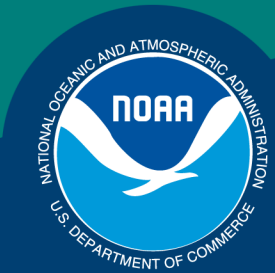


Science, Service, Stewardship



Crab SAFE: Economic Status Report 2019

Presented by:

Brian Garber-Yonts

Alaska Fisheries Science Center

Economics and Social Science Research Program

January 15, 2020

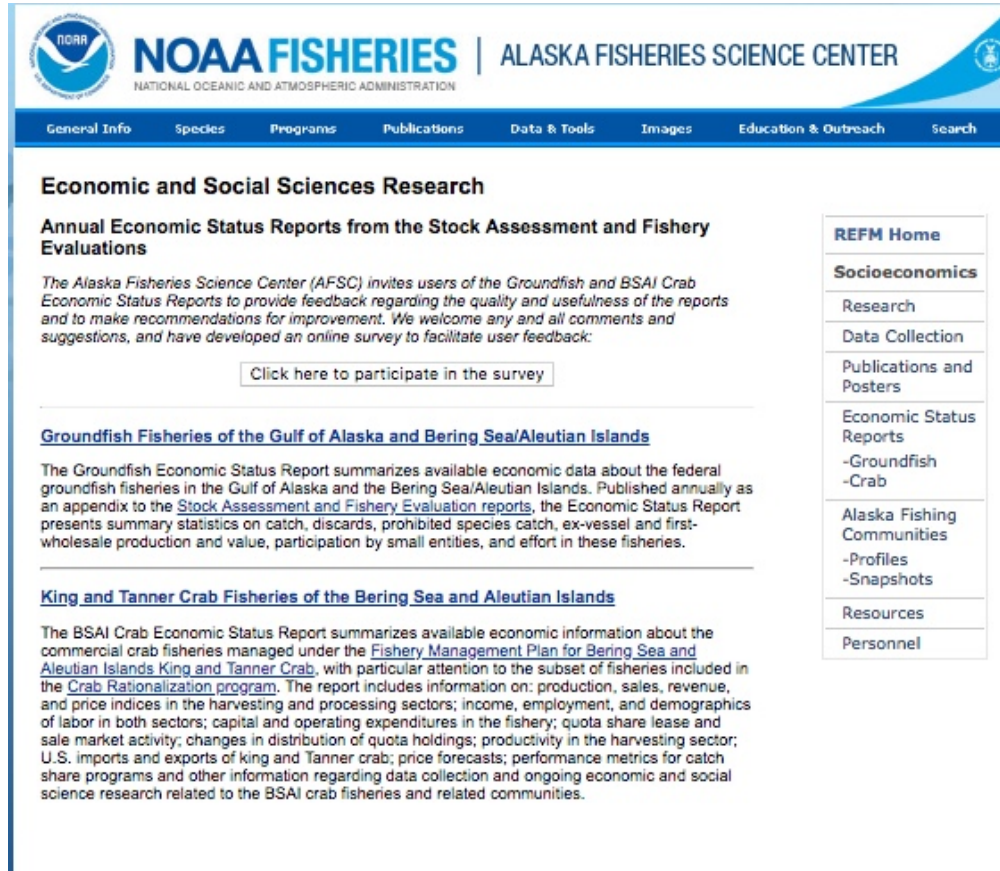
Kodiak, AK

**NOAA
FISHERIES
SERVICE**

2019 Crab Economic SAFE Overview

- Executive Summary (SAFE Report extract)
- Economic Status and Trends
 - Economic output
 - TACs, landings, ex-vessel and finished product volume
 - Ex-vessel and first wholesale revenue and average prices
 - Income and employment
 - Operating costs and Income Statement (New)
 - Quota Market and Holdings
 - Fishing capacity and effort
 - International trade

Economic SAFE availability



The screenshot displays the NOAA Fisheries Alaska Fisheries Science Center website. The header includes the NOAA logo and the text "NOAA FISHERIES | ALASKA FISHERIES SCIENCE CENTER". A navigation bar contains 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 about the AFSC's invitation for feedback and a button to "Click here to participate in the survey". Below this are 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", each with a descriptive paragraph. 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>

SSC Comments

...recommends that [net earnings] 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.”

- Very limited cost data available for crab processors.
- Report card indices 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. This would allow time series tracking of the flow of ownership among communities and analysis of trends (e.g., quota moving from smaller to larger communities over time). 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%).”

- Ownership decomposition still in development; spatial disaggregation of results will be addressed as possible.

SSC Comments

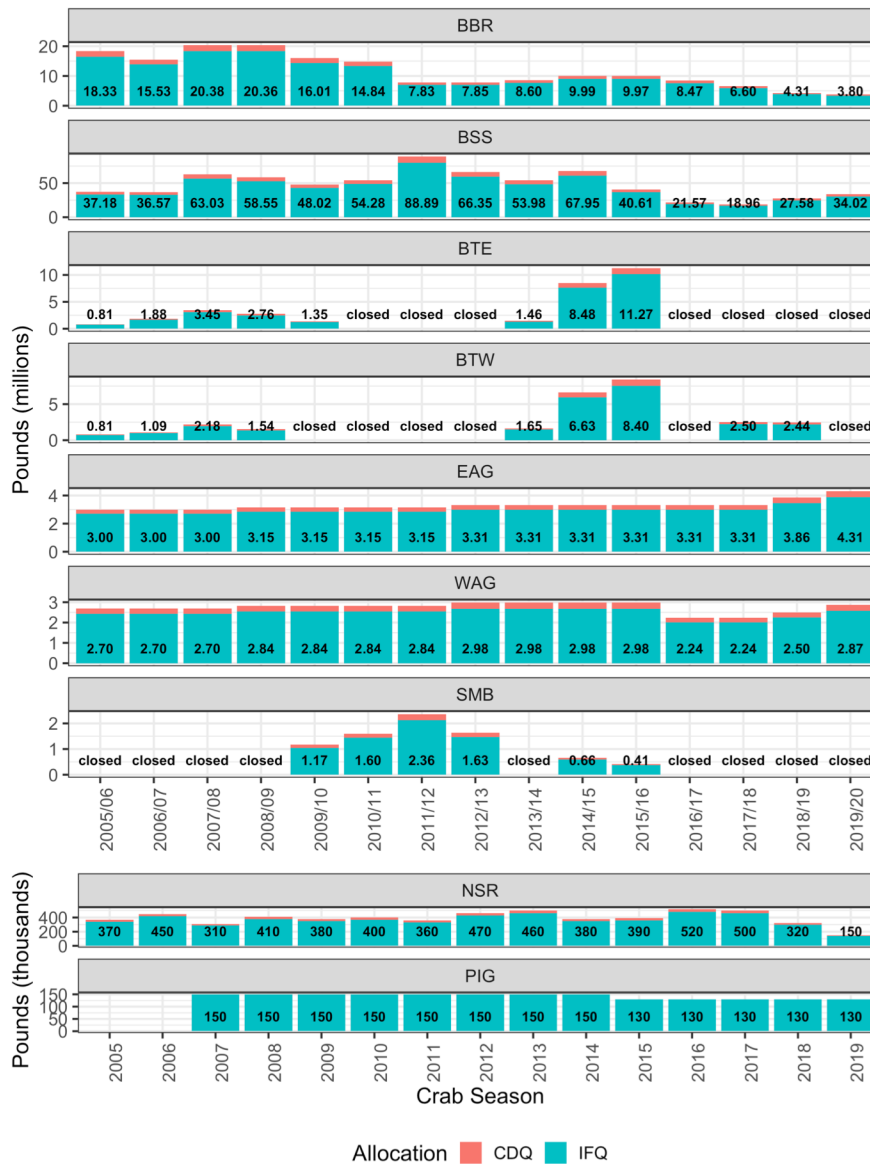
“It should be clarified that an increase in price does not mitigate all community impacts of the decrease in vessel and processing activity that would accompany such a large decrease in TAC...”

SSC suggests that information on average daily and total seasonal wages be provided by community and tracked over time. Similarly, clarification is needed on the relationship between the attribution of a decrease of 33% in processing hours in 2016 compared to the previous year to “the decrease in TACs across all stocks” and the decrease in median processing wages seen that was stated “as most likely due to increased efficiencies in processing procedures and a resultant decrease in overtime pay.”

”

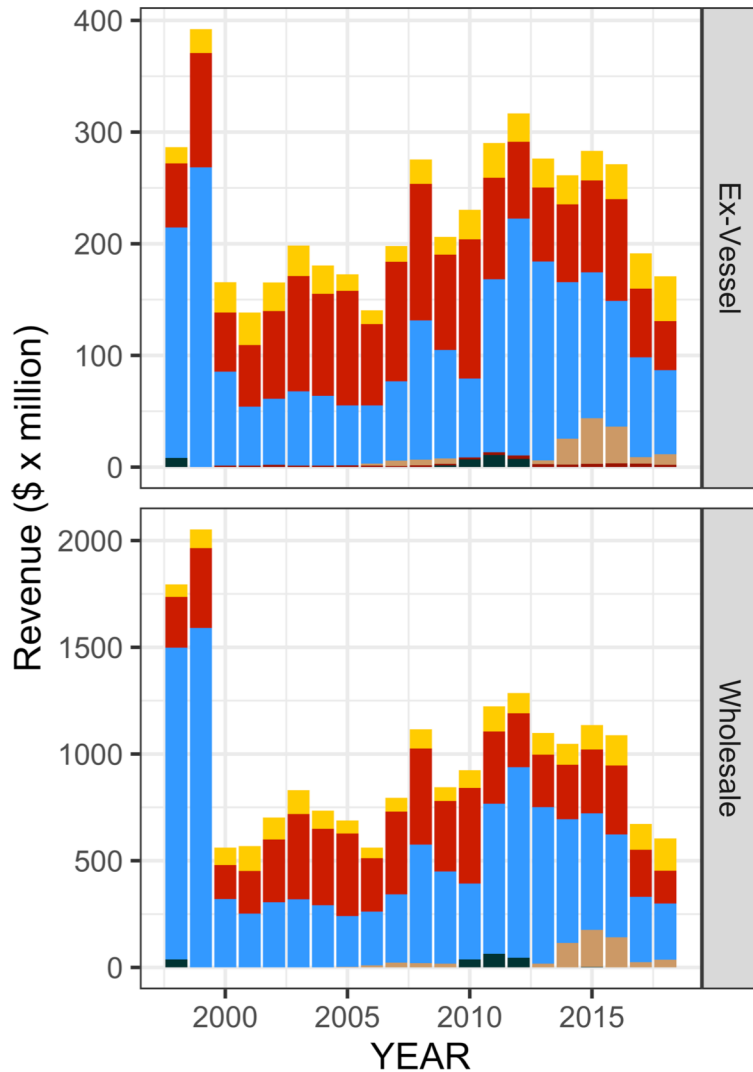
- Crab processing labor statistics generally cannot be disaggregated to community level due to confidentiality limits.

TAC 2005/06 – 2019/20

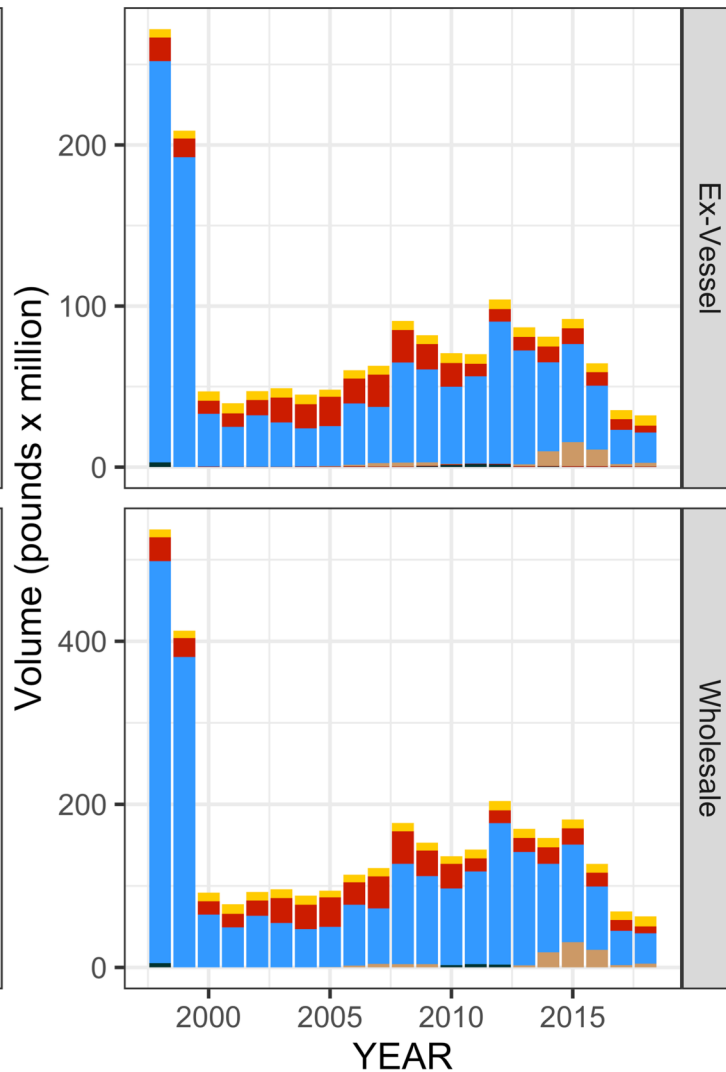


2018 Production & Value

Gross Revenue, All Fisheries by Sector



Production Volume, All Fisheries by Sector

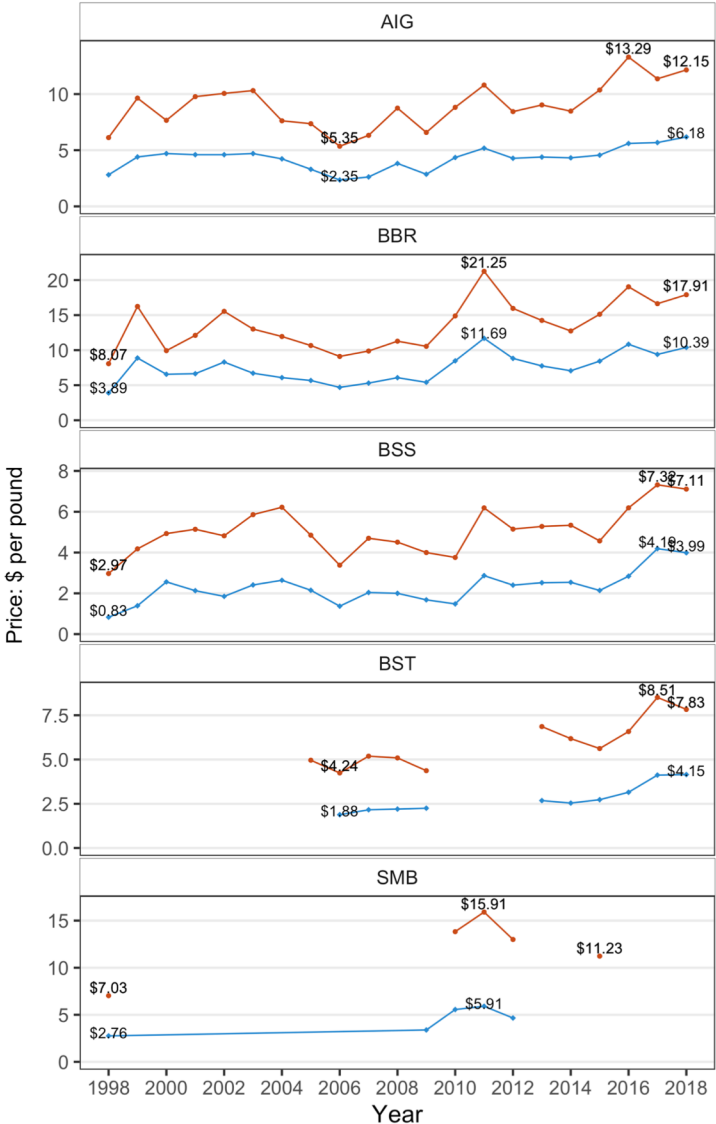


Crab Fishery

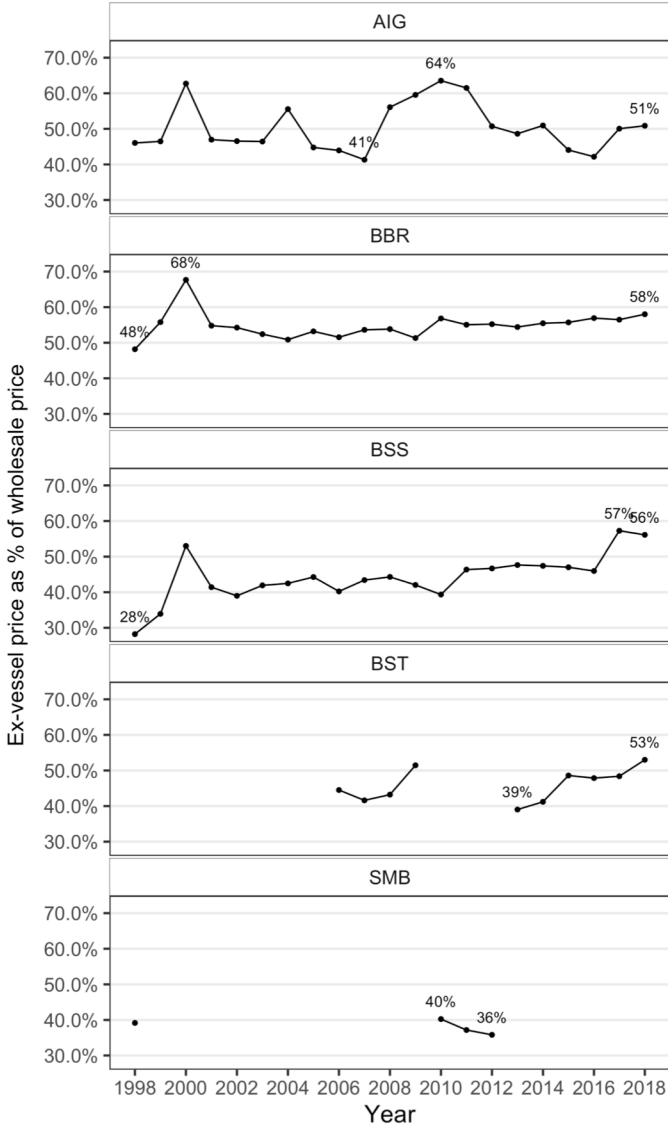
- AIG
- BBR
- BSS
- BST
- NSR
- SMB

2018 Ex-vessel & Wholesale Price

Weighted-average Ex-vessel and First Wholesale Price

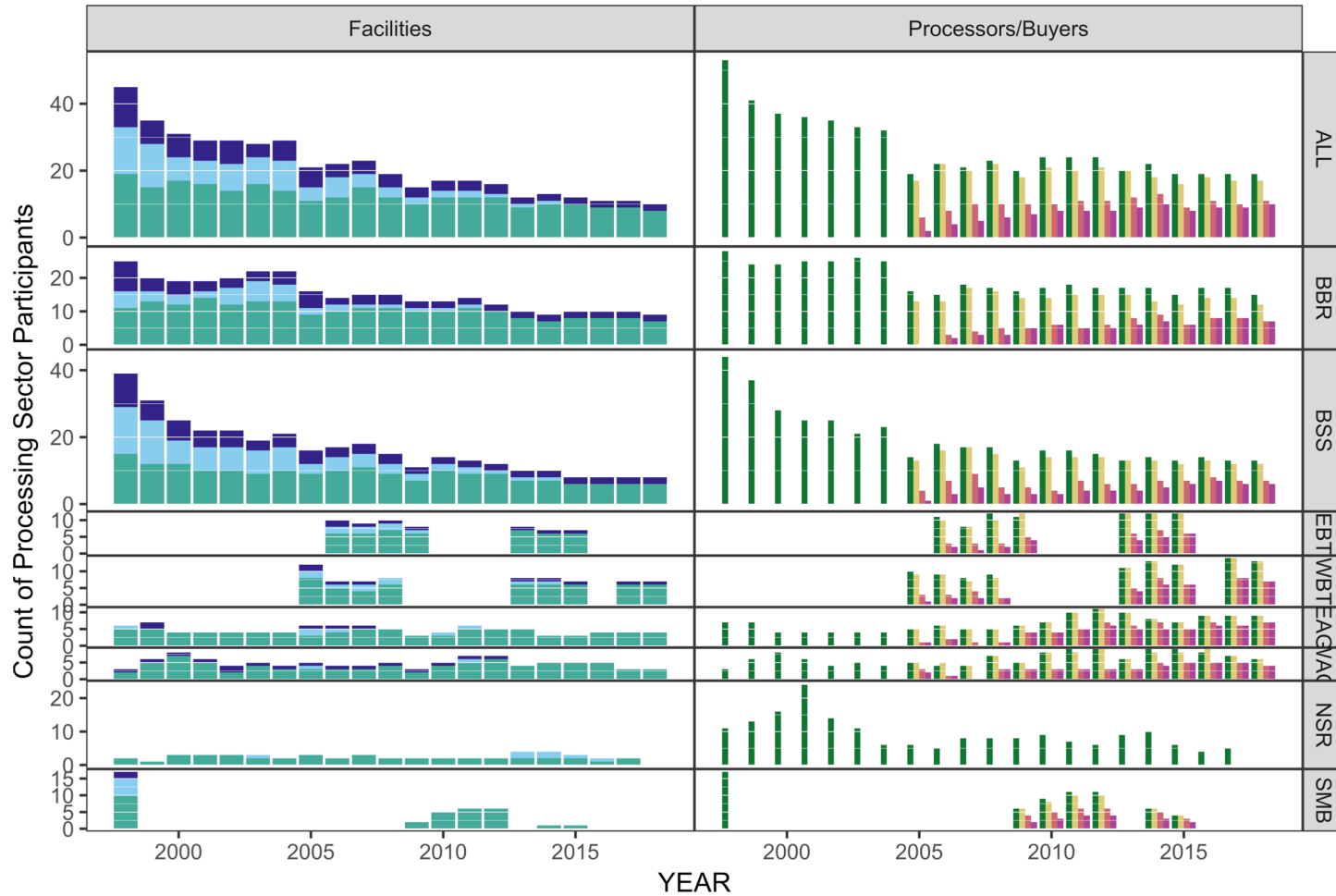


Ratio of Ex-vessel to First Wholesale Price

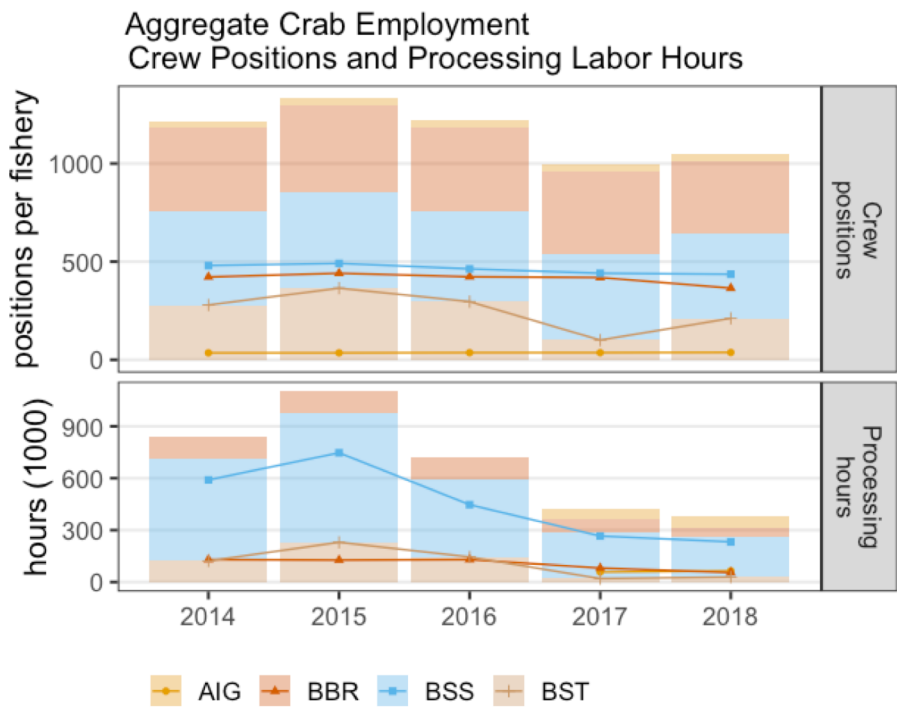


Processing Capacity

Crab Processing Sector Participation



2018 Employment & Income (CR program)



Harvest sector

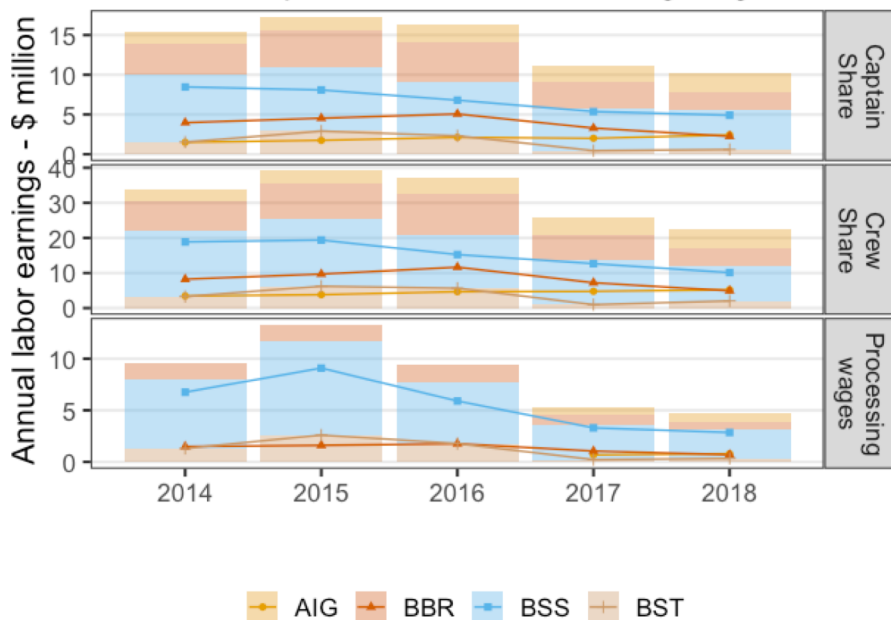
- 67 active vessels, 55 in CR
- Crew positions 1,049
- 788 thousand hours
- \$22 million in crew share
- \$10 million captain share

Processing Sector

- 382 thousand hours
- \$4.7 million in wages
- Median processing wage \$11.85
- 11.01 labor hrs/1000 lbs
- \$145 labor cost/1000 lbs

2018 Employment & Income (CR program)

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



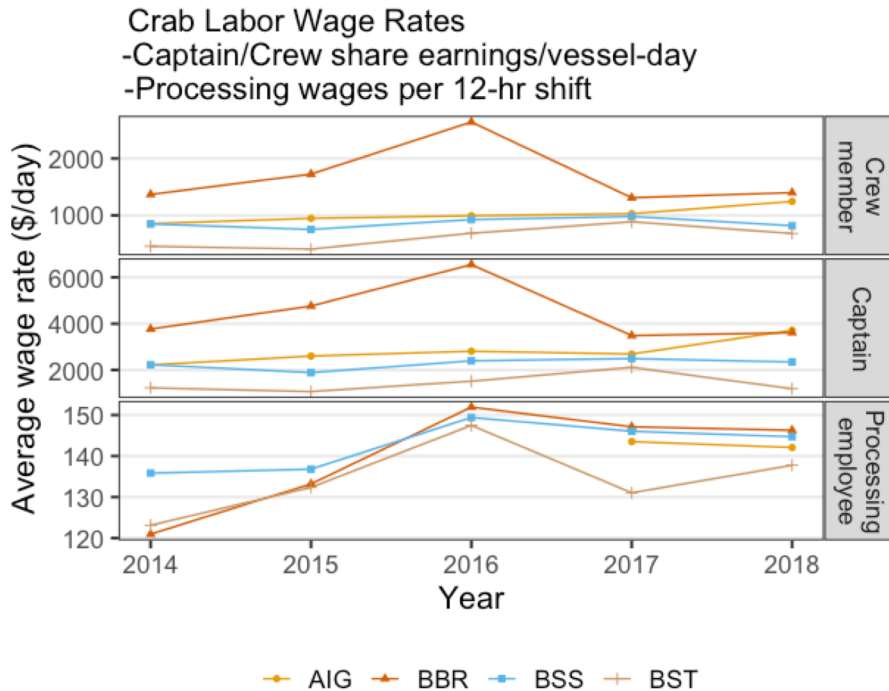
Harvest sector

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- \$10 million captain share

Processing Sector

- 382 thousand hours
- \$4.7 million in wages
- Median processing wage \$11.85
- 14.2 labor hrs/1000 lbs
- \$188 labor cost/1000 lbs

2018 Employment & Income (CR program)



Harvest sector

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- Crew positions 1,049
- 788 thousand hours
- \$22 million in crew share
- \$10 million captain share

Processing Sector

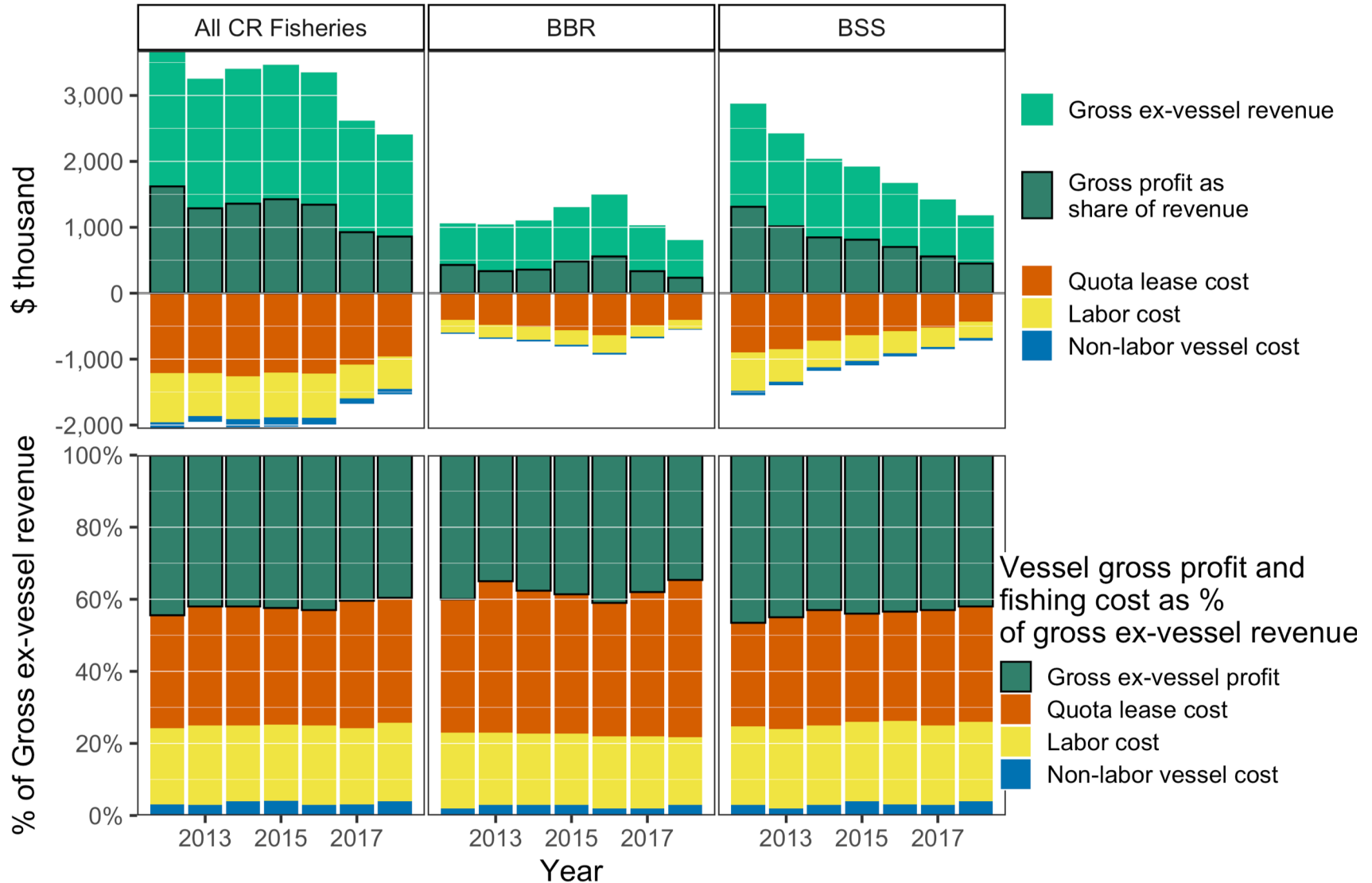
- 382 thousand hours
- \$4.7 million in wages
- Median processing wage \$11.85
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IFQ Lease Activity and Rates

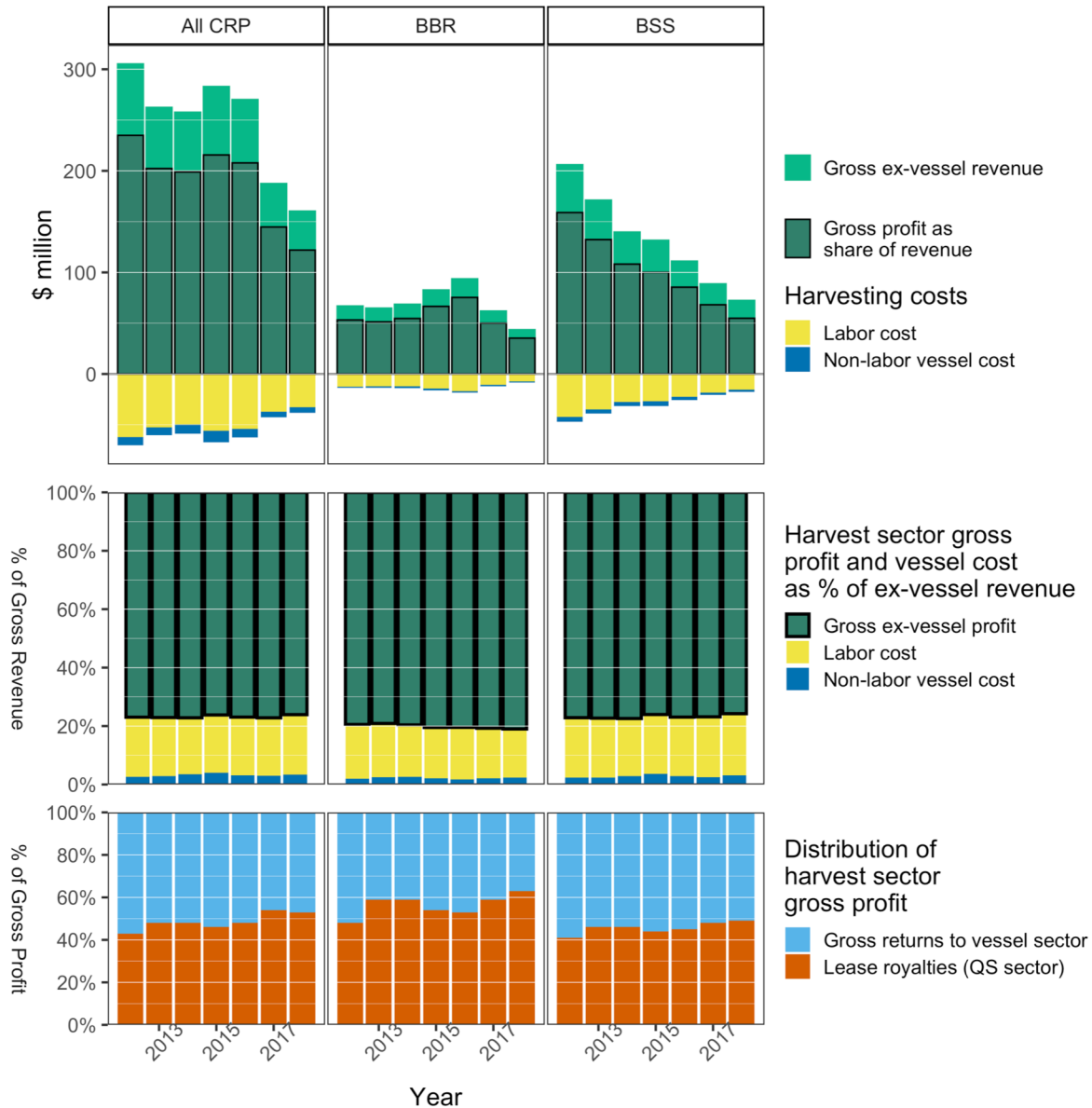


- BBR CVO A: 62-63%
- BSS CVO A: 46%
- Over all QS:
 - 81-88% Leased
 - 39-42% Gross

Vessel Income Statement



Fleet Income Statement



Discussion

Priorities for 2020 SAFE:

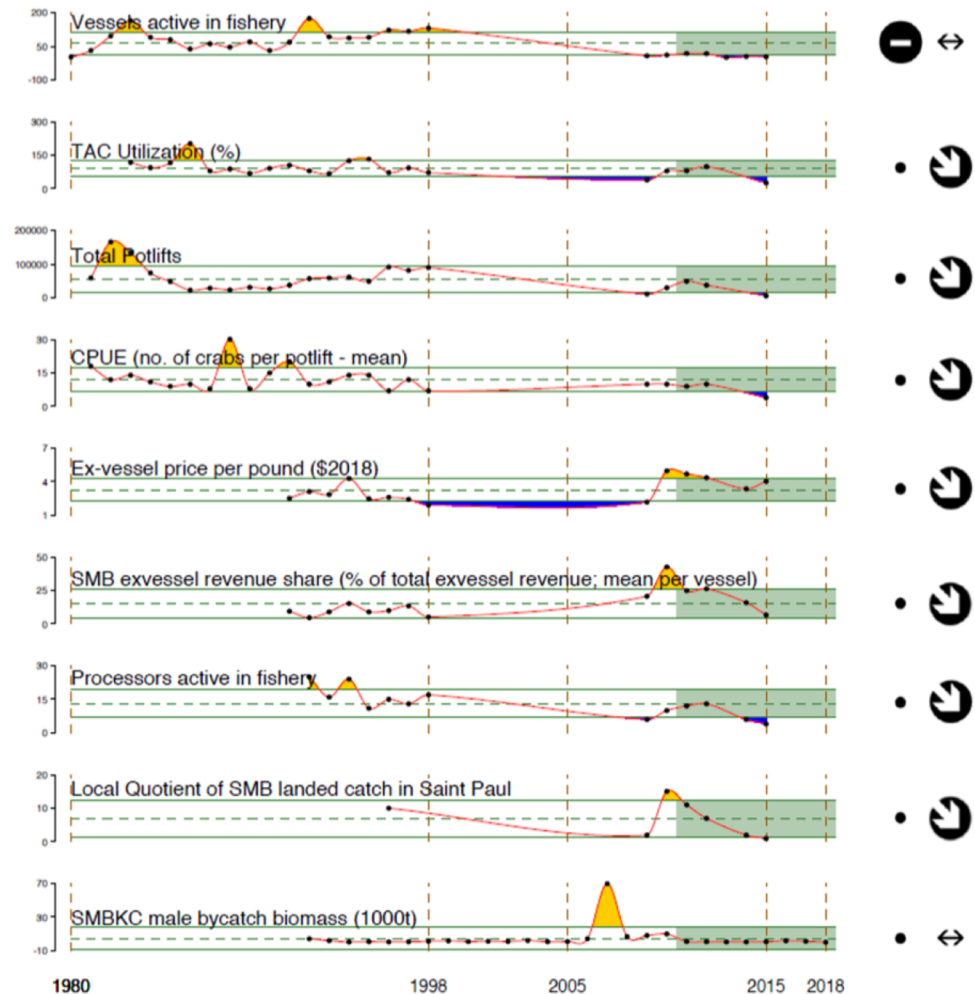
- Report card metrics, ESP integration
- Price forecasts & current-year estimates
- Demographics (Community chapter)
- Processing sector income analysis

- Council EDR Review

ESPs

- Candidate stocks
- Standardize figs

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