

Southeast Alaska Red King Crab Stock Assessment



**King and Tanner Task Force Meeting
December 9, 2024**

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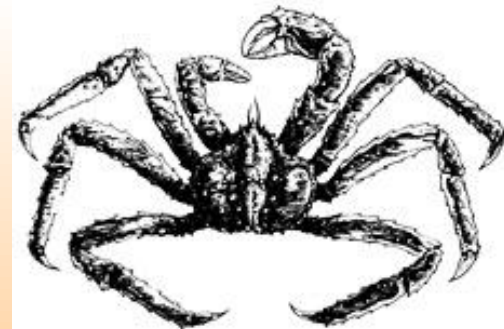


Image: northpacificseafoods.com

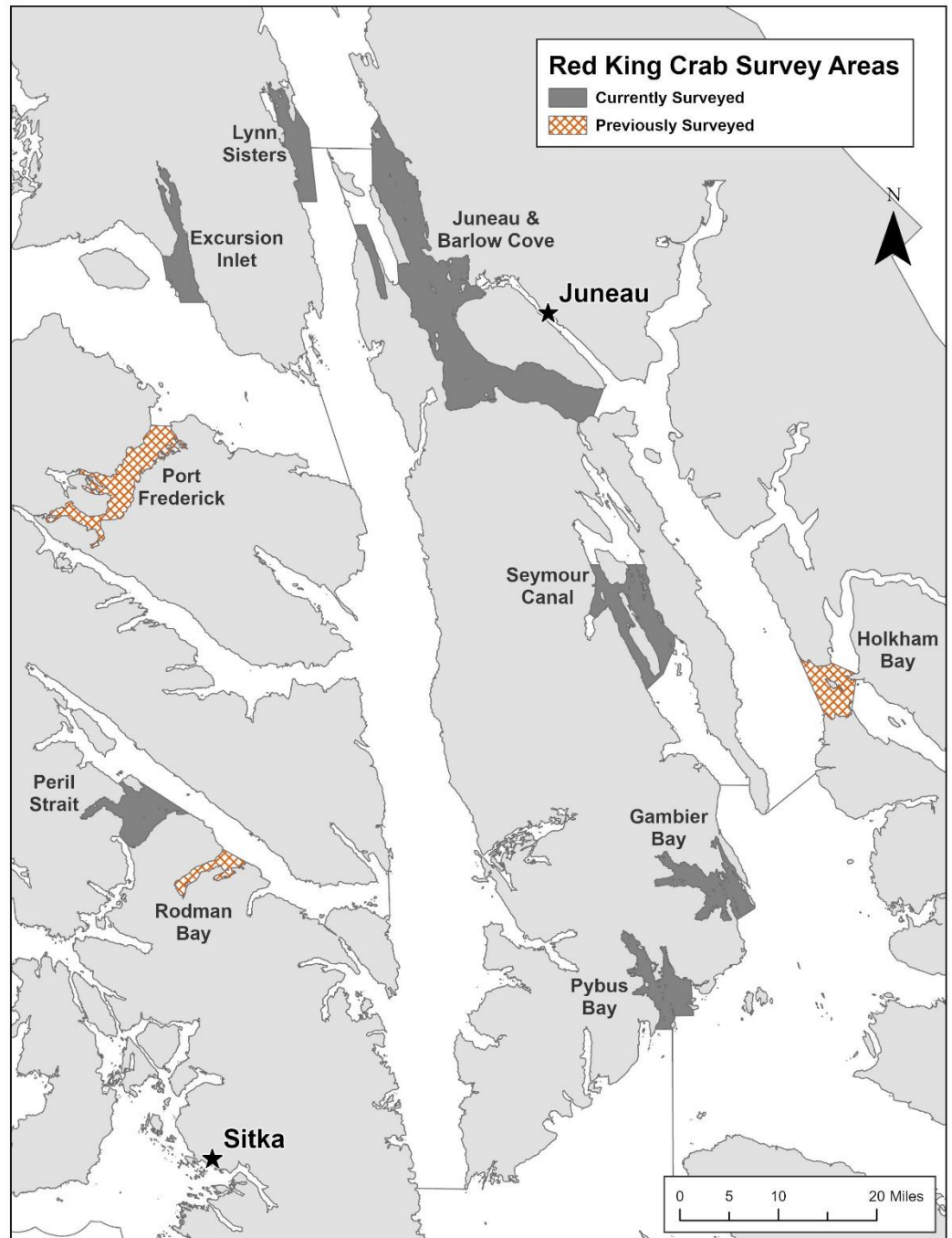
Red King Crab (RKC) Stock Assessment and Management

- Stock Assessment
 - 7 areas surveyed in 2024 with ~615 pot lifts
 - Peril Strait is surveyed biennially (every other year)
 - Biomass estimated using Catch-Survey Analysis (CSA) model
- Management plan
 - Commercial Fishery: November 1 – January 24
 - Appropriate harvest rate
 - Regional GHL set using survey biomass
 - Pot limits based on guideline harvest level (GHL)
 - Minimum GHL threshold of 200,000 lb legal crab
 - Mark/Recapture expansion factor incorporated into biomass estimate
 - Males only, 7-inch minimum CW

Southeast Alaska

Current and previous survey areas for the Southeast Alaska summer crab stock assessment survey

Red King Crab Fishing Grounds



Regional Personal Use King Crab Permits

- New permit system put into place 7/1/2018
- Permits are due June 23 every year

Year	# of Permits	Total # of Crab
2018	1,666	1,637
2019	2,056	1,107
2020	2,690	1,260
2021	1,744	890
2022	1,728	790
2023	1,957	1052
2024	1,368*	232*

- Total catch by species: 30 BKC, 173 GKC, 6,765 RKC

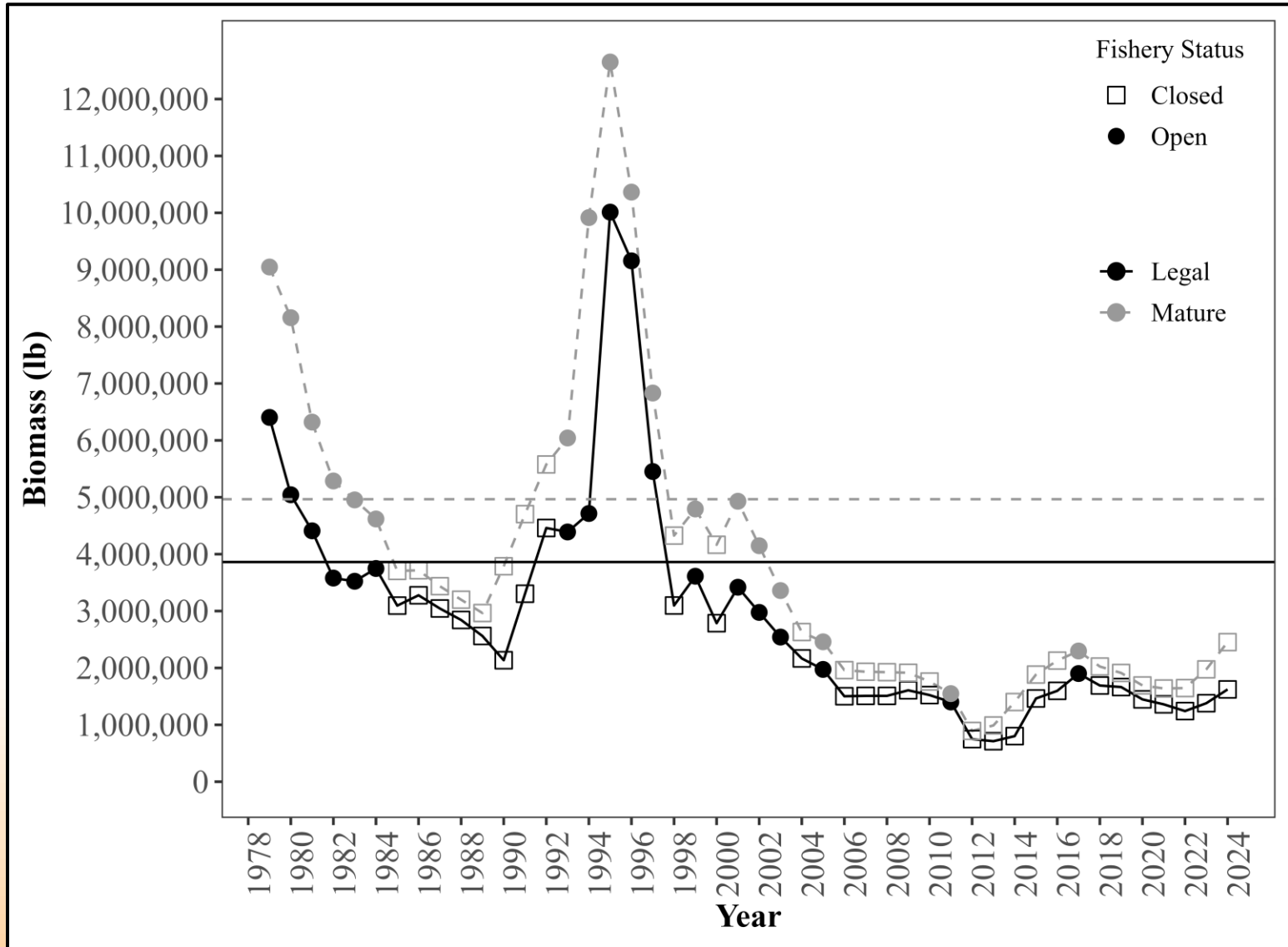
* As of 12/2024. Personal use fishery for 2024/25 is open; data still being gathered.

Section 11-A Personal Use Harvest (# of crab)

Season	Commercial (40%)		Summer personal use (50%)		Winter personal use (10%)		Total allowable harvest	
	Allocation	Harvest	Allocation	Harvest	Allocation	Harvest	Target	Harvest
2017/18	2,410	2,516	3,012	1,663	602	1,962	6,024	6,141
2018/19	0	0	2,168	1,343	434	1,141	2,602	2,484
2019/20	0	0	1,566	1,445	313	103	1,879	1,548
2020/21	0	0	1,527	1,203	305	150	1,832	1,353
2021/22	0	0	1,601	1,182	320	61	1,921	1,243
2022/23	0	0	1,364	1,211	273	239	1,637	1,450
2023/24	0	0	2,842	2,194	568	382	3,410	2,576
2024/25	0	0	2,416	2,271	483	*	2,899	*

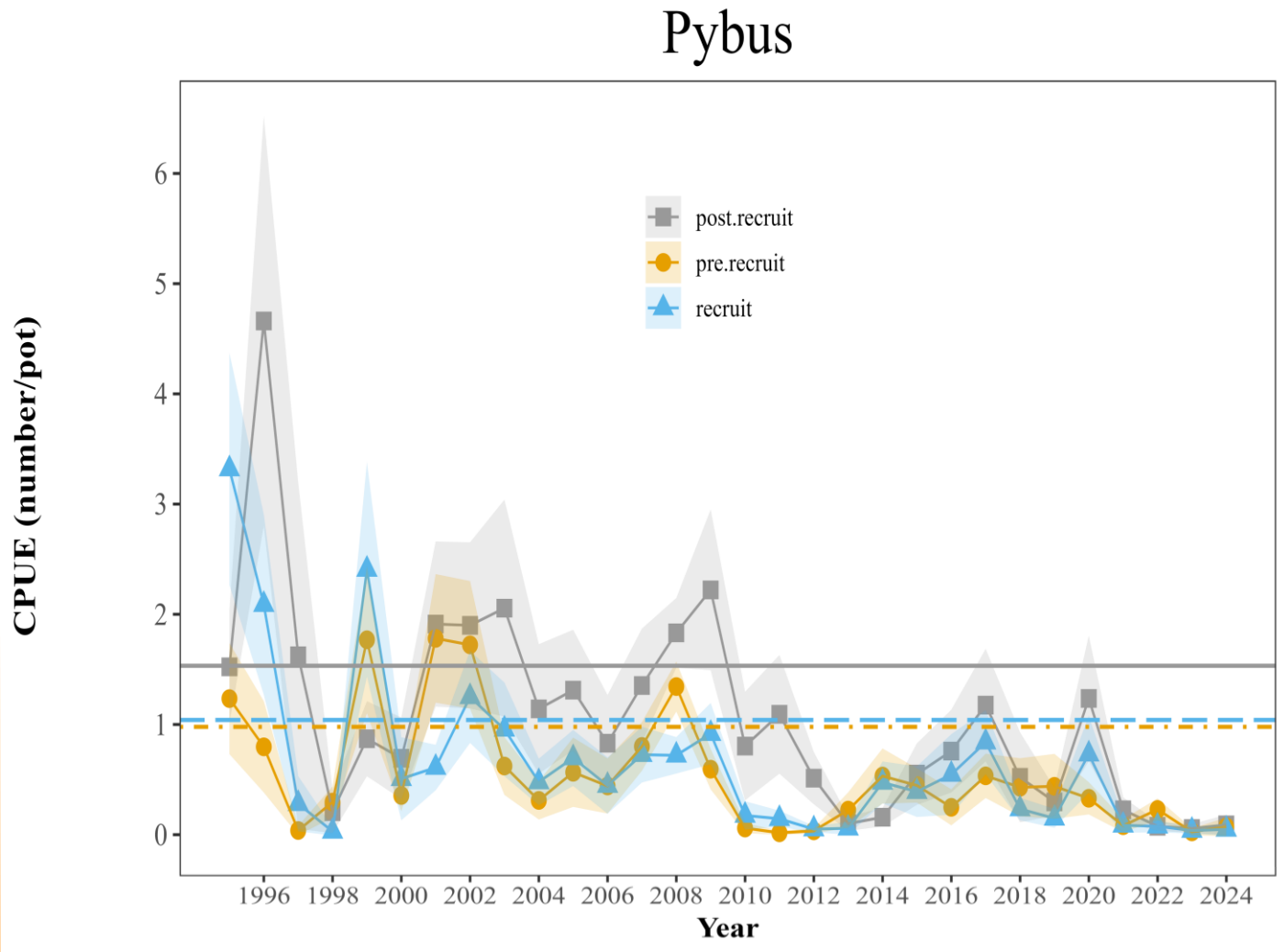
* = Data still being gathered.

RKC Biomass



Pybus Bay

- Stock health remained at poor status.
- All size and sex class CPUEs are below their long-term averages.
- Legal biomass decreased by 34% and mature male biomass decreased by 29%.

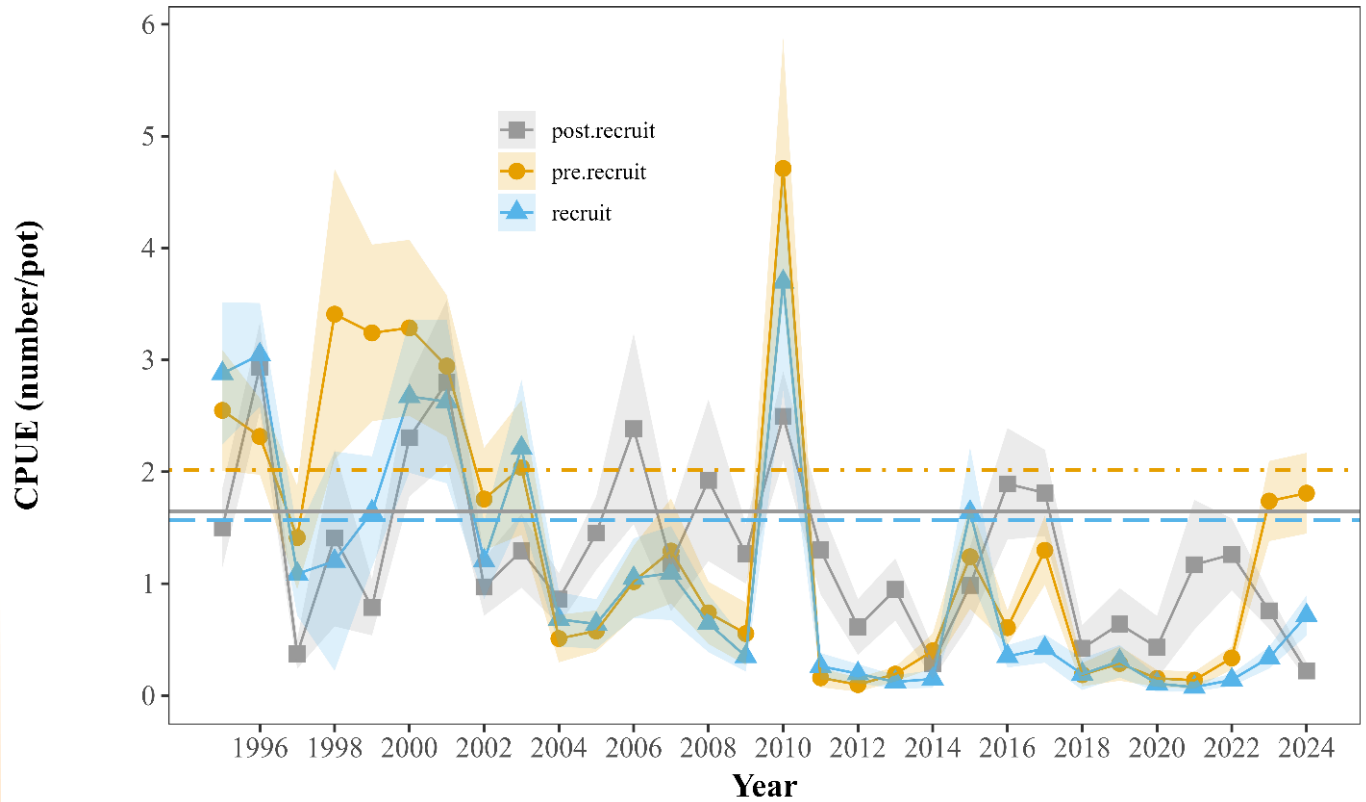


Gambier Bay



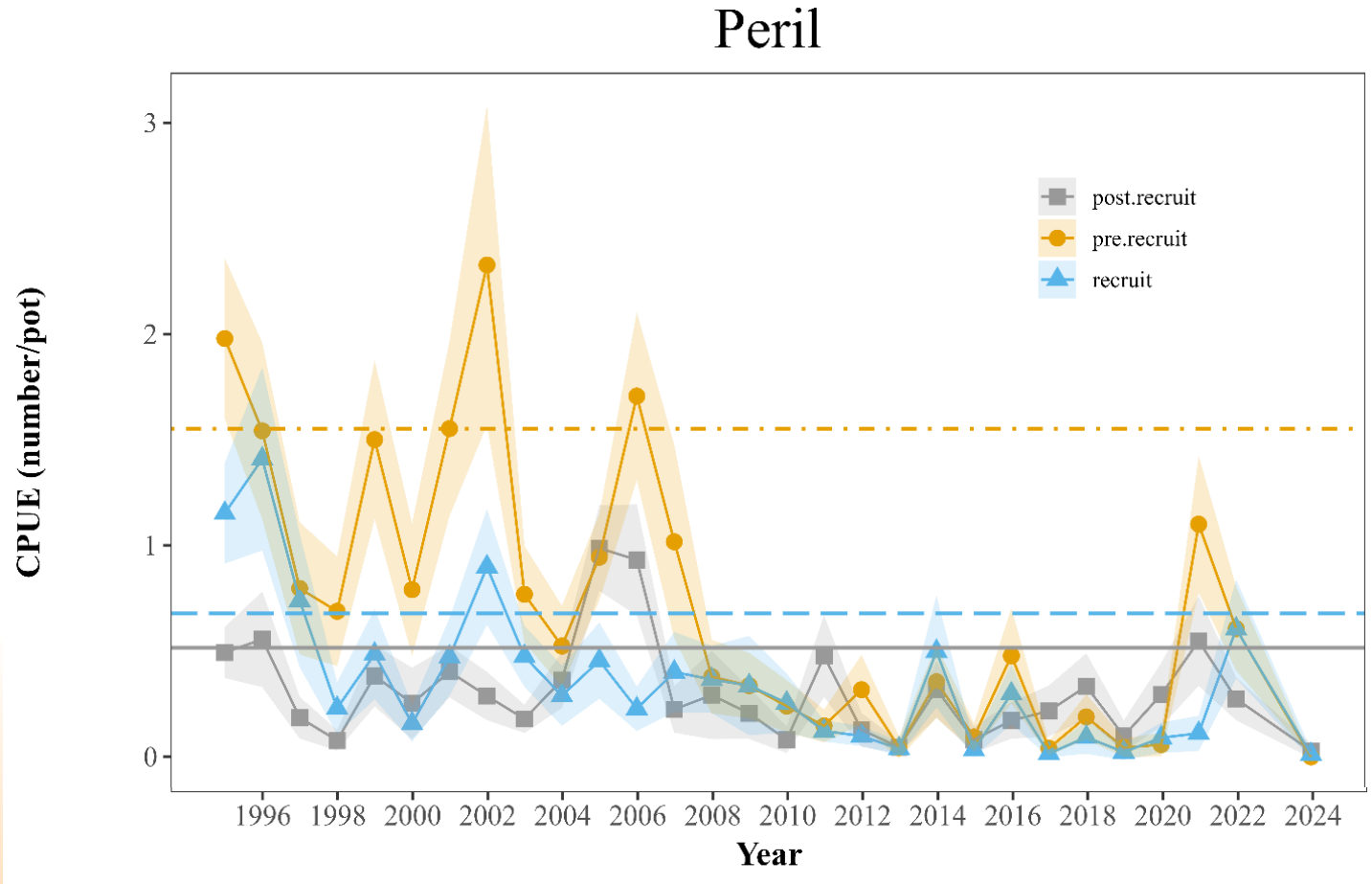
- Below average status
- Recruit, post-recruit, and mature female CPUEs are significantly below their long-term average
- Legal biomass increased 52% and mature male biomass increased 27% from the 2023 model estimates.

Gambier



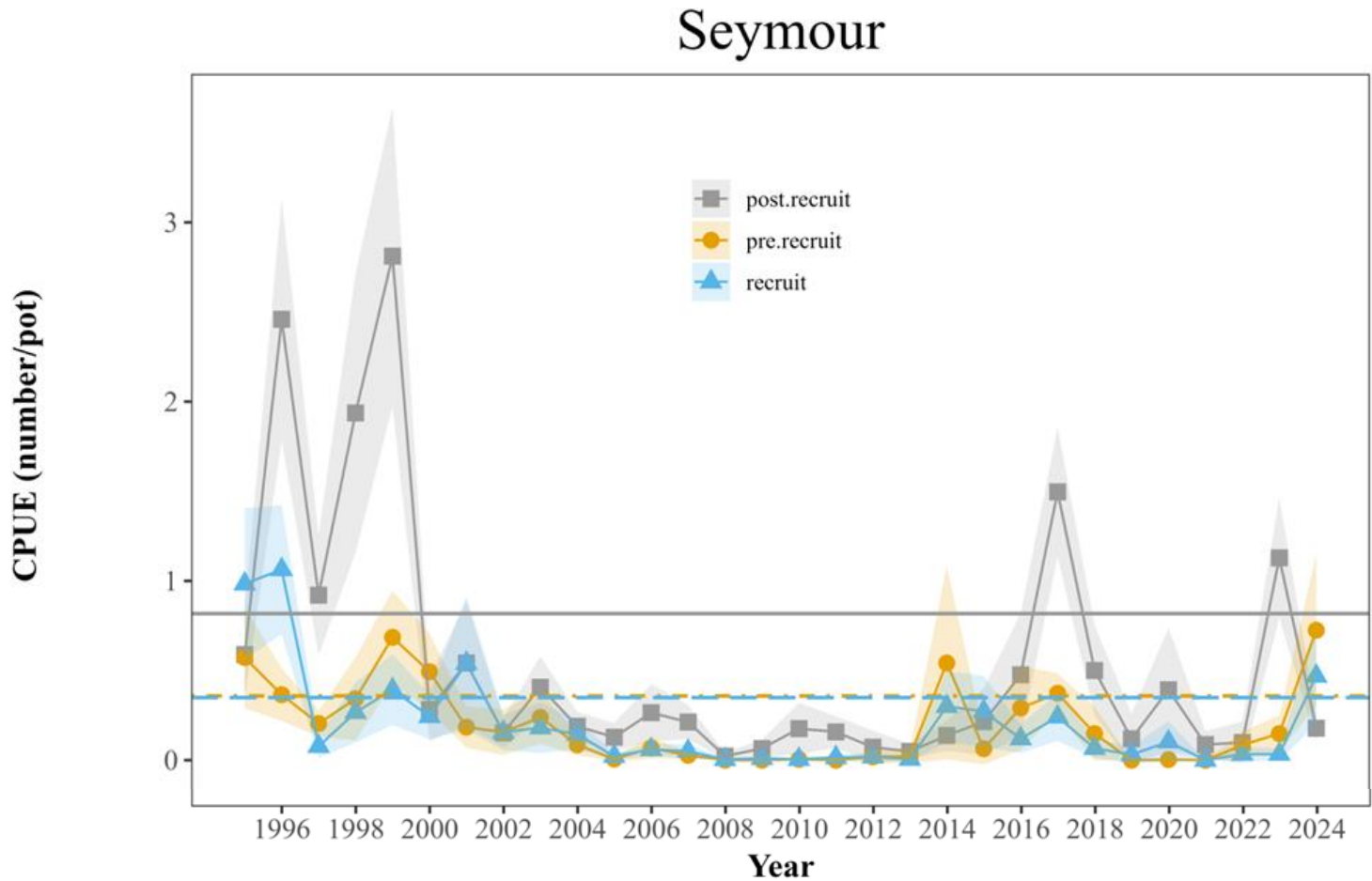
Peril Strait

- Peril Strait was surveyed in 2024 and is on a biennial survey schedule.
- CPUE values for all size and sex classes of crab in Peril Strait are significantly below their long-term averages.
- Estimated legal biomass decreased 44% and mature male biomass decreased 65% from the 2022 model estimates.



Seymour Canal

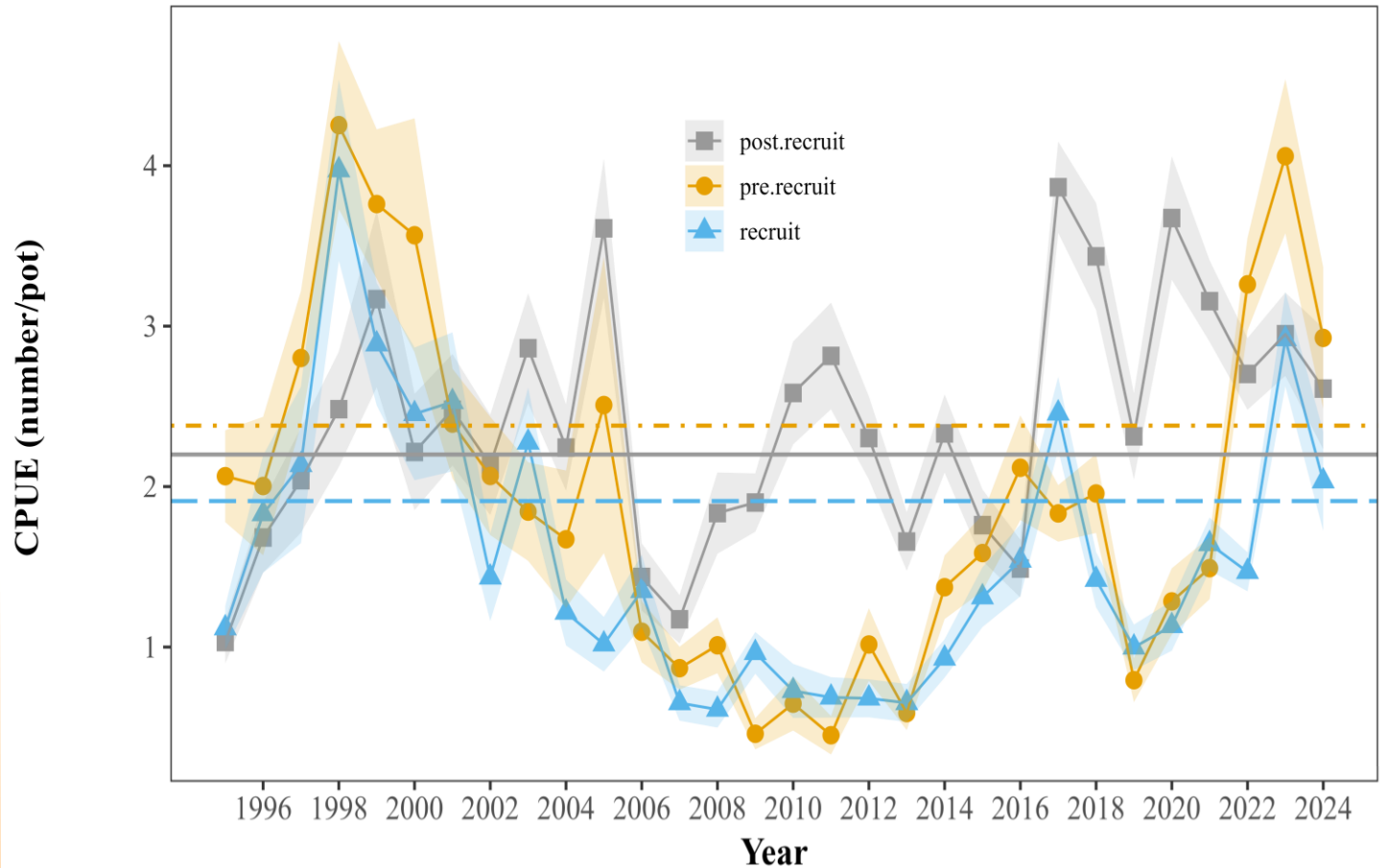
- Stock health improved to moderate.
- Pre-recruit and recruit male CPUEs have significant short-term increasing trends.
- The legal biomass estimate increased 75% and mature male biomass increased 165% from 2023.



Juneau Area



Juneau

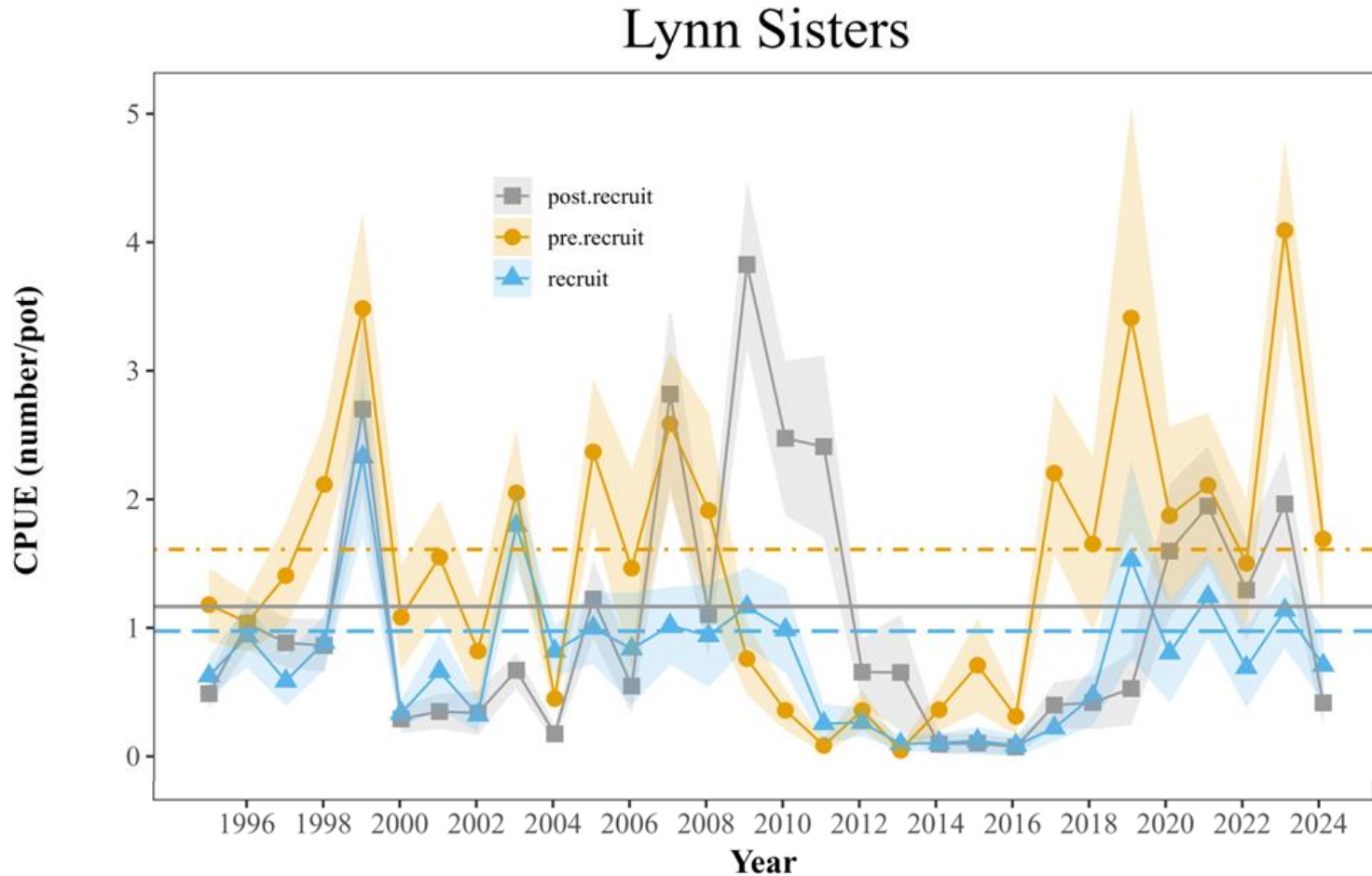


- Above average stock status.
- Significant short-term increasing trends in mature female, pre-recruit male, and recruit male CPUEs.
- Significant short-term decreasing trends juvenile male and female CPUEs.
- Legal biomass increased 13.7% and mature male biomass increased 3.9%.

Lynn Sisters



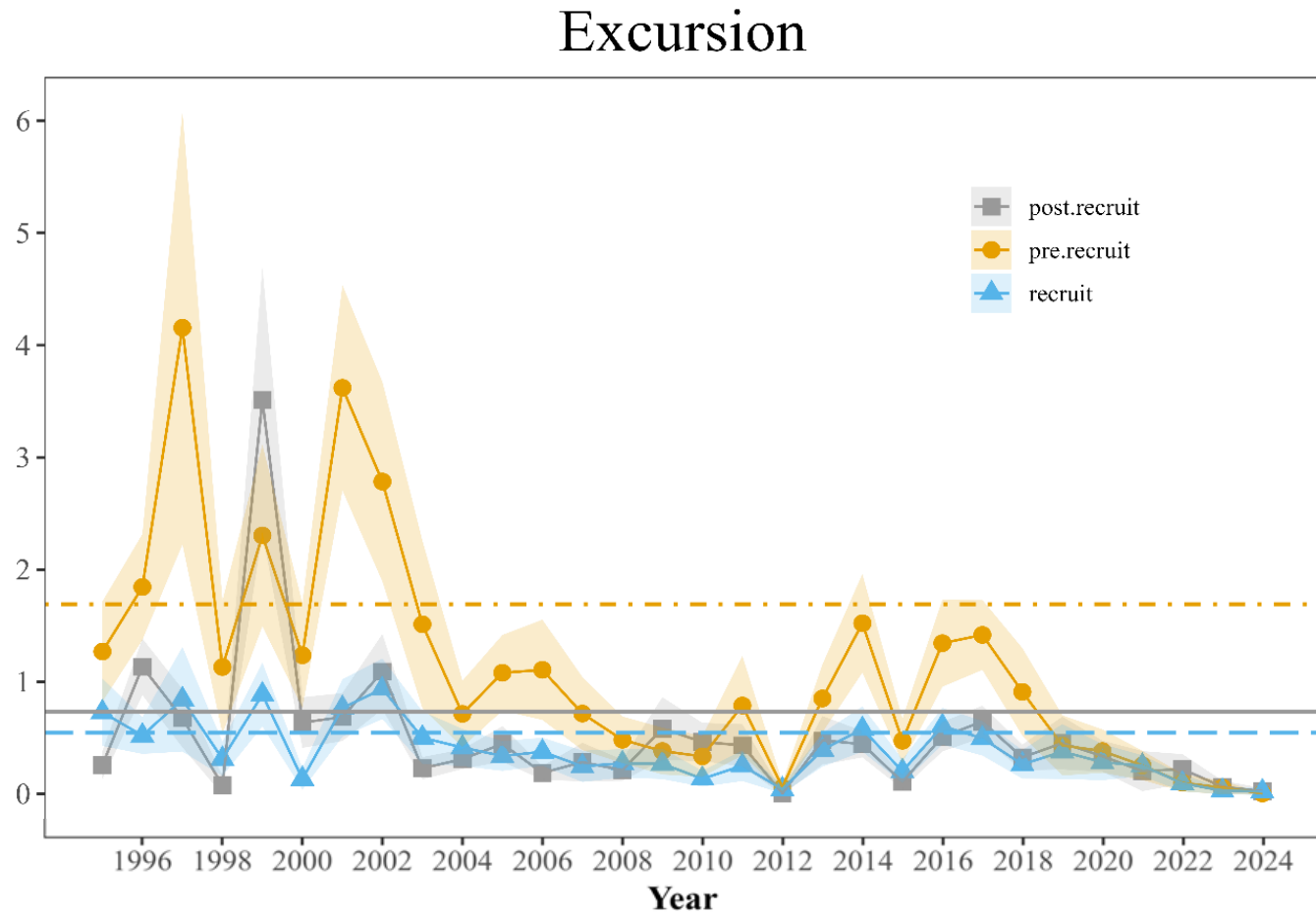
- Stock health declined to below average status.
- Significant short-term decrease in post-recruit male CPUE.
- Legal male biomass increased 1% and mature male biomass decreased 26% from the 2023 model estimates.



Excursion Inlet

- Stock health remained poor.
- CPUEs of all size and sex classes are significantly below their long-term averages.
- Estimated legal biomass decreased 34% while mature male biomass estimates decreased 37% from the 2023 model estimates.

CPUE (number/pot)



Survey area	Stock Status	Legal Biomass (adjusted)	Mature Biomass (adjusted)	Legal Harvest Rate	Total GHL (legal lb)	Personal use harvest (lb)	2024 Commercial GHL (legal lb)
Pybus Bay	Poor	44,728	50,477	0%	0	0	0
Gambier Bay	Below Average	79,431	143,742	4%	3,177	0	3,177
Seymour Canal	Moderate	191,673	406,976	10%	19,167	0	19,167
Peril Strait*	Poor	23,474	23,515	0%	0	0	0
Juneau Area	Above Average	447,849	582,520	8%	35,828	21,497	14,331
Lynn Sisters	Below Average	48,326	66,665	9%	4,349	0	4,349
Excursion Inlet	Poor	21,136	21,658	0%	0	0	0
Other Areas		765,763	1,158,145	10%	76,576	1,000	75,576
BKC		9,080	13,733				435
Total		1,631,459	2,467,431				117,035

2024 RKC Overview

- The 2024 commercial RKC fishery did not open due to the regional biomass below the 200,000 lb regulatory threshold
- The winter Section 11-A personal use fishery will occur in December 2024
- Regional legal and mature biomasses both increased in 2024
- STOCK STATUS
 - Healthy – no areas
 - Above Average – Juneau area
 - Moderate – Seymour Canal
 - Below Average – Gambier Bay and Lynn Sisters
 - Poor – Excursion Inlet, Pybus Bay, and Peril Strait
- The Juneau area, Gambier Bay, and Seymour Canal are the only areas with an increase in both legal and mature male biomass estimates from 2023; Lynn Sisters showed an increase in legal but not mature biomass
- Both the Juneau area and Lynn Sisters had a notable drop in survey CPUE for all male size classes



Thank you!