

Spanish Mackerel Assessment and Management Status

ASMFC Annual Meeting

November 2022

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SAFMC

SEDAR 78 Highlights



NOAA
FISHERIES

Southeast Fisheries
Science Center
Sustainable Fisheries
Division
Atlantic Fisheries Branch

SEDAR 78 – U.S. Atlantic Spanish Mackerel Stock Assessment



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South Atlantic Fisheries Management Council
Scientific and Statistical Committee
August 4 , 2022

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

- Next few slides are based on the August 4, 2022, SAFMC SSC presentation
- pdf references refer to Version 4 of the SEDAR 78 assessment report.

Background

- SEDAR 28 (2012)
 - Not overfished ($SSB_{2011}/MSST=2.29$)
 - Not overfishing ($F_{2009-2011}/F_{MSY}=0.526$)
- SEDAR 78 Operational assessment
 - Terminal year 2020
 - Data provision delays altered original schedule
 - 1 data scoping call and 4 assessment webinars
 - Panel input and approval of all decisions

SEDAR 78 Data and Model Updates

- Growth Model
 - abandoned sex specific growth models
- Natural Mortality
 - updated for revised growth parameters
- Input time series updated through 2020
 - Recreational update with FES estimates
 - Shortened time series – year 1 1986
- Alternative pooling of some commercial age comps due to low sample sizes

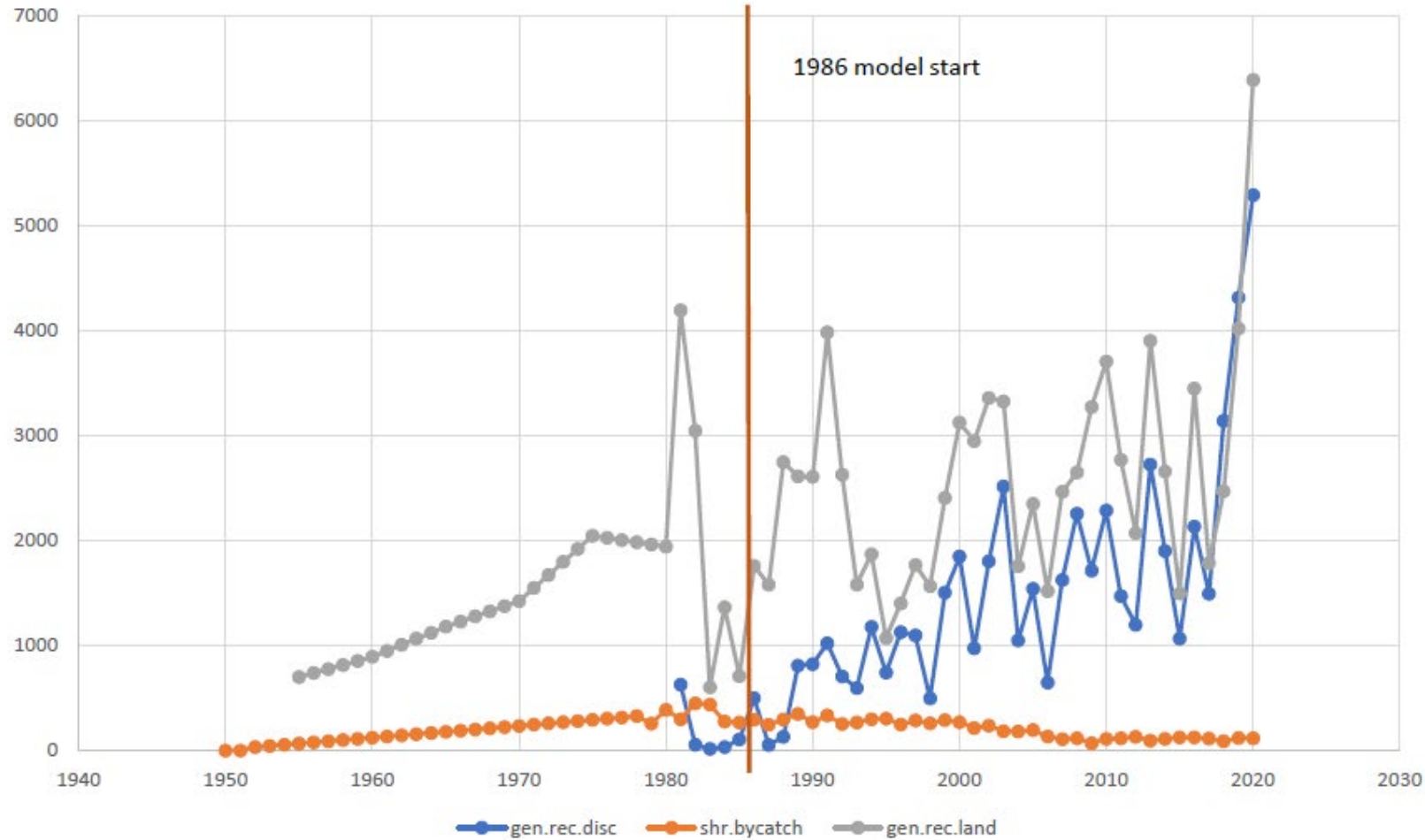
Recreational Data Issues – *terminal year “spike”*

- General recreational (private, charter, shore, and headboat) landings and discards (SEDAR 78 WP-03)
 - Three domains identified as large/small relative to adjacent years (1981 landings, 2020 landings and discards)
 - All traced to FL shore mode, estimates accepted for base run with relatively high CV values
 - Impact of COVID on 2020 estimates evaluated, imputed data did not deviate from the 2015-2019 data

Recreational and Shrimp Bycatch

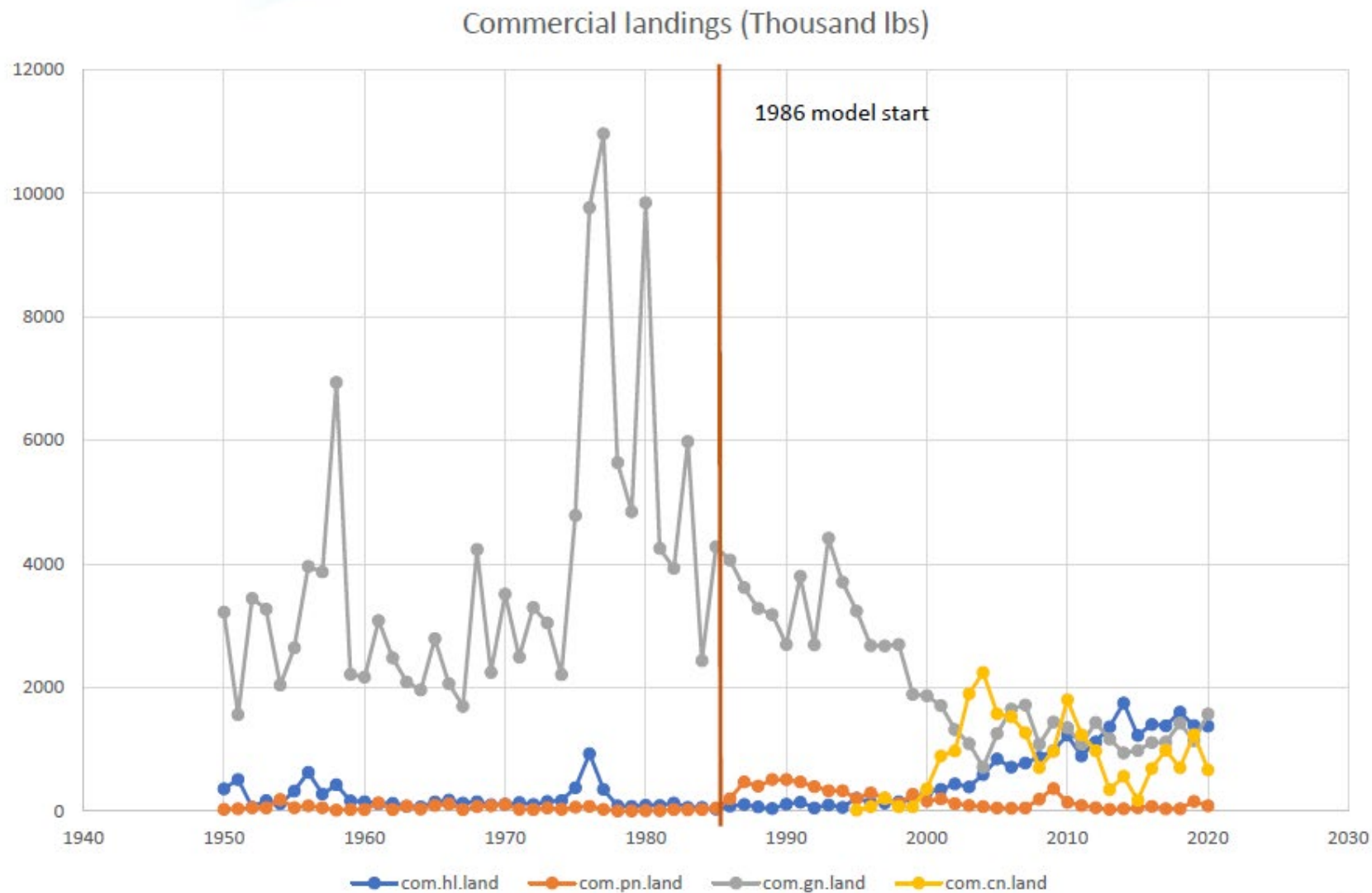
disc – discards (live and dead), shr – shrimp bycatch (dead)

Recreational landings and discards and shrimp bycatch (Thousands)



Commercial Landings

hl – handline, pn – pound net, gn – gillnet, cn – cast net



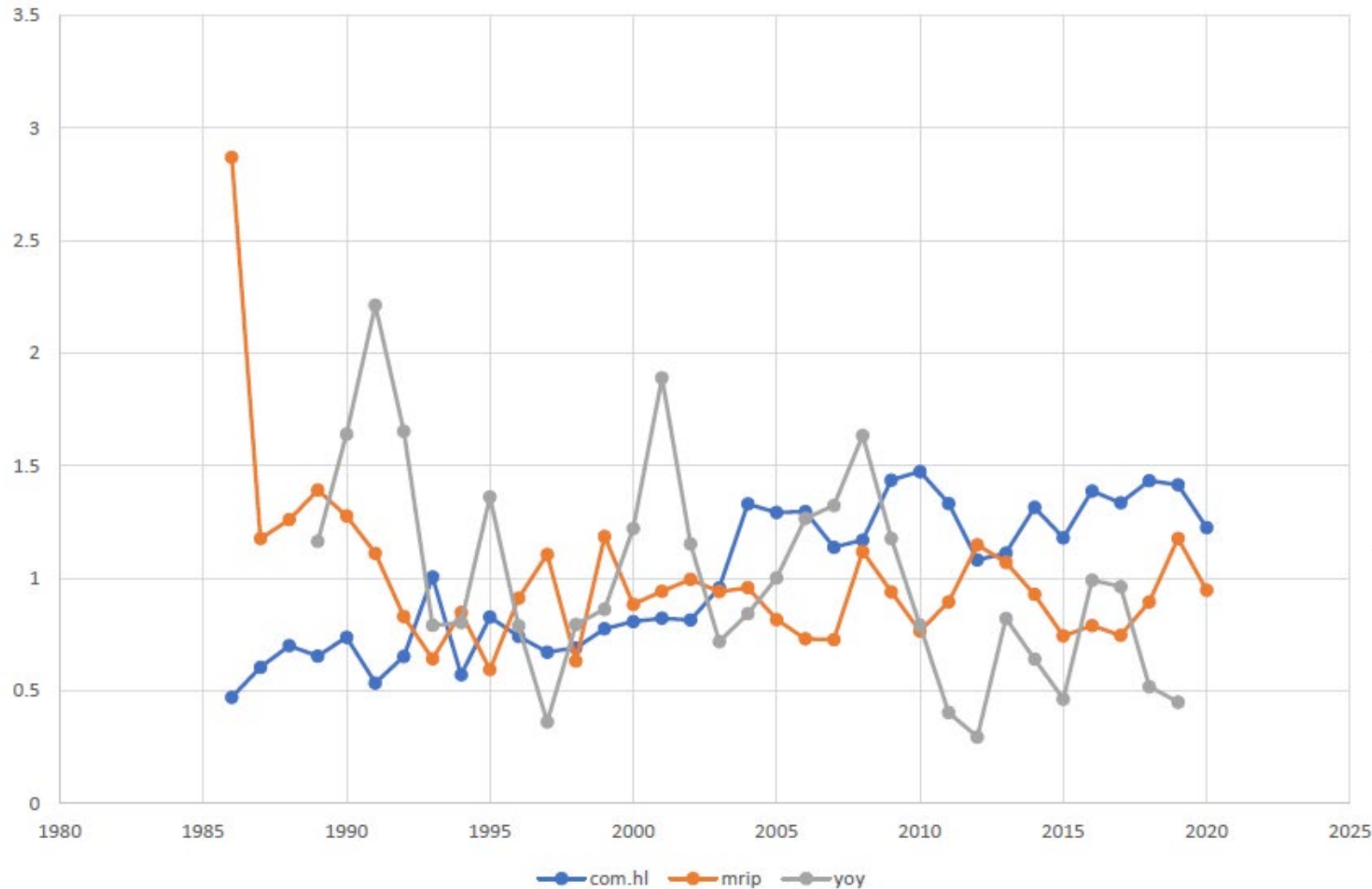
Indices of abundance

Table 3, pdf page 92

Fig 11-13, pdf pages 134-136

com.hl – FL trip ticket, mrip – recreational, yoy – SEAMAP trawl

Indices of abundance

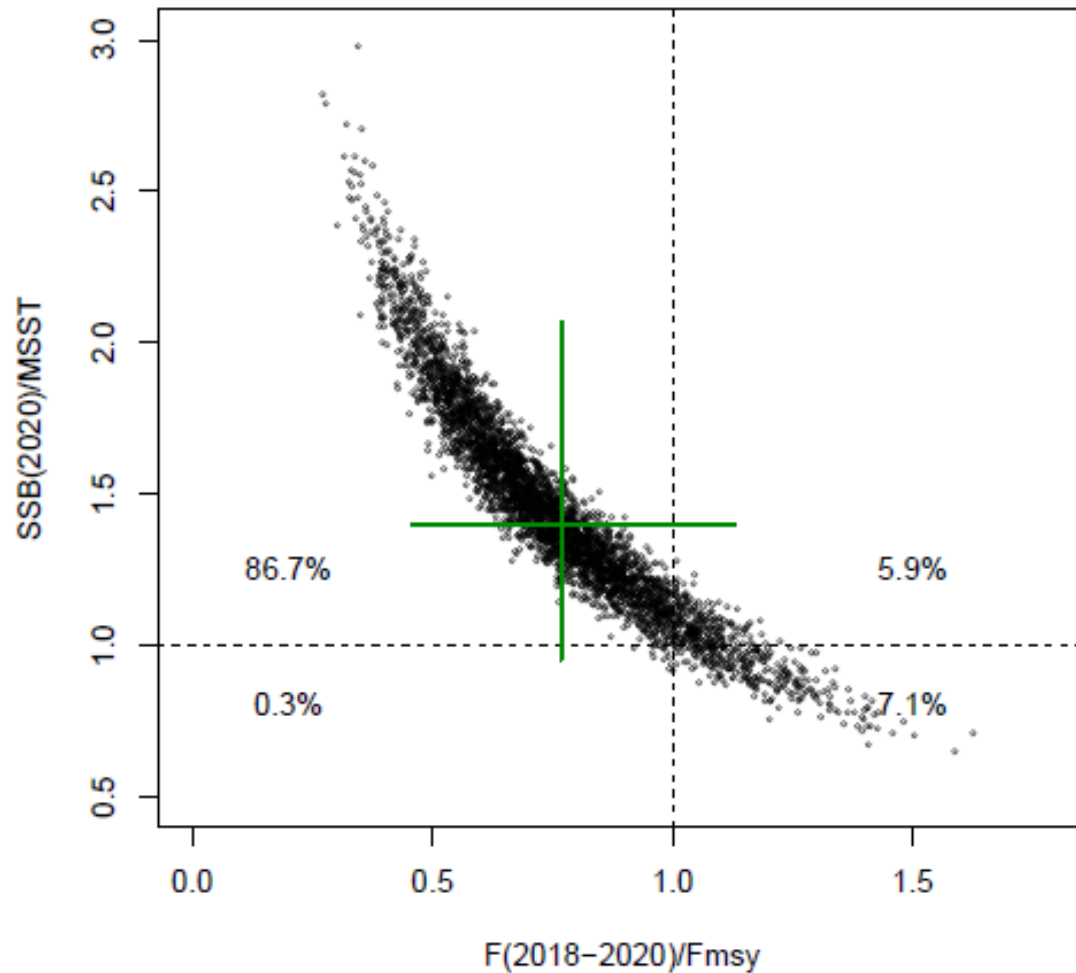


- No YOY value in 2020 due to COVID impacts on the SEAMAP survey
- Fishery surveys dip in 2020

Issues and Challenges

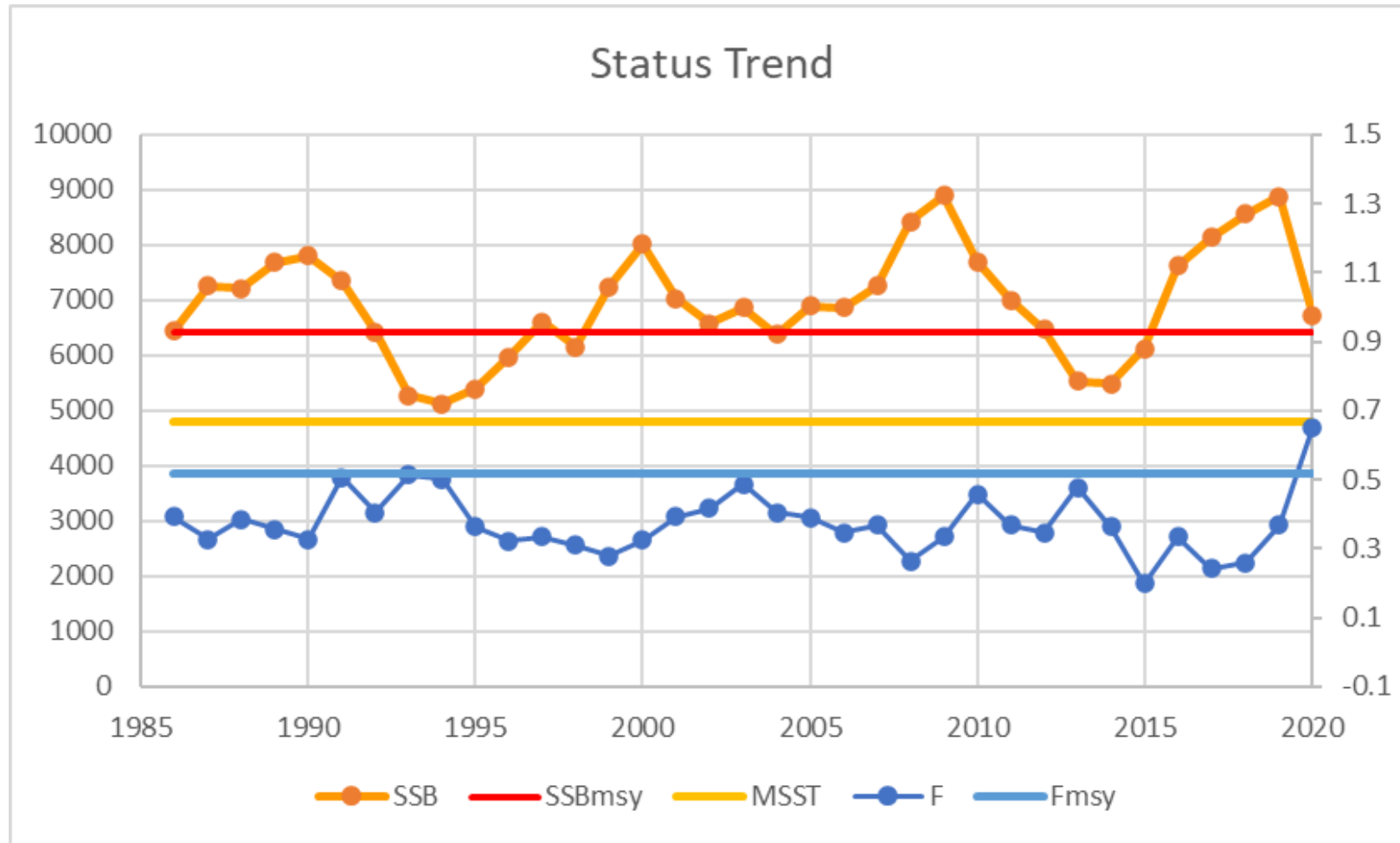
- Difficulty selecting an initial start year
- Limited age composition information
- Difficulty estimating Natural Mortality
- Surveys lack contrast, not very informative & conflict with landings trends
- Unable to estimate reliable steepness (stock recruit relationship)

Stock Status (figure 38)



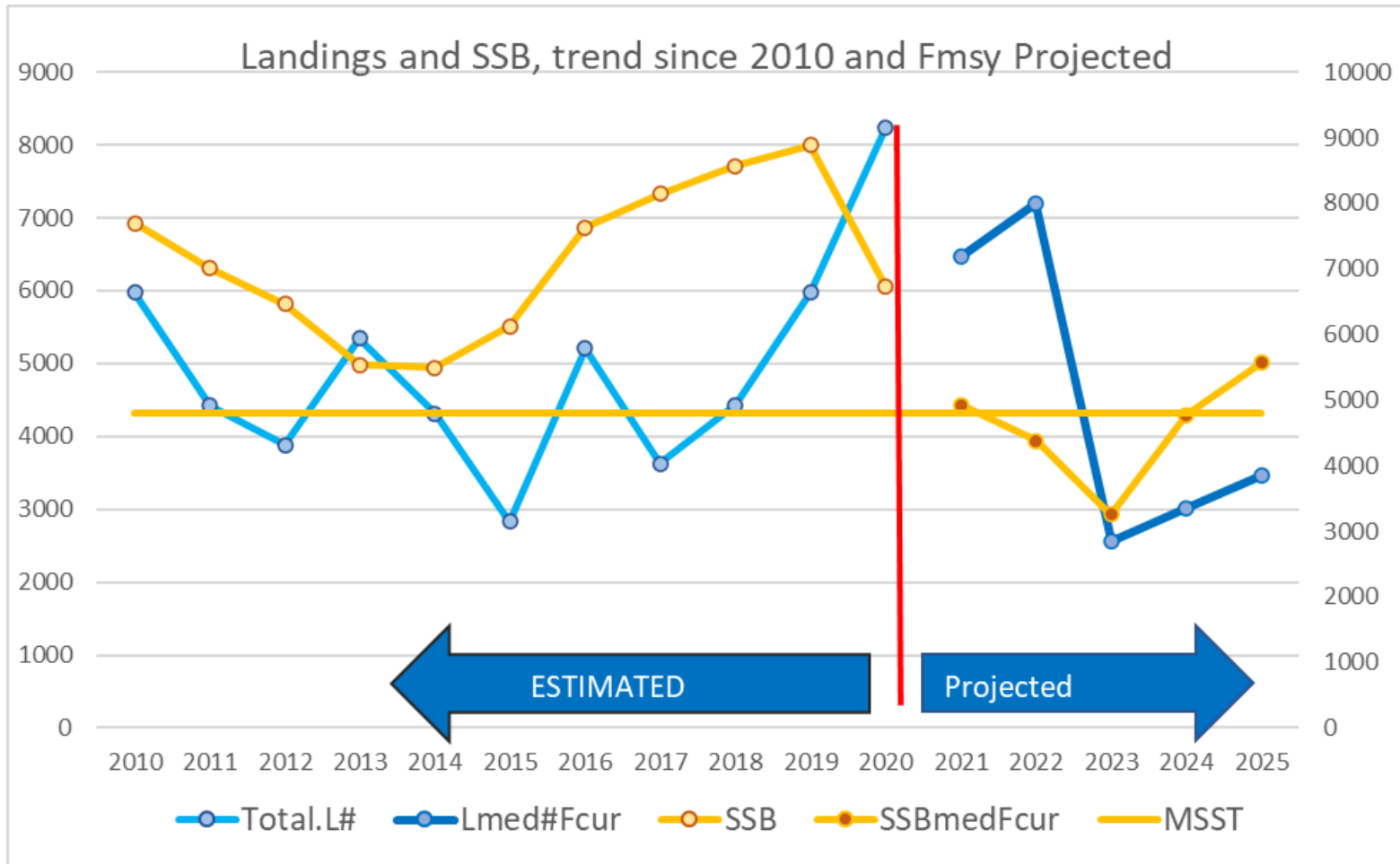
- Not Overfished
- Not Overfishing
- Based on average of the last 3 years of assessment – 2018 - 2020

Status Trend – SSB and Fishing Mortality



- Above MSST all years, SSBmsy most years (estimated at end of July)
- Below Fmsy most years
- Note stock is “overfishing” in 2020

Projections – F current



- High 2020 landings carry over into high average landings in projections during 2021-2022
- Drives down stock (SSB)
- Applying $F_{current}$ (equal to $75\%F_{msy}$) in 2023 results in a nearly 50% reduction in stock yield.
- Is the stock declining, as projected, or do higher landings suggest something else is happening?

SSC Recommendation – August 2022

- Concerned with numerous data and fit issues identified in assessment
- Did not make a BSIA evaluation
- Did not provide a revised ABC
- Created a working group to provide guidance on next assessment steps to resolve major issues

Council Discussion – September 2022

- Assessment and SSC recommendations presented
- SEFSC offered to update the SEDAR 78 assessment with revised MRIP estimates provided by the MRIP program, for review by the SSC at its October meeting.

SSC Discussion – October 25 – 27, 2022



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SEDAR 78 Spanish Mackerel: 2020 MRIP Data Update

Prepared for SAFMC SSC meeting
October, 2022

SEFSC/SFD/AFB

- Revised Model presented with updated MRIP values

MRIP REVISED

- Changes in 2020-2021 landings – East Florida, shore mode, state waters and inland

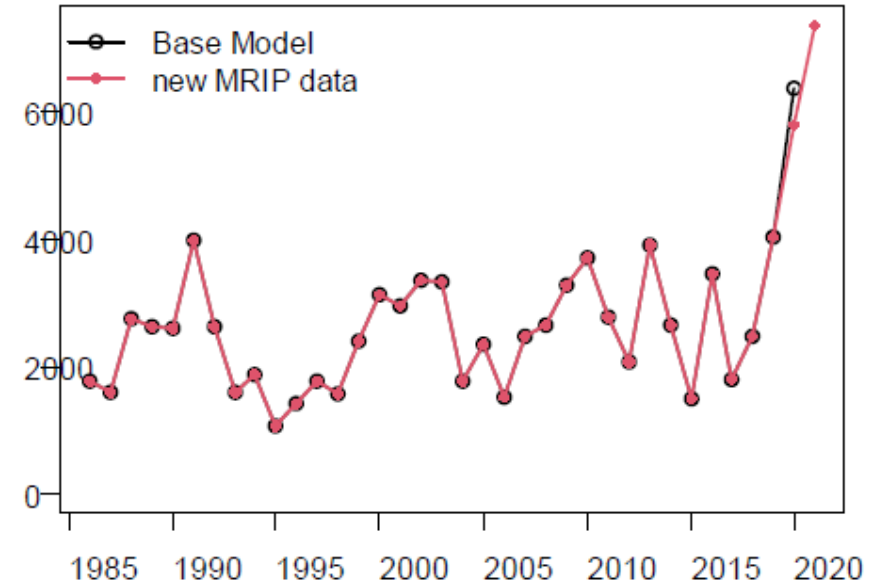
2020W5, EFL, SH:

- State Territorial Sea: from 2,327 to 223,812 (+221K)
- Inland: from 1,297,439 to 484,547 (-813K)

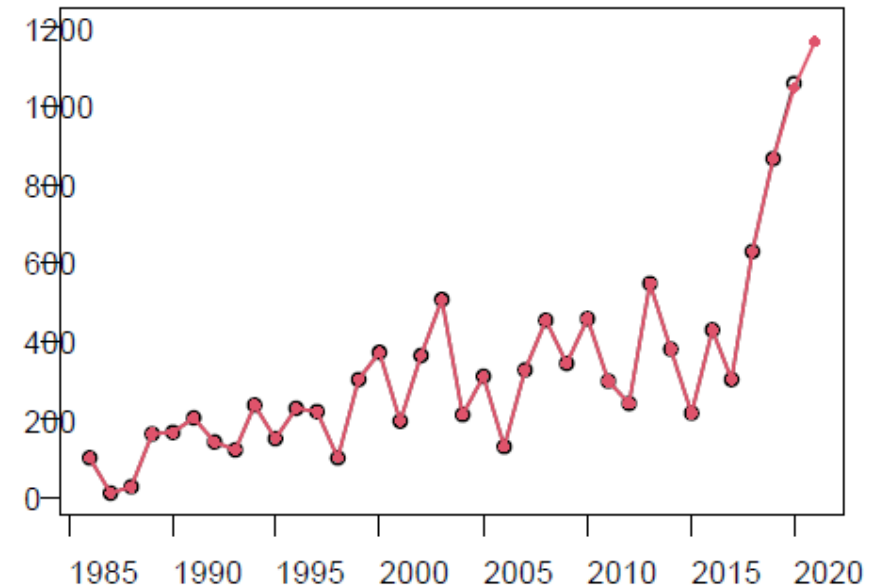
2021W2, EFL, SH

- State Territorial Sea: from 2,536,976 to 1,220,303 (-1.3M)
- Inland: from 82,423 to 175,438 (+93K)
- SSC concerned with the magnitude of changes and inadequate explanation of the cause
- Noted further increase in 2021

GR landings (1000's)



GR dead discards (1000)



SSC Recommendations

- Revised MRIP estimates did not resolve SSC concerns
- Did not evaluate BSIA nor recommend ABC
- Directed the Working Group to develop TORs for additional assessment analysis
 - TORs Reviewed in January 2023
 - Additional model runs desired for April 2023 meeting

Where does this leave management

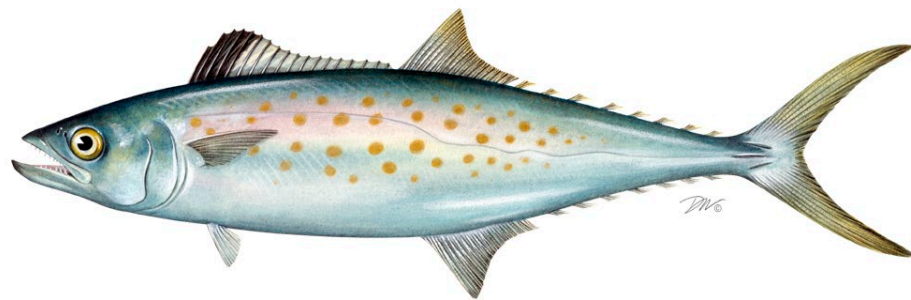
- Existing Fishing Level Recommendations (OFL, ABC, MSST etc) still in effect
- Existing ACL still in effect
- Initiation of an FMP Amendment on hold until assessment concerns are resolved and ABC is updated
- SAFMC intends to begin discussing allocations in December 2022 by applying its Allocation Decision Tool.

Challenges and Risks

- Stock risk appears low based on history and anecdotal info
 - high availability (MRIP landings and discards remained high in 2021)
 - large fish reported in commercial sector
 - steadily shortening northern zone seasons through 2022 indicates high availability
- Only suggestion of stock risk arises in highly uncertain stock projections uninformed by data (age comps, CPUE, surveys)
- Management remains based on the MRIP CHTS, not the newer FES
 - FES typically indicates higher historic landings (which could indicate higher true stock yield)
 - Confusion for constituents since MRIP now reports FES based estimates
 - NMFS/SERO required to adjust CHTS to FES 'currency' for ACL monitoring
- Actions to address commercial northern zone closures on hold
- Climate change?



Spanish Mackerel Management: State and Federal Differences



Coastal Pelagics Management Board
November 8, 2022

Background



- In February 2020, the Board discussed differences between the Interstate and Federal FMPs for Spanish mackerel
 - Interstate: Omnibus Amendment (2011)
 - Federal: Coastal Migratory Pelagics FMP
- Management action to consider addressing differences was postponed until completion of the 2022 stock assessment

Management Differences



- Commercial Management Zones
- Commercial Trip Limits and Closures
- Allowable Gears
- Recreational Season
- Recreational Accountability Measures

Commercial Zones



- **Commercial Zones**

Interstate

Northern*: NY – GA

Southern: FL (east coast)

**RI joined the interstate management unit in 2021*

Federal

Northern: NY – NC

Southern: SC – FL (east coast⁺)

⁺ through Miami-Dade/Monroe County Line

Commercial Trip Limits



- **Interstate Commercial Trip Limits**

- North – 3,500 lb
- South – 3,500 lb stepped down based on day of the week, date, and % of adjusted quota harvested, lowest step: 500 lb
- Not required to close state waters when federal waters close

- **Federal Commercial Trip Limits**

- North – 3,500 lb
- South – 3,500 lb stepped down based on % of adjusted quota harvested, lowest step: 500 lb
- Federal zone closed when total zone's quota is met

Recent Commercial Years



- Commercial Season is March through February for both Interstate and Federal FMPs
- Federal Northern Zone (NY-NC federal waters) closed by June, July or August in recent four seasons
 - In state waters, MD, VA, and NC implemented reduced trip limit (500 lbs) when federal waters closed
- Federal Southern Zone (SC-FL federal waters) has closed in January or February in two of the most recent four seasons

Gears and Recreational Season



- **Gears**

- Interstate: lists prohibited gears

- Commercial: purse seines, and drift gill nets south of Cape Lookout, NC are prohibited
- Recreational: drift gill nets south of Cape Lookout, NC are prohibited

- Federal: lists allowable gears

- Only automatic reel, bandit gear, handline, rod and reel, cast net, run-around gillnet, and stab net allowed

- **Recreational Season**

- Interstate: Calendar year

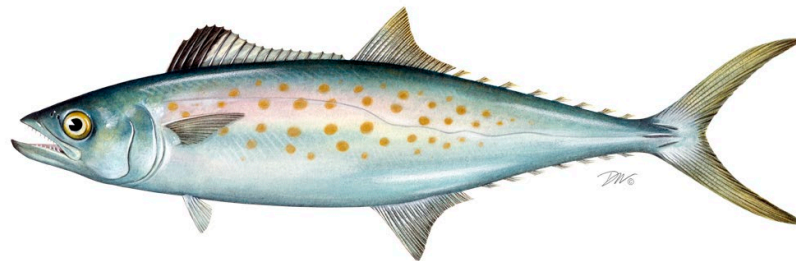
- Federal: March – February

Recreational Accountability



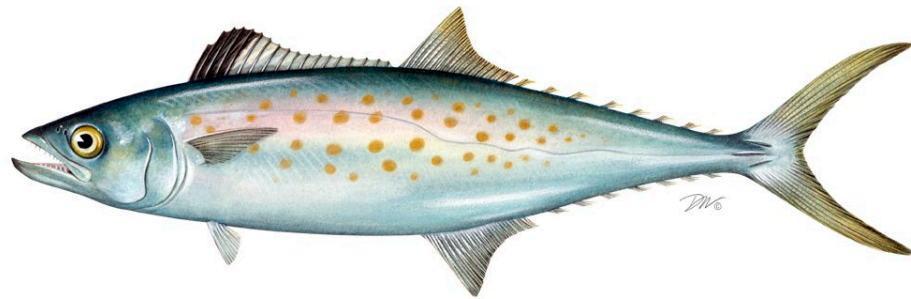
- **Recreational Accountability**
 - Interstate: if total ACL exceeded and the stock is overfished, then rec quota is decreased via reduced bag limits
 - Federal: if total ACL is exceeded, bag limits reduced to achieve annual catch target (ACT); if total ACL is exceeded and the stock is overfished, ACT is reduced by the overage

Questions?





Spanish Mackerel FMP Review: 2021 Fishing Year



Coastal Pelagics Management Board
November 8, 2022

Status of the FMP



Omnibus Amendment (2011) to the Interstate FMP

Recreational Fishery

- 12" FL or 14" TL minimum size limit
- 15 fish creel limit
- Must be landed with head and fins intact
- Prohibited gear: Drift gill nets prohibited south of Cape Lookout, NC

Commercial Fishery

- 12" FL or 14" TL minimum size limit
- Trip limits (per vessel, per day)
 - NY-GA: 3500 lbs
 - FL: 3500 lbs, 3/1-11/30;
 - 3500 lbs Mon-Fri & 1500 lbs Sat-Sun, 12/1 until 75% adj. quota taken;
 - 1500 lbs, when 75% adj. quota taken;
 - 500 lbs after 100% of adj. quotas taken.
- Prohibited: purse seines; drift gill nets south of Cape Lookout, NC

Status of the Stock



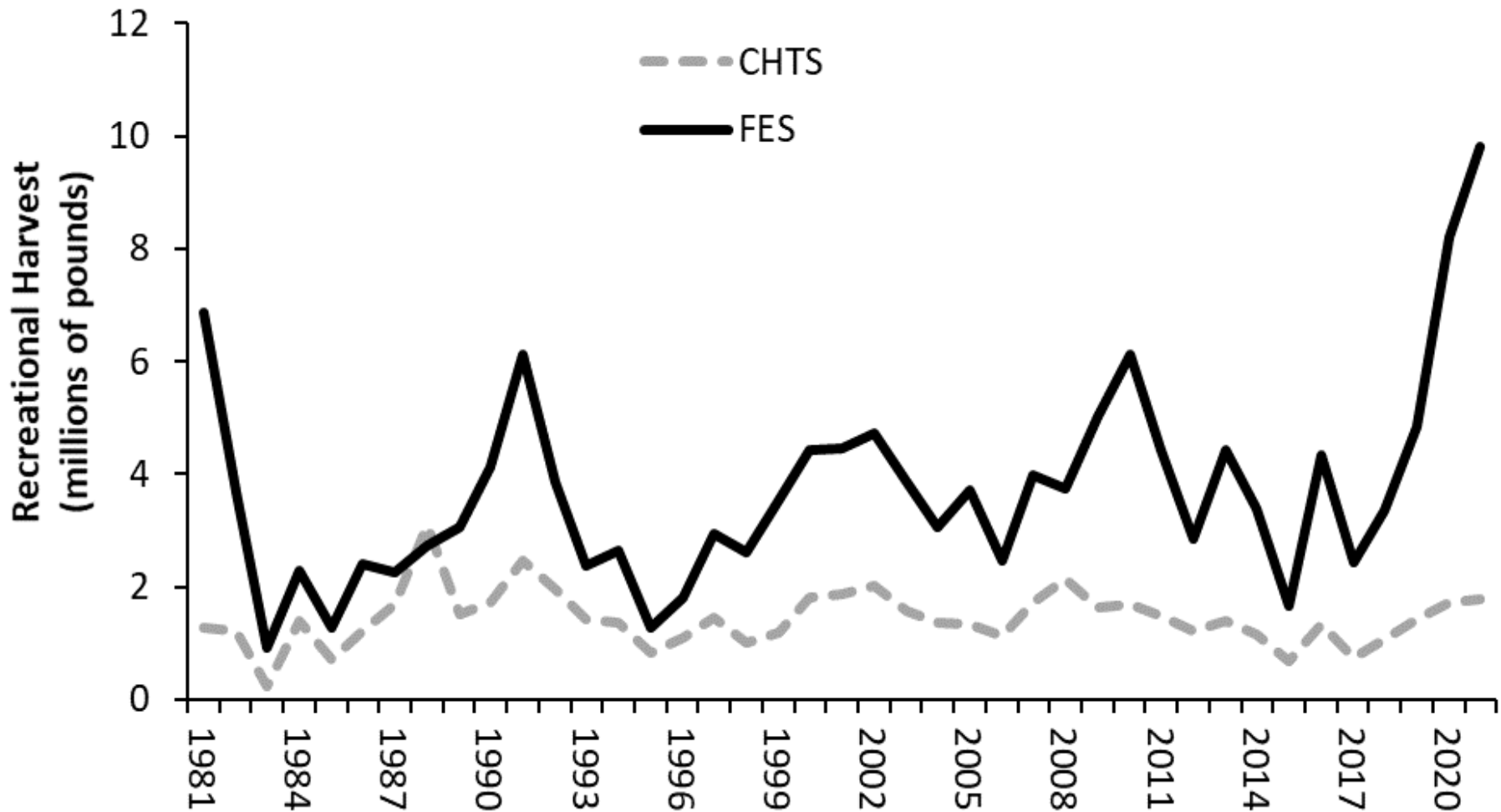
- SEDAR 28 (2012): Atlantic Spanish mackerel stock is not overfished nor experiencing overfishing
 - Terminal year 2011
- SEDAR 78 (2022): undergoing additional analysis and review before being considered for use in management
 - Terminal year 2020

Status of the Fishery



- Landings in the FMP Review are calendar year
- This year's FMP Review uses current, recalibrated MRIP estimates (based on FES)
- Previous FMP Reviews listed CHTS estimates
- Federal quotas are based on CHTS, but intent to update quotas using current MRIP estimates with the 2022 stock assessment

CHTS vs. FES



Status of the Fishery



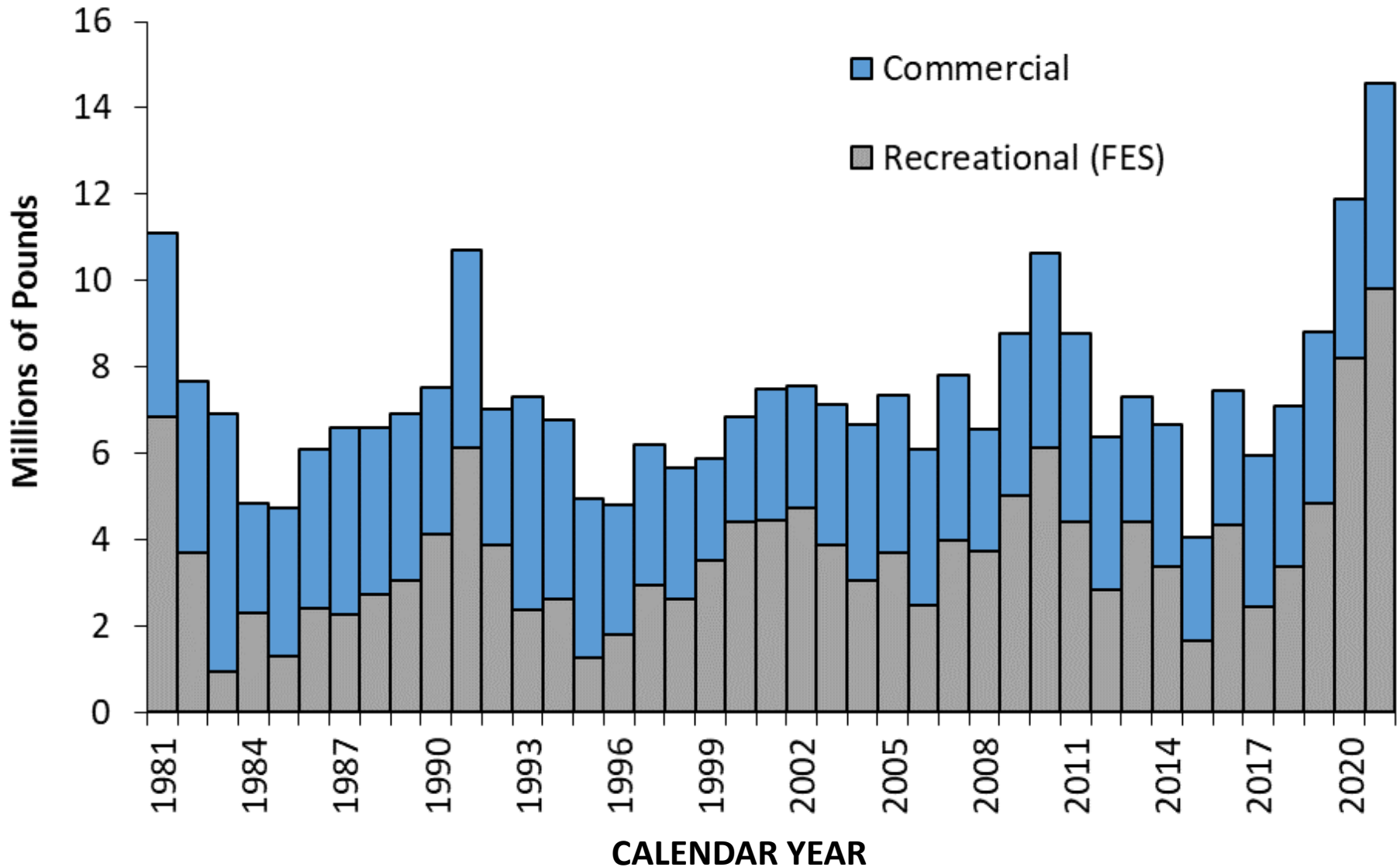
- Total 2021 landings: 14.6 million pounds
 - 33% commercial; 67% recreational (current MRIP)
- 2021 commercial landings: 4.75 million pounds
 - 72% Florida and 24% North Carolina
 - One of only three years > 4 million pounds since 1995
- 2021 recreational landings: 8.6 million fish (9.8 million pounds)
 - By number, Florida 69%; North Carolina 15%
 - Highest in time series
- 2021 recreational live releases: 6 million fish
 - Comprised 41% of total recreational catch

Note on 2020-2021 MRIP



NOTE: Questions raised regarding 2020-2021 recreational catch estimates. MRIP looked further into those estimates, particularly shore-based landings estimates. The FMP Review will be updated with revised MRIP estimates when MRIP database is updated.

Spanish Mackerel Landings



2021 Compliance



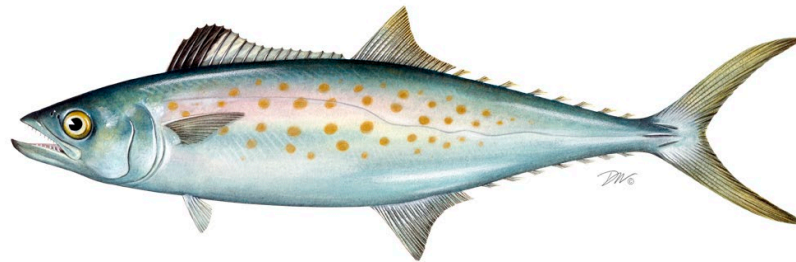
- PRT found no inconsistencies from the FMP
- Rhode Island declared interest in Spanish mackerel in 2021, and is currently developing Spanish mackerel regulations through their state process

De Minimis



- Qualifies for *de minimis* if state's 3-yr average combined commercial and recreational landings is less than 1% of coastwide 3-yr average
- *De minimis* states are not required to implement monitoring requirements (there are none in the FMP)
- Rhode Island, New Jersey, and Delaware requested and meet the requirements for *de minimis*

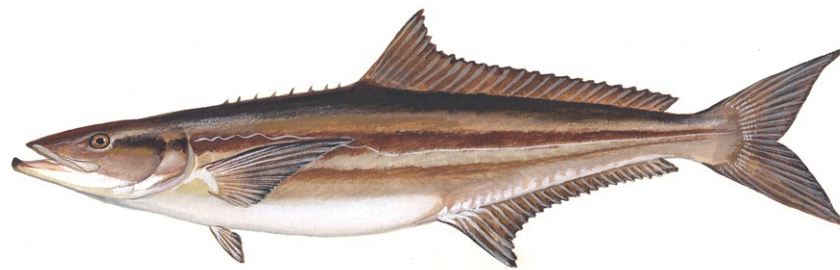
Questions?



Board action for consideration: Approve Spanish mackerel FMP Review for fishing year 2021, state compliance reports, and de minimis requests.



Atlantic Cobia FMP Review: Fishing Year 2021



Coastal Pelagics Management Board
November 8, 2022

Status of the FMP



- **Amendment 1 (2019) and Addendum I (2020)**
- Sole management of Atlantic cobia by ASMFC
- 2021-2023 Total Harvest Quota: 80,112 fish
- Allocation: 96% recreational; 4% commercial

- Commercial
 - 33” FL or 37” TL minimum size
 - 2 per person; 6 per vessel
 - Non-*de minimis* states monitor commercial landings in-season against commercial closure trigger
 - Sets aside 4% of commercial quota for *de minimis* states

Status of the FMP



- Recreational
 - 36” FL or 40” TL minimum size
 - 1 per person; 6 per vessel
 - Recreational quota allocated to state harvest targets (*non-de minimis* only)
 - States evaluate average harvest against target during specifications process
 - 1% designated for *de minimis*
 - Recreational *de minimis*
 - Adopt same measures as nearest *non-de minimis* state; OR
 - 33” FL or 37” TL; 1 fish per vessel

Status of the Stock



- SEDAR 58 (2020) with terminal year 2017
- Atlantic cobia not overfished and overfishing not occurring
- Next SEDAR assessment tentatively in 2025 (terminal year of 2023 or 2024)
- Note: Atlantic cobia stock extends from Georgia north

Status of the Fishery



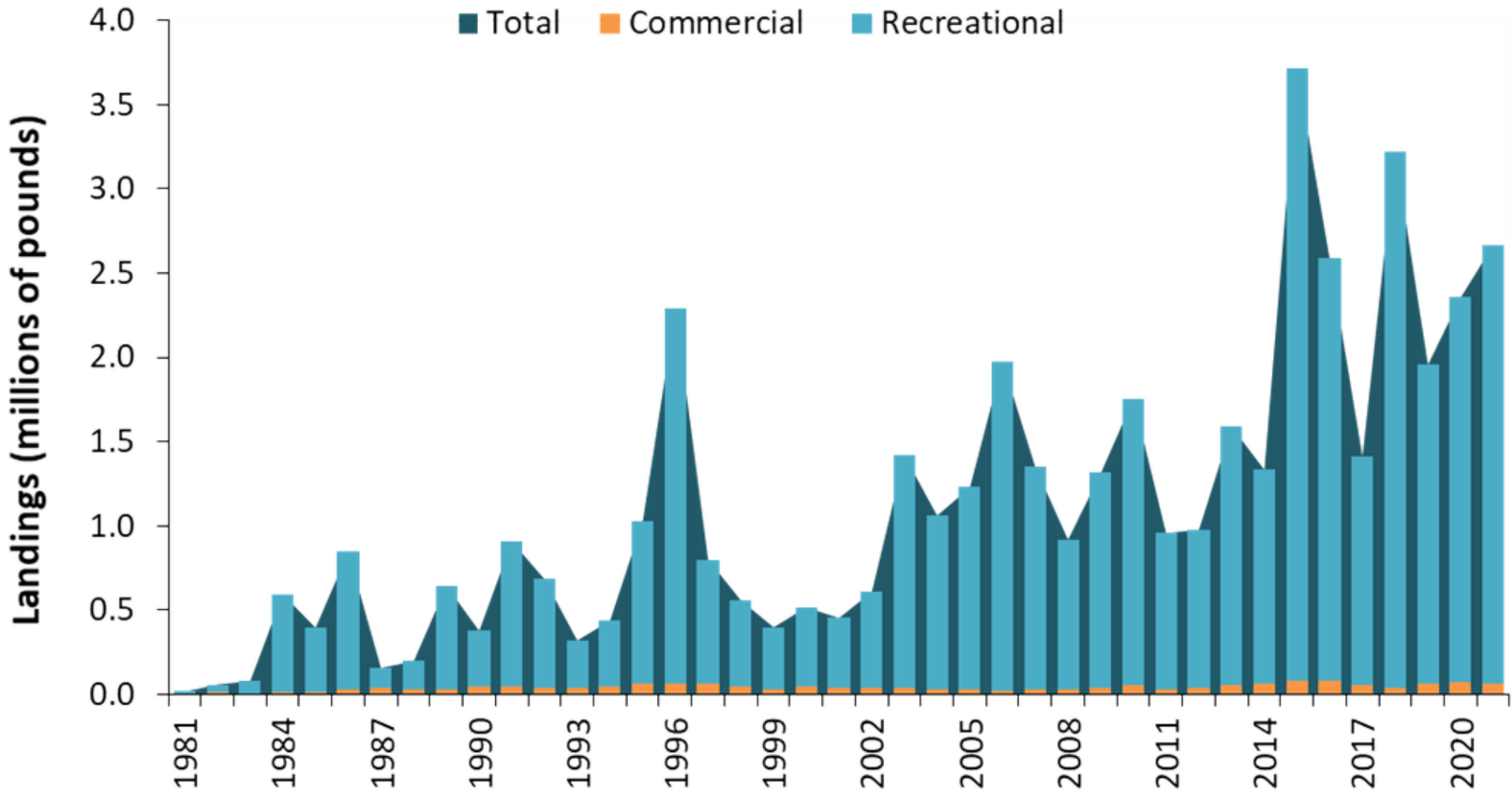
- Total 2021 landings: 2.7 million pounds
 - Commercial (2.5%); Recreational (97.5%)
 - 13% increase from 2020
- 2021 Commercial landings: 66,499 pounds
 - Virginia (44%) and North Carolina (44%)
 - Total non-*de minimis* landings (VA, NC, SC) did not reach the commercial closure trigger, so fishery open through end of 2021

Status of the Fishery



- 2021 Recreational Landings: 2.6 million pounds (90,807 fish)
 - By number, Virginia (63%) and North Carolina (12%)
 - 2012-2021 average: 2.1 million pounds (74,000 fish)
 - 1981-2021 average: 1.0 million pounds (38,000 fish)
- 2021 Recreational Live Releases: 300,468 fish
 - 2017-2021 average 79% released alive per year
 - 2012-2016 average 61% released alive per year

Cobia Landings



2021 Implementation



- PRT found no inconsistencies from the FMP
- Some states implemented new recreational cobia measures in 2021 based on Addendum I
 - Based on new harvest target, Virginia measures designed to reduce harvest by 42% (reduce vessel limit, shorten season)
 - Based on new harvest target, North Carolina liberalized measures (private angler vessel limit)
 - *De minimis* states either adopted Virginia's measures (nearest *non-de minimis* state) or adopted the standard *de minimis* measure

Recreational *De Minimis*



- One percent of the recreational quota is designated to *de minimis* states (no state-specific targets)
- Recreational harvest in 2 of 3 years is less than 1% of annual coastwide recreational landings
- RI, NJ, DE, MD, FL requested; all meet qualifications except Maryland
- MD noted variability in landings year to year (0% in 2019; 1.7% in 2020; 5% in 2021), and requested to continue under *de minimis* until 2022 harvest can be evaluated
 - **The PRT agreed with this rationale**

Commercial *De Minimis*



- Commercial *de minimis* states are not required to monitor cobia landings in-season
- Commercial landings in 2 of 3 years is less than 2% of annual coastwide commercial landings
- RI, NJ, DE, MD, GA, and FL requested; all meet qualifications except New Jersey
- NJ noted anomalously high landings in 2019 (conf) and 2021 (3.4%), and current 2022 landings are less than 20% of those high years, and requested to continue under *de minimis* until 2022 harvest can be evaluated
 - **The PRT agreed with this rationale**

PRT Recommendations



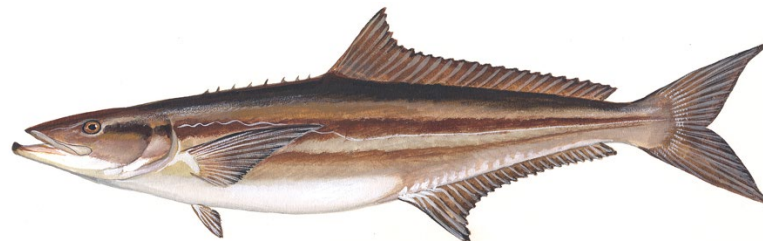
- The PRT recommends the Board approve all *de minimis* requests, including MD and NJ
- Multiple states could exceed *de minimis* thresholds over the next few years, particularly if cobia landings continue to increase in the Mid-Atlantic
- Management implications:
 - Commercial: requiring in-season monitoring in more states
 - Recreational: adding new states to calculation of state recreational harvest targets; current allocation based on landings data through only 2015
- When discussing new specifications next year and the next stock assessment, Board could discuss whether these recreational updates are warranted

PRT Recommendations



- PRT noted New York's recent cobia commercial landings: 6.9% of coastwide commercial landings in 2020 and 2.4% in 2021
- PRT recommends New York declare an interest in Atlantic cobia and update their cobia regulations for 2023 to meet requirements for *de minimis*
 - Depending on future landings, in-season commercial monitoring may need to be considered in the future

Questions?



Board action for consideration: Approve Atlantic cobia FMP Review for fishing year 2021, state compliance reports, and de minimis requests.