

# 2025 American lobster stock assessment

Oct 27, 2025



# US lobster stocks, SAs, and LCMAs

- Currently assessed as 2 stocks
  - GOMGBK
    - We also pay attention to sub-stock dynamics
  - SNE
- Stock boundaries align with NOAA Fisheries Statistical Reporting Areas (SAs)
  - Resolution for landings and effort data
- 7 Lobster Conservation Management Areas (LCMAs or LMAs)
  - Do not align with stock boundaries or SAs.
  - Defined in the late 1990s
  - Intended to account for some localized industry dynamics

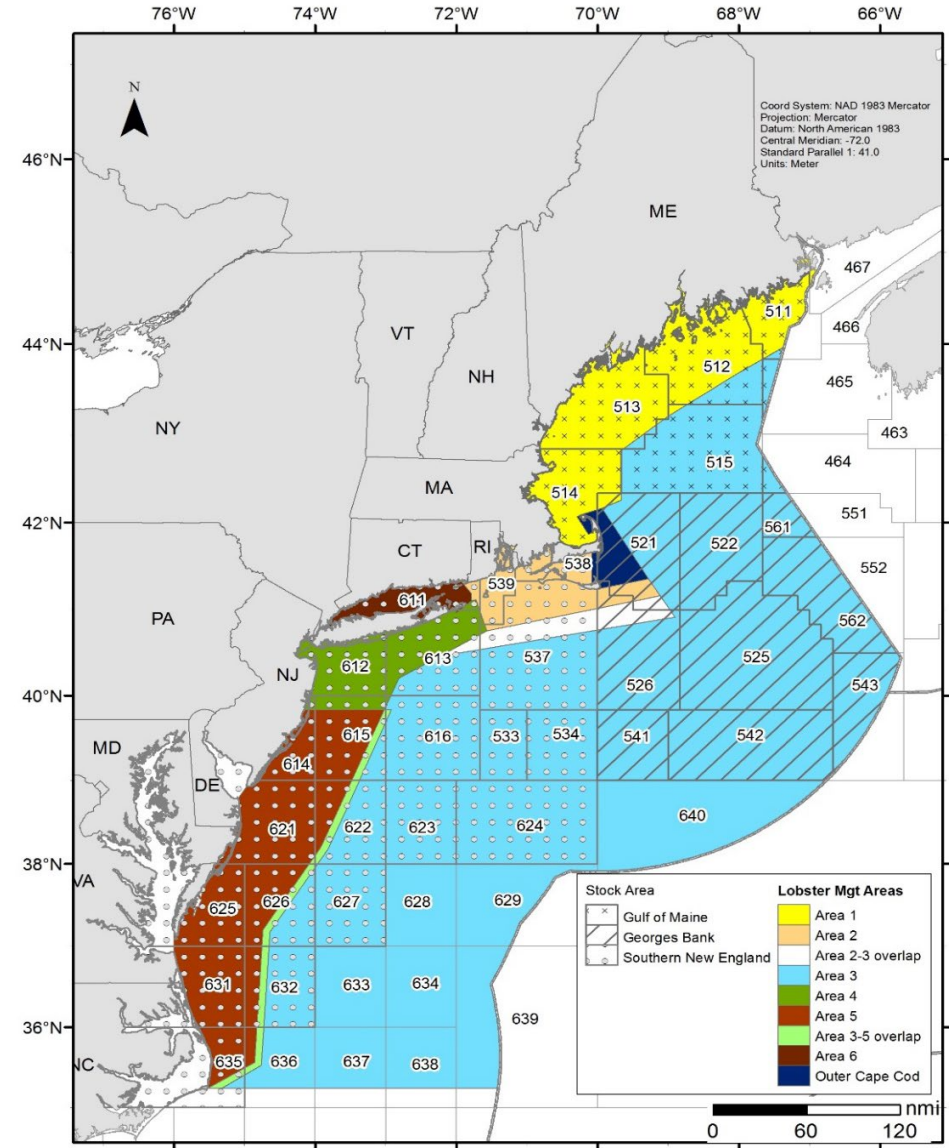
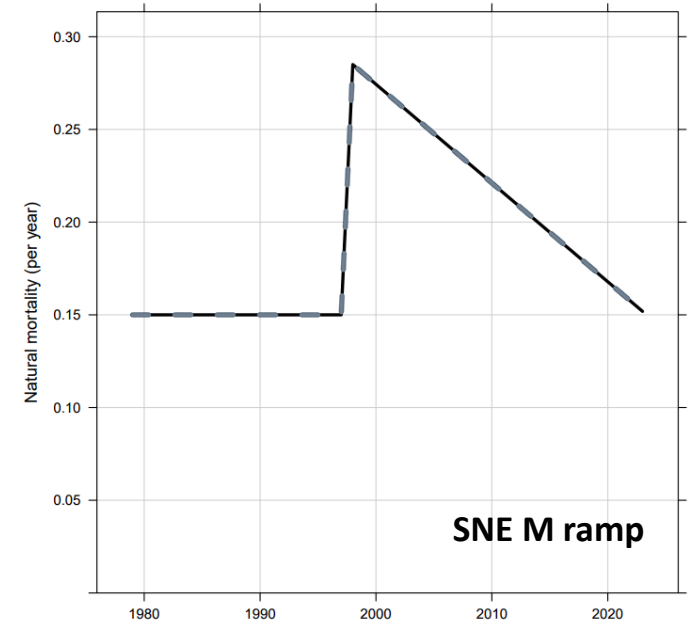


Figure 1

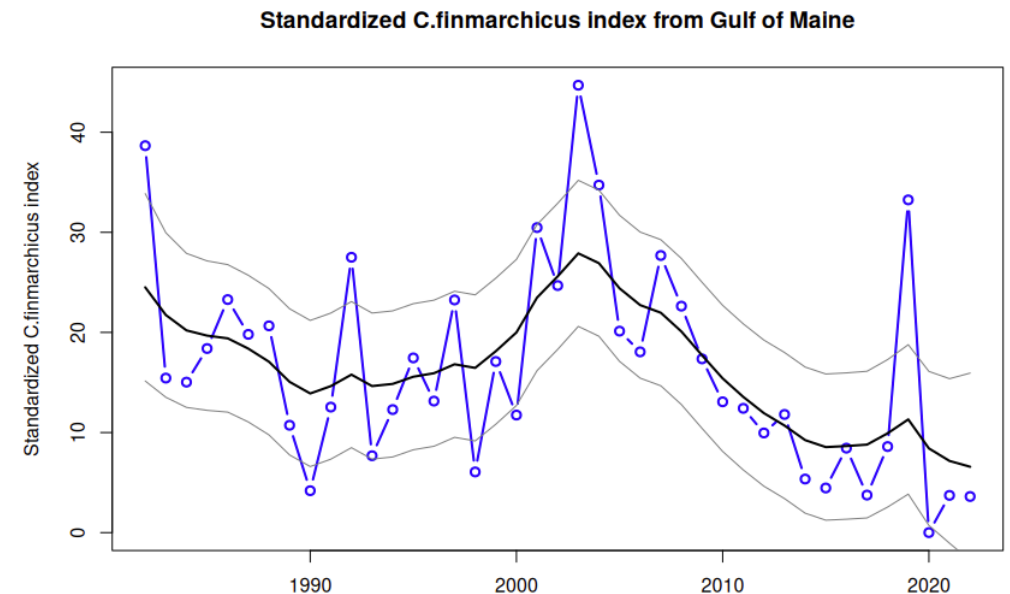
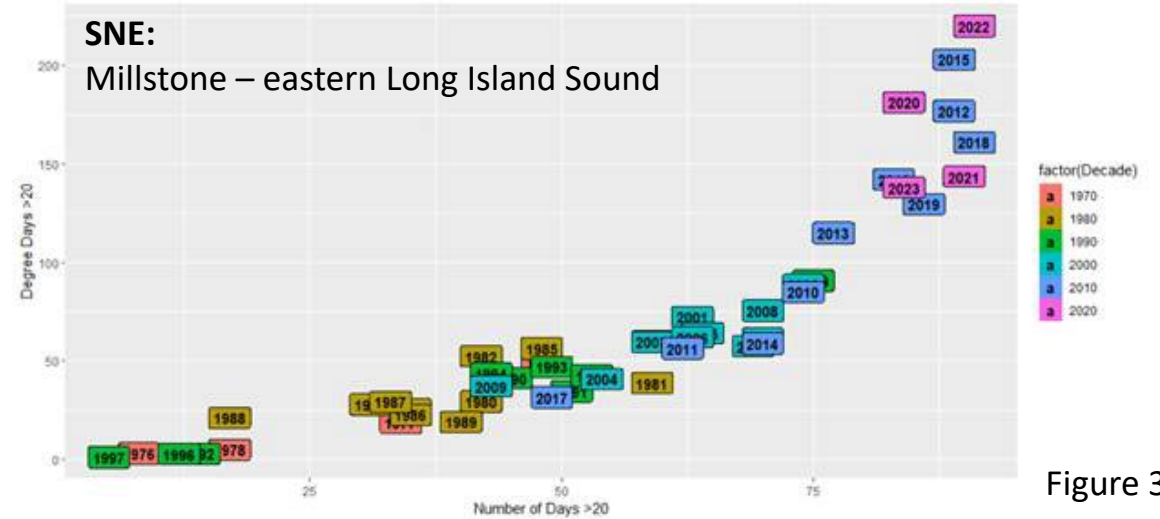
# Life history updates

- Entire section updated to incorporate recent literature
- Minor updates to size at 50% mature:
  - GOMGBK – 86.2 mm CL (just over  $3 \frac{3}{8}$ " )
  - SNE – 78.9 mm CL ( $\sim 3 \frac{1}{8}$ " )
- Growth (see Appendix 1)
  - Basecase
    - Updates to molt increments
    - No new data for probabilities, error in SNE probabilities corrected
  - New growth model used to test sensitivities around growth
    - Results indicate scale of abundance estimates is sensitive to growth, but trends are robust
- Natural mortality (M)
  - Change for SNE (see Sections 2.4 and 6.2.2)
    - Remaining stock has re-distributed into deeper waters, subjecting those in modeled size range to closer to 'baseline' M
  - Sensitivity runs to examine alternative M for both stocks indicate trends are robust to assumptions around M



# Environment and productivity

- Continued divergent trends in thermal conditions by stock
  - GOM (inshore) improving conditions conducive to growth and settlement
  - SNE (inshore) continued decreases in suitability
- Linkages between *Calanus finmarchicus* and YOY lobsters
  - Calanus* is a major food source for larval lobster
  - Lobster settlement correlated with *Calanus*
    - Declining density of *Calanus* since mid 2000s
    - Mismatch in the seasonal timing, so *Calanus* and larval lobsters don't overlap like they have previously
- Some conflict in GOMGBK where thermal conditions are good, but larval survival is an issue due to decreases in food resources



# Landings by state 1950 - 2023

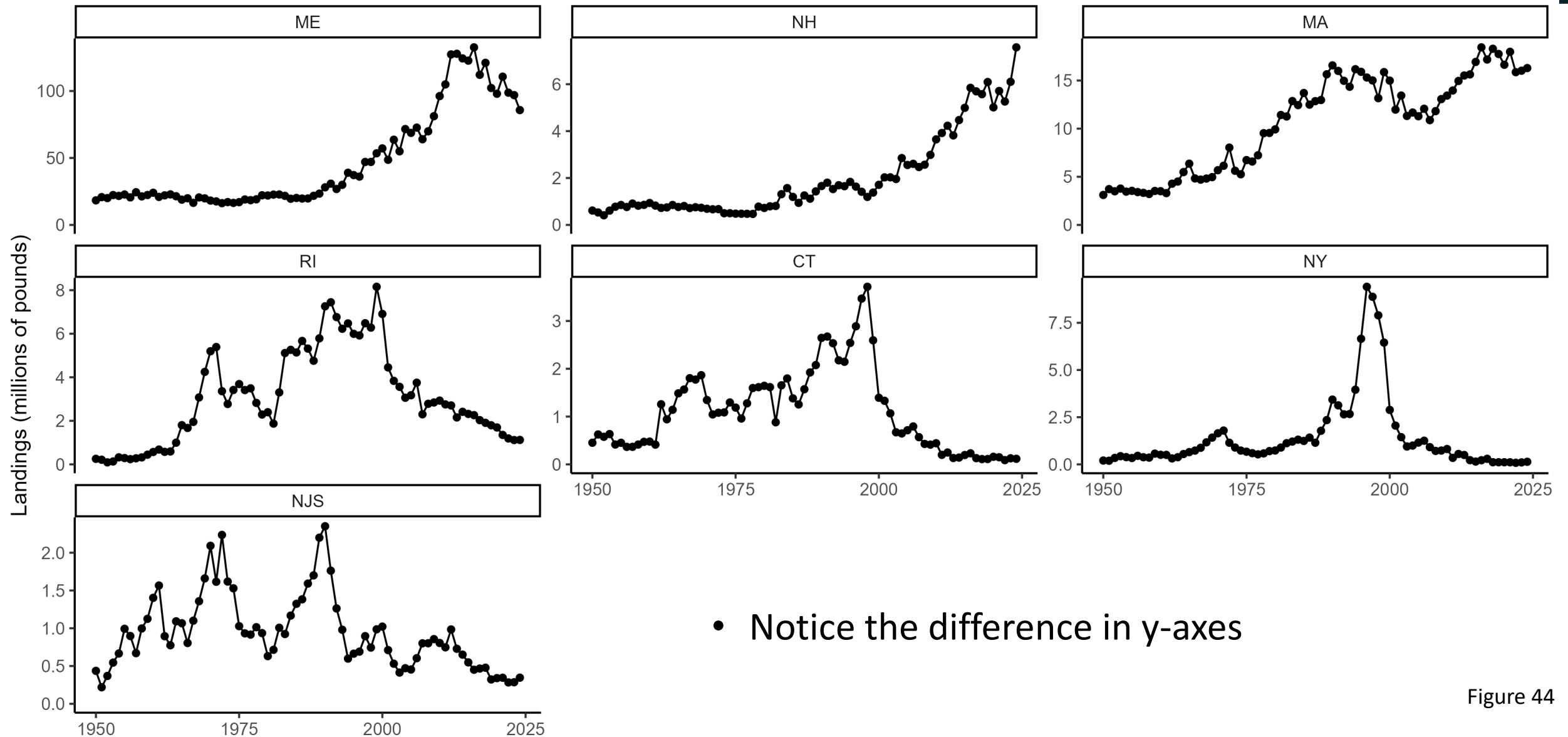
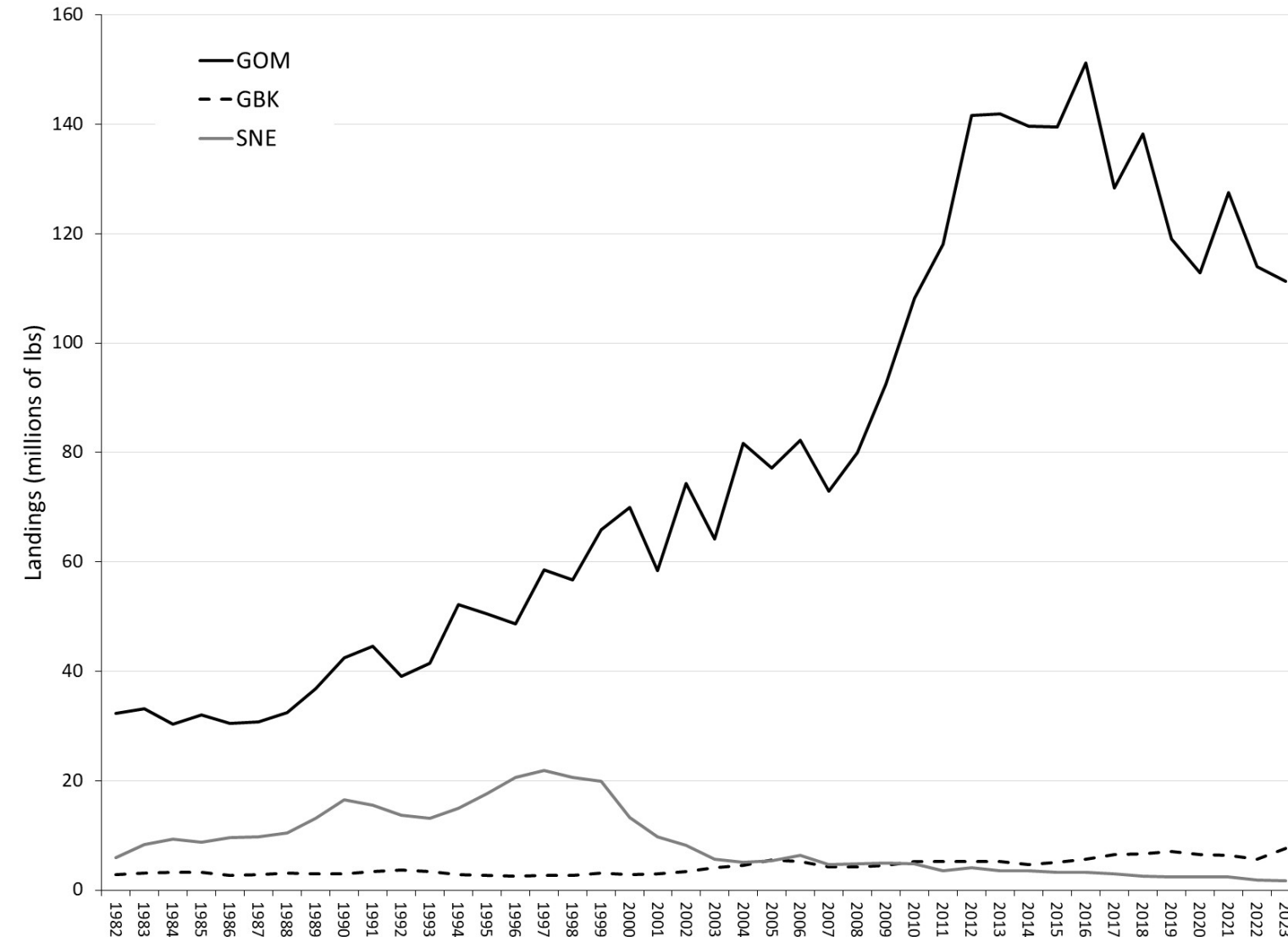


Figure 44

# Landings by sub-stock 1982 - 2023



- Most US landings come from GOM sub-stock
  - Inshore GOM areas dominate landings
  - SA 512 (midcoast ME) increasingly more dominant through the 2000s ( $\geq 50\%$  of GOM catch)
- Spatial shifts to east in GBK
  - GBK landings shifting more towards SA 562
  - Some declines in SA 521 (inshore, OCC)
  - Biggest increases in GBK landings: summer & fall
- Overall SNE at record low

# SNE landings: inshore-offshore

- Dramatic increase and decrease occurred in inshore SAs
- Inshore landings stable & low 2012 - current
- Offshore had been more stable from ~2002 – 2015
- Last decade has seen continual decline in offshore landings



Figure 55

# Socio-economics

- Active participation has declined in all sub-stocks
- Remaining permit holders are catching increasing share
  - Proportional increase in share is much lower in ME

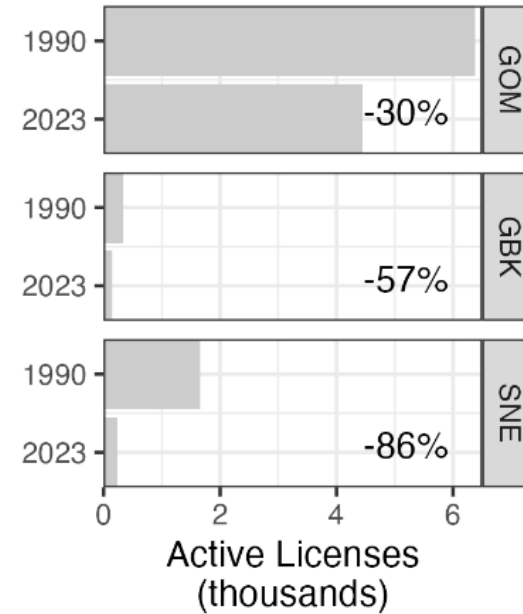
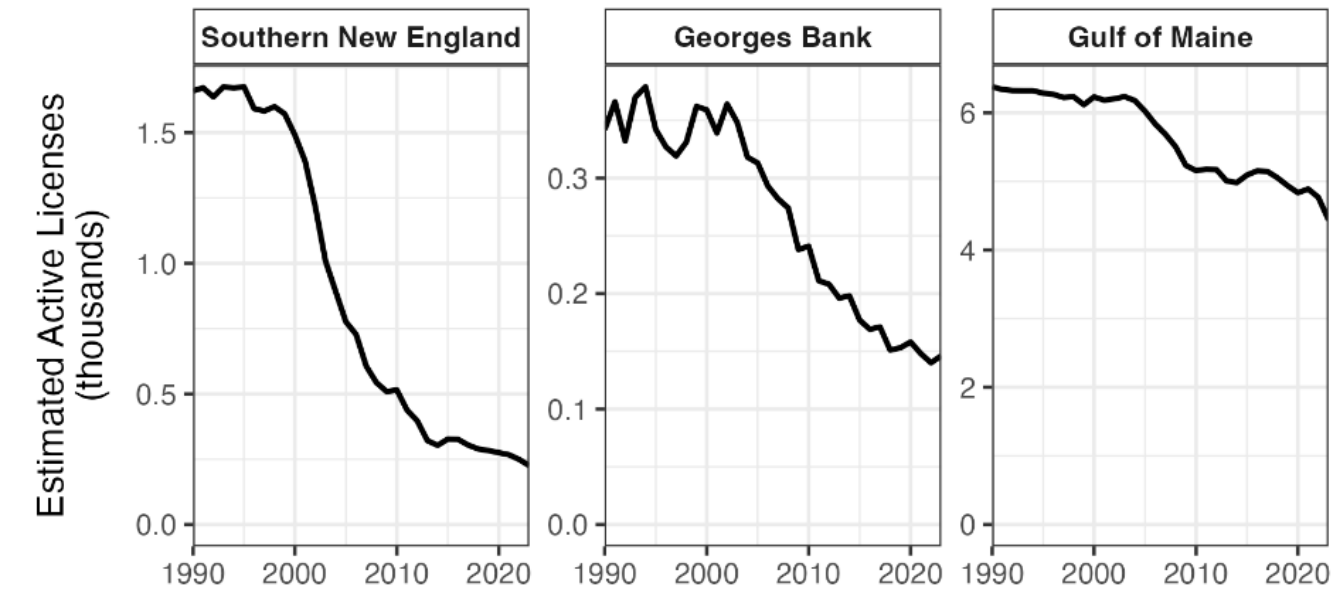


Figure 94

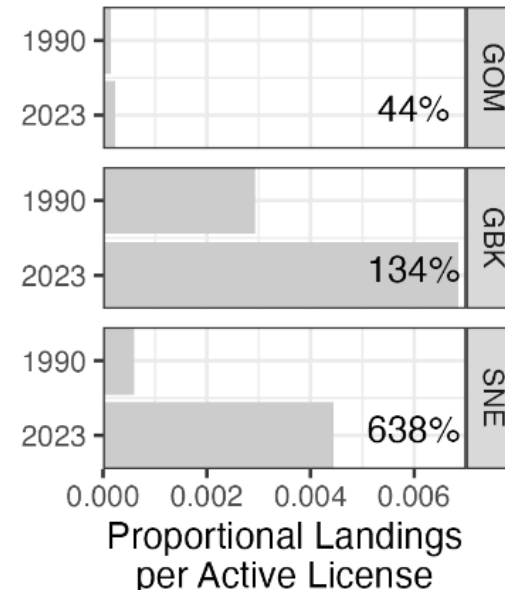
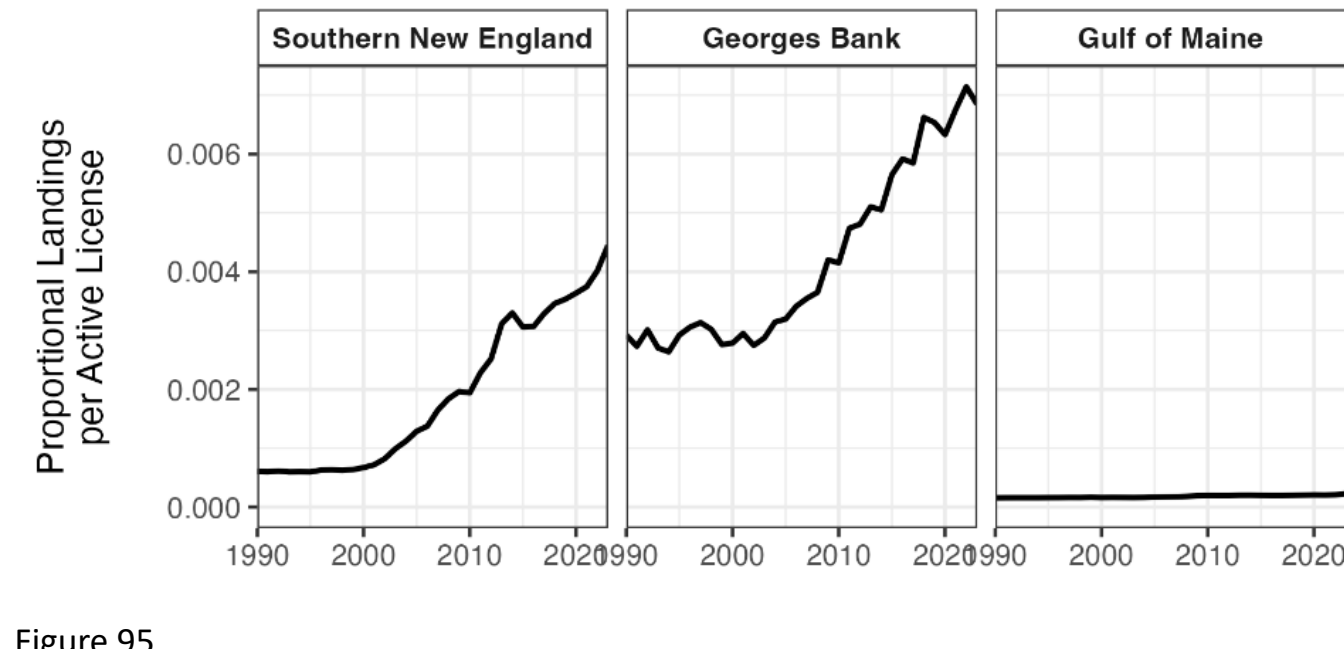


Figure 95

# Assessment model

## Inputs

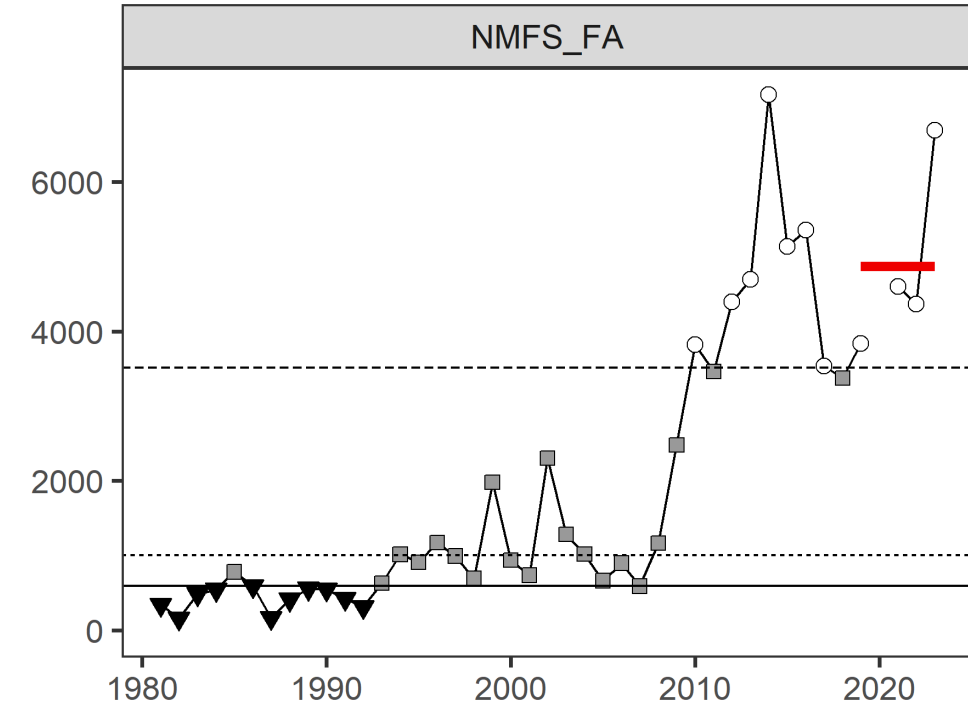
- Life history characteristics (growth, M, maturity)
- Commercial catch
  - Weight, length, sex ratio
- Survey data (bottom trawls & VTS)
  - Abundance trends
  - Length & sex
  - Temperature-based catchability covariates
- Commercial selectivity
  - Gear retention information
  - Discards from biosampling (agencies, CFRF)
- Recruitment covariates
- Terminal year is 2023 (status determination)
  - Preliminary 2024 data to "anchor" terminal year estimates

## Outputs

- Diagnostics
  - Goodness of fit
  - Jitter analyses (new)
- Annual recruitment to model 53+ size bin
- Abundance and spawning stock biomass (SSB)
- Population size composition
- Reference abundance (all lobsters 78+ mm CL)
- Effective exploitation

# Model-free indicators

- “Common sense” indicators
- Corroborate model results and provide additional info on stock health
- Similar to a ‘traffic light’ approach
- Focus on trends, provides a relative comparison of stock status
- Established use of positive, neutral, negative based on quartiles
  - Time series through 2018 is used to calculate the quartiles (25<sup>th</sup> and 75<sup>th</sup> percentiles)
- Evaluate by sub-stock
- New, graphic presentation
  - Similar to presentation of data in the Annual Data Updates



status

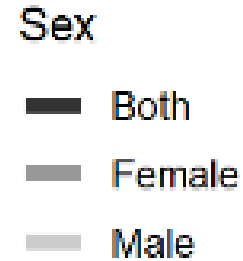
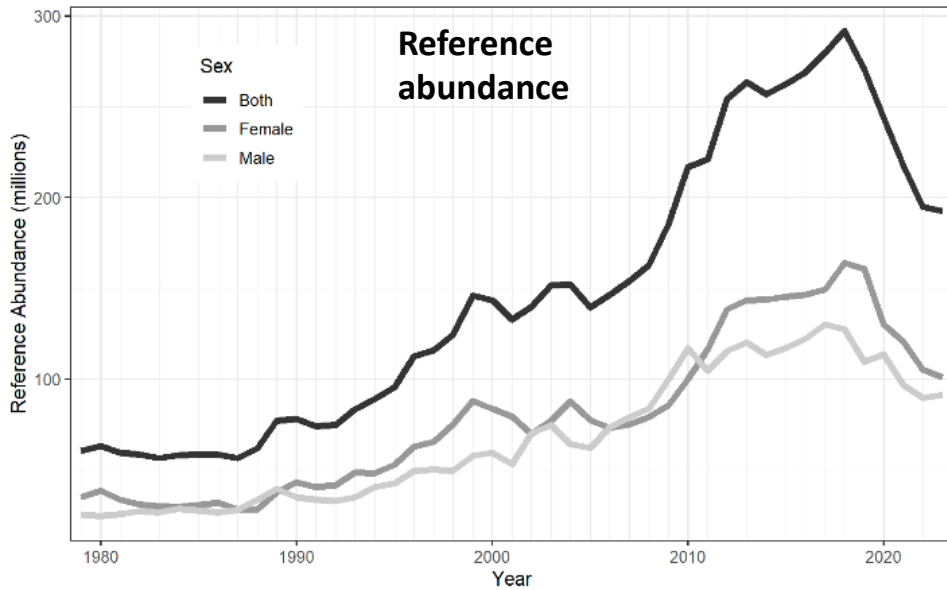
- ▼ NEGATIVE
- NEUTRAL
- POSITIVE



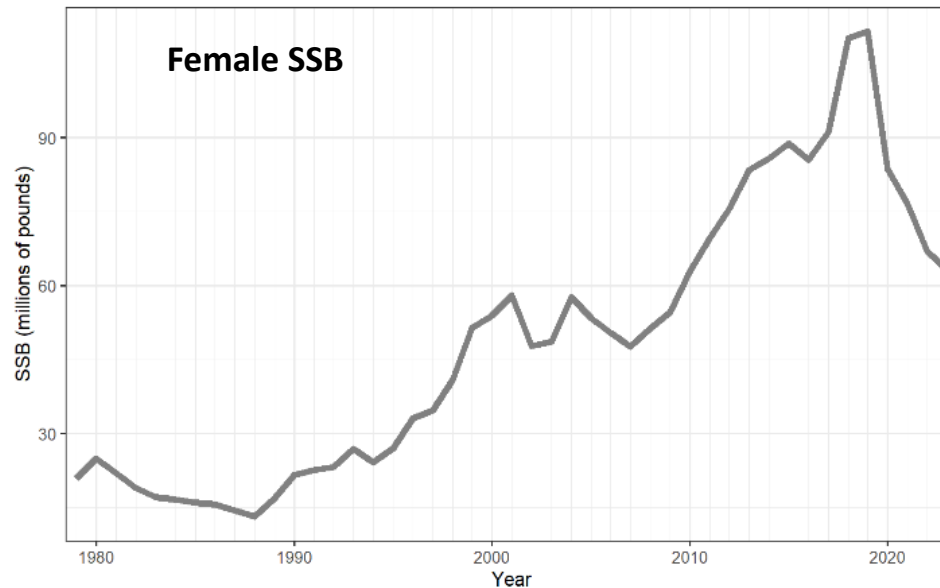
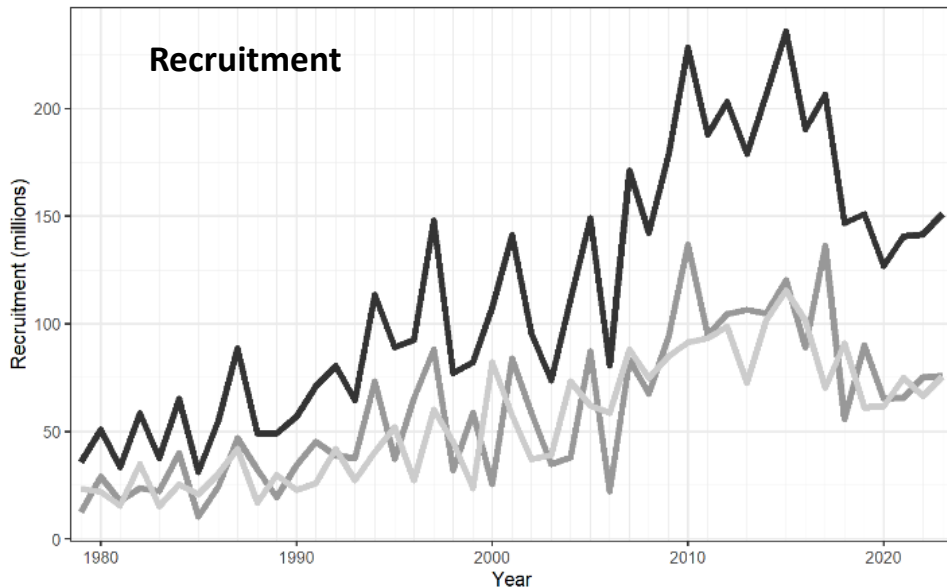
**Atlantic States  
Marine Fisheries**  
COMMISSION

# GOM GBK Results

# GOMGBK model results

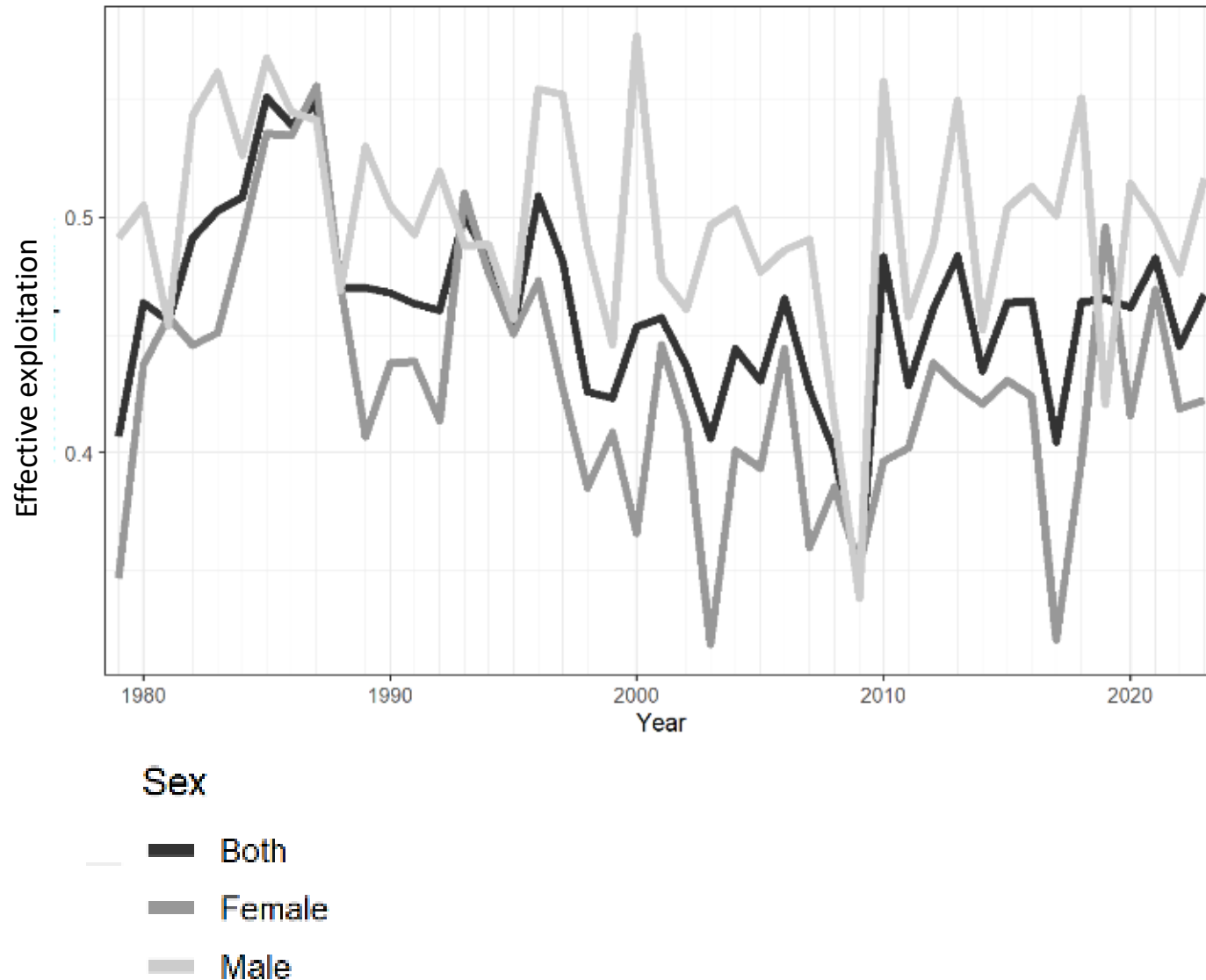


- Increasing abundance since ~1990 to peak in 2018
- Declined 34% since peak to levels similar to ~2010
- SSB followed similar trajectory



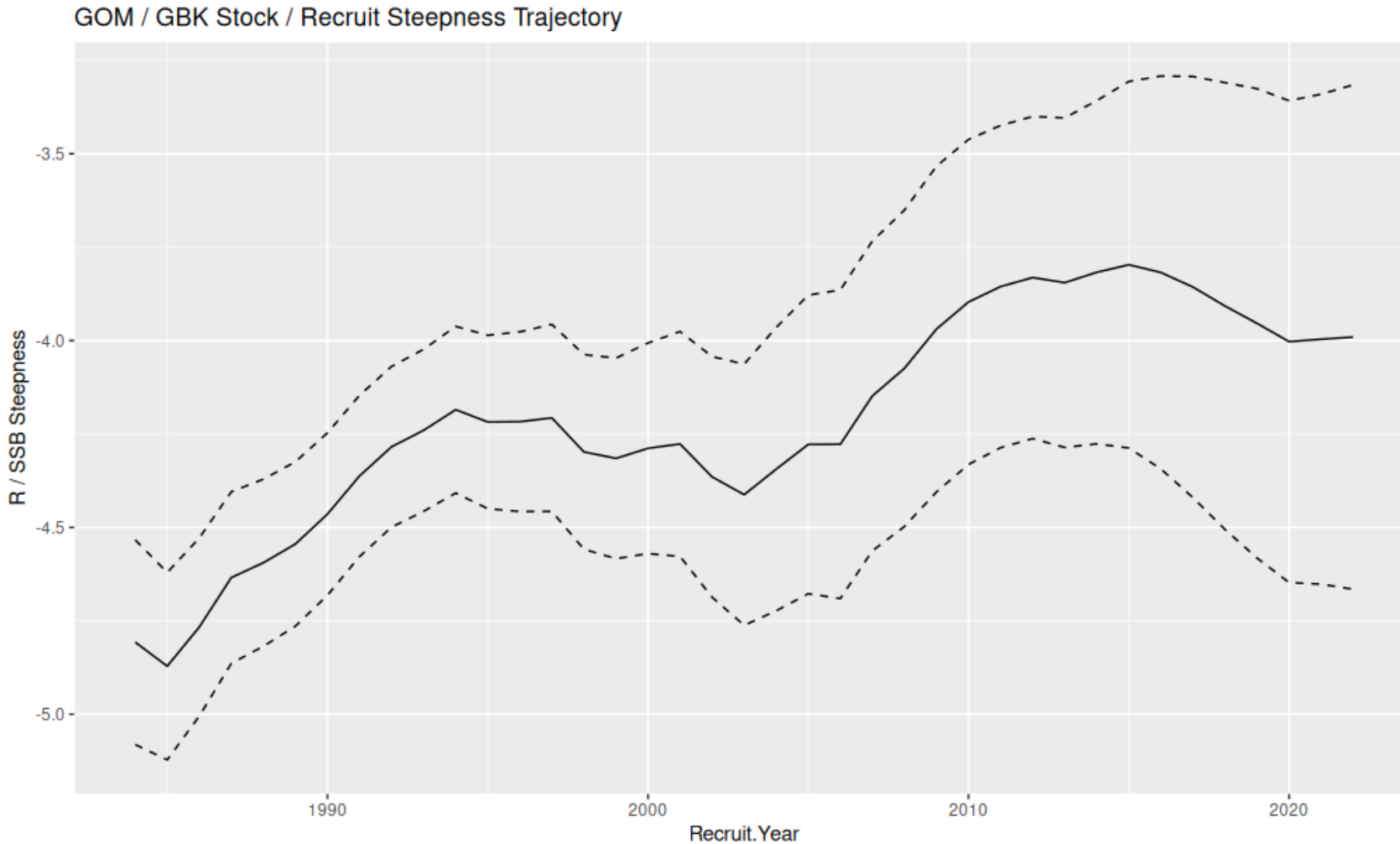
- Recruits also similar
  - More interannual variation
  - Peak around 2016

# GOMGBK model results



- Effective exploitation is Catch/Reference abundance
- Effective exploitation generally higher for males than females
  - Due to extra protections for reproductive females
- Exploitation declined after highs in the late 1980s following increased minimum sizes
- Exploitation has been relatively stable around interannual variation since ~2000

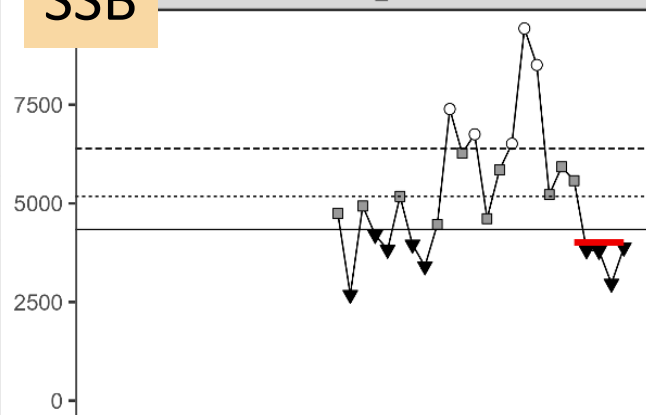
# GOMGBK – estimated productivity



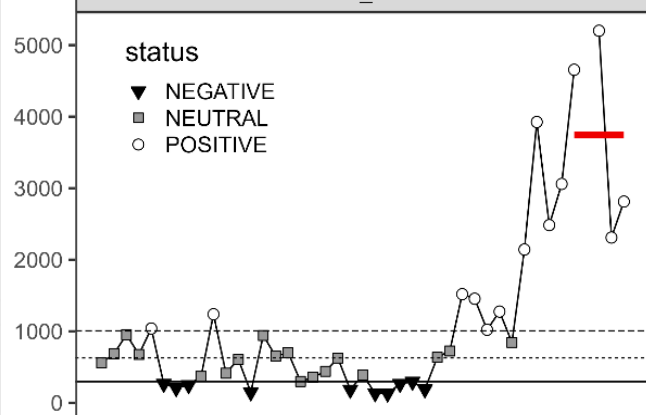
- Productivity trend estimated from model outputs
  - Recruits here are recruits to the model (53+ mm)
- Produced after the model to infer productivity trend through time
- Indicates overall increases since the 1980s
  - Higher level of recruits per SSB than previously
- Some recent declines from peak productivity, although note the high uncertainty
  - Peak around recruit yr 2015
    - Resulting from SSB in ~2010
- Uncertain future trajectory

SSB

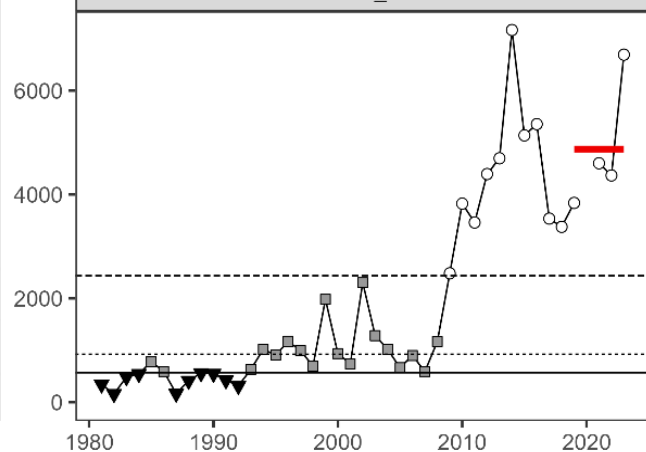
MENH\_FA



MA\_FA

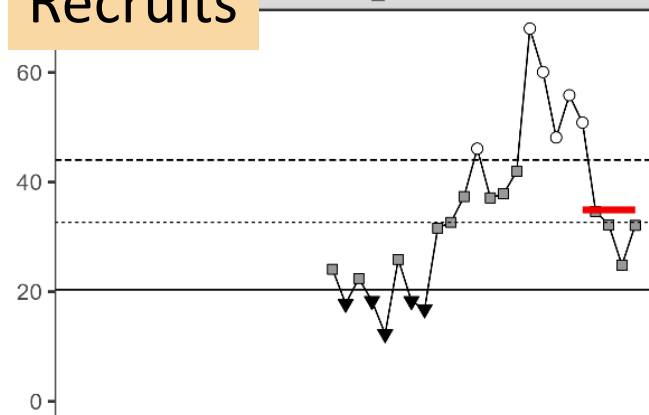


NMFS\_FA

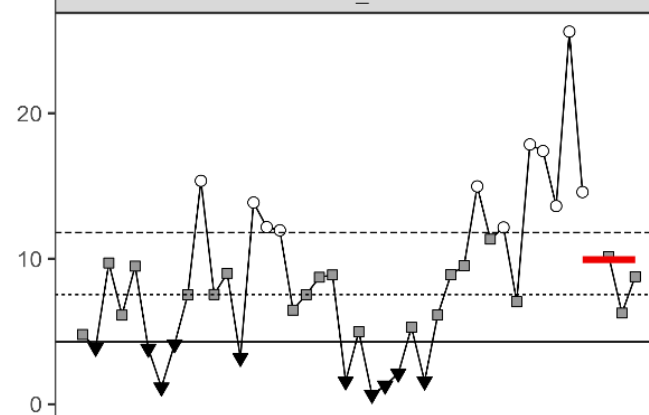


Recruits

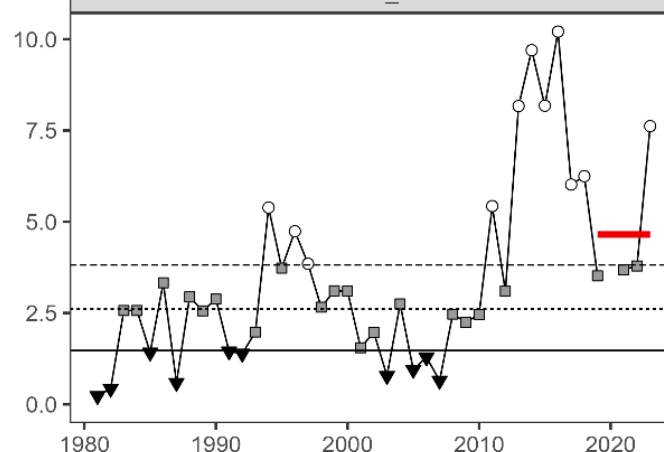
MENH\_FA



MA\_FA



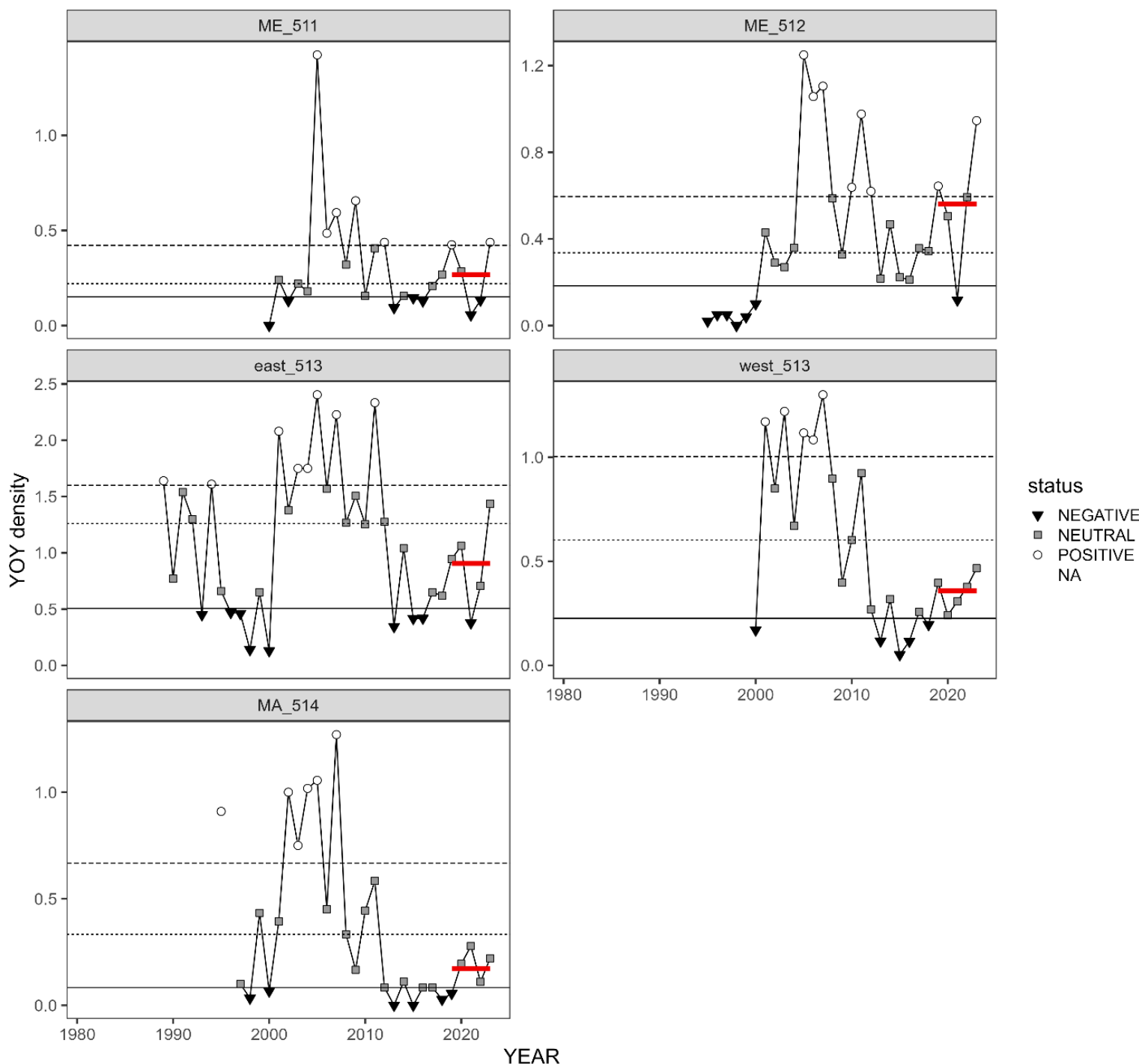
NMFS\_FA



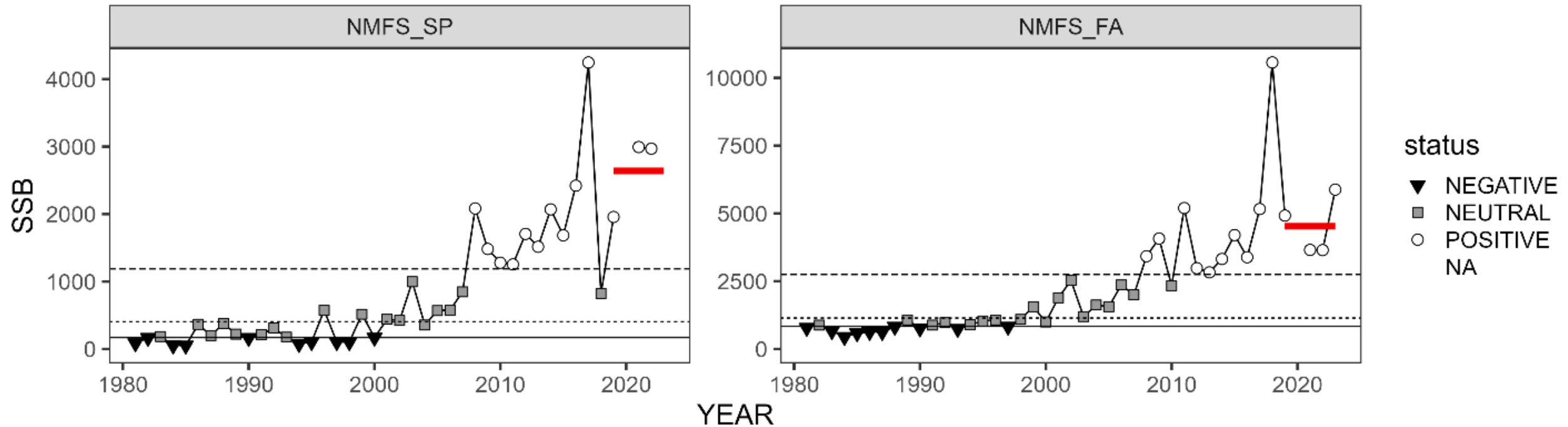
# GOM: model-free SSB and Recruits

- GOM abundance indicators generally show decline from peaks
- Most clearly in ME/NH survey
  - Status changed from positive to neutral from last assessment to current
- Refer to Section 5 figures for all indicators graphs*

# GOM: model-free YOY

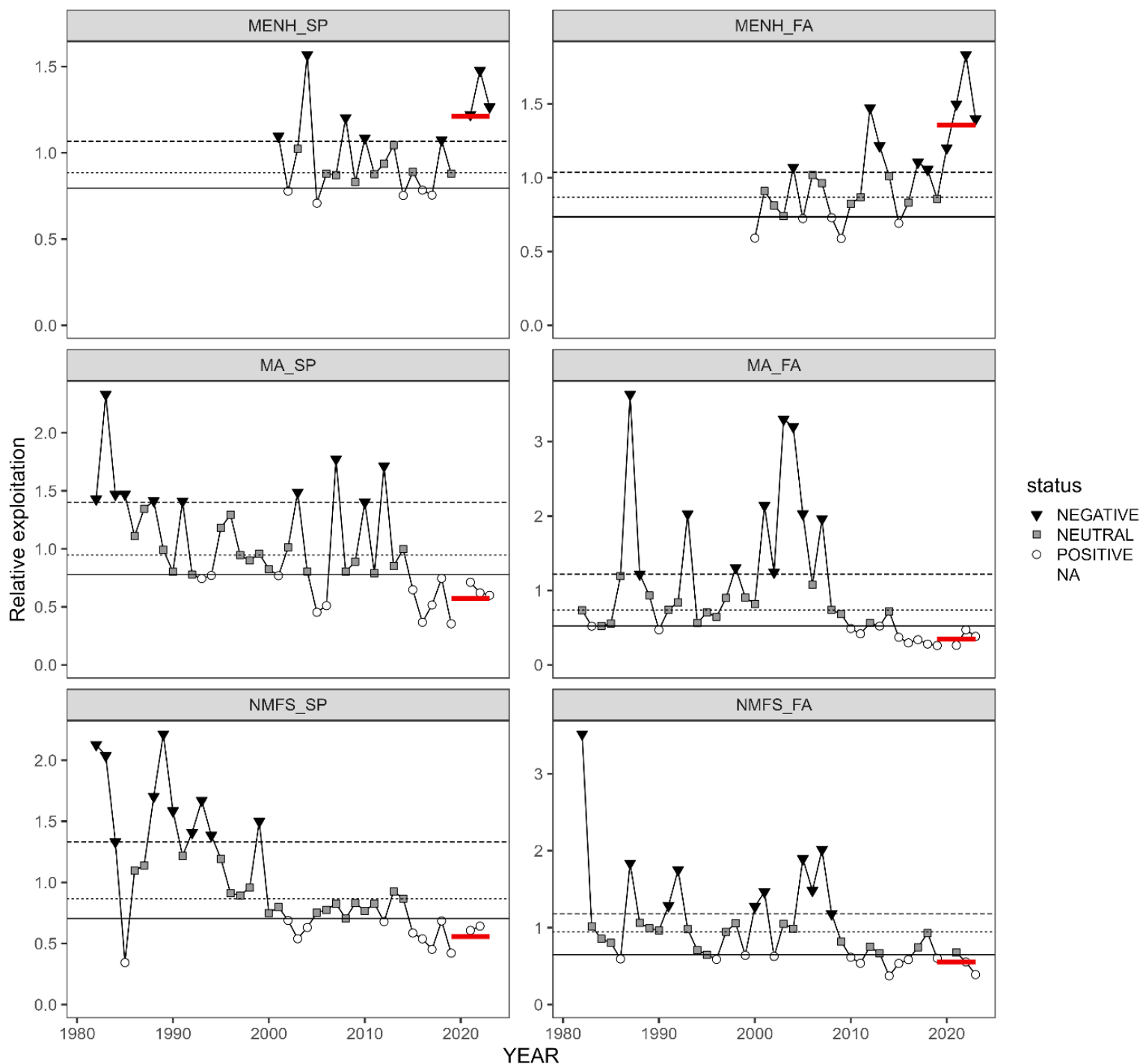


- Lows in the late 1990s increased to a high period during the 2000s
- Period of lows in the mid to late 2010s
- Improved in most recent years
- Terminal 5-year mean status is neutral for all surveys
  - Improvement from 2020 assessment (negative status in 513 West and 514)



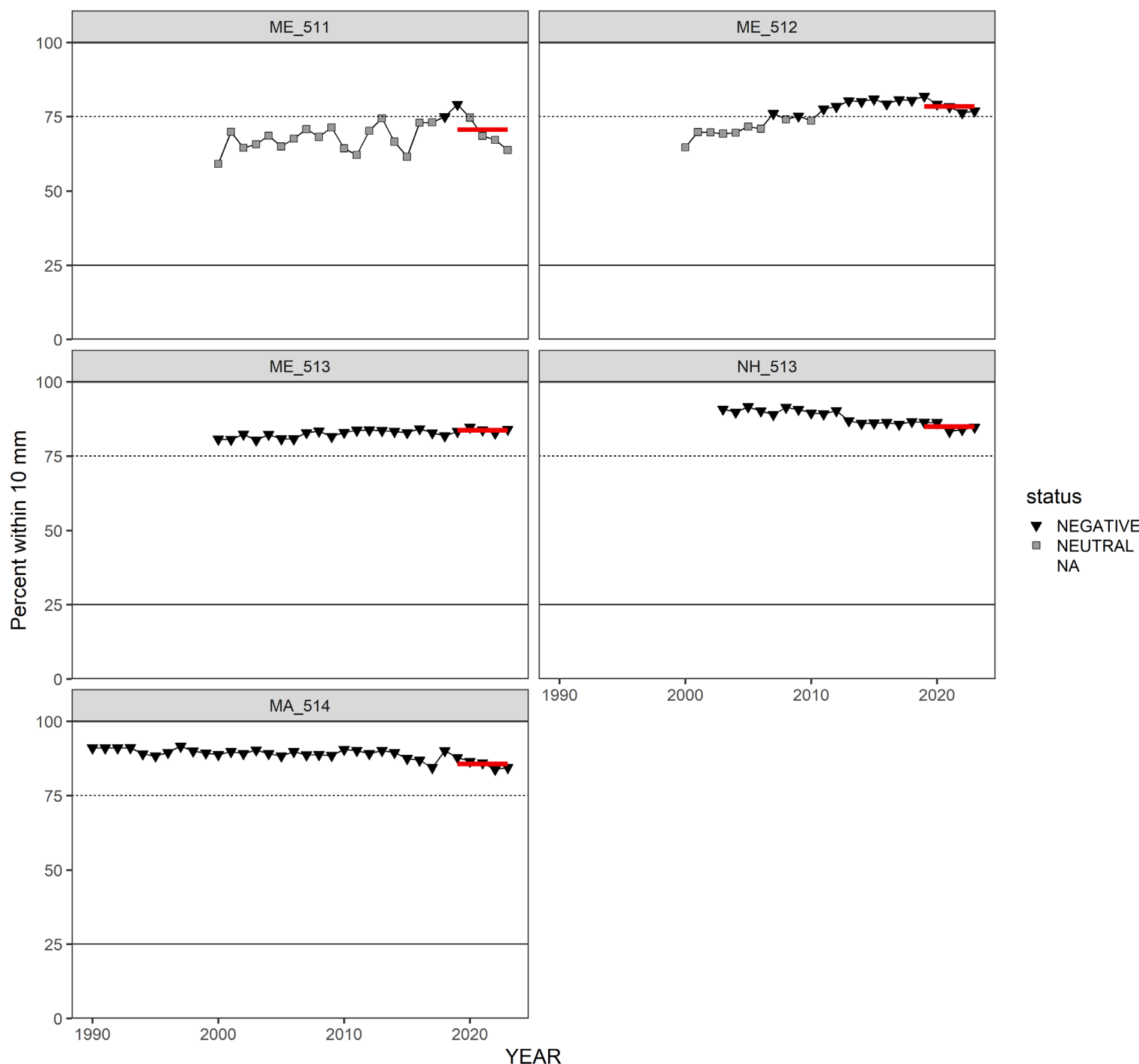
- GBK abundance indicators are mostly positive

# GOM: model-free relative exploitation



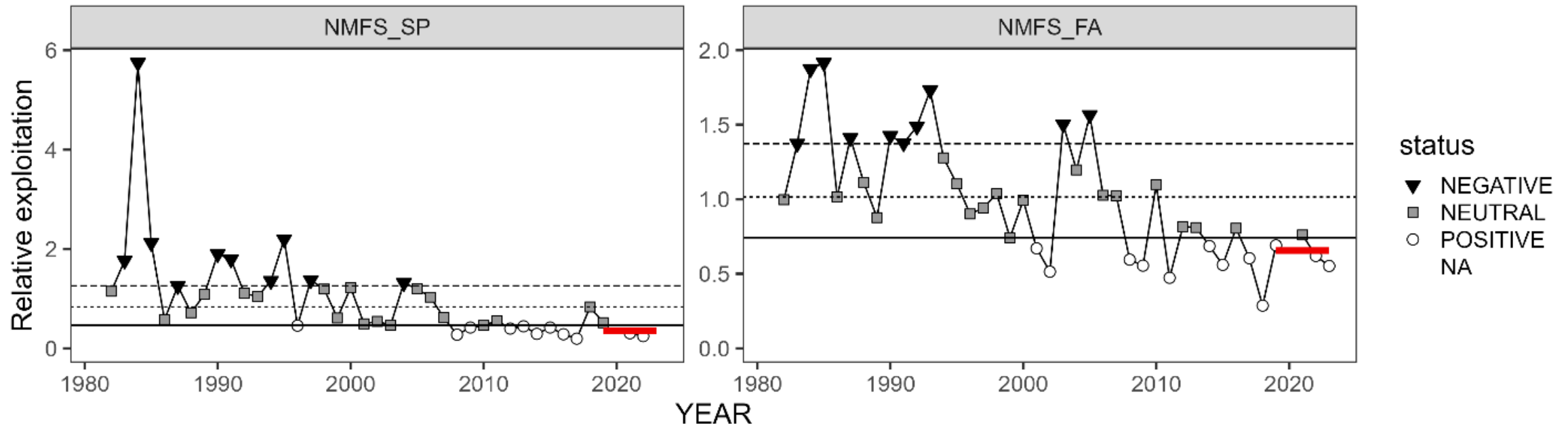
- MA and NEFSC relative exploitation remain relatively low, positive status
- ME/NH relative exploitation has increased in recent years – negative status

# GOM: model-free recruit dependency



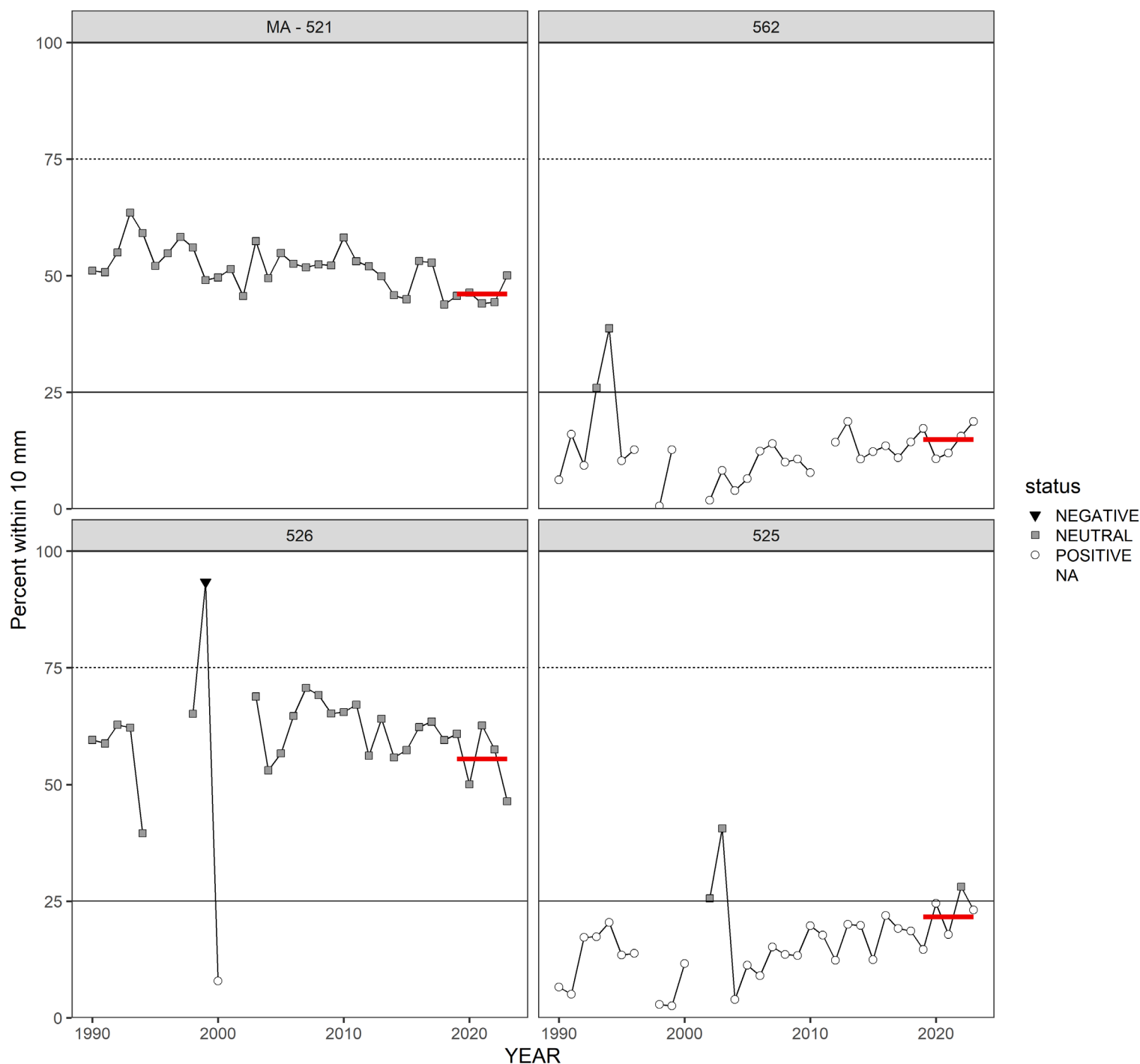
- Percentage of the marketable catch within 10 mm (approximately a molt) of the gauge
- Consistent & high dependence on new recruits in southern GOM
  - ME 513, NH 513, and MA 514
  - Some declines in NH and MA in recent years
- ME 512 has increased over time
- ME 511 is the least recruit-dependent area in GOM
- Terminal 5-year mean status is negative for all areas except ME 511 (neutral)

# GBK: model-free relative exploitation



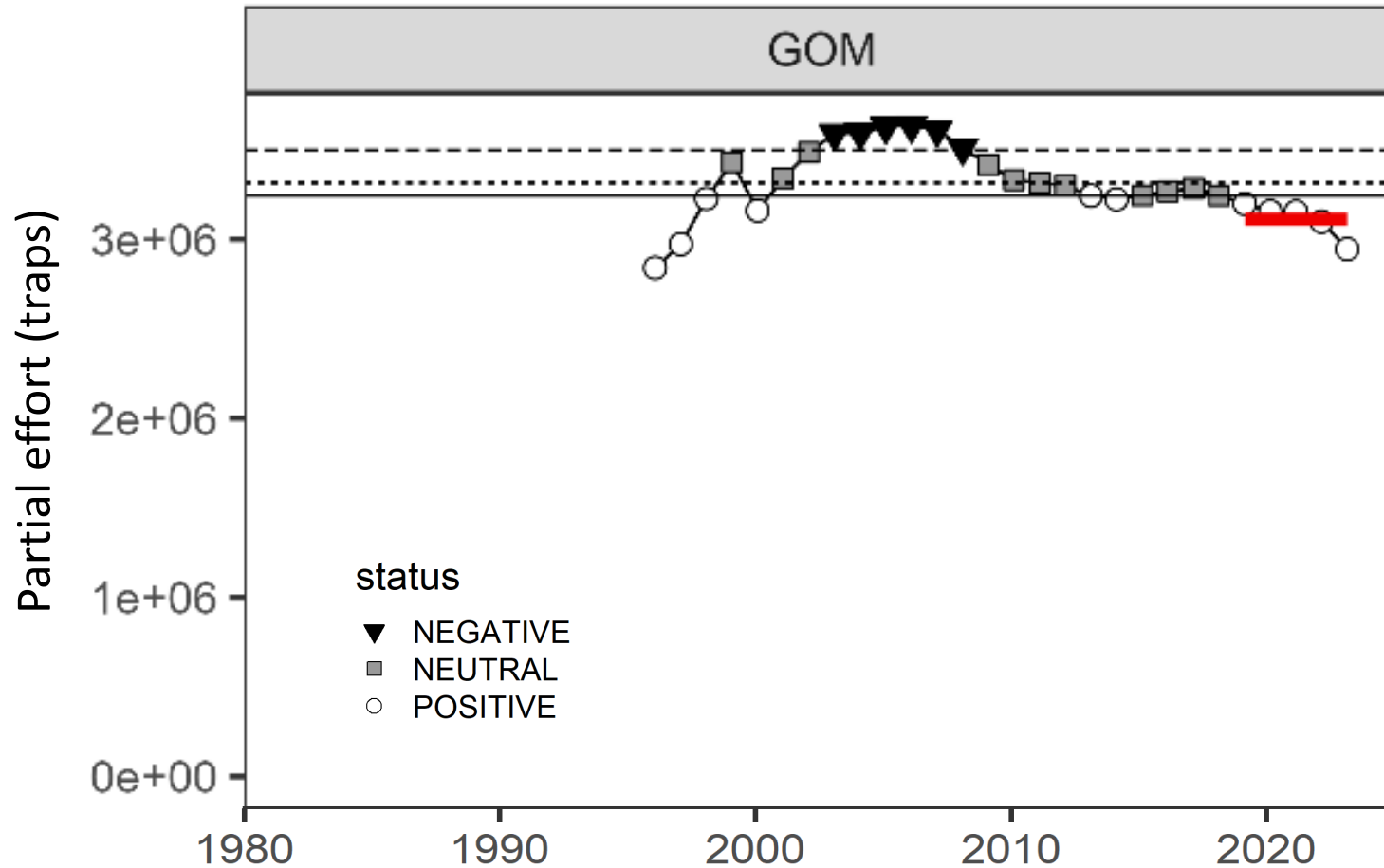
- Generally declining over time in both seasons
- Terminal 5-year mean status is positive

# GBK: model-free - Recruit dependency



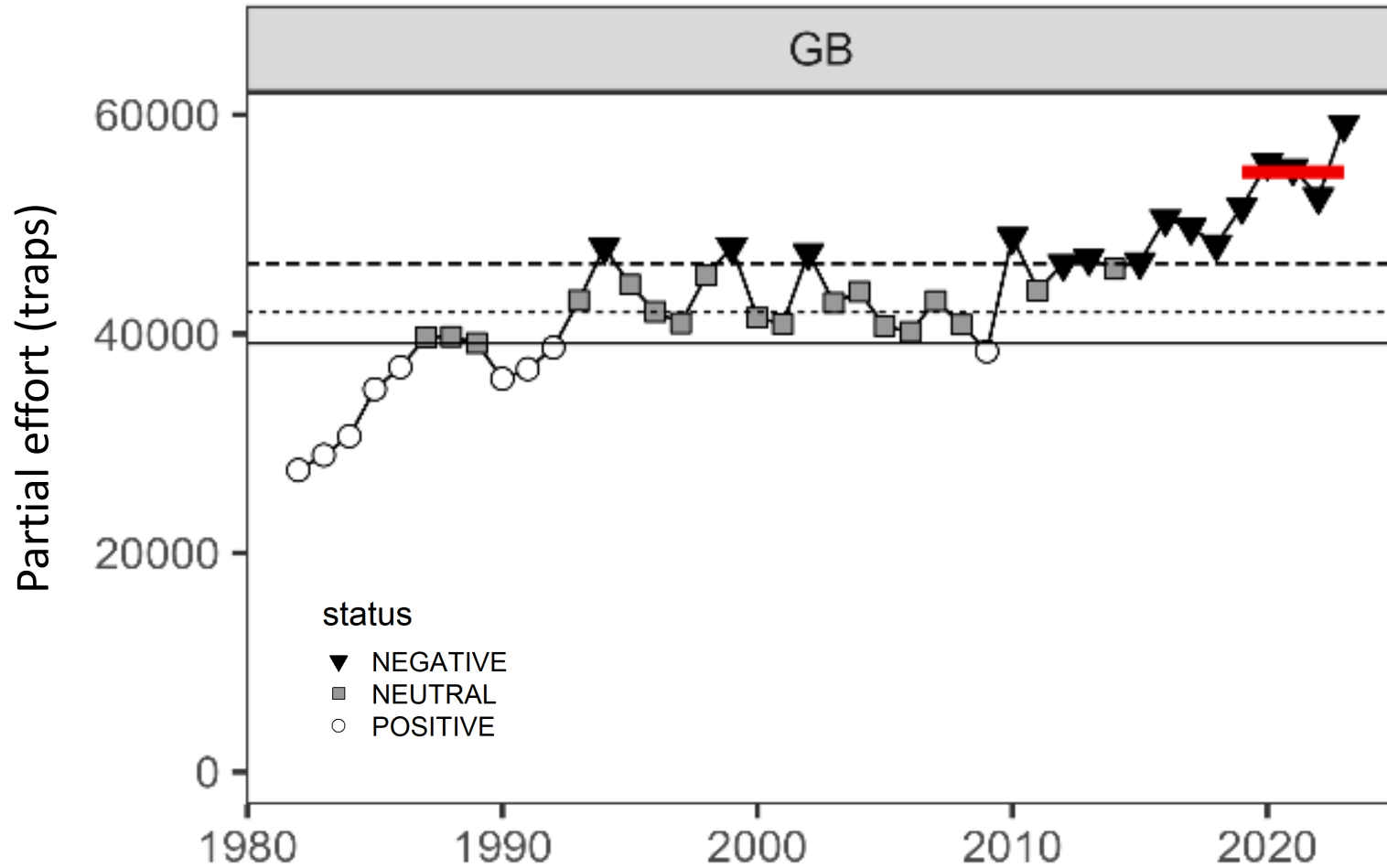
- Much lower than GOM
  - Indicative of broader size structure
- Terminal 5-year mean status neutral in the western SAs
  - More than 50% in SA 526
    - southwestern-most SA, bordering SNE stock
- Status is positive in the two eastern SAs

# GOM: model-free Partial effort - traps



- Data from just ME and MA
- Note that high values are negative
- Max traps peaked mid-2000s
- Declines since
- Terminal 5-year mean status is positive

# GBK: model-free Partial effort - traps

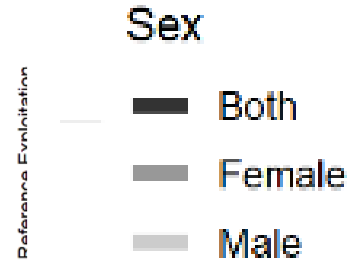
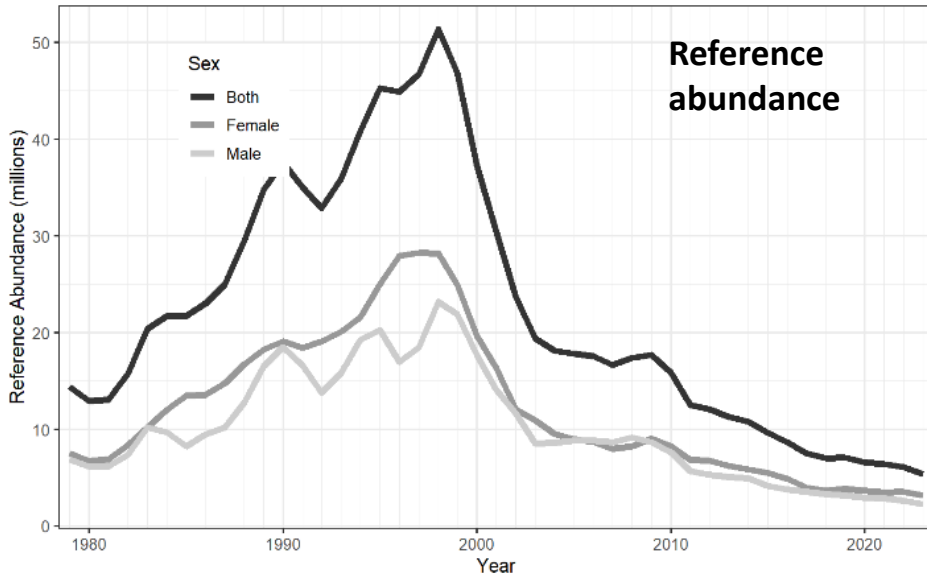


- Just MA data
  - NH & RI have active vessels, but shorter time series and some confidentiality issues
- Max traps fished has increased in recent years after relative stability mid 1990s - 2010
- Terminal 5-year mean status is negative

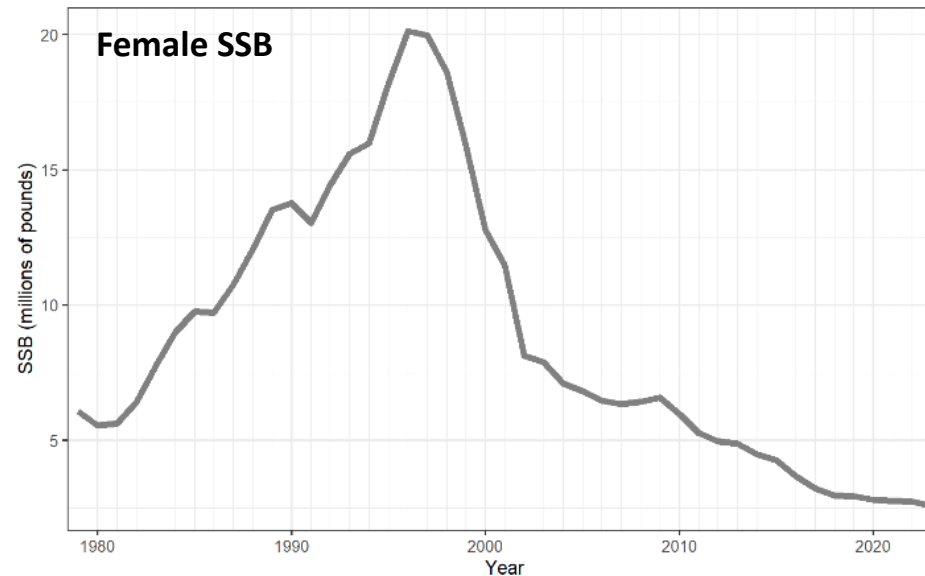
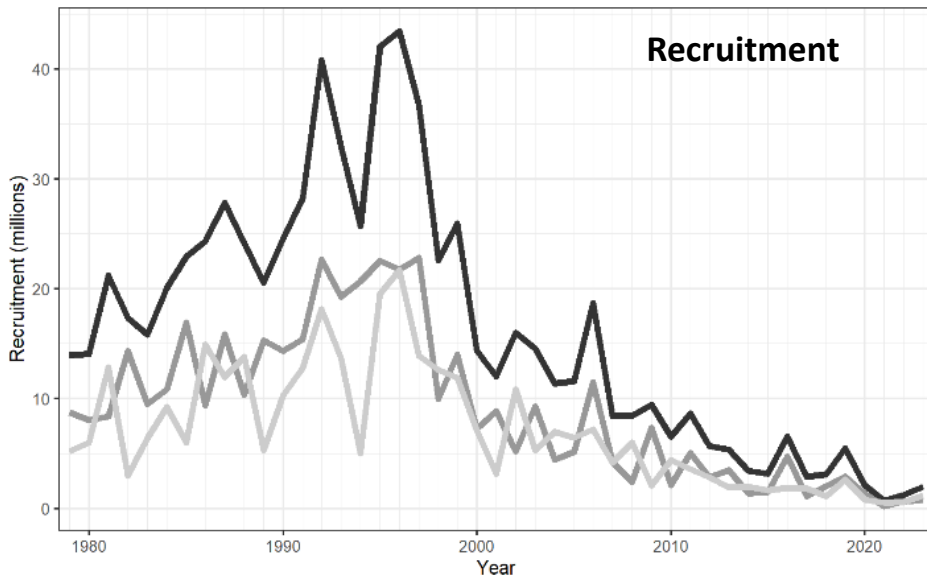


# SNE Results

# SNE model results

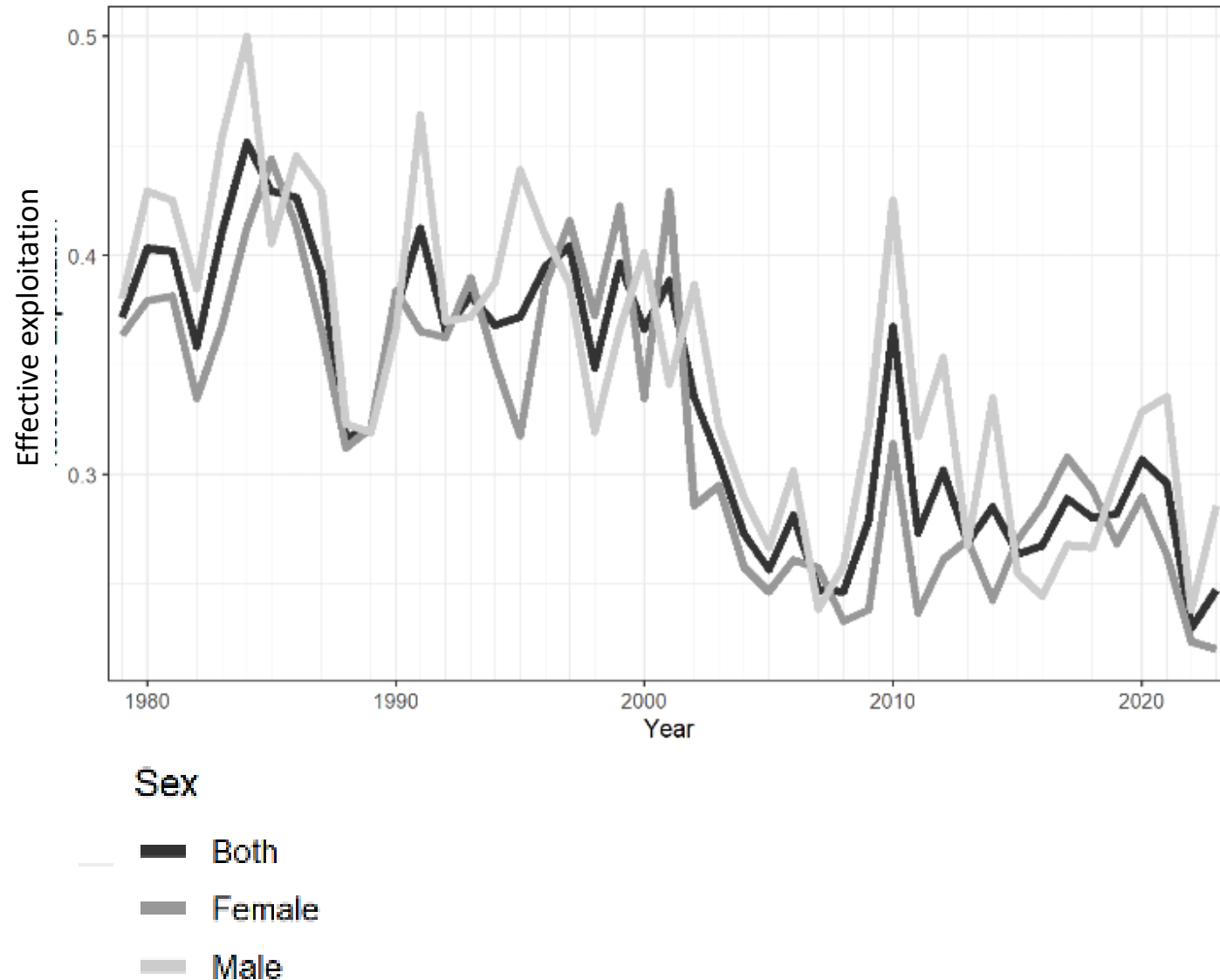


- Increasing abundance from early 1980s to peak in 1998
- Declined dramatically for several years, slower but steady decline since early 2000s
- Currently reference abundance is at time series low



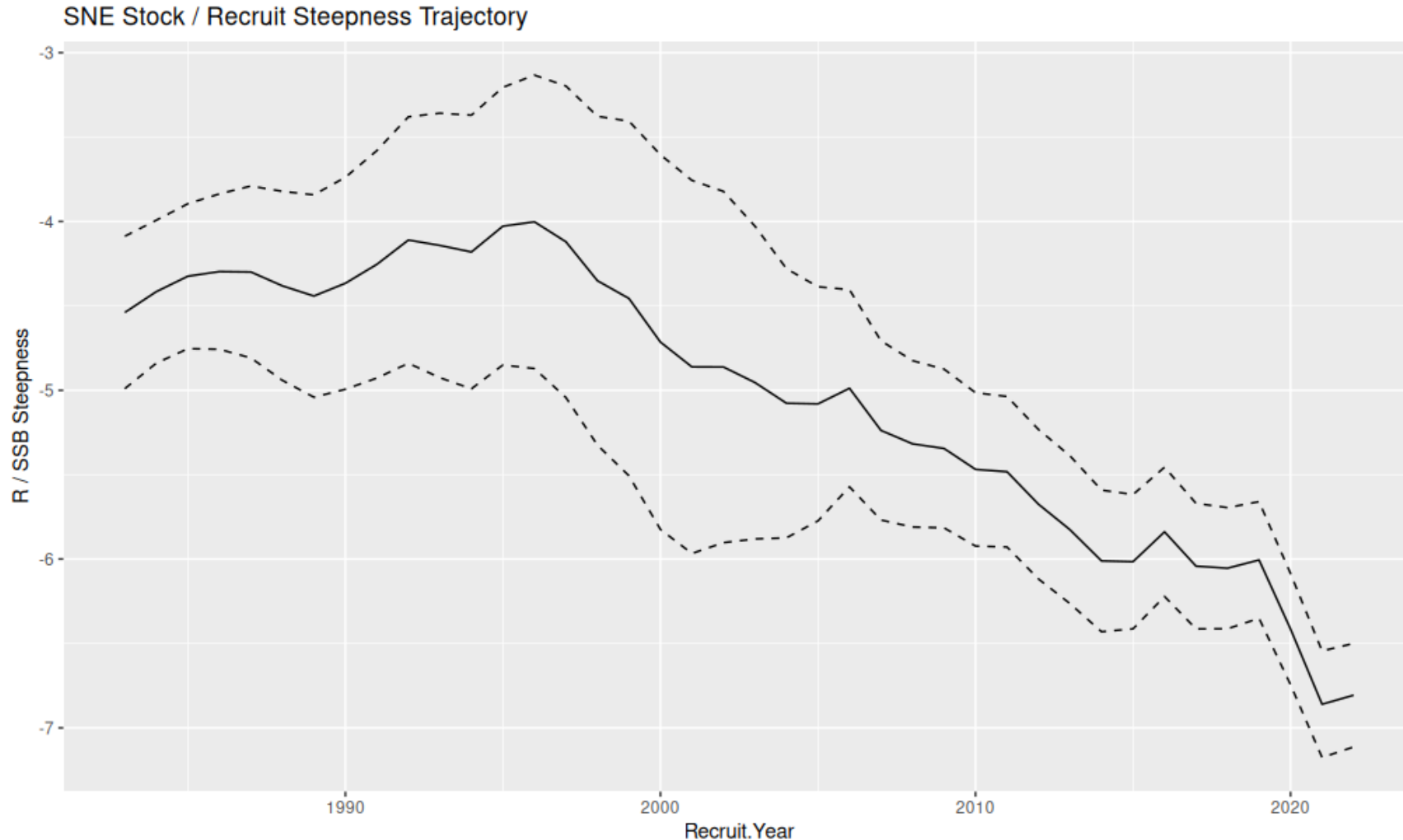
- SSB followed similar trajectory
- Recruits also similar
  - More interannual variation
  - Peak around 1995-1996

# SNE model results



- Two periods of stable exploitation
  - Higher through early 2000
  - Lower since mid-2000s
- Transition coincides with increased minimum legal size
  - Higher proportion of reference abundance protected after increased minimum legal size
  - Fishery tends to remove similar proportion of reference abundance annually under the same regulations

# SNE – estimated productivity

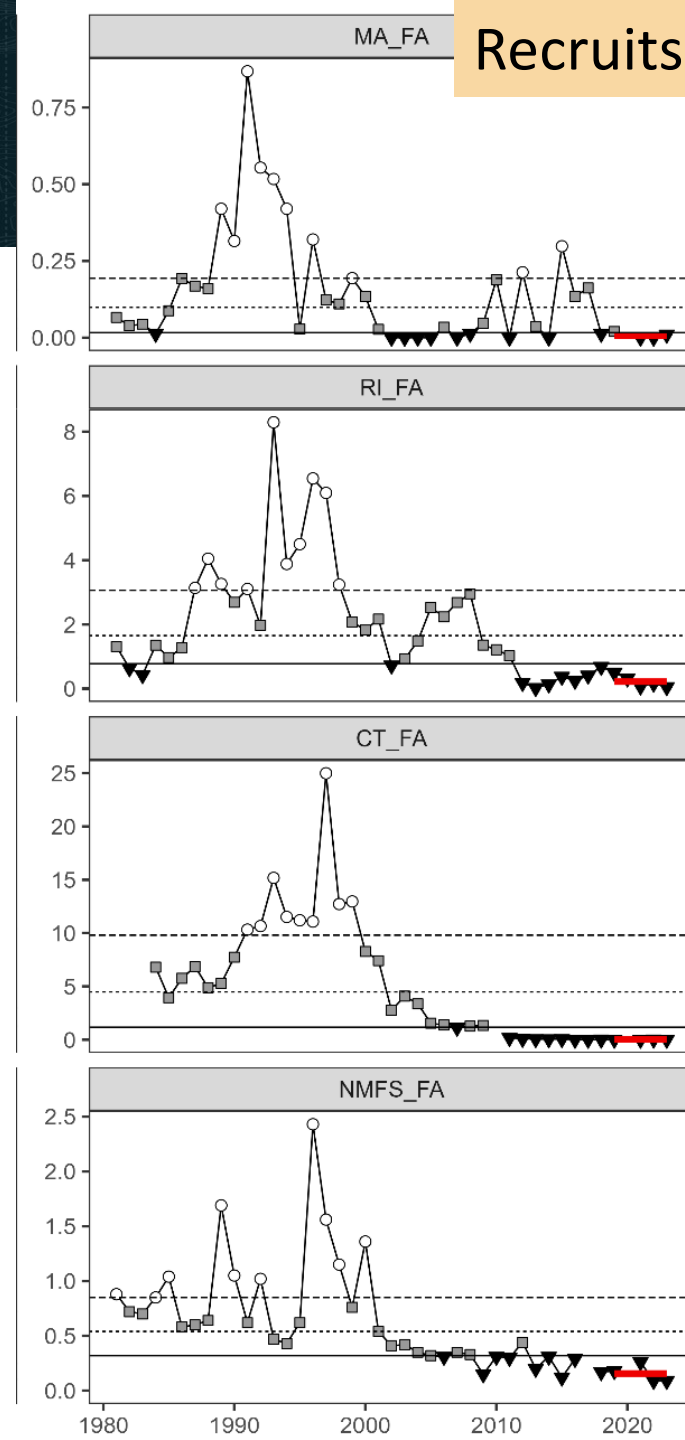
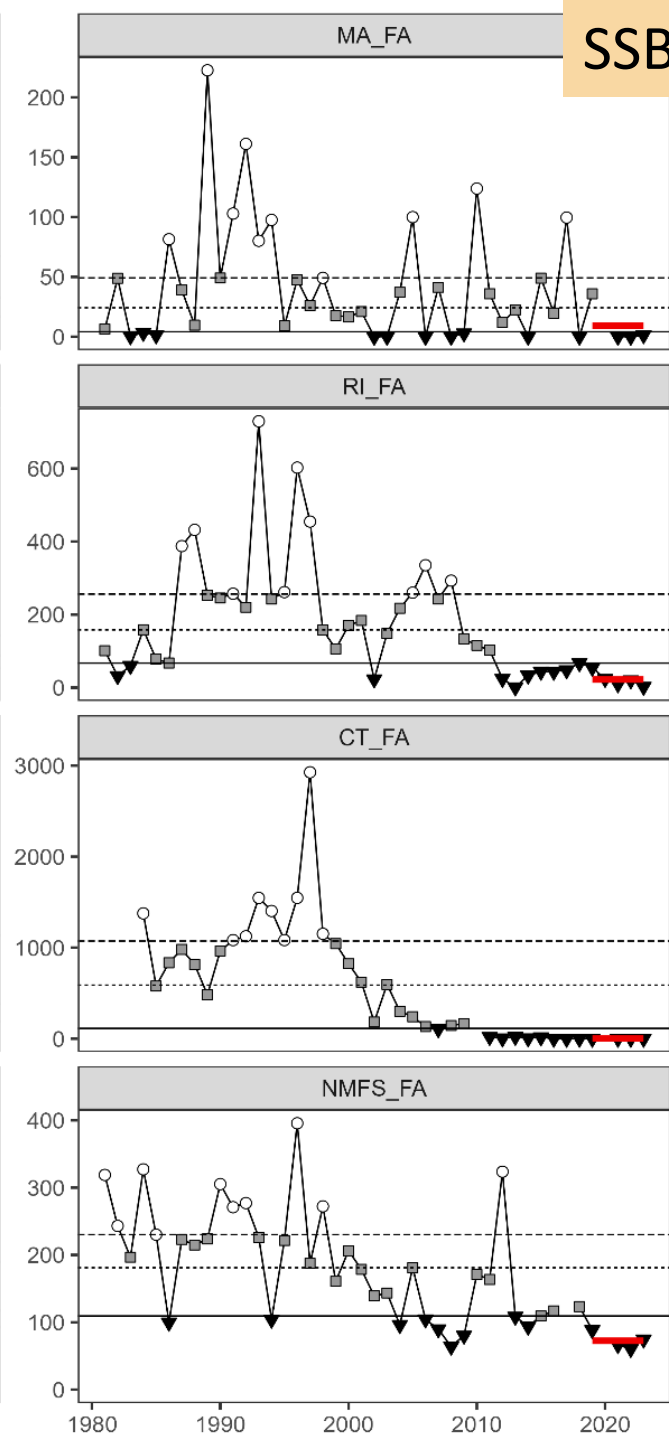


- Peak stock productivity ~1996
  - Produced by SSB in ~1992
- Declines since to all-time low productivity
  - Another steep productivity decline in the most recent ~5 years

# SNE: model-free fall SSB and recruits

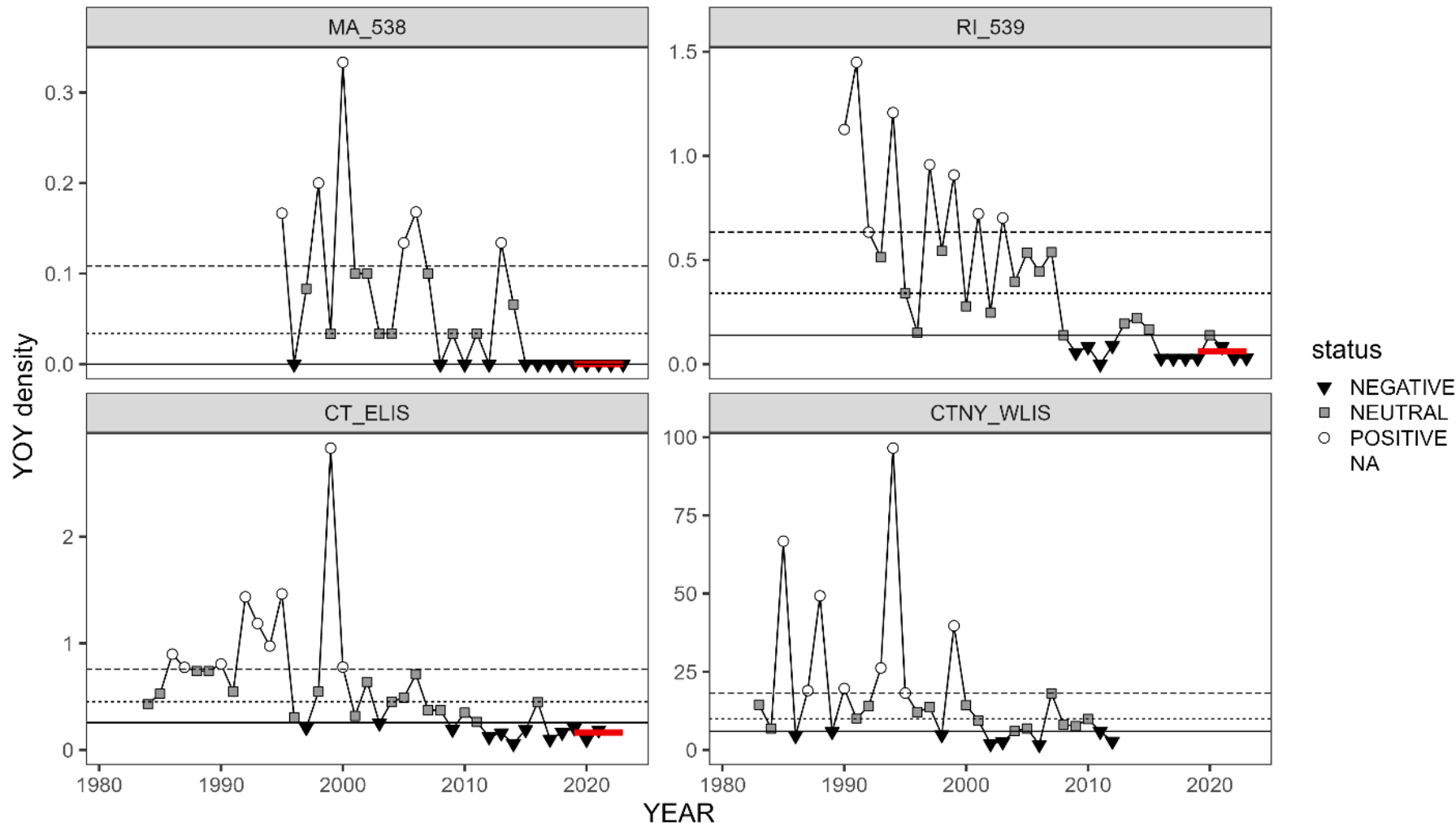
SSB

Recruits



- Nearly all SNE abundance indicators were negative
- Most inshore surveys have been at or below 25<sup>th</sup> percentile for past 10+ years
- All surveys except MA fall SSB have negative terminal 5-year mean status
  - MA fall is neutral but in 2 of last 3 years had 0 SSB

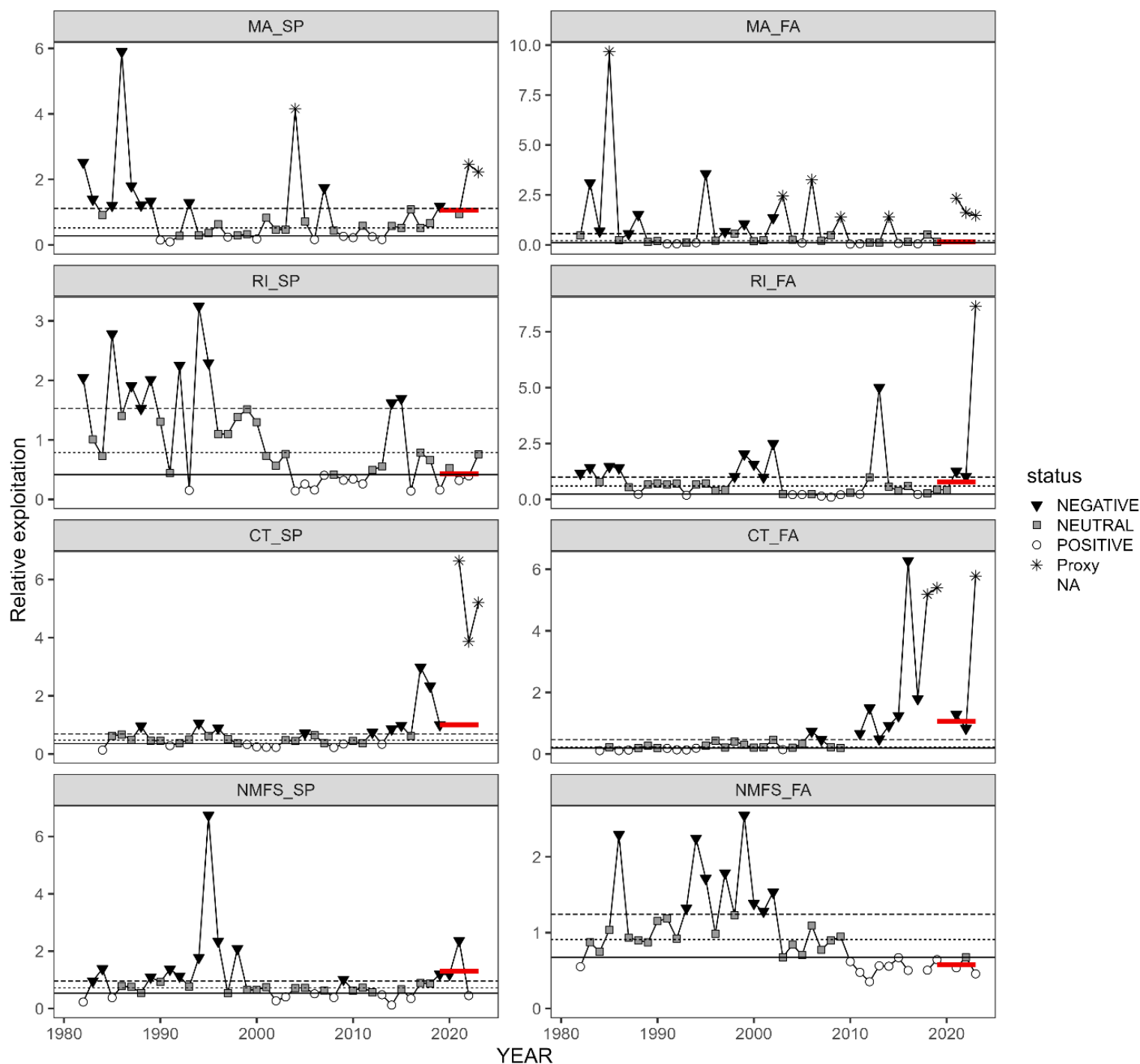
# SNE: model-free YOY



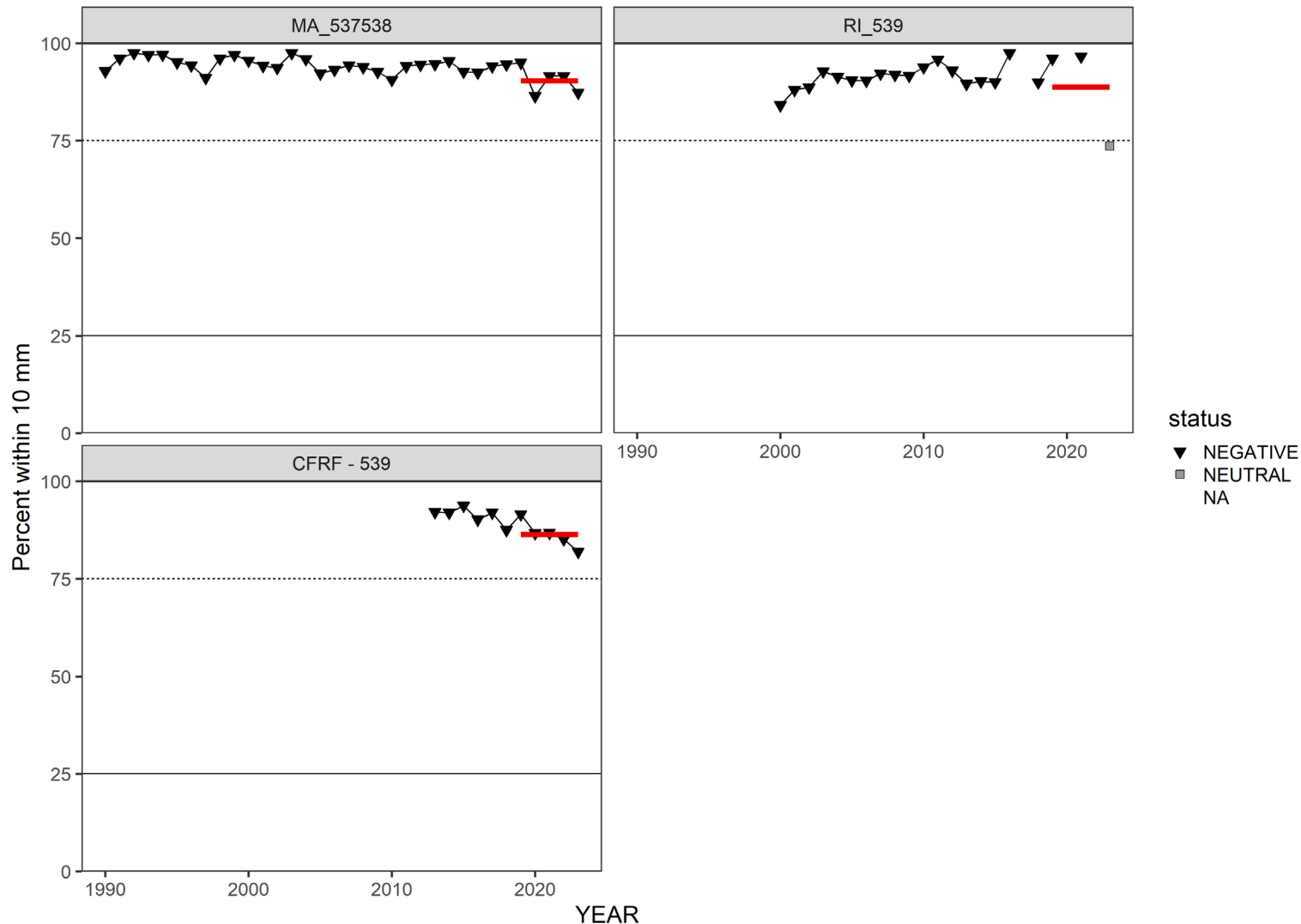
- MA has seen 0 YOYs since 2015
- RI has been very low most years since 2016
- Very few larvae detected in ELIS survey since ~2012
- All surveys have negative terminal 5-year mean status
  - No status calculated for WLIS

# SNE: model-free Relative exploitation

- Landings/SurveyRefN
  - Proxied survey values make it very high
- Mixed results
  - NEFSC fall terminal 5-year mean status is positive
  - NEFSC spring, CT spring & fall are negative
  - RI and MA are neutral

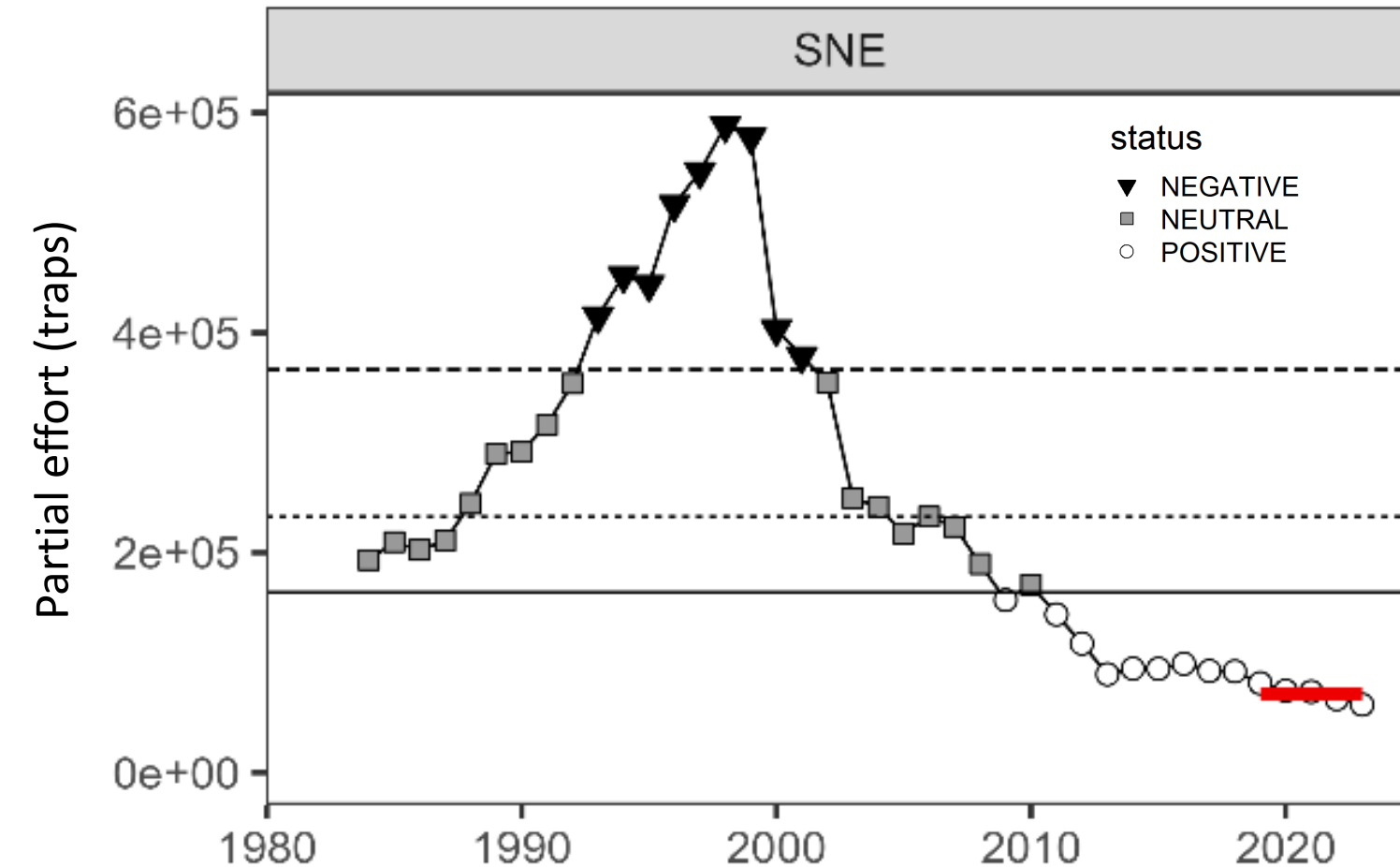


# SNE: model-free Recruit dependency



- Very high dependence on new recruits
  - Somewhat lower in recent years in the MA and CFRF datasets
- Status for all is negative

# SNE: model-free Partial effort - traps



- Data from just MA, CT, NY
- Traps fished have declined dramatically since peak in late 1990s
- New time series lows
- Status is positive

# Stock status determination

- Status determination is based on trend-based reference points defined using regime shift analysis of model outputs
  - Detected regimes consistent with prior assessment
- Focus is on reference abundance
  - Management recommendations primarily tied to the abundance status determination
  - Abundance is more informative than effective exploitation for understanding stock status
- Effective exploitation status is also provided
  - Act as extra safeguard against sudden increases in exploitation that may not be explained by decreases in abundance
  - Stability of exploitation observed during periods of significant abundance changes in both directions reduces ability to understand population's response to fishing mortality

# Abundance reference points

- Fishery/Industry Target (GOMGBK only)
  - 25<sup>th</sup> percentile of high abundance regime
    - Recommended action: post-assessment economic analyses to provide robust advice on appropriate action to stabilize the fishery and prevent economic harm
- Abundance Limit (GOMGBK only)
  - Median of moderate abundance regime
  - Concerns that stock's ability to replenish itself is diminished and will worsen if no action is taken
  - Stock is **Depleted** if 3-year average reference abundance is below the limit
    - Recommend management action to halt the decline in abundance
- Abundance Threshold (both stocks)
  - Average of three highest abundance years during the low abundance regime
  - Significant concern about stock's ability to replenish itself; potential for collapse
  - **Significantly Depleted** if 3-year average reference abundance is below the threshold
    - Recommend significant management action to halt the decline of abundance and increase reproductive capacity and recruitment to the stock, such as a moratorium

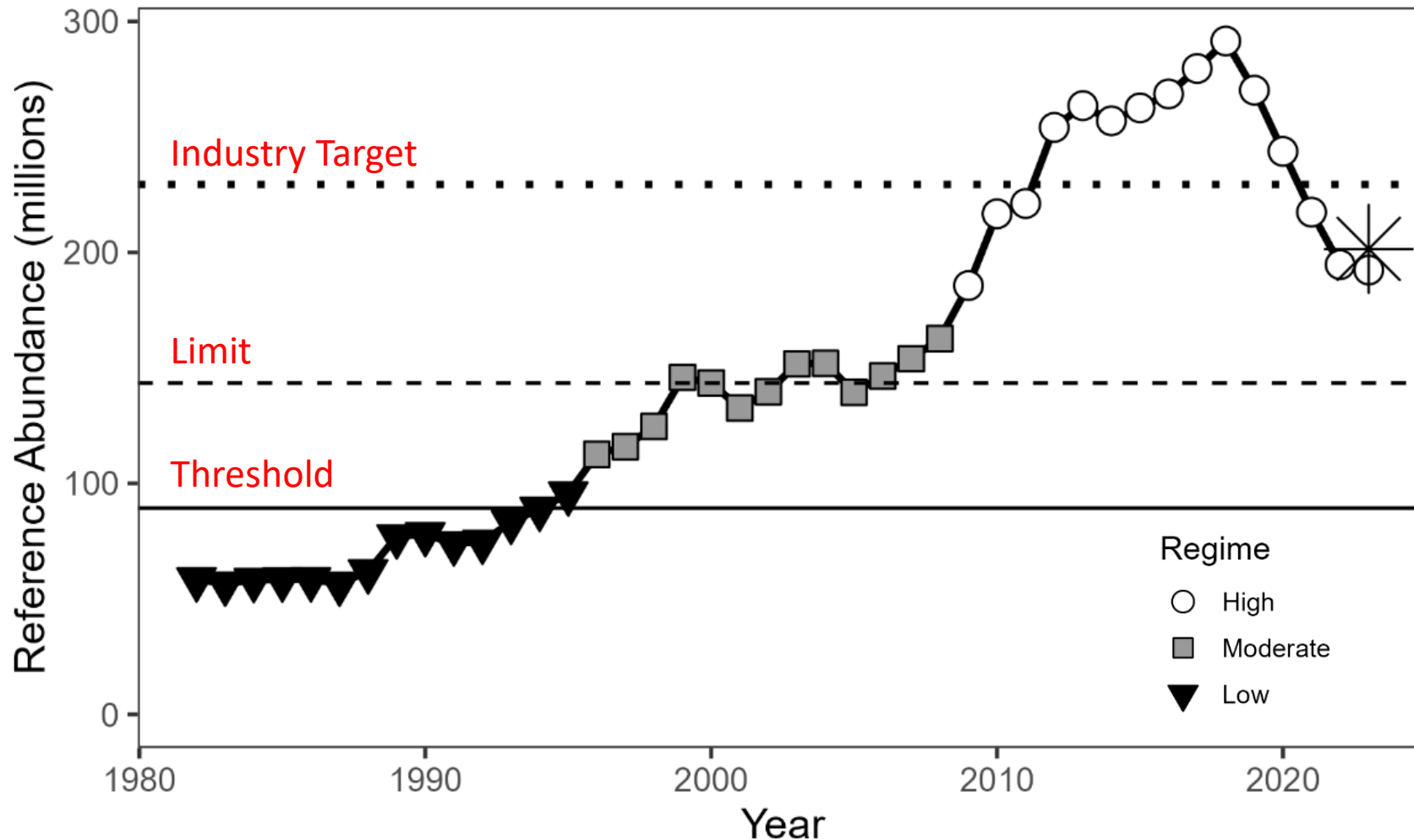
# Exploitation reference points

- Target
  - 25<sup>th</sup> percentile of exploitation estimates during the current abundance regime
  - Fishing mortality is favorable if three-year average exploitation  $\leq$  Target
- Threshold
  - 75<sup>th</sup> percentile of exploitation estimates during the current abundance regime
  - Experiencing overfishing if three-year average exploitation  $>$  Threshold
    - Recommended action is to initiate additional research to better understand the cause of increased exploitation and determine if management action is necessary



# Stock status - GOMGBK

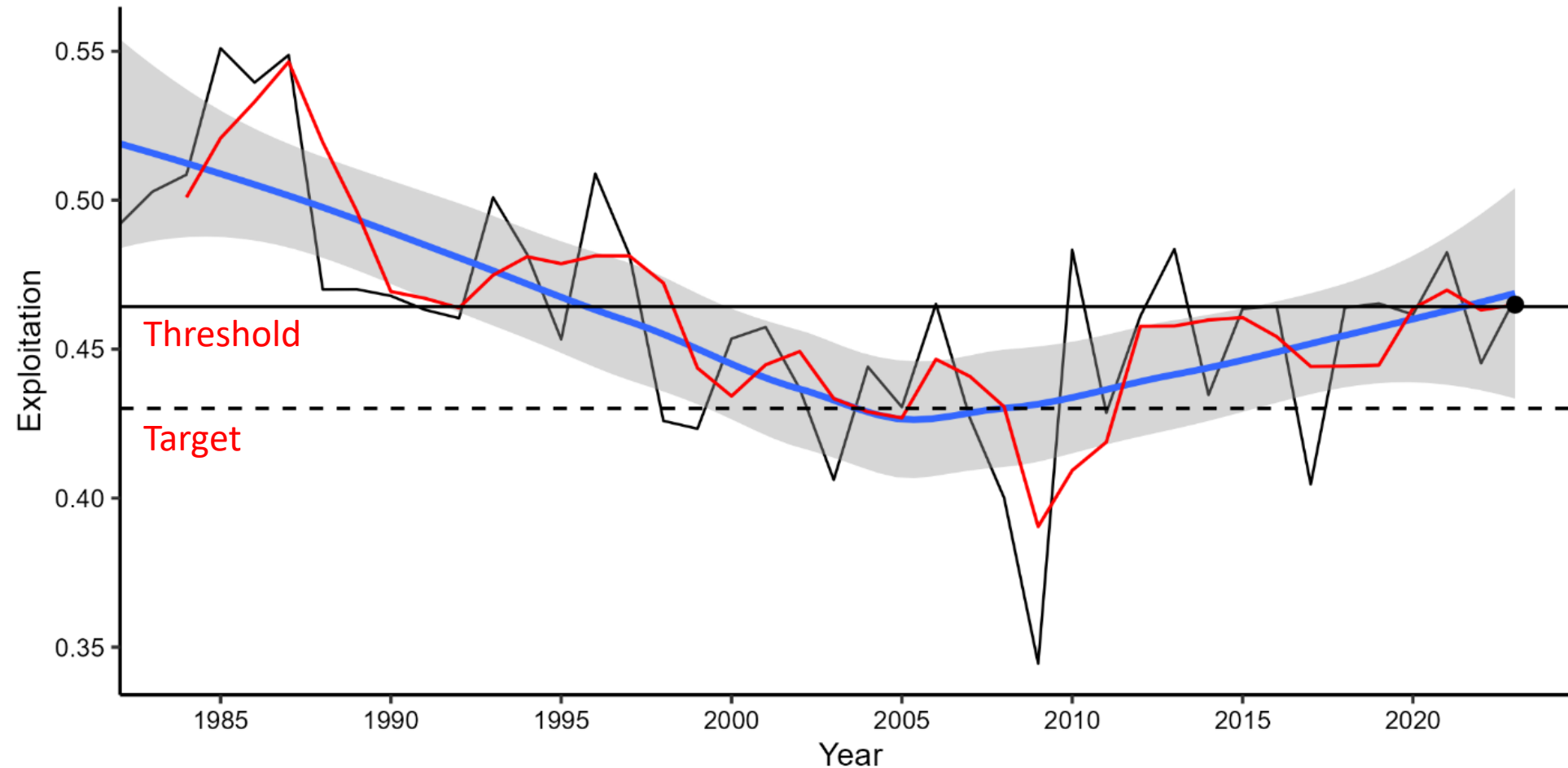
## Reference Abundance



- Abundance is below the Target but above the Limit
- Stock is not depleted

# Stock status - GOMGBK

## Effective exploitation



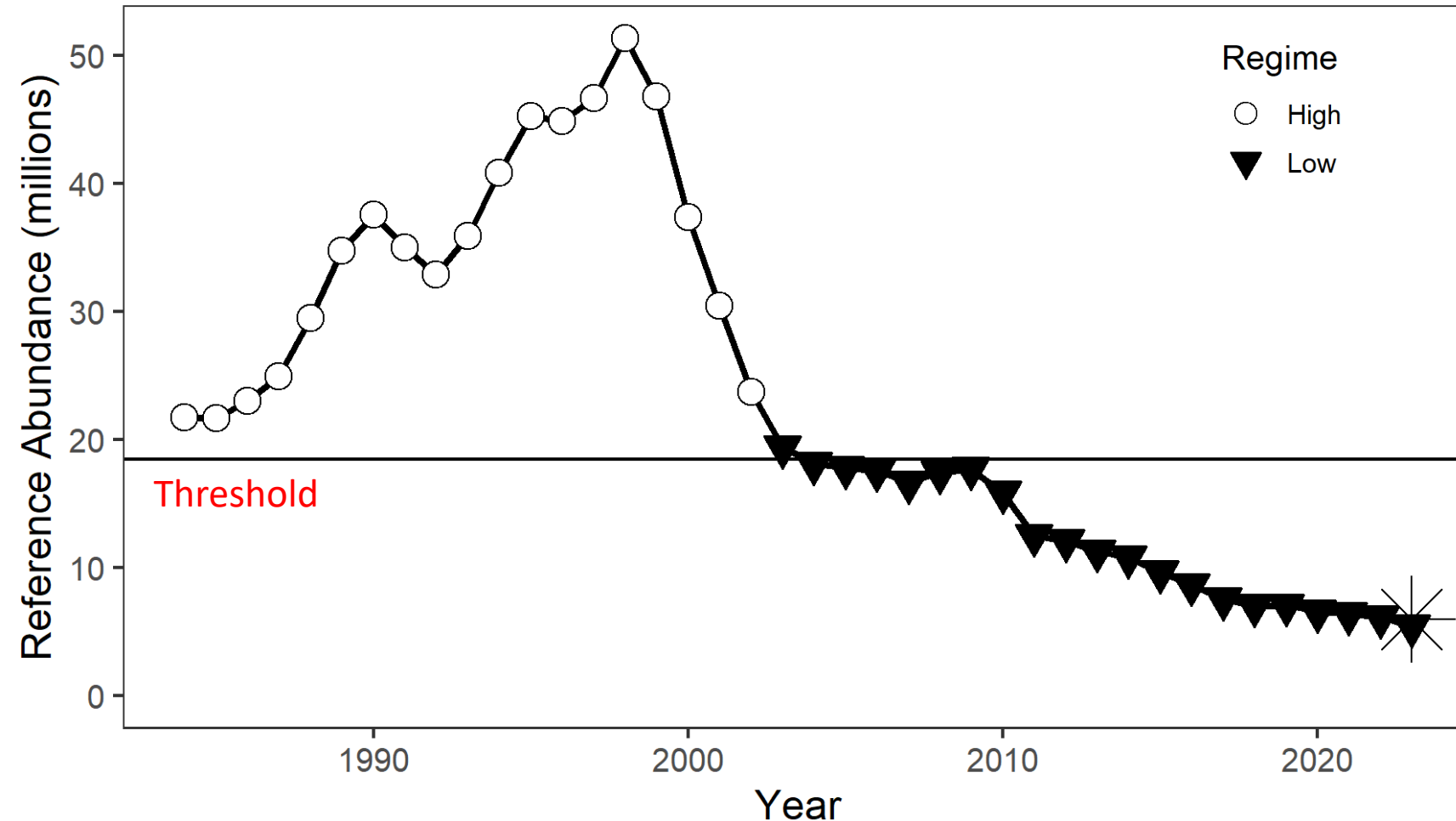
- Exploitation is above the Threshold by 0.00066
- Overfishing is occurring

# GOMGBK considerations

- Eastern Maine has seen more dramatic changes and is likely driving the increase and subsequent decline in survey abundance and landings over the past 15 years.
- Inshore fishery is heavily recruit-dependent. This leaves the fishery and the stock vulnerable to a downturn in recruitment.
  - This also means that the resource is experiencing growth overfishing.
- Stable exploitation over time shows the fishery is very efficient at removing the harvestable component of the resource, again demonstrating recruit-dependency.
  - Important metric to monitor, but may not be best way to assess impact of fishing on the stock
- Continued monitoring of larval dynamics and settlement success is critical, as is monitoring of the suspected environmental drivers to these processes.
- While environment likely has a large influence on survival of larvae and settlers, fishing and management actions impact adult biomass and resulting larval production.

# Stock status - SNE

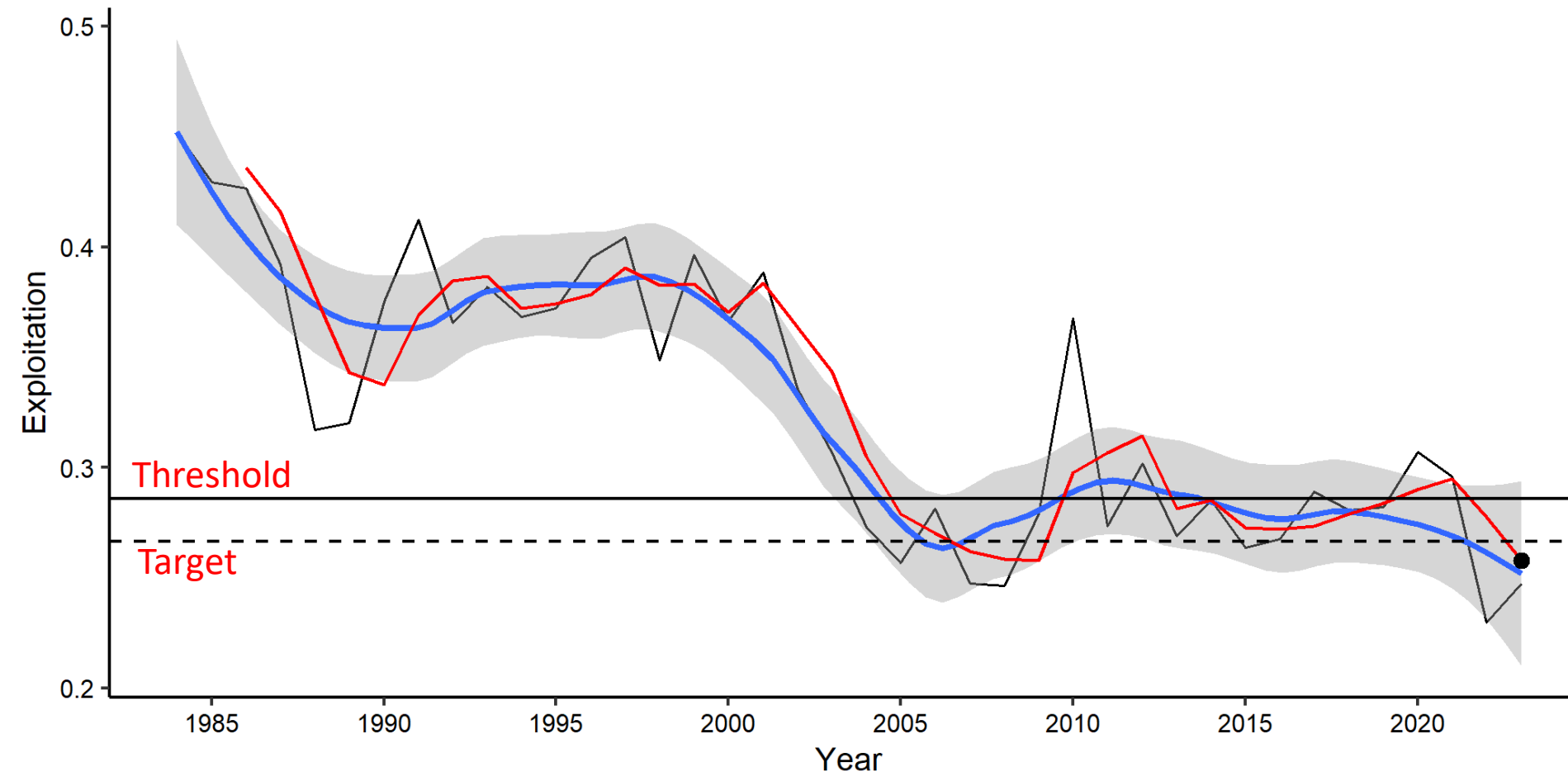
## Reference Abundance



- Abundance is well below the Threshold
- Stock is significantly depleted
- SNE stock status determination has been significantly depleted in every stock assessment since 2006

# Stock status - SNE

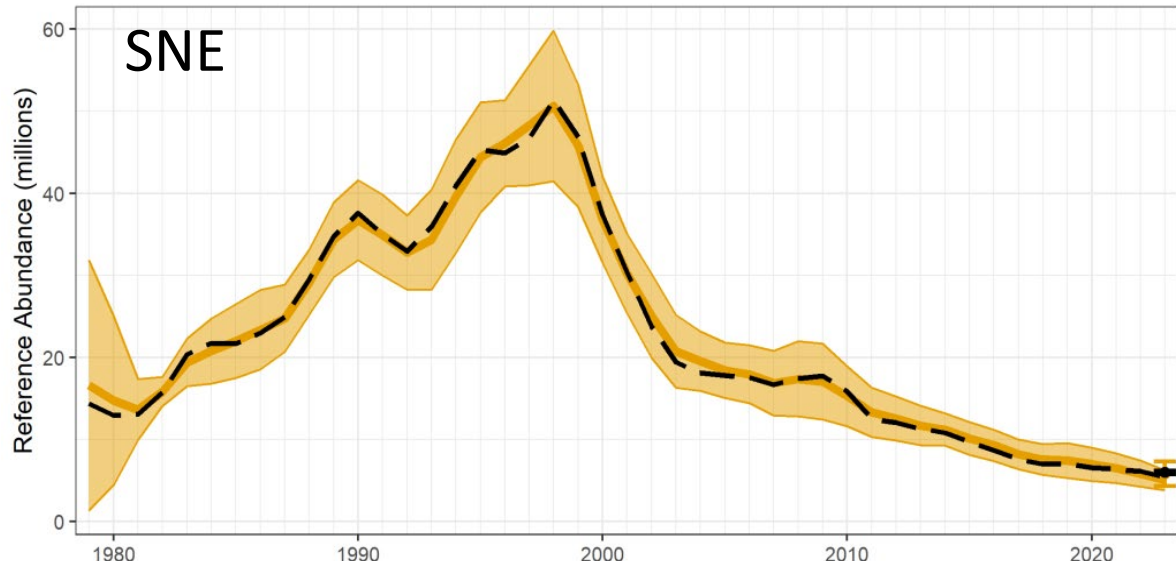
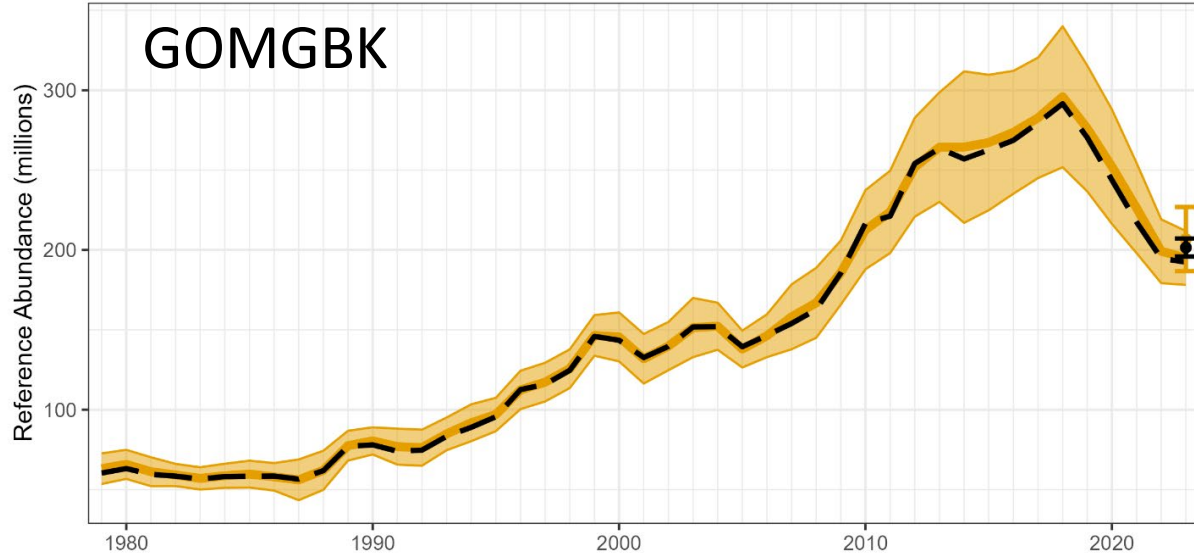
## Effective exploitation



- Exploitation is below the Target
- Overfishing is not occurring

- Inshore landings have stabilized over the last decade at very low levels, but offshore landings have declined consistently since 2015 after a prior period of relative stability.
  - SNE landings are at a new time series low
- Limited ability to track settlement with surveys either being discontinued or environmental changes in surveyed areas now resulting in non-suitable habitat. It is unclear, but seems unlikely, that settlement in non-traditional nursery habitat (deep water) is sufficient to provide recruitment to the stock.
- Productivity in this stock is severely compromised and environmental conditions inshore have continued to worsen.
  - Reproductive success from existing SSB appears insufficient to sustain a stable population at current exploitation levels

# Characterization of model & stock status uncertainty



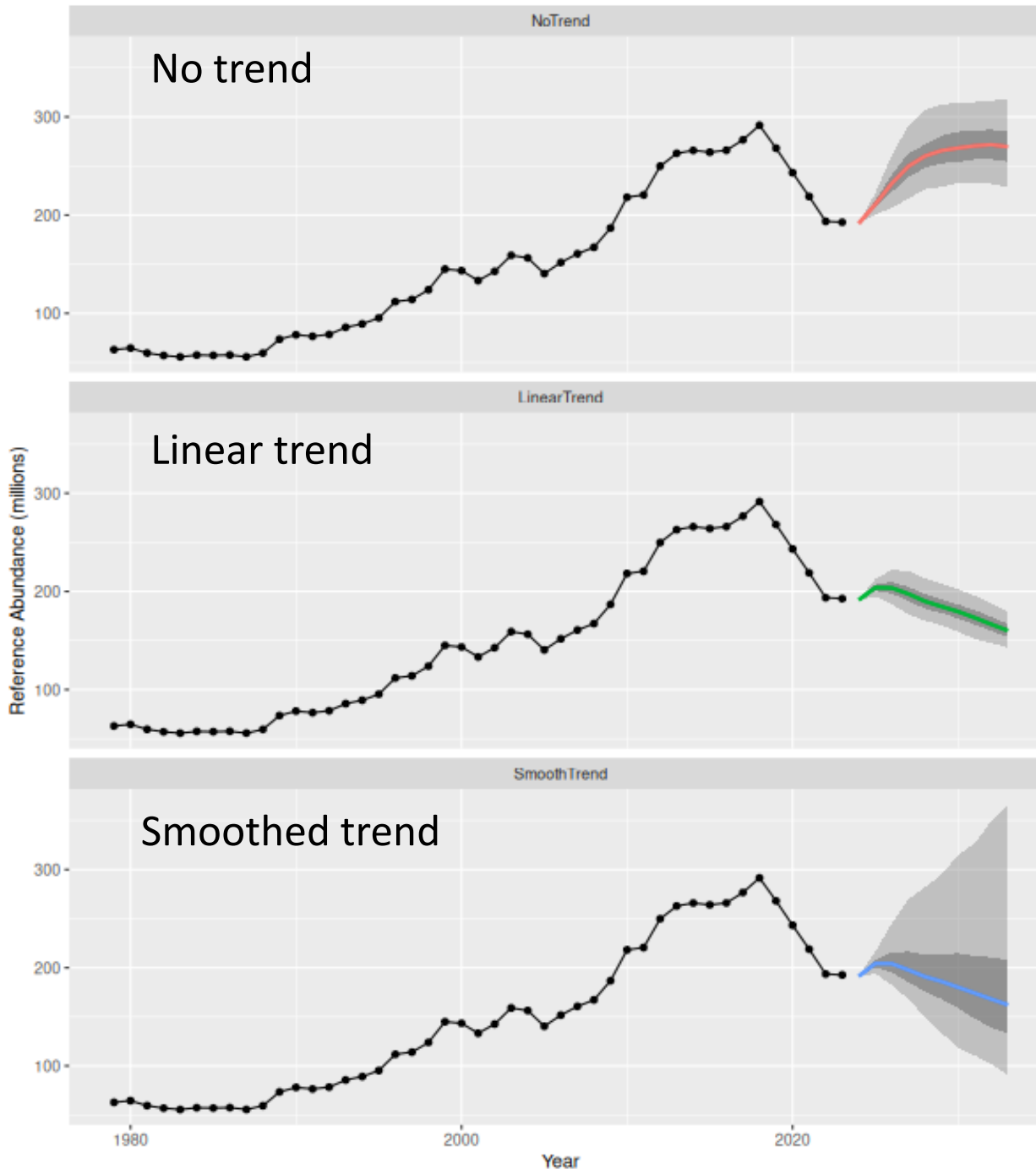
- Uncertainty characterized using the results of the sensitivity analyses
- GOMGBK – 21 runs, all robust to trends
  - Abundance: all were below Target and above Limit
  - Exploitation: 11 were above Threshold (overfishing; same as base model), 10 were between the Threshold & Target (not overfishing)
- SNE – 38 runs, all robust to trends
  - Abundance: all below Threshold
  - Exploitation: 12 below Target (not overfishing; same as base model), 20 between Target & Threshold, 6 above Threshold

# GOMGBK recommendation

- Immediately initiate a Management Strategy Evaluation to:
  - Clearly identify management goals/objectives
  - Better understand socioeconomic status and concerns
  - Identify potential management tools that will have buy-in from industry and prevent further declines towards biological thresholds
- Continue with annual data update process established after the 2020 assessment
- Next benchmark assessment for GOMGBK stock in 5 years

- Initiate significant management action
  - Provides the best chance of stabilizing or improving abundance and reproductive capacity
- Continue the annual data update process established after the 2020 assessment
- Simplify the next assessment of the SNE stock by discontinuing modeling efforts and focusing on the use of model-free indicators to watch for any indications of improvement to the resource
  - To be completed in 5 years, coincident with the next GOMGBK benchmark assessment

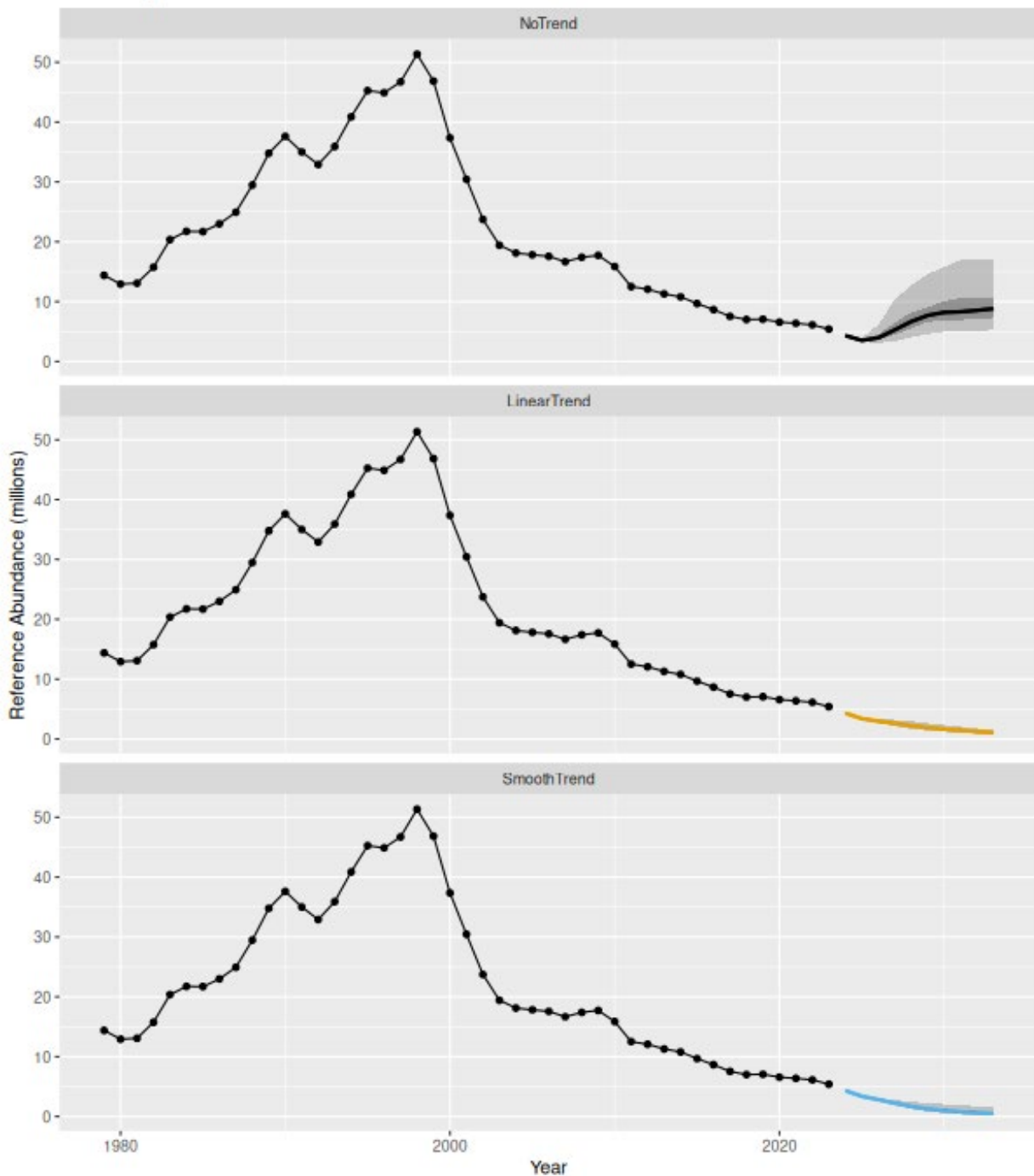
- Use a simulation model to make projections (10 yrs)
  - Works with the end results of the assessment model
- Assumes fishing mortality ( $F$ ) is similar to last five years from assessment
- Dealing with recruitment is the most challenging aspect
  - Assumptions about what recruitment will do in the future
  - 3 different methods for estimating recruitment
    - No trend –uses average recruitment from the current abundance regime
    - Linear trend – fits a linear trend to recruitment in current regime
    - Smoothed trend – (new) models entire recruitment time series and extends it forward in annual steps
- 3 sets of projections: basecase, sensitivity-based, and historical
  - I'll only be showing the basecase



# GOMGBK projected abundance

- Abundance with no trend in recruits suggests increase then leveling off near levels seen late 2010s
  - Recruitment estimate for this is relatively high
  - SAS considers this projection to be biased unrealistically high
- Linear trend suggests declines in abundance
- Smoothed trend suggests declines
  - Technique is an improvement over previous methods, BUT
  - It shows a high degree of uncertainty in this projection
- Assuming past recruitment dynamics are appropriate to apply to the future is a problem, especially as ecosystem processes are changing

SNE Projected Reference Abundance



# SNE projected abundance

- Abundance with no trend in recruits suggests slight increase and stabilization
- Linear recruits trend indicates further declines in abundance
- Smoothed trend in recruits indicates further declines in abundance
- If trend in declining recruitment continues, abundance will continue to decline
  - Note - estimates shown here might be over-estimating the decline



**Atlantic States  
Marine Fisheries**  
COMMISSION

# Questions?



Atlantic States  
Marine Fisheries  
COMMISSION

# Lobster Stock Assessment Peer Review Report



*American Lobster Fishery Management Board*

*October 27, 2025*

# Stock Assessment Peer Review Process

- Lobster Technical Committee and Stock Assessment Subcommittee developed new stock assessment
- Peer Review Workshop: September 2-5, Woods Hole, MA
- Scientific review of data inputs, analytical methods, results, and overall quality of stock assessment

## Products

- ASMFC Stock Assessment and Review Report
- <https://asmfc.org/species/american-lobster/>



# Stock Assessment Peer Review Process

## Scientific Review Panel

Chair + 3 additional Technical Reviewers, with expertise in

- Marine crustacean ecology and population dynamics
- Lobster fisheries sampling and stock assessment methods
- Statistical catch-at-length models

Dr. Tom Miller (Chair), University of Maryland, Chesapeake Biological Laboratory

Dr. Adam Cook, Fisheries and Oceans Canada

Dr. Yuying Zhang, Florida International University

Dr. Chris Cahill, Quantitative Fisheries Center, Michigan State University

## ✓ **ToR 1: Evaluate the data used in the stock assessment**

### Conclusions

- The Review Panel concludes the SAS fully met this term of reference
- Quality of catch and effort data has improved consistently in the last 25 yrs
- Discarding is a prominent feature of the lobster fishery
- Spatiotemporal modeling of fishery-independent surveys offers promise
- The Ventless Trap Survey is an important element of the input data

Recommendation 1: Discard mortality may require additional consideration in future assessments

Recommendation 2: VTS should be continued in all regions

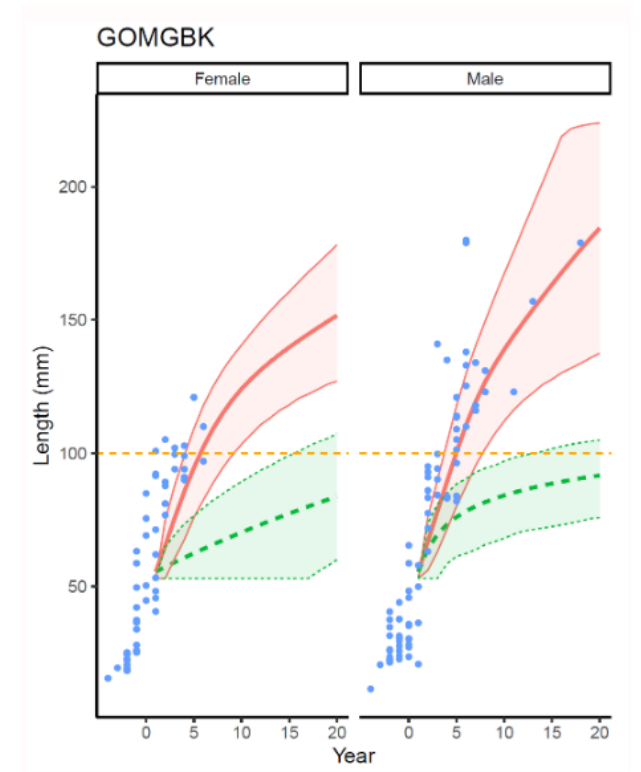


## ✓ ToR 2: Evaluate the assessment methods and models

A comprehensive ToR with multiple elements

### Conclusions

- Assumptions related to mortality were non-standard
  - Because assessment models estimate  $Z (=F+M)$ , non-standard patterns in  $M$  can impact the understanding of  $F$
- Estimation of growth was improved
- An alternative growth model was explored but not used
  - Newer model may offer the potential to estimate growth in the assessment model
- There was a fulsome and rich consideration of environmental drivers on lobster ecology and life histories
- The length-based model is getting long in the tooth



## ✓ **ToR 2: Evaluate the assessment methods and models**

Recommendation 1: A more comprehensive evaluation of M is required in future assessments, that aligns with our understanding of longevity and is supported by empirical evidence

Recommendation 2: Development of an alternative growth model should be encouraged as it offers considerable advantages

Recommendation 3: The current length-based model is probably over parameterized (see ToR 5); development of a new assessment model within the RTMB modeling program should be encouraged



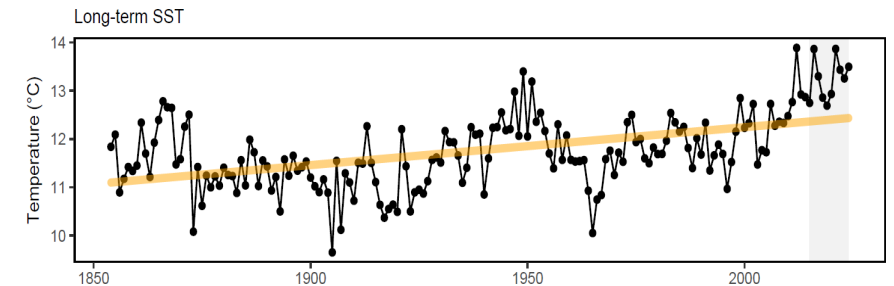
## ✓ ToR 3: Evaluate the characterization of environmental/climatic drivers

### Conclusions

- Evaluation of climate effects is more comprehensive and sophisticated than in most other assessments
- Changing climate is clearly affecting the dynamics of lobsters, causing marked changes in distribution, growth, and disease
- The regime shift paradigm framework is interesting

### BUT

- Over-emphasizing environmental drivers risks underemphasizing the important role of the fishery, and management to ensure sustainability
- Regime change frameworks require the capability to detect the current regime
  - 🎵 “You don’t know what you’ve got till its gone” 🎵 Joni Mitchell



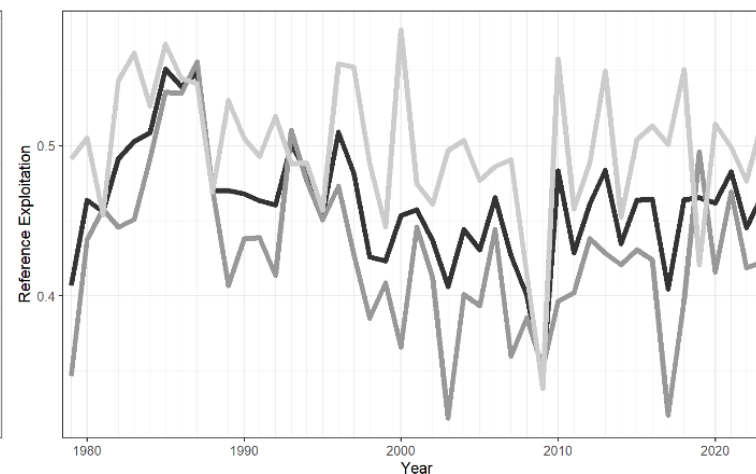
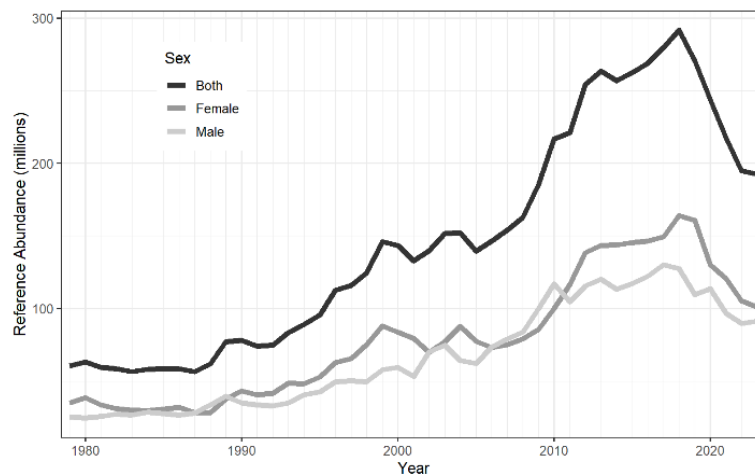
## ✓ ToR 4: Evaluate the estimates of abundance and exploitation

### Conclusions

- The Review Panel concludes the SAS fully met this ToR; trends in stock abundance and exploitation produced by the assessment model represent the best scientific information available for management decisions

### Recommendations (for future assessment work)

- Biological reference points should be developed in future assessments



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

### Conclusions

- The Panel congratulates the committee on the application of the “jitter” analysis
  - Results of the “jitter” analysis suggest the model may be too complex
  - An implication of the results may be that estimated quantities (reference points) may be estimated with a high degree of uncertainty

Recommendation 1: Future assessment models should integrate jitter analyses throughout the development of the assessment

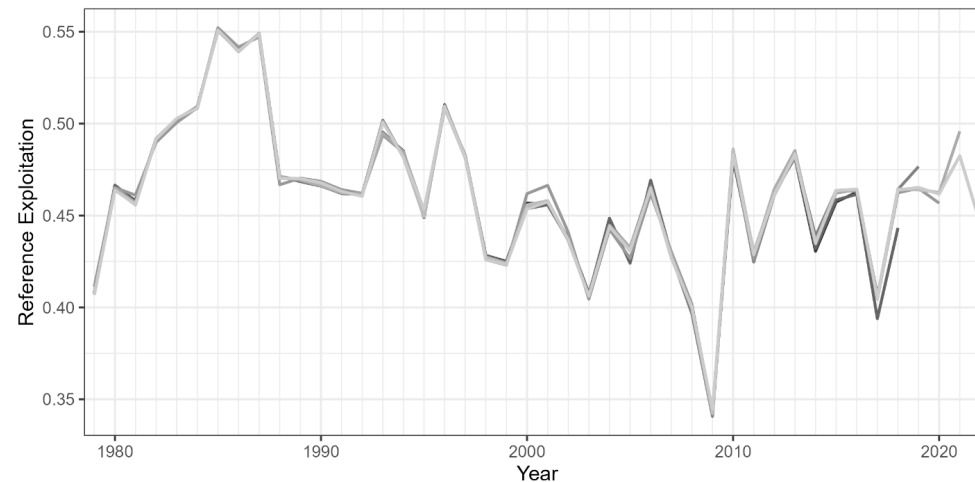
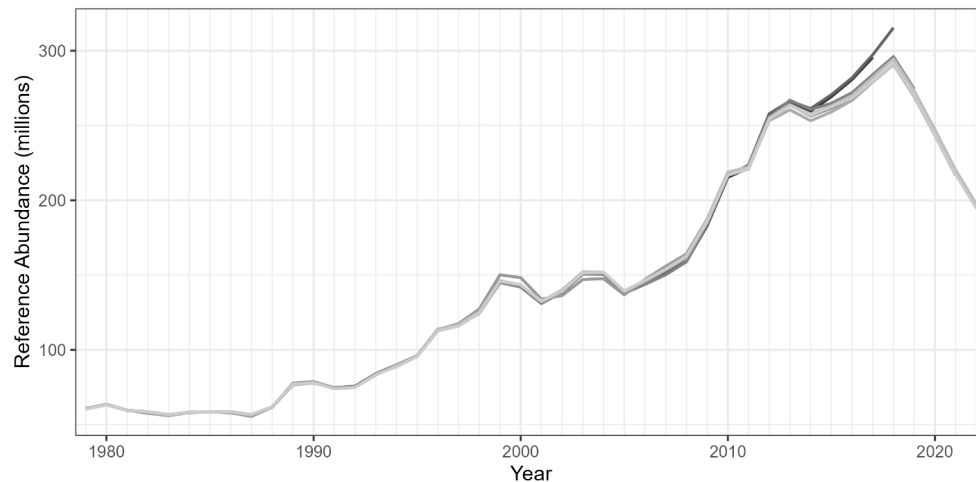
Recommendation 2: Future assessments should be prepared to bring forward and evaluate multiple models



## ✓ ToR 6: Evaluate model diagnostics, including sensitivity and retrospective analyses

### Conclusions

- The Panel concluded the SAS fully met this ToR
- Sensitivity runs indicated abundance estimates were relatively insensitive to alternative configurations
- No worrisome retrospective patterns were obvious in model results



## ✓ **ToR 7: Evaluate the indicator-based analyses**

### Conclusions

- Indicator analyses were comprehensive
- The Panel supports strongly the restriction of the indicator analysis to time series longer than 10-years
- The Panel recommended strongly the last five years of the time series not be included in defining the determination of status

Recommendation 1: The indicator analysis should be updated in relation to the definition and calculation of status



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

## Conclusions

- The Panel agrees that reference points were calculated appropriately based on existing definitions
- Stock status was appropriately defined



Recommendation 1: The Panel recommends strongly that additional future reference points be developed to reflect biological productivities rather than being *ad hoc*

Recommendation 2: Biological reference points should continue to be developed for both stocks



## ✓ **ToR 9: Review and prioritize future American lobster research**

### Conclusions

- The Panel supports the Research Recommendations provided by the SAS; the Panel added specific recommendations

Recommendation 1: Biological reference points should be calculated for the two principal lobster stocks

Recommendation 2: Develop an integrated assessment model that estimates parameters of the growth transition matrix internally in the model

Recommendation 3: Extend estimates of the natural mortality rate ( $M$ ) to smaller-sized lobster



## ✓ **ToR 10: Recommend timing of future stock assessments**

### Conclusions

- The Panel supports a five-year timing of the next assessment
- The Panel recommends interim assessment work for both stocks be continued
- The Panel supports strongly development of a Management Strategy Evaluation for lobster that could be conducted at a range of scales
  - Internal to the SAS to evaluate alternative models
  - With fishery managers to explore management options under consideration
  - A comprehensive MSE involving all stakeholders

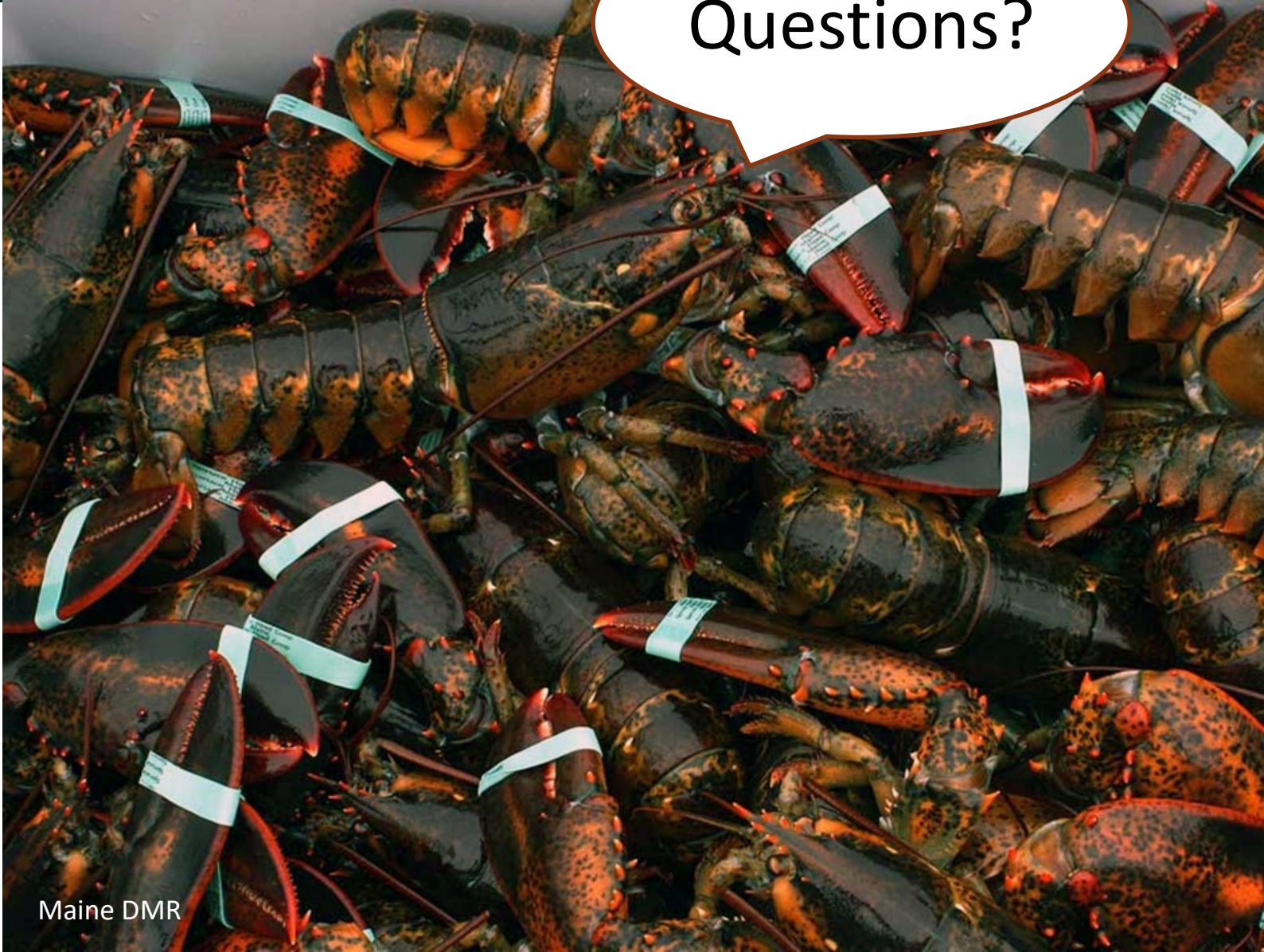


- The Review Panel recommends the ASMFC American Lobster Fishery Management Board consider the results of the new Benchmark Stock Assessment to meet the requirement of best scientific information available for use in management decisions
- The Panel acknowledges environmental change has likely had a large influence on the decline of lobster in Southern New England. However, that should not be interpreted as evidence that fishing has no effect on stock status, nor should it diminish the obligation to manage the fisheries that remain.
- The Review Panel offers the strong recommendation to the Management Board and Stock Assessment Subcommittee to urgently work to define biological reference points for lobster. Knowing the limits to biological productivity is a first-order condition for precautionary management of any fishery resource.
- Establishing a clear understanding of the biological productivity and limits of lobster populations is a minimum requirement for sustainable and precautionary management, and for safeguarding the viability of coastal communities across New England.



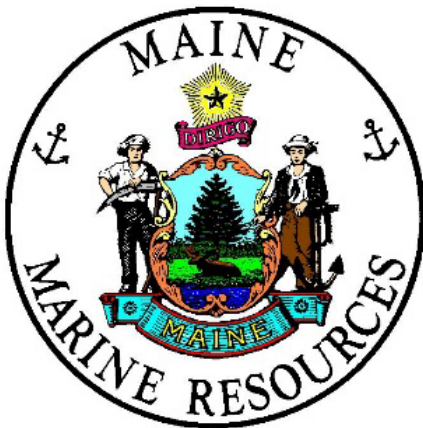


Questions?



# 2025 Lobster Industry Survey Results

Maine Department of Marine Resources, New Hampshire Fish and Game Department, and Massachusetts Division of Marine Fisheries





# Maine 2025 Lobster Industry Survey

- Sent to lobster license holders (>18 years old) and dealers
- Supported and crafted by Maine's Lobster Advisory Council & DMR
- Opportunity to gauge opinions on the resource and fishery
- Individualized paper survey with unique QR code
  - 29% Response Rate: 1,375 of 4,697 (258 electronic)
    - 2008 Survey 35% (2,381 of 6,832)
- Overall good representation
  - By zone, license type, age, and activity



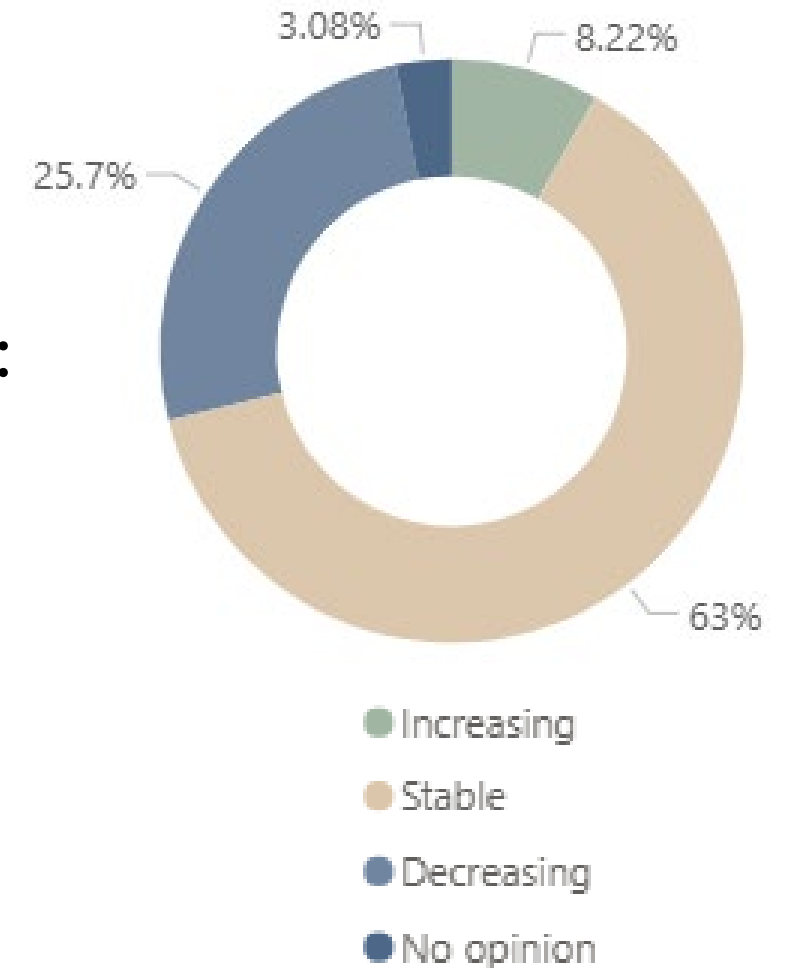
*Scan for dashboard and survey results*

<https://www.maine.gov/dmr/fisheries/commercial/fisheries-by-species/lobsters/industry-survey>



# Perception of the Resource

- Based on fishing experience:
  - 63% Stable, 26% Decreasing, 8% increasing
- Compared to five years ago lobster in traps are:
  - Egg bearing (**58% increasing**, 31% no change)
  - Legal (**49% no change**, 36% decreasing)
  - Oversized (**52% no change**, 22% increasing)
  - Sublegal (**42% increasing**, 36% no change)
  - V-Notched (**49% increasing**, 34% no change)



# Threats to the fishery and resource

- 91% of respondents were very (68%) or somewhat (23%) concerned with **NARW conservation measures** impacting the way they fish
- 88% of respondents were very (58%) or somewhat concerned (30%) about potential **ASMFC plan changes**
- Maintaining the sustainability of fleet (respondents could pick three)
  - Top concerns were **Input costs** (1172, 85%) and **NARW protection measures** (952, 69%), followed by **Markets** (613, 44.5%) and **Crew availability** (455, 33%).
- Long term health of the resource (respondents could pick three)
  - Leading threats were **Predation** (730, 53%), **Habitat degradation** (660, 48%), **Lobster distribution changes** (572, 42%), **Water quality/climate** (418, 30%), **Fishing competition** (227, 17%)



# Perceptions of the future

- 47% of respondents were very (30%) or somewhat optimistic (17%) of the future
- 79% of respondents feel current Area 1 management is very (43%) or somewhat effective (26%)
  - 22% Neutral, Ineffective 6%, Very ineffective 3%
- If compelled to act
  - Lower trap limits, increase V-notching, seasonal closure, lobster hatchery
  - Gauge increase, limited entry change, purchase v-notch, area closures
- Continued engagement
  - fishery, zones, LCMTs etc
- Periodic resurvey



# New Hampshire 2025 Lobster Industry Survey



- Sent to all commercial lobster license holders and dealers
- Opportunity to gauge opinions on the resource and fishery
- Response Rate
  - Commercial (1200 trap) and Limited Commercial (600 trap)
    - 51%: 60 responses
  - Part-time Commercial (100 trap)
    - 17%: 65 responses

# Perception of the Resource

- Based on fishing experience:
  - Commercial and Limited Commercial
    - 63% Stable, 13% Decreasing, 17% Increasing, 7% No opinion
  - Part-time Commercial
    - 45% Stable, 25% Decreasing, 12% Increasing, 18% No opinion



# Perception of the Resource

## (Commercial and Limited Commercial Licensees)

- Compared to five years ago lobster in traps are :
  - Egg bearing
    - 68% increasing, 19% no change
  - Legal
    - 58% no change, 20% decreasing
  - Oversized
    - 55% increasing, 26% no change
  - Sublegal
    - 57% increasing, 21% no change
  - V-Notched
    - 63% increasing, 19% no change



# Threats to the fishery and resource

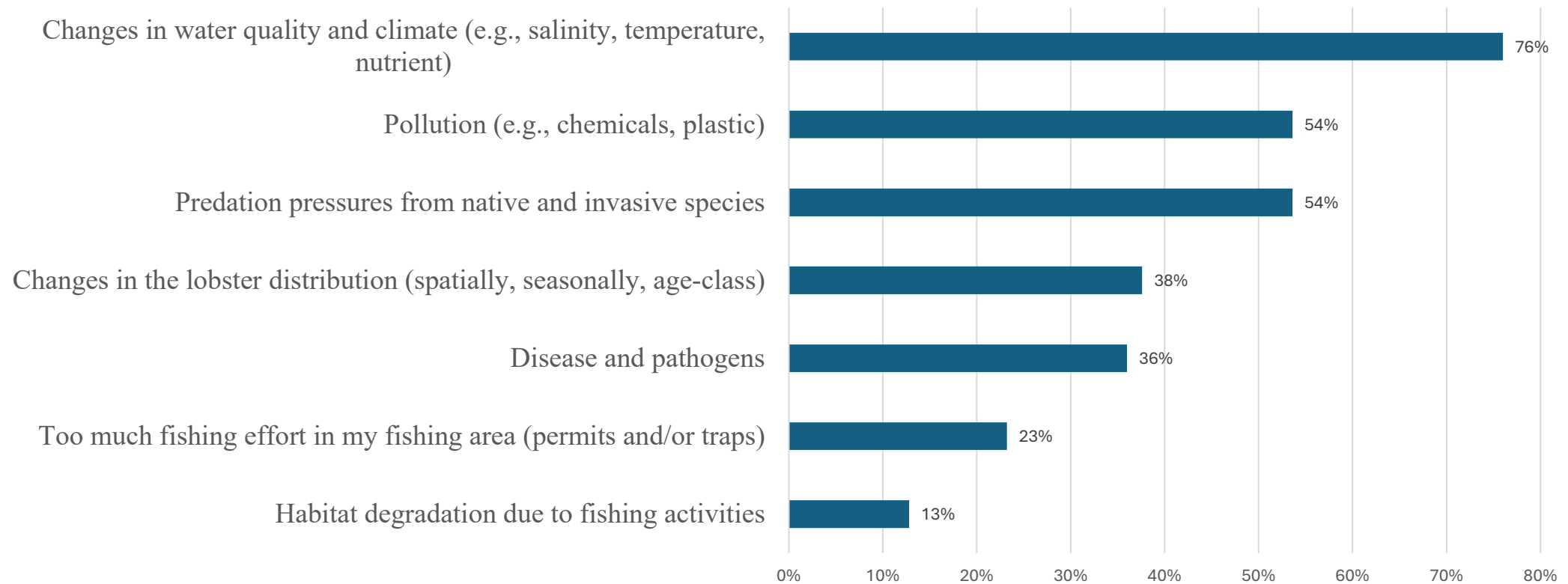
(Commercial and Limited Commercial Licensees)

- 88% of respondents were very (68%) or somewhat (20%) concerned with NARW conservation measures impacting the way they fish
- 88% of respondents were very (63%) or somewhat concerned (25%) about potential ASMFC plan changes



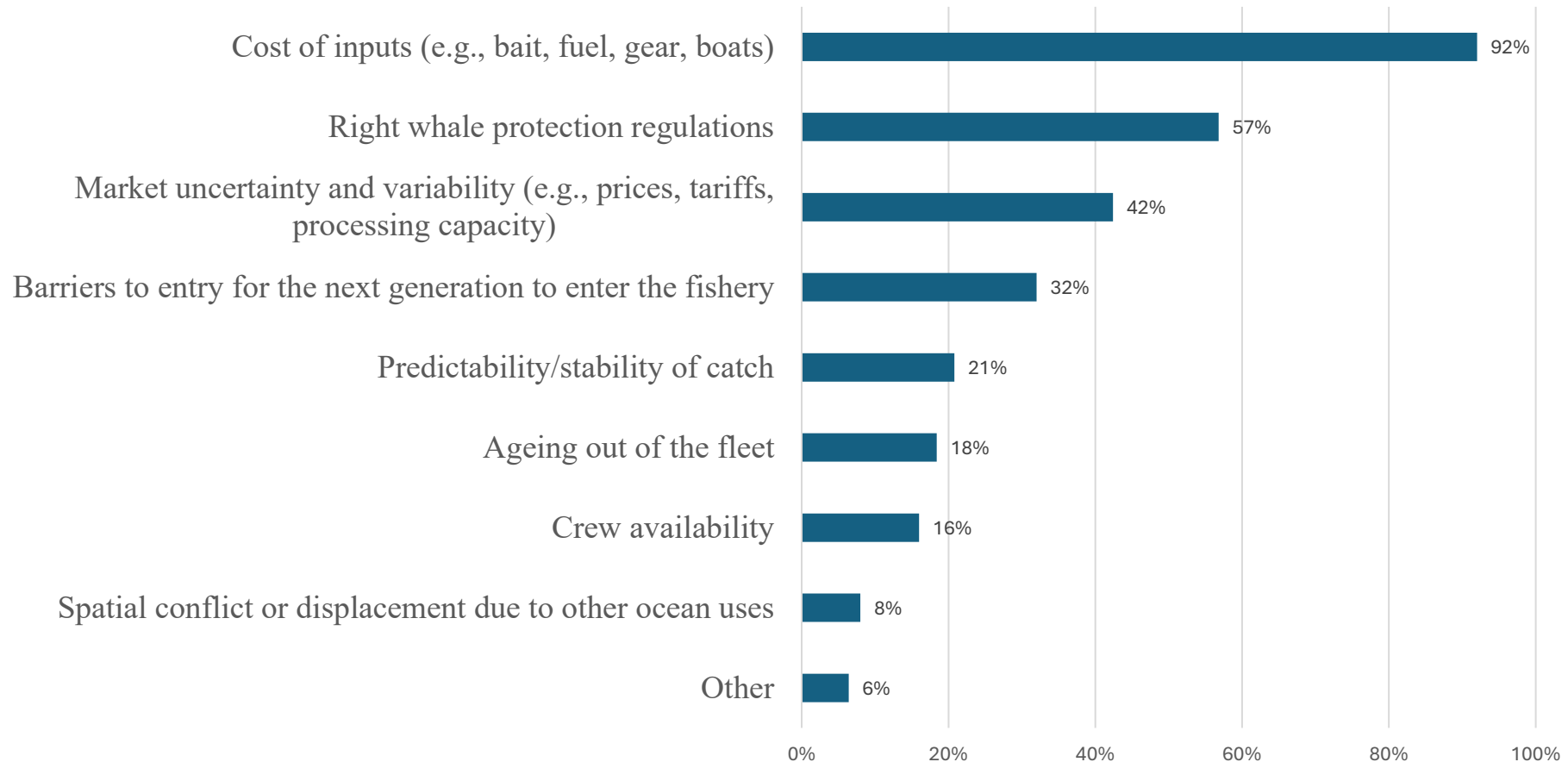
# Threats to the fishery and resource

**What do you feel is the biggest challenge to the long-term health of the lobster resource (population)?**



# Threats to the fishery and resource

**In considering the future, which of these areas presents the greatest concern for maintaining the sustainability of the fleet?**



# Where to go from here

(Commercial and Limited Commercial Licensees)

- 54% of respondents were very (32%) or somewhat optimistic (22%) of the future
- 75% of respondents feel current Area 1 management is very (48%) or somewhat effective (27%)
  - 22% Neutral, Ineffective 3%, Very ineffective 0%



# Where to go from here

(Commercial and Limited Commercial Licensees)

- If compelled to act
  - Increase gauge size on the small end
    - 1/16" (19%), 1/32" (19%), Other (62% - no change or did not answer)
  - Lower trap limit
    - No change, did not answer (58%)
    - limited entry/ license changes (27%)
    - 10% reduction (8%)
    - 20% reduction (7%)
  - Seasonal Closures
    - Jan 15 – Mar 31 (52%)
    - Jan 15 – Apr 30 (32%)
  - Other Management Options
    - Other (53% - none, more law enforcement, no 100 trap licenses)
    - Reduction in maximum size (25%)
    - Area closures (10%)
    - Quotas (2%)
    - Trip Limits (10%)



# Massachusetts 2025 Lobster Industry Survey



- Sent to all commercial lobster trap license holders
- Modified the ME survey to fit various LMAs
- Options to respond on paper or online
  - 28% Overall response rate: 287 of 1,043 (89 electronic responses)
- Responses by LMA:
  - LMA1: 217 out of 792 (27%)
  - LMA2: 29 out of 117 (25%)
  - LMA3: 20 out of 56 (36%)
  - OCCLMA: 21 out of 62 (34%)
  - Other (offshore permits with multiple LMAs): 0 out of 16 (0%)
- 78% indicated they fished in 2025.
- 60% did not have an active federal permit.
- 60% fished more than 400 traps, on average.
- 48% were aged 50-70 years old.
- [Link to results dashboard](https://www.mass.gov/marinefisheries) (www.mass.gov/marinefisheries → Commercial Fishing → 2025 Lobster Survey Results)

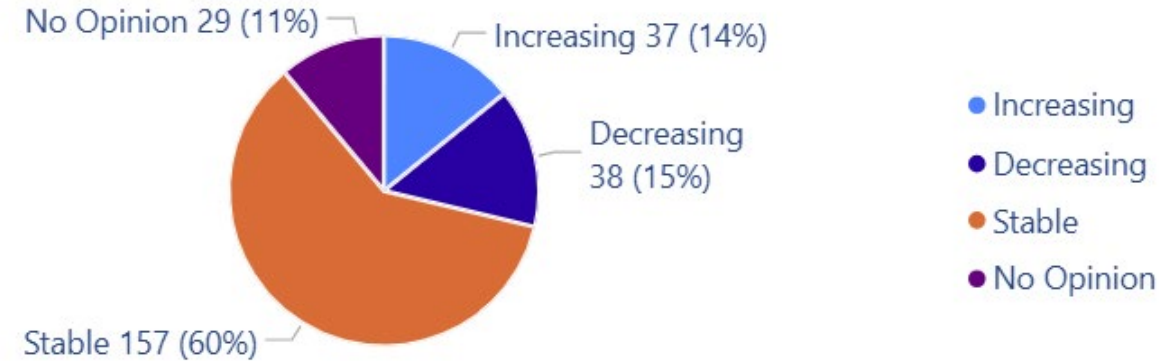
Note that all percentages presented throughout are the percent of respondents.

# Perception of the Resource

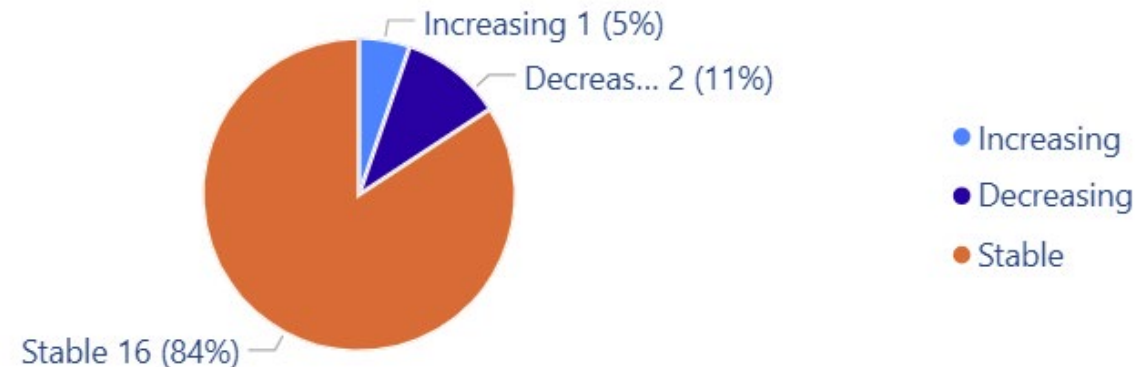
- Based on fishing experience over the previous 5 years, respondents felt the resource was:

- LMA1, 2, OCC** were similar: **60% Stable**, 15% Decreasing, 14% increasing
- LMA3** differed with **84% Stable**, 11% Decreasing, 5% increasing

**LMA1, LMA2, OCCLMA Combined**  
**Status of the Lobster Population, based on previous 5 years of fishing**



**LMA3**  
**Status of the Lobster Population, based on previous 5 years of fishing**



# Perception of the Resource

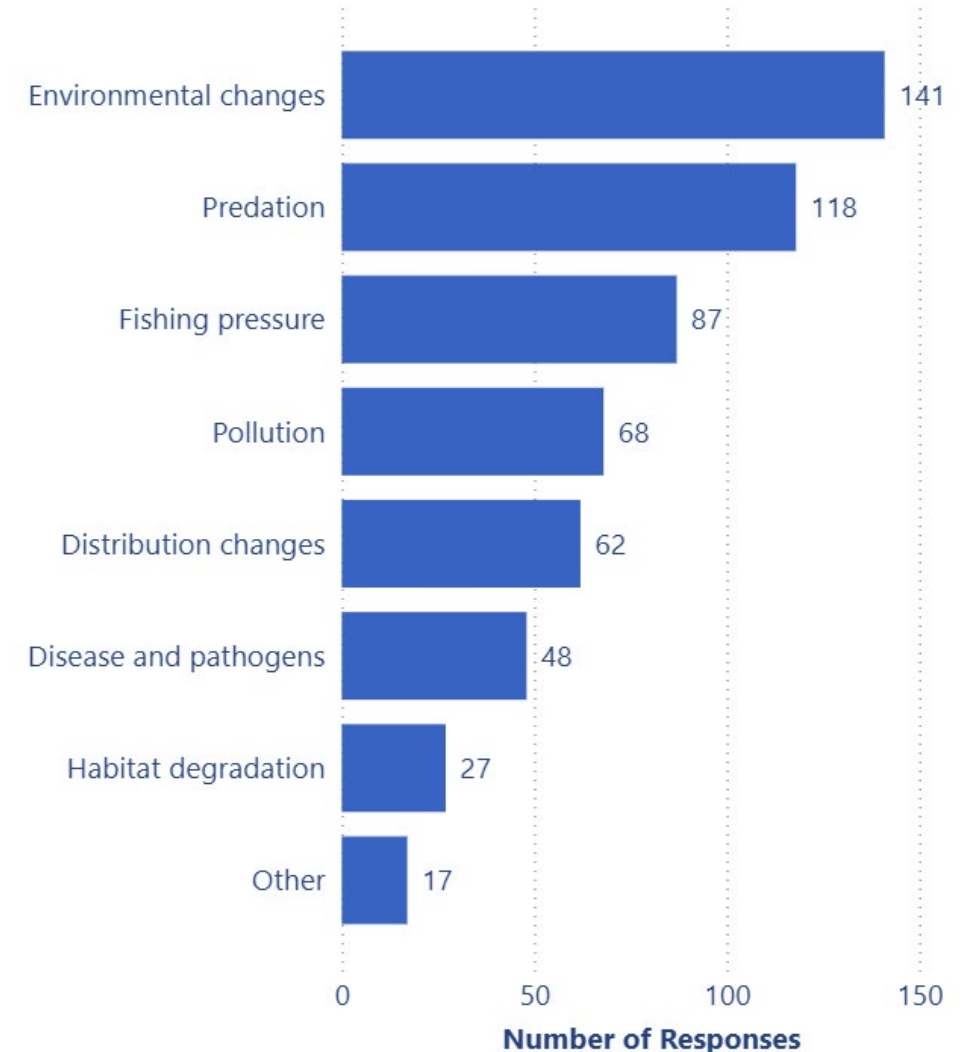
- Compared to five years ago, changes to lobsters in traps varied by LMA:
  - **Egg bearing**
    - LMA1: **53% more**, 33% no change
    - LMA2: 30% more, **41% no change**
    - OCCLMA: **65% more**, 30% no change
    - LMA3: 21% more, **68% no change**
  - **V-Notched**
    - LMA1: **58% more**, 27% no change
    - LMA2: 30% more, **33% no change**
    - OCCLMA: **50% more**, 20% less
    - LMA3: 37% more, **58% no change**
  - **Legal**
    - LMA1: **50% no change**, 20% more, 20% less
    - LMA2: **41% no change**, 30% more
    - OCCLMA: **55% no change**, 40% more
    - LMA3: **63% no change**, 21% more
  - **Oversized**
    - LMA1: 33% no change, **51% more**
    - LMA2: **41% no change**, 22% more
    - OCCLMA: **35% no change**, 30% more
    - LMA3: **68% no change**, 16% more
  - **Sublegal**
    - LMA1: **36% no change**, **36% more**
    - LMA2: **44% no change**, 22% more
    - OCCLMA: **50% more**, 20% less
    - LMA3: **63% no change**, 26% more



# Perception of Threats to the Fishery and Resource

- Challenges to long term health of the resource varied by LMA
  - **LMA1: Water quality/climate (55%)** and **Predation (44%)** ranked highest followed by fishing pressures (31%), pollution (25%), and distribution changes (25%)
  - **LMA2: Predation (59%)** and **Water quality/climate (41%)** ranked highest followed by pollution (37%), disease (30%), and fishing pressures (26%)
  - **OCCLMA: Habitat degradation (45%)** and **Water quality/climate (35%)** ranked highest followed by pollution (30%), predation (30%), and fishing pressures (20%)
  - **LMA3: Fishing pressures (60%)** and **Water quality/climate (55%)** ranked highest followed by predation (25%) and distribution changes (20%)

**All LMAs Combined**  
**Greatest Challenges to the Health of the Lobster Population (selected up to 3)**



# Perception of Threats to the Fishery and Resource

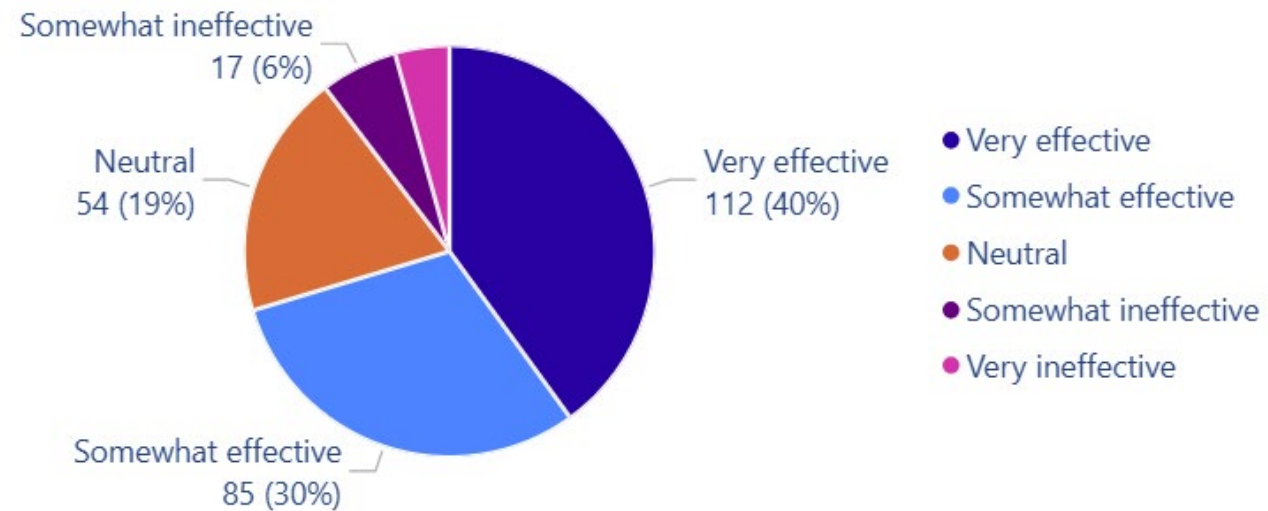
- 93% of respondents were very (73%) or somewhat (20%) concerned with **NARW conservation measures** impacting the way they fish
- 87% of respondents were very (63%) or somewhat concerned (24%) about **potential ASMFC plan changes**
- Greatest concern for maintaining the sustainability of fleet did not vary as widely by LMA (respondents could select up to 3)
  - Overall, **Input costs (77%)** and **NARW protection (69%)** ranked highest followed by Markets (35%).
  - LMA2 resulted in a higher percentage for **spatial conflict (34% of LMA2 respondents)** over markets (21% of LMA2 respondents).



# Perceptions of the Future

- Perception of the effectiveness of current management varied by LMA
  - **LMA1:** 70% of respondents feel management is very (41%) or somewhat effective (29%); 19% were neutral
  - **LMA2:** 56% of respondents feel management is very (26%) or somewhat effective (30%); 37% were neutral
  - **OCCLMA:** 85% of respondents feel management is very (65%) or somewhat effective (20%); 5% were neutral
  - **LMA3:** 79% of respondents feel management is very (26%) or somewhat effective (53%); 11% were neutral

**All LMAs Combined**  
**Effectiveness of Current Conservation Measures in Protecting the Future of the Lobster Population**



# Perceptions of the Future

- 49% of respondents were very (36%) or somewhat optimistic (13%) of the future of the industry; 29% were neutral
- If required to act in response to stock assessment, conservation measures respondents were willing to discuss: (respondents could select up to 3)
  - **LMA1: Trap limit reductions (35%)** and more conservative v-notch regulations (24%)
    - Some support for increasing the minimum size (16%) and decreasing the maximum size (13%)
  - **LMA2: Trap allocation reductions (29%)**
    - Some support for decreasing the maximum size (18%), seasonal area closures (18%) and more conservative v-notch regulations (18%)
  - **OCCLMA: Increase the minimum size (60%)**
  - **LMA3: More conservative v-notch regulations (45%)**



# Update on Council Action on Omnibus Alternative Gear-Marking Framework

- NEFMC and MAFMC are developing an action to consider allowing alternative surface marking provisions for fixed gear fisheries in the Greater Atlantic Region.
  - Provide increased access in areas closed to persistent buoy lines under the Atlantic Large Whale Take Reduction Plan (TRP)
- In September/October the Councils postponed action until more information on ropeless gear and visualization technology is available

- NOAA Fisheries plans to solicit information through Request for Information (RFI) in 2026
- RFI will solicit input on various questions pertaining to alternative gear marking and the approval of certain systems for use



# FMP Reviews for the 2024 Fishing Year

## *American Lobster and Jonah Crab*



October 27, 2025



# American Lobster



1. Status of the FMP
2. Status of the Stock
3. Status of the Fishery
4. Compliance Review for 2024
5. *De Minimis* requests
6. PRT Recommendations
7. Board action

## Addendum XXVI (2018)

- Implemented 100% harvester reporting in 2023

## Addendum XXIX (2022)

- Vessel tracking requirements effective December 15, 2023

## Addendum XXVII (2023)

- Established management trigger for gauge changes
- rule to issue trap tags equal to harvester allocations until trap loss is documented
- v-notch possession definition for all permit holders in OCC is 1/8" with or without setal hairs

## Addendum XXX (2024)

- Recommended increased minimum size apply to lobster imports

## Addendum XXXI (2025)

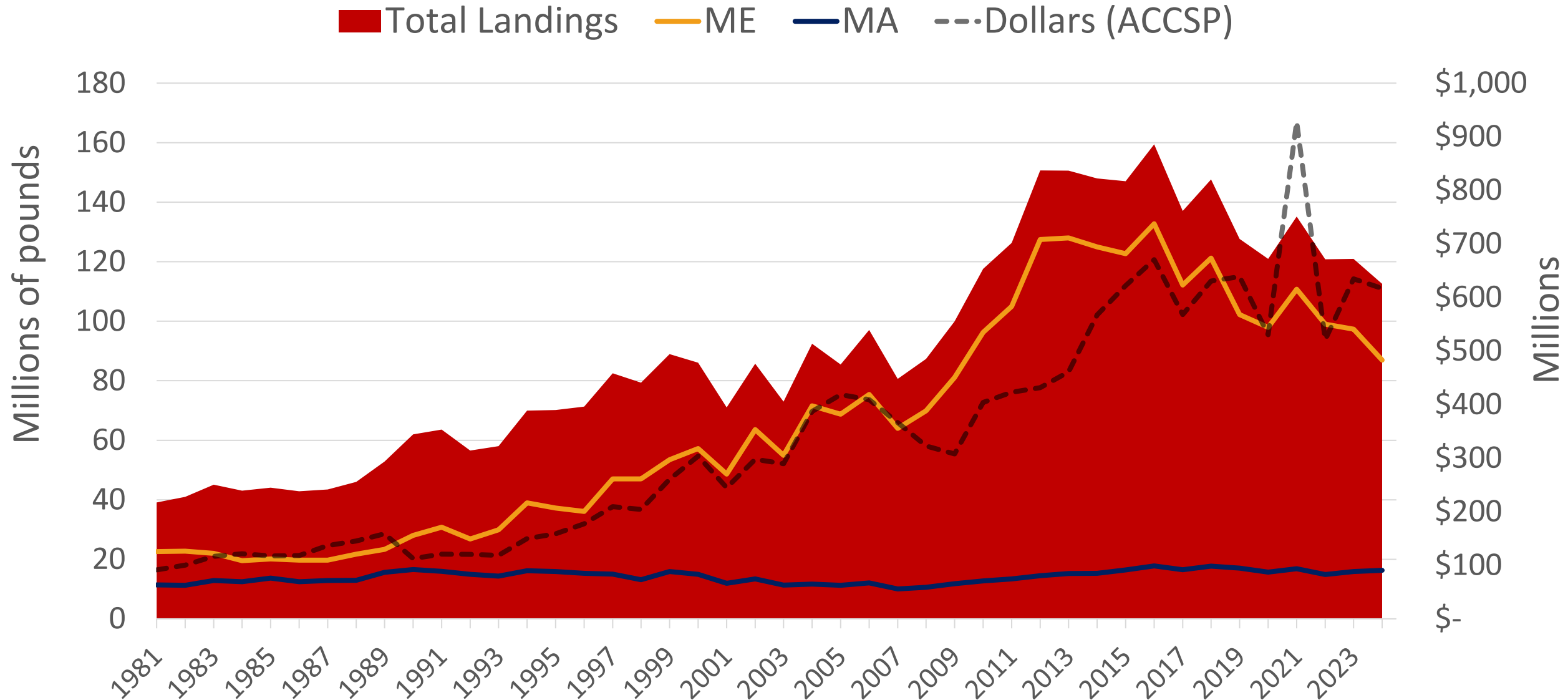
- Postponed gauge and vent size measures of Addendum XXVII

## Addendum XXXII (2025)

- Repealed all gauge and vent size measures of Addendum XXVII



# Status of the Fishery



- Connecticut, and New Jersey and did not meet the Addendum XXVI minimum requirement of ten sea/port sampling trips
  - No trips completed for NJ and CT
- Massachusetts did not provide all required data by August 1 deadline
- Otherwise, states in compliance with FMP

# *De Minimis* Requests

- DE, MD, VA requested and qualify for *de minimis* status
- Criterion: Most recent 2-year average of commercial landings under 40,000 lbs
- The PRT recommends the Board approve the *de minimis* requests

# PRT Recommendations

- TC Task to provide a recommendation on sampling requirements by area or stock unit

# Jonah Crab



## FMP (2015)

- 4.75" minimum size, prohibition on retention of egg-bearing females, 50 whole crab recreational limit, permit requirements

## Addendum I (2016)

- Established bycatch limit of 1,000 crabs per trip

## Addendum II (2017)

- Established coastwide standards for claw harvest

## Addendum III (2018)

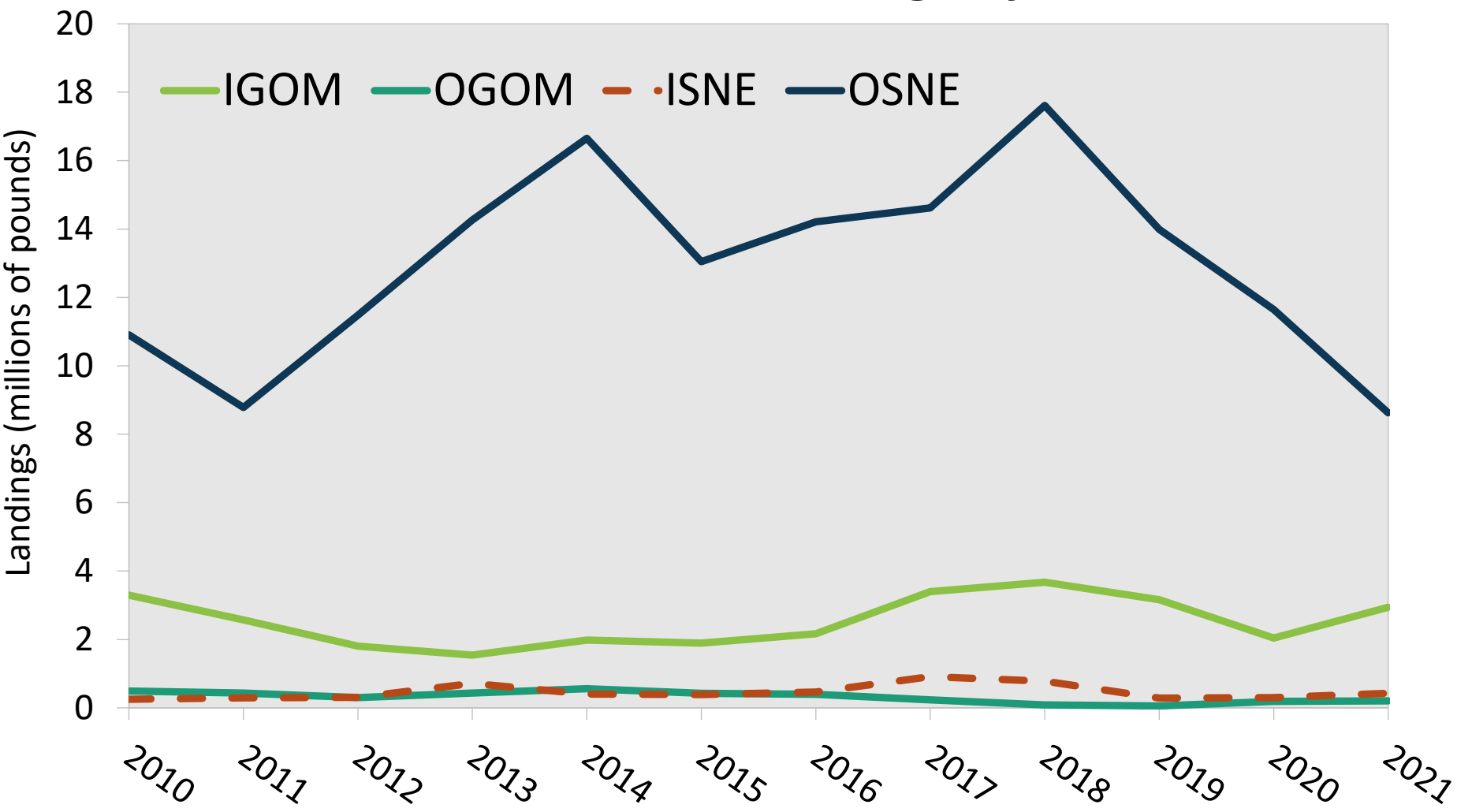
- Improved data collection and reporting requirements

## Addendum IV (2022)

- Established electronic tracking requirements for federally-permitted vessels



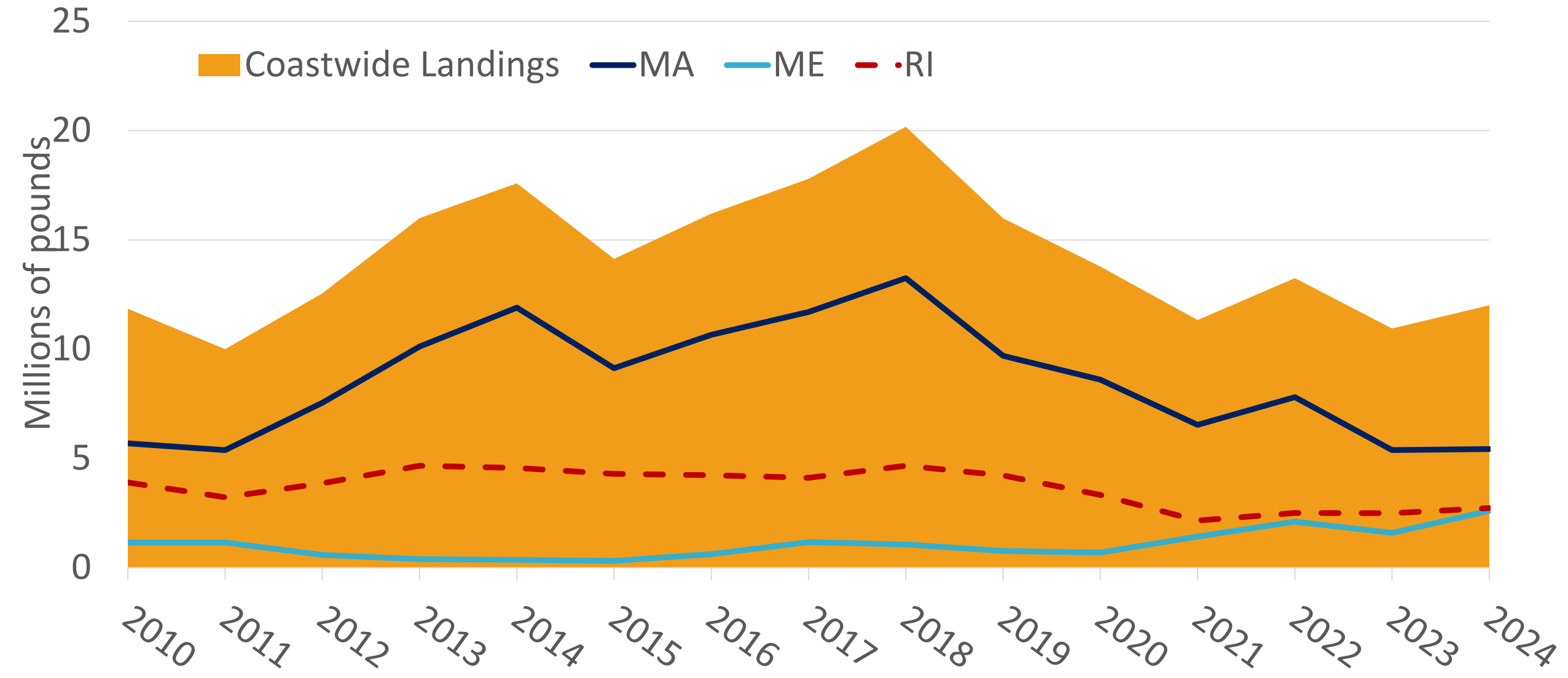
## Jonah Crab Commercial Landings by Stock Area



| Stock Area | Status       |
|------------|--------------|
| IGOM       | Not depleted |
| OGOM       | Not depleted |
| ISNE       | Unknown      |
| OSNE       | Not depleted |



# Status of the Fishery



- Massachusetts has been unable to meet the August 1 deadline for compliance reports for the last six years
- Connecticut, and New Jersey did not complete the required sea and/or port sampling trips

# *De Minimis* Requests

- States may qualify if, for the 3 preceding years, their average commercial landings constitute less than 1% of average coastwide commercial catch
- DE, MD, and VA apply and meet *de minimis* requirement
- The PRT recommends the Board approve the *de minimis* requests

# Board Action for Consideration

- Consider approval of the Lobster and Jonah Crab FMP Reviews for the 2024 fishing year, state compliance reports, and *de minimis* status for DE, MD, and VA.
- Task Technical Committee with recommending commercial sampling needs

# Questions?

