STOCK ASSESSMENT AND FISHERY EVALUATION REPORT FOR THE KING AND TANNER CRAB FISHERIES OF THE GULF OF ALASKA AND BERING SEA/ALEUTIAN ISLANDS AREA:

ECONOMIC STATUS OF THE BSAI KING AND TANNER CRAB FISHERIES OFF ALASKA, 2021

by

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The authors of the BSAI King and Tanner Crab SAFE Economic Status Report invite users to provide feedback regarding the quality and usefulness of the Report and recommendations for improvement. AFSC's Economic and Social Sciences Research Program staff maintain continuous efforts to revise the SAFE Economic Status Reports for Alaska Groundfish and BSAI Crab to incorporate additional analytical content and synthesis, improve online accessibility of public data in electronic formats, and otherwise improve the utility of the reports to users. We welcome any and all comments and suggestions for improvements to the SAFE Economic Status Reports. Please address comments and suggestions to Brian Garber-Yonts (contact information below).

This report will be available at:
`http://www.afsc.noaa.gov/refm/Socioeconomics/SAFE/default.php`

Time series of data for the tables presented in this report (in CSV format) are available at:
`https://reports.psmfc.org/akfin/`

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ABSTRACT

This report presents information on economic activity in commercial crab fisheries currently managed under the Federal Fishery Management Plan (FMP) for Bering Sea and Aleutian and Islands King and Tanner Crab (BSAI crab), with attention to the subset of fisheries included in the Crab Rationalization (CR) Program. Statistics are provided on harvesting and processing activity and effort; production, revenue and prices; labor employment and compensation; operational costs and economic performance; and quota ownership, usage and disposition among participants in the fisheries.

ECONOMIC STATUS REPORT EXECUTIVE SUMMARY: BSAI CRAB FISHERIES, 2021

The Economic Status Report for BSAI Crab Fisheries, 2021 (Crab Economic SAFE) provides detailed information regarding production, sales, revenue, and price indices in the harvesting and processing sectors, income, employment, and demographics of labor in both sectors, capital and operating expenditures in the fishery, quota share lease and sale market activity, changes in distribution of quota holdings, productivity in the harvesting sector, U.S. imports and exports of king and Tanner crab. Statistics are primarily reported for calendar years up to 2020, the most recent year for which primary data sources are complete, and encompassing the fall and spring portions of the 2019/20 and 2020/21 crab seasons, respectively. Where available, more current statistics and information are reported for calendar year 2021, crab season 2020/21, or crab season 2021/22. This executive summary highlights three sets of primary indicators describing aggregate changes in gross volume and value of production, labor earnings and employment in the crab processing and harvesting sectors, and crab harvest quota leasing activity.

Of the 10 crab stocks and 11 fisheries managed under the North Pacific Fishery Management Council's Fishery Management Plan (FMP),[1] seven fisheries were open to targeted fishing during 2020, including the Bristol Bay red king crab (BBR) and Norton Sound red king crab (NSR) fisheries, Eastern and Western Aleutian Islands golden king crab (EAG/WAG) and Pribilof Islands golden king crab (PIG) fisheries, the Bering Sea snow crab (BSS) fishery, and Western Bering Sea Tanner crab (WBT) fisheries. Both the Eastern Bering Sea Tanner (EBT) and Saint Matthew blue king crab (SMB) fisheries were closed for the 2016/17 crab season and have remained closed through the 2021/22 season. The SMB fishery was declared to be overfished in October, 2018 and a rebuilding plan for the fishery was adopted by the Council in June, 2020, and issued as Amendment 50 to the FMP by NMFS in October, 2020 (85 FR 71272). The Western Aleutian red king crab fishery has been closed since 2003/04, and the Pribilof Islands red and blue king crab have been closed since 1999, and are both currently designated overfished.

Stock assessments for the 2021/22 crab season indicated declining conditions for both BBR and BSS fisheries, and the BBR fishery has been closed for the 2021/22 season. As of October, 2021, NMFS declared the BSS stock to be overfished, initiating the Council process for developing a rebuilding plan for BSS. The BSS fishery opened for the 2021/22 season with a reduced TAC of 5.6 million pounds, BTW at 1.1 million pounds, EAG at 3.61 million, and WAG at 2.32 million pounds.

[1]There are currently 11 distinctly managed fisheries on the 10 crab stocks managed under the FMP; catch allocations and other management elements are administered separately for the Eastern and Western components of the Bering Sea Tanner crab stock, and for the Eastern and Western components of the Aleutian Islands golden king crab stock, and the Pribilof Island blue and red king crab stocks are managed collectively as a single fishery. For fisheries characterized by a small number of participating entities, individual statistics where indicated in Tables 1 - 3, and elsewhere in the report, are suppressed due to confidentiality restrictions; this includes most values for the Pribilof Island golden king (PIG) crab fishery and the Norton Sound red king (NSR) crab fisheries, and statistics for both Aleutian Islands golden king crab (WAG) fisheries and both Bering Sea Tanner crab fisheries (BST) are reported in aggregate, respectively. Values that are indicated as suppressed for a specific fishery are also excluded from values reported in aggregate over multiple crab fisheries. Except where noted, the suppressed values are sufficiently small that they have minimal effect on the accuracy of aggregate information at the level of precision reported here.

Fishery production and economic value

The Bering Sea/Aleutian Islands (BSAI) crab fisheries managed under the FMP are currently (as of calendar year 2021) prosecuted by an active fleet of 67 catcher vessels and two catcher processors, and landed and processed at 15 processing facilities throughout the region. Across all fisheries managed under the BSAI Crab FMP during 2020, the total volume of ex-vessel landings was 42.6 million pounds (19.3 thousand metric tons), a 9% increase from the previous year. Processing sector finished production volume during 2020 was 27.6 million pounds (12.6 thousand mt) aggregated over all BSAI crab species and product forms, an increase of 10% from the previous year. The effect of a net increase in production volume across crab fisheries, combined with changes in market prices, produced a 2% increase in aggregate ex-vessel revenue over all fisheries in 2020, totaling $208 million for the year, and with aggregate first wholesale revenues also increasing by 10% to $270 million.[2]

Harvest and processing sector production statistics by crab fishery, including ex-vessel and first wholesale output, estimated revenue, and average prices are shown in Table 1 for calendar years 2016 through 2020 and summarized in Figure 1, with ex-vessel and first wholesale prices shown in Figure 2.

As of 2020, allowable catch quantities in most BSAI crab fisheries currently open to targeted fishing are fully exploited ($>$ 98% of total allocation landed), and recent inter-annual variation in commercial landings largely reflects the results of stock assessments and the State of Alaska's specified TAC and GHL catch limits rather than changes in fishing capacity or exploitation rates. However, landings in the 2020/21 WBT and WAG fisheries fell substantially below the TACs issued, to 61% for the WBT fishery and 94% for WAG.

The increase in aggregate harvest production during 2020 was driven solely by increased production in the BSS fishery during 2020, with total catch of 33.6 million pounds (15.2 thousand mt) landed in the Bering Sea snow crab (BSS) fishery, an increase of 32% from 2019. Landings in other fisheries declined from 2019, with 5.7 million pounds (2.6 thousand mt) in the AIG fisheries (-16%), 2.64 million pounds (1.2 thousand mt) in the BBR fishery (-30%), and 620 thousand pounds (281 mt) in the western portion of the Bering Sea Tanner (BST) fisheries.

Similar to ex-vessel production, the 9% increase in processing sector output volume aggregated over all active crab fisheries during 2020 was driven solely by increased production in the BSS fishery, with finished volume of 22 million pounds (10 thousand mt) increasing 23% over the previous year. Finished production in other fisheries declined from 2019, with 3.6 million pounds (1.6 thousand mt) in the AIG fisheries (-16%), 1.8 million pounds (806 mt) in the BBR fishery (-30%), and 420 thousand pounds (192 mt) in the western portion of the Bering Sea Tanner (BST) fisheries.

A notable divergence in average prices between the harvest and processing sectors occurred during 2020, with first wholesale price increasing across the four largest fisheries, while ex-vessel prices increased in the AIG and BBR fisheries, but declined in the BSS and BST fisheries. The average BSS ex-vessel price declined 2% to $3.93 per pound, while the first wholesale price increased 11% to $7.99 per finished pound, and ex-vessel price in the BST fishery declined 9% to $4.12 per pound landed, while first wholesale price increased 22% to $11.15 per pound. The average ex-vessel and

[2]All monetary values in the report, unless otherwise noted, are inflation-adjusted to 2020-equivalent dollars using the GDP-chaintype price index (`https://research.stlouisfed.org/fred2/series/GDPCTPI`). The GDP price index is used to adjust fishery production revenues and costs to account for the change in general US production prices over time.

wholesale prices in the BBR fishery increased to $12.20 per pound landed (+2%), and $21.49 (+5%) per finished pound. The average ex-vessel price in the AIG fishery increased by 12% to $7.29 per pound landed, while first wholesale price increased 6% to $14.03 per pound.

With equivalent proportional gains in volume of production for the respective sectors of 9% and 10% in aggregate across crab fisheries in 2020, the divergent trends between ex-vessel and first wholesale prices in the BSS and BST fisheries is reflected in the more robust year-on-year performance in processing sector gross revenue, which increased by 10%, compared to 2% in gross ex-vessel revenue. Among individual crab fisheries in 2020, gross revenues in both sectors declined in all but the BSS fishery, which increased in ex-vessel value by 20% from 2019, to $132 million, and by 37% in first wholesale value, to $176 million. Ex-vessel revenues in the AIG fisheries declined 5% from 2019, to $42 million, and by 11% in the processing sector, to $51 million. Gross ex-vessel earnings in the BBR fishery declined 30% to $32 million, while first wholesale value declined by 26% to $51 million. Gross production value in both sectors of the BST fishery declined substantially during 2020, with $2.6 million ex-vessel and $4.7 million in the processing sector declining by 52% and 36%, respectively.

Employment and Income

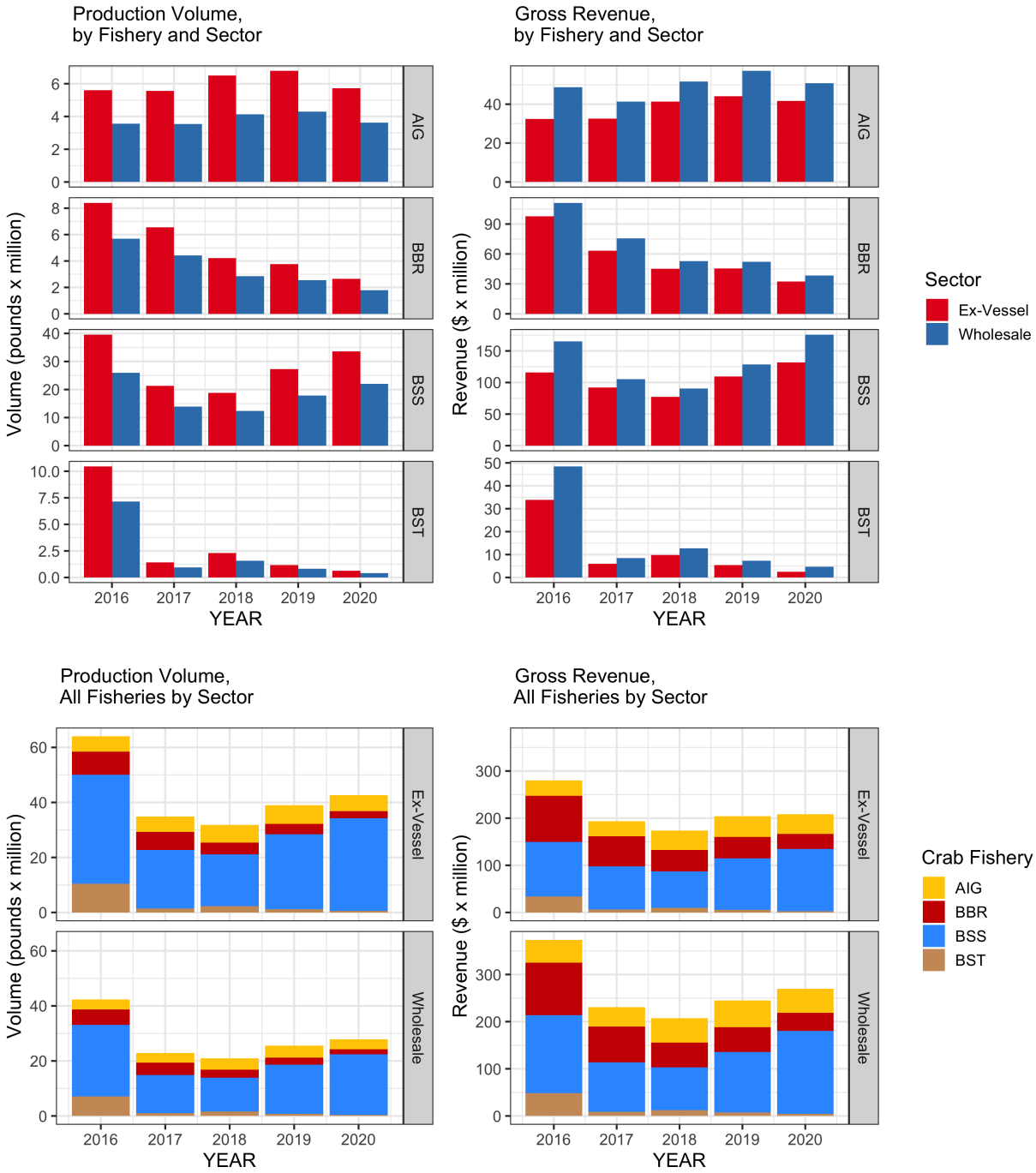
A summary of selected indicators from the most recent employment data available for Crab Rationalization (CR) program fisheries is provided in Table 2 and depicted graphically in Figure 3, reporting results through calendar year 2020.[3]

During 2020, 67 vessels actively operated in BSAI crab fisheries, a historically low level of vessel participation across all BSAI crab fisheries, declining from 118 vessels in 2016 and 91 in 2019, while the number of vessels operating in one or more of the CR fisheries in 2020 was reduced by 3 from 2019, to 64 vessels. Participation in the BBR fishery declined by 9, to 47 vessels, and with 59 vessels active in the BSS fishery, both BBR and BSS saw the lowest level vessel participation to-date. The active fleet in the AIG fishery remained constant at 5, and 25 vessels were active in the BST fisheries, increased from 18 in 2019. Based on the number of crew onboard participating vessels during each fishery (averaged over crew size values reported in eLandings catch accounting records for crab vessels), there were an estimated 948 in crew positions in aggregate across all 67 vessels in CR fisheries in 2020, also the lowest number of crew positions reported in CR fisheries to-date.[4]

[3]BSAI Crab Economic Data Report (EDR) data are collected for CR fisheries only. The NSR and Pribilof Island golden king (PIG) crab fisheries are managed by the State of Alaska under the FMP, but are not included in the CR program.

[4] Note that the aggregate count of vessels indicates the total number of distinct vessels, while the count of crew positions counts positions separately by fishery and vessel, such that individual crew members are counted more than once.

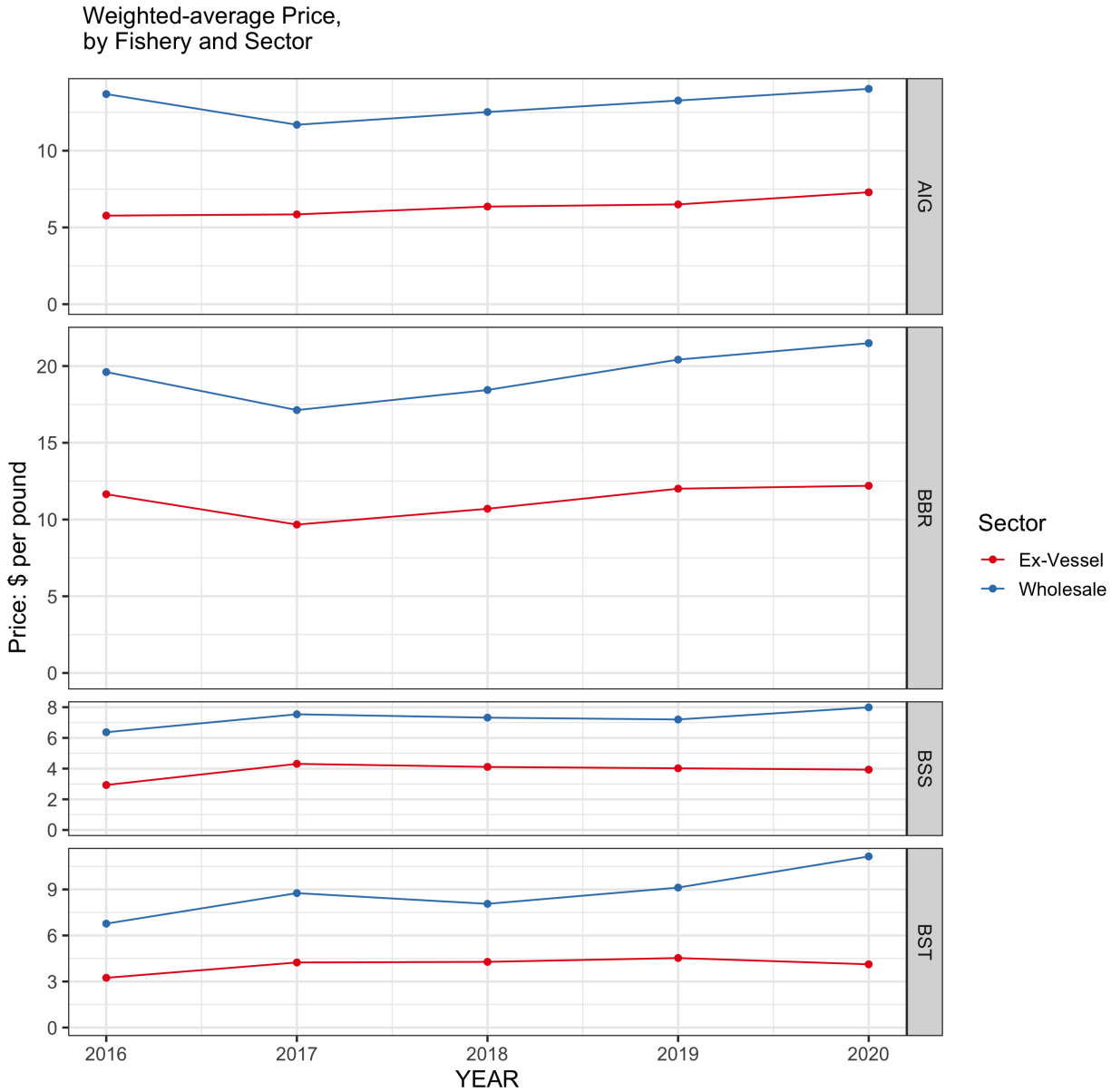
Figure 1: BSAI Crab Ex-vessel and First Wholesale Production, 2016 - 2020



Source: *ADF&G fish tickets, eLandings, CFEC pricing, ADF&G Commercial Operator's Annual Report, NMFS AFSC BSAI Crab Economic Data Report (EDR) database.*

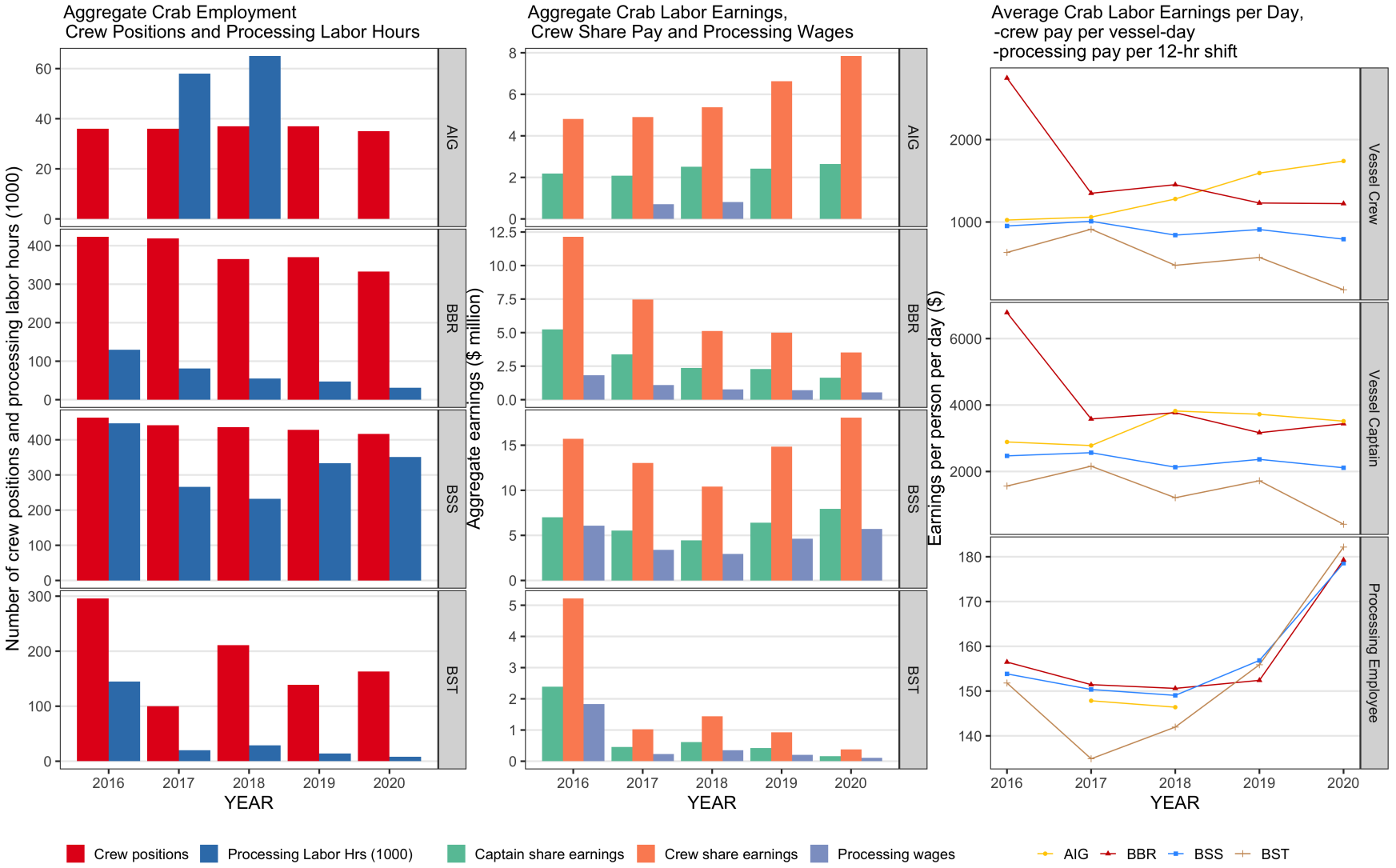
(a) Revenue, (b) Volume, and (c) Weighted Average Price, 2016 - 2020; gross revenue and production volume by sector are presented in the upper pair of panels by individual crab fishery for comparison of within-fishery variation over time, and summarized over all fisheries in the lower panels to illustrate the variation in aggregate values and relative contribution of each fishery over time. Figure does not display information for NSR, SMB, and PIG fisheries due to confidentiality. See Table 1 footnotes for details.

Figure 2: BSAI Crab Ex-vessel and First Wholesale Price, 2016 - 2020



Source: *ADFG/CFEC Fish Tickets (data compiled by AKFIN in Comprehensive FT), eLandings, CFEC pricing, ADFG Commercial Operators Annual Report (data compiled by AKFIN in Comprehensive ENCOAR PROD), NMFS AFSC BSAI Crab Economic Data Report (EDR) database. Figure does not display information for NSR, SMB, and PIG fisheries due to confidentiality. See Table 1 footnotes for details.* Ex-vessel and First Wholesale Weighted Average Price, 2016 - 2020. See Table 1 footnotes for data sources and details.

Figure 3: Harvest and Processing Employment and Compensation, Selected Crab Fisheries, 2016 - 2020



Source: *NMFS AFSC BSAI Crab Economic Data Report (EDR) database; ADF&G Shellfish Observer Program, Confidential Interview Form (CIF) database. See Table 2 footnotes for details.*

Across CR fisheries in 2020, revenue-share payments to crab vessel crew members as a group totaled approximately $29.8 million , with an additional $12.4 million paid to vessel captains, increasing by 9% and 15% respectively.[5]

Aggregate crew earnings in the AIG fishery during 2020 increased by 18% to $7.8 million, and captain earnings increased by 9% to $2.6 million. Aggregate crew earnings in the BSS fishery increased by 22% to $18.1 million and captain earnings increased by 24% to $7.9 million, while crew and captain earnings in the BBR fishery each declined by 29%, to $3.5 million and $1.6 million, respectively. Earnings in the BST fishery declined 60%, with captain earnings of $160 thousand and aggregate crew earnings falling to $380 thousand.

Seven active processing plants received deliveries from BSAI crab fisheries in 2020, unchanged from 2019, but following a long declining trend in 2020 to the lowest number in the history of BSAI crab fisheries, and compared to 19 active plants in CR fisheries as of 2006. Crab processing employment in 2020, as measured by hours of processing labor input at plants that received IFQ and CDQ crab landings, is estimated at 452 thousand labor hours, unchanged from 2019. Aggregate wages paid to crab processing line employees across all CR fisheries during 2020 generated labor earnings of $7.2 million, 15% greater than the previous year. Based on number of processing labor hours and wage payments in each CR fishery reported by crab processors, average hourly labor earnings over all CR fisheries increased from $12.96 to $14.95 per hour in 2020, a second year of wage gains and a 23% increase since 2018. The BSS fishery accounted for the largest share of processing labor wages in 2020, at $5.7 million.

IFQ Leasing

This report provides results from the BSAI Crab Rationalization Economic Data Report (EDR) program collection of crab harvest quota allocation lease data associated with 2012 through 2020 calendar year crab fishing activity. Table 3 and Figure 4 shows aggregated results for crab fishing quota lease market indicators over the most recent five calendar years for CR fisheries, by fishing quota type. Quota types are categorized as the following: catcher vessel owner (CVO) Class A IFQ; catcher vessel owner Class B IFQ and catcher/processor owner (CPO) IFQ; catcher vessel crew IFQ and catcher/processor crew IFQ, and Community Development Quota (CDQ). Indicators shown in Figure 4 include weighted average statistics for average lease rates (i.e., the share of per-pound ex-vessel value paid to the IFQ holder), aggregate volume of quota pounds leased as a percentage of total landings, and aggregate quota lease cost as a percentage of gross ex-vessel revenue. Table 3 also reports volume (in pounds) and cost reported for crab vessels active during fishing year, including total quantities summed over all reporting vessels, and average values (both median and mean) per vessel.

In contrast to more dynamic changes in most aspects of Alaska crab fisheries, quota lease rates have remained quite stable over the 2016-2020 period shown in Table 3. As in previous years, median

[5] In addition to revenue-share payments, income is derived by some crew and many captains from royalties for harvesting quota shares held by either the captain or crew. While this may become an increasingly important source of income as opportunities for investment in QS ownership are advanced, there is no evidence to date that the proportion of CR fishery quota share pools held by crab crew members has changed in recent years, following a small amount of consolidation occurring during the initial years of the program (see NMFS Alaska Region, Restricted Access Management Program, Bering Sea and Aleutian Islands Crab Rationalization Program Report, Fishing Year 2011/12 for information on quota allocation and transfer activity, and other current CR program administration details).

Figure 4: Crab Harvest Quota Lease Market Indicators, Selected Crab Fisheries, 2016 - 2020

Source: *NMFS AFSC BSAI Crab Economic Data Report (EDR) database. See Table 3 footnotes for details.*

and weighted average lease rates in the BBR and BSS fisheries vary somewhat by quota type within fishery, but are generally quite consistent over the most recent five years. The median lease rate reported for BBR CVO Class A allocation, which remained at 62% over the previous four years, increased to 64% in 2020, and rate premia of 1-5% typically reported non-share-matched IFQ types (CVO Class B and Crew IFQ) were minimal during 2020 with the exception of CDQ, with a median

lease rate of 68% in 2020, increased from 63% in 2016. Only small marginal change in lease rate statistic were reported for the 2020 BSS fishery, with median lease rate constant at 46% and minimal premiums for CVO Class B and Crew IFQ.

Reflecting the reduced size of the active fleet in the BBR fishery, of which 38 of 47 vessels reported quota lease costs for 2020,[6] total volume of leased quota in the BBR fishery during 2020, at 2.06 million pounds aggregating over all IFQ and CDQ pounds leased, represented 92% of total ex-vessel pounds landed by the leasing segment of the fleet, an aggregate cost of $16.2 million, 59% of gross ex-vessel revenue, the highest proportions of volume and value reported to date.

Of the 59 vessels active the BSS fishery during 2020 (two fewer than in 2019), 47 reported leased pounds totaling 25.3 million pounds, at a cost of $49.7 million, 88% of landed volume and 44% of ex-vessel revenue among the leasing segment of the fleet.

[6] As in prior years, a largely consistent segment of 9 to 13 vessels in the BBR and BSS fleets report no IFQ or CDQ lease costs.

Table 1: BSAI crab harvesting and processing sector output – production volume, gross revenue, and average price

		Harvesting Sector: Ex-Vessel Statistics[a]							Processing Sector: First Wholesale Statistics[b]				
	Year	Vessels	CFEC permits	Landed volume 1000t	Landed volume million lbs	Buyers	Gross revenue $million	Average price $/lb	Plants	Finished volume, 1000t	Finished volume, million lbs	Gross revenue $million	Average price $/lb
All	2016	118	262	29.04	64.02	21	$279.93	-	13	19.19	42.30	$373.59	-
	2017	108	276	15.80	34.84	23	$193.82	-	13	10.38	22.88	$230.73	-
	2018	101	231	14.45	31.87	20	$173.90	-	13	9.48	20.90	$207.38	-
	2019	91	194	17.69	38.99	21	$204.36	-	15	11.57	25.52	$245.04	-
	2020	67	154	19.31	42.58	23	$208.47	-	15	12.63	27.85	$269.72	-
AIG	2016	5	12	2.54	5.60	11	$32.33	$5.77	5	1.61	3.56	$48.67	$13.69
	2017	5	12	2.52	5.56	13	$32.54	$5.85	6	1.60	3.53	$41.30	$11.69
	2018	5	14	2.95	6.51	11	$41.40	$6.36	5	1.87	4.13	$51.70	$12.52
	2019	5	16	3.08	6.78	11	$44.05	$6.50	5	1.95	4.30	$57.10	$13.27
	2020	5	14	2.59	5.72	12	$41.68	$7.29	6	1.65	3.63	$50.88	$14.03
BBR	2016	63	70	3.81	8.41	17	$97.90	$11.65	11	2.57	5.68	$111.28	$19.61
	2017	61	69	2.97	6.55	17	$63.35	$9.67	11	2.01	4.42	$75.74	$17.13
	2018	55	62	1.92	4.23	15	$45.26	$10.70	10	1.30	2.86	$52.68	$18.44
	2019	56	65	1.71	3.77	14	$45.32	$12.01	9	1.16	2.55	$52.02	$20.42
	2020	47	54	1.20	2.64	15	$32.22	$12.20	10	0.81	1.78	$38.30	$21.49
BSS	2016	68	86	17.95	39.57	12	$115.84	$2.93	8	11.76	25.92	$165.19	$6.37
	2017	63	78	9.67	21.32	14	$91.96	$4.31	8	6.33	13.97	$105.25	$7.54
	2018	63	78	8.55	18.84	13	$77.45	$4.11	8	5.60	12.34	$90.37	$7.32
	2019	61	77	12.36	27.26	13	$109.64	$4.02	8	8.10	17.86	$128.55	$7.20
	2020	59	77	15.24	33.61	13	$132.01	$3.93	8	9.99	22.01	$175.80	$7.99
BST	2016	46	63	4.74	10.45	12	$33.86	$3.24	8	3.24	7.15	$48.44	$6.77
	2017	16	21	0.64	1.41	11	$5.97	$4.24	7	0.44	0.96	$8.44	$8.76
	2018	30	34	1.04	2.29	14	$9.79	$4.28	8	0.71	1.57	$12.64	$8.06
	2019	18	22	0.54	1.18	10	$5.35	$4.53	8	0.37	0.81	$7.37	$9.12
	2020	25	26	0.28	0.62	9	$2.56	$4.12	6	0.19	0.42	$4.73	$11.15

Continued on next page.

Table 1: Continued

		Harvesting Sector: Ex-Vessel Statistics[a]							Processing Sector: First Wholesale Statistics[b]				
	Year	Vessels	CFEC permits	Landed volume 1000t	Landed volume million lbs	Buyers	Gross revenue $million	Average price $/lb	Plants	Finished volume, 1000t	Finished volume, million lbs	Gross revenue $million	Average price $/lb
NSR	2016	37	75	*	*	2	*	*	1	*	*	*	*
	2017	37	110	*	*	2	*	*	1	*	*	*	*
	2018	34	71	*	*	1	*	*	1	*	*	*	*
	2019	25	32	*	*	1	*	*	1	*	*	*	*
	2020	1	1	*	*	0	*	*	-	*	*	*	*
PIG	2017	2	2	*	*	2	*	*	2	*	*	*	*
	2018	1	2	*	*	1	*	*	1	*	*	*	*
	2019	2	2	*	*	2	*	*	2	*	*	*	*
	2020	4	4	*	*	3	*	*	3	*	*	*	*

Notes: Data shown for all BSAI crab fisheries by calendar year. All dollar values are adjusted for inflation to 2019-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".

[a] Except where noted, ex-vessel results reflect total commercial sales volume and value across all management programs (LLP/open access, IFQ, CDQ, ACA), inclusive of all harvesting sector production (CV, CP, and catcher-sellers); ex-vessel average price results are sourced from CV sector EDR data for CR program fisheries and from CFEC gross earnings estimates for non-CR fisheries; ex-vessel value of CP and catcher-seller landings are incorporated in revenue total using average CV ex-vessel price as a proxy per-pound value, multiplied by pounds of live catch

[b] Counts of buyers include CPs landing and processing their own crab, but exclude catcher sellers (NSR fishery only); processing sector results are inclusive of all CP and shoreside processor output. CR program fisheries finished volume and gross first wholesale revenue and price for 2016 to current are sourced from calendar year sales reported in crab processor EDR data; production volume for non-CR fisheries is estimated from ex-vessel landings volume adjusted using average product recovery rate (PRR), with price and revenue derived from COAR gross earnings estimates.

[c]Statistics reported for "All BSAI Fisheries" reflect information aggregated over all FMP crab fisheries, excluding fishery-level confidential information suppressed where indicated by "*".

[d]Landings and ex-vessel revenue suppressed in years where CDQ fishery landings are confidential.

[e]Data for Norton Sound red king crab are aggregated over the summer and winter commercial fisheries.

Source: ADF&G fish ticket data; eLandings; CFEC ex-vessel pricing; ADF&G Commercial Operator's Annual Report (COAR) data; NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 2: CR Program fisheries crew and processing sector employment and earnings

		Crew positions[a]			Crew share[b]		Captain share		Processing labor hours[c]			Processing labor payment[d]		
	Year	Vessels	Total	Vessel median	Total $million	Vessel median $1,000	Total $million	Vessel median $1,000	Plants	Total 1,000 hrs	Plant median 1,000 hrs	Median $/hour	Total $million	Plant median, $1,000
All CR Fisheries	2016	80	1,218	-	$37.89	-	$16.85	-	8	788	95	$13.04	$10.55	$775.85
	2017	72	996	-	$26.43	-	$11.45	-	9	426	32	$12.55	$5.43	$321.99
	2018	67	1,049	-	$22.37	-	$9.95	-	8	382	30	$12.20	$4.87	$191.88
	2019	67	974	-	$27.39	-	$11.54	-	7	452	52	$12.96	$6.29	$369.05
	2020	64	948	-	$29.81	-	$12.37	-	7	452	56	$14.95	$7.24	$422.27
AIG	2016	5	36	7.0	$4.81	$1,061.03	$2.19	$388.09	4	*	*	*	*	*
	2017	5	36	7.0	$4.91	$818.22	$2.08	$382.11	5	58	10	$12.32	$0.71	$108.67
	2018	5	37	7.0	$5.38	$1,028.65	$2.51	$396.09	5	65	8	$12.20	$0.81	$127.13
	2019	5	37	7.0	$6.63	$1,212.80	$2.42	$455.40	3	*	*	*	*	*
	2020	5	35	7.0	$7.84	$1,130.34	$2.64	$528.06	4	*	*	*	*	*
BBR	2016	63	423	6.0	$12.14	$169.17	$5.25	$74.74	8	130	9	$13.04	$1.82	$93.87
	2017	61	419	6.0	$7.46	$109.85	$3.38	$50.37	8	81	8	$12.62	$1.09	$65.98
	2018	55	365	6.0	$5.13	$83.18	$2.36	$40.76	7	55	5	$12.55	$0.77	$48.99
	2019	56	370	6.0	$4.99	$80.26	$2.29	$36.91	6	47	6	$12.70	$0.72	$73.64
	2020	47	333	6.0	$3.53	$69.70	$1.63	$33.25	6	31	4	$14.94	$0.55	$51.90
BSS	2016	68	463	6.0	$15.71	$203.24	$7.02	$100.64	6	447	69	$12.82	$6.08	$576.29
	2017	63	441	6.0	$13.04	$173.78	$5.53	$80.83	6	266	35	$12.53	$3.40	$221.12
	2018	63	436	6.0	$10.42	$142.77	$4.46	$66.94	6	232	30	$12.42	$2.94	$168.36
	2019	61	428	6.0	$14.84	$202.23	$6.42	$98.52	6	333	46	$13.07	$4.63	$309.99
	2020	59	417	6.0	$18.06	$270.03	$7.94	$123.38	6	351	51	$14.88	$5.72	$401.11

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Table 2: Continued

		Crew positions[a]			Crew share[b]		Captain share		Processing labor hours[c]			Processing labor payment[d]		
	Year	Vessels	Total	Vessel median	Total $million	Vessel median $1,000	Total $million	Vessel median $1,000	Plants	Total 1,000 hrs	Plant median 1,000 hrs	Median $/hour	Total $million	Plant median, $1,000
	2016	46	296	6.0	$5.22	$84.16	$2.39	$42.06	6	145	18	$12.65	$1.83	$214.07
	2017	16	100	6.0	$1.02	$67.75	$0.46	$26.72	5	20	3	$11.24	$0.23	$35.66
BST	2018	30	211	6.0	$1.44	$39.07	$0.61	$18.98	6	29	2	$11.83	$0.36	$23.13
	2019	18	139	6.0	$0.93	$40.26	$0.42	$16.01	6	14	2	$12.99	$0.20	$22.24
	2020	25	163	6.0	$0.38	$12.92	$0.16	$6.05	5	8	1	$15.18	$0.11	$13.52

Notes: Data shown for all BSAI crab fisheries by calendar year. All dollar values are adjusted for inflation to 2019-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".

[a] Crew positions total and median summary statistics are calculated from vessel-level observations derived from eLandings crew size reporting, averaged over all landings in the respective fishery reported by each active vessel.

[b] Crew and captain payments reflect amounts paid for labor during the crab fishery and include all post-season adjustments, bonuses, and deductions for shared expenses such as fuel, bait, and food and provisions; payments for IFQ royalties, labor outside of crab fishery, health/retirement or other benefits are excluded.

[c] Processing labor hours reflect hours worked by processing-line employees working at shoreside and floating processor sectors only, excluding processing employees on catcher/processors and salaried workers employed in the processing sectors.

[d] Pay per hour statistics reflect only the shoreside and floating processing sectors; all other processing labor pay statistics are reported inclusive of catcher/processors

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database, and Crew positions from eLandings.

Table 3: Crab harvest quota lease activity, volume, cost, and average lease prices and rates, CR Program fisheries

			Vessels[a]	Lease rate (percent of ex-vessel price)[a]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[b]	Lease cost as % of ex-vessel gross)[c]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
AIG	All Quota	2016	4	*	*	*	*	*	*	*	*	*	*
		2017	5	51%	54%	4,524	934	905	$14,366	$2,710.18	$2,873.22	83%	45%
		2018	4	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	4	*	*	*	*	*	*	*	*	*	*
	CVO A	2016	3	*	*	*	*	*	*	*	*	*	*
		2017	5	52%	53%	2,368	367	395	$7,458	$1,233.30	$1,243.08	76%	40%
		2018	4	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	4	*	*	*	*	*	*	*	*	*	*
	CVO B + CPO	2016	4	*	*	*	*	*	*	*	*	*	*
		2017	5	54%	40%	1,285	73	161	$3,113	$203.18	$389.16	91%	37%
		2018	4	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	4	*	*	*	*	*	*	*	*	*	*
	CVC + CPC	2016	3	*	*	*	*	*	*	*	*	*	*
		2017	5	52%	74%	204	23	29	$926	$76.99	$132.30	100%	78%
		2018	3	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	3	*	*	*	*	*	*	*	*	*	*
	CDQ + ACA	2016	3	*	*	*	*	*	*	*	*	*	*
		2017	4	*	*	*	*	*	*	*	*	*	*
		2018	2	*	*	*	*	*	*	*	*	*	*
		2019	2	*	*	*	*	*	*	*	*	*	*
		2020	2	*	*	*	*	*	*	*	*	*	*

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Table 3: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[a]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[b]	Lease cost as % of ex-vessel gross)[c]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
BBR	All Quota	2016	53	62%	63%	5,786	89	109	$42,275	$663.00	$797.64	81%	51%
		2017	52	62%	64%	4,959	70	95	$30,560	$423.00	$587.69	84%	53%
		2018	45	63%	65%	3,328	48	74	$23,030	$345.55	$511.77	90%	58%
		2019	46	63%	64%	2,938	42	64	$22,595	$320.77	$491.19	89%	57%
		2020	38	64%	64%	2,061	41	54	$16,176	$301.58	$425.70	92%	59%
	CVO A	2016	50	62%	62%	4,433	75	89	$31,776	$529.66	$635.51	77%	47%
		2017	50	62%	63%	3,709	56	74	$22,754	$338.02	$455.07	81%	51%
		2018	42	62%	64%	2,503	41	60	$17,047	$283.05	$405.88	87%	56%
		2019	42	62%	63%	2,164	35	52	$16,228	$263.26	$386.38	87%	55%
		2020	36	64%	64%	1,578	33	44	$12,203	$256.71	$338.98	91%	58%
	CVO B + CPO	2016	43	64%	66%	610	10	13	$4,769	$75.13	$99.36	77%	51%
		2017	43	63%	63%	546	9	11	$3,390	$55.70	$70.63	85%	54%
		2018	39	64%	65%	358	6	8	$2,580	$39.74	$58.64	83%	54%
		2019	42	64%	67%	366	6	8	$3,044	$47.44	$63.43	80%	54%
		2020	35	64%	64%	203	4	5	$1,631	$33.33	$41.82	80%	51%
	CVC + CPC	2016	35	64%	62%	193	5	5	$1,433	$37.00	$38.72	46%	30%
		2017	39	62%	64%	153	3	4	$972	$23.03	$24.29	85%	55%
		2018	35	63%	67%	109	3	3	$788	$19.83	$20.20	81%	54%
		2019	35	63%	65%	93	2	2	$753	$16.76	$19.31	87%	57%
		2020	33	65%	62%	60	1	2	$485	$12.03	$13.47	74%	48%
	CDQ + ACA	2016	5	63%	67%	550	121	110	$4,298	$907.86	$859.51	101%	67%
		2017	6	63%	64%	551	94	92	$3,445	$577.07	$574.12	100%	65%
		2018	6	66%	67%	357	71	60	$2,615	$506.00	$435.76	100%	67%
		2019	6	67%	68%	315	54	52	$2,569	$428.21	$428.24	100%	68%
		2020	5	68%	68%	220	48	44	$1,858	$392.51	$371.50	100%	68%

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Table 3: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[a]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[b]	Lease cost as % of ex-vessel gross)[c]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
BSS	All Quota	2016	56	46%	49%	27,475	412	491	$39,729	$547.50	$709.44	82%	41%
		2017	54	46%	48%	16,448	218	305	$34,073	$451.18	$630.98	86%	41%
		2018	52	47%	48%	14,030	187	270	$27,679	$352.11	$532.29	88%	42%
		2019	51	46%	48%	21,151	303	415	$40,563	$597.92	$795.35	89%	43%
		2020	47	46%	50%	25,348	429	539	$49,748	$857.08	$1,058.46	88%	44%
	CVO A	2016	54	46%	49%	19,640	337	364	$27,847	$431.95	$515.69	79%	39%
		2017	52	46%	47%	11,518	176	222	$23,234	$340.21	$446.81	82%	38%
		2018	48	46%	47%	10,046	153	209	$19,282	$290.36	$401.70	83%	39%
		2019	48	46%	47%	15,318	235	319	$28,646	$442.62	$596.79	86%	41%
		2020	45	46%	49%	18,443	338	410	$35,402	$636.08	$786.72	89%	43%
	CVO B + CPO	2016	45	46%	50%	3,868	44	77	$5,861	$70.16	$117.22	83%	41%
		2017	48	48%	50%	2,469	28	46	$5,398	$64.12	$99.96	85%	43%
		2018	42	48%	48%	2,091	29	44	$4,361	$62.80	$90.86	95%	45%
		2019	45	46%	47%	3,094	41	61	$6,141	$82.03	$120.40	84%	39%
		2020	41	46%	53%	3,585	55	76	$7,542	$111.42	$160.46	75%	40%
	CVC + CPC	2016	36	46%	47%	925	22	25	$1,364	$33.32	$36.87	99%	45%
		2017	37	49%	55%	479	12	12	$1,096	$23.41	$28.11	77%	42%
		2018	36	46%	50%	500	12	13	$1,070	$25.71	$28.17	98%	49%
		2019	37	46%	49%	704	17	18	$1,478	$36.84	$37.90	81%	40%
		2020	34	46%	50%	829	19	23	$1,716	$40.79	$47.67	75%	38%
	CDQ + ACA	2016	7	51%	52%	3,042	335	435	$4,656	$490.69	$665.16	101%	52%
		2017	8	50%	51%	1,982	222	248	$4,345	$494.16	$543.13	101%	51%
		2018	6	51%	51%	1,393	228	232	$2,965	$492.87	$494.24	100%	51%
		2019	8	48%	51%	2,035	228	254	$4,298	$483.24	$537.27	100%	51%
		2020	8	51%	51%	2,491	294	311	$5,088	$621.98	$635.96	100%	51%

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Table 3: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[a]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[b]	Lease cost as % of ex-vessel gross)[c]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
BST	All Quota	2016	38	28%	30%	9,862	158	260	$9,346	$150.82	$245.95	106%	32%
		2017	15	28%	29%	1,188	70	79	$1,479	$82.13	$98.57	88%	26%
		2018	30	31%	31%	1,891	54	63	$2,553	$73.63	$85.12	90%	29%
		2019	16	32%	33%	1,010	42	63	$1,513	$62.41	$94.57	99%	32%
		2020	17	30%	32%	592	22	35	$766	$23.11	$45.08	100%	31%
	CVO A	2016	37	28%	29%	7,470	127	170	$6,741	$116.42	$153.19	108%	31%
		2017	15	28%	29%	829	60	55	$1,004	$55.69	$66.95	82%	24%
		2018	28	29%	30%	1,394	44	50	$1,813	$54.59	$64.76	93%	28%
		2019	15	32%	33%	691	32	46	$1,047	$53.51	$69.82	91%	30%
		2020	17	30%	32%	488	19	29	$627	$22.87	$36.90	96%	31%
	CVO B + CPO	2016	31	28%	33%	1,125	19	26	$1,219	$18.58	$28.34	87%	29%
		2017	15	28%	29%	172	7	9	$224	$7.81	$11.82	89%	26%
		2018	26	31%	35%	244	6	9	$383	$7.39	$13.67	79%	30%
		2019	14	32%	33%	146	5	9	$217	$6.60	$13.58	101%	33%
		2020	9	28%	27%	51	4	5	$62	$3.59	$6.18	95%	27%
	CVC + CPC	2016	23	28%	29%	438	7	13	$566	$7.12	$16.16	66%	19%
		2017	14	28%	28%	31	2	2	$40	$2.12	$2.82	93%	27%
		2018	22	29%	30%	54	1	2	$69	$1.96	$2.89	59%	19%
		2019	14	32%	32%	42	1	3	$62	$1.30	$3.85	90%	29%
		2020	9	27%	28%	14	1	2	$16	$1.29	$1.76	112%	31%
	CDQ + ACA	2016	7	31%	32%	830	81	104	$821	$79.20	$102.65	100%	32%
		2017	4	*	*	*	*	*	*	*	*	*	*
		2018	5	29%	31%	199	44	40	$288	$61.26	$57.64	100%	32%
		2019	3	*	*	*	*	*	*	*	*	*	*
		2020	1	*	*	*	*	*	*	*	*	*	*

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Table 3: Continued

Year	Vessels[a]	Lease rate (percent of ex-vessel price)[a]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[b]	Lease cost as % of ex-vessel gross)[c]
		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
2020	1	*	*	*	*	*	*	*	*	*	*

Notes: Other fishery data is not shown due to insufficient observations. Lease data shown represent "market-rate and/or negotiated price" lease transactions as reported for active crab fishing vessels in the 2012 through 2018 Crab EDR, which includes both true arm's length transactions as well as transfers between related parties at market-rate value. Harvest quota types are categorized in this report as the following: CVO A (catcher vessel owner Class A IFQ), CVO B + CPO (catcher vessel owner Class B IFQ and catcher/processor owner IFQ), and CVC + CPC (catcher vessel crew IFQ and catcher/processor crew IFQ). Statistics reported represent results pooled over all quota types and/or regional designations within each category.
[a] Vessels column shows total count of vessel-level observations for fishery-year where both pounds and cost of quota leased were reported as non-zero values; in a small number of observations where leased pounds was reported for a given fishery/quota type but lease cost was missing, the mean price over all complete observations was used to impute the missing data in computing the total aggregate lease cost over all vessels.
[b] Average lease price statistics by fishery and quota type are calculated as the median and arithmetic mean, respectively, over all observations where both pounds and cost for one or more quota type within the respective category were reported as non-zero values.
[c] Average lease rate statistics by fishery and quota type are calculated as the median and mean, respectively, of the ratio of lease price to ex-vessel price, over all observations where both ex-vessel and lease pounds, and ex-vessel revenue and lease cost, were reported as non-zero values. Lease rate for each quota type is calculated with respect to ex-vessel value of crab sold using the same quota type. As such, variation in lease price and lease rate in a given fishery may not be consistent between different quota types.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

ABBREVIATIONS

Crab fisheries

AIG	Aleutian Islands golden king crab (East and West fisheries combined)
BBR	Bristol Bay red king crab
BSS	Bering Sea snow crab
BST	Bering Sea Tanner crab (East and West fisheries combined)
EAG	Eastern Aleutian Islands golden king crab
EBT	Eastern Bering Sea Tanner crab
NSR	Norton Sound red king crab
PIG	Pribilof Islands golden king crab
PIK	Pribilof Islands red and blue king crab
SMB	St. Matthew Island blue king crab
WAG	Western Aleutian Islands golden king crab
WAI	Western Aleutian Islands (Adak) red king crab
WBT	Western Bering Sea Tanner crab

Other

ACA	Adak Community Allocation
ADF&G	Alaska Department of Fish & Game
AFSC	NMFS Alaska Fisheries Science Center
AKR	NMFS Alaska Regional Office
BSAI	Bering Sea and Aleutian Islands
CDQ	Community Development Quota
CFEC	Alaska Commercial Fisheries Entry Commission
COAR	Commercial Operators Annual Report
CP	Catcher/Processor (vessel type and/or industry sector)
CPC	Catcher/Processor Crew (Quota Share sector)
CPO	Catcher/Processor Owner (Quota Share sector)
CPUE	Catch per unit effort
CR	Crab Rationalization
CV	Catcher vessel (vessel type and/or industry sector)
CVC	Catcher Vessel Crew (Quota Share sector)
CVCP	Catcher Vessel + Catcher/Processor (collectively denotes crab industry sectors with harvesting activity components)
CVO	Catcher Vessel Owner (Quota Share sector)
CVOA	Catcher Vessel Owner Class A (Individual Fishing Quota type)
CVOB	Catcher Vessel Owner Class B (Individual Fishing Quota type)
EDR	Economic Data Report
ESSRP	Economic and Social Sciences Research Program
FMP	Fishery Management Plan
GHL	Guideline Harvest Limit
IFQ	Individual Fishing Quota
IPQ	Individual Processing Quota

LLP	License Limitation Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NMFS	National Marine Fisheries Service (NOAA Fisheries)
NOAA	National Oceanic and Atmospheric Administration
NPFMC	North Pacific Fishery Management Council
PQS	Processing Quota Share
PSMFC	Pacific States Marine Fisheries Commission
QS	Quota Share (harvesting QS)
RAM	NMFS Alaska Regional Office, Restricted Access Management Program
RCR	Registered Crab Receiver
RPUE	Revenue per unit effort
SAFE	Stock Assessment and Fishery Evaluation
SFCP	Shoreside Processor, Stationary Floating Processor, and Catcher/Processor (collectively denotes crab industry sectors with processing activity components)
SFP	Shoreside Processor and Stationary Floating Processor (collectively denotes shore-based crab processing sectors)
SP	Shoreside Processor
TAC	Total Allowable Catch

1. INTRODUCTION

This report provides statistics on economic activity in commercial crab fisheries managed under the North Pacific Fishery Management Council's *Federal Fishery Management Plan For Bering Sea/Aleutian Islands King and Tanner Crabs* (FMP), with substantial additional detail available for active fisheries managed under the Crab Rationalization Program. The report is produced as part of the annual *Stock Assessment and Fishery Evaluation For The King and Tanner Crab Fisheries Of The Bering Sea and Aleutian Islands Regions* (SAFE), and is provided as a reference source for information on status and trends in social and economic dimensions of fisheries managed under the FMP to support evaluation of management and regulatory decision making.

Across all fisheries managed under the FMP, total volume of commercial ex-vessel landings in 2020 was 42.6 million pounds, with an estimated gross ex-vessel revenue value of $208.5 million. Total sales of finished crab production reported by processors in 2020 across all FMP crab species and product forms was 27.9 million pounds, with an estimated first wholesale value of $269.7 million (F.O.B Alaska). As an indicator of the relative economic importance of Alaska crab fisheries to the state and U.S. economies, the 63.1 million pounds (28.6 thousand metric tons) of commercial catch of king and tanner crab in domestic waters off Alaska (including catch in the Gulf of Alaska and other crab fisheries not managed under the FMP) during 2016 represented 0.66% of the 9.62 billion pounds (4.62 million metric tons) total volume of U.S. commercial seafood landings, but accounted for 4.83% of total ex-vessel value; with respect to Alaska alone, these fisheries accounted for 1.13% of total landed volume and 16.7 percent of total ex-vessel value produced in commercial fisheries off Alaska (NMFS, 2021).

The North Pacific Fishery Management Council (Council) has identified maximizing the social and economic benefits to the nation over time as one of seven management objectives in the FMP, which include, but are not limited to:

> *"profits, income, employment, benefits to consumers, and less tangible or less quantifiable social benefits such as the economic stability of coastal communities"* (NPFMC, 2011; pp. 28-29).

The Council further stipulated that, in the selection of management measures, specific examination of socioeconomic metrics will include: the value of crab harvested (less deadloss), both during the season for which measures are considered, as well in the future based on value as reproductive as well as harvestable stock; subsistence harvests; and economic impacts on coastal communities,

> *"... accomplished by considering, to the extent that data allow, the impact of management alternatives on the size of the catch during the current and future seasons and their associated prices, harvesting costs, processing costs, employment, the distribution of benefits among members of the harvesting, processing and consumer communities, management costs, and other factors affecting the ability to maximize the economic and social benefits as defined in this section."*

The information presented in this report is provided as an annual summary of the economic status of the BSAI crab fisheries in terms of the magnitude and distribution of benefits produced by the fisheries, as broadly outlined in the FMP, in the context of the most recent period for which data are available, and the flow of benefits as produced over time. The report is not intended to provide a dedicated analysis of any specific management measure, either prospectively or retrospectively, but is expected to facilitate greater access to social and economic indices of fishery performance, support preparation and use of such information in more targeted analyses, and over time, develop improved social and economic metrics for effective monitoring and evaluation of management goals and objectives. The report consolidates relevant information published in annual management reports by Alaska Department of Fish and Game and NOAA Fisheries Alaska Region, supplemented with additional analysis and information derived from primary data collected annually by the State of Alaska's Commercial Fisheries Entry Commission, NOAA Fisheries Alaska Fisheries Science Center, and Pacific States Marine Fisheries Commission.

Chapter 2 of this report presents summary statistics and discussion of social and economic status and trends in commercial fisheries encompassed under the following categories: i) economic output; ii) income and employment; iii) harvest sector operating costs and net income; iv) use and distribution of ownership in quota share allocations and other fishery capital assets; v) fishing and processing capacity and effort, and vi) international trade in crab commodities. Within each of these categories, current status is represented in terms of annual averages and totals for the most recent five to seven years of data available. In most cases, the most recent period for which data are presented is two calendar years prior to the date of publication, or the crab fishery season prior to the current season as of the date of publication. All monetary values are inflation-adjusted to 2020-equivalent U.S. dollar terms using the GDP chain-type index (BEA; `https://fred.stlouisfed.org/series/GDPCTPI`). See below for additional introductory notes regarding data sources and reporting conventions used in this document.

1.1. Fishery Overview

Ten crab stocks are currently managed under the BSAI crab FMP: four red king crab (*Paralithodes camtschaticus*) stocks: Bristol Bay, Pribilof Islands, Norton Sound, and Adak (Western Aleutians); two blue king crab (*Paralithodes platypus)* stocks: Pribilof District and St. Matthew Island; two golden (or brown) king crab (*Lithodes aequispinus)* stocks: Aleutian Island and Pribilof Islands; Bering Sea Tanner crab (*Chionoecetes bairdi)*, and Bering Sea snow crab (*Chionoecetes opilio)*. These ten crab stocks are targeted in eleven fisheries, managed by NOAA Fisheries and the State of Alaska (SOA) as distinct units: Bristol Bay red king crab, Bering Sea snow crab, Eastern Aleutian Islands golden king crab, Western Aleutian Islands golden king crab, Norton Sound red king crab, Pribilof Islands golden king crab, St. Matthew Island blue king crab, Adak red king crab, separate fisheries for the Eastern- and Western- components of the Bering Sea Tanner stock, and a single combined fishery for Pribilof Islands red and blue king crab Eastern.

Management of these stocks is shared between NMFS and SOA under terms set forth in the FMP, which defines management measures within three categories:

1. Those that are fixed in the FMP and require FMP amendment to change;
2. Those that are framework-type measures that the state can change following criteria set out in the FMP; and

3. Those measures that are neither rigidly specified nor frameworked in the FMP.

Under the shared state and federal management structure specified in the FMP, decisions regarding management of crab stocks that are reserved to the Council and NMFS under the FMP Annual OFL and ACL status determinations are made by NMFS with Council input subject to federal requirements under the Magnuson-Stevens Reauthorization Act; as the findings of scientific assessments, stock status determinations and not in themselves considered to be management decisions.

Amendments to the FMP itself (Category 1 measures) pertain to changes in the federal regulatory framework under which the crab fisheries are managed, and are thus reserved to the Council and NMFS. Such changes typically involve measures of sufficient scope that they require federal rulemaking and call for preparation of dedicated socioeconomic analyses of decision alternatives, typically in the form of a combined Environmental Impact Statement or Environmental Assessment, Regulatory Impact Review, and Initial Regulatory Flexibility Analysis (EIS or EA/RIR/IRFA; e.g. NMFS, 2004). Category 2 and 3 measures are deferred to the State subject to terms of the FMP. Annual OFL and ACL stock status determinations are approved by the Council and NMFS Alaska Regional Office under the FMP in conformance with the Magnuson Stevens Act. As the findings of scientific assessments, status determinations and not in themselves considered to be management decisions. Although these determinations set the upper bound on total catch of FMP crab stocks, including both directed fishing and bycatch in other fisheries, decisions with respect to annual Total Allowable Catch (TAC) and GHL (Guideline Harvest Level) levels for directed fishing are designated Category 2 measures deferred in the FMP to the state. TACs are set for crab fisheries managed under the Crab Rationalization Program, described in further detail below, while GHLs are set by the state for the Pribilof Islands golden king crab and Norton Sound red king crab fisheries.

Of the 10 crab stocks and 11 fisheries managed under the FMP, seven fisheries were open to targeted fishing during 2020, including the Bristol Bay red king crab (BBR) and Norton Sound red king crab (NSR) fisheries, Eastern and Western Aleutian Islands golden king crab (EAG/WAG) and Pribilof Islands golden king crab (PIG) fisheries, the Bering Sea snow crab (BSS) fishery, and Western Bering Sea Tanner crab (WBT) fisheries. Both the Eastern Bering Sea Tanner (EBT) and Saint Matthew blue king crab (SMB) fisheries were closed for the 2016/17 crab season and have remained closed through the 2021/22 season. The SMB fishery was declared to be overfished in October, 2018, the Western Aleutian red king crab (WAI) fishery has been closed since 2003/04, and the Pribilof Islands red and blue king crab have been closed since 1999, and are both currently designated overfished.

After closure for ten years while under a rebuilding plan beginning in 1999, the Saint Matthew Island blue king crab stock was declared rebuilt in 2009 and the fishery was opened for the 2009/10 season. Due to low area-swept survey results in 2013, the fishery was closed for the 2013/14 season, but was subsequently reopened for the 2014/15 and 2015/16 seasons; with low survey abundance again in 2016 through 2018, the fishery was again declared to be overfished in October, 2018 and a rebuilding plan for the fishery was adopted by the Council in June, 2020, and issued as Amendment 50 to the FMP by NMFS in October, 2020 (85 FR 71272). The Pribilof Islands blue king crab stock was declared overfished in 2002 and the combined red and blue king crab fishery has been closed to directed fishing to date. The Council took final action in June, 2012, approving Amendment 103 to the FMP for Groundfish of the BSAI, prohibiting directed fishing for Pacific cod with pot gear within the Pribilof Islands Habitat Conservation Zone (already closed to all trawl fishing under the FMP), and Amendment 43 to the FMP for BSAI King and Tanner Crabs revising the rebuilding plan to acknowledge that the time required to rebuild the stock would likely exceed 10 years despite

available management measures. The rule implementing the amendments became effective January 1, 2015 (79 FR 71344). To date, there has been no stock survey for Western Aleutian (Adak) red king crab and therefore no basis for stock status determinations, and the fishery has been closed since 2003/2004.

Stock assessments for the 2021/22 crab season indicated declining conditions for both BBR and BSS fisheries, and the BBR fishery has been closed for the 2021/22 season. As of October, 2021, NMFS declared the BSS stock to be overfished, initiating the Council process for developing a rebuilding plan for BSS. The BSS fishery opened for the 2021/22 season with a reduced TAC of 5.6 million pounds, BTW at 1.1 million pounds, EAG at 3.61 million, and WAG at 2.32 million pounds.

1.1.1 BSAI Crab Rationalization Program

In March 2005, NMFS issued a final rule to implement the Crab Rationalization (CR) Program as Amendments 18 and 19 to the BSAI Crab FMP. The CR Program went into effect with the 2005/2006 crab season that began in August 2005, which affects the following fisheries: Bristol Bay red king crab (BBR), Bering Sea snow crab (BSS), Eastern Bering Sea Tanner crab (EBT), Western Bering Sea Tanner crab (WBT), Pribilof blue and red king crab (PIK), St. Matthew Island blue king crab (SMB), Western Aleutian Islands golden king crab (WAG), Eastern Aleutian Islands golden king crab (EAG), and Western Aleutian Islands (Adak) red king crab (WAI). Two fisheries managed under the BSAI crab FMP, Norton Sound red king crab (NSR) and Pribilof Islands golden king crab (PIG), are excluded from the CR Program.

The CR Program allocates BSAI crab resources to qualifying harvesters, vessel crew members, processors, and Western Alaska coastal communities. Under terms of FMP Amendments 18 and 19 and subsequent amendments, harvest and processing privileges in the CR fisheries are granted as long-term percentage shares, designated as harvest quota share (QS) and processor quota share (PQS). Subject to annual application requirements, annual allocations proportional to QS and PQS percentages are issued to participating share holders as Individual Fishing Quota (IFQ) and Individual Processing Quota (IPQ) permits, granting pound-denominated quantities of catch and processing shares of the annual Total Allowable Catch (TAC). The harvest component of the CR fisheries is divided between the QS/IFQ component, representing 90% of the annual TAC, and the remaining 10% allocated as Community Development Quota (CDQ) or, for Western Aleutian Islands golden king crab fishery, Adak Community Allocation (ACA) quota. Under the three-pie allocation system that is unique to the CR Program, a portion of the harvest shares issued as IFQ are subject to a share matching requirement, wherein subject IFQ must be sold to qualified crab buyers holding shares of IPQ, with additional delivery requirements designating a portion of share-matched IFQ for delivery to specified regions within the BSAI. Specifically, IFQ allocations issued to catcher vessel owners (CVO-IFQ) are issued as 90 % Class A IFQ, subject to regional delivery requirements and share-matching, and the remaining 10% designated Class B IFQ are exempt from share matching and regional delivery requirements. All other QS/IFQ pools, including those issued to catcher/processor owners, catcher/processor crew members, and catcher vessel crew members, as well as CDQ and ACA allocations, are exempt from regional delivery and share matching requirements.

In this report the terms “BSAI crab” and “FMP crab” are interchangeably used to denote the collective commercial crab fisheries associated with the ten crab stocks currently managed under the BSAI crab FMP, and “CR crab” to denote those fisheries included in the CR program, inclusive of all QS/PQS, CDQ, and ACA allocations; and the term “IFQ fisheries” to denote specifically the

QS/IFQ and PQS/IPQ allocation fisheries within the program. All other crab stocks in waters off Alaska are exclusively managed by the State and are outside the scope of this report.

This overview outlines the key details regarding the structure of BSAI crab management and the CR program as referenced in this report. For detailed information regarding the regulatory structure of BSAI crab fisheries and recent management actions, readers are referred to the FMP, NMFS Alaska Region's Annual Bering Sea and Aleutian Islands Crab Rationalization Program webpage, and the Council's Crab Rationalization webpage (website address URL's and links to other useful references regarding the CR Program are provided below). The Council completed its 10 Year Review of the CR Program during 2016, and readers are directed to the review for a comprehensive analysis of the performance of the CR program over the 2005 to 2014 period (NPFMC, 2017). Several elements of annual CR program administration of importance to economic status of the fisheries are publicly reported on the NMFS AKR CR program webpage, including annual reports of QS/PQS entity holdings and IFQ/IPQ annual allocations; harvest cooperative formation, membership, and IFQ assignment by fishery; initiation and outcomes of arbitration proceedings between harvesters and processors; safety and regulatory compliance by program participants; loan issuance under the NMFS Fisheries Finance Program; and CRP cost recovery fee assessment and collection.

Additional information on BSAI crab fisheries is available from NOAA Fisheries Alaska Regional Office (AKR), the North Pacific Fishery Management Council (NPFMC), and the Alaska Department of Fish & Game (ADF&G). Readers seeking more extensive discussion of fishery history and management may find the following resources particularly useful:

- NOAA Fisheries Alaska Region
  - BSAI Crab Fisheries: `https://www.fisheries.noaa.gov/alaska/sustainable-fisheries/bering-sea-and-aleutian-islands-bsai-crab-fisheries`
  - BSAI Crab Rationalization (includes history of relevant amendments to the FMP): `https://www.fisheries.noaa.gov/alaska/sustainable-fisheries/bering-sea-and-aleutian-islands-crab-rationalization-program`;
    see especially the Frequently Asked Questions for an overview of CR program provisions and definition of terms (`https://media.fisheries.noaa.gov/dam-migration/bsai-crab-rat-faq-101518.pdf`)
  - Crab Rationalization Program Cost Recovery Reports: `https://www.fisheries.noaa.gov/resource/document/crab-rationalization-program-cost-recovery-reports`
- NPFMC
  - BSAI Crab FMP: `http://www.npfmc.org/wp-content/PDFdocuments/fmp/CrabFMPOct11.pdf`
  - Bering Sea and Aleutian Islands Crab Rationalization Program: `http://www.npfmc.org/crabrationalization/`
  - BSAI Crab Plan Team: `http://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/`
- ADF&G Shellfish Management

- Westward Region, Bering Sea & Aleutian Islands Area Shellfish: `http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareaaleutianislands.shellfish`
- Arctic-Yukon-Kuskokwim Region, Norton Sound and Kotzebue Shellfish (for information on the Norton Sound red king crab fishery): `http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareanortonsound.shellfish`

1.2. Data Sources

The current report summarizes information available to date, largely comprising data reported through 2021 for the 2020 calendar year, spanning the end of the 2019/20 and beginning of the 2020/21 crab seasons. All data sources are subject to revision as data errors at the observation level are identified and corrected. Data for the most recent period available for all sources, but particularly from BSAI Crab Economic Data Report (EDR) data, is presented on a preliminary basis and may change significantly in the next annual release of the report, or in an amended version of the current report.

This document is the primary channel for publication of aggregate data from the Crab EDR program administered by NMFS Alaska Fisheries Science Center, Economic and Social Sciences Research Program (AFSC, ESSRP). The EDR program is a mandatory census involving reporting of detailed operational and financial information by owners and leaseholders of vessels and processing plants participating in CR program fisheries. The EDR program was designed by the Council as a component of the Crab Rationalization Program to improve its ability to monitor and assess achievement of social and economic objectives of management set forth in the FMP. Broadly speaking, the objectives of this reporting requirement are to monitor the economic performance of the rationalization program in terms of changes in the efficiency and profitability of the fisheries, and economic stability for harvesters, processors, and coastal communities, as a result of the rationalization of the fisheries and in response to ongoing management decisions. The EDR reporting requirement was implemented in 2005, with baseline data submission required retroactively for 1998, 2001, and 2004, and subsequently, on an annual basis, for calendar year crab fishing and processing activities for 2005 to present. Revised EDR reporting requirements implemented under Amendment 42 (78 FR 36122, June 17, 2013) to the FMP went into effect during 2013 for 2012 and subsequent calendar year data.

The current Economic Status Report focuses on reporting summary statistics for reported values across EDR data elements identified as sufficiently accurate for public reporting. Several key elements in the EDR data collection prior to 2012 were limited by data quality have not been used in analysis of the CR program (AFSC, 2011) and have been withheld from the current report. These include quantity and cost of fuel used in the fishery, prices and costs for leasing of Individual Fishing Quota (IFQ), and spending for factor inputs by individual location. Given the importance of these elements in examining changes in profitability and distribution of income generated by and within the fishery, these data quality issues have limited the analysis of several key performance metrics for the fishery. Revised data collection protocols implemented for 2012 and subsequent reporting years have corrected errors associated with quantity and cost of fuel and prices and costs for leasing of crab fishing quota, and data reported for 2012 forward are presented in the current report; data reported previous to 2012 continue to be withheld due to data quality limitations. Several data elements were eliminated under revised EDR protocols, most notably all operating and capital cost elements for the crab fishing vessel and processing sectors, with the exception of fishing crew wages, processing labor wages, aggregate salary expenses, lease expenses for fishing quota (IFQ and CDQ/ACA quota) and processing quota (IPQ), vessel expenses for fuel, bait, and food and

provisions, and payments for custom processing of crab purchased but not processed by the buyer submitting the EDR.

Varying degrees of coverage error apply to EDR data collected retroactively in 2005 for calendar years 1998, 2001, and 2004, as well as for certain processing-sector reporting elements in all years of the data collection. The historical (pre-2005) reporting requirement was tied to issuance of fishing and processing quota in the rationalized fishery. As such, the historical data may exclude operations that participated in the crab fisheries in 1998, 2001, and/or 2004 but did not anticipate receiving quota in the rationalized fishery. Additionally, because purchasers of CR crab that do not process any crab in their own facility are exempt from EDR reporting requirements, the data collection does not represent a full census of activity, revenue, and costs in the processing sector.

A number of other sources in addition to the EDR database have been utilized to compile the statistics presented in this report. ADF&G fish tickets document commercial harvest from Alaska commercial fishery resources, including all BSAI crab fisheries. Since implementation of the crab rationalization program in 2005/06, NMFS Alaska Region, Restricted Access Management (RAM) division has maintained accounting of landings, quota usage, and quota disposition in the IFQ crab fisheries. The ADF&G Commercial Operator's Annual Report (COAR) provides data on statewide crab production differentiated by crab species, product, and process type; and is additionally used by the Alaska Commercial Fisheries Entry Commission (CFEC) to estimate crab ex-vessel pricing. Regular reporting on BSAI crab fisheries cited in this document include the *Bering Sea and Aleutian Islands Crab Rationalization Program Report*, published annually (through the 2011/2012 crab seasons) by NMFS Alaska Region, RAM Division; and area management reports published by ADF&G. [1]

ADF&G fishery management reports provide information on fishery history, management, and stock status, in addition to detailed information on fishing activity occurring in the most recent fishing season. The Crab Rationalization Program Report, which formerly provided information on the annual administration and management of the program, ceased publication after 2013. Subsequently, NMFS Alaska Region has released annual tabular reports documenting administration of the CR program, including QS and PQS holdings, annual permit issuance, harvesting coop membership and IFQ assignments, IFQ and CDQ landings by fishery and region, and other detailed information: tabular reports are available at `https://www.fisheries.noaa.gov/alaska/sustainable-fisheries/bering-sea-and-aleutian-islands-crab-rationalization-program`. Citations for these and other sources used in compiling this report are provided in figure and table footnotes and in the References section.

1.3. Data Conventions

Under the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (P.L. 109-479), fishery information required to be submitted under Fishery Management Plans, including

[1] With the exception of Norton Sound red king crab, all fisheries included in the BSAI crab FMP are managed as part of the ADF&G Westward Region, Bering Sea/Aleutian Islands Management Area, with annual reporting on these fisheries available in the *Annual Management Report for the Commercial and Subsistence Shellfish Fisheries of the Aleutian Islands, Bering Sea and the Westward Region's Shellfish Observer Program* (http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareaaleutianislands.shellfish#/management). Norton Sound red king crab is managed as part of the Norton Sound and Kotzebue Management Area within the Artic-Yukon-Kuskokwim Region; reporting is provided in *Annual Management Report Norton Sound, Port Clarence, and Kotzebue* (http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareanortonsound.shellfish

landings data, is confidential. NOAA Administrative Order (NAO) 216-100 is the principal guidance for NOAA Fisheries employees on protocols for handling confidential data. To assure confidentiality, data must be structured or aggregated so that the identity of the submitter cannot be determined from the present release of the data or in combination with other releases. "Submitter" is applied in context for the specific data presented. Data provided by the State of Alaska are treated consistent with the Memorandum of Understanding between NMFS and the State of Alaska regarding data sharing. Due to the sensitive nature of financial information reported in this document, confidentiality protocols have been interpreted conservatively and may result in greater suppression of statistical information representing contributions from low numbers of reporting units. Data cited in this report have been aggregated across individual reporting entities by year and management unit so as to satisfy confidentiality requirements, while maximizing detail and comparability of statistics both within and among tables and figures.

All price, revenue, and other monetary values in the report, unless otherwise noted. The Gross Domestic Production (GDP) chain-type price index (`https://research.stlouisfed.org/fred2/series/GDPCTPI`) accounts for change in the general price level of US domestic production of all goods and services, and is used in this report to deflate estimates of production revenues and costs reported for the crab processing sector, and with some exceptions, for costs and revenues in the harvest sector. Where noted, the Personal Consumption Expenditures (PCE) chain-type price index (`https://fred.stlouisfed.org/series/PCEPI`) is used to deflate estimates of income accruing to vessel owners and crew in the harvest sector. GDP and CPI Index values from 1991 to 2020 are provided in Table 3.50 of Section 3. [2]

Some notable discontinuities and other limitations in source data limit comparability of statistics between tables or in time series within some tables. In particular, discontinuation or revision of several capital and operating expenditure data elements are reflected in the current report, with data series for the affected data elements terminating at 2011 or beginning at 2012. To replace data previously provided by EDR reporting of days active in crab fisheries in the EDR (days fishing, days steaming and offloading, and days processing; discontinued for 2012 and subsequent years), data collected by ADF&G is incorporated in the current report. However, as the replacement data set (Confidential Interview Form (CIF) data) is only available beginning 2008, all statistics presented on a daily pro-rata basis in the report use CIF data where available, and EDR data otherwise. The calendar-year basis by which most statistics in this report are presented is incongruent with the July-to-June management season of BSAI crab fisheries, resulting in some statistics presented on a fishery-year basis where disaggregation to the calendar-year is infeasible with available data. Declining participation in CR program fisheries following rationalization has reduced the number of reporting entities in some strata below minimum thresholds for nondisclosure, necessitating aggregation across strata in order to maximize use and dissemination of available data. EDR data for the Eastern and Western Aleutian Islands golden king crab fisheries are reported together in aggregate, even though the fisheries are prosecuted by partially distinct fleets and managed as distinct fisheries. Users should also note the discontinuity in presentation of EDR statistics by industry sector between 2009 and earlier years: due to low participation in the catcher/processor sector, EDR data from 2009 forward are presented with aggregations over the catcher/processor and catcher vessel sectors for statistics related to harvesting activity; and over the catcher/processor, shoreside processor, and floating processor sectors for statistics related to processing activity. Users

[2] Previous editions of the report used U.S. Bureau of Labor Statistics Producer Price Index for unprocessed and packaged fish to adjust for inflation, but for consistency with the Groundfish Economic SAFE document, this and subsequent editions of the report use the GDP deflator.

should also note that the validation process for EDR data and finalization of the dataset may take several months following the EDR submission deadline, and statistical values for the most recent period published in the report may be subject to revision in the next annual edition.

Users of this report are strongly encouraged to consult table and figure footnotes, which provide citations of data sources, interpretive guidance, and discussion of data limitations and qualifications in addition to those already noted above and/or in discussion text accompanying figures and tables. Figures for selected results are accompanied by cross-references to the relevant tabular data; more extensive footnotes are provided with tabular data in order to conserve space. Users should also note the abbreviation and notation conventions used in tabular and graphical presentations of data in this report:

Abbreviations and notations used in tables and figures

*	Data suppressed to prevent disclosure of confidential information
n/a or -	Not applicable
–	No data available (data not collected, no observations in reported data, or available data are insufficient for public reporting).
2005 or 05	Calendar year, or FMP crab fishing season that occurred wholly within calendar year
2005/06 or 05/06	FMP crab fishing year
lbs.	Pounds
mt or t	Metric tons
obs or observations for measure of interest	Number of observations with value > 0
sd	Standard deviation
$	US dollars; inflation-adjusted to 2020-equivalent value
(blank)	Statistic not calculated; in some tables, certain statistics (e.g. mean or median) are calculated only for a subset of categories or strata, such that columns or rows in a portion of the table are left blank.

2. ECONOMIC STATUS AND TRENDS IN BSAI CRAB FISHERIES

The following section presents information on the economic status of BSAI crab commercial fisheries in terms of economic output, income, and employment; operating and production costs; use and distribution of ownership in quota share allocations and other fishery capital assets; fishing and processing capacity and effort; and international trade in crab commodities. Data are summarized as aggregate totals and/or averages calculated over relevant economic units, primarily at the level of harvesting and processing sectors within individual crab fisheries, with mean and/or median values representing the average value across individual vessels and processing facilities within the respective sector with additional levels of stratification as appropriate, and/or aggregated over some or all crab fisheries. The presentation is largely limited to these descriptive statistics, with measures of variability and/or uncertainty for selected variables where supported by available data. Depending on the data source, results are reported by calendar year (denoted as a single year; for example, 2020), or crab fishery year (spanning July-June and denoted, for example, as 2019/20). The current report summarizes information available in primary databases to date, largely comprising data reported through 2021 for the 2020 calendar year, comprising the late (January - May) portion of the 2019/20 and early (August - December) portion of the 2020/21 crab seasons. Where available, more recent information is reported for the 2021 calendar year, and for the 2020/21 and 2021/22 crab seasons.

As many of the key data sources are reported on an annual basis, current status and trends are framed in the context of inter-annual variation, with a focus on the most recent five to seven years of the crab fishery, with longer time series presented where available and longer historical perspectives noted where relevant, particularly with regard to pre- and post-rationalization comparisons, and structural changes developing in the crab industry subsequent to Crab Rationalization (CR) program implementation where indicated. To the extent that descriptive statistics indicate a sustained directional change in magnitude or distribution of economic benefits, discussion of potential trends and associated management and/or market changes is limited to qualitative description of observed changes over time. Statistical tests to assess significant differences in measured values of the descriptive statistics or attribute causality to management or market factors, or models to forecast changes in status of the fisheries in the future, are not employed in the presentation.

2.1. Economic Output

2.1.1 Annual TAC/GHL, Landings, and Finished Product Volume

As detailed in the 2021 Final Crab SAFE, poor and declining abundance and recruitment trends across BSAI crab stocks that have historically accounted for nearly all of the commercial production in FMP crab fisheries, in conjunction with increased uncertainty in stock assessments associated with poor environmental conditions in the current and recent years and the suspension of the EBS trawl survey data for 2020 due to the COVID-19 pandemic, resulted in OFL and ABC specifications adopted by the Council in October, 2021 that collectively were at historically low levels. Commensurate with Council action on ABC and OFL specifications, Crab Plan Team recommendations, and a conservative management strategy in light of elevated scientific uncertainty,

ADF&G announced moderate to severe reductions in 2021/2022 season TACs and closure of the BBR fishery.

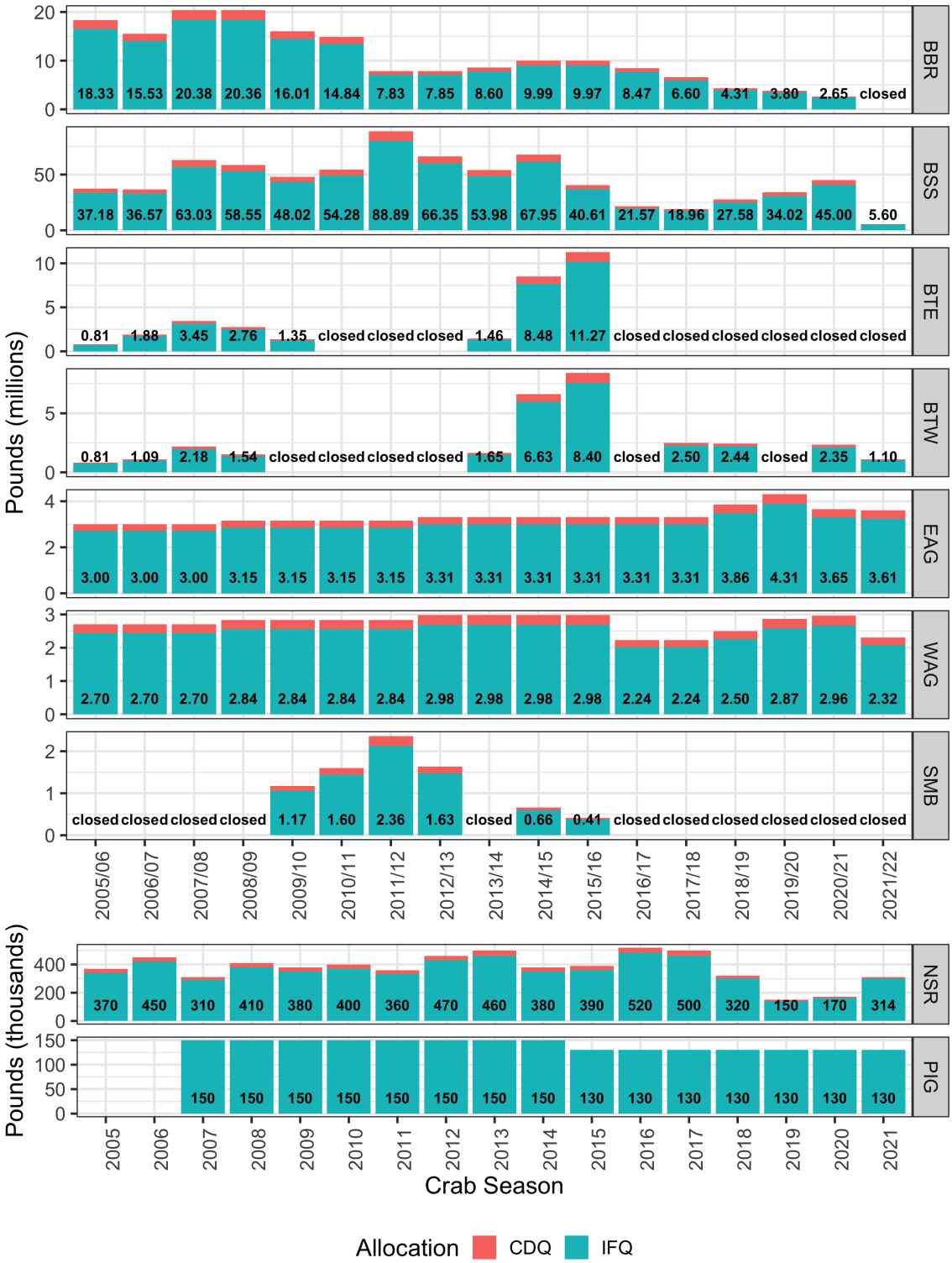
Given the retrospective nature of this report, necessitated by the *post-hoc* data collection and production timelines for principal data sources, the authors wish to acknowledge the untimeliness of the information presented below, in light of the historically low TAC levels issued for the current crab season and elevated concerns among industry and the public regarding the current status and outlook for BSAI crab fisheries. It is clear that physical production in the harvesting and processing sectors, yet to be determined or assessed for 2021 and 2022 as of publication of this report, will be in sharp decline relative to the historical baseline, up to calendar year 2020, that is documented herein. These and other recent changes and trends, including the ongoing COVID-19 pandemic, clearly have critical implications for the current status of BSAI crab fisheries, and that of direct and indirect participants in the crab harvesting and processing sectors, including vessel and processing plant owners and managers, crew members and employees, quota share holders, material and service suppliers and other businesses, and communities. It can be anticipated that short-term structural adjustment within both industry sectors, to minimize costs and maintain operating efficiency at reduced production levels, will result in immediate contraction in the active fleet, and potentially in engagement of crab processing plants. Any such structural adjustment, however ultimately resolved, will have immediate distributional effects within and between the respective industry sectors, with community-level effects, including direct effects on employment and income, and may accelerate or precipitate longer-term structural and distributional changes. As data become available and additional analytical metrics developed, future updates of this report will provide the basis for *post hoc* assessment of the short-term effects of TAC reductions for the 2021/22 crab season, propagating through, and as measured by, the scope of metrics reported below. Pending direction from NMFS regarding any specific analyses to support assessments addressing current or anticipated economic disruption in the crab industry, no attempt has been made in the current report to expand the scope of reporting to include additional in-season information and statistics, or to forecast values of performance metrics beyond the 2020 calendar year. It should be noted, however, that the documentation in this report of baseline status conditions for rationalized crab fisheries as of 2020, as facilitated by the enhanced data collections implemented as part of the CR Program, is substantially more complete than that available for most other fisheries and sectors under Council oversight.

Crab season Total Allowable Catch (TAC) and Guideline Harvest Limit (GHL) levels are reported by crab fishery in Table 3.1 and summarized graphically in Figure 2.1, including TACs issued for 2020/21 and 2021/22. After reaching a historical low (to that point) of 19 million pounds issued for the 2017/18 season, TACs in the BSS fishery trended successively upward over the following three seasons, reaching 45 million pounds for the 2020/21 season, before declining to 5.6 million pounds for 2021/22. TACs in both EAG and WAG fisheries intermittently saw small incremental increases up through the 2015/16 season, reaching 3.31 million pounds in the EAG fishery and 2.98 million pounds in the WAG fishery. The latter was reduced to 2.24 million pounds for the 2016/17 season, and has incrementally increased over successive seasons, to 2.96 million pounds for the 2020/21 season, before declining to 2.32 million pounds for 2021/22, while the TAC in the EAG fishery peaked at 4.31 million pounds for the 2019/20 season, declining to 3.61 million pounds for 2021/22. TACs in the BBR fishery declined steadily from the 9.99 million pounds issued for the 2014/15 season, ending with closure of the fishery for 2021/22, with the 2.65 million pounds issued for 2020/21 representing the lowest TAC since the last closure of the fishery in 1995/96. Reductions in the BTW fishery TAC in 2017/18 and 2018/19 were followed in 2019/20 with closure of the

fishery under ADF&G's harvest management strategy, but reopened for 2020/21 with a TAC of 2.35 million pounds, which was reduced for 2021/22 to 1.1 million pounds. As a result of 2016 and subsequent stock assessments, fishery closures in the EBT and SMB fisheries continued through 2020/21, as did those in other crab fisheries that have remained closed since rationalization.

As of the 2014/15 crab season, allowable catch quantities in all BSAI crab fisheries currently open to targeted fishing reached full exploitation (i.e., 98-100 percent of total allocation landed), including the WBT, which previously varied below 50% during some seasons (Table 3.1). Since the 2010/11 crab season, all FMP crab fisheries that were in considered in-development following periods of extended closures (including both BST fisheries and the SMB fishery) maintained greater than 75% exploitation of allowable catch during open seasons prior to subsequent, ongoing closures in the SMB and EBT fisheries, and the decline to 62% exploitation in the 2020/21 WBT fishery.

Figure 2.1: TACs/GHLs and Management Program Allocations, BSAI Crab Fisheries



Source: ***ADF&G.*** Tabular data available in Table 3.1.

Numeric values above bars indicate total quantity (in million pounds) of TAC/GHL allocations to directed fishing, 10% of which is allocated to CDQ/Adak Community Allocation.

Across all fisheries managed under the BSAI Crab FMP, the total volume of commercial ex-vessel landings during 2020 was 42.6 million pounds (19.3 thousand metric tons), low relative to production over the last two decades, but representing a 9% increase from the previous year and a 36% increase from the historical low production level of 31.87 million pounds (14.45 thousand metric tons) during 2018 (Figure 2.2). The increase in aggregate harvest production during 2020 was driven solely by increased production in the BSS fishery during 2020, with total catch of 33.6 million pounds (15.2 thousand mt) landed in the Bering Sea snow crab (BSS) fishery, an increase of 32% from 2019. Landings in other fisheries declined from 2019, with 5.7 million pounds (2.6 thousand mt) in the AIG fisheries (-16%), 2.64 million pounds (1.2 thousand mt) in the BBR fishery (-30%), and 620 thousand pounds (281 mt) in the western portion of the Bering Sea Tanner (BST) fisheries.

Crab processors produced 27.6 million pounds (12.6 thousand mt) of finished crab product volume in 2020, aggregated over all active crab fisheries, a 9% increase from 2019 and a 33% increase in processing sector output from 2018, which was also the lowest historical level of production for the sector. Similar to ex-vessel production, the 9% increase in processing sector output volume aggregated over all active crab fisheries during 2020 was driven solely by increased production in the BSS fishery, with finished volume of 22 million pounds (10 thousand mt) increasing 23% over the previous year. Finished production in other fisheries declined from 2019, with 3.6 million pounds (1.6 thousand mt) in the AIG fisheries (-16%), 1.8 million pounds (806 mt) in the BBR fishery (-30%), and 420 thousand pounds (192 mt) in the western portion of the Bering Sea Tanner (BST) fisheries.

Figures 2.2 and 2.3 summarize 1998 to 2020 annual (calendar year) values for total landed live catch and gross ex-vessel revenue (detailed in Tables 3.4 to 3.6). Finished production volume and first wholesale value are reported in Tables 3.7 to 3.9 for all crab fisheries managed under the BSAI crab FMP. Figure 2.3 displays production and revenue time series in separate vertical bar graphs for each fishery (note that the vertical scales vary by fishery). To enable clearer comparison of the relative contribution of individual fisheries over time (graphed separately for harvesting and processing sectors), Figure 2.2 displays values of revenue and volume, respectively, aggregated over all crab fisheries and color coded by fishery in proportional area of vertical bars.

2.1.2 Ex-vessel and First Wholesale Prices and Revenue Value of Production

The effect of mixed trends in physical output across BSAI crab fisheries, with the net increase in both sectors' aggregate production driven solely by the BSS fishery offsetting production declines across all other crab fisheries, combined with market-driven price increases across all four crab fisheries in the processing sector, produced an overall 10% increase in aggregate first-wholesale revenue during 2020, to $270 million. In contrast, the harvest sector saw a modest decline in average ex-vessel price in the BSS fishery, which partially offset the substantial production gain in that fishery as well as price increases in the BBR, and more significantly, AIG fisheries, resulting in a modest 2% increase in aggregate ex-vessel revenue of $208 million for 2020 (Figure 2.2 and Tables 3.4 and 3.7). Though varying in relative magnitude, growth in aggregate value produced by both sectors in 2020 continued a second year of revenue gains following historical lows observed in 2018.

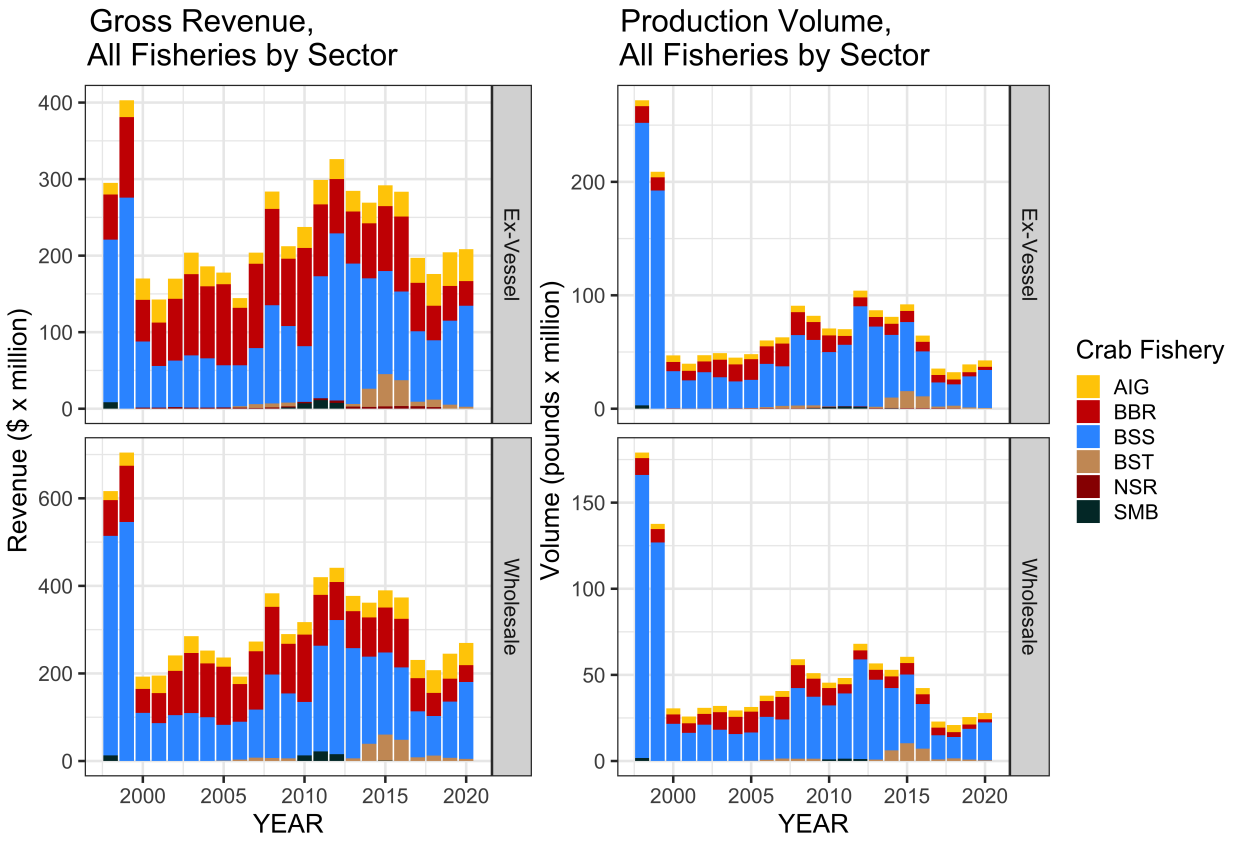
A somewhat notable divergence in average prices between the harvest and processing sectors occurred during 2020, with first wholesale price increasing across the four largest fisheries, while ex-vessel prices increased in the AIG and BBR fisheries, but declined in the BSS and BST fisheries (Figure 2.4). The average BSS ex-vessel price declined 2% to $3.93 per pound, while the first wholesale price

increased 11% to $7.99 per finished pound, and ex-vessel price in the BST fishery declined 9% to $4.12 per pound landed, while first wholesale price increased 22% to $11.15 per pound. Directional price changes were consistent between sectors in the AIG and BBR fisheries. The average ex-vessel and wholesale prices in the BBR fishery increased to $12.20 per pound landed (+2%), and $21.49 (+5%) per finished pound, and in the AIG fishery ex-vessel price increased by 12% to $7.29 per pound landed, while first wholesale price increased 6% to $14.03 per pound.[1]

Among individual crab fisheries in 2020, gross revenues in both sectors declined in all but the BSS fishery, which increased in ex-vessel value by 20% from 2019, to $132 million, and by 37% in first wholesale value, to $176 million (Figure 2.3). Ex-vessel revenues in the AIG fisheries declined 5% from 2019, to $42 million, and by 11% in the processing sector, to $51 million. Gross ex-vessel earnings in the BBR fishery declined 30% to $32 million, while first wholesale value declined by 26% to $51 million. Gross production value in both sectors of the BST fishery declined substantially during 2020, with $2.6 million ex-vessel and $4.7 million in the processing sector declining by 52% and 36%, respectively.

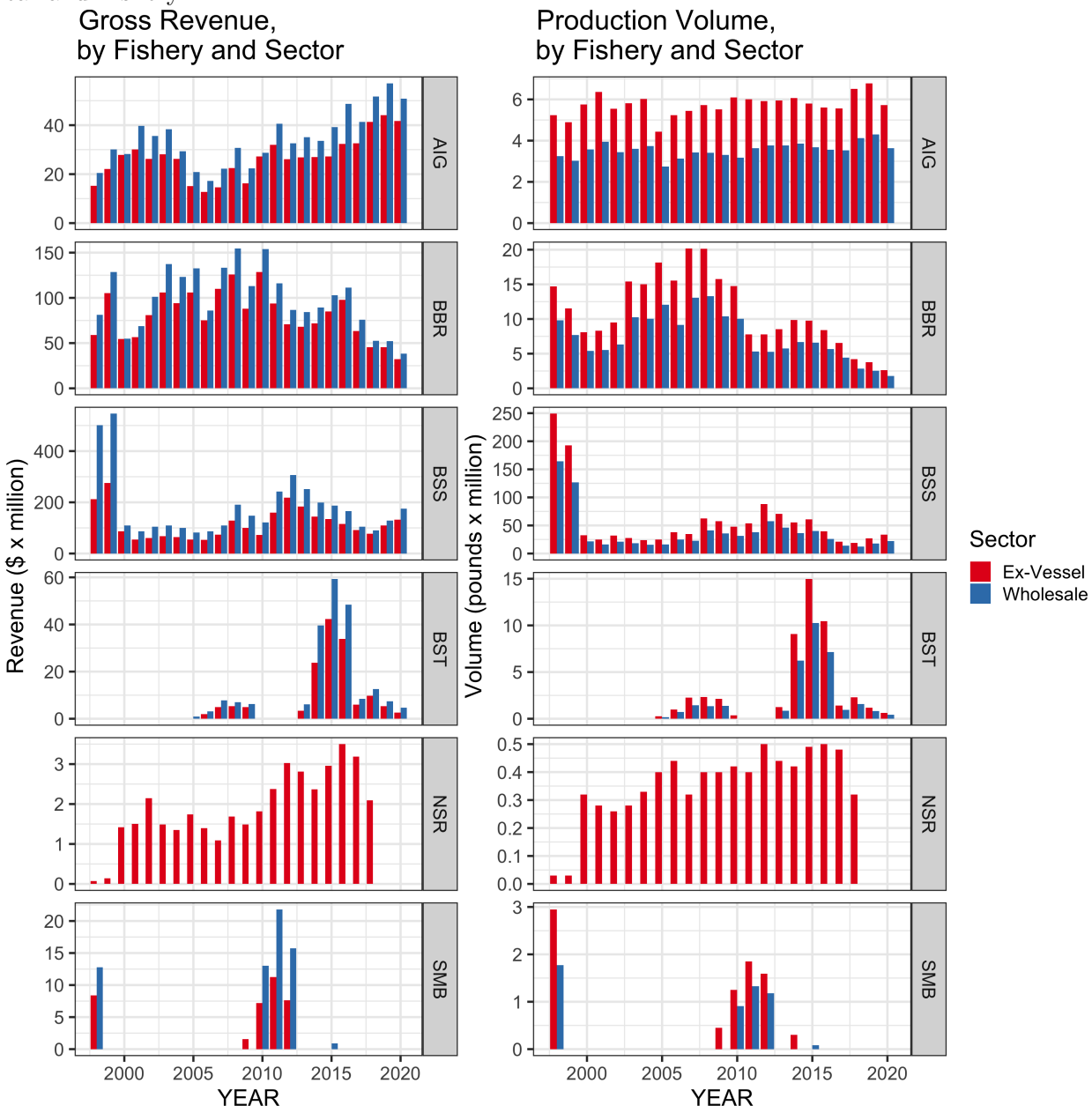
[1] A note on the term "price" as used in this report: a variety of price indices are presented herein that are derived from data on volume and revenue of sales of landed crab and/or finished crab product, collected and reported at different levels of aggregation. The typical representation of ex-vessel or first-wholesale prices in fishery management reports (e.g., NMFS, 2012) is fishery- or fleet-level average price, calculated as aggregate revenue divided by aggregate volume. Rather than representing the per-unit market "price" for a uniform commodity, this index is equivalent to the weighted arithmetic mean calculated over individual sale price observations, weighted by volume of individual sale. For example, ex-vessel price calculated as the quotient $\frac{\sum_i r_i}{\sum_i v_i}$, where $\sum_i r_i$ is the ex-vessel sale revenue and $\sum_i v_i$ is volume of sold landings, aggregated over all vessels $i \ldots j$, is equivalent to the weighted arithmetic mean price calculated as $p = \frac{\sum_i v_i p_i}{\sum_i v_i} = \frac{\sum_i v_i \left(\frac{r_i}{v_i}\right)}{\sum_i v_i} = \frac{\sum_i r_i}{\sum_i v_i}$, where p_i is the individual price observation for the i^{th} vessel. In relevant tables and figures in this report, the aggregate revenue (or cost) per volume ratio is referred to as weighted average price; this representation of average per-unit value places greater emphasis on large volume sales (or sellers), relative to smaller volume sales. This is of particular importance where factors that may affect an individual transaction price are correlated with the volume of the transaction and/or the frequency of similar transactions, such as type of harvest quota used in sales of ex-vessel landings, or wholesale product form of individual processor sales. It is important to note that, with limited exceptions, observation level data used to prepare this report represent yearly aggregate sale volume and revenue reported by industry entities for different categories of goods, rather than transaction-level data representing sales of uniformly-defined commodities. For selected tables and figures displaying economic value per unit metrics (price, cost, wages, or other per-unit rates), medians and/or unweighted means and associated measures of dispersion are included where appropriate to represent the center and, in some cases, dispersion of observation-level data. In cases where data do not appear to conform to an approximately normal distribution, median value of observation-level price per-unit is reported rather than mean.

Figure 2.2: Ex-Vessel and First Wholesale Gross Revenue and Production Volume, by Calendar Year, FMP Crab Fisheries



Source: ADF&G fish tickets, eLandings, CFEC pricing based on COAR buying reports. Data shown by calendar year. Tabular results are shown in Tables 3.4 and 3.7. Includes commercial harvest from general, IFQ, and CDQ management programs and commercial pounds harvested by catcher/processors; NSR is not included in production volume and value.

Figure 2.3: Ex-Vessel and First Wholesale Gross Revenue and Production Volume, by Calendar Year and Fishery



Source: ADF&G fish tickets, eLandings, CFEC pricing based on COAR buying reports. Data shown by calendar year. Tabular results are shown in Tables 3.4 and 3.7. Includes commercial harvest from general, IFQ, and CDQ management programs and commercial pounds harvested by catcher/processors; NSR is not included in production volume and value.

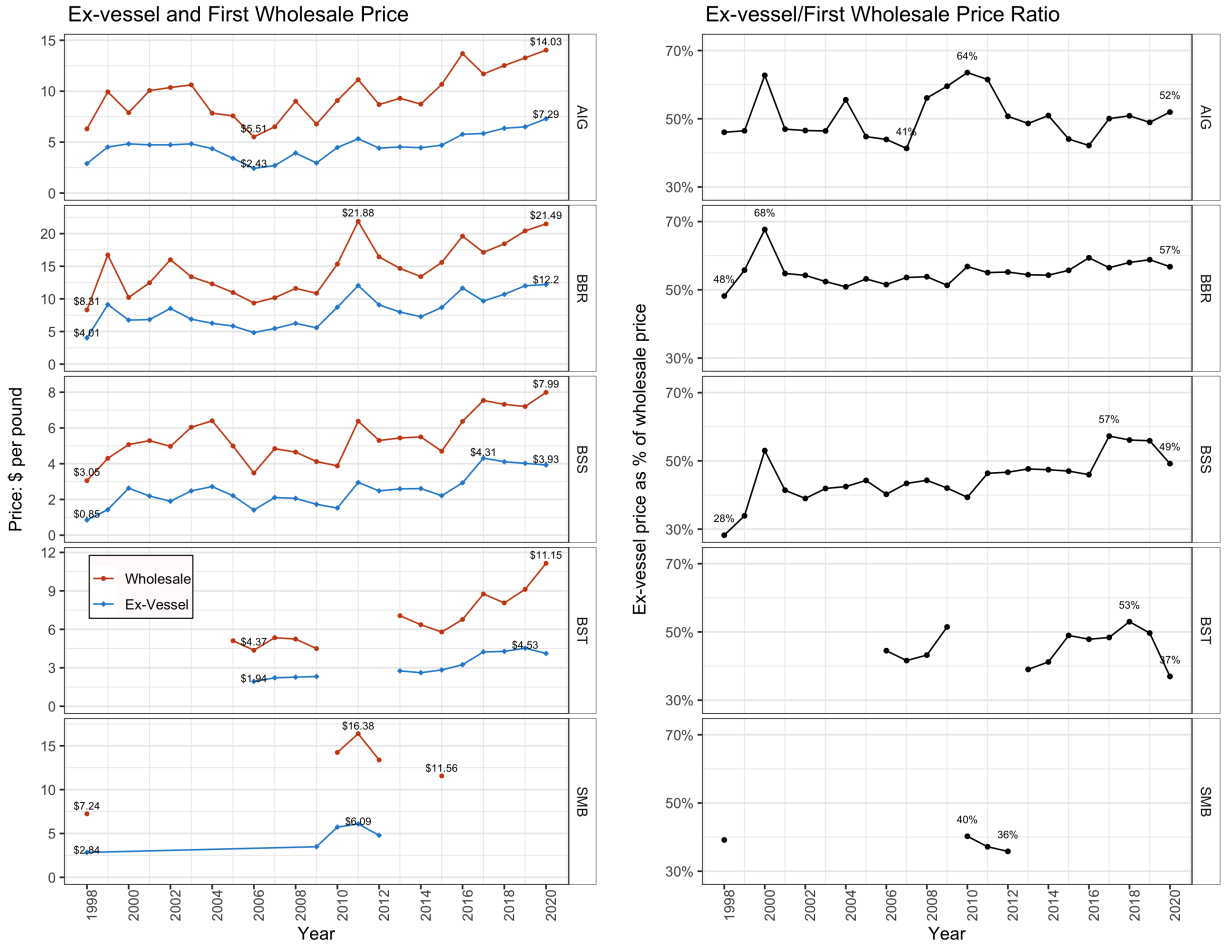
Average first wholesale prices reported for 2020 showed substantial gains for the year across crab fisheries, continuing general upward trends observed since 2013 to produce record levels in the AIG, BSS, and BST, and approaching the previous high in the BBR fishery. As noted above, relative price changes diverged between sectors in 2020, with ex-vessel prices marginally declining in the BSS fishery and by 10% in the BST fishery, in contrast to the 11% increase in BSS and 22% increase

in BST first wholesale prices. The right panel of Figure 2.4 reports the ratio of ex-vessel to first wholesale prices, with increasing values indicating a relative increase of ex-vessel price compared to first wholesale price. Note that both price series represent weighted average prices over all categories of sales for the respective sector within a given fishery and year. Comparison of prices between the harvest and processing sectors is complicated by a number of factors, including price arbitration and differences in ex-vessel prices by harvest quota share type, regional differences, variation in product forms and in timing of processor's final sales from product inventory, and affiliations between entities in the respective sectors. As such, annual variation in the relative ratio of average ex-vessel and first whole sale prices shown in Figure 2.4, as an indicator of distributional changes between sectors, should be interpreted with caution, and are likely most useful as a moving average. In the BSS and BBR fisheries, the downward shift in the ratio value during 2020 represented convergence toward the long-term post-2005 average.

Sector-level price trends for 2020 may also be indicative market conditions associated with the COVID-19 pandemic. As reported in the Groundfish Economic SAFE for 2020, with few exceptions, ex-vessel and first wholesale prices reported for groundfish species declined during 2020, which the author notes is likely attributable in part to COVID-19 related supply-chain constraints and foodservice closures, compounded by tariff-driven downward pressure on demand for exported Alaskan groundfish product. In marked contrast, wholesale market demand for premium shellfish products, including Alaskan crab, appears to have markedly increased during the pandemic. As shown in Table 3.49, import volume of frozen king and snow crab product increased substantially in 2020 (by 17% and 24%, respectively), while average per-unit value for the year increased by 8% for king crab, and decreased by 4% for snow crab imports. In 2021, king crab import volume declined somewhat while average per unit value increased moderately. However, for 2021 in aggregate, snow crab import volume increased by 8% while average per unit value increased by 64%. Examination of monthly import data for 2020 and 2021 indicates that a striking upward trend in per unit value of snow crab imports began in June, 2020 and continued through August, 2021.[2] Contrasted with the typical monthly pattern in per unit value for snow crab imports, with a consistent and pronounced seasonal trend peaking in June-July in years prior to 2020, the prolonged upward trend that began in June 2020 is strong evidence of a pandemic-related surge in U.S. consumer demand for snow crab product that likely applies to domestic and international markets for all Alaska crab species, persisting through 2021.

[2]Monthly import/export trade data for frozen king crab and snow crab products were accessed through NOAA Fisheries Foreign Trade data portal, `https://www.fisheries.noaa.gov/foss/f?p=215:2:1408303763277::NO:::`.

Figure 2.4: Ex-Vessel and First Wholesale Prices, Selected Fisheries



Source: NMFS AFSC BSAI Crab Economic Data, and CFEC pricing based on COAR buying reports. Data shown by calendar year. Tabular results are shown in Tables 3.4 and 3.7 - see table notes for additional detail on calculation and sourcing for price and value statistics. Note that ex-vessel and first whole prices shown in figure represent weighted mean of values derived from aggregate volume and revenue from calendar year sales reported in crab catcher vessel and processor EDR data. The figure excludes results for WAI, PIG, and PIK fisheries, for which data cannot be reported due to confidentiality.

The values shown in Figure 2.4 are reported by calendar year and therefore pool prices from successive crab fishery years (i.e., 2017 BSS data late season 2016/17 and early season 2017/18 sales). Calendar year data on first wholesale sales includes sales from inventory and excludes production that was not sold during the same year. These factors may result in pooling non-contemporaneous ex-vessel sales of landed crab and the sale of associated finished product to a certain degree, and likely accounts for smaller inter-annual variations in the price ratio in fisheries with stable price arbitration formulae. As the values shown the 2.4 and associated tables also pool over all IFQ and CDQ landings, variation in the price ratio is also driven by the relative differential between the arbitrated ex-vessel price for share-matched IFQ-A class quota landings and landings on CDQ and non-share-matched IFQ. Ex-vessel sales volume, revenue, and average price statistics for landings sold to processors (excluding CP catch processed on-board) are reported by quota category in Table 3.6, and indicate some variation in the relative share of volume and value of landings by quota

type. Further analysis is needed to quantify these market effects more completely and assess the inter-sectoral distributional changes that they suggest, and causal factors including changes in quota share holdings (particularly the proportion of crab QS held directly and indirectly by CDQ groups; see Section 2.4.4 below).

Results for ex-vessel sale volume, value, and prices reported in Table 3.5 provides additional detail on regional distribution of ex-vessel earnings, as associated with vessel owner state-of-residence. In general, 2012 marks a significant change in the relative distribution of ex-vessel revenue accruing to Alaska and Washington state in both BBR and BSS fisheries, with Alaska's share of revenue in both fisheries averaging approximately 23% compared to Washington state's 66% from 2005 to 2011, shifting to averages of 34% and 54%, respectively, over the 2012-2020 period; no other discernible trends, within or across these time periods is discernible.

Beyond statistics reported in Table 3.5, this report provides limited detail on spatial distribution of benefits and impacts of crab fisheries at the regional or community level. The *Annual Community Engagement and Participation Overview (ACEPO)* from Alaska Fisheries Science Center provides a more comprehensive analysis of community-level distributional aspects of groundfish and crab fishery management, including quantitative metrics of community engagement in the harvesting and processing sectors for highly engaged communities, and is intended to support monitoring and assessment of management performance relative to Council objectives and MSA National Standard 8 (NS8). Readers are referred to the most recent release of the ACEPO report[3], pending release of an updated report for the April, 2022 Council meeting.

A more comprehensive analysis of King and snow crab product markets, including product forms and associated wholesale and retail markets and import/export trade, are provided in the most recent *Market Profiles for Alaska Groundfish and Crab*(AFSC, 2019).[4]

2.2. Income and Employment

2.2.1 Processing Sector Employment and Wages

Table 3.10 presents data on crab processing labor employment and wages associated with CR program fisheries. Crab processing employment in 2020, as measured by hours of processing labor input (including employees at shore-based plants as well as processing employees on crab catcher/processors) is estimated at 452 thousand labor hours, unchanged from 2019, and 18% increase from a previous historical low of 382 thousand labor hours in 2018. Aggregate wages paid to crab processing line employees across all CR fisheries during 2020 generated labor earnings of $7.2 million, 15% greater than the previous year. Based on number of processing labor hours and wage payments in each CR fishery reported by crab processors, average hourly labor earnings over all CR fisheries reached a record high of $15.18 per hour in 2020. The BSS fishery accounted for the largest share of processing labor hours and wages in 2020, at 351 thousand hours and $5.7 million, while processing labor in the BBR fishery during 2020 accounted for 31 thousand hours and $550 thousand in wages, declining by approximately 24% and 34% from 2019.

As indicated in Figure 2.5, inter-annual variation in aggregate processing labor hours and gross earnings are generally consistent with catch and production volume fluctuations. Average hourly

[3]Available at `https://tinyurl.com/5c2ds4hc`.
[4]Available at `https://repository.library.noaa.gov/view/noaa/25242/noaa_25242_DS1.pdf`

wages (represented as daily earnings in Figure 2.5 assuming 12-hour daily shifts per employee), estimated from gross wage and payroll hours reported in EDR data, have varied between positive and negative inter-annual changes, while indicating a long term decline in real wage rates over the 2005-2014 period. This trend reversed beginning in 2014, with successive gains of 5% to 12% in annual average wages in the BBR and BSS fisheries, reaching $13.04 and $12.82 per hour in the 2016 BBR and BSS fisheries, the highest reported wage rates previously observed since 2004. These increases correspond with Alaska State minimum wage increases beginning January 1, 2015 under Alaska Statute 23.10.050 - 23.10.150, under which minimum hourly wage (in nominal terms) increased from $7.75 to $8.75 for 2015 and $9.75 for 2016, with required annual inflation adjustments beginning in 2017 to maintain the minimum equivalent to $9.75 in 2016 terms. Based on number of processing labor hours and wage payments in each CR fishery reported by crab processors, average hourly labor earnings over all CR fisheries increased from $12.96 to $14.95 per hour in 2020, a second year of wage gains and a 23% increase since 2018. Average hourly crab processing wages declined following 2016, to $12.42 per hour in the BSS fishery, and $12.55 in the BBR fishery in 2018, and have subsequently increased over the most recent two years.

An important factor in estimating average hourly wages paid to processing labor is the relative amount of overtime hours required by processors in a given fishery and year, with the associated overtime wage premiums contributing substantially to labor earnings. No data are available to identify overtime hours in the total processing labor hours reported in correspond with EDR data, such that inter-annual changes in base wage rates are confounded with variation processors use of overtime hours. Table 3.10 provides estimated indices of crab processing labor productivity in terms of labor input and cost (aggregate labor hours and wages) per unit output (1000 pounds of raw crab processed), and also provide piece-rate metrics of processing labor and wages that control for over-time premia.[5] Aggregating over all crab fisheries and active plants, median plant-level labor hours per 1,000 pounds processed has ranged between 11.0 and 15.9 over the 2012-2020 period, and have been at the low end of the range in the most recent three years, while labor cost per 1,000 pounds have ranged between $134 and $202 and generally follow a similar trend as hourly wages over the time period.

Table 3.12 reports the total number of individual crab processing workers employed by shore-based crab processing plants annually, by location of residence, aggregated to Alaska, Pacific Northwest states (Washington, Oregon, and Idaho), other U.S. states, and non-U.S.. Since 2014, the number of active crab processing plants has varied between 7 and 9, compared to 17 active plants in 2005, and varying between 12 to 15 plants from 2006 to 2013. The total count of processing employees reported, aggregated over all plants, increased from 2,561 in 2019, to 2,907 in 2020. The distribution of the processing labor pool by location of residence represents the effects of labor recruitment by processors sourcing from different regions of the U.S. and elsewhere. Historically, the proportional share of employment sourced from three regions (Alaska; Pacific Northwest states - Washington, Oregon, and Idaho; and other U.S states) has averaged approximately 30%-30%-40%, respectively. In the most recent crab seasons, however, the distribution has shifted toward a larger proportion of processing employees identified as residents of other U.S. states. In 2020, a sharp increase in recruitment of non-U.S. workers brought in 386 workers, representing 13% of the processing employee labor pool, while the number of Alaska state residents employed in crab processing declined from 636

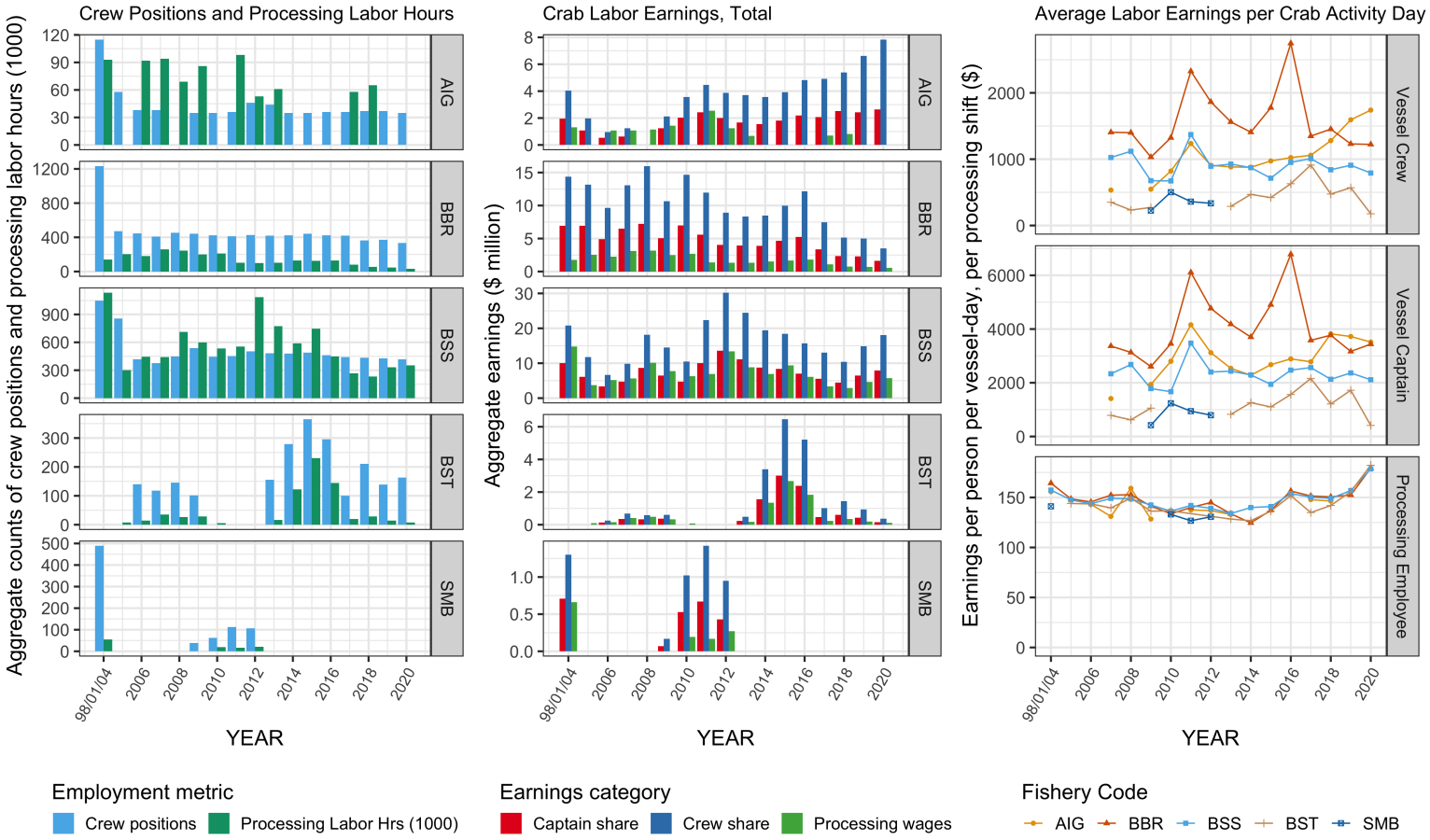
[5] As measures of productivity, both metrics invert the standard output-per unit input metrics, such that a negative change shown in the productivity values reported in Table 3.10 indicate increased labor efficiency. Note that statistics shown for both indices use data from shore-based crab processing plants, and do not include catcher-processor labor data; see table notes for additional details.

to 609 (21% of the pool), and residents of Pacific Northwest and other U.S states modestly increased by count, whole both declined in proportional employment shares. The relative attrition of Alaska and, particularly, Pacific Northwest residents from the crab processing labor pool reported for the three most recent seasons may be an incidental effect, but may be an indication of increasingly competitive regional labor markets, labor recruitment efforts of processing firms, and/or longer-term demographic changes in Alaska fishing industry labor participation.

Employment and payroll expenditures for personnel other than processing line workers (supervisory and administrative personnel) in the crab processing sector are presented in Table 3.11 for the 1998/01/04 baseline period through 2011, and for 2012 to 2020.[6] Data reported for 2012 to 2020 represent all supervisory and administrative personnel (all positions other than hourly processing line workers) employed by crab processing operations annually, inclusive of all processing and sales activity in all fisheries, and are not exclusive to crab. Aggregating over all shore-based processing plants that actively processed in crab fisheries during 2020, salaried and other non-processing employment totaled 1,522 individuals, and 228 per plant (median). Total wage and salary expenditures of $67.2 million (exclusive of non-wage benefits, taxes, and other payroll and employment expenses) were on par with 2019, while median salary payments per plant increased to $9.7 million, the highest value reported to date, and declined in terms of pay per salaried employee, to $44 thousand.

[6]See table notes regarding discontinuities in processor sector salary cost data.

Figure 2.5: Harvest and Processing Employment and Compensation, Selected Crab Fisheries



Source: NMFS AFSC BSAI Crab Economic Data. Data shown by calendar year. Tabular data available in Tables 3.10, 3.16, and 3.18. Values shown for 98/01/04 represent the annual average over the three-year series. Data for PIK, WAI, and 2008 data for AIG fisheries are suppressed for confidentiality. Labor earnings per activity day represent aggregate crew and captain pay per vessel, pro-rated over vessel activity days; processing pay per day represents aggregate processing labor payments divided by number of 12-hour FTE shifts (aggregate processing labor-hours/12).

(a)1998-2008 shows CV positions and participants only; 2009 shows data aggregated over CV and CP sectors 2005 and later crew positions data from ADF&G fish tickets. BSS crew position data were not collected in 2005.

(b) 1998-2008 data show total and median CV and SFP payments only; 2009 and later data show total and median crew payments over CV and CP sectors combined and processing employee payments over CP and SFP combined.

2.2.2 Harvest Sector Employment and Compensation

A summary of selected indicators from the most recent harvest sector employment and labor earnings data available for CR program fisheries are presented in Tables 3.13 to 3.17 and summarized in Figure 2.5.[7]

During 2020, 67 vessels actively operated in BSAI crab fisheries, a historically low level of vessel participation across all BSAI crab fisheries, declining from 118 vessels in 2016 and 91 in 2019, while the number of vessels operating in one or more of the CR fisheries in 2020 was reduced by 3 from 2019, to 64 vessels. Participation in the BBR fishery declined by 9, to 47 vessels, and with 59 vessels active in the BSS fishery, both BBR and BSS saw the lowest level vessel participation to-date. The active fleet in the AIG fishery remained constant at 5, and 25 vessels were active in the BST fisheries, increased from 18 in 2019. Based on the number of crew onboard participating vessels during each fishery (averaged over crew size values reported in eLandings catch accounting records for crab vessels), there were an estimated 948 in crew positions in aggregate across all 67 vessels in CR fisheries in 2020, also the lowest number of crew positions reported in CR fisheries to-date.[9]

Using counts of individual captains and crew members identified by license or permit number in EDR records, it is estimated that 630 unique individuals worked on-board crab fishing vessels during 2020 CR fisheries, 29 more than in 2019, and a continued upward trend since 2018, which was the lowest number of individual crab crew participants reported since 2006 when the collection of this data began (Table 3.14). Alaska state residents accounted for 221 of the 548 ADF&G commercial fishing crew license holders participating in CR crab fisheries during 2020, and 22 of the 82 CFEC gear operator permit holders. At 40% of commercial fishing crew license holders in 2020, Alaska residents made up a substantially greater share of crew licensees than in previous years, which typically ranged from 29% to 34%.[10].

Total labor payments[11] to crab vessel captains and crews totaled $12.4 million and $29.8 million during 2020, increasing from 2019 earnings by 15% and 9%, respectively (Figure 2.5 and Table 3.16). Aggregate crew earnings in the AIG fishery during 2020 increased by 18% to $7.8 million, and

[7]Two primary data sources are used to compute employment statistics for the harvesting sector. The eLandings catch accounting system collects trip-level information on the size of the crew onboard a vessel at each landing. These data provide the basis for estimating the number of crew positions across the fleet during a fishing season and for observing changes over time in the aggregate- and average per-vessel quantity of crew labor employed in crab fishing. For each CR fishery, EDR data report the value of fishing crew contract settlement payments (net labor payment after deductions for shared vessel operating costs) to vessel captains and fishing crews and the number of paid fishing crew members (excluding captains) at the fishery level for each vessel.[8] In addition, EDR reporting of commercial fishing crew license data captures information on the number of unique individuals working as crew on crab fishing vessels as deckhands, vessel captains, and other positions in a given year (see Table 3.14 notes for details on crew license data). EDR labor payment data provides the basis for estimating aggregate labor earnings statistics, and the data reported on numbers of paid crew and counts of distinct crew licenses provides the basis for estimating the number of distinct labor participants in a given crab fishery, as well as the annual count of distinct crew participants over all crab fisheries.

[9] Note that the aggregate count of vessels indicates the total number of distinct vessels, while the count of crew positions counts positions separately by fishery and vessel, such that individual crew members are counted more than once.

[10]See the ACEPO report for community-level detail on crab crew employment

[11]In addition to direct labor earnings, income is derived by some crew members and many captains as lease royalties for crab IFQ quota shares. While this may become an increasingly important source of income as opportunities for investment in QS ownership are advanced, there is no evidence in data available to date that the proportion of CR fishery quota share pools held by crab crew members has changed in recent years (see the section on QS holdings below for further detail).

captain earnings increased by 9% to $2.6 million. Aggregate crew earnings in the BSS fishery increased by 22% to $18.1 million and captain earnings increased by 24% to $7.9 million, while crew and captain earnings in the BBR fishery each declined by 29%, to $3.5 million and $1.6 million, respectively. Earnings in the BST fishery declined 60%, with captain earnings of $160 thousand and aggregate crew earnings falling to $380 thousand.

The effects of rationalization on crew earnings and the relative distribution of economic benefits between quota share owners and active crews working in the crab fishery remain ongoing concerns for fishery managers. Identifying trends in labor earnings is complicated by the lay share system that is commonly the basis of crew compensation in commercial fisheries. Unlike typical labor market conditions, where prevailing wage rates are generally stable from year-to-year, the value of crab crew pay settlements under the lay share system is highly influenced by the price and market value of landed crab as well as prices and costs of other factor inputs (e.g. fuel), both of which are exogenously determined by larger external markets. It is therefore difficult to clearly associate the effect of management changes under rationalization and changing productivity of the fishery with any trend in the status of crew earnings. The volatility of both crab prices and catch levels over the period following rationalization contributes to highly variable annual results for both aggregate- and per-vessel average payments to crab crews and captains as described above.

Median seasonal settlement payments to vessel crews (vessel-level aggregated settlement payments to the fishing crew, exclusive of payments to captain) in the BBR fishery initially increased substantially following rationalization, from $60 thousand on average during the pre-rationalization reference years (1998, 2001, and 2004), to $130 thousand in 2005 (excluding crab C/P's), and have varied between $104 thousand to $217 thousand from 2006 to 2017. In the most recent three years, median vessel-level crew and captain settlement earnings in the BBR fishery have been lower than in any year since the fishery was rationalized, and have continued to decline, to $70 thousand and $33 thousand, respectively, in 2020. The median crew settlement payment total per vessel in the BSS fishery during 2020 was $270 thousand, and $123 thousand median captain pay per vessel, increased by 38% and 32% from 2019.

As shown in Figure 2.5 (right panel), average pro-rata daily earnings for crew and captains across all CR fisheries were in a declining trend from 2011 to 2014, but from 2015 to 2016, increased sharply in the BBR fishery, and more modestly in AIG and BSS fisheries. Although average daily earnings in the BBR fishery were highly variable between years prior to 2017, the last four years have been more consistent, ranging from $1,454 to $1,223 per day for crew members and $3,167 to $3,439 per day for captains. Despite reduced gross revenue in the BBR fishery during 2020, the reduced number of days-at-sea (Table 3.18[12]) in the fishery resulted in average pro-rata daily captain earnings increased by 9%, to $3,439 and individual crew earnings were virtually unchanged at $1,223 per day on average. In contrast, while gross revenue in the BSS fishery increased by 20% in 2019, vessel days-at-sea increased by 35%, resulting in average daily earnings to captains and crew declining from the previous year, to $792 per individual crew member (-13%), and $2,112 per crab vessel captain (-11%). Average daily earnings in the AIG fishery increased by 9% for crew members, to $1,740, and declined by 6% for captains, to $3,515 per day, with days-at-sea in the fishery increasing by 16%. Beginning in 2019, the AIG fishery has paid the highest average daily rates to both captain and crew. Daily rates have consistently been the lowest in the BST fishery,

[12]See Figure 2.15 and Table 3.18 and associated footnotes for details on data sources for vessel activity-days used for daily pro-rata earnings calculations.

and with vessel days-at-sea increasing by 60% in 2020, declined to the lowest levels to date, at $177 per day for crew members, and $411 per day for captains.

Table 3.17) reports median-vessel crab crew earnings in terms of "gross-share" (value of payments to the captain and crew as a share of gross ex-vessel revenue), and median "net share" (share of ex-vessel revenue less deducted operating costs) for years prior to 2011.

In the transition to rationalized management, gross revenue share percentage values (calculated as the ratios of captain and crew share payment costs to gross ex-vessel revenue) declined sharply. Aggregating over all CR program fisheries, captain and crew gross share fell from 23% for captains and 12% for crews averaged over the pre-2005 baseline years, to 15% and 7% in 2006. Subsequently, labor gross share (aggregating crew and captain settlements) have increased over time in the AIG fishery, from 17% in 2006, to 24% in 2017 and 23% in 2020, have remained relatively stable in the WBT fishery, ranging from 21% to 24% since 2007 with no discernible trend. In the BSS fishery gross share ranged from 21% to 23% up to 2011, and remained steady at 20% in subsequent years, with captains and crews exchanging 1% of gross share between years. Aggregate labor gross share has declined over time in the BBR fishery, ranging from 18% to 23% between 2006 and 2012, but not exceeding 19% since 2012 and falling to 15% in the BBR fishery during 2019 and 2020.

2.3. Harvest Sector Operating and Production Costs, and Net Earnings Indices

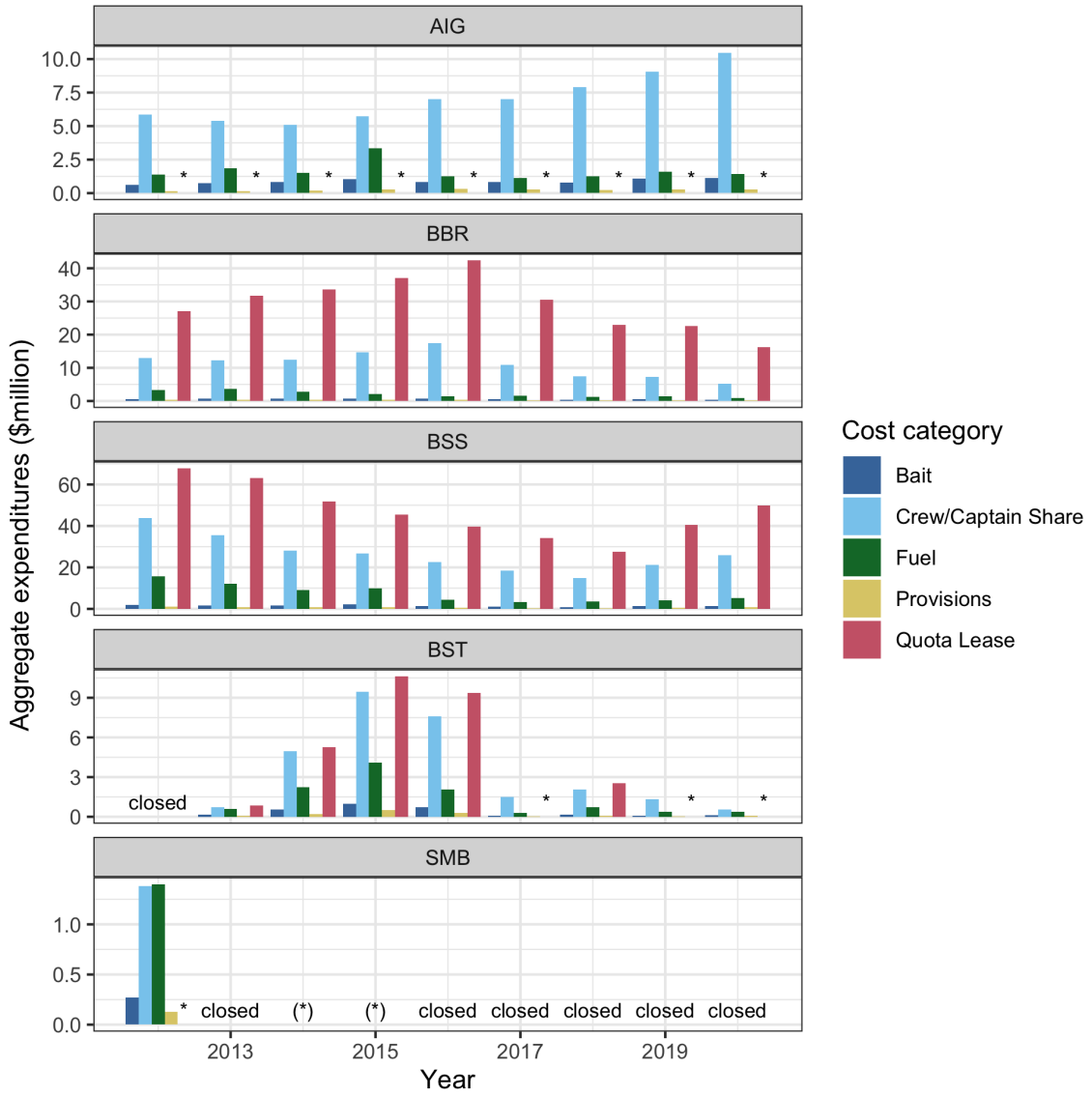
Statistics reporting information available for crab vessel operating expenditures are summarized in Figure 2.6; in addition to tables and figures reporting vessel crew labor and quota costs presented in other sections, Tables 3.19, 3.20, and 3.21 provide summary statistics for available data on food and provisions, bait, and fuel costs in the harvest sector over the baseline-to-current period. Total aggregated expenditure by fishery sector and per-vessel or per-plant median expenditure are presented for cost data elements where data of sufficient quality to warrant dissemination are available through the current period.[13]

Total fuel consumption and costs reached 3.1 million gallons and $7.8 million over all CR fisheries and vessels in 2020, increasing 18% and 5% from 2019, slightly offset by a modest decline in average per-gallon fuel costs, from $2.84 to $2.49 per gallon averaging over all fisheries. Fuel costs of $1.4 million in the AIG fishery declined 11% from 2019, and in the BBR fishery declined by 36% to $860 thousand, while fuel costs in the BSS fishery increased by 24% to $5.2 million. Table 3.21 also reports median and total vessel fuel consumption (gallons purchased) by fishery, and average fuel cost per gallon.[14] Total bait expenditures across all fisheries and vessels during 2020 was on par with the previous year at $3 million, with the BSS and AIG fisheries accounting for the majority of bait expenditures at approximately $1.2 million each during 2020. Reported expenditures for food and provisions costs totaled $1.4 million over all fisheries during 2020, a 30% increase from 2019.

[13]Cost elements that were discontinued in the crab EDR data collection program as of 2012 are not included; see the 2013 edition of this report for additional detail on discontinued harvest and processing cost data collected prior to 2012. Analysis of trends in operating and/or capital expenditures over time, or in relation to production or revenue, is inhibited by a variety of factors. In addition to data quality limitations for specific cost elements collected prior to 2012 (vessel fuel expenditures and quota lease costs), discontinuities in data time series also limit use of these data. As with other information contained in this report, catcher-processor sector data in many cases cannot be reported at the sector level due to confidentiality requirements.

[14]Table 3.22 provides a compilation of diesel prices per gallon from 1999 to current for the five principal fueling ports for Alaska fishing vessels.

Figure 2.6: Aggregate Crab Vessel Operating Costs, by Cost Item and Fishery



Source: NMFS AFSC BSAI Crab Economic Data. Tabular data available in Tables 3.16, 3.19, 3.21 and 3.25. Values shown represent total annual expenditures by cost item for calendar years 1998-2020 where available, or 2012-2020 otherwise, aggregated over all vessel entities reporting except where data are suppressed for confidentiality (as indicated by "(*)"). Cost data shown include all cost items for which data are available, but do not represent a comprehensive accounting of operating expenditures. Change in data collection protocols implemented beginning 2012 discontinued reporting for several expenditure items, and disaggregated expenditures for food and provisions by crab fishery. Data for fuel and quota lease expenses collected prior to 2012 are not shown in figures due to data quality limitations.

2.3.1 Harvest Sector Net Earnings Indices

Tables 3.23 and 3.24 present tabulations of vessel- and sector-level cost and earnings analyses using the most complete cost and revenue data available for vessels operating in the Bering Sea snow crab and Bristol Bay red king crab fisheries, as well as aggregate results calculated over all CR fisheries,

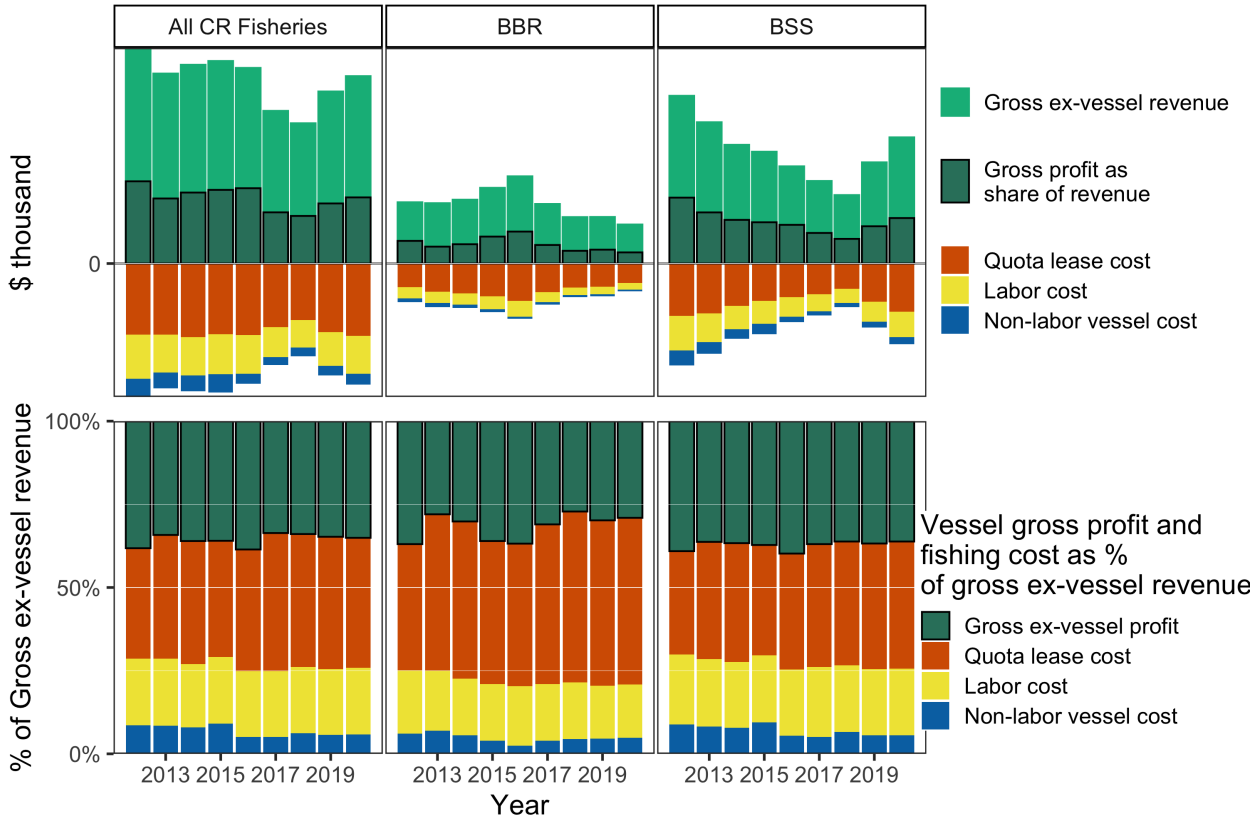
during 2012 through 2020. Results presented as gross ex-vessel profit in the tables, and illustrated in Figures 2.7 and 2.8, provide relative indices of gross profitability of vessels operating in the respective crab fisheries, recognizing that additional costs not accounted for in available data are substantial, including other direct vessel operating costs, maintenance and repair, overhead, finance, and other fixed costs. As such, the estimated gross profit residual does not directly measure, and is greater than, vessel operating profit. In essence, these separate totals and averages into separate tables rather than in adjacent columns as in most other tables in this report, except that quota lease costs are treated differently in the vessel-average values than in the harvest sector or fleet aggregate values.

CR fisheries in aggregate generated average gross ex-vessel revenues ranging from $2.5 million to $3.8 million per-vessel between 2012-2019, from landings ranging from 450 thousand pounds to 1.25 million pounds. In 2020, vessel-level average ex-vessel gross revenue, aggregating across CR fisheries, increased by 9% from $3.0 million in 2019 to $3.3 million in 2020, from crab landings of 667 thousand pounds. As a proportion of total ex-vessel pounds and value of catch in CR program fisheries, the average quantity of leased quota pounds reported by vessels comprises approximately 75% of landings on average over the period, with quota lease costs ranging from 33% to 42% of gross revenue. For 2020, quota lease costs of $1.3 million accounted for 39% of average vessel gross crab landing revenue, leaving a gross revenue residual after quota lease royalties of $2.0 million. Vessel non-labor operating costs of $189 thousand during 2020 include vessel fuel, bait, and provisions costs, accounting for 6% of gross revenue, leaving an average gross revenue residual after all non-labor vessel costs of $1.8 million, or 56% of ex-vessel gross revenue. Average vessel-level crab fishing labor costs over all CR fisheries paid as crew and captain share payments in 2020 totaled $669 thousand per vessel, 20% of gross ex-vessel revenue, bringing average vessel-level operating and quota lease costs for 2020 BSAI crab fishing to $2.1 million, 65% of gross revenue. The remaining $1.04 million gross profit after deducting costs represented a 35% gross profit margin, compared to gross margins of 34% to 39% from 2016 to 2019.

In the vessel-level analysis shown in Figure 2.7 and Table 3.23, quota lease (royalty) costs are represented as a vessel cost of crab harvest, in order to financially account for the diversion of sales revenue from a vessel owner's balance sheet. Quota lease royalties are commonly paid to the quota holder as a direct share of gross ex-vessel value of the leased quota pounds. Labor share payments to crew and captain are typically paid on the basis of gross residual revenue after lease royalties and fishing costs (fuel, bait, provisions) are paid (Gross-residual non-labor in Table 3.23). In the context of gauging the economic benefits generated by the fishery, in contrast to the financial performance of vessel operations, it should be understood that crab harvest quota is not an economic input that could be redirected to alternate productive use outside of the crab fishery. As such, its use by a particular crab vessel doesn't represent an economic opportunity cost in the same sense that crew labor or vessel capital does. Rather, quota lease royalties represent transfer payments within the assemblage of crab vessels and QS holders rather than an economic cost of ex-vessel production. Reflecting this distinction, the harvest sector level analysis shown in Figure 2.8 and 3.24 treats quota lease royalties as a distribution of gross ex-vessel profit from the vessel sector to the quota sector, treating only vessel labor and materials expenses as operating costs.

Results shown for 2015 to 2020 in Figure 2.7 and Table 3.23 indicate that, in a given year, quota leasing as a proportion of vessel pounds landed is roughly equivalent in the BBR and BSS fisheries, varying within 2 percentage points between fisheries. Both fisheries have seen proportion of pounds leased generally increase over the period, from 68% to 70% in the BBR fishery and from 70% to 76%

Figure 2.7: Vessel-level mean operating costs and gross revenue residuals, BBR, BSS, and all CR fisheries in aggregate, 2012 through 2020



Source: NMFS AFSC BSAI Crab Economic Data. Tabular data available in Table 3.23. Values shown represent mean vessel-level earnings and expenditures by cost item for calendar years 2012-2017, averaged over all vessel entities reporting except where data are suppressed for confidentiality. Cost data shown include all cost items for which data are available, but do not represent a comprehensive accounting of operating expenditures.

in the BSS fisheries. Vessel-average quota lease costs in the BSS fishery represent a substantially smaller share of gross ex-vessel revenue, 37% on average compared to 48% in the BBR fishery (consistent with the proportion of leased pounds and average lease rates of approximately 50% and 65% for BSS and BBR CVO A Share IFQ)[15]. Proportionally, labor and vessel expenses in the BBR fishery, at 16% and 5% of gross revenue in 2020, were marginally lower than those in the BSS, at 20% and 6%, respectively. On this basis, average vessel-level gross profit margins of vessels in the BBR and BSS fisheries since 2015 have averaged 32% and 37%, respectively. In these results, the relative financial performance of vessels operating in the BBR and BSS fisheries is principally a function of the differential in quota lease rates between fisheries. which is a result of the higher profit margins in the BBR fishery historically, given lower fishing costs in Bristol Bay and higher market value of red king crab.

It is not readily apparent how much of the 60% to 80% of the volume of quota landings that are reported as leased in EDR data is owned independently of the pool of owners operating active crab vessels, and there is substantial variation across the fleet in the relative proportion of leased pounds

[15]More precisely, weighted average lease rates over all quota types reported in Table 3.25 in the BSS and BBR fisheries average 48% and 64% over the 2012 - 2020 period

to ex-vessel landing volume. The results shown in the vessel-level analysis represents the effects of quota lease costs Without controlling for true arms-length transfers of income from vessel owners to third-party QS holders.

Figure 2.8 demonstrates an alternative perspective on harvest sector economic performance of CR Program fisheries, treating quota lease royalties paid by vessel operations as a distribution of aggregate gross profit in the harvest sector. Over all CR fisheries, accounting for operating labor and materials costs captured in EDR data, gross profit ranged from a high of $223 million in 2012 to a low of $122 million in 2018, with gross profit margin varying independently from magnitude of gross profit, between 71% and 75%. Quota lease royalty transfers averaged 51% of gross profit over the period, ranging from $103 million in 2012 (46% of gross profit) to $66 million in 2018 (54% of gross profit). Fleet aggregate gross revenue in the BBR fishery reached a high for the period in 2016 of $96 million, and a low in 2020 of $32 million, corresponding to gross profits of $76 million and $25 million, respectively. Over this recent period, gross profit margin in the BBR fishery has trended upward, from an average 76% from 2012 to 2015, to 79% from 2016 to 2020, and has been maintained over the most recent three years, when gross revenues have fallen to historically low levels, and the fleet has contracted in response to declining TAC levels. Concurrently, there has been a substantial increase in the proportion of gross profits accruing to QS holders as lease royalties, from 51% of fleet aggregate gross profit in 2012 to 64% in 2020.

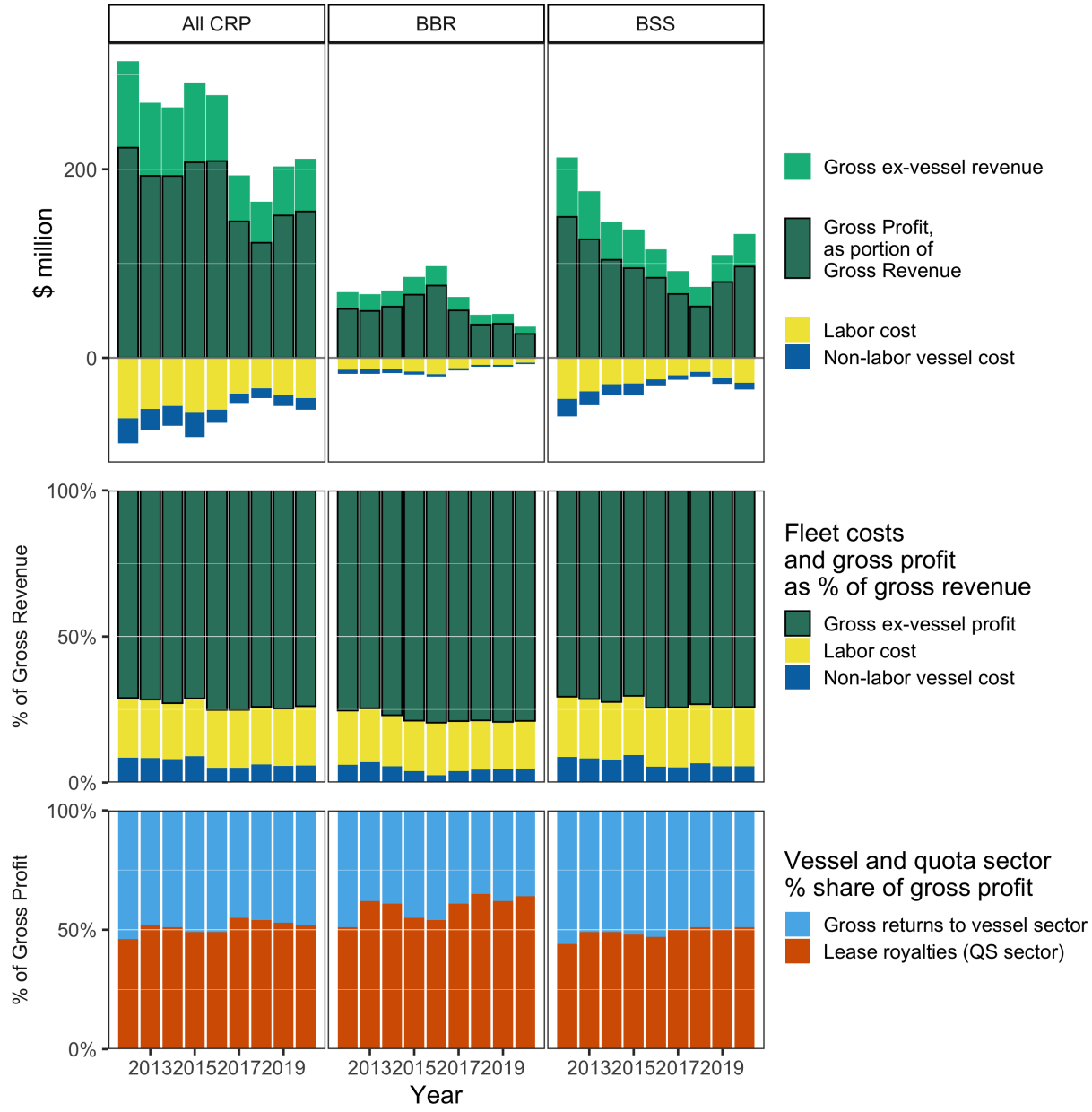
In the BSS fishery, fleet-aggregate gross revenue declined each year over the period 2012 to 2018, from $212 million in 2012 to $74 million in 2018, corresponding to gross profit declining from $149 million in 2012 to $54 million in 2018, while gross profit margin in those respective years increased from 71% to 73%. The decline was reversed in 2019 and 2020, with gross revenue increasing to $131 million and gross profit to $97 million in 2020, and gross profit margin equaling 74% to 74% in both years. Over the period, the proportion of gross profit accruing to BSS QS owners increased substantially, from 44% in 2012 to 51% in 2020.

Note that the trend toward higher quota lease costs at the vessel level, and higher distribution of gross profits to QS owners within the harvest sector, are driven primarily by an increase in the volume of quota pounds being leased as a proportion of total pounds landed. This corresponds to the reduced number of active vessels as the fleet adjusts to reduced TACs. Lease rates, the proportion of ex-vessel value per pound leased paid to QS holders, have remained largely constant over the period as reported by vessel owners in EDR data (see Section 2.4.1). Also, any apparent systematic differences in financial performance between fleets operating in distinct crab fisheries may be more of a function of the degree to which the fleets and the population of associated businesses are distinct between fisheries, rather than differences that are intrinsic to the fisheries and their associated markets.

2.4. Quota Holdings, Leasing Activity, and Quota Share Sale Transfers

The following section provides information regarding lease market activity associated with transfers of Individual Fishing Quota (IFQ) and Individual Processing Quota (IPQ) annual permits in the CRP, and several indices measuring changes in the status of crab harvesting and processing quota share (QS and PQS, respectively) holdings among eligible shareholder entities under the CR program.

Figure 2.8: Fleet-level aggregate operating costs and gross revenue residuals, BBR, BSS, and all CR fisheries in aggregate, 2012 through 2020



Source: NMFS AFSC BSAI Crab Economic Data. Tabular data available in Table 3.24. Values shown represent aggregate earnings and expenditures by cost item for calendar years 2012 to 2020, summed over all vessel entities reporting except where data are suppressed for confidentiality. Cost data shown include all cost items for which data are available, but do not represent a comprehensive accounting of operating expenditures.

2.4.1 Harvest Quota Lease Market Activity and Average Prices

Table 3.25, summarized in Figure 2.9 displays aggregated results for indicators of quota lease market activity and value reported for crab vessels that participated in the quota lease market (as indicated

by reporting quota lease costs in EDR data) during 2012 through 2020 calendar year CR fisheries[16]. Indicators shown in Figure 2.9 include weighted average statistics for average lease rates (lease price as percentage of ex-vessel price) per vessel, aggregate volume of quota pounds leased as a percentage of total landings, and aggregate quota lease cost as a percentage of gross ex-vessel revenue. Table 3.25 also reports the number of vessels leasing quota, volume (in pounds) and cost reported for crab vessels active during fishing year, including total quantities summed over all reporting vessels, and average values (both median and mean) per vessel. Note that lease market statistics are exclusive of crab vessels that do not report quota lease costs (i.e., solely harvest the vessel owner's IFQ), which in recent years generally comprise approximately 10 vessels in the active fleets in the BBR and BSS fisheries; as such, the value of lease market indicators reported in this section, including average and aggregate pounds leased as a percentage of total landings, may differ from similar metrics reported in other sections (e.g., 2.3.1) that are inclusive of all vessels active in the respective fisheries and years. Median and arithmetic mean values computed over leasing vessels are presented together to show information on the variation in reported values within each fishery and quota-type stratum, with higher relative mean values indicating the presence of a subset of high-value data points in these data (i.e., a right-skewed data distribution). Harvest quota types are categorized as the following: Catcher Vessel Owner Class A (CVOA) IFQ; Catcher Vessel Owner Class B (CVOB) IFQ and Catcher/Processor Owner (CPO) IFQ; Catcher Vessel Crew (CVC) IFQ and Catcher/Processor Crew (CPC) IFQ, Community Development Quota (CDQ), and Adak Community Allocation (ACA).

The total volume of leased quota in the BBR fishery during 2020, aggregating over all IFQ and CDQ pounds leased, represented 92% of aggregate ex-vessel pounds landed in the fishery by leasing vessels, compared to 78% of total pounds landed in the fishery by all active vessels (Table 3.24). This is similar to 2018 and 2019, but a notable increase compared to previous seasons, when leased quota varied annually between 78% and 84% of annual pounds landed, and reflects the reduced size of the active fleet in recent years. Similarly, aggregate quota costs in the BBR fishery increased proportionally during the last three years; after ranging between 48% and 53% of total ex-vessel value over the previous six years, quota lease royalties paid by crab vessel operators increased to 57-59% of aggregate ex-vessel revenue within the leasing segment of the fleet (and 49% to 51% of gross ex-vessel value for the fishery as a whole). A similar increasing trend in aggregate lease volume and cost relative to total catch and value among the leasing segment of the fleet is evident in the BSS fishery, where prior to 2017, leased quota represented 81% to 83% of pounds landed and 38% to 40% of ex-vessel value, compared to 88% to 89% of pounds and 42% to 44% of value from 2018 to 2020, again reflecting contraction of the fleet in recent years. vessels active the BSS fishery during 2020 (two fewer than in 2019), 47 reported leased pounds totaling 25.3 million pounds, at a cost of $49.7 million, 88% of landed volume and 44% of ex-vessel revenue among the leasing segment of the fleet. During 2020, of the 59 vessels active the BSS fishery (two fewer than in 2019), 47 reported

[16]EDR data collection for the 2012 calendar year implemented newly revised data collection protocols under Amendment 42 to the BSAI King and Tanner Crabs FMP (78 FR 36122, June 17, 2013); prior to the implementation of EDR revisions, data collected regarding EDR lease activity and costs did not differentiate between transfers of quota between independent entities that were priced at competitive market rates from non-arms-length transactions (i.e., those between affiliated entities or other types of non-market transfers characterized by nominal prices or in-kind compensation). For this reason, EDR quota lease data collected previously for 2005-2011 fisheries was not deemed of sufficient quality to disseminate. For collection of data associated with 2012 and later fisheries, revised EDR forms employ revised instructions specifying quota lease data elements as market-rate or negotiated-price transfers. Also note again that CR crab fisheries are managed on a July-June seasonal calendar, such that statistics shown for 2015 BBR and BSS calendar year fisheries are based primarily on data reported for the 2014/15 BSS season and 2015/16 BBR season.

leased pounds totaling 25.3 million pounds, at a cost of $49.7 million, 88% of landed volume and 44% of ex-vessel revenue among the leasing segment of the fleet, and 76% of volume and 38% of value for the fishery as a whole.

The relative variability of crew-share IFQ (CVC+CPC) lease volume and value relative to total ex-vessel sales on crew-share quota volume and value indicated by Figure 2.9 is notable. This is indicative of both the relatively small number of crew share leases reported, resulting in higher statistical variation, but is also a reflection of the more informal nature of lease arrangements for crew share compared to CVO Class A quota. In cases of quota held by hired crew members, up to 100% of the ex-vessel value may be paid to the crew member, and may not be reported in EDR data as a "market-rate and/or negotiated price" transfer.

In contrast to more dynamic changes in the volume of lease activity in recent years, quota lease rates (i.e., the per-pound lease cost as a percentage of ex-vessel value) have remained quite stable. The median and weighted average lease rates in the BBR and BSS fisheries shown in Table 3 and Figure 2.9 vary somewhat by quota type within fishery, but are generally quite consistent over time. The median lease rate reported for BBR CVO Class A allocation, which remained at 62% over the previous four years, increased to 64% in 2020, and rate premia of 1-5% typically reported non-share-matched IFQ types (CVO Class B and Crew IFQ) were minimal during 2020 with the exception of CDQ, with a median lease rate of 68% in 2020, increased from 63% in 2016. Only small marginal change in lease rate statistic were reported for the 2020 BSS fishery, with median lease rate constant at 46% and minimal premiums for CVO Class B and Crew IFQ.

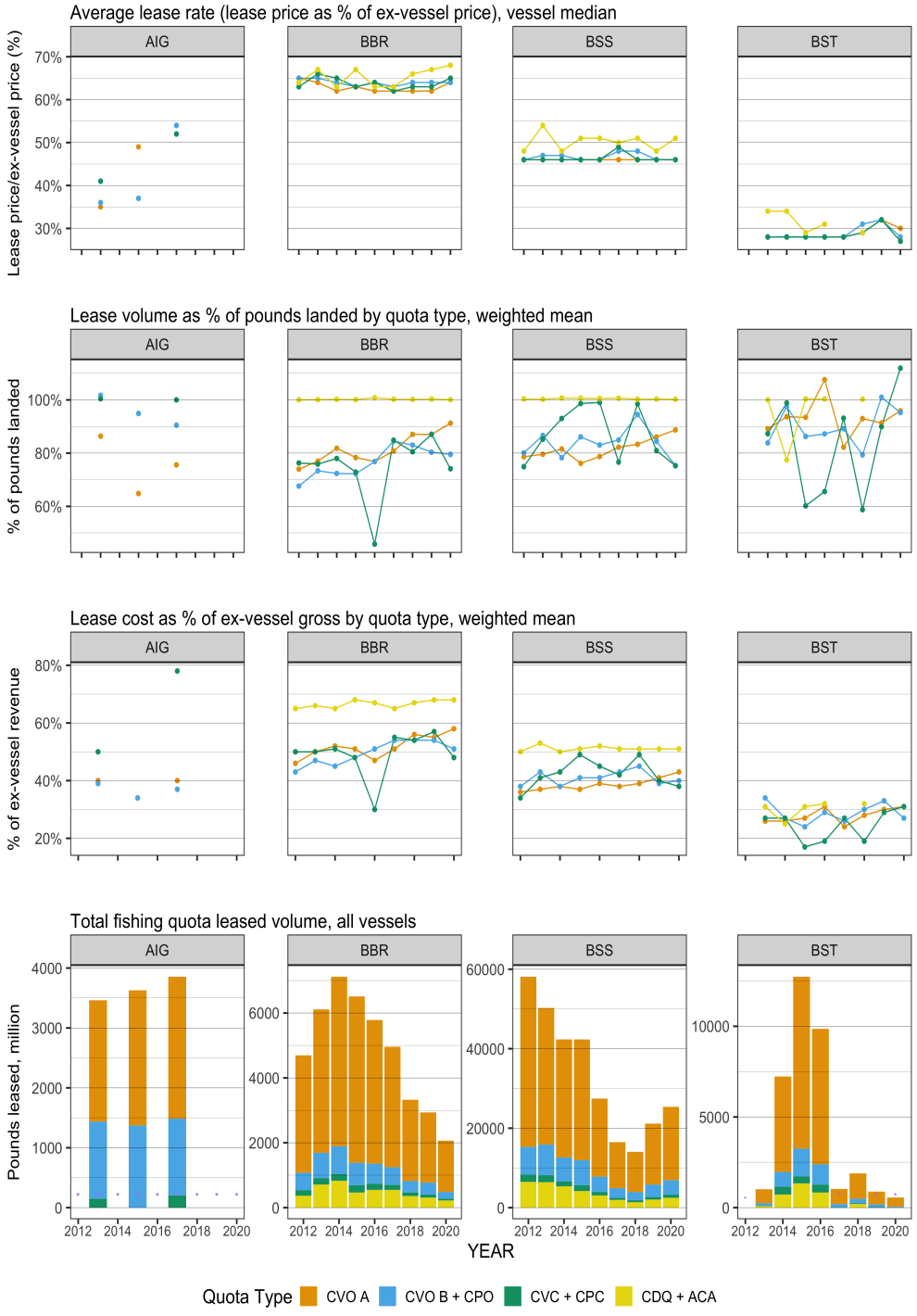
During the first year of rationalization, 23 distinct crab harvesting cooperatives were formed by vessel and QS owner entities, and a rapid shift toward pooling of IFQ within cooperatives occurred in response to program incentives, as noted above. As of 2009, only a small fraction of the issued IFQ was landed by non-cooperative vessels, and beginning with the 2009/10 crab season, virtually all IFQ has been pooled within harvest cooperatives.[17] Correspondingly, since 2008/09, virtually all IFQ lease transactions registered with NMFS (Table 3.26) have taken place within harvest cooperatives, primarily in the form of IFQ assignment to a cooperative by member QS holders. Since 2005, leases registered by cooperatives have ranged from 144 during 2005/06, to 342 in 2014/15, increasing to 296 leases registered in 2019/20. Noncooperative IFQ leases (i.e., leases of IFQ held directly by QS holders, and not assigned to cooperatives) were most common in the first year, with 113 in total, declining to 16 by 2007/08, and four in 2011/12, the last year such transfers occurred. Prior to 2020, processing quota permit (IPQ) leases varied between a low of 25 in 2010/11 to a high of 55 in 2015/16, but increased to 63 in 2019/20, potentially reflecting a similar recent dynamic as in IFQ lease activity discussed above, with concentration of ex-vessel purchasing associated with ongoing decline in active processing capacity.

[17]For the 2009/10 crab season, the Inter-Cooperative Exchange (ICE) harvest cooperative was formed. As of the 2012/13 season, 65% of crab IFQ was issued to ICE, with the remaining IFQ issued to eight other cooperatives; the Alternative Crab Exchange (ACE) harvest cooperative was formed for the 2013/14 season out of concerns regarding ICE membership compliance with the Fishermen's Collective Marketing Act of 1934 (FCMA; 15 U.S.C. SS 521 et seq.), and the membership of the two have held approximately 31.5 and 34% of the total QS pool respectively, aggregated over all CR program fisheries. Nine other harvest cooperatives that participated over the course of the CR Program represent smaller QS pools, between 1.7 and 7.9% of the total allocation during recent seasons. Among other effects of formation of the ICE and ACE cooperatives, administrative requirements related to IFQ transfer applications were largely obviated, facilitating assignment of 100% of issued IFQ to harvest cooperatives. See the Crab Cooperative Permits and Information section of NMFS AKRO Crab Rationalization webpage for more information: https://alaskafisheries.noaa.gov/fisheries/bsai-crab-rationalization.

2.4.2 Quota Share Sales and Average Prices

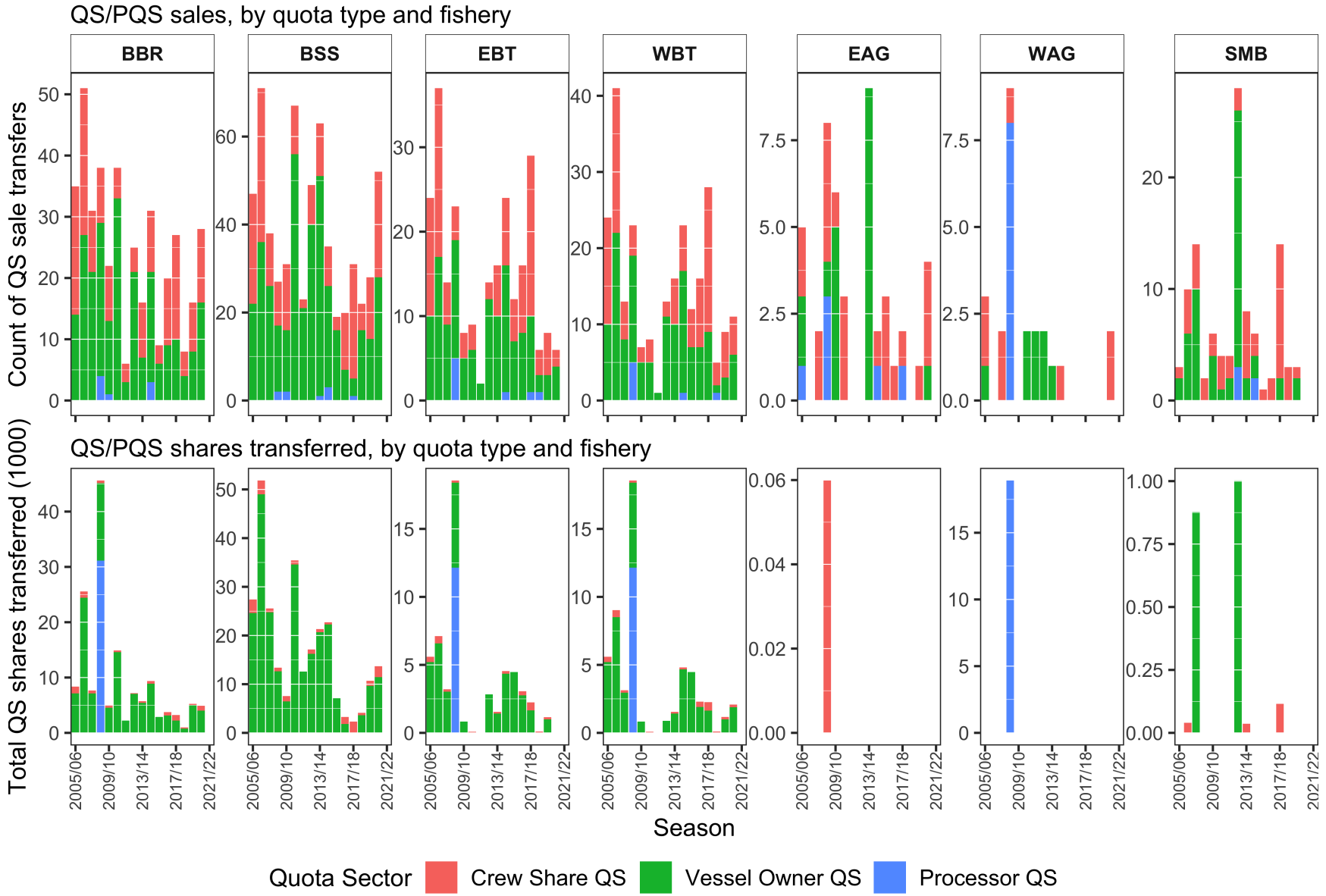
Permanent sale transfer of CR Program QS and PQS is permitted under a framework of rules intended to prevent excessive share consolidation and, in the case of PQS, maintain regional and community level processing capacity and employment associated with crab processing histories of individual processing plants (as discussed previously). As such, the frequency and volume of QS and PQS sales discussed below are strongly influenced by regulation of the respective markets. The total number of QS sales reported over the course of the program has ranged from a peak of 329 during 2006/07 to a low of 86 registered in 2015/16, with 154 sales in 2019/20 (Table 3.26). Sales of PQS peaked during the early period of the CR program, with 42 transfers during 2008/09, substantially higher than any other year. No PQS sales occurred in 6 of the last 16 crab seasons, including 2019/20.

Figure 2.9: Crab Harvest Quota Lease Market Indicators



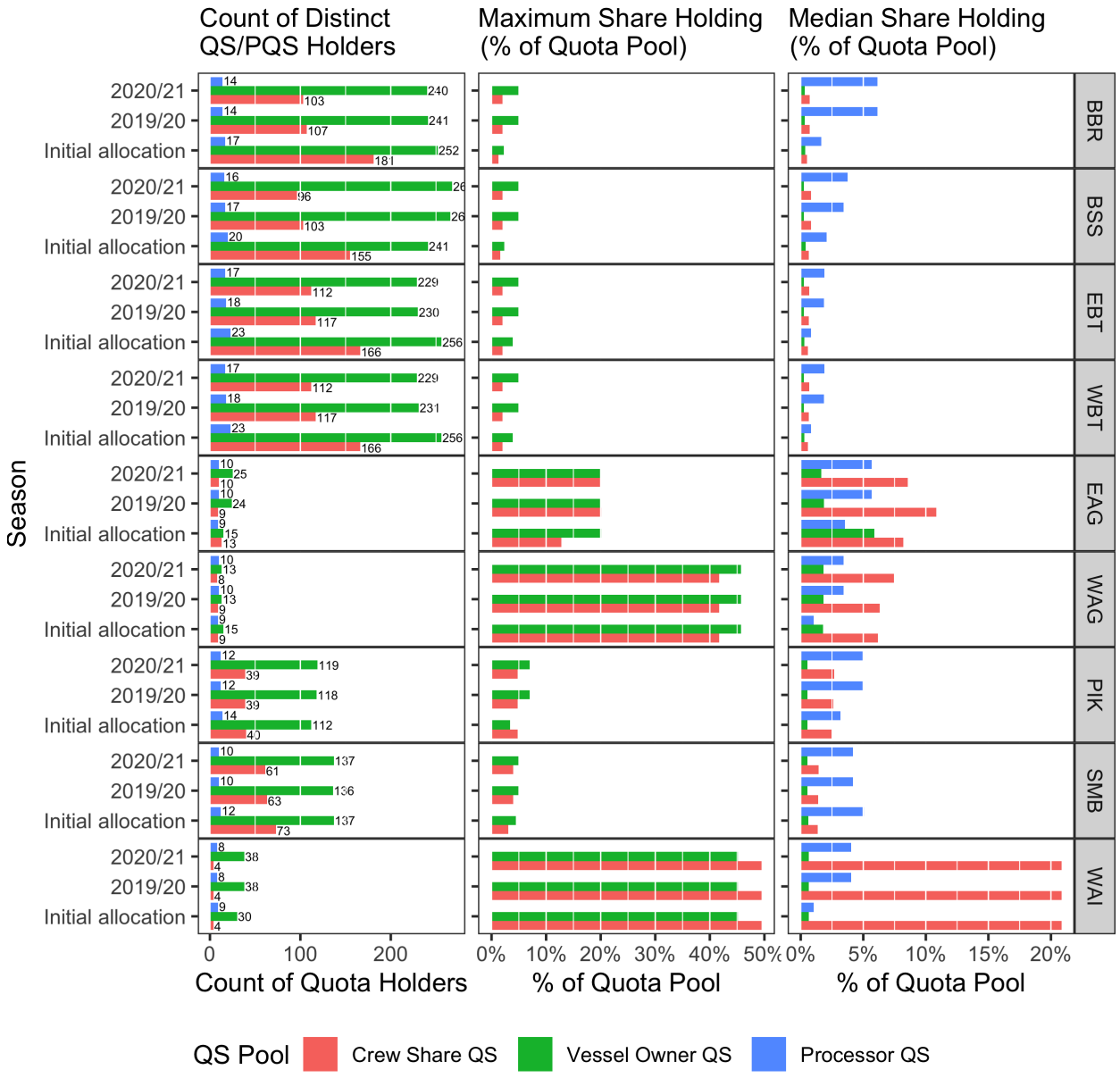
Source: NMFS AFSC BSAI Crab Economic Data. Tabular data available in Table 3.25. Lease data shown represent "market-rate and/or negotiated price" lease transactions as reported for active crab fishing vessels in the 2012 through 2020 Crab EDR, which includes both true arm's length transactions as well as transfers between related parties at market-rate value. Quota lease data collected for earlier years is not reported due to data quality limitations. Harvest quota types are categorized in this report as the following: CVO A - catcher vessel owner Class A IFQ; CVO B + CPO - catcher vessel owner Class B IFQ and catcher/processor owner IFQ; CVC + CPC - catcher vessel crew IFQ and catcher/processor crew IFQ. Statistics reported represent results pooled over all quota types and/or regional designations within each category.

Figure 2.10: QS and PQS Sales



Source: NMFS AKRO RAM division, Quota share transfer data. Tabular data presented in Table 3.27. Counts of QS sales are non-confidential, however, number of shares transferred in individual QS sales is confidential information and aggregate QS units sold is suppressed in the figure where fewer than 3 transfers occurred during the reporting year.

Figure 2.11: CR Program Harvest and Processing Quota Share Holdings, Initial Allocation, 2019/2020 and 2020/21 Seasons



Source: NMFS AKRO RAM Division, quota share holders files.

Tabular data available in Tables 3.31 and 3.36.

More detailed information on QS/PQS sale transfers by CR fishery and QS type is shown in Tables 3.27 and 3.28, and Figure 2.10, with counts of entities transferring, total and median volume of QS units transferred, and median price per QS unit shown by fishery, season, and quota type. During the first two years of the CR program, sales of catcher vessel crew share (CVC QS) represented a large proportion of the number of total QS transfers, though representing a small fraction of total QS shares transferred. Subsequently, the number of CVC QS sales has varied in most years between three and 10 in the BBR fishery and two to 14 in the BSS, but a notable increase in sale activity in 2017/18, with 17 sales in the BBR fishery, totaling 9% of the CVO share

pool, and 26 sales in the BSS fishery (7% of the share pool), and again in 2019/20 with 12 and 24 CVC sales in BBR and BSS, respectively (7% of the respective pools).

QS sales transfer active in the CVO share pools has been highly variable from year to year. In more recent years, the number of transfers and volume of QS transferred in both the BBR and BSS fisheries peaked in 2014/15, with 18 sales in the BBR CVO share pool, and 23 sales in the BSS pool, comprising 2% of both respective pools. During 2019/20, CVO QS sale activity increased compared to recent years, with 16 sales in the BBR CVO share pool, and 28 sales in the BSS pool, comprising 1% of both respective pools.

PQS sales have been infrequent through the duration of the CR program, with the largest number occurring in 2008/09 at 27 over all, including 4 sales in the BBR fishery totaling 32.2 million PQS units (7.8% of the PQS pool), 5 in the each of the EBT and WBT fisheries totaling 12.2 million units (6% of each pool), and 8 in the WAG fishery totaling 18.9 million units (47% of the pool). Prices at each of these points have averaged $0.10 for BBR PQS, $0.05 for EBT PQS, and $0.07 for WAG PQS. Subsequent to the 2008/09 season, too few PQS sales have been completed during most years to enable publication of aggregate statistics.

Table 3.30 presents a comparison of contemporaneous QS transfer prices and IFQ lease prices where sufficient observations allow reporting. Recent QS market trends toward increased sales and low per-unit QS transfer prices correspond with historically low TAC levels in the BBR and BSS fisheries in recent seasons. As noted above, sale activity increased in both BBR and BSS share pools during 2018/19 and 2019/20. During 2019/20, the average price for quota share in the BBR fishery fell to a historic low, with CVC shares selling at an average $0.30/share and CVO at $0.36/share, compared to prices averaging $0.88 and $1.09 per share, respectively, over the previous 15 seasons. BBS quota share prices reached recent lows during the 2018/19 season when the TAC was cut to the previous low (before 2021/22) of 19 million pounds, with CVC shares selling at an average $0.28/share and CVO at $0.53/share, the lowest price levels since the 2007/08 season. Share prices in the BSS pools increased over the most recent 2 seasons, corresponding to increasing TAC levels, with CVC shares selling at an average $0.57/share and CVO at $0.86/share during 2020/21. Data for the 2021/22 season are not yet available, and the effects of closure of the BBR fishery and historically low BSS TAC cannot yet be assessed.

Although harvest quota share privileges represent a share interest in the future stream of TAC allocations, which are indeterminate, brokered sales of CR program QS are typically conducted on the basis of price per pound. Such terms of sale imply conversion of QS units to the contemporaneous IFQ pounds-equivalent (a particular transaction may or may not include current-season permitted IFQ pounds). As such, the 'QS price/IFQ Pound' values shown in Table 3.30 are the average of observed selling prices for completed sales of crab QS, denominated in units under which such sales are commonly valued.[18] Assuming competitive market conditions, variation over time in QS sale price is indicative of both the contemporaneous lease value of IFQ, and buyers' expectations of future returns on the QS investment. The 'IFQ/QS Price Ratio' values reported in Table 3.30 provide an inverse index of contemporary expectations of QS buyers. In principle, holding IFQ lease price constant, increasing QS sale price reduces the value of the IFQ/QS price ratio, such that

[18]QS price per IFQ pound values are comparable to current brokerage offers, for example: `https://dockstreetbrokers.com/crab-ifqs/crew-shares`).

higher ratio values indicate low QS valuation at time of sale relative to contemporaneous ex-vessel market value.[19]

2.4.3 QS/PQS Holdings

CR Program QS and PQS were initially issued to qualifying U.S. individuals and companies or other non-individual business entities based on historical participation in the CR fisheries. Over time, attrition of initial QS/PQS recipients and consolidation of quota holdings within a smaller pool of holders is anticipated as initial recipients exit the fishery and divest their financial interests in quota share and associated assets. Changes in the demographics of the quota holder population over time, concentration of quota shares, and/or other distributional outcomes, are important dimensions of the economic status of the fishery. In addition to monitoring attrition of initial recipients generally, of particular interest are the role of Western Alaska Community Development Quota (CDQ) groups and community-based non-profit entities affiliated with Alaska Native tribes or corporations in acquiring control of IFQ and IPQ program quota shares. The recent public announcement of acquisitions negotiated by Coastal Villages Region Fund and the Bristol Bay Economic Development Corporation of BBR and BSS QS holdings comprising 3% of the respective QS pools, and 7 crab vessels, from Seattle-based initial QS recipient Mariner Companies [20], is the most recent such acquisition, which was completed after the beginning of the 2020/21 season and is not reflected in QS transfer and holdings data presented in this report.

CR program rules limit the consolidation of vessel owner QS to a maximum share proportion of the quota share pool held by any single entity to 1% in BBR, BSS, EBT, and WBT fisheries, 2% in PIK and SMB, and 20% in EAG, WAG, and WAI fisheries, with "grandfathering" exceptions for initial issuees, and higher caps for crew share QS, CDQ groups, and non-individual PQS holders (see table below; use caps and related regulations are found at 50 CFR Part 680, at SS680.42). Under the rule, use of IFQ to catch and land crab by any one entity is subject to the similar caps, but an exemption for members of harvest cooperatives eliminates limitations on the consolidation of catch on vessels harvesting exclusively IFQ held by a cooperative.

[19] In principal, in a well-functioning competitive market, price per pound of IFQ reflects QS holders and fishermen's expectations regarding the surplus to be produced from fishing the leased quota during the current season, taking account of uncertainty regarding factors that influence fishing costs and ex-vessel revenue. Similarly, QS sale prices reflect holder's expectations for the surplus value of the fishery over time, defined as the present value of the stream of annual lease earnings for the indefinite future, where distant future expected lease revenues are ascribed a lower value (discounted) relative to near-term expected earnings. Implicit in the ratio of IFQ price to QS price is the average discount rate, r, such that

$$\mathrm{QS}_{\mathrm{price}} = \left(\frac{1}{r}\right) * \mathrm{IFQ}_{\mathrm{lease\ price}}$$

In this relation, the index $r = \frac{\mathrm{IFQ}_{\mathrm{lease\ price}}}{\mathrm{QS}_{\mathrm{price}}}$ reflects QS holders' expected rate of return for holding QS, which in principal can provide an indicator of QS holders' collective expectations regarding the rate of return for holding QS. Changes over time in this index can suggest changing expectations of future value of the fishery, e.g. a negative change in over time would indicate a reduced perceived risk of declining stock productivity, product prices, or other adverse management or market conditions. As a capital asset, the expected rate of return on QS is comparable to that of other investments of comparable risk, e.g. bond yields. As such, it is lower than the market rate, the holder could expect to earn more over time by selling the QS and investing in alternative assets.

[20] National Fisherman, January 7, 2021, *Bering Sea buyout: Western Alaska coalition now owns 3 percent of crab quota*

QS Use Caps As % Of Initial Quota Share Pool, by Holder Category and QS Type

Fishery	CDQ Group CVO/CPO	Non-individual PQS holder CVO/CPO	CVC/CPC	All other transferees CVO/CPO QS
BBR	5%	5%	2%	1%
BSS	5%	5%	2%	1%
EBT	5%	5%	2%	1%
WBT	5%	5%	2%	1%
PIK	10%	5%	4%	2%
SMB	10%	5%	4%	2%
EAG	20%	5%	20%	10%
WAG	20%	5%	20%	10%
WAI	20%	5%	20%	10%

Source: NMFS Alaska Region.

Structure of QS Entities

CR Program Quota Share registries are published by RAM annually, as well as annual registries of IFQ/IPQ permit issuees and other annual permits issued under the CR program. [21] Under CR Program regulations, eligibility to hold or receive CVO or CPC is limited to individual persons who meet minimum active at-sea requirements, and as such, counts of crew QS holders represent distinct individuals registered with RAM. In contrast, registries of QS/PQS holders include individual persons, as well as CDQ groups and community-based non-profit entities, but the large majority of direct QS and PQS holders are non-individual legal entities (e.g. corporations and partnerships), which are often chartered specifically and solely for the purpose of registering as a QS entity and holding QS. The underlying ownership structure of a non-individual QS entity may intersect with that of one or more other QS entities, and the underlying ownership of a given entity may change over time. As a result, with the exception of individual QS holders and associated shares identified in QS registries, the effective ownership and control of the large fraction of QS pools held by non-individual entities is obscured. As such, statistics summarizing information about Owner QS and PQS pools, and change therein over time, are of limited utility, particularly in depicting distributional aspects of QS pools and associated fishery income, including concentration of ownership, length of tenure, regional/spatial distribution, and the distribution between active participants in crab fisheries as owners or crew members of active crab fishing vessels and nonparticipating "absentee" individuals.

NMFS administrative enforcement of QS/PQS and IFQ/IPQ use caps is applied at the level of individual persons. Under CR program rules, in order to receive issuance of annual IFQ pounds (assigned to either an individual or harvesting cooperative IFQ permit), QS holders are required to submit an Annual Crab IFQ Permit application. In the case of non-individual QS entities, the application includes full disclosure of the direct and indirect ownership structure of the QS entity, identifying each individual owner and their percentage ownership interest in the entity, and by extension, their percentage interest in the total amount of QS shares in each quota pool held by the QS entity. Similar disclosure of PQS holder ownership interest is required in the annual

[21] Available online at `https://www.fisheries.noaa.gov/alaska/commercial-fishing/permits-and-licenses-issued-alaska`.

application for IPQ issuance.[22] In processing IFQ applications and issuing IFQ permits, NMFS enters information reported in applications into a database, and QS holder ownership interest information is analyzed to ensure that individual persons do not exceed QS/IFQ use caps through direct or indirect interest in one or more QS entity, and that associated IFQ pounds are not issued in excess of use caps. [23]. Ownership interest information reported in IFQ/IPQ applications includes interest percentages assigned to some non-divisible entities, primarily CDQ groups and other non-profit entities, and trusts and estates, as well as some corporate and other non-individual equity-based entities for which equity information is not fully reported. The information contained in the database is primarily intended for NMFS' administration of annual IFQ/IPQ issuance and enforcement of use caps, but by decomposing the ownership structure of QS entities, also provides the basis for a somewhat more complete analysis of distributional aspects of QS/PQS pools. Figures 2.12 and 2.13 display the results of QS entity decomposition for the BBR and BSS QS pools, comparing the number of QS entities (Figure 2.12) and distribution of QS shares (Figure 2.13), classified by entity type (Individual, CDQ Group/Non-profit, Corporate), and the number of individual owners identified by entity decomposition, classified by type (Individual, CDQ Group/Non-profit, Corporate, Trust/Estate, and Unknown).[24][25] The undecomposed QS entities are primarily comprised of corporate entities, with a smaller number of individual QS holders, and a small number of CDQ/Non-profits. The QS entity counts in each category have stayed quite constant over time: corporate entities in the BBR pool went from 222 during the 2005/06 season, to 201 during the 2020/21 season, and from 212 to 214 in the BSS pool, and individuals in the BBR pool went from 26 during the 2005/06 season, to 35 during the 2020/21 season, and from 25 to 46 in the BSS pool. The counts of individual owners shows greater variation over time, with the distinct number of identified owners increasing from 394 to 513 in the BBR pool, and from 372 to 477 in the BSS pool. To a significant extent, the change over time in distribution of entity/owner types indicated in Figure 2.12, particularly in the relative numbers of corporate and individual owners over the first three seasons, is an artifact of improving data quality as administrative recordkeeping and fuller disclosure of ownership interests improved following initial implementation of the CR program. However, several notable changes over time in the ownership distribution are apparent in the decomposed QS results beginning with the 2007/08 season.

The number of CDQ groups and community-based non-profit entities identified as direct QS holders in the BSS pool increased from two to four within the first three years of the program and increased to five as of 2011/12, while the decomposed results indicate an additional 1 to 3 CDQ/Non-profits with interests in the QS pool over time. Most notably, CDQ/Non-profit holdings in the BSS QS pool have increased from 8% at the beginning the CR program to 21% as of 2020/21, with a similar increase in the BBR pool. Also increasing over time is the role of trusts and estates in the QS

[22]CR Program Annual IFQ and IPQ permit application forms, and other annual permit applications, are available online at `https://www.fisheries.noaa.gov/permit/bering-sea-and-aleutian-islands-crab-rationalization-applications-and-reporting-forms`

[23]The same ownership interest information is used in the review of applications for eligibility to receive QS/PQS through transfer to determine if the transfer would place the control of IFQ/IPQ to any individual person, through direct or indirect interest in any QS entity, in excess of IFQ/IPQ use caps. Approval of QS/IPQ transfers requires that individuals associated with the transfer divest such interests so as to limit their control of IFQ/IPQ so as not to exceed IFQ/IPQ use caps.

[24]Interest percentages for QS Entities in IFQ applications are required to sum to 100%, but rounding error results in residual decimal values that are assigned to ''Unknown"; the associated count of ''Unknown" type owners shown in Figure 2.12 indicates the frequency of residual percentages in applications, however, as shown in Figure 2.13, the associated QS shares are negligible.

[25]Note that, while QS/PQS registries are public information, individual shareholding information disclosed in IFQ/IPQ permit applications is confidential, and only summary information is reported in results shown here.

ownership pool, with 19 identified in the BBR Owner QS pool in the first season, collectively holding 2.5% of the QS pool, and increasing to 60 in 2020/21, holding 9% of the pool; the trend is similar in the BSS pool, increasing from 18 to 59 entities and from 2% to 8% of the pool. Following the initial decline in number of corporate owners in the decomposed results, the marked increase in number of distinct corporate owners shown in Figure 2.12 between 2008/09 and 2014/15 is an artifact of reporting anomalies in the QS Holder database by a small number of QS entities, but with negligible effects on the proportion of the respective QS pools held by corporate owners as shown in Figure 2.13, which has continued to decline over time, from 5% in 2007/08, to less than 1% in 2020/21 in the BSS pool, and similarly in the BBR pool. before declining to 8 or fewer in each following season. While the number of individual persons identified in the entity decomposition has varied over time, there has not been a discernible trend after the initial years of the CR program. However, the proportion of the QS pools held collectively by individual owners declined significantly between 2008/09 and 2015/16, from 80% to 70% in both respective pools, concurrent with the increase in QS shares in both BBR and BSS pools by both CDQ/Non-profit and Trust/Estates owner-types. This reflects parallel trends in the respective QS pools of increased acquisition of QS shares by CDQ groups from initial QS recipients, and the conveyance of QS share interests of initial issuees to their heirs and other beneficiaries.

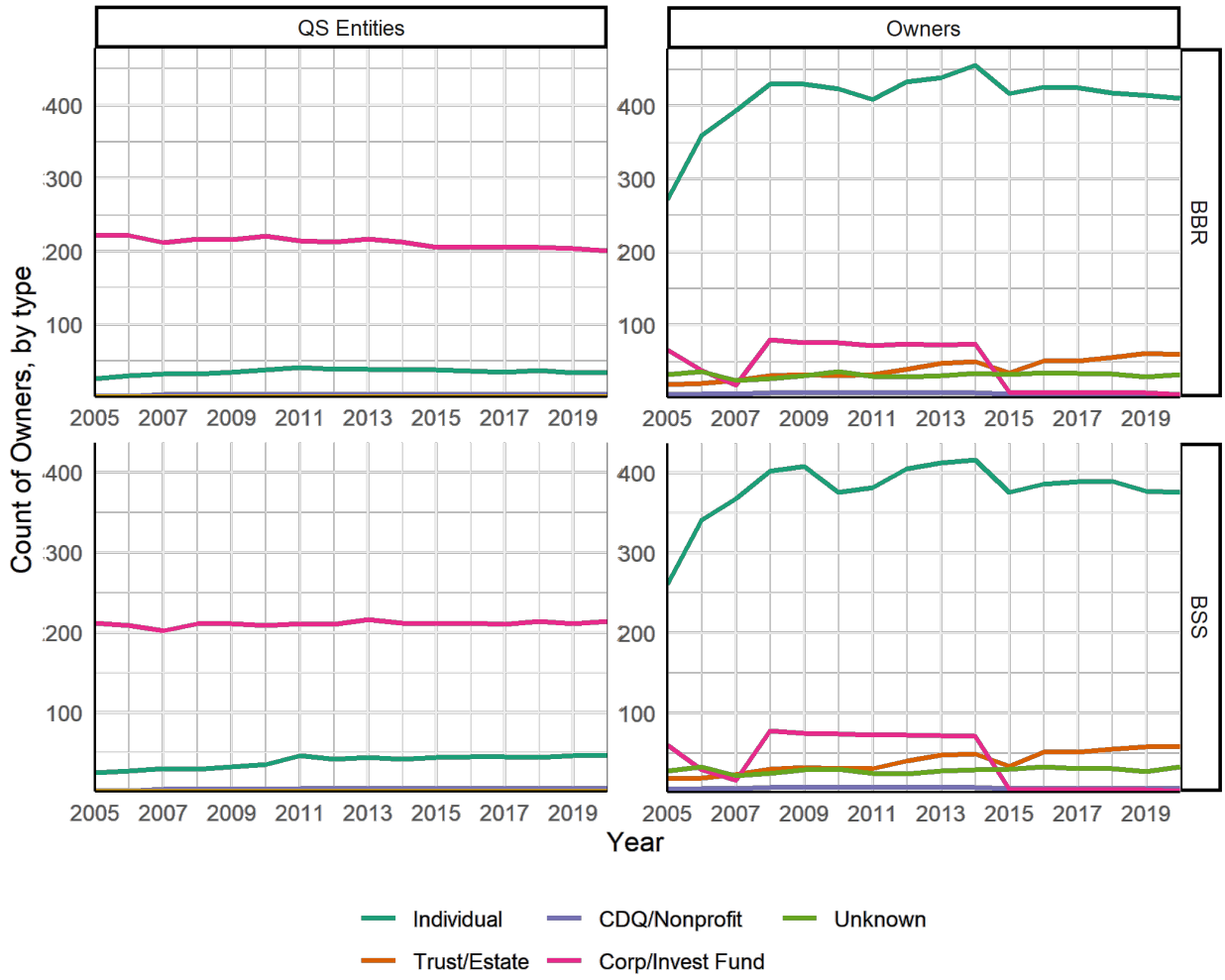
Further analysis of decomposition results will be developed in future editions of this report. Efforts to provide more detailed analysis of the geographic distribution of QS holdings and benefits is in development, but has been limited by incomplete residence information for a substantial proportion of the individual owners identified in the decomposition, limiting the utility of the analysis relative to the existing information available from the QS registry information directly. Efforts to improve the decomposition results and database with additional residence information are pending.

Vessel owner and crew QS pools

Information on CR program vessel owner and crew QS share holdings, including numbers of QS holders and statistics depicting the concentration of and regional distribution of quota holdings, and entry and exit from QS pools over time, is presented in Tables 3.31 to 3.39 of the report, and summarized in Figures 2.10 and 2.11. Information reported for vessel owner QS pools in Figure 2.11 and Tables 3.31, 3.34, 3.36, 3.38, and 3.39 reflect QS holdings at the level of QS entities registered with NMFS Alaska Regional Office, Restricted Access Management division (RAM) as direct issuees or holders of quota share, and do not incorporate results of QS entity decomposition discussed in the preceding section of the report.

The period of active transition of harvest quota share holdings that occurred in the initial two years of the program initially subsided, but market activity has continued to fluctuate inter-annually over subsequent years (Figure 2.10), indicating a level of ongoing turnover in QS pools. As indicated by the general metrics of QS pool status shown in Figure 2.11 and Tables 3.31 through 3.39, however, the overall structure and distribution of QS ownership has been relatively stable over the length of the CR Program, with minimal change over the most recent two seasons. In the BBR, BSS, EBT and WBT share pools and fisheries for both QS and PQS holdings, marginal reductions (4-7 fewer distinct QS holders) occurred between 2019/20 and 2020/21 in the Crew QS shareholder population across CR fisheries, with the largest change occurring in the BSS pool of a net reduction of 7 QS holders and median share holding increasing from 0.81% to 0.84% of the combined Catcher Vessel Crew (CVC) and Catcher Processor Crew (CPC) QS pool. Indices of Owner QS pools were

Figure 2.12: CVO/CPO Entity Decomposition, BBR and BSS QS Pools



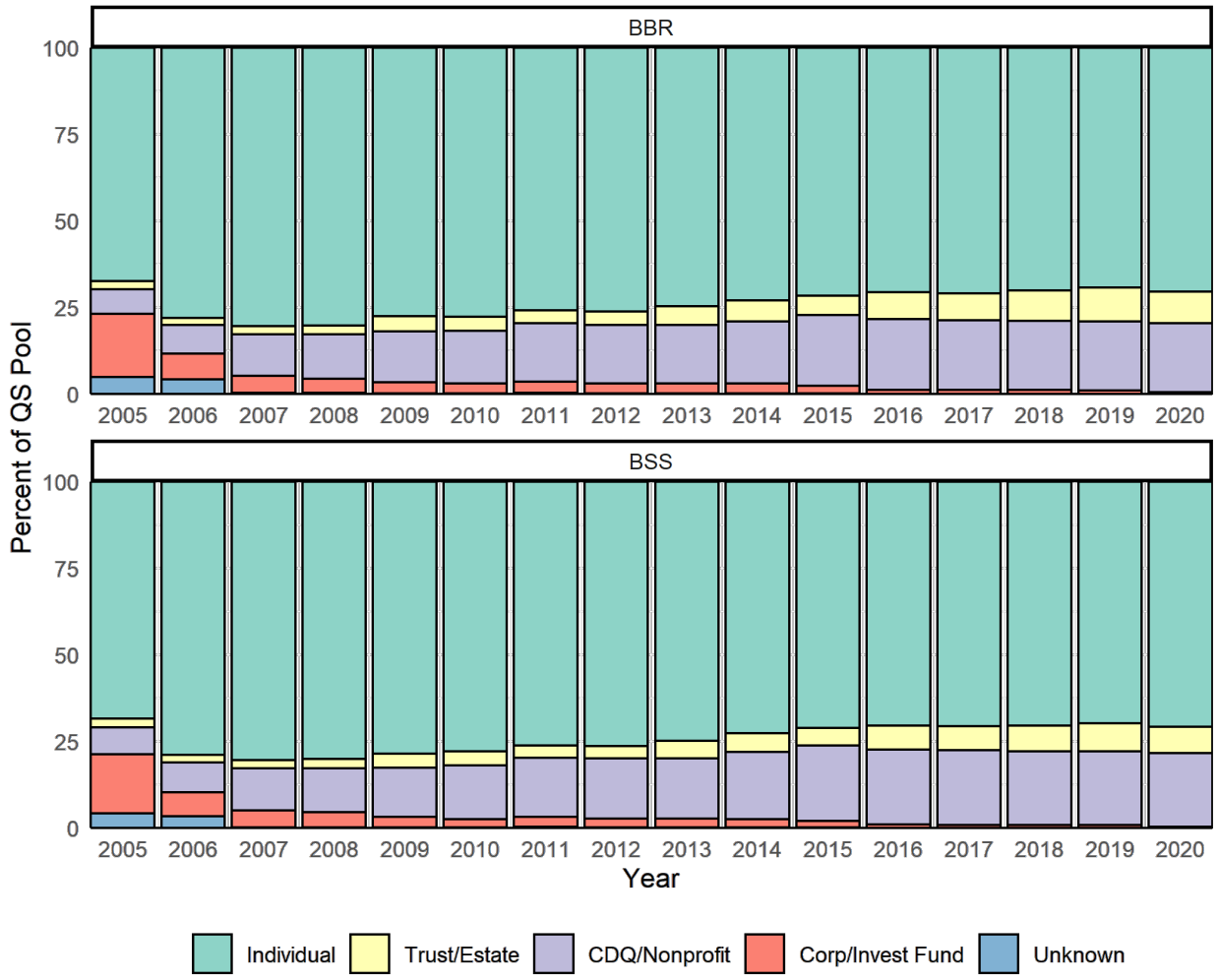
Source: NMFS AKRO RAM Division, quota share holders files; Alaska Fisheries Information Network (AKFIN).

Tabular data reported in Table 3.32.

largely unchanged between 2019/20 and 2020/21, the largest change occurring in the combined BSS Catcher Vessel Owner (CVO) and Catcher Processor Owner (CPO) QS pool, with 268 distinct QS entities increasing by 2 from the previous season, and by 27 from initial issuance, and median share holding declining from 0.39% at initial issuance to 0.25% in the most recent two seasons.

Across all fisheries, consolidation of crew share QS holdings during the first four years of the CR program produced a relatively large (-8%) initial decline from the total 224 individual CVC QS holders (Table 3.33), aggregated across all CR fisheries. Subsequent changes in the number of individuals moderated to a net value of 1-2 entries or exits per year through 2016/17 with a total of 201 individuals, but reclining significantly over recent years, to 166 as of the end of the 2020/21 crab season. With respect to individual CFEC-permitted crab vessel operators active on-board

Figure 2.13: CVO/CPO Share Decomposition, BBR and BSS QS Pools



Source: NMFS AKRO RAM Division, quota share holders files; Alaska Fisheries Information Network (AKFIN).

Tabular data reported in Table 3.32.

crab vessels however,[26], a gradual decline has continued in the numbers of individuals holding CVC and CPC shares, as well as in the percentages of the share pools held by them.[27] CVC and CPC QS holders active as gear operators in one or more crab fishery have declined from 95 during the 2005/06 season to 58 as of the 2020/21 season, representing 35% of the 166 current individual CVC and CPC QS holders, and 43% of the aggregate pool of crew QS shares across all fisheries.

[26]Except for CFEC-permitted crab vessel operators identifiable in crab landings reports, no data are currently available to identify active participation status of crab fishing crew generally.

[27]Note that CVC shares are also held to some degree by active crab vessel crew members that do not hold CFEC gear operator permits. Most deck crew members hold ADF&G commercial crew licenses rather than CFEC permits, but only the CFEC permit of the vessel operator is recorded on landing reports. With currently available data, it is not possible to associate QS ownership with on-board crew status for individuals other than crab vessel masters.

Tables 3.34 and 3.35 report the change in regional distribution of Owner and Crew QS holdings, distinguishing between Alaska, Pacific Northwest (PNW; includes Oregon, Washington, and Idaho), and Other U.S.., from initial issuance and in the two most recent seasons. The regional distribution of share holdings and number of individuals holding Crew QS s has shifted from PNW to Alaska residents, by 3% to 5% in the BBR, BSS, EBT/WBT, and SMB pools, with substantially fewer individual QS holders in both regions comprising the larger pools than at initial issuance. EAG and WAG crew QS began at 94% PNW held and is now 100% held by 9 PNW residents. Inter-regional changes in Owner QS pools has been more pronounced. Across all CR fisheries, the number of Owner QS holders and share of Owner QS pools held by residents of Alaska have increased relative to PNW-resident holders. In each of the respective BBR, BSS and EBT/WBT pools at initial issuance, 16% of the pool was held by some 40 Alaska residents, increasing to between 28% and 32% of the respective pools as of the two most recent seasons, and number of distinct Alaska resident QS holders increasing by 7 to 12; inversely, the 82% of each pool held by PNW residents at initial issuance declined by 12 to 17 percentage points as of 2018/19 and 2019/20. Similar regional shifts have occurred in EAG/WAG Owner QS pools, toward greater relative QS interests held by Alaska residents. Note that the metrics reported for Owner QS holdings include CVO and CPO QS acquired by CDQ groups, which account for a substantial fraction of the distributional change since initial issuance. As shown in Table 3.37, compared to less than 2% of respective Owner QS pools (other than EAG/WAG) held by CDQ groups at initial issuance, between 14% and 18% of the combined CVO/CPO QS pools in the BBR, BSS, and WBT/EBT pools is currently held by CDQ groups (this includes directly held QS and wholly-owned subsidiary QS entities, but excludes CDQ QS holdings through partial and/or indirect interest in other QS entities).

Tables 3.38 and 3.39 report statistics showing the progress of attrition of initial issuees and entry of new share holder individuals and entities in each of the respective CR fishery Owner (CPO and CVO) QS, Crew (CPC and CVC) QS, and PQS pools. Over all fisheries and sectors as of 2020/21, 216 out of 532 (40%) of initial issuees have exited from holding QS in one or more fisheries since 2005, of which 4 exited after the end of the 2019/20 season. Within individual quota pools, higher proportional rates of attrition have occurred, including approximately 45% of initial QS issuees exiting from each of the BBR, BSS, BST, and SMB fisheries.

Table 3.39 provides statistics on new entrants (i.e., not initial issuees) to respective QS/PQS pools in each fishery as of the end of the 2020/21 season, relative to initial issuance and to the end of the 2019/20 season. The table provides counts of new entrants and total share of the quota pool acquired, and differentiates entrants that were new to CR program holdings in general ("New crab entrant"), or only to the respective quota pool (i.e., where the entrant previously held quota in another fishery or sector ("New in fishery"). Relative to initial issuance, the most pronounced change in the proportion of QS pools held by new entrants is in the EAG owner and crew QS pools, with 51% and 80%, respectively, having been acquired by new entrants as of 2020/21, and the 53% of the PQS pool held by new entrants in the WAG fishery. The EAG also fishery saw the largest proportional transfer of QS number to new entrants between the 2019/20 and 2020/21 seasons, with 1 individual entrant acquiring 20% of the crew QS pool. There were no new entrants to PQS pools during 2019/20.

2.4.4 Concentration of Catch Volume

The exemption from the use cap limitations on concentration of IFQ for vessels exclusively fishing IFQ held by CR program cooperatives is a critical element of the program that enables cooperatives to respond to resource and market conditions and shift the deployment and operation of vessels toward maximizing operating efficiency and economic surplus. The movement toward consolidation of 100% of IFQ landings within crab harvesting cooperatives, while consistent with the intention of the CR program, also obviates any structural limitation on concentration of IFQ landings within the fleet. To provide an index of concentration, the Gini coefficient is presented in Table 3.41, showing changes in concentration of IFQ landings across active vessels within the crab fleet, and the equivalent for crab purchasing across the set of active Registered Crab Receivers (crab buyers). As calculated[28], the coefficient measures the relative evenness of the distribution of vessel-level total IFQ landings (or buyer-level total crab purchases) across the set of active vessels and buyers in a given crab fishery season. The index varies between 0 and 1, where 0 indicates equal quantity of pounds landed or purchased across all vessels/buyers, and 1 indicates complete concentration, with one vessel (buyer) landing (purchasing) all landed pounds.

With a heterogeneous fleet and highly variable operating environment, (hypothetical) perfectly even distribution of catch would not necessarily be economically optimal, *a priori.* However, a progression toward a more even distribution of catch may indicate incremental improvement in efficient utilization of vessel capital at the fleet level, whether achieved by means of capital improvements amongst a consistent set of active vessels, or consolidation and retirement of less efficient vessels. Table 3.41 displays Gini coefficient index values by calendar year for 1998-2020, with number of active vessels, total pounds landed and sold, average (median) pounds landed per vessel, and median percentage of total pounds landed, by fishery. In the BBR and BSS fisheries, the index has varied between 0.24 and 0.37, with the concentration of catch highest in the first rationalized season (2005 and 2007, respectively), and a recent increasing trend beginning in 2015 as TACs have declined and fleets have consolidated in response.

For purchasing of live-landed crab in the BBR fishery prior to the CR program (Table 3.42), concentration index values varied between 0.58 - 0.66, with the number of active buyers averaging 25 per year; following program implementation, index values have varied within a slightly lower range (0.54 - 0.61), with substantially fewer buyers (17 per season on average). In the BSS fishery, index values ranged 0.48 - 0.63 prior to 2006, and 0.42 - 0.53 subsequently, with the average number of buyers per season decreasing from 28 in 2000 to 12 in 2016. In both fisheries, there is some indication of less concentration of crab purchasing among the remaining pool of buyers following rationalization, but no discernible pattern of change in the period following rationalization analogous to that shown results for the harvesting sector. Note, however, that the counts of buyers shown in Table 3.42 includes those actively processing crab in their own plant as well as those that did not operate a plant at which they processed their own crab (i.e., buyers that solely contracted for custom processing of their purchased crab at one or more plants operated by other crab processors). As such, in contrast to the landings per vessel data shown in Table 3.41, the linkage to physical

[28]The index is calculated as $\frac{\sum_{i=1,..,n}(2P_i-n-1)x_i}{n^i u}$ where P_i is the landings rank of vessel i, with landings of x_i pounds, such that the vessel with the highest landings is ranked 1 and the lowest is ranked n. Note that the number of active vessels n is generally decreasing over time, such that index values as calculated represent relative concentration among the set of active vessels in each crab fishery for each year. If calculated over a larger population that included inactive vessels with zero catch (not performed for this report), the index would indicate increasing concentration consistent with the overall consolidation of catch.

processing capacity is indirect in these results and possible inferences for relative efficiency in the processing sector are less clear.

2.5. Fishing Capacity, Effort, and Efficiency

General metrics of the gross capacity of physical and labor resources actively deployed in BSAI fisheries over the 1998-2020 period have been noted in a variety of contexts in the preceding discussion, including changes in size and composition of the active fleet (Table 3.3), as well as the number of individual crab vessel captains identified by CFEC permit number in crab landings records, and distinct crab buyers in the processing sector (Table 3.2). The substantial consolidation of fishing capacity following rationalization is clearly depicted in fleet composition (Figure 2.14), particularly in BBR and BSS fisheries where the total number of vessels operating in the BBR fishery ranged from a high of 274 vessels in 1998, to 89 during the first year of the CR program, and 241 vessels in the 1999 BSS fishery to 78 in 2006 (noting that 24 vessels were retired from the fishery in the capacity reduction program implemented in 2004).

In addition to general measures of deployed capacity, more granular indicators of applied fishing effort and productivity are provided in this report, including vessel trips, vessel days-at-sea (both days fishing and total days at sea) and, as a measure of effort at the gear level, pot lifts (analogous to hauls, in the case of groundfish trawl fisheries). Pro-rata indexing of ex-vessel volume and revenue by each of these provide additional indicators productivity by season, and changes in efficiency over time.

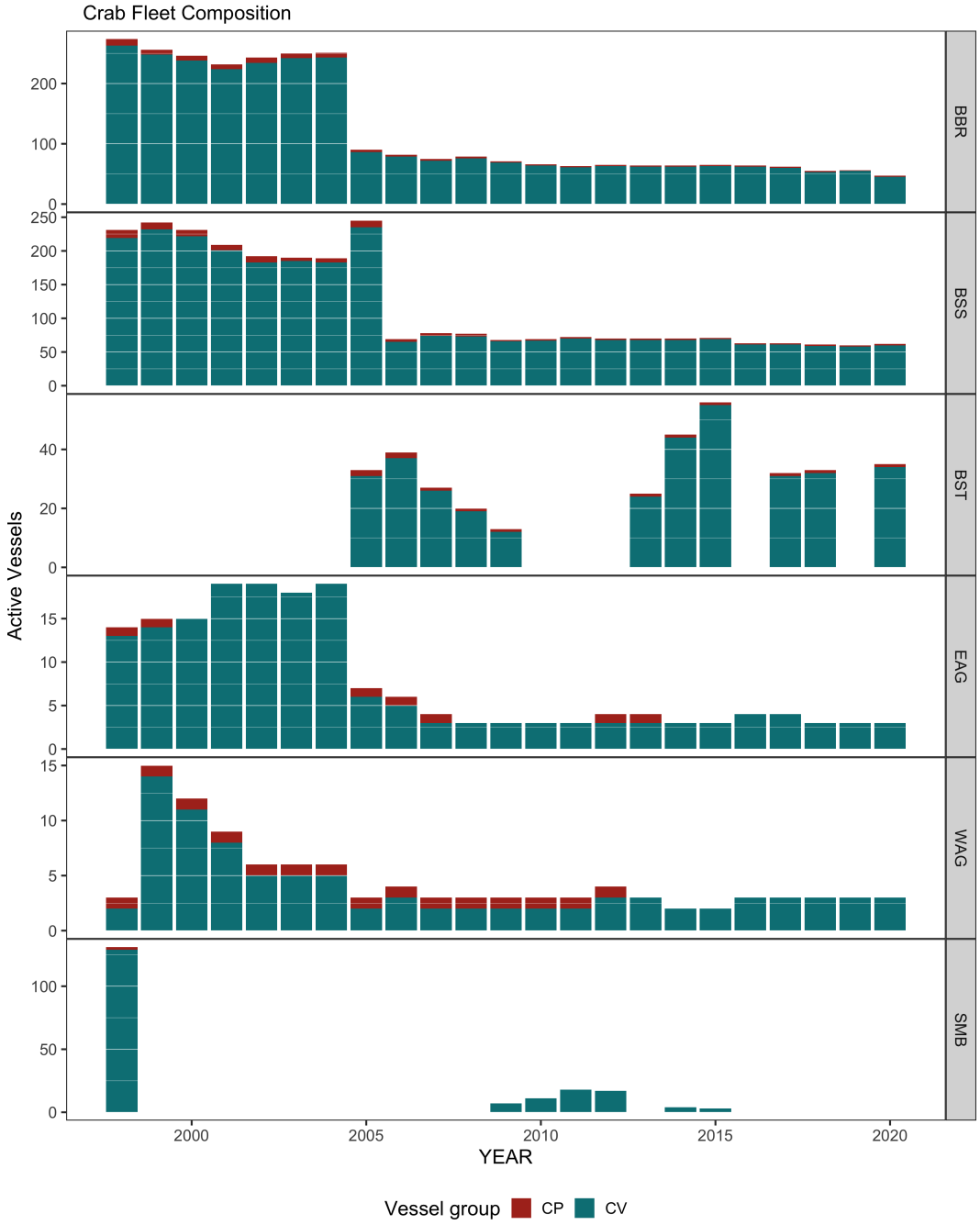
Table 3.18[29] depicts the total number of days during which vessels in the crab fleet were active at sea, which varies in response to a variety of conditions, including the quantity of allowable catch, but also weather and sea ice conditions affecting fishing. Most variation has occurred in the BBR and BSS fisheries, where there were an average 2,670 (2,611 for CV's and 52 for CPs) vessel days per season in the BBR fishery during the baseline reference years (1998, 2001, and 2004), and 474 vessel days during 2020, the lowest level in the time series. Active days in the BSS fishery have ranged from 6,570 averaged over pre-rationalization reference years (239 days for CPs and 6331 days for CVs), to 3,032 in 2010 (as reported in EDR data; CIF data indicate 2,812 days active during 2010, but both sources indicate a median of 41-42 active days per vessel). Days active in the 2020 BSS fishery increased from 2,714 days in 2019, to 3,759 in 2020.

Table 3.43 provides a summary of trip statistics, including the total number of vessel-trips by fishery and season, average (mean and sd) of trips per vessel, and average volume of landings per trip.[30] Crab vessels often make deliveries to multiple processors following a single fishing trip, and Table 3.43 provides the total number of deliveries per season, average deliveries per trip, and average landings volume per delivery. Statistics for vessel trips (total and mean per vessel) in the BBR fishery during the last 11 seasons have ranged from 237 total trips (3.0 per vessel) during

[29] See notes for the table describing data sources available for calculating vessel activity days during different periods, which introduces a degree of discontinuity in counts of vessel activity days over the pre- and post 2008 period, and in statistics calculated using these data to estimate daily pro-rata rates for various indicators. Table 3.18 and Figure 2.15 display results using eLandings and ADF&G Crab observer program data to estimate vessel activity days; see the 2013 edition of the economic status report for a comparison of alternative data sources.

[30] Note that trip-based metrics in are available only for the 2006/07 crab season and later, with limited information available for EAG and WAG fisheries. Also note that BST results shown include landings of BST crab that are caught as bycatch in the BSS fishery and do not solely reflect directed fishing, and effort statistics shown should be interpreted accordingly.

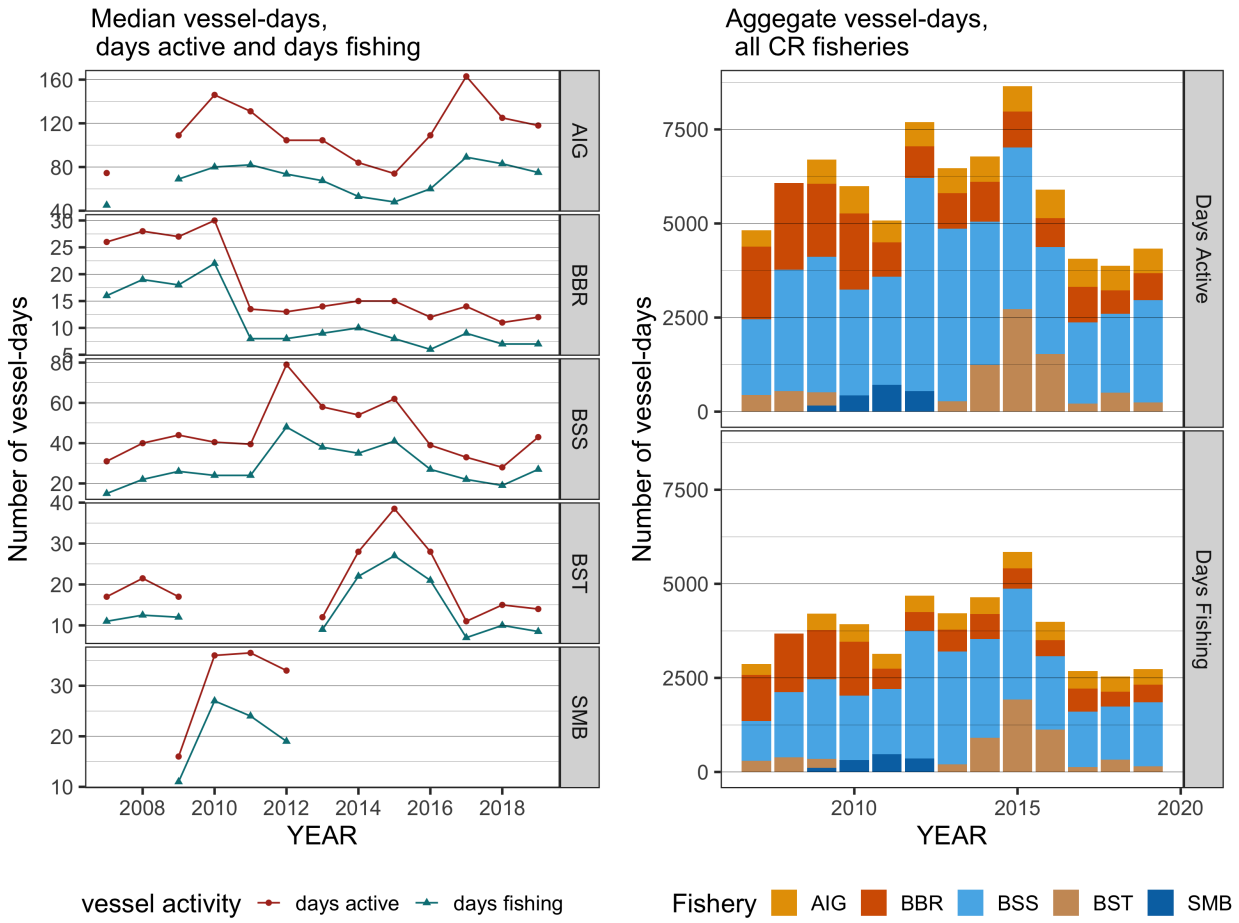
Figure 2.14: BSAI Crab Fishery Fleet Composition



Source: ADF&G fish tickets, eLandings. Tabular data available in Tables 3.2 and 3.3. Gaps in time series for BST, PIG, PIK, SMB, and WAI indicate fishery closure years. All crab fishery total ("ALL" panel in figure) represents counts of distinct vessels fishing in one or more crab fisheries during the year, not including the NSR fishery.

the 2008/09 season to a low of 86 total trips (1.5 per vessel) during the 2019/20 season. In the BSS fishery, as discussed previously, total catch has been considerably more volatile and vessel-trips counts have varied more widely, from 190 total trips (3 per vessel) in 2017/18 to 636 total trips (9 per vessel) in 2011/12 when the TAC was 89 million pounds. Over this period, average landings per

Figure 2.15: Harvest Vessel Activity Days, Selected Fisheries



Source: ADF&G Shellfish Observer Program, Confidential Interview Form Data. Tabular data is presented in Table 3.18; the figure displays CIF vessel activity data only, from 2007 to 2020. Data for PIK and WAI fisheries not shown. Results for 2007 and 2008 show CV activity only, 2009-current shows activity aggregated over CV and CP sectors.

trip have varied between a high of 168 thousand pounds per trip in 2010/11 to a low of 99 thousand pounds per trip in 2016/17.

As a well-known result of rationalization, season lengths in the CR program fisheries increased sharply as management shifted from derby fishing conditions, with BBR season openings lasting as few as 4 days during the 2004/05 season, and 6 days in the 2005 BSS season, to quota-based management under which season lengths have expanded to the full regulatory seasons, as defined by State of Alaska as 93 days for BBR, 229 days for BSS, 274 for EAG/WAG, and 110 days for SMB (with extended seasons subject to approval as needed). Details for seasons 1998 through 2019/20 are displayed in Table 3.44, including season lengths in days, and the date-span of active seasons subsequent to rationalization, including dates of first and last vessel landings, number of days during the season that vessels were active, and percentage of the open season during which vessels actively prosecuted the fishery.

Information on active season lengths as discussed above is shown for the BBR and BSS fisheries with additional detail in Tables 3.46 and 3.47 (summarized in Figure 2.16), depicting the length of fishing

seasons (in terms of the period over which vessels delivered landings to processors), intensity of effort (number of vessels making landings in a week), and the cumulative proportion of total quota allocation landed by date, by allocation type (CVO A Class IFQ, CVO B Class and crew share IFQ, and all quota types combined). Since the 2011/12 BBR fishery, the fishery has been completed with all TAC landed between October 15 and November 12, but was completed by October 29 in the last two seasons. The BSS season is more variable, given the late-season sea ice conditions that historically limited access to northern fishing grounds until April-May. As indicated in Figure 2.16) by the lines showing cumulative proportion of fishing quota allocations landed over the course of the fishing season by type of quota, a consistent phenomenon across fisheries and seasons is that CVO A share quota (dotted line) is fished and landed somewhat earlier in the season than quota types that are not subject to share matching with processors holding IPQ (CVO B- and crew share IFQ, shown as the dashed line). The 2020/21 BSS season was completed somewhat later than the previous four seasons, with active fishing through April 22, and with 15% of total quota remaining to be landed as of the 24th week of the season, compared to completion of all landings by the end of the 23rd week (March 18) in 2016/17 through 2018/19.

Finally, summary statistics for harvesting sector operating effort, measured as pot lifts per vessel are provided in Table 3.48 for all CR fishery seasons from 1998 to current, and BSS fisheries with derived productivity per-unit-effort metrics calculated as retained catch- and revenue-per pot lift. Statistics reported include total (aggregated over all vessels) and mean (sd) for pot lifts, and mean(sd) and weighted average per vessel for catch per unit effort (CPUE), and revenue per unit effort (RPUE).

In the BBR fishery, fishing effort as measured by total pot lifts fell to a record low of 31 thousand for 2018/19. Pot lifts per vessel prior to rationalization ranged from 300-600, increasing to 700-2000 per vessel after 2004 in response to fleet consolidation, but declining to 600-700 per vessel during the most recent two seasons. Vessel average CPUE in the BBR fishery ranged from 11.9 to 22.9 crabs per pot over the period 1998-2005, with an average over the period of 17.2 legal crab per pot; over the period 2005/06 to 2019/20, CPUE has ranged from 18.6 - 33.3, averaging 25.9 over the period, an increase of 51 percent over the pre-CR fishery average CPUE. Vessel average RPUE in the BBR fishery ranged from $399 to $1,130 per pot lift during the pre-rationalization period (nominal dollars), compared to $757 - $2,755 subsequently. In the BSS fishery, total pot lifts have ranged from a high of 945,000 (3,900 per vessel) in 1999, to a low of 73,000 (400 per vessel) during the 2005 season, both occurring prior to CR implementation, with pot lifts per vessel averaging 1,300 over the period. Following rationalization, total pot lifts have ranged from 85 - 270 thousand, and per vessel have ranged from 1,200 to 3,700 and averaged 2,600 per vessel, a 100% increase. CPUE has increased from a range of 76-242 and an average of 143 legal crab per pot over the period 1998-2004, to 222-353 crabs per pot, increasing 83% to an average of 270 over the period 2005/06 to 2019/20. Vessel average RPUE ranged from $186 to $779 per pot lift during the pre-rationalization period, compared to $441 - $1,051 subsequently.

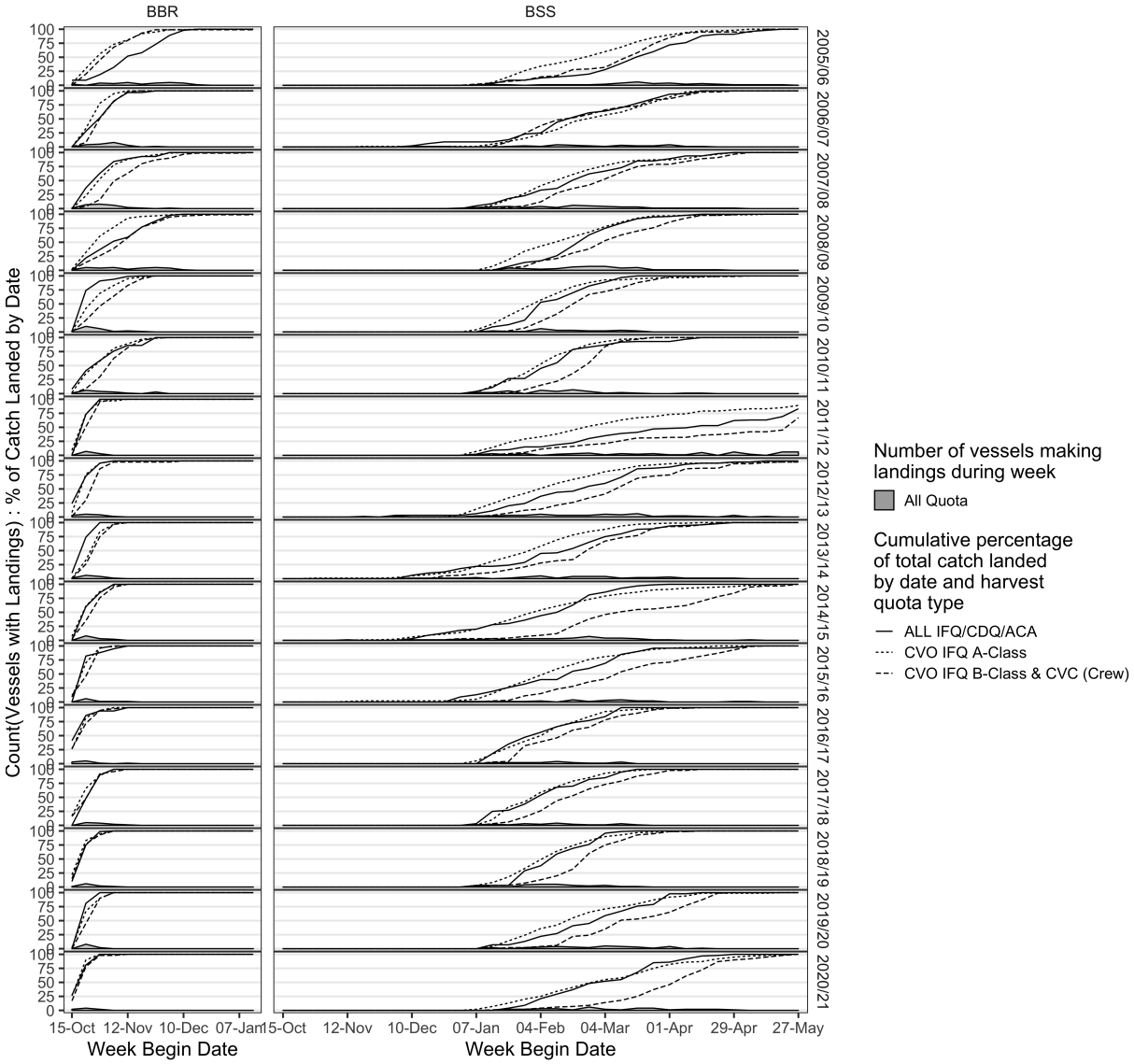
2.6. International Trade in Crab Commodities

U.S. foreign trade statistics for frozen, processed king and snow crab are summarized for the period 1991-2020 in Table 3.49 and depicted graphically in Figure 2.17. For most of the last two decades, the U.S. has been a net importer of both king and snow crab product, with a negative trade gap beginning in 1995 for king crab and 1998 for snow crab.

In 2020, the U.S. trade deficit in frozen snow crab product in terms of trade value reached a historical peak of $925 million in net import value on 53 thousand t in net import volume. U.S. exports of frozen snow crab product since 2003 has varied from a recent peak in 2012 of $145 million on 12.7 thousand t, to a recent low in 2018 at $43 million on 2.5 thousand t.

The trade deficit in frozen king crab product continued the recent increasing trend since 2015, at $495 million and 12.1 thousand metric tons (t) in net imports, and a record low in exports, at $15.2 million in export value on 710 t.

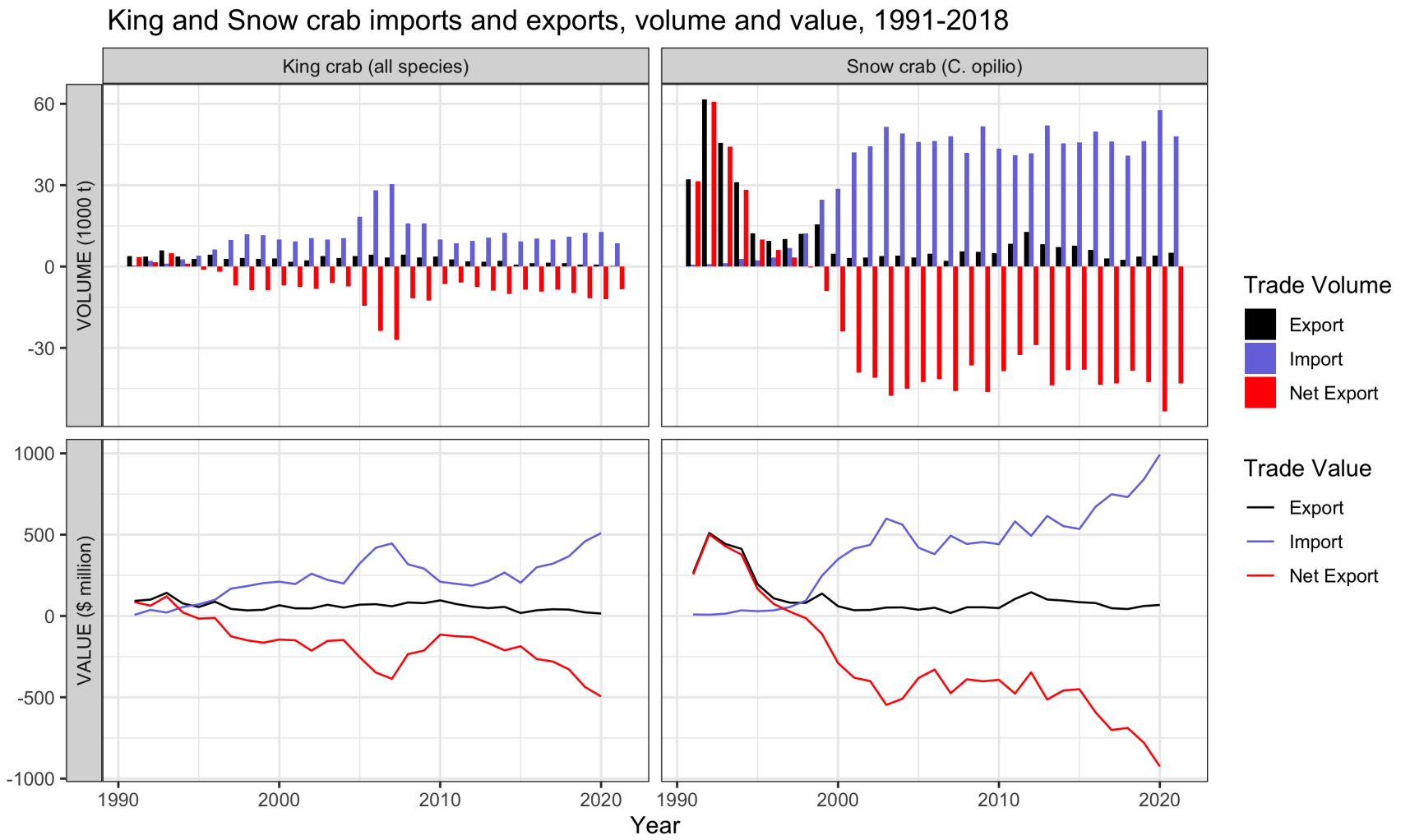
Figure 2.16: Crab Vessel Landing Activity and Cumulative Catch, by Quota Share Class and Week of Season: Bristol Bay Red King and Bering Sea Snow Crab



Source: ADF&G fish tickets via eLandings; NMFS RAM Division, IFQ accounting database. Tabular data available in Tables 3.46 and 3.47.

In the figure above, the plotted lines show cumulative percentage of fishing quota expended on landings over the course of the season, by quota type: ALL IFQ/CDQ/ACA includes all IFQ and CDQ programs quota landed by catcher vessels and catcher/processors; IFQ A-Class includes CVO A Class IFQ quota permits only; CVO IFQ B-Class & CVC (Crew) includes CVO B Class IFQ and CVC (crew) IFQ. The filled area in the graph indicates the count of vessels making landings each week. CDQ landings are not shown separately due to confidentiality restrictions. The vertical axis indicates count of vessels and percentage of quota share, both on a scale of 0-100, and the horizontal axis shows the end date of each week of the Bristol Bay red king (BBR) and Bering Seas snow (BSS) crab fishing season. BSS seasons normally open October 15 and close May 31 of the next calendar year; the 2011/12 BSS season was extended until June 15 due to an extended period of sea ice cover which substantially delayed prosecution of the fishery.

Figure 2.17: King and Snow Crab Exports and Imports by Calendar Year



Source: U.S. Foreign Census Bureau Foreign Trade Division, via NMFS Fisheries Statistics Division, U.S. Foreign Trade Database. Data available at `http:/www.st.nmfs.noaa.gov/st1/trade/`; Tabular data shown in figure available in Table 3.49. Trade value is inflation-adjusted to 2020-equivalent dollars using the GDP index. Imports and exports shown are for TSUSA product codes 306144010 (frozen king crab) and 306144020 (frozen snow crab).

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3. TABLES REPORTING ECONOMIC DATA FOR THE KING AND TANNER CRAB FISHERIES OF THE BERING SEA AND ALEUTIAN ISLANDS REGIONS

Table 3.1: TACs/GHLs, BSAI crab fishery management program allocations and usage

	Year	IFQ / general allocation (million lbs)	CDQ/ACA allocation (million lbs)	TAC/GHL (million lbs)	Percent IFQ/general allocation landed	Percent CDQ allocation landed
EAG	2005/06	2.70	0.30	3.00	95%	*
	2006/07	2.70	0.30	3.00	100%	*
	2007/08	2.70	0.30	3.00	100%	100%
	2008/09	2.84	0.32	3.15	100%	100%
	2009/10	2.84	0.32	3.15	*	*
	2010/11	2.84	0.32	3.15	*	*
	2011/12	2.84	0.32	3.15	*	100%
	2012/13	2.98	0.33	3.31	*	100%
	2013/14	2.98	0.33	3.31	*	100%
	2014/15	2.98	0.33	3.31	*	100%
	2015/16	2.98	0.33	3.31	*	100%
	2016/17	2.98	0.33	3.31	*	100%
	2017/18	2.98	0.33	3.31	*	100%
	2018/19	3.47	0.39	3.86	100%	100%
	2019/20	3.88	0.43	4.31	100%	100%
	2020/21	3.29	0.37	3.65	100%	100%
	2021/22	3.24	0.36	3.61	-	-
WAG	2005/06	2.43	0.27	2.70	98%	*
	2006/07	2.43	0.27	2.70	82%	*
	2007/08	2.43	0.27	2.70	92%	*
	2008/09	2.55	0.28	2.84	88%	*
	2009/10	2.55	0.28	2.84	*	*
	2010/11	2.55	0.28	2.84	*	*
	2011/12	2.55	0.28	2.84	*	*
	2012/13	2.68	0.30	2.98	*	*
	2013/14	2.68	0.30	2.98	*	*
	2014/15	2.68	0.30	2.98	*	*
	2015/16	2.68	0.30	2.98	*	*
	2016/17	2.01	0.22	2.24	*	*
	2017/18	2.01	0.22	2.24	100%	*
	2018/19	2.25	0.25	2.50	100%	*
	2019/20	2.58	0.29	2.87	99%	*
	2020/21	2.66	0.30	2.96	94%	*
	2021/22	2.08	0.23	2.32	-	-

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Table 3.1: Continued

	Year	IFQ / general allocation (million lbs)	CDQ/ACA allocation (million lbs)	TAC/GHL (million lbs)	Percent IFQ/general allocation landed	Percent CDQ allocation landed
	2005/06	16.50	1.83	18.33	100%	100%
	2006/07	13.97	1.55	15.53	99%	100%
	2007/08	18.34	2.04	20.38	100%	100%
	2008/09	18.33	2.04	20.36	100%	100%
	2009/10	14.41	1.60	16.01	100%	100%
	2010/11	13.36	1.48	14.84	100%	100%
	2011/12	7.05	0.78	7.83	100%	100%
	2012/13	7.07	0.79	7.85	100%	100%
BBR	2013/14	7.74	0.86	8.60	100%	100%
	2014/15	8.99	1.00	9.99	100%	100%
	2015/16	8.98	1.00	9.97	100%	100%
	2016/17	7.62	0.85	8.47	100%	100%
	2017/18	5.94	0.66	6.60	100%	100%
	2018/19	3.88	0.43	4.31	100%	100%
	2019/20	3.42	0.38	3.80	100%	100%
	2020/21	2.38	0.26	2.65	100%	100%
	2021/22	-	-	-	-	-
	2005/06	33.47	3.72	37.18	99%	100%
	2006/07	32.91	3.66	36.57	99%	100%
	2007/08	56.73	6.30	63.03	100%	100%
	2008/09	52.70	5.86	58.55	100%	100%
	2009/10	43.22	4.80	48.02	100%	100%
	2010/11	48.85	5.43	54.28	100%	100%
	2011/12	80.00	8.89	88.89	100%	100%
	2012/13	59.72	6.64	66.35	100%	100%
BSS	2013/14	48.58	5.40	53.98	100%	100%
	2014/15	61.16	6.80	67.95	100%	100%
	2015/16	36.55	4.06	40.61	100%	100%
	2016/17	19.41	2.16	21.57	100%	100%
	2017/18	17.06	1.90	18.96	100%	100%
	2018/19	24.82	2.76	27.58	100%	100%
	2019/20	30.62	3.40	34.02	100%	100%
	2020/21	40.50	4.50	45.00	100%	100%
	2021/22	5.04	0.56	5.60	-	-

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Table 3.1: Continued

	Year	IFQ / general allocation (million lbs)	CDQ/ACA allocation (million lbs)	TAC/GHL (million lbs)	Percent IFQ/general allocation landed	Percent CDQ allocation landed
BST	2005/06	1.46	0.16	1.62	54%	100%
EBT	2006/07	1.69	0.19	1.88	75%	72%
	2007/08	3.10	0.34	3.45	46%	42%
	2008/09	2.49	0.28	2.76	62%	100%
	2009/10	1.22	0.14	1.35	98%	100%
	2013/14	1.32	0.15	1.46	99%	100%
	2014/15	7.63	0.85	8.48	100%	100%
	2015/16	10.14	1.13	11.27	100%	100%
WBT	2005/06	0.73	0.08	0.81	54%	100%
	2006/07	0.98	0.11	1.09	64%	79%
	2007/08	1.96	0.22	2.18	24%	26%
	2008/09	1.38	0.15	1.54	8%	1%
	2013/14	1.48	0.16	1.65	81%	73%
	2014/15	5.96	0.66	6.63	78%	93%
	2015/16	7.56	0.84	8.40	100%	100%
	2017/18	2.25	0.25	2.50	100%	100%
	2018/19	2.20	0.24	2.44	100%	100%
	2020/21	2.11	0.23	2.35	62%	60%
	2021/22	0.99	0.11	1.10	-	-
SMB	2009/10	1.05	0.12	1.17	44%	0%
	2010/11	1.44	0.16	1.60	77%	98%
	2011/12	2.12	0.24	2.36	80%	77%
	2012/13	1.47	0.16	1.63	99%	100%
	2014/15	0.59	0.07	0.66	*	*
	2015/16	0.37	0.04	0.41	*	0%

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Table 3.1: Continued

	Year	IFQ / general allocation (million lbs)	CDQ/ACA allocation (million lbs)	TAC/GHL (million lbs)	Percent IFQ/general allocation landed	Percent CDQ allocation landed
	2005	0.34	0.03	0.37	108%	100%
	2006	0.42	0.03	0.45	100%	96%
	2007	0.29	0.02	0.31	99%	100%
	2008	0.38	0.03	0.41	96%	100%
	2009	0.35	0.03	0.38	107%	100%
	2010	0.37	0.03	0.40	106%	98%
	2011	0.33	0.03	0.36	113%	100%
	2012	0.43	0.03	0.47	102%	100%
NSR	2013	0.46	0.04	0.46	81%	50%
	2014	0.35	0.03	0.38	102%	98%
	2015	0.36	0.03	0.39	102%	100%
	2016	0.48	0.04	0.52	96%	100%
	2017	0.46	0.04	0.50	98%	100%
	2018	0.30	0.02	0.32	103%	100%
	2019	0.14	0.01	0.15	50%	0%
	2020	0.16	0.01	0.17	0%	0%
	2021	0.30	0.01	0.31	0%	0%
	2007	0.15	-	0.15	0%	-
	2008	0.15	-	0.15	0%	-
	2009	0.15	-	0.15	0%	-
	2010	0.15	-	0.15	*	-
	2011	0.15	-	0.15	*	-
	2012	0.15	-	0.15	*	-
	2013	0.15	-	0.15	*	-
PIG	2014	0.15	-	0.15	*	-
	2015	0.13	-	0.13	0%	-
	2016	0.13	-	0.13	0%	-
	2017	0.13	-	0.13	*	-
	2018	0.13	-	0.13	*	-
	2019	0.13	-	0.13	100%	-
	2020	0.13	-	0.13	*	-
	2021	0.13	-	0.13	*	-

Notes: Adak Community Allocation (ACA) applies to Western Aleutian Islands golden king crab fishery only. Values shown for the Norton Sound Red king crab fishery for 2005 through 2015 are for the summer commercial fishery only; prior to 2016, the winter commercial fishery was not managed with a GHL or TAC. General allocations and GHL apply to non-rationalized stocks (NSR and PIG). Data for PIK fishery (closed since 1999) and WAI fishery (closed since 2004/2005) are not shown.

Source: ADF&G (TAC and allocation amounts for all fisheries, usage for Norton Sound red king crab, Pribilof Islands golden king crab, and CDQ/ACA fisheries), and NMFS AKRO RAM division (IFQ usage).

Table 3.2: BSAI crab fishery participation by calendar year

	Year	CFEC permits	Vessels	Buyers/processors
All BSAI Crab	1998	790	294	54
	1999	607	293	43
	2000	562	277	39
	2001	529	280	36
	2002	576	280	37
	2003	570	278	37
	2004	538	281	34
	2005	355	212	30
	2006	272	128	20
	2007	232	114	27
	2008	262	116	23
	2009	242	112	27
	2010	232	102	24
	2011	235	102	27
	2012	284	113	26
	2013	237	115	29
	2014	257	109	25
	2015	270	117	22
	2016	262	118	21
	2017	276	108	23
	2018	231	101	20
	2019	194	91	21
	2020	156	67	22
BBR	1998	281	274	28
	1999	266	256	24
	2000	255	244	22
	2001	240	230	23
	2002	253	241	24
	2003	264	250	26
	2004	268	251	25
	2005	115	89	16
	2006	100	81	15
	2007	85	73	18
	2008	98	79	17
	2009	86	70	16
	2010	79	65	17
	2011	71	62	18
	2012	74	64	17
	2013	73	63	17
	2014	72	63	17
	2015	71	64	15
	2016	70	63	17
	2017	69	61	17
	2018	62	55	15
	2019	65	56	14
	2020	54	47	15

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Table 3.2: Continued

	Year	CFEC permits	Vessels	Buyers/processors
BSS	1998	276	230	44
	1999	298	241	37
	2000	244	231	28
	2001	219	207	23
	2002	205	191	26
	2003	202	190	21
	2004	200	189	23
	2005	178	167	20
	2006	106	78	13
	2007	89	68	18
	2008	108	78	17
	2009	103	77	18
	2010	87	68	13
	2011	88	68	16
	2012	109	72	16
	2013	91	71	15
	2014	93	70	13
	2015	94	70	14
	2016	86	68	12
	2017	78	63	14
	2018	78	63	13
	2019	77	61	13
	2020	77	59	13
EBT	2006	22	21	6
	2007	32	23	9
	2008	27	19	10
	2009	21	15	11
	2010	5	4	7
	2013	22	19	12
	2014	44	33	12
	2015	51	41	11
	2016	34	25	11
	2017	2	1	2
WBT	2005	5	4	5
	2006	41	32	9
	2007	22	18	8
	2008	18	18	8
	2009	9	9	7
	2013	4	3	3
	2014	26	22	13
	2015	51	38	13
	2016	39	31	10
	2017	21	16	11
	2018	34	30	14
	2019	22	18	10
	2021	25	20	11

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Table 3.2: Continued

	Year	CFEC permits	Vessels	Buyers/processors
EAG	1998	15	14	7
	1999	15	15	7
	2000	16	15	4
	2001	19	19	4
	2002	20	19	4
	2003	18	18	4
	2004	19	19	4
	2005	9	6	4
	2006	12	6	6
	2007	7	4	5
	2008	8	4	6
	2009	9	3	6
	2010	8	3	7
	2011	9	3	10
	2012	9	3	11
	2013	8	3	10
	2014	8	3	8
	2015	7	3	7
	2016	8	3	9
	2017	9	4	9
	2018	10	4	9
	2019	10	3	9
	2020	10	3	11
WAG	1998	13	8	6
	1999	15	12	5
	2000	22	15	7
	2001	20	13	7
	2002	13	8	6
	2003	8	7	5
	2004	8	6	4
	2005	7	4	5
	2006	7	3	3
	2007	6	4	4
	2008	6	3	5
	2009	4	2	6
	2010	7	3	5
	2011	6	3	9
	2012	6	4	9
	2013	7	4	8
	2014	3	2	9
	2015	5	2	8
	2016	6	3	8
	2017	5	3	9
	2018	6	3	6
	2019	7	3	6
	2020	6	3	8

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Table 3.2: Continued

	Year	CFEC permits	Vessels	Buyers/processors
SMB	1998	136	131	16
	2009	7	7	6
	2010	14	11	9
	2011	23	18	11
	2012	22	17	11
	2014	5	4	6
	2015	3	3	4
WAI	1998	1	1	1
	1999	0	0	0
	2002	33	33	9
	2003	30	30	10
	2004	0	0	0
NSR	1998	16	8	2
	1999	13	10	2
	2000	29	15	7
	2001	36	29	4
	2002	54	32	4
	2003	53	25	4
	2004	41	26	2
	2005	44	30	3
	2006	41	26	2
	2007	42	28	4
	2008	34	22	2
	2009	29	23	3
	2010	37	23	3
	2011	38	24	2
	2012	64	29	3
	2013	52	33	5
	2014	65	33	4
	2015	72	36	3
	2016	75	36	2
	2017	110	36	2
	2018	71	33	1
	2019	32	24	1
	2020	1	0	0

Continued on next page.

Table 3.2: Continued

	Year	CFEC permits	Vessels	Buyers/processors
	1998	4	3	3
	1999	4	3	2
	2000	8	6	4
	2001	6	6	3
	2002	9	8	3
	2003	3	3	2
	2004	5	5	2
	2005	4	4	2
PIG	2010	1	1	2
	2011	2	2	1
	2012	1	1	1
	2013	1	1	1
	2014	1	1	1
	2017	2	2	2
	2018	2	1	1
	2019	2	2	2
	2020	4	4	3

Notes: Data shown by calendar year. Cells displaying '-' indicate fishery closure years. CFEC permits counts unique permits reported on ADF&F fish ticket crab landing reports; includes permits held by distinct crab vessel operators and additional permits required to fish CDQ/ACA allocation.

[a] Data for Norton Sound red king crab are aggregated over the summer and winter commercial fisheries; as no vessels are used in the winter commercial fishery, the number of CFEC permits fished is a better measure of participation and effort for the combined fisheries.

[b] Count of buyers/processors for Norton Sound red king crab excludes catcher seller operations.

[c] Excludes participation in 2000/2001 and 2001/2002 Western Aleutian Islands red king crab Petrel Bank test fishery.

Source: ADF&G fish ticket data, and eLandings

Table 3.3: Fleet composition by season, CR Program fisheries

	Season	Total vessels	Catcher vessels	Catcher/processors
BBR	1998	274	263	11
	1999	256	248	8
	2000	244	238	8
	2001	230	224	8
	2002	241	234	9
	2003	250	242	8
	2004	251	243	8
	2005/06	89	86	4
	2006/07	81	79	3
	2007/08	74	72	3
	2008/09	78	76	3
	2009/10	70	69	2
	2010/11	65	64	2
	2011/12	62	61	2
	2012/13	64	63	2
	2013/14	63	62	2
	2014/15	63	62	2
	2015/16	64	63	2
	2016/17	63	62	2
	2017/18	61	60	2
	2018/19	55	53	2
	2019/20	56	55	1
	2020/21	47	45	2
BSS	1998	230	219	12
	1999	241	232	10
	2000	231	222	9
	2001	207	201	8
	2002	191	183	9
	2003	190	185	5
	2004	189	183	6
	2005	167	161	6
	2005/06	78	74	4
	2006/07	69	65	4
	2007/08	78	74	4
	2008/09	77	73	4
	2009/10	68	66	2
	2010/11	68	67	2
	2011/12	72	70	2
	2012/13	70	68	2
	2013/14	70	68	2
	2014/15	70	68	2
	2015/16	70	69	2
	2016/17	63	61	2
	2017/18	63	61	2
	2018/19	61	59	2
	2019/20	59	58	2
	2020/21	62	60	2

Continued on next page.

Table 3.3: Continued

	Season	Total vessels	Catcher vessels	Catcher/processors
	2005/06	33	31	2
	2006/07	39	37	2
	2007/08	27	26	1
	2008/09	20	19	1
	2009/10	13	12	1
BST	2013/14	25	24	1
	2014/15	45	44	1
	2015/16	56	55	1
	2017/18	32	31	1
	2018/19	33	32	1
	2020/21	35	34	1
	1998	14	13	1
	1999	15	14	1
	2000	15	15	0
	2001	19	19	0
	2002	19	19	0
	2003	18	18	0
	2004	19	19	0
	2005/06	7	6	1
	2006/07	6	5	1
	2007/08	4	3	1
	2008/09	3	3	0
EAG	2009/10	3	3	0
	2010/11	3	3	0
	2011/12	3	3	0
	2012/13	3	3	1
	2013/14	3	3	1
	2014/15	3	3	0
	2015/16	3	3	0
	2016/17	4	4	0
	2017/18	4	4	0
	2018/19	3	3	0
	2019/20	3	3	0
	2020/21	3	3	0

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Table 3.3: Continued

	Season	Total vessels	Catcher vessels	Catcher/processors
WAG	1998/99	3	2	1
	1999/00	15	14	1
	2000/01	12	11	1
	2001/02	9	8	1
	2002/03	6	5	1
	2003/04	6	5	1
	2004/05	6	5	1
	2005/06	3	2	1
	2006/07	4	3	1
	2007/08	3	2	1
	2008/09	3	2	1
	2009/10	3	2	1
	2010/11	3	2	1
	2011/12	3	2	1
	2012/13	4	3	1
	2013/14	3	3	0
	2014/15	2	2	0
	2015/16	2	2	0
	2016/17	3	3	0
	2017/18	3	3	0
	2018/19	3	3	0
	2019/20	3	3	0
	2020/21	3	3	0
PIK	1998	58	58	0
SMB	1998	131	129	2
	2009/10	7	7	0
	2010/11	11	11	0
	2011/12	18	18	0
	2012/13	17	17	0
	2014/15	4	4	0
	2015/16	3	3	0
WAI	1998/99	1	0	1
	2002/03	33	31	2
	2003/04	30	28	2

Notes: Data shown for all FMP crab fisheries by season; 'All CR Fisheries' shows counts of distinct vessels participating in one or more of the FMP fisheries that were rationalized beginning in 2005 (i.e., excluding NSR and PIG fisheries).
Vessel counts shown for the Norton Sound Red king (NSR) crab fishery for 1998 through 2015 include only vessels participating in the summer commercial fishery; 2016 and later counts include vessels in both summer and/or winter commercial fisheries [a] Excludes participation in 2000/2001 and 2001/2002 Western Aleutian Islands red king crab Petrel Bank test fishery.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database and eLandings.

Table 3.4: Ex-vessel volume, gross revenue value, and average price: harvesting sector total, BSAI crab fisheries

	Year	Sold weight (million lbs)	Ex-vessel value ($million)	Weighted average, price ($/lb)	Mean(sd), price ($/lb)
AIG	1998	5.24	$15.19	$2.90	$2.94(0.20)
	1999	4.89	$22.09	$4.52	-
	2000	5.76	$27.80	$4.83	-
	2001	6.36	$30.11	$4.73	$4.79(0.53)
	2002	5.54	$26.20	$4.73	-
	2003	5.82	$28.10	$4.83	-
	2004	6.02	$26.21	$4.36	$4.35(0.10)
	2005	4.44	$15.08	$3.40	$3.36(0.29)
	2006	5.24	$12.71	$2.43	$2.59(0.42)
	2007	5.44	$14.66	$2.70	$2.73(0.36)
	2008	5.73	$22.53	$3.93	*
	2009	5.51	$16.26	$2.95	*
	2010	6.09	$27.26	$4.47	*
	2011	6.00	$31.98	$5.33	*
	2012	5.92	$26.10	$4.41	$4.36(0.38)
	2013	5.94	$26.90	$4.53	$4.51(0.39)
	2014	6.07	$26.99	$4.45	$4.59
	2015	5.80	$27.25	$4.70	$4.86
	2016	5.60	$32.33	$5.77	$6.14
	2017	5.56	$32.54	$5.85	$5.90
	2018	6.51	$41.40	$6.36	$6.59
	2019	6.78	$44.05	$6.50	$6.48
	2020	5.72	$41.68	$7.29	$7.35
BBR	1998	14.70	$58.90	$4.01	$4.04(0.74)
	1999	11.53	$105.25	$9.13	-
	2000	8.07	$54.45	$6.75	-
	2001	8.30	$56.69	$6.83	$6.84(0.57)
	2002	9.48	$80.84	$8.53	-
	2003	15.39	$106.09	$6.89	-
	2004	15.02	$94.09	$6.26	$6.29(0.31)
	2005	18.14	$105.88	$5.84	$5.80(0.17)
	2006	15.55	$75.02	$4.83	$4.85(0.23)
	2007	20.17	$110.08	$5.46	$5.54(0.65)
	2008	20.13	$125.86	$6.25	$6.19(0.35)
	2009	15.78	$87.91	$5.57	$5.61(0.20)
	2010	14.73	$128.46	$8.72	$8.78(0.76)
	2011	7.79	$93.78	$12.04	$12.12(1.61)
	2012	7.80	$70.86	$9.08	$9.16(0.46)
	2013	8.52	$67.99	$7.98	$8.11(0.56)
	2014	9.87	$71.80	$7.27	$7.37(0.65)
	2015	9.77	$84.83	$8.68	$8.79(0.39)
	2016	8.41	$97.90	$11.65	$11.74(0.98)
	2017	6.55	$63.35	$9.67	$9.73(0.21)
	2018	4.23	$45.26	$10.70	$10.82(0.80)
	2019	3.77	$45.32	$12.01	$11.67(0.59)
	2020	2.64	$32.22	$12.20	$10.23(3.00)

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Table 3.4: Continued

	Year	Sold weight (million lbs)	Ex-vessel value ($million)	Weighted average, price ($/lb)	Mean(sd), price ($/lb)
BSS	1998	249.05	$212.57	$0.85	$0.85(0.06)
	1999	192.41	$275.58	$1.43	-
	2000	32.81	$86.38	$2.63	-
	2001	24.78	$54.33	$2.19	$2.20(0.13)
	2002	31.94	$60.63	$1.90	-
	2003	27.51	$68.19	$2.48	-
	2004	23.69	$64.41	$2.72	$2.73(0.11)
	2005	24.86	$55.03	$2.21	$2.34(0.23)
	2006	38.02	$53.46	$1.41	$1.42(0.18)
	2007	34.76	$73.18	$2.11	$2.09(0.25)
	2008	62.23	$128.29	$2.06	$2.16(0.53)
	2009	57.68	$100.06	$1.73	$1.75(0.26)
	2010	47.84	$72.68	$1.52	$1.53(0.23)
	2011	54.05	$159.51	$2.95	$2.97(0.37)
	2012	88.23	$218.49	$2.48	$2.52(0.25)
	2013	70.69	$183.39	$2.59	$2.66(0.12)
	2014	55.22	$144.24	$2.61	$2.75(0.47)
	2015	60.91	$134.53	$2.21	$2.22(0.14)
	2016	39.57	$115.84	$2.93	$3.03(0.76)
	2017	21.32	$91.96	$4.31	$4.40(0.66)
	2018	18.84	$77.45	$4.11	$4.20(0.28)
	2019	27.26	$109.64	$4.02	$4.11(0.24)
	2020	33.61	$132.01	$3.93	$4.01(0.30)
BST	2005	0.26	*	*	*
	2006	0.99	$1.92	$1.94	$1.85(0.44)
	2007	2.25	$4.99	$2.22	$2.20(0.72)
	2008	2.33	$5.29	$2.27	$2.23(0.28)
	2009	2.14	$4.96	$2.32	$2.29(0.20)
	2010	0.37	*	*	*
	2013	1.25	$3.45	$2.76	$2.76(0.76)
	2014	9.09	$23.81	$2.62	$2.69(0.36)
	2015	14.98	$42.34	$2.83	$2.92(0.37)
	2016	10.45	$33.86	$3.24	$3.20(0.21)
	2017	1.41	$5.97	$4.24	$4.32(0.30)
	2018	2.29	$9.79	$4.28	$4.30(0.58)
	2019	1.18	$5.35	$4.53	$4.51(0.22)
	2020	0.62	$2.56	$4.12	$4.01(1.07)
PIK	1998	1.03	$3.68	$3.57	$3.64(0.58)
SMB	1998	2.95	$8.38	$2.84	$2.88(0.22)
	2009	0.45	$1.57	$3.49	$3.55(0.30)
	2010	1.25	$7.18	$5.73	$5.82(0.30)
	2011	1.85	$11.27	$6.09	$6.51(0.69)
	2012	1.59	$7.64	$4.79	$4.81(0.29)
	2014	0.30	*	*	*
	2015	*	*	*	*
WAI	1998	*	*	*	*
	2002	0.50	$4.27	$8.50	-
	2003	0.48	$3.27	$6.89	-

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Table 3.4: Continued

	Year	Sold weight (million lbs)	Ex-vessel value ($million)	Weighted average, price ($/lb)	Mean(sd), price ($/lb)
	1998	0.03	$0.07	$2.38	-
	1999	0.03	$0.14	$4.73	-
	2000	0.32	$1.42	$4.43	-
	2001	0.28	$1.50	$5.39	-
	2002	0.26	$2.15	$8.29	-
	2003	0.28	$1.49	$5.31	-
	2004	0.33	$1.35	$4.04	-
	2005	0.40	$1.74	$4.39	-
	2006	0.44	$1.40	$3.16	-
	2007	0.32	$1.09	$3.45	-
	2008	0.40	$1.69	$4.24	-
NSR	2009	0.40	$1.49	$3.75	-
	2010	0.42	$1.82	$4.32	-
	2011	0.40	$2.38	$5.89	-
	2012	0.50	$3.03	$6.10	-
	2013	0.44	$2.81	$6.34	-
	2014	0.42	$2.37	$5.69	-
	2015	0.49	$2.96	$6.07	-
	2016	0.50	$3.50	$7.08	-
	2017	0.48	$3.19	$6.63	-
	2018	0.32	$2.09	$6.48	-
	2019	*	*	*	-
	2020	*	*	*	-

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Table 3.4: Continued

	Year	Sold weight (million lbs)	Ex-vessel value ($million)	Weighted average, price ($/lb)	Mean(sd), price ($/lb)
	1998	*	*	*	-
	1999	*	*	*	-
	2000	0.12	$0.60	$4.96	-
	2001	*	*	*	-
	2002	*	*	*	-
	2003	*	*	*	-
	2004	*	*	*	-
	2005	*	*	*	-
PIG	2010	*	*	*	-
	2011	*	*	*	-
	2012	*	*	*	-
	2013	*	*	*	-
	2014	*	*	*	-
	2017	*	*	*	-
	2018	*	*	*	-
	2019	*	*	*	-
	2020	0.11	*	*	-

Notes: Data shown for all BSAI crab fisheries by calendar year. Except where noted, data reflect total commercial volume and value across all management programs (LLP/open access, IFQ, CDQ, ACA) inclusive of all harvesting sector production (CV, CP, and catcher-sellers); approximation of ex-vessel sale value of CP and catcher-seller volume is incorporated in revenue total by using weighted average ex-vessel sale price. Price results are sourced from CV sector EDR data where available (1998, 2001, 2004, and 2005-current for CR program fisheries) and secondarily from CFEC gross earnings estimates (1999-2000, 2002-2003 for CR fisheries; all years for non-CR fisheries).
Weighted average price is calculated as the ratio of aggregate sales revenue to aggregate sold volume, and thus does not include a measure of distributional variation. Mean price results as shown are calculated as the arithmetic mean over price observations by vessel or processor (i.e., each price observation is weighted equally), with standard deviation (sd) reported to indicate relative variability over vessel-level observations, noting that large standard deviations are likely indicative of a non-symmetrical distribution.
[a] Landings and ex-vessel revenue suppressed in years where CDQ fishery landings are confidential.
[b] Excludes landings in Petrel Bank test fishery in 2001.
[c] Data for Norton Sound red king crab are aggregated over the summer and winter commercial fisheries.

Source: ADF&G fish ticket data, eLandings, CFEC ex-vessel pricing, ADF&G Commercial Operator's Annual Report (COAR) data, NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.5: Ex-vessel price and share of fishery-year landings by owner or leaseholder state of residence, catcher vessels - CR Program fisheries

		State	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
AIG	98/01/04	AK	3(2)	-	-	*	*
		WA	43(18)	-	-	$4.06	$4.14(0.87)
		Other	6(2)	-	-	*	*
	2005	WA	8	80%	80%	$3.42	$3.32(0.26)
		Other	2	*	*	*	*
	2006	WA	5	80%	80%	$2.42	$2.52(0.21)
		Other	1	*	*	*	*
	2007	AK	1	*	*	*	*
		WA	4	*	*	*	*
		Other	1	*	*	*	*
	2008	AK	1	*	*	*	*
		WA	2	*	*	*	*
		Other	1	*	*	*	*
	2009	AK	1	*	*	*	*
		WA	2	*	*	*	*
		Other	1	*	*	*	*
	2010	AK	1	*	*	*	*
		WA	2	*	*	*	*
		Other	1	*	*	*	*
	2011	AK	1	*	*	*	*
		WA	2	*	*	*	*
		Other	1	*	*	*	*
	2012	AK	2	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2013	AK	2	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2014	AK	1	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2015	AK	1	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2016	AK	1	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2017	AK	1	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2018	AK	1	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2019	AK	1	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*
	2020	AK	1	*	*	*	*
		WA	3	*	*	*	*
		Other	1	*	*	*	*

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Table 3.5: Continued

		State	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
	98/01/04	AK	100(41)	-	-	$1.13	$1.91(0.82)
		WA	354(143)	-	-	$1.14	$1.93(0.80)
		Other	70(30)	-	-	$1.14	$1.90(0.80)
	2005	AK	29	16%	17%	$2.35	$2.35(0.04)
		WA	103	73%	71%	$2.16	$2.32(0.27)
		Other	18	11%	12%	$2.37	$2.38(0.10)
	2006	AK	17	20%	20%	$1.38	$1.40(0.09)
		WA	48	67%	67%	$1.41	$1.42(0.21)
		Other	9	13%	13%	$1.43	$1.43(0.17)
	2007	AK	14	23%	23%	$2.08	$2.10(0.23)
		WA	43	66%	66%	$2.12	$2.10(0.27)
		Other	7	11%	11%	$2.08	$2.02(0.16)
	2008	AK	15	22%	21%	$2.01	$2.04(0.32)
		WA	50	66%	69%	$2.13	$2.22(0.58)
		Other	9	12%	11%	$1.80	$2.01(0.49)
	2009	AK	19	32%	33%	$1.76	$1.81(0.37)
		WA	45	59%	59%	$1.73	$1.74(0.18)
		Other	9	9%	9%	$1.68	$1.71(0.25)
	2010	AK	14	23%	23%	$1.52	$1.54(0.08)
		WA	40	65%	65%	$1.52	$1.53(0.28)
		Other	12	11%	11%	$1.49	$1.50(0.12)
BSS	2011	AK	15	24%	24%	$2.95	$3.01(0.18)
		WA	40	62%	63%	$2.96	$2.95(0.45)
		Other	11	14%	13%	$2.93	$3.03(0.22)
	2012	AK	25	34%	34%	$2.47	$2.49(0.36)
		WA	37	53%	53%	$2.48	$2.53(0.18)
		Other	9	13%	13%	$2.48	$2.58(0.15)
	2013	AK	26	33%	34%	$2.60	$2.66(0.11)
		WA	34	55%	55%	$2.59	$2.66(0.13)
		Other	9	12%	12%	$2.60	$2.68(0.10)
	2014	AK	26	36%	37%	$2.65	$2.73(0.21)
		WA	32	51%	50%	$2.57	$2.69(0.36)
		Other	10	13%	14%	$2.64	$3.03(0.98)
	2015	AK	26	37%	37%	$2.20	$2.21(0.12)
		WA	32	50%	50%	$2.20	$2.23(0.09)
		Other	10	13%	13%	$2.27	$2.22(0.30)
	2016	AK	25	35%	35%	$2.92	$2.96(0.13)
		WA	32	54%	54%	$2.93	$2.97(0.16)
		Other	8	11%	11%	$2.91	$2.98(0.09)
	2017	AK	24	33%	33%	$4.31	$4.41(0.27)
		WA	28	56%	56%	$4.31	$4.39(0.94)
		Other	9	11%	12%	$4.36	$4.42(0.18)
	2018	AK	23	30%	30%	$4.11	$4.15(0.28)
		WA	29	59%	59%	$4.11	$4.23(0.29)
		Other	8	11%	11%	$4.14	$4.21(0.14)
	2019	AK	23	34%	34%	$4.05	$4.12(0.24)
		WA	28	53%	54%	$4.04	$4.15(0.17)
		Other	8	13%	12%	$3.86	$3.93(0.42)
	2020	AK	21	28%	27%	$3.90	$3.96(0.33)
		WA	29	60%	60%	$3.93	$4.01(0.27)
		Other	8	12%	12%	$4.01	$4.12(0.28)

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Table 3.5: Continued

		State	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
	98/01/04	AK	122(49)	-	-	$5.67	$5.70(1.33)
		WA	429(174)	-	-	$5.59	$5.73(1.33)
		Other	82(33)	-	-	$5.47	$5.79(1.27)
	2005	AK	19	16%	16%	$5.79	$5.76(0.21)
		WA	53	69%	70%	$5.85	$5.82(0.15)
		Other	13	14%	14%	$5.84	$5.78(0.21)
	2006	AK	24	24%	23%	$4.79	$4.82(0.25)
		WA	48	66%	67%	$4.85	$4.87(0.23)
		Other	8	10%	10%	$4.78	$4.78(0.21)
	2007	AK	17	22%	23%	$5.48	$5.56(1.21)
		WA	44	67%	68%	$5.46	$5.53(0.42)
		Other	9	10%	10%	$5.28	$5.50(0.25)
	2008	AK	17	20%	20%	$6.44	$6.30(0.62)
		WA	51	71%	71%	$6.20	$6.16(0.21)
		Other	8	9%	9%	$6.24	$6.18(0.14)
	2009	AK	19	28%	28%	$5.52	$5.58(0.16)
		WA	40	62%	62%	$5.60	$5.63(0.17)
		Other	9	10%	10%	$5.52	$5.61(0.37)
	2010	AK	12	25%	24%	$8.58	$8.63(0.83)
		WA	38	62%	63%	$8.83	$8.93(0.70)
		Other	13	14%	13%	$8.48	$8.50(0.75)
BBR	2011	AK	12	23%	22%	$11.45	$10.46(0.94)
		WA	36	60%	61%	$12.35	$9.82(2.24)
		Other	11	17%	17%	$11.78	$9.54(2.64)
	2012	AK	21	31%	31%	$9.17	$9.20(0.46)
		WA	33	55%	55%	$9.03	$9.11(0.42)
		Other	9	13%	13%	$9.06	$9.24(0.59)
	2013	AK	23	37%	37%	$8.01	$8.06(0.41)
		WA	28	49%	49%	$7.95	$8.12(0.44)
		Other	10	14%	14%	$8.00	$8.00(0.45)
	2014	AK	22	34%	34%	$7.37	$7.43(0.37)
		WA	28	51%	51%	$7.23	$7.35(0.73)
		Other	10	15%	15%	$7.22	$7.28(0.94)
	2015	AK	23	36%	36%	$8.74	$8.82(0.39)
		WA	29	50%	50%	$8.63	$8.76(0.42)
		Other	10	14%	14%	$8.71	$8.82(0.30)
	2016	AK	21	35%	35%	$11.71	$11.74(0.16)
		WA	30	52%	52%	$11.62	$11.36(1.68)
		Other	10	13%	13%	$11.60	$11.59(0.28)
	2017	AK	21	33%	33%	$9.68	$9.71(0.24)
		WA	29	56%	56%	$9.69	$9.75(0.15)
		Other	9	12%	11%	$9.58	$9.68(0.32)
	2018	AK	19	36%	36%	$10.71	$10.83(0.47)
		WA	27	53%	53%	$10.69	$10.80(1.02)
		Other	7	11%	11%	$10.68	$10.91(0.31)
	2019	AK	18	31%	30%	$11.93	$11.61(0.38)
		WA	29	58%	58%	$11.99	$11.70(0.60)
		Other	8	12%	12%	$12.31	$11.43(1.03)
	2020	AK	16	34%	34%	$12.22	$9.56(3.40)
		WA	24	55%	55%	$12.20	$11.93(0.00)
		Other	6	11%	11%	$12.21	$11.84(0.00)

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Table 3.5: Continued

		State	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
BST	2005	AK	1	*	*	*	*
		WA	3	*	*	*	*
	2006	AK	6	11%	12%	$1.99	$1.82(0.32)
		WA	30	81%	81%	$1.94	$1.89(0.47)
		Other	5	7%	7%	$1.86	$1.53(0.25)
	2007	AK	7	26%	25%	$2.14	$2.13(0.30)
		WA	17	55%	57%	$2.33	$2.23(0.87)
		Other	3	*	*	*	*
	2008	AK	6	5%	4%	$2.00	$1.87(0.52)
		WA	19	61%	61%	$2.26	$2.28(0.18)
		Other	4	*	*	*	*
	2009	AK	5	17%	17%	$2.34	$2.32(0.13)
		WA	10	43%	41%	$2.22	$2.26(0.22)
		Other	2	*	*	*	*
	2010	AK	1	*	*	*	*
		WA	1	*	*	*	*
		Other	2	*	*	*	*
	2013	AK	8	31%	34%	$3.03	$2.91(0.67)
		WA	8	43%	37%	$2.34	$2.45(0.82)
		Other	3	*	*	*	*
	2014	AK	15	30%	30%	$2.69	$2.75(0.32)
		WA	15	41%	40%	$2.54	$2.62(0.37)
		Other	8	29%	30%	$2.66	$2.72(0.39)
	2015	AK	19	32%	33%	$2.97	$2.99(0.43)
		WA	24	41%	41%	$2.85	$2.96(0.30)
		Other	10	27%	25%	$2.62	$2.69(0.32)
	2016	AK	15	28%	28%	$3.24	$3.27(0.12)
		WA	19	43%	42%	$3.15	$3.18(0.20)
		Other	8	29%	30%	$3.37	$3.15(0.32)
	2017	AK	2	*	*	*	*
		WA	10	58%	59%	$4.35	$4.41(0.11)
		Other	4	*	*	*	*
	2018	AK	9	36%	37%	$4.42	$4.39(0.28)
		WA	17	55%	53%	$4.12	$4.20(0.72)
		Other	3	*	*	*	*
	2019	AK	5	38%	38%	$4.51	$4.44(0.35)
		WA	8	50%	50%	$4.54	$4.56(0.13)
		Other	4	*	*	*	*
	2020	AK	8	17%	18%	$4.39	$4.37(1.19)
		WA	13	72%	73%	$4.19	$3.99(1.06)
		Other	2	*	*	*	*

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Table 3.5: Continued

		State	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
PIK	98/01/04	AK	12(12)	-	-	$3.64	$3.83(0.80)
		WA	28(28)	-	-	$3.88	$3.72(0.72)
		Other	5(5)	-	-	$3.46	$3.48(0.06)
SMB	98/01/04	AK	20(20)	-	-	$2.81	$2.82(0.08)
		WA	61(61)	-	-	$2.86	$2.91(0.26)
		Other	14(14)	-	-	$2.82	$2.83(0.10)
	2009	AK	1	*	*	*	*
		WA	5	71%	72%	$3.56	$3.61(0.32)
		Other	1	*	*	*	*
	2010	AK	3	*	*	*	*
		WA	5	47%	49%	$5.95	$5.94(0.07)
		Other	2	*	*	*	*
	2011	AK	6	25%	26%	$6.40	$6.66(0.73)
		WA	9	50%	50%	$6.10	$6.51(0.63)
		Other	3	*	*	*	*
	2012	AK	10	50%	50%	$4.85	$4.87(0.26)
		WA	5	31%	30%	$4.63	$4.65(0.31)
		Other	2	*	*	*	*
	2014	AK	2	*	*	*	*
		WA	1	*	*	*	*
		Other	1	*	*	*	*
	2015	AK	1	*	*	*	*
		WA	1	*	*	*	*
		Other	1	*	*	*	*
WAI	98/01/04	WA	2(2)	-	-	*	*
		Other	1(1)	-	-	*	*

Notes: See footnote on previous table regarding weighted and mean price. Data shown by calendar year for EDR reporting years 2005-present, and as three-year average over pre-rationalization reporting years (1998, 2001, and 2004, shown as '98/01/04'). Except where noted, data reflect total catcher-vessel sector commercial volume and revenue value across all management programs (LLP/open access, IFQ, CDQ, ACA). Beginning in 2012, data include ex-vessel sales reported by catcher/processor sector.

[a] Landings in 2001 Petrel Bank test fishery; 1998 fishery data unavailable.

[b] Vessels column shows total count of vessel-level observations for fishery-year; for 98/01/04, count of unique vessels represented over all observations in the 3-year data series is shown in parentheses. In a limited number of observations where there is missing data for either revenue or volume, average price for the fishery/year is used to impute the missing value.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.6: Ex-vessel price and share of fishery-year landings by quota type, catcher vessels, CR Program fisheries

		Type	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
		CVOA	6	75%	72%	$2.31	$2.38(0.17)
	2006	CVOB/CPO/CDQ/ADAK	5	23%	27%	$2.80	$2.82(0.60)
		CVC/CPC	3	*	*	*	*
		CVOA	5	81%	81%	$2.71	$2.74(0.34)
	2007	CVOB/CPO/CDQ/ADAK	6	17%	16%	$2.61	$2.64(0.43)
		CVC/CPC	3	*	*	*	*
		CVOA	4	*	*	*	*
	2008	CVOB/CPO/CDQ/ADAK	4	*	*	*	*
		CVC/CPC	4	*	*	*	*
		CVOA	4	*	*	*	*
	2009	CVOB/CPO/CDQ/ADAK	4	*	*	*	*
		CVC/CPC	4	*	*	*	*
		CVOA	4	*	*	*	*
	2010	CVOB/CPO/CDQ/ADAK	4	*	*	*	*
		CVC/CPC	4	*	*	*	*
		CVOA	4	*	*	*	*
	2011	CVOB/CPO/CDQ/ADAK	4	*	*	*	*
		CVC/CPC	4	*	*	*	*
		CVOA	4	*	*	*	*
AIG	2012	CVOB/CPO/CDQ/ADAK	6	36%	35%	$4.30	$4.32(0.31)
		CVC/CPC	4	*	*	*	*
		CVOA	4	*	*	*	*
	2013	CVOB/CPO/CDQ/ADAK	6	41%	39%	$4.29	$4.38(0.35)
		CVC/CPC	5	3%	3%	$4.48	$4.47(0.52)
		CVOA	5	69%	69%	$4.46	$4.47(0.37)
	2014	CVOB/CPO/CDQ/ADAK	5	29%	28%	$4.38	$4.57(0.29)
		CVC/CPC	5	2%	2%	$4.75	$4.72(0.23)
		CVOA	5	60%	61%	$4.78	$4.91(0.50)
	2015	CVOB/CPO/CDQ/ADAK	5	36%	35%	$4.55	$4.71(0.66)
		CVC/CPC	5	3%	4%	$4.81	$4.95(0.74)
		CVOA	4	*	*	*	*
	2016	CVOB/CPO/CDQ/ADAK	5	38%	40%	$6.10	$6.31(0.72)
		CVC/CPC	4	*	*	*	*
		CVOA	5	58%	58%	$5.90	$6.08(0.58)
	2017	CVOB/CPO/CDQ/ADAK	5	38%	38%	$5.77	$5.71(0.82)
		CVC/CPC	5	4%	4%	$5.83	$5.90(1.22)
		CVOA	5	62%	60%	$6.19	$6.15(0.12)
	2018	CVOB/CPO/CDQ/ADAK	5	36%	37%	$6.57	$6.69(0.75)
		CVC/CPC	4	*	*	*	*
		CVOA	5	63%	63%	$6.42	$6.35(0.29)
	2019	CVOB/CPO/CDQ/ADAK	5	33%	34%	$6.58	$6.55(0.70)
		CVC/CPC	5	3%	3%	$7.15	$6.54(1.22)
		CVOA	5	66%	65%	$7.22	$7.09(0.44)
	2020	CVOB/CPO/CDQ/ADAK	5	32%	32%	$7.39	$7.50(0.62)
		CVC/CPC	4	*	*	*	*

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Table 3.6: Continued

		Type	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
		CVOA	77	77%	77%	$4.81	$4.81(0.21)
	2006	CVOB/CPO/CDQ/ADAK	65	19%	19%	$4.89	$4.88(0.22)
		CVC/CPC	49	4%	3%	$4.78	$4.87(0.26)
		CVOA	69	78%	78%	$5.45	$5.47(0.31)
	2007	CVOB/CPO/CDQ/ADAK	53	19%	19%	$5.45	$5.51(0.93)
		CVC/CPC	41	3%	3%	$5.33	$5.68(0.65)
		CVOA	73	76%	76%	$6.27	$6.18(0.48)
	2008	CVOB/CPO/CDQ/ADAK	56	22%	22%	$6.20	$6.18(0.21)
		CVC/CPC	38	2%	2%	$6.24	$6.24(0.18)
		CVOA	68	77%	77%	$5.55	$5.55(0.12)
	2009	CVOB/CPO/CDQ/ADAK	53	20%	20%	$5.62	$5.66(0.23)
		CVC/CPC	39	3%	3%	$5.64	$5.68(0.24)
		CVOA	63	76%	76%	$8.64	$8.61(0.56)
	2010	CVOB/CPO/CDQ/ADAK	52	20%	21%	$9.05	$8.87(0.95)
		CVC/CPC	33	4%	4%	$8.60	$8.98(0.69)
		CVOA	58	79%	78%	$11.94	$10.31(0.86)
	2011	CVOB/CPO/CDQ/ADAK	48	19%	20%	$12.53	$9.94(2.49)
		CVC/CPC	34	2%	2%	$11.46	$9.08(3.09)
		CVOA	61	77%	76%	$9.01	$9.00(0.46)
BBR	2012	CVOB/CPO/CDQ/ADAK	47	21%	21%	$9.31	$9.26(0.39)
		CVC/CPC	33	3%	3%	$9.34	$9.29(0.47)
		CVOA	58	76%	76%	$7.90	$7.88(0.35)
	2013	CVOB/CPO/CDQ/ADAK	51	21%	22%	$8.24	$8.20(0.45)
		CVC/CPC	30	2%	3%	$8.20	$8.25(0.39)
		CVOA	59	75%	75%	$7.35	$7.35(0.36)
	2014	CVOB/CPO/CDQ/ADAK	48	23%	22%	$7.03	$7.37(0.74)
		CVC/CPC	32	3%	3%	$7.38	$7.41(0.91)
		CVOA	60	76%	75%	$8.59	$8.57(0.41)
	2015	CVOB/CPO/CDQ/ADAK	47	21%	22%	$8.95	$8.91(0.31)
		CVC/CPC	33	3%	3%	$9.04	$9.02(0.22)
		CVOA	59	75%	75%	$11.61	$11.61(0.16)
	2016	CVOB/CPO/CDQ/ADAK	46	20%	21%	$11.84	$11.75(0.27)
		CVC/CPC	29	5%	4%	$11.31	$10.56(3.89)
		CVOA	59	77%	77%	$9.65	$9.63(0.19)
	2017	CVOB/CPO/CDQ/ADAK	50	21%	21%	$9.76	$9.78(0.21)
		CVC/CPC	33	2%	2%	$9.81	$9.82(0.18)
		CVOA	52	77%	76%	$10.63	$10.59(0.33)
	2018	CVOB/CPO/CDQ/ADAK	40	20%	21%	$10.94	$10.98(0.59)
		CVC/CPC	34	3%	3%	$10.81	$10.98(1.29)
		CVOA	53	74%	74%	$11.90	$11.66(0.52)
	2019	CVOB/CPO/CDQ/ADAK	47	23%	24%	$12.30	$11.42(0.93)
		CVC/CPC	31	3%	3%	$12.50	$11.85(0.01)
		CVOA	45	76%	75%	$12.10	$11.91(0.06)
	2020	CVOB/CPO/CDQ/ADAK	38	22%	22%	$12.52	$7.45(0.00)
		CVC/CPC	28	3%	3%	$12.71	$4.57(0.00)

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Table 3.6: Continued

		Type	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
		CVOA	73	80%	79%	$1.40	$1.40(0.14)
	2006	CVOB/CPO/CDQ/ADAK	63	18%	18%	$1.42	$1.42(0.26)
		CVC/CPC	52	3%	3%	$1.45	$1.43(0.11)
		CVOA	62	80%	80%	$2.10	$2.10(0.17)
	2007	CVOB/CPO/CDQ/ADAK	53	17%	18%	$2.14	$2.09(0.29)
		CVC/CPC	41	3%	3%	$2.04	$2.08(0.30)
		CVOA	73	75%	75%	$2.07	$2.04(0.24)
	2008	CVOB/CPO/CDQ/ADAK	62	22%	22%	$2.02	$2.26(0.85)
		CVC/CPC	42	3%	3%	$2.23	$2.21(0.06)
		CVOA	73	78%	78%	$1.73	$1.71(0.18)
	2009	CVOB/CPO/CDQ/ADAK	59	19%	19%	$1.73	$1.74(0.23)
		CVC/CPC	40	2%	3%	$1.88	$1.85(0.37)
		CVOA	66	73%	73%	$1.52	$1.54(0.24)
	2010	CVOB/CPO/CDQ/ADAK	53	24%	24%	$1.53	$1.51(0.19)
		CVC/CPC	38	3%	3%	$1.41	$1.53(0.26)
		CVOA	63	75%	74%	$2.93	$2.85(0.28)
	2011	CVOB/CPO/CDQ/ADAK	60	23%	23%	$3.04	$3.06(0.41)
		CVC/CPC	37	2%	2%	$2.98	$3.05(0.39)
		CVOA	68	76%	75%	$2.43	$2.44(0.12)
BSS	2012	CVOB/CPO/CDQ/ADAK	64	21%	22%	$2.60	$2.54(0.35)
		CVC/CPC	41	3%	4%	$2.66	$2.64(0.20)
		CVOA	68	74%	73%	$2.56	$2.57(0.07)
	2013	CVOB/CPO/CDQ/ADAK	58	23%	24%	$2.69	$2.72(0.11)
		CVC/CPC	38	3%	3%	$2.74	$2.74(0.07)
		CVOA	67	74%	73%	$2.60	$2.62(0.26)
	2014	CVOB/CPO/CDQ/ADAK	56	23%	24%	$2.64	$2.87(0.67)
		CVC/CPC	40	3%	3%	$2.80	$2.81(0.30)
		CVOA	68	74%	74%	$2.19	$2.16(0.17)
	2015	CVOB/CPO/CDQ/ADAK	58	23%	24%	$2.26	$2.26(0.11)
		CVC/CPC	32	2%	3%	$2.30	$2.28(0.09)
		CVOA	65	73%	72%	$2.89	$2.87(0.14)
	2016	CVOB/CPO/CDQ/ADAK	57	24%	25%	$3.01	$3.02(0.13)
		CVC/CPC	33	3%	3%	$3.24	$3.07(0.05)
		CVOA	60	74%	74%	$4.31	$4.37(0.72)
	2017	CVOB/CPO/CDQ/ADAK	49	24%	24%	$4.32	$4.42(0.55)
		CVC/CPC	31	3%	3%	$4.26	$4.42(0.71)
		CVOA	58	74%	74%	$4.06	$4.04(0.24)
	2018	CVOB/CPO/CDQ/ADAK	49	23%	24%	$4.24	$4.29(0.23)
		CVC/CPC	31	2%	3%	$4.36	$4.34(0.28)
		CVOA	59	76%	75%	$3.97	$3.97(0.13)
	2019	CVOB/CPO/CDQ/ADAK	45	22%	22%	$4.17	$4.22(0.23)
		CVC/CPC	31	3%	3%	$4.26	$4.23(0.27)
		CVOA	57	73%	73%	$3.92	$3.91(0.18)
	2020	CVOB/CPO/CDQ/ADAK	53	24%	24%	$3.93	$4.06(0.34)
		CVC/CPC	34	3%	3%	$4.04	$4.08(0.35)

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Table 3.6: Continued

		Type	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
BST	2006	CVOA	39	75%	74%	$1.92	$1.82(0.53)
		CVOB/CPO/CDQ/ADAK	14	23%	24%	$2.03	$1.91(0.17)
		CVC/CPC	12	2%	2%	$1.82	$1.85(0.31)
	2007	CVOA	28	87%	87%	$2.22	$2.30(0.86)
		CVOB/CPO/CDQ/ADAK	14	12%	12%	$2.24	$2.20(0.36)
		CVC/CPC	9	1%	1%	$2.09	$1.94(0.65)
	2008	CVOA	26	73%	72%	$2.24	$2.22(0.29)
		CVOB/CPO/CDQ/ADAK	12	26%	27%	$2.35	$2.23(0.32)
		CVC/CPC	5	2%	2%	$2.33	$2.33(0.08)
	2009	CVOA	17	75%	74%	$2.30	$2.26(0.20)
		CVOB/CPO/CDQ/ADAK	9	22%	23%	$2.41	$2.38(0.23)
		CVC/CPC	9	3%	3%	$2.21	$2.25(0.18)
	2010	CVOA	4	*	*	*	*
		CVOB/CPO/CDQ/ADAK	2	*	*	*	*
		CVC/CPC	2	*	*	*	*
	2013	CVOA	17	76%	76%	$2.78	$2.60(0.77)
		CVOB/CPO/CDQ/ADAK	15	21%	20%	$2.64	$2.87(0.72)
		CVC/CPC	11	3%	4%	$3.02	$2.85(0.82)
	2014	CVOA	36	76%	76%	$2.61	$2.63(0.24)
		CVOB/CPO/CDQ/ADAK	28	21%	22%	$2.64	$2.72(0.40)
		CVC/CPC	23	3%	3%	$2.79	$2.74(0.45)
	2015	CVOA	52	75%	75%	$2.80	$2.88(0.36)
		CVOB/CPO/CDQ/ADAK	38	21%	22%	$2.88	$2.90(0.38)
		CVC/CPC	25	3%	3%	$3.00	$3.05(0.36)
	2016	CVOA	42	74%	71%	$3.11	$3.11(0.19)
		CVOB/CPO/CDQ/ADAK	36	21%	21%	$3.23	$3.24(0.22)
		CVC/CPC	24	4%	7%	$5.51	$3.33(0.11)
	2017	CVOA	16	74%	74%	$4.19	$4.21(0.30)
		CVOB/CPO/CDQ/ADAK	14	24%	24%	$4.40	$4.36(0.29)
		CVC/CPC	13	2%	2%	$4.45	$4.41(0.30)
	2018	CVOA	28	72%	72%	$4.28	$4.29(0.34)
		CVOB/CPO/CDQ/ADAK	25	24%	24%	$4.33	$4.29(0.78)
		CVC/CPC	19	4%	4%	$3.84	$4.34(0.58)
	2019	CVOA	17	71%	72%	$4.55	$4.46(0.32)
		CVOB/CPO/CDQ/ADAK	12	25%	25%	$4.47	$4.53(0.11)
		CVC/CPC	12	3%	3%	$4.56	$4.56(0.08)
	2020	CVOA	23	85%	84%	$4.04	$4.20(1.13)
		CVOB/CPO/CDQ/ADAK	8	13%	15%	$4.69	$3.51(0.74)
		CVC/CPC	6	2%	2%	$3.87	$3.97(1.11)

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Table 3.6: Continued

		Type	Vessels	Share of ex-vessel volume	Share of ex-vessel revenue	Weighted average price ($/lb)	Mean(sd) price ($/lb)
SMB	2009	CVOA	7	95%	95%	$3.47	$3.44(0.23)
		CVOB/CPO/CDQ/ADAK	1	*	*	*	*
		CVC/CPC	1	*	*	*	*
	2010	CVOA	10	79%	78%	$5.69	$5.72(0.39)
		CVOB/CPO/CDQ/ADAK	8	19%	20%	$5.91	$5.90(0.19)
		CVC/CPC	5	2%	2%	$5.78	$5.88(0.25)
	2011	CVOA	18	79%	78%	$5.96	$6.09(0.45)
		CVOB/CPO/CDQ/ADAK	15	17%	19%	$6.65	$6.70(0.56)
		CVC/CPC	9	4%	4%	$6.39	$7.03(0.83)
	2012	CVOA	17	77%	77%	$4.78	$4.75(0.22)
		CVOB/CPO/CDQ/ADAK	14	21%	21%	$4.85	$4.85(0.34)
		CVC/CPC	12	2%	2%	$4.82	$4.85(0.31)
	2014	CVOA	4	*	*	*	*
		CVOB/CPO/CDQ/ADAK	4	*	*	*	*
		CVC/CPC	1	*	*	*	*
	2015	CVOA	3	*	*	*	*
		CVOB/CPO/CDQ/ADAK	2	*	*	*	*
		CVC/CPC	1	*	*	*	*

Notes: Except where noted, data reflect total catcher-vessel sector commercial volume and revenue value across all management programs (LLP/open access, IFQ, CDQ, ACA). Beginning in 2012, data include ex-vessel sales reported by catcher/processor sector. Weighted average price is calculated as the ratio of aggregate gross revenue value to sold volume, and thus does not include a measure of distributional variation. Mean price results as shown are calculated as the arithmetic mean over observations by vessel and quota share-type, with standard deviation (sd) reported to indicate relative variability over vessel-level observations.
[a] Landings in 2001 Petrel Bank test fishery; 1998 fishery data unavailable.
[b] Vessels column shows total count of vessel-level observations for fishery-year; in a limited number of observations where there is missing data for either revenue or volume, average price for the fishery/year is used to impute the missing value.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.7: Estimated finished production, first wholesale value, and price, CR Program fisheries.

	Year	Processors	Finished weight (million lbs)	First wholesale value ($million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
AIG	1998	6	3.25	$20.51	$6.30	$6.27(0.26)
	1999	8	3.03	$30.10	$9.93	$9.66(2.34)
	2000	6	3.57	$28.18	$7.89	$8.82(3.02)
	2001	5	3.95	$39.73	$10.06	$10.01(0.25)
	2002	5	3.44	$35.60	$10.36	$10.15(1.05)
	2003	5	3.61	$38.34	$10.62	$10.72(0.46)
	2004	5	3.73	$29.29	$7.84	$8.46(1.47)
	2005	6	2.75	$20.87	$7.58	$7.48(0.47)
	2006	6	3.13	$17.26	$5.51	$5.21(0.47)
	2007	6	3.42	$22.26	$6.51	$6.45(0.64)
	2008	7	3.41	$30.74	$9.01	$8.74(0.74)
	2009	8	3.30	$22.32	$6.77	$7.26(2.10)
	2010	8	3.17	$28.75	$9.08	$9.61(1.62)
	2011	14	3.64	$40.55	$11.13	$11.45(2.63)
	2012	13	3.76	$32.66	$8.69	$9.56(2.82)
	2013	12	3.77	$35.10	$9.30	$8.42(3.12)
	2014	10	3.85	$33.65	$8.73	$7.92(3.41)
	2015	8	3.68	$39.27	$10.67	$9.52(3.71)
	2016	10	3.56	$48.67	$13.69	$12.87(4.20)
	2017	12	3.53	$41.30	$11.69	$11.10(3.63)
	2018	9	4.13	$51.70	$12.52	$12.03(3.86)
	2019	9	4.30	$57.10	$13.27	$12.63(4.50)
	2020	11	3.63	$50.88	$14.03	$13.75(4.30)
BBR	1998	22	9.79	$81.38	$8.31	$8.13(1.31)
	1999	21	7.68	$128.46	$16.73	$16.66(2.00)
	2000	20	5.38	$54.98	$10.22	$12.50(2.32)
	2001	20	5.53	$68.90	$12.47	$13.08(1.69)
	2002	20	6.32	$101.07	$16.00	$16.02(2.11)
	2003	25	10.25	$137.32	$13.39	$13.17(1.33)
	2004	23	10.01	$123.11	$12.30	$12.48(0.70)
	2005	16	12.08	$132.63	$10.98	$11.15(0.97)
	2006	15	9.17	$85.92	$9.37	$9.04(1.13)
	2007	17	13.09	$133.18	$10.17	$10.08(0.85)
	2008	16	13.31	$154.56	$11.61	$11.03(2.98)
	2009	15	10.40	$113.01	$10.86	$10.46(1.34)
	2010	16	10.03	$153.79	$15.33	$15.30(1.97)
	2011	18	5.30	$116.06	$21.88	$20.34(4.10)
	2012	16	5.27	$86.64	$16.44	$16.65(4.84)
	2013	17	5.75	$84.36	$14.67	$14.48(4.33)
	2014	17	6.66	$89.33	$13.41	$13.30(4.03)
	2015	15	6.60	$102.79	$15.58	$15.34(3.54)
	2016	17	5.68	$111.28	$19.61	$19.25(4.90)
	2017	17	4.42	$75.74	$17.13	$16.60(3.84)
	2018	14	2.86	$52.68	$18.44	$17.81(4.83)
	2019	13	2.55	$52.02	$20.42	$19.38(5.22)
	2020	14	1.78	$38.30	$21.49	$20.10(5.11)

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Table 3.7: Continued

	Year	Processors	Finished weight (million lbs)	First wholesale value ($million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
BSS	1998	33	164.27	$501.66	$3.05	$2.97(0.42)
	1999	31	126.92	$546.02	$4.30	$4.13(0.85)
	2000	24	21.64	$109.82	$5.07	$5.81(1.40)
	2001	21	16.34	$86.44	$5.29	$5.23(0.40)
	2002	21	21.06	$104.65	$4.97	$5.05(0.61)
	2003	19	18.15	$109.56	$6.04	$6.03(0.32)
	2004	21	15.62	$100.01	$6.40	$6.33(0.39)
	2005	20	16.40	$81.85	$4.99	$4.75(0.65)
	2006	13	24.92	$86.65	$3.48	$3.46(0.24)
	2007	18	22.66	$109.75	$4.84	$4.98(0.42)
	2008	16	41.02	$190.67	$4.65	$4.53(1.29)
	2009	16	35.97	$148.26	$4.12	$4.12(0.19)
	2010	12	31.41	$121.77	$3.88	$3.97(0.35)
	2011	16	37.89	$241.53	$6.38	$6.57(0.86)
	2012	15	57.79	$306.39	$5.30	$5.02(1.73)
	2013	15	46.31	$251.74	$5.44	$5.22(1.55)
	2014	13	36.17	$198.93	$5.50	$5.21(1.67)
	2015	14	39.90	$187.63	$4.70	$4.51(1.49)
	2016	12	25.92	$165.19	$6.37	$6.07(1.94)
	2017	14	13.97	$105.25	$7.54	$8.14(1.02)
	2018	12	12.34	$90.37	$7.32	$7.96(1.09)
	2019	13	17.86	$128.55	$7.20	$7.84(1.09)
	2020	11	22.01	$175.80	$7.99	$8.14(0.53)
BST	2005	4	0.18	$0.92	$5.11	$4.63(0.71)
	2006	9	0.72	$3.15	$4.37	$4.23(0.36)
	2007	9	1.46	$7.80	$5.35	$5.33(0.36)
	2008	10	1.34	$7.00	$5.24	$5.25(0.27)
	2009	10	1.39	$6.25	$4.50	$4.49(0.82)
	2010	7	*	*	*	*
	2013	12	0.86	$6.05	$7.06	$7.53(1.52)
	2014	12	6.23	$39.60	$6.36	$5.84(2.30)
	2015	13	10.26	$59.33	$5.79	$5.18(1.70)
	2016	12	7.15	$48.44	$6.77	$6.39(2.13)
	2017	11	0.96	$8.44	$8.76	$8.57(0.91)
	2018	12	1.57	$12.64	$8.06	$8.57(1.42)
	2019	10	0.81	$7.37	$9.12	$9.37(1.07)
	2020	8	0.42	$4.73	$11.15	$10.66(1.72)

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Table 3.7: Continued

	Year	Processors	Finished weight (million lbs)	First wholesale value ($million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
PIK	1998	12	0.67	$5.58	$8.37	$8.23(0.99)
SMB	1998	13	1.77	$12.78	$7.24	$7.33(0.28)
	2009	6	*	*	*	*
	2010	8	0.91	$13.02	$14.24	$12.33(3.45)
	2011	11	1.33	$21.82	$16.38	$15.91(3.16)
	2012	10	1.18	$15.73	$13.39	$12.41(4.85)
	2014	6	*	*	*	*
	2015	4	0.08	$0.89	$11.56	$11.66(1.80)
WAI	1998	1	*	*	*	*
	2002	9	0.34	$5.44	$15.93	$15.55(3.09)
	2003	9	0.32	$4.33	$13.40	$13.17(0.54)

Notes: Data shown by calendar year. Weighted average price is calculated as the ratio of aggregate sales revenue to aggregate sold volume, and thus does not include a measure of distributional variation. Mean price results as shown are calculated as the arithmetic mean over price observations by vessel or processor (i.e., each price observation is weighted equally), with standard deviation (sd) reported to indicate relative variability over vessel-level observations, noting that large standard deviations are likely indicative of a non-symmetrical distribution. Counts of processors in Tables 3.9, 3.10, and 3.11 identify number of entities reporting crab production in the Commercial Operators Annual Report, including buyers of landed crab that employed custom processing services of other crab processors for all purchased crab; where noted, processor counts in other tables show the number of active crab processing plants exclusive of custom-only buyers. For 1998-2005 wholesale value is estimated by multiplying the yearly estimated wholesale production volume with the annual weighted first wholesale value per lb., by species, derived from COAR production reports for processors reporting processing in the given fishery and year. Wholesale value and prices for 2006 and later are estimated by applying prices derived from EDR crab sales data to yearly estimates of wholesale production volume. Note that crab sales reported in the EDR may reflect sales from prior-year inventory. For 1998-2005 and 2012 and later, wholesale production volume is estimated by multiplying the volume of ex-vessel commercial landings reported in fish tickets to the 1998-2005 or, for 2012 and later, 2007-2011 mean product recovery rate calculated from COAR production and buying reports for processors reporting landings >=1000 lbs. in the relevant BSAI crab fishery. Annual production volume for 2006-2011 is sourced from EDR data.

[a]Excludes estimates of production from landings made in the 2000/2001 and 2001/2002 Western Aleutian Islands red king crab Petrel Bank test fishery.

Source: ADF&G fish ticket data, eLandings, ADF&G Commercial Operator's Annual Report (COAR) data, NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.8: Statewide crab production, first wholesale value and pricing for selected species

	Year	Processors	Finished weight (million lbs)	First wholesale value	Weighted average price ($/lb)	Mean(sd) price ($/lb)
Red king	1998	29	9.23	$76.70	$8.31	$8.13(2.02)
	1999	31	7.05	$117.81	$16.71	$15.35(4.17)
	2000	22	6.58	$67.24	$10.22	$12.21(3.82)
	2001	30	6.35	$79.17	$12.47	$11.58(4.01)
	2002	32	6.93	$109.42	$15.79	$14.21(5.64)
	2003	38	10.50	$139.93	$13.33	$12.08(4.30)
	2004	26	9.73	$120.07	$12.34	$11.43(2.76)
	2005	23	12.50	$136.52	$10.92	$10.62(4.30)
	2006	16	10.40	$97.52	$9.37	$8.43(3.45)
	2007	19	13.32	$139.42	$10.47	$9.11(2.81)
	2008	17	13.18	$154.17	$11.70	$10.27(2.97)
	2009	18	10.96	$112.95	$10.30	$9.09(3.14)
	2010	18	9.27	$148.87	$16.06	$14.00(4.80)
	2011	25	6.03	$123.03	$20.41	$19.22(7.14)
	2012	19	5.25	$88.78	$16.91	$15.13(4.65)
	2013	22	6.50	$91.41	$14.05	$14.21(3.42)
	2014	21	7.36	$94.32	$12.82	$12.73(3.29)
	2015	19	7.26	$106.64	$14.70	$14.52(3.14)
	2016	18	5.59	$110.47	$19.77	$17.36(5.56)
	2017	23	5.05	$79.34	$15.71	$15.22(5.09)
	2018	16	3.25	$56.73	$17.46	$17.15(5.10)
	2019	15	2.74	$52.39	$19.09	$16.20(6.92)
	2020	13	1.95	$34.82	$17.87	$17.94(8.42)
Snow (opilio)	1998	34	157.20	$480.51	$3.06	$2.81(0.86)
	1999	31	116.91	$503.13	$4.30	$3.57(1.33)
	2000	23	22.78	$115.73	$5.08	$5.20(2.00)
	2001	20	15.15	$80.04	$5.28	$4.73(1.58)
	2002	25	20.84	$102.89	$4.94	$4.43(1.31)
	2003	19	17.38	$104.95	$6.04	$6.10(2.70)
	2004	22	15.30	$97.96	$6.40	$5.99(1.39)
	2005	20	16.29	$81.29	$4.99	$4.60(1.06)
	2006	13	27.89	$101.35	$3.63	$3.59(0.95)
	2007	16	20.38	$98.15	$4.82	$4.90(1.16)
	2008	16	31.35	$152.71	$4.87	$4.63(1.09)
	2009	16	35.89	$146.74	$4.09	$3.96(0.54)
	2010	12	29.91	$115.50	$3.86	$3.84(1.20)
	2011	16	35.58	$220.32	$6.19	$5.89(1.52)
	2012	15	59.05	$316.41	$5.36	$5.08(1.25)
	2013	16	47.53	$263.56	$5.55	$5.53(2.87)
	2014	14	37.28	$213.39	$5.72	$6.59(5.74)
	2015	14	40.18	$189.87	$4.73	$4.65(1.27)
	2016	12	29.02	$165.99	$5.72	$5.45(3.13)
	2017	14	17.37	$117.22	$6.75	$7.17(3.62)
	2018	12	14.20	$89.91	$6.33	$7.04(2.66)
	2019	13	22.21	$141.45	$6.37	$6.83(2.56)
	2020	10	25.61	$150.15	$5.86	$6.22(3.46)

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Table 3.8: Continued

	Year	Processors	Finished weight (million lbs)	First wholesale value	Weighted average price ($/lb)	Mean(sd) price ($/lb)
Tanner (bairdi)	1998	16	1.65	$11.11	$6.73	$6.51(3.35)
	1999	11	1.48	$8.67	$5.88	$6.41(2.83)
	2000	10	1.00	$8.46	$8.43	$7.62(1.86)
	2001	17	1.27	$9.05	$7.15	$6.56(1.60)
	2002	12	0.74	$5.42	$7.32	$6.22(2.05)
	2003	13	0.81	$6.80	$8.43	$7.36(2.76)
	2004	12	0.94	$8.30	$8.83	$8.43(1.70)
	2005	19	2.22	$12.38	$5.57	$6.46(3.52)
	2006	21	2.94	$14.53	$4.94	$4.71(1.51)
	2007	18	2.49	$13.51	$5.42	$6.16(3.65)
	2008	22	2.44	$13.90	$5.71	$5.60(2.01)
	2009	17	2.25	$10.35	$4.60	$5.08(2.21)
	2010	17	1.90	$8.66	$4.55	$4.88(1.20)
	2011	15	3.88	$29.58	$7.62	$7.84(1.77)
	2012	15	3.08	$21.69	$7.04	$7.74(2.97)
	2013	20	1.89	$13.06	$6.90	$7.69(2.86)
	2014	17	6.86	$42.24	$6.16	$7.35(3.35)
	2015	19	11.63	$58.77	$5.05	$6.11(3.30)
	2016	20	8.66	$52.80	$6.10	$6.91(3.12)
	2017	15	1.74	$16.36	$9.41	$9.36(4.40)
	2018	23	2.92	$22.05	$7.55	$8.51(3.35)
	2019	22	2.11	$19.09	$9.05	$8.92(3.29)
	2020	17	1.41	$13.79	$9.78	$10.00(3.44)
Golden (brown) king	1998	13	2.92	$18.78	$6.43	$8.27(2.11)
	1999	16	3.44	$33.79	$9.82	$9.21(3.81)
	2000	16	4.92	$40.73	$8.28	$9.84(3.42)
	2001	16	4.30	$42.06	$9.79	$9.15(3.39)
	2002	16	3.82	$39.53	$10.36	$11.51(4.48)
	2003	16	3.93	$42.07	$10.72	$11.47(3.86)
	2004	13	4.65	$37.47	$8.06	$9.85(3.51)
	2005	13	2.85	$22.10	$7.75	$8.82(4.27)
	2006	14	3.65	$21.33	$5.85	$7.76(4.12)
	2007	11	3.75	$25.99	$6.93	$8.18(3.47)
	2008	13	3.89	$32.22	$8.28	$8.80(3.04)
	2009	15	4.09	$26.67	$6.52	$7.78(3.72)
	2010	17	5.13	$46.09	$8.99	$9.32(3.19)
	2011	20	4.16	$52.91	$12.72	$12.92(4.86)
	2012	21	3.95	$39.72	$10.06	$12.65(5.59)
	2013	19	4.20	$40.67	$9.69	$11.59(5.34)
	2014	16	4.50	$40.67	$9.04	$12.42(4.92)
	2015	12	3.36	$37.19	$11.07	$12.47(2.93)
	2016	15	3.38	$46.35	$13.72	$15.33(5.41)
	2017	17	3.45	$42.85	$12.42	$13.84(3.91)
	2018	13	3.23	$37.75	$11.68	$14.52(13.98)
	2019	14	4.13	$52.95	$12.83	$13.34(4.25)
	2020	14	4.44	$52.36	$11.78	$11.07(5.86)

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Table 3.8: Continued

	Year	Processors	Finished weight (million lbs)	First wholesale value	Weighted average price ($/lb)	Mean(sd) price ($/lb)
	1998	19	2.08	$15.07	$7.24	$7.23(0.96)
	1999	4	0.01	$0.08	$13.40	$10.81
	2000	2	*	*	*	*
	2001	1	*	*	*	*
	2002	1	*	*	*	*
	2003	1	*	*	*	*
Blue king	2005	1	*	*	*	*
	2009	4	0.19	$1.48	$7.76	$6.93
	2010	7	0.67	$9.23	$13.85	$12.23(3.51)
	2011	12	1.25	$19.71	$15.83	$14.71(5.66)
	2012	11	1.12	$15.77	$14.14	$12.14(3.41)
	2014	6	0.22	$2.24	$10.21	$9.77(3.25)
	2015	5	0.08	$0.73	$9.07	$9.49(4.57)

Notes: Data shown by calendar year. Includes processing of crab taken from stocks/fisheries other than those managed under the BSAI crab FMP. Counts of processors in Tables 3.9, 3.10, and 3.11 identify number of entities reporting crab production in the Commercial Operators Annual Report, including buyers of landed crab that employed custom processing services of other crab processors for all purchased crab; where noted, processor counts in other tables show the number of active crab processing plants exclusive of custom-only buyers.

Source: ADF&G Commercial Operator's Annual Report (COAR) data.

Table 3.9: Statewide crab production by product for selected species

		Product	Processors	Finished weight (million lbs)	First wholesale value ($ million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
Red king	2007	Sections	19	12.86	$135.89	$10.56	$10.64(0.98)
		Whole crab	10	0.36	$3.18	$8.84	$9.03(2.13)
		Other	8	0.10	$0.36	$3.66	$3.72(1.33)
	2008	Sections	17	12.58	$148.14	$11.78	$11.64(1.35)
		Whole crab	8	0.44	$5.24	$11.83	$10.30(2.64)
		Other	7	0.16	$0.78	$4.97	$4.75(1.63)
	2009	Sections	17	10.34	$110.80	$10.72	$10.51(2.24)
		Whole crab	11	0.51	$1.67	$3.28	$8.80(2.69)
		Other	8	0.12	$0.48	$4.17	$4.41(1.87)
	2010	Sections	17	8.91	$145.03	$16.27	$16.60(3.05)
		Whole crab	11	0.22	$3.16	$14.44	$13.61(3.63)
		Other	8	0.14	$0.68	$4.87	$6.61(2.96)
	2011	Sections	23	5.72	$118.09	$20.63	$22.25(3.66)
		Whole crab	15	0.23	$4.40	$19.51	$17.66(4.72)
		Other	11	0.08	$0.54	$6.84	$12.95(11.91)
	2012	Sections	18	4.93	$83.91	$17.03	$17.63(2.88)
		Whole crab	10	0.29	$4.64	$15.72	$13.90(3.72)
		Other	6	0.03	$0.23	$7.76	$7.43(2.65)
	2013	Sections	19	6.15	$86.77	$14.10	$15.57(2.64)
		Whole crab	13	0.31	$4.19	$13.47	$12.94(3.79)
		Other	7	0.04	$0.45	$11.23	$11.50(3.11)
	2014	Sections	19	6.95	$89.10	$12.82	$13.53(2.93)
		Whole crab	13	0.35	$4.76	$13.41	$12.91(2.46)
		Other	7	0.05	$0.46	$9.00	$9.77(4.43)
	2015	Sections	17	6.87	$101.21	$14.74	$14.96(3.29)
		Whole crab	10	0.30	$4.37	$14.48	$15.16(2.78)
		Other	8	0.09	$1.06	$12.25	$12.29(2.30)
	2016	Sections	18	5.36	$107.60	$20.06	$19.70(3.19)
		Whole crab	6	0.14	$1.84	$13.30	$18.93(4.15)
		Other	8	0.08	$1.04	$12.23	$10.42(5.60)
	2017	Sections	21	4.74	$74.82	$15.80	$16.23(4.69)
		Whole crab	11	0.26	$3.79	$14.44	$13.99(3.68)
		Other	11	0.05	$0.73	$14.39	$14.11(6.86)
	2018	Sections	16	3.08	$54.00	$17.52	$17.61(5.80)
		Whole crab	5	0.13	$2.22	$16.54	$18.10(4.17)
		Other	6	0.03	$0.51	$15.18	$14.72(1.60)
	2019	Sections	14	2.64	$50.75	$19.20	$17.94(6.83)
		Whole crab	5	0.06	$1.10	$19.08	$17.38(4.58)
		Other	8	0.04	$0.54	$12.77	$12.16(6.80)
	2020	Sections	13	1.91	$34.29	$17.98	$19.35(8.28)
		Whole crab	1	*	*	*	*
		Other	6	0.02	$0.18	$8.17	$13.12(8.52)

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Table 3.9: Continued

		Product	Processors	Finished weight (million lbs)	First wholesale value ($ million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
Snow (opilio)	2007	Sections	16	20.19	$97.55	$4.83	$4.93(0.24)
		Whole crab	1	*	*	*	*
		Other	2	*	*	*	*
	2008	Sections	16	29.60	$144.60	$4.88	$4.97(0.32)
		Whole crab	1	*	*	*	*
		Other	3	*	*	*	*
	2009	Sections	16	35.60	$146.05	$4.10	$4.11(0.21)
		Other	1	*	*	*	*
	2010	Sections	12	29.80	$115.13	$3.86	$3.94(1.20)
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*
	2011	Sections	16	35.30	$218.80	$6.20	$5.86(1.58)
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*
	2012	Sections	15	58.86	$316.13	$5.37	$5.21(0.99)
		Whole crab	2	*	*	*	*
		Other	1	*	*	*	*
	2013	Sections	16	47.50	$263.56	$5.55	$5.33(1.83)
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*
	2014	Sections	14	36.98	$212.00	$5.73	$6.44(5.82)
		Whole crab	2	*	*	*	*
		Other	1	*	*	*	*
	2015	Sections	14	39.83	$188.43	$4.73	$4.60(1.25)
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*
	2016	Sections	12	28.65	$164.82	$5.75	$5.60(1.37)
		Whole crab	1	*	*	*	*
		Other	3	*	*	*	*
	2017	Sections	14	17.22	$116.94	$6.79	$7.83(3.22)
		Other	3	*	*	*	*
	2018	Sections	12	14.20	$89.91	$6.33	$6.85(2.82)
		Whole crab	3	*	*	*	*
	2019	Sections	13	22.15	$141.03	$6.37	$6.81(2.62)
		Other	1	*	*	*	*
	2020	Sections	10	25.58	$150.08	$5.87	$6.45(3.29)
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*

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Table 3.9: Continued

		Product	Processors	Finished weight (million lbs)	First wholesale value ($ million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
Tanner (bairdi)	2007	Sections	18	2.46	$13.37	$5.44	$5.89(1.10)
		Whole crab	4	0.01	$0.02	$3.94	$7.54
		Other	1	*	*	*	*
	2008	Sections	22	2.39	$13.70	$5.74	$5.91(1.33)
		Whole crab	4	0.00	$0.01	$3.90	$3.27
		Other	4	0.04	$0.18	$4.19	$6.17
	2009	Sections	16	2.20	$10.24	$4.66	$5.14(1.45)
		Whole crab	3	*	*	*	*
		Other	4	0.02	$0.08	$3.26	$6.36
	2010	Sections	16	1.45	$7.14	$4.93	$5.21(0.95)
		Whole crab	6	0.44	$1.45	$3.30	$3.90(1.54)
		Other	1	*	*	*	*
	2011	Sections	14	3.49	$26.29	$7.54	$7.97(1.30)
		Whole crab	5	0.30	$2.64	$8.77	$6.38(2.31)
		Other	4	0.10	$0.65	$6.81	$8.90
	2012	Sections	13	2.73	$18.55	$6.80	$7.43(1.53)
		Whole crab	6	0.35	$3.14	$8.89	$6.93(2.30)
		Other	1	*	*	*	*
	2013	Sections	19	1.60	$10.70	$6.68	$6.96(1.17)
		Whole crab	4	0.29	$2.29	$7.98	$7.26
		Other	4	0.00	$0.07	$14.63	$12.30
	2014	Sections	15	6.78	$41.52	$6.13	$6.77(1.68)
		Whole crab	4	0.08	$0.65	$7.92	$6.52
		Other	2	*	*	*	*
	2015	Sections	17	10.73	$56.38	$5.25	$5.62(1.41)
		Whole crab	6	0.84	$2.07	$2.46	$4.91(2.51)
		Other	5	0.06	$0.33	$5.67	$10.58(7.37)
	2016	Sections	18	8.38	$50.95	$6.08	$6.66(1.78)
		Whole crab	6	0.17	$1.32	$7.62	$6.21(1.89)
		Other	5	0.10	$0.53	$5.15	$9.54(7.70)
	2017	Sections	15	1.73	$16.27	$9.39	$8.48(2.75)
		Whole crab	1	*	*	*	*
		Other	3	*	*	*	*
	2018	Sections	22	2.91	$21.92	$7.54	$8.19(2.56)
		Whole crab	5	0.00	$0.02	$6.71	$7.11(2.77)
		Other	4	0.01	$0.11	$14.03	$13.55
	2019	Sections	17	1.75	$15.50	$8.84	$8.68(2.47)
		Whole crab	6	0.04	$0.34	$7.99	$6.47(1.50)
		Other	6	0.31	$3.25	$10.35	$11.43(4.73)
	2020	Sections	15	1.31	$12.91	$9.86	$9.75(1.19)
		Whole crab	5	0.08	$0.71	$8.49	$7.86(4.22)
		Other	3	*	*	*	*

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Table 3.9: Continued

		Product	Processors	Finished weight (million lbs)	First wholesale value ($ million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
Golden (brown) king	2007	Sections	7	2.96	$20.16	$6.82	$7.72(2.55)
		Whole crab	6	0.46	$3.59	$7.84	$7.86(1.25)
		Other	4	0.34	$2.25	$6.65	$9.56
	2008	Sections	8	2.96	$24.78	$8.37	$9.46(2.11)
		Whole crab	8	0.51	$4.07	$7.93	$7.51(1.31)
		Other	4	0.42	$3.37	$8.06	$9.66
	2009	Sections	10	3.31	$21.22	$6.42	$8.12(3.16)
		Whole crab	8	0.78	$5.38	$6.91	$6.61(1.71)
		Other	3	*	*	*	*
	2010	Sections	11	4.04	$38.56	$9.55	$10.67(1.50)
		Whole crab	12	1.08	$7.45	$6.87	$7.86(1.61)
		Other	3	*	*	*	*
	2011	Sections	14	3.40	$44.15	$13.00	$13.81(4.93)
		Whole crab	10	0.76	$8.70	$11.44	$11.25(1.32)
		Other	3	*	*	*	*
	2012	Sections	15	3.32	$32.06	$9.66	$12.70(5.33)
		Whole crab	11	0.62	$7.60	$12.20	$11.99(3.07)
		Other	4	0.01	$0.06	$10.42	$14.16
	2013	Sections	14	3.51	$33.82	$9.65	$11.49(5.28)
		Whole crab	10	0.69	$6.80	$9.91	$11.57(3.92)
		Other	6	0.01	$0.04	$8.73	$11.89(7.85)
	2014	Sections	12	4.33	$37.93	$8.75	$10.09(4.08)
		Whole crab	8	0.16	$2.71	$16.66	$15.11(3.88)
		Other	2	*	*	*	*
	2015	Sections	6	2.94	$32.26	$10.97	$11.35(1.07)
		Whole crab	7	0.41	$4.86	$11.81	$14.22(3.32)
		Other	2	*	*	*	*
	2016	Sections	12	3.31	$45.21	$13.67	$15.55(5.20)
		Whole crab	6	0.07	$1.08	$16.22	$17.10(3.17)
		Other	2	*	*	*	*
	2017	Sections	13	3.31	$40.97	$12.36	$12.52(3.61)
		Whole crab	6	0.13	$1.83	$13.77	$16.33(2.82)
		Other	2	*	*	*	*
	2018	Sections	9	2.98	$35.65	$11.96	$10.41(5.71)
		Whole crab	5	0.25	$2.04	$8.31	$21.34(24.04)
		Other	2	*	*	*	*
	2019	Sections	9	3.85	$50.71	$13.17	$13.82(4.79)
		Whole crab	9	0.27	$2.21	$8.10	$12.74(3.93)
		Other	1	*	*	*	*
	2020	Sections	10	4.30	$51.52	$11.98	$12.73(5.74)
		Whole crab	6	0.14	$0.84	$5.98	$10.54(3.16)
		Other	2	*	*	*	*

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Table 3.9: Continued

		Product	Processors	Finished weight (million lbs)	First wholesale value ($ million)	Weighted average price ($/lb)	Mean(sd) price ($/lb)
Blue king	2009	Sections	4	0.19	$1.47	$7.89	$8.09
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*
	2010	Sections	7	0.65	$9.10	$14.04	$13.39(2.66)
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*
	2011	Sections	12	1.22	$19.52	$15.96	$15.67(5.92)
		Whole crab	2	*	*	*	*
		Other	2	*	*	*	*
	2012	Sections	10	1.10	$15.58	$14.19	$12.65(3.87)
		Whole crab	2	*	*	*	*
		Other	2	*	*	*	*
	2014	Sections	6	0.21	$2.17	$10.27	$10.64(3.04)
		Whole crab	1	*	*	*	*
		Other	2	*	*	*	*
	2015	Sections	5	0.07	$0.69	$9.57	$10.32(2.65)
		Whole crab	1	*	*	*	*
		Other	1	*	*	*	*

Notes: Data shown by calendar year. Includes processing of crab taken from stocks/fisheries other than those managed under the BSAI crab FMP. Counts of processors in Tables 3.9, 3.10, and 3.11 identify number of entities reporting crab production in the Commercial Operators Annual Report, including buyers of landed crab that employed custom processing services of other crab processors for all purchased crab; where noted, processor counts in other tables show the number of active crab processing plants exclusive of custom-only buyers.

Source: ADF&G Commercial Operator's Annual Report (COAR) data.

Table 3.10: Processing labor hours and pay, CR Program fisheries

			Processors	Processing labor hours			Labor Payments ($1,000)		Processing wages, median ($)	
		Year		Total (1,000)	Median per plant (1,000)	Median per 1000 pounds (raw)	Total	Median per plant	per hour	per 1000 pounds (raw)
All CR	SF & CP	2012	16	1,262	71.66	15.84	$16,184	$676	$11.61	$165.61
		2013	14	956	53.70	12.75	$11,059	$622	$11.30	$139.15
		2014	11	905	103.11	11.06	$10,491	$664	$10.98	$133.75
		2015	11	1,179	112.90	15.88	$14,513	$1,166	$11.46	$176.51
		2016	10	788	95.46	14.17	$10,554	$776	$13.04	$201.51
		2017	11	426	31.95	13.41	$5,428	$322	$12.55	$166.30
		2018	10	382	29.90	11.01	$4,872	$192	$12.20	$149.56
		2019	9	452	51.95	12.07	$6,287	$369	$12.96	$163.22
		2020	9	452	56.43	12.96	$7,245	$422	$14.95	$197.59
AIG	CP	98/01/04	4(2)	-	-	-	*	*	-	*
		2005	2	-	-	-	*	*	-	*
		2006	1	-	-	-	*	*	-	*
		2007	1	-	-	-	*	*	-	*
		2008	1	-	-	-	*	*	-	*
	SF	98/01/04	13(7)	93	14.59	19.74	$1,323	$174	$12.98	$298.64
		2005	4	*	*	*	*	*	*	*
		2006	6	92	9.96	13.12	$1,066	$124	$11.93	$201.20
		2007	5	94	13.19	17.86	$1,069	$147	$10.92	$182.35
		2008	6	69	2.83	8.55	$1,147	$165	$13.26	$184.90
	SF & CP	2009	5	86	15.69	15.89	$1,422	$153	$10.70	$164.82
		2010	4	*	*	*	*	*	*	*
		2011	7	98	4.79	16.97	$2,544	$86	$11.46	$198.97
		2012	8	53	2.60	6.89	$1,238	$66	$11.40	$83.29
		2013	6	61	5.96	9.19	$678	$68	$11.08	$117.13
		2014	4	*	*	*	*	*	*	*
		2015	3	*	*	*	*	*	*	*
		2016	4	*	*	*	*	*	*	*
		2017	5	58	9.67	12.70	$708	$109	$12.32	$159.42
		2018	5	65	8.23	11.54	$812	$127	$12.20	$144.86
		2019	3	*	*	*	*	*	*	*
		2020	4	*	*	*	*	*	*	*

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Table 3.10: Continued

		Year	Processors	Processing labor hours			Labor Payments ($1,000)		Processing wages, median ($)	
				Total (1,000)	Median per plant (1,000)	Median per 1000 pounds (raw)	Total	Median per plant	per hour	per 1000 pounds (raw)
BBR	CP	98/01/04	18(10)	-	-	-	$302	$47	-	*
		2005	4	-	-	-	*	*	-	*
		2006	3	-	-	-	*	*	-	*
		2007	3	-	-	-	*	*	-	*
		2008	3	-	-	-	*	*	-	*
	SF	98/01/04	40(20)	142	9.96	12.75	$1,776	$115	$13.69	$163.14
		2005	11	202	12.12	13.44	$2,535	$228	$12.38	$150.81
		2006	11	180	10.76	13.73	$2,271	$182	$12.13	$166.49
		2007	11	261	25.22	13.17	$3,141	$258	$12.69	$167.19
		2008	11	245	12.58	16.04	$3,175	$322	$12.73	$179.47
	SF & CP	2009	12	199	16.06	14.47	$2,514	$145	$11.78	$164.62
		2010	13	212	20.09	15.43	$2,691	$218	$11.14	$173.83
		2011	14	104	6.71	13.97	$1,392	$84	$11.66	$158.98
		2012	12	100	6.51	13.74	$1,314	$75	$12.08	$150.04
		2013	10	104	10.00	14.95	$1,318	$104	$11.14	$157.25
		2014	9	130	21.07	12.11	$1,541	$83	$10.38	$154.32
		2015	10	127	14.80	14.92	$1,656	$129	$11.43	$172.84
		2016	10	130	8.93	11.20	$1,822	$94	$13.04	$147.72
		2017	10	81	8.06	13.47	$1,091	$66	$12.62	$168.05
		2018	9	55	5.38	11.50	$765	$49	$12.55	$151.97
		2019	8	47	6.21	12.72	$717	$74	$12.70	$166.77
		2020	8	31	3.75	15.71	$545	$52	$14.94	$223.20

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Table 3.10: Continued

		Year	Processors	Processing labor hours			Labor Payments ($1,000)		Processing wages, median ($)	
				Total (1,000)	Median per plant (1,000)	Median per 1000 pounds (raw)	Total	Median per plant	per hour	per 1000 pounds (raw)
BSS	CP	98/01/04	17(8)	-	-	-	$791	$123	-	*
		2005	6	-	-	-	$310	$39	-	*
		2006	4	-	-	-	*	*	-	*
		2007	4	-	-	-	*	*	-	*
		2008	4	-	-	-	*	*	-	*
	SF	98/01/04	50(24)	1,134	36.21	12.80	$14,741	$469	$13.11	$174.99
		2005	13	302	23.68	13.36	$3,733	$306	$12.30	$165.18
		2006	10	445	49.45	13.76	$5,221	$591	$11.98	$163.99
		2007	10	442	41.29	13.58	$5,661	$520	$12.42	$192.92
		2008	12	712	30.52	13.17	$10,100	$579	$12.38	$169.40
	SF & CP	2009	14	600	58.41	13.44	$7,727	$354	$11.87	$146.79
		2010	11	534	50.90	13.92	$6,318	$418	$11.36	$147.83
		2011	14	555	45.69	13.90	$6,895	$400	$11.83	$161.89
		2012	13	1,087	77.94	16.00	$13,361	$682	$11.59	$179.46
		2013	12	774	63.55	12.84	$8,882	$536	$11.16	$140.85
		2014	10	590	76.01	12.08	$6,960	$503	$11.66	$134.30
		2015	10	747	95.42	15.45	$9,359	$871	$11.74	$171.92
		2016	8	447	69.40	12.96	$6,079	$576	$12.82	$167.50
		2017	8	266	34.61	11.98	$3,399	$221	$12.53	$154.41
		2018	8	232	30.48	12.39	$2,940	$168	$12.42	$153.90
		2019	8	333	45.70	13.36	$4,628	$310	$13.07	$177.05
		2020	8	351	50.53	13.87	$5,715	$401	$14.88	$202.66

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Table 3.10: Continued

			Processors	Processing labor hours			Labor Payments ($1,000)		Processing wages, median ($)	
		Year		Total (1,000)	Median per plant (1,000)	Median per 1000 pounds (raw)	Total	Median per plant	per hour	per 1000 pounds (raw)
BST	CP	2006	1	-	-	-	*	*	-	*
		2007	1	-	-	-	*	*	-	*
		2008	1	-	-	-	*	*	-	*
	SF	2005	7	8	0.40	17.54	$98	$5	$12.00	$191.01
		2006	8	14	1.25	12.57	$163	$15	$11.96	$134.54
		2007	7	35	4.97	13.85	$401	$51	$11.63	$161.80
		2008	8	27	2.93	15.95	$497	$53	$12.44	$209.62
	SF & CP	2009	8	29	4.27	14.34	$328	$38	$11.36	$152.46
		2010	5	6	0.70	*	$72	$8	$11.38	*
		2013	7	17	1.86	13.77	$180	$17	$10.70	$146.16
		2014	8	122	8.51	11.96	$1,348	$87	$10.56	$128.57
		2015	8	230	21.84	13.06	$2,681	$226	$11.36	$145.78
		2016	7	145	18.44	11.56	$1,833	$214	$12.65	$146.49
		2017	5	20	3.25	12.40	$231	$36	$11.24	$147.93
		2018	7	29	2.01	10.37	$355	$23	$11.83	$126.68
		2019	7	14	1.61	12.18	$204	$22	$12.99	$150.28
		2020	5	8	0.89	*	$110	$14	$15.18	*
PIK	SF	98/01/04	13(13)	25	1.03	14.27	$270	$18	$12.36	$203.63
SMB	CP	98/01/04	1(1)	-	-	-	*	*	-	*
	SF	98/01/04	10(10)	55	3.08	13.64	$662	$36	$11.76	$189.89
	SF & CP	2009	2	*	*	*	*	*	*	*
		2010	5	19	0.40	14.48	$192	$5	$11.09	$149.95
		2011	6	17	0.84	15.10	$168	$9	$10.56	$166.72
		2012	6	21	0.76	11.09	$271	$8	$10.89	$139.79
		2014	1	*	*	*	*	*	*	*
		2015	1	*	*	*	*	*	*	*

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Table 3.10: Continued

			Processors	Processing labor hours			Labor Payments ($1,000)		Processing wages, median ($)	
		Year		Total (1,000)	Median per plant (1,000)	Median per 1000 pounds (raw)	Total	Median per plant	per hour	per 1000 pounds (raw)
WAI	CP	98/01/04	2(1)	-	-	-	*	*	-	*
	SF	98/01/04	1(1)	*	*	*	*	*	*	*

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".
Processing labor hours reflect hourly processing line workers employed by shoreside and floating processor sectors only; excludes salaried workers employed in the processing sectors (see Table 3.11). Processing labor payments exclude benefits and indirect expenses paid on behalf of processing workers and payments to salaried workers employed by processors (see Table 3.11). Where applicable, these figures include bonuses and deductions to labor payments for shared expenses such as food and provisions. Median pay per hour values are inclusive of, and representative of, the shoreside and floating processor sectors only.
Pro rata statistics estimating processing labor hours per 1000 pounds and labor cost per 1000 pounds use the summed value of raw crab purchased and raw pounds custom processed for other buyers reported by shoreside and floating processing plants (excluding CPs) in EDR data; previous editions of this report used finished pounds as the per-pound pro rata factor, but collection of finished pounds in EDRs was discontinued beginning in 2012.
For 2009 to current, results are summarized over all processing sectors (SF & CP) to preserve confidentiality. For the baseline period through 2008, results are shown by processing sector, with CP denoting the catcher-processor sector and SF denoting shore-based processors (shore-plants and stationary floating processors)
Statistics for pre-rationalization base years are calculated as the annual average over the 1998, 2001, and 2004 calendar years, and the Processors column shows the number of unique data records and unique processors (in parentheses) for the period.
Calculation of average prices and pro-rata statistics censors observations where the observation-level calculated value is outside two standard deviations of the group mean.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database .

Table 3.11: Processing sector employment and wages for non-processing employees, CR Program fisheries

		Processors	Salaried employees		Salary cost		
	Year		Total	Per plant, median	Total (\$1,000)	Per plant, median (\$1,000)	Cost per employee, median (\$1000)
CP	98/01/04	17(9)	17	2	$371	$43	$18
	2005	8	44	3	$1,128	$48	$12
	2006	4	*	*	*	*	*
	2007	4	*	*	*	*	*
	2008	4	*	*	*	*	*
	2009	5	*	*	*	*	*
	2010	3	*	*	*	*	*
	2011	3	*	*	*	*	*
SF	98/01/04	65(32)	1,096	17	$8,863	$180	$10
	2005	17	1,592	20	$11,142	$75	$5
	2006	13	2,031	20	$14,029	$379	$5
	2007	14	691	15	$6,069	$258	$9
	2008	13	1,056	16	$12,555	$317	$12
	2009	17	900	29	$8,534	$574	$10
	2010	17	786	22	$6,868	$118	$6
	2011	17	1,148	25	$7,731	$432	$7
	2012	13	1,428	33	$58,831	$1,133	$45
	2013	12	1,459	28	$62,845	$1,375	$44
	2014	9	1,300	84	$63,975	$3,454	$55
	2015	9	1,572	170	$64,787	$5,206	$34
	2016	8	1,473	174	$64,711	$8,413	$42
	2017	9	1,553	170	$59,562	$6,419	$31
	2018	8	1,397	136	$54,418	$6,439	$43
	2019	7	1,488	215	$65,107	$8,459	$50
	2020	7	1,522	228	$67,138	$9,705	$44

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".

Results shown above summarize data reported by processors for number of employees and gross cost of salary and wages paid for non-processing positions at the processing facility (including foremen, managers, administrative, and other personnel not primarily employed as processing line laborers); wage costs include salary, hourly wages, and bonuses paid to employees, and exclude non-wage benefits, payroll taxes, and other employment costs.

Statistics for pre-rationalization base years are calculated as the annual average over the 1998, 2001, and 2004 calendar years, and the Processors column shows the number of unique data records and unique processors (in parentheses) for the period.

Due to changes in Crab EDR data collection beginning in 2012, reporting of this data was discontinued for the CP sector, and employment and salary data after 2012 represents total annual value over all production and sales activities, including but not exclusively crab production. Prior to 2012, employment and salary values are specific to BSAI crab production and are not directly comparable to values reported for 2012 and later.

Calculation of average prices and pro-rata statistics censors observations where the observation-level calculated value is outside two standard deviations of the group mean.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database .

Table 3.12: Shore-based crab processing employee counts by state/region of employee residence, CR Program fisheries

Year	Processors	Total Employees	Alaska	Washington-Oregon-Idaho	U.S. Other	Non-U.S.
2005	17	2,872	605 (21%)	987 (34%)	1,243 (43%)	37 (1%)
2006	13	2,660	898 (34%)	882 (33%)	878 (33%)	2 (<1%)
2007	14	3,192	738 (23%)	970 (30%)	1,477 (46%)	7 (<1%)
2008	13	3,909	927 (24%)	960 (25%)	2,018 (52%)	4 (<1%)
2009	12	3,112	800 (26%)	774 (25%)	1,515 (49%)	23 (1%)
2010	12	3,323	767 (23%)	868 (26%)	1,321 (40%)	367 (11%)
2011	13	2,816	800 (28%)	815 (29%)	1,193 (42%)	8 (<1%)
2012	13	3,291	647 (20%)	1,087 (33%)	1,545 (47%)	12 (<1%)
2013	15	3,133	932 (30%)	938 (30%)	1,259 (40%)	4 (<1%)
2014	9	2,370	780 (33%)	708 (30%)	876 (37%)	6 (<1%)
2015	9	2,600	688 (26%)	833 (32%)	1,076 (41%)	3 (<1%)
2016	8	2,809	731 (26%)	722 (26%)	1,356 (48%)	0 (<1%)
2017	9	2,405	671 (28%)	380 (16%)	1,354 (56%)	0 (<1%)
2018	9	2,512	515 (21%)	317 (13%)	1,675 (67%)	5 (<1%)
2019	7	2,561	636 (25%)	346 (14%)	1,551 (61%)	28 (1%)
2020	7	2,907	609 (21%)	358 (12%)	1,554 (53%)	386 (13%)

Notes: Processing employee counts reported above reflect the number of distinct individuals employed as crab processing line workers during the calendar year by shoreside and floating processor sectors only, excluding the catcher-processor sector, and excluding salaried workers employed in all crab processing sectors (see Table 3.11). Percentage values shown in parentheses report the proportion of total crab processing employees ("Total employees") identified as resident of the respective state/region.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database .

Table 3.13: Harvesting sector employment, CR Program fisheries

			Vessels	Crew positions		
		Year		Total	Mean per vessel (sd)	Median per vessel
AIG	CP	98/01/04	4(2)	-	-	-
		2005	1	*	*	*
		2006	1	*	*	*
		2007	1	*	*	*
		2008	1	*	*	*
	CV	98/01/04	52(22)	115	6.65(0.99)	6.5
		2005	10	58	5.80(1.14)	6.0
		2006	6	38	6.33(0.52)	6.0
		2007	6	38	6.33	*
		2008	4	*	*	*
	CVCP	2009	5	35	7.00	*
		2010	5	35	7.00	*
		2011	5	36	7.20	*
		2012	6	46	7.67(1.21)	7.5
		2013	6	44	7.33(1.03)	7.0
		2014	5	35	7.00	*
		2015	5	35	7.00	*
		2016	5	36	7.20	*
		2017	5	36	7.20	*
		2018	5	37	7.40	*
		2019	5	37	7.40	*
		2020	5	35	7.00	*
BBR	CP	98/01/04	20(9)	-	-	-
		2005	3	*	*	*
		2006	3	*	*	*
		2007	3	*	*	*
		2008	3	*	*	*
	CV	98/01/04	633(250)	1,233	5.85(0.92)	6.0
		2005	84	472	5.61(0.82)	6.0
		2006	79	445	5.63(0.83)	6.0
		2007	70	407	5.81(0.79)	6.0
		2008	76	452	5.95(0.91)	6.0
	CVCP	2009	70	443	6.33(2.41)	6.0
		2010	65	422	6.48(2.93)	6.0
		2011	62	413	6.66(3.23)	6.0
		2012	64	428	6.68(2.69)	6.0
		2013	63	418	6.63(2.53)	6.0
		2014	63	422	6.70(2.49)	6.0
		2015	64	441	6.89(3.26)	6.0
		2016	63	423	6.71(2.52)	6.0
		2017	61	419	6.86(2.98)	6.0
		2018	55	365	6.64(3.26)	6.0
		2019	56	370	6.61(3.33)	6.0
		2020	47	333	7.09(3.85)	6.0

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Table 3.13: Continued

			Vessels	Crew positions		
		Year		Total	Mean per vessel (sd)	Median per vessel
BSS	CP	98/01/04	18(8)	-	-	-
		2005	6	69	11.50(4.81)	12.0
		2006	4	*	*	*
		2007	4	*	*	*
		2008	4	*	*	*
	CV	98/01/04	524(210)	1,049	6.01(0.89)	6.0
		2005	150	857	5.71(0.73)	6.0
		2006	74	418	5.65(0.78)	6.0
		2007	65	377	5.79(0.79)	6.0
		2008	74	447	6.03(0.79)	6.0
	CVCP	2009	77	536	6.96(4.12)	6.0
		2010	68	444	6.53(2.61)	6.0
		2011	68	453	6.66(2.87)	6.0
		2012	72	502	6.97(3.61)	6.0
		2013	71	481	6.77(3.11)	6.0
		2014	70	480	6.86(2.92)	6.0
		2015	70	491	7.01(3.50)	6.0
		2016	68	463	6.81(2.49)	6.0
		2017	63	441	7.00(3.52)	6.0
		2018	63	436	6.92(3.21)	6.0
		2019	61	428	7.02(3.58)	6.0
		2020	59	417	7.07(3.56)	6.0
BST	CP	2006	1	*	*	*
		2007	1	*	*	*
		2008	1	*	*	*
	CV	2005	4	*	*	*
		2006	25	140	5.60(1.00)	5.0
		2007	22	118	5.36(0.66)	5.0
		2008	26	146	5.62(0.75)	6.0
	CVCP	2009	14	102	7.29(5.20)	6.0
		2010	4	*	*	*
		2013	22	156	7.09(3.52)	6.0
		2014	41	279	6.80(2.62)	6.0
		2015	55	365	6.63(2.19)	6.0
		2016	46	296	6.42(1.14)	6.0
		2017	16	100	6.25(1.00)	6.0
		2018	30	211	7.03(3.72)	6.0
		2019	18	139	7.69(5.12)	6.0
		2020	25	163	6.52(1.19)	6.0

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Table 3.13: Continued

			Vessels	Crew positions		
		Year		Total	Mean per vessel (sd)	Median per vessel
SMB	CP	98/01/04	2(2)	-	-	-
	CV	98/01/04	94(94)	489	5.20(0.80)	5.0
		2009	7	39	5.57(0.79)	6.0
		2010	11	63	5.73(0.65)	6.0
		2011	17	112	6.56(1.12)	6.0
		2012	17	106	6.24(0.97)	6.0
		2014	4	*	*	*
		2015	3	*	*	*
WAI	CP	98/01/04	2(1)	-	-	-
	CV	98/01/04	3(3)	*	*	*

Notes: Data shown by calendar year; statistics shown for 98/01/04 are calculated over the 1998, 2001, and 2004 calendar years, with vessel column indicating count of vessel-level observations, and unique vessels (in parentheses) over the 3-year period. Starting in 2009, data are summarized over all harvesting sectors (CVCP) to preserve confidentiality.

Total count and mean per vessel statistics by fishery/sector/year are shown for crew positions in the active fleet and unique crew members receiving payment for crab fishing; statistics include fishing crew and captain, excludes processing-only employees on CPs.

Crew positions statistics are calculated using average fishing crew size reported in EDR data for 1998/04/05 (data not collected for CPs). As of 2005 calendar years (2006 for BSS fishery), crew positions are calculated using eLandings data on count of crew on-board reported by trip. CP crew positions statistics are inclusive of processing crew, as reported in the EDR and/or eLandings.

Crew participant statistics published prior to 2013 used EDR data on number of crew receiving pay settlements for each crab fishery, but was discontinued in the EDR beginning in 2012 - see earlier editions of this report for by-fishery crab crew participant statistics for 1998 through 2012.

[a] No catcher/processor operations reported fishing activity in the SMB fishery from 2009 to 2012.

[b] 2001 WAI fishery was closed except for Petrel Bank test fishery.

[c] As elsewhere in this document, data for EAG and WAG fisheries are summarized in aggregate for Aleutian Islands golden king crab (AIG) fishery to preserve confidentiality; where vessel crew data are reported for both the EAG and WAG fisheries, mean figures over the two fisheries for crew participants and crew positions were used in place of cumulative figures under the assumption that the same individuals are employed in both fisheries.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database, 2005 and later crew positions information from eLandings.

Table 3.14: Alaska residency of participating licensed crew members and gear operators, CR Program fisheries

	Crew license holders				Gear operators			Crew and gear operators
Year	Alaska resident	Non-resident	Unknown	Total	Alaska resident	Non-resident	Total	Total
1998	-	-	-	-	106	242	348	-
1999	-	-	-	-	105	246	351	-
2000	-	-	-	-	90	208	298	-
2001	-	-	-	-	78	210	288	-
2002	-	-	-	-	77	204	281	-
2003	-	-	-	-	82	199	281	-
2004	-	-	-	-	81	197	278	-
2005	-	-	-	-	56	137	193	-
2006	192	332	10	534	39	93	132	666
2007	188	337	5	530	28	72	100	630
2008	208	413	10	631	31	88	119	750
2009	187	381	1	569	30	80	110	679
2010	164	346	5	515	29	70	99	614
2011	181	347	2	530	27	66	93	623
2012	202	394	4	600	32	80	112	712
2013	188	374	13	575	26	69	95	670
2014	200	379	3	582	26	69	95	677
2015	231	476	22	729	32	76	108	837
2016	185	420	26	631	28	72	100	731
2017	154	353	11	518	22	64	86	604
2018	166	317	6	489	23	60	83	572
2019	161	350	7	518	23	60	83	601
2020	221	326	1	548	22	60	82	630

Notes: Data shown by calendar year. A commercial crewmember license or CFEC Gear Operator permit is required of any individual participating directly or indirectly in taking of raw fishery products on a commercial vessel, including cooks, engineers, and individuals handling fishing gear or involved in maintenance or operation of the vessel; processing line workers on catcher-processors are not required to hold licenses, however the counts above may include crab CP processing line workers that held commercial crew licenses but did not work as fishing crew.

[a] Note that crew license and gear operator permit number reporting in EDR data was likely incomplete for 2005 and 2006, but is largely accurate for 2007 and subsequent years due to improvements in EDR administration implemented by the NMFS EDR data collection agent (PSMFC), including providing lookup support to EDR submitters and online access to crew license and gear operator permit registries.

Source: ADF&G commercial crewmember license files, , ADF&G fish ticket data, eLandings, and NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.15: Active CFEC Gear Operator Permit holders: count of permit holders reported on crab fishery landings, and share of CR fishery ex-vessel value landed on associated vessels, by state of residence

		Alaska residents		Non-residents[ab]	
	Year	Permit holders	Associated share of landed ex-vessel value	Permit holders	Associated share of landed ex-vessel value
AIG	1998	2	*	23	*
	1999	5	*	21	*
	2000	3	*	23	*
	2001	4	3%	24	97%
	2002	3	*	25	*
	2003	3	*	19	*
	2004	3	*	21	*
	2005	0	0%	10	100%
	2006	1	*	9	*
	2007	1	*	5	*
	2008	1	*	6	*
	2009	0	0%	7	100%
	2010	2	*	6	*
	2011	2	*	5	*
	2012	1	*	7	*
	2013	1	*	7	*
	2014	1	*	5	*
	2015	1	*	6	*
	2016	1	*	6	*
	2017	2	*	5	*
	2018	2	*	5	*
	2019	2	*	6	*
	2020	2	*	7	*
BBR	1998	87	24%	186	76%
	1999	72	26%	185	74%
	2000	70	27%	174	73%
	2001	66	23%	164	77%
	2002	67	27%	176	73%
	2003	73	21%	180	79%
	2004	73	22%	183	78%
	2005	33	22%	69	78%
	2006	28	24%	59	76%
	2007	19	22%	55	78%
	2008	21	21%	64	79%
	2009	21	22%	54	78%
	2010	18	21%	51	79%
	2011	18	22%	44	78%
	2012	19	23%	46	77%
	2013	16	22%	48	78%
	2014	17	24%	46	76%
	2015	16	21%	48	79%
	2016	15	24%	48	76%
	2017	16	24%	45	76%
	2018	15	23%	40	77%
	2019	16	27%	41	73%
	2020	14	28%	35	72%

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Table 3.15: Continued

	Year	Alaska residents		Non-residents[ab]	
		Permit holders	Associated share of landed ex-vessel value	Permit holders	Associated share of landed ex-vessel value
BSS	1998	72	23%	183	77%
	1999	81	25%	194	75%
	2000	74	28%	156	72%
	2001	54	19%	154	81%
	2002	56	23%	138	77%
	2003	56	24%	136	76%
	2004	53	22%	137	78%
	2005	45	22%	126	78%
	2006	18	16%	74	84%
	2007	19	24%	58	76%
	2008	21	18%	72	82%
	2009	19	17%	69	83%
	2010	21	22%	55	78%
	2011	19	21%	55	79%
	2012	24	21%	69	79%
	2013	18	20%	60	80%
	2014	22	18%	59	82%
	2015	22	20%	61	80%
	2016	19	19%	55	81%
	2017	15	17%	53	83%
	2018	19	23%	49	77%
	2019	15	18%	50	82%
	2020	16	21%	49	79%
BST	2005	0	0%	4	100%
	2006	10	11%	38	89%
	2007	9	21%	25	79%
	2008	6	17%	28	83%
	2009	3	*	17	*
	2010	2	*	2	*
	2013	7	31%	15	69%
	2014	13	19%	31	81%
	2015	20	33%	46	67%
	2016	15	32%	37	68%
	2017	3	*	13	*
	2018	8	34%	21	66%
	2019	6	39%	12	61%
	2020	8	24%	17	76%

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Table 3.15: Continued

	Year	Alaska residents		Non-residents[ab]	
		Permit holders	Associated share of landed ex-vessel value	Permit holders	Associated share of landed ex-vessel value
PIK	1998	34	57%	23	43%
SMB	1998	34	25%	97	75%
	2009	2	*	5	*
	2010	4	33%	7	67%
	2011	4	24%	14	76%
	2012	8	44%	10	56%
	2014	2	*	2	*
	2015	2	*	1	*
WAI	1998	0	0%	1	100%
	2002	7	18%	26	82%
	2003	4	12%	26	88%

Notes: Data shown by calendar year. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".

[a] Count of unique holders of CFEC Gear Operator permits recorded on ADF&G fish tickets for BSAI crab landings.

[b] Percentage share of total aggregate crab fishery ex-vessel value represented by summed value of crab landings associated with Gear Operator permits, by State of Residence.

[c] 2001 Petrel Bank test fishery excluded.

Source: ADF&G fish ticket data, eLandings, CFEC ex-vessel pricing, and ADF&G Commercial Operator's Annual Report (COAR) data.

Table 3.16: Captain and crew share payments, and crab-equivalent crew pay, CR Program fisheries

			Crew share payment			Captain share payment		CV Crew payment, crab equivalent (1000 lbs)	
		Year	Vessels	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median	Total
AIG	CP	98/01/04	4(2)	*	*	*	*	-	-
		2005	1	*	*	*	*	-	-
		2006	1	*	*	*	*	-	-
		2007	1	*	*	*	*	-	-
		2008	1	*	*	*	*	-	-
	CV	98/01/04	50(21)	\$144.41	\$4.03	\$70.91	\$1.95	40.24	1,002.58
		2005	10	\$169.56	\$1.98	\$71.18	\$1.08	46.18	583.75
		2006	6	\$124.44	\$0.95	\$71.03	\$0.53	58.24	386.17
		2007	6	\$194.43	\$1.25	\$91.50	\$0.62	66.47	466.01
		2008	4	*	*	*	*	*	*
	CV & CP	2009	5	\$427.28	\$2.12	\$230.44	\$1.25	*	*
		2010	5	\$719.51	\$3.57	\$310.38	\$2.03	*	*
		2011	5	\$755.07	\$4.46	\$401.66	\$2.42	*	*
		2012	6	\$707.49	\$3.88	\$354.44	\$2.00	175.67	739.97
		2013	6	\$596.04	\$3.70	\$304.20	\$1.68	137.26	821.72
		2014	5	\$769.75	\$3.56	\$320.23	\$1.54	167.09	807.83
		2015	5	\$778.14	\$3.93	\$376.05	\$1.80	151.04	845.68
		2016	5	\$1,061.03	\$4.81	\$388.09	\$2.19	177.92	848.56
		2017	5	\$818.22	\$4.91	\$382.11	\$2.08	132.78	842.63
		2018	5	\$1,028.65	\$5.38	\$396.09	\$2.51	164.57	846.04
		2019	5	\$1,212.80	\$6.63	\$455.39	\$2.42	186.29	1,016.89
		2020	5	\$1,130.34	\$7.84	\$528.06	\$2.64	154.97	1,072.20

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Table 3.16: Continued

			Crew share payment			Captain share payment		CV Crew payment, crab equivalent (1000 lbs)	
		Year	Vessels	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median	Total
BBR	CP	98/01/04	20(9)	\$95.54	\$0.72	\$32.15	\$0.23	-	-
		2005	3	*	*	*	*	-	-
		2006	3	*	*	*	*	-	-
		2007	3	*	*	*	*	-	-
		2008	3	*	*	*	*	-	-
	CV	98/01/04	626(249)	\$60.19	\$14.35	\$30.61	\$6.93	10.88	2,551.38
		2005	84	\$129.65	\$13.16	\$70.09	\$6.92	22.81	2,261.70
		2006	79	\$111.71	\$9.65	\$59.06	\$4.89	23.45	2,002.05
		2007	70	\$158.73	\$13.05	\$83.72	\$6.50	27.60	2,391.78
		2008	76	\$181.96	\$15.98	\$87.86	\$7.22	29.74	2,568.73
		2009	70	\$136.10	\$10.64	\$71.42	\$5.04	24.50	1,848.95
		2010	65	\$217.49	\$14.67	\$112.47	\$6.99	24.96	1,630.31
		2011	62	\$173.82	\$11.98	\$94.54	\$5.56	14.07	942.64
		2012	66	\$113.48	\$8.92	\$60.40	\$4.02	13.55	958.50
		2013	63	\$104.26	\$8.33	\$58.71	\$3.96	13.13	1,021.99
		2014	63	\$116.53	\$8.47	\$57.54	\$3.91	15.67	1,113.59
	CV & CP	2015	65	\$148.53	\$9.98	\$68.50	\$4.68	16.97	1,114.42
		2016	64	\$169.17	\$12.14	\$74.74	\$5.25	14.77	1,018.18
		2017	61	\$109.85	\$7.46	\$50.37	\$3.38	11.87	761.56
		2018	55	\$83.18	\$5.13	\$40.76	\$2.36	7.64	470.63
		2019	56	\$80.26	\$4.99	\$36.91	\$2.29	6.81	407.23
		2020	47	\$69.69	\$3.53	\$33.25	\$1.63	5.70	280.95

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Table 3.16: Continued

			Crew share payment			Captain share payment		CV Crew payment, crab equivalent (1000 lbs)	
		Year	Vessels	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median	Total
BSS	CP	98/01/04	18(8)	\$276.60	\$1.78	\$91.67	\$0.57	-	-
		2005	6	\$76.63	\$0.62	\$35.30	\$0.21	-	-
		2006	4	*	*	*	*	-	-
		2007	4	*	*	*	*	-	-
		2008	4	*	*	*	*	-	-
	CV	98/01/04	517(210)	\$83.46	\$20.76	\$42.18	\$10.01	33.92	18,059.94
		2005	150	\$74.12	\$11.79	\$40.84	\$6.06	31.02	5,335.74
		2006	74	\$78.04	\$6.68	\$40.64	\$3.34	56.65	4,787.81
		2007	65	\$130.05	\$9.87	\$67.71	\$4.69	63.39	4,701.20
		2008	74	\$225.36	\$18.14	\$115.00	\$8.63	108.04	8,833.86
	CV & CP	2009	77	\$165.50	\$14.50	\$81.86	\$6.42	97.27	7,687.66
		2010	68	\$138.38	\$10.45	\$66.20	\$4.69	88.79	6,625.45
		2011	68	\$315.15	\$22.34	\$146.25	\$10.00	104.28	7,350.30
		2012	72	\$415.67	\$30.21	\$195.16	\$13.60	164.03	11,961.77
		2013	71	\$314.98	\$24.48	\$157.16	\$11.14	119.71	9,132.92
		2014	69	\$259.72	\$19.43	\$120.37	\$8.72	97.45	7,255.43
		2015	70	\$257.80	\$18.41	\$122.17	\$8.34	116.01	7,952.72
		2016	68	\$203.24	\$15.71	\$100.64	\$7.02	71.78	5,243.28
		2017	63	\$173.78	\$13.04	\$80.83	\$5.53	41.41	2,953.51
		2018	62	\$142.77	\$10.42	\$66.94	\$4.46	34.77	2,483.14
		2019	61	\$202.23	\$14.84	\$98.52	\$6.42	49.63	3,577.19
		2020	59	\$270.03	\$18.06	\$123.38	\$7.94	67.67	4,433.53

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Table 3.16: Continued

			Crew share payment			Captain share payment		CV Crew payment, crab equivalent (1000 lbs)	
		Year	Vessels	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median	Total
BST	CP	2006	1	*	*	*	*	-	-
		2007	1	*	*	*	*	-	-
		2008	1	*	*	*	*	-	-
	CV	2005	4	*	*	*	*	*	*
		2006	25	\$4.18	\$0.26	\$2.62	\$0.14	2.46	135.42
		2007	21	\$20.96	\$0.68	\$13.26	\$0.35	9.22	308.06
		2008	26	\$16.02	\$0.59	\$8.72	\$0.34	6.73	259.61
	CV & CP	2009	14	\$31.32	\$0.60	\$17.66	\$0.37	13.71	256.98
		2010	4	*	*	*	*	*	*
		2013	19	\$16.13	\$0.49	\$8.29	\$0.23	6.92	198.93
		2014	38	\$75.97	\$3.39	\$34.04	\$1.57	27.32	1,268.04
		2015	52	\$122.79	\$6.46	\$51.06	\$3.00	40.40	2,233.97
		2016	45	\$84.16	\$5.22	\$42.06	\$2.39	27.34	1,616.12
		2017	16	\$67.75	\$1.02	\$26.72	\$0.46	15.48	239.62
		2018	31	\$39.07	\$1.44	\$18.98	\$0.61	9.81	329.06
		2019	18	\$40.26	\$0.93	\$16.01	\$0.42	10.61	201.69
		2020	20	\$12.92	\$0.38	\$6.05	\$0.16	2.47	92.92
PIK	CV	98/01/04	42(42)	\$11.53	\$0.58	\$5.37	\$0.29	3.22	163.87
SMB	CP	98/01/04	2(2)	*	*	*	*	-	-
	CV	98/01/04	92(92)	\$11.96	\$1.30	\$6.81	\$0.71	4.09	429.84
		2009	7	\$20.00	\$0.17	\$8.62	\$0.07	5.97	49.67
		2010	11	\$80.39	\$1.02	\$48.06	\$0.53	13.60	163.26
		2011	17	\$66.44	\$1.42	\$35.99	\$0.67	10.69	232.83
		2012	17	\$48.99	\$0.95	\$24.97	\$0.43	10.16	197.23
		2014	4	*	*	*	*	*	*
		2015	3	*	*	*	*	*	*

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Table 3.16: Continued

			Crew share payment			Captain share payment		CV Crew payment, crab equivalent (1000 lbs)	
		Year	Vessels	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median (\$1000)	Total (\$million)	Per vessel, median	Total
WAI	CP	98/01/04	2(1)	*	*	*	*	-	-
	CV	98/01/04	3(3)	*	*	*	*	*	*

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".
Statistics shown for 98/01/04 are calculated over the 1998, 2001, and 2004 calendar years, with vessel obs. indicating total vessel-level observations, and unique vessels (in parentheses) over the 3-year period. Starting in 2009, data are summarized over all harvesting sectors (CVCP) to preserve confidentiality.
Crew and captain share payment statistics show total aggregate and vessel-level median payment by fishery/sector/year. Share payment reflects amount paid for harvesting labor and includes post-season adjustments, bonuses, and deductions for shared expenses such as fuel, bait, and food and provisions, where applicable; excludes any royalty or capital-rent payments for IFQ or vessel ownership share held by captain or crew members.
Crab-equivalent crew pay represents crew share payment value in terms of pounds of landed crab, which normalizes over year-to-year changes in ex-vessel price; calculated for catcher vessels (excludes catcher/processor sector, which do not report ex-vessel landings or revenue) by dividing vessel crew share payment by the vessel-specific average ex-vessel price per pound (ex-vessel revenue/landed pounds).
[a] No catcher/processor operations reported fishing activity in the SMB fishery from 2009 to 2012.
[b] 2001 WAI fishery was closed except for Petrel Bank test fishery.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database .

Table 3.17: Harvest labor net and gross revenue share percentages, vessel-level median, CR Program fisheries

		Obs (vessels)	Net share, median			Gross share, median		
	Year		Labor total	Crew	Captain	Labor total	Crew	Captain
All CR Fisheries	98/01/04	660 (257)	-	40%	-	35%	23%	12%
	2005	163	-	-	-	31%	20%	10%
	2006	95	-	-	-	22%	15%	7%
	2007	82	-	-	-	22%	14%	8%
	2008	89	-	-	-	22%	14%	7%
	2009	83	-	-	-	21%	14%	7%
	2010	74	-	-	-	20%	13%	7%
	2011	73	-	-	-	20%	14%	7%
	2012	78	-	-	-	20%	14%	6%
	2013	78	-	-	-	20%	13%	6%
	2014	74	-	-	-	20%	13%	7%
	2015	79	-	-	-	20%	13%	7%
	2016	77	-	-	-	20%	13%	7%
	2017	70	-	-	-	20%	14%	6%
	2018	65	-	-	-	20%	14%	6%
	2019	65	-	-	-	18%	12%	6%
	2020	61	-	-	-	20%	14%	6%
AIG	98/01/04	48 (20)	-	-	-	29%	18%	9%
	2005	10	35%	23%	14%	21%	14%	8%
	2006	6	36%	25%	13%	17%	11%	6%
	2007	6	40%	25%	13%	18%	12%	6%
	2008	4	*	*	*	*	*	*
	2009	4	*	*	*	*	*	*
	2010	4	*	*	*	*	*	*
	2011	4	*	*	*	*	*	*
	2012	5	-	-	-	18%	13%	5%
	2013	6	-	-	-	18%	13%	5%
	2014	5	-	-	-	19%	13%	6%
	2015	5	-	-	-	19%	13%	7%
	2016	5	-	-	-	21%	15%	6%
	2017	5	-	-	-	24%	16%	7%
	2018	5	-	-	-	22%	15%	7%
	2019	5	-	-	-	21%	15%	6%
	2020	5	-	-	-	23%	16%	6%
BBR	98/01/04	608 (244)	-	-	-	35%	23%	12%
	2005	83	39%	25%	13%	23%	15%	8%
	2006	78	39%	26%	13%	23%	15%	8%
	2007	70	40%	26%	14%	21%	14%	7%
	2008	75	39%	26%	14%	21%	13%	7%
	2009	67	40%	26%	12%	20%	12%	6%
	2010	62	40%	27%	13%	18%	12%	6%
	2011	59	40%	27%	12%	19%	13%	7%
	2012	60	-	-	-	20%	14%	6%
	2013	60	-	-	-	18%	12%	6%
	2014	60	-	-	-	18%	12%	6%
	2015	62	-	-	-	17%	11%	6%
	2016	60	-	-	-	19%	13%	6%
	2017	59	-	-	-	18%	12%	6%
	2018	53	-	-	-	17%	12%	5%
	2019	54	135 -	-	-	15%	10%	5%
	2020	44	-	-	-	15%	10%	5%

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Table 3.17: Continued

		Obs (vessels)	Net share, median			Gross share, median		
	Year		Labor total	Crew	Captain	Labor total	Crew	Captain
BSS	98/01/04	496 (203)	-	-	-	34%	23%	11%
	2005	150	40%	26%	14%	35%	23%	12%
	2006	73	39%	26%	13%	22%	15%	7%
	2007	63	39%	26%	13%	23%	15%	8%
	2008	73	39%	26%	13%	23%	15%	8%
	2009	74	39%	26%	12%	22%	15%	7%
	2010	65	40%	27%	13%	22%	15%	7%
	2011	65	40%	27%	12%	21%	14%	7%
	2012	69	-	-	-	21%	14%	7%
	2013	68	-	-	-	20%	13%	6%
	2014	67	-	-	-	20%	13%	6%
	2015	68	-	-	-	20%	13%	6%
	2016	64	-	-	-	20%	13%	6%
	2017	61	-	-	-	20%	14%	7%
	2018	60	-	-	-	20%	14%	7%
	2019	59	-	-	-	20%	13%	7%
	2020	57	-	-	-	21%	14%	7%
BST	2005	4	*	*	*	*	*	*
	2006	31	40%	26%	14%	27%	17%	9%
	2007	24	40%	26%	14%	23%	15%	8%
	2008	25	40%	26%	14%	22%	15%	8%
	2009	15	40%	26%	12%	21%	15%	7%
	2010	4	*	*	*	*	*	*
	2013	18	-	-	-	24%	17%	8%
	2014	37	-	-	-	21%	15%	7%
	2015	50	-	-	-	23%	15%	7%
	2016	41	-	-	-	24%	16%	8%
	2017	16	-	-	-	22%	15%	7%
	2018	29	-	-	-	22%	15%	7%
	2019	16	-	-	-	23%	16%	7%
	2020	19	-	-	-	22%	15%	7%

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Table 3.17: Continued

		Obs (vessels)	Net share, median			Gross share, median		
	Year		Labor total	Crew	Captain	Labor total	Crew	Captain
	98/01/04	89 (89)	-	-	-	28%	18%	10%
	2009	7	40%	26%	14%	17%	13%	6%
	2010	11	40%	27%	14%	20%	14%	6%
SMB	2011	18	40%	30%	12%	22%	14%	5%
	2012	17	-	-	-	18%	13%	6%
	2014	4	-	-	-	*	*	*
	2015	3	-	-	-	*	*	*

Notes: Data shown by calendar year. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-". Results exclude crab CPs and are shown for crab CVs only. Net revenue share percentages are estimated as the median value over vessel-level net share percentages reported in EDR data from 1998-2011, and represent crew and captain percentages of ex-vessel revenue after deductions for vessel operating expenses and crew-related costs, by crab fishery (for 1998/2001/2004, netshare percentage was reported in aggregate over all vessel labor (captain and crew) and over all crab fisheries). Net revenue share reporting for all sectors was discontinued in the EDR beginning in 2012. Gross revenue share percentages are estimated as median vessel-level values of crew and captain labor payments as a percentage of gross ex-vessel value, before deductions for vessel operating expenses and payments to harvest quota share-holders.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.18: Harvesting sector activity days, CR Program fisheries

			Vessels	Days active total (median)[b]		Days fishing total (median)[c]	
		Year		EDR	CIF	EDR	CIF
AIG	CP	98/01/04	4(2)	*	-	-	-
		2005	2	*	-	*	-
		2006	1	*	-	*	-
		2007	1	*	*	*	*
		2008	1	*	*	*	*
	CV	98/01/04	52(22)	1,203(40)	-	-	-
		2005	10	589(54)	-	411(38)	-
		2006	6	571(102)	-	410(67)	-
		2007	6	471(75)	439(74)	349(55)	289(45)
		2008	4	*	*	*	*
	CVCP	2009	6	666(105)	645(109)	460(68)	439(69)
		2010	5	719(105)	725(146)	486(77)	466(80)
		2011	5	617(107)	582(131)	398(76)	400(82)
		2012	6	-	641(104)	-	427(74)
		2013	6	-	662(104)	-	430(68)
		2014	5	-	676(84)	-	449(53)
		2015	5	-	673(74)	-	437(48)
		2016	5	-	758(109)	-	493(60)
		2017	5	-	748(163)	-	469(89)
		2018	5	-	657(125)	-	405(83)
		2019	5	-	650(118)	-	423(75)
		2020	5	-	751(121)	-	487(83)
BBR	CP	98/01/04	20(9)	59(7)	-	-	-
		2005	5	162(23)	-	98(19)	-
		2006	3	*	-	*	-
		2007	3	*	*	*	*
		2008	3	*	*	*	*
	CV	98/01/04	631(250)	2,611(10)	-	-	-
		2005	85	2,253(25)	-	1,374(13)	-
		2006	79	1,766(21)	-	1,062(12)	-
		2007	71	2,274(30)	1,930(26)	1,442(19)	1,230(16)
		2008	76	2,459(29)	2,306(28)	1,702(20)	1,555(19)
	CVCP	2009	70	2,126(29)	1,936(27)	1,408(19)	1,306(18)
		2010	65	2,321(34)	2,023(30)	1,604(22)	1,429(22)
		2011	62	1,150(17)	910(14)	701(10)	538(8)
		2012	64	-	843(13)	-	499(8)
		2013	63	-	947(14)	-	587(9)
		2014	63	-	1,056(15)	-	660(10)
		2015	64	-	954(15)	-	539(8)
		2016	63	-	774(12)	-	422(6)
		2017	61	-	944(14)	-	605(9)
		2018	55	-	626(11)	-	396(7)
		2019	56	-	723(12)	-	462(7)
		2020	47	-	474(9)	-	283(6)

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Table 3.18: Continued

			Vessels	Days active total (median)[b]		Days fishing total (median)[c]	
		Year		EDR	CIF	EDR	CIF
BSS	CP	98/01/04	18(8)	239(39)	-	-	-
		2005	6	189(28)	-	80(8)	-
		2006	4	*	-	*	-
		2007	4	*	*	*	*
		2008	4	*	*	*	*
	CV	98/01/04	522(210)	6,331(25)	-	-	-
		2005	150	2,710(16)	-	1,275(7)	-
		2006	74	2,926(34)	-	1,930(22)	-
		2007	63	2,321(36)	2,009(31)	1,491(21)	1,057(15)
		2008	74	3,610(48)	3,223(40)	2,408(30)	1,737(22)
	CVCP	2009	77	3,869(49)	3,602(44)	2,600(32)	2,111(26)
		2010	68	3,032(42)	2,812(40)	2,110(29)	1,718(24)
		2011	68	3,303(46)	2,878(40)	2,217(30)	1,734(24)
		2012	72	-	5,665(79)	-	3,391(48)
		2013	71	-	4,581(58)	-	2,998(38)
		2014	69	-	3,802(54)	-	2,629(35)
		2015	69	-	4,294(62)	-	2,947(41)
		2016	67	-	2,842(39)	-	1,949(27)
		2017	63	-	2,155(33)	-	1,475(22)
		2018	62	-	2,094(28)	-	1,404(19)
		2019	61	-	2,714(43)	-	1,704(27)
		2020	59	-	3,759(63)	-	2,654(45)
BST	CP	2005	1	*	-	*	-
		2006	1	*	-	*	-
		2007	1	*	*	*	*
		2008	1	*	*	*	*
	CV	2005	4	*	-	*	-
		2006	25	416(13)	-	283(10)	-
		2007	24	555(22)	445(17)	410(16)	295(11)
		2008	26	557(18)	549(22)	390(10)	389(12)
	CVCP	2009	17	467(22)	350(17)	321(15)	238(12)
		2010	4	*	*	*	*
		2013	18	-	279(12)	-	200(9)
		2014	38	-	1,245(28)	-	905(22)
		2015	52	-	2,728(38)	-	1,928(27)
		2016	44	-	1,529(28)	-	1,130(21)
		2017	16	-	213(11)	-	132(7)
		2018	30	-	504(15)	-	331(10)
		2019	16	-	244(14)	-	149(8)
		2020	23	-	389(15)	-	248(9)

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Table 3.18: Continued

			Vessels	Days active total (median)[b]		Days fishing total (median)[c]	
		Year		EDR	CIF	EDR	CIF
	CP	98/01/04	2(2)	*	-	-	-
SMB	CV	98/01/04	93(93)	1,630(17)	-	-	-
		2009	7	184(19)	166(16)	133(10)	112(11)
		2010	11	485(36)	429(36)	365(23)	313(27)
		2011	18	663(33)	710(36)	473(26)	468(24)
		2012	17	-	542(33)	-	363(19)
		2014	4	-	*	-	*
		2015	3	-	*	-	*
WAI	CP	98/01/04	2(1)	*	-	-	-
	CV	98/01/04	3(3)	*	-	-	-

Notes: Data shown by calendar year. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".
Statistics shown for 98/01/04 are calculated as the annual average over the 1998, 2001, and 2004 calendar years; 'Vessels' for 98/01/04 shows count of vessels operating each year, summed over all years; numbers in parentheses show count of unique vessels participating within the three years. Total statistics for Days Active and Days Fishing columns for 98/01/04 shows total aggregate count of vessel activity days averaged across years for participating/reporting vessels. Starting in 2009, data are summarized over all harvesting sectors (CVCP) to preserve confidentiality.
Days active and days fishing are shown as calculated from EDR reporting (1998-2011 for days active, 2005-2011 for days fishing) and ADF&G Shellfish Observer Program confidential interview form data (CIF) supplemented with eLandings data (2009 and later). EDR days active by fishery is calculated using reported days at sea in the 1998-2004 data and, for 2005 and later, the sum of days fishing and days travelling and offloading (vessel activity was not reported by days fishing and traveling/offloading in the 1998-2004 EDR). Note that the 1998-2004 and 2005 and later figures for both total and median days active are not directly comparable, as the pre-2005 data do not include days spent queuing and offloading at processors.
[a] 2001 WAI data reflect activity in Petrel Bank test fishery.

Source: ADF&G Shellfish Observer Program, Confidential Interview Form (CIF) data, eLandings, NMFS AFSC BSAI Crab Economic Data Report (EDR) database

Table 3.19: Fishery expenditures - food and provisions costs, CR Program fisheries

	Year	Vessels	Total Costs ($1,000)	Median Costs ($1,000)
All CR Fisheries	98/01/04	647(258)	$2,883	$9
	2005	156	$1,634	$6
	2006	70	$1,017	$8
	2007	61	$915	$11
	2008	69	$1,696	$16
	2009	60	$1,007	$13
	2010	49	$1,182	$15
	2011	52	$945	$13
	2012	81	$2,035	$9
	2013	76	$1,413	$8
	2014	72	$1,712	$7
	2015	77	$2,097	$8
	2016	75	$1,573	$6
	2017	69	$1,002	$5
	2018	64	$982	$4
	2019	63	$1,059	$5
	2020	60	$1,376	$6
AIG	2012	6	$161	$19
	2013	6	$159	$21
	2014	5	$204	$38
	2015	5	$258	$42
	2016	5	$320	$69
	2017	5	$264	$35
	2018	5	$248	$41
	2019	5	$257	$42
	2020	5	$262	$41
BBR	2012	62	$387	$5
	2013	59	$359	$5
	2014	59	$442	$5
	2015	60	$434	$6
	2016	61	$348	$5
	2017	59	$304	$4
	2018	52	$229	$3
	2019	53	$240	$3
	2020	44	$220	$3
BSS	2012	70	$1,355	$16
	2013	68	$826	$11
	2014	63	$816	$10
	2015	65	$875	$13
	2016	62	$600	$8
	2017	60	$395	$6
	2018	57	$425	$7
	2019	57	$522	$8
	2020	55	$828	$11

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Table 3.19: Continued

	Year	Vessels	Total Costs ($1,000)	Median Costs ($1,000)
BST	2013	16	$70	$3
	2014	35	$241	$4
	2015	47	$530	$6
	2016	37	$305	$6
	2017	14	$40	$2
	2018	27	$80	$3
	2019	16	$39	$2
	2020	18	$67	$3
SMB	2012	16	$131	$7
	2014	2	*	*
	2015	1	*	*

Notes: Bering Sea Tanner crab managed as a single fishery in 2005/2006 and as Eastern and Western fisheries in subsequent seasons. Eastern area closed as an in-season management measure in 2005/2006. Count of quota holding entities in the baseline, 2005/2006 and 2006/2007 seasons represent holders of Bering Sea Tanner quota; subsequent seasons show count of distinct holders of Eastern or Western quota.
[a] Beginning in 2012, vessel food and provisions expenses are reported on a by-fishery basis. Collection of processing employee provisions costs paid by shoreside processors was discontinued after 2011; see earlier volumes of this report for processing plant provisions costs for 1998 through 2011.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database .

Table 3.20: Fishery expenditures - bait usage and costs, CR Program fisheries

			Vessels	Bait costs ($1000)		Bait usage (1000 lbs)		Price ($/lb)
		Year		Per vessel, median	Total	Per vessel, median	Total	Weighted average
All CR	CV+CP	98/01/04	610(246)	$13.88	$5,046	21	7,980	$0.63
		2005	169	$10.14	$2,751	17	4,453	$0.62
		2006	99	$14.03	$2,116	24	3,659	$0.58
		2007	86	$17.42	$2,077	30	3,676	$0.57
		2008	96	$21.75	$2,836	33	4,474	$0.63
		2009	89	$25.74	$3,049	38	4,719	$0.65
		2010	79	$28.55	$3,041	43	4,614	$0.66
		2011	76	$27.16	$2,778	36	4,086	$0.68
		2012	83	$12.69	$3,262	-	-	-
		2013	81	$13.51	$3,241	-	-	-
		2014	76	$12.52	$3,867	-	-	-
		2015	82	$13.48	$4,878	-	-	-
		2016	80	$13.43	$3,576	-	-	-
		2017	72	$8.87	$2,419	-	-	-
		2018	67	$8.89	$2,350	-	-	-
		2019	67	$9.61	$3,063	-	-	-
		2020	64	$10.99	$2,954	-	-	-
AIG	CP	98/01/04	4(2)	*	*	*	*	*
		2005	1	*	*	*	*	*
		2006	1	*	*	*	*	*
		2007	1	*	*	*	*	*
		2008	1	*	*	*	*	*
	CV	98/01/04	50(21)	$36.26	$1,089	60	1,825	$0.60
		2005	9	$47.47	$493	79	863	$0.57
		2006	6	$81.83	$429	142	778	$0.55
		2007	6	$43.07	$319	84	741	$0.43
		2008	4	*	*	*	*	*
	CV+CP	2009	7	$78.16	$687	169	1,137	$0.60
		2010	6	$116.30	$761	215	1,259	$0.60
		2011	5	$174.53	$707	291	1,172	$0.60
		2012	6	$86.28	$612	-	-	-
		2013	6	$121.50	$746	-	-	-
		2014	5	$126.08	$841	-	-	-
		2015	5	$105.21	$1,056	-	-	-
		2016	5	$88.59	$827	-	-	-
		2017	5	$138.36	$850	-	-	-
		2018	5	$131.16	$800	-	-	-
		2019	5	$170.67	$1,079	-	-	-
		2020	5	$201.16	$1,146	-	-	-

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Table 3.20: Continued

			Vessels	Bait costs ($1000)		Bait usage (1000 lbs)		Price ($/lb)
		Year		Per vessel, median	Total	Per vessel, median	Total	Weighted average
BBR	CP	98/01/04	15(8)	$8.07	$48	15	90	$0.53
		2005	4	*	*	*	*	*
		2006	3	*	*	*	*	*
		2007	2	*	*	*	*	*
		2008	3	*	*	*	*	*
	CV	98/01/04	546(227)	$5.34	$1,142	8	1,742	$0.66
		2005	82	$7.11	$909	13	1,380	$0.66
		2006	73	$7.83	$684	13	1,162	$0.59
		2007	70	$11.90	$914	19	1,488	$0.61
		2008	76	$12.79	$1,180	19	1,683	$0.70
	CV+CP	2009	68	$14.09	$1,099	20	1,666	$0.66
		2010	61	$14.99	$1,109	23	1,625	$0.68
		2011	61	$9.30	$722	10	961	$0.75
		2012	64	$6.99	$513	-	-	-
		2013	63	$8.30	$651	-	-	-
		2014	63	$9.87	$716	-	-	-
		2015	64	$10.58	$713	-	-	-
		2016	64	$8.99	$646	-	-	-
		2017	61	$8.37	$530	-	-	-
		2018	53	$7.28	$418	-	-	-
		2019	53	$7.78	$519	-	-	-
		2020	46	$5.46	$444	-	-	-
BSS	CP	98/01/04	13(7)	$15.85	$84	28	147	$0.57
		2005	5	$12.01	$56	23	102	$0.55
		2006	4	*	*	*	*	*
		2007	3	*	*	*	*	*
		2008	4	*	*	*	*	*
	CV	98/01/04	448(190)	$9.53	$2,224	14	3,270	$0.68
		2005	148	$6.65	$1,114	10	1,758	$0.63
		2006	74	$8.18	$641	13	1,041	$0.62
		2007	64	$7.55	$513	12	869	$0.59
		2008	72	$9.33	$809	16	1,288	$0.63
	CV+CP	2009	75	$11.93	$1,051	18	1,616	$0.65
		2010	67	$12.10	$931	18	1,374	$0.68
		2011	67	$14.20	$1,014	19	1,504	$0.67
		2012	72	$24.38	$1,869	-	-	-
		2013	72	$19.59	$1,688	-	-	-
		2014	69	$23.21	$1,676	-	-	-
		2015	69	$27.69	$2,084	-	-	-
		2016	67	$18.31	$1,365	-	-	-
		2017	63	$12.52	$960	-	-	-
		2018	62	$12.55	$959	-	-	-
		2019	61	$12.53	$1,406	-	-	-
		2020	59	$18.77	$1,247	-	-	-

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Table 3.20: Continued

			Vessels	Bait costs ($1000)		Bait usage (1000 lbs)		Price ($/lb)
		Year		Per vessel, median	Total	Per vessel, median	Total	Weighted average
BST	CP	2006	1	*	*	*	*	*
		2007	1	*	*	*	*	*
		2008	1	*	*	*	*	*
	CV	2005	4	*	*	*	*	*
		2006	15	$1.08	$27	2	41	$0.65
		2007	16	$4.69	$93	8	191	$0.49
		2008	21	$5.18	$143	8	230	$0.62
	CV+CP	2009	12	$6.36	$143	10	204	$0.70
		2010	4	*	*	*	*	*
		2013	17	$6.55	$156	-	-	-
		2014	37	$9.51	$550	-	-	-
		2015	51	$10.22	$999	-	-	-
		2016	44	$14.36	$737	-	-	-
		2017	13	$4.76	$78	-	-	-
		2018	27	$5.40	$174	-	-	-
		2019	13	$3.79	$59	-	-	-
		2020	19	$3.52	$118	-	-	-
PIK	CV	98/01/04	35(35)	$5.04	$179	7	249	$0.72
SMB	CV	98/01/04	72(72)	$6.41	$462	9	668	$0.69
		2009	7	$5.18	$69	8	96	$0.71
		2010	13	$12.65	$221	22	329	$0.67
		2011	18	$13.82	$335	17	448	$0.75
		2012	17	$13.79	$269	-	-	-
		2014	4	*	*	-	-	-
		2015	3	*	*	-	-	-
WAI	CP	98/01/04	2(1)	*	*	*	*	*
	CV	98/01/04	3(3)	*	*	*	*	*

Notes: Data shown by calendar year. Statistics shown for 98/01/04 are calculated as the annual average over the 1998, 2001, and 2004 calendar years; Vessels column for 98/01/04 shows count of vessels operating each year, summed over all years; numbers in parentheses show count of unique vessels participating within the three years. Starting in 2009, data are reported over all harvesting sectors (CVCP) to preserve confidentiality. Totals for 98/01/04 represent total annual bait pounds purchased or bait costs averaged across years with participating/reporting vessels. Changes in the reporting of bait quantity and costs in the EDR limit the comparability of bait statistics over the available time series. Beginning in 2006, EDR submitters were directed to report only pounds and costs of bait purchased during the reporting year; treatment of bait caught by the vessel or purchased in the prior year was not specified in EDR reporting instructions for 2005 and earlier years. Additionally, bait quantity reporting is differentiated by species and fishery in all years of EDR data collection, whereas bait costs are reported only by fishery for the years 1998-2004 and by fishery and species together for 2005 and later years. Methods for generating price per pound statistics differs across reporting years. For 1998 - 2004 statistics, reported bait quantities are aggregated by submitter and fishery to match reported bait costs; 2005 and later bait price statistics reflect the exclusion of quantity-cost observations that indicate zero or no reported costs, as well as of observations where the quantity of bait is less than 100 pounds. Bait quantity reporting was dropped from the EDR beginning in 2012. a No catcher/processor operations reported fishing activity in the SMB fishery from 2009 to 2012.

Source: NMFS AFSC BSAI Crab Economic Data.

Table 3.21: Fishery expenditures - vessel fuel costs, CR Program fisheries

		Fuel expenses ($1,000)		Gallons purchased (1,000)		Fuel price ($/gal)
	Year	Total	Median	Total	Median	Average
AIG	2012	$1,392	$262	355	70	$3.92
	2013	$1,853	$337	455	85	$4.08
	2014	$1,518	$306	386	75	$3.94
	2015	$3,329	$240	431	78	$7.73
	2016	$1,250	$230	531	101	$2.35
	2017	$1,121	$231	469	100	$2.39
	2018	$1,273	$226	445	91	$2.86
	2019	$1,599	$241	613	87	$2.61
	2020	$1,418	$216	557	106	$2.55
BBR	2012	$3,396	$37	731	8	$4.65
	2013	$3,718	$41	813	9	$4.57
	2014	$2,800	$33	681	8	$4.11
	2015	$2,159	$27	670	8	$3.22
	2016	$1,465	$20	573	8	$2.56
	2017	$1,668	$21	602	8	$2.77
	2018	$1,329	$20	447	7	$2.98
	2019	$1,335	$23	458	8	$2.92
	2020	$856	$16	346	6	$2.47
BSS	2012	$15,789	$179	3,431	38	$4.60
	2013	$12,195	$129	2,645	28	$4.61
	2014	$8,961	$109	2,172	27	$4.12
	2015	$9,891	$97	2,398	30	$4.12
	2016	$4,306	$58	1,667	20	$2.58
	2017	$3,336	$44	1,241	16	$2.69
	2018	$3,494	$47	1,200	16	$2.91
	2019	$4,140	$58	1,420	19	$2.92
	2020	$5,142	$71	2,023	29	$2.54
BST	2013	$579	$25	137	6	$4.22
	2014	$2,249	$50	546	12	$4.12
	2015	$4,077	$51	1,208	16	$3.37
	2016	$2,075	$41	790	16	$2.63
	2017	$285	$14	106	5	$2.68
	2018	$740	$19	235	6	$3.15
	2019	$359	$19	123	6	$2.92
	2020	$357	$13	148	5	$2.41
SMB	2012	$1,401	$92	296	19	$4.73
	2014	*	*	*	*	*
	2015	*	*	*	*	*

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database .

Table 3.22: Average monthly fuel prices for selected ports

	Port	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1999	Dutch Harbor	-	$1.29	$1.24	$1.45	$1.40	$1.41	$1.56	$1.62	$1.63	$1.60	$1.60	$1.59
	Kodiak	-	$1.16	$1.15	$1.38	$1.47	$1.47	$1.58	$1.59	$1.61	$1.61	$1.63	$1.64
	Seattle	$0.80	$0.87	$0.79	$1.26	$0.95	$1.14	$1.32	$1.16	$1.33	$1.28	$1.22	$1.26
2000	Dutch Harbor	$1.59	$1.73	$2.10	$2.10	$1.88	-	$1.91	$1.93	$2.04	$2.25	$2.31	$2.32
	Kodiak	$1.60	$1.74	$2.03	$2.03	$1.98	$1.92	$1.99	$1.99	$2.09	$2.20	$2.33	$2.33
	Seattle	$1.39	$1.43	$1.58	$1.58	$1.38	$1.39	$1.59	$1.44	$2.01	$2.02	$1.92	$2.07
2001	Adak	-	-	$2.19	$2.05	$2.05	$1.98	$2.05	$1.88	$1.88	$1.98	-	$1.81
	Dutch Harbor	$2.27	$2.14	$2.14	$2.01	$1.98	$1.97	$1.98	$1.86	$1.94	$1.96	$1.86	$1.75
	Kodiak	$2.28	$2.19	$2.09	$1.94	$1.94	$1.94	$1.94	$1.91	$1.94	$1.84	$1.79	$1.60
	Seattle	$1.86	$1.57	$1.49	$1.54	$1.55	$1.50	$1.38	$1.32	$1.60	$1.23	$1.21	$0.96
2002	Adak	$1.78	$1.78	$1.78	$1.78	$1.91	-	-	$1.78	$1.89	$2.03	-	-
	Dutch Harbor	$1.62	$1.39	$1.38	$1.52	$1.59	$1.59	$1.59	$1.59	$1.66	$1.74	$1.77	$1.81
	Kodiak	$1.56	$1.46	$1.45	$1.49	$1.54	$1.54	$1.79	$1.53	$1.61	$1.65	$1.65	$1.65
	Seattle	$1.07	$0.97	$1.20	$1.32	$1.39	$1.38	$1.40	$1.37	$1.58	$1.41	$1.56	$1.39
2003	Adak	$2.00	$2.00	-	$2.30	$2.20	$2.20	$2.13	$2.13	$2.13	$2.13	$2.13	$2.13
	Dutch Harbor	$1.77	$1.85	$2.01	$2.13	$2.02	$1.99	$1.99	$1.99	$2.06	$2.06	$2.06	$2.06
	Kodiak	$1.64	$1.70	$1.90	$2.08	$1.93	$1.88	$1.88	$1.89	$1.86	$2.04	$1.86	$1.86
	Seattle	$1.57	$1.59	$2.31	$1.89	$1.63	$1.58	$1.72	$1.71	$1.70	$1.61	$1.64	$1.67
2004	Adak	$2.14	$2.14	$2.14	-	$2.35	$2.61	$2.61	$2.61	-	$2.75	$2.81	$2.81
	Dutch Harbor	$2.00	$2.00	$2.19	$2.14	$2.20	$2.38	$2.38	$2.47	$2.48	$2.60	$2.68	$2.68
	Kodiak	$1.81	$1.84	$1.98	$2.01	$2.18	$2.36	$2.39	$2.39	$2.39	$2.46	$2.63	$2.65
	Seattle	$1.72	$1.89	$1.98	$2.03	$2.36	$2.28	$2.22	$2.25	$2.27	$2.66	$2.68	$2.26
2005	Adak	$2.73	$2.73	$2.79	$2.87	-	$3.44	$2.99	$3.05	$3.26	$3.44	$3.44	$3.44
	Dutch Harbor	$2.60	$2.60	$2.71	$2.79	$2.86	$2.86	$2.86	$2.99	$3.26	$3.28	$3.36	$3.34
	Kodiak	$2.50	$2.50	$2.55	$2.74	$2.90	$2.90	$2.89	$2.90	$3.22	$3.48	$3.43	$3.38
	Seattle	$2.16	$2.38	$2.90	$2.96	$2.91	$2.70	$2.89	$3.08	$3.73	$3.67	$3.29	$2.88

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Table 3.22: Continued

	Port	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2006	Adak	-	$3.23	$3.23	-	$4.29	$3.56	$3.56	$3.56	$3.77	$3.77	$3.71	$3.71
	Dutch Harbor	$3.12	$3.10	$3.10	$3.10	$3.33	$3.41	$3.41	$3.49	$3.60	$3.42	$3.25	$3.23
	Kodiak	$3.13	$3.15	$3.14	$3.17	$3.39	$3.39	$3.39	$3.46	$3.65	$3.46	$3.20	$3.27
	Seattle	$2.93	$2.76	$3.18	$3.07	$3.56	$3.66	$3.50	$3.73	$3.81	$3.09	$3.12	$3.41
2007	Adak	$3.67	$3.67	$3.39	$3.27	$3.51	$3.51	$3.51	$3.51	$3.51	$3.60	$3.67	$3.93
	Dutch Harbor	$3.14	$3.09	$3.05	$3.07	$3.23	$3.34	$3.34	$3.36	$3.45	$3.47	$3.67	$3.91
	Kodiak	$3.12	$3.09	$3.06	$3.05	$3.18	$3.30	$3.30	$3.30	$3.49	$3.43	$3.61	$3.69
	Seattle	$3.27	$3.20	$3.05	$3.33	$3.42	$3.42	$3.49	$3.55	$3.41	$3.66	$4.19	$3.97
2008	Adak	$3.86	$3.86	$3.94	$4.34	-	$5.00	$5.42	$5.61	$5.61	$5.61	$5.61	$5.61
	Dutch Harbor	$3.60	$3.62	$3.87	$4.50	-	$5.22	$5.39	$5.56	$5.37	$5.18	$4.75	$4.64
	Kodiak	$3.63	$3.69	$3.82	$4.57	-	$5.12	$5.29	$5.59	$5.41	$5.10	$4.80	$3.97
	Seattle	$4.02	$3.83	$4.25	$4.53	-	$5.35	$5.32	$5.20	$4.91	$3.78	$3.54	$2.94
2009	Adak	$5.56	$3.99	$3.88	$3.76	$3.76	$3.46	$3.46	$3.46	-	$3.58	$3.58	$3.58
	Dutch Harbor	$3.66	$3.24	$3.06	$3.06	$3.06	$3.06	$3.33	$3.29	$3.33	$3.47	$3.47	$3.52
	Kodiak	$3.46	$3.28	$3.10	$2.98	$2.98	$3.10	$3.22	$3.22	$3.26	$3.46	$3.31	$3.34
	Seattle	$2.74	$2.58	$2.40	$2.50	$2.72	$2.86	$2.87	$2.92	$3.24	$3.09	$3.23	$3.23
2010	Adak	$3.53	$3.53	-	$3.53	$3.69	$3.69	$3.69	$3.69	$3.77	$3.77	$3.95	$3.95
	Dutch Harbor	$3.43	$3.48	$3.43	$3.51	$3.61	$3.59	$3.69	$3.61	$3.61	$3.61	$3.78	$3.78
	Kodiak	$3.30	$3.48	$3.42	$3.53	$3.71	$3.65	$3.54	$3.53	$3.53	$3.56	$3.72	$3.71
	Seattle	$3.34	$3.17	$3.25	$3.49	$3.72	$3.44	$3.27	$3.42	$3.54	$3.43	$3.69	$3.63
2011	Adak	$3.87	$4.06	$4.27	$4.62	$4.97	$4.79	-	$4.85	$4.74	$4.74	$4.88	$5.08
	Dutch Harbor	$3.71	$3.82	$3.94	$4.34	$4.43	$4.46	$4.46	$4.46	$4.46	$4.46	$4.46	$4.46
	Kodiak	$3.64	$3.75	$3.80	$4.34	$4.43	$4.52	$4.48	$4.49	$4.42	$4.49	$4.47	$4.49
	Seattle	$3.66	$3.85	$4.34	$4.58	$4.68	$4.57	$4.22	$4.35	$4.59	$4.24	$4.35	$4.26

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Table 3.22: Continued

	Port	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2012	Adak	$4.99	-	-	-	$4.94	$4.94	$4.94	$4.94	$4.94	$4.94	$4.94	$4.94
	Dutch Harbor	$4.37	$4.37	$4.60	$4.60	$4.71	$4.68	$4.49	$4.37	$4.49	$4.54	$4.54	$4.54
	Kodiak	$4.27	$4.31	$4.40	$4.61	$4.70	$4.65	$4.47	$4.29	$4.43	$4.60	$4.53	$4.53
	Seattle	$4.03	$4.15	$4.53	$4.69	$4.64	$4.07	$3.74	$4.28	$4.66	$4.33	$4.30	$4.19
2013	Adak	-	$4.86	$4.86	-	$4.90	$4.90	-	$4.90	$4.90	$4.90	$4.90	$4.90
	Dutch Harbor	$4.47	$4.41	$4.48	$4.46	$4.45	$4.46	$4.46	$4.48	$4.50	$4.47	$4.46	$4.39
	Kodiak	$4.40	$4.39	$4.46	$4.45	$4.45	$4.47	$4.43	$4.47	$4.50	$4.49	$4.42	$4.40
	Seattle	$3.99	$4.14	$4.16	$4.14	$3.96	$4.00	$3.95	$4.14	$4.18	$4.04	$4.02	$4.10
2014	Adak	-	$4.81	$4.81	$4.81	-	$4.81	$4.81	$4.81	$4.81	-	-	-
	Dutch Harbor	$4.31	$4.22	$4.24	$4.24	$4.22	$4.22	$4.35	$4.33	$4.35	$4.33	$4.18	$4.11
	Kodiak	$4.32	$4.37	$4.26	$4.26	$4.27	$4.32	$4.38	$4.25	$4.27	$4.21	$4.13	$3.98
	Seattle	$3.93	$4.03	$4.04	$4.05	$3.96	$4.04	$4.05	$4.00	$4.30	$3.90	$3.61	$3.49
2015	Adak	$4.76	$4.76	$4.76	$4.76	$4.75	$4.76	$4.76	-	$4.30	-	$4.07	-
	Dutch Harbor	$3.81	$3.69	$3.63	$3.54	$3.53	$3.53	$3.61	$3.53	$3.25	$3.25	$3.25	$3.25
	Kodiak	$3.74	$3.23	$3.23	$3.24	$3.25	$3.30	$3.41	$3.42	$3.35	$3.11	$3.11	$2.95
	Seattle	$2.90	$2.61	$2.94	$2.63	$2.95	$3.19	$3.08	$2.79	$2.62	$2.61	$2.52	$2.31
2016	Adak	$4.02	$3.49	$3.49	-	$3.49	$3.49	$3.49	$3.27	$3.27	$3.27	$3.27	$3.27
	Dutch Harbor	$2.79	$2.63	$2.70	$2.59	$2.47	$2.58	$2.61	$2.68	$2.68	$2.68	$2.68	$2.68
	Kodiak	$2.75	$2.56	$2.39	$2.48	$2.40	$2.56	$2.69	$2.70	$2.67	$2.67	$2.78	$2.78
	Seattle	$2.11	$1.94	$1.95	$2.02	$2.31	$2.55	$2.61	$2.28	$2.44	$2.41	$2.73	$2.49
2017	Adak	$3.22	$3.22	$3.21	-	-	$3.40	$3.40	$3.40	$3.37	-	$3.40	$3.20
	Dutch Harbor	$2.67	$2.79	$2.75	$2.75	$2.79	$2.74	$2.74	$2.59	$2.75	$2.95	$2.95	$3.10
	Kodiak	$2.78	$2.78	$2.78	$2.78	$2.78	$2.78	$2.78	$2.78	$2.81	$2.93	$2.87	$2.99
	Seattle	$2.73	$2.57	$2.58	$2.59	$2.42	$2.58	$2.45	$2.57	$2.87	$2.70	$3.01	$2.98

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Table 3.22: Continued

	Port	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2018	Adak	$3.13	$3.37	$3.35	$3.35	$3.36	-	$3.36	$3.36	$3.70	$3.70	$3.70	$3.70
	Dutch Harbor	$2.99	$2.97	$2.94	$2.96	$2.88	$3.09	$3.09	$3.47	$3.19	$3.19	$3.30	$3.30
	Kodiak	$2.87	$2.87	$2.93	$2.87	$2.85	$3.07	$3.23	$3.24	$3.33	$3.25	$3.30	$3.18
	Seattle	$2.88	$2.96	$2.70	$3.10	$3.20	$3.35	$3.33	$3.21	$3.15	$3.31	$3.30	$3.03
2019	Adak	$3.63	$3.63	-	$3.63	$3.67	$3.67	$3.67	$3.66	$3.67	$3.67	$3.67	$3.67
	Dutch Harbor	$3.34	$3.03	$3.29	$3.03	$3.14	$3.24	$3.24	$3.24	$3.19	$3.19	$3.17	$3.24
	Kodiak	$3.14	$2.98	$2.97	$2.96	$2.95	$3.01	$3.10	$3.04	$3.07	$3.07	$3.15	$3.17
	Seattle	$2.70	$2.72	$3.04	$3.30	$3.18	$3.04	$2.78	$2.99	$2.82	$2.77	$3.31	$3.01
2020	Adak	$3.62	$3.62	$3.62	$3.62	$2.89	$2.89	$2.89	$2.89	$2.89	$2.89	$2.89	$2.89
	Dutch Harbor	$3.20	$3.30	$3.30	$2.10	$2.53	$2.45	$2.48	$2.45	$2.55	$2.55	$2.55	$2.55
	Kodiak	$3.14	$3.14	$3.15	$3.05	$2.29	$2.17	$2.14	$2.14	$2.14	$2.13	$2.14	$2.14
	Seattle	$3.11	$2.87	$2.46	$2.14	$1.89	$1.99	$2.22	$2.21	$2.00	$2.40	$2.32	$2.54

Notes:

Source: Pacific States Marine Fisheries Commission EFIN monthly marine fuel price data [http://www.psmfc.org/efin/data/fuel.html#FUEL_AK].

Table 3.23: Vessel-level mean operating costs and revenue residuals, BBR, BSS, and all CR Program fisheries in aggregate, 2017 to 2021

		2016		2017		2018		2019		2020	
	variable	Pounds, Value (1,000)	% of Gross	Pounds, Value (1,000)	% of Gross	Pounds, Value (1,000)	% of Gross	Pounds, Value (1,000)	% of Gross	Pounds, Value (1,000)	% of Gross
BBR	Number of active vessels	63		61		55		56		47	
	Pounds landed	132		108		76		68		56	
	Quota pounds leased (% of landed)	90	(68%)	81	(75%)	61	(79%)	52	(77%)	44	(78%)
	Gross ex-vessel revenue	$1529		$1044		$814		$816		$684	
	—- Quota lease cost	($655)	(43%)	($499)	(48%)	($418)	(51%)	($404)	(50%)	($344)	(50%)
	Gross residual after lease cost	$874	57%	$545	52%	$396	49%	$412	50%	$340	50%
	——— Provisions	($5)	(0.4%)	($5)	(0.5%)	($4)	(0.5%)	($4)	(0.5%)	($5)	(0.7%)
	——— Bait	($10)	(0.7%)	($9)	(0.8%)	($8)	(0.9%)	($9)	(1.1%)	($9)	(1.4%)
	——— Fuel	($23)	(1.5%)	($27)	(2.6%)	($24)	(3.0%)	($24)	(2.9%)	($18)	(2.7%)
	—- Non-labor vessel cost (Total)	($38)	(2%)	($41)	(4%)	($36)	(4%)	($37)	(5%)	($33)	(5%)
	Gross residual (non-labor)	$836	55%	$504	48%	$361	44%	$375	46%	$307	45%
	—- Labor cost	($275)	(18%)	($179)	(17%)	($137)	(17%)	($132)	(16%)	($112)	(16%)
	– Harvesting cost (Total)	($969)	(63%)	($719)	(69%)	($591)	(73%)	($573)	(70%)	($489)	(71%)
	Gross ex-vessel profit	$560	37%	$325	31%	$223	27%	$243	30%	$195	29%
BSS	Number of active vessels	67		63		62		61		59	
	Pounds landed	585		337		292		441		563	
	Quota pounds leased (% of landed)	410	(70%)	261	(78%)	226	(77%)	347	(79%)	430	(76%)
	Gross ex-vessel revenue	$1704		$1447		$1200		$1774		$2212	
	—- Quota lease cost	($590)	(35%)	($539)	(37%)	($445)	(37%)	($666)	(38%)	($843)	(38%)
	Gross residual after lease cost	$1114	65%	$908	63%	$754	63%	$1109	62%	$1369	62%
	——— Provisions	($9)	(0.5%)	($6)	(0.4%)	($7)	(0.6%)	($9)	(0.5%)	($14)	(0.6%)
	——— Bait	($20)	(1.2%)	($15)	(1.1%)	($15)	(1.3%)	($23)	(1.3%)	($21)	(1.0%)
	——— Fuel	($64)	(3.8%)	($53)	(3.6%)	($56)	(4.7%)	($68)	(3.8%)	($87)	(3.9%)
	—- Non-labor vessel cost (Total)	($93)	(6%)	($74)	(5%)	($79)	(6%)	($100)	(6%)	($122)	(6%)
	Gross residual (non-labor)	$1021	60%	$834	58%	$676	56%	$1009	57%	$1247	56%
	—- Labor cost	($344)	(20%)	($298)	(21%)	($243)	(20%)	($356)	(20%)	($450)	(20%)
	– Harvesting cost (Total)	($1026)	(60%)	($911)	(63%)	($767)	(64%)	($1122)	(63%)	($1416)	(64%)
	Gross ex-vessel profit	$678	40%	$536	37%	$432	36%	$653	37%	$797	36%

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Table 3.23: Continued

	variable	2016 Pounds, Value (1,000)	2016 % of Gross	2017 Pounds, Value (1,000)	2017 % of Gross	2018 Pounds, Value (1,000)	2018 % of Gross	2019 Pounds, Value (1,000)	2019 % of Gross	2020 Pounds, Value (1,000)	2020 % of Gross
	Number of active vessels	81		72		67		67		64	
	Pounds landed	787		482		451		574		667	
	Quota pounds leased (% of landed)	582	(74%)	377	(78%)	357	(79%)	452	(79%)	510	(77%)
	Gross ex-vessel revenue	$3429		$2676		$2459		$3016		$3285	
	—- Quota lease cost	($1256)	(37%)	($1113)	(42%)	($987)	(40%)	($1201)	(40%)	($1267)	(39%)
	Gross residual after lease cost	$2173	63%	$1562	58%	$1472	60%	$1815	60%	$2018	61%
All CRP	——— Provisions	($19)	(0.6%)	($14)	(0.5%)	($15)	(0.6%)	($16)	(0.5%)	($22)	(0.7%)
	——— Bait	($44)	(1.3%)	($33)	(1.2%)	($35)	(1.4%)	($46)	(1.5%)	($46)	(1.4%)
	——— Fuel	($111)	(3.2%)	($89)	(3.3%)	($102)	(4.1%)	($111)	(3.7%)	($121)	(3.7%)
	—- Non-labor vessel cost (Total)	($174)	(5%)	($136)	(5%)	($151)	(6%)	($172)	(6%)	($189)	(6%)
	Gross residual (non-labor)	$1998	58%	$1426	53%	$1320	54%	$1643	54%	$1828	56%
	—- Labor cost	($678)	(20%)	($530)	(20%)	($486)	(20%)	($590)	(20%)	($669)	(20%)
	– Harvesting cost (Total)	($2108)	(61%)	($1779)	(66%)	($1625)	(66%)	($1963)	(65%)	($2125)	(65%)
	Gross ex-vessel profit	$1320	39%	$897	34%	$834	34%	$1053	35%	$1159	35%

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".
Cost and revenue values are shown in $1000. Vessel-level mean monetary and percentage statistics are calculated across all included vessels. Data reflect total commercial volume and value across all management programs (LLP/open access, IFQ, CDQ, ACA) inclusive of all harvesting sector production; approximation of ex-vessel sale value of CP and catcher-seller volume is incorporated in revenue total by multiplying volume of retained catch by the weighted average ex-vessel sale price sourced from CV sector EDR data. Note that cost information reported in the crab EDR data collection program is limited; vessel operating (i.e., variable) costs are not comprehensive, and fixed cost and capital expenditures are not collected. As a result, cost and revenue residual aggregates shown in table represent partial indices of costs and net earnings, and estimated gross profit from represent upper bound approximations of gross profit. This value does not take into account fixed, overhead, finance/interest, and associated costs and is not a measure of vessel-level net profit.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database

Table 3.24: Fleet-level aggregate operating costs and revenue residuals, BBR, BSS, and all CR Program fisheries in aggregate, 2017 to 2021

		2016		2017		2018		2019		2020	
	variable	Pounds, Value (million)	% of Gross	Pounds, Value (million)	% of Gross	Pounds, Value (million)	% of Gross	Pounds, Value (million)	% of Gross	Pounds, Value (million)	% of Gross
BBR	Number of active vessels	63	-	61	-	55	-	56	-	47	-
	Pounds landed, million	8.3	-	6.6	-	4.2	-	3.8	-	2.6	-
	IFQ leased (% of landed)	5.7	68%	5.0	75%	3.3	79%	2.9	77%	2.1	78%
	Gross ex-vessel revenue	$96.3	-	$63.7	-	$44.8	-	$45.7	-	$32.1	-
	——— Provisions	($0.3)	(0%)	($0.3)	(0%)	($0.2)	(1%)	($0.2)	(1%)	($0.2)	(1%)
	——— Bait	($0.6)	(1%)	($0.5)	(1%)	($0.4)	(1%)	($0.5)	(1%)	($0.4)	(1%)
	——— Fuel	($1.4)	(1%)	($1.7)	(3%)	($1.3)	(3%)	($1.3)	(3%)	($0.9)	(3%)
	—- Non-labor vessel cost (Total)	($2.4)	(2%)	($2.5)	(4%)	($2.0)	(4%)	($2.1)	(5%)	($1.5)	(5%)
	Gross residual (non-labor)	$93.9	98%	$61.2	96%	$42.8	96%	$43.6	95%	$30.6	95%
	—- Labor cost	($17.3)	(18%)	($10.9)	(17%)	($7.6)	(17%)	($7.4)	(16%)	($5.3)	(16%)
	– Harvesting cost (Total)	($19.8)	(20%)	($13.4)	(21%)	($9.5)	(21%)	($9.5)	(21%)	($6.8)	(21%)
	Gross ex-vessel profit	$76.6	80%	$50.3	79%	$35.3	79%	$36.2	79%	$25.4	79%
	– Gross returns to vessel sector^a	$35.3	46%	$19.8	39%	$12.3	35%	$13.6	38%	$9.2	36%
	– Lease royalties (QS sector)	$41.3	54%	$30.4	61%	$23.0	65%	$22.6	62%	$16.2	64%
BSS	Number of active vessels	67	-	63	-	62	-	61	-	59	-
	Pounds landed, million	39.2	-	21.2	-	18.1	-	26.9	-	33.2	-
	IFQ leased (% of landed)	27.5	70%	16.4	78%	14.0	77%	21.2	79%	25.3	76%
	Gross ex-vessel revenue	$114.2	-	$91.2	-	$74.4	-	$108.2	-	$130.5	-
	——— Provisions	($0.6)	(1%)	($0.4)	(0%)	($0.4)	(1%)	($0.5)	(0%)	($0.8)	(1%)
	——— Bait	($1.4)	(1%)	($1.0)	(1%)	($1.0)	(1%)	($1.4)	(1%)	($1.2)	(1%)
	——— Fuel	($4.3)	(4%)	($3.3)	(4%)	($3.5)	(5%)	($4.1)	(4%)	($5.1)	(4%)
	—- Non-labor vessel cost (Total)	($6.2)	(5%)	($4.7)	(5%)	($4.9)	(7%)	($6.1)	(6%)	($7.2)	(6%)
	Gross residual (non-labor)	$107.9	95%	$86.5	95%	$69.5	93%	$102.2	94%	$123.3	94%
	—- Labor cost	($23.0)	(20%)	($18.8)	(21%)	($15.1)	(20%)	($21.7)	(20%)	($26.6)	(20%)
	– Harvesting cost (Total)	($29.3)	(26%)	($23.5)	(26%)	($20.0)	(27%)	($27.8)	(26%)	($33.8)	(26%)
	Gross ex-vessel profit	$84.9	74%	$67.7	74%	$54.4	73%	$80.4	74%	$96.7	74%
	– Gross returns to vessel sector^a	$45.4	53%	$33.8	50%	$26.8	49%	$39.8	50%	$47.0	49%
	– Lease royalties (QS sector)	$39.5	47%	$33.9	50%	$27.6	51%	$40.6	50%	$49.7	51%

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Table 3.24: Continued

	variable	2016 Pounds, Value (million)	2016 % of Gross	2017 Pounds, Value (million)	2017 % of Gross	2018 Pounds, Value (million)	2018 % of Gross	2019 Pounds, Value (million)	2019 % of Gross	2020 Pounds, Value (million)	2020 % of Gross
	Number of active vessels	81	-	72	-	67	-	67	-	64	-
	Pounds landed, million	63.8	-	34.7	-	30.2	-	38.5	-	42.7	-
	IFQ leased (% of landed)	47.1	74%	27.1	78%	23.9	79%	30.3	79%	32.6	77%
	Gross ex-vessel revenue	$277.7	-	$192.6	-	$164.8	-	$202.1	-	$210.2	-
	——— Provisions	($1.6)	(1%)	($1.0)	(1%)	($1.0)	(1%)	($1.1)	(1%)	($1.4)	(1%)
	——— Bait	($3.6)	(1%)	($2.4)	(1%)	($2.3)	(1%)	($3.1)	(2%)	($3.0)	(1%)
All CRP	——— Fuel	($9.0)	(3%)	($6.4)	(3%)	($6.8)	(4%)	($7.4)	(4%)	($7.8)	(4%)
	—- Non-labor vessel cost (Total)	($14.1)	(5%)	($9.8)	(5%)	($10.1)	(6%)	($11.6)	(6%)	($12.1)	(6%)
	Gross residual (non-labor)	$263.6	95%	$182.8	95%	$154.6	94%	$190.5	94%	$198.1	94%
	—- Labor cost	($54.9)	(20%)	($38.1)	(20%)	($32.6)	(20%)	($39.5)	(20%)	($42.8)	(20%)
	– Harvesting cost (Total)	($69.0)	(25%)	($47.9)	(25%)	($42.7)	(26%)	($51.1)	(25%)	($54.9)	(26%)
	Gross ex-vessel profit	$208.7	75%	$144.7	75%	$122.1	74%	$151.0	75%	$155.3	74%
	– Gross returns to vessel sector^a	$107.0	51%	$64.6	45%	$55.9	46%	$70.5	47%	$74.2	48%
	– Lease royalties (QS sector)	$101.7	49%	$80.2	55%	$66.1	54%	$80.5	53%	$81.1	52%

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".
Cost and revenue values are shown in $ million. Fleet-level monetary and percentage statistics are calculated across all included vessels. Data reflect total commercial volume and value across all management programs (LLP/open access, IFQ, CDQ, ACA) inclusive of all harvesting sector production; approximation of ex-vessel sale value of CP and catcher-seller volume is incorporated in revenue total by multiplying volume of retained catch by the weighted average ex-vessel sale price sourced from CV sector EDR data. Note that cost information reported in the crab EDR data collection program is limited; vessel operating (i.e., variable) costs are not comprehensive, and fixed cost and capital expenditures are entirely excluded. As a result, cost and revenue residual aggregates shown in table represent partial indices of costs and net earnings, and estimated gross profit from represent upper bound approximations of gross profit. This value does not take into account fixed, overhead, finance/interest, and associated costs and is not a complete measure of net income or economic profit.
[a] Residual percentages are vessel and QS sector share of gross ex-vessel profit; all other percentages are cost shares or residuals with respect to gross revenue.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database

Table 3.25: Crab harvest quota lease activity, volume, cost, and average lease prices and rates, CR Program fisheries

			Vessels[a]	Lease rate (percent of ex-vessel price)[b]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[c]	Lease cost as % of ex-vessel gross)[d]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
AIG	All Quota	2012	5	42%	45%	4,202	553	840	$8,459	$1,151.28	$1,691.78	82%	37%
		2013	6	35%	42%	3,664	589	611	$6,935	$1,036.04	$1,155.83	102%	43%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	5	49%	45%	4,013	1,094	803	$8,873	$1,716.42	$1,774.58	76%	36%
		2016	4	*	*	*	*	*	*	*	*	*	*
		2017	5	51%	54%	4,524	934	905	$14,366	$2,710.18	$2,873.22	83%	45%
		2018	4	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	4	*	*	*	*	*	*	*	*	*	*
	CVO A	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	5	35%	43%	2,026	328	405	$4,005	$639.84	$800.91	86%	40%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	5	49%	49%	2,252	351	450	$5,647	$1,002.61	$1,129.40	65%	34%
		2016	3	*	*	*	*	*	*	*	*	*	*
		2017	5	52%	53%	2,368	367	395	$7,458	$1,233.30	$1,243.08	76%	40%
		2018	4	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	4	*	*	*	*	*	*	*	*	*	*
	CVO B + CPO	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	6	36%	37%	1,285	83	143	$2,045	$257.27	$227.23	102%	39%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	5	37%	36%	1,375	24	196	$2,193	$78.94	$313.29	95%	34%
		2016	4	*	*	*	*	*	*	*	*	*	*
		2017	5	54%	40%	1,285	73	161	$3,113	$203.18	$389.16	91%	37%
		2018	4	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	4	*	*	*	*	*	*	*	*	*	*
	CVC + CPC	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	5	41%	49%	151	27	25	$342	$49.93	$57.02	100%	50%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	4	*	*	*	*	*	*	*	*	*	*
		2016	3	*	*	*	*	*	*	*	*	*	*
		2017	5	52%	74%	204	23	29	$926	$76.99	$132.30	100%	78%
		2018	3	*	*	*	*	*	*	*	*	*	*
		2019	4	*	*	*	*	*	*	*	*	*	*
		2020	3	*	*	*	*	*	*	*	*	*	*

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Table 3.25: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[b]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[c]	Lease cost as % of ex-vessel gross)[d]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
AIG	CDQ + ACA	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	2	*	*	*	*	*	*	*	*	*	*
		2014	3	*	*	*	*	*	*	*	*	*	*
		2015	3	*	*	*	*	*	*	*	*	*	*
		2016	3	*	*	*	*	*	*	*	*	*	*
		2017	4	*	*	*	*	*	*	*	*	*	*
		2018	2	*	*	*	*	*	*	*	*	*	*
		2019	2	*	*	*	*	*	*	*	*	*	*
		2020	2	*	*	*	*	*	*	*	*	*	*
BBR	All Quota	2012	53	65%	62%	4,698	80	89	$27,026	$468.45	$509.93	77%	48%
		2013	55	65%	65%	6,116	88	111	$31,704	$448.63	$576.44	80%	52%
		2014	52	63%	64%	7,122	108	137	$33,557	$524.72	$645.32	83%	53%
		2015	52	63%	66%	6,515	106	125	$37,087	$570.91	$713.22	80%	53%
		2016	53	62%	63%	5,786	89	109	$42,275	$663.00	$797.64	81%	51%
		2017	52	62%	64%	4,959	70	95	$30,560	$423.00	$587.69	84%	53%
		2018	45	63%	65%	3,328	48	74	$23,030	$345.55	$511.77	90%	58%
		2019	46	63%	64%	2,938	42	64	$22,595	$320.77	$491.19	89%	57%
		2020	38	64%	64%	2,061	41	54	$16,176	$301.58	$425.70	92%	59%
	CVO A	2012	50	65%	62%	3,619	65	72	$20,235	$346.96	$404.70	74%	46%
		2013	51	64%	65%	4,425	79	87	$22,623	$383.37	$443.58	77%	50%
		2014	50	62%	64%	5,229	88	105	$24,396	$409.37	$487.92	82%	52%
		2015	49	63%	65%	5,129	90	105	$28,810	$480.87	$587.95	78%	51%
		2016	50	62%	62%	4,433	75	89	$31,776	$529.66	$635.51	77%	47%
		2017	50	62%	63%	3,709	56	74	$22,754	$338.02	$455.07	81%	51%
		2018	42	62%	64%	2,503	41	60	$17,047	$283.05	$405.88	87%	56%
		2019	42	62%	63%	2,164	35	52	$16,228	$263.26	$386.38	87%	55%
		2020	36	64%	64%	1,578	33	44	$12,203	$256.71	$338.98	91%	58%
	CVO B + CPO	2012	42	65%	67%	539	8	12	$3,309	$47.27	$73.54	68%	43%
		2013	45	65%	64%	778	10	16	$4,131	$52.73	$82.62	73%	47%
		2014	43	64%	63%	854	12	17	$4,089	$59.79	$83.45	72%	45%
		2015	42	63%	66%	697	11	15	$4,141	$64.36	$88.10	72%	48%
		2016	43	64%	66%	610	10	13	$4,769	$75.13	$99.36	77%	51%
		2017	43	63%	63%	546	9	11	$3,390	$55.70	$70.63	85%	54%
		2018	39	64%	65%	358	6	8	$2,580	$39.74	$58.64	83%	54%
		2019	42	64%	67%	366	6	8	$3,044	$47.44	$63.43	80%	54%
		2020	35	64%	64%	203	4	5	$1,631	$33.33	$41.82	80%	51%

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Table 3.25: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[b]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[c]	Lease cost as % of ex-vessel gross)[d]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
BBR	CVC + CPC	2012	36	63%	64%	172	4	5	$1,019	$24.09	$26.82	76%	50%
		2013	37	66%	66%	199	5	5	$1,087	$24.13	$26.51	76%	50%
		2014	34	65%	66%	213	6	6	$1,017	$25.98	$28.24	78%	51%
		2015	40	63%	65%	222	5	5	$1,311	$31.31	$31.23	73%	48%
		2016	35	64%	62%	193	5	5	$1,433	$37.00	$38.72	46%	30%
		2017	39	62%	64%	153	3	4	$972	$23.03	$24.29	85%	55%
		2018	35	63%	67%	109	3	3	$788	$19.83	$20.20	81%	54%
		2019	35	63%	65%	93	2	2	$753	$16.76	$19.31	87%	57%
		2020	33	65%	62%	60	1	2	$485	$12.03	$13.47	74%	48%
	CDQ + ACA	2012	5	64%	72%	369	71	74	$2,478	$491.50	$495.50	100%	65%
		2013	8	67%	66%	713	77	89	$3,863	$417.81	$482.93	100%	66%
		2014	7	63%	67%	826	118	118	$4,055	$551.69	$579.26	100%	65%
		2015	5	67%	68%	468	100	94	$2,825	$589.22	$565.09	100%	68%
		2016	5	63%	67%	550	121	110	$4,298	$907.86	$859.51	101%	67%
		2017	6	63%	64%	551	94	92	$3,445	$577.07	$574.12	100%	65%
		2018	6	66%	67%	357	71	60	$2,615	$506.00	$435.76	100%	67%
		2019	6	67%	68%	315	54	52	$2,569	$428.21	$428.24	100%	68%
		2020	5	68%	68%	220	48	44	$1,858	$392.51	$371.50	100%	68%
BSS	All Quota	2012	60	46%	47%	58,129	830	969	$67,762	$994.78	$1,129.36	81%	38%
		2013	61	47%	48%	50,270	671	824	$63,069	$764.93	$1,033.92	83%	40%
		2014	59	46%	47%	42,296	556	717	$51,889	$681.78	$879.48	84%	39%
		2015	57	46%	48%	42,317	641	742	$45,509	$690.23	$798.41	81%	39%
		2016	56	46%	49%	27,475	412	491	$39,729	$547.50	$709.44	82%	41%
		2017	54	46%	48%	16,448	218	305	$34,073	$451.18	$630.98	86%	41%
		2018	52	47%	48%	14,030	187	270	$27,679	$352.11	$532.29	88%	42%
		2019	51	46%	48%	21,151	303	415	$40,563	$597.92	$795.35	89%	43%
		2020	47	46%	50%	25,348	429	539	$49,748	$857.08	$1,058.46	88%	44%
	CVO A	2012	55	46%	46%	42,796	640	778	$48,337	$745.54	$878.86	79%	36%
		2013	56	46%	47%	34,353	487	613	$41,184	$573.98	$735.43	80%	37%
		2014	57	46%	46%	29,683	442	521	$35,463	$536.03	$622.16	82%	38%
		2015	55	46%	48%	30,362	523	552	$32,028	$526.26	$582.32	76%	37%
		2016	54	46%	49%	19,640	337	364	$27,847	$431.95	$515.69	79%	39%
		2017	52	46%	47%	11,518	176	222	$23,234	$340.21	$446.81	82%	38%
		2018	48	46%	47%	10,046	153	209	$19,282	$290.36	$401.70	83%	39%
		2019	48	46%	47%	15,318	235	319	$28,646	$442.62	$596.79	86%	41%
		2020	45	46%	49%	18,443	338	410	$35,402	$636.08	$786.72	89%	43%

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Table 3.25: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[b]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[c]	Lease cost as % of ex-vessel gross)[d]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
BSS	CVO B + CPO	2012	47	46%	48%	6,990	84	132	$8,867	$113.90	$167.31	80%	38%
		2013	50	47%	50%	7,741	78	133	$10,647	$105.60	$183.57	87%	43%
		2014	48	47%	56%	5,988	69	107	$7,876	$102.81	$140.64	78%	38%
		2015	47	46%	49%	6,289	70	119	$7,018	$81.34	$132.42	86%	41%
		2016	45	46%	50%	3,868	44	77	$5,861	$70.16	$117.22	83%	41%
		2017	48	48%	50%	2,469	28	46	$5,398	$64.12	$99.96	85%	43%
		2018	42	48%	48%	2,091	29	44	$4,361	$62.80	$90.86	95%	45%
		2019	45	46%	47%	3,094	41	61	$6,141	$82.03	$120.40	84%	39%
		2020	41	46%	53%	3,585	55	76	$7,542	$111.42	$160.46	75%	40%
	CVC + CPC	2012	39	46%	46%	1,880	48	46	$2,278	$57.17	$56.95	75%	34%
		2013	41	46%	48%	1,767	35	40	$2,322	$44.54	$52.78	85%	41%
		2014	37	46%	47%	1,258	29	31	$1,605	$37.75	$41.15	93%	43%
		2015	37	46%	49%	1,516	33	37	$1,689	$40.09	$42.22	99%	49%
		2016	36	46%	47%	925	22	25	$1,364	$33.32	$36.87	99%	45%
		2017	37	49%	55%	479	12	12	$1,096	$23.41	$28.11	77%	42%
		2018	36	46%	50%	500	12	13	$1,070	$25.71	$28.17	98%	49%
		2019	37	46%	49%	704	17	18	$1,478	$36.84	$37.90	81%	40%
		2020	34	46%	50%	829	19	23	$1,716	$40.79	$47.67	75%	38%
	CDQ + ACA	2012	11	48%	50%	6,464	563	588	$8,279	$752.07	$752.61	100%	50%
		2013	11	54%	54%	6,409	564	583	$8,916	$834.70	$810.51	100%	53%
		2014	10	48%	58%	5,367	423	537	$6,945	$559.34	$694.53	101%	50%
		2015	7	51%	52%	4,150	509	593	$4,774	$586.52	$682.07	101%	51%
		2016	7	51%	52%	3,042	335	435	$4,656	$490.69	$665.16	101%	52%
		2017	8	50%	51%	1,982	222	248	$4,345	$494.16	$543.13	101%	51%
		2018	6	51%	51%	1,393	228	232	$2,965	$492.87	$494.24	100%	51%
		2019	8	48%	51%	2,035	228	254	$4,298	$483.24	$537.27	100%	51%
		2020	8	51%	51%	2,491	294	311	$5,088	$621.98	$635.96	100%	51%
BST	All Quota	2013	19	30%	31%	1,022	32	54	$848	$31.05	$44.64	89%	27%
		2014	36	28%	27%	7,231	191	201	$5,264	$129.99	$146.22	99%	27%
		2015	45	28%	30%	12,737	215	283	$10,625	$177.91	$236.11	96%	28%
		2016	38	28%	30%	9,862	158	260	$9,346	$150.82	$245.95	106%	32%
		2017	15	28%	29%	1,188	70	79	$1,479	$82.13	$98.57	88%	26%
		2018	30	31%	31%	1,891	54	63	$2,553	$73.63	$85.12	90%	29%
		2019	16	32%	33%	1,010	42	63	$1,513	$62.41	$94.57	99%	32%
		2020	17	30%	32%	592	22	35	$766	$23.11	$45.08	100%	31%

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Table 3.25: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[b]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[c]	Lease cost as % of ex-vessel gross)[d]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
BST	CVO A	2013	16	28%	29%	777	53	49	$607	$28.17	$37.95	89%	26%
		2014	32	28%	27%	5,256	95	128	$3,762	$71.67	$91.77	94%	26%
		2015	43	28%	30%	9,487	131	164	$7,760	$96.95	$133.79	93%	27%
		2016	37	28%	29%	7,470	127	170	$6,741	$116.42	$153.19	108%	31%
		2017	15	28%	29%	829	60	55	$1,004	$55.69	$66.95	82%	24%
		2018	28	29%	30%	1,394	44	50	$1,813	$54.59	$64.76	93%	28%
		2019	15	32%	33%	691	32	46	$1,047	$53.51	$69.82	91%	30%
		2020	17	30%	32%	488	19	29	$627	$22.87	$36.90	96%	31%
	CVO B + CPO	2013	13	28%	47%	130	6	8	$133	$5.03	$8.33	84%	34%
		2014	25	28%	34%	820	12	21	$662	$10.14	$16.96	98%	27%
		2015	27	28%	29%	1,527	26	33	$1,302	$20.90	$28.29	86%	24%
		2016	31	28%	33%	1,125	19	26	$1,219	$18.58	$28.34	87%	29%
		2017	15	28%	29%	172	7	9	$224	$7.81	$11.82	89%	26%
		2018	26	31%	35%	244	6	9	$383	$7.39	$13.67	79%	30%
		2019	14	32%	33%	146	5	9	$217	$6.60	$13.58	101%	33%
		2020	9	28%	27%	51	4	5	$62	$3.59	$6.18	95%	27%
	CVC + CPC	2013	9	28%	33%	27	1	2	$25	$1.14	$2.07	87%	27%
		2014	24	28%	17%	428	3	11	$200	$2.20	$5.26	99%	27%
		2015	24	28%	26%	382	6	9	$283	$4.31	$6.58	60%	17%
		2016	23	28%	29%	438	7	13	$566	$7.12	$16.16	66%	19%
		2017	14	28%	28%	31	2	2	$40	$2.12	$2.82	93%	27%
		2018	22	29%	30%	54	1	2	$69	$1.96	$2.89	59%	19%
		2019	14	32%	32%	42	1	3	$62	$1.30	$3.85	90%	29%
		2020	9	27%	28%	14	1	2	$16	$1.29	$1.76	112%	31%
	CDQ + ACA	2013	5	34%	34%	88	25	18	$83	$17.46	$16.58	100%	31%
		2014	6	34%	39%	729	30	81	$640	$34.24	$71.13	77%	25%
		2015	8	29%	35%	1,342	125	149	$1,281	$99.93	$142.30	100%	31%
		2016	7	31%	32%	830	81	104	$821	$79.20	$102.65	100%	32%
		2017	4	*	*	*	*	*	*	*	*	*	*
		2018	5	29%	31%	199	44	40	$288	$61.26	$57.64	100%	32%
		2019	3	*	*	*	*	*	*	*	*	*	*
		2020	1	*	*	*	*	*	*	*	*	*	*

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Table 3.25: Continued

			Vessels[a]	Lease rate (percent of ex-vessel price)[b]		Pounds Leased (1000 pounds)			Cost ($1000)			Lease pounds as % of pounds landed)[c]	Lease cost as % of ex-vessel gross)[d]
		Year		Median	Wtd mean	Total	Median	Mean	Total	Median	Mean	Wtd mean	Wtd mean
SMB	All Quota	2012	17	33%	32%	1,488	68	88	$2,322	$124.96	$136.58	105%	34%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	3	*	*	*	*	*	*	*	*	*	*
	CVO A	2012	17	32%	34%	1,149	49	68	$1,849	$75.11	$108.79	99%	33%
		2014	3	*	*	*	*	*	*	*	*	*	*
		2015	3	*	*	*	*	*	*	*	*	*	*
	CVO B + CPO	2012	10	33%	35%	144	12	11	$236	$20.37	$18.13	111%	39%
		2014	2	*	*	*	*	*	*	*	*	*	*
		2015	3	*	*	*	*	*	*	*	*	*	*
	CVC + CPC	2012	9	34%	11%	95	2	11	$51	$6.09	$5.68	340%	39%
		2014	2	*	*	*	*	*	*	*	*	*	*
		2015	2	*	*	*	*	*	*	*	*	*	*
	CDQ + ACA	2012	3	*	*	*	*	*	*	*	*	*	*
		2014	1	*	*	*	*	*	*	*	*	*	*

Notes: Other fishery data is not shown due to insufficient observations. Lease data shown represent "market-rate and/or negotiated price" lease transactions as reported for active crab fishing vessels in the 2012 through 2019 Crab EDR, which includes both true arm's length transactions as well as transfers between related parties at market-rate value. Harvest quota types are categorized in this report as the following: CVO A (catcher vessel owner Class A IFQ), CVO B + CPO (catcher vessel owner Class B IFQ and catcher/processor owner IFQ), and CVC + CPC (catcher vessel crew IFQ and catcher/processor crew IFQ). Statistics reported represent results pooled over all quota types and/or regional designations within each category.

[a] Vessels column shows total count by year and quota type of vessels reporting pounds of the quota type leased; the count for "All Quota" shows the number of vessels reporting pounds leased for one or more quota types, and excludes vessels active for the year that did not report lease data for any quota type.

[b] Lease rate statistics for each quota type are calculated with respect to ex-vessel value of crab sold using the same quota type, calculated as the ratio of lease price to ex-vessel price over all observations where both ex-vessel and lease pounds, and ex-vessel revenue and lease cost were reported as non-zero values. Median lease rates are calculated over observation-level lease/ex-vessel ratios by quota type, and weighted mean values are weighted by observation-level pounds. "All Quota" lease rates are calculated over observations where by-quota type quantities are summed over all quota types at the vessel level, such that the weighted average is weighted by total pounds leased at the vessel-level.

[c] Weighted mean statistics reported for "Lease pounds as % of pounds landed", and "Lease cost as % of ex-vessel gross" are calculated over all observations where both ex-vessel and lease pounds, and ex-vessel revenue and lease cost were reported as non-zero values. By-quota type values are reported with respect to the percentage of aggregated ex-vessel pounds and revenue landed by vessels reporting non-zero lease values for that quota type, not the total ex-vessel volume and value of all landings of that quota type across the fleet.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.26: Counts of QS/PQS sales and IFQ/IPQ lease transfers, all CR Program fisheries

	Harvest			Processing	
Year	Coop lease	Non-coop lease	QS sale	PQS sale	PQS lease
2005/06	144	113	199	7	40
2006/07	171	39	329	7	39
2007/08	211	16	292	12	32
2008/09	229	-	209	42	45
2009/10	190	-	221	4	31
2010/11	247	-	192	-	25
2011/12	163	4	126	-	28
2012/13	180	-	211	3	35
2013/14	281	-	215	4	30
2014/15	342	-	193	16	37
2015/16	255	-	86	-	55
2016/17	172	-	140	-	28
2017/18	215	-	243	5	31
2018/19	252	-	128	3	50
2019/20	191	-	167	-	38
2020/21	296	-	154	-	63

Notes: Counts of Cooperative and Non-cooperative lease transfers represent the number of distinct transfers completed through submission of an Application for Transfer of IFQ Between Fishing Cooperatives and Application for Transfer (Lease) of Crab IFQ forms, respectively; each individual transfer of IFQ pounds in a given crab fishery (e.g., BBR, BSS) between one IFQ permit/entity and another IFQ permit/entity identified in submitted forms is counted separately, and counts are aggregated over all crab fisheries for a given crab year. IFQ leasing (or other transfer arrangements) between crab harvest cooperative members within a cooperative are not subject to reporting to NMFS and are not included in these counts.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files .

Table 3.27: Crab harvest quota (QS) sale transfers, estimated price per QS unit, catcher vessel owner and crew QS

		CVC QS				CVO QS			
	Year	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit
EAG	2005/06	2(2,1)	*	*	*	2(1,1)	*	*	*
	2007/08	2(2,2)	*	*	*	-	-	-	-
	2008/09	4(4,3)	*	*	*	1(1,1)	*	*	*
	2009/10	1(1,1)	*	*	*	5(2,5)	*	*	*
	2010/11	3(2,3)	*	*	*	-	-	-	-
	2013/14	-	-	-	-	9(2,9)	*	*	*
	2014/15	1(1,1)	*	*	*	-	-	-	-
	2015/16	3(2,2)	*	*	*	-	-	-	-
	2016/17	1(1,1)	*	*	*	-	-	-	-
	2017/18	1(1,1)	*	*	*	-	-	-	-
	2019/20	1(1,1)	*	*	*	-	-	-	-
	2020/21	3(1,1)	*	*	*	1(1,1)	*	*	*
WAG	2005/06	2(1,1)	*	*	*	1(1,1)	*	*	*
	2007/08	2(1,1)	*	*	*	-	-	-	-
	2008/09	1(1,1)	*	*	*	-	-	-	-
	2010/11	-	-	-	-	2(1,1)	*	*	*
	2011/12	-	-	-	-	2(1,1)	*	*	*
	2012/13	-	-	-	-	2(1,1)	*	*	*
	2013/14	-	-	-	-	1(1,1)	*	*	*
	2014/15	1(1,1)	*	*	*	-	-	-	-
	2020/21	2(1,1)	*	*	*	-	-	-	-

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Table 3.27: Continued

		CVC QS				CVO QS			
	Year	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit
BBR	2005/06	21(19,14)	1,221	56	$1.08	14(6,10)	7,140	115	$0.68
	2006/07	24(20,17)	1,130	40	$0.78	27(17,11)	24,420	404	$1.13
	2007/08	10(8,5)	525	56	$0.86	21(11,13)	7,145	289	$1.43
	2008/09	9(7,7)	482	54	$0.94	25(16,19)	13,988	274	$1.43
	2009/10	9(6,7)	428	38	$0.87	12(10,11)	4,526	375	$1.20
	2010/11	5(5,5)	293	46	$0.77	33(15,22)	14,596	195	$1.03
	2011/12	3(3,2)	*	*	*	3(3,3)	*	*	*
	2012/13	4(3,3)	*	*	*	21(9,16)	7,044	141	$0.89
	2013/14	9(8,7)	283	34	$0.89	7(6,4)	5,424	1,051	$1.06
	2014/15	10(8,6)	484	48	$0.98	18(8,11)	8,903	86	$1.34
	2015/16	3(2,2)	*	*	*	6(5,5)	2,866	364	$1.45
	2016/17	11(7,10)	603	51	$0.99	9(7,7)	3,138	71	$1.39
	2017/18	17(17,14)	1,020	58	$0.61	10(7,8)	2,207	223	$1.02
	2018/19	4(4,3)	*	*	*	4(3,4)	*	*	*
	2019/20	8(6,7)	254	24	$0.32	8(5,7)	5,007	427	$0.53
	2020/21	12(10,8)	873	65	$0.23	16(10,10)	4,022	25	$0.23
BSS	2005/06	25(14,12)	2,793	110	$0.27	22(9,12)	24,619	442	$0.44
	2006/07	35(17,15)	2,864	65	$0.25	36(17,8)	48,984	604	$0.34
	2007/08	12(5,5)	822	51	$0.36	26(10,13)	24,752	1,000	$0.66
	2008/09	10(5,6)	758	48	$0.51	15(9,11)	12,649	382	$0.60
	2009/10	15(6,8)	1,121	49	$0.33	14(8,10)	6,452	366	$0.47
	2010/11	11(6,6)	852	81	$0.43	56(17,24)	34,572	248	$0.58
	2011/12	2(1,1)	*	*	*	21(10,12)	12,598	289	$0.67
	2012/13	9(4,5)	*	*	*	40(9,18)	16,223	179	$1.03
	2013/14	12(6,6)	674	34	$0.80	50(15,18)	20,656	121	$1.19
	2014/15	9(5,3)	*	*	*	23(13,14)	22,281	396	$1.16
	2015/16	3(2,1)	*	*	*	16(9,10)	7,089	119	$0.86
	2016/17	13(7,8)	1,433	138	$0.32	7(4,5)	*	*	*
	2017/18	26(14,13)	2,305	76	$0.30	4(2,3)	*	*	*
	2018/19	6(3,3)	*	*	*	16(4,10)	3,611	104	$0.53
	2019/20	14(8,5)	1,058	62	$0.53	14(8,10)	9,647	321	$0.66
	2020/21	24(11,8)	2,219	70	$0.73	28(9,18)	11,467	256	$1.28

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Table 3.27: Continued

		CVC QS				CVO QS			
	Year	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit
	2006/07	17(14,14)	394	22	$0.05	17(13,8)	6,578	417	$0.10
	2007/08	5(4,3)	*	*	*	9(7,8)	3,031	388	$0.18
	2008/09	4(4,4)	*	*	*	14(8,9)	6,246	373	$0.18
	2009/10	3(2,3)	*	*	*	5(4,5)	*	*	*
	2010/11	3(3,3)	*	*	*	6(6,2)	*	*	*
	2011/12	-	-	-	-	2(2,2)	*	*	*
	2012/13	2(2,2)	*	*	*	12(5,10)	2,825	44	$0.12
EBT	2013/14	6(5,6)	127	27	$0.06	10(5,6)	1,412	121	$0.06
	2014/15	8(8,7)	185	25	$0.20	15(7,11)	4,355	153	$0.48
	2015/16	5(2,3)	*	*	*	7(6,7)	4,481	314	$0.38
	2016/17	8(7,7)	288	28	$0.20	8(5,7)	2,766	304	$0.49
	2017/18	19(19,14)	584	30	$0.06	9(6,7)	1,657	122	$0.32
	2018/19	3(3,3)	*	*	*	2(2,2)	*	*	*
	2019/20	5(4,5)	*	*	*	3(3,3)	*	*	*
	2020/21	2(2,2)	*	*	*	4(3,2)	*	*	*
	2006/07	16(13,13)	372	22	$0.05	22(18,9)	8,512	359	$0.06
	2007/08	5(4,3)	*	*	*	8(6,7)	2,948	388	$0.12
	2008/09	4(4,4)	*	*	*	14(8,9)	6,246	373	$0.12
	2009/10	2(2,2)	*	*	*	5(4,5)	*	*	*
	2010/11	3(3,3)	*	*	*	5(5,2)	*	*	*
	2011/12	-	-	-	-	1(1,1)	*	*	*
	2012/13	2(2,2)	*	*	*	11(5,9)	885	36	$0.09
WBT	2013/14	6(5,6)	127	27	$0.06	10(5,6)	1,412	121	$0.06
	2014/15	6(6,5)	136	25	$0.24	16(8,12)	4,677	172	$0.37
	2015/16	5(2,3)	*	*	*	7(6,7)	4,481	314	$0.38
	2016/17	9(8,8)	408	34	$0.19	7(4,6)	1,894	192	$0.45
	2017/18	19(19,15)	616	30	$0.09	9(6,7)	1,637	122	$0.32
	2018/19	3(3,3)	*	*	*	1(1,1)	*	*	*
	2019/20	6(5,5)	170	27	$0.08	3(3,3)	*	*	*
	2020/21	5(5,4)	*	*	*	6(4,4)	*	*	*

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Table 3.27: Continued

		CVC QS				CVO QS			
	Year	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit
PIK	2007/08	-	-	-	-	8(2,3)	*	*	*
	2008/09	4(2,1)	*	*	*	-	-	-	-
	2010/11	1(1,1)	*	*	*	6(3,1)	*	*	*
	2012/13	2(1,1)	*	*	*	4(1,2)	*	*	*
	2016/17	4(2,2)	*	*	*	-	-	-	-
	2017/18	3(2,2)	*	*	*	-	-	-	-
	2018/19	-	-	-	-	2(1,1)	*	*	*
SMB	2005/06	1(1,1)	*	*	*	2(1,2)	*	*	*
	2006/07	4(3,3)	*	*	*	6(1,3)	*	*	*
	2007/08	4(2,1)	*	*	*	10(3,4)	*	*	*
	2008/09	2(1,1)	*	*	*	-	-	-	-
	2009/10	2(1,1)	*	*	*	4(2,2)	*	*	*
	2010/11	3(2,2)	*	*	*	1(1,1)	*	*	*
	2011/12	2(2,1)	*	*	*	2(2,2)	*	*	*
	2012/13	2(1,1)	*	*	*	23(8,12)	1,003	21	$0.98
	2013/14	6(3,3)	*	*	*	2(1,1)	*	*	*
	2014/15	2(1,1)	*	*	*	2(2,2)	*	*	*
	2015/16	1(1,1)	*	*	*	-	-	-	-
	2016/17	2(1,1)	*	*	*	-	-	-	-
	2017/18	12(8,9)	115	8	$0.06	2(1,1)	*	*	*
	2018/19	3(2,2)	*	*	*	-	-	-	-
	2019/20	1(1,1)	*	*	*	2(1,2)	*	*	*
WAI	2013/14	-	-	-	-	2(2,1)	*	*	*

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-". The counts of transfers reported in the first column represent the number of distinct bi-lateral transfers for which transfer applications were submitted to RAM by QS holders; counts of transferors represents the number of distinct QS holders submitting applications to sell QS shares, and transferees identifies the number of distinct entities receiving transfers.

Source: NMFS AKRO RAM division Quota share transfer data.

Table 3.28: Crab processor quota (PQS) sale transfers, estimated price per PQS unit

		Processor QS			
	Year	Transfers (transferors, transferees)	Total units transferred (1,000)	Median units per transfer (1,000)	Median price per QS unit
EAG	2005/06	1(1,1)	*	*	*
	2008/09	1(1,1)	*	*	*
	2009/10	2(1,1)	*	*	*
	2014/15	1(1,1)	*	*	*
	2017/18	1(1,1)	*	*	*
WAG	2008/09	8(4,3)	18,921.69	979.27	$0.08
BBR	2008/09	2(2,2)	*	*	*
	2009/10	3(3,1)	*	*	*
	2014/15	3(1,1)	*	*	*
BSS	2008/09	1(1,1)	*	*	*
	2009/10	3(1,1)	*	*	*
	2013/14	1(1,1)	*	*	*
	2015/16	3(1,1)	*	*	*
	2018/19	1(1,1)	*	*	*
EBT	2008/09	3(3,3)	4,001.16	207.15	$0.02
	2009/10	2(2,1)	*	*	*
	2015/16	1(1,1)	*	*	*
	2018/19	2(2,1)	*	*	*
WBT	2008/09	3(3,3)	4,001.16	207.15	$0.00
	2009/10	2(2,1)	*	*	*
	2015/16	1(1,1)	*	*	*
	2018/19	1(1,1)	*	*	*
SMB	2013/14	3(2,1)	*	*	*
	2014/15	2(1,1)	*	*	*

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-".

Source: NMFS AKRO RAM division Quota share transfer data.

Table 3.29: CR Program computation quota share (QS) and IFQ ratio

	Season	QS Pool for LLP Holders (CVO and CPO)	QS Pool for Captains/Crew (QS units)	QS Pool for all Harvester QS Units (Holders + Crew)	Final Ratio QS units/IFQ pound
EAG	2019/20	9,700,156	299,989	10,000,145	2.5780
	2020/21	9,700,156	299,989	10,000,145	3.0442
	2021/22	9,700,156	299,989	10,000,145	3.0779
WAG	2019/20	38,800,000	1,200,058	40,000,058	15.4859
	2020/21	38,800,000	1,200,058	40,000,058	15.0150
	2021/22	38,800,000	1,200,058	40,000,058	19.1571
BBR	2019/20	387,828,995	12,000,335	399,829,330	117.0015
	2020/21	387,828,995	12,000,335	399,829,330	167.7699
BSS	2019/20	970,675,714	30,207,732	1,000,883,446	32.6903
	2020/21	970,675,714	30,207,732	1,000,883,446	24.7132
	2021/22	970,675,714	30,207,732	1,000,883,446	198.5880
WBT	2020/21	194,308,390	5,920,159	200,228,549	94.7513
	2021/22	194,308,390	5,920,159	200,228,549	202.2511

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share Pools and Ratios.

Table 3.30: Comparison of crab QS sale price to IFQ lease price

		CVC QS					CVO QS				
	Season	Average price/QS unit	Ratio QS units:IFQ pounds	QS Price/IFQ Pound	Average IFQ Lease Price	IFQ/QS Price Ratio	Average price/QS unit	Ratio QS units:IFQ pounds	QS Price/IFQ Pound	Average IFQ Lease Price	IFQ/QS Price Ratio
BBR	2005/06	$1.13	24.27	$27.44	-	-	$0.68	24.27	$16.40	-	-
	2006/07	$1.00	28.75	$28.83	-	-	$1.37	28.75	$39.53	-	-
	2007/08	$0.77	21.91	$16.96	-	-	$0.99	21.91	$21.80	-	-
	2008/09	$0.98	21.92	$21.40	-	-	$1.43	21.92	$31.44	-	-
	2009/10	$0.87	27.88	$24.35	-	-	$1.21	27.88	$33.68	-	-
	2010/11	$0.77	30.08	$23.12	-	-	$1.04	30.08	$31.30	-	-
	2011/12	$0.61	56.71	$34.81	-	-	$0.60	56.71	$34.15	-	-
	2012/13	-	-	-	-	-	$0.75	56.57	$42.60	$6.21	0.15
	2013/14	$0.79	51.66	$40.95	$5.48	0.13	$0.98	51.66	$50.75	$5.14	0.10
	2014/15	$0.95	44.49	$42.41	$4.83	0.11	$1.27	44.49	$56.55	$4.69	0.08
	2015/16	$0.98	44.54	$43.76	$5.94	0.14	$1.34	44.54	$59.91	$5.73	0.10
	2016/17	$0.97	52.46	$50.65	$7.60	0.15	$1.45	52.46	$75.98	$7.38	0.10
	2017/18	$0.97	67.30	$65.18	$6.27	0.10	$1.16	67.30	$77.93	$6.17	0.08
	2018/19	$0.60	103.12	$61.60	$7.20	0.12	$0.96	103.12	$98.77	$7.02	0.07
	2019/20	$0.37	117.00	$43.20	$8.01	0.19	$0.57	117.00	$66.28	$7.69	0.12
	2020/21	$0.30	167.77	$50.33	$8.18	0.16	$0.36	167.77	$60.40	$7.80	0.13
BSS	2005/06	$0.27	29.88	$8.16	-	-	$0.68	29.88	$20.20	-	-
	2006/07	$0.28	30.60	$8.49	-	-	$0.37	30.60	$11.39	-	-
	2007/08	$0.25	17.75	$4.36	-	-	$0.25	17.75	$4.36	-	-
	2008/09	$0.51	19.11	$9.68	-	-	$0.66	19.11	$12.67	-	-
	2009/10	$0.38	23.31	$8.92	-	-	$0.57	23.31	$13.38	-	-
	2010/11	$0.33	20.62	$6.82	-	-	$0.58	20.62	$11.94	-	-
	2011/12	-	-	-	-	-	$0.61	12.51	$7.68	$1.21	0.16
	2012/13	$1.05	16.76	$17.52	$1.36	0.08	$1.00	16.76	$16.76	$1.25	0.07
	2013/14	$1.02	20.60	$20.93	$1.34	0.06	$1.13	20.60	$23.23	$1.28	0.06
	2014/15	$0.80	16.37	$13.09	$1.17	0.09	$1.02	16.37	$16.68	$1.07	0.06
	2015/16	-	-	-	-	-	$1.16	27.38	$31.78	$1.47	0.05
	2016/17	$0.38	51.56	$19.36	$2.23	0.12	$0.74	51.56	$38.17	$2.19	0.06
	2017/18	$0.31	58.65	$18.32	$2.16	0.12	-	-	-	-	-
	2018/19	$0.28	40.31	$11.21	$2.08	0.19	$0.53	40.31	$21.17	$1.91	0.09
	2019/20	$0.45	32.69	$14.55	$2.17	0.15	$0.70	32.69	$22.82	$1.94	0.08
	2020/21	$0.57	24.71	$14.19	-	-	$0.86	24.71	$21.25	-	-

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Table 3.30: Continued

		CVC QS					CVO QS				
	Season	Average price/QS unit	Ratio QS units:IFQ pounds	QS Price/IFQ Pound	Average IFQ Lease Price	IFQ/QS Price Ratio	Average price/QS unit	Ratio QS units:IFQ pounds	QS Price/IFQ Pound	Average IFQ Lease Price	IFQ/QS Price Ratio
EBT	2006/07	$0.05	118.90	$6.00	-	-	$0.09	118.90	$10.50	-	-
	2007/08	$0.07	64.72	$4.32	-	-	$0.10	64.72	$6.36	-	-
	2008/09	$0.14	80.69	$11.67	-	-	$0.18	80.69	$14.59	-	-
	2009/10	-	-	-	-	-	$0.11	165.14	$17.78	-	-
	2013/14	$0.06	152.13	$8.49	$0.89	0.10	$0.06	152.13	$8.49	$0.82	0.10
	2014/15	$0.10	26.23	$2.59	$0.84	0.32	$0.46	26.23	$12.07	$0.82	0.07
	2015/16	$0.33	19.74	$6.42	$0.88	0.14	$0.48	19.74	$9.42	$0.89	0.09
WBT	2006/07	$0.05	203.77	$10.28	-	-	$0.28	203.77	$56.55	-	-
	2007/08	$0.05	102.46	$5.03	-	-	$0.06	102.46	$6.29	-	-
	2008/09	$0.08	145.05	$12.24	-	-	$0.12	145.05	$17.48	-	-
	2013/14	$0.04	135.26	$6.04	-	-	$0.06	135.26	$7.55	-	-
	2014/15	$0.09	33.56	$2.94	$0.92	0.31	$0.36	33.56	$12.14	$0.82	0.07
	2015/16	$0.26	26.50	$6.90	$0.72	0.10	$0.41	26.50	$10.92	$0.79	0.07
	2017/18	$0.20	89.00	$17.80	$1.38	0.08	$0.32	89.00	$28.11	$1.24	0.04
	2018/19	$0.08	91.20	$7.04	$1.38	0.20	-	-	-	-	-
	2020/21	$0.08	94.75	$7.58	$1.12	0.15	-	-	-	-	-
SMB	2012/13	-	-	-	-	-	$1.20	20.47	$24.65	$1.76	0.07

Notes: Data shown for all CR program crab fisheries by calendar year. All dollar values are adjusted for inflation to 2018-equivalent value. Information suppressed for confidentiality where indicated by "*", and data not available where indicated by "-". Average price/QS unit is calculated as the median price of quota share sales as reported by QS transfer applicants to NMFS AKRO RAM division; Ratio of QS units/IFQ pounds is the season-specific conversion factor used by RAM in determining annual IFQ issuance in pounds per QS share; QS Price/IFQ Pound is the ratio of the preceding quotients, used to convert the QS price from price/QS unit to price/IFQ pound, to facilitate comparison of QS price to IFQ price on the same per-unit basis.

Source: NMFS AKRO RAM division Quota share transfer data; NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 3.31: CR Program owner- and crew-type quota share holdings statistics

		Crew QS				Owner QS			
	Season	QS holders	Mean(sd) holding	Median holding	Max holding	QS holders	Mean(sd) holding	Median holding	Max holding
EAG	Initial allocation	13	7.69(3.28)%	8.20%	12.79%	15	6.67(5.18)%	5.90%	20.11%
	2019/20	9	11.11(8.03)%	10.83%	20.14%	24	4.17(5.02)%	1.85%	20.00%
	2020/21	10	10(8.31)%	8.55%	20.00%	25	4(4.96)%	1.63%	20.00%
WAG	Initial allocation	9	11.11(12.84)%	6.17%	41.74%	15	6.67(12.38)%	1.78%	45.73%
	2019/20	9	11.11(13.16)%	6.30%	41.74%	13	7.69(13.33)%	1.81%	45.73%
	2020/21	8	12.5(13.37)%	7.45%	41.74%	13	7.69(13.33)%	1.81%	45.73%
BBR	Initial allocation	181	0.55(0.21)%	0.52%	1.23%	252	0.4(0.3)%	0.36%	2.24%
	2019/20	107	0.93(0.59)%	0.70%	2.00%	241	0.41(0.53)%	0.31%	5.00%
	2020/21	103	0.97(0.6)%	0.71%	2.00%	240	0.42(0.54)%	0.31%	5.00%
BSS	Initial allocation	155	0.65(0.25)%	0.64%	1.59%	241	0.41(0.32)%	0.39%	2.35%
	2019/20	103	0.97(0.57)%	0.81%	1.99%	266	0.38(0.57)%	0.25%	5.00%
	2020/21	96	1.04(0.6)%	0.84%	1.99%	268	0.37(0.57)%	0.25%	5.00%
EBT	Initial allocation	166	0.6(0.34)%	0.56%	1.99%	256	0.39(0.39)%	0.30%	3.87%
	2019/20	117	0.85(0.59)%	0.63%	1.99%	230	0.43(0.59)%	0.27%	4.97%
	2020/21	112	0.89(0.6)%	0.69%	1.99%	229	0.44(0.59)%	0.27%	4.97%
WBT	Initial allocation	166	0.6(0.34)%	0.56%	1.99%	256	0.39(0.39)%	0.30%	3.87%
	2019/20	117	0.85(0.59)%	0.63%	1.99%	231	0.43(0.59)%	0.27%	4.97%
	2020/21	112	0.89(0.6)%	0.69%	1.99%	229	0.44(0.59)%	0.27%	4.97%

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Table 3.31: Continued

	Season	Crew QS				Owner QS			
		QS holders	Mean(sd) holding	Median holding	Max holding	QS holders	Mean(sd) holding	Median holding	Max holding
PIK	Initial allocation	40	2.5(1.05)%	2.47%	4.81%	112	0.89(0.85)%	0.53%	3.41%
	2019/20	39	2.56(1.17)%	2.60%	4.81%	118	0.85(0.92)%	0.53%	6.96%
	2020/21	39	2.56(1.14)%	2.68%	4.81%	119	0.84(0.9)%	0.55%	6.96%
SMB	Initial allocation	73	1.37(0.44)%	1.35%	3.10%	137	0.73(0.61)%	0.62%	4.43%
	2019/20	63	1.59(0.78)%	1.41%	3.95%	136	0.74(0.79)%	0.54%	5.00%
	2020/21	61	1.64(0.83)%	1.42%	3.95%	137	0.73(0.8)%	0.54%	5.00%
WAI	Initial allocation	4	25(17.29)%	20.84%	49.46%	30	3.33(8.46)%	0.65%	45.16%
	2019/20	4	25(17.29)%	20.84%	49.46%	38	2.63(7.53)%	0.63%	45.16%
	2020/21	4	25(17.29)%	20.84%	49.46%	38	2.63(7.53)%	0.63%	45.16%

Notes: Statistics shown for Crew QS and Owner QS report combined crab catcher vessel and catcher/processor crew (CVC and CPC) QS, and combined (CVO and CPO) quota share pools, including the number of distinct persons directly holding QS (number of individual persons directly holding crew QS, and number of persons directly holding owner QS including both individual persons and non-individual entities), and the mean and standard deviation (shown as mean(sd)), median and maximum percentage of QS pool shares held amongst distinct entities in the pool. Owner QS statistics include QS held by CDQ groups and wholly owned direct subsidiaries of CDQ groups. Initial allocation reports the status of the quota pool as of the beginning of the 2005/06 crab season; statistics shown for the two most recent crab seasons reports the status of the QS pool as of the end of the respective season.

Initial issuees received QS for the first crab season under the CR program, 2005/06. In the Tanner crab fishery, BST quota was initially issued, and the pool was subsequently split into Eastern and Western BST quota (EBT, WBT); statistics shown for Initial allocation for EBT and WBT are identical and represent the same pool, while statistics for subsequent periods are calculated separately for the distinct Eastern and Western fisheries.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files .

Table 3.32: CVO/CPO Entity Decomposition, BBR and BSS QS Pools

		Total		Individual		Corp/Invest Fund		CDQ/Nonprofit		Trust/Estate		Unknown
	Season	Entities	Owners	Entities	Owners	Entities	Owners	Entities	Owners	Entities	Owners	Owners
BBR	2005/06	251	394	26	272	222	66	2	5	0	19	32
	2006/07	255	460	30	360	222	38	2	6	0	20	36
	2007/08	249	466	32	394	212	18	4	6	0	24	24
	2008/09	254	575	32	430	217	80	4	7	0	31	27
	2009/10	256	576	35	430	216	76	4	7	0	32	31
	2010/11	264	574	38	424	221	76	4	7	0	31	36
	2011/12	261	550	41	409	215	72	4	7	0	32	30
	2012/13	257	583	39	433	213	74	4	7	0	40	29
	2013/14	261	598	39	439	217	73	4	7	0	48	31
	2014/15	256	621	38	456	213	74	4	7	0	50	34
	2015/16	249	498	38	417	206	8	4	6	0	35	32
	2016/17	247	525	36	426	206	7	4	6	0	51	35
	2017/18	246	523	35	425	206	7	4	6	0	51	34
	2018/19	248	519	37	418	206	7	4	5	0	56	33
	2019/20	243	517	34	415	204	7	4	5	0	61	29
	2020/21	241	513	35	411	201	5	4	5	0	60	32
BSS	2005/06	240	372	25	261	212	60	2	5	0	18	28
	2006/07	239	428	27	341	209	29	2	6	0	19	33
	2007/08	237	435	30	368	202	16	4	6	0	23	22
	2008/09	245	542	29	402	211	78	4	7	0	30	25
	2009/10	249	551	32	408	211	75	4	7	1	32	29
	2010/11	250	518	35	376	209	74	4	7	1	31	30
	2011/12	263	518	46	382	211	73	5	7	0	31	25
	2012/13	258	549	42	405	210	73	5	7	0	40	24
	2013/14	266	568	44	413	216	72	5	7	0	48	28
	2014/15	260	572	42	416	212	71	5	7	0	49	29
	2015/16	261	451	44	376	211	5	5	6	0	34	30
	2016/17	263	480	45	386	212	4	5	6	0	51	33
	2017/18	261	481	45	389	210	4	5	6	0	51	31
	2018/19	264	486	44	390	214	4	5	6	0	55	31
	2019/20	263	472	46	377	211	4	5	6	0	58	27
	2020/21	266	477	46	376	214	3	5	6	0	59	33

Notes: Statistics shown for Owner QS report combined crab catcher vessel and catcher/processor owner (CVO and CPO) quota share pools, and report the number of distinct QS entities (''Entities"), and number of distict individuals and equity owners of QS entities (''Owners") obtained by decomposition of ownership information reported to NMFS in Annual IFQ Permit applications, and summed percentages of QS pool shares collectively by Entities and Owners, categorized by type – Individual, CDQ Group/Non-profit, Corporate, Trust/Estate, and Unknown (rounding error results in residual decimal values that are assigned to ''Unknown").

Source: NMFS AKRO RAM division Quota Share holder files; Alaska Fisheries Information Network (AKFIN.

Table 3.33: Crew-type crab quota share allocation held by active CFEC-licensed gear operators, CR Program fisheries

	Year	Total QS holders at season end	QS holders active during season	Percent of Crew QS holders active during season	Percent of Crew QS held by active vessel operators
Combined	2005/06	224	95	42%	54%
	2006/07	214	82	38%	52%
	2007/08	211	84	40%	51%
	2008/09	206	82	40%	50%
	2009/10	207	72	35%	49%
	2010/11	204	71	35%	48%
	2011/12	203	72	35%	46%
	2012/13	202	65	32%	43%
	2013/14	203	64	32%	42%
	2014/15	204	66	32%	41%
	2015/16	203	71	35%	43%
	2016/17	201	61	30%	40%
	2017/18	175	65	37%	45%
	2018/19	172	59	34%	42%
	2019/20	166	59	36%	44%
	2020/21	164	50	30%	37%
CVC	2005/06	218	94	43%	53%
	2006/07	208	81	39%	51%
	2007/08	205	83	40%	51%
	2008/09	200	80	40%	49%
	2009/10	201	72	36%	49%
	2010/11	198	70	35%	47%
	2011/12	197	71	36%	45%
	2012/13	196	64	33%	43%
	2013/14	197	63	32%	42%
	2014/15	198	65	33%	42%
	2015/16	197	70	36%	44%
	2016/17	196	60	31%	40%
	2017/18	172	63	37%	46%
	2018/19	169	58	34%	43%
	2019/20	162	58	36%	44%
	2020/21	160	49	31%	37%

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Table 3.33: Continued

	Year	Total QS holders at season end	QS holders active during season	Percent of Crew QS holders active during season	Percent of Crew QS held by active vessel operators
CPC	2005/06	24	13	54%	69%
	2006/07	24	10	42%	69%
	2007/08	24	12	50%	60%
	2008/09	24	13	54%	60%
	2009/10	25	9	36%	43%
	2010/11	27	12	44%	51%
	2011/12	28	12	43%	51%
	2012/13	28	11	39%	49%
	2013/14	29	11	38%	49%
	2014/15	28	8	29%	27%
	2015/16	28	12	43%	33%
	2016/17	28	10	36%	44%
	2017/18	28	10	36%	32%
	2018/19	27	9	33%	25%
	2019/20	27	10	37%	44%
	2020/21	27	11	41%	49%

Notes: Active gear operators are those who made landings of any CR-program crab (including landings on IFQ, CDQ, and ACA permits), irrespective of fishery, during the given season. Data show gear operators active during the season and holding crew-type quota share (CVC, CPC) at season end.

Source: eLandings,CFEC Gear Operator Permit registry, NMFS AKRO RAM division Quota Share and Processor Quota Share holder files and IFQ accounting database.

Table 3.34: IFQ fisheries owner quota share holdings by QS holder location

		Owner QS, Alaska		Owner QS, WA-OR-ID		Owner QS, Other Location	
	Season	QS holders	Percent of pool	QS holders	Percent of pool	QS holders	Percent of pool
EAG	Initial allocation	1	2%	14	98%	0	0%
	2019/20	5	30%	18	70%	1	0%
	2020/21	7	35%	16	52%	2	14%
WAG	Initial allocation	1	2%	14	98%	0	0%
	2019/20	5	63%	8	37%	0	0%
	2020/21	6	63%	6	30%	1	7%
BBR	Initial allocation	41	16%	203	82%	8	2%
	2019/20	49	28%	181	70%	11	3%
	2020/21	61	34%	169	63%	10	3%
BSS	Initial allocation	40	16%	195	82%	6	2%
	2019/20	52	31%	200	66%	14	3%
	2020/21	63	36%	191	61%	14	3%
EBT	Initial allocation	40	16%	209	82%	7	2%
	2019/20	48	31%	170	65%	12	4%
	2020/21	58	36%	159	60%	12	4%
WBT	Initial allocation	40	16%	209	82%	7	2%
	2019/20	49	31%	170	65%	12	4%
	2020/21	58	36%	159	60%	12	4%
PIK	Initial allocation	22	25%	86	72%	4	3%
	2019/20	32	35%	79	57%	7	8%
	2020/21	38	40%	74	52%	7	8%
SMB	Initial allocation	20	19%	113	80%	4	1%
	2019/20	31	33%	98	63%	7	4%
	2020/21	42	42%	88	54%	7	4%
WAI	Initial allocation	6	3%	24	97%	0	0%
	2019/20	13	52%	25	48%	0	0%
	2020/21	16	60%	22	40%	0	0%

Notes: Statistics shown for Owner QS report combined crab catcher vessel and catcher/processor owner (CVO and CPO) quota share pools, report the number of distinct QS holders and percentage of QS pool shares held by individuals by state of residence or entities by state of registration . Owner QS statistics include QS held by CDQ groups and wholly owned direct subsidiaries of CDQ groups. Initial allocation reports the status of the quota pool as of the beginning of the 2005/06 crab season; statistics shown for the two most recent crab seasons reports the status of the QS pool as of the end of the respective season.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files.

Table 3.35: IFQ Fisheries Crew Quota Share Holdings by QS Holder Location

	Season	Crew QS, Alaska		Crew QS, WA-OR-ID		Crew QS, Other Location	
		QS holders	Percent of pool	QS holders	Percent of pool	QS holders	Percent of pool
EAG	Initial allocation	1	2%	11	94%	1	4%
	2019/20	0	0%	9	100%	0	0%
	2020/21	0	0%	10	100%	0	0%
WAG	Initial allocation	0	0%	8	94%	1	6%
	2019/20	0	0%	9	100%	0	0%
	2020/21	0	0%	8	100%	0	0%
BBR	Initial allocation	44	19%	128	75%	9	6%
	2019/20	28	23%	71	70%	8	7%
	2020/21	28	25%	68	70%	7	6%
BSS	Initial allocation	35	19%	111	76%	9	5%
	2019/20	27	22%	69	74%	7	4%
	2020/21	27	24%	63	72%	6	4%
EBT	Initial allocation	40	20%	117	75%	9	5%
	2019/20	29	25%	77	67%	11	8%
	2020/21	30	26%	72	67%	10	7%
WBT	Initial allocation	40	20%	117	75%	9	5%
	2019/20	29	25%	77	67%	11	8%
	2020/21	30	26%	72	67%	10	7%
PIK	Initial allocation	16	34%	19	55%	5	11%
	2019/20	13	29%	20	55%	6	16%
	2020/21	13	29%	19	52%	7	18%
SMB	Initial allocation	17	24%	53	72%	3	4%
	2019/20	16	27%	42	67%	5	6%
	2020/21	16	27%	41	68%	4	5%
WAI	Initial allocation	0	0%	4	100%	0	0%
	2019/20	0	0%	4	100%	0	0%
	2020/21	0	0%	4	100%	0	0%

Notes: Statistics shown for Crew QS report combined crab catcher vessel and catcher/processor crew (CVC and CPC) quota share pools, report the number of distinct QS holders and percentage of QS pool shares held by individuals by state of residence. Initial allocation reports the status of the quota pool as of the beginning of the 2005/06 crab season; statistics shown for the two most recent crab seasons reports the status of the QS pool as of the end of the respective season.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files.

Table 3.36: Crab processor quota share (PQS) allocation holdings, by CR fishery

	Season	PQS holders	Median holding	Max holding	Mean holding in fishery PQS pool (sd)
EAG	Initial allocation	9	3.55%	45.36%	11.11(15.37)%
	2019/20	10	5.68%	45.36%	10(13.61)%
	2020/21	10	5.68%	45.36%	10(13.61)%
WAG	Initial allocation	9	1.03%	62.98%	11.11(21.23)%
	2019/20	10	3.41%	29.98%	10(12.04)%
	2020/21	10	3.41%	29.98%	10(12.04)%
BBR	Initial allocation	17	1.64%	22.98%	5.88(7.07)%
	2019/20	14	6.12%	23.20%	7.14(6.79)%
	2020/21	14	6.12%	23.20%	7.14(6.79)%
BSS	Initial allocation	20	2.08%	25.18%	5(6.73)%
	2019/20	17	3.42%	25.18%	5.88(7.52)%
	2020/21	16	3.76%	25.18%	6.25(7.61)%
EBT	Initial allocation	23	0.83%	24.26%	4.35(6.51)%
	2019/20	18	1.87%	24.37%	5.56(7.13)%
	2020/21	17	1.89%	24.37%	5.88(7.2)%
WBT	Initial allocation	23	0.83%	24.26%	4.35(6.51)%
	2019/20	18	1.87%	24.37%	5.56(7.13)%
	2020/21	17	1.89%	24.37%	5.88(7.2)%
PIK	Initial allocation	14	3.17%	24.49%	7.14(8.09)%
	2019/20	12	4.99%	25.46%	8.33(8.47)%
	2020/21	12	4.99%	25.46%	8.33(8.47)%
SMB	Initial allocation	12	5.06%	32.67%	8.33(10.56)%
	2019/20	10	4.18%	32.67%	10(11.3)%
	2020/21	10	4.18%	32.67%	10(11.3)%
WAI	Initial allocation	9	1.03%	62.98%	11.11(21.23)%
	2019/20	8	4.03%	32.99%	12.5(14.67)%
	2020/21	8	4.03%	32.99%	12.5(14.67)%

Notes: Reports the number of distinct PQS holders (entities or individuals), and the median and maximum percentage of PQS pool shares held amongst distinct entities in the pool. Owner QS statistics include QS held by CDQ groups and wholly owned direct subsidiaries of CDQ groups. Initial allocation reports the status of the quota pool as of the beginning of the 2005/06 crab season; statistics shown for the two most recent crab seasons reports the status of the QS pool as of the end of the respective season.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files.

Table 3.37: CDQ/ACA group direct holdings of CR Program/IFQ quota share allocation, by share type and fishery

		CP QS		CV QS		ALL QS		PQS	
	Season	CDQ Groups	Share of QS held	CDQ Groups	Share of QS held	CDQ Groups	Share of QS held	CDQ Groups	Share of QS held
EAG	2019/20	-	-	3	28.27%	3	26.94%	2	11.72%
	2020/21	-	-	4	28.27%	4	26.94%	2	11.72%
WAG	2019/20	1	96.19%	3	27.83%	4	59.35%	1	29.98%
	2020/21	1	96.19%	3	27.83%	4	59.35%	1	29.98%
BBR	Initial allocation	1	4.29%	3	1.23%	4	1.37%	-	-
	2019/20	4	40.98%	5	14.98%	5	16.16%	2	13.84%
	2020/21	4	40.98%	5	14.95%	5	16.13%	2	13.84%
BSS	Initial allocation	1	3.86%	3	1.42%	4	1.64%	-	-
	2019/20	4	44.53%	6	15.86%	6	18.45%	3	22.90%
	2020/21	4	44.53%	6	15.86%	6	18.45%	3	22.90%
EBT	Initial allocation	1	3.39%	3	1.42%	4	1.55%	-	-
	2019/20	4	62.68%	6	13.79%	6	17.10%	2	18.56%
	2020/21	4	62.68%	6	13.79%	6	17.10%	2	18.56%
WBT	Initial allocation	1	3.39%	3	1.42%	4	1.55%	-	-
	2019/20	4	62.68%	6	13.79%	6	17.10%	2	18.56%
	2020/21	4	62.68%	6	13.79%	6	17.10%	2	18.56%
PIK	Initial allocation	-	-	1	2.34%	1	2.33%	-	-
	2019/20	-	-	6	14.42%	6	14.35%	2	15.77%
	2020/21	-	-	6	14.42%	6	14.35%	2	15.77%
SMB	Initial allocation	-	-	2	1.14%	2	1.11%	-	-
	2019/20	2	100.00%	4	15.01%	5	16.65%	2	23.74%
	2020/21	2	100.00%	4	15.01%	5	16.65%	2	23.74%
WAI	Initial allocation	-	-	1	0.16%	1	0.10%	-	-
	2019/20	1	95.82%	5	24.16%	5	51.58%	-	-
	2020/21	1	95.82%	5	24.16%	5	51.58%	-	-

Notes: Share of QS held reports the proportion of CVO and CPO QS pools held by CDQ groups, including QS held through wholly owned direct subsidiaries; does not include QS held indirectly through partial interest in other QS entities. Initial allocation reports the status of the quota pool as of the beginning of the 2005/06 crab season; statistics shown for the two most recent crab seasons reports the status of the QS pool as of the end of the respective season.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files.

Table 3.38: Crab QS/PQS initial recipients currently remaining in QS Pools, by share type and fishery

	Quota	Initial issuance	2019/20	2020/21	Net change from initial issuance	Net change from previous year
All	All Harvest QS	532	320	316	-216	-4
EAG	CPO	2	0	0	-2	0
	CVC	13	2	2	-11	0
	CVO	13	8	8	-5	0
	All Harvest QS	28	10	10	-18	0
	Processor QS	9	4	4	-5	0
WAG	CPC	2	1	1	-1	0
	CPO	2	1	1	-1	0
	CVC	8	5	5	-3	0
	CVO	13	8	8	-5	0
	All Harvest QS	24	15	15	-9	0
	Processor QS	9	6	6	-3	0
BBR	CPC	8	5	5	-3	0
	CPO	13	5	5	-8	0
	CVC	178	68	61	-117	-7
	CVO	242	156	153	-89	-3
	All Harvest QS	426	229	220	-206	-9
	Processor QS	17	8	8	-9	0
BSS	CPC	8	5	4	-4	-1
	CPO	14	5	5	-9	0
	CVC	152	59	52	-100	-7
	CVO	231	150	147	-84	-3
	All Harvest QS	389	212	203	-186	-9
	Processor QS	20	10	10	-10	0

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Table 3.38: Continued

	Quota	Initial issuance	2019/20	2020/21	Net change from initial issuance	Net change from previous year
BST	CPC	15	-	-	-	-
	CPO	14	-	-	-	-
	CVC	170	-	-	-	-
	CVO	248	-	-	-	-
	All Harvest QS	426	-	-	-	-
	Processor QS	23	-	-	-	-
BTE	CPC	15	8	8	-7	0
	CPO	13	5	5	-8	0
	CVC	160	74	69	-91	-5
	CVO	246	156	153	-93	-3
	All Harvest QS	413	237	230	-183	-7
	Processor QS	23	12	12	-11	0
BTW	CPC	15	8	8	-7	0
	CPO	13	5	5	-8	0
	CVC	160	74	69	-91	-5
	CVO	246	156	153	-93	-3
	All Harvest QS	413	237	230	-183	-7
	Processor QS	23	12	12	-11	0

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Table 3.38: Continued

	Quota	Initial issuance	2019/20	2020/21	Net change from initial issuance	Net change from previous year
PIK	CPO	1	1	1	0	0
	CVC	40	26	26	-14	0
	CVO	111	75	74	-37	-1
	All Harvest QS	148	100	99	-49	-1
	Processor QS	14	9	9	-5	0
SMB	CPO	5	1	1	-4	0
	CVC	73	32	30	-43	-2
	CVO	133	87	84	-49	-3
	All Harvest QS	210	121	116	-94	-5
	Processor QS	12	5	5	-7	0
WAI	CPC	1	1	1	0	0
	CPO	2	2	2	0	0
	CVC	4	3	3	-1	0
	CVO	29	18	17	-12	-1
	All Harvest QS	34	22	21	-13	-1
	Processor QS	9	5	5	-4	0

Notes:
Initial issuance shows the number of initial Crab QS/PQS recipients in each of the respective quota pools as of the beginning of the 2005/06 crab season; counts for the most recent seasons show the current number and net change (exit) in the number of initial issuees in the respective pool remaining as of the end of the two most recent crab seasons.
Quota initially issued for the Bering Sea Tanner crab (BST) was reissued for the 2006/07 season corresponding to division of the fishery into eastern and Western management units (EBT, WBT). The table reports initial BST quota holders as of 2005, and initial EBT and WBT holders as of 2006; net change from initial issuees remaining reported for EBT and WBT is relative to 2006.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files

Table 3.39: New holders of Crab QS and PQS in 2020/21 relative to initial allocation and prior season end

		Owner QS, New in fishery		Owner QS, New in all fisheries		Crew QS, New in fishery		Crew QS, New in all fisheries		PQS, New in fishery		PQS, New in all fisheries	
	Season	Entrants	Share of QS type acquired	Entrants	Share of QS type acquired	Entrants	Share of QS type acquired	Entrants	Share of QS type acquired	Entrants	Share of QS type acquired	Entrants	Share of QS type acquired
EAG	2019 season end	1	2%	-	-	1	20%	1	20%	-	-	-	-
	Initial allocation	17	51%	13	46%	8	80%	6	78%	6	25%	5	24%
WAG	Initial allocation	4	16%	3	4%	2	20%	2	20%	4	53%	3	53%
BBR	2019 season end	3	1%	3	1%	5	5%	2	2%	-	-	-	-
	Initial allocation	83	29%	77	26%	40	48%	36	45%	6	33%	5	32%
BSS	2019 season end	9	1%	8	1%	4	4%	3	4%	-	-	-	-
	Initial allocation	117	28%	107	26%	42	51%	39	48%	6	32%	5	31%
EBT	2019 season end	3	1%	3	1%	3	3%	3	3%	-	-	-	-
	Initial allocation	72	23%	72	23%	39	41%	36	40%	5	22%	4	22%
WBT	2019 season end	3	1%	3	1%	3	3%	3	3%	-	-	-	-
	Initial allocation	72	23%	72	23%	39	41%	36	40%	5	22%	4	22%
PIK	2019 season end	2	2%	2	2%	-	-	-	-	-	-	-	-
	Initial allocation	44	42%	30	29%	13	34%	9	21%	3	30%	2	16%
SMB	2019 season end	5	1%	5	1%	2	4%	1	3%	-	-	-	-
	Initial allocation	52	25%	42	18%	31	54%	25	47%	5	35%	4	27%
WAI	2019 season end	1	1%	1	1%	-	-	-	-	-	-	-	-
	Initial allocation	20	28%	12	14%	1	9%	1	9%	3	62%	2	35%

Notes: Entrants and share of QS type acquired columns show the change in entry to the respective quota pools, as of the beginning of the 2020/21 crab season, relative to the end of the 2019/20 and 2005/06 (initial allocation) seasons.

Source: NMFS AKRO RAM division, Quota shareholder files.

Table 3.40: CR Program fisheries - catch, landings, and deadloss, by season

	Season	IFQ permit holders	RCR permit holders	Landings	IFQ pounds (million)	Sold pounds (million)	Personal use pounds (1,000)	Deadloss pounds (1,000)
EAG	2005/06	6	5	32	2.6	2.5	0.1	23.8
	2006/07	4	6	32	2.7	2.7	0.0	31.3
	2007/08	4	4	36	2.7	2.7	0.0	21.0
	2008/09	3	5	29	2.8	2.8	0.0	24.1
	2009/10	2	6	32	*	*	*	*
	2010/11	2	7	30	*	*	*	*
	2011/12	2	9	45	*	*	*	*
	2012/13	2	10	46	*	*	*	*
	2013/14	2	9	39	*	*	*	*
	2014/15	2	7	37	*	*	*	*
	2015/16	2	6	37	*	*	*	*
	2016/17	2	7	41	*	*	*	*
	2017/18	2	7	41	*	*	*	*
	2018/19	3	8	49	3.5	3.4	0.0	47.5
	2019/20	3	8	49	3.9	3.8	0.0	51.5
	2020/21	3	9	46	3.3	3.3	0.0	29.8
WAG	2005/06	3	5	42	2.4	2.4	3.5	26.3
	2006/07	3	5	31	2.0	2.0	0.0	19.8
	2007/08	3	4	34	2.2	2.2	0.0	23.2
	2008/09	3	7	37	2.3	2.2	0.2	22.8
	2009/10	2	5	38	*	*	*	*
	2010/11	2	7	37	*	*	*	*
	2011/12	2	7	43	*	*	*	*
	2012/13	2	8	46	*	*	*	*
	2013/14	2	6	42	*	*	*	*
	2014/15	1	8	44	*	*	*	*
	2015/16	1	8	48	*	*	*	*
	2016/17	2	8	41	*	*	*	*
	2017/18	3	7	45	2.0	2.0	0.6	55.8
	2018/19	3	6	44	2.3	2.2	0.0	48.5
	2019/20	3	6	50	2.6	2.5	0.0	52.0
	2020/21	3	8	42	2.5	2.4	2.0	56.6
BBR	2005/06	83	13	255	16.5	16.4	18.4	77.5
	2006/07	36	13	183	13.9	13.8	10.3	98.7
	2007/08	27	17	246	18.3	18.2	33.8	132.0
	2008/09	25	16	252	18.3	18.1	21.0	160.8
	2009/10	13	14	212	14.4	14.2	20.8	111.5
	2010/11	10	14	223	13.3	13.2	25.9	99.5
	2011/12	10	15	254	7.1	7.0	15.1	30.2
	2012/13	9	15	219	7.1	7.0	15.2	28.8
	2013/14	10	15	250	7.7	7.7	18.7	60.6
	2014/15	10	14	241	9.0	8.9	14.4	94.5
	2015/16	9	12	243	9.0	8.8	12.8	178.0
	2016/17	8	14	249	7.6	7.6	19.3	35.4
	2017/18	8	14	237	5.9	5.9	15.8	23.0
	2018/19	8	12	208	3.9	3.8	15.9	26.7
	2019/20	8	12	197	3.4	3.4	14.8	7.5
	2020/21	7	14	141	2.4	2.4	14.0	3.7

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Table 3.40: Continued

	Season	IFQ permit holders	RCR permit holders	Landings	IFQ pounds (million)	Sold pounds (million)	Personal use pounds (1,000)	Deadloss pounds (1,000)
BSS	2005/06	70	13	301	33.3	32.9	0.7	322.6
	2006/07	30	16	272	32.7	32.3	0.3	378.8
	2007/08	25	17	459	56.7	56.2	6.5	500.1
	2008/09	24	15	428	52.7	52.3	0.6	403.3
	2009/10	12	11	321	43.2	42.7	1.8	500.0
	2010/11	10	14	466	48.8	48.5	3.3	314.0
	2011/12	11	14	798	79.9	79.4	5.4	582.4
	2012/13	9	14	585	59.6	59.2	2.1	427.3
	2013/14	10	13	573	48.6	48.2	1.5	354.5
	2014/15	10	13	640	61.1	60.6	1.3	546.0
	2015/16	9	11	492	36.6	36.2	2.0	352.7
	2016/17	8	13	360	19.4	19.2	0.7	234.7
	2017/18	8	11	356	17.1	16.9	1.3	153.5
	2018/19	8	12	413	24.8	24.6	0.3	237.6
	2019/20	7	12	460	30.6	30.2	0.7	372.4
	2020/21	8	12	463	40.5	39.7	1.7	788.1
BST	2005/06	34	9	73	0.8	0.8	2.9	14.6
EBT	2006/07	21	10	57	1.3	1.3	0.7	8.4
	2007/08	10	8	58	1.4	1.4	0.1	15.6
	2008/09	10	10	60	1.6	1.5	0.8	11.9
	2009/10	8	12	45	1.2	1.2	3.5	7.1
	2013/14	5	13	107	1.3	1.3	2.1	6.2
	2014/15	7	13	194	7.6	7.6	1.2	48.2
	2015/16	8	12	244	10.1	10.0	1.1	115.0
	2018/19	1	4	8	*	*	*	*
	2020/21	1	1	1	*	*	*	*
WBT	2006/07	14	10	60	0.6	0.6	0.0	18.5
	2007/08	8	8	44	0.5	0.5	1.1	4.1
	2008/09	10	7	50	0.1	0.1	0.1	2.6
	2009/10	4	1	22	*	*	*	*
	2013/14	8	13	186	1.2	1.2	0.0	15.0
	2014/15	8	13	234	4.6	4.5	1.7	92.4
	2015/16	7	11	268	7.5	7.5	0.6	49.6
	2017/18	8	14	133	2.2	2.2	2.9	15.8
	2018/19	8	13	149	2.2	2.2	1.9	39.1
	2019/20	2	2	5	*	*	*	*
	2020/21	6	13	94	1.3	1.3	0.8	24.9
SMB	2009/10	1	6	30	*	*	*	*
	2010/11	2	8	63	*	*	*	*
	2011/12	6	10	107	1.7	1.7	2.9	25.6
	2012/13	3	10	125	1.5	1.4	0.9	19.8
	2014/15	1	6	28	*	*	*	*
	2015/16	1	4	21	*	*	*	*

Notes: Excludes harvest from CDQ programs. A landing is an offload by a vessel to a registered crab receiver, and includes at sea landings on catcher/processors and stationary floating processors. A fishing cooperative and its members are counted as a single IFQ permit holder.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files and IFQ accounting database.

Table 3.41: CR Program fisheries - distribution of vessel catch and landings volume, by calendar year

	Year	Vessels	Sold weight (million lbs)	Median vessel weight sold (1,000lbs)	Median vessel harvest as percent of fishery-year commercial lbs	Gini ratio
AIG	1998	16	5.24	297.49	5.67%	0.44
	1999	16	4.89	231.71	4.74%	0.43
	2000	17	5.76	220.96	3.84%	0.46
	2001	21	6.36	209.56	3.29%	0.47
	2002	22	5.54	167.04	3.02%	0.46
	2003	21	5.82	189.45	3.26%	0.45
	2004	22	6.02	168.79	2.80%	0.49
	2005	9	4.44	595.27	13.42%	0.31
	2006	7	5.24	623.29	11.89%	0.34
	2007	6	5.44	755.96	13.90%	0.34
	2008	5	5.73	1,246.72	21.77%	0.18
	2009	5	5.51	1,109.87	20.13%	0.19
	2010	5	6.09	1,410.32	23.15%	0.20
	2011	5	6.00	1,324.31	22.09%	0.21
	2012	6	5.92	1,007.69	17.01%	0.34
	2013	6	5.94	937.88	15.78%	0.38
	2014	5	6.07	1,375.91	22.66%	0.14
	2015	5	5.80	1,179.83	20.34%	0.17
	2016	5	5.60	1,150.76	20.54%	0.13
	2017	5	5.56	1,155.61	20.77%	0.17
	2018	5	6.51	1,110.86	17.07%	0.21
	2019	5	6.78	1,098.06	16.20%	0.22
	2020	5	5.72	971.12	16.99%	0.24
BBR	1998	274	14.70	49.34	0.34%	0.30
	1999	256	11.53	37.92	0.33%	0.29
	2000	244	8.07	28.46	0.35%	0.31
	2001	230	8.30	29.26	0.35%	0.34
	2002	241	9.48	36.09	0.38%	0.24
	2003	250	15.39	48.19	0.31%	0.35
	2004	251	15.02	53.79	0.36%	0.28
	2005	89	18.14	177.99	0.98%	0.37
	2006	81	15.55	169.27	1.09%	0.35
	2007	73	20.17	259.63	1.29%	0.32
	2008	79	20.13	240.73	1.20%	0.31
	2009	70	15.78	209.29	1.33%	0.26
	2010	65	14.73	214.69	1.46%	0.28
	2011	62	7.79	109.07	1.40%	0.30
	2012	64	7.80	108.53	1.39%	0.30
	2013	63	8.52	122.03	1.43%	0.29
	2014	63	9.87	134.03	1.36%	0.29
	2015	64	9.77	134.73	1.38%	0.26
	2016	63	8.41	112.63	1.34%	0.29
	2017	61	6.55	86.43	1.32%	0.32
	2018	55	4.23	64.23	1.52%	0.34
	2019	56	3.77	57.29	1.52%	0.33
	2020	47	2.64	47.32	1.79%	0.32

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Table 3.41: Continued

	Year	Vessels	Sold weight (million lbs)	Median vessel weight sold (1,000lbs)	Median vessel harvest as percent of fishery-year commercial lbs	Gini ratio
BSS	1998	230	249.05	1,050.76	0.42%	0.23
	1999	241	192.41	813.75	0.42%	0.25
	2000	231	32.81	132.61	0.40%	0.28
	2001	207	24.78	88.71	0.36%	0.40
	2002	191	31.94	149.81	0.47%	0.31
	2003	190	27.51	127.15	0.46%	0.27
	2004	189	23.69	113.04	0.48%	0.26
	2005	167	24.86	131.14	0.53%	0.24
	2006	78	38.02	402.31	1.06%	0.37
	2007	68	34.76	447.33	1.29%	0.34
	2008	78	62.23	702.73	1.13%	0.31
	2009	77	57.68	599.96	1.04%	0.32
	2010	68	47.84	642.93	1.34%	0.32
	2011	68	54.05	693.58	1.28%	0.30
	2012	72	88.23	1,126.73	1.28%	0.30
	2013	71	70.69	892.41	1.26%	0.31
	2014	70	55.22	733.59	1.33%	0.33
	2015	70	60.91	862.01	1.42%	0.29
	2016	68	39.57	526.21	1.33%	0.30
	2017	63	21.32	294.17	1.38%	0.32
	2018	63	18.84	232.46	1.23%	0.34
	2019	61	27.26	357.64	1.31%	0.34
	2020	59	33.61	462.94	1.38%	0.33
BST	2005	4	0.26	*	*	0.37
	2006	45	0.99	5.94	0.60%	0.72
	2007	29	2.25	56.02	2.49%	0.52
	2008	30	2.33	45.52	1.95%	0.65
	2009	18	2.14	91.97	4.30%	0.63
	2010	4	0.37	*	*	0.25
	2013	22	1.25	45.51	3.64%	0.49
	2014	40	9.09	195.02	2.14%	0.38
	2015	55	14.98	201.28	1.34%	0.45
	2016	46	10.45	160.29	1.53%	0.39
	2017	16	1.41	92.38	6.57%	0.30
	2018	30	2.29	65.40	2.86%	0.34
	2019	18	1.18	50.56	4.28%	0.37
	2020	25	0.62	12.76	2.06%	0.60

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Table 3.41: Continued

	Year	Vessels	Sold weight (million lbs)	Median vessel weight sold (1,000lbs)	Median vessel harvest as percent of fishery-year commercial lbs	Gini ratio
PIK	1998	58	1.03	15.61	1.52%	0.34
SMB	1998	131	2.95	20.54	0.70%	0.22
	2009	7	0.45	33.85	7.52%	0.42
	2010	11	1.25	117.30	9.36%	0.34
	2011	18	1.85	80.15	4.33%	0.32
	2012	17	1.59	83.71	5.25%	0.31
	2014	4	0.30	*	*	0.36
	2015	3	*	*	*	*
WAI	1998	1	*	*	*	*
	2002	33	0.50	14.29	2.85%	0.30
	2003	30	0.48	13.18	2.77%	0.31

Notes: Data shown by calendar year. Includes harvest from CDQ and IFQ fisheries and pre-rationalization general access fisheries, as well as landings and harvest made on catcher/processors.
The Gini coefficient measures the relative evenness of the distribution of vessel-level total IFQ landings across the set of active vessels in a given crab fishery season. The index varies between 0 and 1, with higher values indicating greater relative concentration of catch; see section 2.4.4 for discussion of Gini coefficient results shown in the table.

Source: ADF&G fish ticket data, and eLandings.

Table 3.42: CR Program fisheries - distribution of crab processor purchasing volume, by calendar year

	Year	Processors	Purchased weight (million lbs)	Median purchased weight (million lbs)	Median as percent of fishery year commercial lbs	Gini ratio
AIG	1998	9	5.24	0.23	4.3%	0.66
	1999	8	4.89	0.29	5.9%	0.59
	2000	7	5.76	0.65	11.3%	0.40
	2001	7	6.36	0.36	5.7%	0.59
	2002	6	5.54	0.83	15.1%	0.50
	2003	6	5.82	1.08	18.6%	0.45
	2004	5	6.02	1.35	22.5%	0.40
	2005	6	4.44	0.48	10.8%	0.49
	2006	6	5.24	0.71	13.5%	0.56
	2007	6	5.44	0.79	14.5%	0.49
	2008	7	5.73	1.04	18.1%	0.34
	2009	9	5.51	0.30	5.4%	0.58
	2010	9	6.09	0.49	8.0%	0.42
	2011	14	6.00	0.28	4.7%	0.52
	2012	14	5.92	0.20	3.3%	0.53
	2013	13	5.94	0.25	4.2%	0.58
	2014	12	6.07	0.26	4.2%	0.60
	2015	9	5.80	0.32	5.5%	0.56
	2016	11	5.60	0.30	5.3%	0.60
	2017	13	5.56	0.25	4.5%	0.55
	2018	11	6.51	0.24	3.7%	0.56
	2019	11	6.78	0.34	5.0%	0.58
	2020	12	5.72	0.30	5.2%	0.58
BBR	1998	28	14.70	0.26	1.8%	0.61
	1999	24	11.53	0.21	1.9%	0.61
	2000	24	8.07	0.11	1.4%	0.65
	2001	25	8.30	0.10	1.2%	0.66
	2002	26	9.48	0.13	1.4%	0.64
	2003	26	15.39	0.29	1.9%	0.58
	2004	25	15.02	0.23	1.5%	0.61
	2005	16	18.14	0.50	2.8%	0.61
	2006	15	15.55	0.54	3.5%	0.61
	2007	18	20.17	0.52	2.6%	0.60
	2008	17	20.13	0.61	3.0%	0.54
	2009	16	15.78	0.48	3.1%	0.55
	2010	17	14.73	0.39	2.7%	0.58
	2011	18	7.79	0.20	2.5%	0.58
	2012	17	7.80	0.33	4.2%	0.54
	2013	17	8.52	0.34	4.0%	0.58
	2014	17	9.87	0.39	4.0%	0.56
	2015	15	9.77	0.29	2.9%	0.61
	2016	17	8.41	0.19	2.2%	0.59
	2017	17	6.55	0.15	2.3%	0.62
	2018	15	4.23	0.17	4.0%	0.56
	2019	14	3.77	0.14	3.7%	0.57
	2020	15	2.64	0.11	4.0%	0.53

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Table 3.42: Continued

	Year	Processors	Purchased weight (million lbs)	Median purchased weight (million lbs)	Median as percent of fishery year commercial lbs	Gini ratio
BSS	1998	44	249.05	1.73	0.7%	0.59
	1999	37	192.41	3.79	2.0%	0.55
	2000	28	32.81	0.86	2.6%	0.52
	2001	24	24.78	0.63	2.5%	0.51
	2002	27	31.94	0.35	1.1%	0.63
	2003	21	27.51	0.97	3.5%	0.48
	2004	23	23.69	0.61	2.6%	0.53
	2005	20	24.86	0.86	3.5%	0.53
	2006	13	38.02	2.27	6.0%	0.47
	2007	18	34.76	1.74	5.0%	0.49
	2008	17	62.23	2.96	4.8%	0.49
	2009	18	57.68	2.51	4.3%	0.52
	2010	13	47.84	3.30	6.9%	0.42
	2011	16	54.05	2.21	4.1%	0.49
	2012	16	88.23	3.73	4.2%	0.50
	2013	15	70.69	3.14	4.4%	0.53
	2014	13	55.22	4.43	8.0%	0.45
	2015	14	60.91	2.82	4.6%	0.47
	2016	12	39.57	2.56	6.5%	0.45
	2017	14	21.32	0.86	4.0%	0.51
	2018	13	18.84	0.77	4.1%	0.47
	2019	13	27.26	1.11	4.1%	0.48
	2020	13	33.61	1.37	4.1%	0.45
BST	2005	5	0.26	*	*	0.78
	2006	9	0.99	0.07	7.5%	0.61
	2007	9	2.25	0.21	9.4%	0.41
	2008	11	2.33	0.16	6.9%	0.51
	2009	11	2.14	0.16	7.5%	0.45
	2010	7	0.37	*	*	0.43
	2013	13	1.25	0.06	4.7%	0.61
	2014	13	9.09	0.34	3.8%	0.56
	2015	13	14.98	0.59	3.9%	0.56
	2016	12	10.45	0.66	6.4%	0.54
	2017	11	1.41	0.07	5.1%	0.46
	2018	14	2.29	0.07	3.2%	0.59
	2019	10	1.18	0.13	10.7%	0.42
	2020	9	0.62	0.04	6.4%	0.56

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Table 3.42: Continued

	Year	Processors	Purchased weight (million lbs)	Median purchased weight (million lbs)	Median as percent of fishery year commercial lbs	Gini ratio
PIK	1998	17	1.03	0.03	2.8%	0.57
SMB	1998	16	2.95	0.09	3.1%	0.66
	2009	6	0.45	0.06	12.2%	0.45
	2010	9	1.25	0.07	5.7%	0.59
	2011	11	1.85	0.08	4.1%	0.61
	2012	11	1.59	0.07	4.4%	0.59
	2014	6	0.30	*	*	0.64
	2015	4	*	*	*	*
WAI	1998	1	*	*	*	*
	2002	9	0.50	0.04	8.2%	0.42
	2003	10	0.48	0.04	8.2%	0.53

Notes: Data shown by calendar year. Includes purchased crab landings from CDQ and IFQ fisheries and pre-rationalization general access fisheries. Landings/harvest made by and self-processed by catcher/processors are treated as purchases, with catcher/processors counted as buyers.
Buyers include catcher/processors landing and processing their own crab.
The Gini coefficient measures the relative evenness of the distribution of catch purchasing across the set of active buyers in a given crab fishery season. The index varies between 0 and 1, with higher values indicating greater relative concentration of purchasing; see section 2.4.4 for discussion of Gini coefficient results shown in the table.

Source: ADF&G fish ticket data, and eLandings.

Table 3.43: CR Program fisheries - delivery and trip statistics, by season

	Season	Vessels	Deliveries total	Deliveries per vessel mean(sd)	Trips per vessel means(sd)	Landings per delivery, mean(sd) (1,000 pounds)	Trips total	Landings per trip, mean(sd) (1,000 pounds)
EAG	1998	14	51	3.6(1.5)	-	59.8(35.8)	-	-
	1999	15	59	3.9(1.2)	-	48.7(33.0)	-	-
	2000	15	50	3.3(0.8)	-	59.0(34.3)	-	-
	2001	19	45	2.4(0.6)	-	69.5(44.3)	-	-
	2002	19	43	2.3(0.5)	-	64.3(38.1)	-	-
	2003	18	37	2.1(0.2)	-	78.4(38.0)	-	-
	2004	19	32	1.7(0.5)	-	88.8(54.7)	-	-
	2005/06	7	34	4.9(2.1)	-	83.5(47.3)	-	-
	2006/07	6	28	4.7(4.2)	4.0(2.7)	105.6(59.5)	24	124.7(57.9)
	2007/08	4	35	8.8	7.0	84.8(57.7)	28	106.8(62.3)
	2008/09	3	*	*	*	*	*	*
	2009/10	3	*	*	*	*	*	*
	2010/11	3	*	*	*	*	*	*
	2011/12	3	*	*	*	*	*	*
	2012/13	3	*	*	*	*	*	*
	2013/14	3	*	*	*	*	*	*
	2014/15	3	*	*	*	*	*	*
	2015/16	3	*	*	*	*	*	*
	2016/17	4	27	6.8	6.3	120.1(54.9)	25	132.3(52.6)
	2017/18	4	26	6.5	6.0	125.2(65.5)	24	137.8(65.0)
	2018/19	3	*	*	*	*	*	*
	2019/20	3	*	*	*	*	*	*

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Table 3.43: Continued

	Season	Vessels	Deliveries total	Deliveries per vessel mean(sd)	Trips per vessel means(sd)	Landings per delivery, mean(sd) (1,000 pounds)	Trips total	Landings per trip, mean(sd) (1,000 pounds)
	1998/99	3	*	*	-	*	-	-
	1999/00	15	113	7.5(10.4)	-	23.2(15.3)	-	-
	2000/01	12	97	8.1(9.4)	-	28.0(17.5)	-	-
	2001/02	9	90	10.0(8.2)	-	29.9(16.2)	-	-
	2002/03	6	72	12.0(9.2)	-	36.2(20.7)	-	-
	2003/04	6	60	10.0(6.8)	-	44.0(29.5)	-	-
	2004/05	6	51	8.5(5.9)	-	51.8(36.2)	-	-
	2005/06	3	*	*	-	*	-	-
	2006/07	4	33	8.3	7.3	67.6(29.6)	29	77.7(32.0)
	2007/08	3	*	*	*	*	*	*
WAG	2008/09	3	*	*	*	*	*	*
	2009/10	3	*	*	*	*	*	*
	2010/11	3	*	*	*	*	*	*
	2011/12	3	*	*	*	*	*	*
	2012/13	4	32	8.0	6.8	90.5(40.1)	27	109.4(40.2)
	2013/14	3	*	*	*	*	*	*
	2014/15	2	*	*	*	*	*	*
	2015/16	2	*	*	*	*	*	*
	2016/17	3	*	*	*	*	*	*
	2017/18	3	*	*	*	*	*	*
	2018/19	3	*	*	*	*	*	*
	2019/20	3	*	*	*	*	*	*

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Table 3.43: Continued

	Season	Vessels	Deliveries total	Deliveries per vessel mean(sd)	Trips per vessel means(sd)	Landings per delivery, mean(sd) (1,000 pounds)	Trips total	Landings per trip, mean(sd) (1,000 pounds)
BBR	1998	274	293	1.1(0.3)	-	50.2(27.3)	-	-
	1999	256	273	1.1(0.3)	-	42.2(22.8)	-	-
	2000	244	263	1.1(0.4)	-	30.7(16.2)	-	-
	2001	230	249	1.1(0.4)	-	33.3(20.1)	-	-
	2002	241	258	1.1(0.4)	-	36.7(14.6)	-	-
	2003	250	274	1.1(0.4)	-	56.2(35.5)	-	-
	2004	251	278	1.1(0.4)	-	54.0(25.1)	-	-
	2005/06	89	261	2.9(1.7)	-	69.8(47.8)	-	-
	2006/07	81	187	2.3(1.1)	2.2(1.0)	82.8(61.6)	176	88.7(67.0)
	2007/08	74	247	3.3(1.6)	2.8(1.4)	81.7(53.7)	207	98.4(55.7)
	2008/09	78	263	3.4(1.8)	3.0(1.5)	76.5(48.1)	237	85.8(51.3)
	2009/10	70	211	3.0(1.2)	2.8(1.1)	74.8(48.4)	198	80.5(50.3)
	2010/11	65	213	3.3(1.3)	3.1(1.1)	69.0(42.7)	201	73.8(45.7)
	2011/12	62	124	2.0(0.9)	1.8(0.9)	62.8(49.8)	114	68.1(51.9)
	2012/13	64	118	1.8(0.9)	1.6(0.7)	66.1(45.2)	101	77.7(57.1)
	2013/14	63	119	1.9(1.0)	1.7(0.7)	71.6(47.7)	105	81.9(52.7)
	2014/15	63	117	1.9(0.6)	1.8(0.6)	84.4(51.6)	113	87.6(56.1)
	2015/16	64	116	1.8(0.7)	1.8(0.7)	84.3(51.9)	114	87.5(53.5)
	2016/17	63	117	1.9(0.8)	1.8(0.8)	71.8(41.6)	115	73.0(42.4)
	2017/18	61	112	1.8(0.8)	1.8(0.8)	58.6(36.9)	112	58.9(37.0)
	2018/19	55	89	1.6(0.9)	1.5(0.8)	47.9(30.4)	85	50.7(30.3)
	2019/20	56	86	1.5(0.7)	1.5(0.7)	43.8(30.0)	86	44.1(30.1)

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Table 3.43: Continued

	Season	Vessels	Deliveries total	Deliveries per vessel mean(sd)	Trips per vessel means(sd)	Landings per delivery, mean(sd) (1,000 pounds)	Trips total	Landings per trip, mean(sd) (1,000 pounds)
BSS	1999	241	1,720	7.1(2.7)	-	111.9(71.8)	-	-
	2000	231	313	1.4(0.7)	-	104.8(53.8)	-	-
	2001	207	316	1.5(1.0)	-	78.4(56.3)	-	-
	2002	191	430	2.3(1.1)	-	74.3(57.5)	-	-
	2003	190	261	1.4(1.0)	-	105.4(55.9)	-	-
	2004	189	243	1.3(0.8)	-	97.5(53.9)	-	-
	2005	167	211	1.3(0.7)	-	116.1(52.3)	-	-
	2005/06	78	316	4.1(2.9)	-	115.9(75.7)	-	-
	2006/07	69	273	4.0(2.5)	3.1(2.0)	131.5(83.1)	215	169.1(104.1)
	2007/08	78	466	6.0(2.9)	5.4(2.6)	134.1(81.2)	420	149.4(84.6)
	2008/09	77	437	5.7(2.7)	4.9(2.3)	132.9(78.0)	381	153.7(84.4)
	2009/10	68	308	4.5(1.9)	4.3(1.7)	154.1(85.4)	289	165.0(88.7)
	2010/11	68	343	5.0(2.2)	4.8(2.1)	157.2(83.9)	323	168.0(84.6)
	2011/12	72	658	9.1(3.7)	8.8(3.7)	134.0(85.4)	636	139.7(87.8)
	2012/13	70	435	6.2(2.5)	6.0(2.4)	151.2(81.9)	422	157.0(82.7)
	2013/14	70	379	5.4(2.3)	5.3(2.3)	141.4(76.7)	370	145.1(78.5)
	2014/15	70	471	6.7(2.9)	6.5(2.8)	143.0(79.3)	458	146.7(84.4)
	2015/16	70	295	4.2(1.7)	4.1(1.6)	136.4(83.1)	289	124.9(92.8)
	2016/17	63	201	3.2(1.1)	3.0(1.0)	106.1(76.4)	192	111.8(79.3)
	2017/18	63	190	3.0(1.4)	3.0(1.4)	98.9(76.5)	187	99.3(80.3)
	2018/19	61	242	4.0(1.8)	3.8(1.8)	112.9(79.9)	230	116.4(85.4)
	2019/20	59	305	5.2(1.8)	5.0(1.8)	110.2(74.4)	296	114.9(77.4)

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Table 3.43: Continued

	Season	Vessels	Deliveries total	Deliveries per vessel mean(sd)	Trips per vessel means(sd)	Landings per delivery, mean(sd) (1,000 pounds)	Trips total	Landings per trip, mean(sd) (1,000 pounds)
BST	2005/06	33	64	1.9(1.1)	-	14.6(22.8)	-	-
	2006/07	39	88	2.3(1.3)	2.1(1.2)	23.8(28.2)	82	18.1(28.1)
	2007/08	27	95	3.5(2.4)	3.4(2.4)	21.9(25.3)	93	17.7(25.2)
	2008/09	20	67	3.4(3.0)	3.0(2.3)	28.7(35.8)	59	14.7(33.8)
	2009/10	13	32	2.5(1.6)	2.2(1.2)	41.0(43.0)	28	14.9(35.7)
	2013/14	25	74	3.0(2.0)	2.8(2.0)	37.2(35.2)	71	10.9(26.0)
	2014/15	45	191	4.2(2.6)	4.1(2.5)	70.9(51.4)	184	44.8(54.8)
	2015/16	56	282	5.0(2.6)	5.0(2.5)	69.0(44.3)	280	52.1(49.5)
	2017/18	32	55	1.7(1.1)	1.7(1.1)	45.1(36.6)	53	34.2(40.0)
	2018/19	33	57	1.7(1.1)	1.6(0.8)	42.1(32.1)	52	31.3(36.1)
PIK	1998	58	91	1.6(0.7)	-	11.3(8.7)	-	-
SMB	1998	131	259	2.0(0.5)	-	11.4(7.1)	-	-
	2009/10	7	16	2.3(1.5)	2.1(1.5)	28.1(16.5)	15	30.7(22.3)
	2010/11	11	40	3.6(1.5)	3.5(1.4)	31.3(17.8)	38	33.3(17.7)
	2011/12	18	58	3.2(1.4)	3.2(1.4)	31.9(17.0)	57	33.0(21.0)
	2012/13	17	45	2.6(1.4)	2.6(1.4)	35.4(17.7)	45	35.9(18.1)
	2014/15	4	14	3.5	3.5	21.6(15.5)	14	22.0(15.9)
	2015/16	3	*	*	*	*	*	*
WAI	1998/99	1	*	*	-	*	-	-
	2002/03	33	35	1.1(0.2)	-	14.4(8.3)	-	-
	2003/04	30	30	1.0(0.0)	-	15.8(9.7)	-	-

Notes: A delivery is counted as each unique day that a vessel landed crab and may include landings to multiple processors; a single fishing trip may result in multiple deliveries if crab was landed on multiple days. Includes landings on and by catcher/processors. Trip accounting data unavailable prior to 2006/2007 season.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files and IFQ accounting database, and eLandings.

Table 3.44: Opening and closing dates, season length, and days fished by season, CR Program fisheries

	Year	Season dates	Season length, days	Earliest landing	Latest landing	Days fished	Percent of season fished
EAG	1998	01-Sep - 07-Nov	68	NA	NA	75	80%
	1999	01-Sep - 25-Oct	55	NA	NA	75	80%
	2000	15-Aug - 24-Sep	41	NA	NA	75	80%
	2001	15-Aug - 10-Sep	27	NA	NA	75	80%
	2002	15-Aug - 07-Sep	24	NA	NA	75	80%
	2003	15-Aug - 08-Sep	25	NA	NA	75	80%
	2004	15-Aug - 29-Aug	15	NA	NA	75	80%
	2005/06	15-Aug - 15-May	274	30-Aug	28-Mar	39	40%
	2006/07	15-Aug - 15-May	274	31-Aug	13-Jan	8	21%
	2007/08	15-Aug - 15-May	275	30-Aug	09-Feb	22	25%
	2008/09	15-Aug - 15-May	274	07-Sep	22-Dec	2	11%
	2009/10	15-Aug - 15-May	274	31-Aug	10-Jan	7	20%
	2010/11	15-Aug - 15-May	274	22-Aug	16-Dec	5	14%
	2011/12	15-Aug - 15-May	275	26-Aug	24-Nov	72	7%
	2012/13	15-Aug - 15-May	274	25-Aug	03-Dec	1	10%
	2013/14	15-Aug - 15-May	274	30-Aug	26-Nov	70	6%
	2014/15	15-Aug - 15-May	274	30-Aug	13-Nov	65	2%
	2015/16	01-Aug - 30-Apr	274	23-Aug	13-Nov	68	4%
	2016/17	01-Aug - 30-Apr	273	19-Aug	02-Apr	43	47%
	2017/18	01-Aug - 30-Apr	273	14-Aug	25-Mar	42	46%
	2018/19	01-Aug - 30-Apr	273	13-Aug	09-Feb	29	31%
	2019/20	15-Jul - 18-May	309	29-Jul	08-Feb	34	29%
	2020/21	01-Aug - 30-Apr	273	16-Aug	21-Feb	31	34%
WAG	1998/99	01-Sep - 31-Aug	365	NA	NA	75	80%
	1999/00	01-Sep - 14-Aug	349	NA	NA	75	80%
	2000/01	01-Sep - 28-May	270	NA	NA	75	80%
	2001/02	15-Aug - 30-Mar	228	NA	NA	75	80%
	2002/03	15-Aug - 08-Mar	206	NA	NA	75	80%
	2003/04	15-Aug - 06-Feb	176	NA	NA	75	80%
	2005/06	15-Aug - 15-May	274	06-Sep	25-Mar	36	36%
	2006/07	15-Aug - 15-May	274	10-Sep	06-May	46	56%
	2007/08	15-Aug - 15-May	275	14-Sep	21-May	48	62%
	2008/09	15-Aug - 15-May	274	13-Sep	12-May	47	58%
	2009/10	15-Aug - 15-May	274	05-Sep	18-May	50	68%
	2010/11	15-Aug - 15-May	274	11-Sep	18-Mar	30	33%
	2011/12	15-Aug - 15-May	275	06-Sep	10-Apr	41	43%
	2012/13	15-Aug - 15-May	274	10-Sep	05-May	45	55%
	2013/14	15-Aug - 15-May	274	09-Sep	08-May	47	58%
	2014/15	15-Aug - 15-May	274	06-Sep	17-May	49	65%
	2015/16	01-Aug - 30-Apr	274	14-Aug	02-May	52	74%
	2016/17	01-Aug - 30-Apr	273	02-Sep	17-Mar	35	35%
	2017/18	01-Aug - 30-Apr	273	13-Aug	06-Mar	37	37%
	2018/19	01-Aug - 30-Apr	273	14-Aug	14-Mar	40	41%
	2019/20	15-Jul - 18-May	309	22-Aug	12-May	53	53%
	2020/21	01-Aug - 24-May	297	25-Aug	18-May	54	60%

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Table 3.44: Continued

	Year	Season dates	Season length, days	Earliest landing	Latest landing	Days fished	Percent of season fished
BBR	1998	01-Nov - 06-Nov	6	NA	NA	75	80%
	1999	15-Oct - 20-Oct	6	NA	NA	75	80%
	2000	16-Oct - 20-Oct	5	NA	NA	75	80%
	2001	15-Oct - 18-Oct	4	NA	NA	75	80%
	2002	15-Oct - 18-Oct	4	NA	NA	75	80%
	2003	15-Oct - 20-Oct	6	NA	NA	75	80%
	2004	15-Oct - 18-Oct	4	NA	NA	75	80%
	2005/06	15-Oct - 15-Jan	93	20-Oct	16-Jan	70	73%
	2006/07	15-Oct - 15-Jan	93	19-Oct	28-Nov	58	17%
	2007/08	15-Oct - 15-Jan	93	18-Oct	15-Jan	71	75%
	2008/09	15-Oct - 15-Jan	93	18-Oct	17-Jan	73	78%
	2009/10	15-Oct - 15-Jan	93	17-Oct	16-Jan	73	78%
	2010/11	15-Oct - 15-Jan	93	16-Oct	10-Dec	62	26%
	2011/12	15-Oct - 15-Jan	93	18-Oct	18-Nov	56	8%
	2012/13	15-Oct - 15-Jan	93	18-Oct	16-Dec	63	30%
	2013/14	15-Oct - 15-Jan	93	21-Oct	15-Nov	51	3%
	2014/15	15-Oct - 15-Jan	93	19-Oct	17-Nov	55	5%
	2015/16	15-Oct - 15-Jan	93	17-Oct	17-Nov	56	8%
	2016/17	15-Oct - 15-Jan	93	18-Oct	18-Nov	56	8%
	2017/18	15-Oct - 15-Jan	93	19-Oct	06-Jan	66	54%
	2018/19	15-Oct - 15-Jan	93	19-Oct	08-Jan	67	57%
	2019/20	15-Oct - 15-Jan	93	21-Oct	11-Jan	68	59%
	2020/21	15-Oct - 15-Jan	93	20-Oct	15-Jan	69	71%
BSS	1998	15-Jan - 20-Mar	65	NA	NA	75	80%
	1999	15-Jan - 22-Mar	67	NA	NA	75	80%
	2000	01-Apr - 08-Apr	8	NA	NA	75	80%
	2001	15-Jan - 14-Feb	31	NA	NA	75	80%
	2002	15-Jan - 08-Feb	25	NA	NA	75	80%
	2003	15-Jan - 25-Jan	11	NA	NA	75	80%
	2004	15-Jan - 23-Jan	9	NA	NA	75	80%
	2005	15-Jan - 20-Jan	6	NA	NA	75	80%
	2005/06	15-Oct - 31-May	229	27-Oct	27-May	40	67%
	2006/07	15-Oct - 31-May	229	07-Nov	05-May	28	42%
	2007/08	15-Oct - 31-May	230	18-Nov	10-May	27	39%
	2008/09	15-Oct - 31-May	229	30-Nov	16-May	25	36%
	2009/10	15-Oct - 31-May	229	11-Jan	06-May	4	22%
	2010/11	15-Oct - 31-May	229	18-Nov	09-Apr	10	28%
	2011/12	15-Oct - 15-Jun	245	02-Nov	19-Jun	44	70%
	2012/13	15-Oct - 31-May	229	24-Nov	05-Jun	33	50%
	2013/14	15-Oct - 31-May	229	20-Oct	29-Apr	32	49%
	2014/15	15-Oct - 31-May	229	03-Nov	30-May	38	62%
	2015/16	15-Oct - 31-May	230	05-Nov	14-May	32	48%
	2016/17	15-Oct - 31-May	229	07-Jan	25-Apr	3	19%
	2017/18	15-Oct - 31-May	229	12-Jan	16-Apr	74	12%
	2018/19	15-Oct - 31-May	229	05-Nov	26-Apr	26	38%
	2019/20	15-Oct - 31-May	230	11-Jan	19-May	6	24%
	2020/21	15-Oct - 04-Jun	233	09-Jan	02-Jun	13	27%

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Table 3.44: Continued

	Year	Season dates	Season length, days	Earliest landing	Latest landing	Days fished	Percent of season fished
BST	2005/06	15-Oct - 31-Mar	168	27-Oct	02-Apr	19	69%
BTE	2006/07	15-Oct - 31-Mar	168	23-Oct	27-Mar	17	68%
	2007/08	15-Oct - 31-Mar	169	20-Oct	02-Apr	23	77%
	2008/09	15-Oct - 31-Mar	168	19-Oct	11-Mar	12	52%
	2009/10	15-Oct - 31-Mar	168	17-Oct	01-Mar	8	44%
	2013/14	15-Oct - 31-Mar	168	29-Oct	29-Mar	14	61%
	2014/15	15-Oct - 31-Mar	168	21-Oct	01-Apr	21	76%
	2015/16	15-Oct - 31-Mar	169	23-Oct	27-Mar	18	66%
BTW	2006/07	15-Oct - 31-Mar	168	04-Nov	26-Mar	11	51%
	2007/08	15-Oct - 31-Mar	169	16-Nov	31-Mar	9	45%
	2008/09	15-Oct - 31-Mar	168	13-Jan	25-Mar	64	16%
	2013/14	15-Oct - 31-May	229	07-Nov	08-Apr	15	32%
	2014/15	15-Oct - 31-Mar	168	03-Nov	18-Apr	24	79%
	2015/16	15-Oct - 31-Mar	169	31-Oct	03-Apr	16	64%
	2017/18	15-Oct - 31-Mar	168	18-Oct	29-Mar	21	76%
	2018/19	15-Oct - 31-Mar	168	24-Oct	01-Apr	20	72%
	2020/21	15-Oct - 05-Apr	173	29-Oct	04-Apr	19	63%
PIK	1998	15-Sep - 28-Sep	14	NA	NA	75	80%
SMB	1998	15-Sep - 26-Sep	12	NA	NA	75	80%
	2009/10	15-Oct - 01-Feb	110	23-Oct	07-Dec	59	13%
	2010/11	15-Oct - 01-Feb	110	23-Oct	11-Dec	61	18%
	2011/12	15-Oct - 01-Feb	110	21-Oct	15-Dec	62	23%
	2012/13	15-Oct - 01-Feb	110	23-Oct	08-Dec	60	15%
	2014/15	15-Oct - 01-Feb	110	28-Oct	05-Dec	57	9%
	2015/16	15-Oct - 01-Feb	110	30-Oct	28-Nov	55	1%
WAI	1998/99	01-Nov - 31-Jul	273	NA	NA	75	80%
	2002/03	25-Oct - 27-Oct	3	NA	NA	75	80%
	2003/04	24-Oct - 29-Oct	372	NA	NA	75	80%

Notes: Days fished is calculated as the difference between latest and earliest landing dates during a given season. Percent of season fished is calculated as days fished divided by season length. In some fishery seasons, deliveries made were after the season closing date. Includes landings made on catcher/processors.
[a] 2011/2012 Bering Sea Snow crab fishery season extended past regular season closing date (May 31) due to sea ice coverage.

Source: Season dates and season length from ADF&G. Earliest and latest landing dates in 2005/2006 and later seasons from NMFS AKRO RAM division IFQ accounting.

Table 3.45: Days between first and last delivery by season, CR Program fisheries

	Season	Vessels with one delivery	Vessels with multiple deliveries	Average days between first and last delivery, mean(sd)	Median days	Minimum days	Maximum days
EAG	2005/06	0	3	22(24)	15	2	48
	2006/07	1	2	13(8)	13	7	19
	2007/08	2	1	2	2	2	2
	2008/09	0	3	31(22)	30	10	54
	2009/10	1	2	29(1)	29	28	30
	2010/11	2	1	27	27	27	27
	2011/12	1	2	56(39)	56	28	83
	2012/13	1	2	37(21)	37	22	51
	2013/14	1	2	42(6)	42	37	46
	2014/15	3	0	-	-	-	-
	2015/16	1	2	21(1)	21	20	22
	2016/17	2	1	44	44	44	44
	2017/18	0	3	42(17)	51	22	52
	2018/19	1	2	16(3)	16	14	18
	2019/20	0	3	24(12)	27	11	34
	2020/21	0	3	45(17)	40	30	64
WAG	2005/06	0	1	126	126	126	126
	2006/07	0	2	14(11)	14	6	22
	2007/08	0	1	163	163	163	163
	2008/09	0	1	168	168	168	168
	2009/10	0	1	41	41	41	41
	2010/11	0	1	33	33	33	33
	2011/12	0	1	33	33	33	33
	2012/13	0	1	52	52	52	52
	2013/14	0	1	46	46	46	46
	2014/15	0	1	94	94	94	94
	2015/16	0	1	137	137	137	137
	2016/17	0	1	237	237	237	237
	2017/18	0	1	112	112	112	112
	2018/19	0	2	58(57)	58	18	98
	2019/20	0	2	63(42)	63	33	92
	2020/21	0	1	200	200	200	200

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Table 3.45: Continued

	Season	Vessels with one delivery	Vessels with multiple deliveries	Average days between first and last delivery, mean(sd)	Median days	Minimum days	Maximum days
BBR	2005/06	3	10	17(10)	14	4	35
	2006/07	6	7	10(7)	9	2	19
	2007/08	1	9	15(12)	14	4	43
	2008/09	3	12	13(10)	10	1	34
	2009/10	5	6	16(14)	14	1	38
	2010/11	4	6	24(13)	21	12	40
	2011/12	7	2	7(1)	7	6	8
	2012/13	5	4	5(3)	6	1	9
	2013/14	9	1	11	11	11	11
	2014/15	3	6	7(2)	8	3	10
	2015/16	5	3	8(4)	6	6	13
	2016/17	6	2	13(6)	13	9	17
	2017/18	5	3	15(5)	17	9	19
	2018/19	6	2	7(2)	7	5	9
	2019/20	5	3	7(3)	7	4	10
	2020/21	4	3	8(4)	6	5	12
BSS	2005/06	4	11	25(20)	18	4	64
	2006/07	4	8	25(16)	20	11	59
	2007/08	2	13	24(14)	24	2	45
	2008/09	2	13	29(15)	25	9	54
	2009/10	1	10	17(13)	15	1	42
	2010/11	2	12	18(11)	18	4	48
	2011/12	1	15	78(46)	82	15	152
	2012/13	0	13	56(30)	65	17	103
	2013/14	0	12	31(23)	23	12	88
	2014/15	0	11	54(35)	46	8	115
	2015/16	0	11	22(13)	16	4	48
	2016/17	2	8	16(13)	10	5	41
	2017/18	1	8	24(15)	25	3	48
	2018/19	3	8	24(16)	21	4	50
	2019/20	1	10	43(16)	41	23	73
	2020/21	2	12	42(24)	35	13	81

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Table 3.45: Continued

	Season	Vessels with one delivery	Vessels with multiple deliveries	Average days between first and last delivery, mean(sd)	Median days	Minimum days	Maximum days
BST	2005/06	3	3	11(12)	7	2	25
	2006/07	3	4	45(48)	27	11	115
	2007/08	0	4	29(42)	12	3	91
	2008/09	1	2	30(27)	30	11	49
	2009/10	4	0	-	-	-	-
	2013/14	4	4	73(58)	66	12	146
	2014/15	1	7	69(53)	77	12	139
	2015/16	5	9	46(49)	19	4	138
	2017/18	5	2	2	2	2	3
	2018/19	5	1	112	112	112	112
	2020/21	2	1	118	118	118	118
SMB	2010/11	1	2	22(13)	22	12	31
	2011/12	3	2	19(18)	19	6	32
	2012/13	2	2	21(5)	21	17	24
	2014/15	1	0	-	-	-	-

Notes: A delivery is counted as each unique day that a vessel landed crab and may include landings to multiple processors; a single fishing trip may result in multiple deliveries if crab was landed on multiple days. Includes landings on and by catcher/processors. Trip accounting data unavailable prior to 2006/2007 season.

Source: NMFS AKRO RAM division Quota Share and Processor Quota Share holder files and IFQ accounting database, and eLandings.

Table 3.46: BBR fishery harvest by week of season

	2016/17		2017/18		2018/19		2019/20		2020/21	
Week	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed
1: 15-Oct	3	41(26,27)	0	0(17,16)	1	10(22,15)	0	0(2,0)	2	27(26,17)
2: 22-Oct	5	86(82,72)	5	48(66,48)	6	75(83,77)	8	81(67,45)	4	81(90,78)
3: 29-Oct	1	94(95,95)	4	90(89,92)	2	99(95,93)	2	100(90,90)	2	100(100,98)
4: 05-Nov	0	94(100,98)	2	100(100,96)	1	100(100,100)	0	100(100,100)	0	100(100,98)
5: 12-Nov	1	100(100,100)	1	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
6: 19-Nov	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
7: 26-Nov	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
8: 03-Dec	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
9: 10-Dec	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
10: 17-Dec	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
11: 24-Dec	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
12: 31-Dec	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
13: 07-Jan	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
14: 14-Jan	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
Postseason: 16-Jan	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)

Notes: The BBR fishery season is open by regulation from October 15 to January 15. Cumulative proportion of pounds landed indicates total of a) combined IFQ and CDQ sold pounds, including catcher/processor landings ("All"); b) sold pounds landed on catcher vessel owner A-type IFQ permits (CVOA); and c) sold pounds landed on catcher vessel owner B-type IFQ permits or catcher vessel crew type IFQ permits (CVOB + CVC). CVOA IFQ permits are subject to matching to processing quota, whereas CVC and CVOB may be landed at any processor.

Source: NMFS RAM IFQ accounting database via eLandings.

Table 3.47: BSS fishery harvest by week of season

	2016/17		2017/18		2018/19		2019/20		2020/21	
Week	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed	Vessels	Percent of pounds landed
1: 15-Oct	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
2: 22-Oct	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
3: 29-Oct	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
4: 05-Nov	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
5: 12-Nov	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
6: 19-Nov	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
7: 26-Nov	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
8: 03-Dec	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
9: 10-Dec	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
10: 17-Dec	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
11: 24-Dec	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
12: 31-Dec	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)	0	0(0,0)
13: 07-Jan	0	0(5,0)	1	3(1,0)	1	3(3,1)	0	0(0,0)	0	0(2,0)
14: 14-Jan	2	18(17,3)	2	25(10,3)	0	3(8,3)	2	7(4,0)	0	0(7,1)
15: 21-Jan	2	35(29,4)	1	27(33,6)	0	3(18,3)	0	7(14,2)	2	4(13,2)
16: 28-Jan	2	47(40,32)	3	38(42,15)	4	29(33,7)	2	13(24,2)	2	9(20,2)
17: 04-Feb	2	56(50,39)	2	54(59,26)	5	38(49,13)	3	22(36,4)	3	21(25,4)
18: 11-Feb	4	66(66,46)	4	68(69,44)	5	59(64,20)	4	27(42,6)	3	29(34,6)
19: 18-Feb	2	73(74,60)	2	70(79,53)	3	69(74,32)	3	41(55,22)	1	37(41,7)
20: 25-Feb	1	77(84,65)	1	82(85,65)	2	76(83,60)	2	45(65,24)	6	48(49,9)
21: 04-Mar	1	84(93,78)	1	85(93,73)	3	96(90,75)	5	59(71,35)	2	52(55,14)
22: 11-Mar	3	100(95,86)	3	95(96,79)	1	99(93,83)	4	67(75,51)	1	55(58,18)
23: 18-Mar	0	100(97,90)	1	100(98,88)	1	100(97,93)	3	76(80,53)	4	68(66,25)
24: 25-Mar	0	100(98,96)	0	100(100,92)	0	100(98,95)	1	79(87,58)	4	85(75,37)
25: 01-Apr	0	100(99,99)	0	100(100,98)	0	100(99,99)	4	98(92,65)	1	86(82,46)
26: 08-Apr	0	100(99,99)	0	100(100,98)	0	100(99,99)	0	98(94,77)	2	92(86,61)
27: 15-Apr	0	100(100,100)	0	100(100,100)	0	100(100,100)	1	100(99,87)	2	97(87,72)
28: 22-Apr	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(99,99)	2	98(92,87)
29: 29-Apr	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(99,100)	1	100(95,90)
30: 06-May	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(99,100)	0	100(97,92)
31: 13-May	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(99,100)	0	100(98,95)
32: 20-May	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(99,98)
33: 27-May	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)
Postseason: 01-Jun	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)	0	100(100,100)

Notes: The BSS fishery is open by regulation from October 15 to May 31. Cumulative proportion of pounds landed indicates total of a) combined IFQ and CDQ sold pounds landed, including catcher/processor landings ("All"); b) sold pounds landed on catcher vessel owner A-type IFQ permits (CVOA); and c) sold pounds landed on catcher vessel owner B-type IFQ permits or catcher vessel crew type IFQ permits (CVOB + CVC). CVOA IFQ permits are subject to matching to processing quota, whereas CVC and CVOB may be landed at any processor.
[a] 2011/2012 Bering Sea Snow crab fishery season extended past regular season closing date (May 31) due to sea ice coverage.

Source: NMFS RAM IFQ accounting database via eLandings.

Table 3.48: Fishing effort (pot lifts, CPUE, and RPUE) by season, CR Program fisheries

		Vessels	CPUE (lb legal crab)		Pot lifts		RPUE ($)	
	Season		Mean(sd) CPUE per vessel, 1,000	Weighted mean	Mean(sd) per vessel, 1,000	Total	Mean(sd) RPUE per vessel, 1,000	Weighted mean
EAG	1998	14	8.0(4.4)	9.0	5.6(2.6)	78.1	$100(51)	$110
	1999	15	9.0(4.7)	9.0	5.0(2.0)	74.3	$176(93)	$175
	2000	15	9.7(4.3)	9.7	4.6(1.6)	68.4	$212(101)	$214
	2001	19	11.2(5.6)	11.5	3.3(1.1)	62.6	$222(105)	$225
	2002	19	12.2(4.9)	12.1	2.7(0.7)	52.0	$254(100)	$254
	2003	18	10.6(2.9)	10.6	3.3(0.7)	58.9	$234(65)	$238
	2004	19	18.6(7.1)	18.0	1.8(0.4)	34.8	$354(126)	$343
	2005/06	7	25.3(7.9)	25.2	3.5(1.9)	24.6	$379(140)	$398
	2006/07	6	23.7(5.4)	24.5	4.4(3.5)	26.2	$242(63)	$269
	2007/08	4	29.1	27.8	5.7	22.7	$330	$357
	2008/09	3	*	*	*	*	*	*
	2009/10	3	*	*	*	*	*	*
	2010/11	3	*	*	*	*	*	*
	2011/12	3	*	*	*	*	*	*
	2012/13	3	*	*	*	*	*	*
	2013/14	3	*	*	*	*	*	*
	2014/15	3	*	*	*	*	*	*
	2015/16	3	*	*	*	*	*	*
	2016/17	4	42.3	31.6	5.8	23.4	$1,117	$817
	2017/18	4	30.0	30.7	6.2	24.6	$761	$763
	2018/19	3	*	*	*	*	*	*
	2019/20	3	*	*	*	*	*	*
WAG	1998/99	3	*	*	*	*	*	*
	1999/00	15	4.2(2.7)	6.1	7.0(7.7)	104.3	$80(50)	$116
	2000/01	12	4.7(3.3)	6.8	8.2(6.7)	97.9	$90(59)	$127
	2001/02	9	5.8(1.7)	6.4	11.7(9.4)	105.5	$107(28)	$116
	2002/03	6	6.4(3.4)	8.3	13.2(10.5)	79.0	$120(60)	$156
	2003/04	6	8.5(3.3)	10.0	11.0(7.8)	66.2	$160(61)	$186
	2004/05	6	9.3(4.4)	11.9	9.5(7.1)	56.8	$153(70)	$193
	2005/06	3	*	*	*	*	*	*
	2006/07	4	18.6	20.0	6.5	25.9	$159	$164
	2007/08	3	*	*	*	*	*	*
	2008/09	3	*	*	*	*	*	*
	2009/10	3	*	*	*	*	*	*
	2010/11	3	*	*	*	*	*	*
	2011/12	3	*	*	*	*	*	*
	2012/13	4	20.8	20.2	8.2	32.7	$381	$362
	2013/14	3	*	*	*	*	*	*
	2014/15	2	*	*	*	*	*	*
	2015/16	2	*	*	*	*	*	*
	2016/17	3	*	*	*	*	*	*
	2017/18	3	*	*	*	*	*	*
	2018/19	3	*	*	*	*	*	*
	2019/20	3	*	*	*	*	*	*

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Table 3.48: Continued

	Season	Vessels	CPUE (lb legal crab)		Pot lifts		RPUE ($)	
			Mean(sd) CPUE per vessel, 1,000	Weighted mean	Mean(sd) per vessel, 1,000	Total	Mean(sd) RPUE per vessel, 1,000	Weighted mean
BBR	1998	274	15.3(6.7)	15.2	0.5(0.2)	144.9	$399(175)	$395
	1999	257	12.6(6.1)	12.5	0.6(0.2)	150.0	$704(348)	$702
	2000	244	11.9(5.2)	12.0	0.4(0.1)	103.4	$520(228)	$527
	2001	230	19.1(10.0)	19.2	0.3(0.1)	66.2	$828(440)	$830
	2002	242	20.6(7.1)	20.4	0.3(0.1)	72.2	$1,131(384)	$1,119
	2003	250	18.2(9.5)	18.4	0.5(0.2)	134.1	$777(404)	$791
	2004	251	22.9(9.0)	22.9	0.4(0.1)	96.3	$964(368)	$967
	2005/06	89	28.0(10.5)	23.7	1.3(1.0)	114.6	$1,056(399)	$898
	2006/07	81	33.3(9.9)	34.0	0.9(0.5)	71.7	$962(294)	$982
	2007/08	74	27.9(7.2)	27.5	1.5(0.9)	113.1	$956(251)	$943
	2008/09	78	23.7(7.1)	21.7	1.8(1.1)	139.7	$931(289)	$853
	2009/10	70	22.3(5.9)	21.2	1.7(0.8)	118.4	$757(200)	$723
	2010/11	65	18.6(5.1)	18.1	2.0(1.0)	131.4	$986(277)	$959
	2011/12	62	27.6(7.3)	28.2	0.7(0.3)	45.1	$2,078(549)	$2,117
	2012/13	64	30.7(9.0)	30.2	0.6(0.3)	38.0	$1,863(560)	$1,840
	2013/14	63	27.0(8.9)	26.9	0.7(0.3)	45.8	$1,406(476)	$1,396
	2014/15	63	29.0(28.7)	25.3	0.9(0.5)	58.5	$1,431(1,466)	$1,243
	2015/16	64	31.7(9.7)	30.6	0.7(0.4)	48.0	$1,822(571)	$1,762
	2016/17	63	39.2(9.1)	37.8	0.5(0.3)	33.0	$2,755(608)	$2,663
	2017/18	61	20.5(7.8)	19.9	0.8(0.4)	48.2	$1,238(459)	$1,198
	2018/19	55	19.7(6.3)	19.6	0.6(0.3)	30.6	$1,419(463)	$1,416
	2019/20	56	16.0(6.0)	15.4	0.6(0.3)	34.4	$1,315(493)	$1,258
BSS	1999	241	155.4(42.0)	158.3	3.9(1.5)	945.4	$287(73)	$291
	2000	231	138.5(59.9)	136.2	0.8(0.3)	181.5	$487(217)	$476
	2001	207	91.6(48.0)	95.6	0.9(0.5)	191.0	$268(129)	$280
	2002	191	76.2(35.2)	75.6	1.7(0.8)	325.6	$188(87)	$186
	2003	190	151.6(63.0)	146.9	0.8(0.4)	153.7	$460(182)	$444
	2004	189	156.0(60.3)	149.6	0.7(0.4)	123.4	$542(203)	$519
	2005	168	246.2(87.9)	242.8	0.4(0.1)	72.9	$792(297)	$779
	2005/06	78	211.4(71.9)	202.6	1.5(1.1)	120.0	$457(147)	$441
	2006/07	69	349.1(74.7)	343.0	1.2(0.8)	85.3	$836(193)	$809
	2007/08	78	354.7(74.1)	352.7	1.8(1.0)	141.4	$893(183)	$888
	2008/09	77	284.6(70.5)	279.1	2.1(1.3)	163.3	$598(152)	$587
	2009/10	69	255.8(55.6)	255.0	2.0(1.1)	136.8	$529(108)	$527
	2010/11	68	255.3(51.4)	254.9	2.2(1.1)	147.2	$1,054(210)	$1,051
	2011/12	72	224.7(63.4)	222.7	3.7(1.8)	270.0	$789(221)	$785
	2012/13	70	218.9(64.0)	209.8	3.2(1.6)	224.6	$769(216)	$738
	2013/14	70	181.8(49.9)	179.8	3.3(1.7)	231.4	$601(168)	$590
	2014/15	71	192.4(57.0)	190.6	4.0(1.9)	286.1	$530(164)	$524
	2015/16	74	143.0(53.7)	137.5	2.9(1.6)	213.4	$558(199)	$536
	2016/17	63	135.7(48.8)	137.3	1.9(0.8)	118.1	$606(218)	$613
	2017/18	63	140.4(61.6)	132.8	1.9(1.0)	117.1	$656(307)	$623
	2018/19	61	181.0(46.6)	176.3	2.1(1.2)	126.2	$855(245)	$835
	2019/20	59	149.5(38.7)	150.1	3.2(1.7)	188.3	$675(177)	$680

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Table 3.48: Continued

		Vessels	CPUE (lb legal crab)		Pot lifts		RPUE ($)	
	Season		Mean(sd) CPUE per vessel, 1,000	Weighted mean	Mean(sd) per vessel, 1,000	Total	Mean(sd) RPUE per vessel, 1,000	Weighted mean
BST	2005/06	43	19.1(16.7)	15.0	0.7(0.6)	29.0	$75(69)	$60
	2006/07	52	16.8(15.4)	17.2	1.0(0.8)	52.9	$76(69)	$77
	2007/08	41	18.6(10.1)	17.6	1.3(1.3)	52.0	$84(46)	$80
	2008/09	49	14.7(15.7)	12.9	1.3(1.3)	63.9	$65(70)	$57
	2009/10	41	38.8(30.9)	11.8	1.0(0.7)	40.6	$206(165)	$63
	2010/11	49	0.0(0.0)	0.0	0.8(0.5)	38.6	$0	$0
	2011/12	56	0.0(0.0)	0.0	1.2(0.7)	64.2	$0	$0
	2012/13	59	0.0(0.0)	0.0	1.4(0.9)	81.1	$0	$0
	2013/14	66	15.2(12.0)	9.7	2.3(1.5)	147.6	$84(67)	$53
	2014/15	64	34.9(15.2)	33.5	3.5(2.6)	221.7	$172(76)	$161
	2015/16	70	41.8(19.4)	38.4	4.0(3.2)	280.4	$190(90)	$174
	2016/17	47	0.0(0.0)	0.0	1.0(0.7)	49.2	$0	$0
	2017/18	39	52.3(28.9)	41.2	0.8(0.6)	32.3	$391(227)	$304
	2018/19	37	37.2(18.1)	30.4	1.2(0.7)	44.6	$282(142)	$228
	2019/20	8	0.0(0.0)	0.0	0.8(0.5)	6.4	$0	$0
PIK	1998	58	3.0(1.7)	3.0	0.8(0.3)	46.0	$78(43)	$76
SMB	1998	132	7.1(2.0)	6.9	0.7(0.3)	91.7	$94(26)	$91
	2009/10	7	9.3(1.4)	9.6	1.5(1.0)	10.6	$106(16)	$110
	2010/11	11	9.7(2.0)	10.1	2.7(1.2)	29.3	$236(48)	$247
	2011/12	18	8.5(2.1)	8.9	2.7(1.1)	48.6	$196(48)	$203
	2012/13	17	9.8(2.6)	10.1	2.2(1.0)	37.0	$205(55)	$209
	2014/15	4	6.2	6.7	2.5	10.1	$101	$109
	2015/16	3	*	*	*	*	*	*
WAI	1998/99	1	*	*	*	*	*	*
	2002/03	33	18.7(12.7)	17.9	0.1(0.0)	3.8	$1,182(803)	$1,129
	2003/04	30	10.2(5.4)	10.3	0.2(0.1)	5.8	$562(302)	$569

Notes: Effort statistics for the most recent crab year shown in the table represent fishing activity occurring during the early part of the season, before December 31. CPUE = number of legal crab per potlift; RPUE = ex-vessel value of commercially sold crab per potlift. Dollars are inflation-adjusted to 2020 -equivalent value using the GDP deflator. Includes catcher/processor harvest and effort.

Source: ADF&G fish ticket data, and eLandings.

Table 3.49: Snow and king crab exports and imports

	Year	Export (1,000t)	Export value ($million)	Import (1,000t)	Import value ($million)	Net export (1,000t)	Net export value ($million)
King crab	1991	3.85	$92.64	0.30	$6.89	3.55	$85.75
	1992	3.70	$100.75	2.19	$37.47	1.51	$63.28
	1993	5.96	$142.11	1.12	$21.25	4.84	$120.86
	1994	3.62	$77.28	2.60	$55.08	1.02	$22.20
	1995	2.85	$55.10	4.01	$71.42	-1.16	$-16.32
	1996	4.46	$87.89	6.27	$99.65	-1.81	$-11.76
	1997	2.80	$43.10	9.77	$168.31	-6.97	$-125.21
	1998	3.10	$34.37	11.82	$183.77	-8.72	$-149.40
	1999	2.73	$38.06	11.49	$202.35	-8.76	$-164.29
	2000	3.05	$66.03	10.05	$210.94	-7.00	$-144.91
	2001	1.83	$47.02	9.29	$196.51	-7.46	$-149.49
	2002	2.28	$46.81	10.42	$259.95	-8.14	$-213.14
	2003	3.94	$68.97	9.96	$222.27	-6.02	$-153.30
	2004	3.25	$51.94	10.55	$199.76	-7.30	$-147.82
	2005	3.90	$69.65	18.39	$323.29	-14.49	$-253.64
	2006	4.32	$72.39	28.07	$419.74	-23.75	$-347.35
	2007	3.31	$59.69	30.35	$446.15	-27.04	$-386.46
	2008	4.33	$82.98	15.92	$317.41	-11.59	$-234.43
	2009	3.36	$78.96	15.83	$291.26	-12.47	$-212.30
	2010	3.62	$95.95	10.06	$210.57	-6.44	$-114.62
	2011	2.66	$73.38	8.50	$197.73	-5.84	$-124.35
	2012	1.98	$57.39	9.41	$186.65	-7.43	$-129.26
	2013	1.78	$48.61	10.69	$215.88	-8.91	$-167.27
	2014	2.19	$55.84	12.34	$267.13	-10.15	$-211.29
	2015	0.75	$18.34	9.35	$204.59	-8.60	$-186.25
	2016	1.17	$35.04	10.39	$299.60	-9.22	$-264.56
	2017	1.46	$41.38	10.01	$321.48	-8.55	$-280.10
	2018	1.33	$39.22	11.02	$367.08	-9.69	$-327.86
	2019	0.78	$22.23	12.39	$459.05	-11.61	$-436.82
	2020	0.71	$15.21	12.79	$509.94	-12.08	$-494.73
	2021	0.17	-	8.56	-	-8.39	-

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Table 3.49: Continued

	Year	Export (1,000t)	Export value ($million)	Import (1,000t)	Import value ($million)	Net export (1,000t)	Net export value ($million)
Snow crab	1991	32.20	$264.96	0.74	$9.17	31.46	$255.79
	1992	61.61	$509.92	0.88	$7.93	60.73	$501.99
	1993	45.56	$443.09	1.33	$14.10	44.23	$428.99
	1994	31.12	$412.51	2.86	$34.65	28.26	$377.86
	1995	12.26	$195.59	2.26	$29.32	10.00	$166.27
	1996	9.53	$108.60	3.38	$34.34	6.15	$74.26
	1997	10.17	$81.95	6.90	$55.09	3.27	$26.86
	1998	11.99	$80.94	12.26	$94.27	-0.27	$-13.33
	1999	15.62	$137.69	24.68	$247.50	-9.06	$-109.81
	2000	4.75	$60.12	28.61	$349.27	-23.86	$-289.15
	2001	3.09	$35.52	42.18	$414.75	-39.09	$-379.23
	2002	3.36	$36.99	44.41	$437.46	-41.05	$-400.47
	2003	3.92	$51.90	51.60	$598.50	-47.68	$-546.60
	2004	4.09	$52.86	49.10	$561.79	-45.01	$-508.93
	2005	3.42	$38.73	45.97	$420.18	-42.55	$-381.45
	2006	4.79	$50.90	46.28	$380.48	-41.49	$-329.58
	2007	2.12	$18.55	47.98	$493.43	-45.86	$-474.88
	2008	5.55	$53.43	42.00	$442.92	-36.45	$-389.49
	2009	5.48	$53.63	51.65	$454.94	-46.17	$-401.31
	2010	4.96	$48.87	43.57	$441.72	-38.61	$-392.85
	2011	8.48	$104.90	41.04	$581.57	-32.56	$-476.67
	2012	12.72	$145.95	41.68	$492.75	-28.96	$-346.80
	2013	8.22	$101.30	52.05	$614.97	-43.83	$-513.67
	2014	7.24	$94.76	45.49	$552.72	-38.25	$-457.96
	2015	7.72	$84.93	45.79	$535.19	-38.07	$-450.26
	2016	6.12	$79.67	49.70	$671.48	-43.58	$-591.81
	2017	3.01	$47.74	46.10	$748.86	-43.09	$-701.12
	2018	2.48	$42.83	40.94	$731.41	-38.46	$-688.58
	2019	3.70	$61.13	46.24	$839.59	-42.54	$-778.46
	2020	4.12	$67.80	57.55	$993.21	-53.43	$-925.41
	2021	5.04	-	48.10	-	-43.06	-

Notes: Imports and exports shown for product codes 306144010 (frozen king crab) and 306144020 (frozen snow crab) from the Tariff Schedule for the United States, Annotated (TSUSA). Dollars are inflation-adjusted to 2020 -equivalent value using the GDP deflator.

Source: U.S. Foreign Census Bureau Foreign Trade Division, via NMFS Fisheries Statistics Division, U.S. Foreign Trade Database [http://www.st.nmfs.noaa.gov/st1/trade/].

Table 3.50: Inflation-adjustment indices

Year	GDP Index	2020 GDP Adjustment Factor	PCE Index	2020 PCE Adjustment Factor
1991	65.819	1.73	65.473	1.7
1992	67.321	1.69	67.218	1.65
1993	68.917	1.65	68.892	1.61
1994	70.386	1.61	70.33	1.58
1995	71.864	1.58	71.811	1.55
1996	73.178	1.55	73.346	1.52
1997	74.445	1.53	74.623	1.49
1998	75.266	1.51	75.216	1.48
1999	76.346	1.49	76.338	1.46
2000	78.069	1.46	78.235	1.42
2001	79.822	1.42	79.738	1.39
2002	81.039	1.4	80.789	1.38
2003	82.567	1.38	82.358	1.35
2004	84.778	1.34	84.411	1.32
2005	87.407	1.3	86.813	1.28
2006	90.074	1.26	89.174	1.25
2007	92.498	1.23	91.438	1.22
2008	94.263	1.21	94.18	1.18
2009	94.999	1.2	94.094	1.18
2010	96.109	1.18	95.705	1.16
2011	98.112	1.16	98.13	1.13
2012	100	1.14	100	1.11
2013	101.772	1.12	101.347	1.1
2014	103.688	1.1	102.868	1.08
2015	104.757	1.08	103.126	1.08
2016	105.898	1.07	104.235	1.07
2017	107.932	1.05	106.073	1.05
2018	110.331	1.03	108.231	1.03
2019	112.317	1.01	109.851	1.01
2020	113.623	1	111.225	1

Notes: The Personal Consumption Expenditures (PCE) chain-type price index is used where noted in this report to deflate estimates of ex-vessel revenues, fishing costs, crew earnings, and associated monetary values to account for price inflation in US general personal consumption expenditures. The Gross Domestic Production (GDP) chain-type price index is used where noted to deflate estimates of wholesale production revenues and production costs to account for change in the general price level of US domestic production of all goods and services.

Source: U.S. Bureau of Economic Analysis, Gross Domestic Product: Chain-type Price Index [GDPCTPI], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GDPCTPI, retrieved December 2020. U.S. Bureau of Economic Analysis, Personal Consumption Expenditures: Chain-type Price Index [PCEPI], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PCEPI, retrieved December 2020.