

# 2021 Traffic Light Analysis for Spot and Atlantic Croaker

Atlantic States Marine Fisheries Commission  
Sciaenids Management Board  
Summer Meeting  
August 3, 2021

# Outline



1. Data impacts from COVID-19 pandemic
2. 2021 TLA for Spot
3. 2021 TLA for Atlantic Croaker

# 2020 Survey Data



- No 2019 or 2020 ChesMMAP index values for either species due to recalibration of new boat and gear
  - Should be available Spring 2022
- Several surveys did not run or were interrupted
  - NEFSC Multispecies Bottom Trawl
  - SEAMAP
  - Several state surveys
  - MRIP Data
- TC will evaluate data next year and determine the best way to fill in data gaps



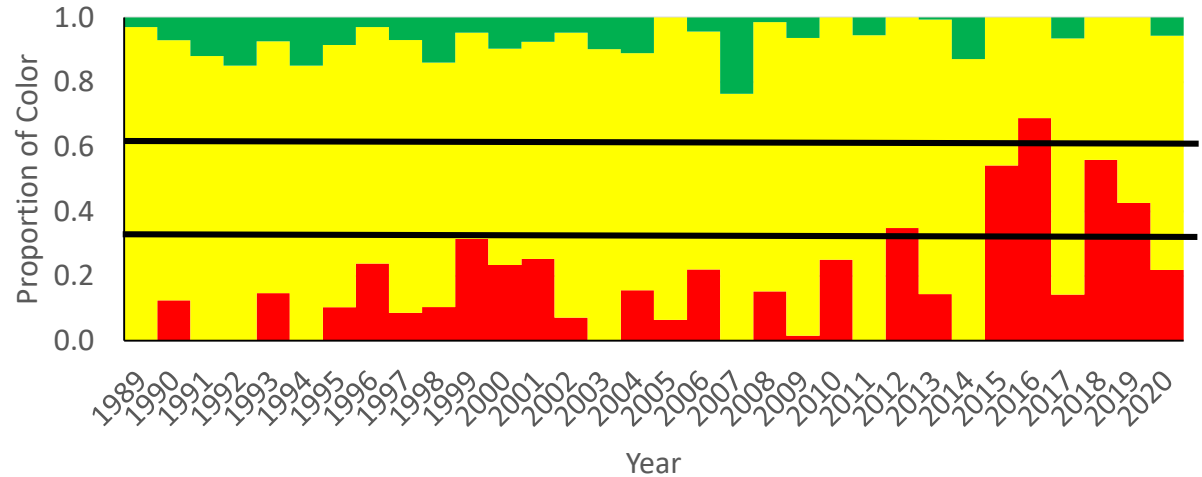
**SPOT**

# 2021 TLA for Spot: Harvest Composite Indices



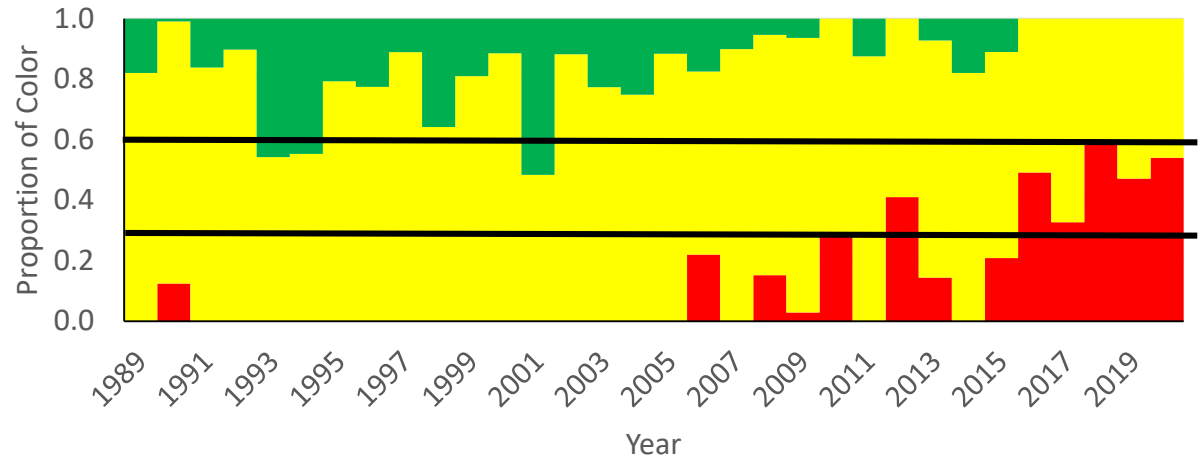
- Mid-Atlantic

- Under the 30% threshold in 2020
- Still above the 30% threshold in two of the past 3 years



- South Atlantic

- 54% red in 2020
- Fifth year in a row above the 30% threshold



# 2021 TLA for Spot: Adult Abundance Composite Indices



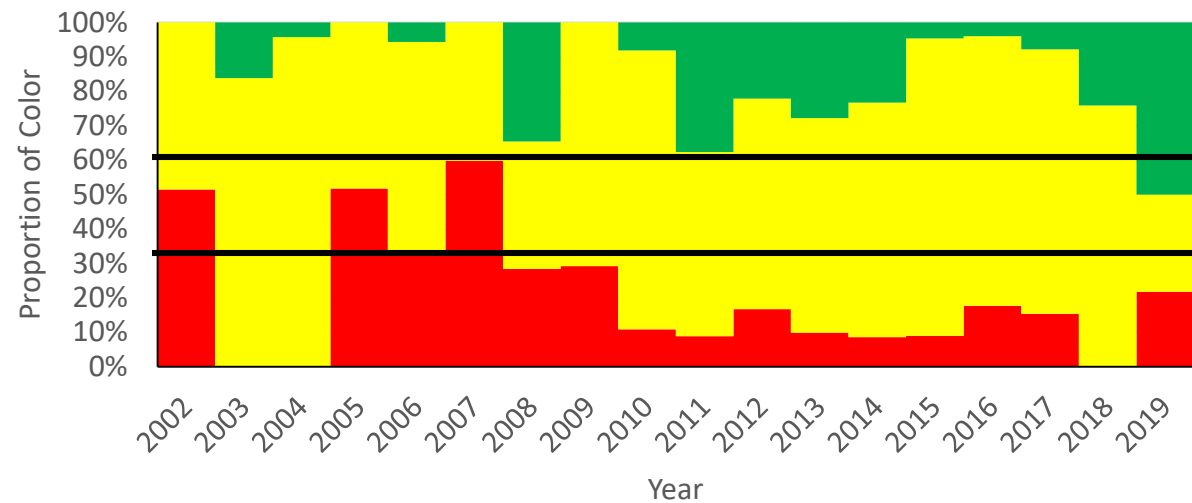
- Mid-Atlantic

- Status unknown
- Eight of most recent available years above 30%

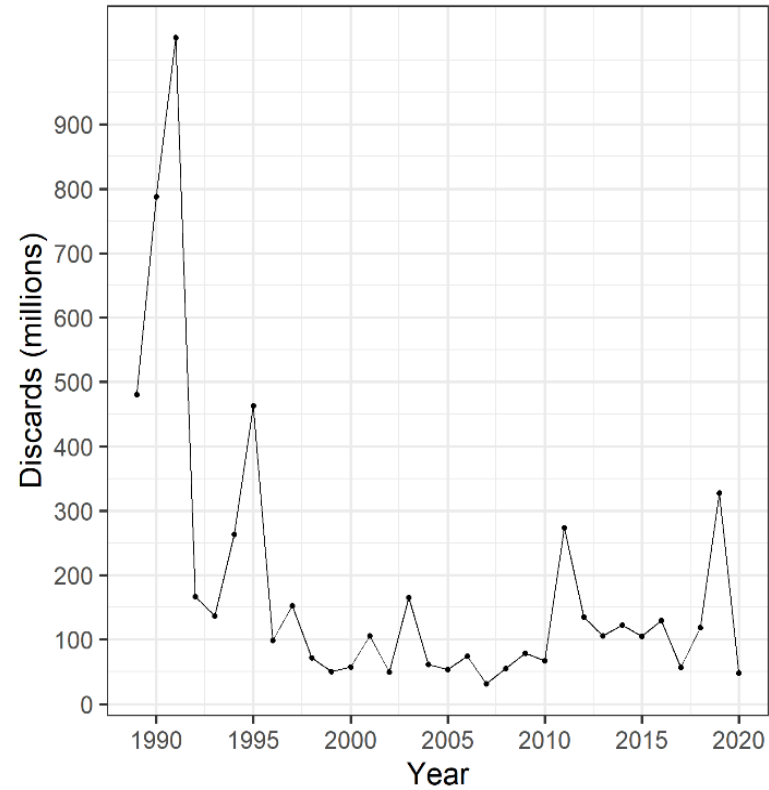
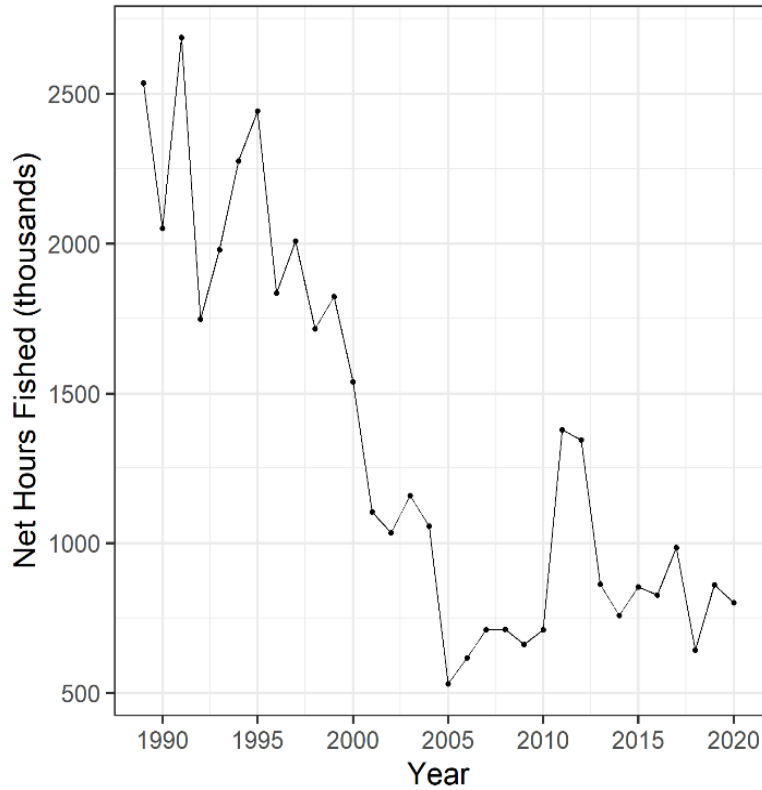


- South Atlantic

- Two of the past 3 years below 30% red, so would not trip regardless of missing 2020 value



# 2021 TLA for Spot: Shrimp Trawl Data

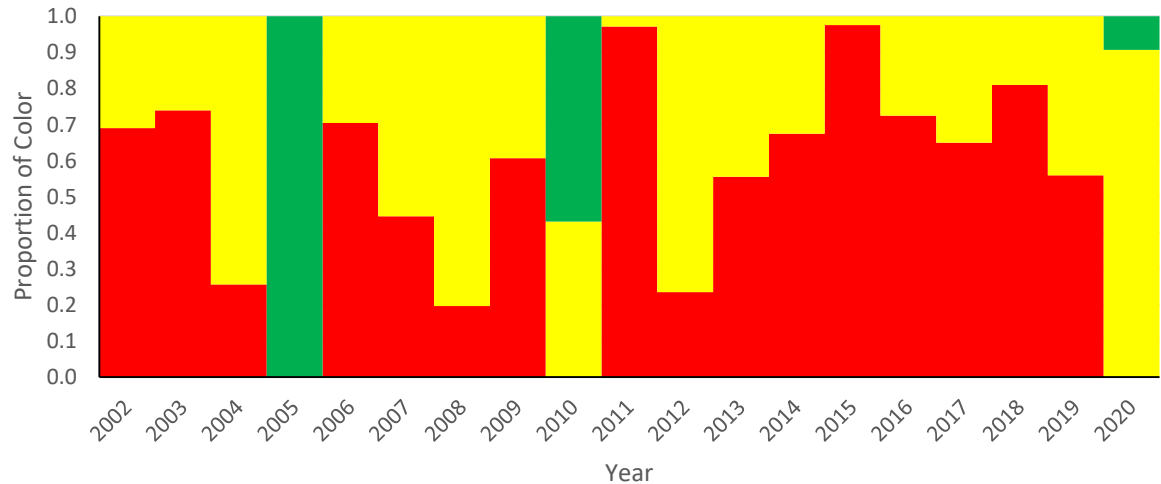


- South Atlantic Shrimp Trawl Fishery
  - Total net hours fished (left) and discards of spot (right)

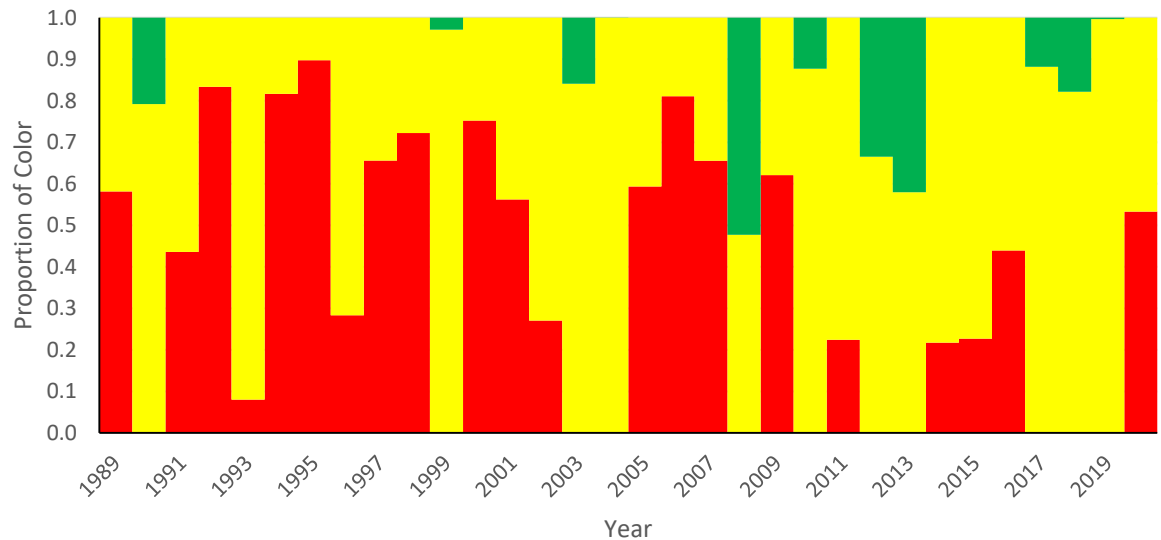
# 2021 TLA for Spot: Juvenile indices



- Mid Atlantic
  - MD seine only
  - 2020 value above the long term mean



- South Atlantic
  - NCDMF Program 195 survey
  - 2020 value above 30 % threshold



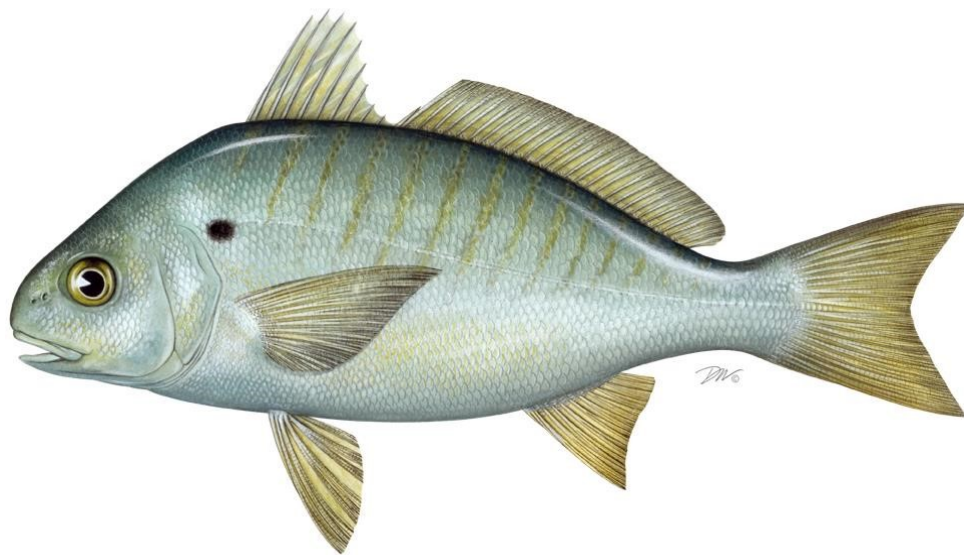


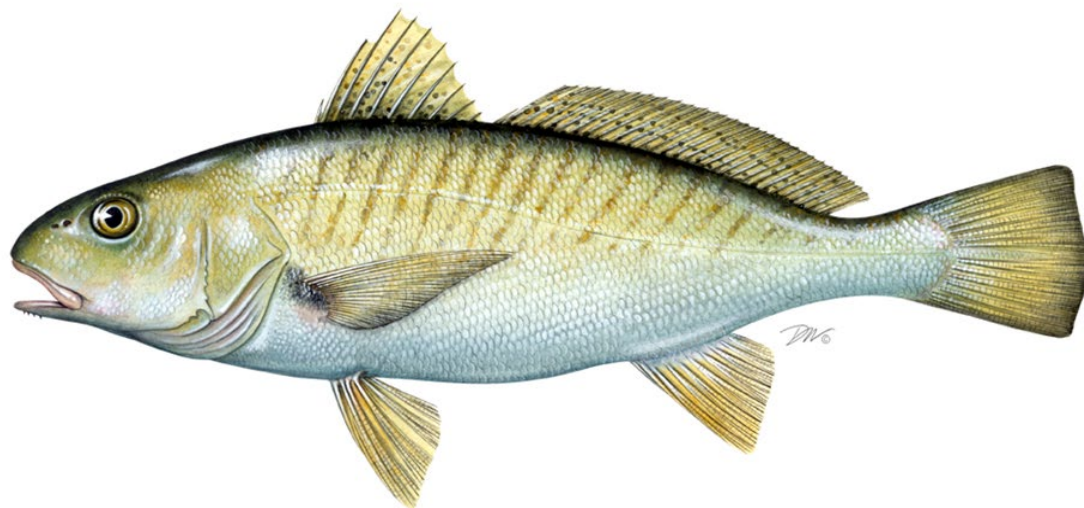
# 2021 TLA for Spot: Summary



TLA Metric	Spot		
	2018	2019	2020
<b>Mid-Atlantic Harvest</b>	56% red	43% red	22% red
<b>South Atlantic Harvest</b>	59% red	52% red	54% red
<b>Mid-Atlantic Adult Index</b>	44% red	Unknown	Unknown
<b>South Atlantic Adult Index</b>	24% green	50% green	Unknown; cannot trigger regardless of 2020 data
<b>2021 TLA Status</b>	Triggered at 30% (Mid-Atl Harvest, S. Atl Harvest, Mid-Atl Index unknown; S. Atl Index did not trigger)		

# Questions?



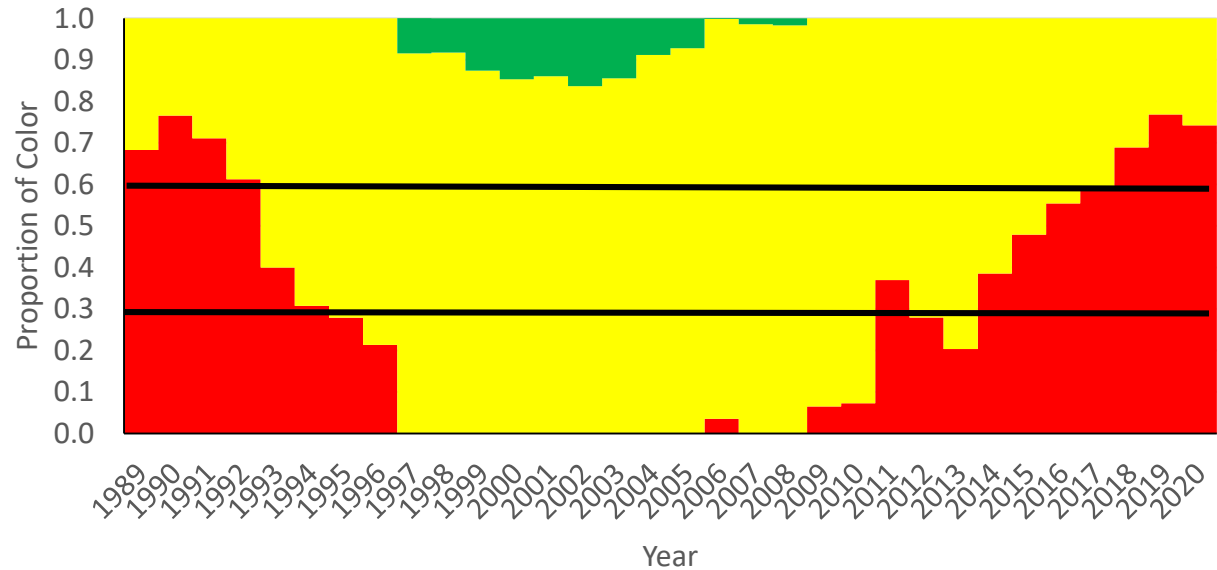


**ATLANTIC CROAKER**

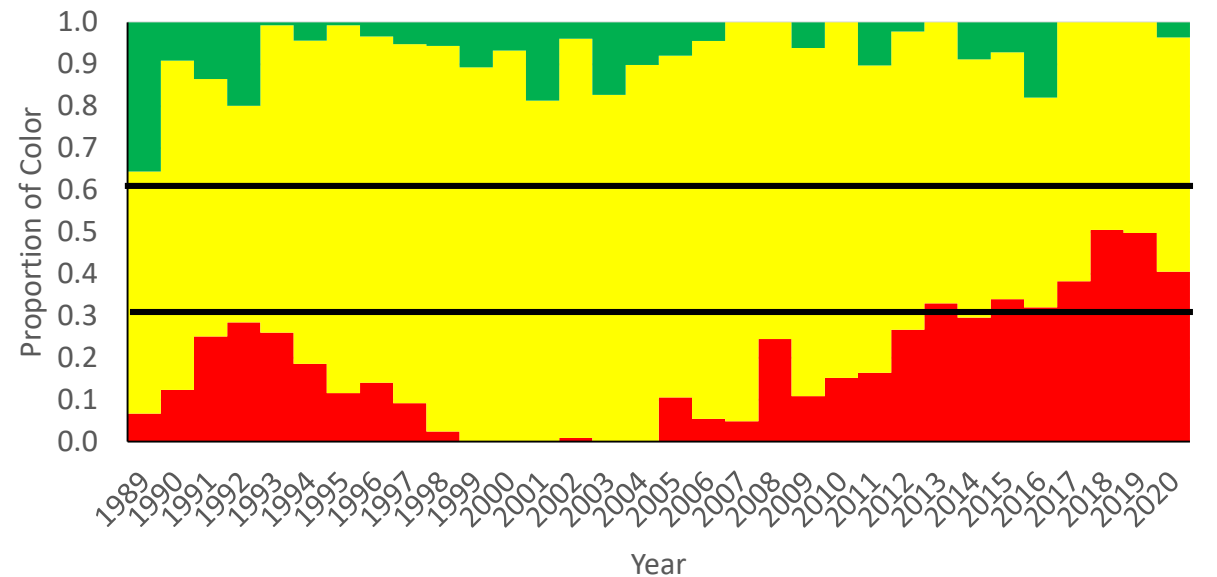
# 2021 TLA for Atlantic Croaker: Harvest Composite Indices



- Mid-Atlantic harvest composite



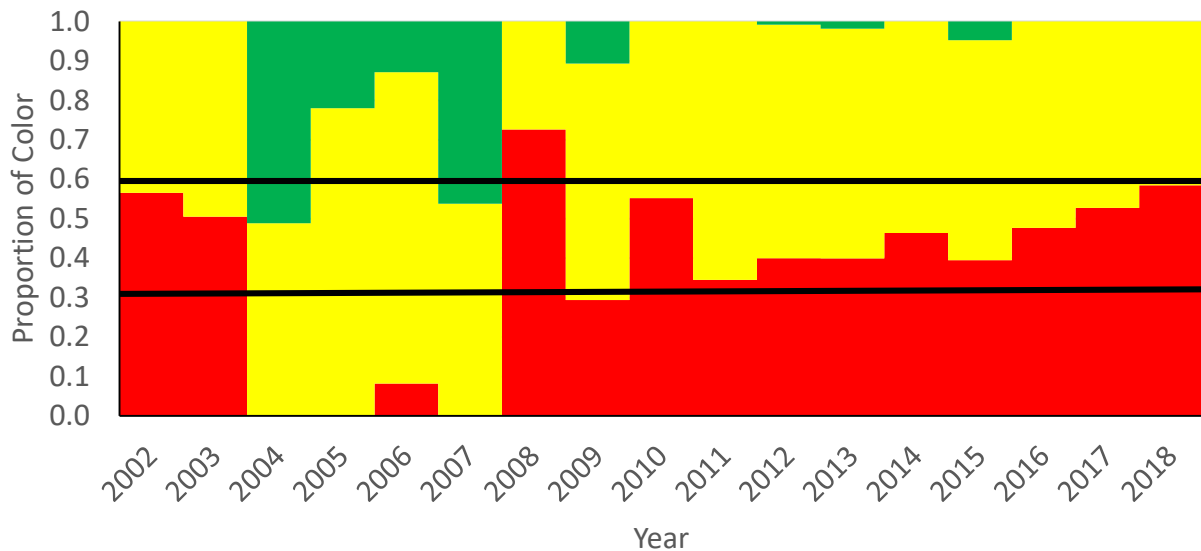
- South Atlantic harvest composite



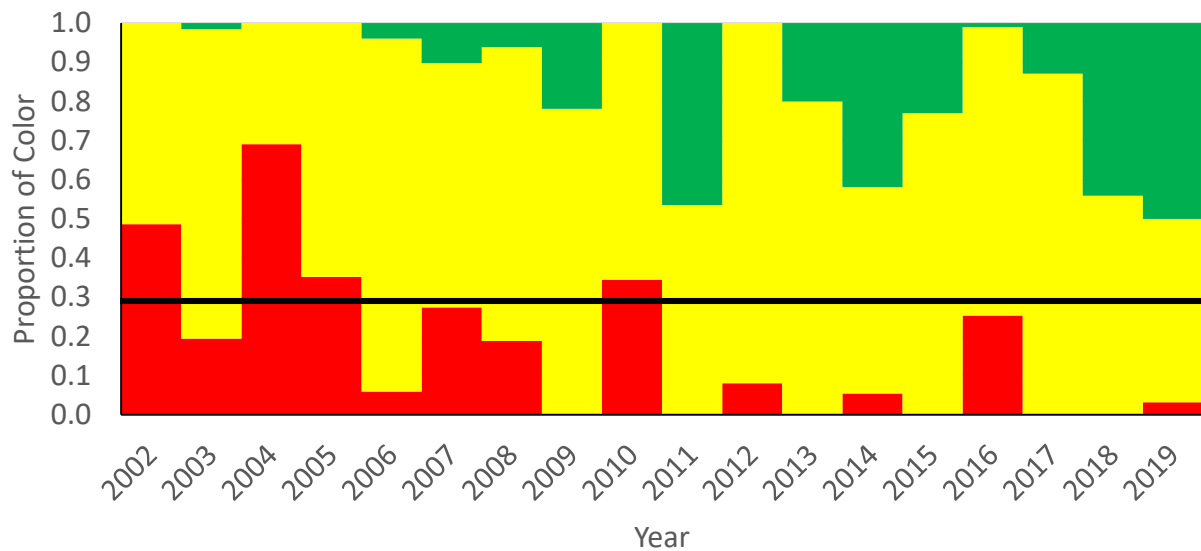
# 2021 TLA for Atlantic Croaker: Adult Abundance Composite Indices



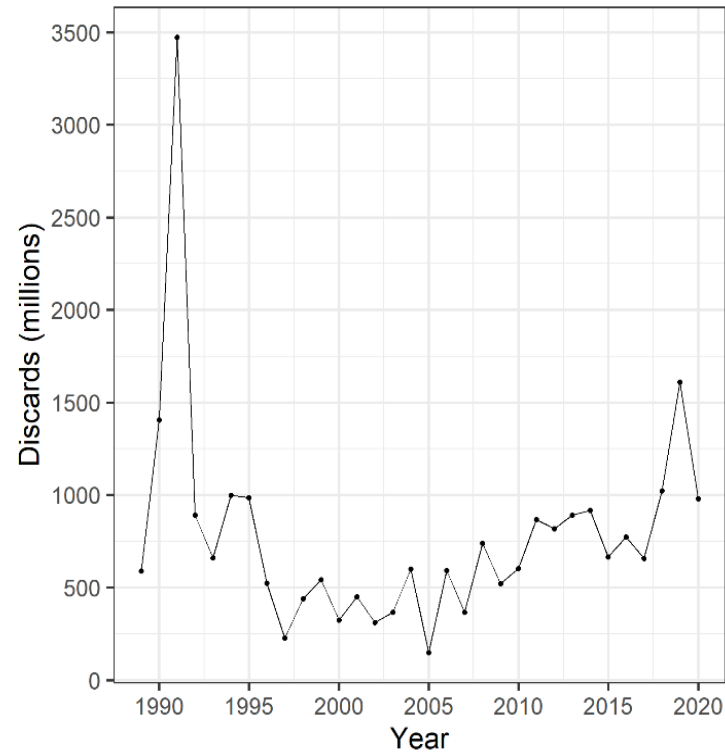
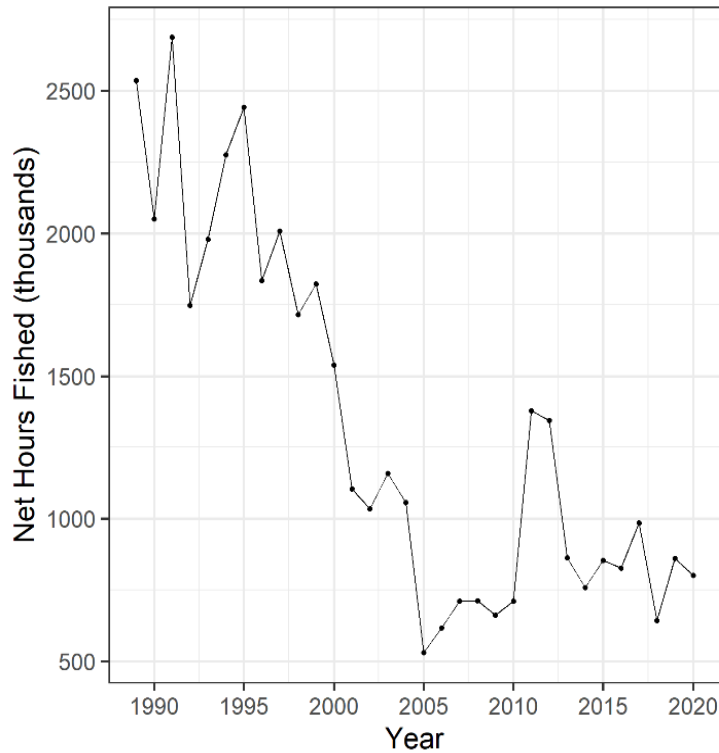
- Mid-Atlantic adult abundance composite



- South Atlantic adult abundance composite



# 2021 TLA for Atlantic Croaker: Shrimp Trawl

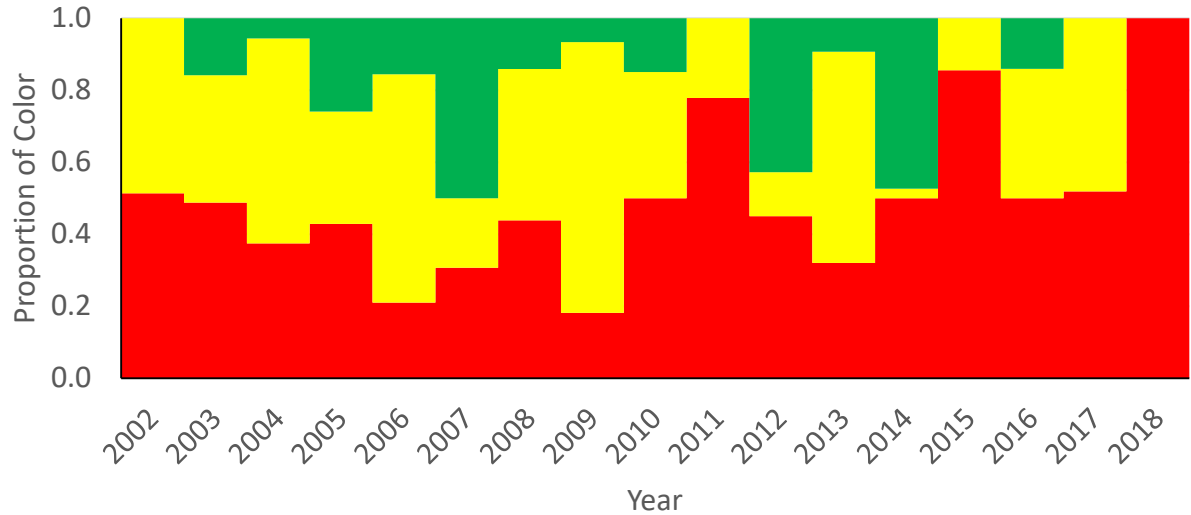


- South Atlantic Shrimp Trawl Fishery
  - Total net hours fished (left) and discards of croaker(right)

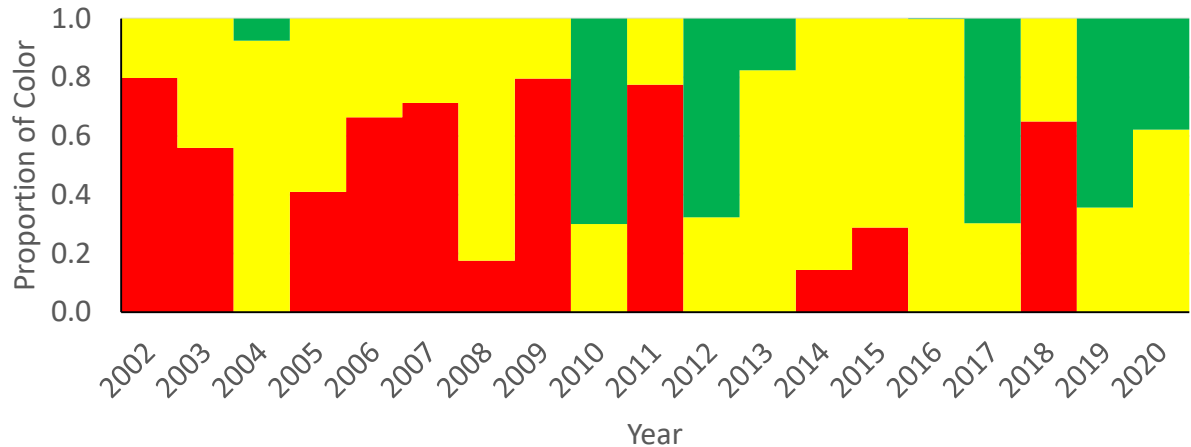
# 2021 TLA for Atlantic Croaker: Juvenile indices



- Mid-Atlantic juvenile abundance composite



- South Atlantic juvenile abundance composite



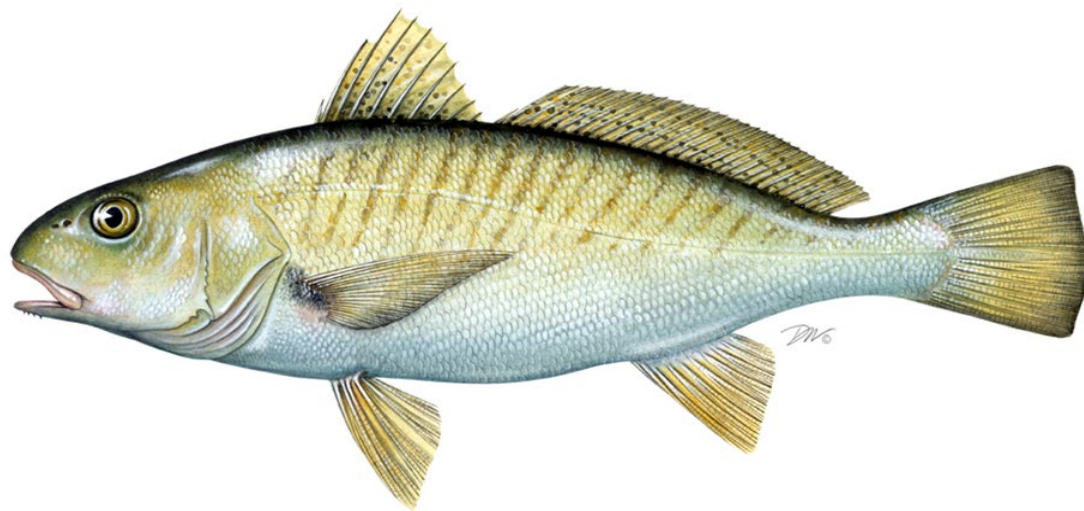
# 2021 TLA for Atlantic Croaker: Summary



TLA Metric	Atlantic Croaker			
	2017	2018	2019	2020
<b>Mid-Atlantic Harvest</b>	59% red	69% red	77% red	74% red
<b>South Atlantic Harvest</b>	38% red	51% red	50% red	41% red
<b>Mid-Atlantic Adult Index</b>	53% red	58% red	Unknown	Unknown
<b>South Atlantic Adult Index</b>	13% green	44% green	50% green	Unknown; cannot trigger at 30% or 60% regardless of 2020 data
<b>2021 TLA Status</b>	Likely still triggered at 30% (Mid-Atl Harvest triggered at 60%; S. Atl Harvest triggered at 30%; Mid-Atl Index unknown; S. Atl Index did not trigger)			



# Questions?



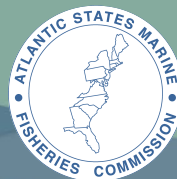


# Technical Committee Recommendations for Monitoring the Atlantic Coast Black Drum Stock

Atlantic States Marine Fisheries Commission  
Sciaenids Management Board  
Summer Meeting  
August 3, 2021



# Outline



1. Background
  1. 2014 Assessment
  2. Assessment timing
2. Benchmark Assessment vs Traffic Light Analysis (TLA)
3. TC Recommendations

# 2014 Benchmark Assessment



- Data through 2012
- Peer reviewed in 2014
- Preferred model was a Depletion Based Stock Reduction Analysis (DB-SRA)
- Reference points accepted for management use
- MRIP effort estimate change after assessment
  - Can not use current reference points to evaluate stock status

# Assessment Timing



The TC met in 2019 to review data and decide on timing and type of next Assessment

- Recommended delaying Assessment to 2022 to allow for a longer time series and aging of archived structures
- Recommended the next assessment be a Benchmark, not an update, to try and improve on model structure, including exploring incorporating one or more tuning indices

TC met in 2021 to evaluate available data and discuss the use of a TLA or Assessment to monitor the stock.

# Benchmark Assessment vs Traffic Light Analysis



## SA

- Currently 5 year cycle
- Technical report and figures (Peer Review)
- Produces Reference points
- Management response calculable
- Update can indicate management success
- Could annually review 'guard rail' metrics as well as reference points

## TLA

- Updated annually
- Easier for less technical audience to interpret
- Thresholds assigned that automatically trigger management
- Management response not calculable
- Triggering management could reduce metrics used

# Key points from TC Discussion



- Current MRIP values
  - Similar trend to the previously un-calibrated values, but tend to be higher
  - The proportion of released alive fish has increased, which is likely attributed to the minimum size limits required by the FMP
  - Recent increase in recreational trips targeting, likely do to effort shifting from other more popular species for various reasons
- Need to update reference points using recalibrated MRIP values to be able to track the stock and calculate reductions if needed
  - Likely to still be a data poor model structure

# Key points from TC Discussion



- Setting a reference period for a TLA would be difficult with most available data
- Evaluation of available data did not reveal the potential for a coastwise fishery independent index
  - The lack of such an index will make moving from a data poor assessment less likely, and would necessitate a TLA to rely heavily on removals



# TC Recommendation



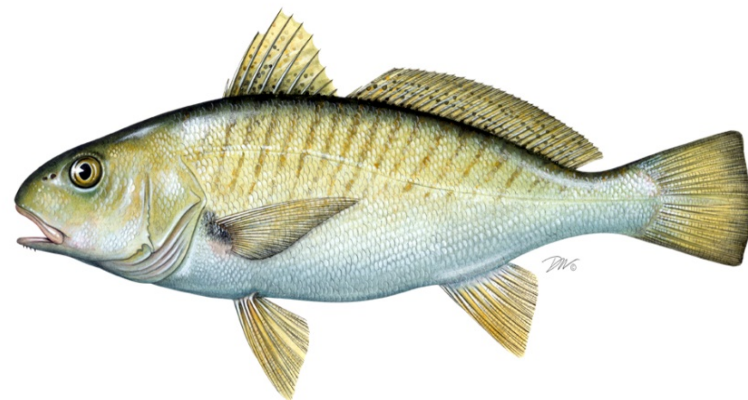
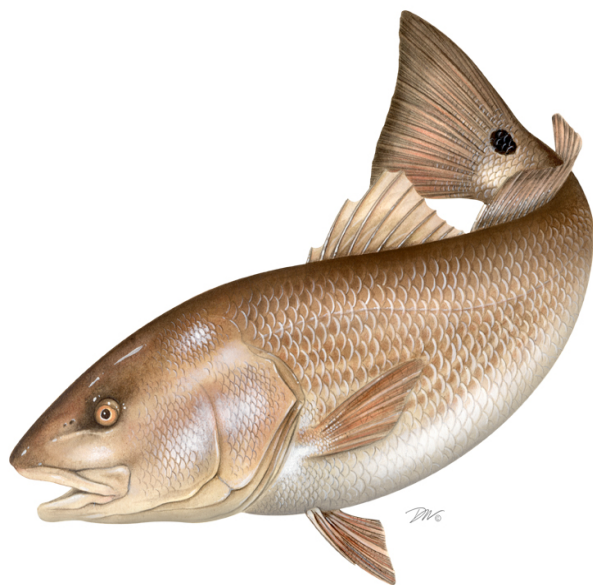
- Conduct a Benchmark Stock Assessment as scheduled in 2022
  - Will provide updated reference points
  - Likely will remain a data poor approach, but may be able to improve on current DB-SRA model
  - Attempt to identify appropriate ‘guard rail’ metrics to monitor the stock annually, along with updated reference points.

# Questions?





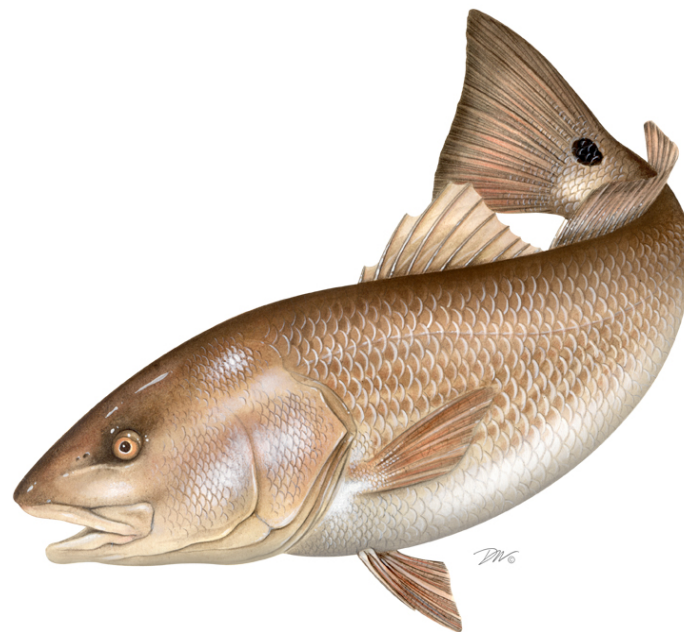
# Red Drum and Atlantic Croaker Fishery Management Plan Review



Sciaenids Management Board  
August 3, 2021

# Red Drum

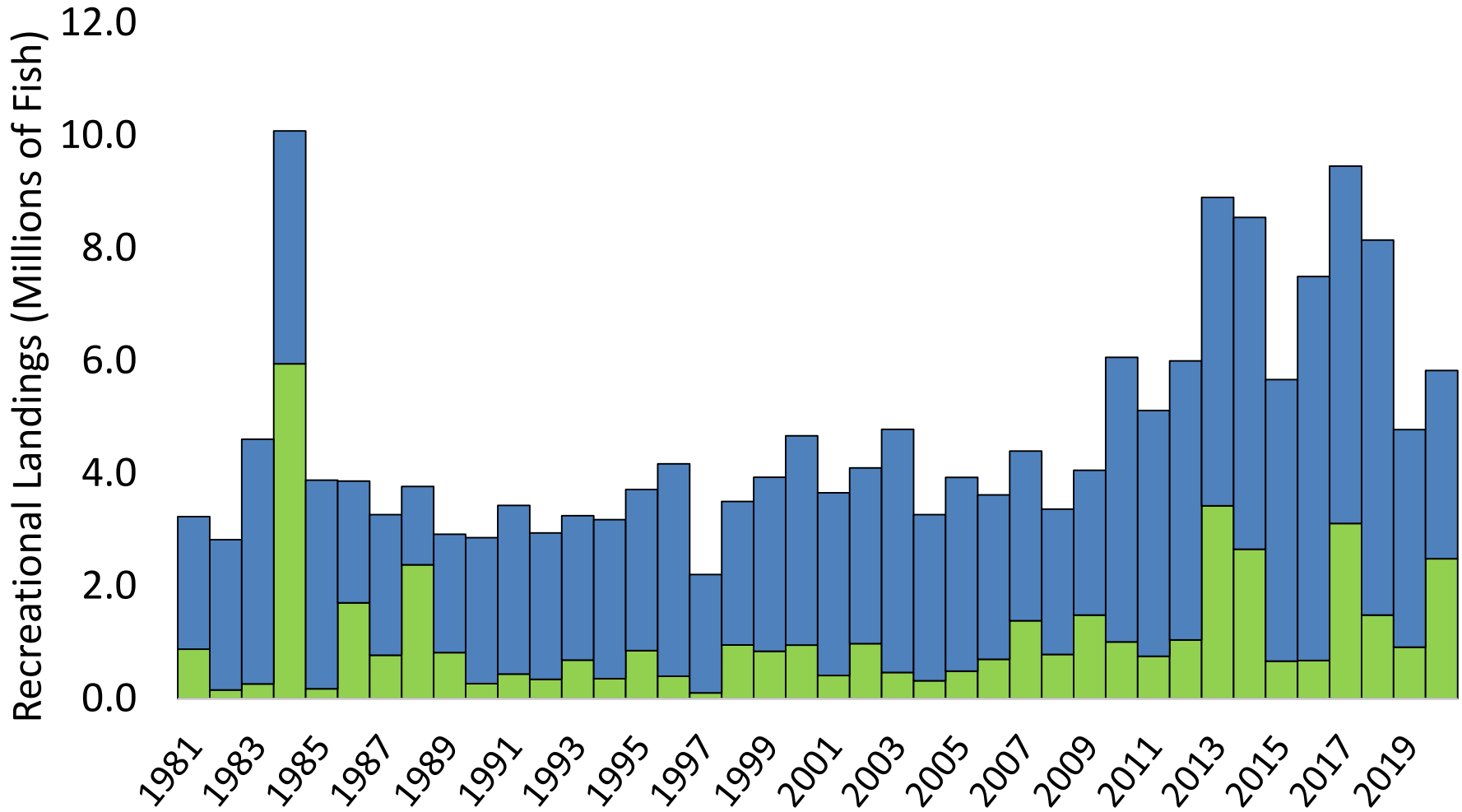
## Fishery Management Plan Review



# Status of the Fishery - Recreational Landings



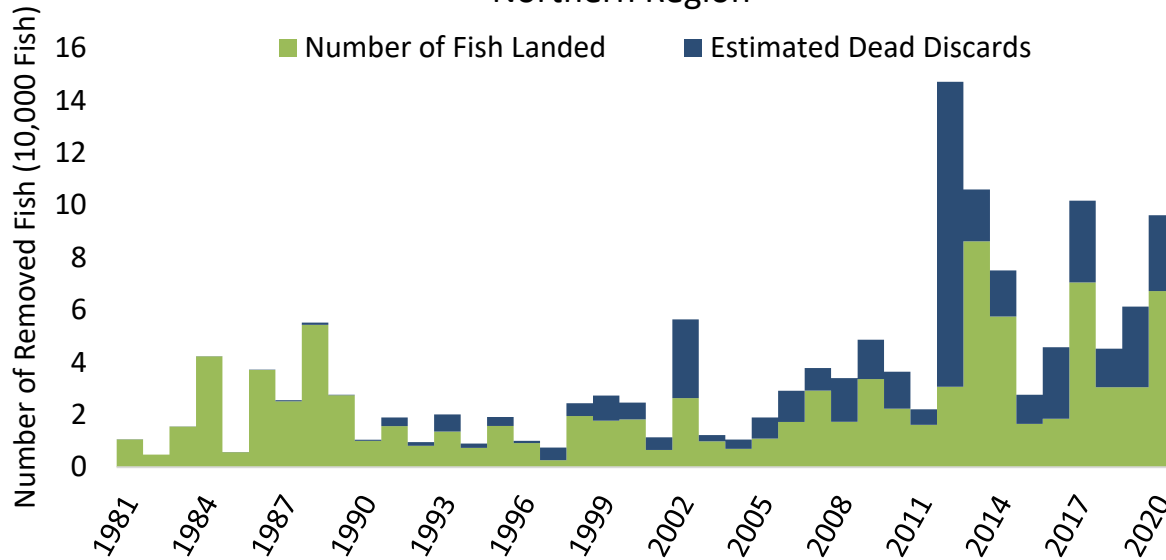
■ Northern Region    ■ Southern Region



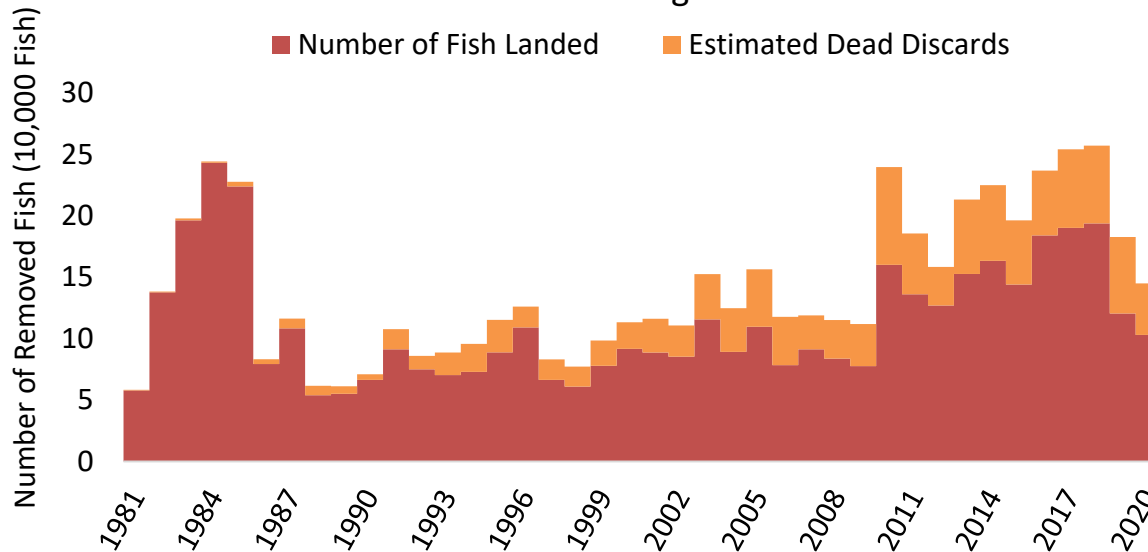
# Recreational Removals by Region



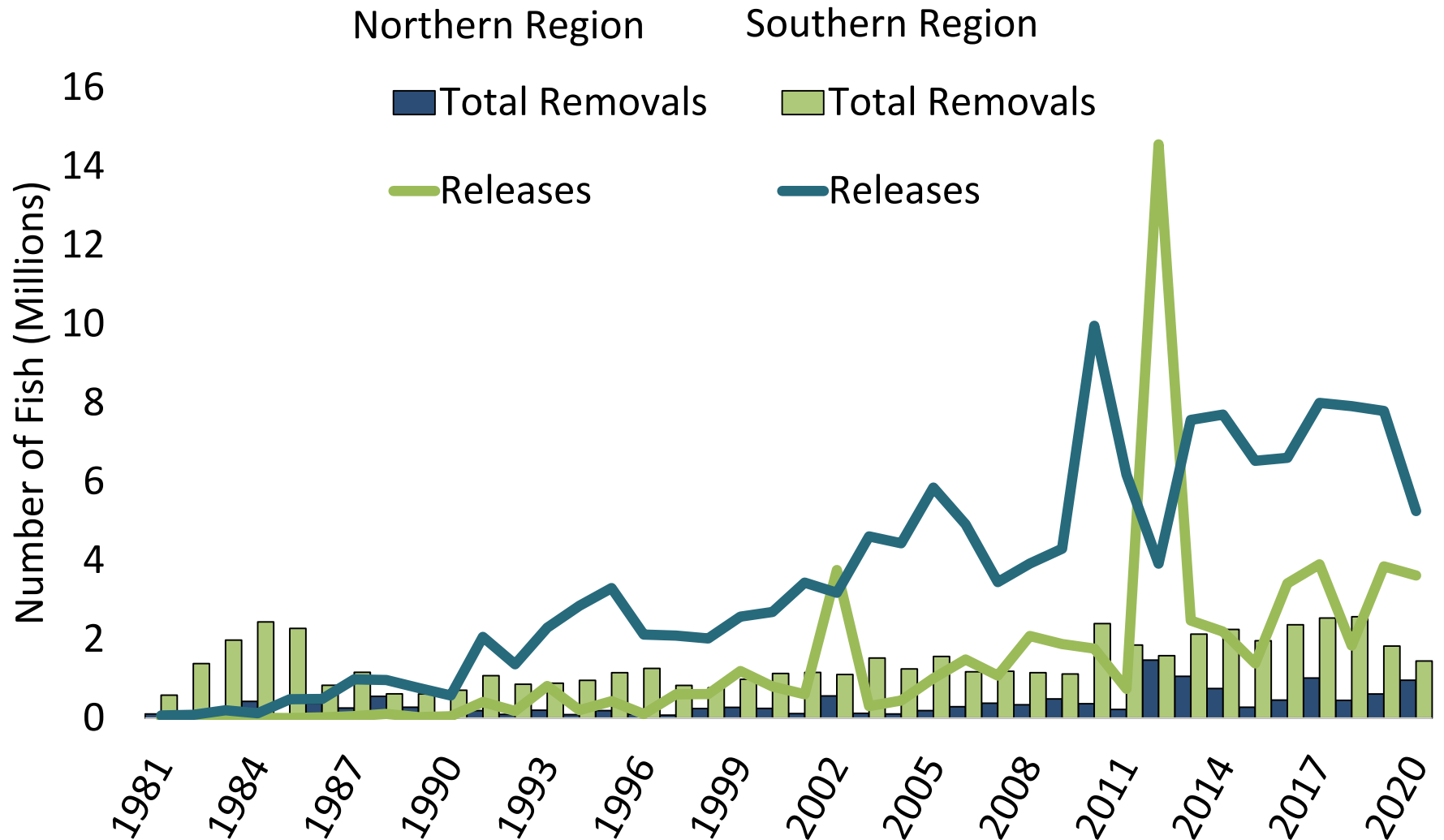
## Northern Region



## Southern Region



# Status of the Fishery – Recreational Removals and Releases



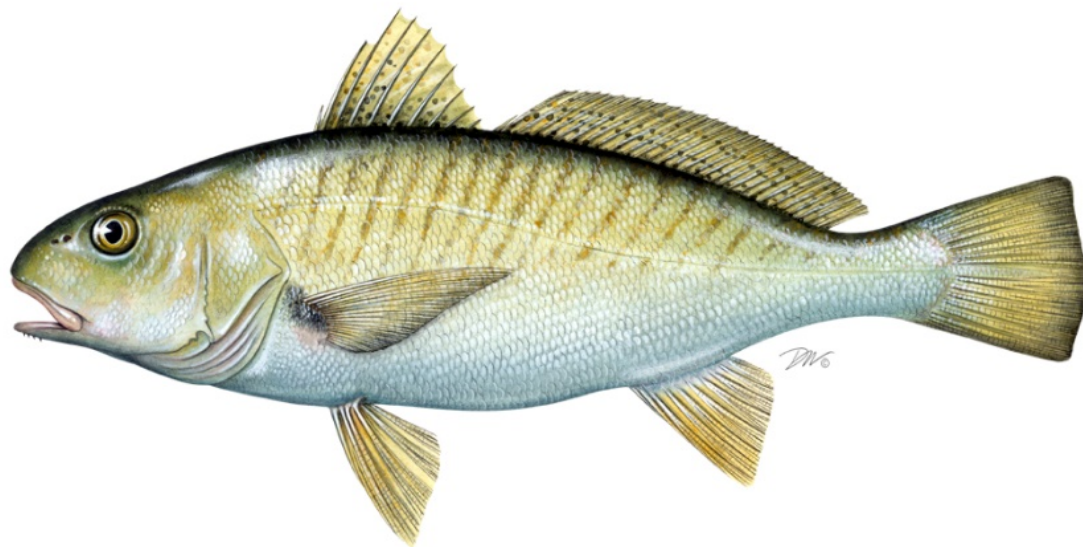
# PRT Recommendations



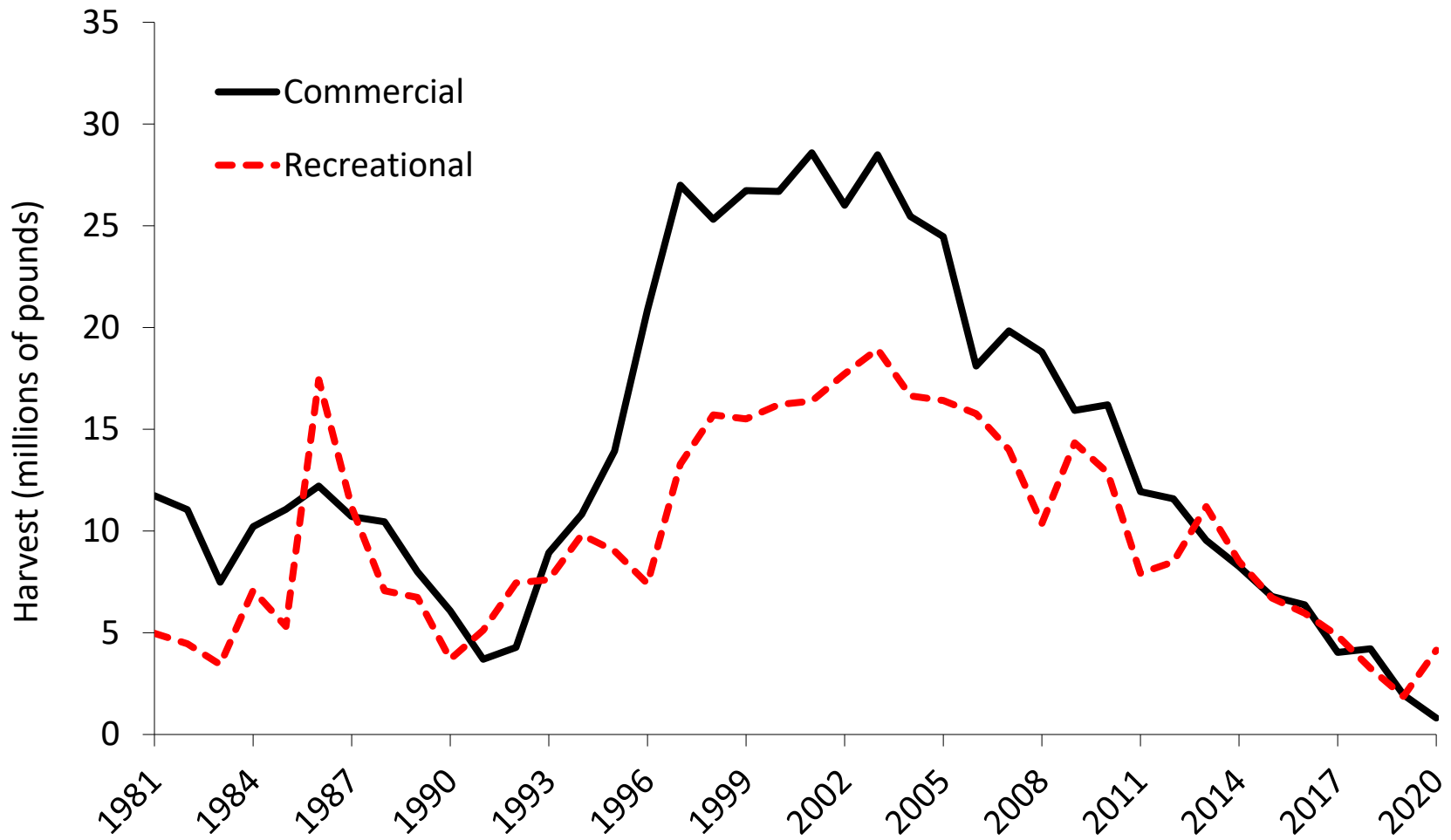
- Found no inconsistencies from the FMP
- TC recommends the approval of state compliance reports and *de minimis* status for New Jersey and Delaware
- Research Recommendations
  - Length composition (and age data, if possible) of recreational discards (B2) of red drum
  - Continue sampling and expansion of adult red drum surveys to determine abundance, size, age, sex composition, and maturity of the adults, senescence in female red drum, and impacts of catch-and-release fishery
  - Assess the effects of environmental factors on stock density/year class strength.
  - Support and conduct applied research to evaluate the social and economic value of this important, primarily recreational fishery.



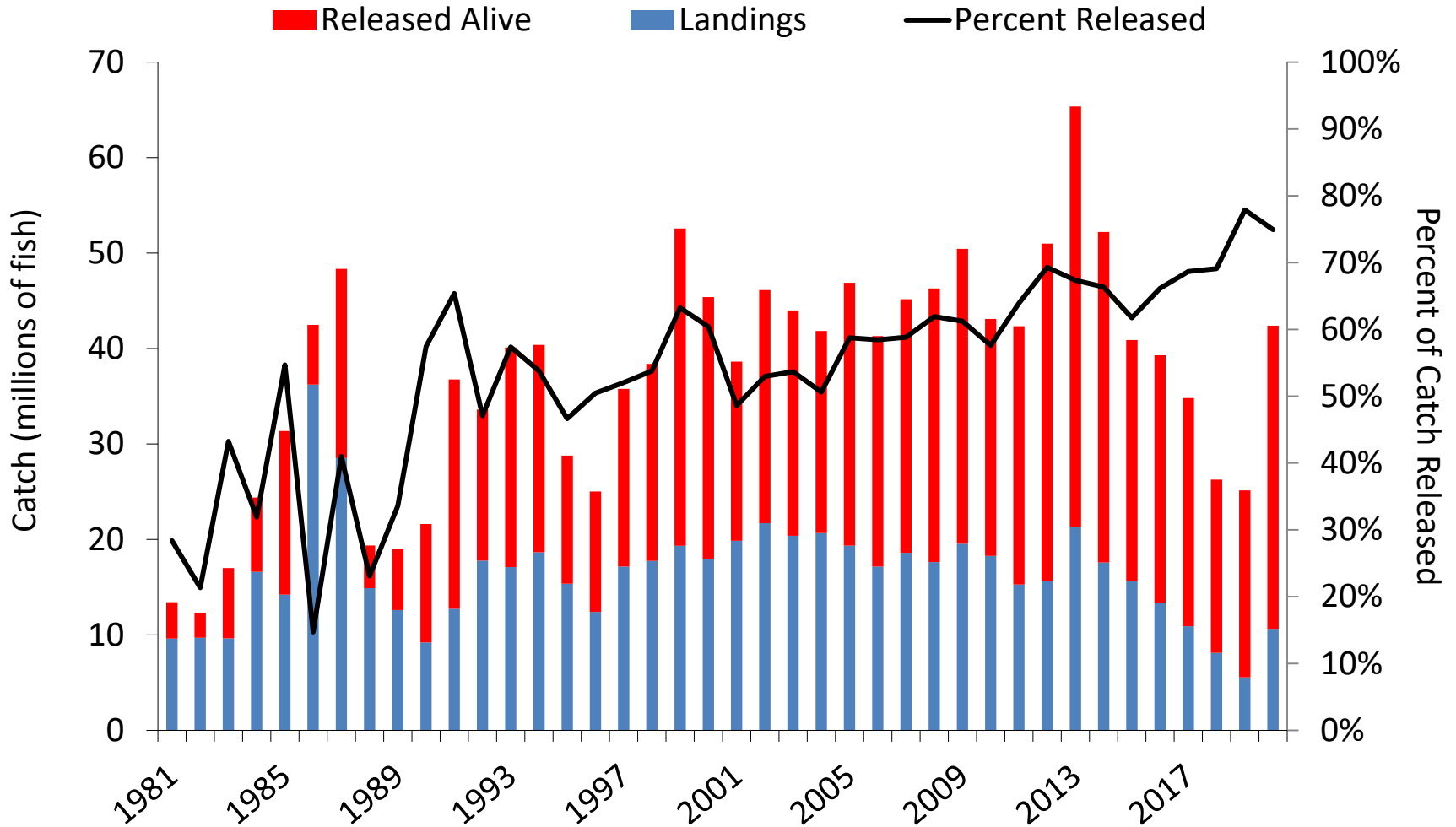
# Atlantic Croaker Fishery Management Plan Review



# Atlantic Croaker Landings 1950-2020



# Atlantic Croaker Landings 1950-2020



# PRT Recommendations



- No inconsistencies found among states with regard to FMP requirements
- TC recommends approval of state compliance reports and *de minimis* status for:
  - New Jersey, Delaware, South Carolina, and Georgia commercial fisheries.
  - New Jersey and Delaware recreational fisheries
- Additional research/monitoring recommendations found in FMP Review document
- Research into the impacts of climate change on the range of the species

# Florida State Implementation Plan

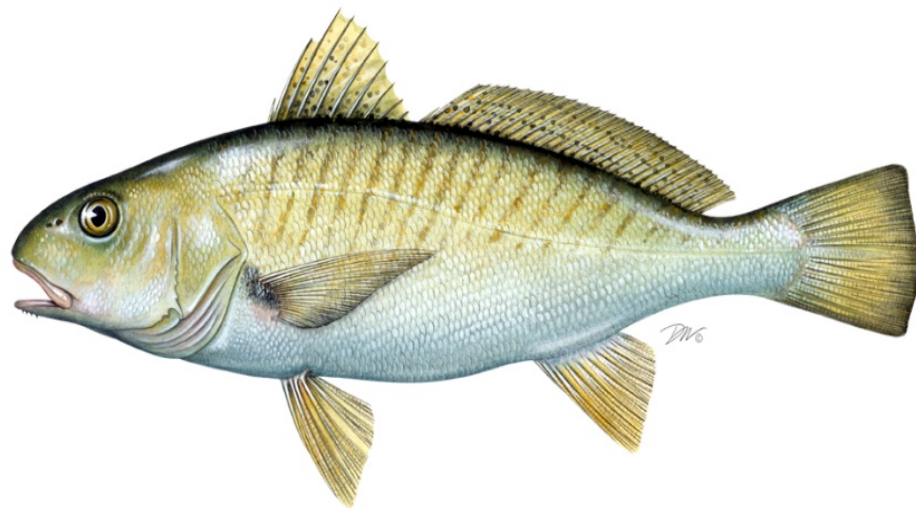
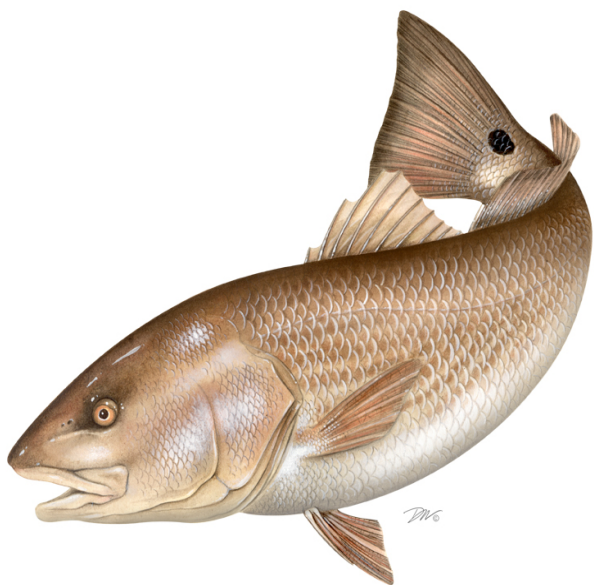


- Florida no longer qualifies for de minimis for commercial Atlantic croaker fishery
- Submitted state implementation plan to be in compliance with Addendum III
  - Reviewed by the TC; found it to be technically sound and recommended approval

## Proposal:

- Commercial vessel limit of 1,200 pounds in state waters
- Projected to reduce 10 year average by 1.06%

# Questions?



# Board Actions and Next Steps



- Motion on approval/disapproval of FMP reviews, state compliance reports, and de minimis requests for red drum and Atlantic croaker.
- Motion on approval/disapproval of Florida state implementation plan for their commercial Atlantic croaker fishery.