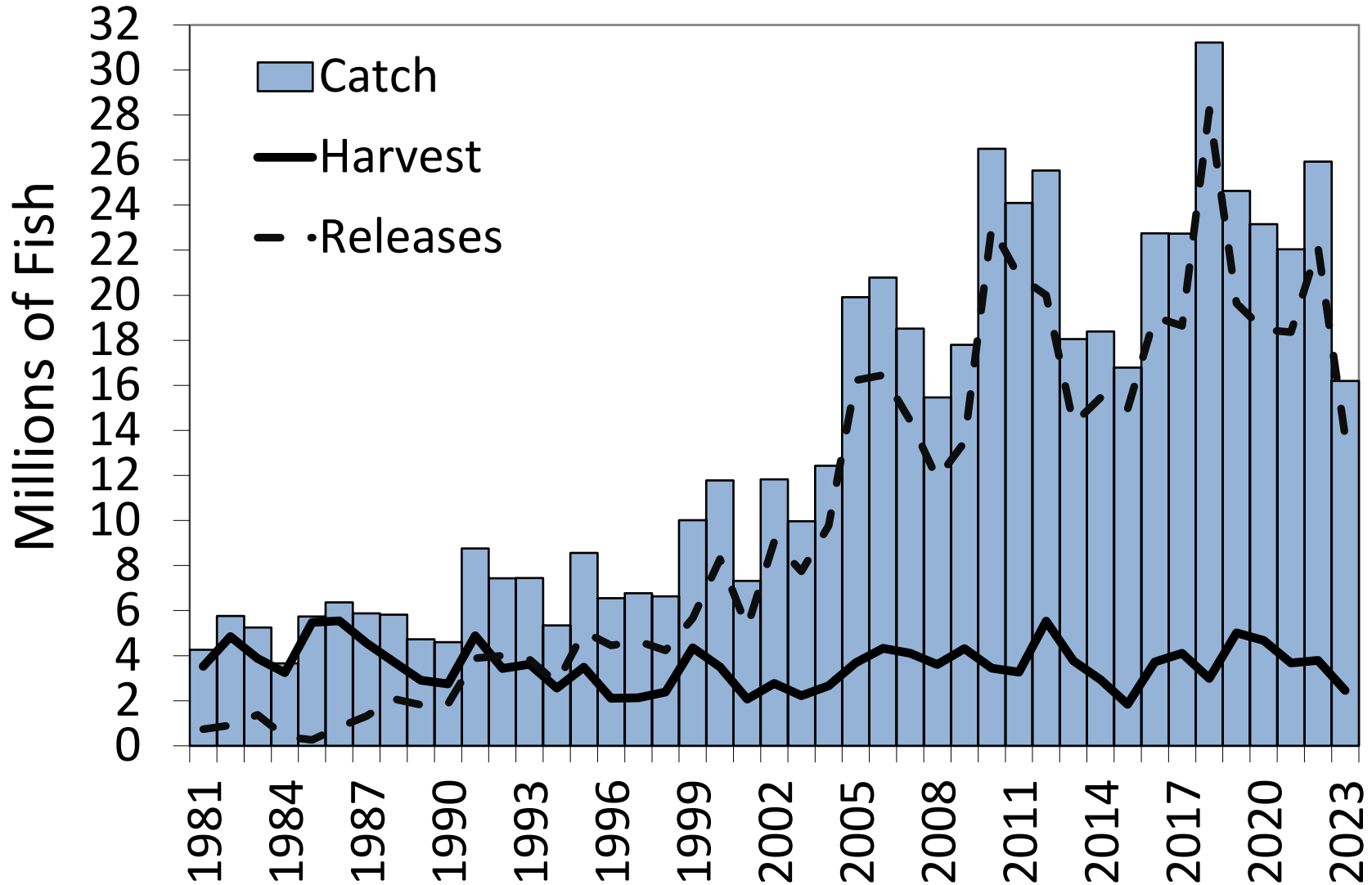
- 2019 Florida Spotted Seatrout Stock Assessment Update
 - Terminal year 2017
- 2022 North Carolina Spotted Seatrout Stock Assessment: the stock is not overfished but overfishing is occurring
 - Terminal year 2019



Status of the Fishery: Commercial and Recreational Harvest



Status of the Fishery: Recreational Catch



PRT Recommendations



- No inconsistencies found among states with regard to FMP requirements
- PRT recommends approval of state compliance reports and *de minimis* status for New Jersey and Delaware.
- Additional research/monitoring recommendations found in FMP Review document

Board Actions and Next Steps



- Motion on approval/disapproval of FMP reviews, state compliance reports, and *de minimis* requests for black drum and spotted seatrout.

Questions?

