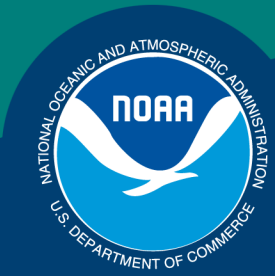


Science, Service, Stewardship



Crab SAFE: Economic Status Report 2019

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Economics and Social Science Research Program

January 28, 2020

Seattle, WA

**NOAA
FISHERIES
SERVICE**

2019 Crab Economic SAFE Overview

- Executive Summary
- Economic Status and Trends
 - Economic output
 - TACs, landings, ex-vessel and finished product volume
 - Ex-vessel and first wholesale revenue and average prices
 - Employment and labor income
 - Harvest sector operating costs and financial performance
 - Quota market and holdings
 - Fishing capacity and effort
 - International trade

Economic SAFE availability



The screenshot shows the NOAA Fisheries Alaska Fisheries Science Center website. The header includes the NOAA logo and the text "NOAA FISHERIES | ALASKA FISHERIES SCIENCE CENTER". Below the header is a navigation menu with links for General Info, Species, Programs, Publications, Data & Tools, Images, Education & Outreach, and Search. The main content area is titled "Economic and Social Sciences Research" and features a section for "Annual Economic Status Reports from the Stock Assessment and Fishery Evaluations". This section includes a paragraph inviting users to provide feedback on the quality and usefulness of the reports, a button to "Click here to participate in the survey", and two sub-sections: "Groundfish Fisheries of the Gulf of Alaska and Bering Sea/Aleutian Islands" and "King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands". A right-hand sidebar contains a table of contents with links to REFM Home, Socioeconomics, Research, Data Collection, Publications and Posters, Economic Status Reports (Groundfish and Crab), Alaska Fishing Communities (Profiles and Snapshots), Resources, and Personnel.

Economic and Social Sciences Research

Annual Economic Status Reports from the Stock Assessment and Fishery Evaluations

The Alaska Fisheries Science Center (AFSC) invites users of the Groundfish and BSAI Crab Economic Status Reports to provide feedback regarding the quality and usefulness of the reports and to make recommendations for improvement. We welcome any and all comments and suggestions, and have developed an online survey to facilitate user feedback:

[Click here to participate in the survey](#)

Groundfish Fisheries of the Gulf of Alaska and Bering Sea/Aleutian Islands

The Groundfish Economic Status Report summarizes available economic data about the federal groundfish fisheries in the Gulf of Alaska and the Bering Sea/Aleutian Islands. Published annually as an appendix to the [Stock Assessment and Fishery Evaluation reports](#), the Economic Status Report presents summary statistics on catch, discards, prohibited species catch, ex-vessel and first-wholesale production and value, participation by small entities, and effort in these fisheries.

King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands

The BSAI Crab Economic Status Report summarizes available economic information about the commercial crab fisheries managed under the [Fishery Management Plan for Bering Sea and Aleutian Islands King and Tanner Crab](#), with particular attention to the subset of fisheries included in the [Crab Rationalization program](#). The report includes information on: 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; price forecasts; performance metrics for catch share programs and other information regarding data collection and ongoing economic and social science research related to the BSAI crab fisheries and related communities.

REFM Home
Socioeconomics
Research
Data Collection
Publications and Posters
Economic Status Reports
-Groundfish
-Crab
Alaska Fishing Communities
-Profiles
-Snapshots
Resources
Personnel

<https://www.afsc.noaa.gov/REFM/Socioeconomics/SAFE/default.php>

or

<https://www.fisheries.noaa.gov/alaska/sustainable-fisheries/alaska-crab-stock-assessment-and-fishery-evaluation-reports>

SSC Comments

*...recommends that **[net earnings] metrics be developed for the processing sector** as well. The SSC also recommends that the Crab SAFE **include report card indices** that parallel those in the groundfish SAFE. The SSC notes that these indices do not need to be the same as those of the groundfish SAFE but should be informative about the current performance of the crab fisheries relative to past performance. The SSC also recommends that **data presented in the Crab Economic SAFE tables be available for download by the public**, similar to the data in the Groundfish SAFE.” February, 2018*

- Very limited non-confidential cost data available for crab processors.
- Report card indices and additional ESPs will be developed for May CPT meeting
- **New! Executive Summary data available online via AKFIN:**
<https://reports.psmfc.org/akfin>

SSC Comments

“The upcoming crab SAFE analysis of the extent of quota leasing, the degree to which quota is being fished by leaseholders rather than quota owners, and how ownership patterns have changed over time should include a disaggregation to the community level where possible... Vessel ownership by community should be similarly tracked on an annual basis in the SAFE document to allow the identification of trends, as should the number of reductions in the amount of employment throughout the fisheries noted (e.g., the number of crew positions decreasing by 10%). ... information on average daily and total seasonal [processing] wages be provided by community and tracked over time.” June, 2018

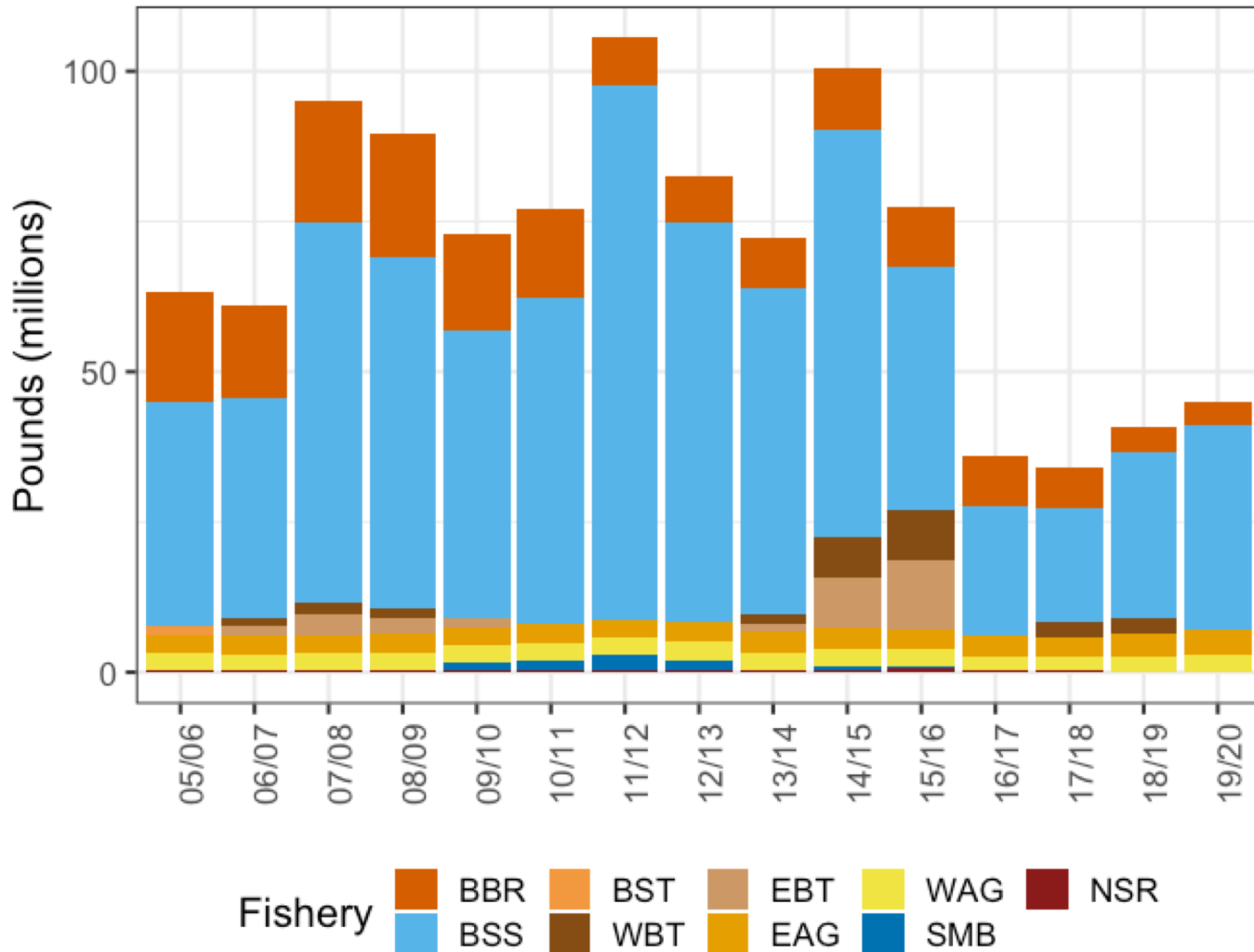
- Ownership decomposition still in development
- Community/regional disaggregation of results will be addressed as possible in annual community participation document (ACEPO, forthcoming).
- Crab processing labor statistics generally cannot be disaggregated to community level due to confidentiality limits.

SSC Comments

“...The SSC agrees with the CPT that the Norton Sound red king crab fishery would be a good candidate for a pilot socio-economic report as it would be particularly valuable for evaluating the efficacy of multiple community protection measures” June, 2019

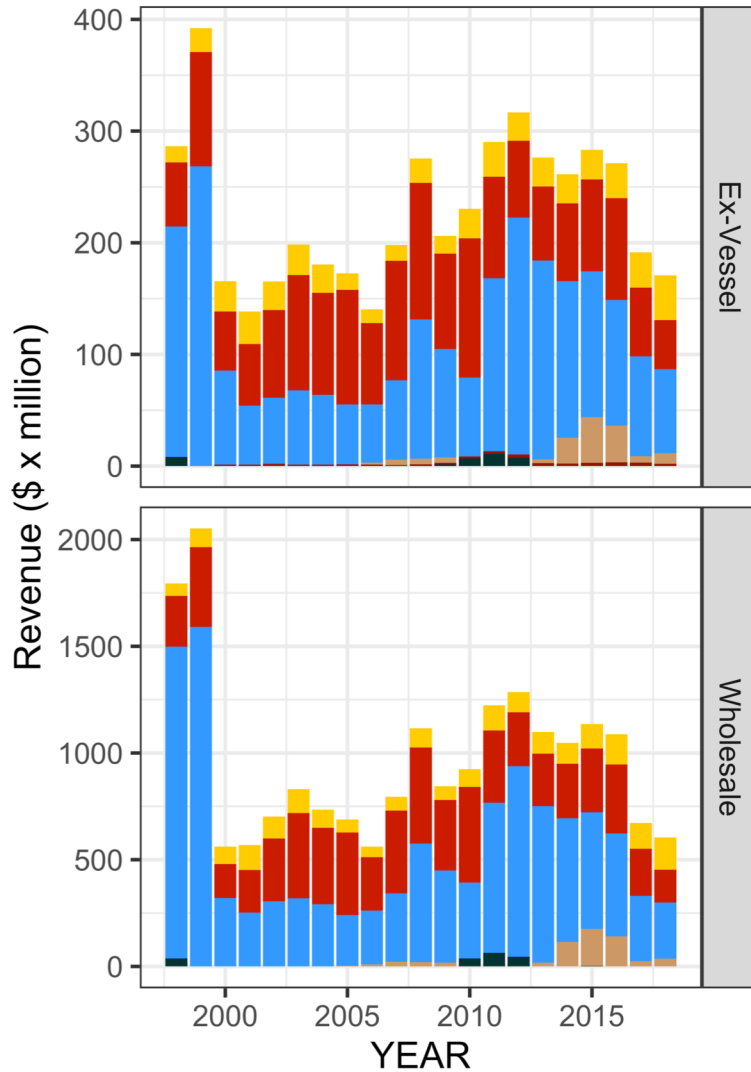
- ESP was produced for SMB fishery; CPT has prioritized BBR as next crab ESP

TAC 2005/06 – 2019/20

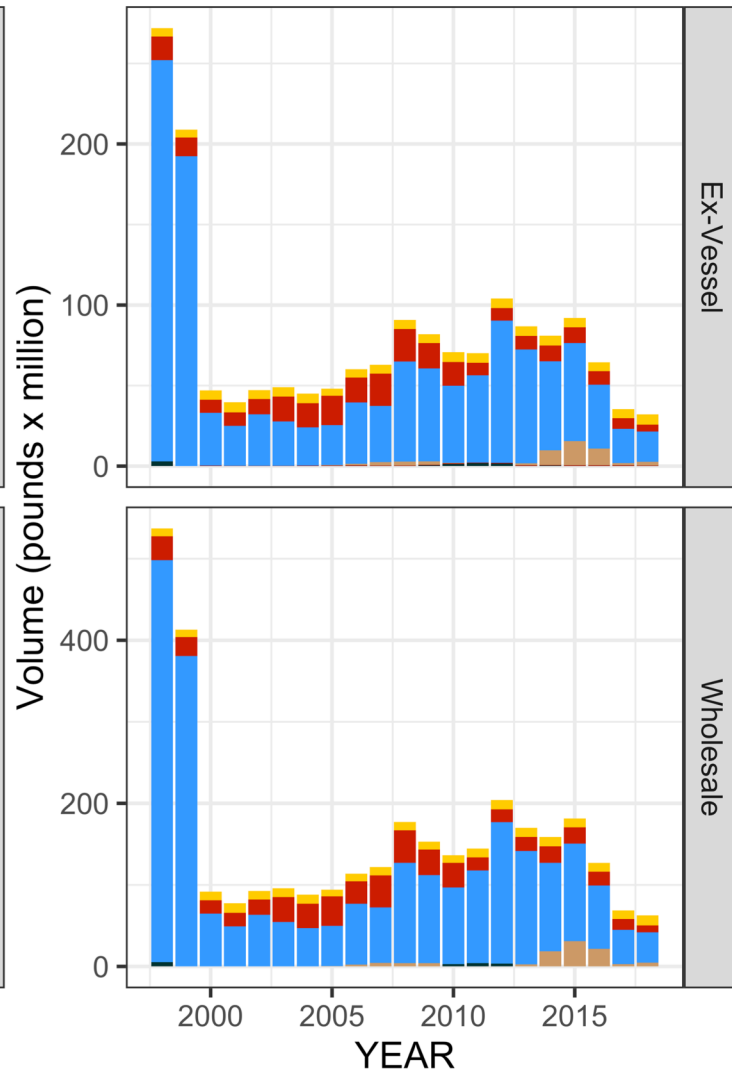


2018 Production & Value

Gross Revenue,
All Fisheries by Sector



Production Volume,
All Fisheries by Sector

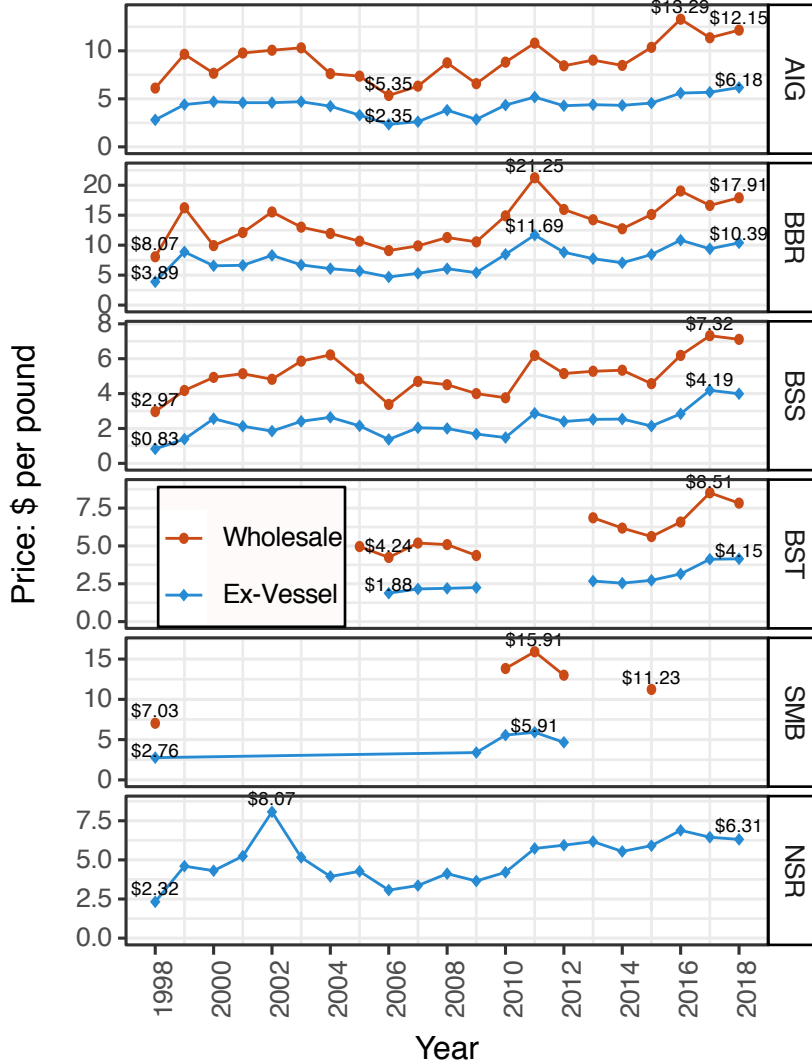


Crab Fishery

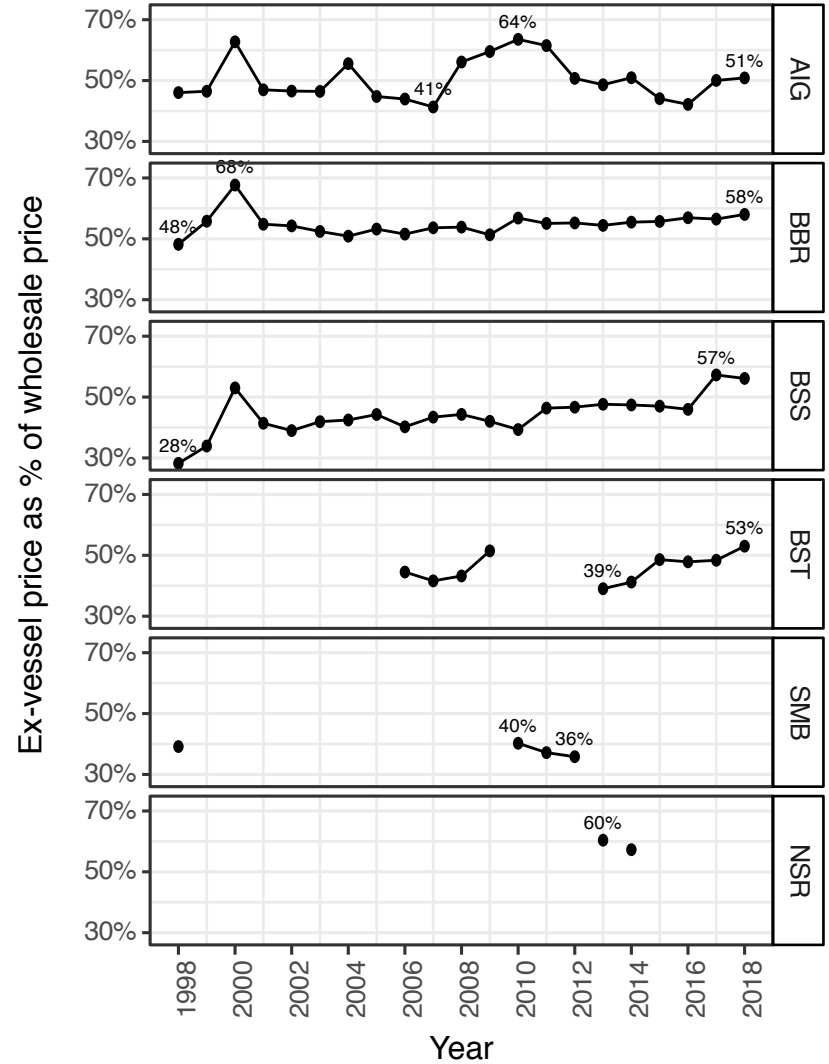
- AIG
- BBR
- BSS
- BST
- NSR
- SMB

Ex-vessel & Wholesale Price

Ex-vessel and First Wholesale Price

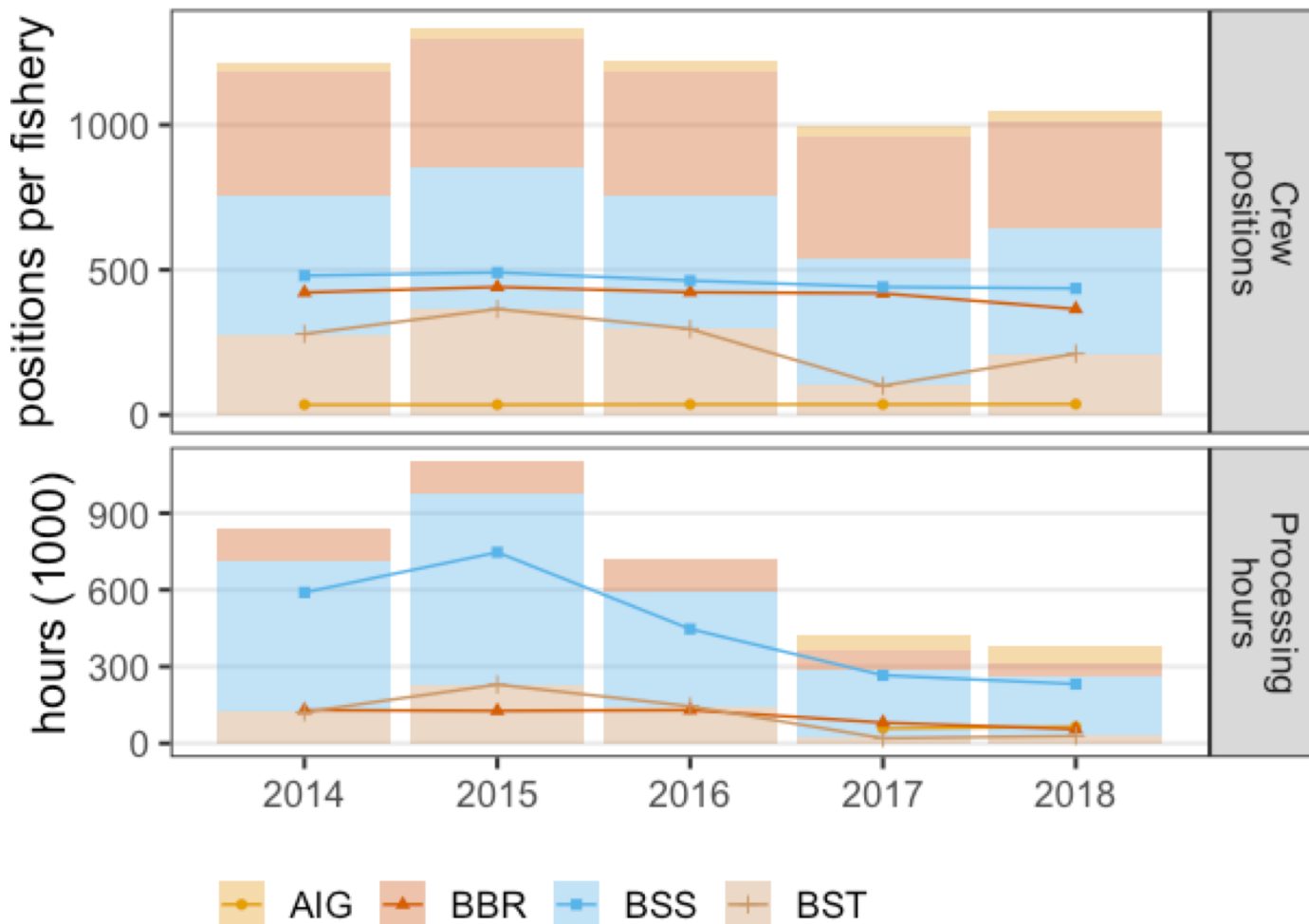


Ex-vessel/First Wholesale Price Ratio



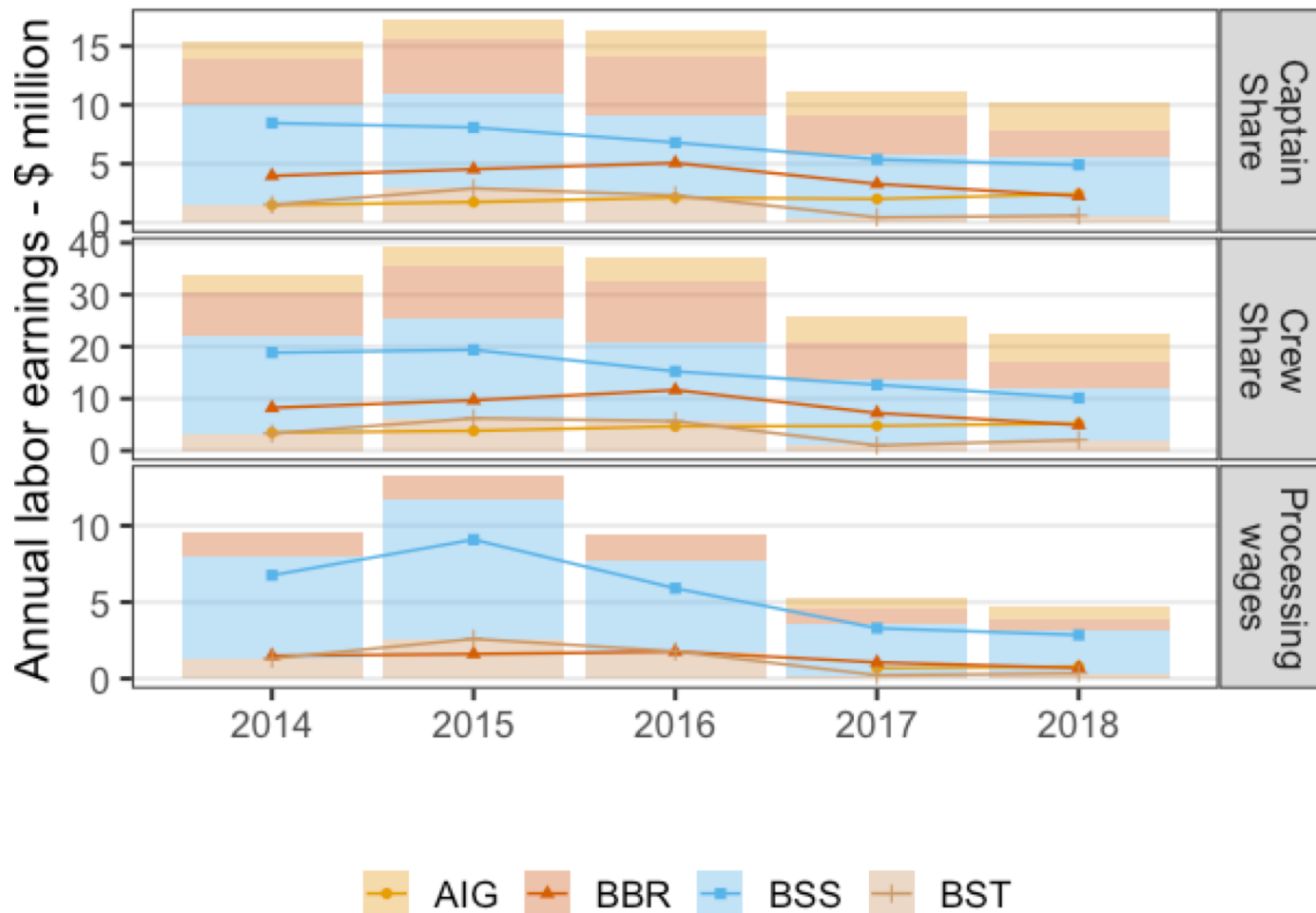
2018 Employment & Income (CR program)

Aggregate Crab Employment
Crew Positions and Processing Labor Hours



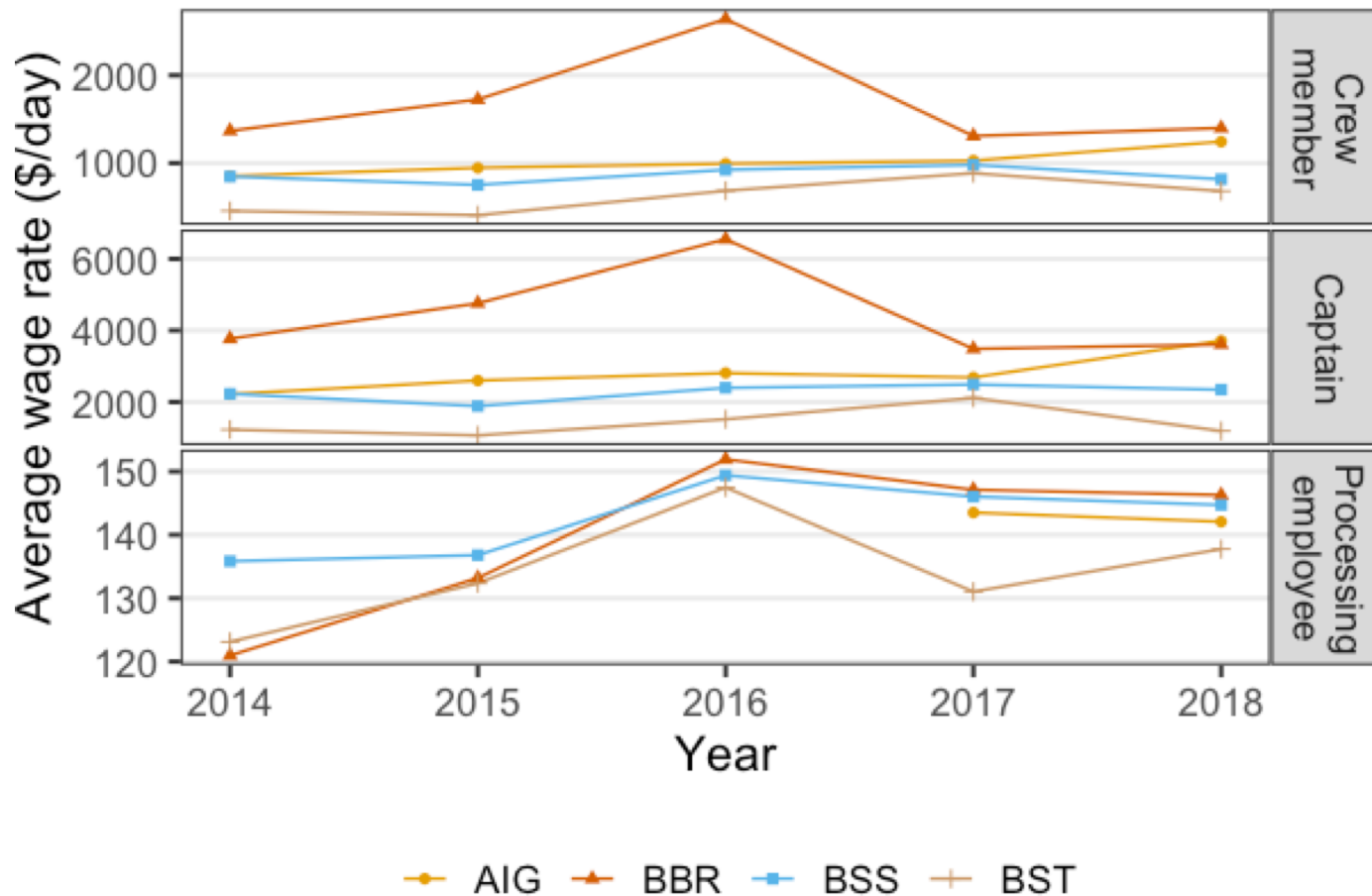
2018 Employment & Income (CR program)

Aggregate Crab Labor Earnings,
Crew and Captain Share, and Processing Wages



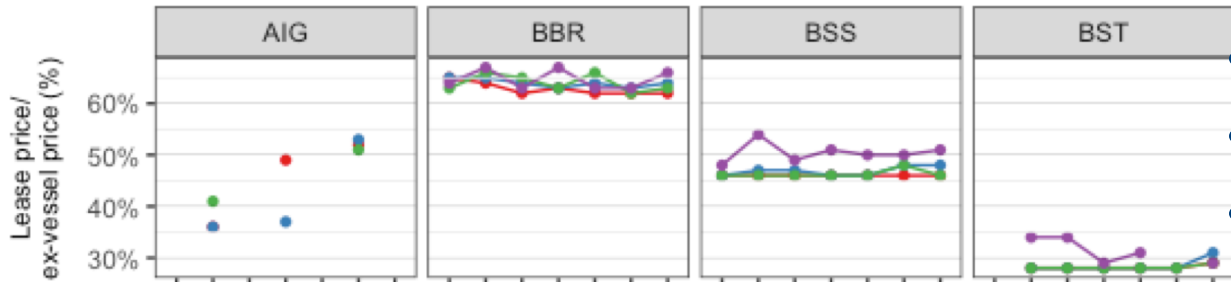
2018 Employment & Income (CR program)

Crab Labor Wage Rates
 -Captain/Crew share earnings/vessel-day
 -Processing wages per 12-hr shift



IFQ Lease Activity and Rates

Average lease rate (lease price as % of ex-vessel price), vessel median



BBR CVO A: 62-63%

BSS CVO A: 46%

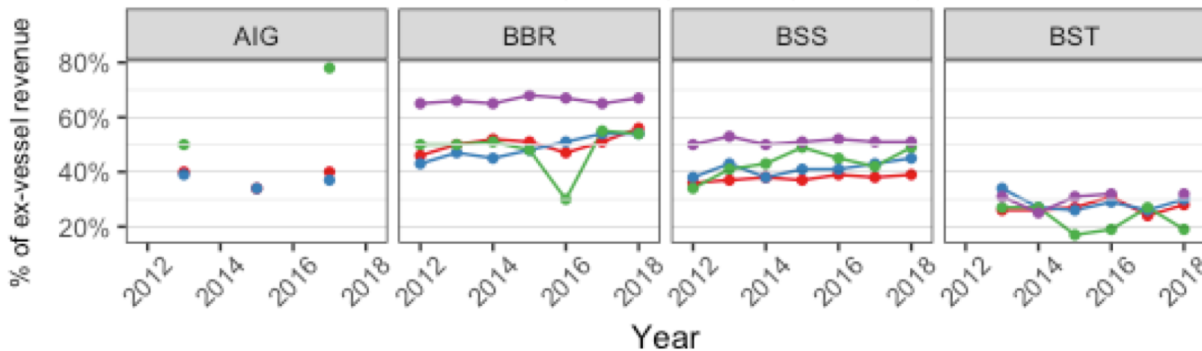
Over all QS:

- 81-88% Leased
- 39-42% Gross

Lease volume as % of pounds landed by quota type, weighted mean



Lease cost as % of ex-vessel gross by quota type, weighted mean



Quota Type — CVO A — CVO B + CPO — CVC + CPC — CDQ + ACA

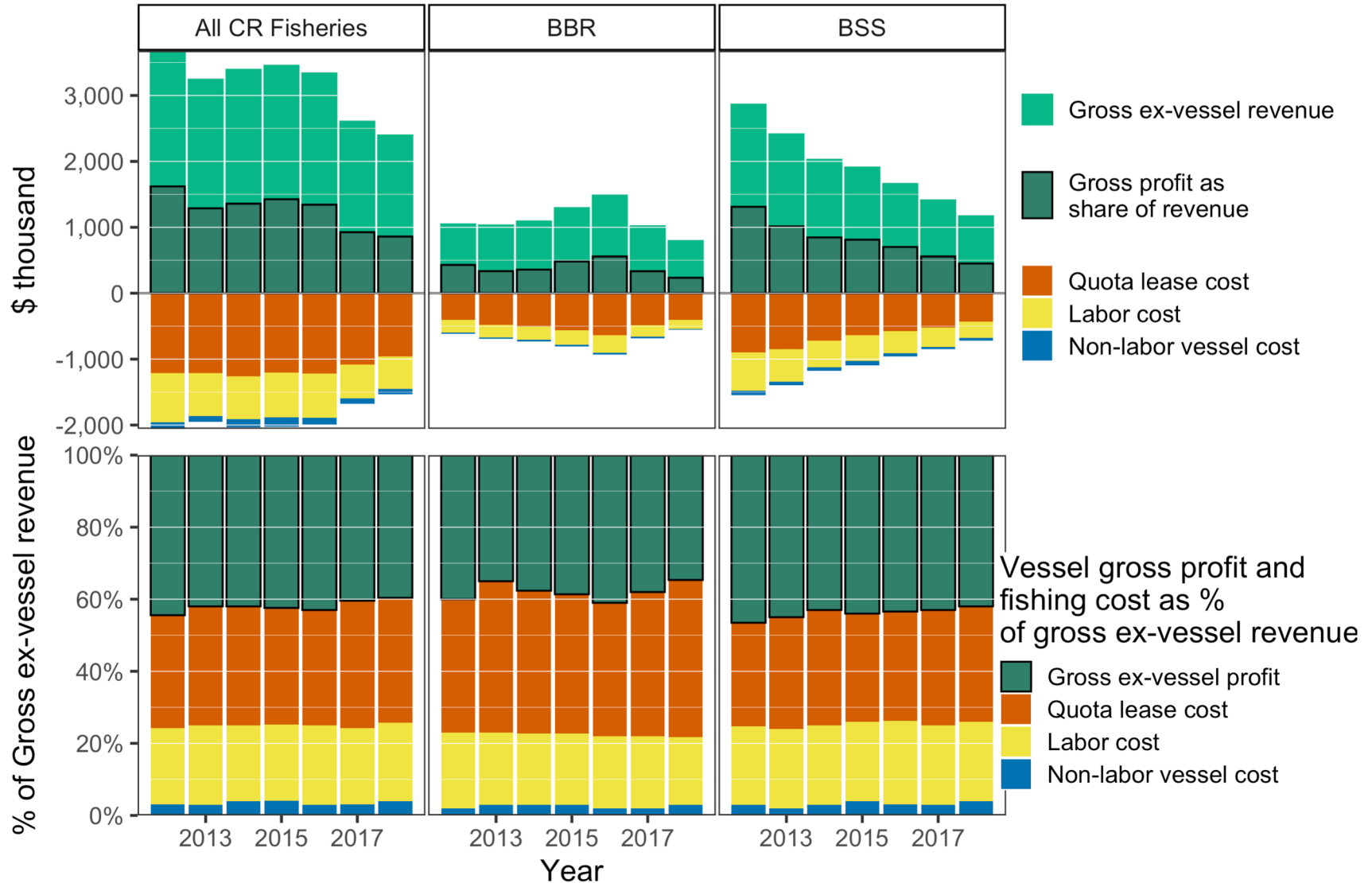
Vessel Income Statement - 2018

	Number of active vessels	55	
	Pounds landed	76	
	Quota pounds leased (% of landed)	61	(68%)
	<hr/>		
	Gross ex-vessel revenue	\$792	
	— Quota lease cost	(\$407)	(44%)
	Gross residual after lease cost	\$386	56%
BBR	— Provisions	(\$4.05)	(0.5%)
	— Bait	(\$7.37)	(0.9%)
	— Fuel	(\$7.50)	(1.0%)
	— Non-labor vessel cost (Total)	(\$19)	(3%)
	Gross residual (non-labor)	\$367	54%
	— Labor cost	(\$132)	(19%)
	– Harvesting cost (Total)	(\$557)	(65%)
	Gross ex-vessel profit	\$235	35%

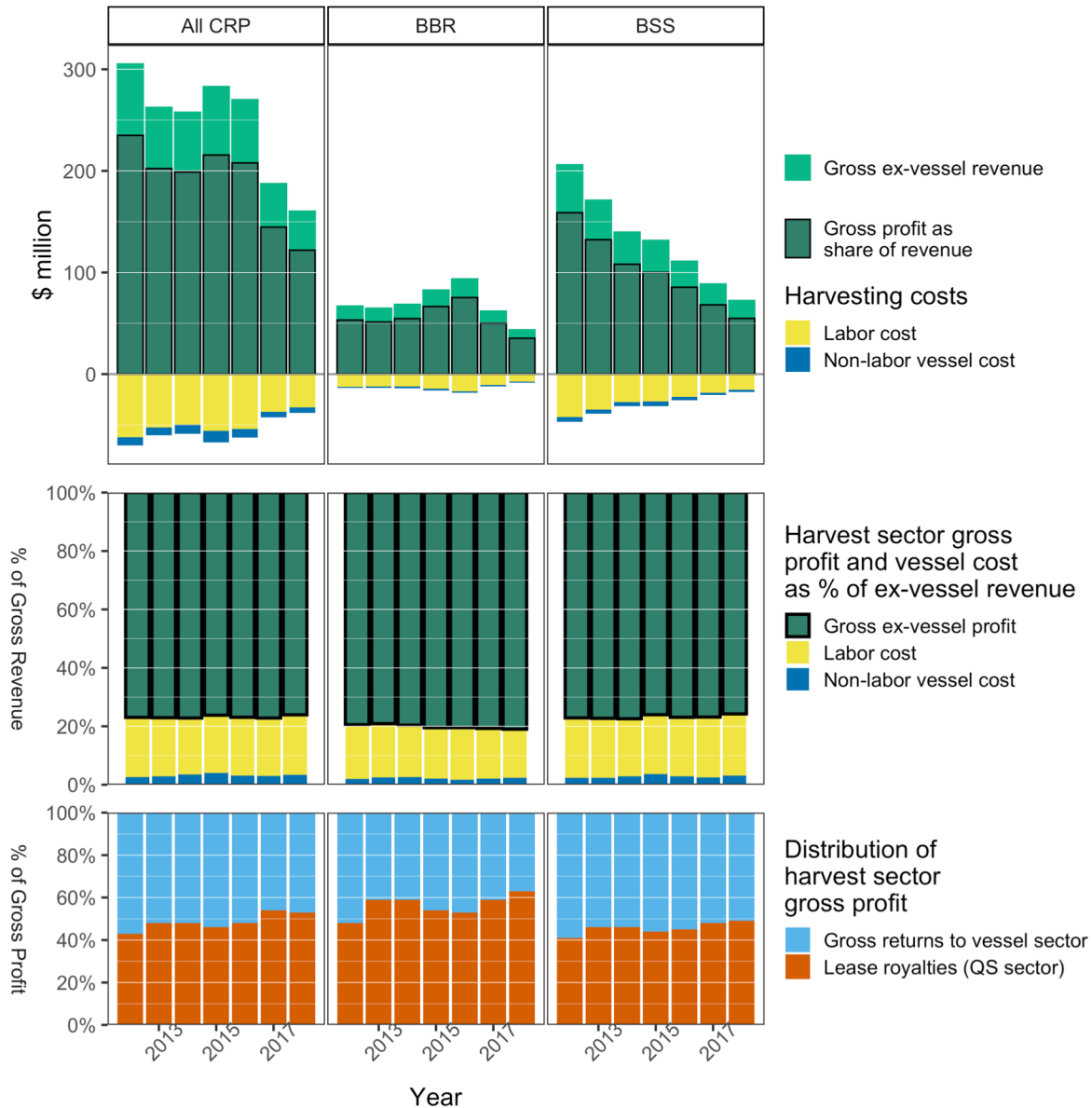
Vessel Income Statement - 2018

	Number of active vessels	62	
	Pounds landed	292	
	Quota pounds leased (% of landed)	226	(66%)
	<hr/>		
	Gross ex-vessel revenue	\$1167	
	— Quota lease cost	(\$433)	(32%)
	Gross residual after lease cost	\$734	68%
BSS	— Provisions	(\$6.66)	(0.6%)
	— Bait	(\$15.02)	(1.3%)
	— Fuel	(\$15.14)	(1.3%)
	— Non-labor vessel cost (Total)	(\$37)	(4%)
	Gross residual (non-labor)	\$697	64%
	— Labor cost	(\$246)	(22%)
	— Harvesting cost (Total)	(\$716)	(58%)
	Gross ex-vessel profit	\$451	42%

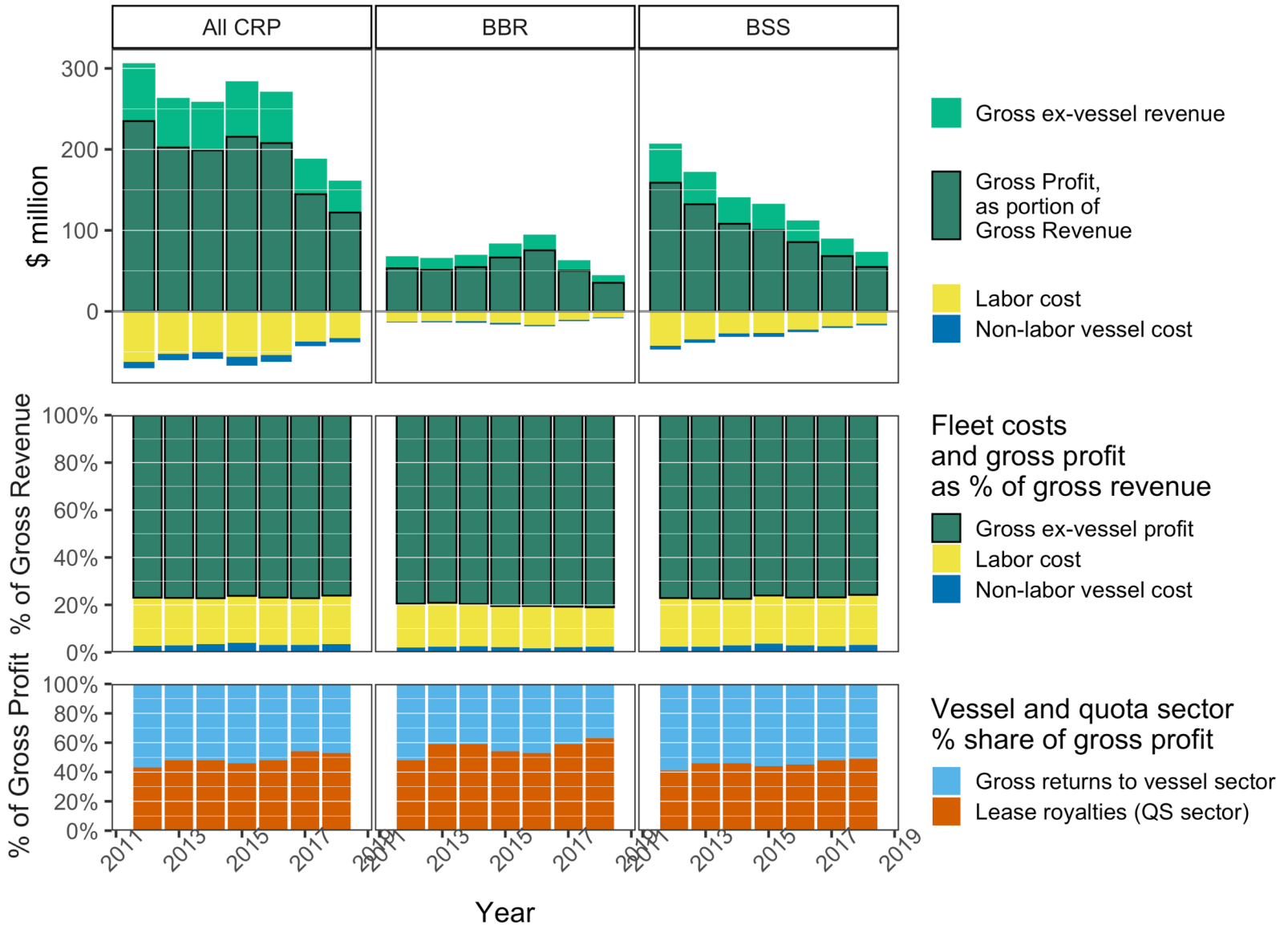
Vessel Income Statement



Fleet Income Statement



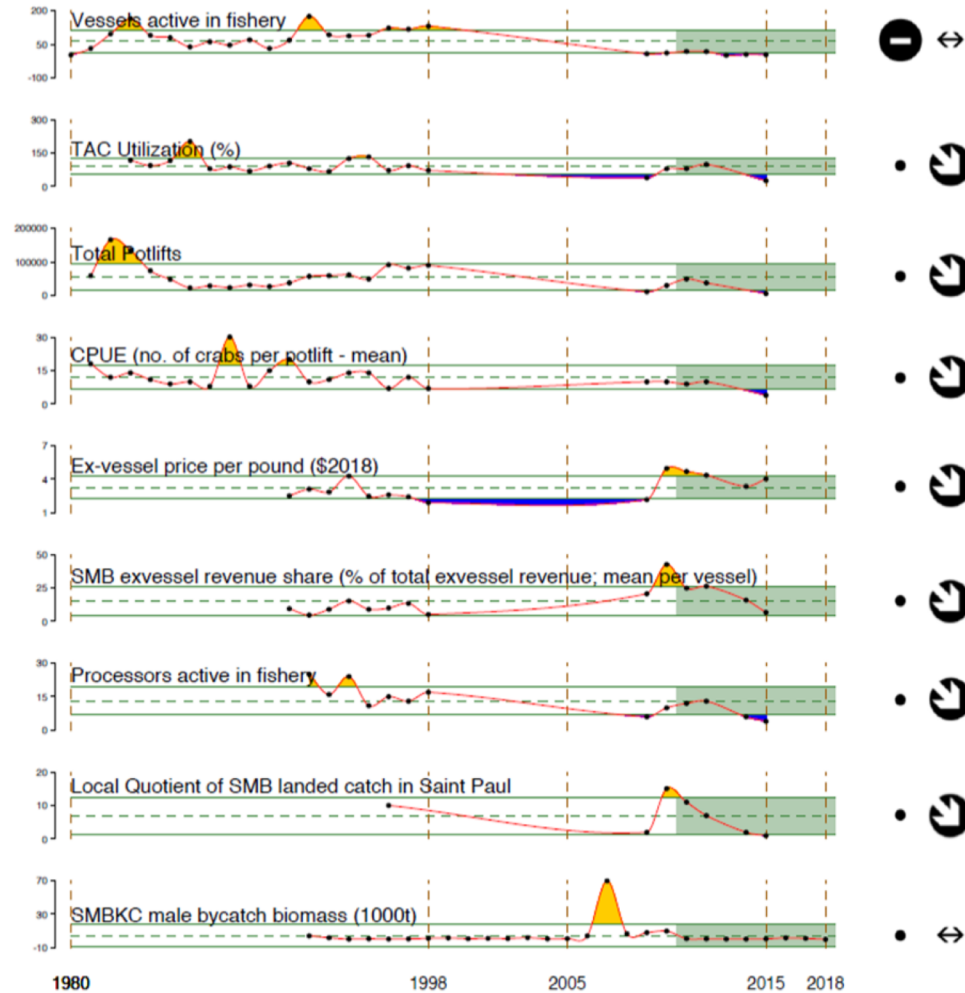
Fleet Income Statement



ESPs

- Candidate stocks
- Standardize metrics

Saint Matthew Island blue king crab
Socioeconomic Indicators



2011-2018 Mean

- + 1 s.d. above mean
- 1 s.d. below mean
- within 1 s.d. of mean
- x fewer than 2 data points

2011-2018 Trend

- ↻ increase by 1 s.d. over time window
- ↺ decrease by 1 s.d. over time window
- ↔ change <1 s.d. over window
- x fewer than 3 data points

Discussion

Priorities for 2020 SAFE:

- Report card metrics, ESP integration
- Price forecasts & current-year estimates
- Demographics (Community chapter)
- Processing sector income analysis
- Consistency with Groundfish Econ SAFE

- Council EDR Review