

C2 BSAI CRAB STOCKS

KATIE PALOF- CPT CHAIR

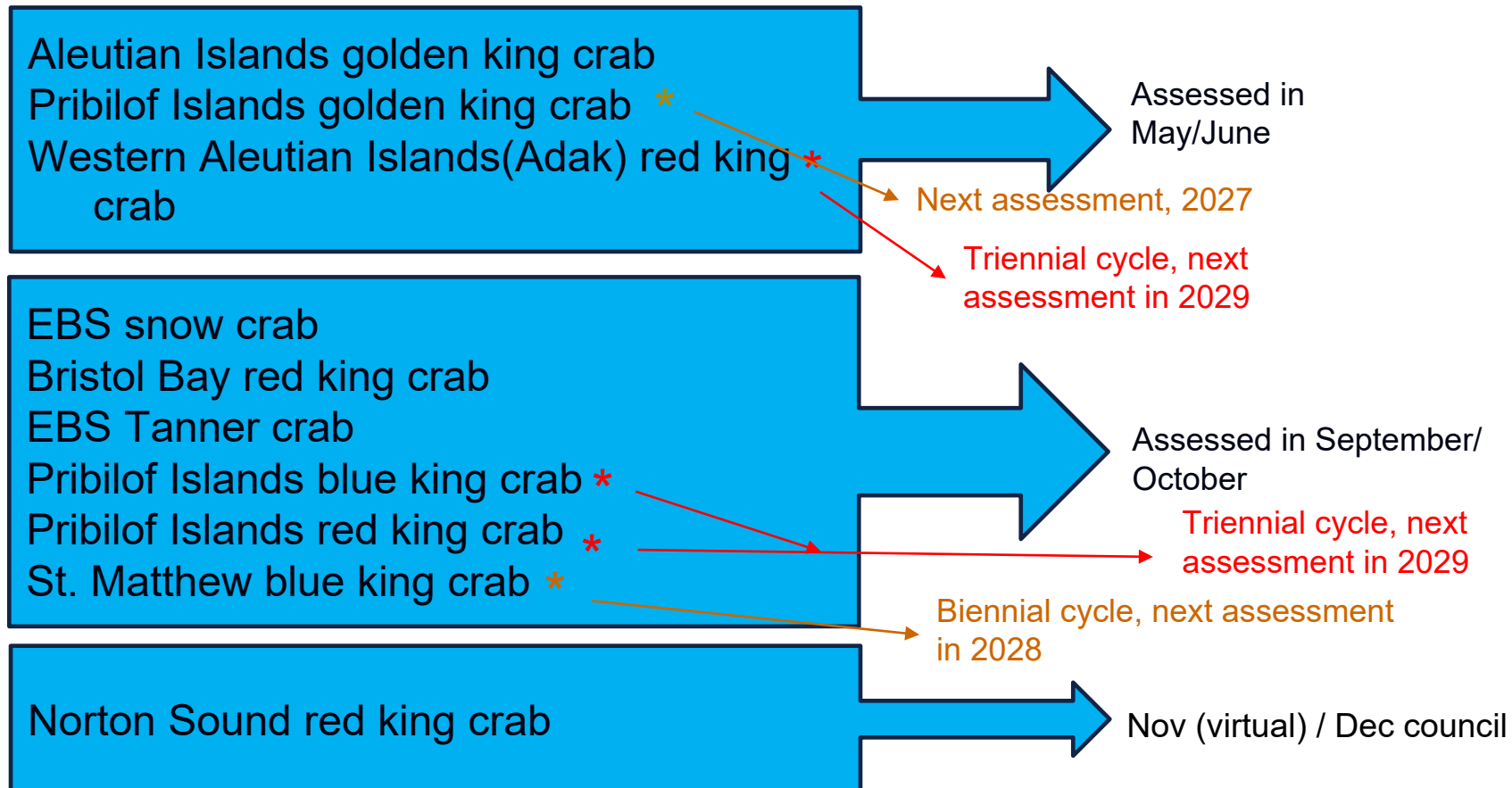
OCTOBER 2026 NPFMC MEETING (Anchorage, AK)

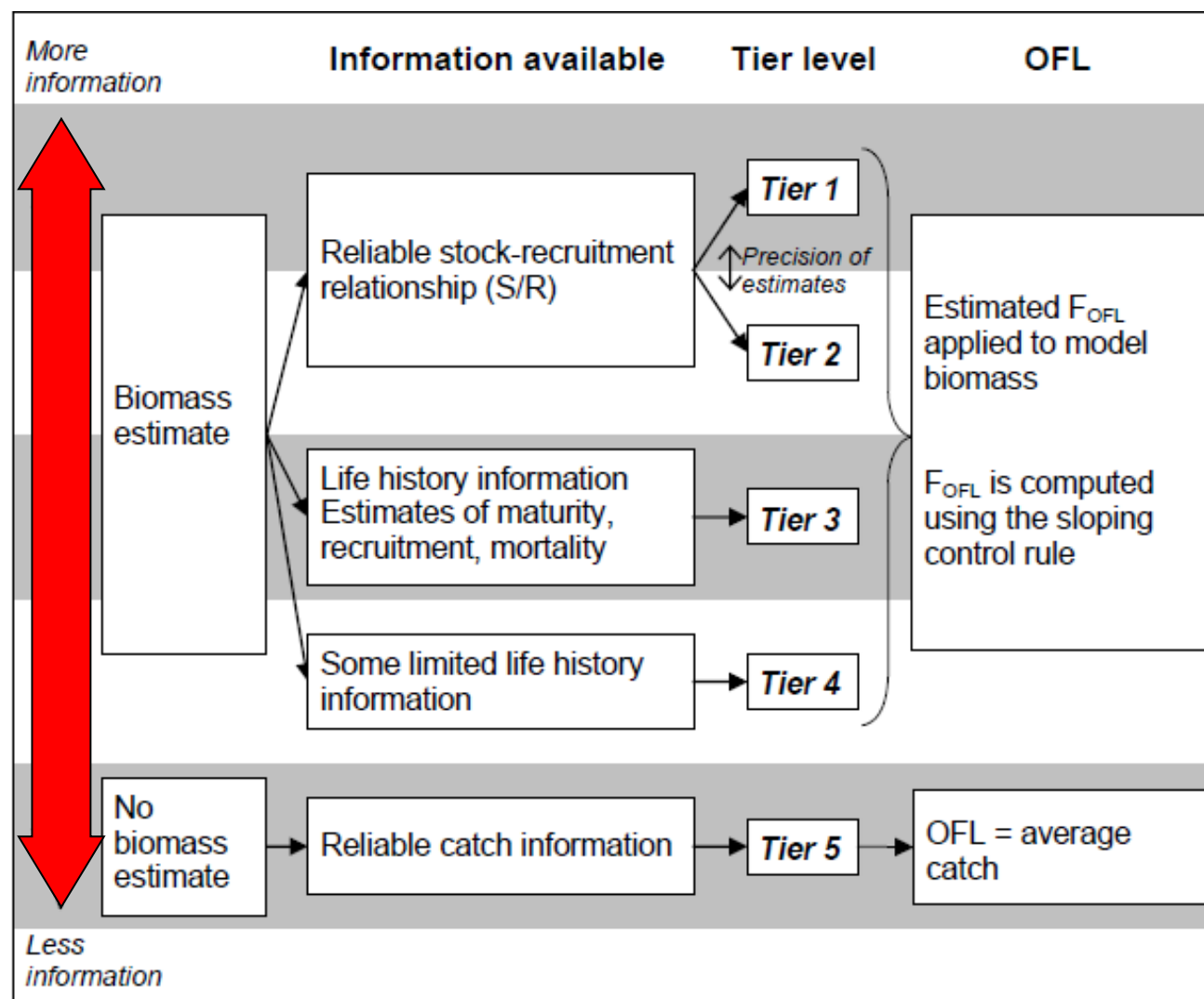
CPT MEETING MINUTES SEPT 14TH – 17TH (Seattle, WA)



?

BSAI Crab Stocks Management Timing





September 2026 Agenda

- ✓ Summer trawl survey results
- ✓ 2025/26 fishery season summary (taken up under each stock)
- ✓ **Snow crab final assessment, OFL and ABC**, and ESP report card
- ✓ **Tanner crab final assessment, OFL and ABC**
- ✓ **BBRKC final assessment, OFL and ABC**, and ESP report card
- ✓ **SMBKC final assessment, OFL and ABC**
- ✓ WAIRKC specification rollover
- ✓ Overfishing updates on non-assessed stocks
- ✓ Ecosystem status report – Bering Sea
- ✓ St. Paul hatchery review (request from ADF&G)
- ✓ SAFE guidelines draft
- ✓ BSFRF research updates
- ✓ New business



CPT updates

- Plan team vacancies –
 - Vacant co-chair position
 - ADF&G management vacancy (CPT would like to thank Ethan Nichols for his contributions to plan team)
 - General quantitative vacancy
- Merging of CPT and SPT – approved, new proposed name “Crab and Scallop plan team”
- GMACS documentation – at minimum April meeting, will be included in CPT report as needed

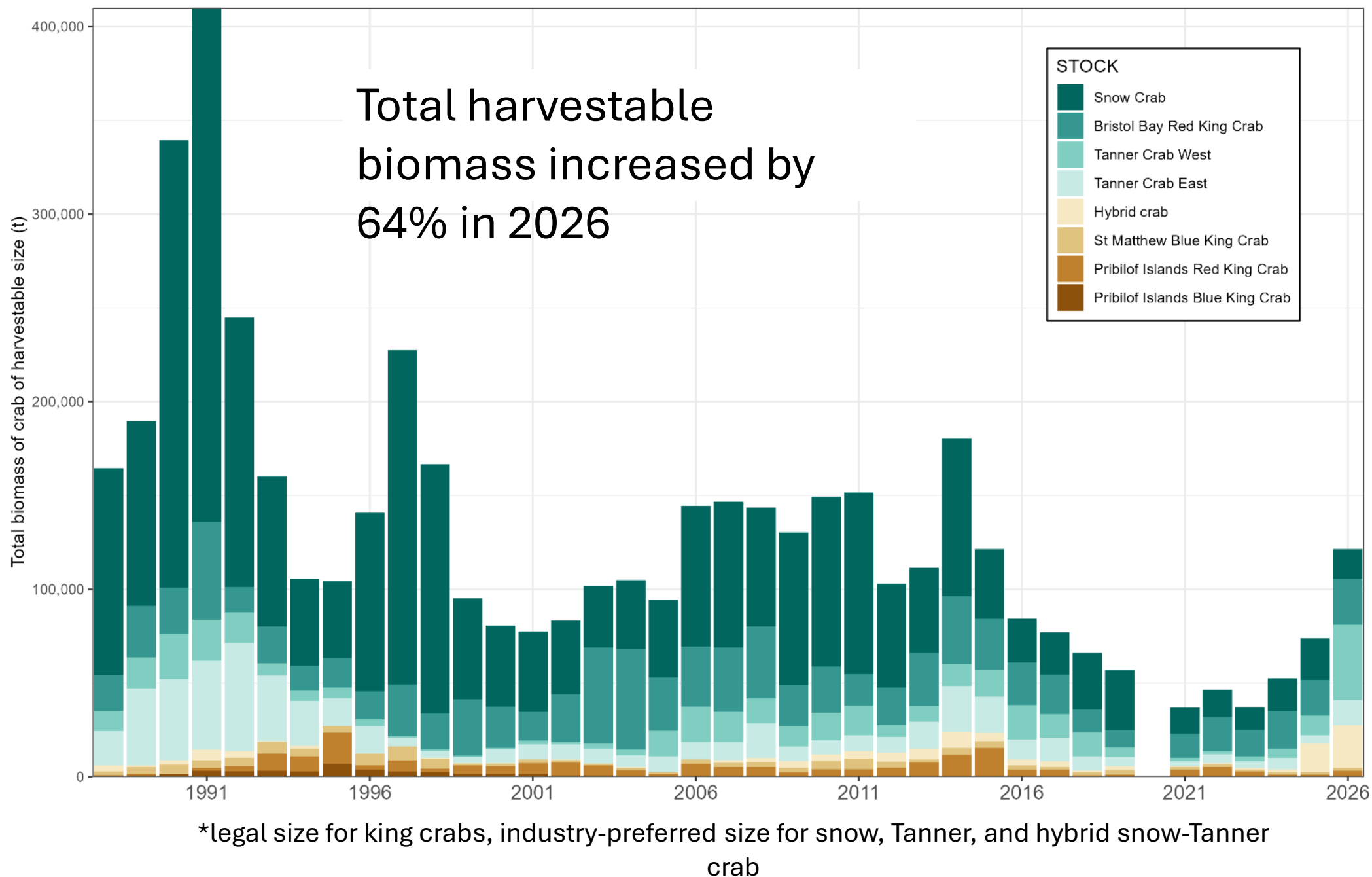


2026 Survey Results

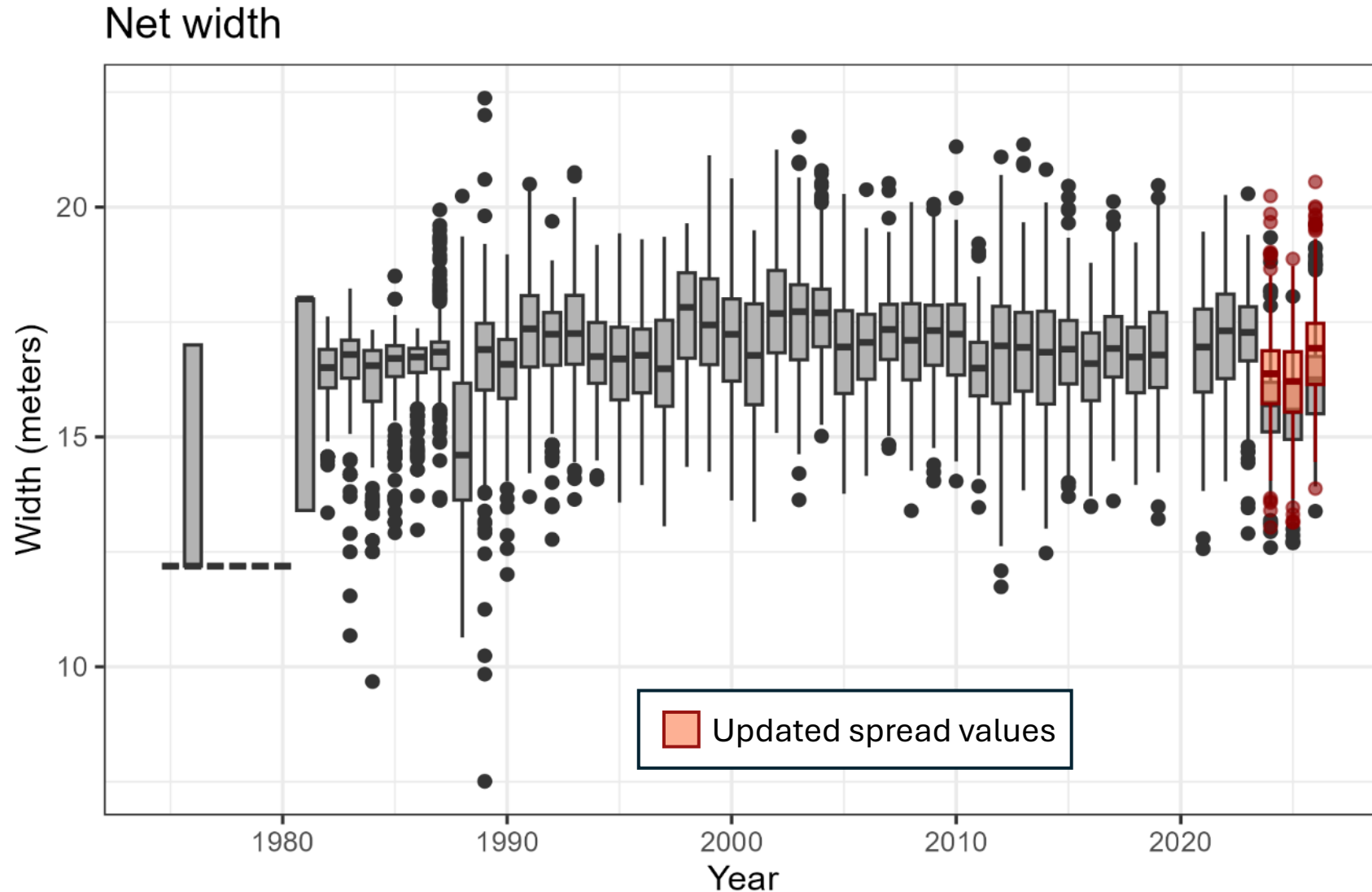
Emily Ryznar, NMFS Kodiak



- 349 stations in eastern Bering Sea, June 2- August 4
- Total harvestable biomass gradually recovering from 2021 low
- Bristol Bay red king crab, Tanner crab, and hybrids make up majority of harvestable biomass in 2026

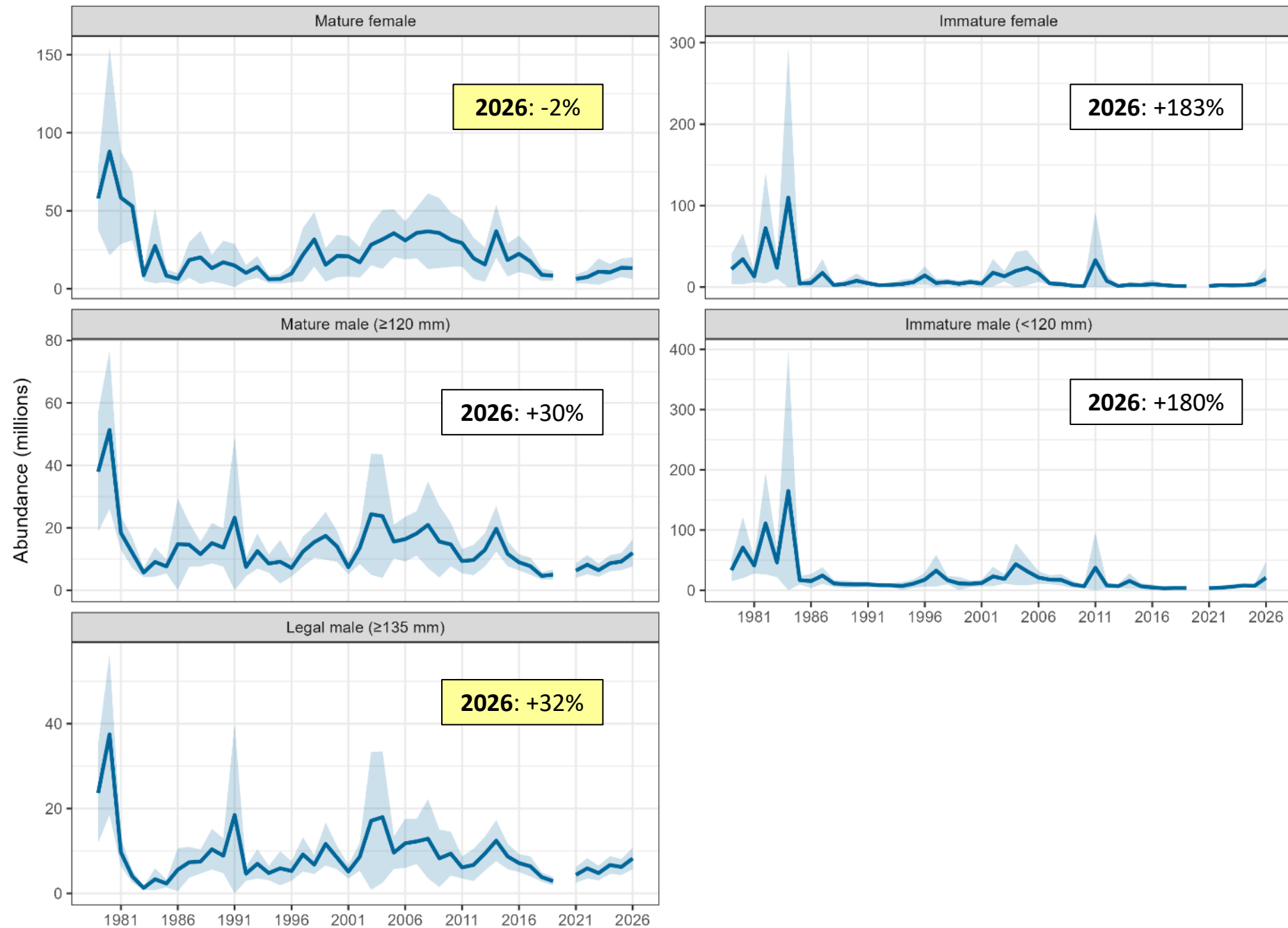


Update to net spread values for 2024-2026 results in a
~4% decrease in biomass and abundance



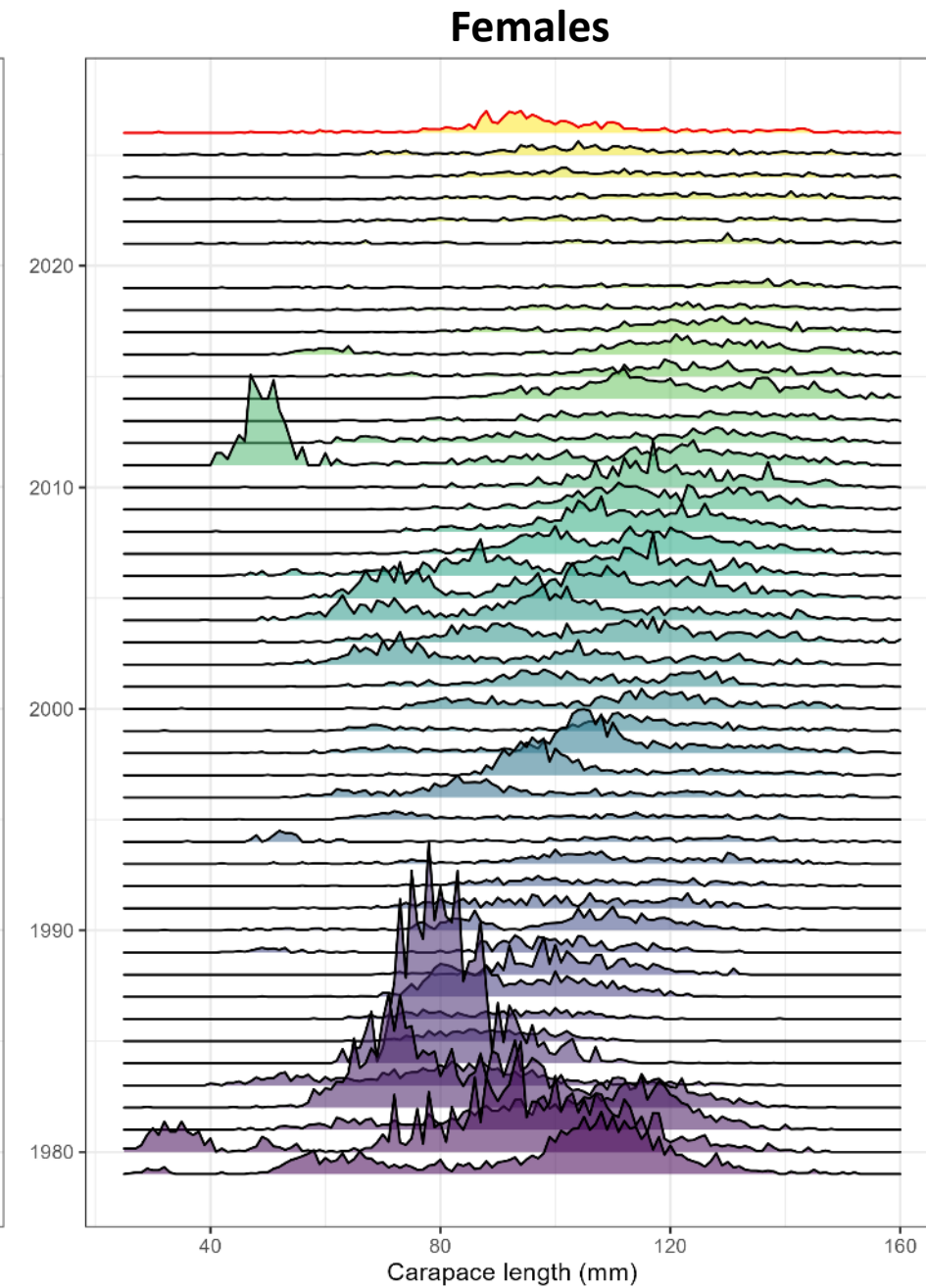
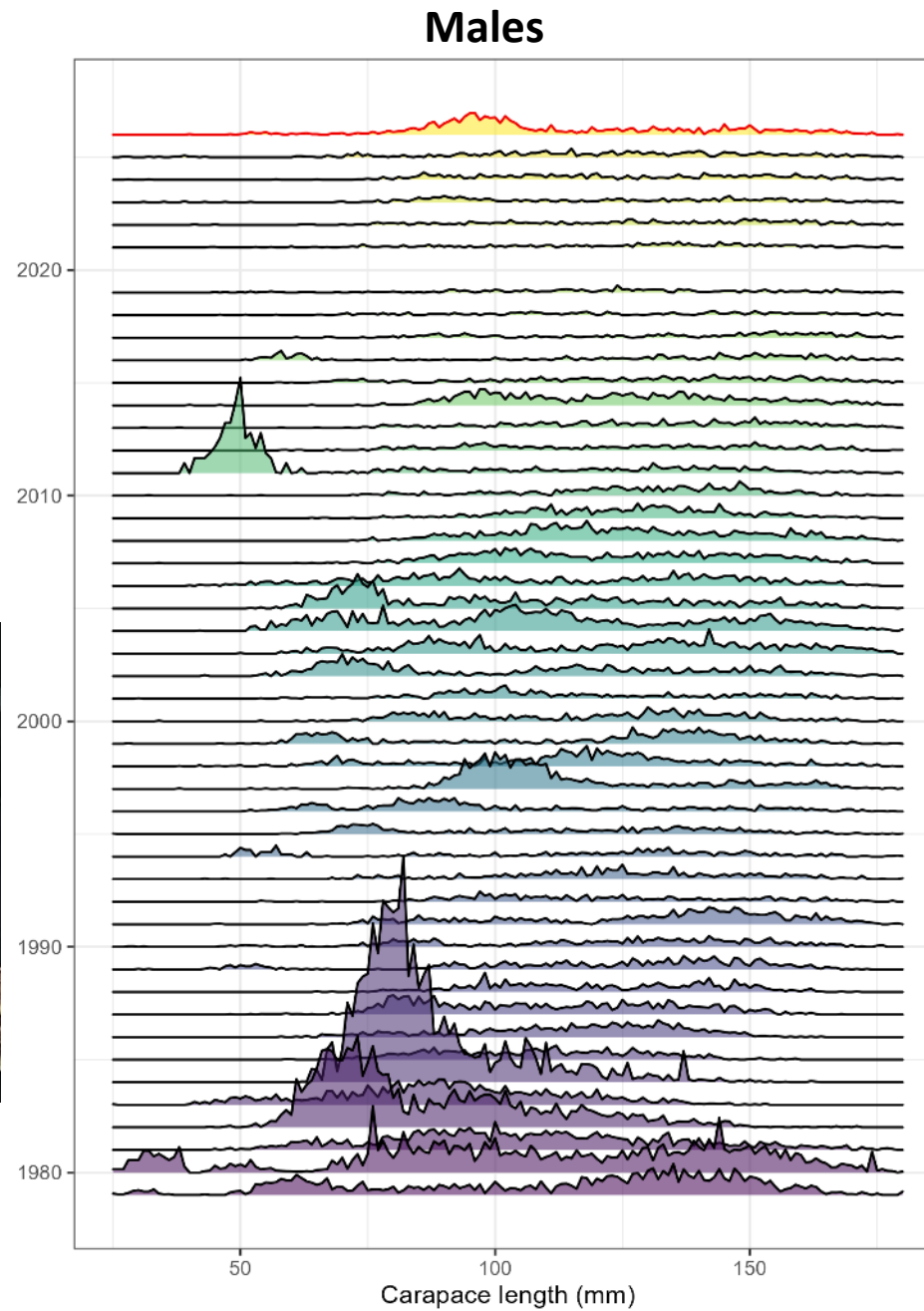
Bristol Bay red king crab

- Increasing trends across most size-sex categories
- Large increases in immature categories, but this was largely caused by one high catch station (65-68% of immature catch)



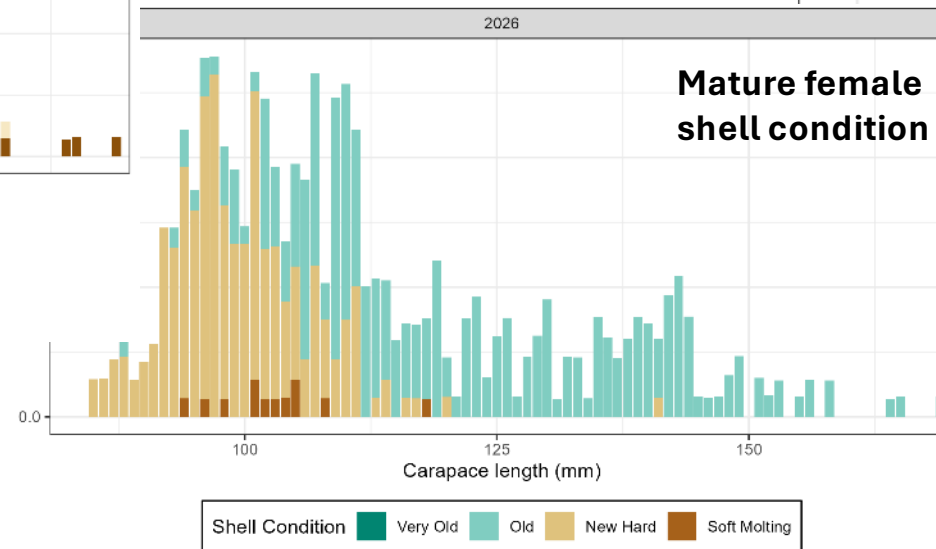
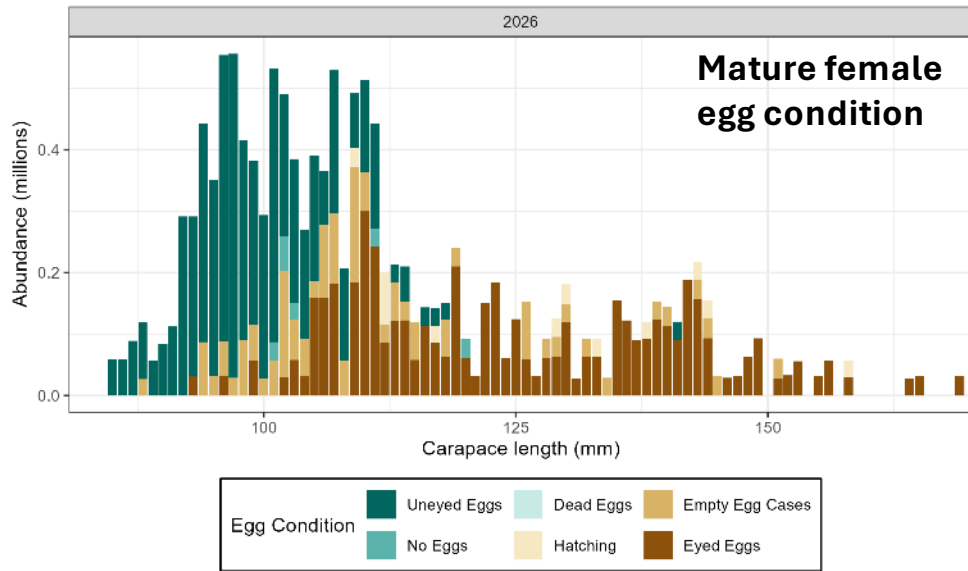
Bristol Bay red king crab

- Increased frequency centered around ~100 mm for both sexes



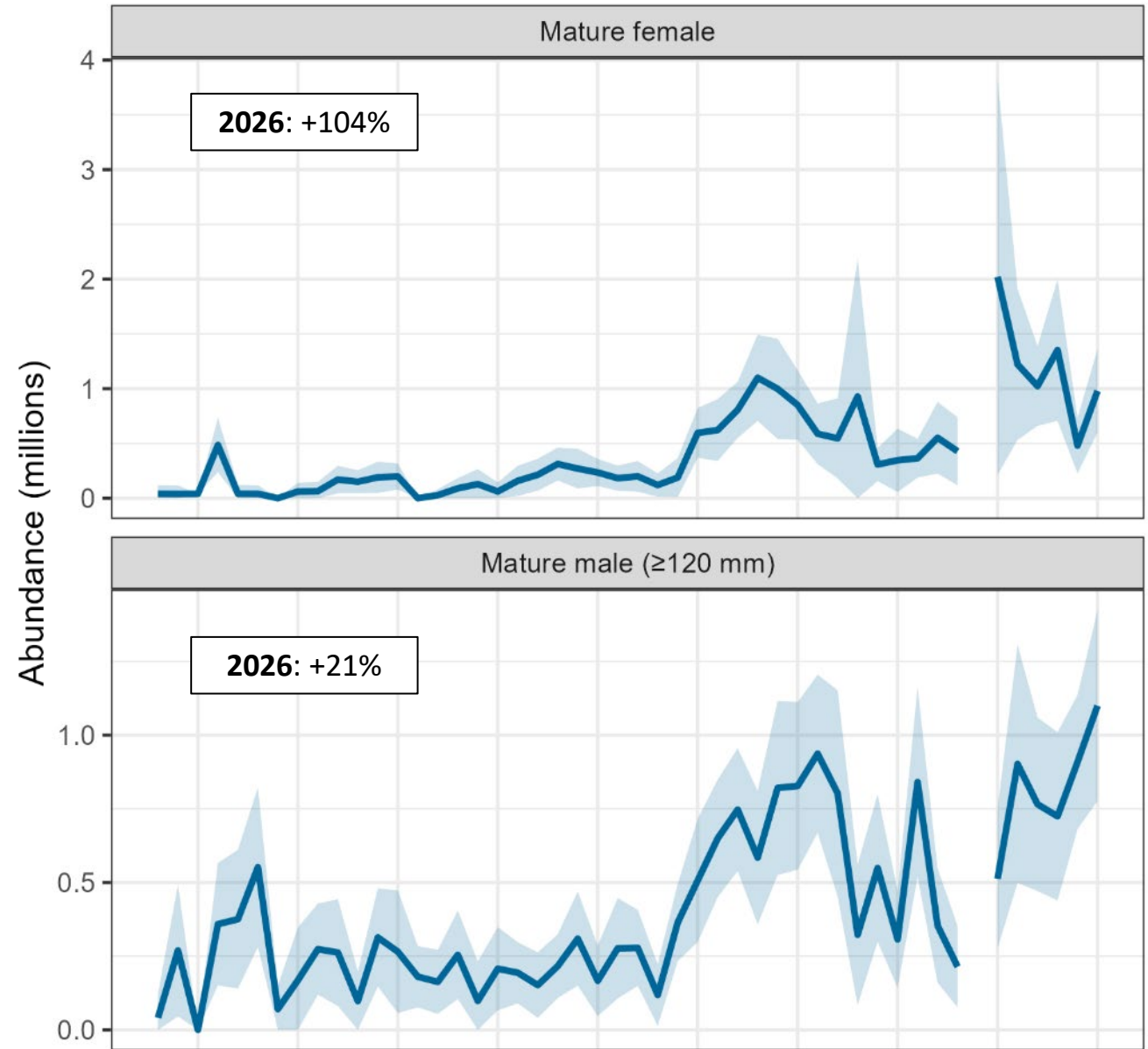
No resampling for Bristol Bay red king crab in 2026

- 56% of mature females had not completed the molt/mate cycle, exceeding the 10% threshold to consider resampling
- NMFS/ADF&G biologists and the stock assessment author agreed that resampling Bristol Bay later in the summer would not materially affect survey or assessment results



Northern District red king crab

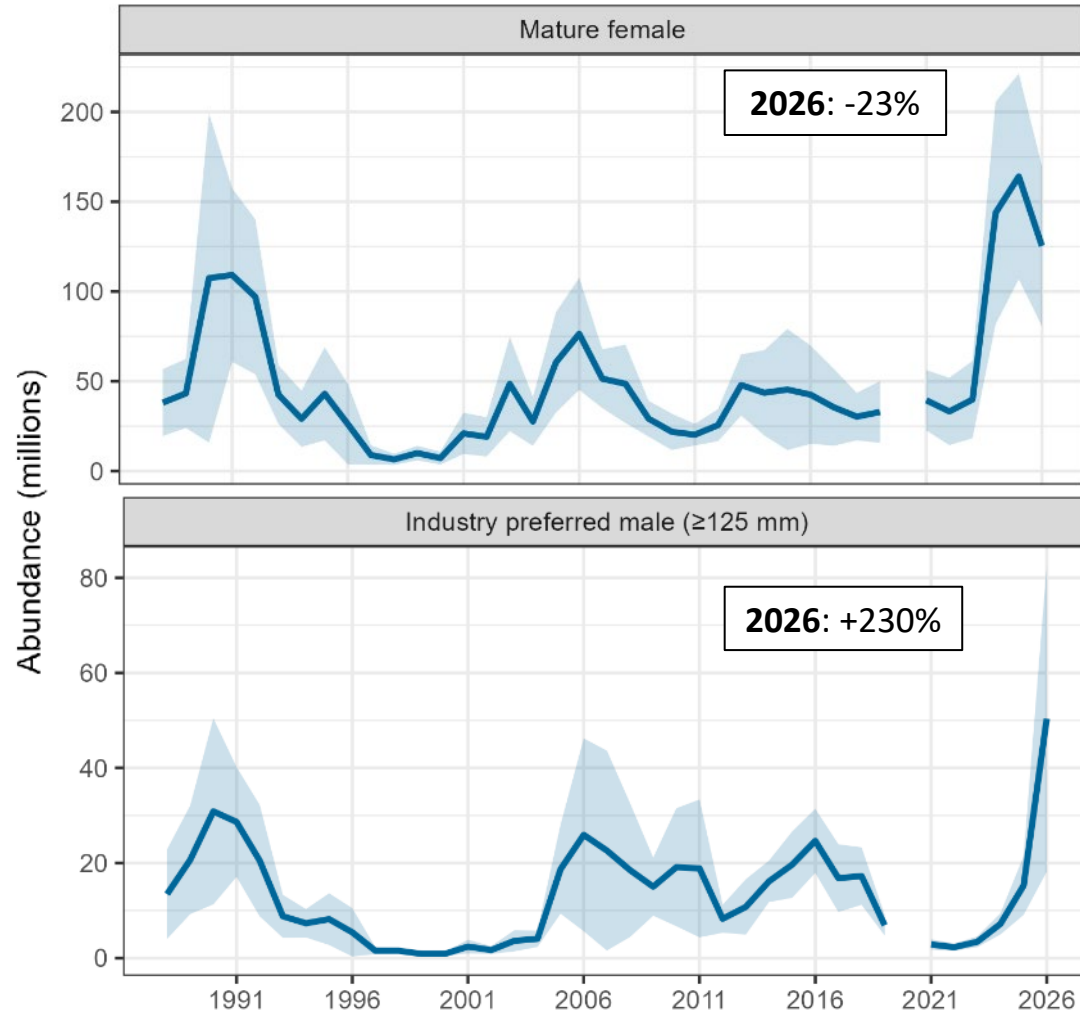
- Mature female & male abundance at elevated levels seen since ~2006
- Magnitude of abundance still much lower than Bristol Bay



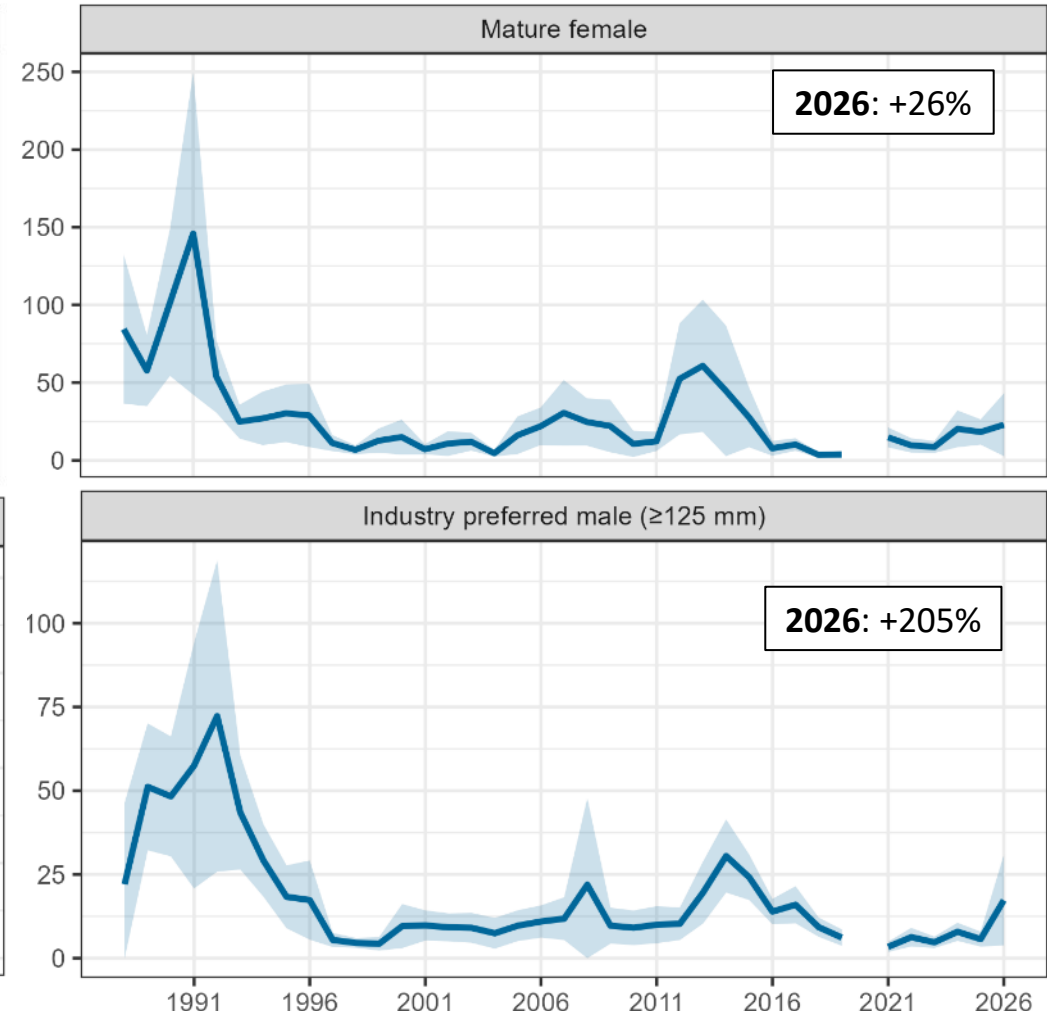
Tanner crab mature/preferred-sized crab

- West of 166°W: Record number of industry-preferred males and sustained high abundance of mature females
- East of 166°W: Increases in both industry-preferred males and mature females

Tanner west of 166°W



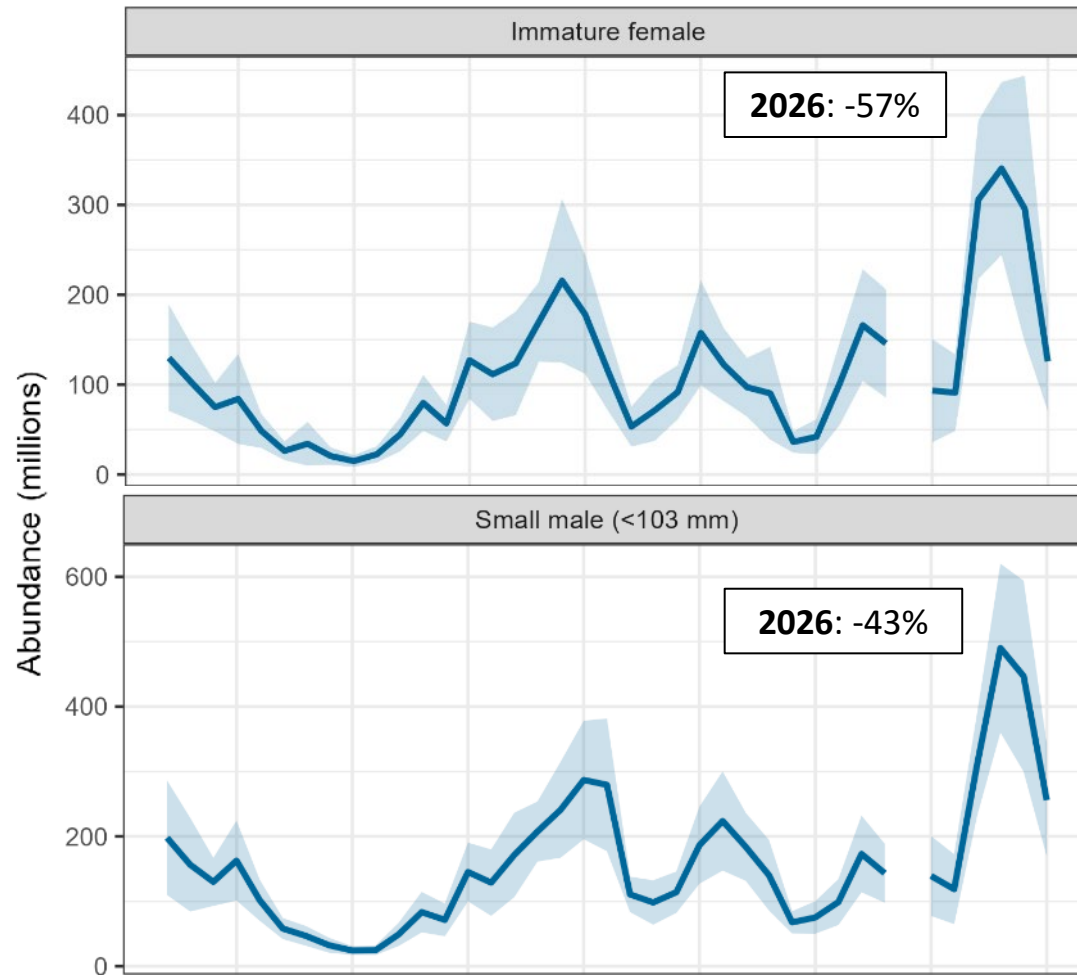
Tanner east of 166°W



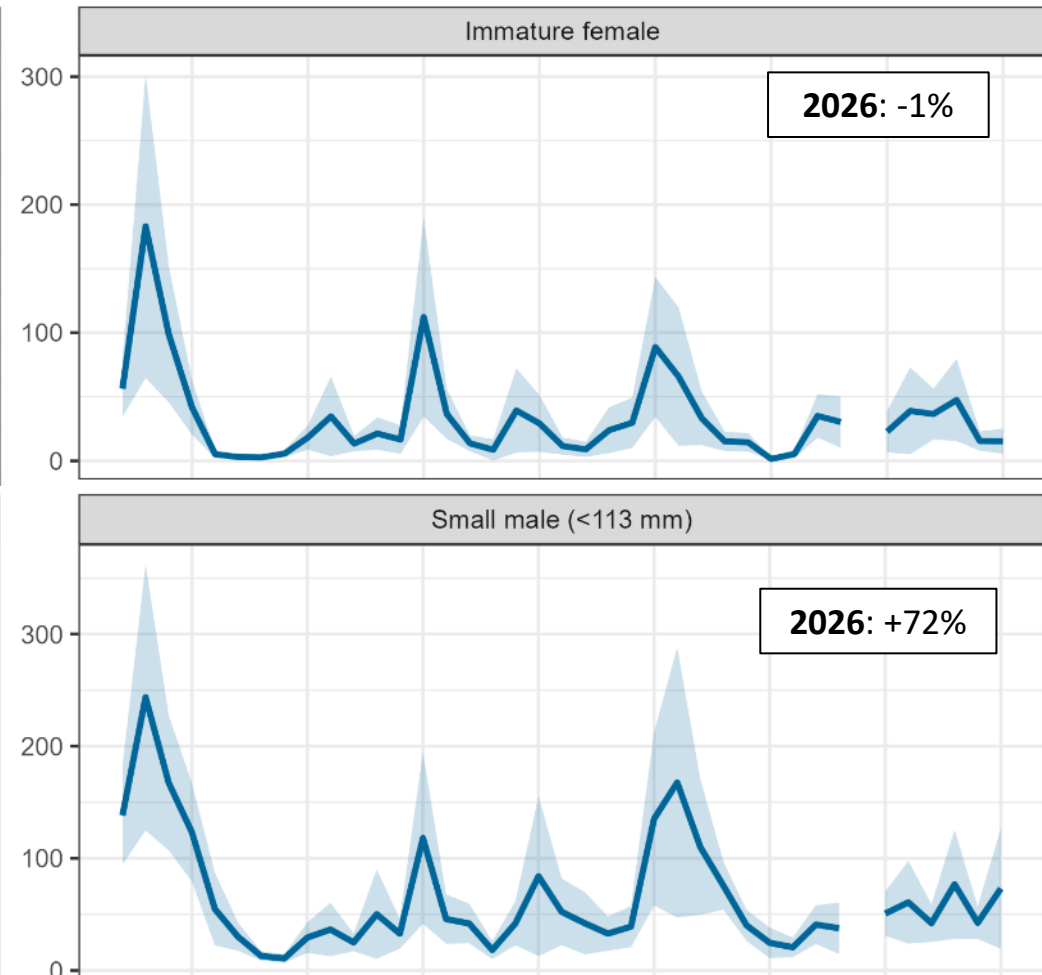
Tanner crab immature/small crab

- West of 166°W: Large declines in juveniles after record highs
- East of 166°W: Juvenile abundances remain low

Tanner west of 166°W

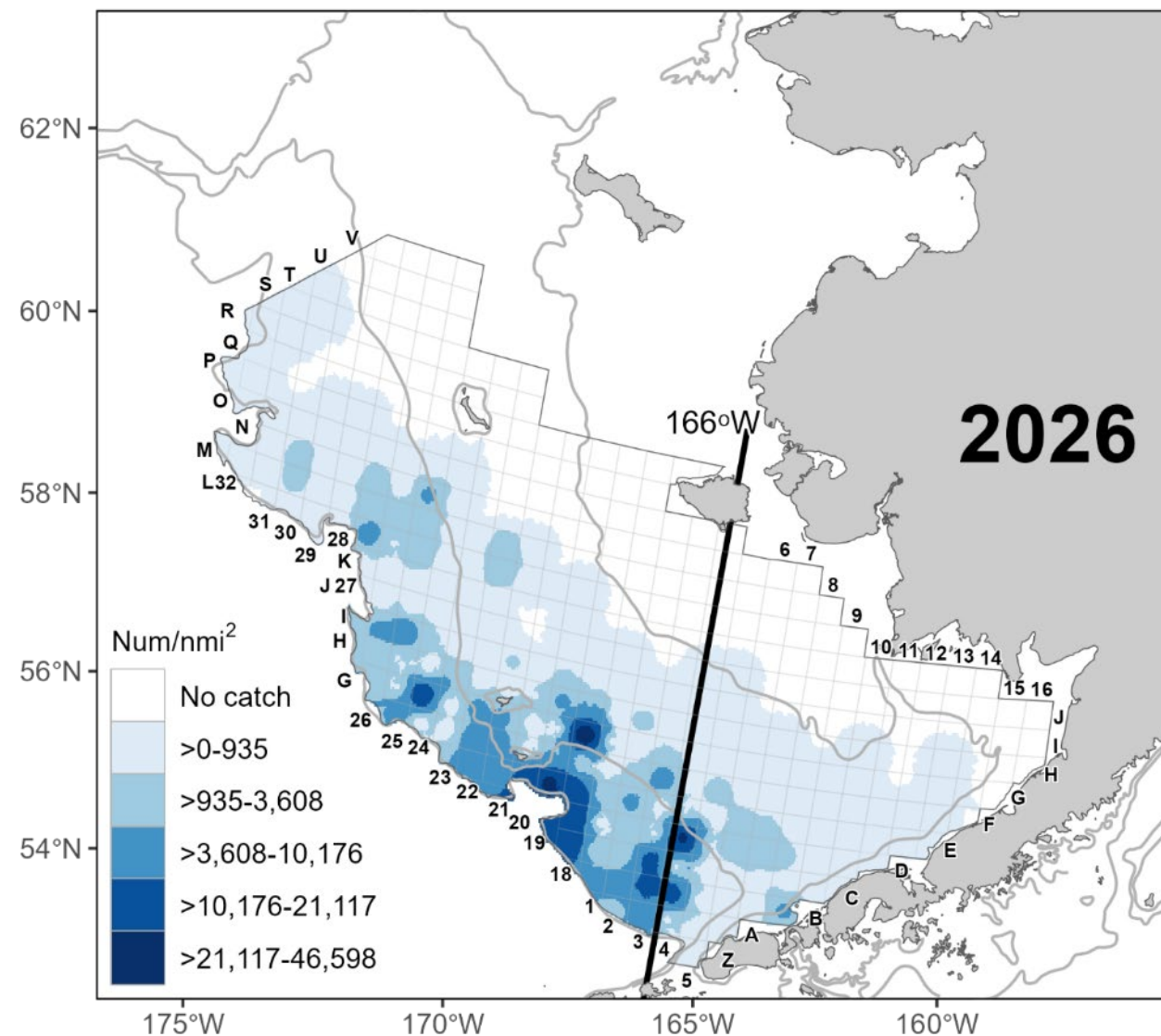
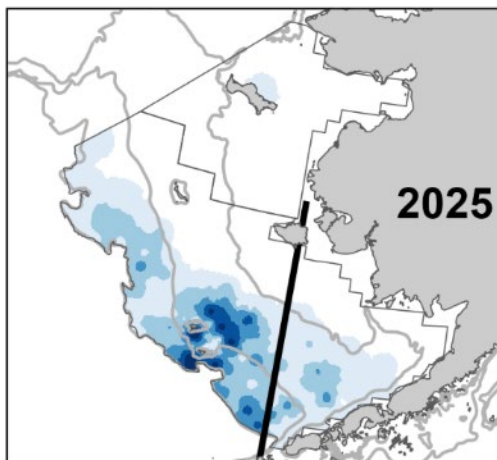
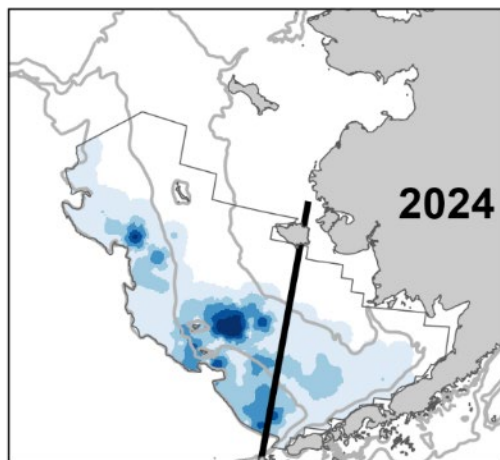


Tanner east of 166°W



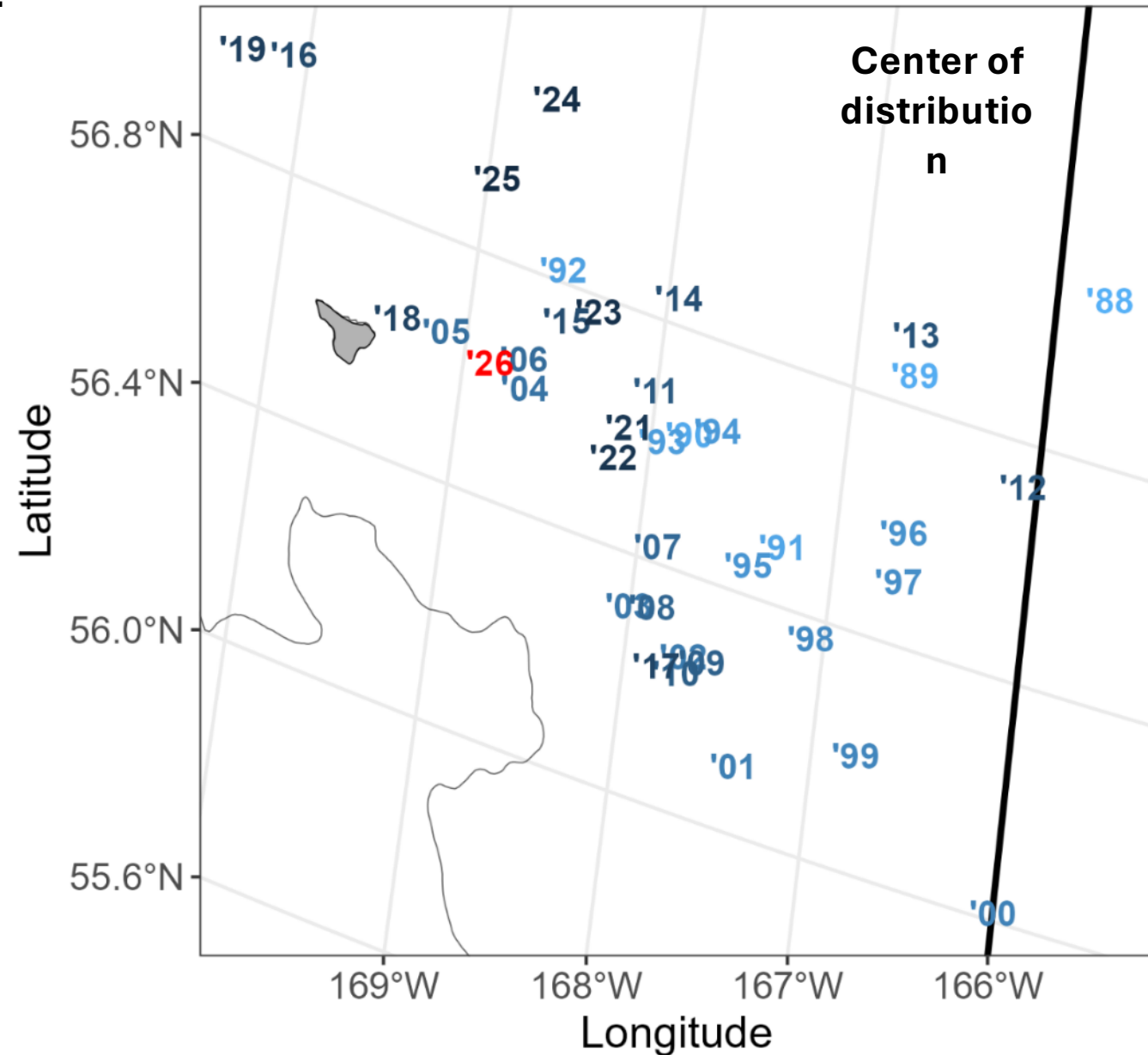
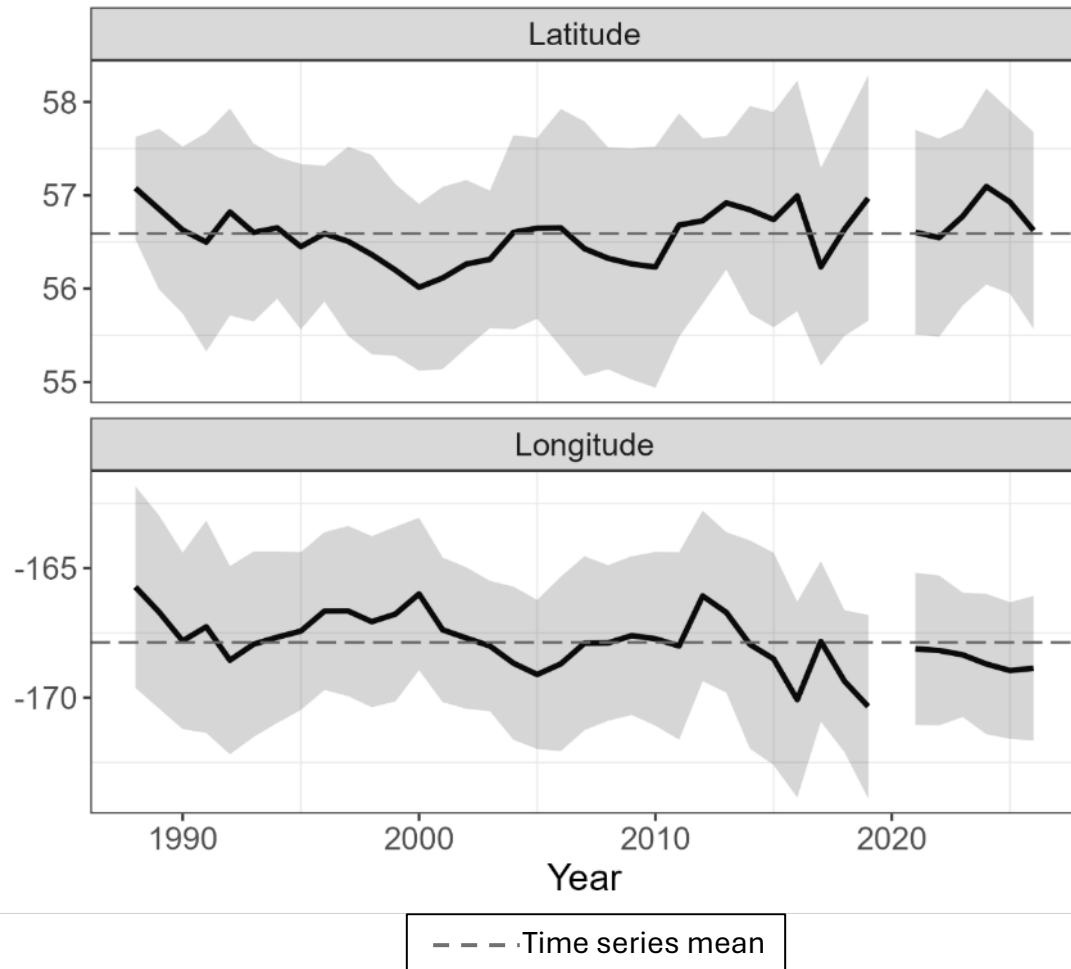
Tanner crab mature females

- Distribution hotspots remain to the east-southeast of the Pribilof Islands



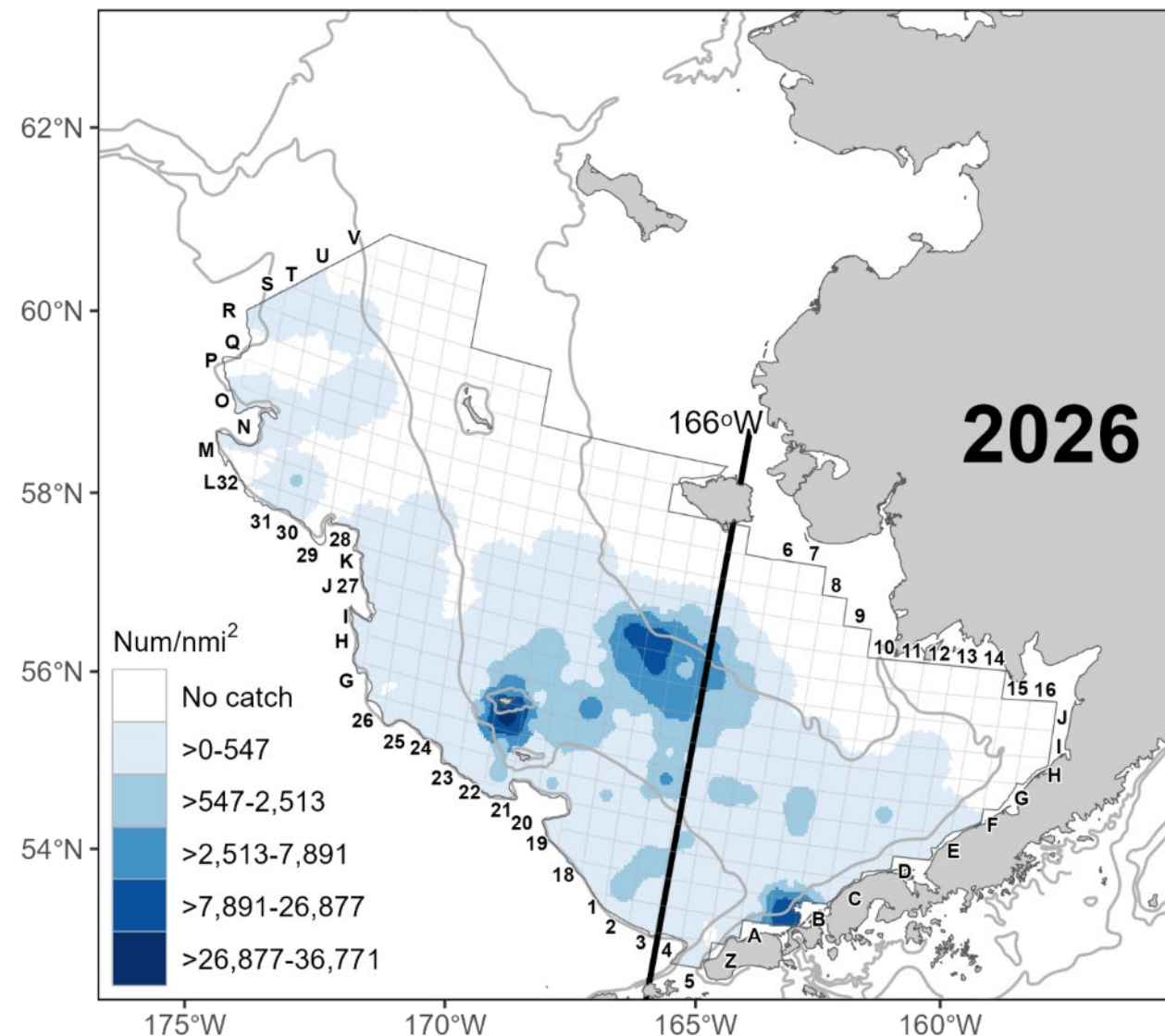
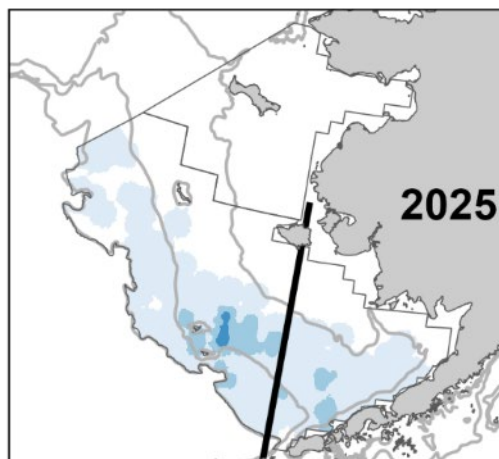
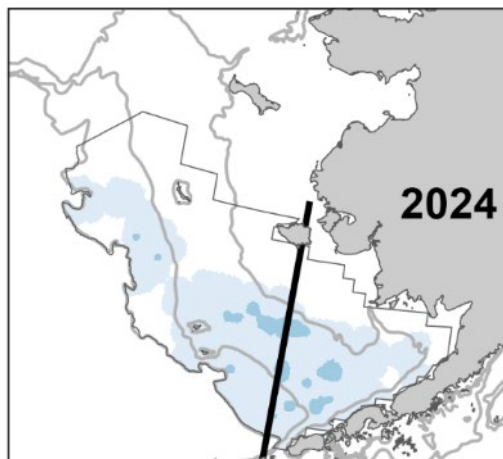
Tanner crab mature females

- Distribution remains near time series average



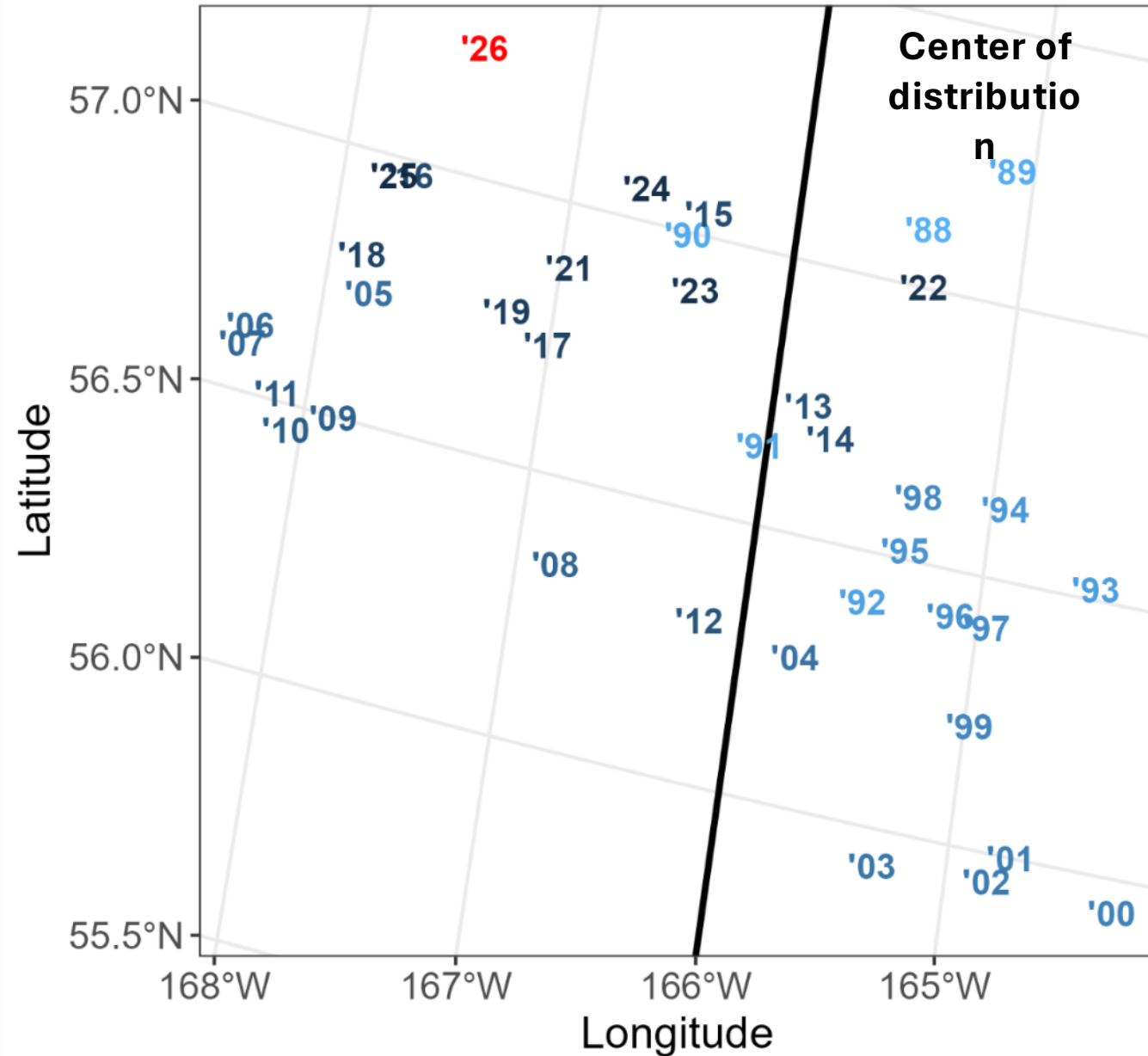
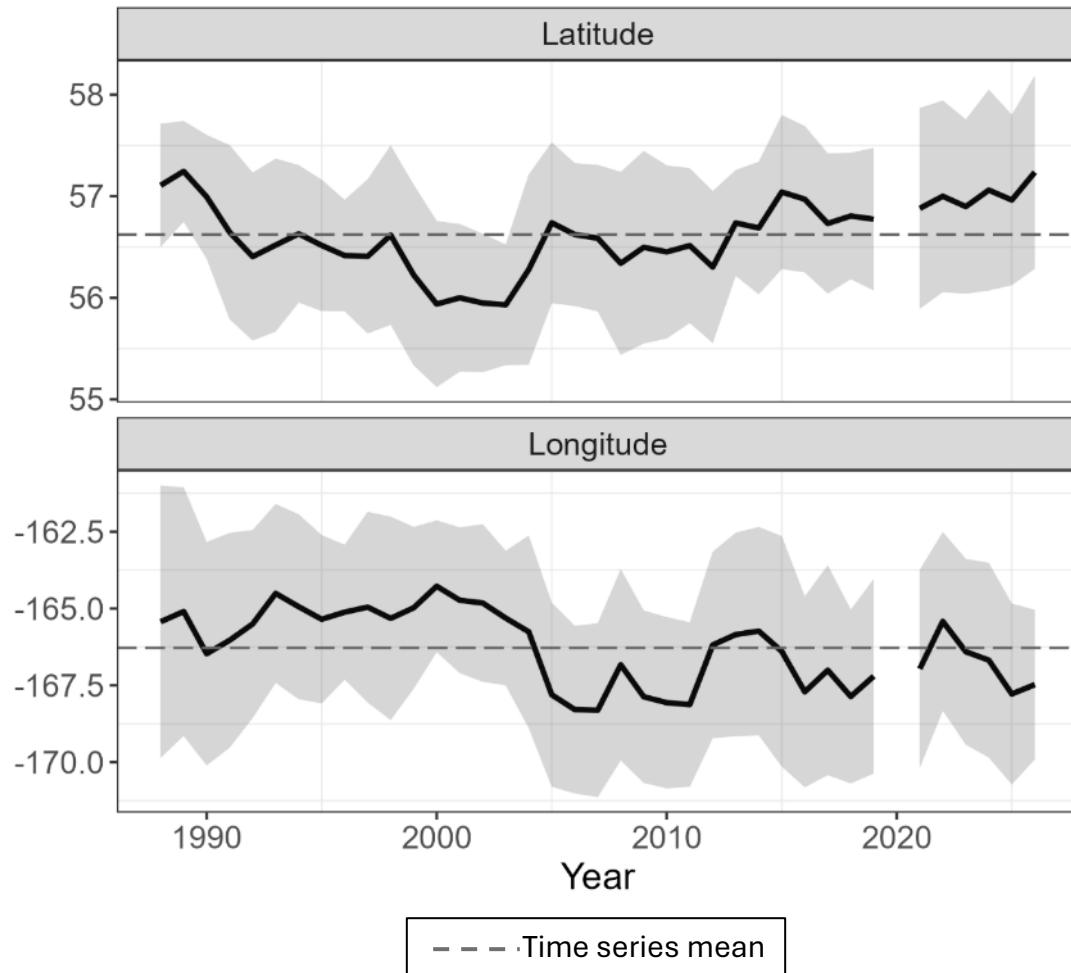
Tanner crab industry preferred males

- Strengthening distribution around and to the northeast of the Pribilof Islands
- Developing hotspot northeast of Unimak



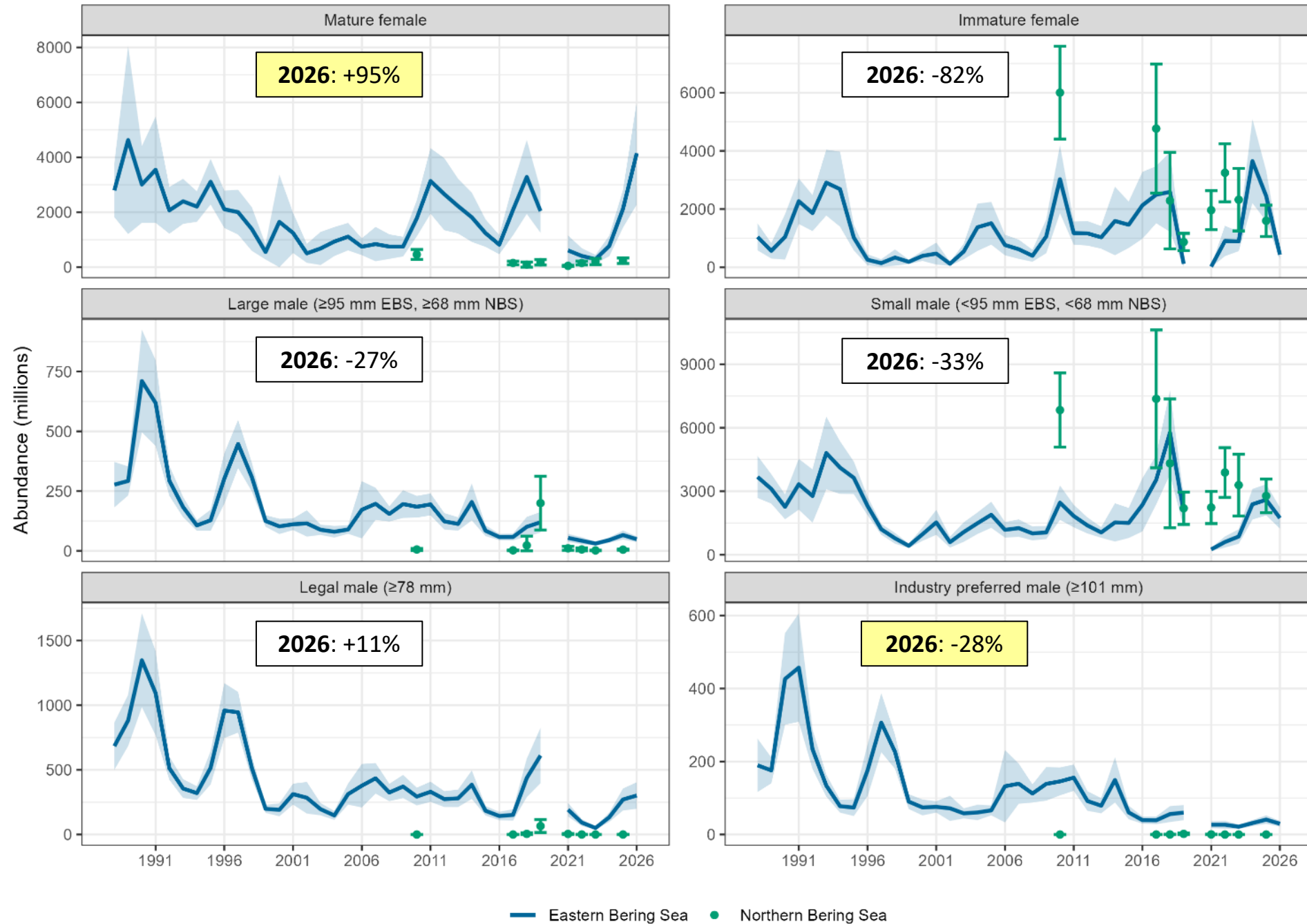
Tanner crab industry preferred males

- Distribution continues to move northward
- Northernmost center of distribution in 2026 since 1989 (both ~57.2°N)



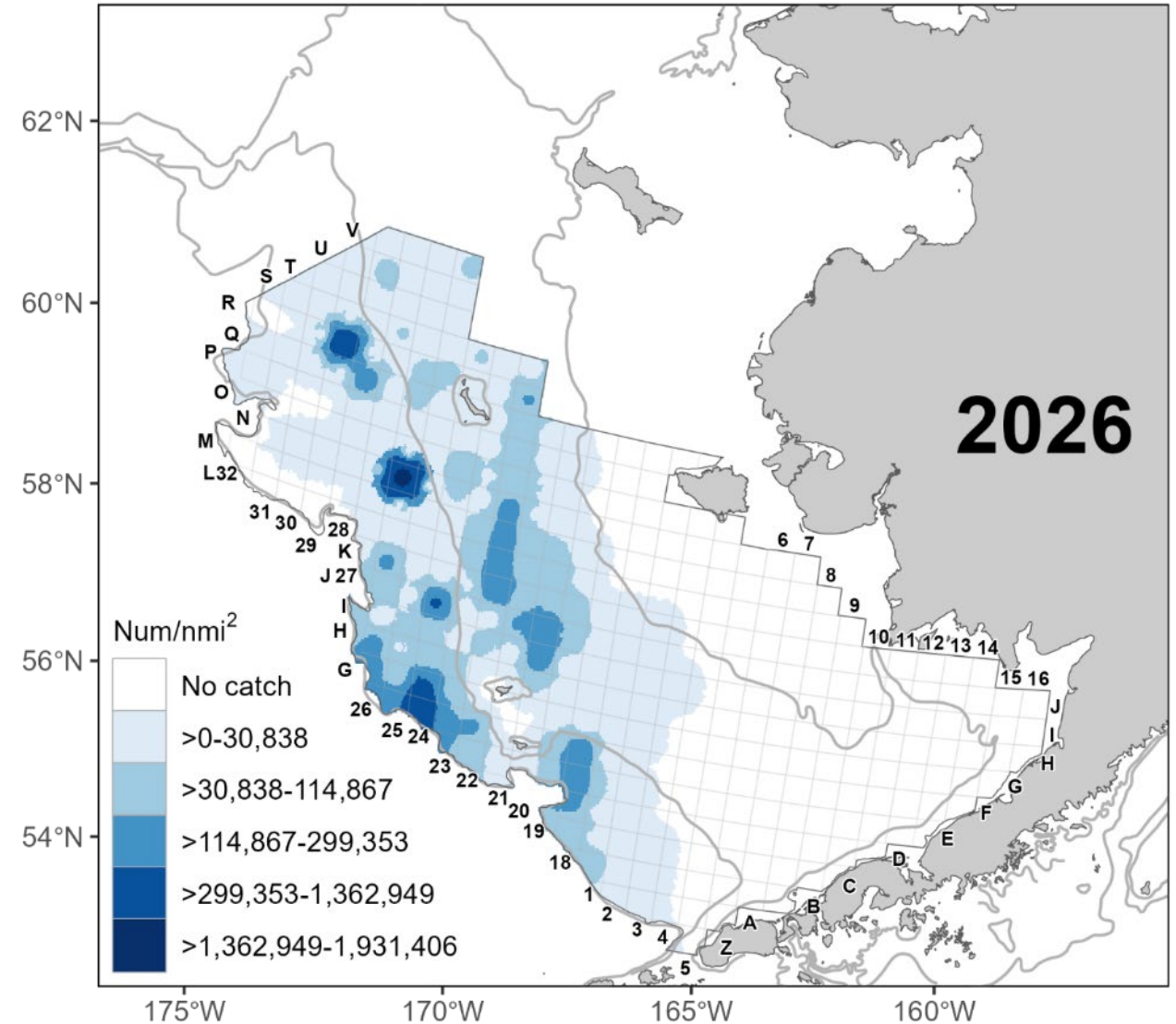
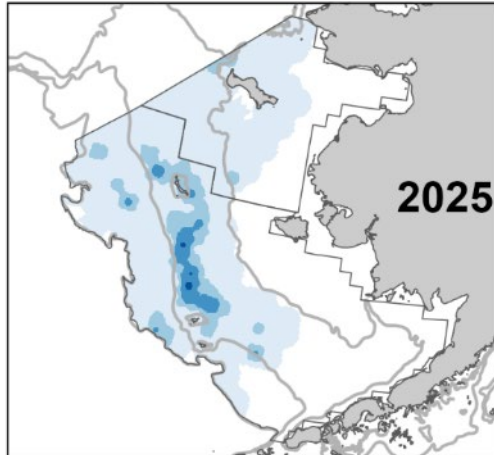
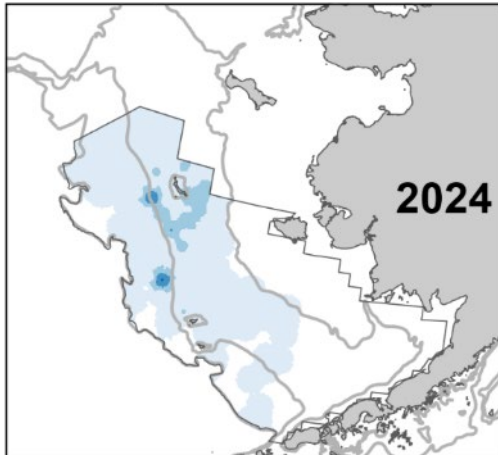
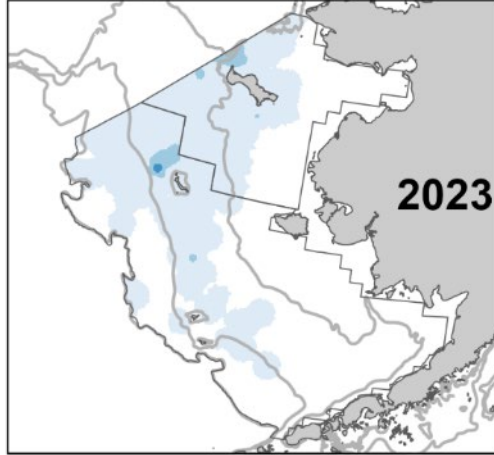
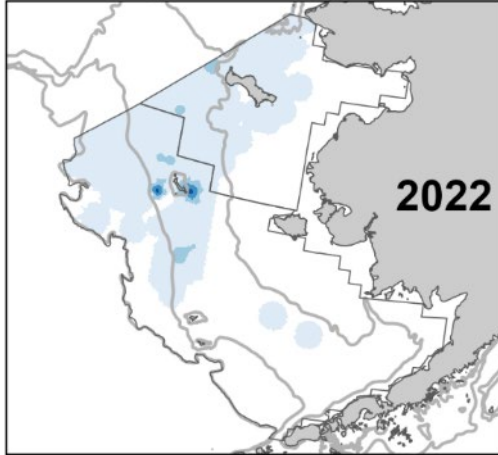
Snow crab

- Mature females at highest abundance since 1989
- Large decline in immature females
- Industry preferred abundance still near time series low



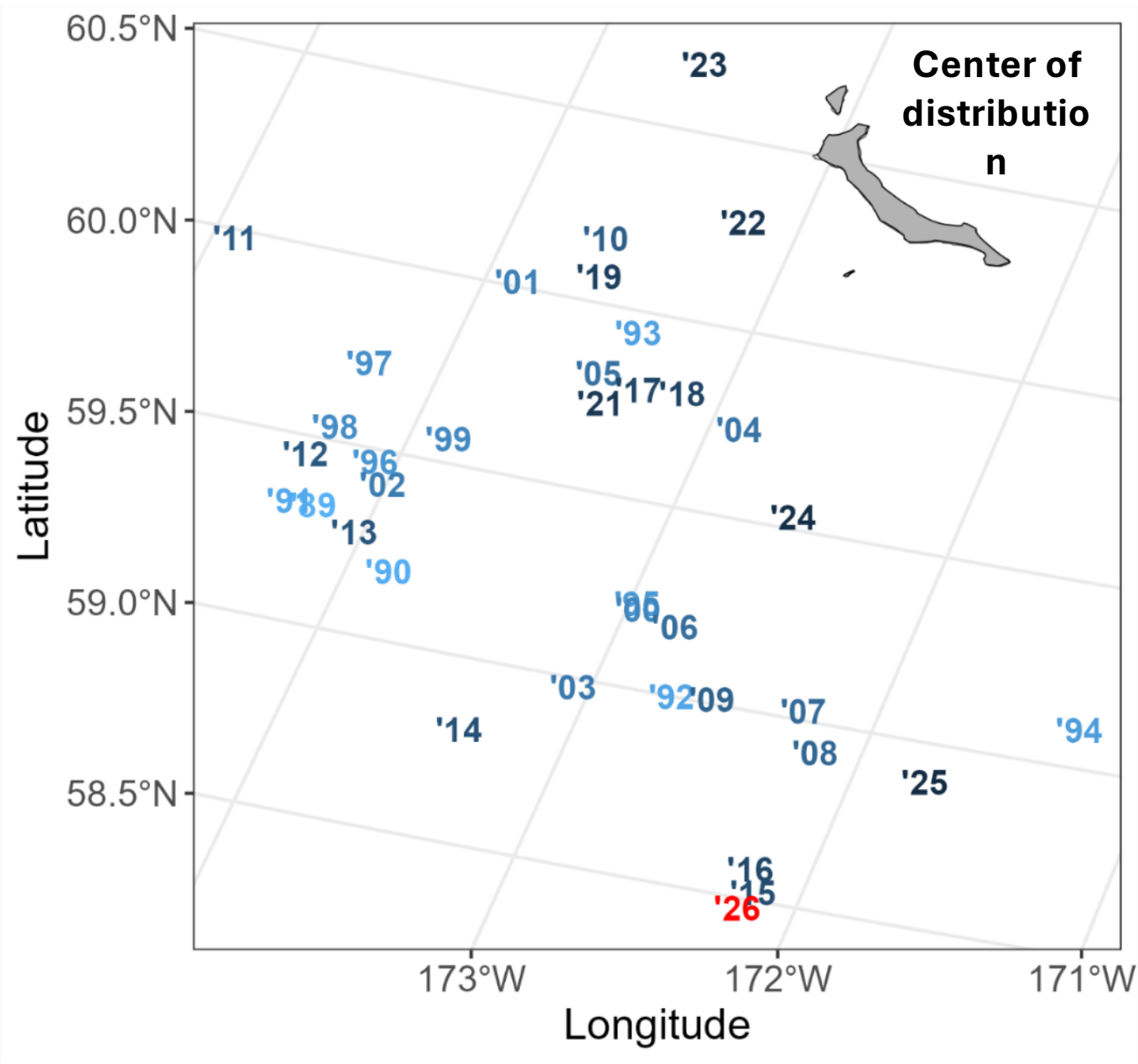
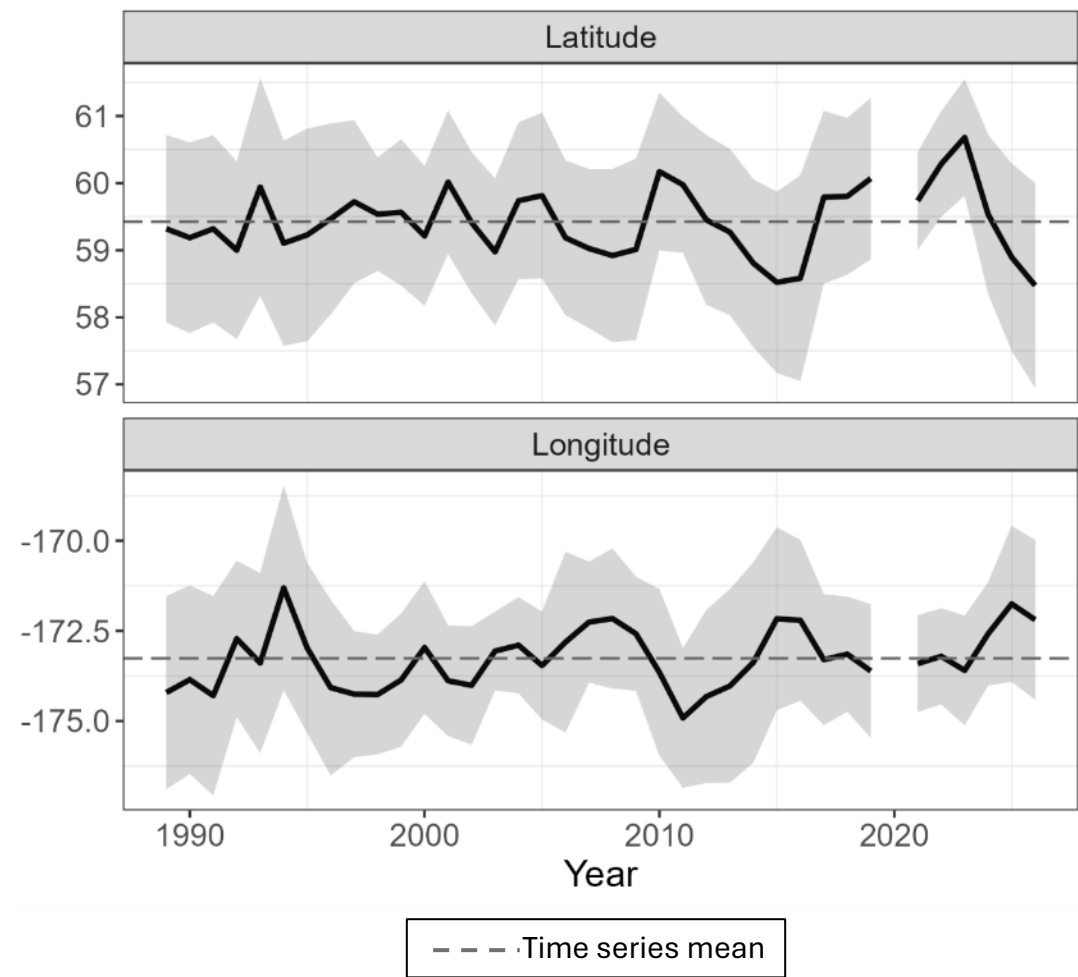
Snow crab mature females

- Multiple areas of increased density in 2026



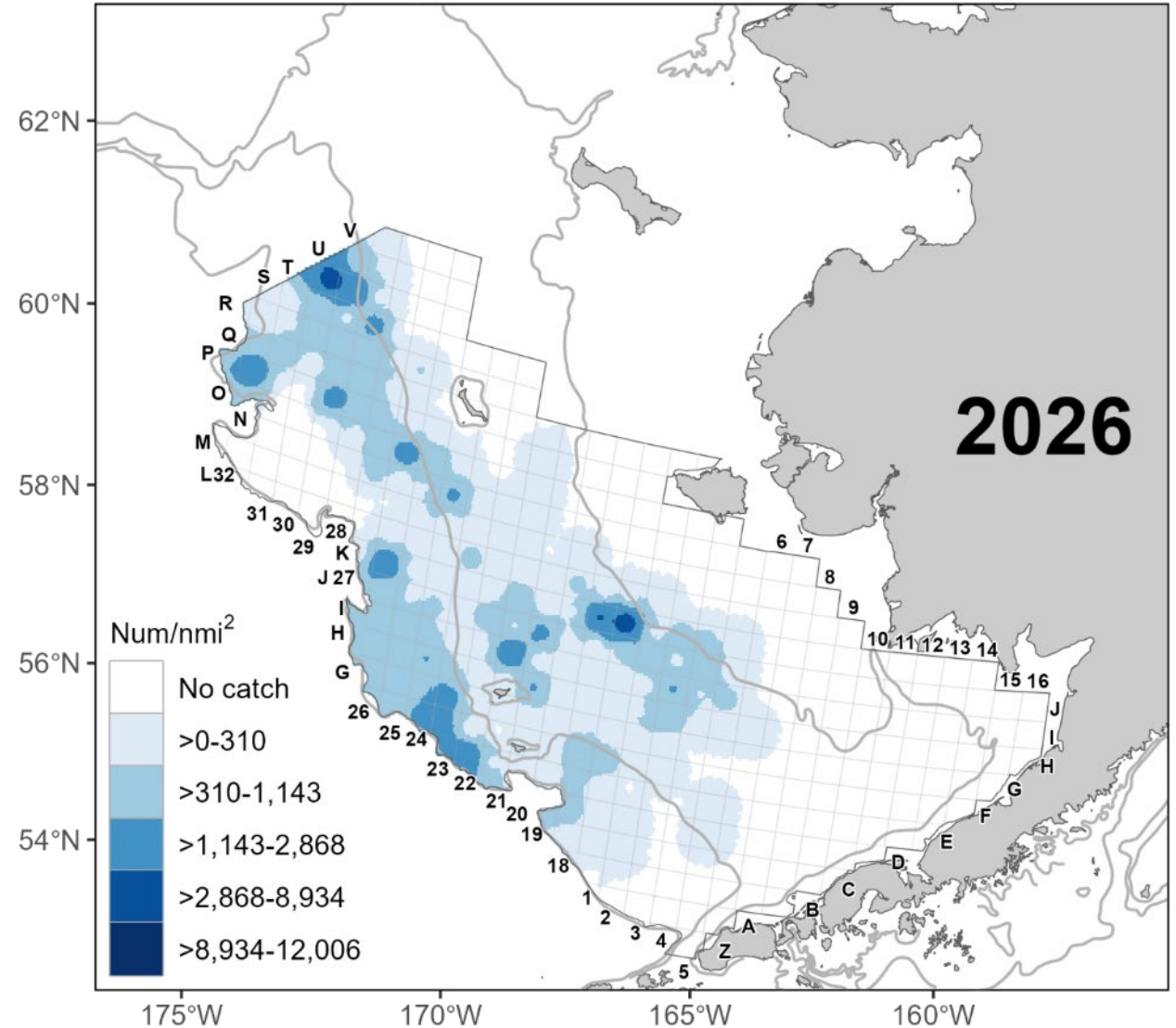
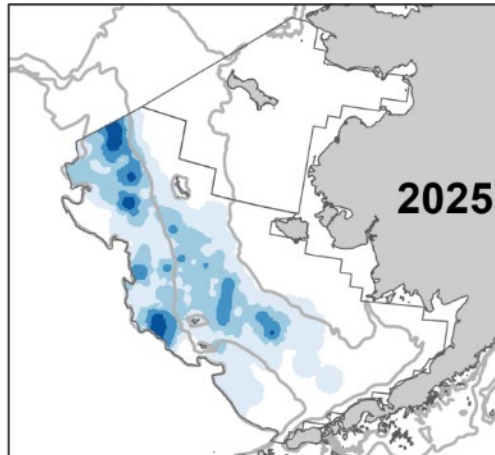
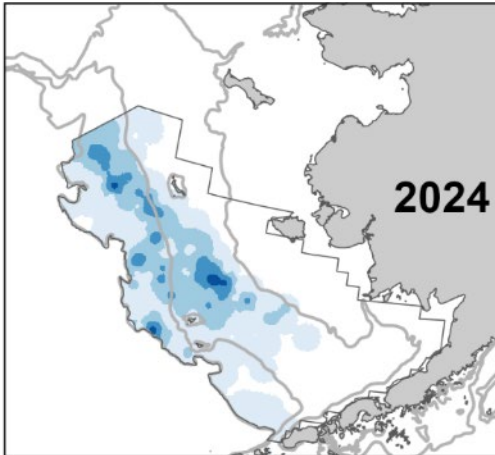
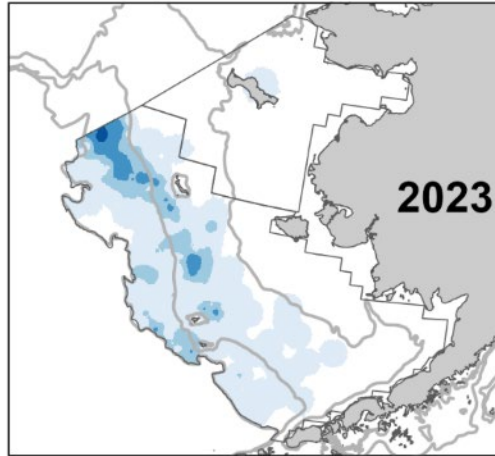
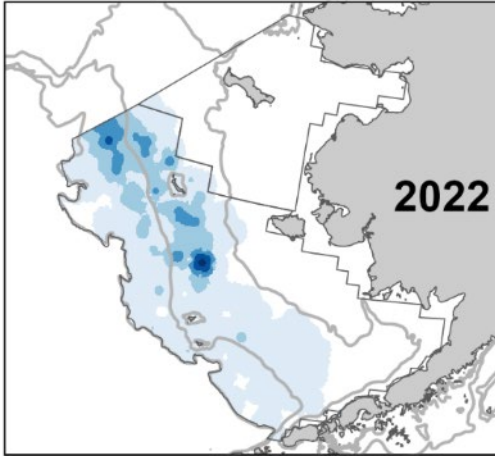
Snow crab mature females

- Distribution continues to move south



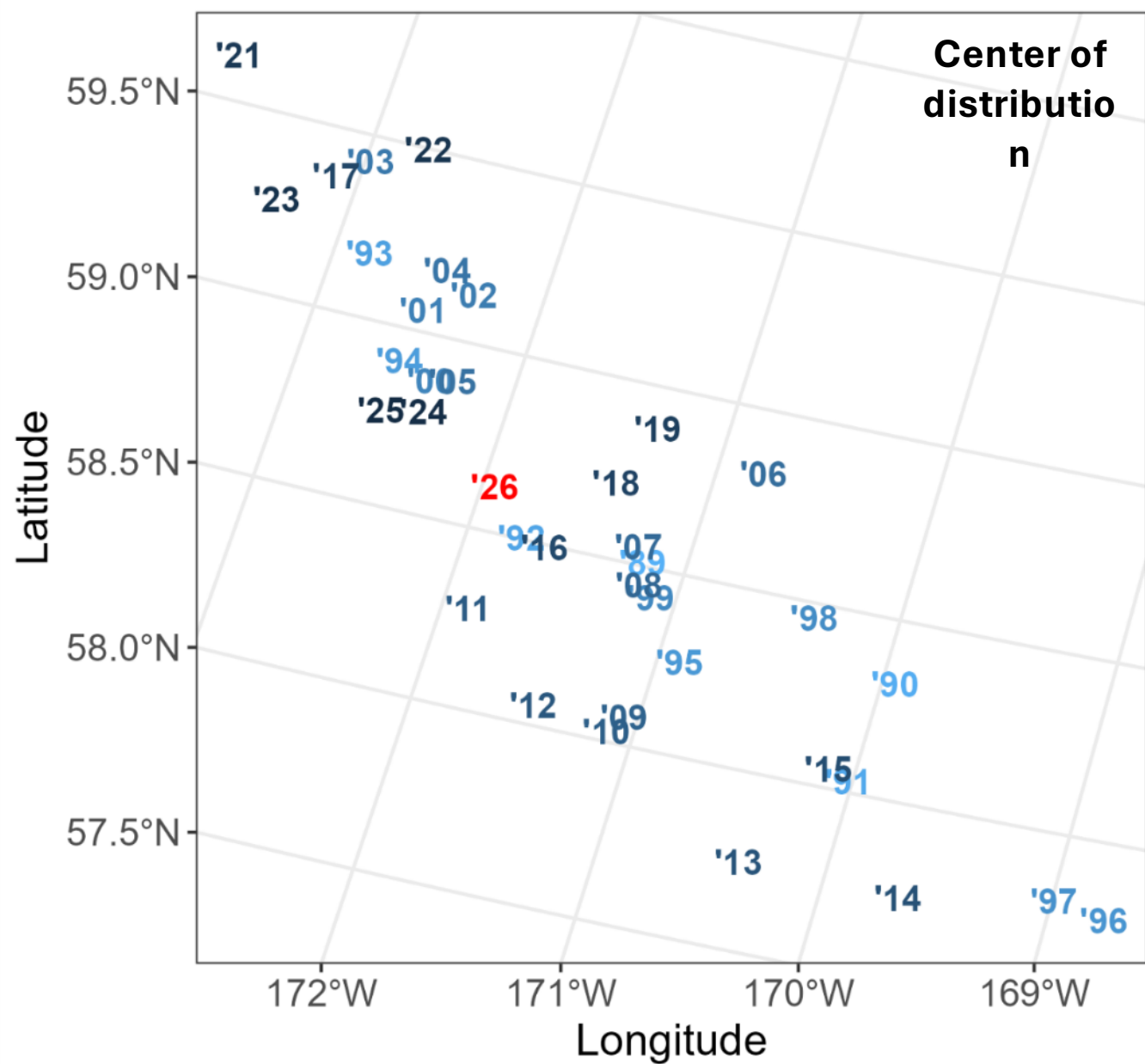
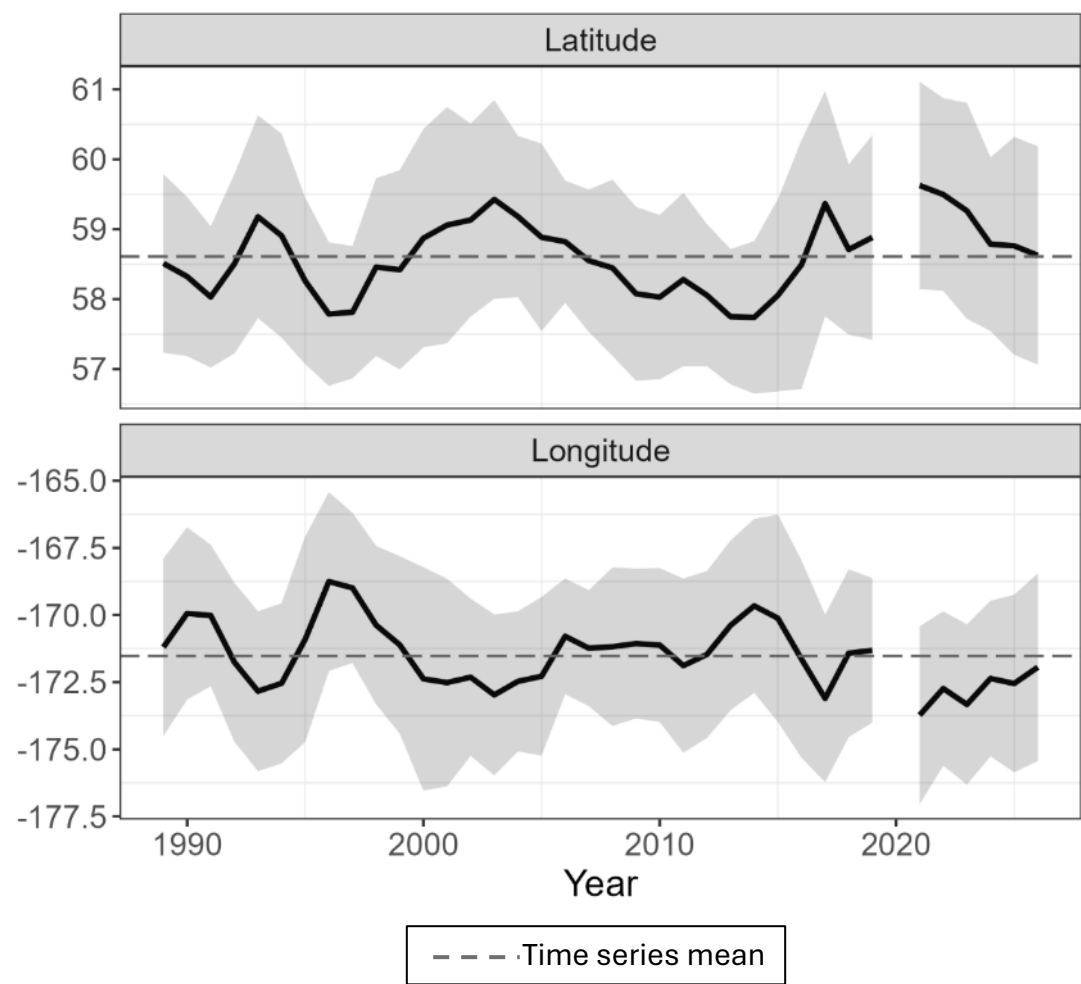
Snow crab industry preferred males

- Distribution continues to be widely distributed across the shelf



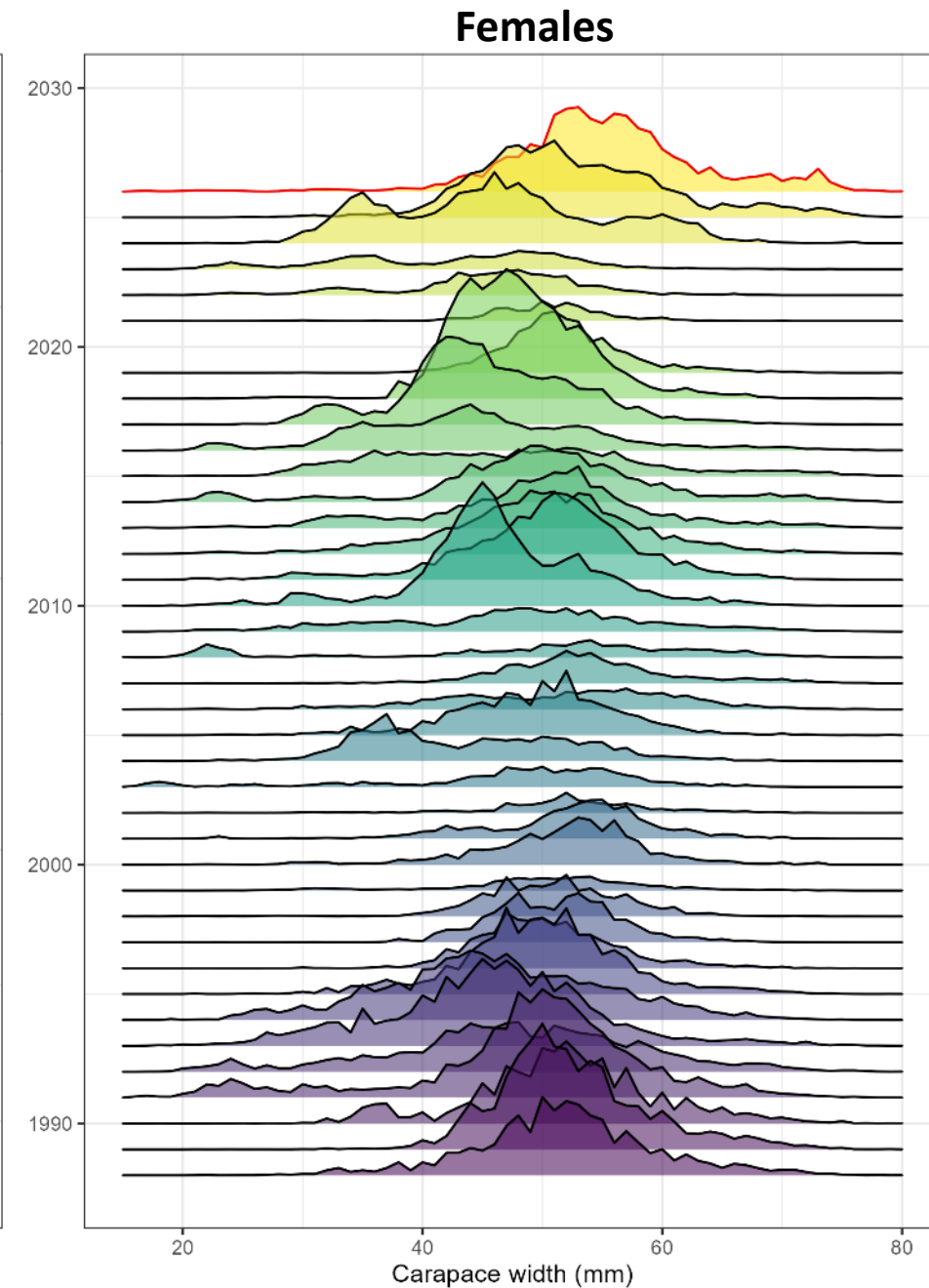
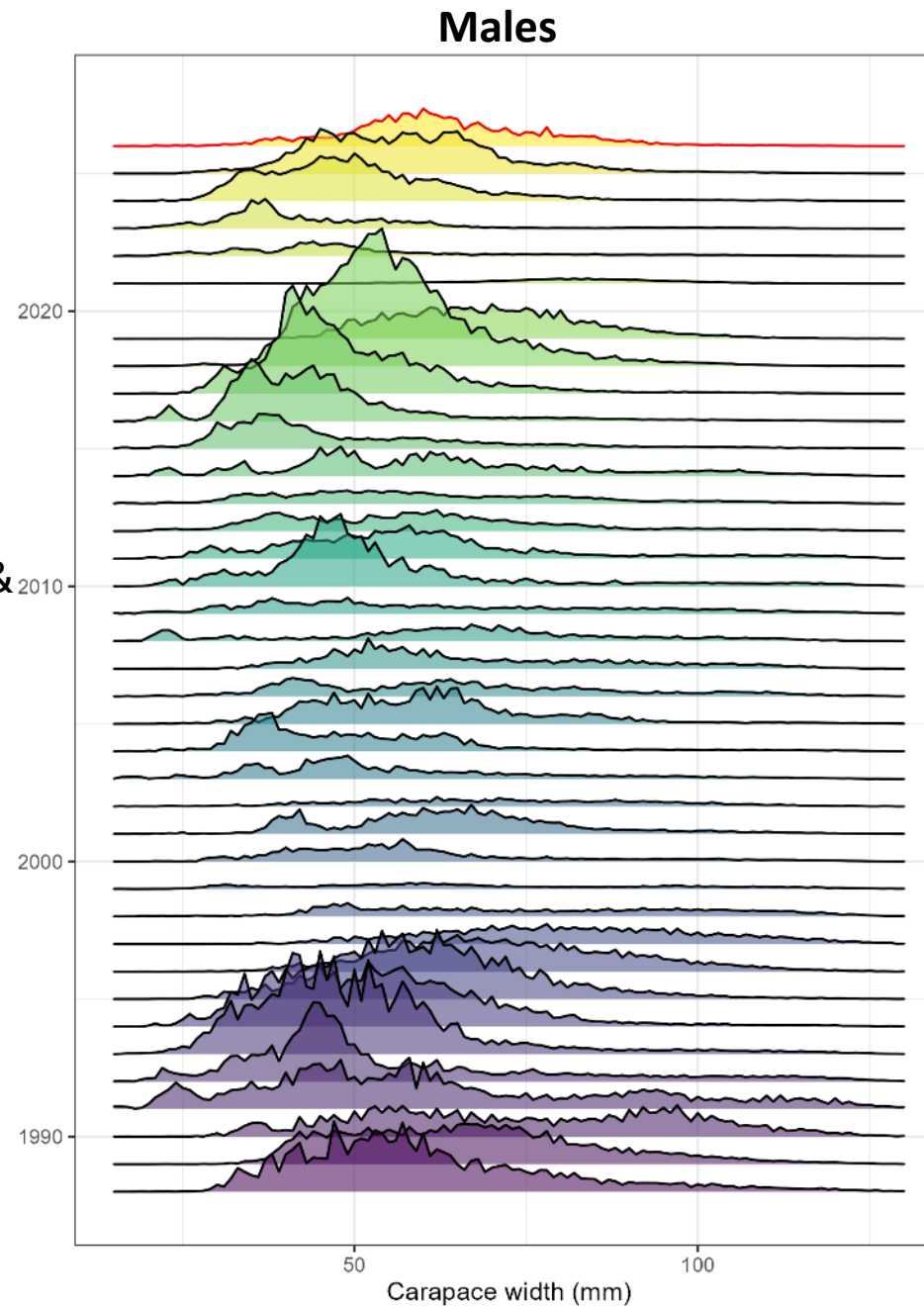
Snow crab industry preferred males

- Distribution near time series average



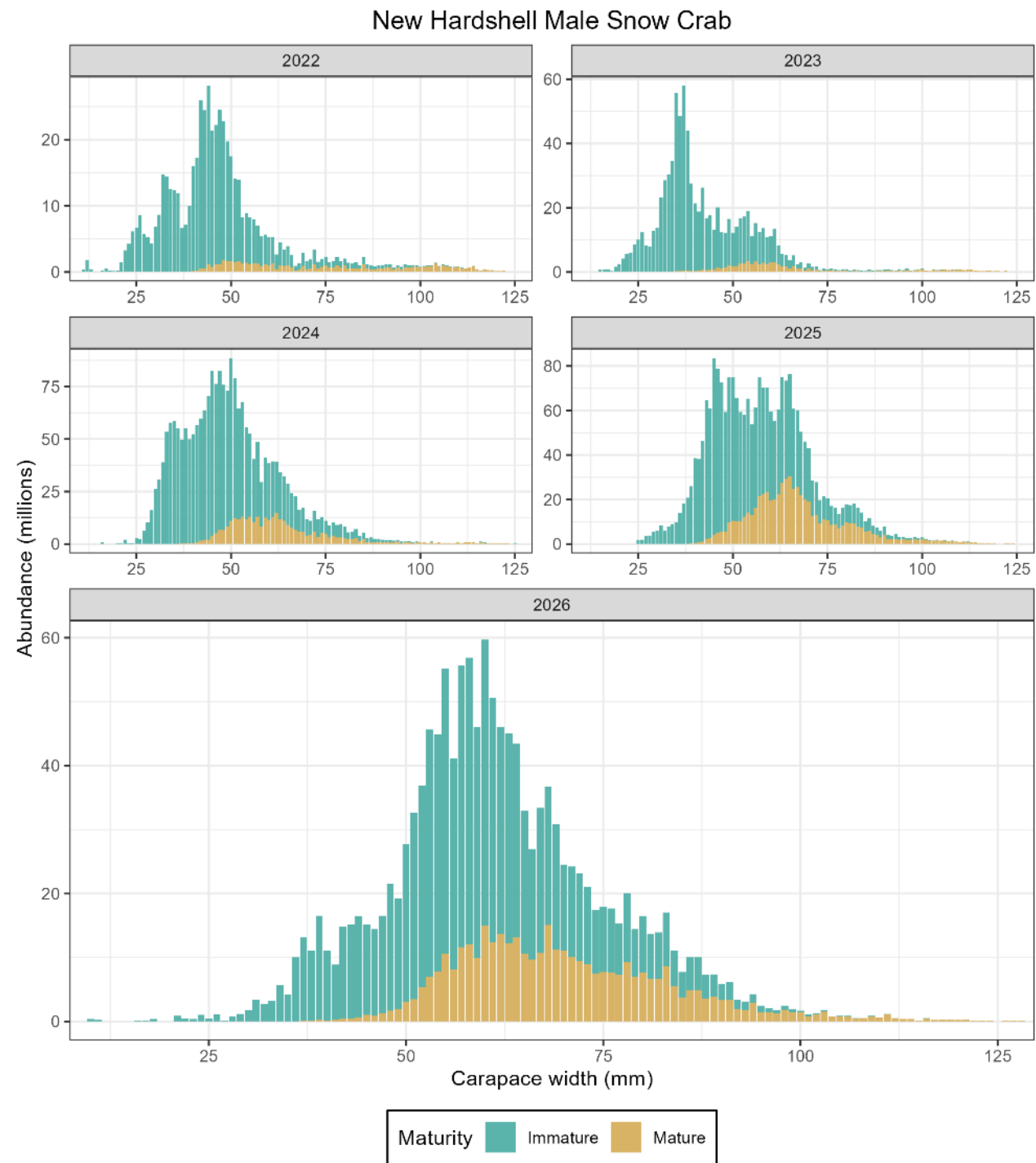
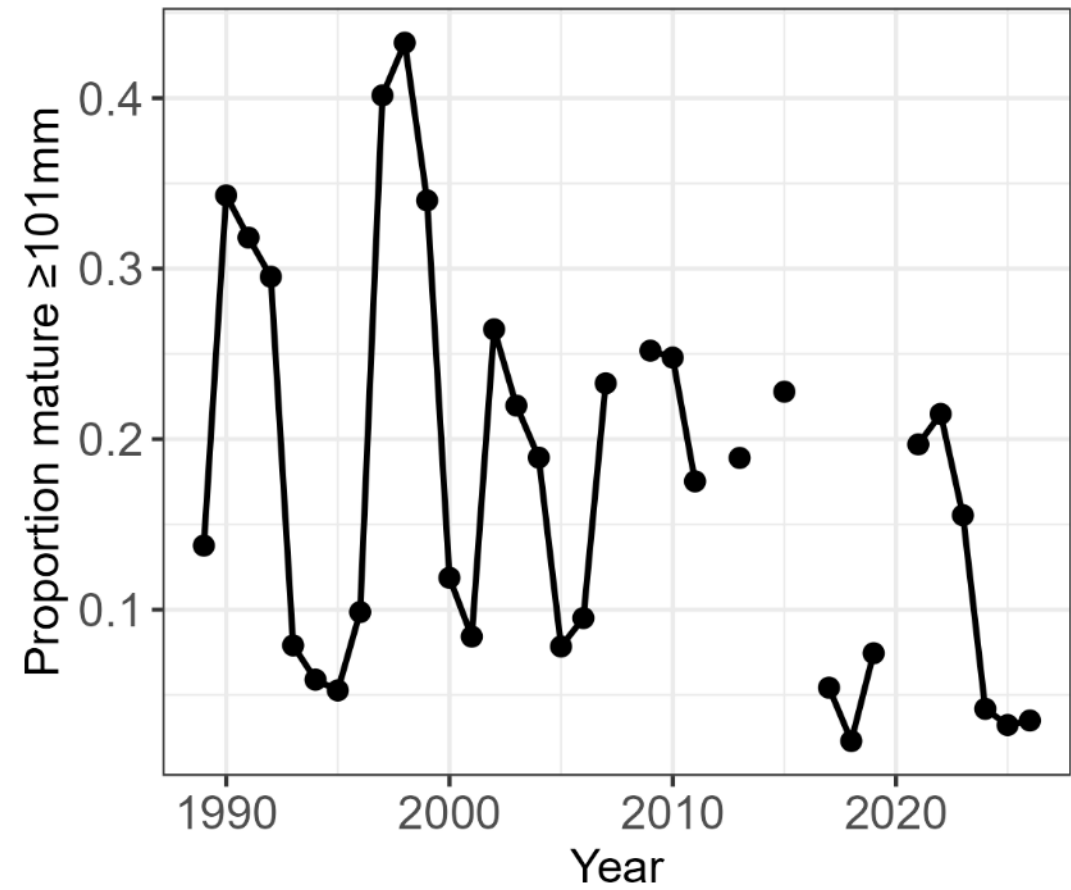
Snow crab

- Very high frequency of mature females in 2026 preceded by record numbers of immature females in 2024
- More females at larger sizes than in 2025
- Low recruitment in 2025 & 2026
- Males are not reaching the same large sizes seen in 1980s/1990s



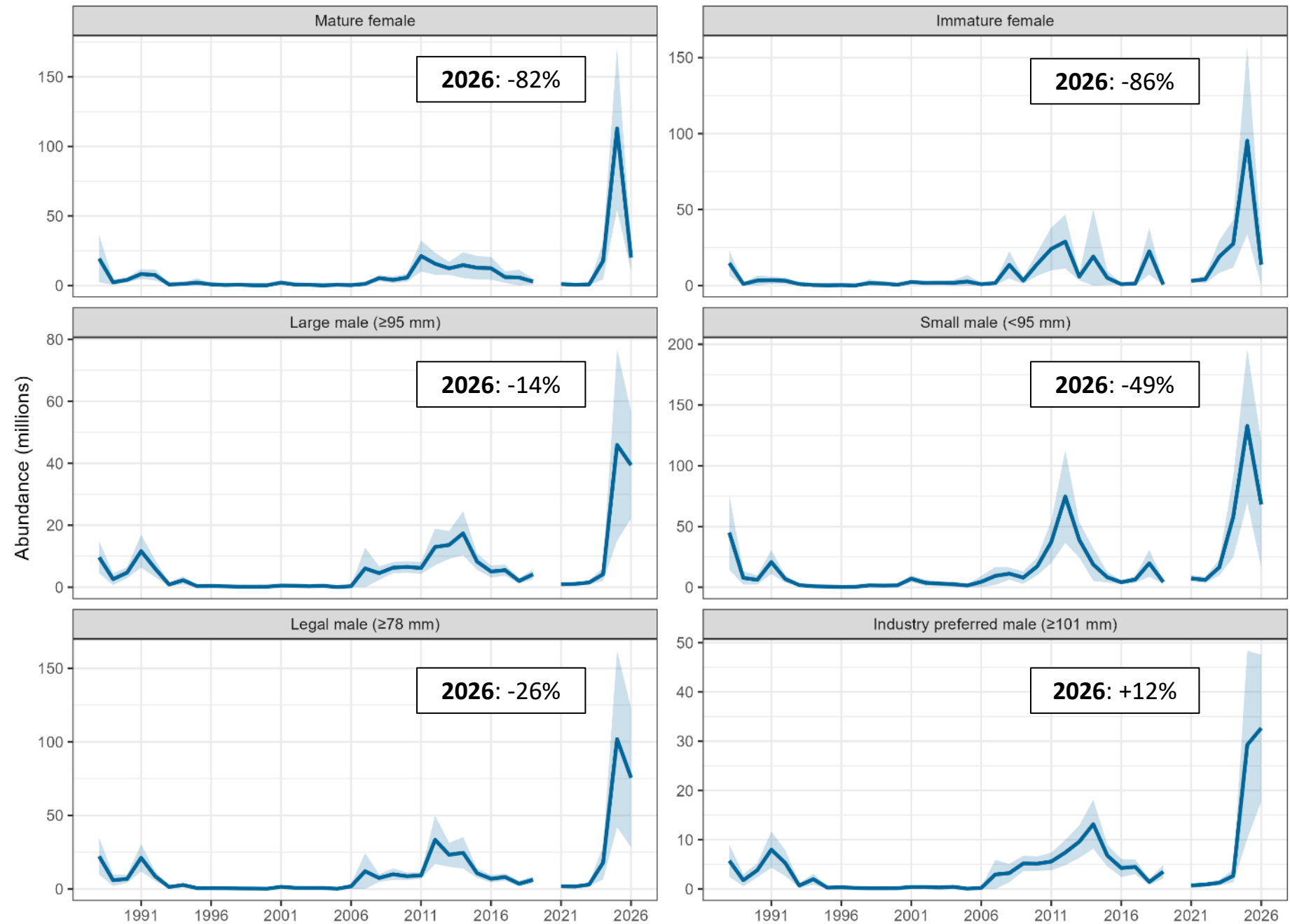
Snow crab males

- In 2026, 96.5% of males that matured were smaller than industry preferred size

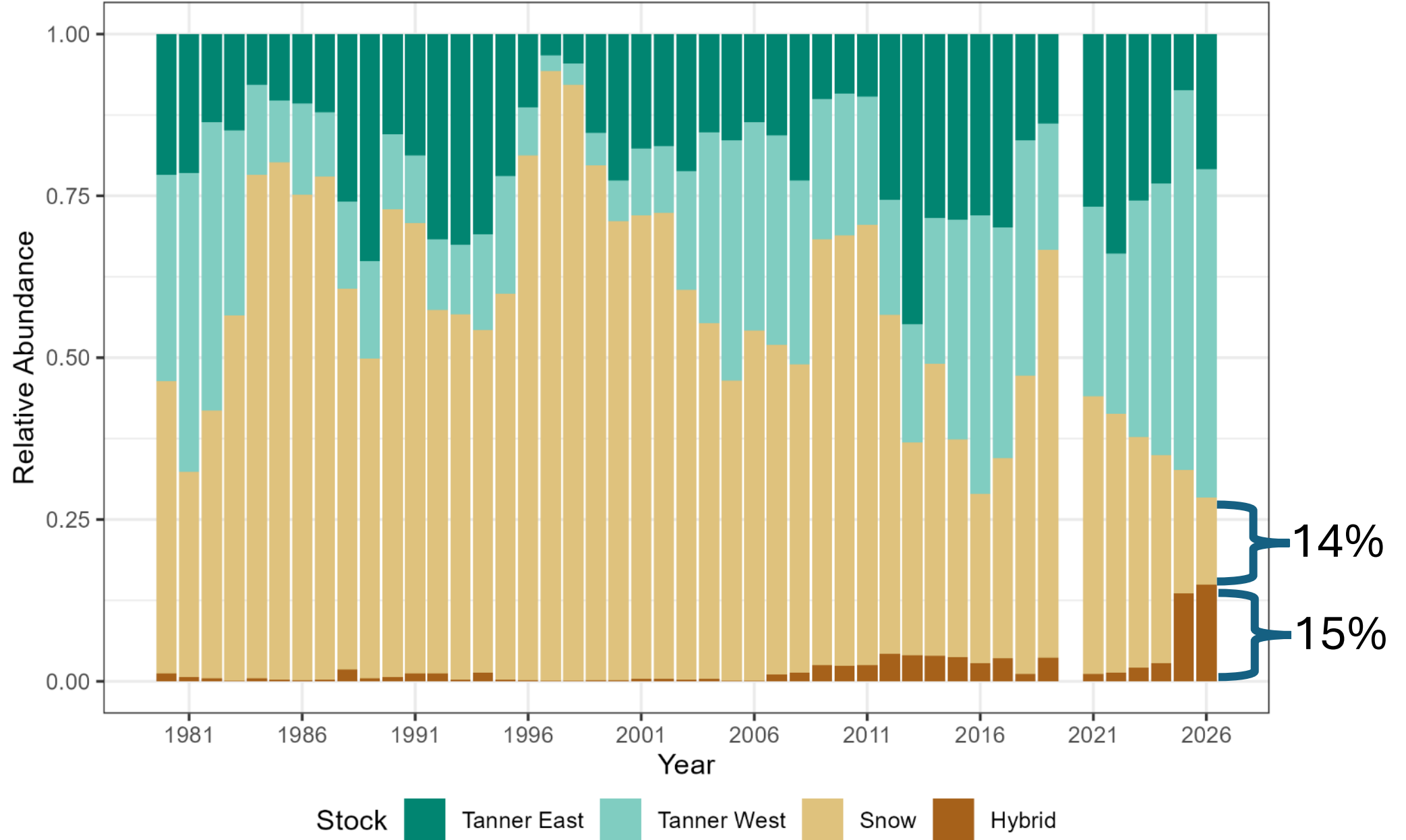


Hybrid crab

- Declines across all categories except industry preferred males
- Large males still at time series highs

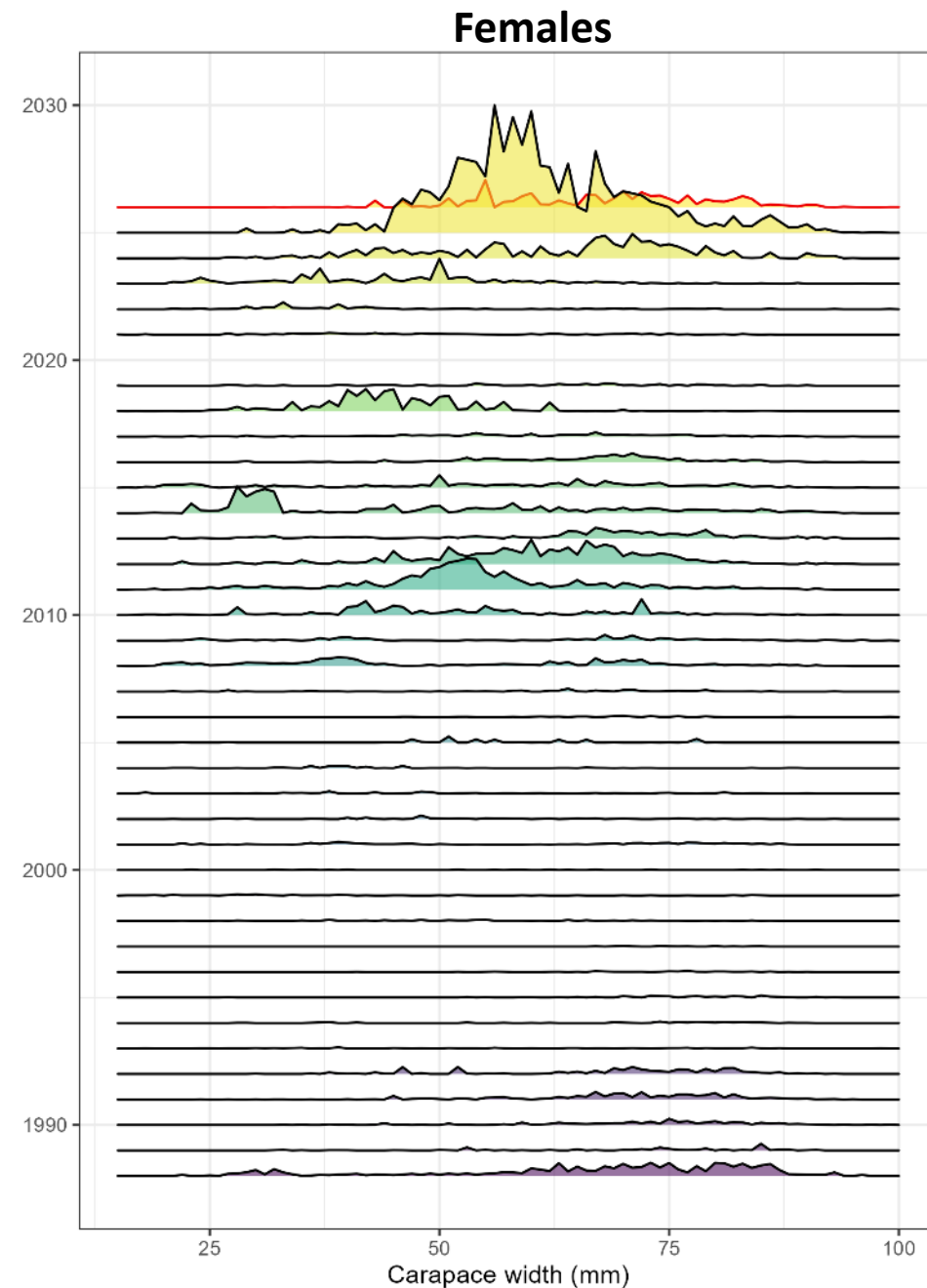
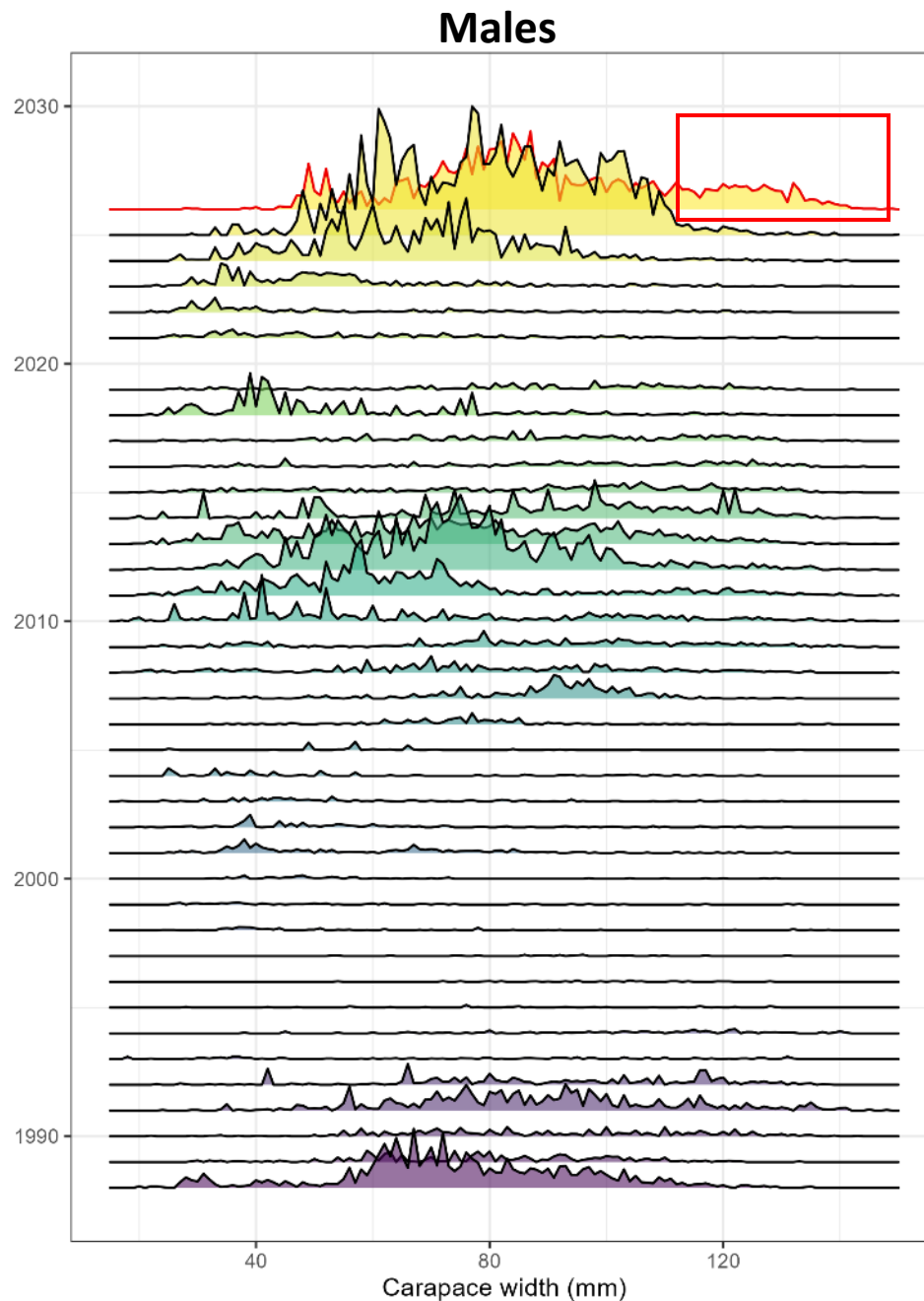


Tanner, snow, and hybrid males ≥ 101 mm



Hybrid crab

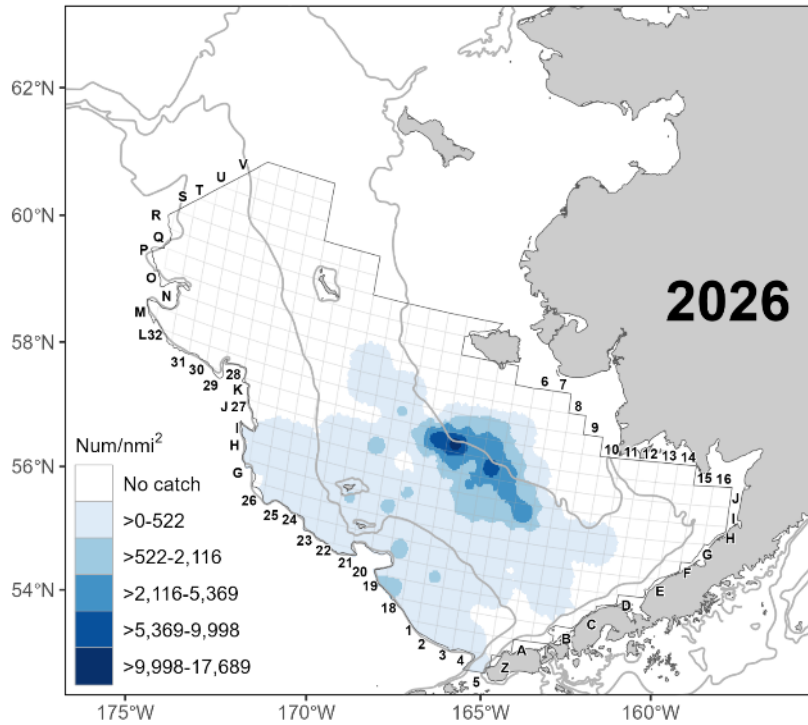
- Between 2025 and 2026 many of the hybrids molted into larger juvenile or mature size classes
- Modest new recruitment into smaller size classes
- Considerable male biomass over 120 mm CW



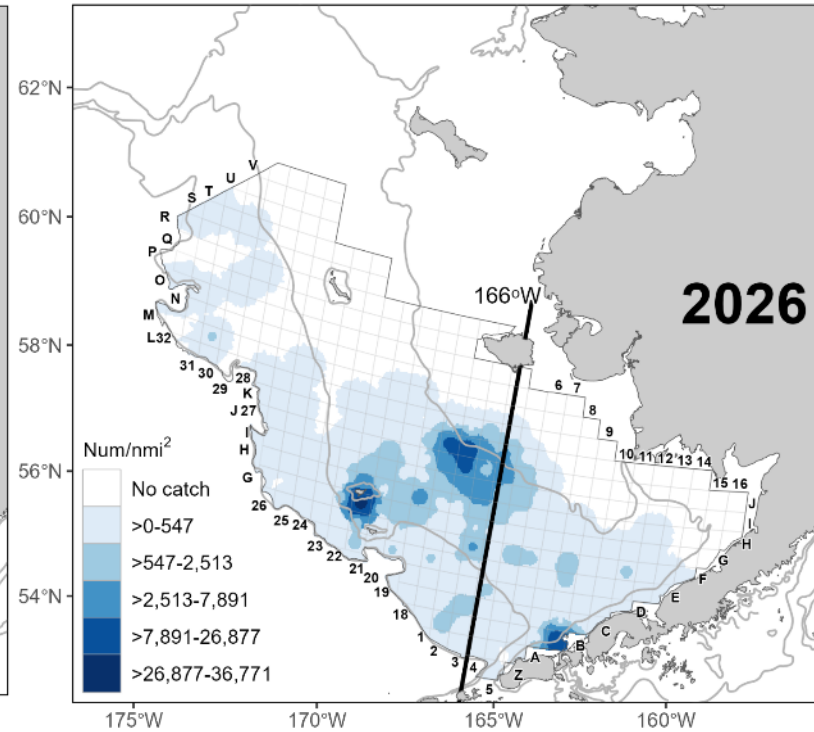
Hybrid crab

Industry-preferred sizes: strongest overlap with Tanner

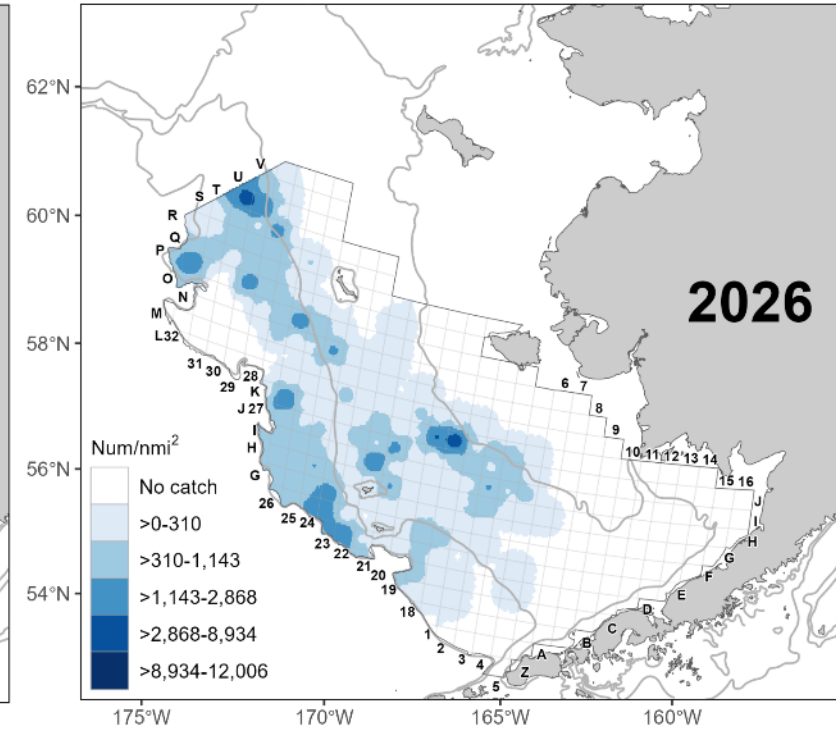
4" male hybrid



5" male Tanner



4" male snow



CPT Survey recommendations/ comments

- 2024-2026 data corrections (updates to trawl net spread values)
 - Bring forward new data in April / May 2027
 - Snow crab has corrected data in current analysis
- Hybrids
 - Will come up again in snow crab discussion
 - CPT encouraged, if possible, chela data collection on male hybrids during the survey
 - May 2026: *"The CPT recommended that hybrids from survey or total catch data streams should not be included in either the snow or Tanner crab assessment models at this time. Instead, the CPT recommends continued tracking of hybrid abundance via the annual NOAA survey tech memo, which is released in the Fall immediately before the September CPT meeting."*
 - Sept 2026: (in snow crab section) *"Research on hybrids, addressing topics including life history, distribution, movement, and genetics, remains a very high priority for the CPT. The CPT noted that, in addition to recommended research avenues, it would be useful to have more information about Federal policy and regulatory pathways to allow for future harvest and management of Chionoecetes hybrids. "*



BRISTOL BAY RED KING CRAB (BBRKC)

FINAL ASSESSMENT 2026



Bristol Bay ESP Overview

Ecosystem Considerations

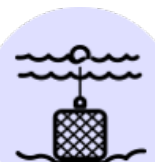
- Bristol Bay average bottom temperature in summer 2026 was the 4th coldest in the 47-year survey time series, resulting in 56% of mature females that had not yet completed the molt-mate cycle by June. Of the females that had successfully molted and mated at the time of survey sampling, **<1% had empty clutches**.
- **Area occupied** by mature males and females in Bristol Bay was **above average** in summer 2026. Contextual indicators that highlight potential spatial distribution shifts across management boundaries and closure areas remain near-average, suggesting that **the population continues to occupy core habitats in Bristol Bay** despite below average summer bottom temperatures that have historically aggregated crab closer to the Alaska Peninsula.
- Spring bottom water **pH increased** from 2025 to 2026 to a near-average value. However, this indicator has been declining for the past three decades and continued declines to pH levels of 7.8 could negatively affect Bristol Bay red king crab survival.

Socioeconomic Considerations

- **Total effort** (# of vessels and total pot lifts) in the 2025/26 BBRKC fishery increased relative to the past season but remains **below the post-rationalization average**.
- **Fishery CPUE declined slightly** this season but remains above the 30-year average of legal crab per pot lift.
- Results from the ABSC Skipper Survey are consistent with **high fishery CPUE**, an **increase in perceived abundance**, and **no notable changes in fleet behavior**. 81% of captains reported a >10% increase in perceived abundance of legal males relative to the previous season.



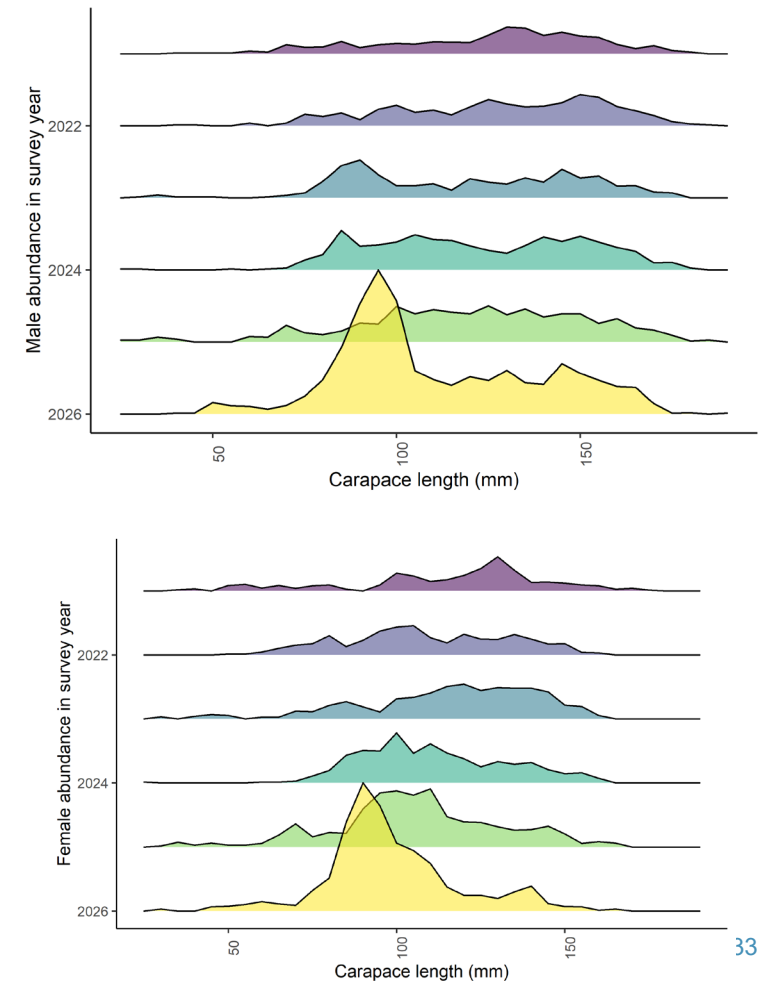
Contextual



Fishery
Informed

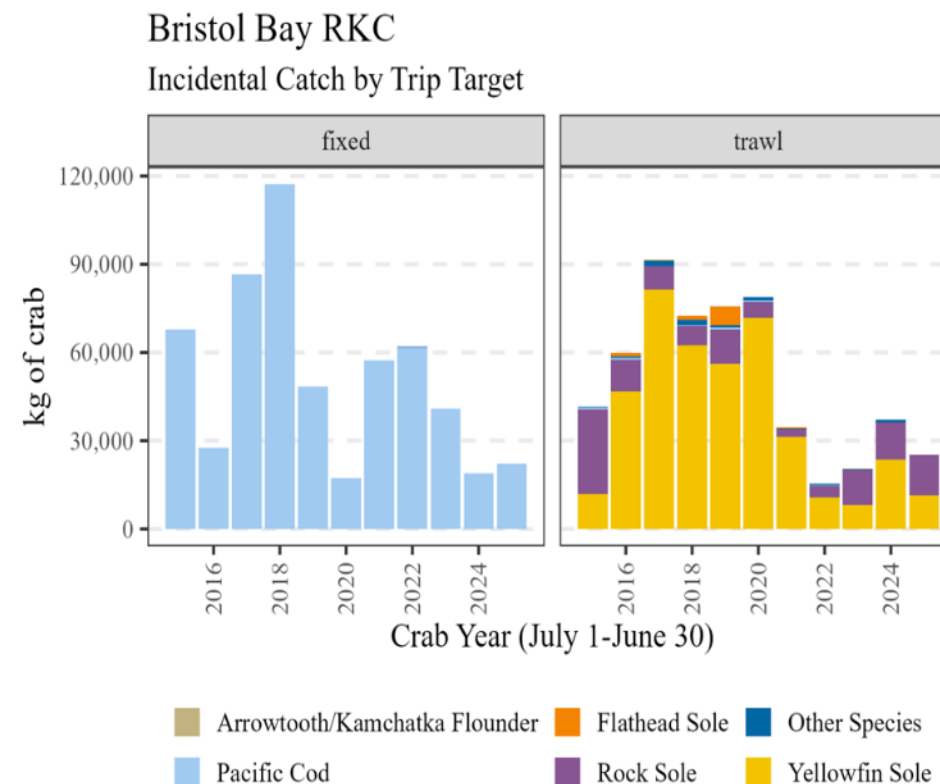
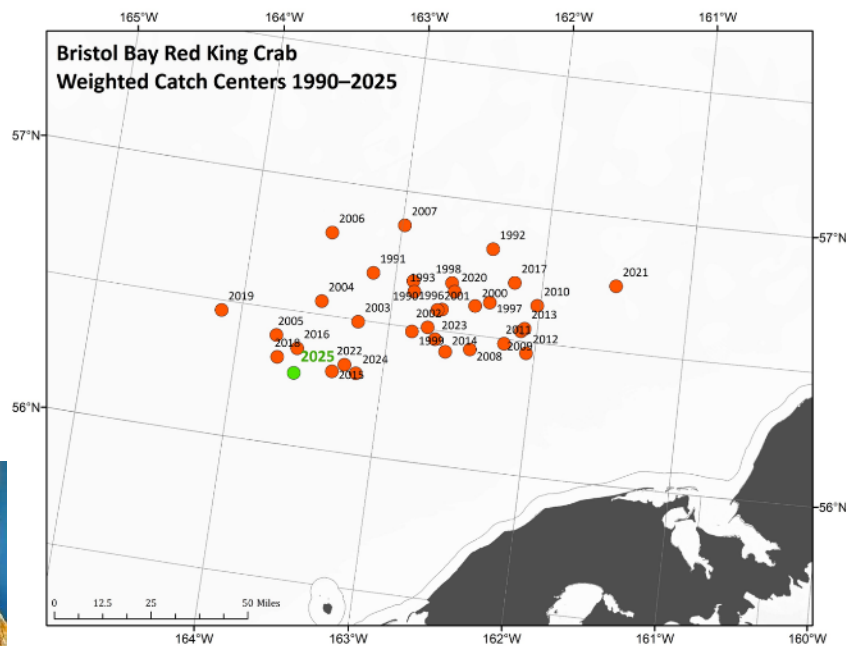
BBRKC overview

- **Tier 3 annual stock assessment, GMACS assessment** framework since 2018
- Mature male biomass increased from 2025, still low compared to long term average
- Directed fishery was open in 2025/26, CPUE (crab/pot) was similar to the previous season
- Estimated mature female biomass is higher than recent years but still lower than it's been since the mid-90s. Mature females meet State of Alaska thresholds harvest strategy thresholds (8.4 million).
- Potential recruitment event? "hot spot" tow, look for confirmation in future years
- Low recruitment in recent years (last 8-12 years), projected decline in biomass without a large recruitment event



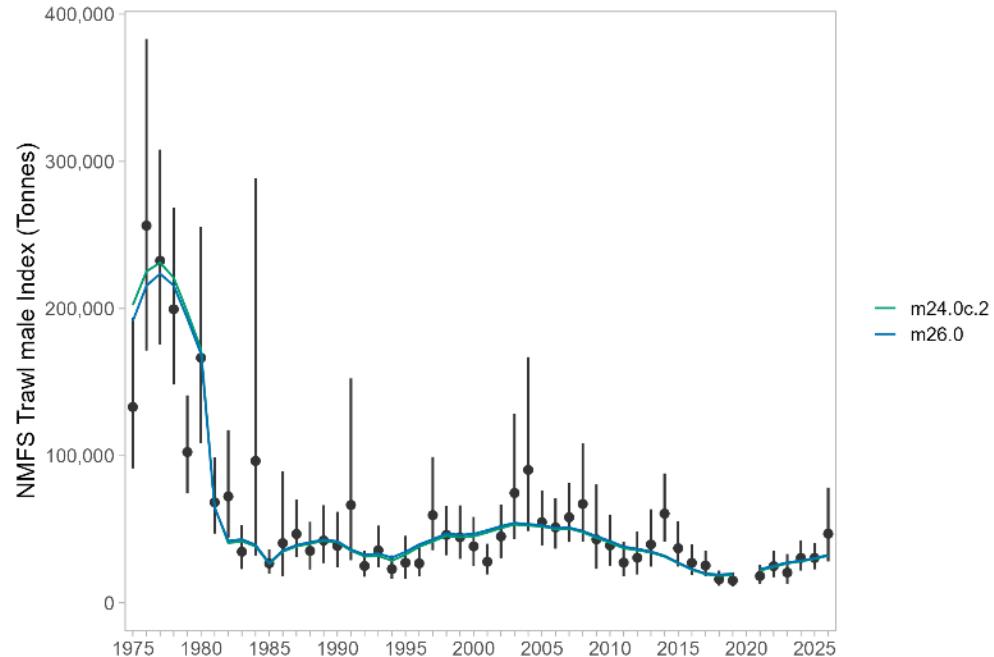
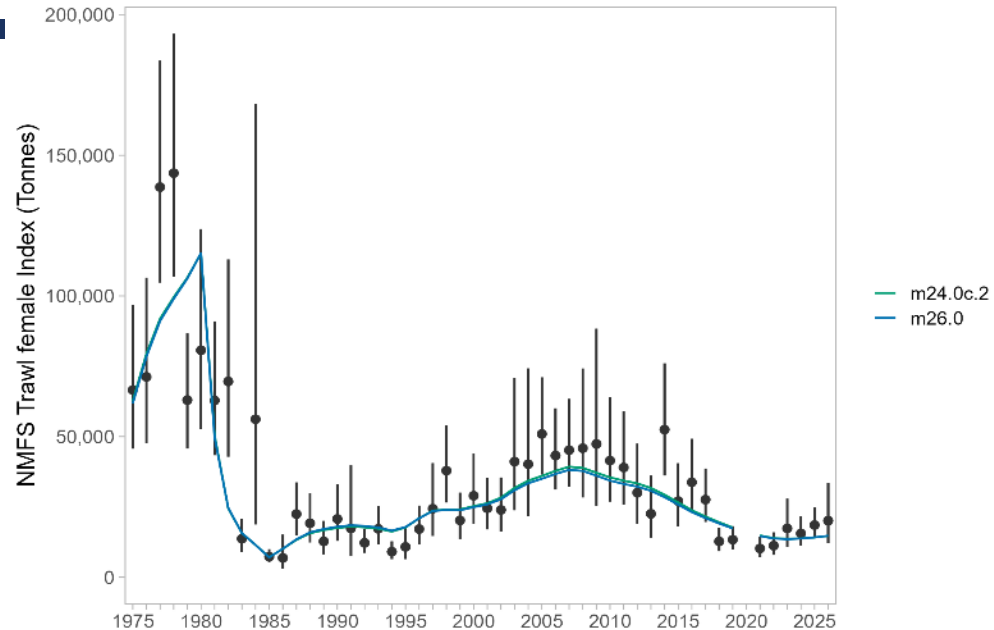
Fishery overview – directed and incidental

- Retained catch was near TAC at 2.72 million lbs, mostly taken in first two weeks
- Weighted catch center of fishery average area
- CPUE similar to previous year (~29 crab/pot)



Taken from fishery updates presentation to CPT – see e-agenda





■ GMACS bridging to v2.20.44

- Bridging similar but not identical due to update in GMACS size composition data fit in non-directed fleet

■ Models evaluated:

- Model 24.0c.2 – 2025 accepted model, includes new GMACS version and new year of data
- Model 26.0 – 24.0c.2 with additional size bins for males and females
- Females are stable in modeled survey estimate (top), despite survey increase
- Males had an increase in modeled survey (bottom) and trawl survey results



- ✓ MMB slowly trending up
- ✓ Potential recruitment event coming through?
- ✓ Model 26.0 improves size comp “build up” of plus group

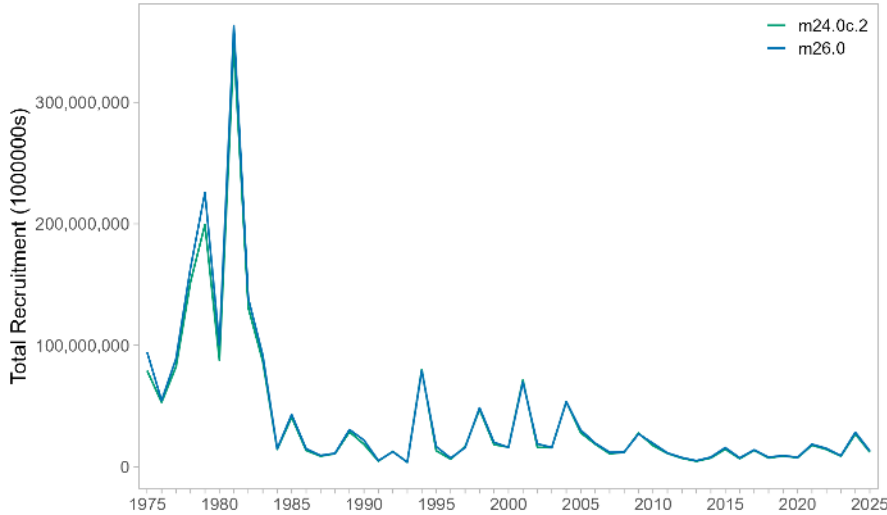
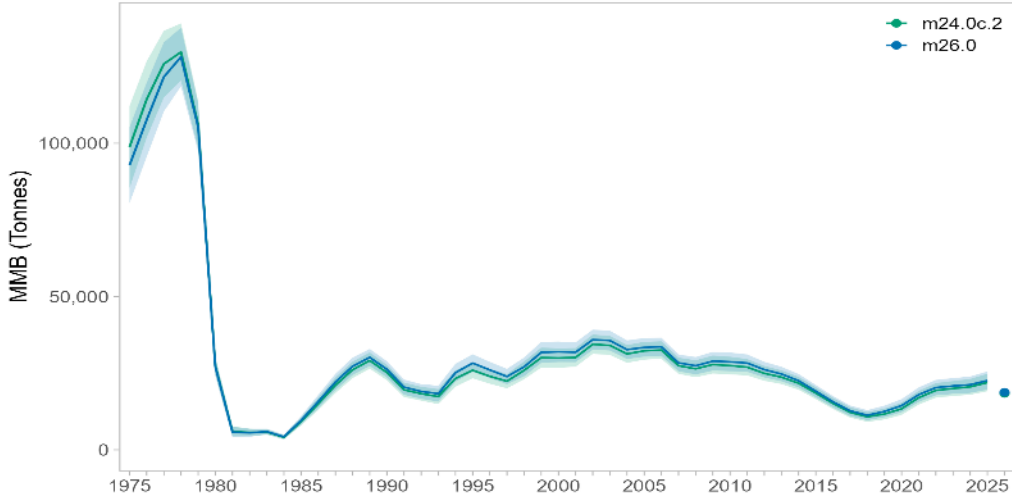
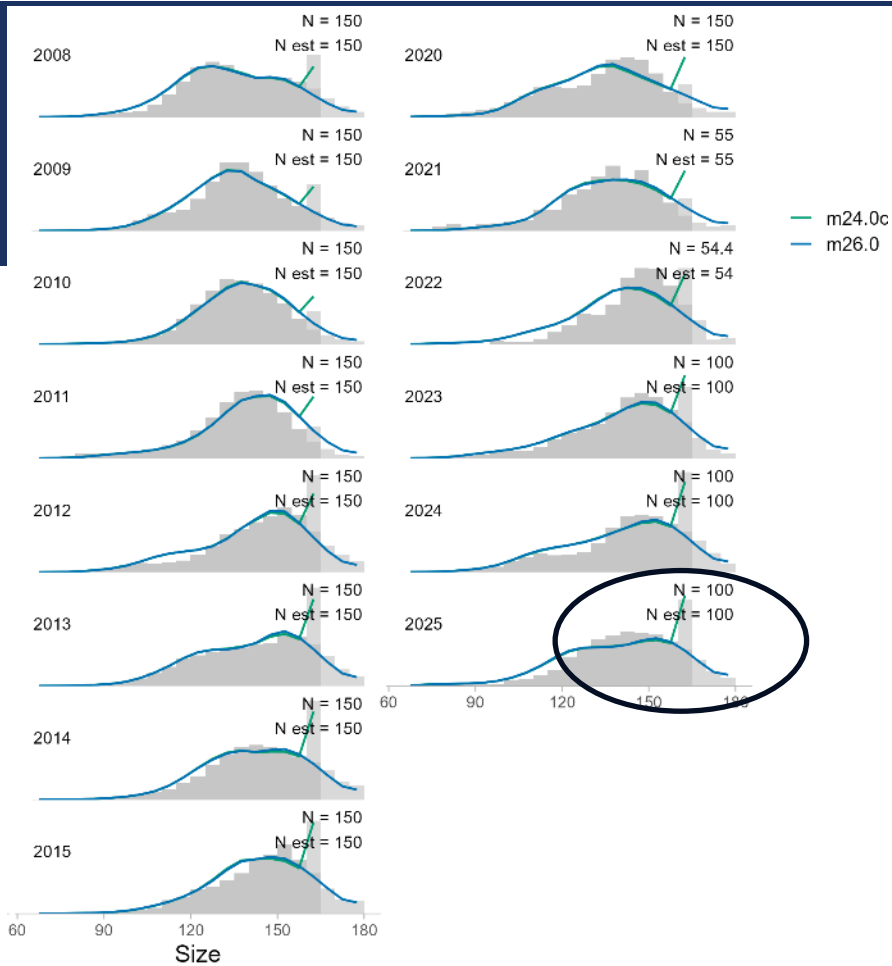


Table 1: Status and catch specifications (1000 t) for the CPT recommended model (26.0).

Year	MSST	Biomass (MMB_{mating})	TAC	Retained Catch	Total Catch	OFL	ABC
2022/23	9.68	18.34	0	0.02	0.11	3.04	2.43
2023/24	9.35	18.65	0.975	0.96	1.34	4.42	3.54
2024/25	9.26	19.74	1.05	1.05	1.20	5.02	4.02
2025/26	9.61	22.6	1.22	1.22	1.48	5.85	4.68
2026/27		18.77				7.13	5.7

CPT recommendation: Model 26.0, ABC buffer 20%

Author recommended 26.0

Total catch mortality (directed + bycatch) < OFL therefore overfishing did not occur in 2025/26

Buffer considerations:

- Recommend staying with 20%(no large changes or improvements in uncertainty)
- Ecosystem considerations from ESP – wind stress and corrosive bottom water
- Non-stationarity in recruitment expectations (not incorporated in the model since model expects recruitment events using 1984 to 2024)
- Retrospective pattern in MMB



Table 2: Risk Table category summary for BBRKC

Assessment-related Considerations	Population Dynamics Considerations	Ecosystem Considerations	Fishery-informed Stock Considerations
- Retrospective pattern in MMB (high Mohn's rho) - Stable GMACS reference model since 2018 - Historic natural mortality event (early 80s)	- Potential shifting spatial distributions - Weak to no stock-recruit relationship - Low levels of abundance compared to historic levels (shifting baseline, non-stationarity)		
Level: 1 Normal	Level: 1 Normal	Level: 1 Normal	Level: 1 Normal
- Female size composition data skewed due to late molt mate cycle.	- Stock-specific indicators suggest no apparent population dynamics concerns	- Thermal conditions over the EBS shelf and in Bristol Bay from winter 2025 through summer 2026 have been cool with an extensive cold pool in summer 2026. Pelagic feeding conditions have been favorable in 2025 and 2026; benthic prey indicators were mixed in 2025. Competition for space remained high, in 2025 while competition for prey remained low. Predation pressure was near-average in 2026. - Overall, ecosystem concerns are minor with uncertain impacts on the stock.	- Fishery-informed indicators are generally consistent with stable stock condition and distribution. No considerations observed in the most recent fishery suggest greater than normal concern.

Risk table



TANNER CRAB

FINAL ASSESSMENT 2026



Tanner crab CIE review

- June 2026; report available on CPT e-agenda

Terms of Reference Topics:

1: Transition to GMACS

- Generally supported but needs some work

2: Side-by-Side Selectivity Analysis and Use

- Support work thus far, some questions on methods and implementation of data in the model (modeling workshop topic)

3: Federal Tier 3 Reference Points

- "current F35%-based reference points are inappropriate for the stock"
- "F35% does not approximate FMSY for this stock"
- Suggestions: productivity understanding, simulation-based approaches to reference points, include females in limit reference points

4: Two-area Model

- Not immediately necessary, potential future work

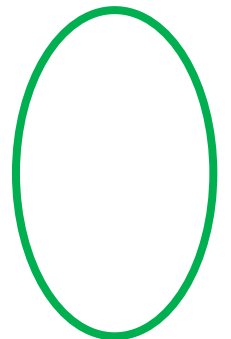
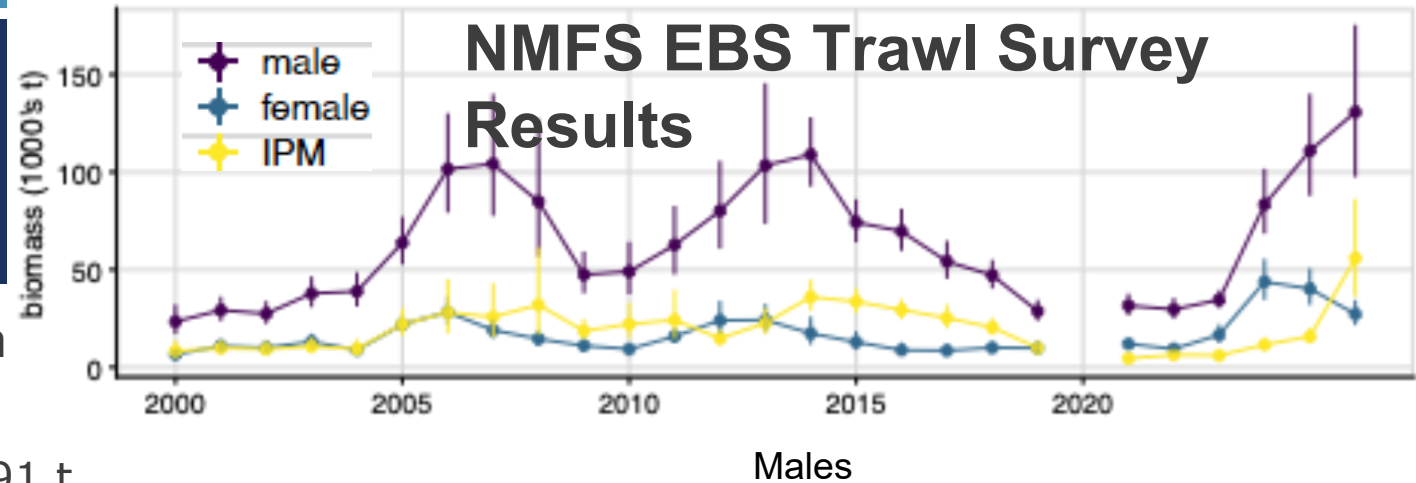
5: Hybrid Chionoecetes

- No need to consider for tanner crab, research needed



Tanner crab 2026 overview

- ADF&G manages fishery in two area
 - East 166W: TAC 513t, Catch 510t
 - West 166W: TAC 4,590t, Catch 4,591 t
- Total fishing mortality less than the OFL, overfishing did not occur
- MMB 129,040 > MSST (23,780t), stock is not overfished
- Tier 3 assessment
 - TCSAM02 – same model as 2025
 - New GMACS models
- Continued cohort progression, large increase in male biomass in 2026



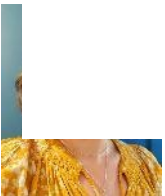
Tanner crab

- GMACS progression ongoing
 - Population dynamics match
 - Differences between bespoke model and GMACS due to modeling frameworks
 - Diagnostic test issues, progress being made, hopefully for 2027
- Model 22.03d5; same as 2025 assessment
 - Size comps are continuing through the population (past concern)
 - Model fit similar, still concerns for “optimistic” model
 - No issues with model convergence (jitter) or parameter bounds
- Fallback REMA smoother provided



Retrospectives

Historical comparisons (using accepted model in that assessment year)



Tanner crab

Year	MSST	Biomass (MMB)	TAC	Retained Catch	Total Catch	OFL	ABC	model
2021/22	17.37	62.05	0.50	0.49	0.78	27.17	21.74	NA
2022/23	18.19	74.17	0.91	0.91	1.19	32.81	26.25	NA
2023/24	20.00	88.21	0.94	0.94	1.09	36.20	27.15	NA
2024/25	21.61	99.53	2.84	2.85	3.09	41.29	33.03	NA
2025/26	23.78	129.04	5.10	5.11	5.70	51.02	40.81	'22.03d5 (GMACS)'
2026/27	NA	108.19	NA	NA	NA	72.10	57.68	'22.03d5 (GMACS)'
2025/26	24.90	127.49	5.10	5.11	5.70	51.02	40.81	'26.02 (GMACS)'
2026/27	NA	111.30	NA	NA	NA	53.73	42.98	'26.02 (GMACS)'
2025/26	21.33	116.89	5.10	5.11	5.70	51.02	40.81	'22.03d5 (2026)'
2026/27	NA	97.85	NA	NA	NA	67.39	53.91	'22.03d5 (2026)'

In 1,000's metric tons

CPT recommendation: Model 22.03d5, ABC buffer 20%

Author recommended 22.03d5

Total catch mortality (directed + bycatch) < OFL therefore overfishing did not occur in 2025/26

Buffer considerations:

- Continuing concern over model performance (abundance of large crab still overestimated but less so)
- Continuing concern over MMB as index of reproductive potential
- Continuing concern over F35%, B35% as metrics for sustainable fishery
- Positive: movement of recruits into larger sizes classes





longterm/persistent

current

<i>Assessment-related considerations</i>	<i>Population dynamics considerations</i>	<i>Environmental/ecosystem considerations</i>	<i>Fishery Performance</i>
Level 2: increased concern	Level 1: Normal	Level 1: Normal	Level 1: Normal
Fails to achieve the dynamic range seen in survey biomass, concern regarding currency for reproductive potential, concern regarding proxies used for Fmsy and Bmsy	The majority of stock-specific ecosystem indicators related to natural mortality, growth, and recruitment suggest no additional concerns. While bitter crab disease prevalence was high, the magnitude of impact on the stock remains unknown. The abundance of Tanner/snow crab hybrids in all population categories was the largest seen in the survey time series (which starts in 1998).	Warm conditions with a reduced cold pool extent in 2024; forecast to be warm with delayed sea ice arrival in 2025. While bottom waters were warm in 2025, ecosystem concerns are minor with uncertain impacts on the stock. Corrosive bottom waters remain a concern for growth and survival. Competitive pressure may be low, while predation pressure may be increasing.	Fishery-informed indicators generally support stable stock condition relative to the most recent seasons and the post-2005 historical record. No considerations observed in the most recent fishery suggest greater than normal risk of overfishing, independent of other considerations captured in the assessment and risk table.
no change	no change	no change	no change
no change	The abundance of Tanner/snow crab hybrids decreased dramatically for females and small males (>45%), and only increased slightly (12%) following the largest abundances seen in the survey time series (which starts in 1998) across all population categories.	Increased transport offshore and to the northwest may affect dispersal and survival of pelagic larvae. The summer cold pool was larger than average, potentially affecting growth of immature crab and survival of all life stages.	no change.

Risk table draft

SNOW CRAB

FINAL ASSESSMENT 2026



Snow Crab ESP Overview

Ecosystem Considerations



Predictive

- Juvenile snow crab **energetic condition** remains **elevated** in 2026, suggesting high survival due to elevated energetic stores.
- Juvenile snow crab **occupied temperatures** were $< 0^{\circ}\text{C}$ in 2026 and the **spatial extent of bottom waters $\leq 0^{\circ}\text{C}$** was **near average**, indicating conditions suitable for high survival, recruitment and stock recovery.
- Spring **sea ice extent increased substantially** in 2026 and is above the time series mean. High sea ice coverage promotes greater flux of primary production to the benthos and supports elevated energetic condition in juvenile snow crab.



Contextual

- Record-high mature female abundance in 2026 resulted in a **strongly female-skewed operational sex ratio** (85 mature females for every one $>95\text{mm}$ large male), although only $\sim 3\%$ of mature females with empty clutches suggests **high reproductive potential**
- Bitter crab **disease** and **Pacific cod predation have** remained **below average** in recent years
- Mature male snow crab **center of abundance and area occupied** remain **near average** in 2026 despite relatively cold summer temperatures
- The **male size at 50% maturity** remains **near average** in 2026, although this indicator has been trending down for the past three decades.

Snow Crab ESP Overview

Socioeconomic Considerations



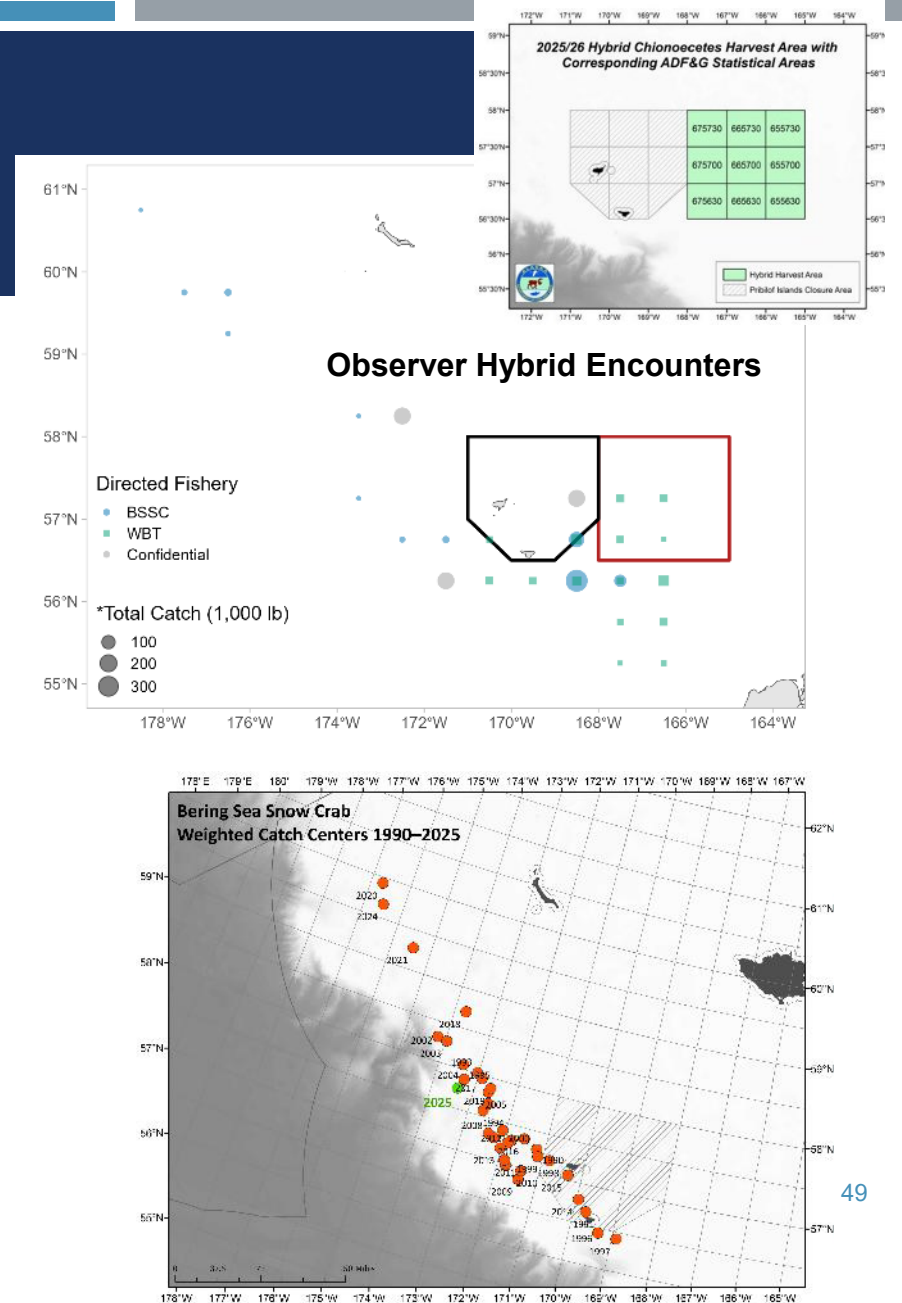
Fishery
Informed

- Fishery **CPUE** and **total effort** in the fishery remain **below average**.
- Fishing during the 2025/26 season **shifted substantially to the southeast**, which is consistent with ~60% of skippers reporting that weather/sea ice, high sorting and fuel costs motivated this change in behavior.
- ~50% of skippers reported a **>10% increase in perceived abundance** of industry-preferred males relative to the previous open season, and 47% of skippers noted **slightly more to a lot more hybrid crab** than the previous season.



Snow crab fishery (hybrid considerations)

- TAC = 9.3 mil lbs
- CPUE down from last season
- Fishery occurred in typically fishing grounds
- ADF&G provided “hybrid opportunity” = 1 mil lbs added to snow crab TAC, encouraged targeting in area of high hybrid abundance (right figure)
- Hybrid retained catch higher than previous season ~0.678 mil lbs



Snow crab 2026 overview

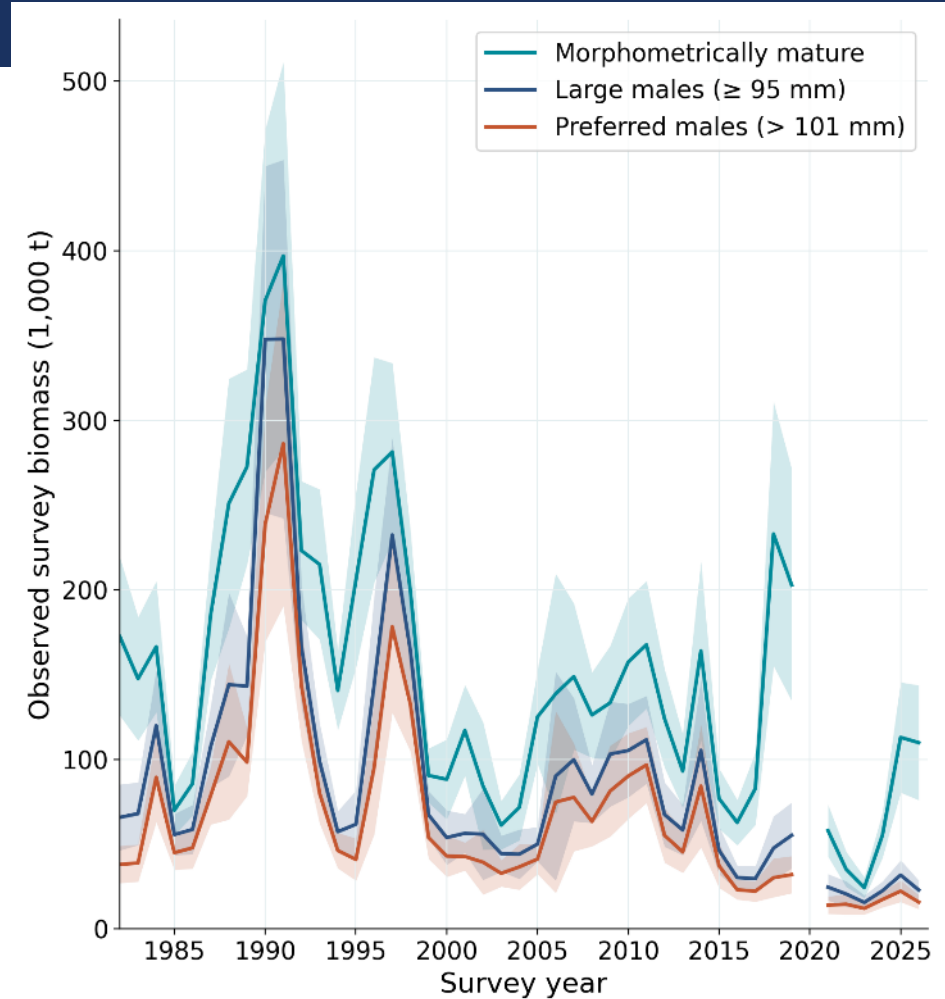
- Model summary
 - Model: Tier 4 random-effects (REMA) model fit to morphometrically mature male biomass
 - OFL calculation alternatives: ramped crab-FMP control rule, Baranov catch equation
 - Alternatives: 6 Tier 3 GMACS models (25.3, 26.1, 26.1a, 26.1b, 26.1c, 26.2) presented to document convergence progress. None proposed for specification
 - Explore data corrections, updated data, truncated to 2019 (avoid mortality event), male only
- New data
 - Catch: 2025/26 directed fishery (4.13 kt retained) and bycatch
 - Survey: 2026 NMFS summer trawl survey, net-mensuration corrected
- Notes
 - Preferred males (>101 mm) 4th lowest in 44-year series.
 - Rebuilding plan (Amendment 53) in place. Not overfished, no overfishing, not rebuilt; 2025/26 status 0.747



Survey trends for male snow crab

Maturity definition	2025	2026	Change (%)
Morphometrically mature males	113.04	109.91	-2.8
Large males (≥ 95 mm)	31.85	23.00	-27.8
Preferred males (> 101 mm)	22.36	15.88	-29.0

- Observed survey biomass (1,000 t), not model output
- Preferred males: 15.88 kt ; 4th lowest in the 44-year series
- Morphometrically mature biomass nearly unchanged: the choice of currency, not the survey, decides whether the stock looks stable or declining
 - Maturity-at-size lower in 2026

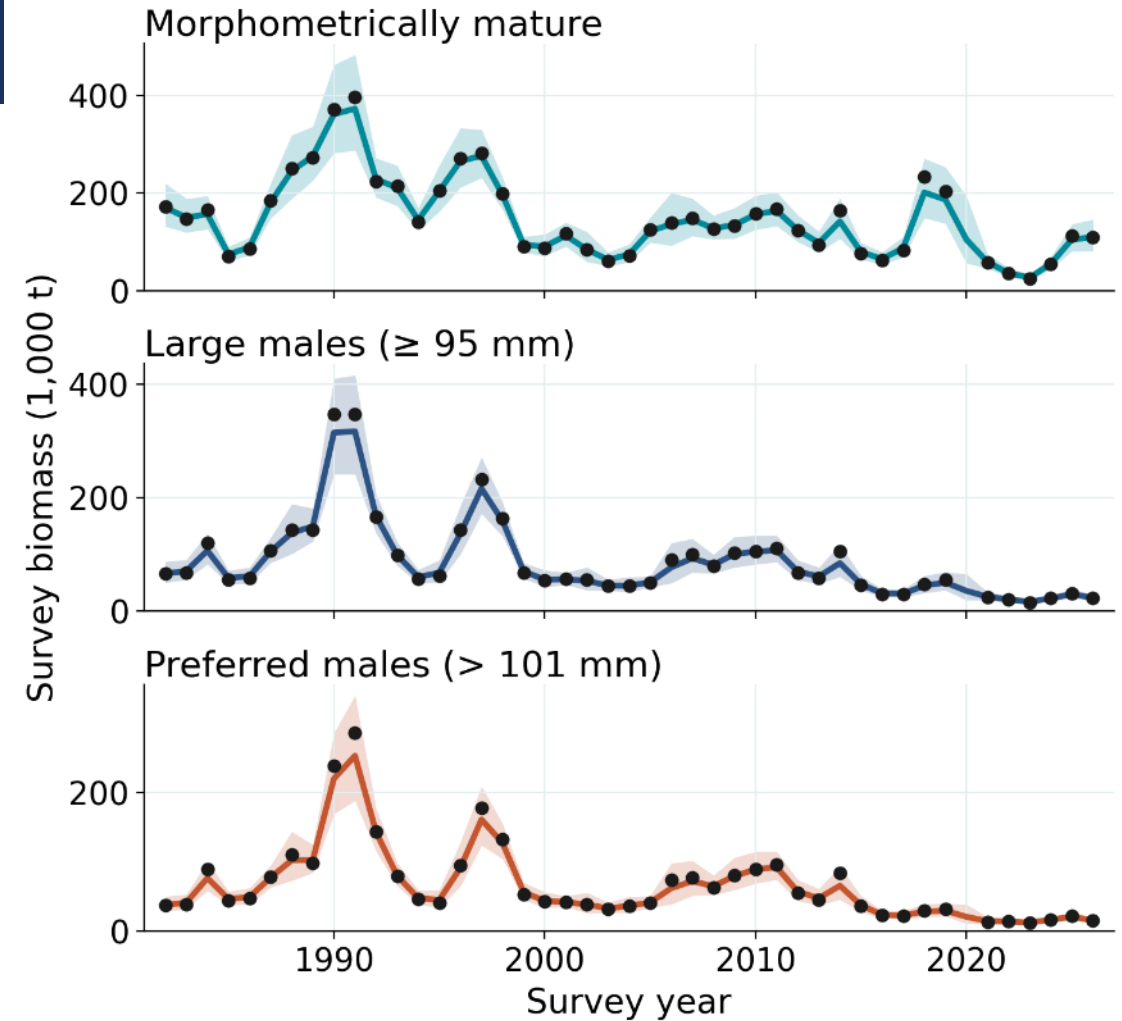


Observed survey biomass by maturity definition, with 95% CI shading.



Fallback REMA model

- Random-effects (REMA) smooth of observed survey biomass, fit separately to each maturity definition
- The control rule uses the terminal smoothed biomass estimate: 109.30 kt (95% CI 81.9 to 145.9, CV 14.8%)
- B_{MSY} proxy = mean of the smoothed series from 1982 to 2026: 146.29 kt
- Ramped crab-FMP Tier 4 rule:
 - Status (0.747), $M = 0.27$, $F_{OFL} = 0.194$
 - OFL calculation:
 - Fallback ($B \cdot FOFL$) = 21.22 kt
 - Baranov (similar to Tier 4 GMACS assessments) = 16.98 kt
- CPT recommended “fallback” model and OFL calculation.
OFL = 21.22 kt, ABC = 10.61



REMA smoothed biomass with 95% prediction intervals, by maturity definition. Points are survey observations.



Category	Long-term / persistent	Current year
Assessment-related	Level 2: Increased concern. Multimodality has persisted across assessment cycles and is the reason the stock moved from Tier 3 to Tier 4. Jittering the accepted model returns to the reported fit in only 1.3 percent of converged runs. A likelihood improvement of 1.27 units moved the OFL of Model 26.1 by 12.8 percent. Successive assessments have revised the same historical years by up to an order of magnitude (Section E, Historical analysis), which is far larger than the within-model retrospective pattern. The base model estimates on the order of four hundred parameters, many highly correlated, which the June 2026 SSC identified as consistent with overparameterization.	Level 1: Normal. The OFL is based on a Tier 4 assessment whose terminal biomass has a CV of 14.8 percent, a 95 percent confidence interval of 81.9 to 145.9 kt, and a status interval of 0.560 to 0.997.
Population dynamics	Level 2: Increased concern. There is considerable uncertainty regarding the population dynamics estimated in the GMACS model. Estimates of M across the various models have large CVs and recruitment estimates have been shown to have high retrospective bias. There is also evidence of decreasing size-at-maturity and an increasing proportion of hybrids in the data.	Level 2: Increased concern. Observed biomass of industry-preferred males (> 101 mm) is the 4th lowest in the 44-year survey time series. A highly female-skewed sex ratio, directional downward shifts in male maturity, and the depressed abundance of large males add to the concern and should continue to be monitored.
Ecosystem	Not scored (long-term row is scoped to the first two categories)	Level 1: Normal. Spring 2026 offshore transport moved crab away from suitable benthic habitat. Thermal conditions over the shelf from winter 2025 to summer 2026 have been favorable for snow crab, with an extensive cold pool and high sea ice extent. Pelagic feeding conditions have remained favorable since 2023, while benthic prey indicators were mixed in 2025. Competition for space remained high and competition for prey remained low in 2025. Predation pressure from Pacific cod was reduced in 2025. Overall, ecosystem concerns are minor with uncertain impacts on the stock.
Fishery-informed stock	Not scored (long-term row is scoped to the first two categories)	Level 1: Normal. Fishery-informed indicators generally support stable stock condition. Shifts in fleet behavior appear motivated primarily by weather, sorting, fuel costs and TAC considerations rather than stock health or distribution. Many skippers noted increased hybrid abundance during the 2025/26 fishery, consistent with the dramatic increase in hybrid abundances observed on the 2025 EBS bottom trawl survey.

Risk table

Snow crab CPT recommendations

- Buffer recommendation:
 - 2025/26 “fallback” buffer was 40% - which was an average of the last 5 years
 - CPT recommended 50%
 - only 3.5% of terminally molting males molted into the industry-preferred size range in 2026
 - recruitment appears to be very low
 - the sex ratio is highly skewed, with approximately 85 mature female crab for every 1 mature male crab
 - morphometrically mature male biomass is used to calculate the OFL rather than biomass of males ≥ 95 mm in carapace width
 - the ‘fallback’ FOFL * B method for calculating OFL produces a biased result.
- Modeling recommendations
 - Tier 3 model explorations, specifically male only model and simplifying model further
 - Fallback REMA smoother: **Should** we investigate a comparison of reference points calculated using time series for B_{MSY} proxy that include only those years which the directed fishery was prosecuted?
- CPT still has concerns over over-harvesting of large males in this stock
 - Majority of crab terminal molt to maturity below harvestable size
- Hybrid considerations are complicated by current status of the snow crab stock, especially large males



St. Matthew Blue King Crab

FINAL ASSESSMENT 2026



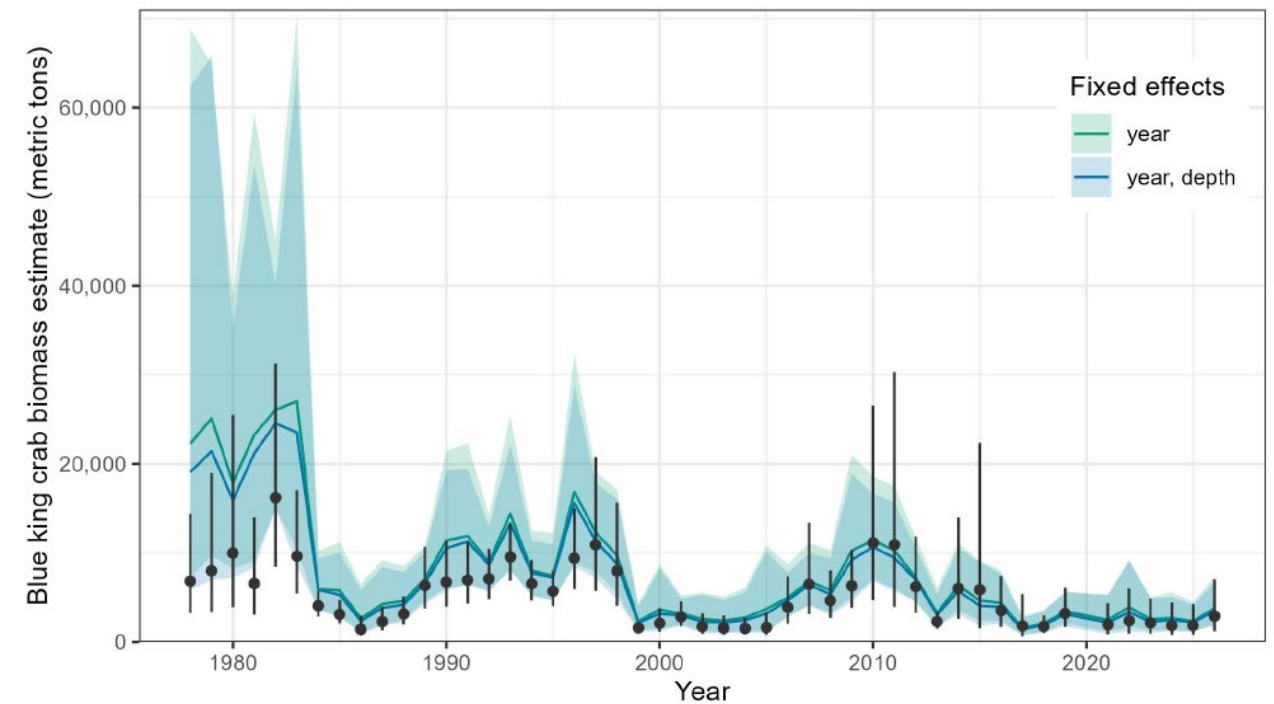
SMBKC Overview

- Tier 4 stock; Biannual assessment; currently in a rebuilding plan since June 2020
- Directed fishery has been closed since 2016/2017
- Data updates:
 - May 2026 – 2024/25 fishery data, 2025 EBS survey, 2025 ADF&G survey
 - Sept 2026 – 2025/26 fishery data, 2026 EBS survey
- Model exploration includes:
 - Base model, accepted in 2024
 - GMACS version bridging
 - Model-based index to account for loss of corner stations in NMFS EBS survey
- Models considered:
 - 26.1b – base model, updated GMACS and data
 - 26.2 – 26.1b + model-based index for EBS trawl survey
 - 26.2a – research model with model-based size comp development



SMBKC model-based index for EBS survey

- Corner station removal makes EBS trawl survey footprint inconsistent over time
- A model-based index has been in development and is currently ready to be adopted in models
- Work towards model-based size comps is ongoing



SMBKC results

- Scale of MMB changes with mode-based index but trends are similar
- Model 26.2 provides consistent EBS survey input for every year
- Rebuilding progress largely dependent on recruitment expectations (all possible recruitments (left) vs recent recruitment (right))
- For last completed crab year this stock is not overfished with a status of 0.518

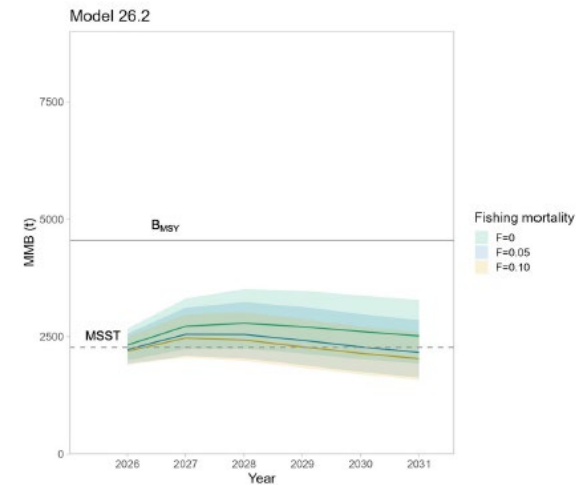
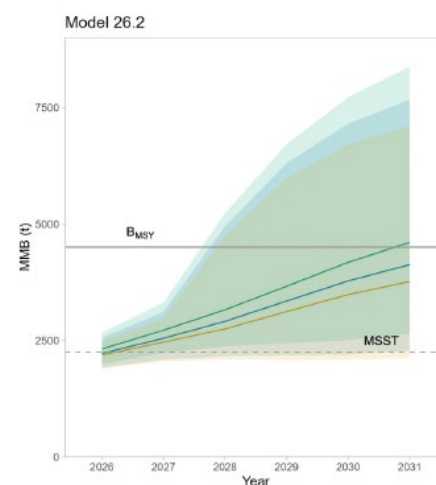
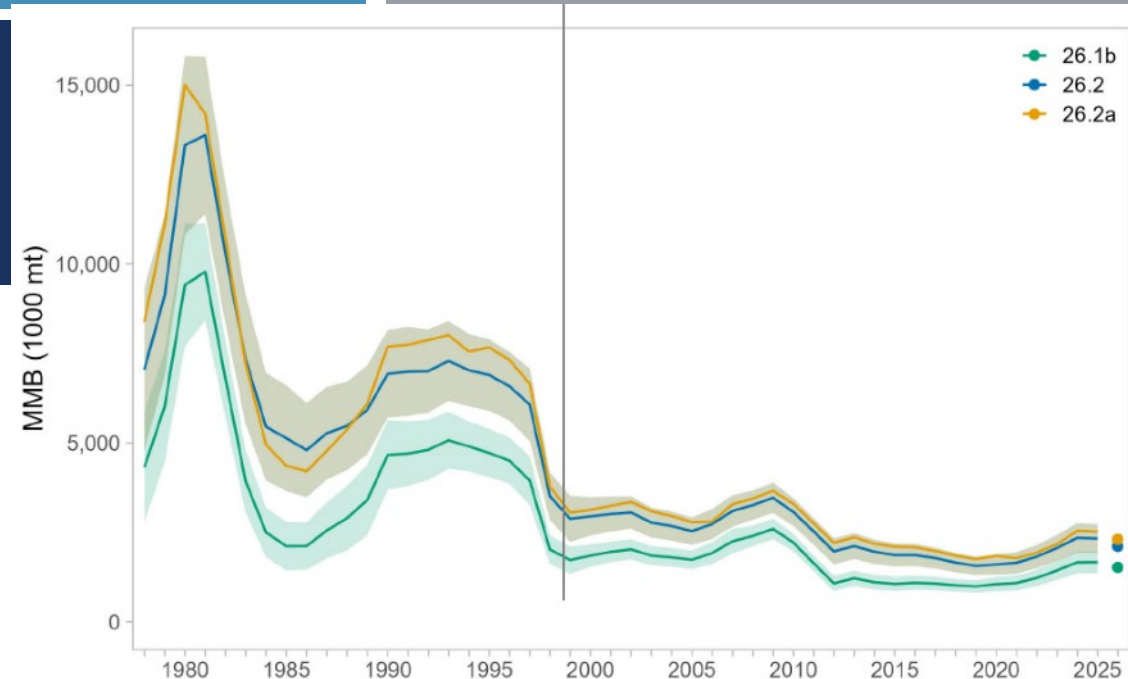


Table 1: Status and catch specifications (1,000 t) for model 26.1b, the base model with updated data, and model 26.2, with a model-based biomass index for the EBS trawl survey. Note that the OFL and ABC for 2024/2025 and 2025/2026 were set in autumn 2024 for this biennially assessed stock. Values for 2024/2025 are estimates or projections based on the 2024 assessment. Values for 2024/2025 and earlier are based on historical estimates and are not updated except for total and retained catch. The MSST for 2024/2025 is left blank because there was no assessment in 2025 and thus MSST was not estimated for that year.

Year	MSST	Biomass (MMB_{mating})	TAC	Retained catch	Total male catch	OFL	ABC	Model
2021/22	1.63	1.18	0.00	0.00	0.0003	0.05	0.04	
2022/23	1.50	1.31	0.00	0.00	0.0021	0.066	0.05	
2023/24	1.48	1.41	0.00	0.00	0.0004	0.066	0.05	
2024/25		1.53	0.00	0.00	0.0007	0.129	0.097	24.1
2025/26	1.44	1.67	0.00	0.00	0.0019	0.129	0.097	26.1b
2025/26	2.25	2.33	0.00	0.00	0.0019	0.129	0.097	26.2
2026/27		1.53				0.151	0.113	26.1b
2026/27		2.12				0.182	0.136	26.2

CPT recommendation: Model 26.2, ABC buffer 25%
Author recommended 26.2
CPT recommends the OFL and ABC for both the 2026/27 and 2027/28 crab years
Total catch mortality (directed + bycatch) < OFL therefore overfishing did not occur in 2025/26

Buffer considerations:

- Stock is currently in a rebuilding plan
- Low stock size overall
- Ecosystem concerns (warmer temperatures)





BALANCE OF CPT REPORT

WAIRKC – roll over specifications for 2026/27

- Recommended for 2026/27 season:
 - OFL = 56 t
 - ABC = 14 t
 - Rollover specifications, includes a buffer of 75%
- Next full assessment – Tier 5 stock – April / May 2027
- 2025/26 total catch mortality 0.00, no bycatch mortality and directed fishery closed
 - Overfishing did not occur



Overfishing status updates (2025/26 total catch)

- PIBKC – directed fishery closed, bycatch mortality 0.029 t
 - $0.029 \text{ t} < \text{OFL } 1.16 \text{ t}$
 - Overfishing did NOT occur
- PIRKC – directed fishery closed, bycatch mortality 0.27 t
 - $0.27 \text{ t} < \text{OFL } 490 \text{ t}$
 - Overfishing did NOT occur
- PIGKC – directed fishery was open (2 vessels so confidential), TAC was set below ABC
 - Total catch mortality $< \text{OFL } (114\text{t})$ therefore overfishing did NOT occur
- AIGKC
 - Total catch mortality $2.04 \text{ mt} < \text{OFL}$ therefore overfishing did NOT occur



QUESTIONS?

- Thanks to all CPT members and crab assessment authors.

