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**2024–2025 Southeast Alaska Tanner Crab Stock
Assessment and Management Plan**

by

Alex Reich

Caitlin Stern

Jan Rumble

and

Adam Messmer

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Alaska Department of Fish and Game

Division of Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code	AAC	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H_A
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	base of natural logarithm	e
hectare	ha	at	@	catch per unit effort	CPUE
kilogram	kg	compass directions:		coefficient of variation	CV
kilometer	km	east	E	common test statistics	(F, t, χ^2 , etc.)
liter	L	north	N	confidence interval	CI
meter	m	south	S	correlation coefficient (multiple)	R
milliliter	mL	west	W	correlation coefficient (simple)	r
millimeter	mm	copyright	©	covariance	cov
Weights and measures (English)		corporate suffixes:		degree (angular)	$^\circ$
cubic feet per second	ft ³ /s	Company	Co.	degrees of freedom	df
foot	ft	Corporation	Corp.	expected value	E
gallon	gal	Incorporated	Inc.	greater than	>
inch	in	Limited	Ltd.	greater than or equal to	\geq
mile	mi	District of Columbia	D.C.	harvest per unit effort	HPUE
nautical mile	nmi	et alii (and others)	et al.	less than	<
ounce	oz	et cetera (and so forth)	etc.	less than or equal to	\leq
pound	lb	exempli gratia (for example)	e.g.	logarithm (natural)	ln
quart	qt	Federal Information Code	FIC	logarithm (base 10)	log
yard	yd	id est (that is)	i.e.	logarithm (specify base)	log ₂ , etc.
Time and temperature		latitude or longitude	lat or long	minute (angular)	'
day	d	monetary symbols (U.S.)	\$, ¢	not significant	NS
degrees Celsius	°C	months (tables and figures): first 3 letters	Jan, ..., Dec	null hypothesis	H_0
degrees Fahrenheit	°F	registered trademark	®	percent	%
degrees kelvin	K	trademark	™	probability	P
hour	h	United States (adjective)	U.S.	probability of a type I error (rejection of the null hypothesis when true)	α
minute	min	United States of America (noun)	USA	probability of a type II error (acceptance of the null hypothesis when false)	β
second	s	U.S.C.	United States Code	second (angular)	"
Physics and chemistry		U.S. state	use 2-letter abbreviations (e.g., AK, WA)	standard deviation	SD
all atomic symbols				standard error	SE
alternating current	AC			variance	
ampere	A			population sample	Var
calorie	cal			sample	var
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity (negative log of)	pH				
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

REGIONAL INFORMATION REPORT NO. 26-02

**2024–2025 SOUTHEAST ALASKA TANNER CRAB STOCK
ASSESSMENT AND MANAGEMENT PLAN**

by

Alex Reich and Caitlin Stern

Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau

and

Adam Messmer and Jan Rumble

Alaska Department of Fish and Game, Division of Commercial Fisheries, Douglas

Alaska Department of Fish and Game
Division of Commercial Fisheries
333 Raspberry Road, Anchorage, Alaska, 99518-1565

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*Alex Reich and Caitlin Stern
Alaska Department of Fish and Game, Division of Commercial Fisheries,
1255 W. 8th Street, Juneau, AK 99801, USA*

*Jan Rumble and Adam Messmer
Alaska Department of Fish and Game, Division of Commercial Fisheries,
802 3rd Street, Douglas, AK 99824, USA*

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ABSTRACT

This document presents the annual stock assessment and management plan for Southeast Alaska Tanner crab. In 2024, the estimated mature male Tanner crab biomass in Southeast Alaska was 3.3 million pounds (lb). This figure was down approximately 1.82 million lb from the 2023 estimate of 5.12 million lb. The regionwide stock status of Southeast Alaska Tanner crab has declined in recent years, with mature male biomass decreasing overall from 2017 to 2024, and legal biomass remaining steady from 2018 to 2021 before a marked decline in 2022. Considering 2024 stock status by survey area: Seymour Canal had healthy stock status; Pybus Bay had above average stock status; Glacier Bay, Holkham Bay, and Thomas Bay had moderate stock status; Excursion Inlet, Lynn Sisters, Stephens Passage, and Peril Strait had below average stock status; and Icy Strait, North Juneau, and Gambier Bay had poor stock status. Stock status considers all age and sex classes of the population. The 2024–2025 commercial fishery opened because the regulatory stock size threshold of 2.3 million lb of mature male Tanner crab was exceeded. Harvest in the 2025 fishery was 833,748 lb of crab from 65 vessels; the exvessel value was \$4.1 million with an average price of \$5.95 per lb.

Keywords: Tanner crab, *Chionoecetes bairdi*, stock assessment, catch per unit effort, CPUE, Southeast Alaska.

OVERVIEW

The Alaska Department of Fish and Game (ADF&G) annually evaluates the stock status of Tanner crab in Southeast Alaska using data from both fishery independent surveys and the commercial fishery. The Southeast Alaska management area (Registration Area A) consists of all waters defined in 5 AAC 34.100 (Figure 1). Estimated mature male biomass exceeding 2.3 million pounds (lb) is required to open the commercial fishery (5 AAC 35.113(a)). No guideline harvest level (GHL) is set or targeted through inseason management. Despite the lack of a GHL-based harvest strategy, ADF&G estimates legal male Tanner crab biomass to provide a basis for evaluating fishery performance and removals from the stock.

Over the past 5 years, Tanner crab fishery participation has ranged from 50 permits fished (2023–2024) to 85 permits fished (2021–2022; Table 1). The golden king crab (GKC) fishery occurs simultaneously. Many permit holders can participate in both of these fisheries. This flexibility may shift effort away from the Tanner crab fishery, potentially affecting annual harvest and CPUE (Figure 2). The healthy GKC populations with higher GHLs and an attractive price may have influenced fishers to choose the potentially more lucrative GKC fishery over the Tanner crab fishery. The average Tanner crab harvest in the past 4 seasons was valued at \$4.5 million, driven by a record high exvessel value during the 2021–2022 season when the price per pound was \$6.60 per lb; for the other 3 seasons, the price ranged from \$2.60 to \$3.40 per lb (Table 1).

The season length is determined using a regulatory harvest strategy based on effort and mature male biomass. The most productive fishing grounds within Registration Area A are classified as *core* areas, while less productive fishing grounds are classified as *noncore*, *inside exploratory*, or *outside exploratory* areas (Figure 1). At the end of the first period of fishing in the core areas, noncore and exploratory areas remain open for 5 additional days. Following that period, the inside exploratory areas remain open for 14 additional days, and the outside exploratory area stays open until May 31 (Figure 1). Weather delay criteria and the fishery start date definition based on tides are also included in the regulations.

The estimated 2024–2025 Southeast Alaska mature male Tanner crab biomass was 3.3 million lb. This number was down approximately 1.82 million lb from the 2023–2024 estimate of 5.12 million lb (Table 2, Figure 3). The stock assessment model used to produce this estimate includes both

survey (Figure 4) and fishery data. The estimate exceeded the 2.3 million lb regulatory threshold, therefore the commercial fishery opened for the 2024–2025 season.

SOUTHEAST TANNER CRAB STOCK ASSESSMENT, 2024

SUMMARY OF STOCK STATUS

The estimated 2024–2025 Southeast Alaska mature male Tanner crab biomass was 3.3 million lb. This figure is down approximately 1.82 million lb from the 2023–2024 estimate of 5.12 million lb (Table 2, Figure 3). This estimate exceeded the 2.3 million lb threshold of mature male biomass in regulation (5 AAC 35.113(a)) required to open the commercial fishery. The stock status of Southeast Alaska Tanner crab has declined in recent years, with mature male biomass decreasing overall from 2017 to 2024, and legal biomass remaining steady from 2018 to 2021 before a marked decline in 2022 (Tables 3 and 4, Figure 3).

SOUTHEAST TANNER CRAB SURVEY AND ANALYSIS

Methods to estimate mature male biomass and assess stock health were similar to those used since 2013 (Bishop et al. 2013). Changes to the sampling areas, sampling methods, and catch per unit effort (CPUE) calculations are described in following sections. The number of pots sampled in each survey area has remained stable in the last three seasons and the number of crab captured has varied (Table 5, Figure 4). A 3 stage Catch–Survey Analysis (CSA) model was used to estimate biomass using ADF&G survey and commercial catch data. Standardized CPUE calculated from the survey data was used to assess stock health (Seber 2002; Zheng and Kruse 1999).

In 2024, the area of the Glacier Bay survey was reduced in order to streamline the sampling process (Figure 5). The strata areas used in calculating the weighted CPUE for Glacier Bay had not yet been updated at the time of this analysis.

HARVESTABLE SURPLUS

Since the 2009–2010 fishing season, the Southeast Alaska Tanner crab commercial fishery has been managed using a minimum mature male biomass threshold with a variable season length in days. This length is determined by a regulatory harvest strategy reliant on fishing effort and mature male biomass. Even though the fishery is not managed using a GHL, the department continues to determine stock health, establish a biologically appropriate mature male harvest rate, and calculate GHLs to provide a biologically sound benchmark against which fishery performance can be evaluated.

Catch–survey modeling of the 2024 fishery and survey data yielded a biomass estimate of 3.3 million lb of mature male Tanner crab (greater than 108 mm carapace width) and 2.21 million lb of legal male Tanner crab (greater than 140 mm carapace width; Table 2 and Figure 3). This was a decrease of 0.83 million lb of legal male Tanner crab (-27.3%) from the 2023 estimate.

SURVEY AREA STOCK STATUS

Stock health status was determined by using a combination of long- and short-term trends in survey CPUE (Table 3). Significance in long-term or short-term trends is defined as a p-value < 0.05. Long-term trends compare the current year's mean to the long-term baseline value (generally 1997–2006, or the first 10 years for which survey data are available). Short-term trends regress the last 4 years of survey data to determine if a significant increasing or decreasing trend is present.

The total score is the sum of scores (1, 0, -1 for long-term; 0.25, 0, -0.25 for short-term) for each response variable. Stock health is defined by the total score with 5 designated categories and associated exploitation rates (Table 3).

GLACIER BAY (MODERATE STOCK STATUS)

The Glacier Bay stock status decreased from above average in 2023 to moderate in 2024 (Table 4). The legal biomass was slightly above baseline levels. Legal biomass increased while mature biomass decreased (Figure 6). Postrecruit male CPUE was significantly lower than the long-term baseline; prerecruit and recruit male and mature female CPUEs were not significantly different from their long-term baselines (Figures 6 and 7). Harvest from this area provided an average of 9.2% of the commercial harvest over the baseline years and 7.8% of the harvest during the 2023–2024 fishery (Table 6).

ICY STRAIT (POOR STOCK STATUS)

The Icy Strait stock status decreased from below average in 2023 to poor in 2024 (Table 4). This change in the population status was due to a decrease in prerecruit, recruit, and postrecruit male CPUEs from the previous year (Figures 8 and 9). Prerecruit, recruit, and postrecruit male CPUEs were significantly below their long-term baselines. Mature female CPUE was near the long-term average (Figure 8). There were short-term decreasing trends in recruit and postrecruit male CPUEs. Harvest in Icy Strait has always been close to the estimated legal biomass (Figure 8), suggesting that the population is not isolated to the survey area and that there is likely movement of crab in and out of this area. This hypothesis would suggest that the CSA model is underestimating biomass in Icy Strait, which is apparent in the high harvest rates in this area that are likely not sustainable for a closed population without fluctuations. Harvest from this area provided an average of 12.0% of the commercial harvest over the baseline years and 3.0% of the harvest during the 2023–2024 fishery (Table 6).

EXCURSION INLET (BELOW AVERAGE STOCK STATUS)

In 2024, the Excursion Inlet stock status increased from poor to below average (Table 4). All mature male CPUEs were significantly below their baseline values, and the mature female CPUE was not significantly different from its baseline value (Figures 10 and 11). There were short-term decreasing trends in prerecruit, recruit, and postrecruit male CPUEs. The percentage of females with poor clutches was significantly below the 10% threshold. Both legal and mature male biomasses increased from the previous year, although the legal biomass estimate was still below the baseline value. The harvest from this area provided an average of 6.3% of the commercial harvest over the baseline years and 1.5% of the harvest during the 2023–2024 fishery (Table 6).

LYNN SISTERS (BELOW AVERAGE STOCK STATUS)

The Lynn Sisters stock status decreased to below average from above average (Table 4). Recruit male and mature female CPUEs were significantly below the long-term baseline, while all other size and sex categories were not significantly different from their long-term baseline values (Figures 12 and 13). Prerecruit and recruit male CPUEs had decreasing short-term trends. The legal biomass estimate was near but below the baseline value. The legal biomass estimate increased from the previous year while the mature biomass remained stable. The harvest from this area provided an average of 0.7% of the commercial harvest over the baseline years and 0.9% of the harvest during the 2023–2024 fishery (Table 6).

NORTH JUNEAU (POOR STOCK STATUS)

The North Juneau stock status fell to poor in 2024 from below average in 2023 (Table 4). All size and sex class CPUEs were significantly below their long-term baselines and had significant short-term decreasing trends (Figures 14 and 15). The percentage of females with poor clutch fullness was significantly less than 10%. Both legal and mature biomasses had decreasing trends, with the legal biomass falling below the baseline (Figure 14). The harvest from this area provided an average of 7.1% of the commercial harvest over the baseline years and 6.3% of the harvest during the 2023–2024 fishery (Table 6).

STEPHENS PASSAGE (BELOW AVERAGE STOCK STATUS)

The Stephens Passage stock status fell to below average in 2024 from above average in 2023 (Table 4). Prerecruit and postrecruit male CPUEs were significantly below their long-term baselines, while recruit male and mature female CPUEs were not significantly different from their long-term baselines (Figures 16 and 17). All size and sex class CPUEs showed significant short-term decreasing trends. The legal biomass estimate was near, but below, the baseline value. Mature biomass decreased from 2023, and the legal biomass estimate was similar to the previous year (Figure 16). The harvest from this area provided an average of 9.5% of the commercial harvest over the baseline years and 13.2% of the harvest during the 2023–2024 fishery (Table 6).

PORT FREDERICK, NOT SURVEYED SINCE 2015

The Port Frederick survey area was removed from the survey in 2015 due to its low contribution to the overall Tanner crab catch and department budget constraints. Port Frederick is now included in the non-surveyed areas. The average contribution of catch in Port Frederick from 1980 to 2000 was removed from the survey expansion percentage. The harvest from this area provided an average of 0.5% of the commercial harvest over the baseline years and 1.0% of the harvest during the 2023–2024 fishery (Table 6).

SEYMOUR CANAL (HEALTHY STOCK STATUS)

The Seymour Canal stock status rose to healthy in 2024 from above average in 2024 (Table 4). All size and sex class CPUEs were significantly above their long-term baselines (Figures 18 and 19). There were no significant short-term trends in CPUE. The percentage of females with poor clutch fullness was significantly less than 10%, an improvement from 2023. The legal biomass estimate slightly increased and the mature biomass estimate slightly decreased from the previous year, and legal biomass remained above the baseline value (Figure 18). The harvest from this area provided an average of 6.3% of the commercial harvest over the baseline years and 21.0% of the harvest during the 2023–2024 fishery (Table 6).

HOLKHAM BAY (MODERATE STOCK STATUS)

The Holkham Bay stock status decreased from above average in 2023 to moderate in 2024 (Table 4). No size and sex class CPUEs were significantly different from their long-term baselines (Figures 20 and 21). Pre-recruit and recruit male CPUEs had short-term decreasing trends. The percentage of females with poor clutch fullness was not significantly different from the baseline 10% level but appeared to show an increasing trend. Mature and legal biomass estimates both decreased slightly, and the legal biomass estimate was close to the baseline (Figure 20). Harvest

from this area provided an average of 7.1% of the commercial harvest over the baseline years and 7.0% of the harvest during the 2023–2024 fishery (Table 6).

PERIL STRAIT (BELOW AVERAGE STOCK STATUS)

The Peril Strait stock status was below average in 2024, down from moderate in 2022 (Table 4). Since 2023, Peril Strait has been surveyed every other year (not surveyed in 2023). Mature female CPUE was significantly above the long-term baseline, and all mature male CPUEs were significantly below the long-term baseline (Figure 22 and 23). All mature male CPUEs had a significant decreasing short-term trend. The percentage of females with poor clutches was not significantly different from the 10% threshold but showed an increasing trend in recent years. The legal biomass estimate was below the baseline value (Figure 22). The legal biomass estimate decreased and the mature biomass estimate increased from the previous year. The harvest from this area contributed an average of 0.7% of the commercial harvest over the baseline years and 1.2% of the harvest during the 2023–2024 fishery (Table 6).

GAMBIER BAY (POOR STOCK STATUS)

The Gambier Bay stock status remained poor (Table 4). Prerecruit male, recruit male, and mature female CPUEs were significantly below their baseline values (Figures 24 and 25). Postrecruit male CPUE was not significantly different from its baseline. Prerecruit and recruit male, and mature female CPUEs had short-term decreasing trends. The percentage of females with poor clutches was not significantly different from the 10% threshold but showed an increasing trend in recent years. The legal biomass estimate was below the baseline value, and both the legal and mature biomasses decreased from the previous year. The harvest from this area provided an average of 1.9% of the commercial harvest over the baseline years and 1.8% of the harvest during the 2023–2024 fishery (Table 6).

PYBUS BAY (ABOVE AVERAGE STOCK STATUS)

In 2024, the Pybus Bay stock status increased to above average from moderate in 2023 (Table 4). Mature female CPUE was significantly above the long-term baseline, and all mature male CPUEs were not significantly different from their long-term baselines (Figures 26 and 27). There were no significant short-term trends in CPUE. The legal biomass estimate was near, but below, the baseline value, and both legal and mature male biomass estimates had slightly decreased from 2023 (Figure 26). The harvest from this area provided an average of 1.2% of the commercial harvest over the baseline years and 2.2% of the harvest during the 2023–2024 fishery (Table 6).

THOMAS BAY (MODERATE STOCK STATUS)

The Thomas Bay stock status increased from below average in 2023 to moderate in 2024 (Table 4). Recruit male CPUE was significantly below the long-term baseline value, whereas mature female, prerecruit male, and postrecruit male CPUEs were not significantly different from their long-term baselines (Figures 28 and 29). There were significant short-term decreasing trends in prerecruit and recruit male CPUEs. The percent of females with poor clutch fullness was significantly below 10%. The legal biomass estimate was below the baseline level and slightly down from the previous year, while mature biomass was up slightly (Figure 28). Thomas Bay commercial harvest provided an average of 4.8% of the regional commercial harvest over the baseline years and 2.1% of the harvest during the 2023–2024 fishery (Table 6).

TANNER FISHERY MANAGEMENT ACTIONS, 2024–2025

The Registration Area A (Southeast Alaska) Tanner crab harvest strategy (5 AAC 35.113) establishes commercial Tanner crab fishing season length using estimated mature male biomass and the number of registered pots at the start of the fishery. As of 4:30 p.m. Sunday, February 16, 2025, there were 58 pot vessels and 4,620 pots registered for fishery. At the current estimated mature male biomass and effort level of 4,620 registered pots, the harvest strategy provides one additional day of season length in the core, non-core, and inside exploratory areas (Figure 1).

The 2025 commercial Tanner crab fishery in Southeast Alaska opened in core, non-core, inside exploratory, and outside exploratory areas on Monday, February 17, 2025, at 12:00 noon. The season closed in core fishing areas after 6 fishing days on Sunday, February 23, 2025, at 12:00 noon. The non-core, inside exploratory areas, and outside exploratory areas remained open for an additional 5 days. After the non-core areas closed to fishing on Friday, February 28, 2025, at 12:00 noon, the inside exploratory areas and outside exploratory areas remained open for an additional 14 days. Following the closure of inside exploratory areas to fishing on Friday, March 14, 2025 at 12:00 noon, the outside exploratory areas remained open through Monday, March 31, 2025, at 11:59 p.m.

FISHERY SUMMARY FOR THE PAST 3 SEASONS - CORE AND NON-CORE AREAS

Harvest in the Southeast Tanner crab fishery ranged from 833,748 lb of crab from 65 vessels in 2025 to a harvest of 954,540 lb from 70 vessels in 2023 (Table 1). Even with lower harvest in 2025, the exvessel value of \$4.1 million was the highest of the most recent 3 fishing seasons. The higher price of \$5.95 per lb in 2025 drove this increase in exvessel value compared to \$2.5 million in both 2023 and 2024, when the price per lb was \$3.08 and \$3.38 per lb, respectively. Average weights were similar for all 3 years: 2.4 lb in 2023 and 2.5 lb for both 2024 and 2025. The percentage of bitter crab recorded on fish tickets was between 12% and 15% for all 3 years. Less than 1% of the permit holders in the fishery used ring nets.

Most of the Tanner crab harvest occurs in the core areas. For the past 3 seasons, this harvest has ranged from 79% to 82% of the total (Table 7). Total harvest ranged from 683,692 lb in 2025 to 752,875 lb in 2023. Participation in the core areas ranged from 47 permits in 2025 to 57 permits in 2023. There was less participation in the noncore areas, ranging from 17 permits in 2024 to 33 permits in 2023. The noncore harvest was 201,629 lb in 2023, 159,068 lb in 2024, and 144,751 lb in 2025. CPUE was higher in the core areas all 3 seasons; core CPUE averaged 16.5 crab per pot and noncore CPUE averaged 14.5 crab per pot.

The ADF&G harvest strategy uses the estimate of mature male biomass and the number of pots registered to determine the season length in the core areas. For 2023, 2024, and 2025 there has been one additional day of fishing in the core areas, making for 6 days of allowed fishing per year.

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- Seber, G. 2002. Estimation of Animal Abundance, International Statistical Review.
- Zheng, J. and G. H. Kruse. 1999. Overview of population dynamics and recommended harvest strategy for Tanner crabs in the eastern Bering Sea. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 5J99-04, Juneau.

TABLES AND FIGURES

Table 1.—Southeast Alaska (Registration Area A) commercial Tanner crab harvest (lb), effort, and value by season and gear type, 2000–2001 through 2023–2024.

Season	Permits fished	Harvest (No. of crab)	Harvest (lb)	Average price	Exvessel value (\$)	Average weight	Percentage bitter crab ^a (%)	Percentage ring net harvest (%)
2000–2001	161	477,827	1,295,680	1.90	2,512,022	2.7	5	6.0
2001–2002	140	369,016	964,836	1.70	1,656,403	2.6	7	3.0
2002–2003	111	312,461	804,234	2.10	1,654,440	2.6	10	4.0
2003–2004	98	336,863	832,158	2.10	1,776,171	2.5	9	3.0
2004–2005	81	320,167	804,035	2.00	1,572,494	2.5	8	2.0
2005–2006	72	349,491	886,521	1.40	1,255,141	2.5	6	2.0
2006–2007	76	367,561	927,900	1.70	1,553,521	2.5	7	2.0
2007–2008	67	239,737	605,062	1.70	1,020,665	2.5	6	2.0
2008–2009	41	244,785	612,550	0.90	575,718	2.5	9	2.0
2009–2010	44	372,737	963,510	0.70	699,271	2.6	8	2.0
2010–2011	64	343,759	891,344	2.60	2,324,727	2.6	6	3.0
2011–2012	70	428,563	1,109,784	2.70	3,045,748	2.6	7	3.0
2012–2013	76	475,538	1,242,433	2.30	2,825,708	2.6	7	3.0
2013–2014	80	470,070	1,256,739	2.50	3,177,955	2.7	7	2.0
2014–2015	84	550,545	1,421,863	1.90	2,746,307	2.6	14	1.0
2015–2016	74	519,561	1,306,416	2.20	2,919,671	2.5	11	1.0
2016–2017	73	408,407	993,614	2.70	2,683,963	2.4	9	2.0
2017–2018	73	487,631	1,199,551	3.10	3,682,606	2.5	9	1.0
2018–2019	69	511,811	1,286,091	3.30	4,197,946	2.5	10	1.0
2019–2020	76	479,727	1,212,725	3.20	3,894,498	2.5	11	0.5
2020–2021	70	504,369	1,265,246	3.40	4,264,882	2.5	18	0.4
2021–2022	85	551,648	1,401,123	6.60	9,298,490	2.5	14	0.8
2022–2023	62	376,599	954,540	2.60	2,515,374	2.5	13	0.6
2023–2024	50	342,209	857,963	2.90	2,471,851	2.5	12	0.2
5-yr average	69	450,910	1,138,319	3.90	4,489,019	2.5	14	0.5

^a Data are gathered from fish tickets.

Table 2.—Southeast Alaska Tanner crab surveys legal and mature male biomass estimates (lb), 2022–2024.

Survey area	2022		2023		2024	
	Legal biomass (lb)	Mature biomass (lb)	Legal biomass (lb)	Mature biomass (lb)	Legal biomass (lb)	Mature biomass (lb)
Glacier Bay	225,991	448,175	258,539	758,339	247,229	469,466
Icy Strait	111,496	186,472	78,109	226,974	43,788	81,868
Excursion Inlet	135,849	207,050	60,629	125,417	58,287	107,196
Lynn Sisters	44,041	55,557	28,785	43,797	233,373	29,777
North Juneau	166,735	223,277	142,645	187,210	94,457	116,672
Stephens Passage	534,899	685,205	385,842	515,626	243,326	302,351
Seymour Canal	439,651	741,913	563,247	759,733	468,428	639,078
Holkham Bay	191,006	386,991	262,488	375,316	145,308	204,693
Peril Strait	65,182	166,306	65,182	166,306	23,652	53,884
Pybus Bay	35,385	63,694	43,532	52,846	28,314	43,704
Gambier Bay	45,265	94,095	47,357	57,227	29,639	38,392
Thomas Bay	99,658	190,138	64,820	109,265	49,771	90,995
Other areas	1,079,324	1,776,692	1,030,908	1,740,211	749,840	1,122,038
Total	3,174,482	5,225,564	3,032,083	5,118,267	2,205,413	3,300,113

Table 3.—Southeast Alaska Tanner crab stock health scores, associated categories, and suggested exploitation rates.

Score	Stock health category	Suggested exploitation rate
<-3.25	Poor	0%
-3.25 to -1.26	Below average	5%
-1.25 to 1.25	Moderate	10%
1.26 to 3.25	Above average	15%
>3.25	Healthy	20%

Table 4.–Southeast Alaska Tanner crab stock health designations and scores 2022–2024 by survey area.

Survey area	2022	2023	2024
Glacier Bay	Moderate (0.75)	Above average (1.5)	Moderate (-1.25)
Icy Strait	Moderate (-0.75)	Below average (-1.75)	Poor (-3.50)
Excursion Inlet	Below average (-2.00)	Poor (-4.00)	Below average (-2.75)
North Juneau	Above average (2.00)	Moderate (-0.50)	Poor (-4.00)
Stephens Passage	Healthy (4.50)	Above average (1.50)	Below average (-2.00)
Seymour Canal	Healthy (4.25)	Above average (2.25)	Healthy (5.00)
Holkham Bay	Healthy (4.25)	Above average (1.75)	Moderate (-0.50)
Peril Strait	Moderate (0.75)	Unsurveyed	Below average (-2.50)
Gambier Bay	Moderate (0.75)	Poor (-4.00)	Poor (-3.75)
Pybus Bay	Moderate (-0.50)	Moderate (-0.25)	Above average (2.00)
Thomas Bay	Moderate (1.00)	Below average (-2.50)	Moderate (-0.50)

Table 5.—Southeast Alaska crab number of pots set and Tanner crab sampled by survey area, 2022–2024.

Survey area	2022		2023		2024	
	No. of pots set	No. of crab sampled	No. of pots set	No. of crab sampled	No. of pots set	No. of crab sampled
Glacier Bay	52	624	52	685	52	459
Icy Strait	52	1,207	52	836	52	348
Excursion Inlet	56	511	56	572	56	554
Lynn Sisters	28	275	28	270	28	162
North Juneau	154	1,551	136	1,174	134	643
Stephens Passage	70	1,095	88	762	90	516
Seymour Canal	71	1,152	71	890	71	934
Holkham Bay	78	1,606	78	1379	78	714
Peril Strait	56	443	NA	NA	56	150
Pybus Bay	56	325	56	174	56	187
Gambier Bay	81	580	81	210	81	179
Thomas Bay	52	1,302	52	796	52	599
Total	806	10,671	750	7,748	806	5,445

Note: NA indicates area not surveyed.

Table 6.—Southeast Alaska Tanner crab commercial fishery harvest contribution by survey area for 2021–2022, 2022–2023, and 2023–2024.

Survey area	Harvest contribution to fishery (%)			
	Baseline ^a	2021–2022	2022–2023	2023–2024
Glacier Bay	9.2	7.1	8.6	7.8
Icy Strait	12.0	7.0	3.8	3
Excursion Inlet	6.3	3.8	3.4	1.5
Lynn Sisters	0.7	0.9	1.2	0.9
North Juneau	7.1	6.1	8.0	6.3
Stephens Passage	9.5	17.2	15.3	13.2
Seymour Canal	6.3	5.4	8.0	21.0
Holkham Bay	7.1	6.6	6.1	7.0
Peril Strait	0.7	1.1	0.9	1.2
Gambier Bay	1.9	–	1.9	1.8
Pybus Bay	1.2	–	1.4	2.2
Thomas Bay	4.8	5.8	2.5	2.1

Note: En dash indicates confidential data.

^a Baseline indicates the average contribution from 1997–2006.

Table 7.—Southeast Alaska Tanner crab participation, harvest, effort, and catch per unit effort (CPUE) from core and noncore designated areas.

Core						
Year	Permits ^a	Harvest (lb)	Harvest (crab)	Pot lifts ^b	CPUE ^b (crab per pot)	Percentage of harvest in core area (%)
2023	57	752,875	296,630	18,183	16.2	79
2024	49	698,895	276,632	16,099	17.0	81
2025	47	683,692	268,974	16,490	16.3	82
Average	51	711,821	280,745	16,924	16.5	81
Noncore						
Year	Permits ^a	Harvest (lb)	Harvest (crab)	Pot lifts ^b	CPUE ^b (crab per pot)	Percentage of harvest in noncore area (%)
2023	33	201,629	103,289	7,676	13.4	21
2024	17	159,068	68,539	4,430	15.4	19
2025	22	144,751	61,734	4,115	14.9	17
Average	24	168,483	77,854	5,407	14.5	19

^a Includes ring net permits

^b Does not include ring net lifts.

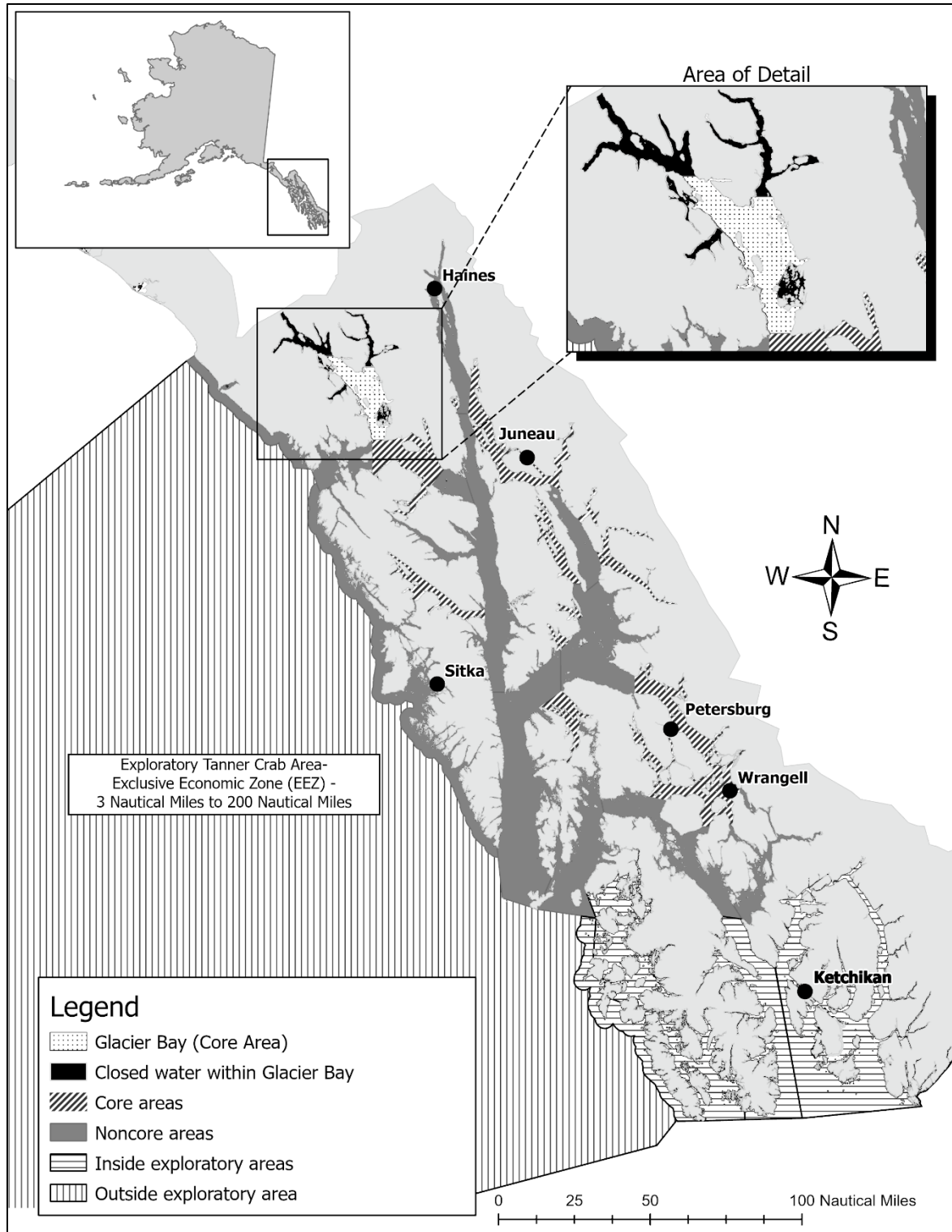


Figure 1.–Southeast Alaska (Registration Area A) commercial Tanner crab fishery core, noncore, inside and outside exploratory, and closed areas.

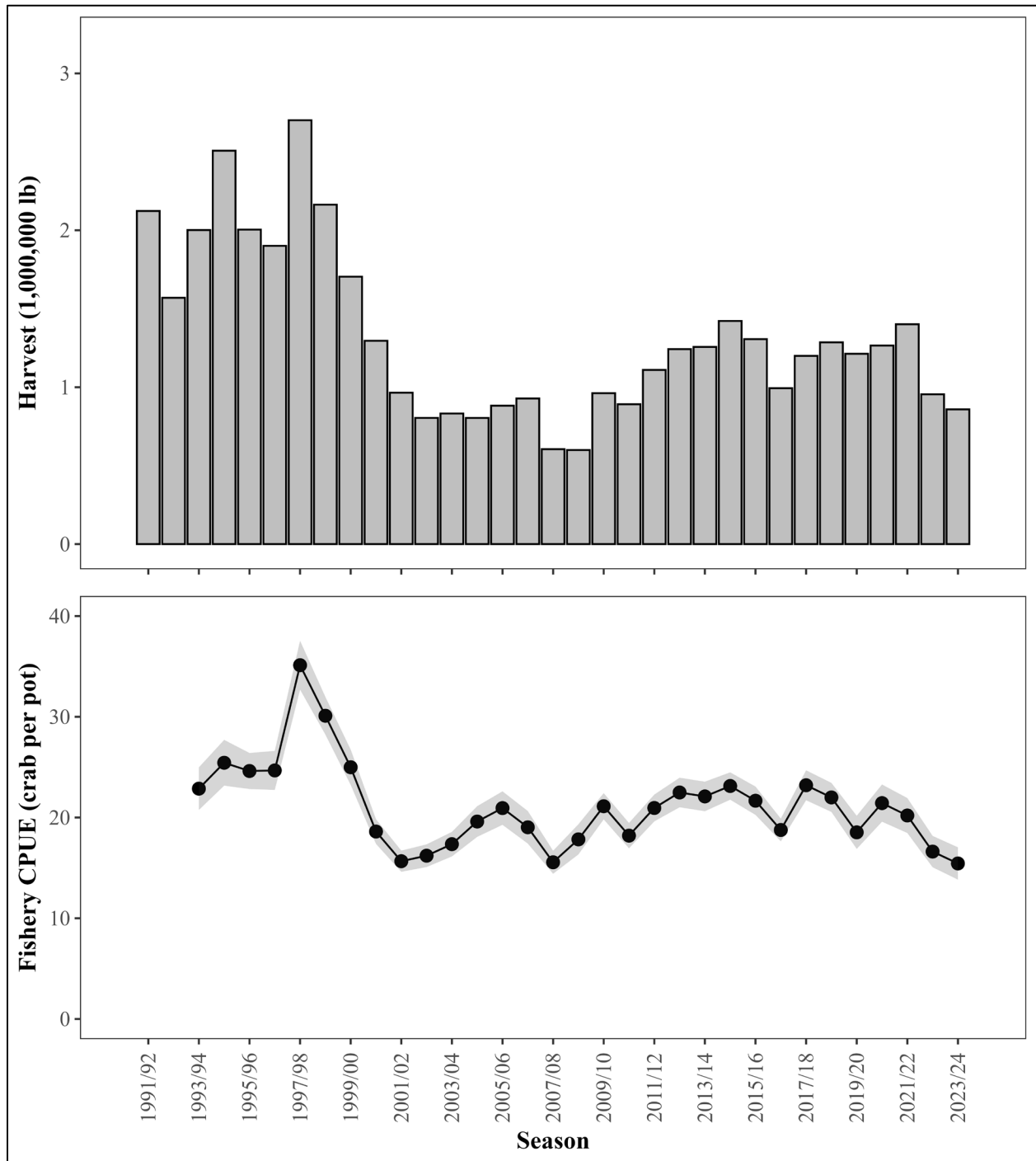


Figure 2.—Southeast Alaska commercial Tanner crab harvest and standardized commercial CPUE for the 1991–1992 through 2023–2024 fishery seasons.

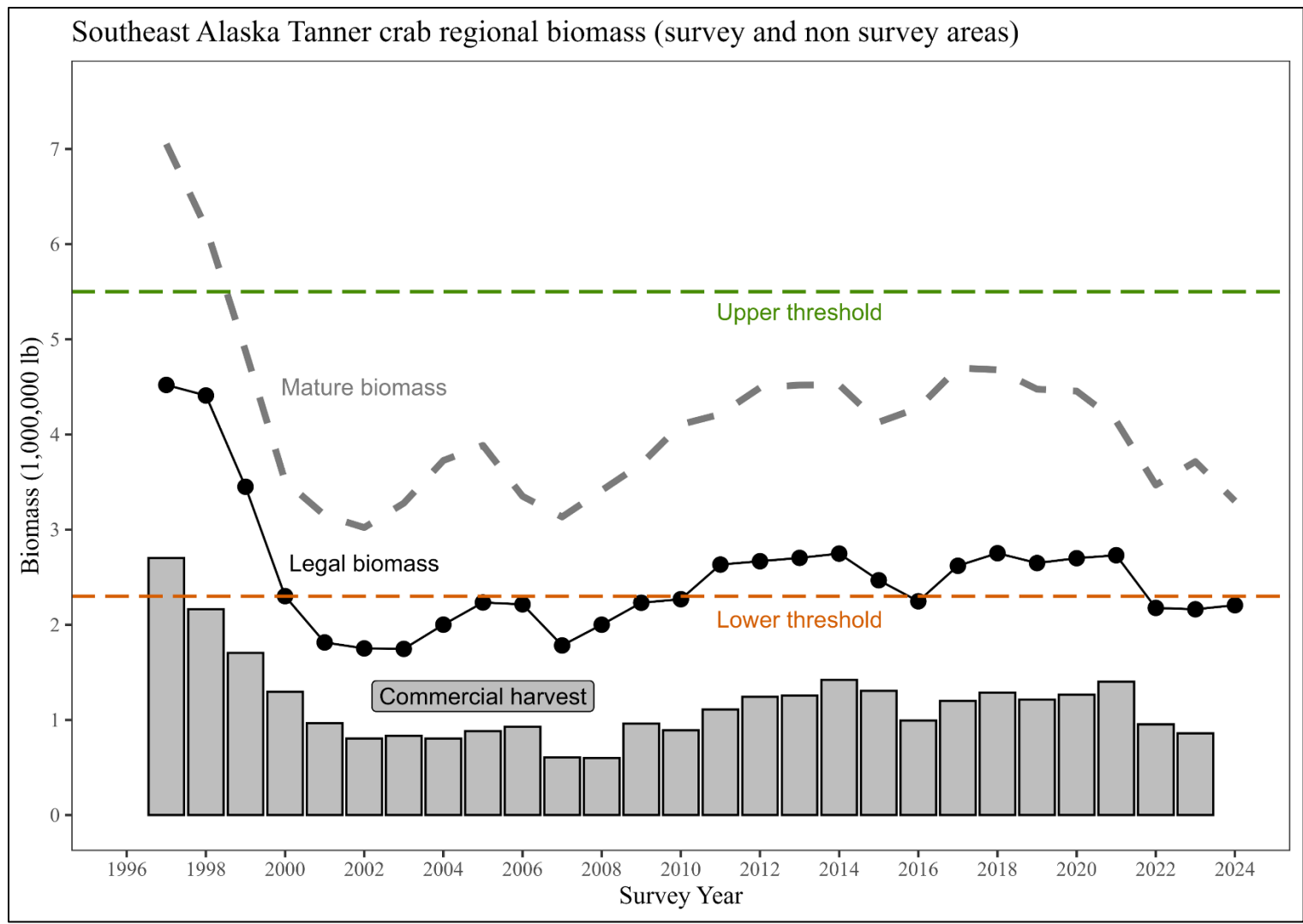


Figure 3.—Southeast Alaska Tanner crab total biomass estimates (expanded regional estimates) of mature male (gray dashed line) and legal male crab (black points and line).

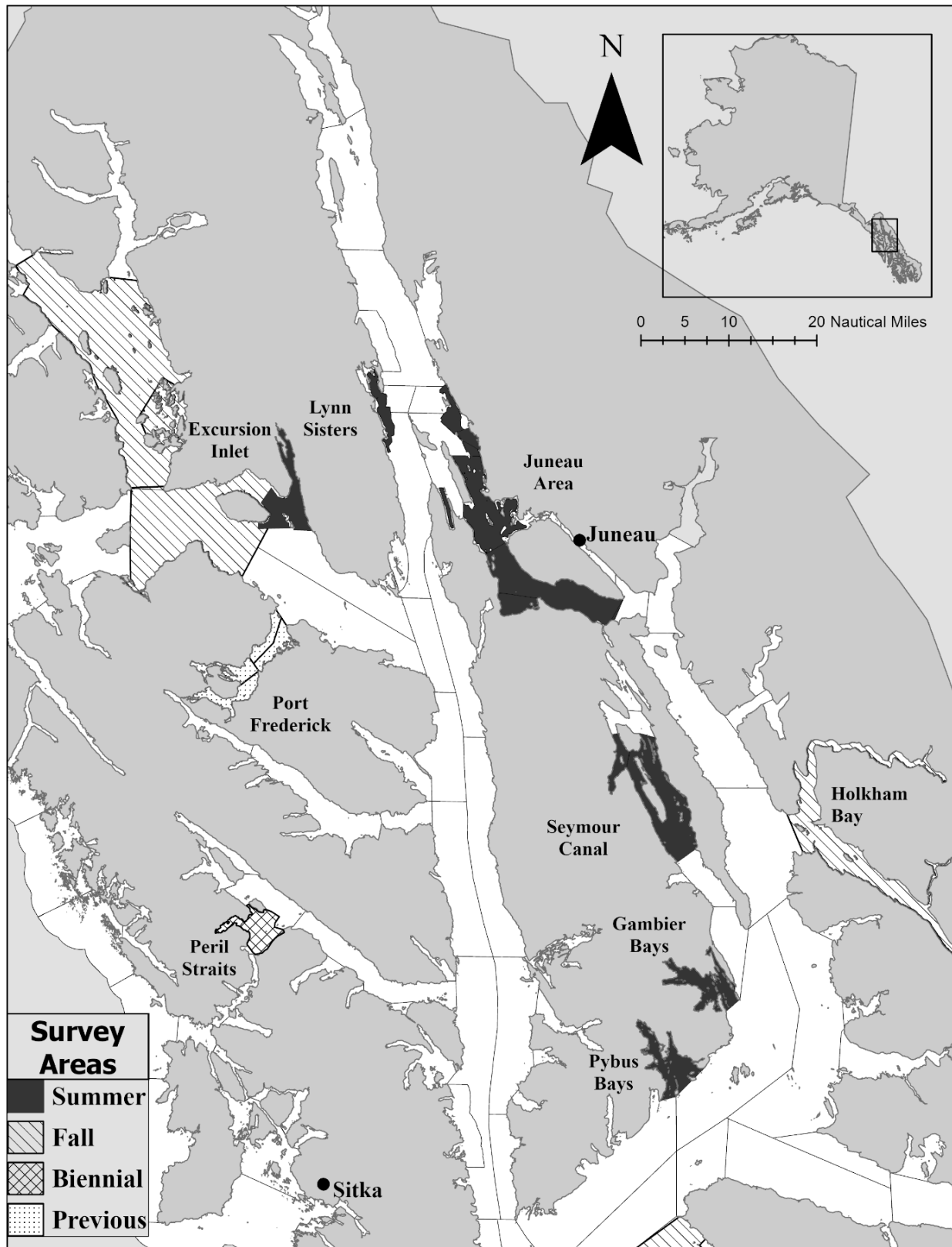


Figure 4.—Southeast Alaska (Registration Area A) summer and fall survey areas for Tanner and red king crab

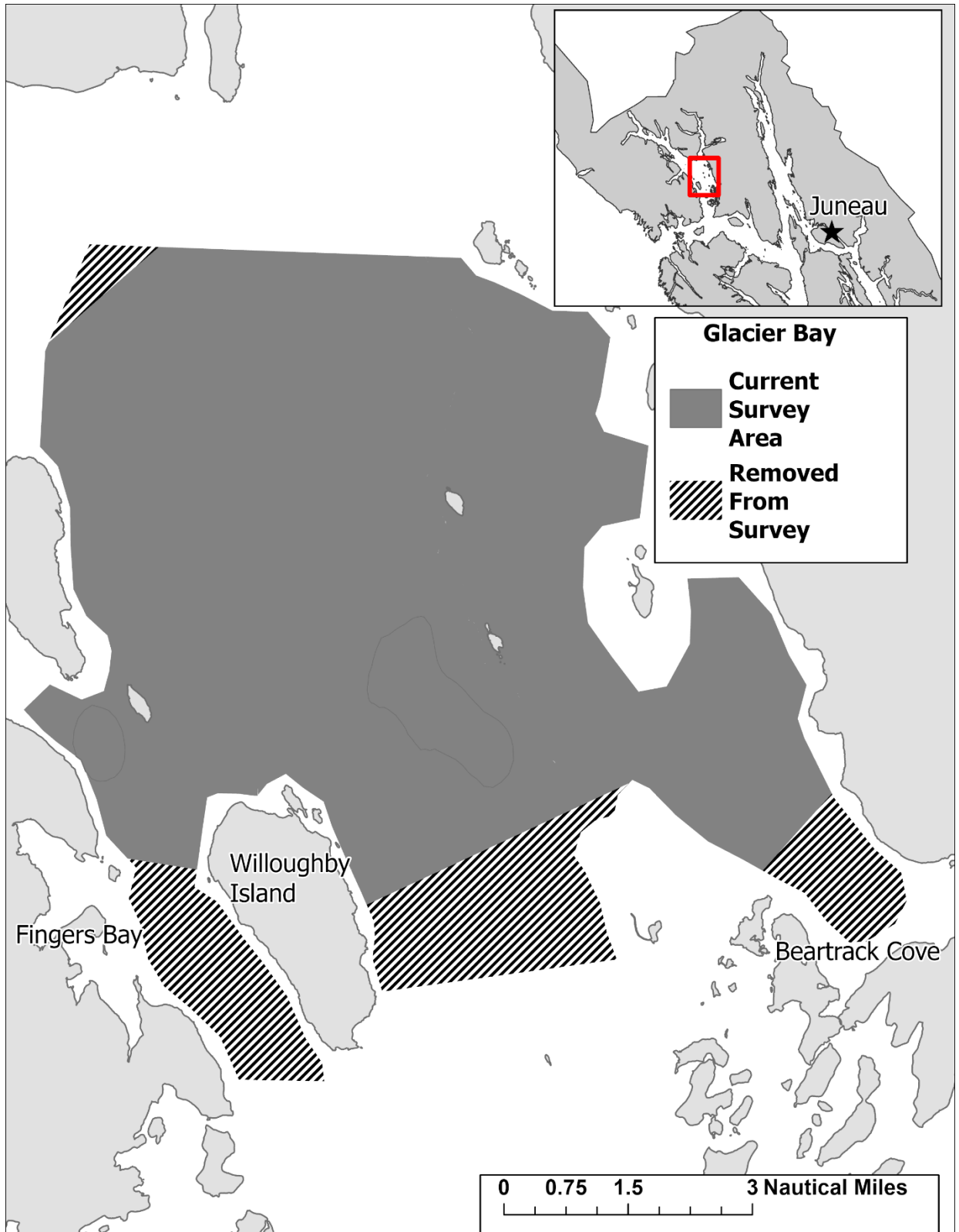


Figure 5.—Glacier Bay reduced survey area implemented in 2024.

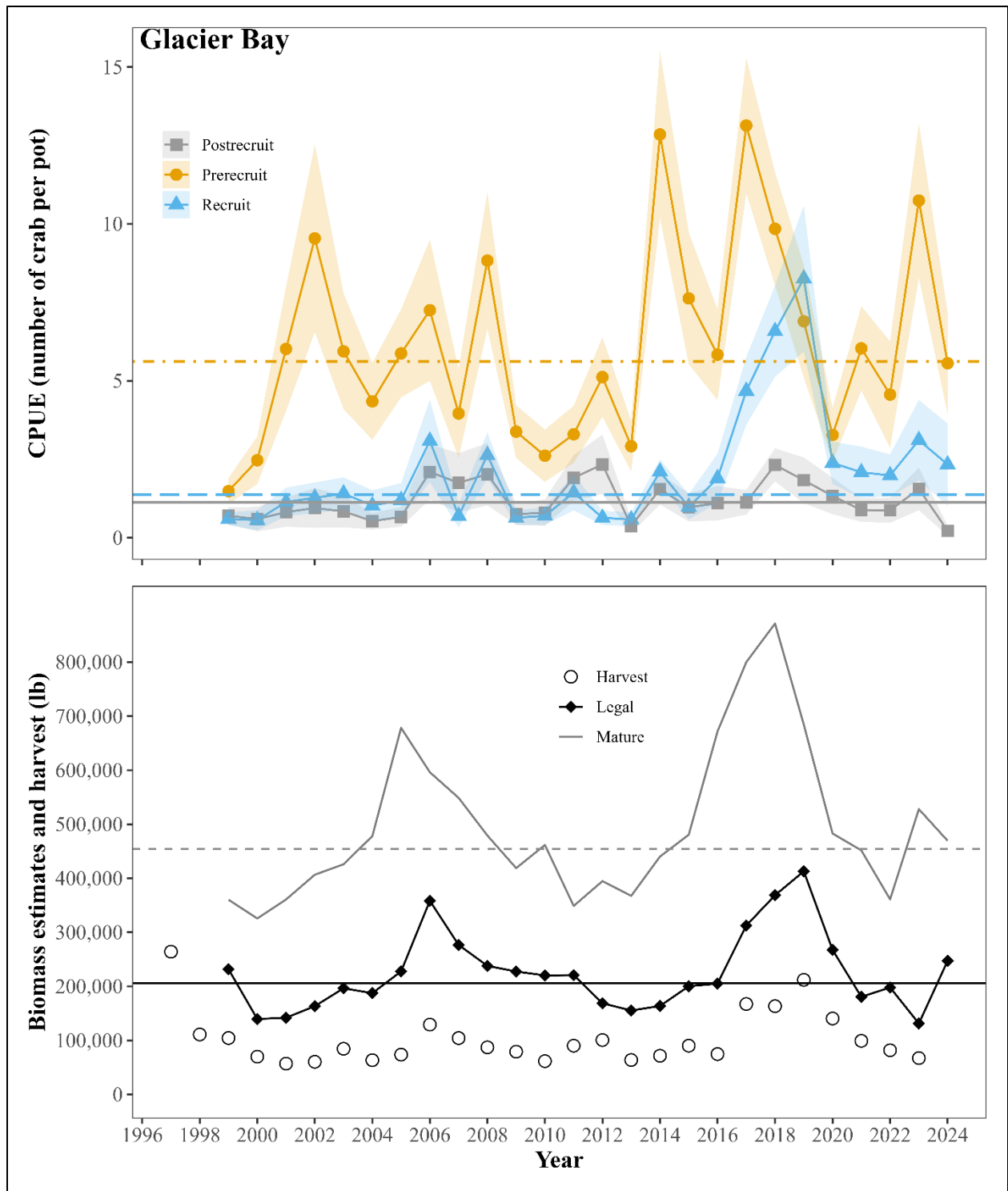


Figure 6.—Glacier Bay standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

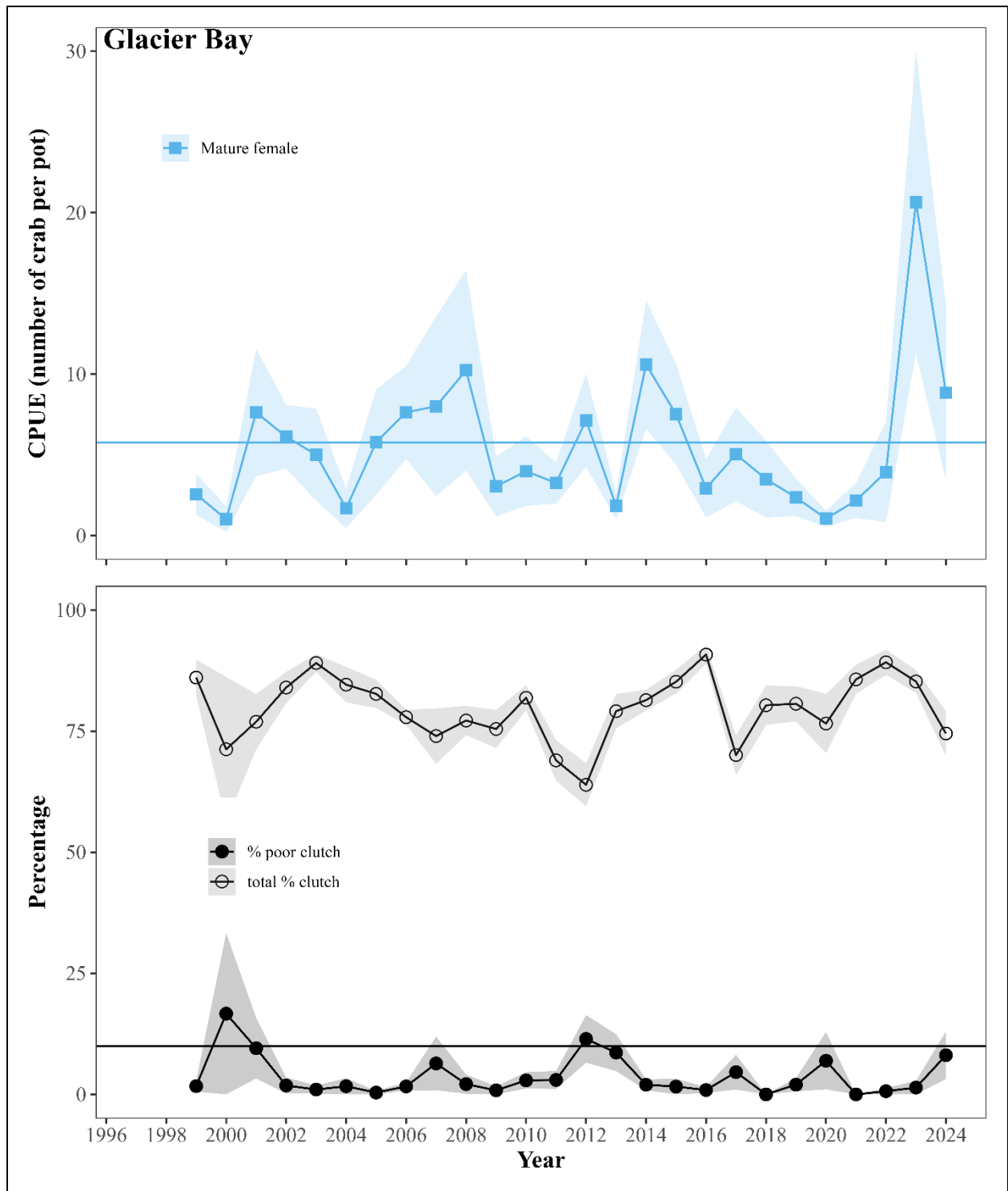


Figure 7.—Glacier Bay standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

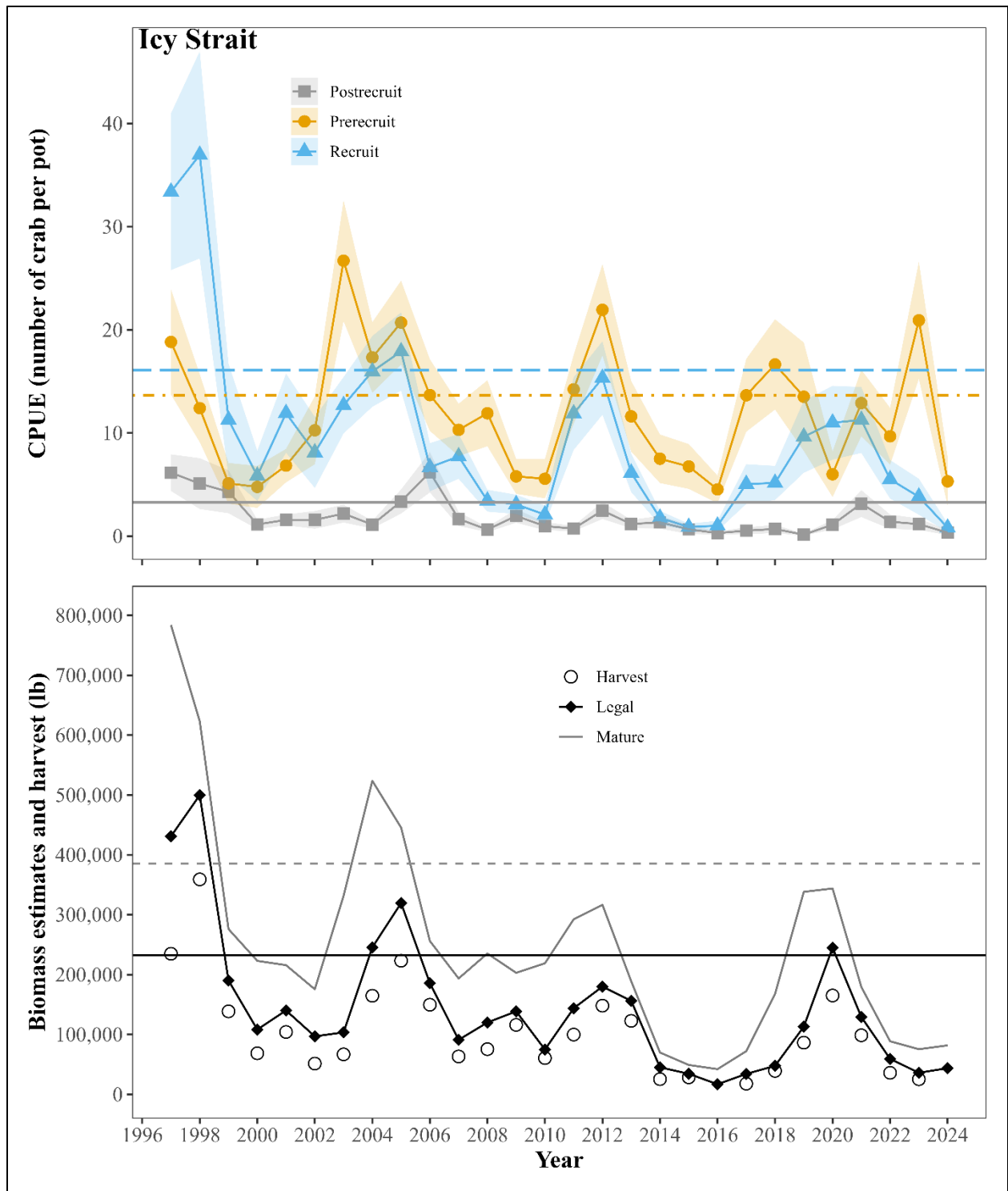


Figure 8.—Icy Strait standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

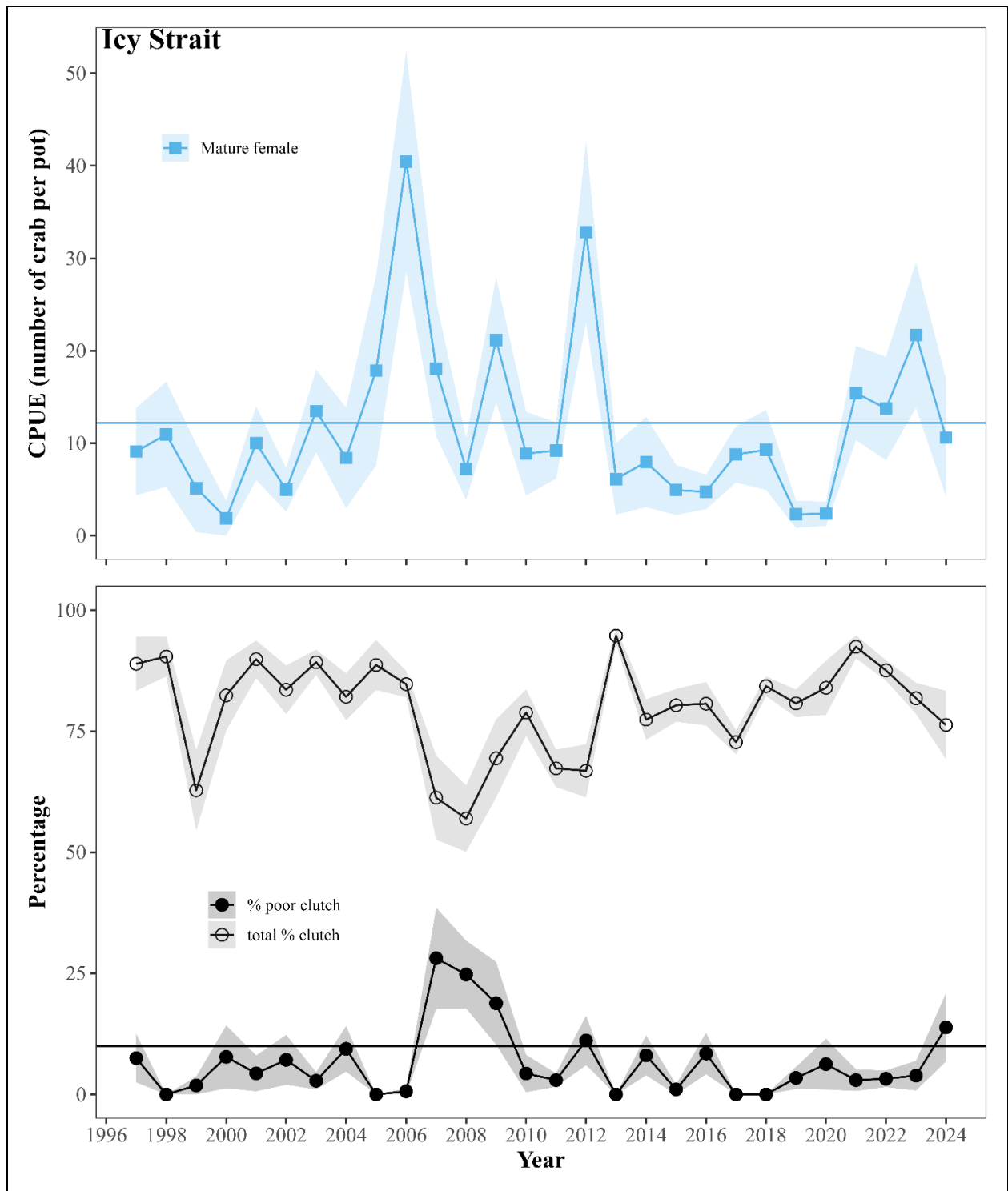


Figure 9.—Icy Strait standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

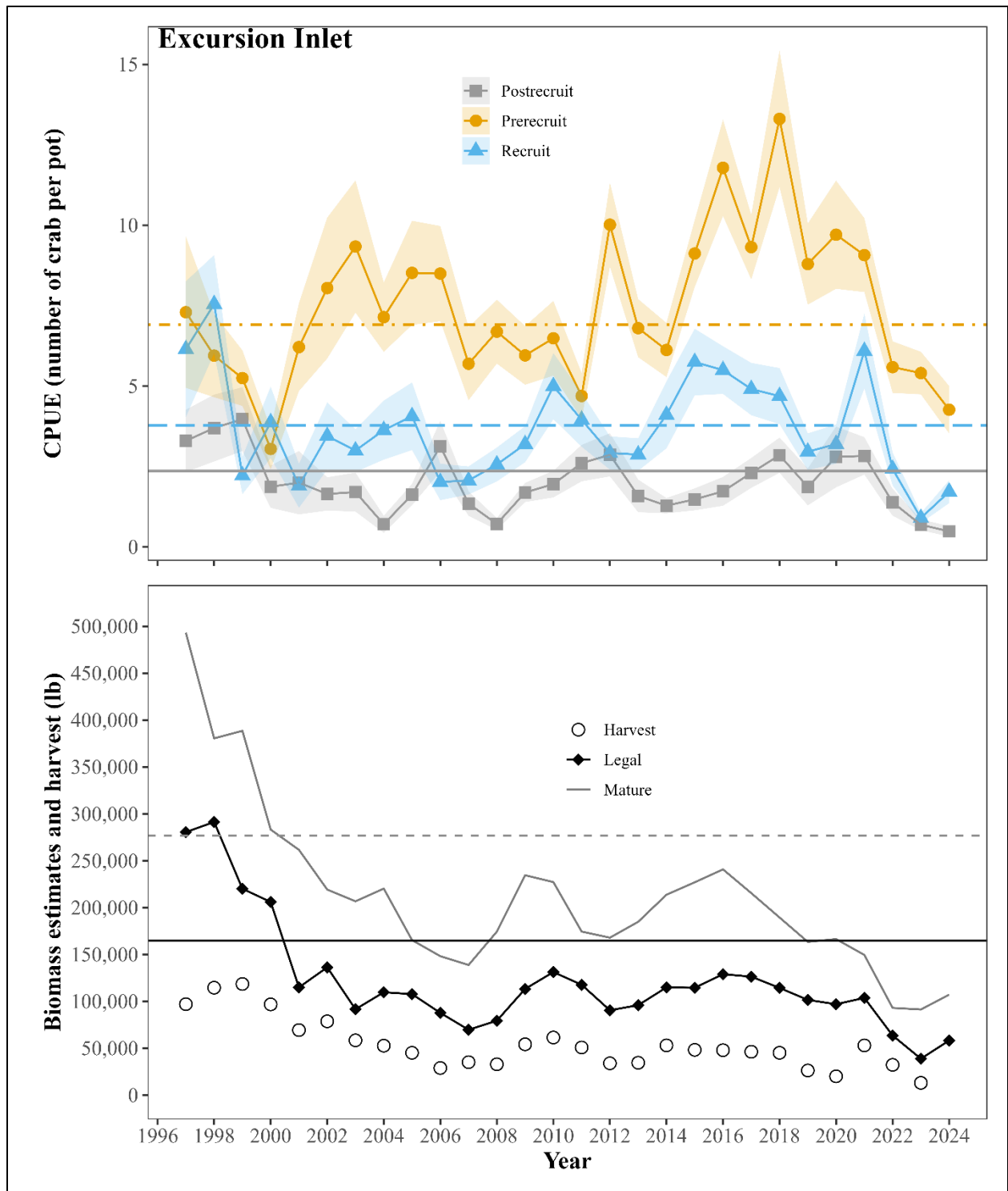


Figure 10.—Excursion Inlet standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

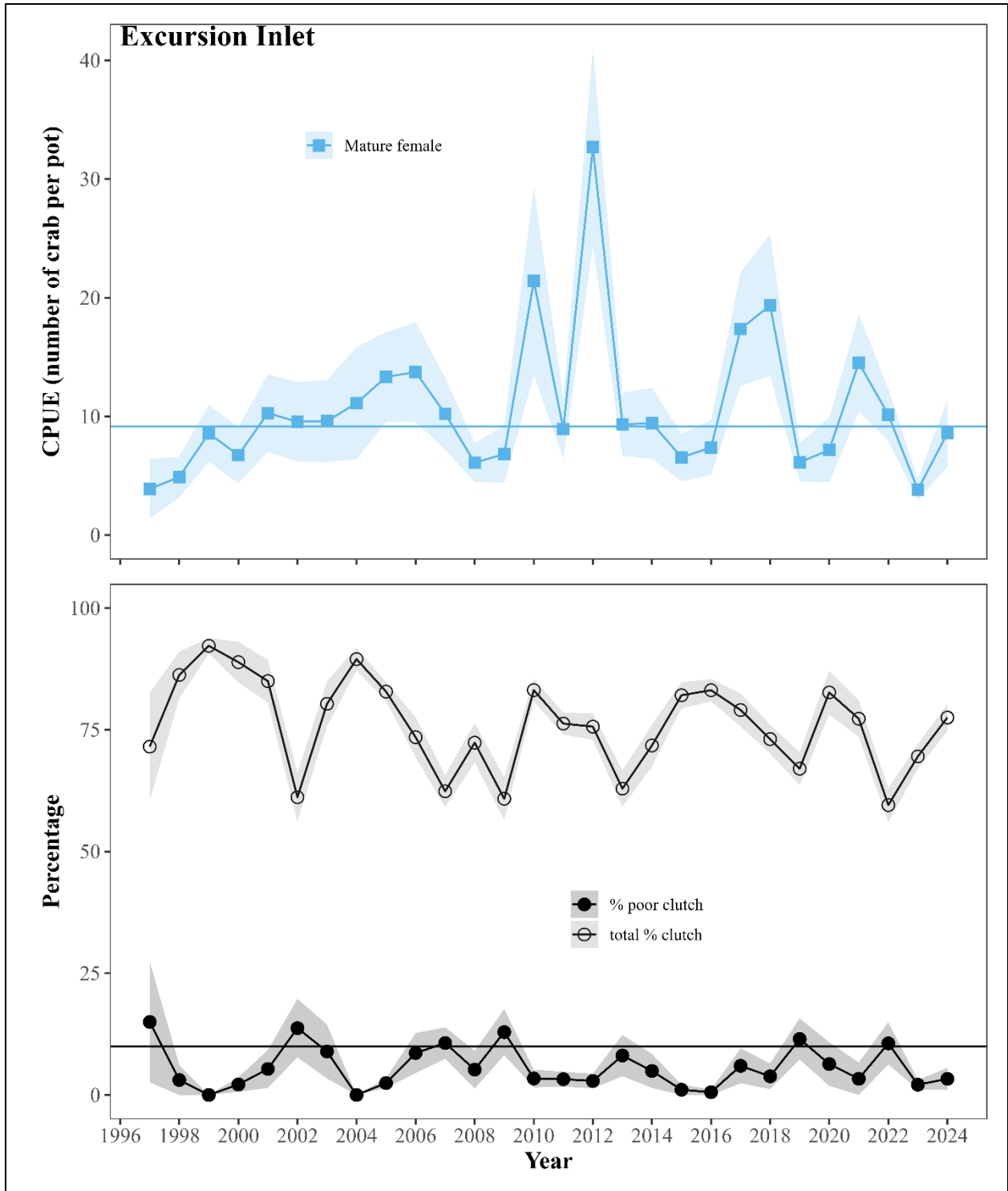


Figure 11.—Excursion Inlet standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

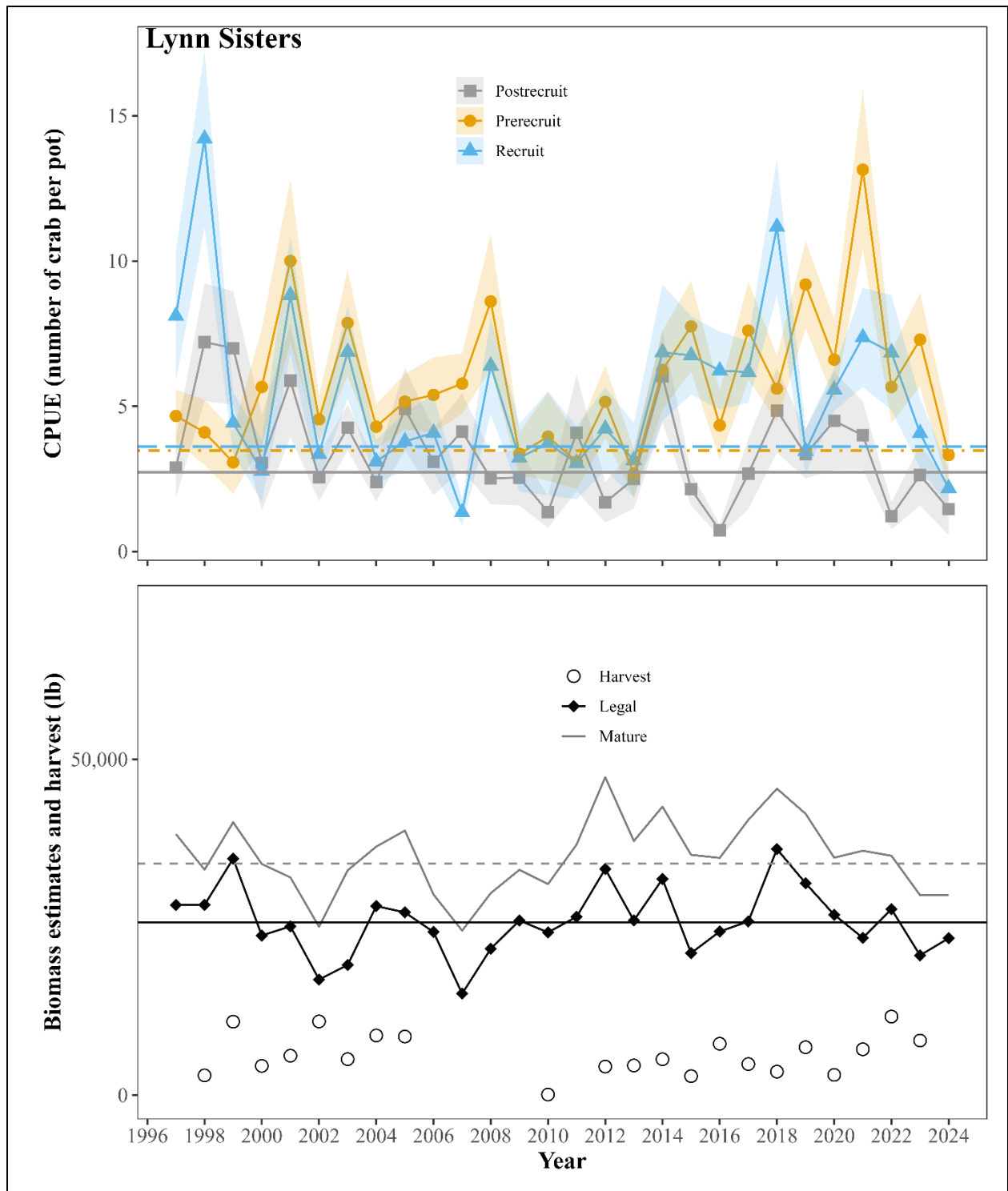


Figure 12.—Lynn Sisters standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

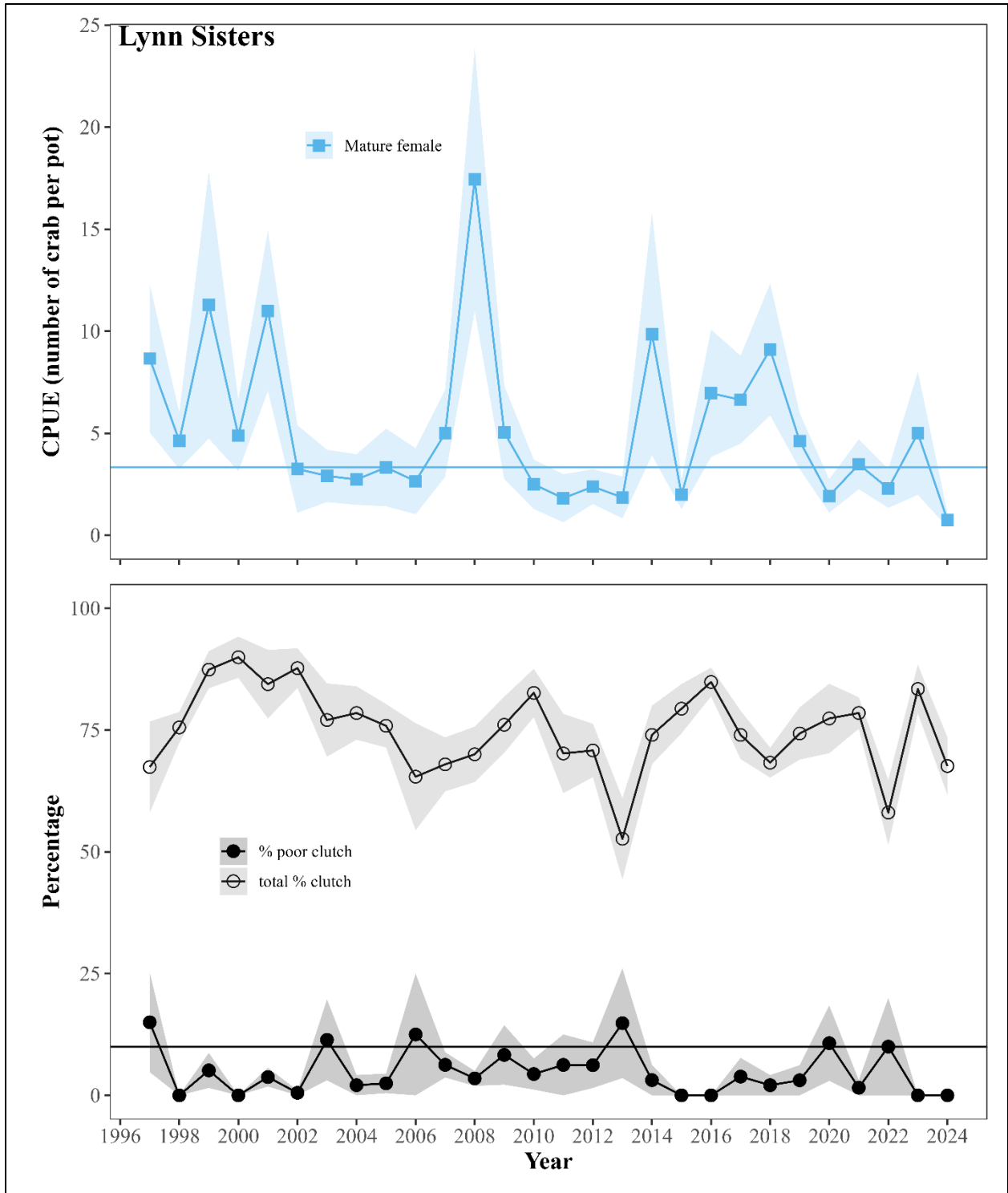


Figure 13.—Lynn Sisters standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

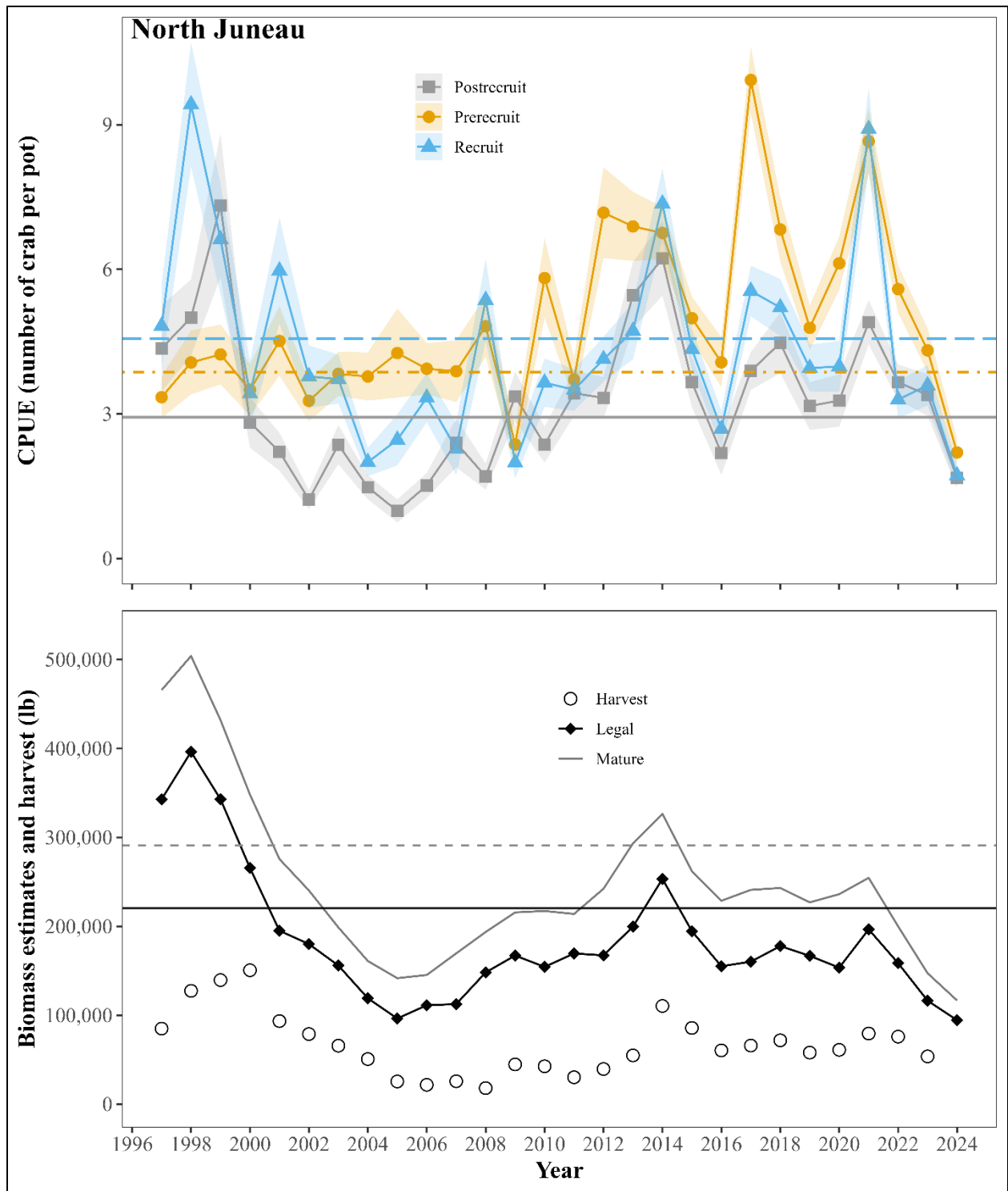


Figure 14.—North Juneau standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

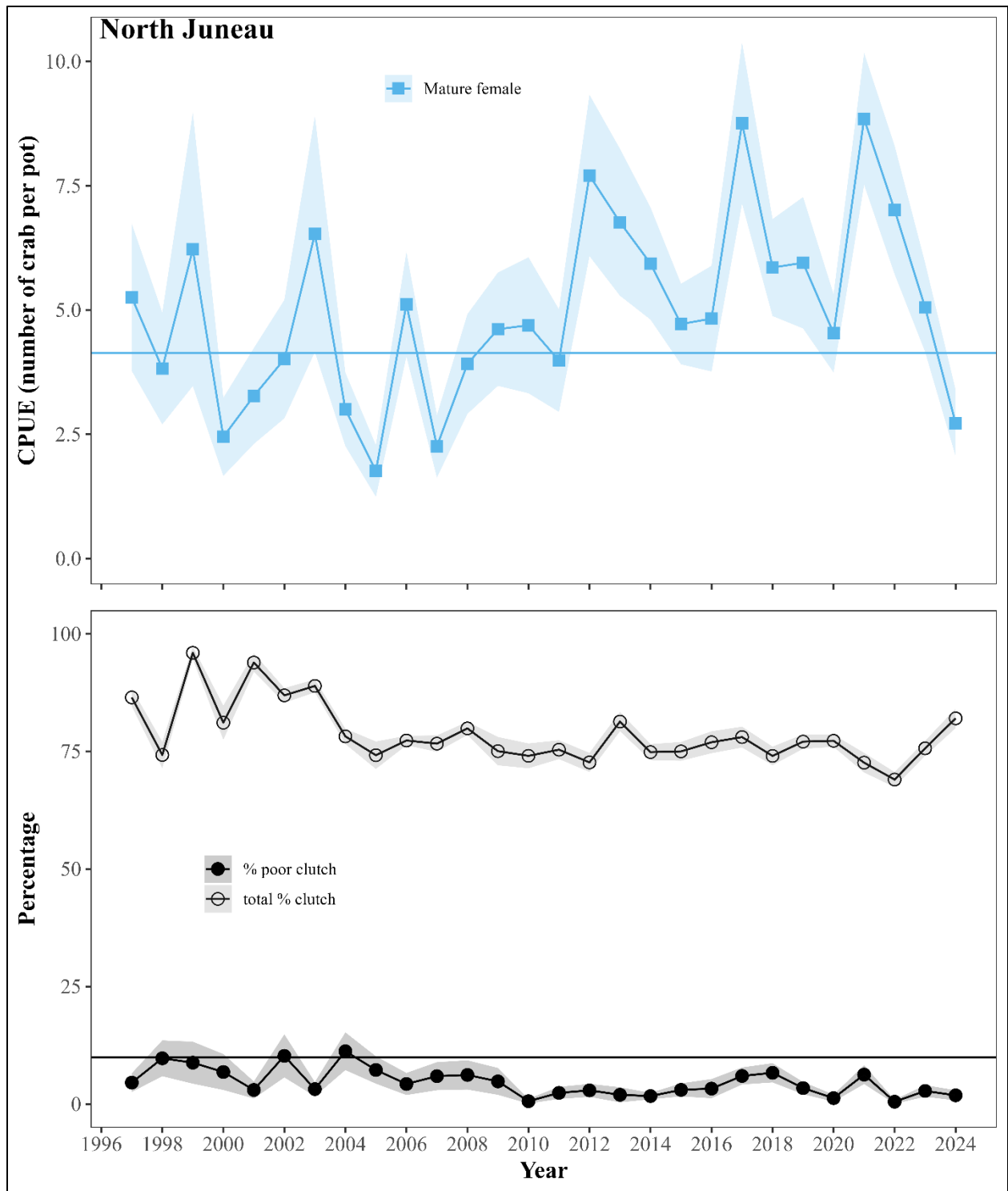


Figure 15.—North Juneau standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

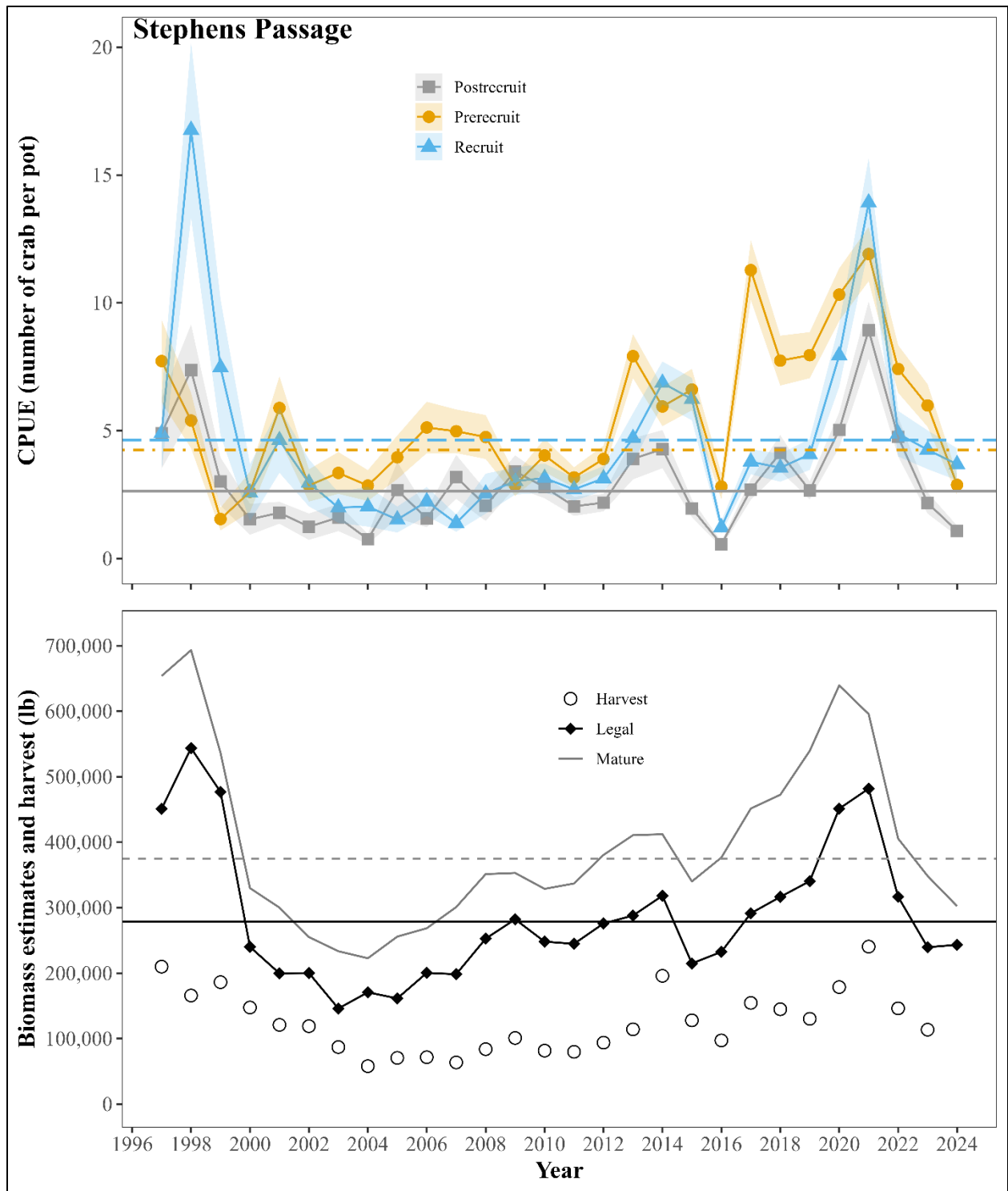


Figure 16.—Stephens Passage standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

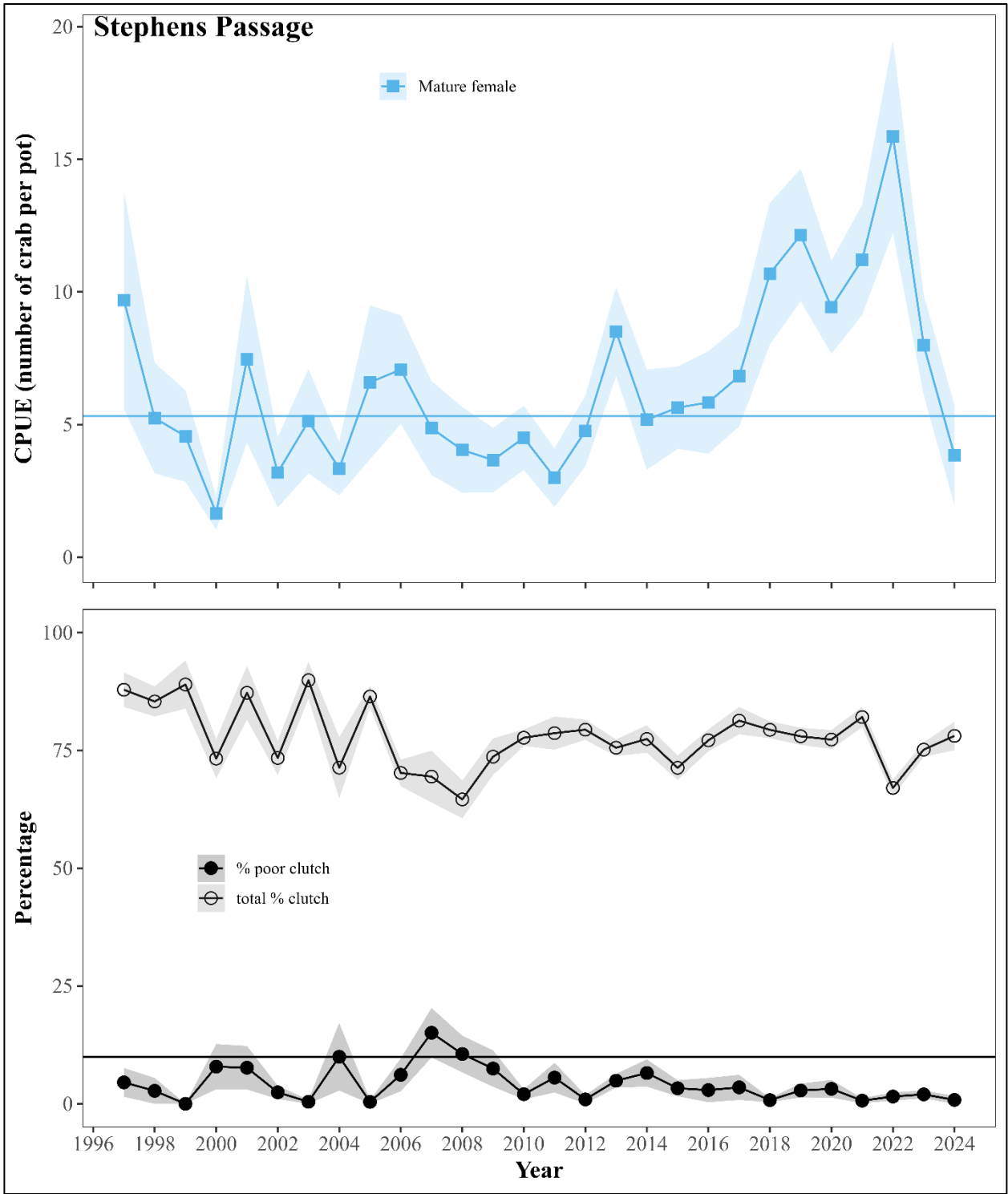


Figure 17.—Stephens Passage standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

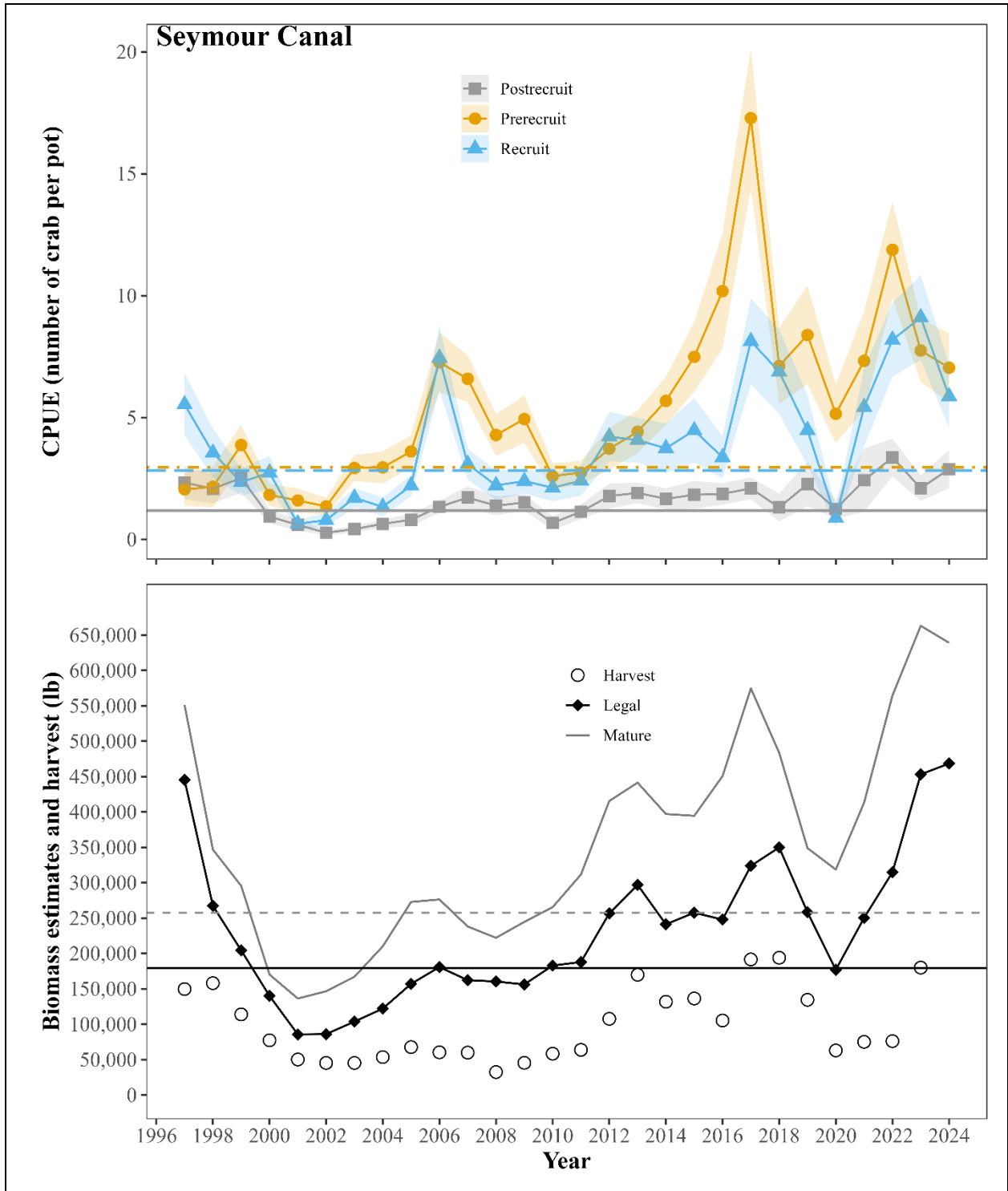


Figure 18.—Seymour Canal standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

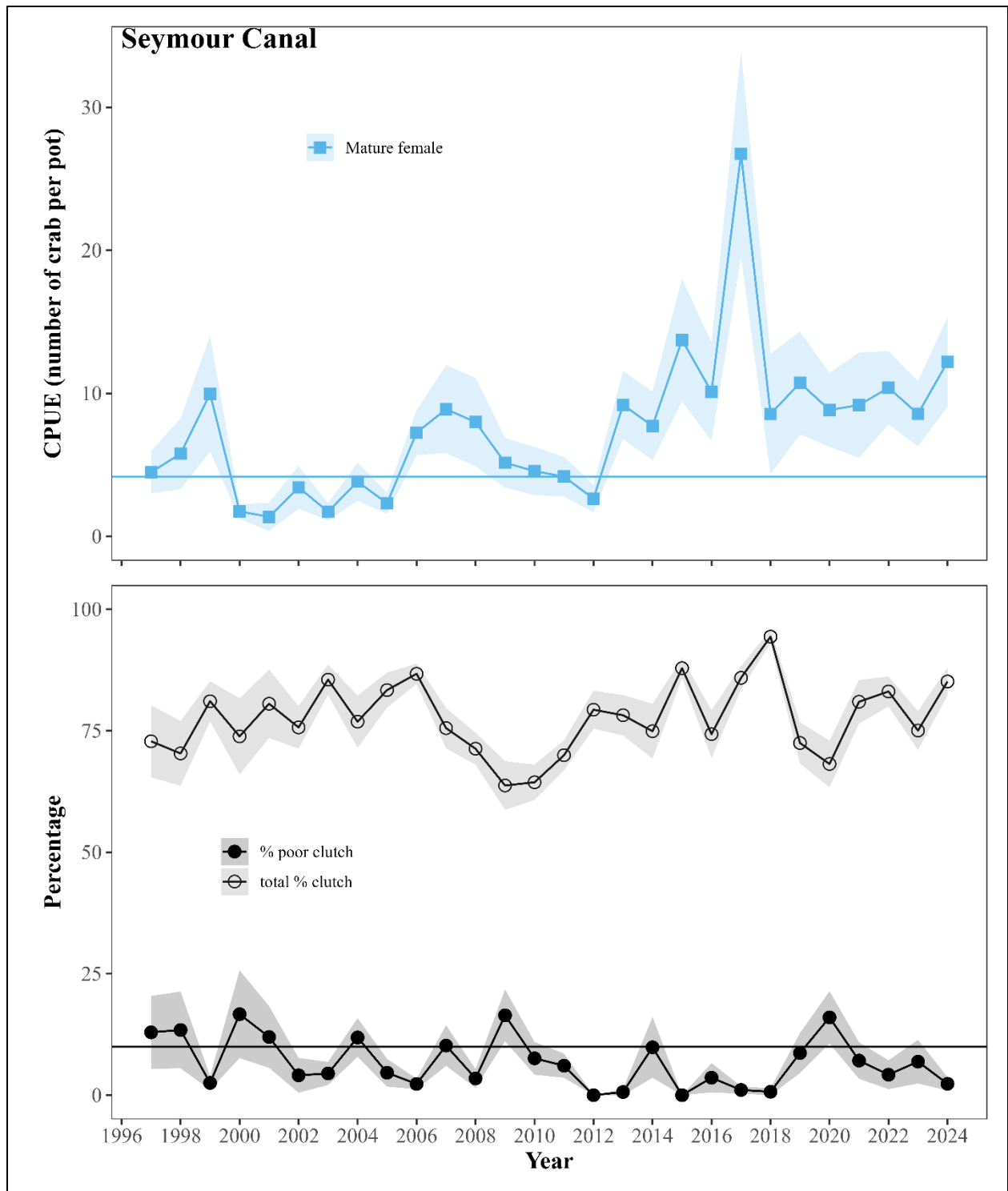


Figure 19.—Seymour Canal standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

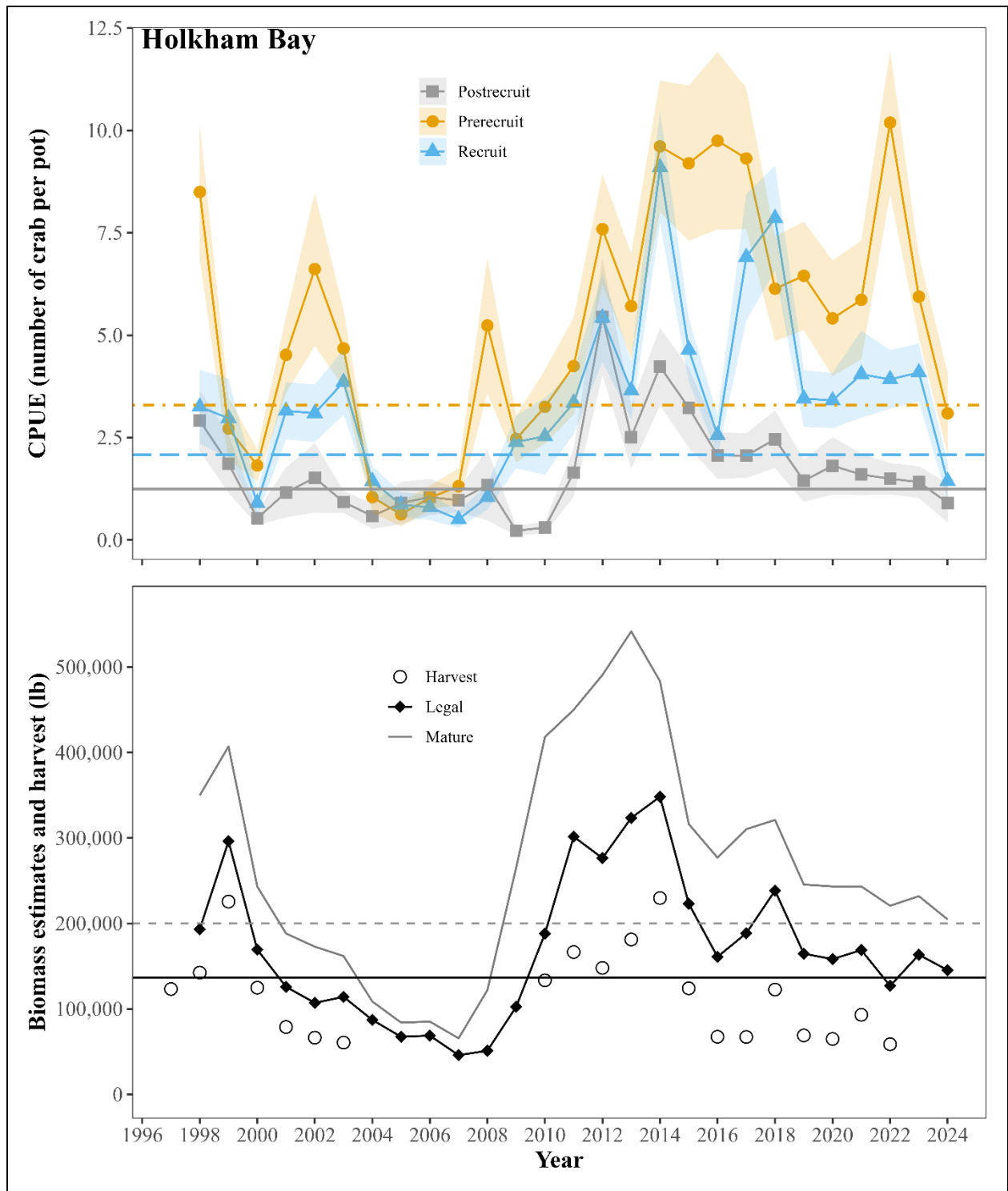


Figure 20.—Holkham Bay standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

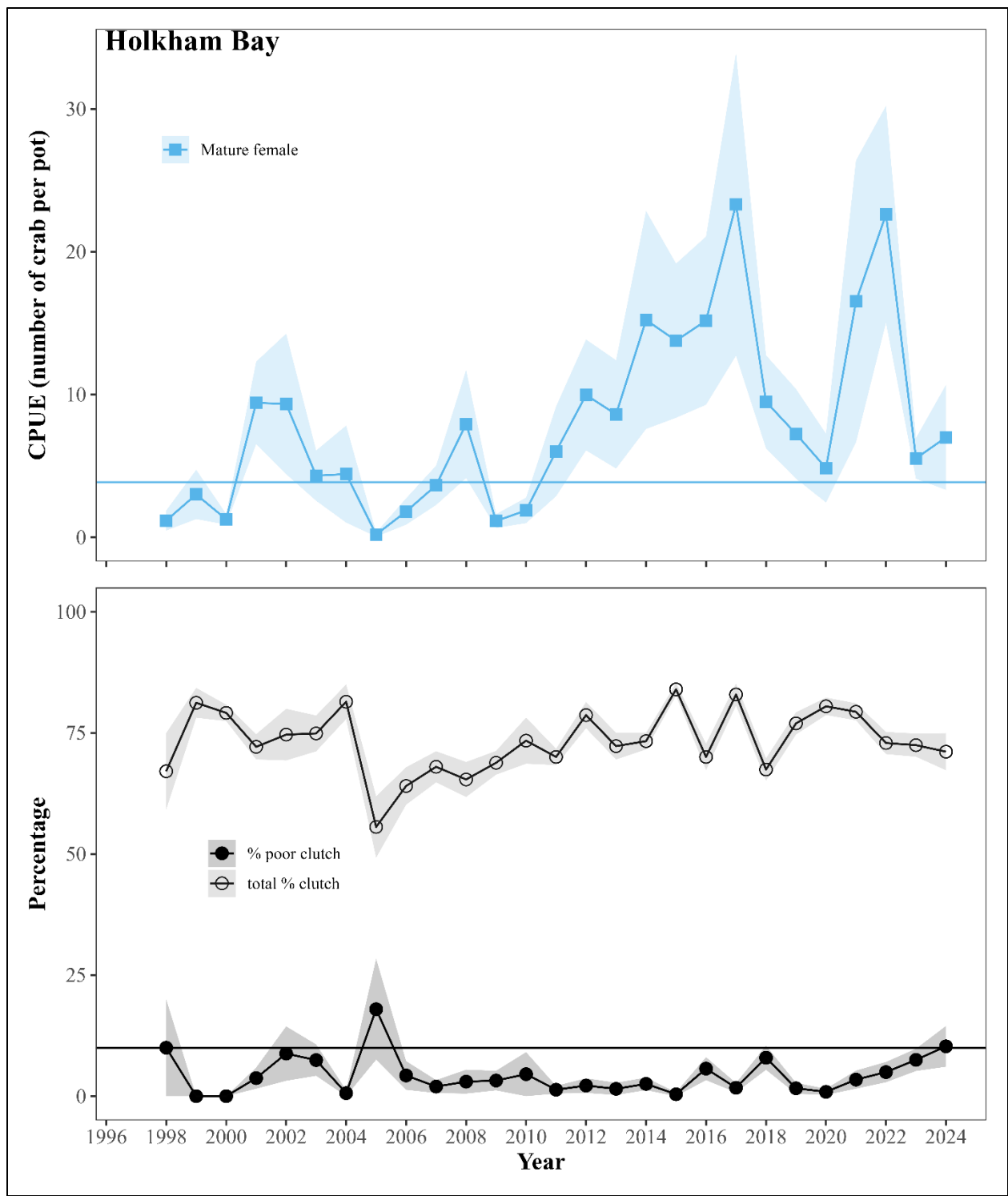


Figure 21.—Holkham Bay standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

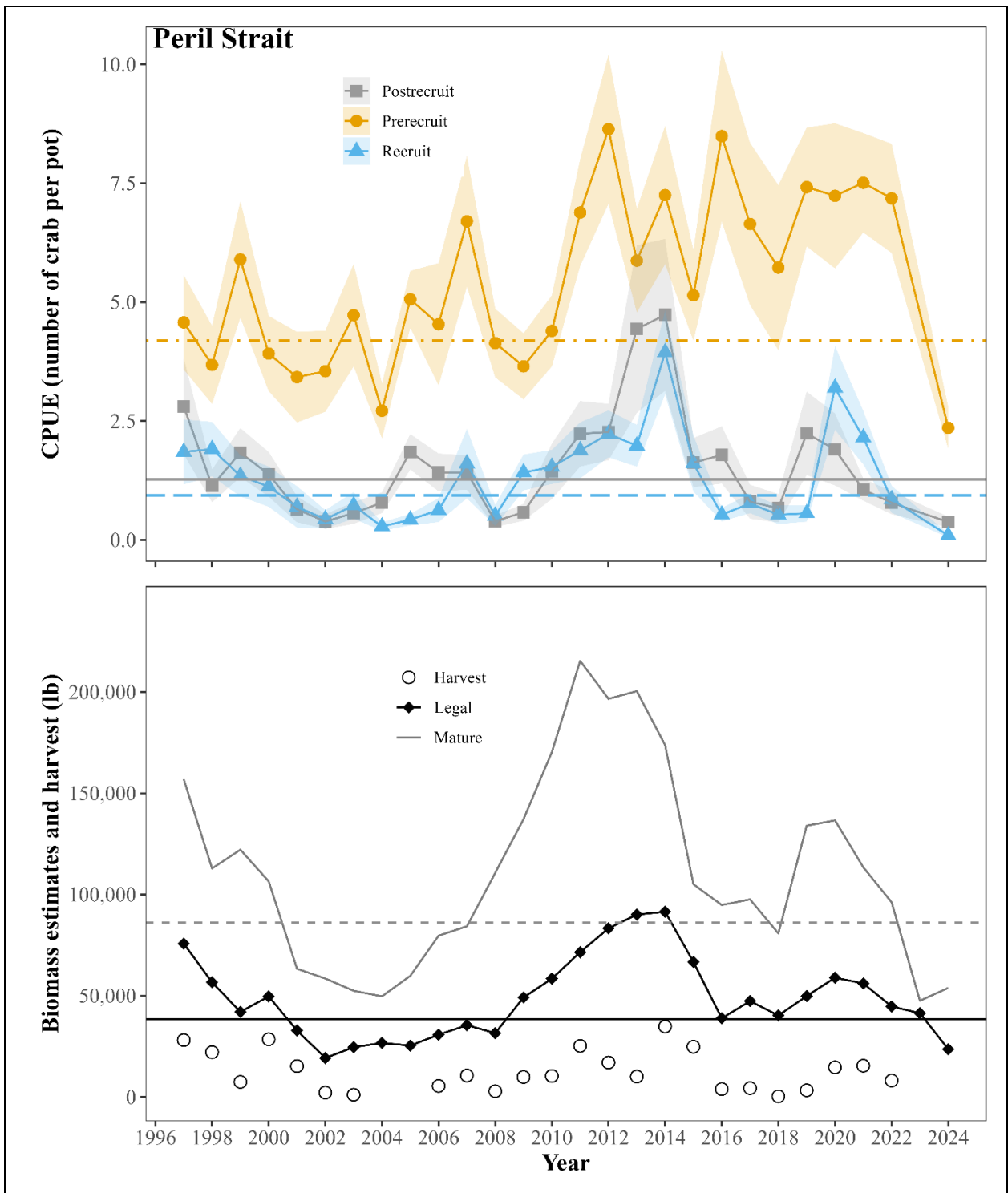


Figure 22.—Peril Strait standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

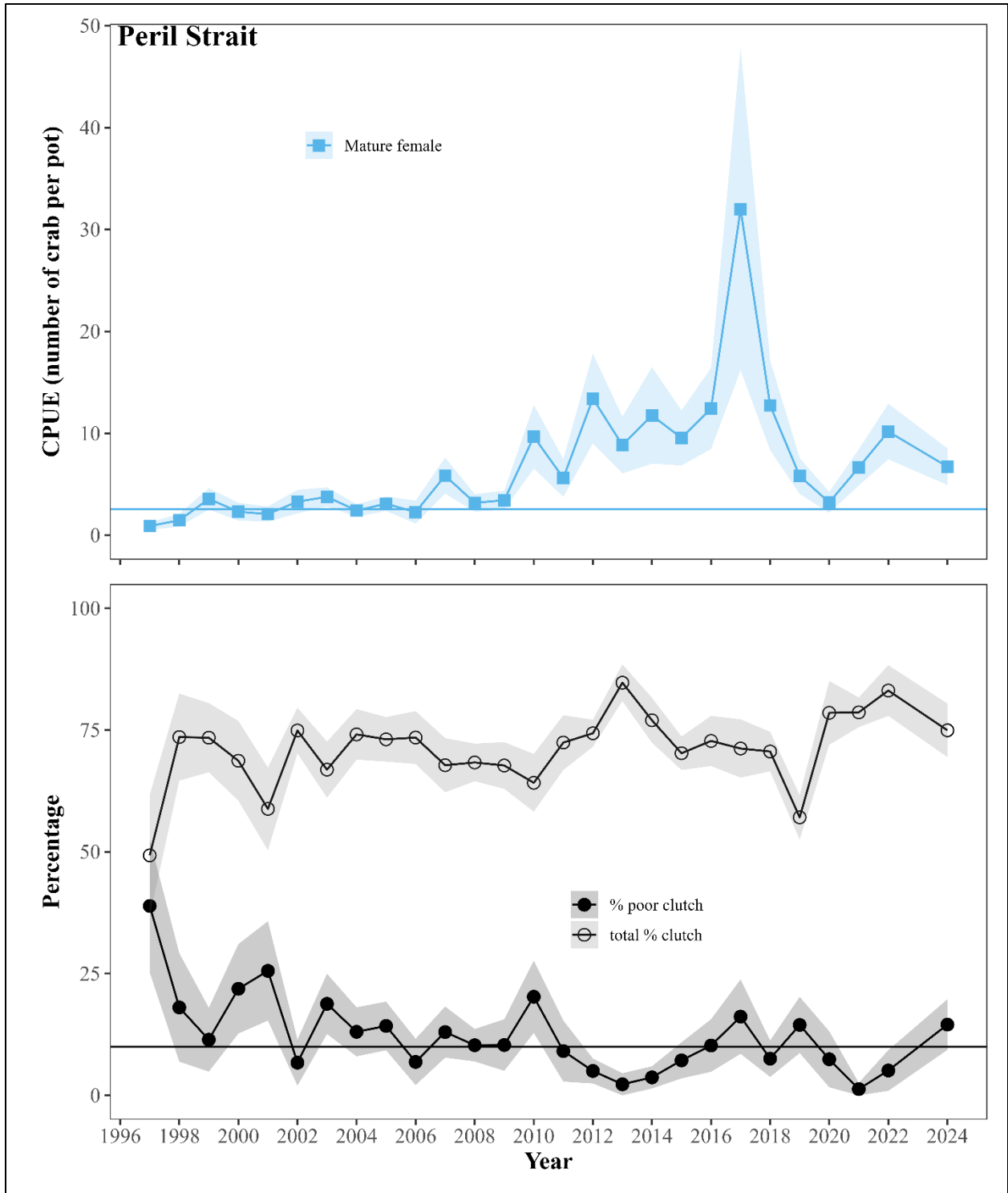


Figure 23.—Peril Strait standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

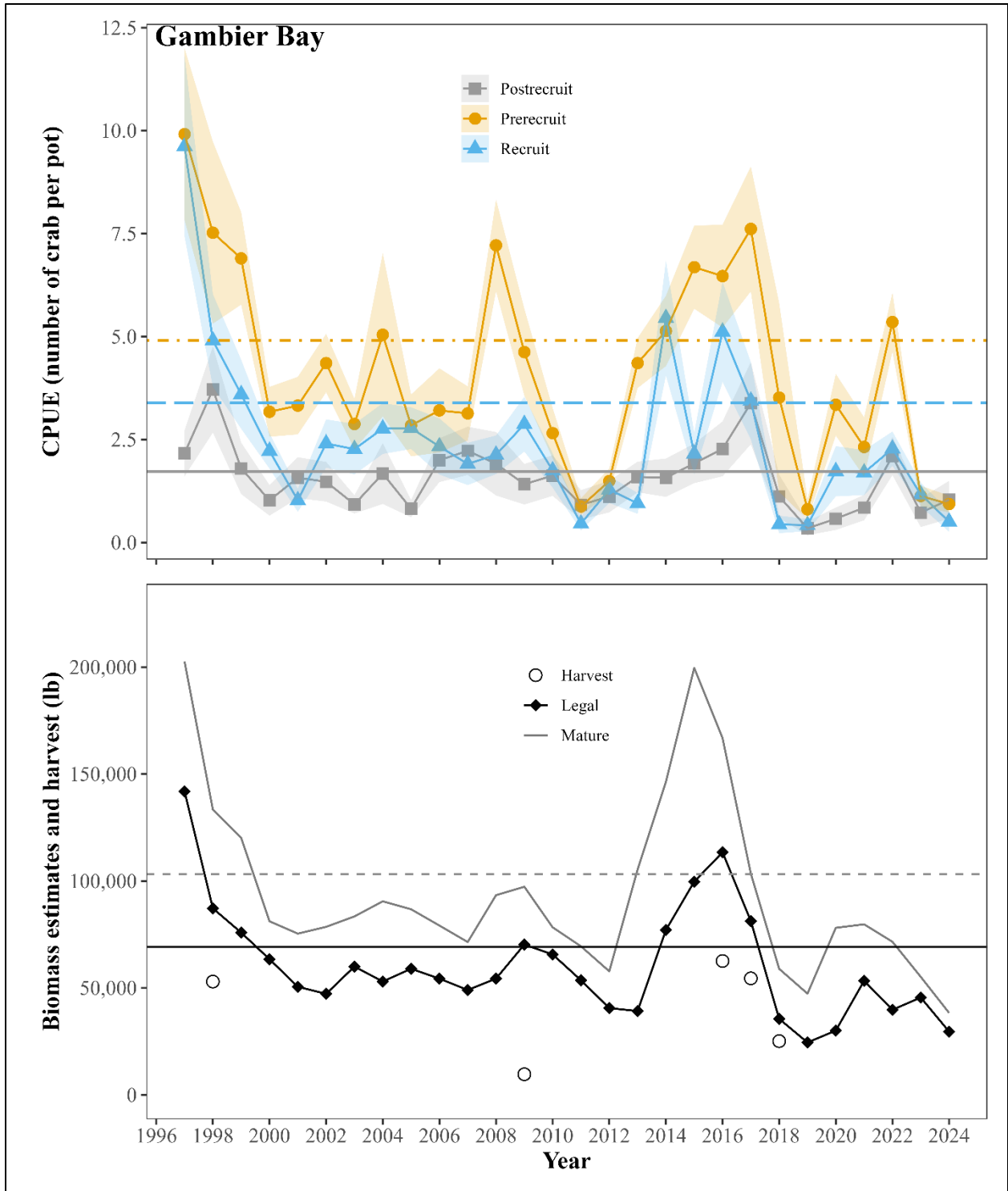


Figure 24.—Gambier Bay standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

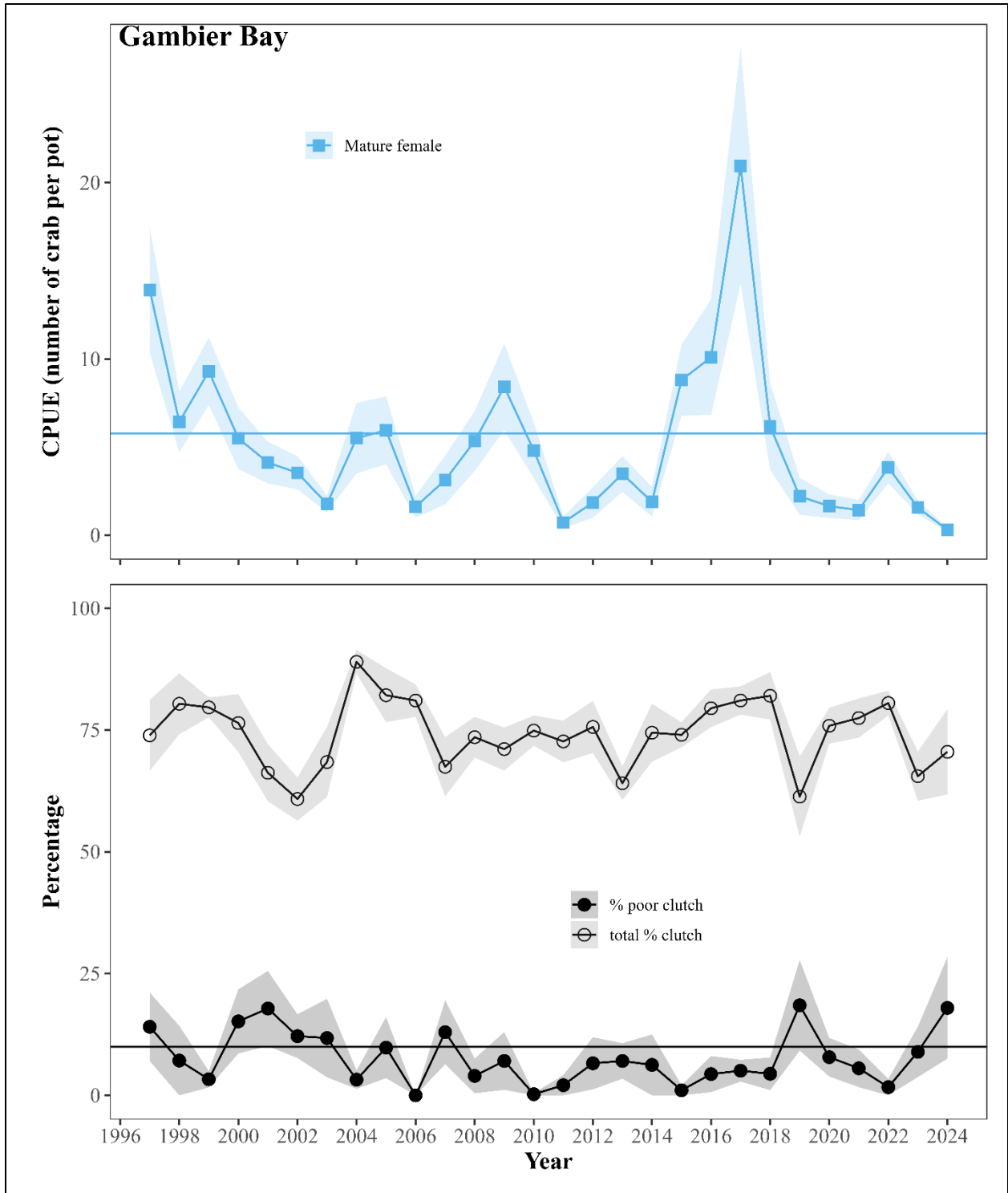


Figure 25.—Gambier Bay standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

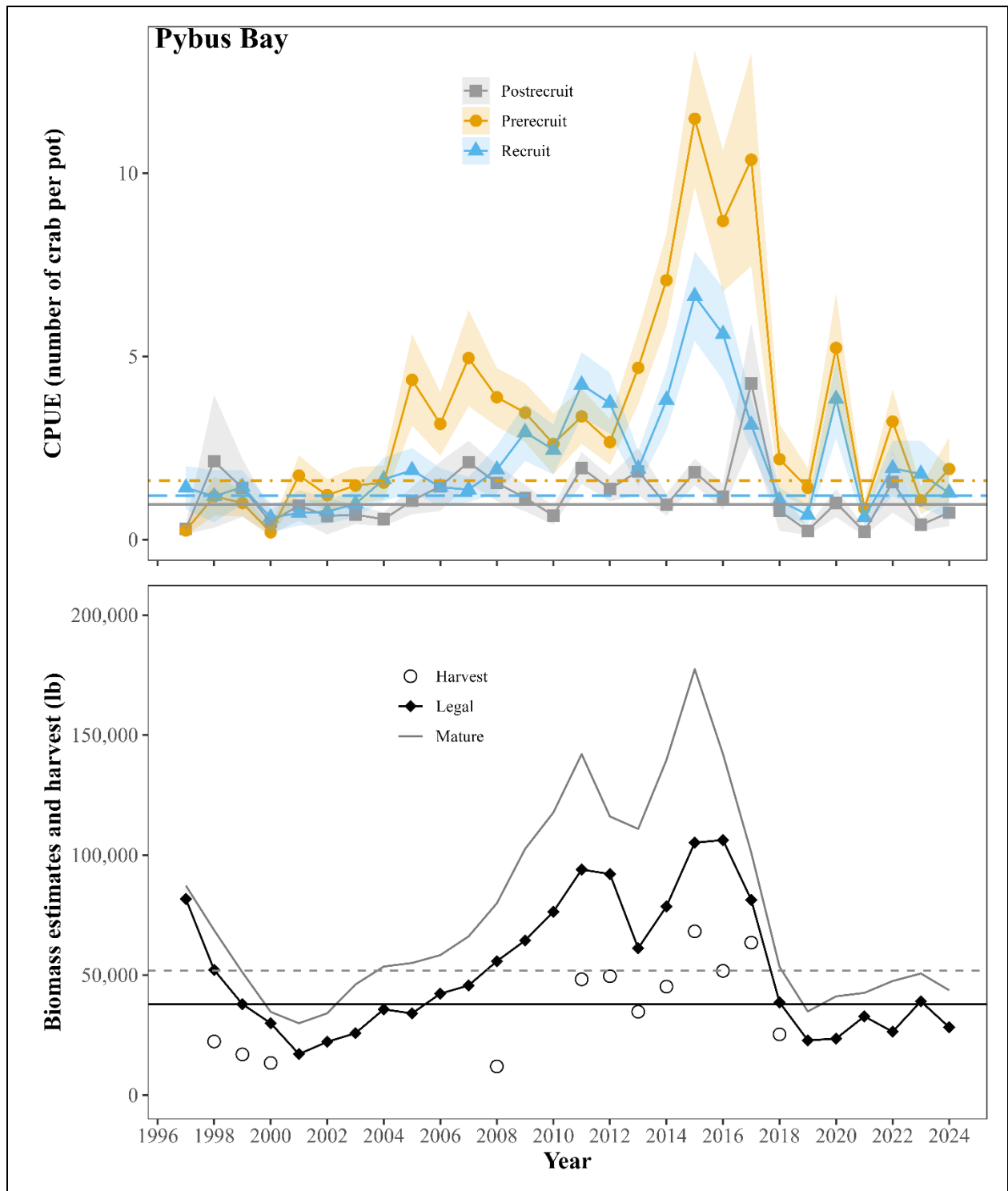


Figure 26.—Pybus Bay standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

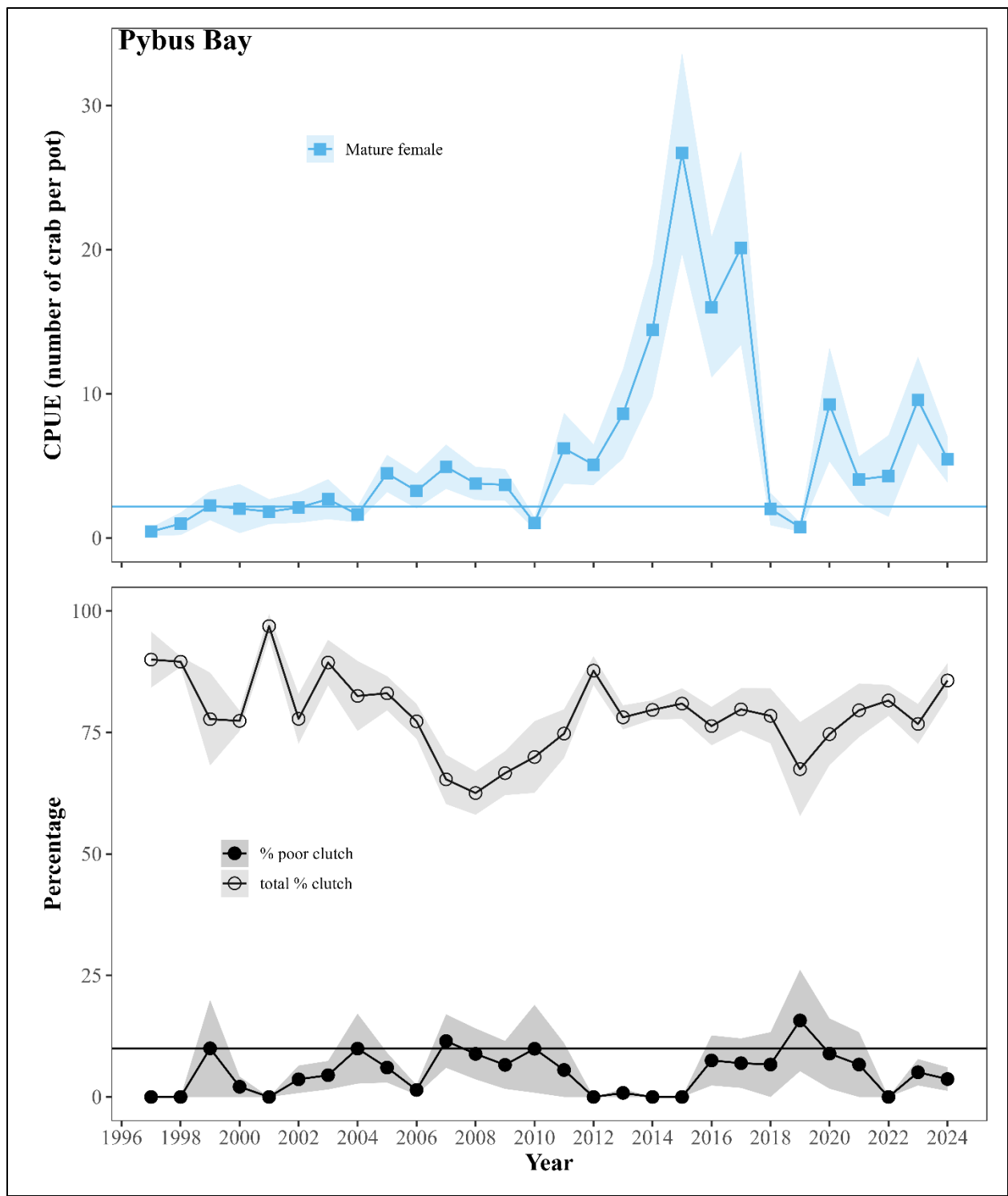


Figure 27.—Pybus Bay standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.

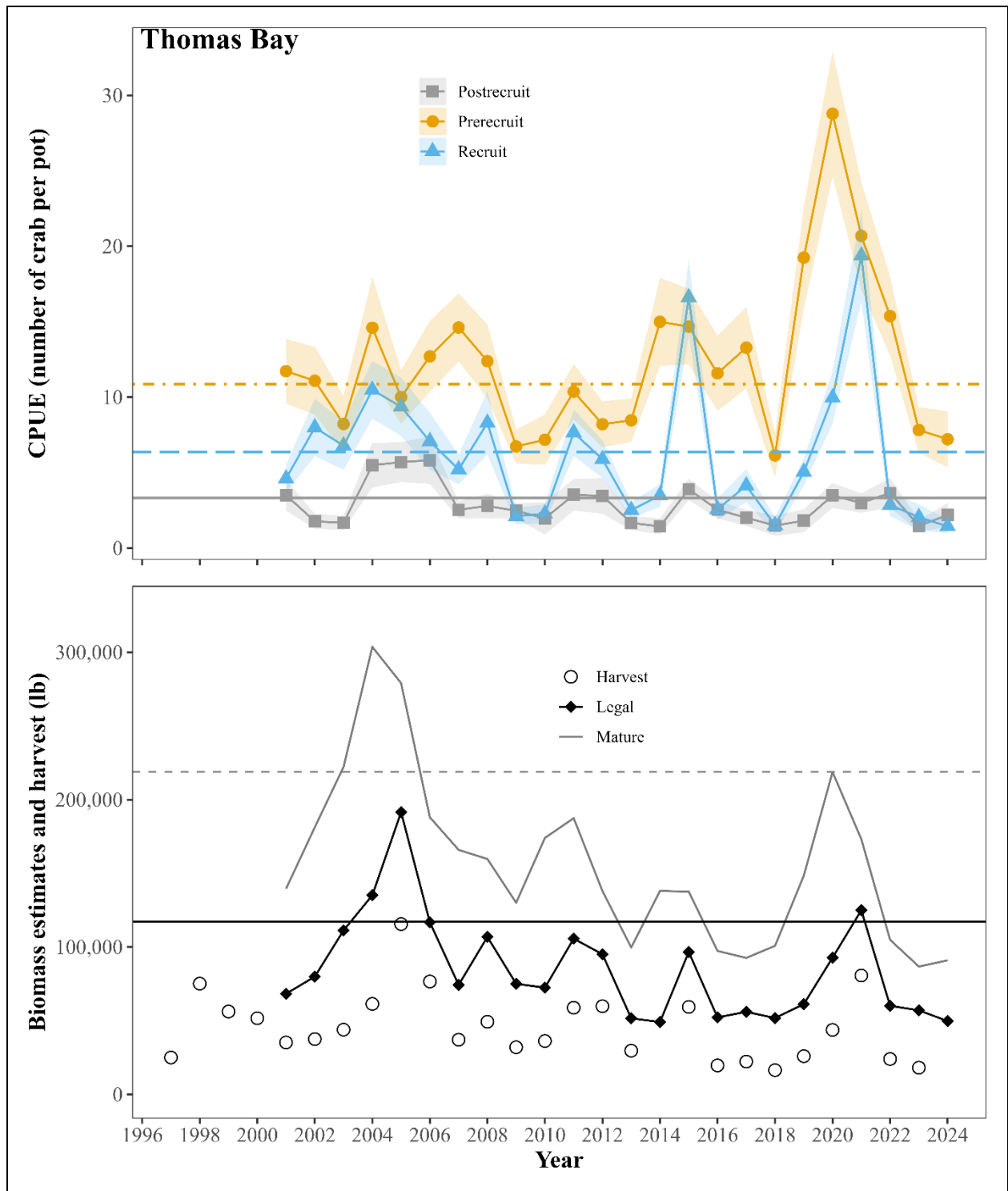


Figure 28.—Thomas Bay standardized CPUEs for male size and sex classes of Tanner crab, biomass estimates from the current year’s CSA model, and harvest data. Horizontal reference lines represent the long-term baselines for each male maturity class (1997–2006, top panel). Gray dotted reference line in the biomass figure represents the long-term baseline for mature biomass, solid black line represents legal biomass long-term baseline (bottom panel).

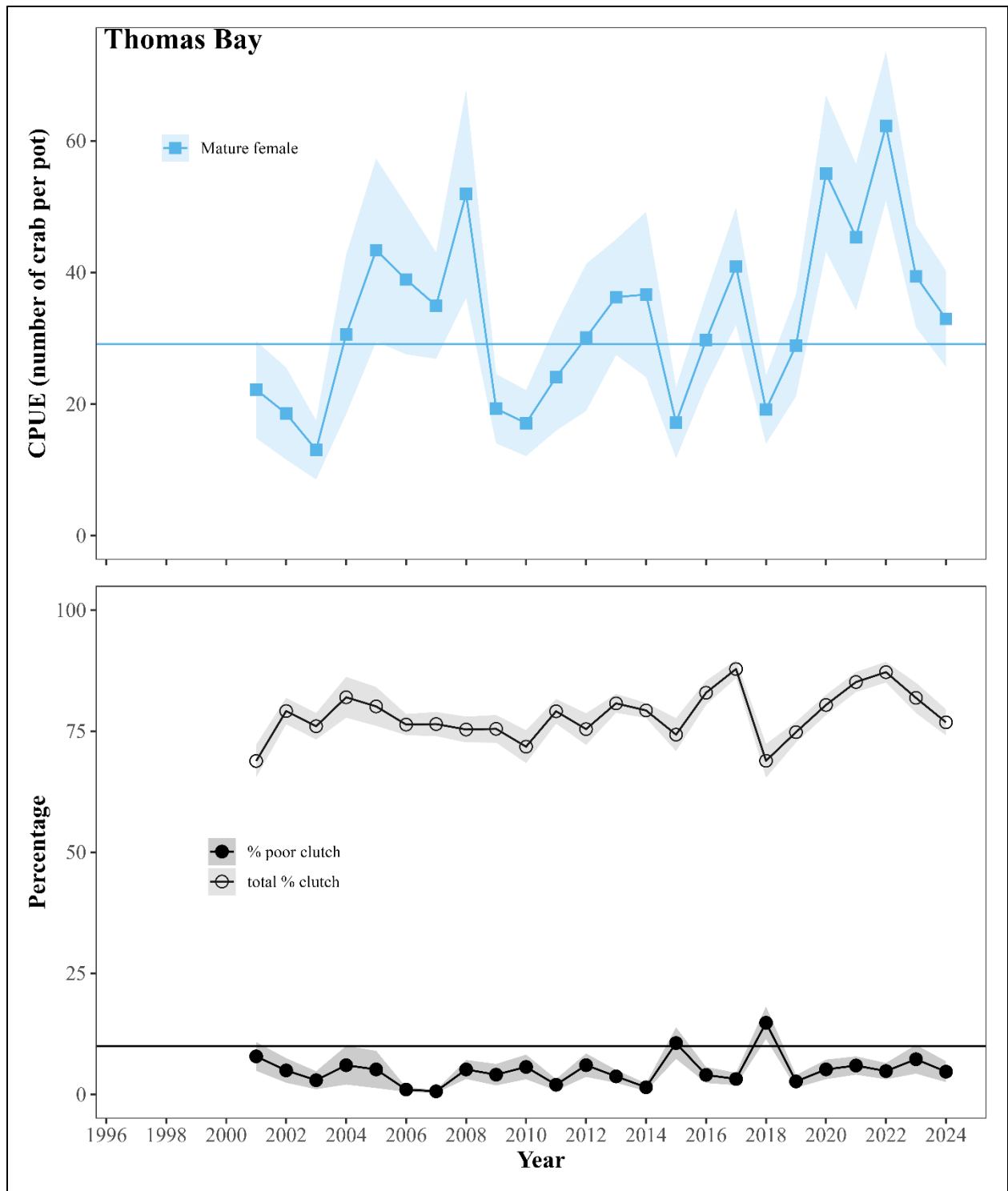


Figure 29.—Thomas Bay standardized CPUE for mature female Tanner crab, clutch fullness, and proportion of poor clutches. The horizontal reference line represents the long-term baselines (1997–2006, top panel). The horizontal line in the bottom panel is a reference line of 10% clutch fullness.