



Atlantic Surfclam and Ocean Quahog (SCOQ)

June Council Meeting

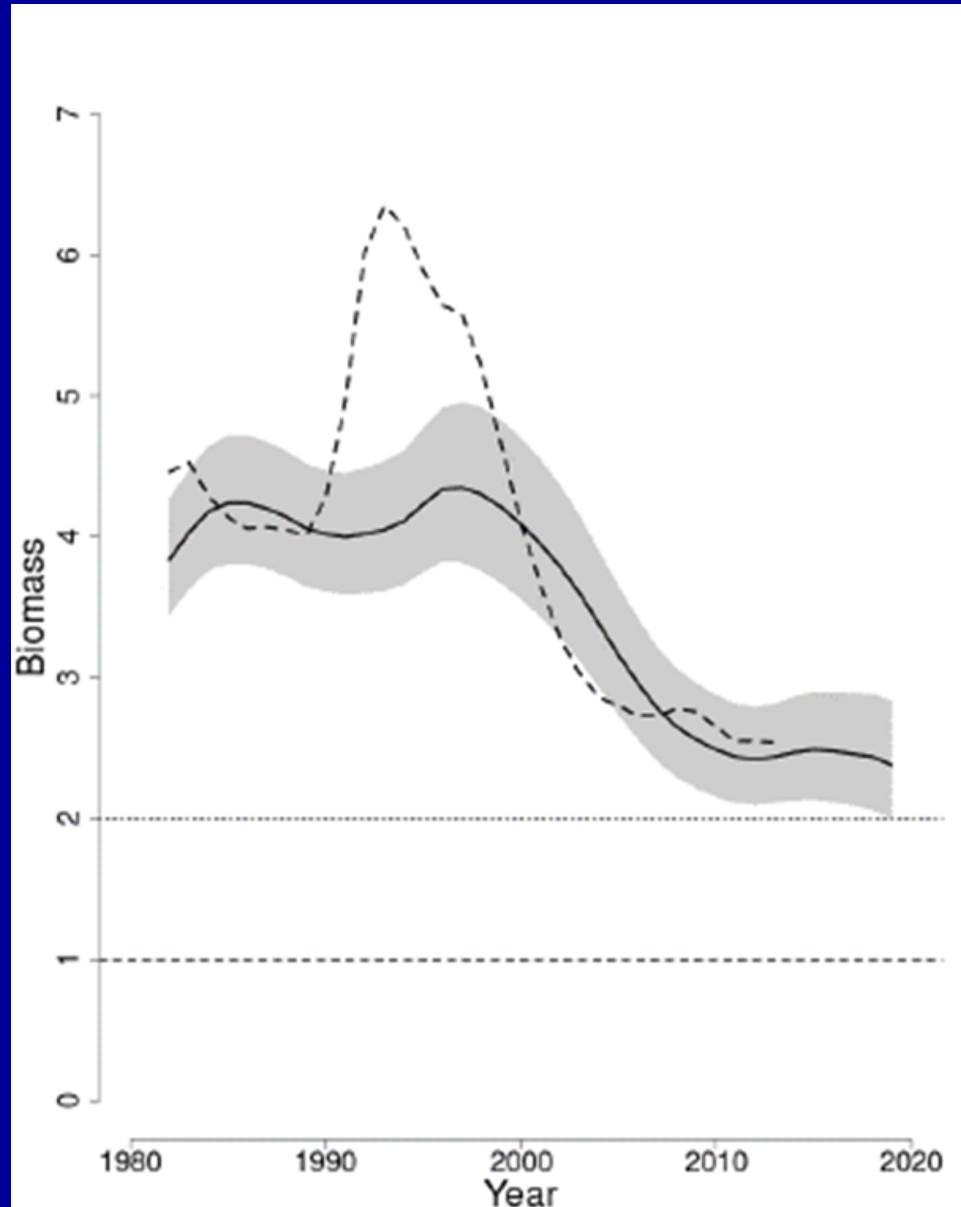
June 9, 2021



Today's Review (2022 Measures)

- Surfclam fishery info doc (fishery data update)
- Fishery performance report (both species)
- Staff recommendations for surfclam
- SSC recommendations for surfclam
- Repeat for ocean quahog...
- Finally, some other clam updates at the end

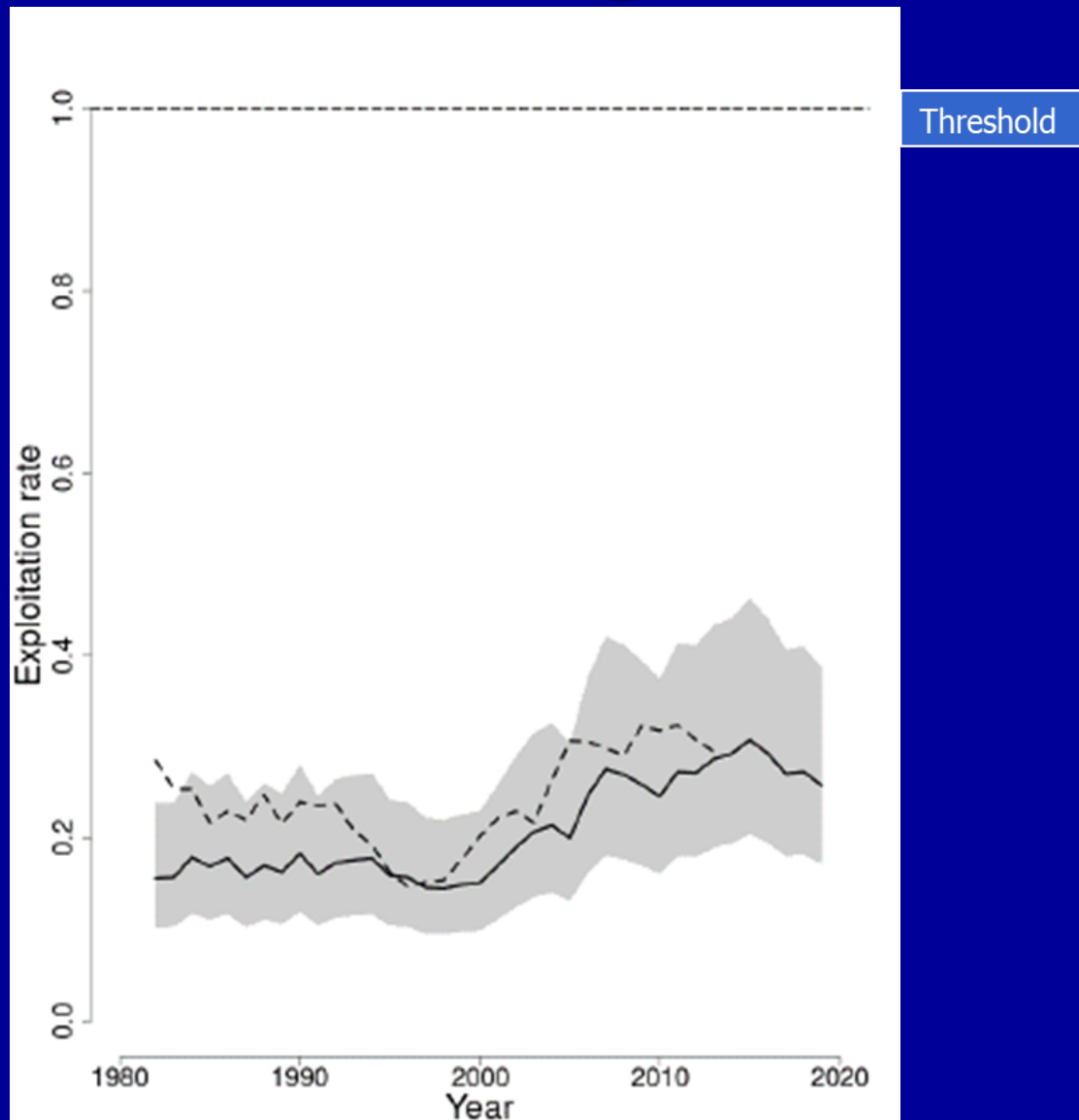
Surfclam Biomass (2020 Level 3 MTA)



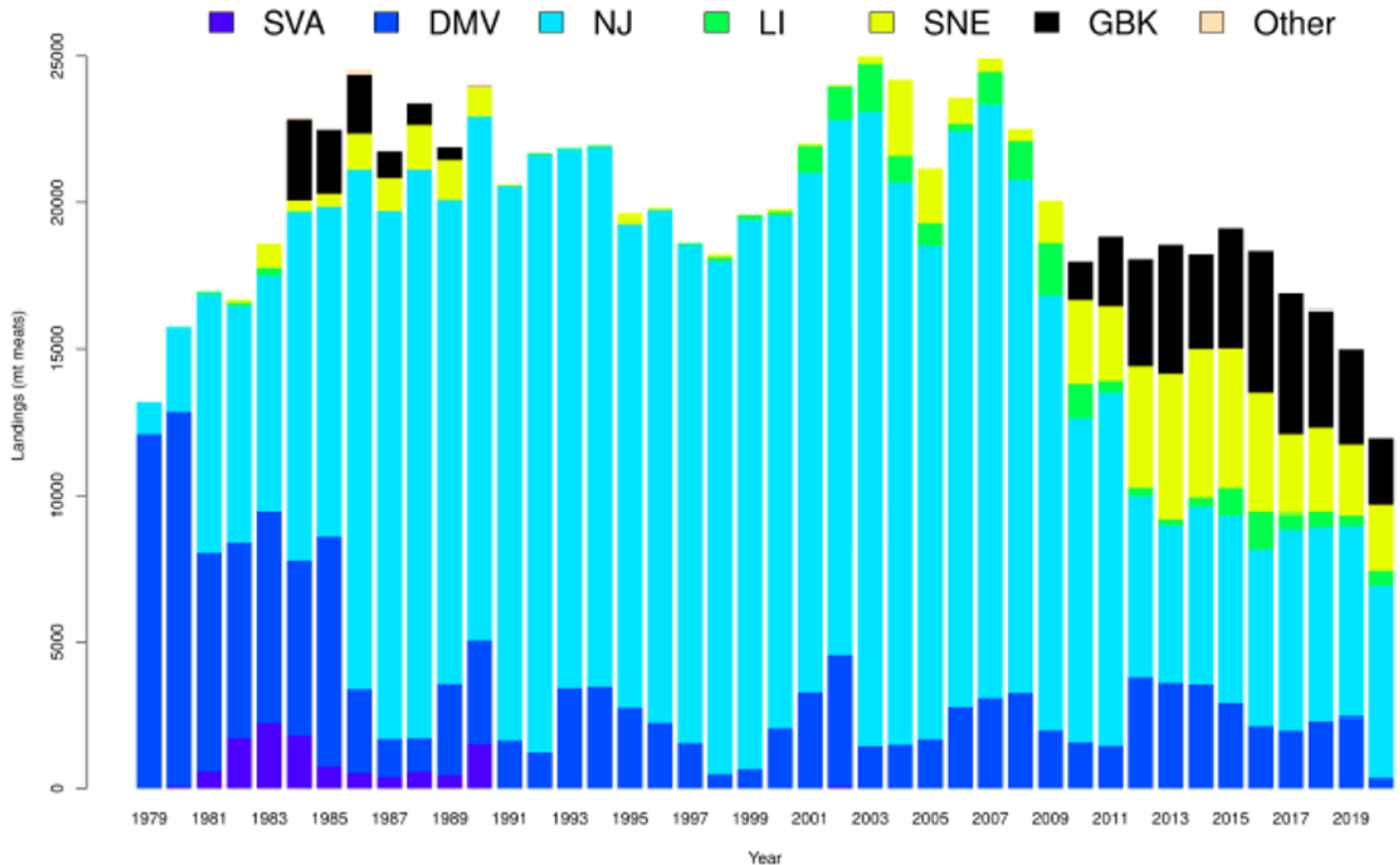
Target

Threshold

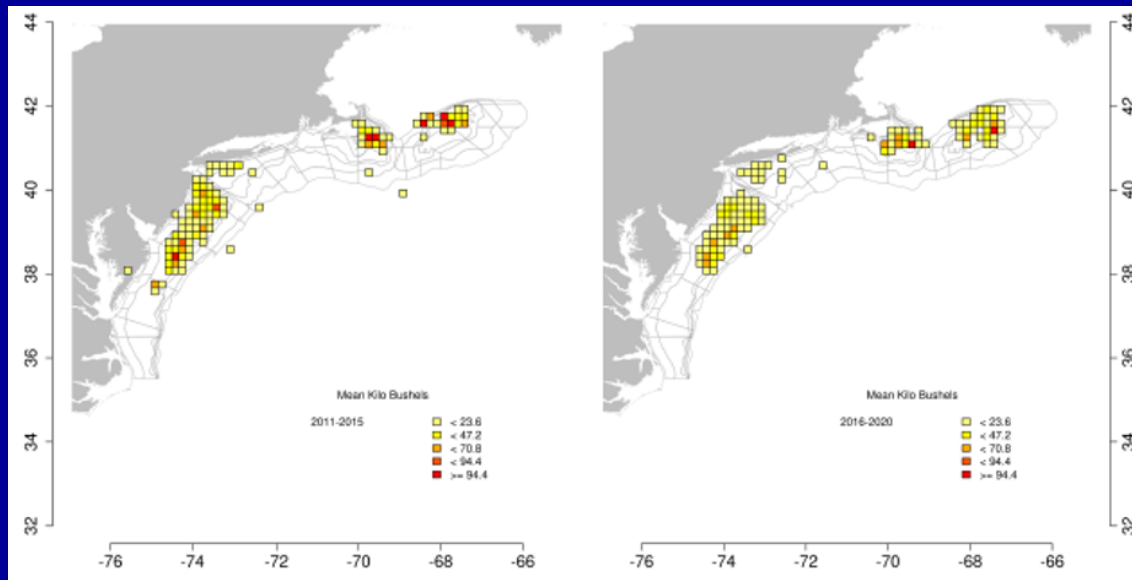
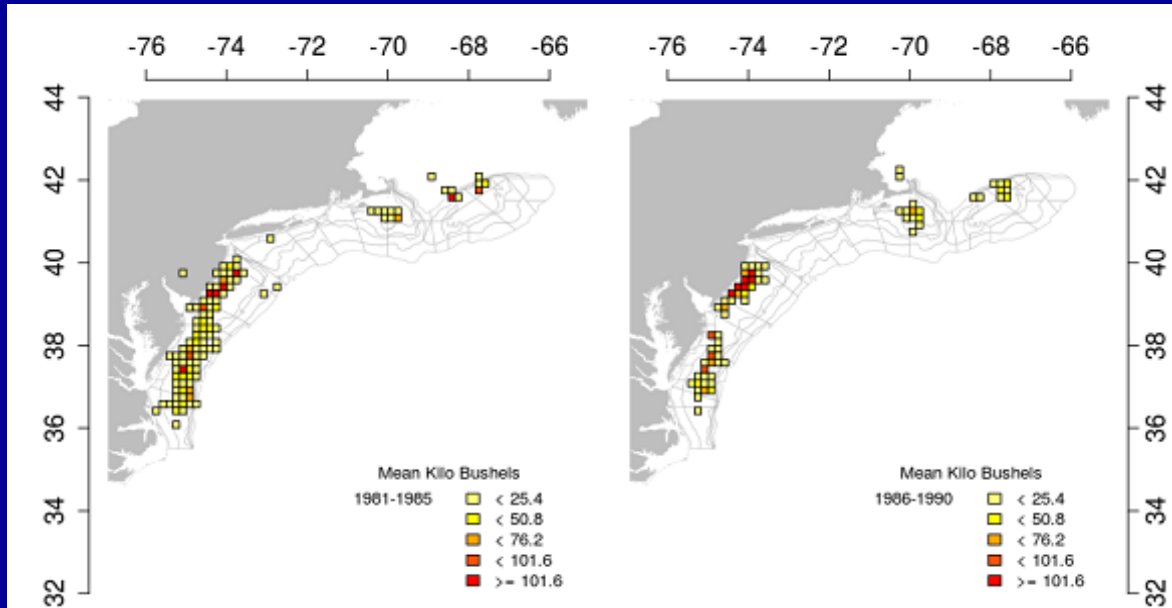
Surfclam Fishing Mortality



Surfclam Info Doc



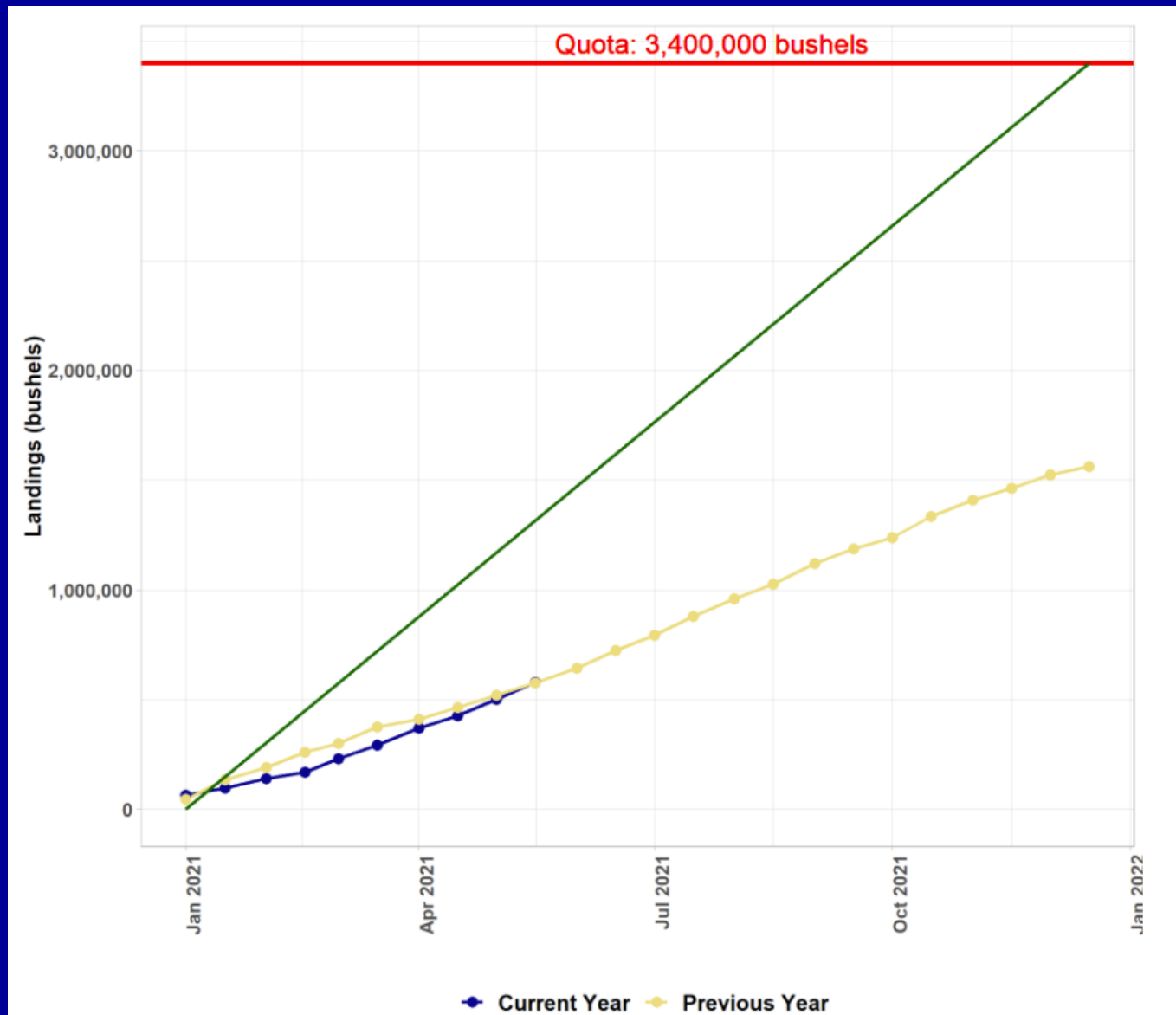
Surfclam Info Doc



Surfclam Info Doc

- 2020: 43 vessels (same as 2019)
- 7 processors SCOQ in 3 states
- Decrease in overall ex-vessel value
 - \$23 million in 2020
 - Down \$5 million from 2019

Surfclam Landings (thru June 2)



Fisheries Performance Report

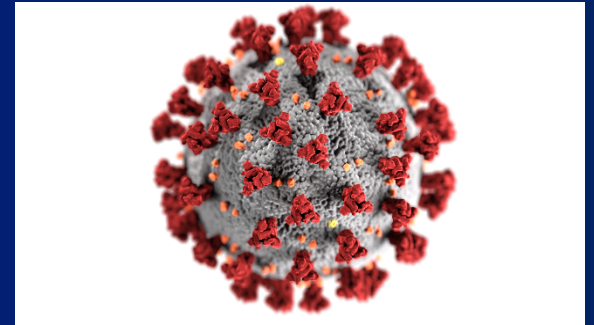
- Covers both SCOQ
- Advisors met April 22, 2021
- Asked series of trigger questions
- AP identified several “Critical Issues”
- Also note, advisors would like status quo quotas (quota stability = fishery/market stability)



Fisheries Performance Report

■ A. COVID-19:

- Sales to restaurants/retail low
- Processors continuing to operate
- Causing inventories to rise – causing storage costs/expenses to increase
- Distribution is starting to increase in anticipation of improved sales, but hasn't helped bottom line at this point yet
- Expect these effects to be ongoing, longer lasting



Source: CDC/Alissa Eckert, MSMI, Dan Higgins, MAMS

Fisheries Performance Report

■ B. Research:

- Important Council support research in Great South Channel Habitat Management Area (Nantucket Shoals/Southern New England area)
- SCOQ AP recommends NEFMC and MAFMC pursue cross Council workshop to,
 - 1) review the management process, 2) better understand what research is being conducted, 3) describe the process for ongoing management, and 4) develop understanding what this means for process of managing these clam access areas

Fisheries Performance Report

- C. Access to Fishing Grounds:
 - Development of wind energy and aquaculture areas, protected marine areas and historic monuments, and other offshore ocean uses have become a critical issue for our industry
 - All of these activities have potential to reduce safe access to historically used fishing ground resulting in a greater concentration of fishing effort in smaller areas

Fisheries Performance Report

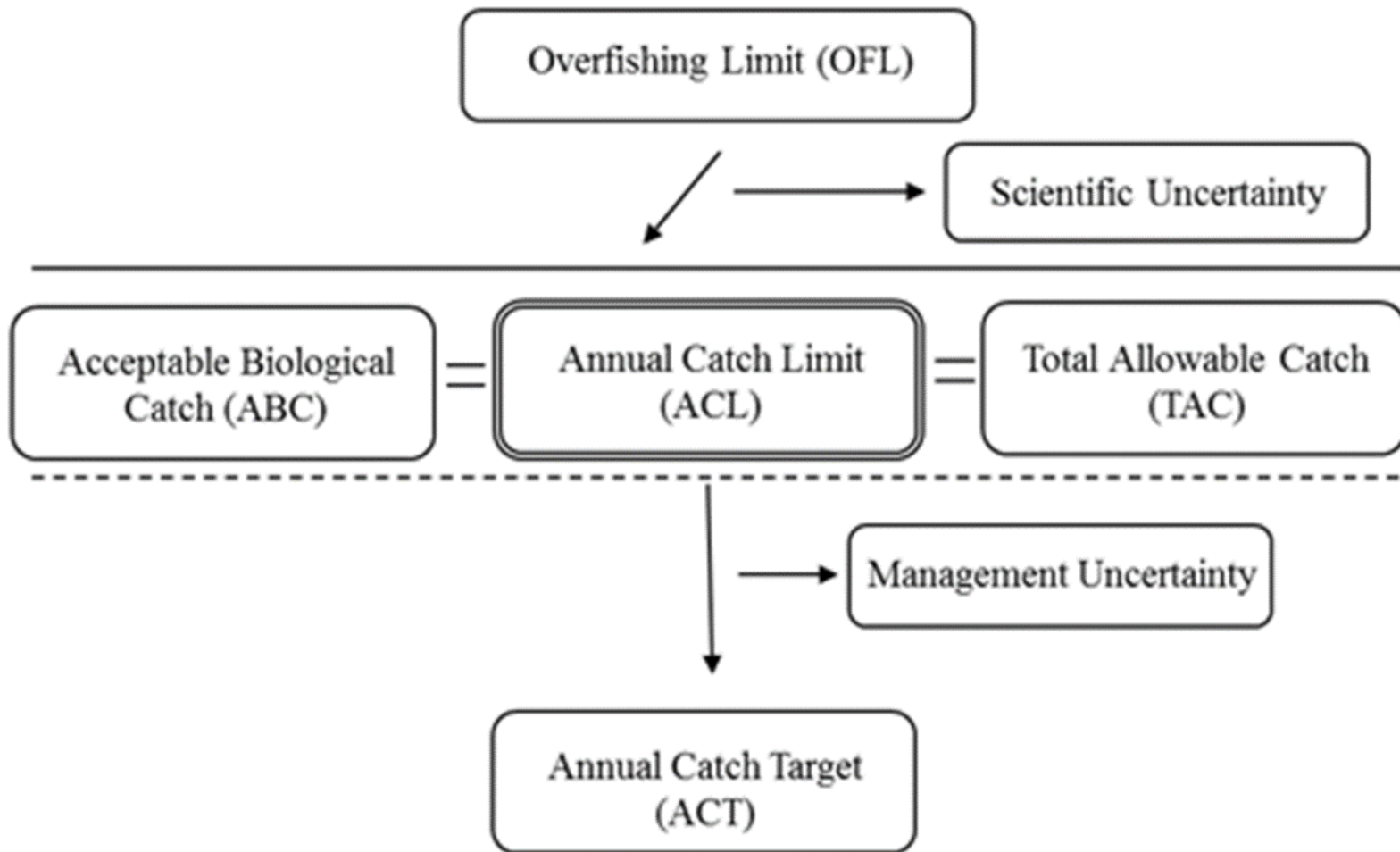
- Other Important Issues:
 - The SCOQ AP would like to request that surfclam and ocean quahog AP members have two seats on Fishery Management Act Teams (FMATs) for issues related to these fisheries

SSC Recommendation 2021-2026



- SSC-modified OFL probability distribution
- Coefficient of variation (OFL CV) of 100%
- Based on report for Level 3 Management Track Assessment
- 2021 $p^*=0.47$

Atlantic Surfclam Flowchart



Surfclam SSC/Council Recommendations

Year	OFL	ABC	ACL	ACT	Commercial Quota
2021	51,361 mt	47,919 mt	47,919 mt	29,363 mt	26,218 mt
2022	48,202 mt	44,522 mt	44,522 mt	29,363 mt	26,218 mt
2023	45,959 mt	42,237 mt	42,237 mt	29,363 mt	26,218 mt
2024	44,629 mt	40,946 mt	40,946 mt	29,363 mt	26,218 mt
2025	44,048 mt	40,345 mt	40,345 mt	29,363 mt	26,218 mt
2026	43,886 mt	40,264 mt	40,264 mt	29,363 mt	26,218 mt

Surfclam Staff Recommendations

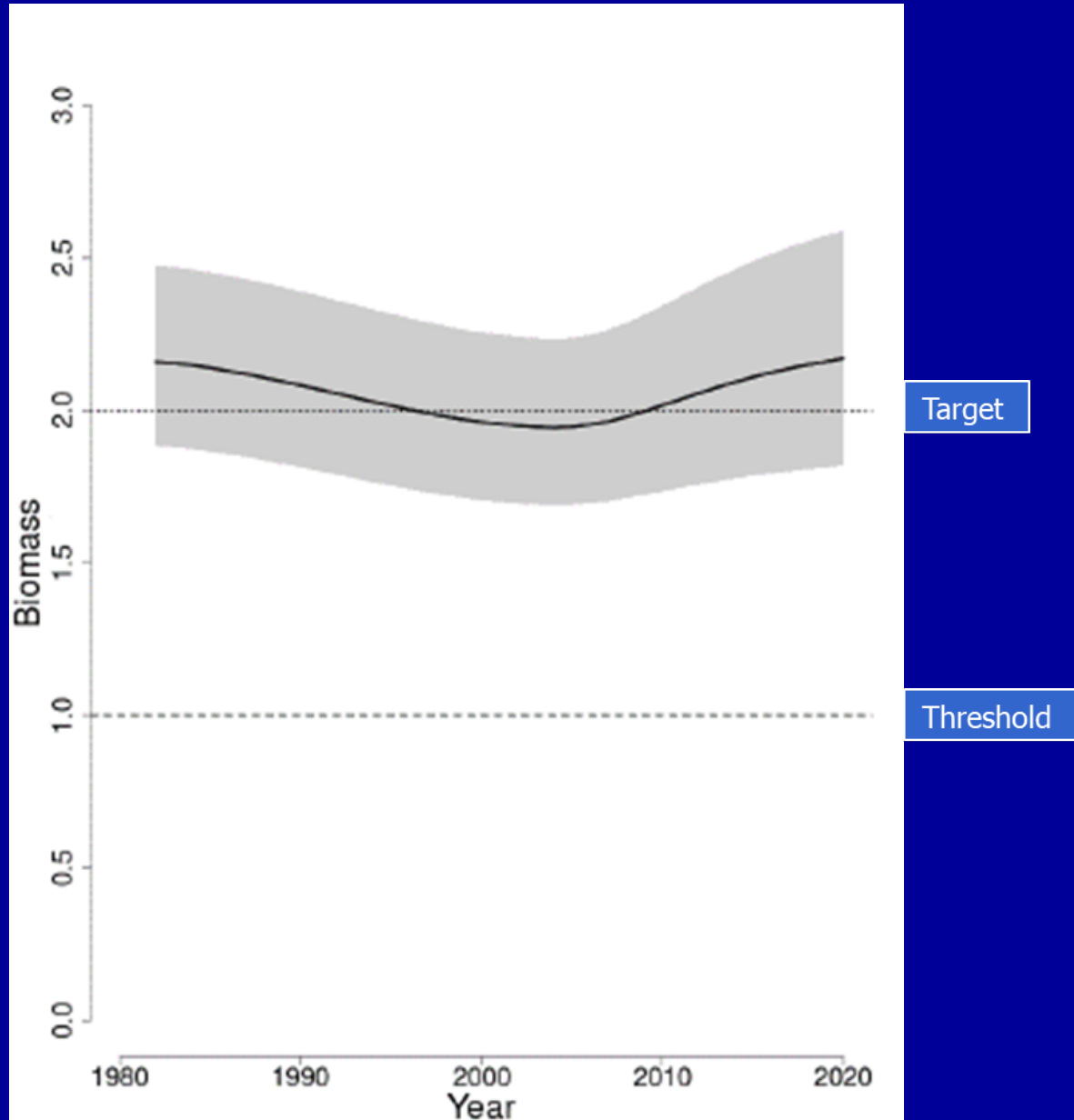


- No changes to measures for 2022
 - Council will need motion to recommend RA suspend minimum size (required annually)

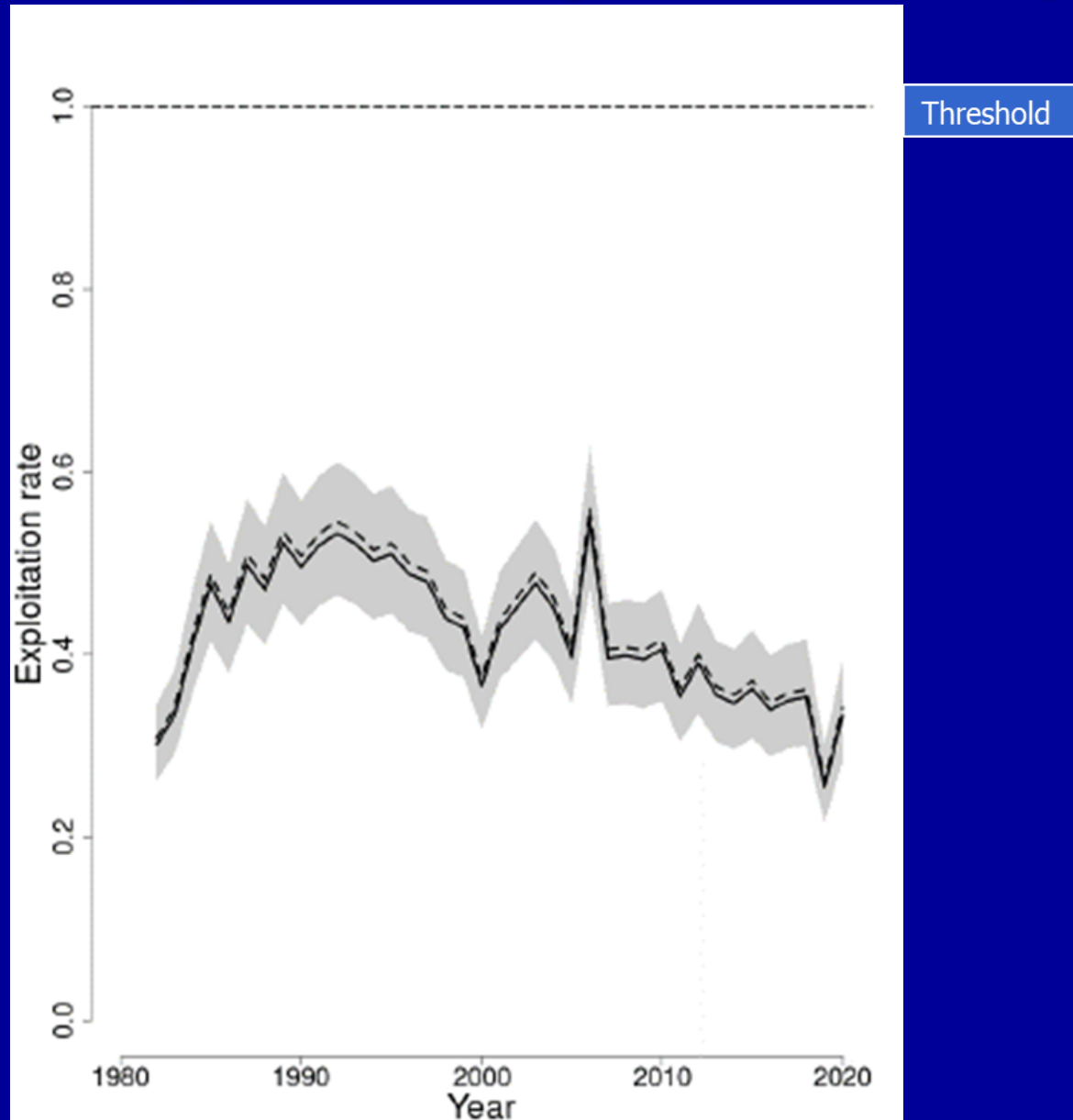
Atlantic Surfclam (see SSC Report)

- No surveys were conducted in 2020 but only minor consequences for future assessments.
- Spatial analyses of fishing activity by 10-minute squares reveals a shift in landings from south to north over time. Overall LPUE has been declining but remains high in Southern New England and on Georges Bank.
- Other Sources of Concern
 - Apparent conversion of high fishing success areas into average density areas (economic thresholds).
 - Consequences of these serial reductions in density for recruitment are not known
 - Wind energy development will reduce access to traditional fishing areas and concentrate effort elsewhere.
 - Surfclams are highly sensitive to climate change.
 - Stock size is beginning to approach Bmsy.
 - Updated perception—Georges Bank population is not as large as previously thought
- Therefore, close monitoring of changes is recommended.
- **None of these concerns were sufficient at this time for the SSC to recommend changes in previously agreed ABCs for 2022.**

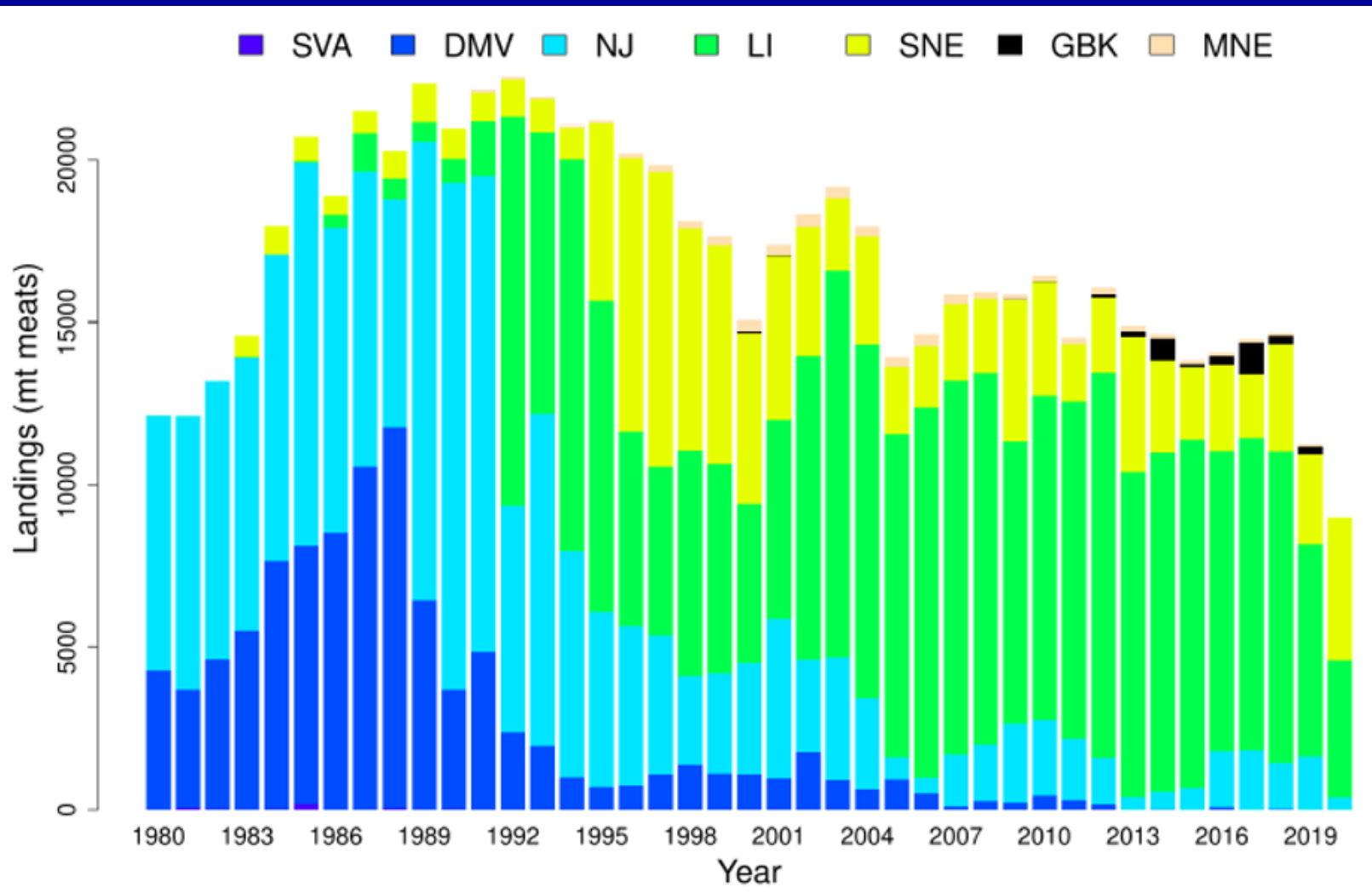
Quahog Biomass (Level 1 MTA)



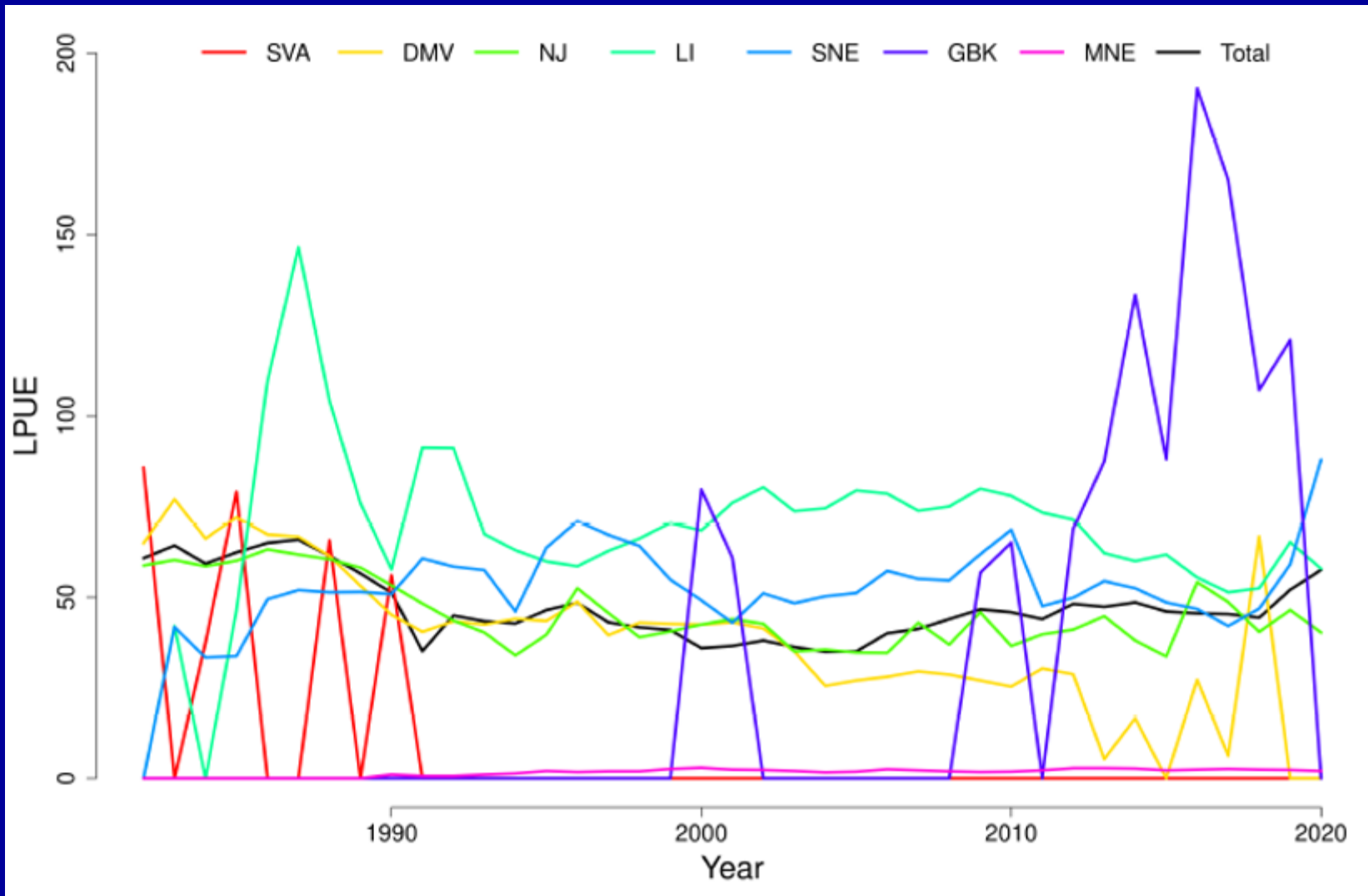
Quahog Fishing Mortality



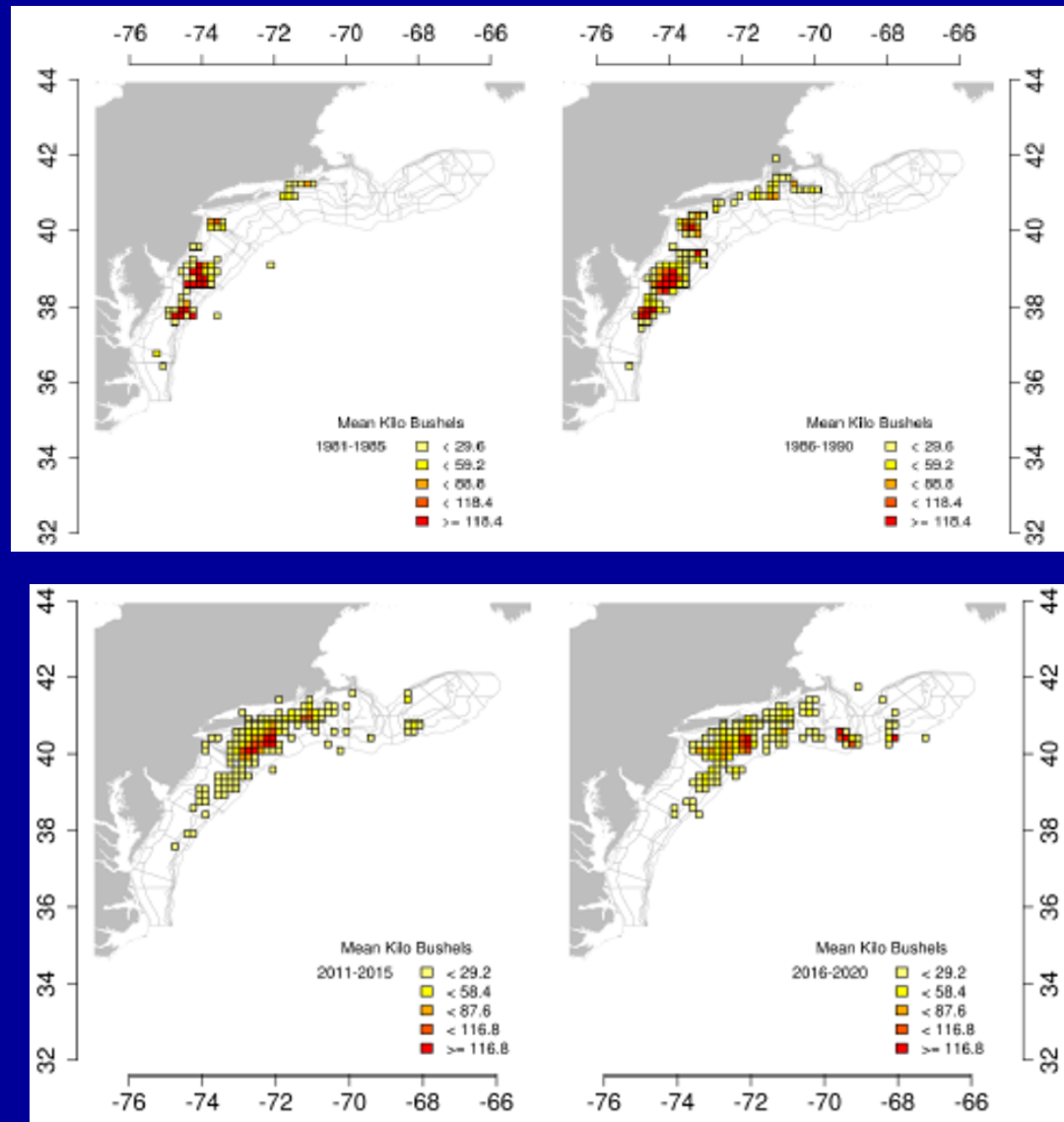
Quahog Info Doc



Quahog Info Doc



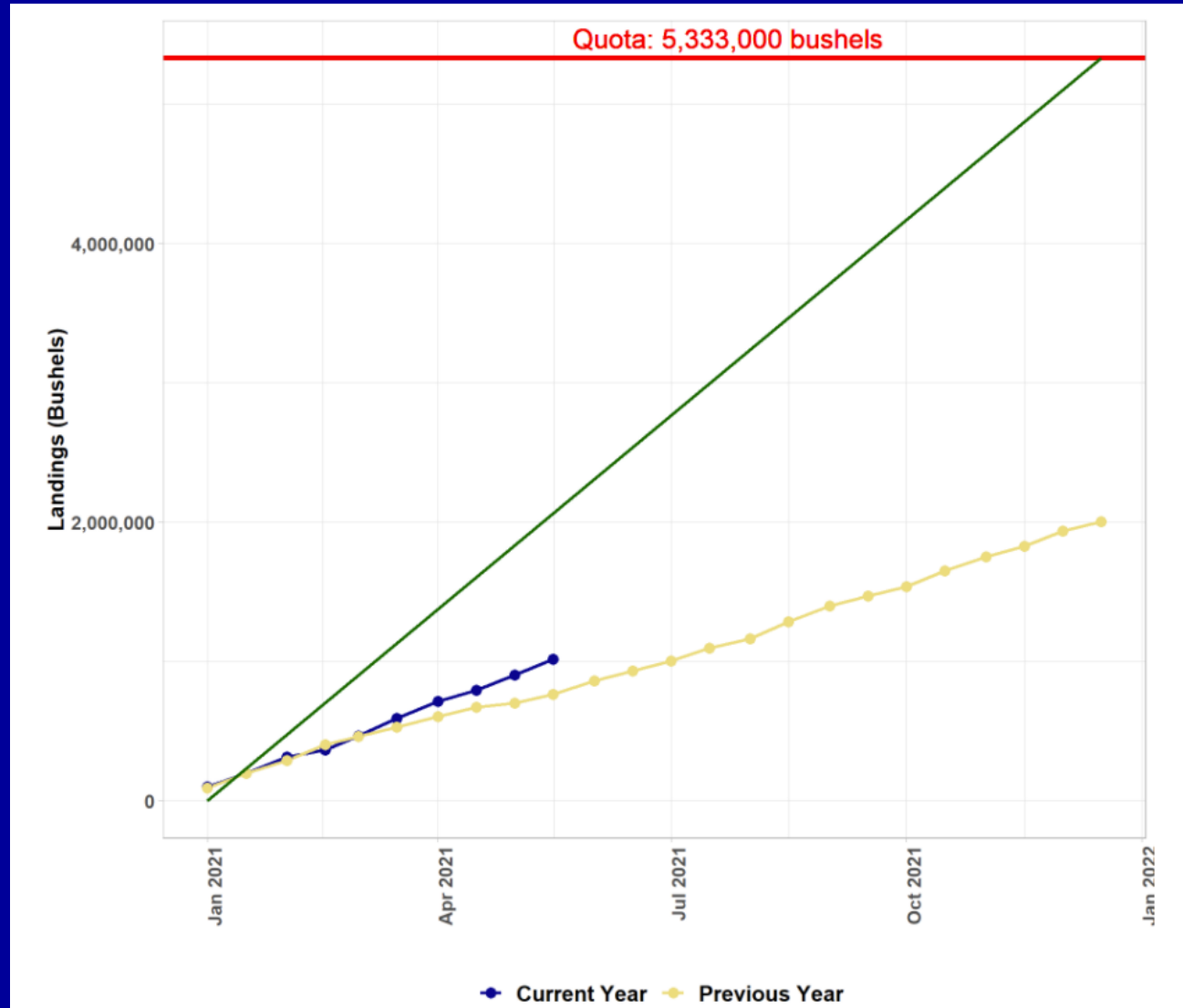
Quahog Info Doc



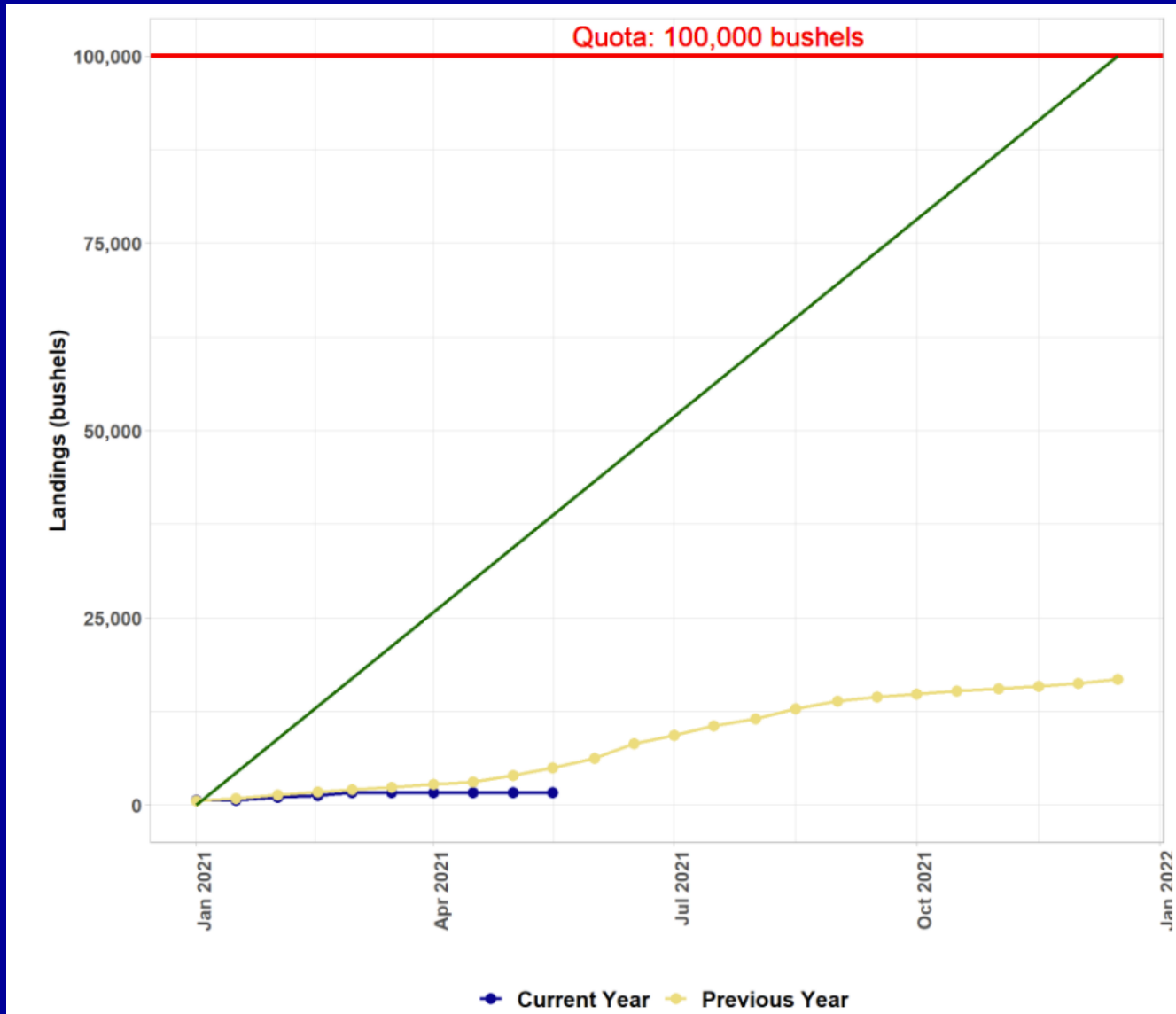
Quahog Info Doc

- 2019: 15 non-ME vessels, 8 ME
- 7 processors SCOQ in 3 states
- Decrease in overall ex-vessel value
 - \$16 million in 2020
 - Down \$3 million from 2019

Quahog Landings – Non-Maine (thru June 2)



Quahog Landings – Maine (thru June 2)

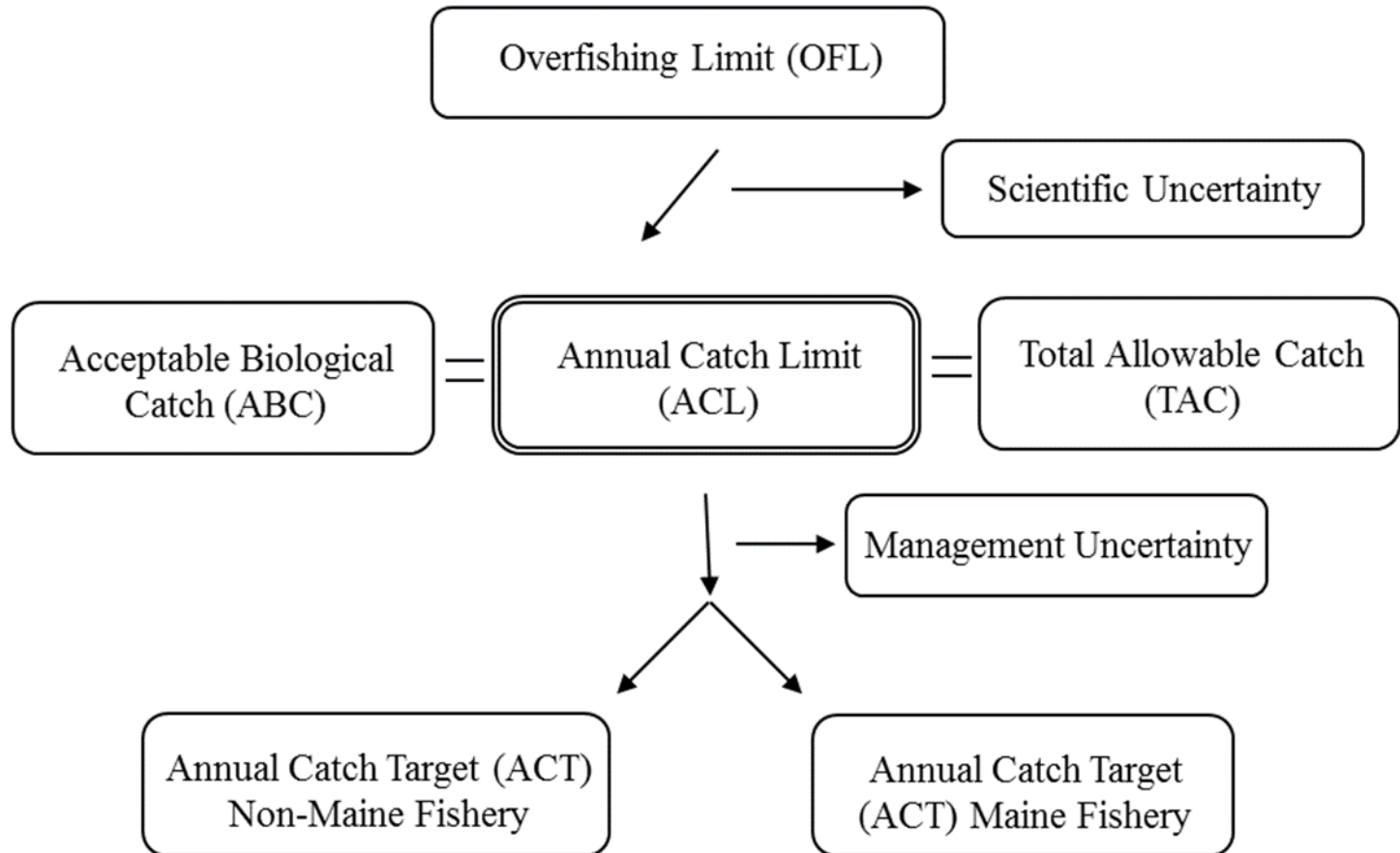


SSC Recommendation 2021-2026



- SSC-modified OFL probability distribution
- Coefficient of variation (OFL CV) of 100%
- Based on report for Level 1 Management Track Assessment
- 2021 $p^*=0.49$

Ocean Quahog Flowchart



Quahog SSC/Council Recommendations

Year	OFL	ABC	ACL	ACT*	Commercial Quota*
2021	44,960 mt	44,031 mt	44,031 mt	25,924 mt	24,689 mt
2022	45,001 mt	44,072 mt	44,072 mt	25,924 mt	24,689 mt
2023	45,012 mt	44,082 mt	44,082 mt	25,924 mt	24,689 mt
2024	44,994 mt	44,065 mt	44,065 mt	25,924 mt	24,689 mt
2025	44,948 mt	44,020 mt	44,020 mt	25,924 mt	24,689 mt
2026	44,875 mt	43,948 mt	43,948 mt	25,924 mt	24,689 mt

* For combined Maine and non-Maine quahog fishery.

Quahog Staff Recommendations

- No changes to measures for 2022

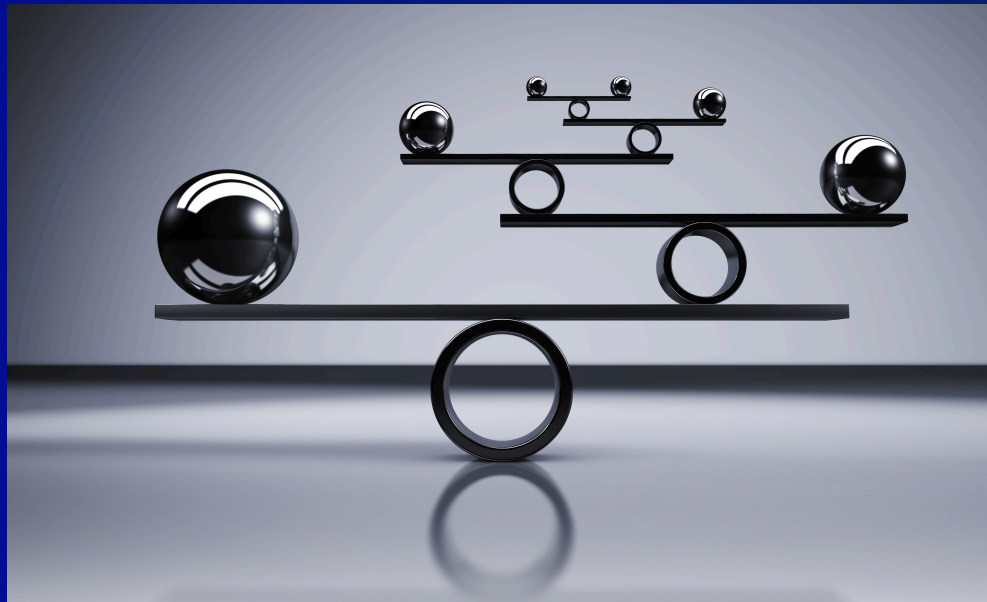


Ocean Quahog (see SSC Report)

- Landings have been declining in southern areas but the overall pattern of LPUE is much flatter than for Atlantic Surfclam.
- SSC expressed concerns about exploitation of this long-lived species given climate changes and wind energy development, but
 - Concerns are not as acute as for Atlantic Surfclam.
 - Georges Bank stock is large and relatively untouched
 - Recruitment appears to be consistent over time.
- Wind energy development could create refugia beneficial to maintaining population stability, but this aspect would be hard to quantify because relatively few 10-minute squares now being fished heavily.
- **None of these concerns were sufficient at this time for the SSC to recommend changes in previously agreed Ocean Quahog ABC for 2022.**

SCOQ Updates on Other Activities

- Surfclam genetics study
- SCOQ species separation requirements
- 2021 clam survey



Surfclam Genetics Study Update

- Matt Hare – Cornell University
- Species diagnostics and population connectivity
 - Atlantic surfclam - *Spisula solidissima solidissima*
 - Southern surfclam - *Spisula solidissima similis*
- Use samples to determine range and habitat affinities of each
- High resolution genomic techniques to quantify amount of gene flow connectivity/verify hybridization

Surfclam Genetics Study Update

- 1-year no cost extension because of sampling challenges
- Conducted two pilot runs with samples from both subspecies to select genomic sequencing methods (University of Minnesota - UOM)
- 150 *S. s. similis* DNA extracts sent to UOM in March
- 350 *S. s. solidissima* to be sent in September
- Initial genetic markers developed for hybridization assay proved provided uncertain hybrid identifications; expect genomic data will provide higher resolution

SCOQ Updates on Other Activities

- Species separation requirement white paper will be discussed at October Council Meeting, instead of August
- Clam survey was not conducted in 2020; missed SC-South survey
- For 2021, conduct SC-South, then continue with cycle of SC-North, OQ-South, OQ-North...
- Will shift SC assessment to 2025 and OQ assessment to 2027
- Current specifications cover until 2026