

ADF&G Tanner Crab Update

Stock Status and Management in the
Kodiak, Chignik, and South Peninsula Districts

Alaska Bycatch Review Task Force

Bering Sea and Gulf of Alaska Crab Committee

April 4, 2022

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Alaska Department of Fish and Game
Division of Commercial Fisheries

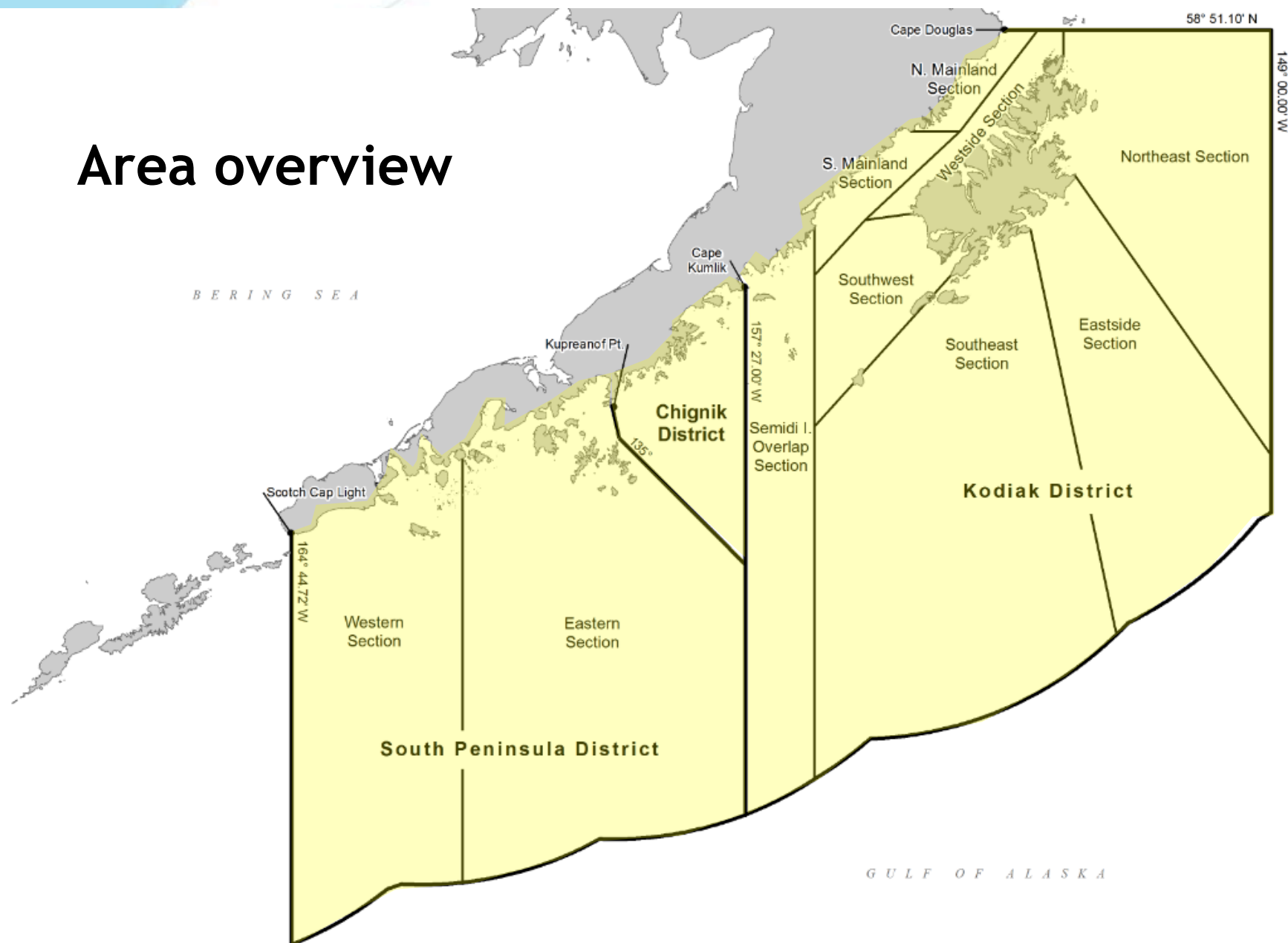




Outline

- Area overview
- Fishery overview
 - 2022 fishery summary
- Survey overview
- Recent stock trends
- Spatial overlap with other fisheries in the Kodiak District

Area overview



Fishery overview

“Local, small boat, fast paced, high value.”

- Winter fishery (Jan 15-Mar 31)
- Daylight fishing hours (8:00 a.m. to 5:59 p.m.)
- Pot gear (20-30 pots/vessel)
- Legal crab (5.5-inch males)
- Vessel size limits
 - Kodiak: ≤ 120 ft
 - Chignik and South Peninsula: ≤ 58 ft
- Permit type
 - Kodiak: limited entry
 - Chignik and South Peninsula: open access

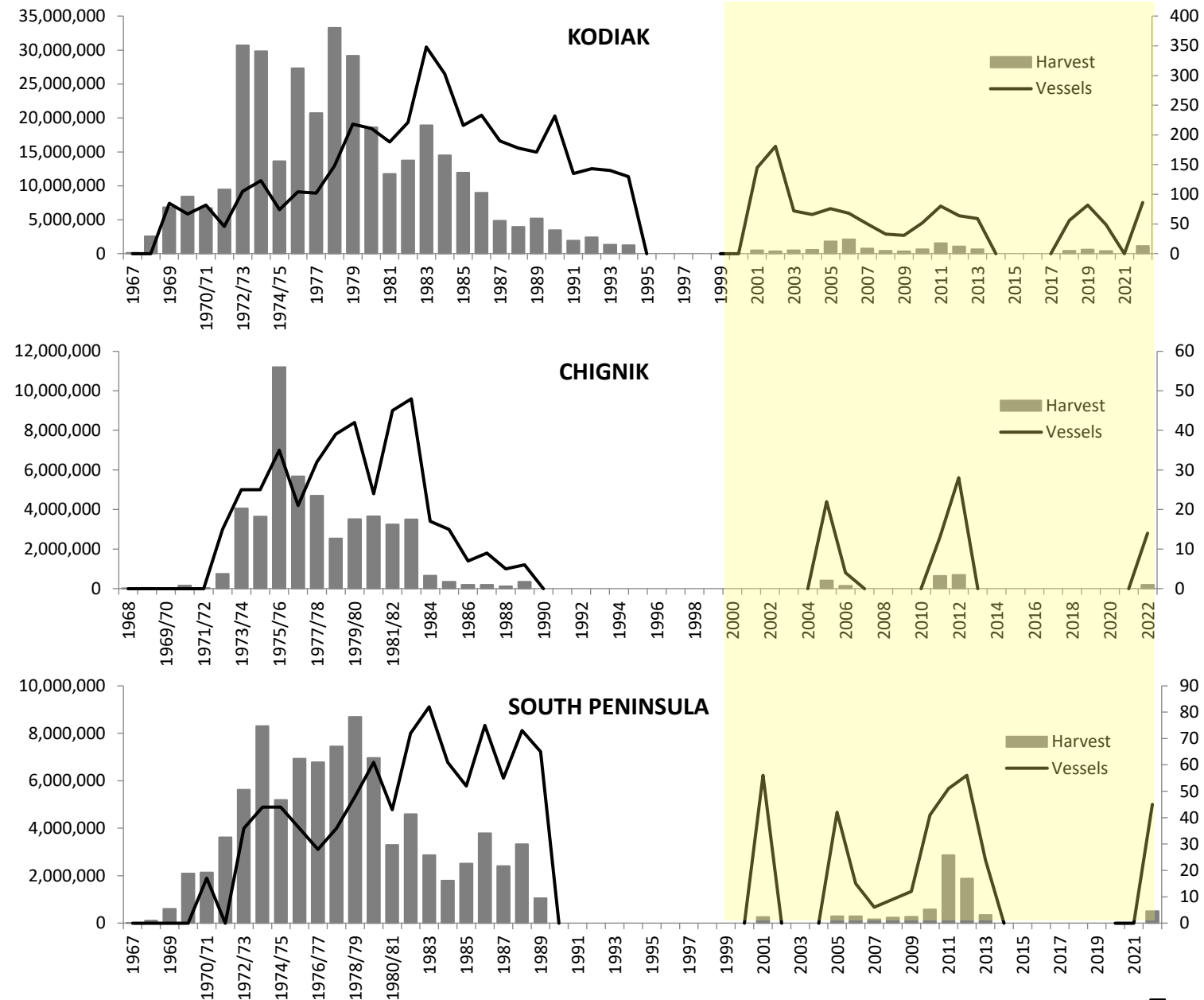
Kodiak, Chignik, and South Peninsula Districts Tanner crab harvest and effort, by year, 1967–2021

Fishery development

- Fisheries developed in the late 1960s
- Harvest peaked in 1970s and declined through the 1980s
- Fisheries closed in 1990s
- Current harvest strategies adopted in 1999
- Lower harvest levels 2000s–present

Fishery summary

- Kodiak
 - 17 seasons, 74 vessels, ~800k pounds
- Chignik
 - 5 seasons, 16 vessels, ~400k pounds
- South Peninsula
 - 11 seasons, 32 vessels, ~700k pounds



2022 Commercial Tanner crab season

	Kodiak	Chignik	South Peninsula
GHL (pounds)	1,100,000	200,000	500,000
Vessels	86	14	45
Season length (days)	8	17	10
Harvest (pounds)	1,139,718	190,416	506,671
Fishery exvessel value	\$9.4M	\$1.6M	\$4.2M
Exvessel value per vessel	\$109k	\$112k	\$93k



**How do we decide
to have a fishery?**

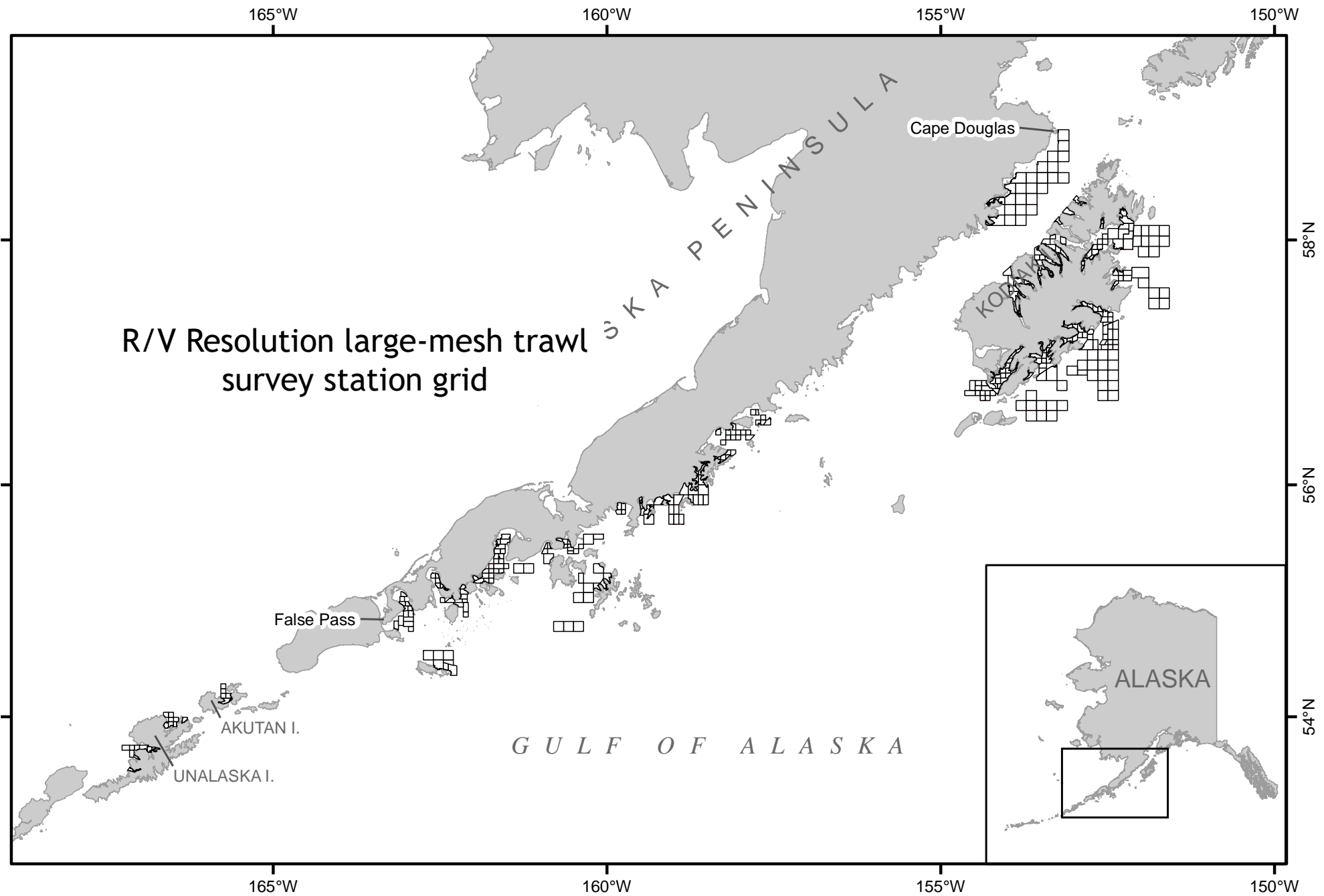
First, we do a survey.

Survey overview

1988–present, consistent:

- **Vessel** (R/V *Resolution*; 95 x 36 ft stern trawler)
- **Net configuration** (400-Eastern otter trawl)
- **Survey grid** (375 stations)
- **Survey timing** (Jun–Sep; 75 days at sea)

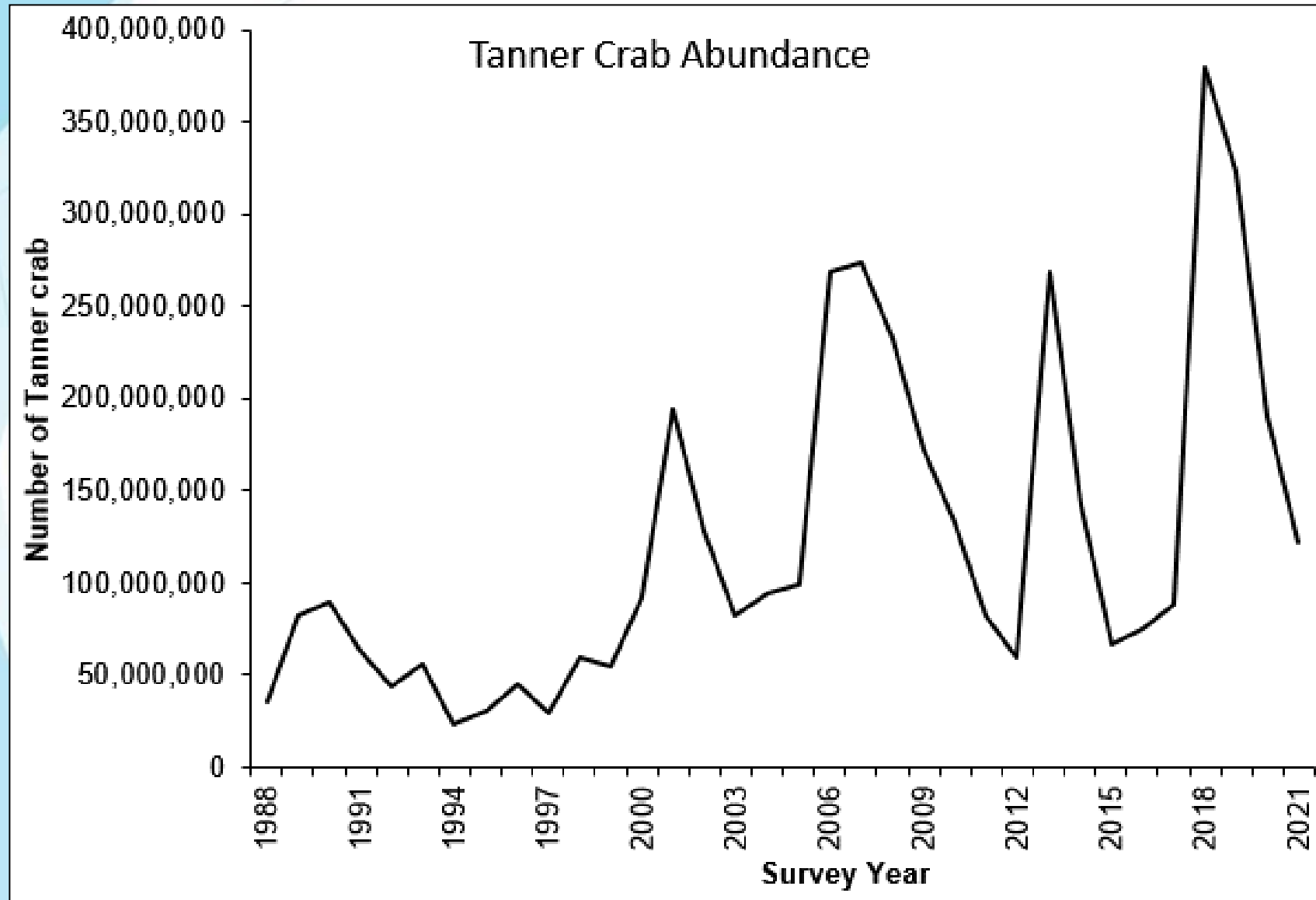




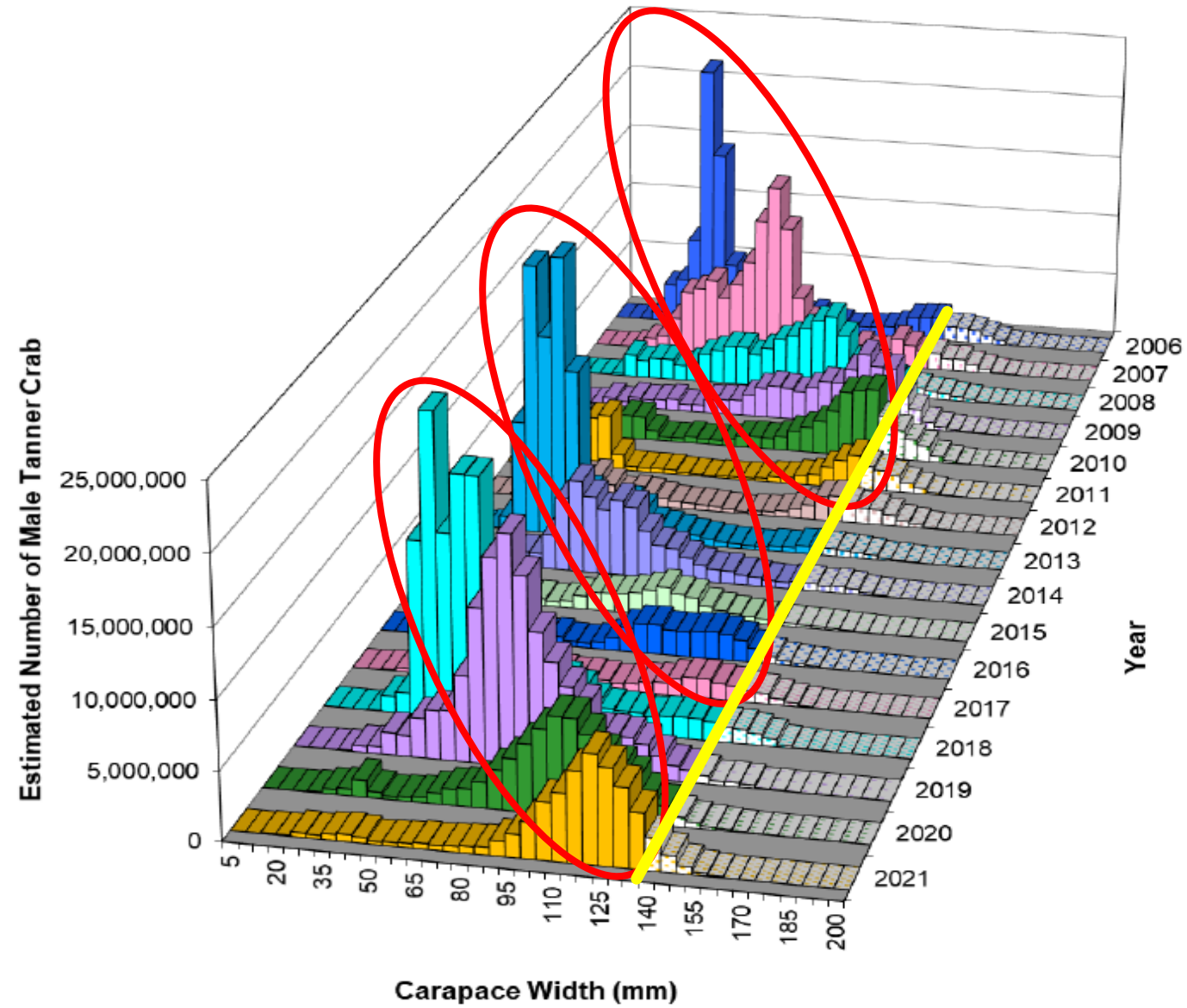


Survey says...

Kodiak, Chignik, and South Peninsula Tanner crab abundance, all sexes and all sizes combined, 1988-2021



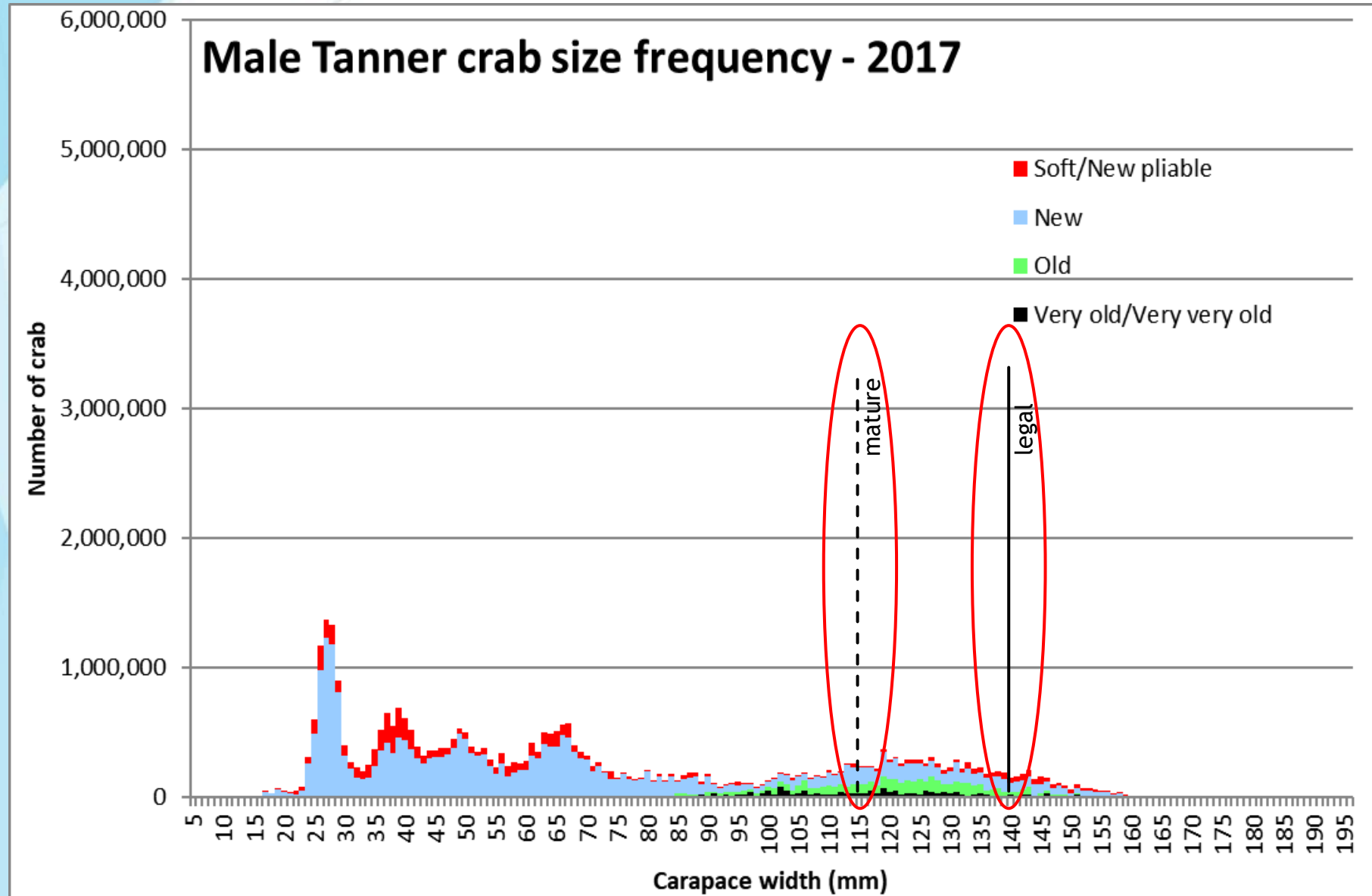
Kodiak

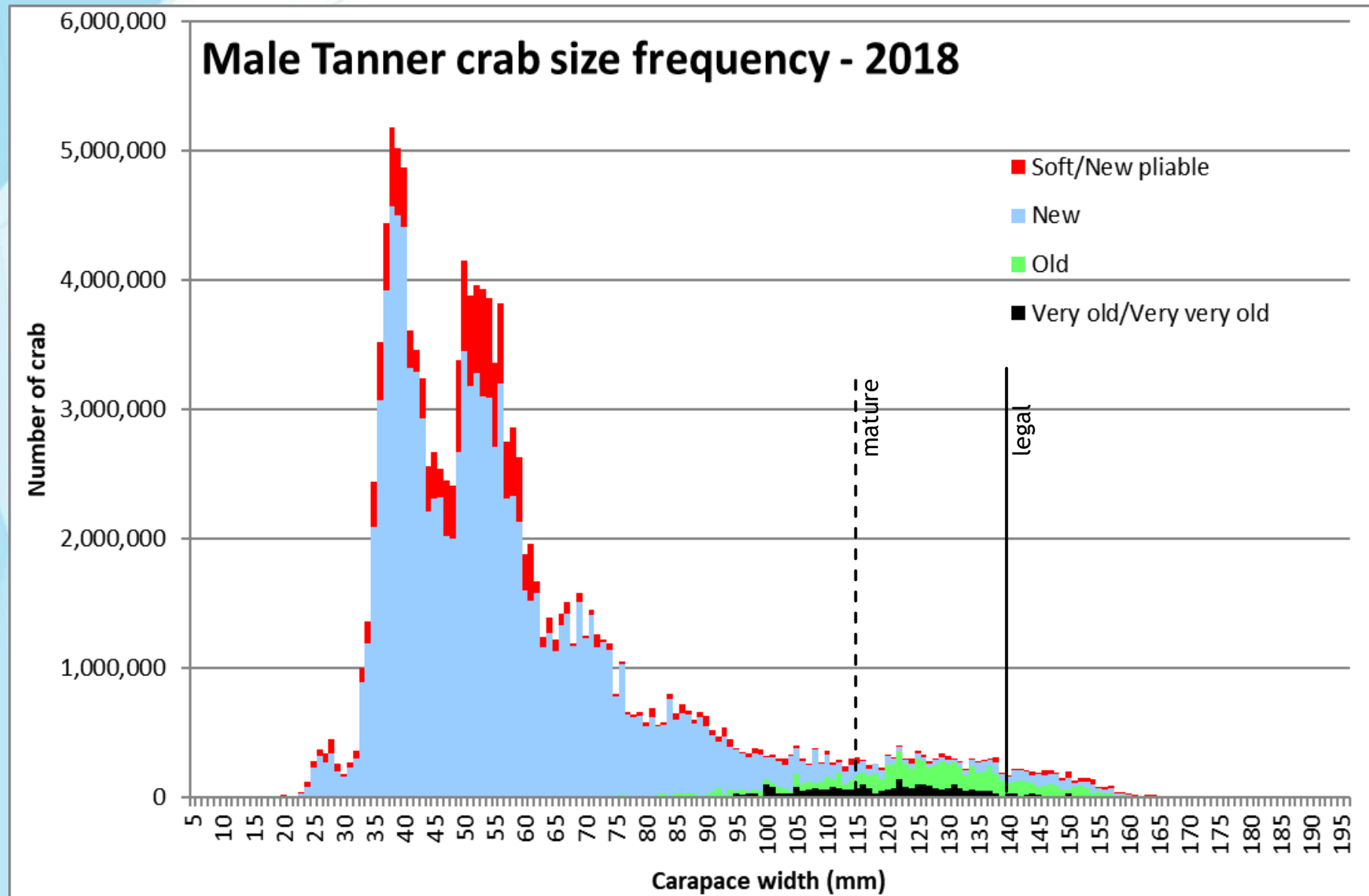


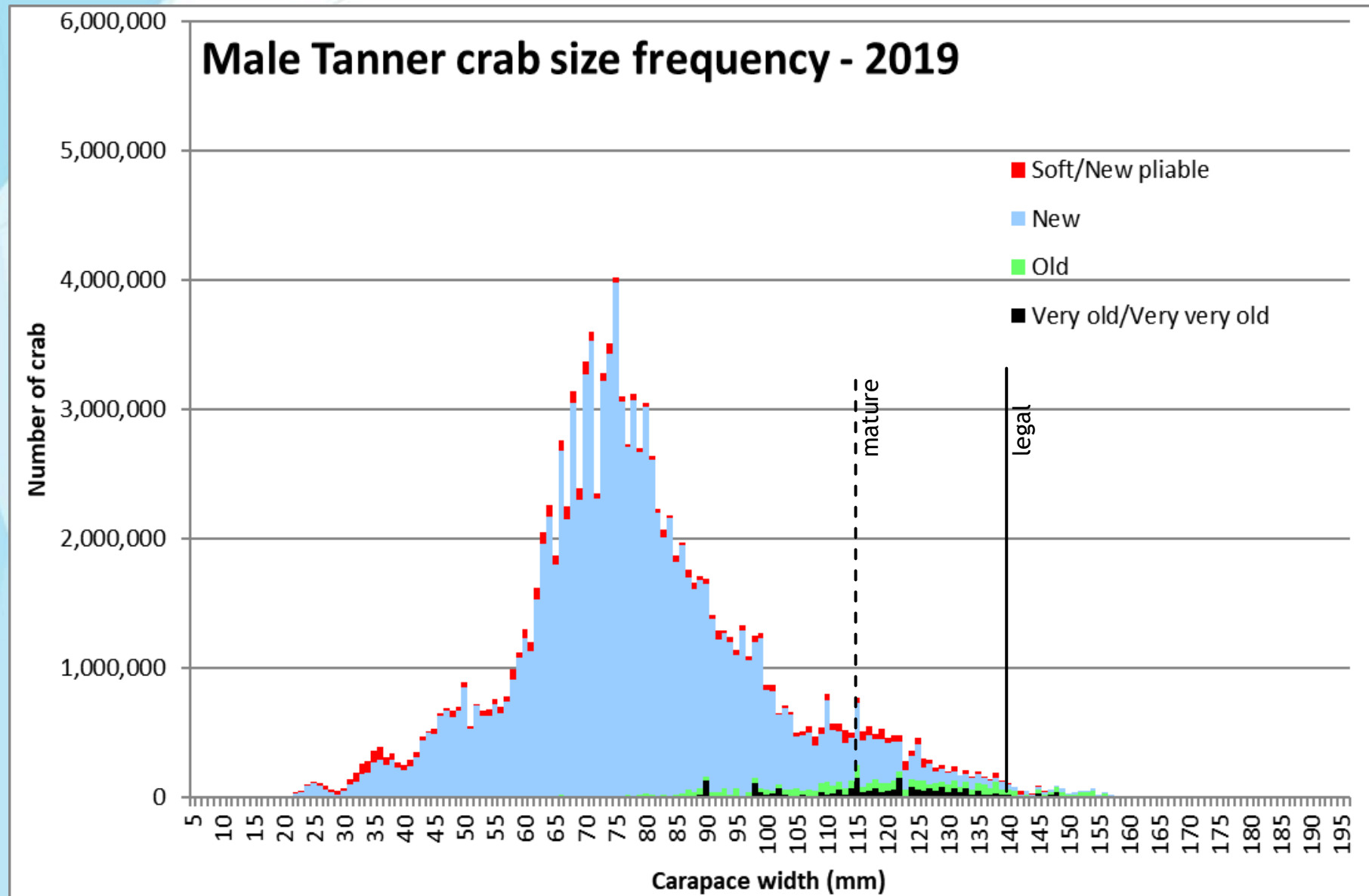


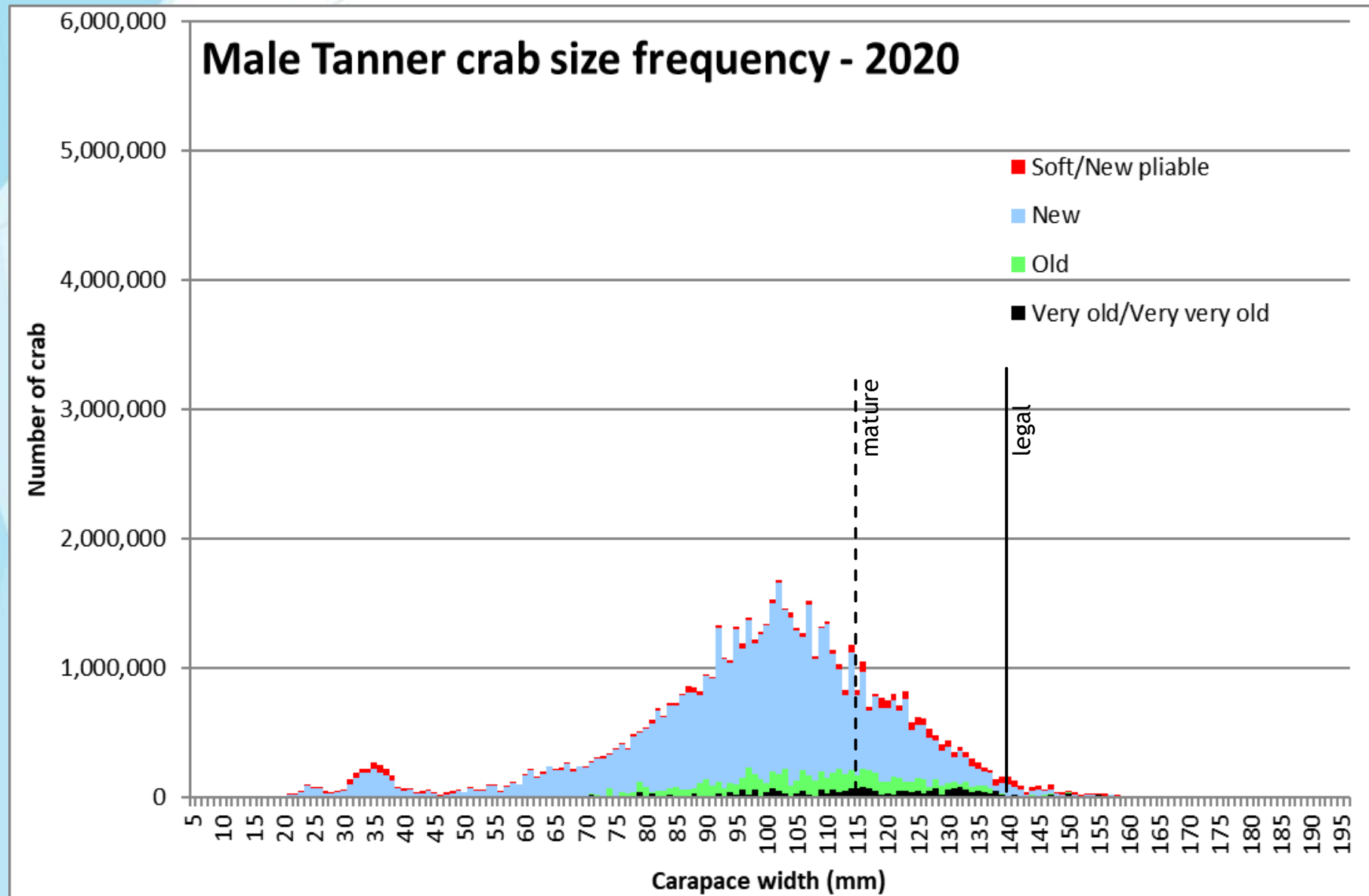
**Let's take a closer look
at the 2018 cohort.**

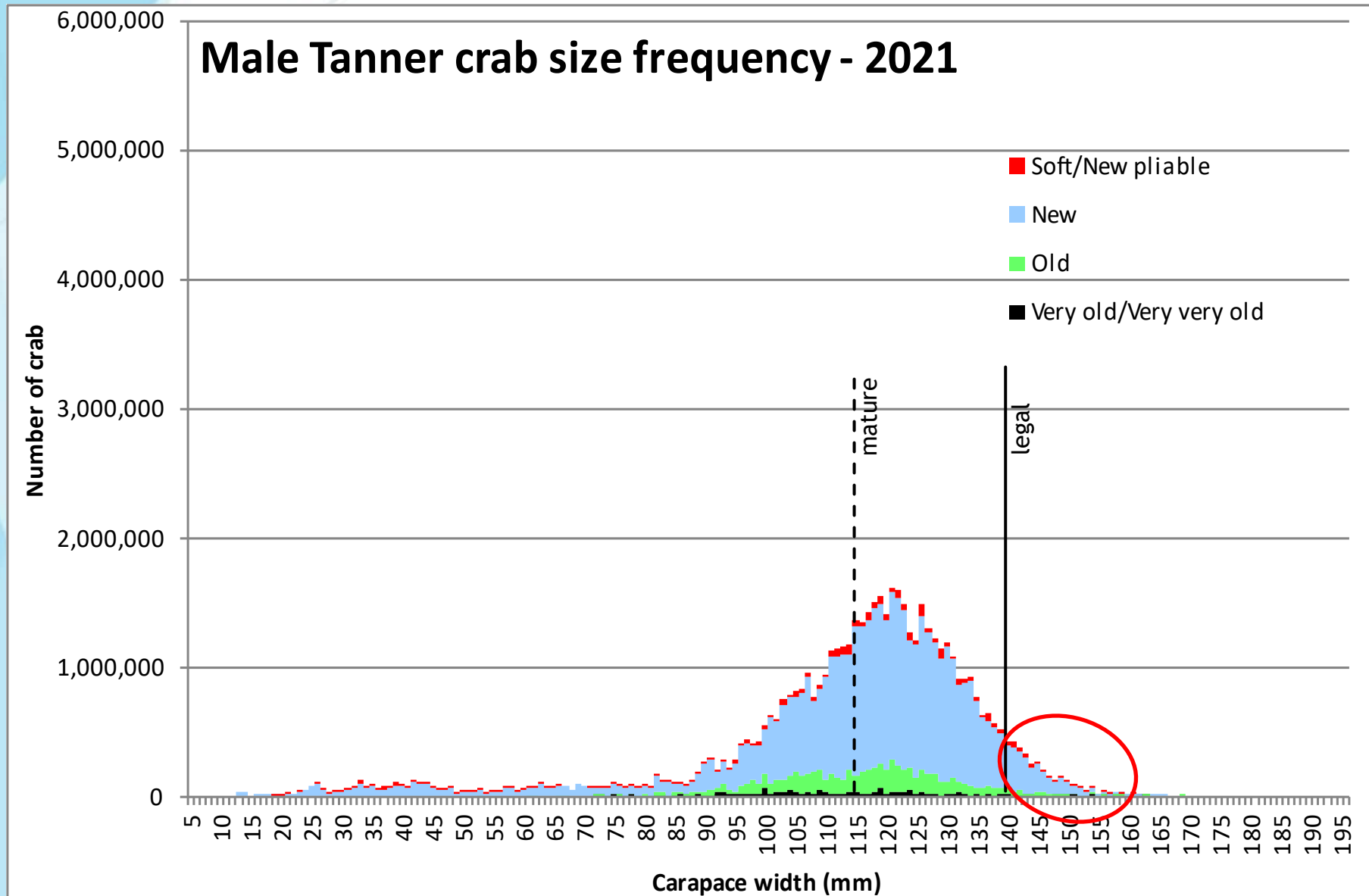
Kodiak District male Tanner crab size frequency and shell condition, 2017-2021

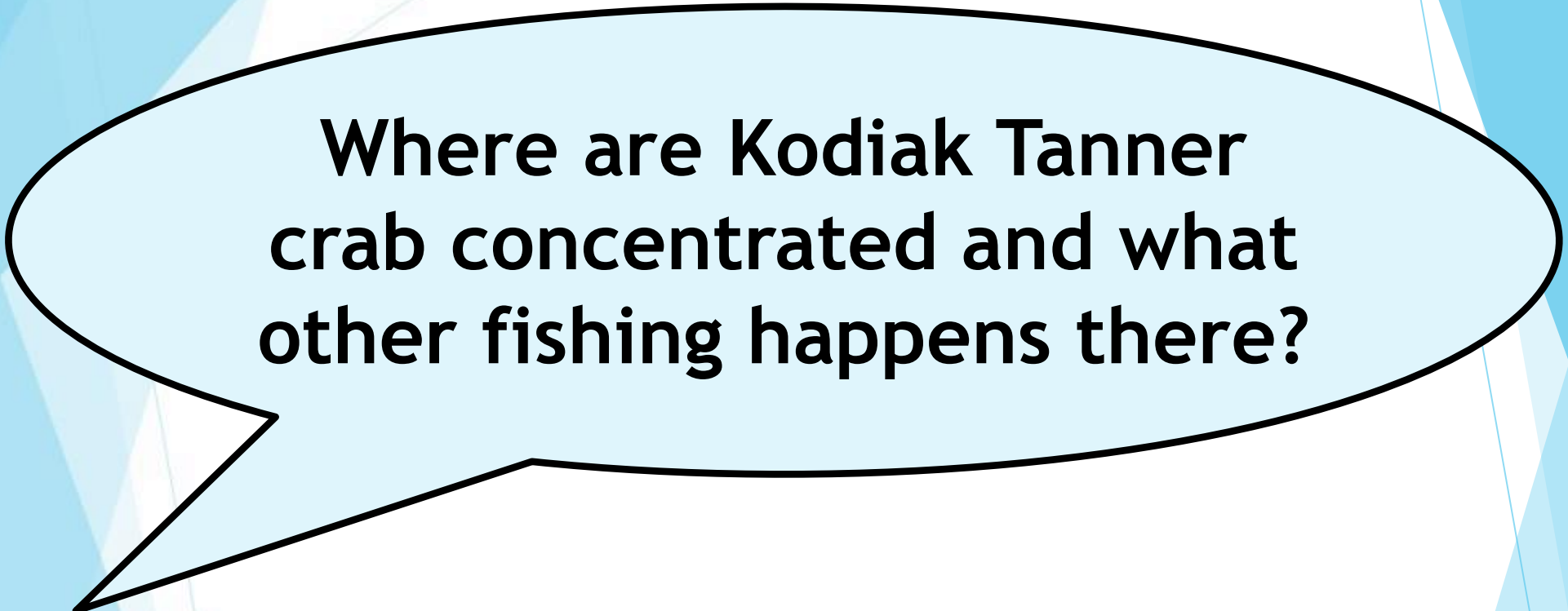




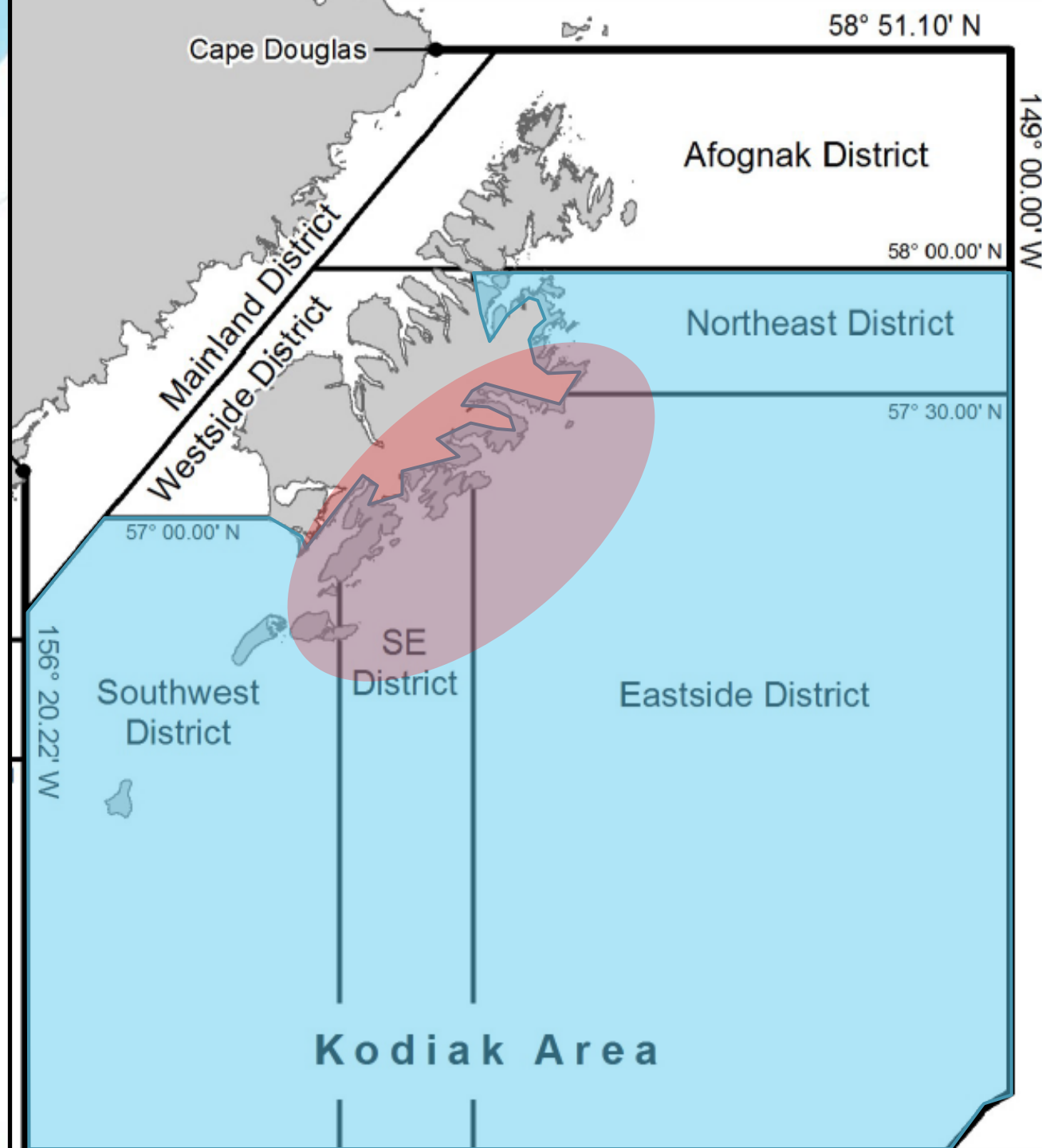




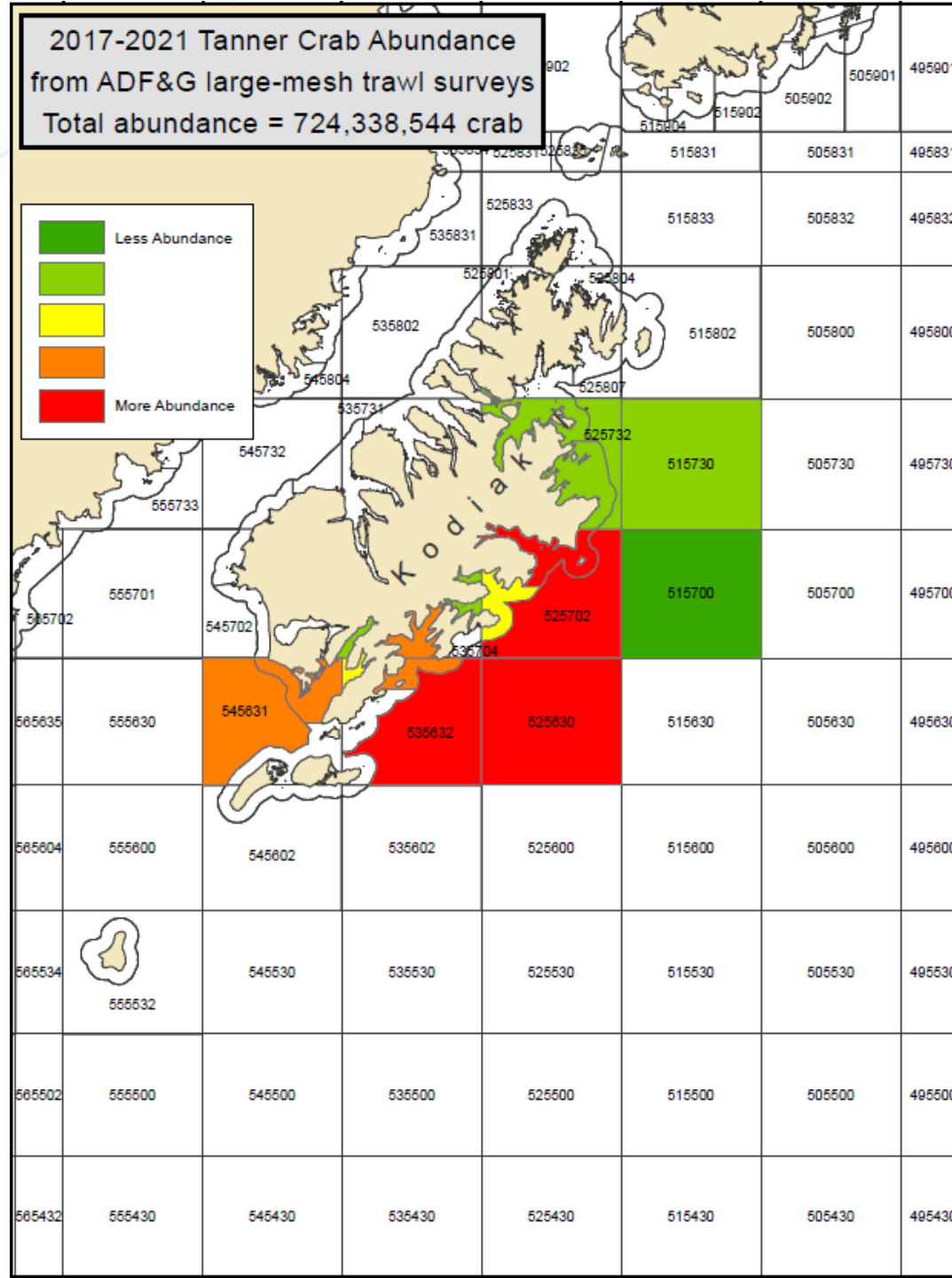
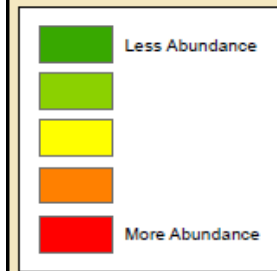




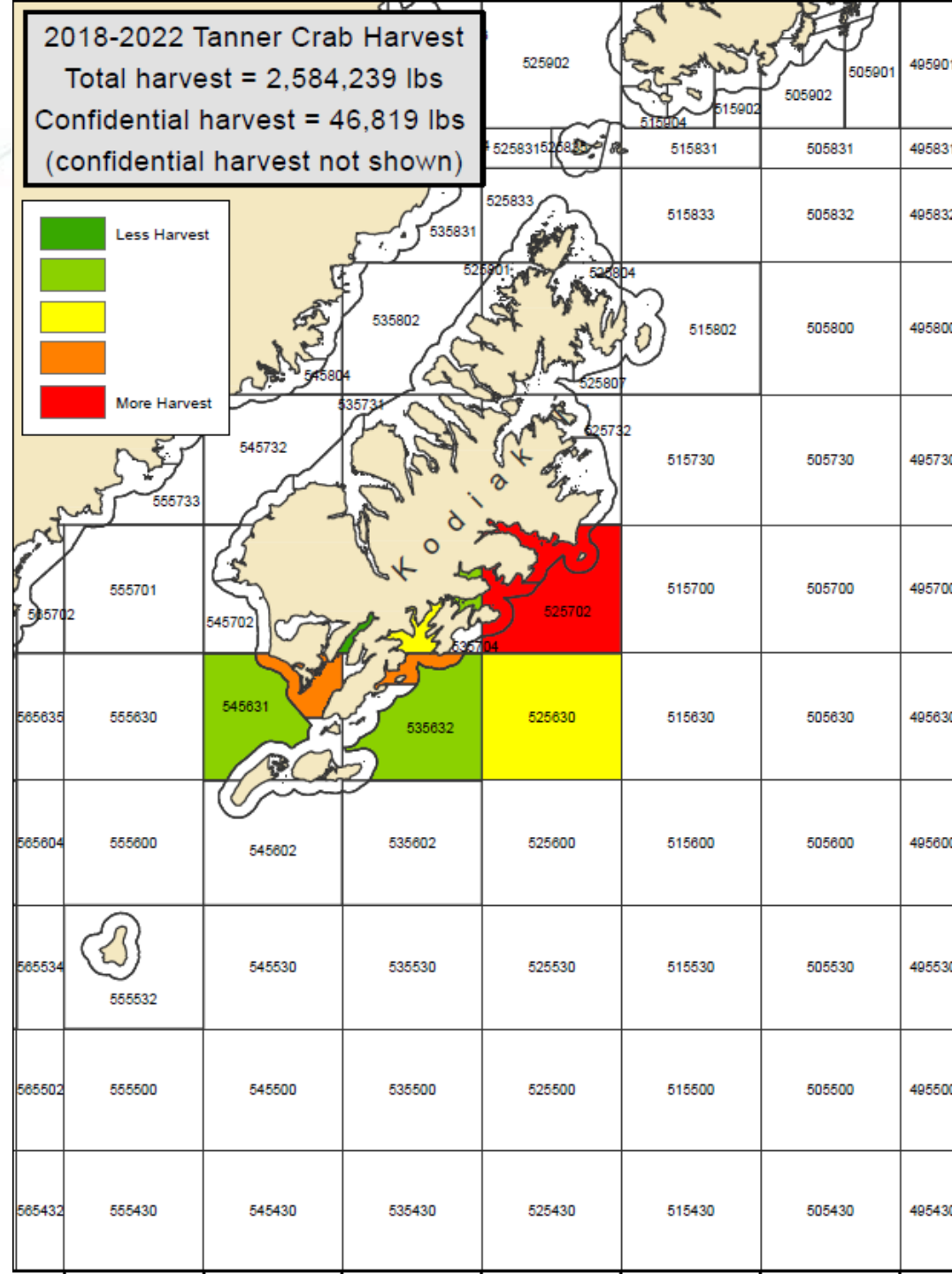
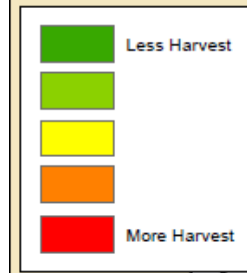
**Where are Kodiak Tanner
crab concentrated and what
other fishing happens there?**



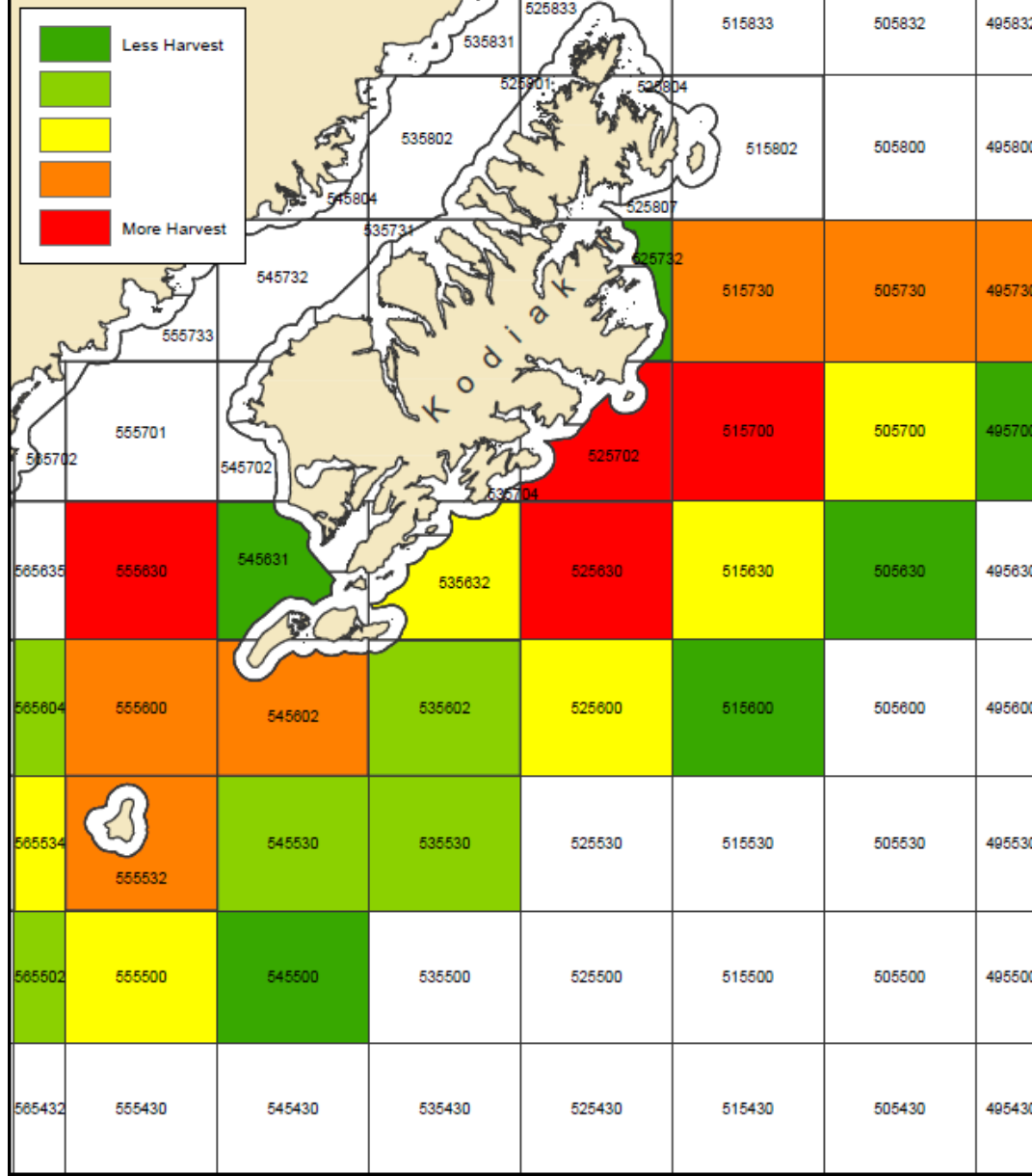
2017-2021 Tanner Crab Abundance
from ADF&G large-mesh trawl surveys
Total abundance = 724,338,544 crab



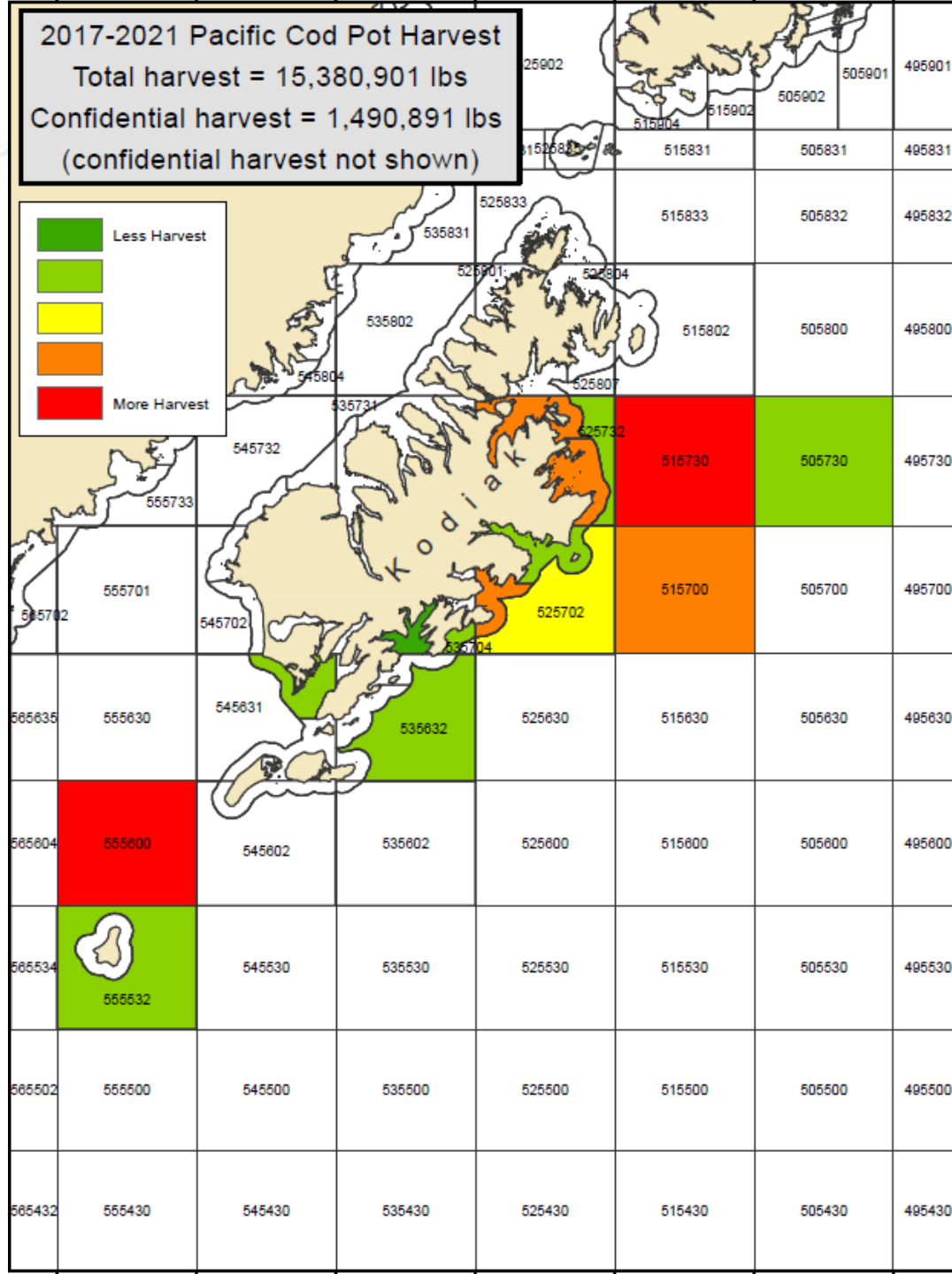
2018-2022 Tanner Crab Harvest
 Total harvest = 2,584,239 lbs
 Confidential harvest = 46,819 lbs
 (confidential harvest not shown)

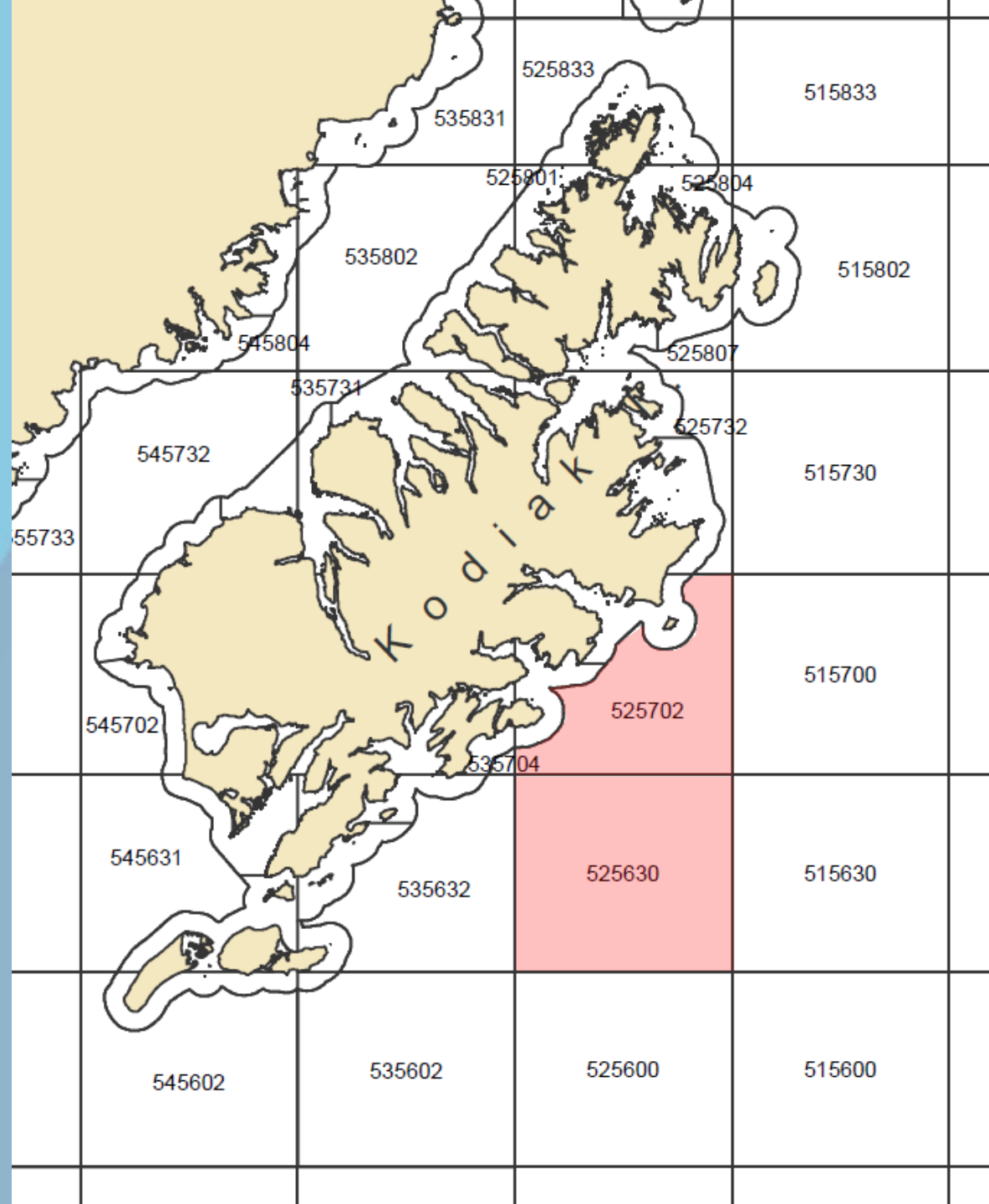


2017-2021 Bottom Trawl Harvest
 Total harvest = 423,724,503 lbs
 Confidential harvest = 881,920 lbs
 (confidential harvest not shown)



2017-2021 Pacific Cod Pot Harvest
 Total harvest = 15,380,901 lbs
 Confidential harvest = 1,490,891 lbs
 (confidential harvest not shown)





525702 and 525630 combined

Tanner trawl survey abundance (2017-2021)

34.1% of Tanner abundance estimate

#1 and **#3** stat areas for Tanner abundance

Tanner harvest (2018-2022)

23.9% of Tanner harvest

#3 and **#6** stat areas for Tanner harvest

Non-pelagic trawl (NPT) harvest (2017-2021)

26.4% of NPT harvest

#1 and **#3** stat area for NPT harvest

Pacific cod pot gear harvest (2017-2021)

7.3% of the Pacific cod pot gear harvest

#7 and **#17** stat area for NPT harvest

Conclusions

- Kodiak Tanner crab stocks are trending up.
- Outlook for 2023 Tanner fishery look encouraging.
- Survey estimated Tanner abundance, directed Tanner harvest, and NPT harvest have the most spatial overlap in stat areas **525702** and **525630**.
 - The Pacific cod pot gear fisheries use these stat areas to a lesser degree.



Questions?

