



Atlantic Surfclam and Ocean Quahog (SCOQ)

Council Meeting

August 12, 2020

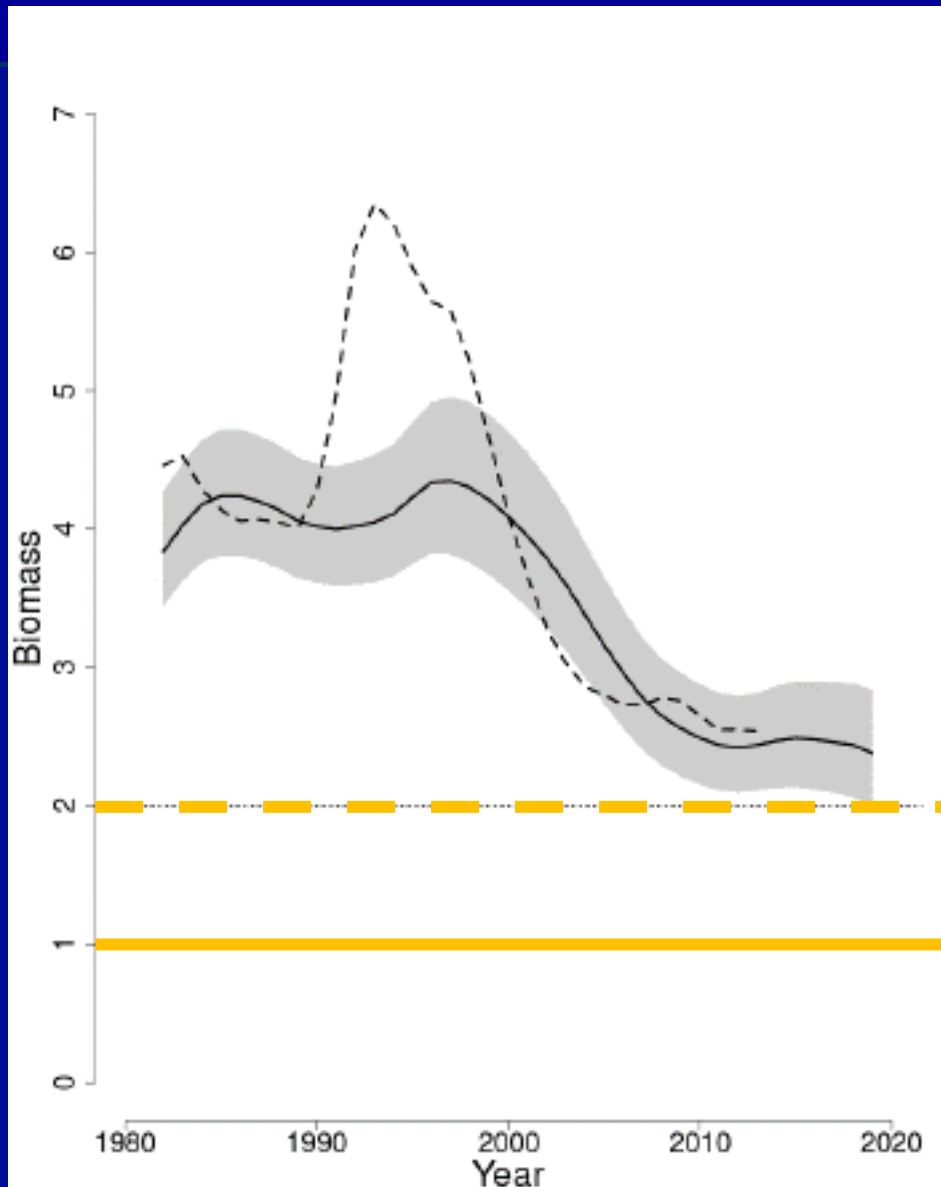


Today SCOQ Specifications

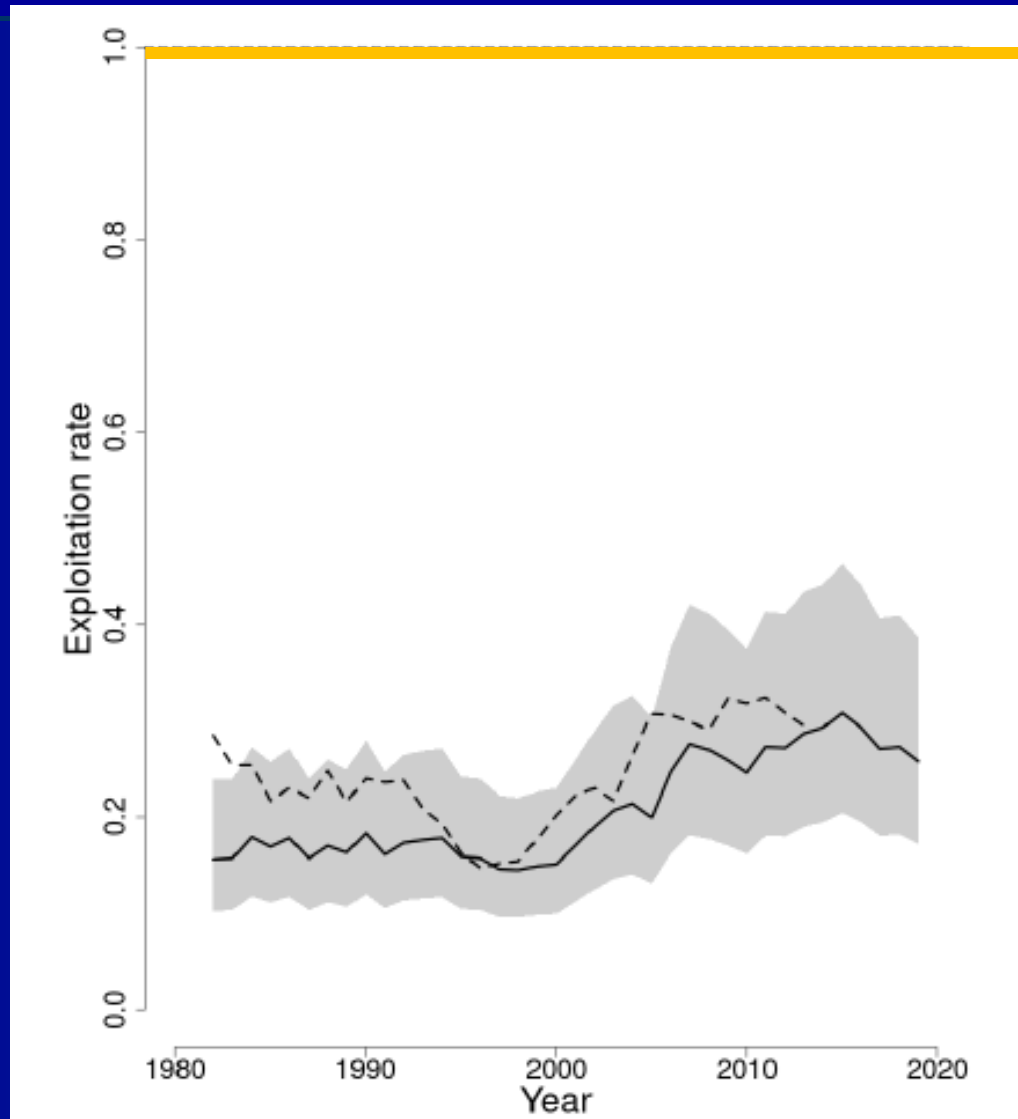
- Surfclam fish info doc (w/ stock assessment info)
- Fishery performance report (both SCOQ)
- Staff recommendations for surfclam
- SSC recommendations for surfclam (*Rago*)
- Repeat for ocean quahog



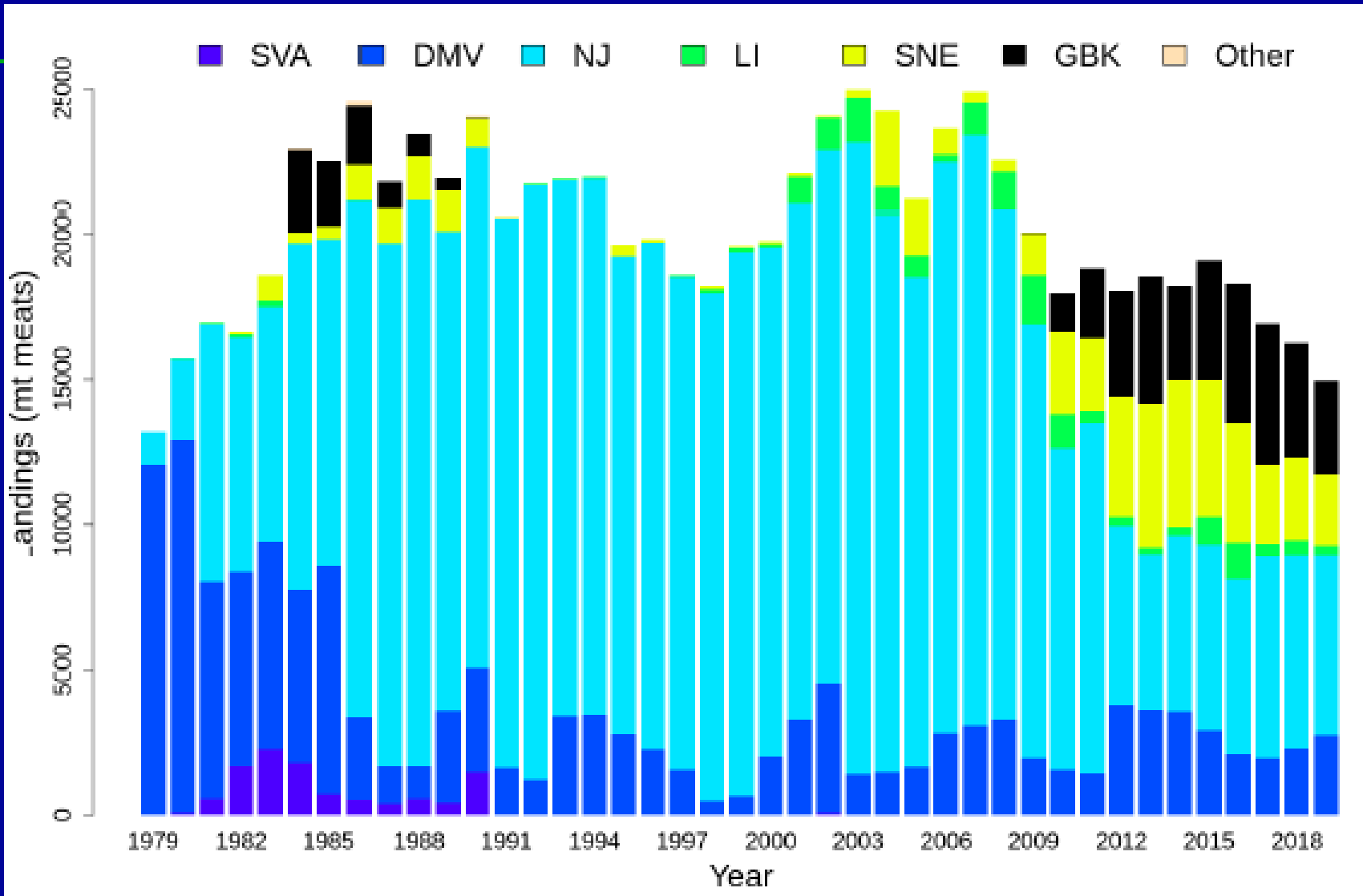
Surfclam Info Doc



Surfclam Info Doc



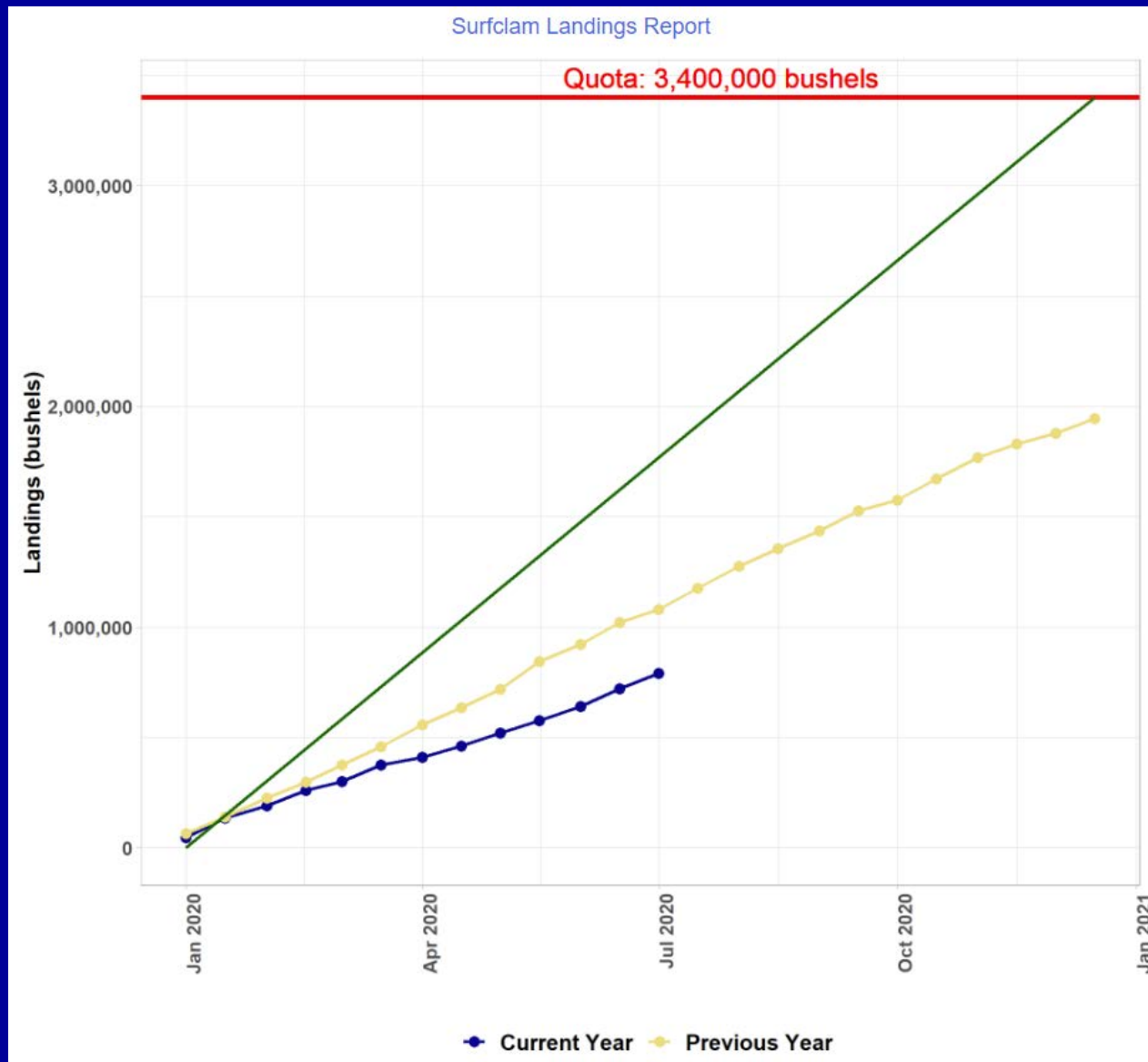
Surfclam Info Doc



Surfclam Info Doc

- 2019: 43 vessels (up 4 from 2018)
- 7 processors SCOQ in 5 states
- Decrease in overall ex-vessel value
 - \$28 million in 2019 (down \$2 mil from 2018)
 - \$14.37/bu in 2019 (up from 2018, \$14.18/bu)

Surfclam Landings (thru July 29)



Fisheries Performance Report

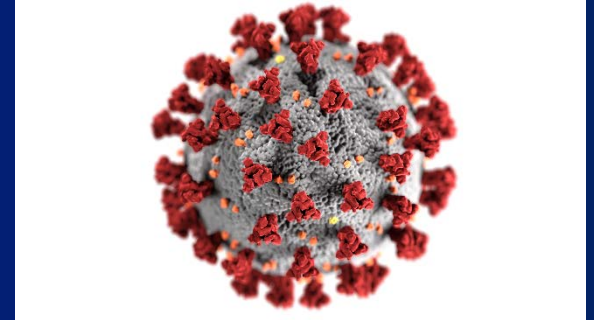
- Covers both SCOQ
- Advisors met July 8, 2020
- Asked series of trigger questions
- AP identified 3 Critical Issues
- Also note, advisors would like status quo quotas (quota stability = fishery/market stability)



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
- If this continues, will result in lower landings
- Reopening of retail may provide some relief
- 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 that might increase harvest opportunities in the Great South Channel Habitat Management Area (Nantucket Shoals/Southern New England area)

■ C. Offshore Development:

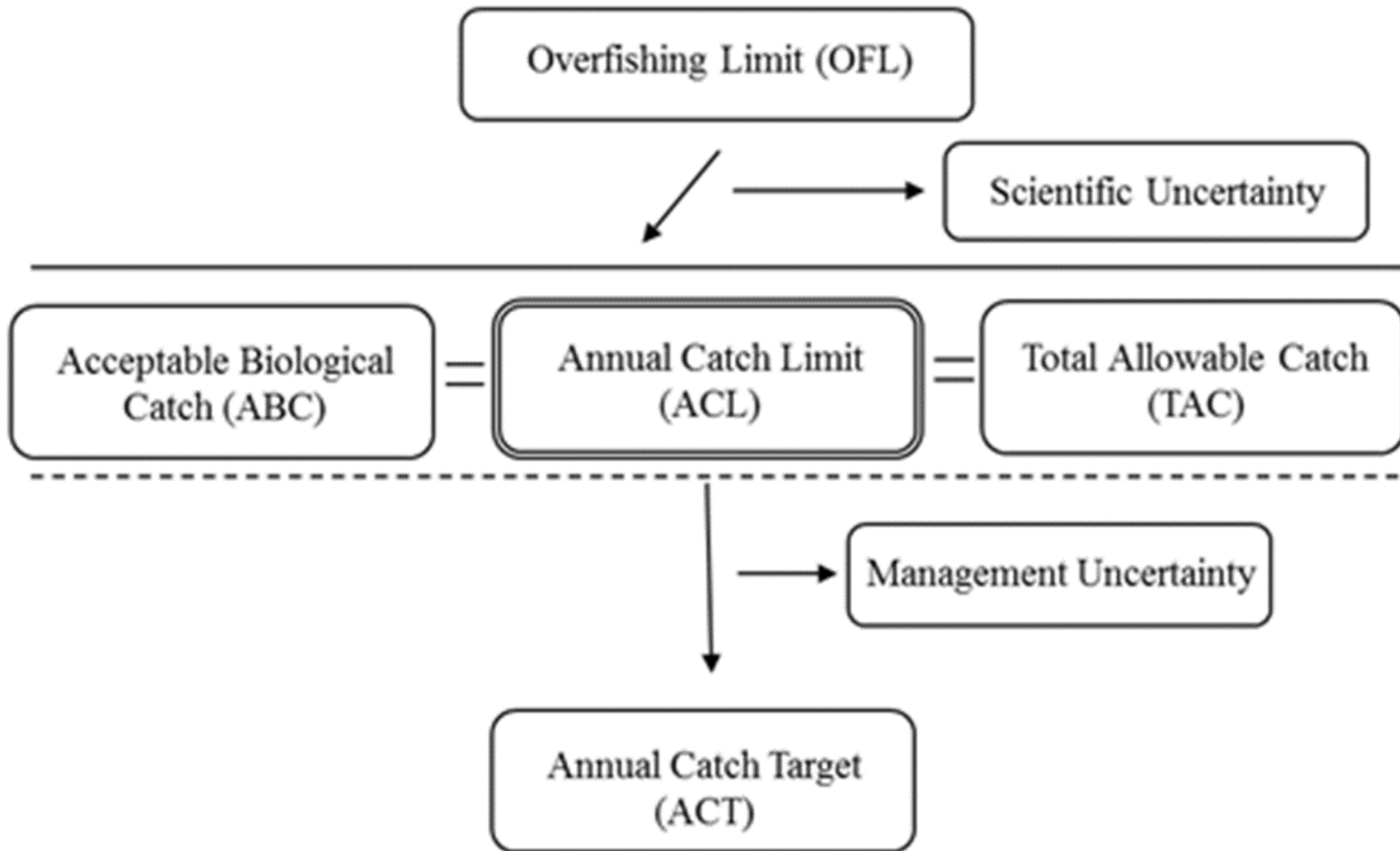
- Wind energy development has become a critical issue for our industry (see expanded discussion in document)

Surfclam 2019-2020

- SSC-modified OFL probability distribution
- Coefficient of variation (OFL CV) of 150%
- Based on report from joint SSC/Northeast Fisheries Science Center (NEFSC) Working Group

Year	OFL (mt)	ABC (mt)
2019	74,281	56,419
2020	74,110	56,289

Atlantic Surfclam Flowchart



Surfclam Staff Recommendations

- Specifications be set for 6-years (2021-2026)
- If applied same previous SSC methods:

Year	OFL (mt)	ABC (mt)	SSB/ SSB Threshold (ratio) ^a	P (overfishing)
2021	51,361	46,919	2.21	0.47
2022	48,202	43,460	2.15	0.46
2023	45,959	41,166	2.12	0.46
2024	44,629	39,888	2.11	0.46
2025	44,048	39,282	2.10	0.46
2026	43,886	39,223	2.11	0.46

^a The target biomass ratio = 2. See section on BRPs above.

Surfclam Staff Recommendations

- Assessment results suggest current catch levels reasonable
- $ABC=ACL$
- $ACT = 26,218 \text{ mt} + 12\% \text{ incidental} = 29,363 \text{ mt}$
- Since 2010 fishery has landed about 70% of quota, 100% not taken since 2003

Surfclam Staff Recommendations

- NMFS Regional Administrator may suspend minimum size if “30 percent of the surfclam are smaller than 4.75 inches (12.065 cm)”
- Coastwide, 22% of landed surfclam undersized (DMV = 32.5%, NJ = 11%, and GBK = 18.2%)
- Staff recommend suspension of minimum shell-length for 2021; however, should encourage fishing industry to work to avoid landing large numbers of small clams

Surfclam Staff Recommendations

- NMFS Regional Administrator close areas to surfclam/quahog fishing if:
 - 60% or more smaller than 4.5 inches;
Not more than 15% larger than 5.5 inches
- NEFSC survey data/Maps provided: does capture small clams, but doesn't sample them well
- Staff recommend the Council continue to monitor spatial differences/changes in the fishery

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July 2020 SSC Meeting Summary

ABC Recommendations for *Surfclam*



Species	Process	OFL CV (%)	2021 ABC (mt)	P star = P(overfishing)
Surfclam (Not Overfished, Overfishing Not occurring)	Level 3 Management Track	100	47,919	0.47
Ocean Quahog	Level 1 Management Track	100	44,031	0.49
Butterfish	Level 2 Management Track	100	11,993 (time varying)	0.35
Longfin Squid	Level 3 Management Track	NA	23,400	NA
Atlantic Mackerel	Data Update	100	29,184	0.386
Bluefish	Data Update	100	7,385	0.183
Summer Flounder	Data Update	60	12,297	0.39
Scup	Data Update	60	15,791	0.49
Black Sea Bass	Data Update	100	7,916	0.49

Atlantic Surfclam (100% OFL CV)

- **Highlights**

- Model was revised to combine areas using same approach as ocean quahog
- Revised survey design using industry based survey.
- Abundance is high, F is low. Greater certainty in scale due to increase in F in north.
- Developed OFL CV Decision Table



- **Uncertainties**

- Changes to scale suggest lower densities on Georges Bank than thought earlier
- Changing ecosystem
- Some suggestions of domed selectivity

- **Research**

- Link OFL with reproductive potential
- Examine recovery in previously fished areas, appropriate spatial scales
- Investigate methods for estimating natural mortality
- Examine recruitment dynamics

- **Based on Best Scientific Information Available**

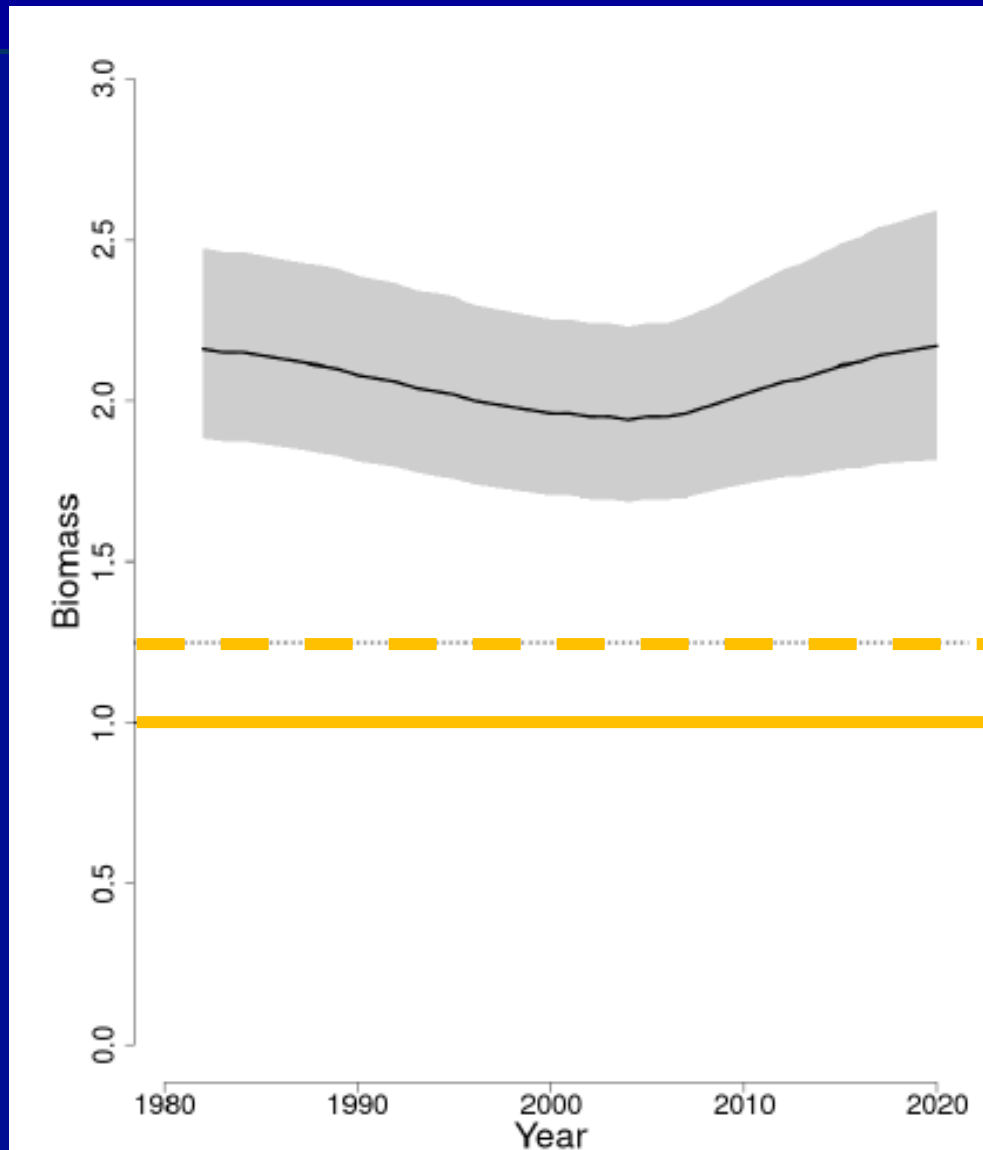
Surfclam SSC/Staff Recommendations

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

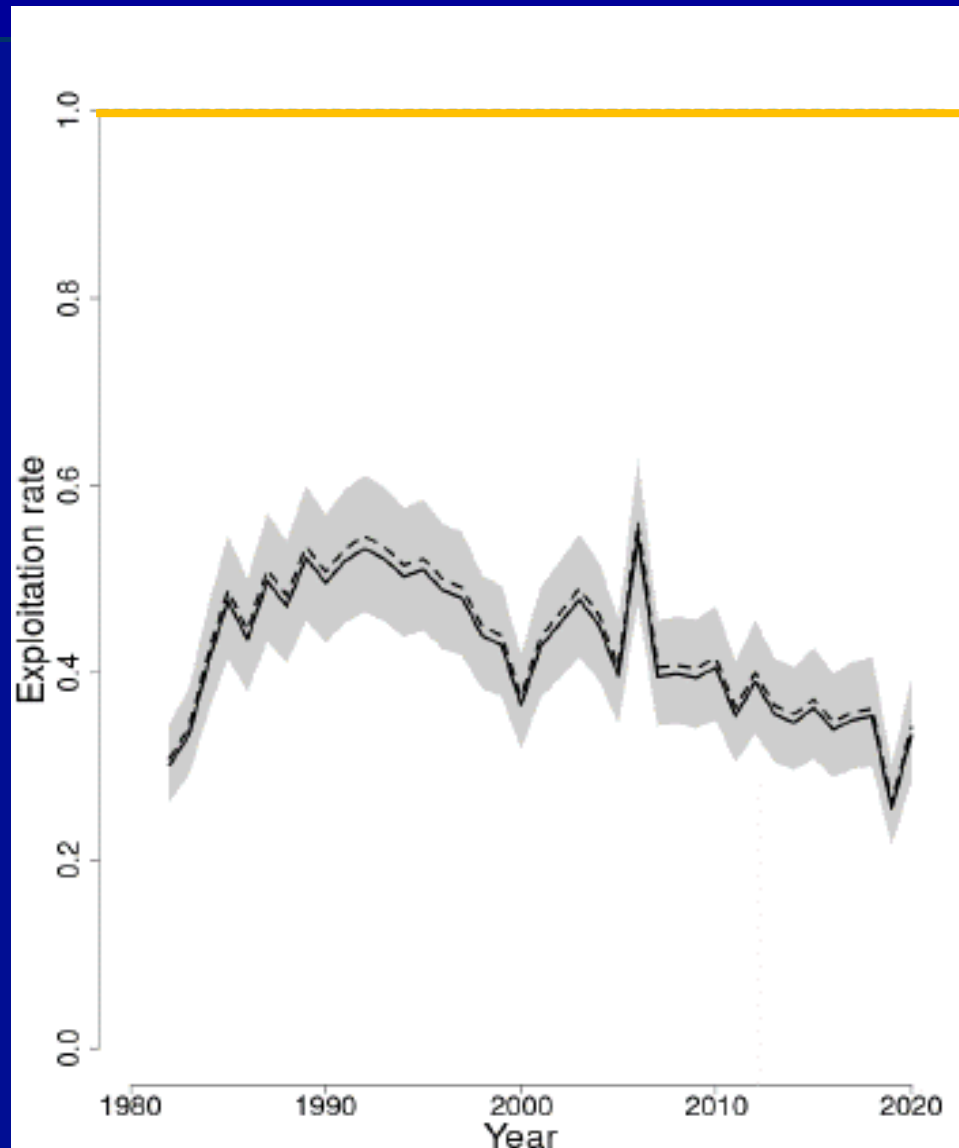
Questions?



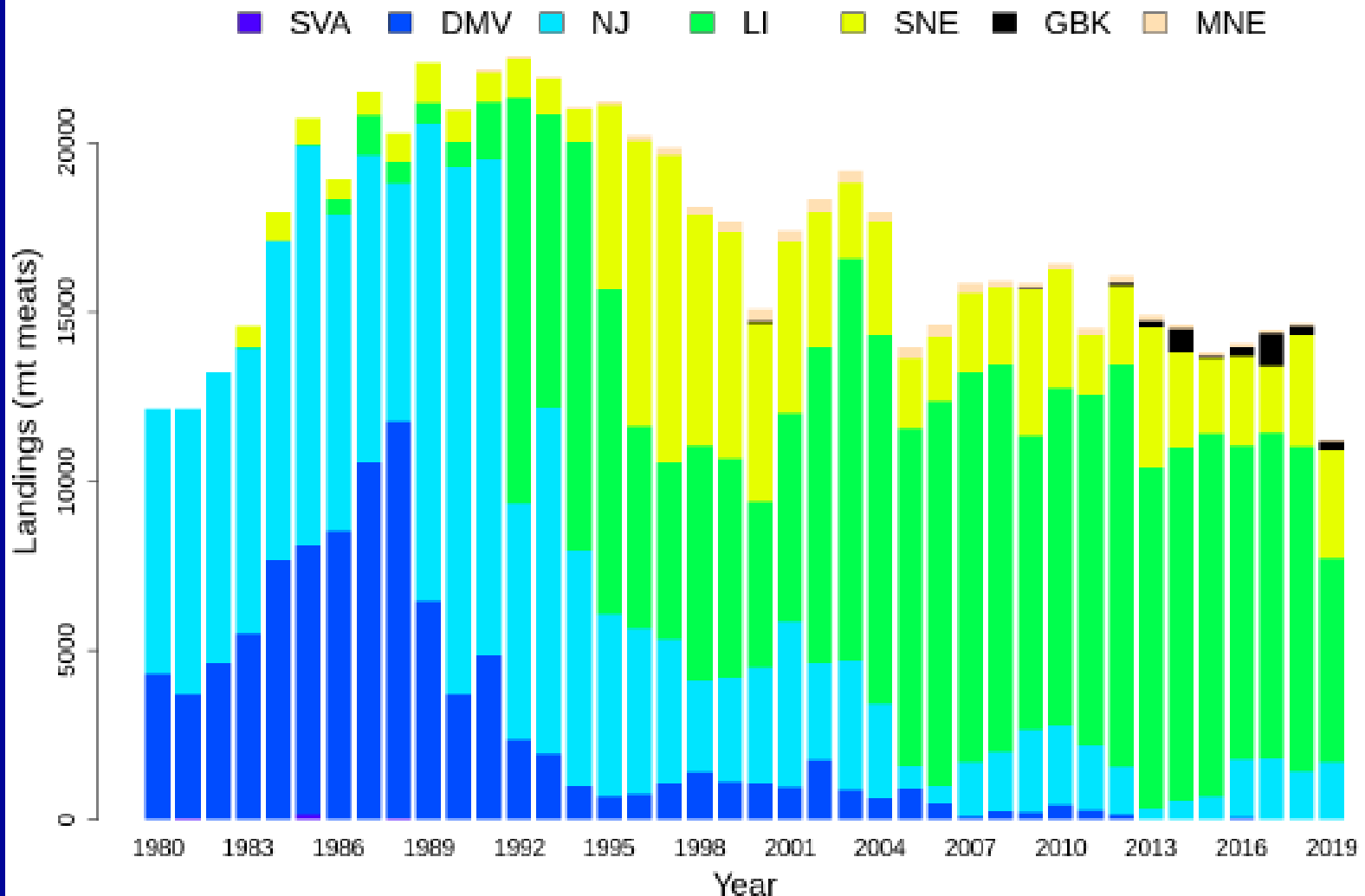
Quahog Info Doc



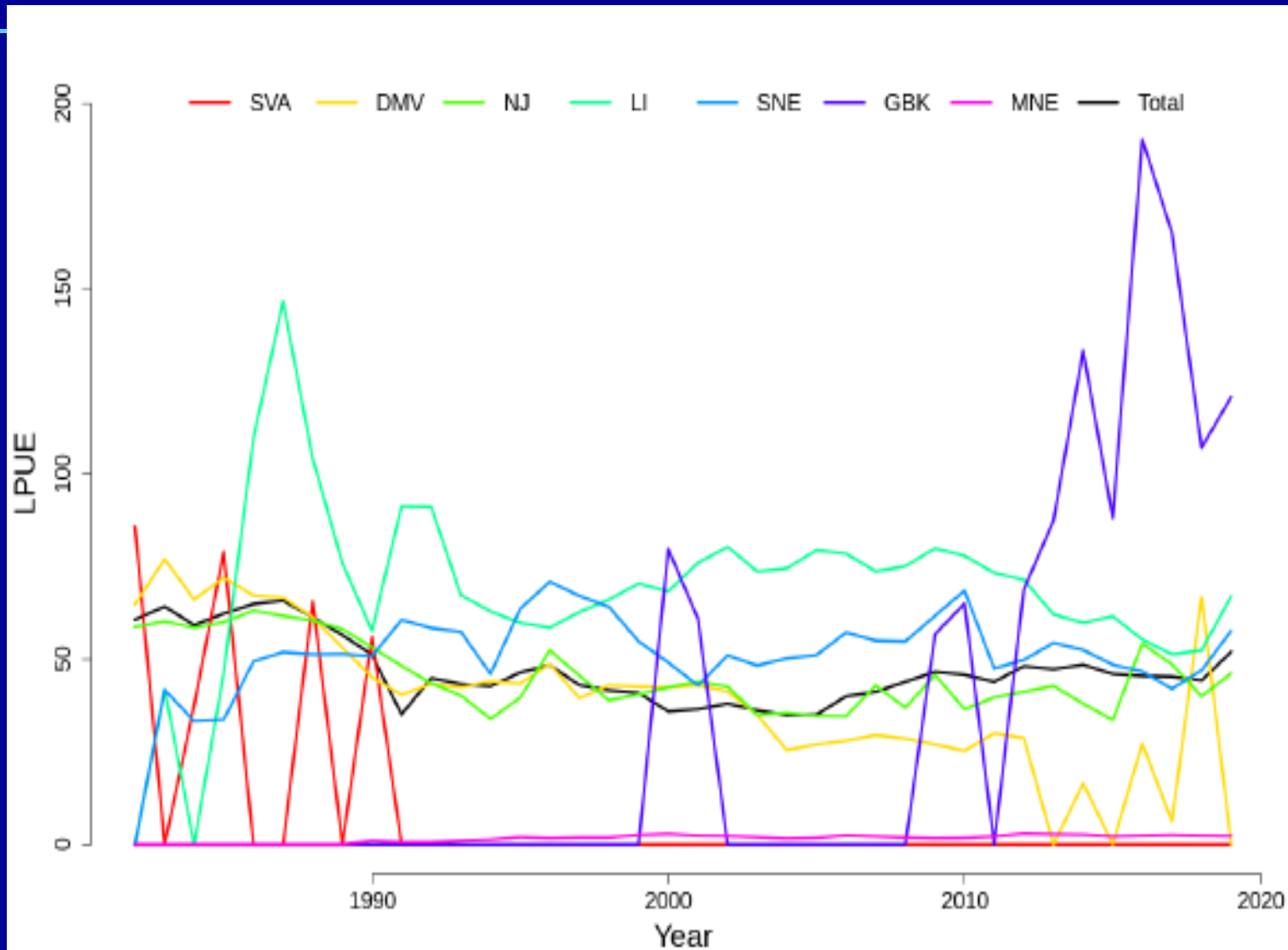
Quahog Info Doc



Quahog Info Doc



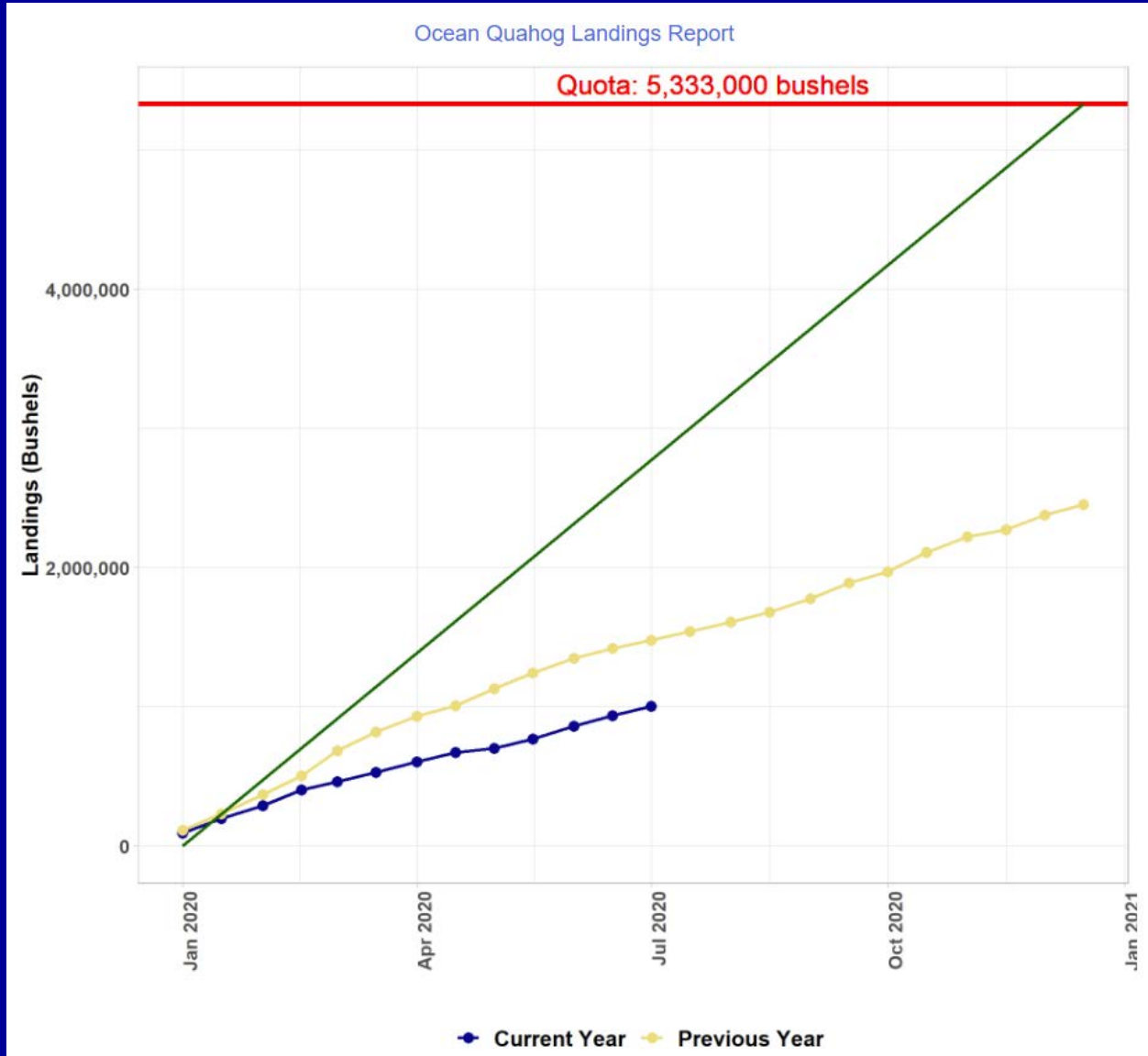
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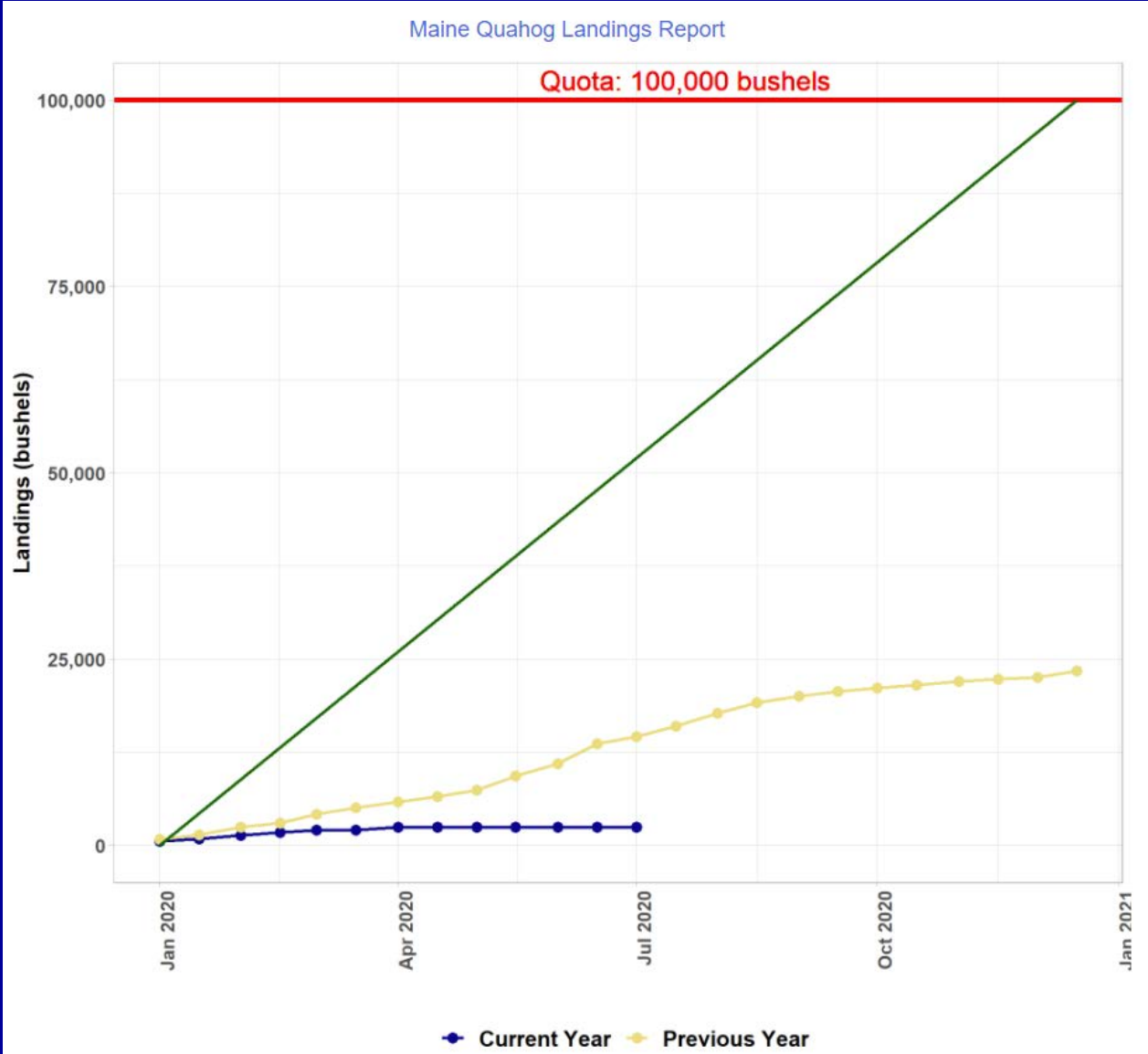
Quahog Info Doc

- 2019: 15 non-ME vessels, 6 ME
- 7 processors SCOQ in 5 states
- Decrease in overall ex-vessel value
 - \$19 million in 2019 (down \$5 million from 2018)
 - Non-Maine: \$7.86/bu in 2019 (up from 2018, \$7.53/bu)
 - Maine: \$38.24/bu in 2019 (up from 2018, \$35.95/bu)

Quahog Landings – Non-Maine (thru July 29)



Quahog Landings – Maine (thru July 29)

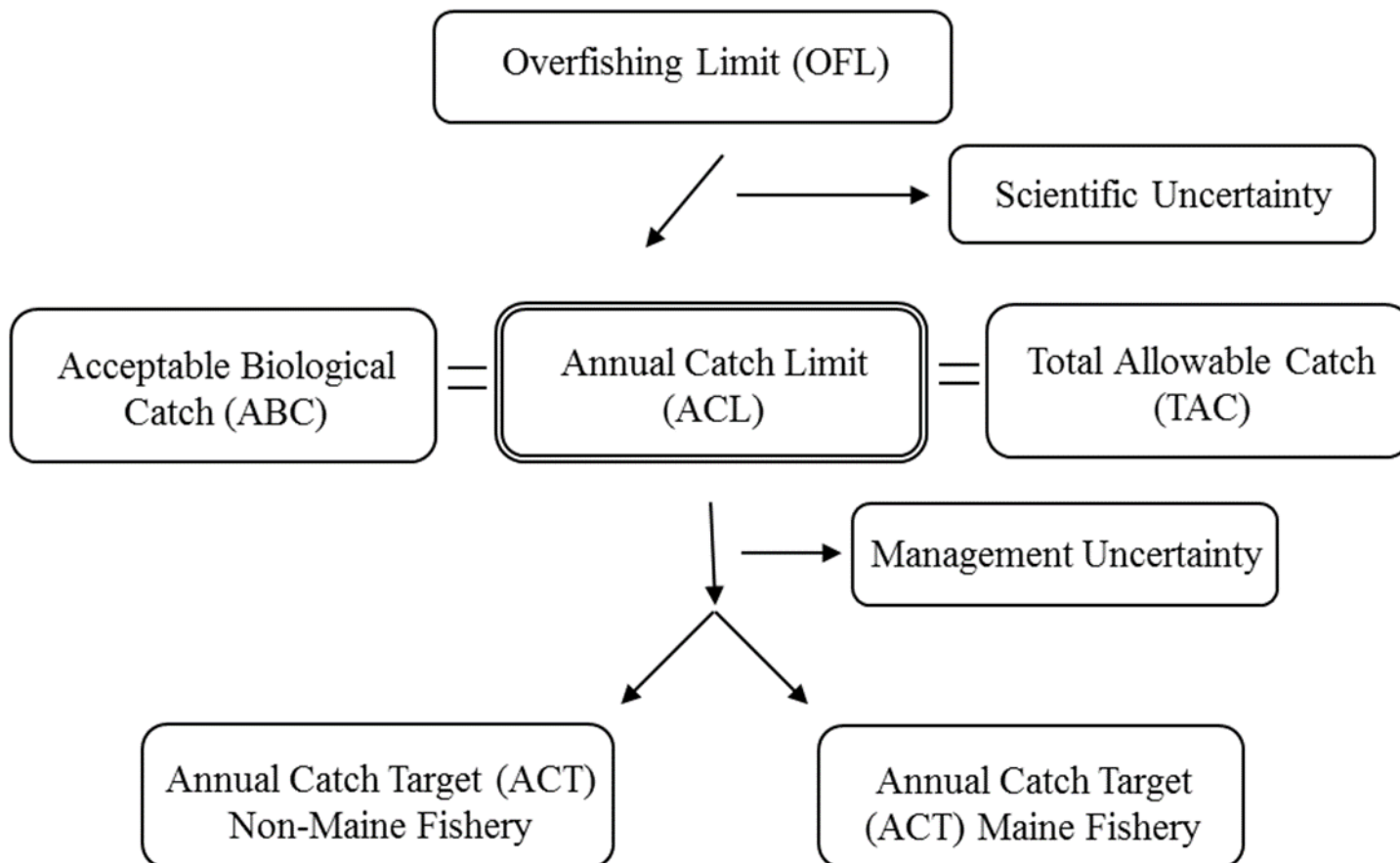


Quahog 2018-2020

- SSC-modified OFL probability distribution
- Coefficient of variation (OFL CV) of 100%
- Atypical life history in risk policy

Year	OFL (mt)	ABC (mt)	SSB/SSB Threshold (ratio)	P (overfishing)
2018	61,600	44,695	2.0	0.35
2019	63,600	46,146		
2020	63,100	45,783		

Ocean Quahog Flowchart



Quahog Staff Recommendations

- Specifications be set for 6-years (2021-2026)
- If applied same previous SSC methods; w/o atypical and using revised risk policy:

Year	OFL (mt)	ABC (mt)	SSB/SSB Threshold (ratio) ^a	P (overfishing)
2021	44,960	44,031	2.18	0.49
2022	45,001	44,072	2.18	
2023	45,012	44,082	2.17	
2024	44,994	44,065	2.16	
2025	44,948	44,020	2.15	
2026	44,875	43,948	2.14	

^a The target biomass ratio = 1.25. See section on BRPs above.

Quahog Staff Recommendations

- Assessment results suggest current catch levels reasonable
- ABC=ACL as prescribed in FMP
- ACT = 25,924 mt (includes 5% incidental mortality)
- Comm quota: All 24,689 mt; Non-Maine = 24,190 mt; Maine = 499 mt; Same quotas since 2005





July 2020 SSC Meeting Summary

ABC Recommendations for *Ocean Quahog*



Species	Process	OFL CV (%)	2021 ABC (mt)	P star = P(overfishing)
Surfclam	Level 3 Management Track	100	47,919	0.47
Ocean Quahog (Not Overfished, Overfishing Not occurring)	Level 1 Management Track	100	44,031	0.49
Butterfish	Level 2 Management Track	100	11,993 (time varying)	0.35
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Scup	Data Update	60	15,791	0.49
Black Sea Bass	Data Update	100	7,916	0.49

Ocean Quahog (100% OFL CV)



- **Highlights**

- Benchmark in 2019, no new survey data.
- Revised survey design using industry based survey, but nearly equivalent results in south
- Abundance is high, F is low → little to no chance of becoming overfished in next 6 years
- Developed OFL CV Decision Table

- **Uncertainties**

- Changes to scale suggest lower densities on Georges Bank (31% less) than thought earlier
- Changing ecosystem
- Long lifespan and by comparison—short period of fishing and research
- Low fishing mortality and lack of contrast in model → reliance on catchability experiments

- **Research**

- Improve biological parameters, especially age composition, natural mortality, growth
- Examine recruitment dynamics and spatial processes
- Better understanding of survey dredge efficiency

- **Based on Best Scientific Information Available**

Quahog SSC/Staff 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.

Questions?



Surfclam/Quahog Commingling Update

- Issue raised by Industry – part of 2020 Implementation Plan
- Surfclam shifting into deeper waters, and catches with both species more common
- Regulations do not allow both species to be landed on same trip or placed in the same tagged cages
- Industry has indicated they are not supportive of required onboard sorting as regulatory solution

Surfclam/Quahog Commingling Update

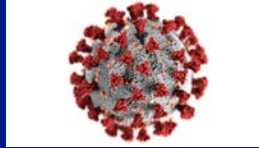
- Letters sent to NEFSC, GARFO, S&T on July 27 to form Fishery Management Action Team (FMAT)
 - GARFO: Doug Potts (SFD) & John Sullivan (APSD)
 - S&T: Brett Alger
 - Waiting on NEFSC
- Plan to have first meeting in early fall to develop action plan

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

■ Sampling challenges



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

- Federal samples obtained from Georges Bank in 2019
- No federal survey in 2020 – no southern areas sampled
- State surveys cancelled too!

■ Path forward

- Existing samples of taxon from about 25 locations
- Exploring options to obtain a few commercial samples to fill in gaps