

ADF&G STAFF PRESENTATION

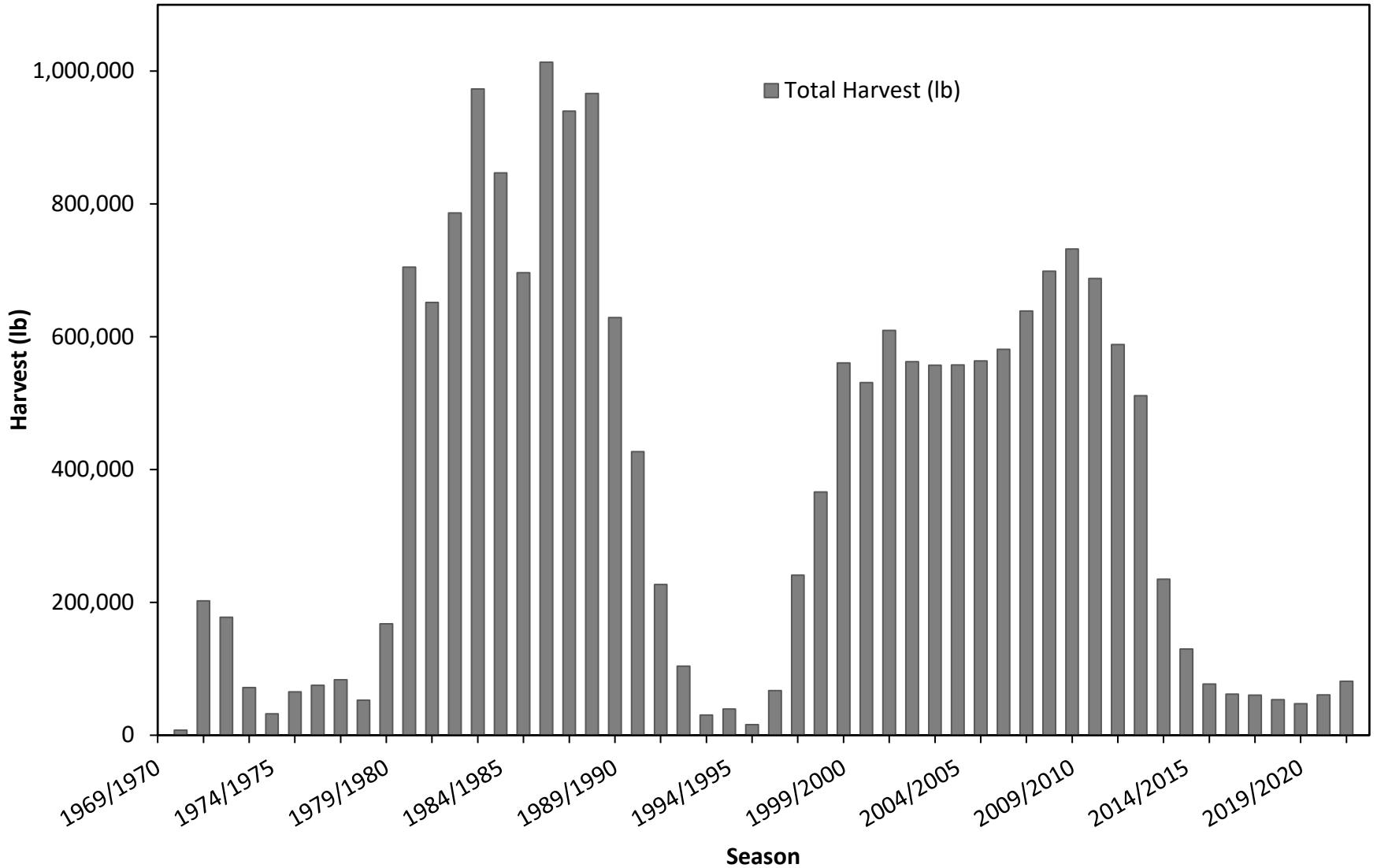
King and Tanner Task Force – December 2022



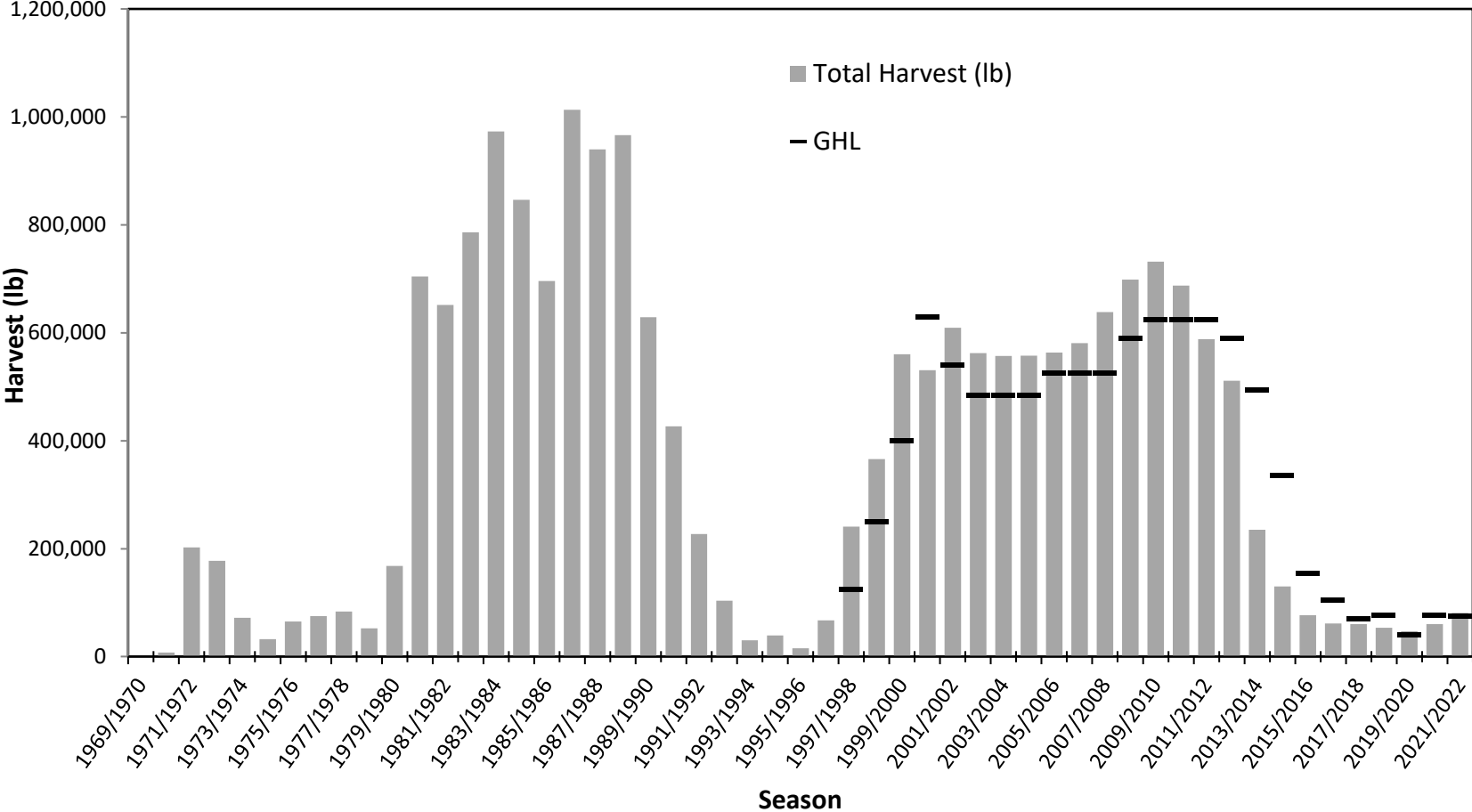
Golden King Crab Commercial Fisheries

Joe Stratman, Lead Shellfish Biologist
Division of Commercial Fisheries, Southeast Region

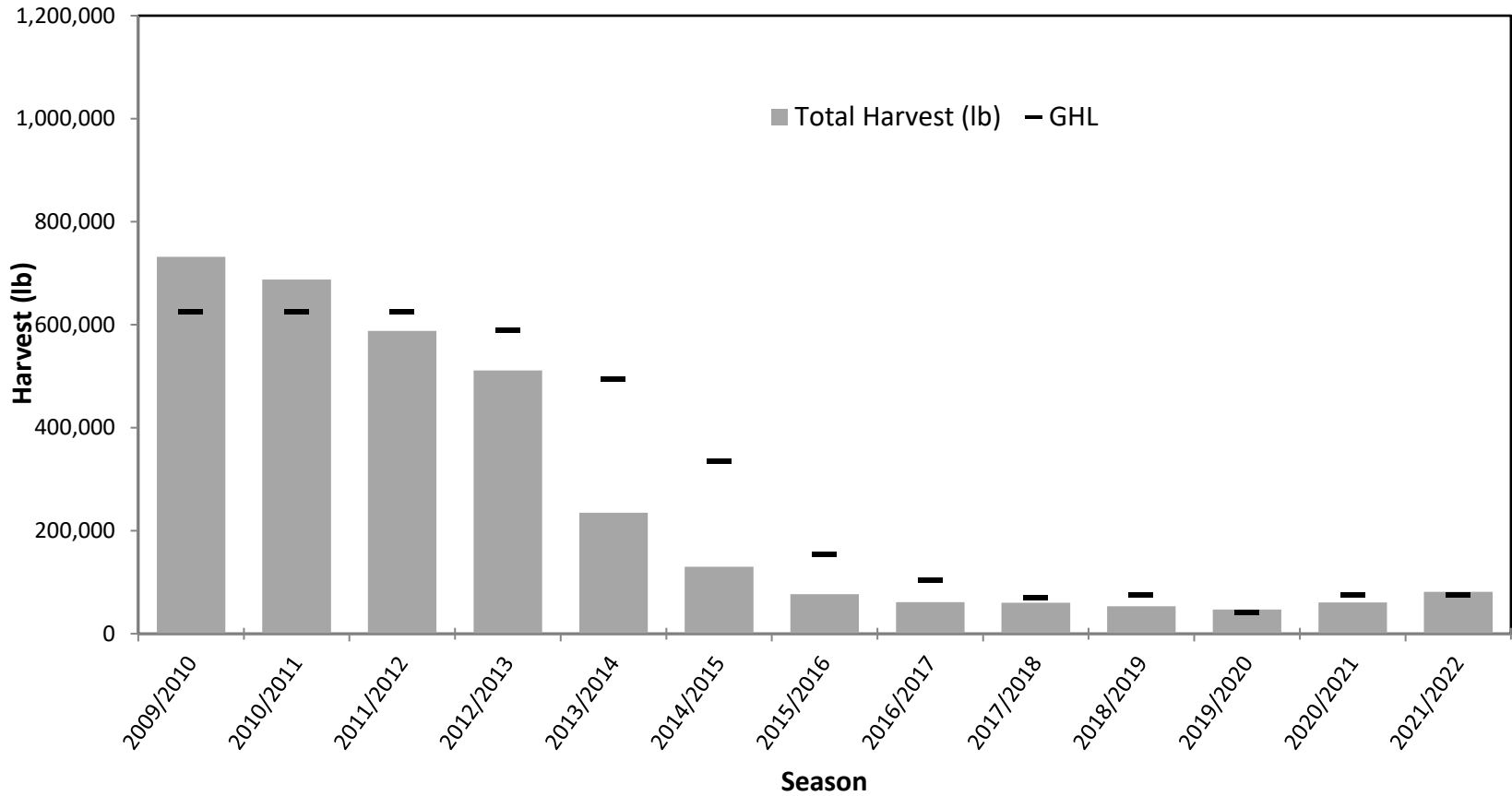
GKC Harvest by Season



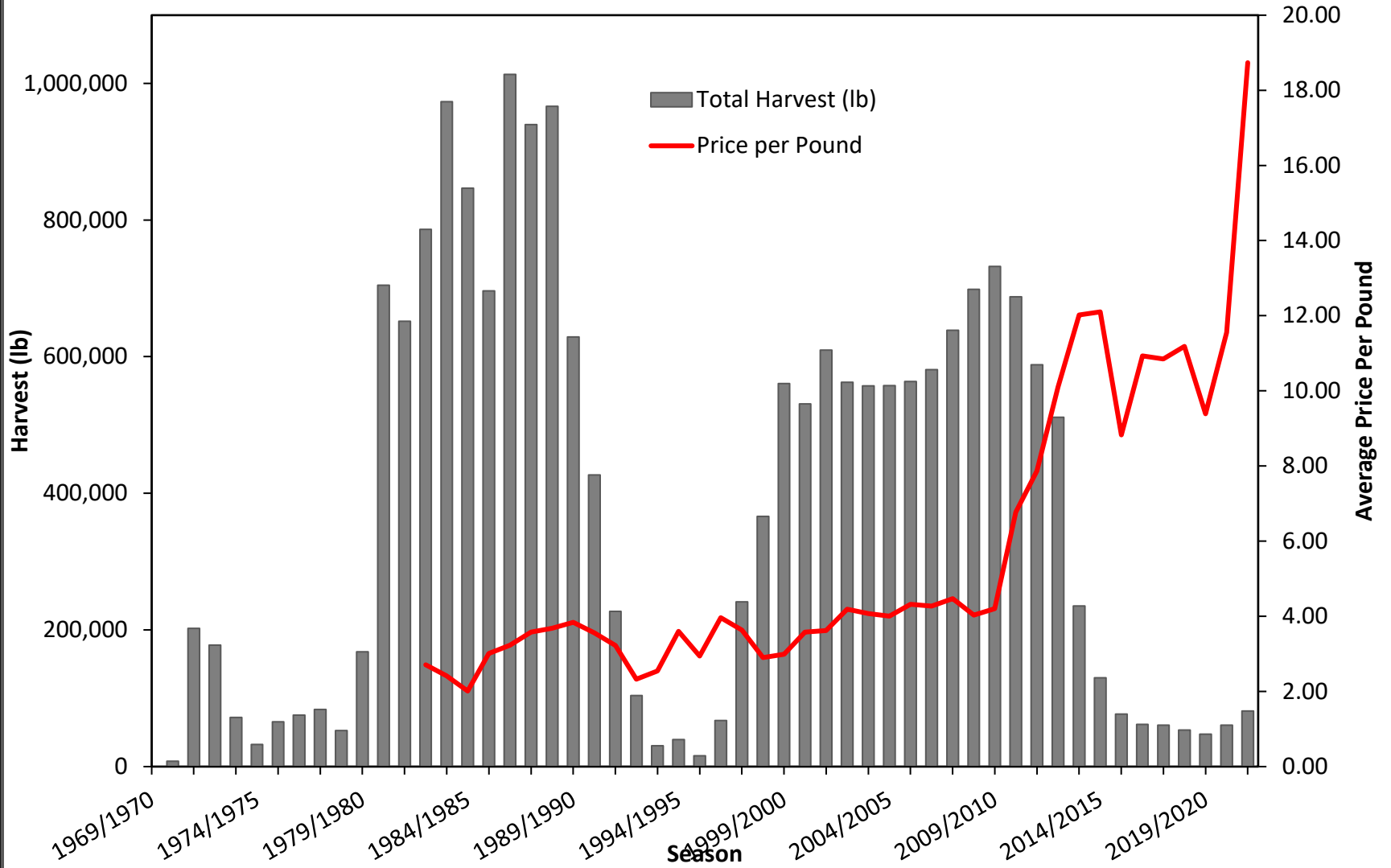
GKC Harvest and GHLS by Season



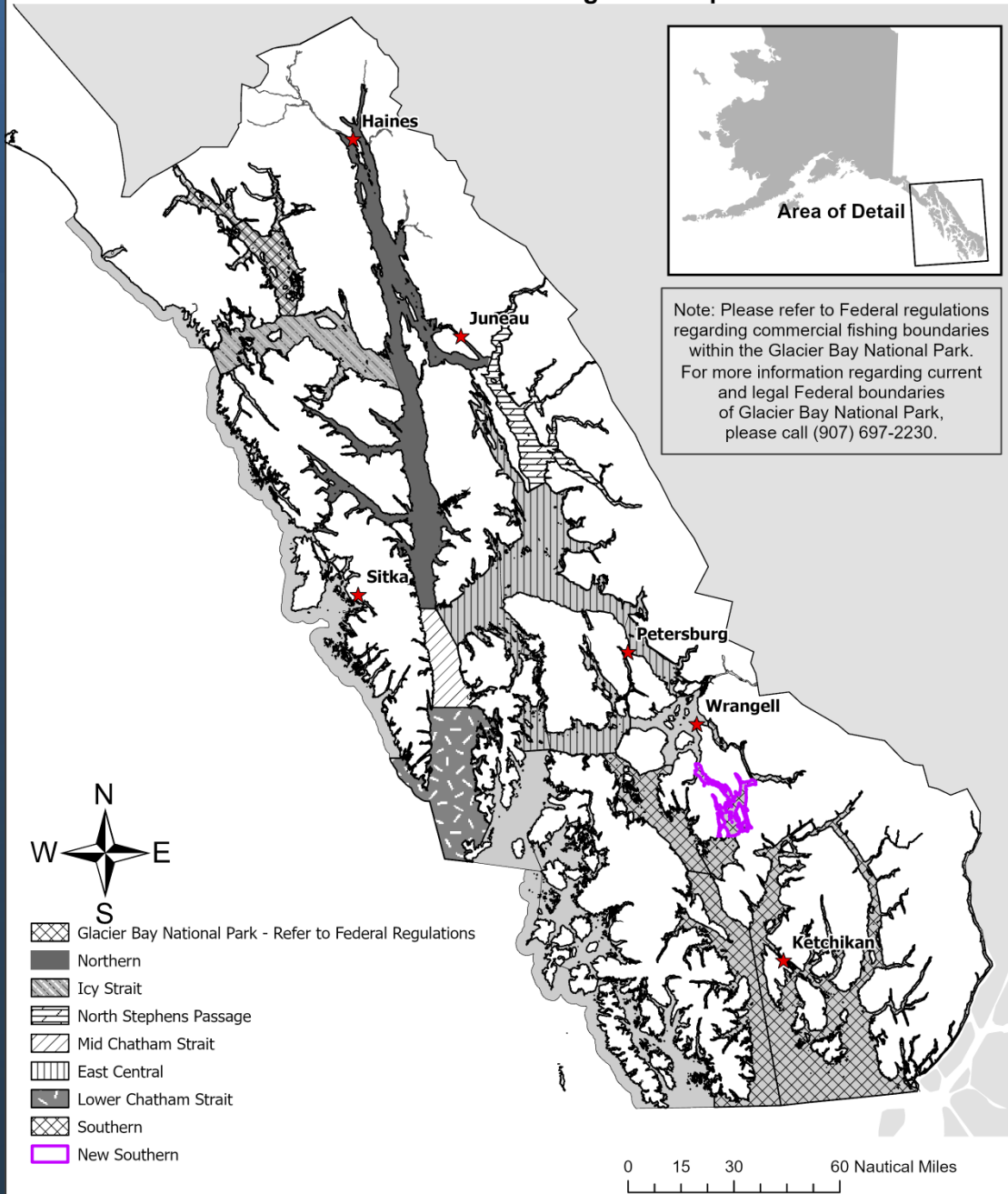
GKC Harvest and GHs by Season



GKC Harvest and Average Price Per Pound by Season



**Golden King Crab Management Areas and Waters of
Registration Area A Closed and Not Open to Commercial Fishing
Refer to 5AAC 34.107 for Legal Descriptions**



Note: Please refer to Federal regulations regarding commercial fishing boundaries within the Glacier Bay National Park. For more information regarding current and legal Federal boundaries of Glacier Bay National Park, please call (907) 697-2230.



- Glacier Bay National Park - Refer to Federal Regulations
- Northern
- Icy Strait
- North Stephens Passage
- Mid Chatham Strait
- East Central
- Lower Chatham Strait
- Southern
- New Southern

0 15 30 60 Nautical Miles

Summary – GHL Review

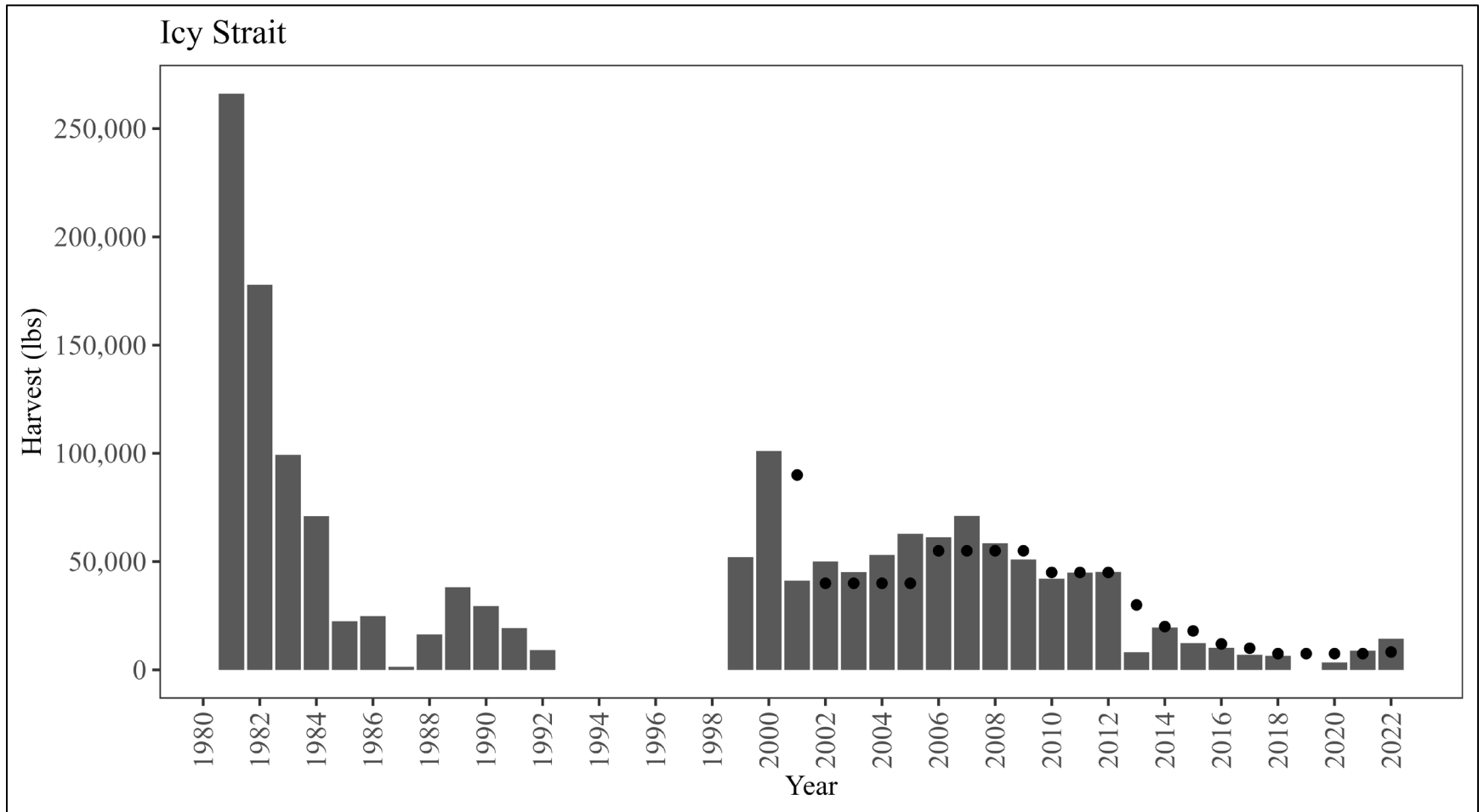
- GHL recommendations are made annually employing a precautionary approach to minimize the risk of recruitment failure.
- Three reasons for this approach:
 - 1) Recent fishery performance has been poor.
 - 2) Data poor fishery with no fishery independent stock assessment program.
 - 3) Golden king crabs are a long-lived deep-water species, on a 20-month asynchronous reproductive cycle with non-feeding larvae that remain at depth; are less fecund than RKC and size at maturity varies across management areas.

Data Sources

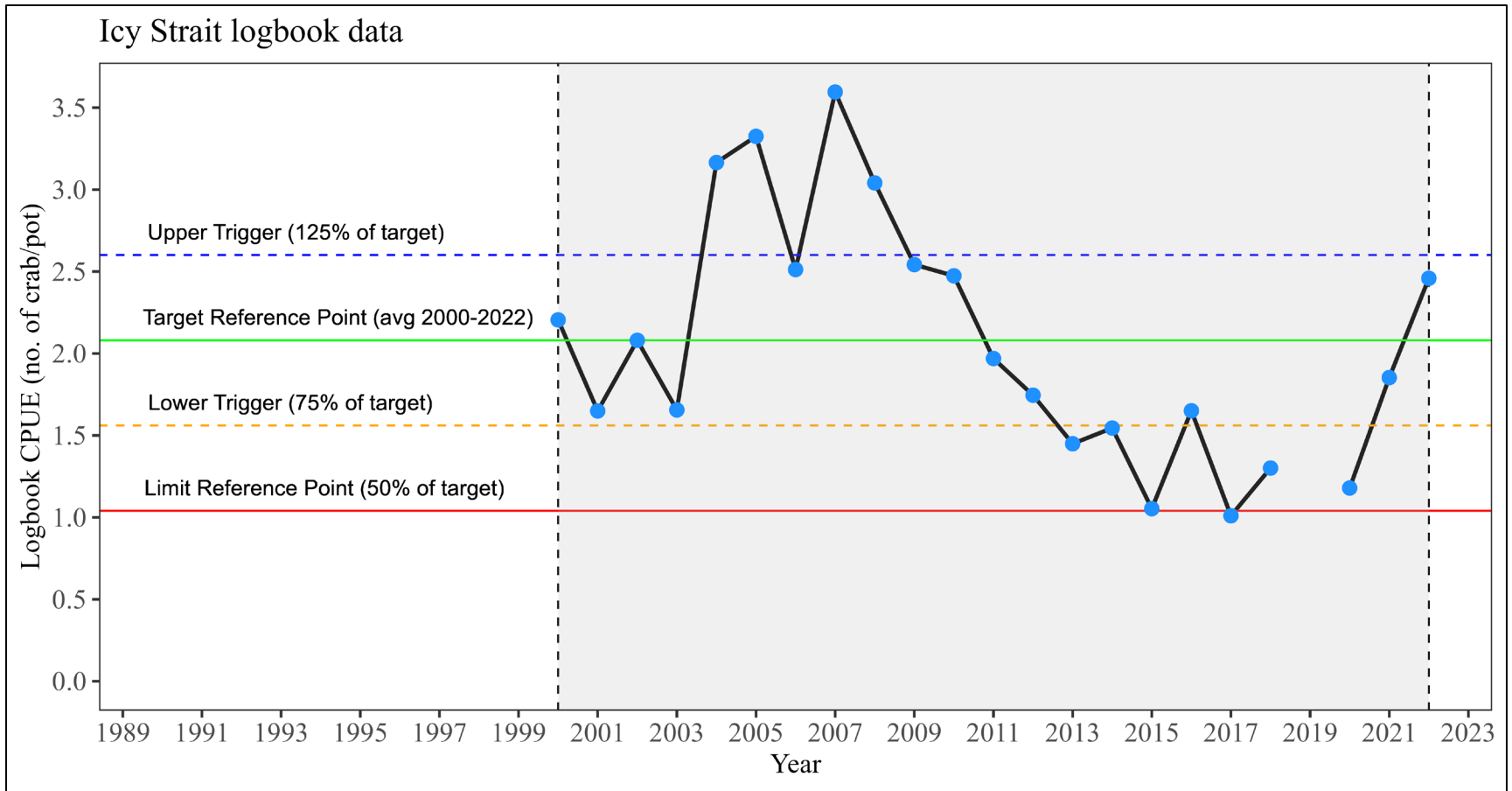
- All data currently available to assess GKC in Southeast Alaska are fishery dependent:
 - 1) Commercial CPUE - fish ticket and logbook. Logbooks have been used in the fishery since 2000.
 - 2) Dockside sampling – length frequencies of crab by recruit class (recruit and post-recruit) from the early 1970s to present.
 - ~~3) Onboard observer data (late 1990s through 2016).~~

2021/2022 Fishery

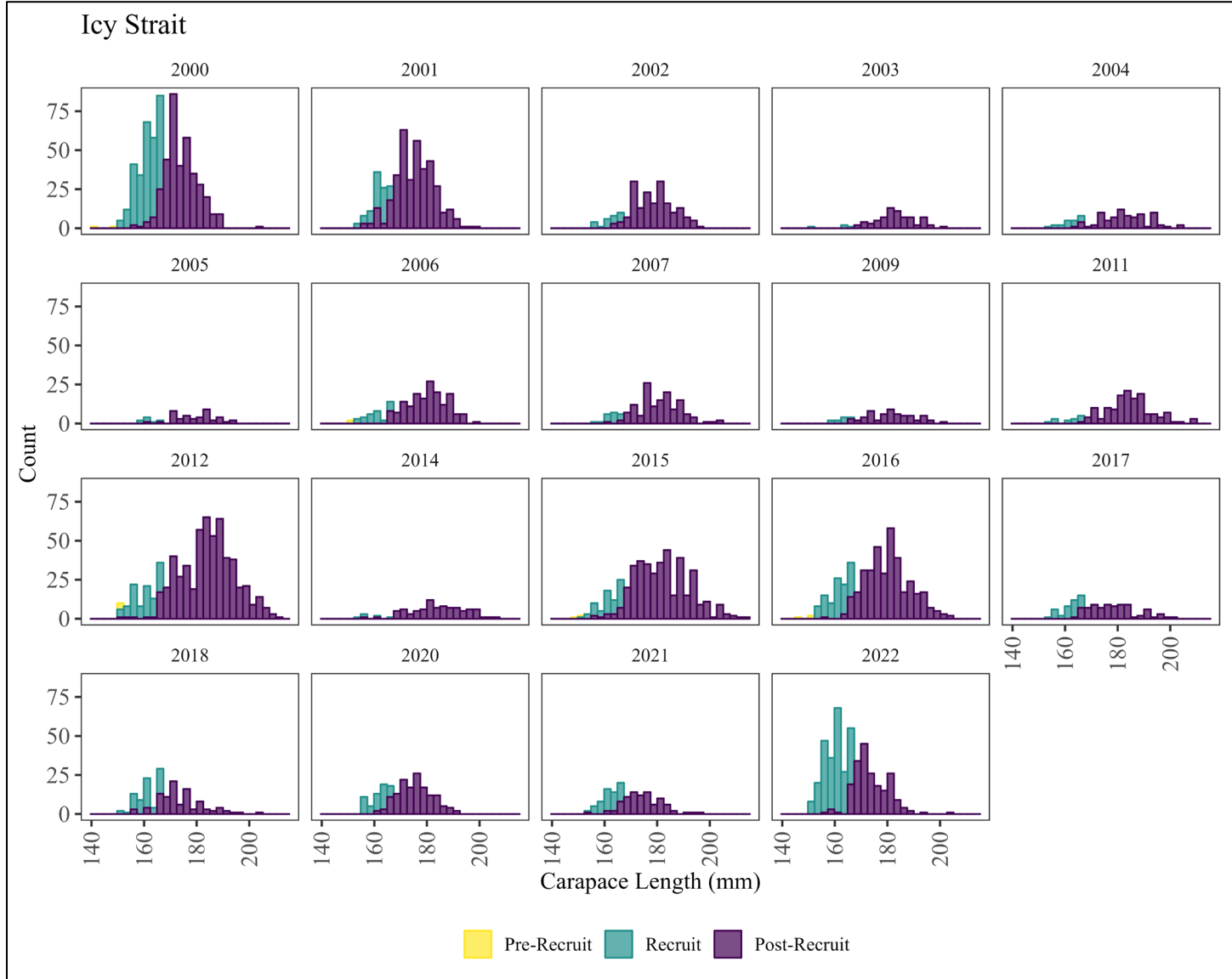
- Six of the seven fishery areas were open:
 - 1) Northern – **CLOSED**.
 - 2) Icy Strait – 8,250 lb.
 - 3) North Stephens Passage – 18,000 lb.
 - 4) East Central – 12,050 lb.
 - 5) Mid-Chatham Strait – 7,500 lb.
 - 6) Lower Chatham Strait – 7,500 lb.
 - 7) Southern – 22,000 lb.



Harvest this season was 14,363 lb.



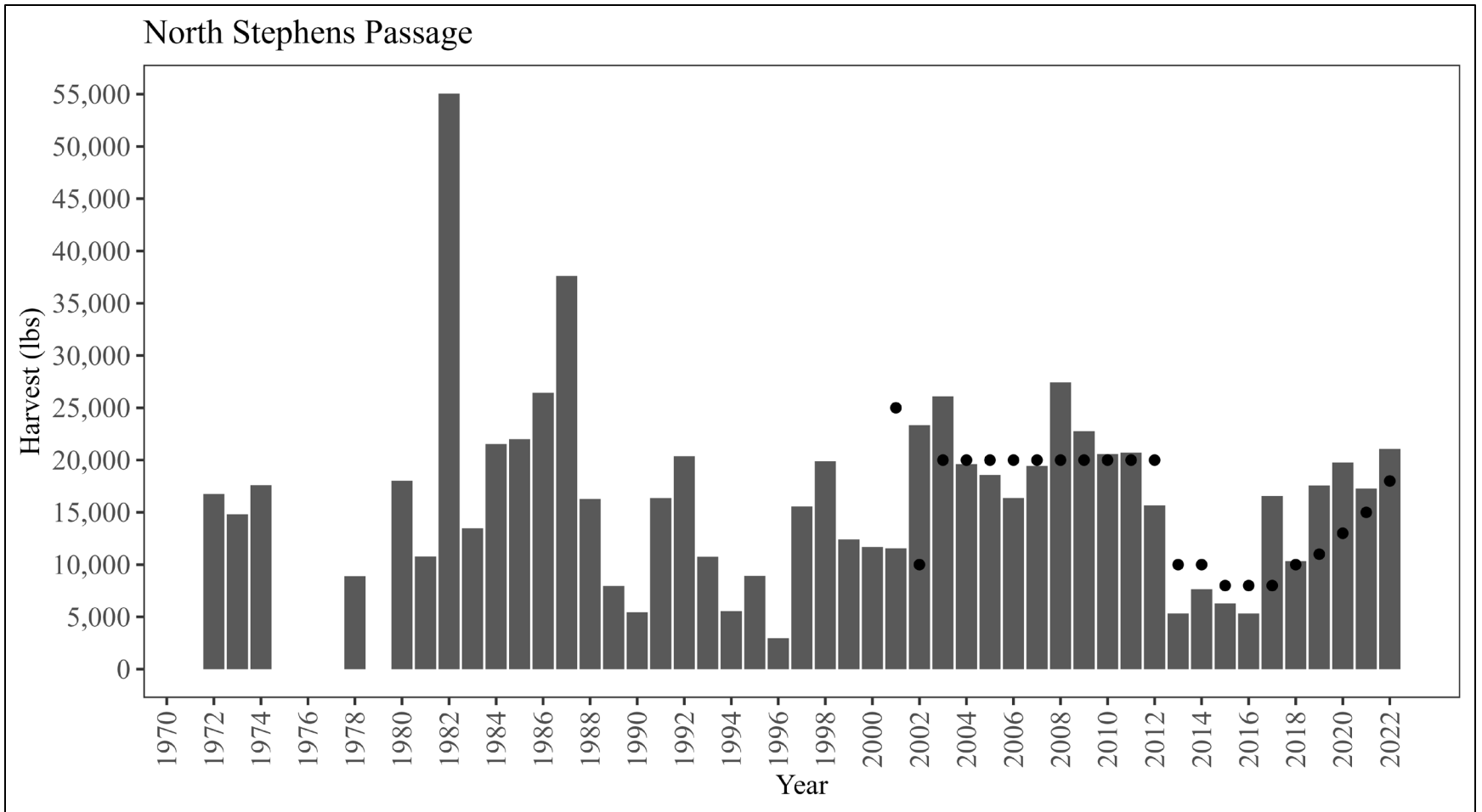
The average CPUE this season was 2.46 crab/pot.



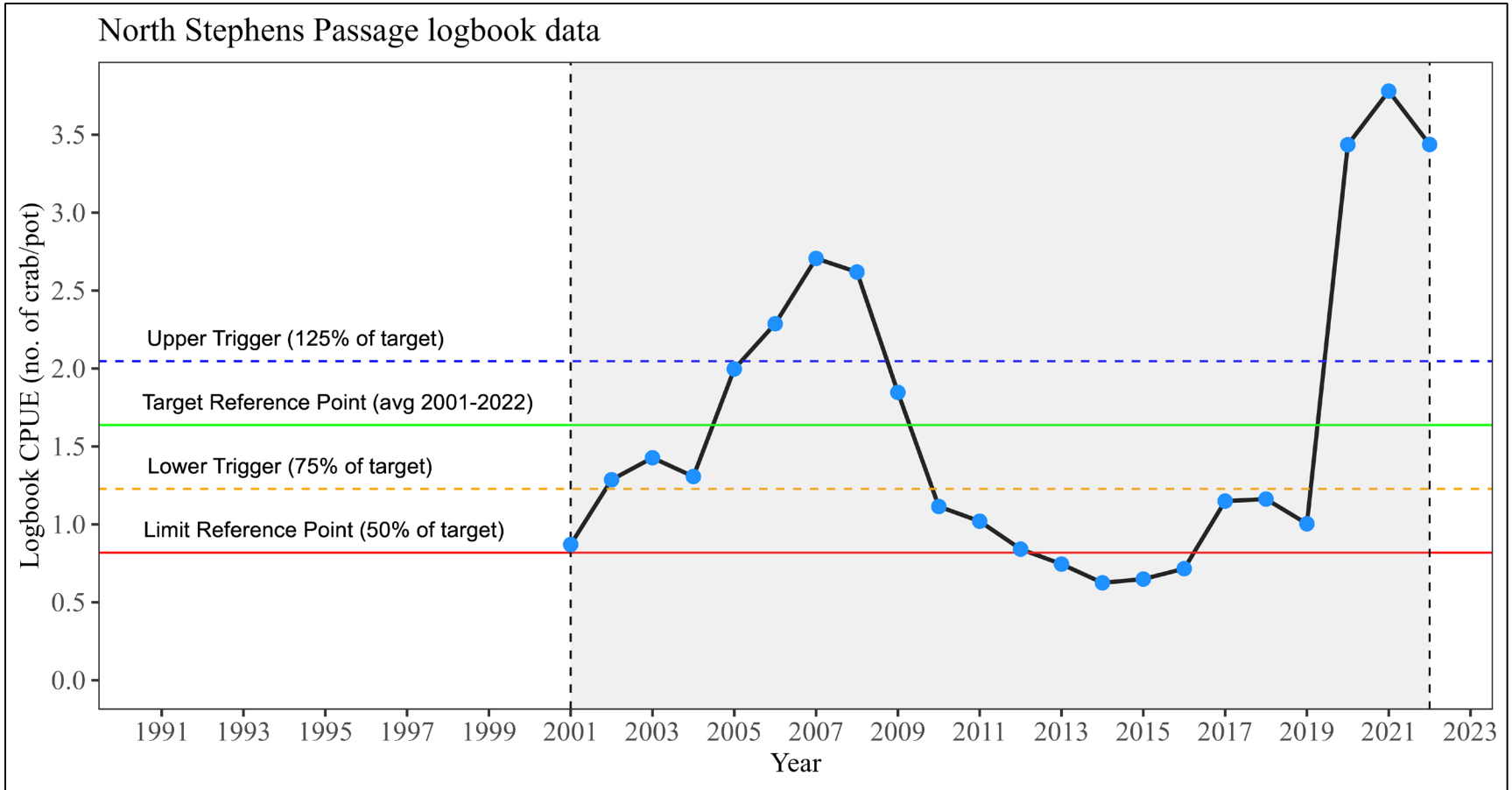
Length frequencies of sampled commercial harvest show an even mix of recruit and post recruit crabs in the most recent season.

Icy Strait

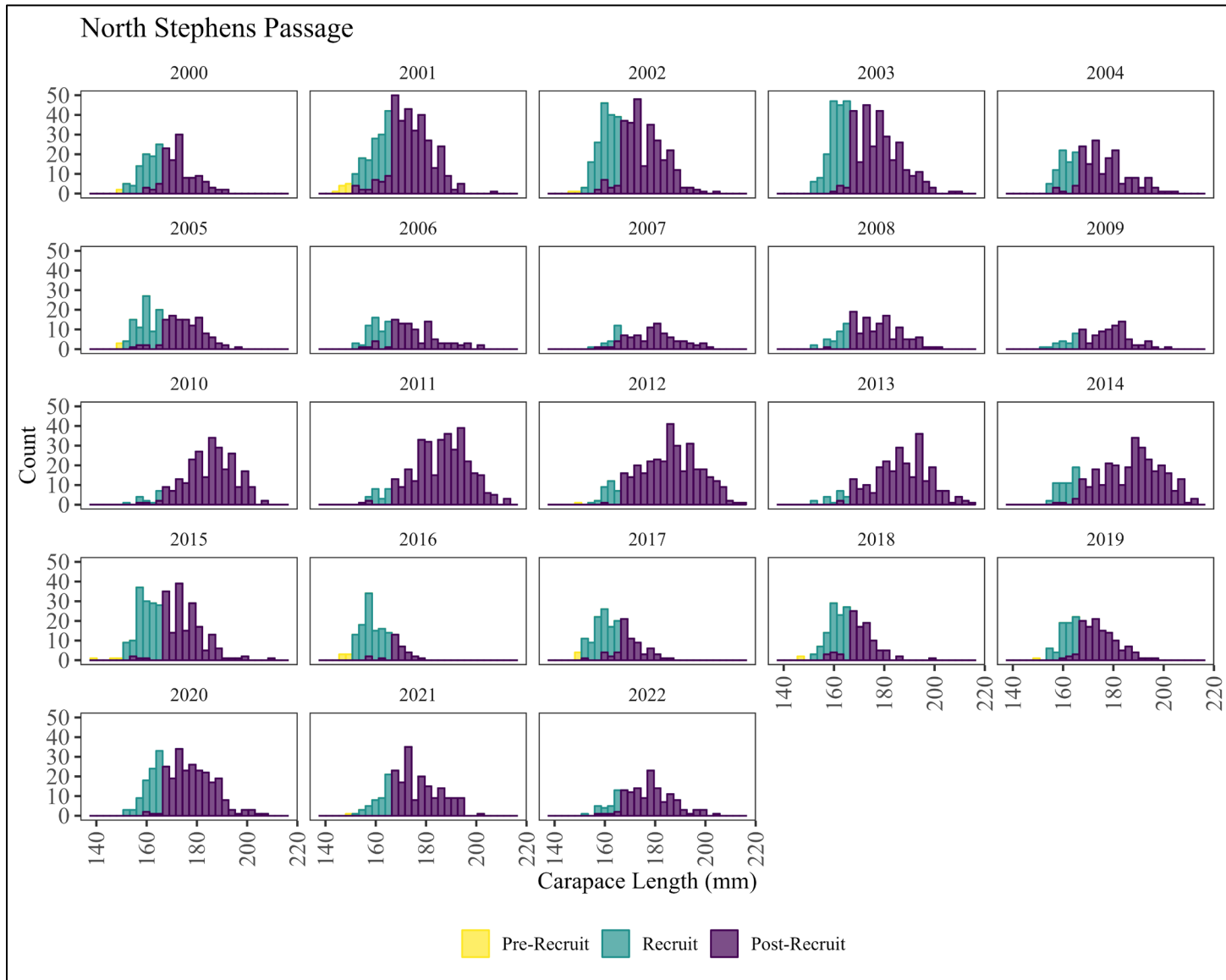
- The Icy Strait management area was closed by EO on February 18, 2022.
- Based on an analysis of effort levels and harvest projections, the harvest was expected to reach the 8,250-pound GHL for the Icy Strait management area by the closure date.



Harvest this season was 21,073 lb.



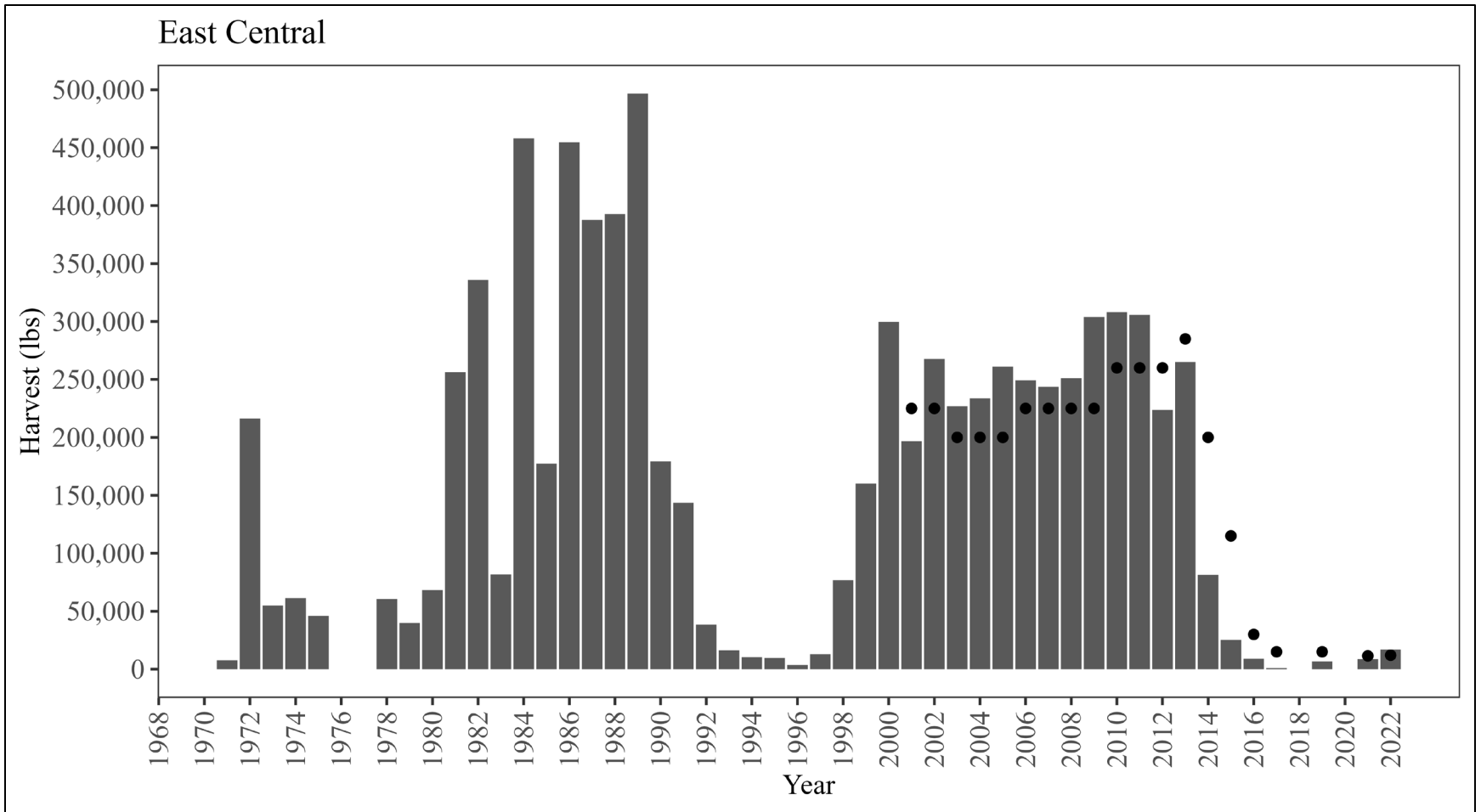
The average CPUE this season was 3.44 crab per pot.



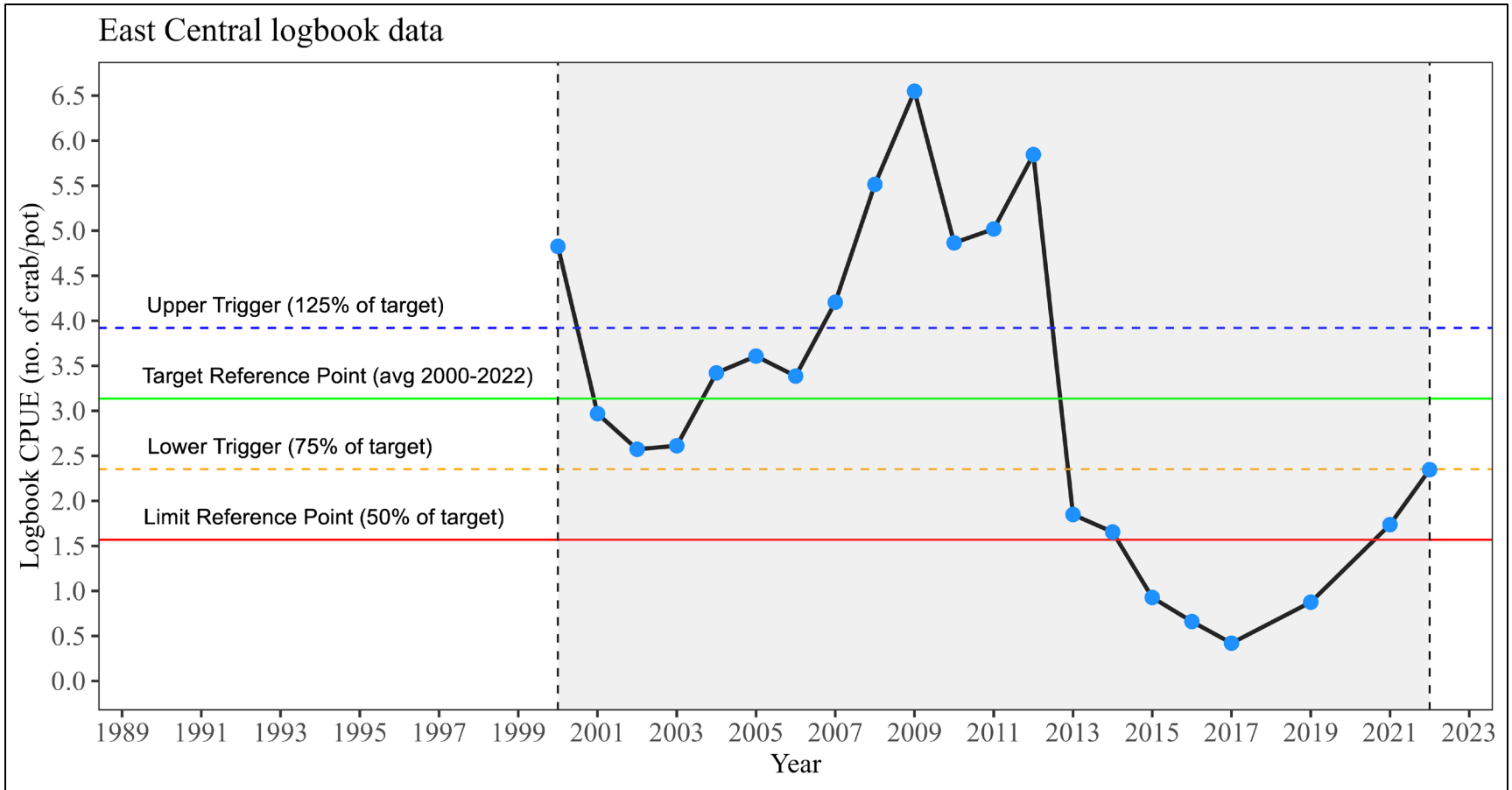
Length frequencies of sampled commercial harvest show a majority of post recruit crabs harvested in the most recent season.

North Stephens Passage

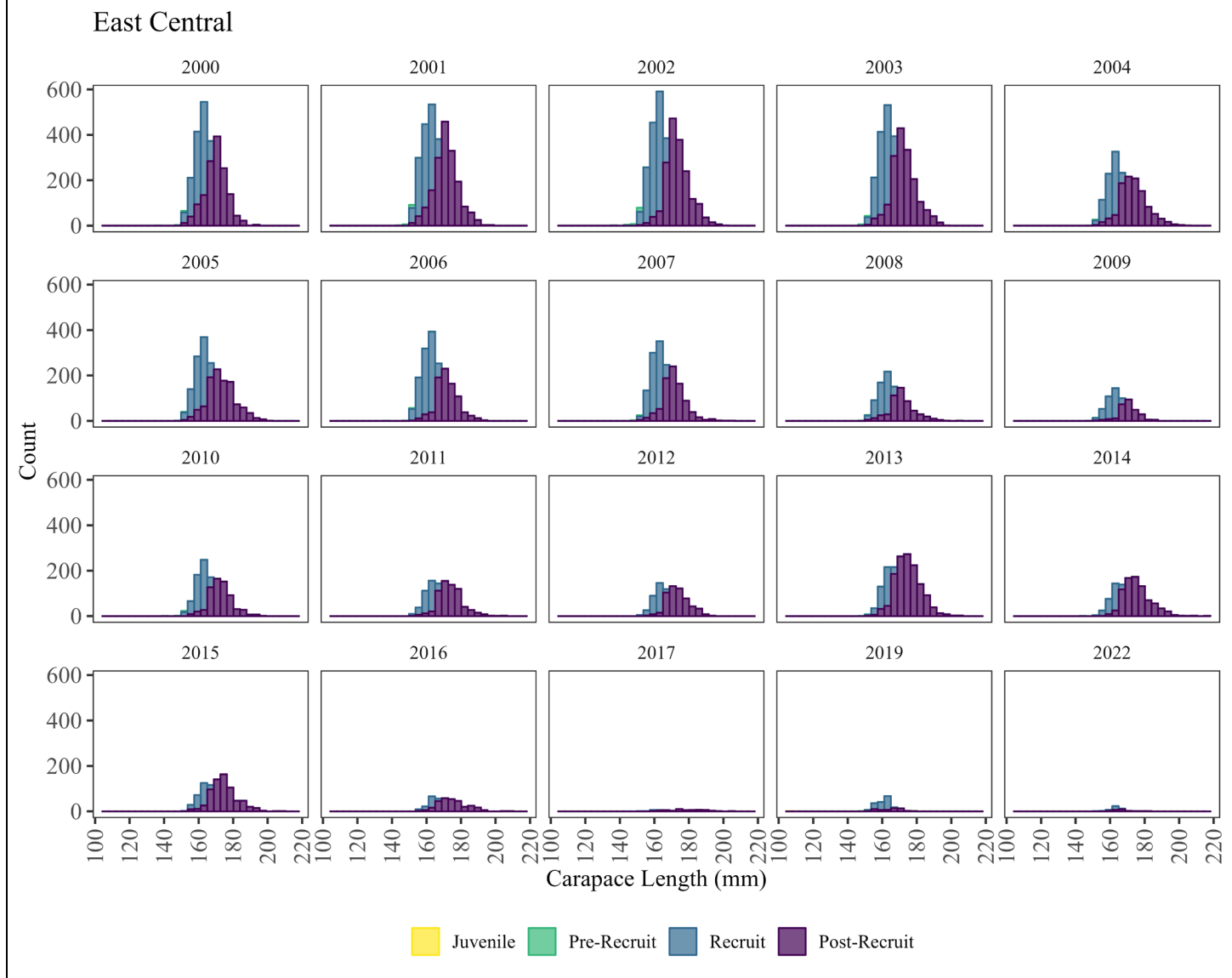
- The North Stephens Passage management area was closed by emergency order (EO) on February 13, 2022, after just over two days of fishing.
- Based on an analysis of effort levels and harvest projections, harvest as of the closure date was expected to reach the 18,000-pound guideline harvest level for the North Stephens Passage management area.



Harvest this season was 17,029 lb.



The CPUE this season was 2.35 crab per pot.

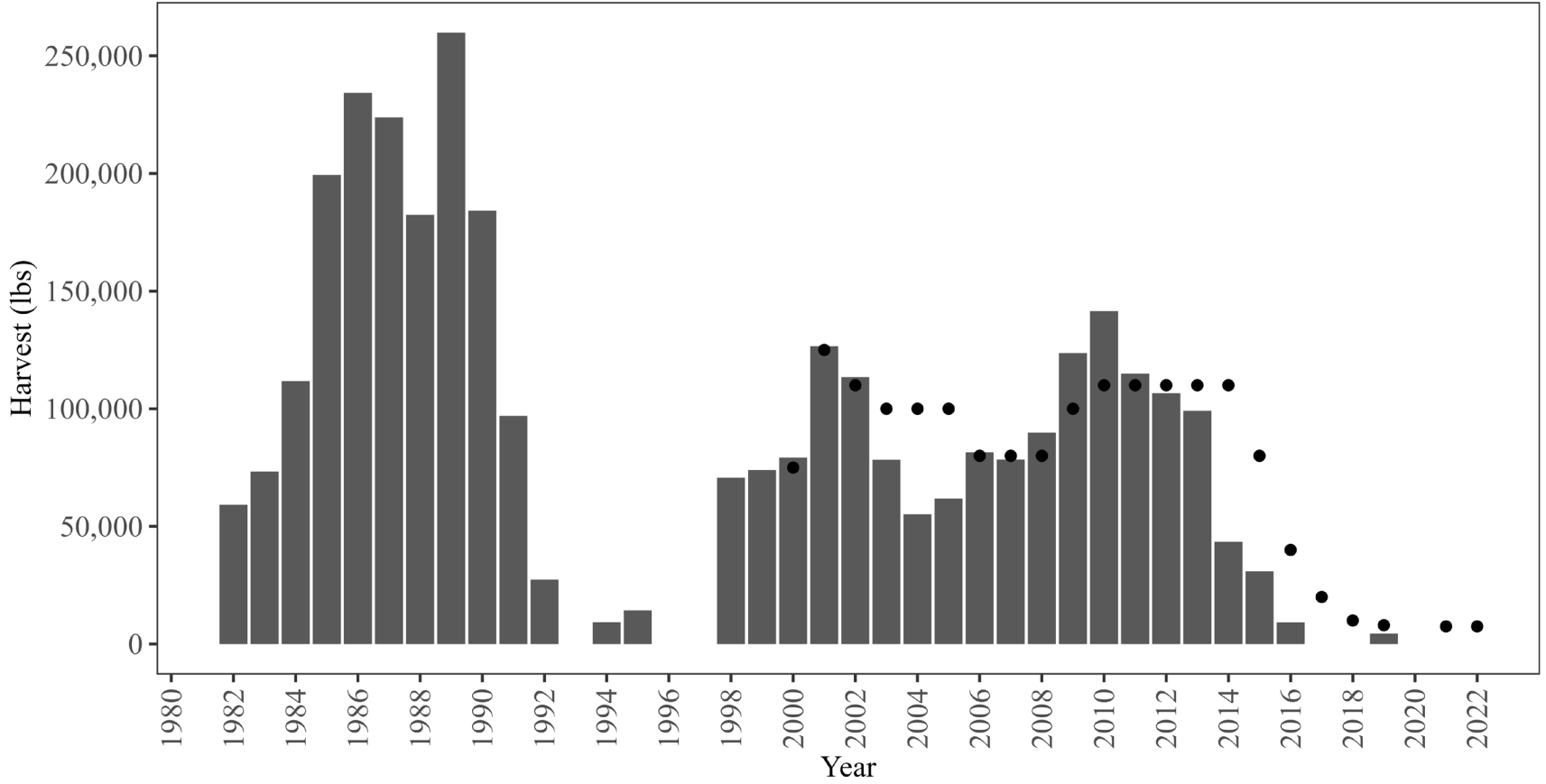


Length frequencies of commercial harvest show small sample sizes and predominantly recruit class crab in the samples.

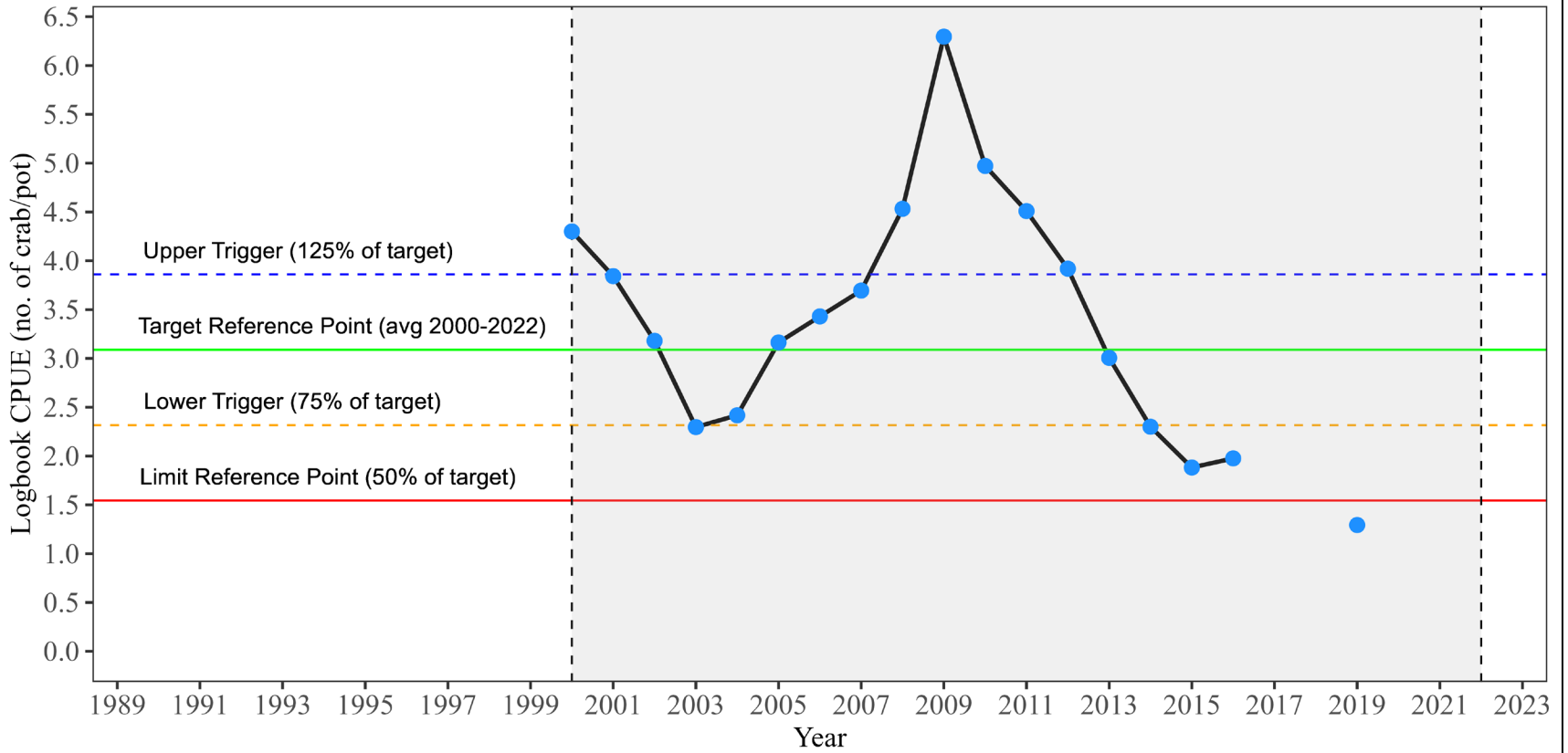
East Central

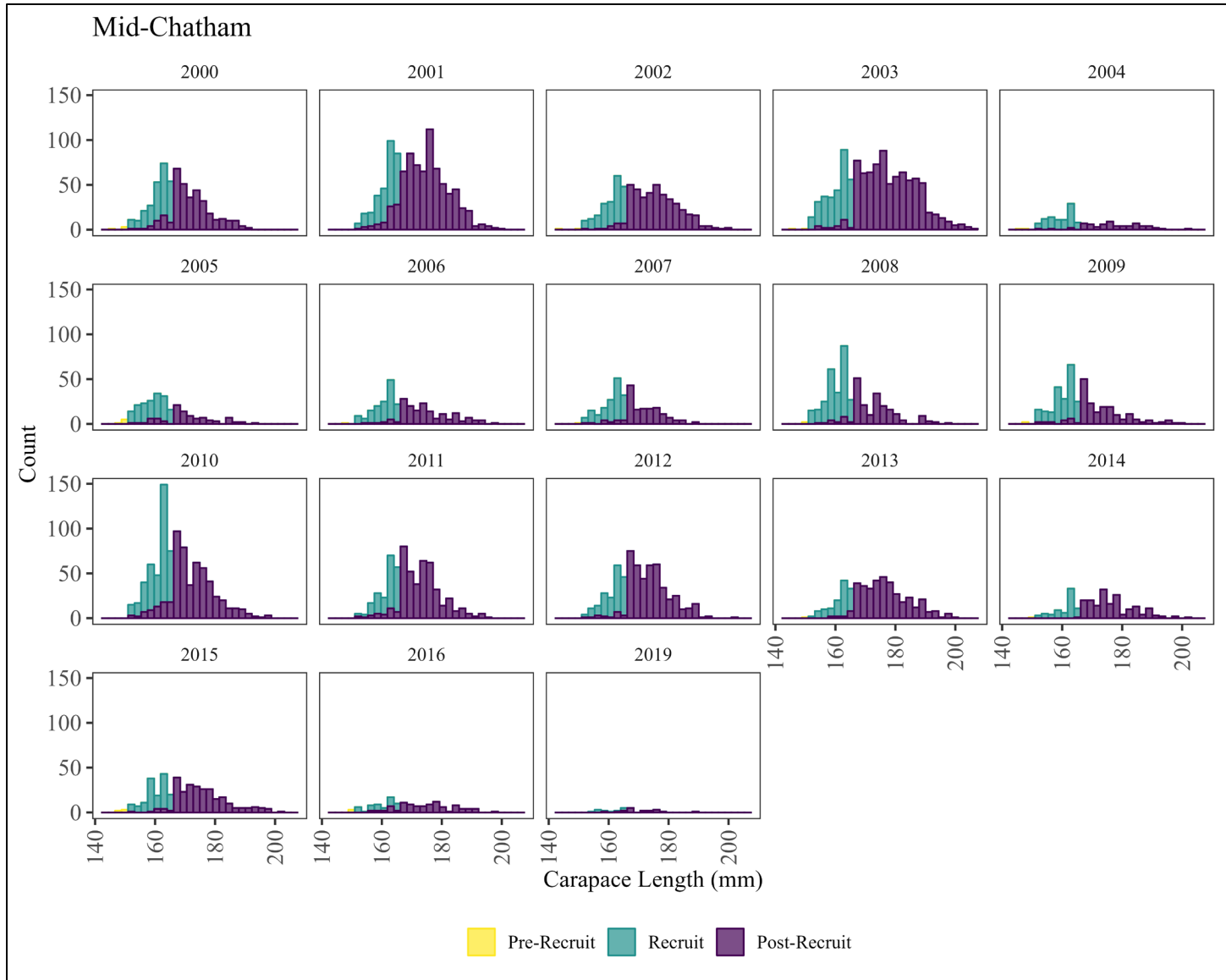
- The East Central management area was closed by emergency order (EO) on February 25, 2022.
- Based on an analysis of effort levels and harvest projections, harvest as of the closure date was expected to reach the 12,050-pound guideline harvest level for the East Central management area.

Mid-Chatham



Mid-Chatham logbook data

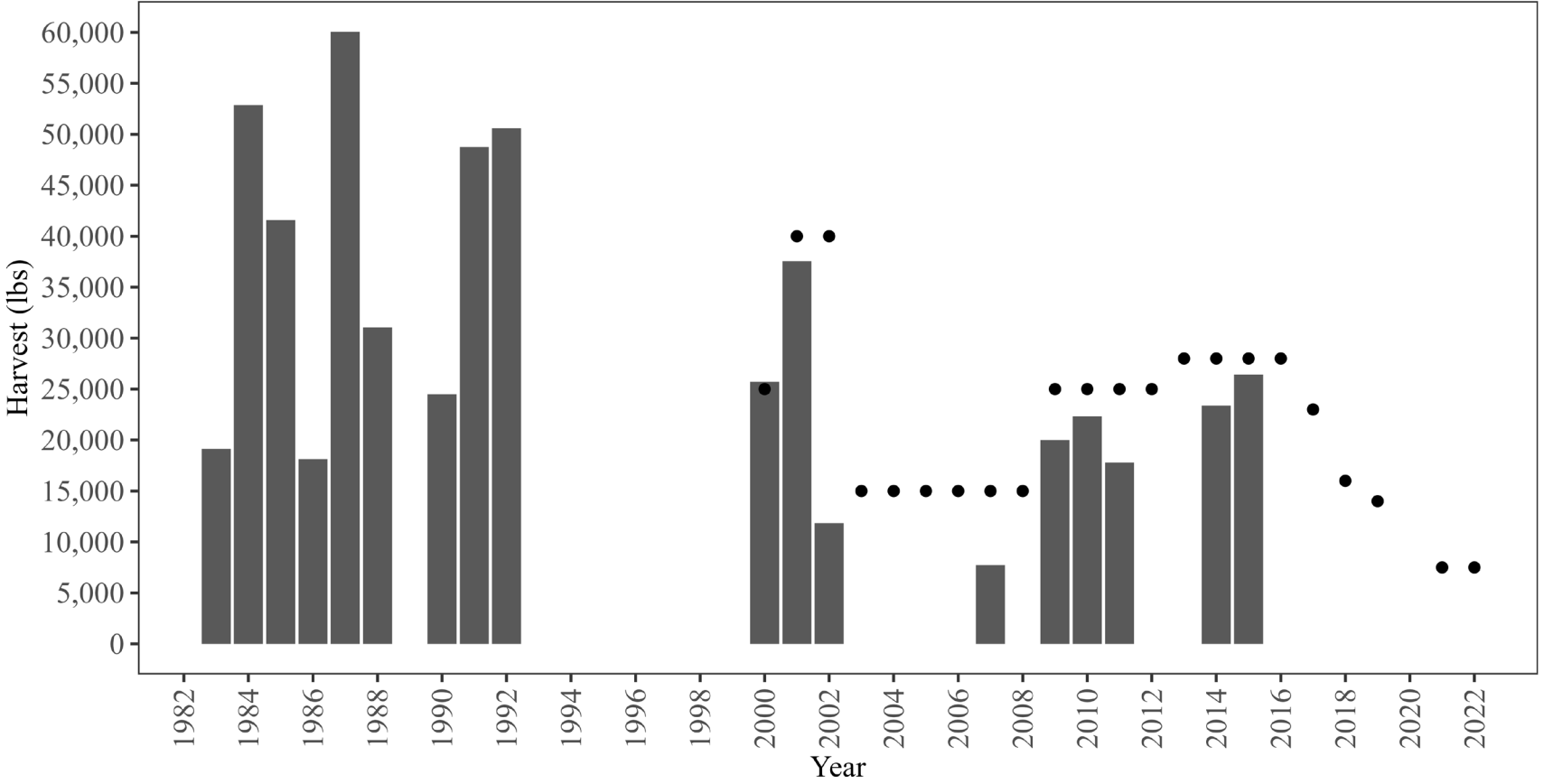




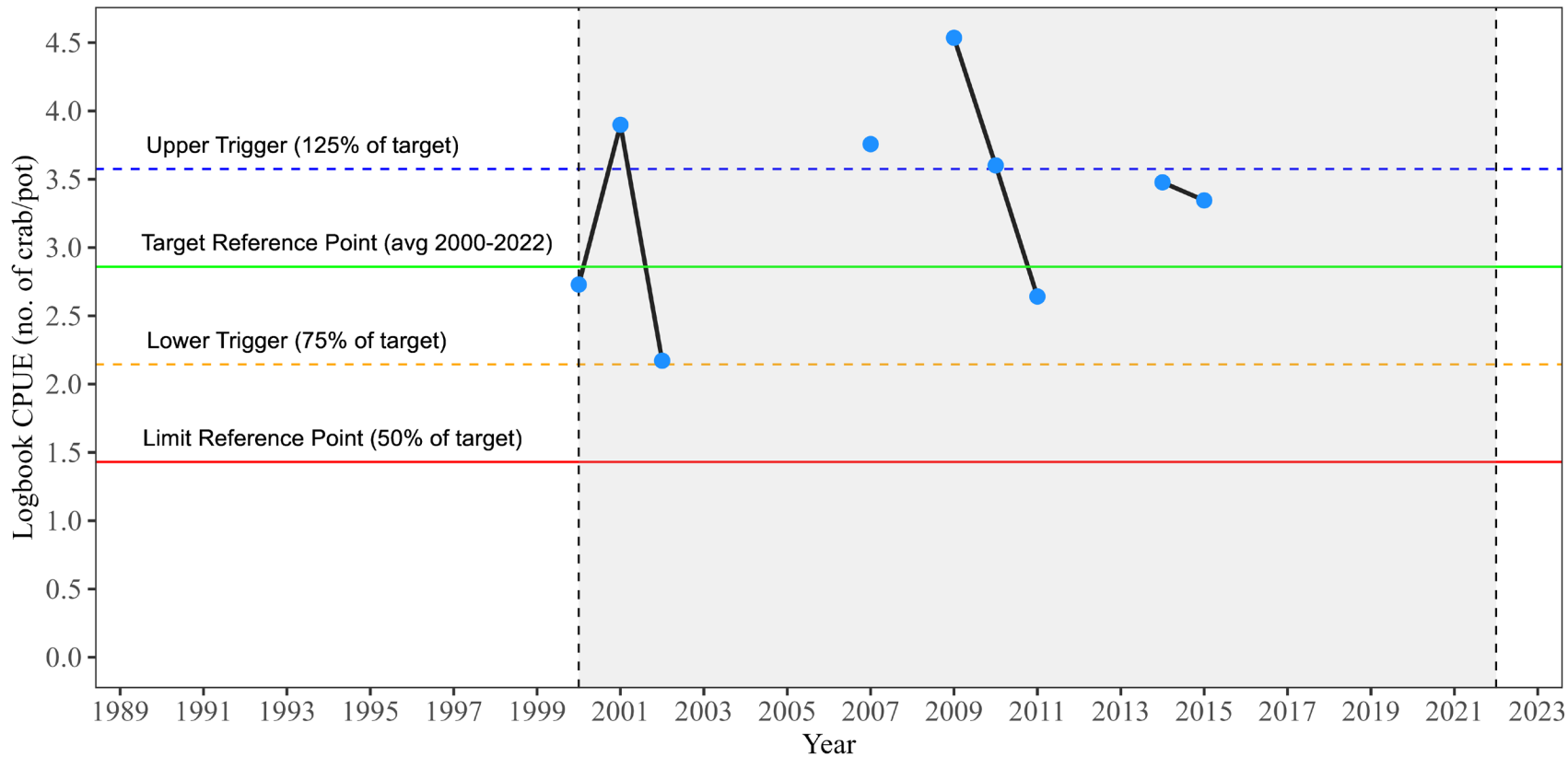
Mid- Chatham Strait

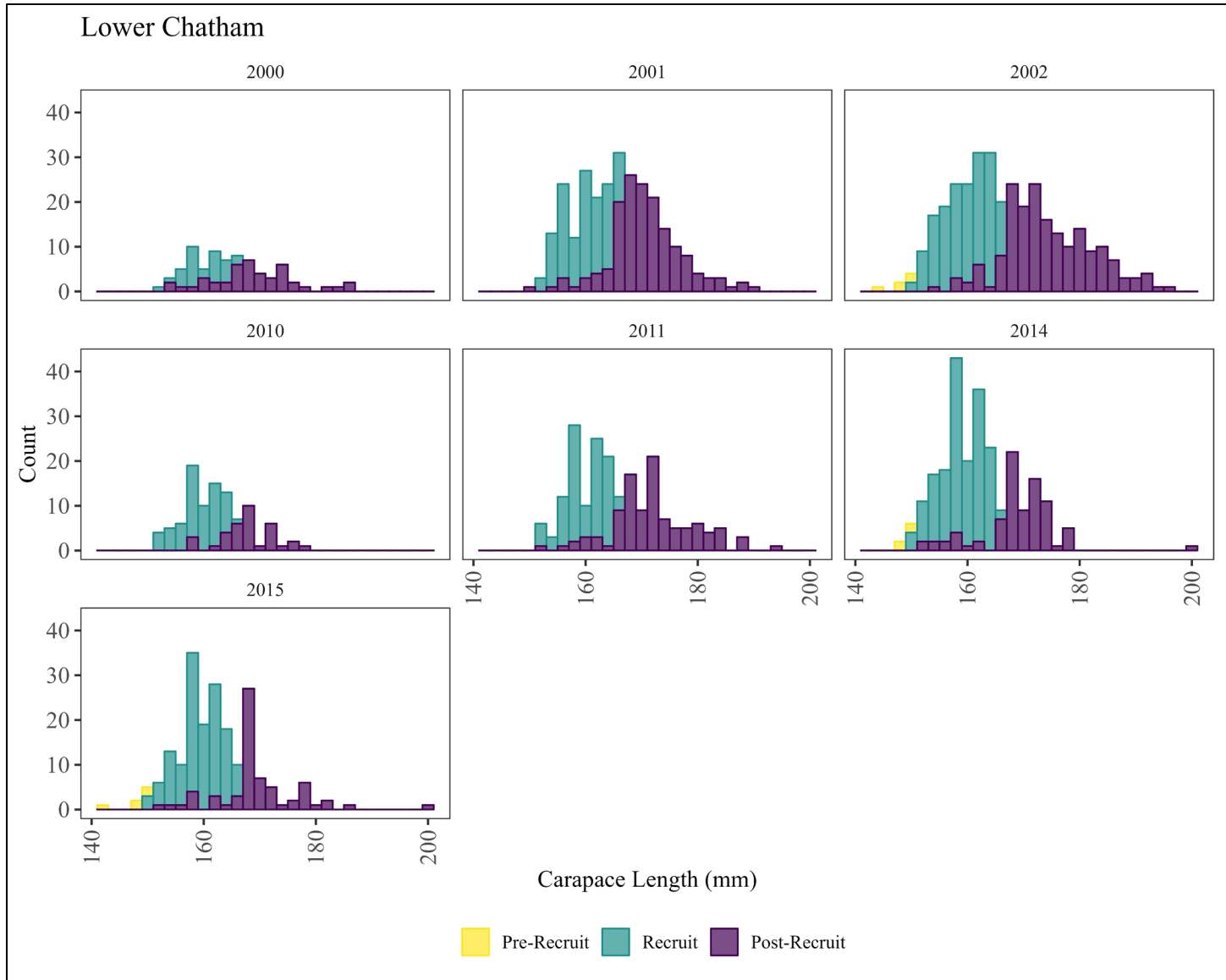
- The Mid-Chatham Strait management area was closed by emergency order (EO) on March 17, 2022.
- Based on an analysis of effort levels and harvest projections, harvest as of the closure date was expected to reach the 7,500-pound guideline harvest level for the Mid-Chatham Strait management area.

Lower Chatham



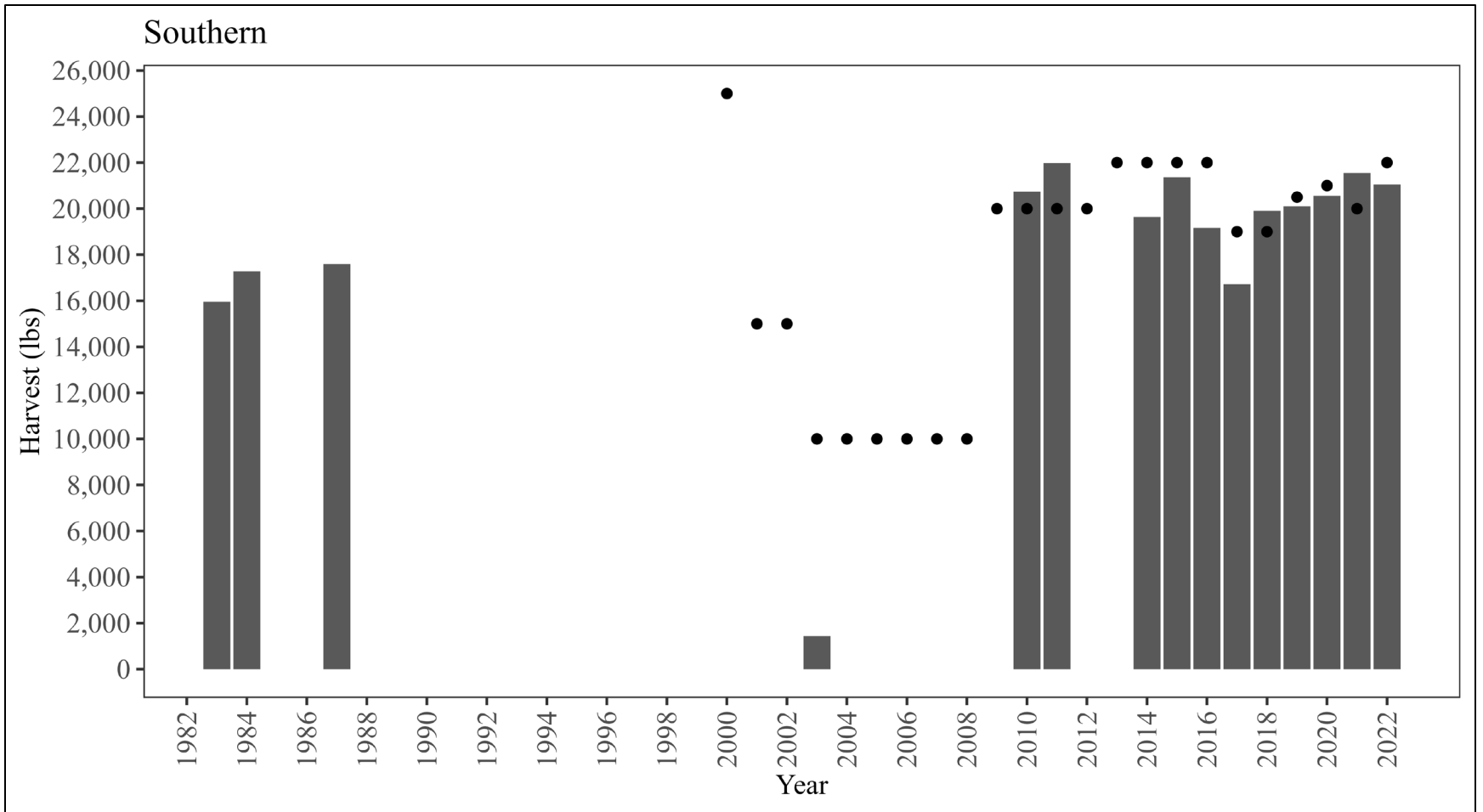
Lower Chatham logbook data



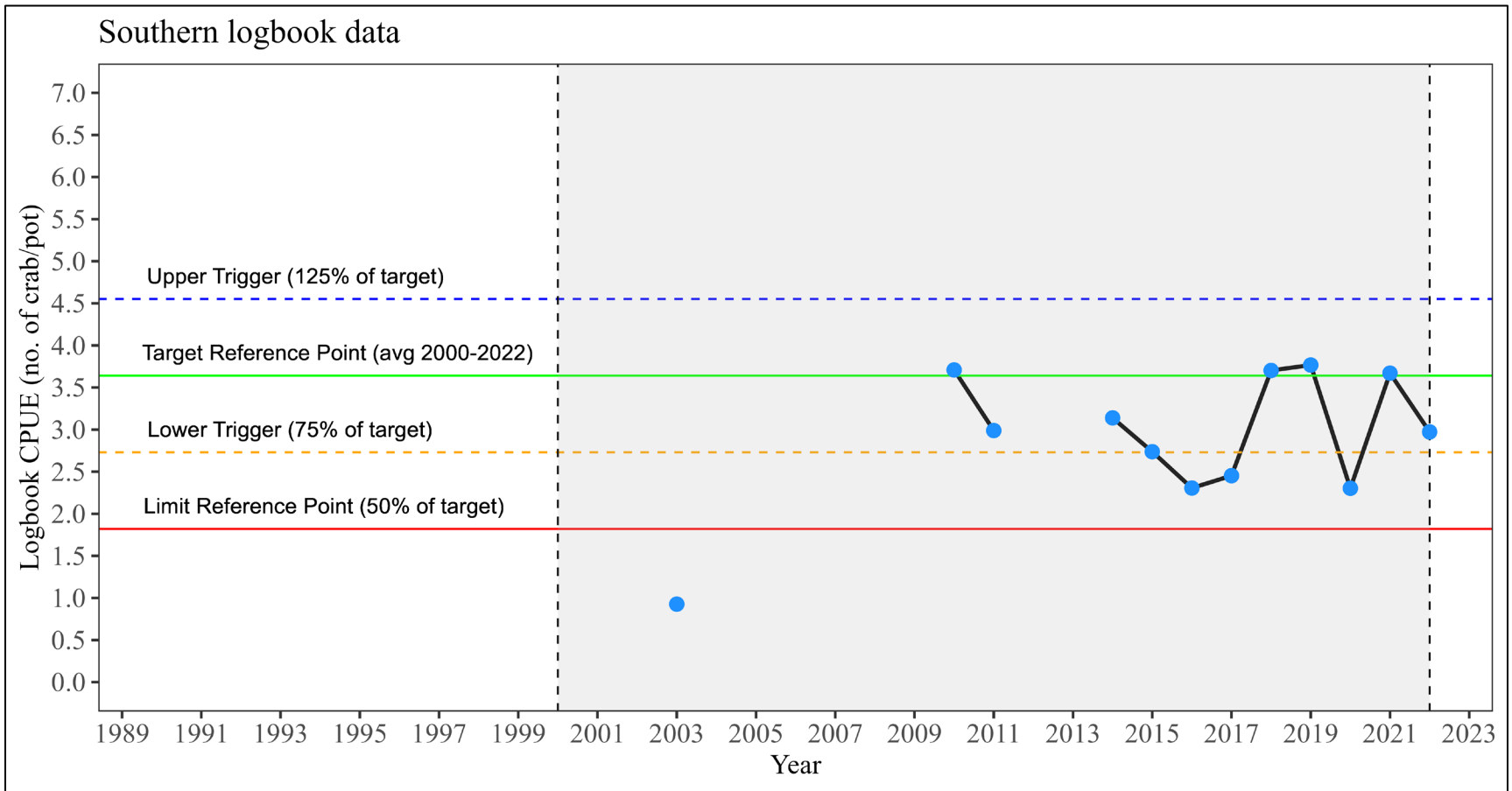


Lower Chatham Strait

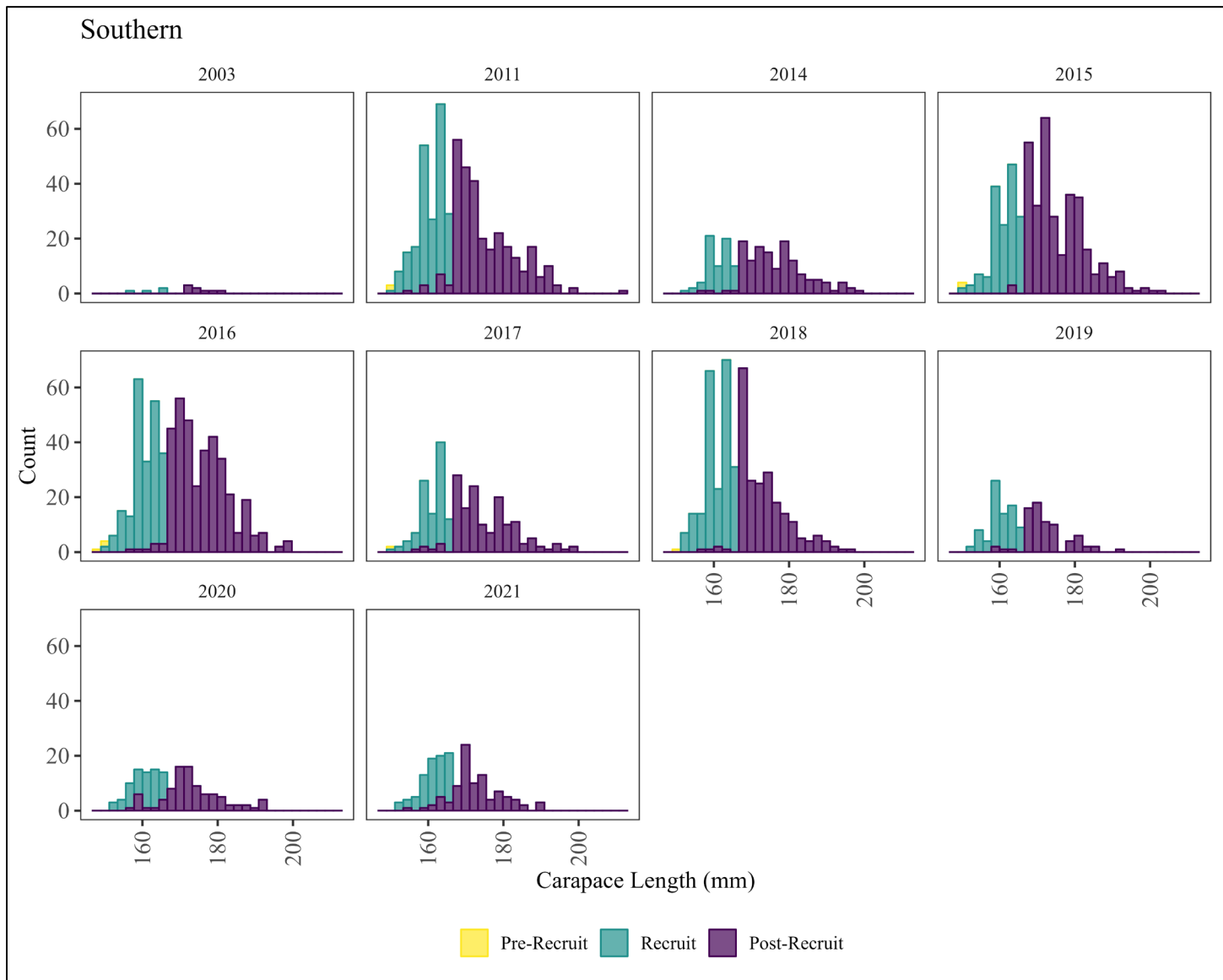
- The Lower Chatham Strait management area saw very few pot lifts in 2022, much fewer than the 500-pot lift threshold, so no inseason decision rules in the harvest strategy were triggered.
- The Lower Chatham Strait management area was closed by regulation [5 AAC 34.110(b)] on December 1, 2022.



Harvest this season was 21,050 lb.



The CPUE this season was 2.97 crab per pot.



Southern

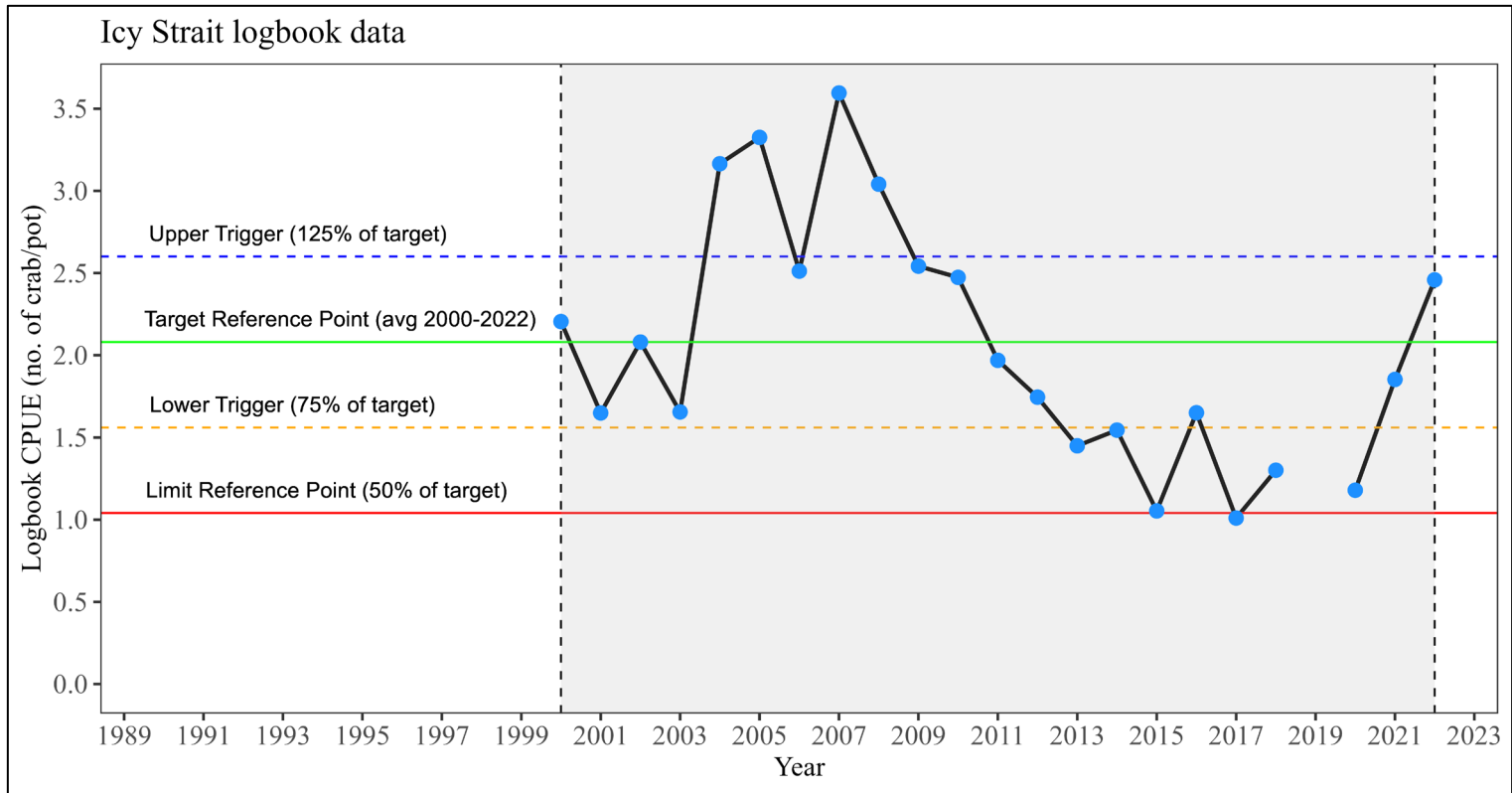
- The Southern management area was closed by EO on April 27, 2022.
- Based on an analysis of effort levels and harvest projections, the harvest was expected to reach the 22,000-pound GHL for the Southern management area by the closure date.

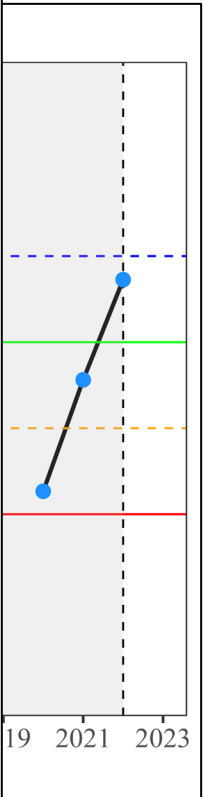
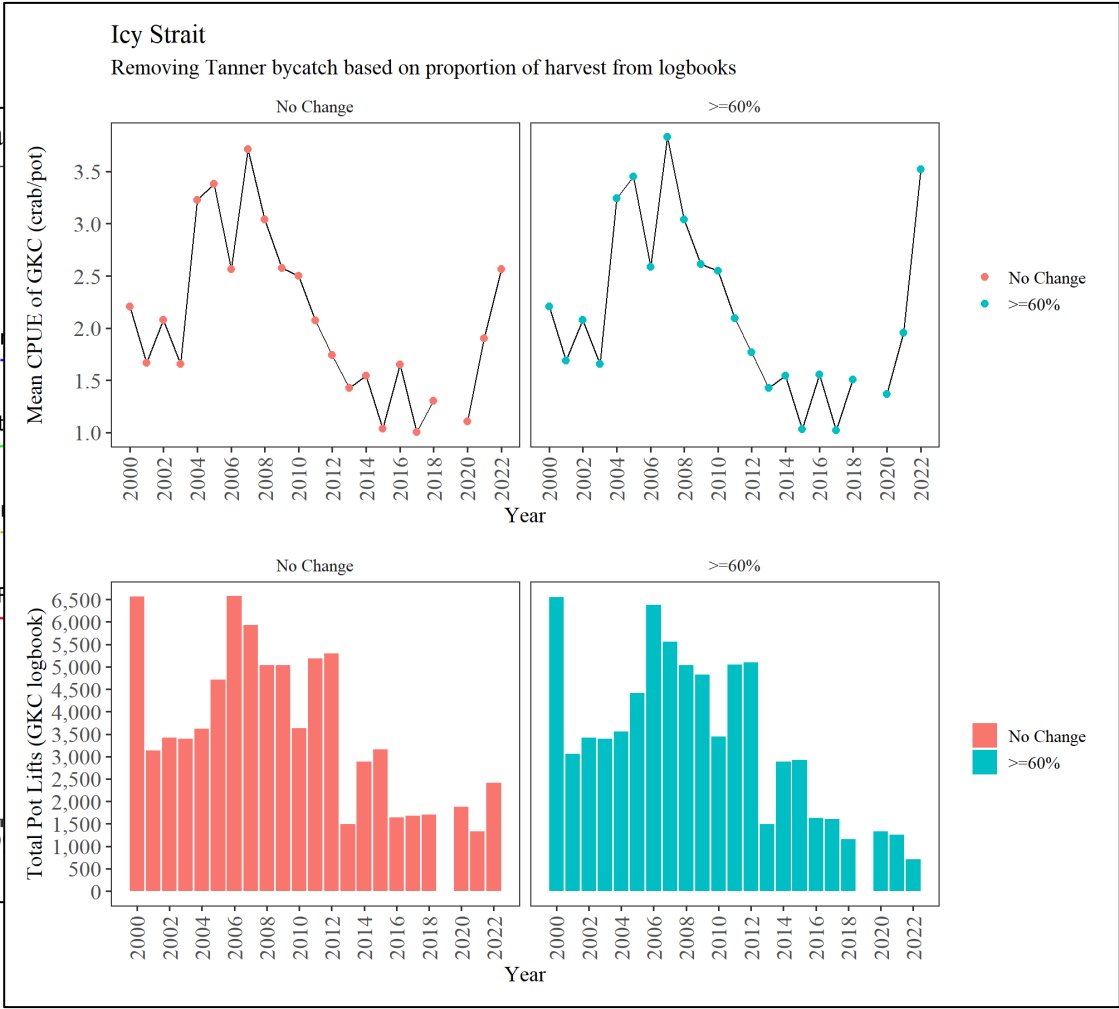
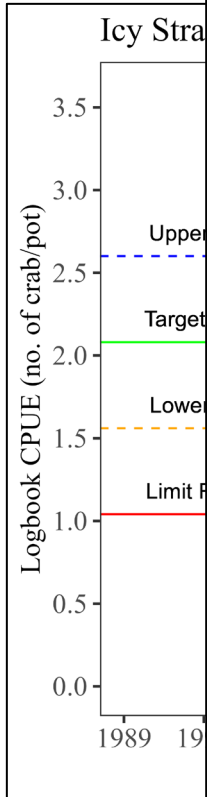
2022/2023 Fishery

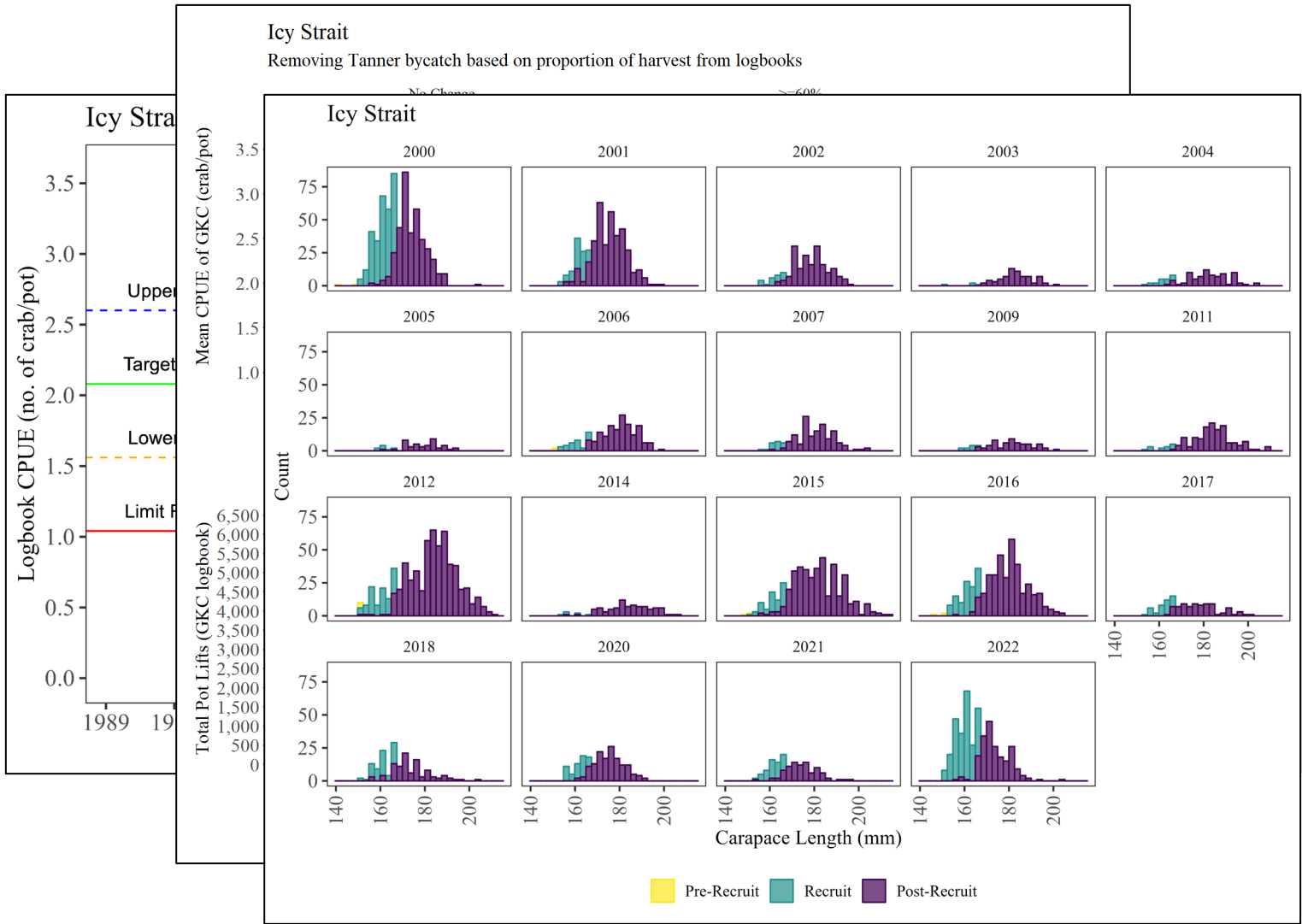
- The season will open on February 12, 2023 and GHGs have not been finalized.
- The department has been in the process of refining a harvest strategy used for the second time last season, with inseason and post-season decision rules defining management actions.

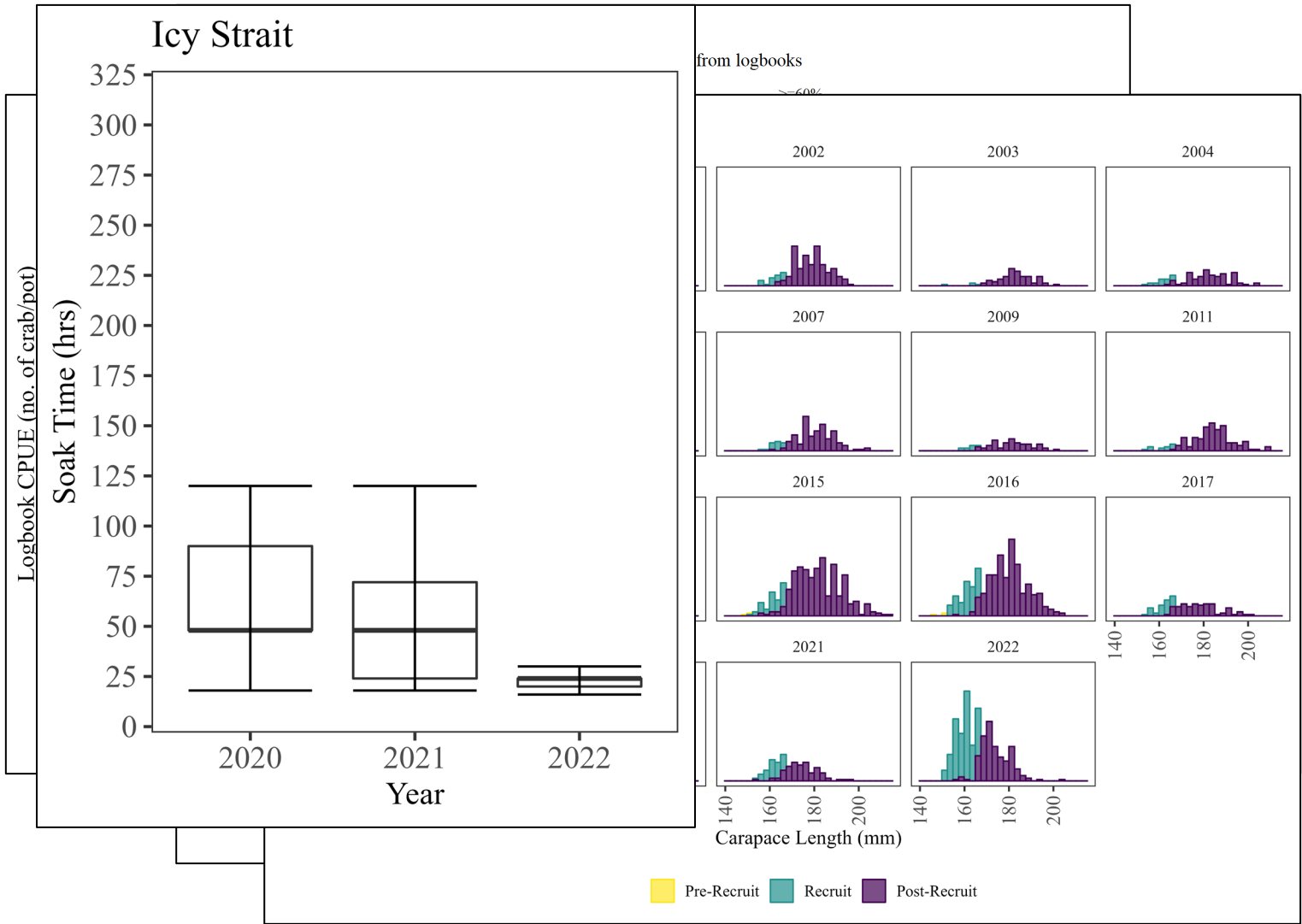
2022/2023 Fishery (cont.)

- For each, we reviewed postseason decision rules from the harvest strategy in its current form using reference points for CPUE (i.e. Limit @ 50%, Lower Trigger @ 75%, Target @ 100%, and Upper Trigger @ 125%)
- We also considered secondary performance indicators to refine the recommendations.









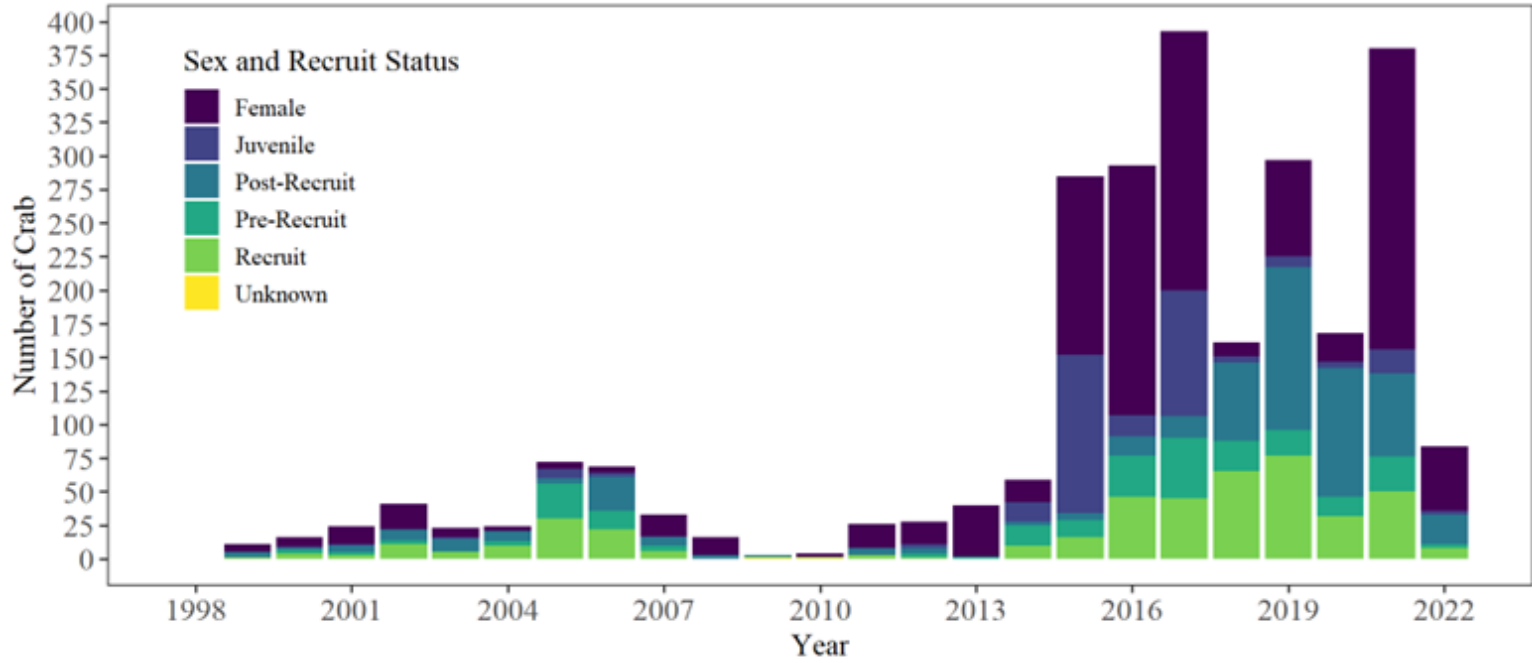
Icy Strait

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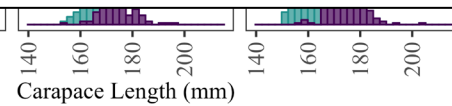
from logbooks

Holkham Bay

Number of GKC caught during the Tanner survey



Year



Pre-Recruit Recruit Post-Recruit

2022/2023 Fishery (cont.)

- After analysis of all seven areas, some potential courses of action include:
 - Northern: Open for 7% of the top end of the GHR (10,150 lbs) for 2023.
 - Icy Strait: increase the GHL by 35% (11,138 lbs) for 2023.
 - North Stephens Passage: Reopen for the same GHL (18,000 lbs) in 2023.

2022/2023 Fishery (cont.)

- East Central: increase the GHL by 10% (13,255 lbs) in 2023.
- Mid-Chatham Strait: increase the GHL by 10% (8,250 lbs) for 2023.
- Lower Chatham Strait: Reopen with the same GHL (7,500 lbs) in 2023.
- Southern: Reopen for the same GHL (22,000 lbs) in 2023.

- QUESTIONS?

