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Alaska
Fisheries
Science
Center

Economic Status of the Groundfish Fisheries off Alaska, 2018

Presented by:

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Research Program (ESSRP)

Jan. 28, 2020

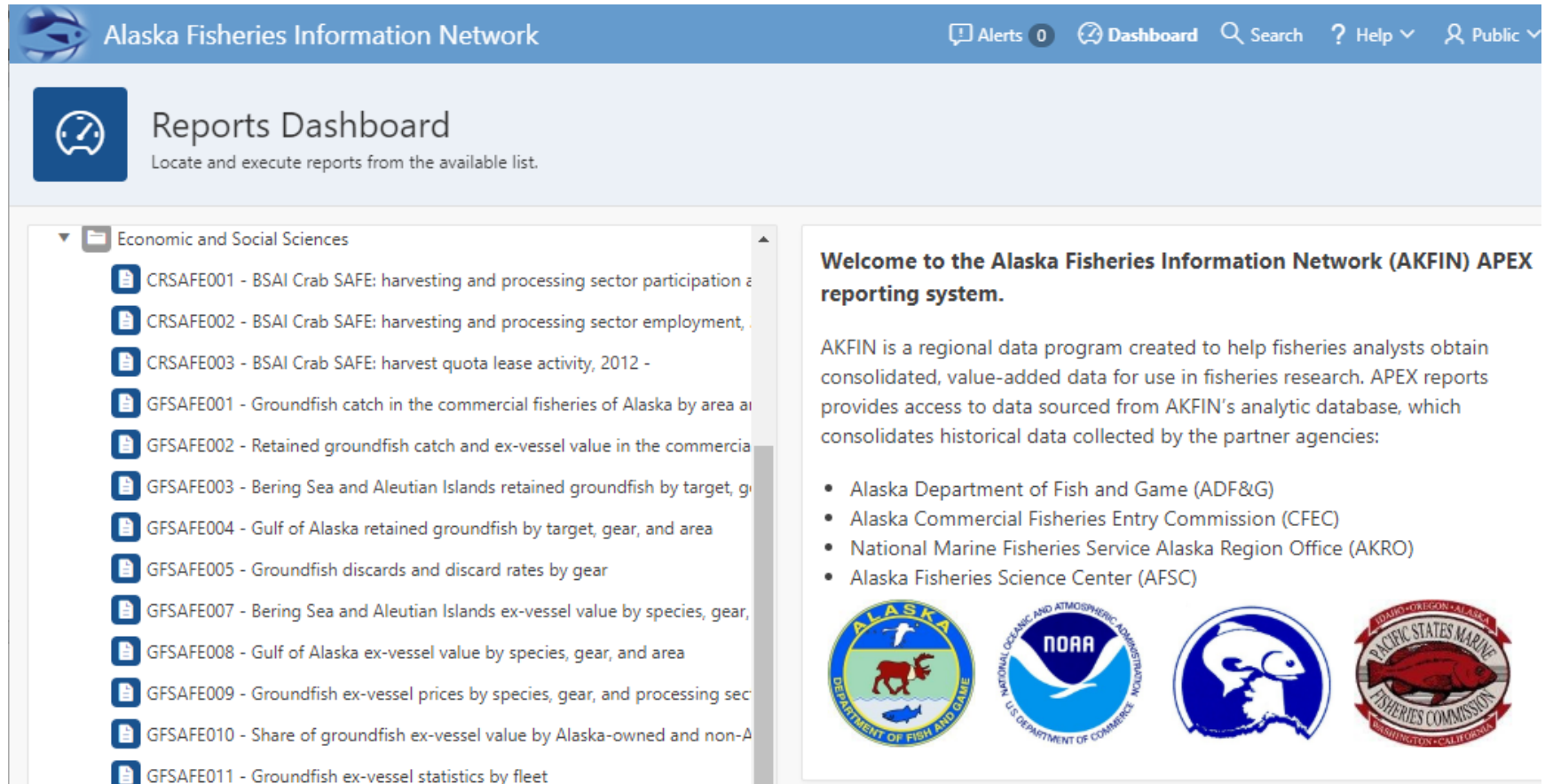
Economic Status Report, 2018: Core Content

- **Executive Summary:** 2018 highlights
 - Report Card Metrics
 - Plan Team Reports
- **Overview of the Economic Data Tables**
- **Economic Data Tables**
 - All Alaska summary Tables (1-9)
 - BSAI data Tables (10-25)
 - GOA data Tables (26-41)
 - Halibut data Tables (H1-H10).

Tables primarily cover: Retained catch, ex-vessel value and prices, first-wholesale production and prices, vessel counts, and fishing and crew weeks.

AKFIN APEX reporting system

- New platform for accessing Econ SAFE data
- <https://reports.psmfc.org/akfin>



The screenshot shows the AKFIN APEX reporting system dashboard. The header includes the Alaska Fisheries Information Network logo and navigation links for Alerts, Dashboard, Search, Help, and Public. The main content area is titled "Reports Dashboard" and lists various reports under the "Economic and Social Sciences" category. A welcome message and a list of partner agencies are also displayed.

Alaska Fisheries Information Network

Alerts 0 Dashboard Search Help Public

Reports Dashboard

Locate and execute reports from the available list.


Economic and Social Sciences

- CRSAFE001 - BSAI Crab SAFE: harvesting and processing sector participation a
- CRSAFE002 - BSAI Crab SAFE: harvesting and processing sector employment,
- CRSAFE003 - BSAI Crab SAFE: harvest quota lease activity, 2012 -
- GFSAFE001 - Groundfish catch in the commercial fisheries of Alaska by area a
- GFSAFE002 - Retained groundfish catch and ex-vessel value in the commercia
- GFSAFE003 - Bering Sea and Aleutian Islands retained groundfish by target, g
- GFSAFE004 - Gulf of Alaska retained groundfish by target, gear, and area
- GFSAFE005 - Groundfish discards and discard rates by gear
- GFSAFE007 - Bering Sea and Aleutian Islands ex-vessel value by species, gear,
- GFSAFE008 - Gulf of Alaska ex-vessel value by species, gear, and area
- GFSAFE009 - Groundfish ex-vessel prices by species, gear, and processing sec
- GFSAFE010 - Share of groundfish ex-vessel value by Alaska-owned and non-A
- GFSAFE011 - Groundfish ex-vessel statistics by fleet

Welcome to the Alaska Fisheries Information Network (AKFIN) APEX reporting system.

AKFIN is a regional data program created to help fisheries analysts obtain consolidated, value-added data for use in fisheries research. APEX reports provides access to data sourced from AKFIN's analytic database, which consolidates historical data collected by the partner agencies:

- Alaska Department of Fish and Game (ADF&G)
- Alaska Commercial Fisheries Entry Commission (CFEC)
- National Marine Fisheries Service Alaska Region Office (AKRO)
- Alaska Fisheries Science Center (AFSC)





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Economic Status Report, 2018

- Economic Performance Indices
- Wholesale and ex-vessel price projections
- Market Profiles
- Amendment 80 Economic Data Report
- **Gulf Trawl Economic Data Report**
- Amendment 91 Economic Data Report
- Recent and ongoing ESSRP research and publications

The sections covering Catch Share Performance Metrics and Community Participation are being moved outside this report.

New, revised or planned content in **RED**

Economic SAFE Related Products



Annual Community Engagement and Participation Overview

ACEPO

ESSR
Alaska Fisheries Science Center



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Focusing on
sustained participation
of those fishing communities
substantially dependent on
or *substantially engaged in*
the North Pacific groundfish
and crab fisheries



Community Participation

in Groundfish and Crab Fisheries

- Historical, regulatory, social, and economic context of fisheries
- Method to quantifiably identify communities ***substantially engaged (High)***
 - Engagement Indices (2008-2018)
- Overview of participation in identified fishing communities

Harvesting sector

- crew data
- # vessels in fleet
- Vessel ownership
- Pounds harvested
- Share of revenue landed by species

Processing sector

- Processing information
- Employment
- Pounds processed
- # Vessels delivering to community
- Vessel ownership

- Community Sketches for those *Highly Engaged* communities

- One document
- *Fishing Community Focus*
- Annual analysis to capture most recent data
- Includes both quantitative & qualitative data
- Multi-scale

Community Sketch

UNALASKA

 Demographics (self-identified)¹

	Population	Gender pop. (%)	Pop. Over 18 (%)	Median household income (\$)	White	Am. Indian/NAI. Native	Black or African Am.
Unalaska	4,376	51.8% female 48.4% male	88%	\$91,035	39.2%	6.3%	8.9%
	Below poverty level (%)	Housing units	Pop. Over 65 (%)	High school graduate or higher (%)	Asian	Native Hawaiian	Hispanic or Latino
Unalaska	6.2%	1,199	2.7%	86.7%	32.6%	2.2%	15.2%

Census data

Area Description

Unalaska overlooks Iliuliuk Bay and Dutch Harbor on Unalaska Island in the Aleutian Chain. Often the name Dutch Harbor is applied to the portion of the city on Adaknak Island, which is connected to Unalaska Island by bridge. The area has been inhabited for thousands of years by the Unangan. The City of Unalaska was incorporated in March 1942. An estimated 2,500 seasonal or transient workers come to Unalaska each year.¹ The population of Unalaska reaches its annual peak between January and April each year (during Pollock "A" Season). With an average household size of 2.46, the total number of households increased from 834 (2000) to 927 (2010), to an estimated 1,167 (2017).² In 2010, 2,090 residents lived in group quarters, which is associated with processor housing.³ Estimated unemployment is 0.08%. Between 2008 and 2017, the number of residents eligible for the PFD increased by 15.81% suggesting an increase in stable residency.³ Unalaska was included under the Alaska Native Claims Settlement Act (ANCSA) and is federally recognized as a Native village.

 Processing Engagement: **HIGH**

 Harvesting Engagement: **LOW**

Sea level rise: Probability of shoreline loss between 2 and 1 m/yr is 10-53%

Coastal hazards: **TSUNAMIS**, **EARTHQUAKES**, storm surges, **EROSION**, Flooding, **VOLCANOES**.
 *Bold indicates high hazard potential

Native Associations & Corporations:

- Unalashka Corporation
- Aleut Corporation

Infrastructure & Transportation

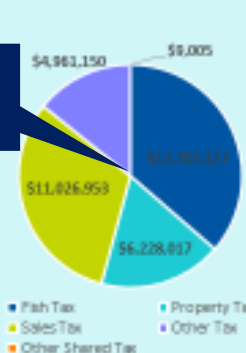
Unalaska is serviced by daily scheduled flights from Anchorage. The state ferry operates bi-weekly from Homer between May and September. There are six marine docks in Unalaska which include 10 docks; three are open to the city.³ The International Port of Dutch Harbor handles fishing vessels and shipping, with 5,200 ft. of moorage, 1,232 ft. of floating dock, accommodating vessels up to 200 feet. The small boat harbor provides 238 moorage slips. The Unalaska Marine Center and US Coast Guard Dock offer cargo, passenger, and other port services. All homes and on-shore fish processors are served by the City's piped water system. All on-shore processors generate their own electrical power. Unalaska school enrollment has remained fairly stable over the past decade, with 184 students in 2018.

Current Economy

Unalaska's economy is based on commercial

 Tax data
 (economic dependence)

Unalaska 2017 Tax Revenue


 School Enrollment
 (community vitality)

Unalaska School Enrollment 1996-2018



and offshore processors provide some local employment; however non-resident workers are usually brought in during peak seasons. Community leaders reported that marine fuel sales tax and fisheries related taxes at least partially supported

medical facilities, law firms, and the hospital. The 2018, compared to \$25,353 and \$80,025 in 2010, respectively.¹

Economic Performance Reports (EPR) and Ecosystem & Socio-economic Profiles (ESP)

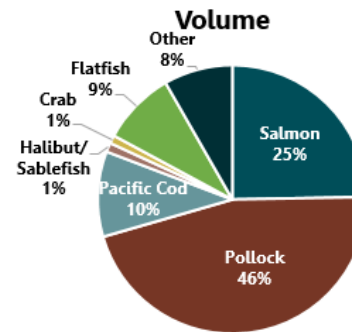
Short (3-5 page) species and region specific economic reports for the stock assessments of species with substantial commercial fisheries.

- Provide a summary of key economic data covering three broad market categories: ex-vessel, first wholesale, and global markets.
- Narrative and context for the state of markets.

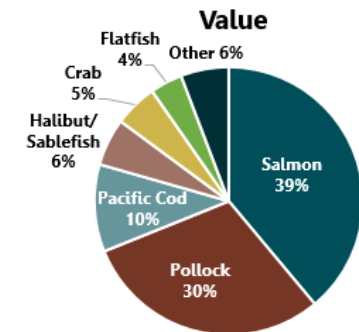
EPRs are becoming part of the ESPs (sablefish & GOA pollock). Revised content, new economic metrics for ESP, expanded community information.

Wholesale Market Profiles

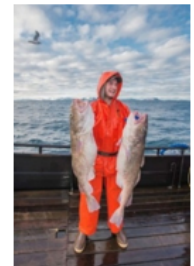
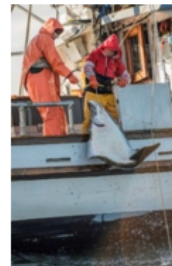
- Forthcoming (next month) document covering the broader wholesale market for Alaskan seafood products.
- Profiles cover: product descriptions production and value, supply chain, key consumer markets, competing supply and products.
- Updated content to reflect recent market events and trends
- New section covering arrowtooth flounder



1.35 million mt



\$4.86 billion



Photos Courtesy of Alaska Seafood Marketing Institute (ASMI) and Aleutian Spray Fisheries.

Status and Trends

Alaska FMP Groundfish Fisheries 2018

\$2.54 billion 1st wholesale

2.15 million tons landed

88% of all AK fish landed

51% of all US fish landed (2016)

Bering Sea

BSAI FMP GF Fisheries

~85% of FMP GF landings & value



Alaska's Groundfish Fisheries in 2018

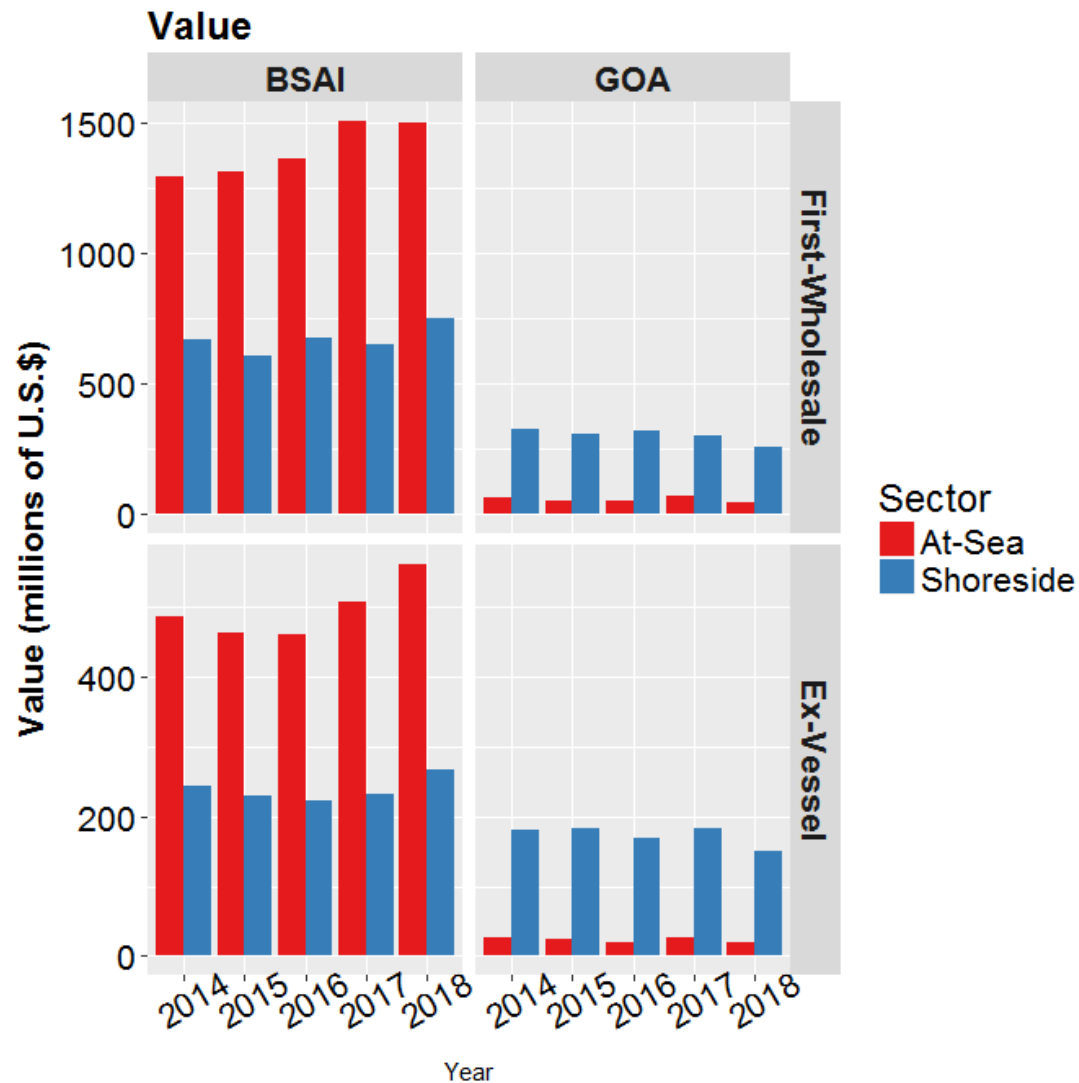
Total catch: 2.2 million t
(decreased 3%)

Aggregate value
increased in BSAI
decreased in GOA.

Wholesale value:
\$2.54 billion (down 1%)

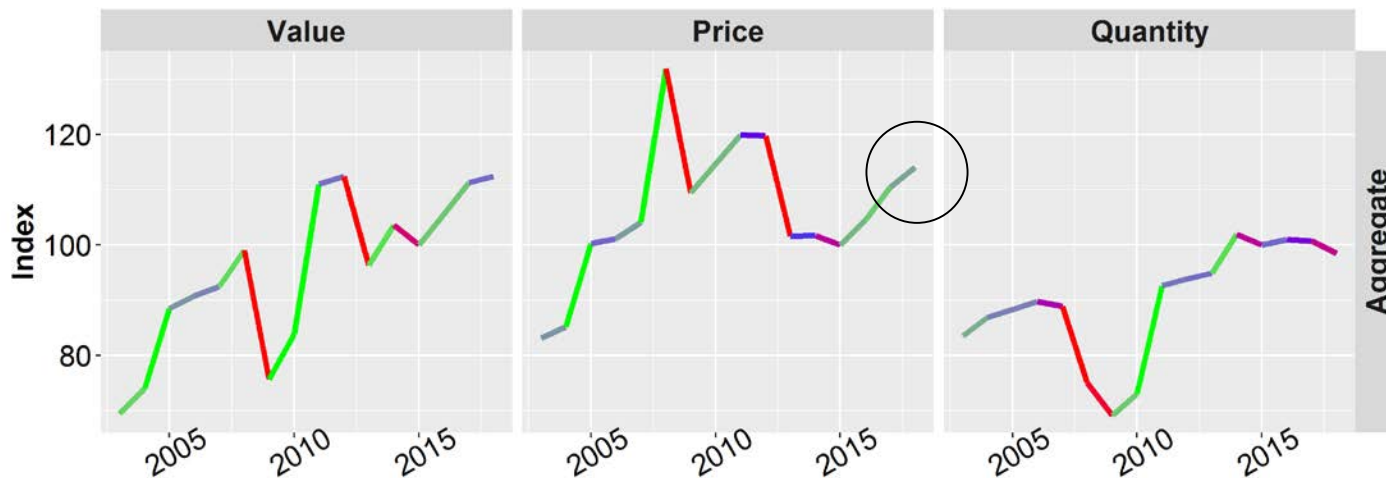
Ex-vessel value:
\$995.7 million (up 3%)

Percent change adjusted for inflation.

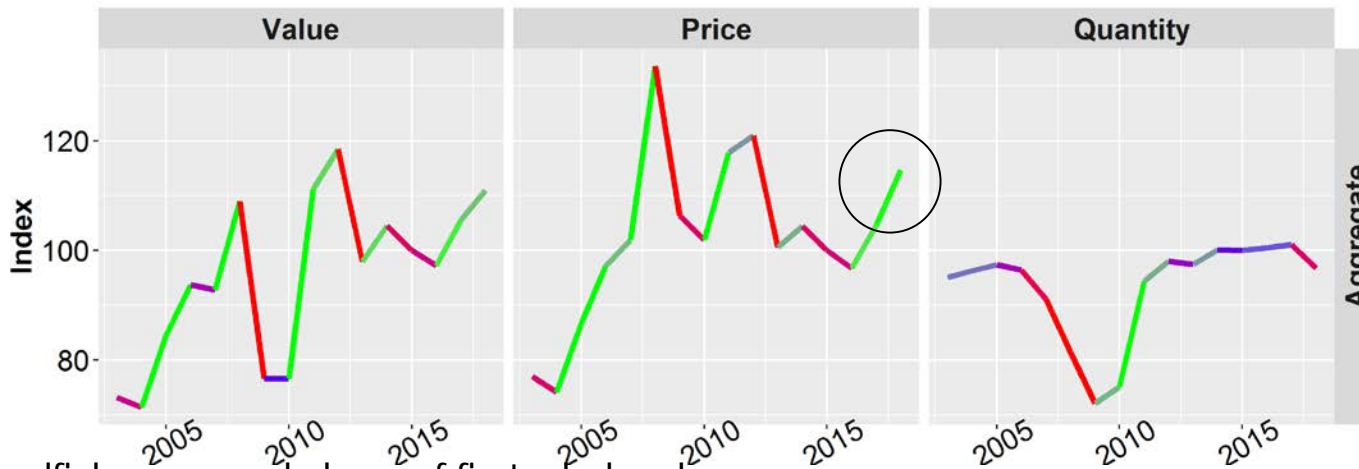


Values in figure nominal (not adjusted for inflation)

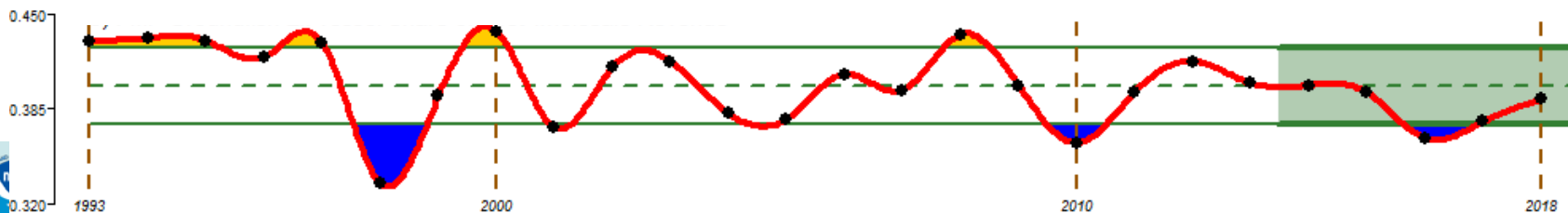
AK First Wholesale Economic Indices (2003-2018)



AK Ex-vessel Economic Indices (2003-2018)



FMP groundfish ex-vessel share of first-wholesale revenue



BSAI First-Wholesale Economic Indices



Species

- Value stable:
 - Atka mackerel
 - Rockfish
- Value increased:
 - Pollock
 - Pacific cod
 - Flatfish



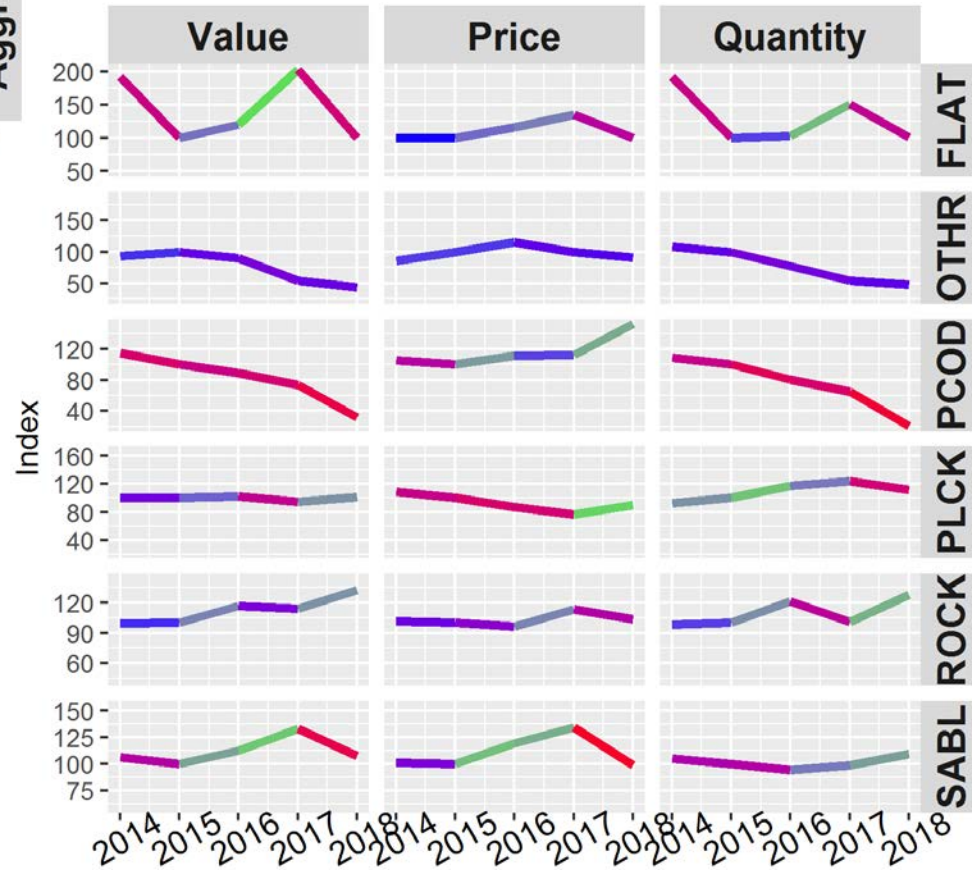
Indices are nominal (not adjusted for inflation)

GOA First-Wholesale Economic Indices

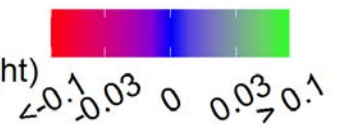


Species

- Value increases:
 - Pollock
 - Rockfish
- Value decreased:
 - Pacific cod
 - Sablefish
 - Flatfish



(yr-on-yr % change)*(share weight)



Indices are nominal (not adjusted for inflation)



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Ex-vessel Price Projections

Uses unadjusted fish ticket information through Sept. 2019 to nowcast an (adjusted) 2019 annual ex-vessel price.

Nowcasts available for:

- BSAI & GOA pollock trawl
- BSAI & GOA Pacific cod trawl and fixed gear
- GOA sablefish fixed gear

Can be coupled with catch to provide ex-vessel revenue estimates from AKRO.



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Ex-vessel Price Projections

Uses unadjusted fish ticket information through Sept. 2019 to estimate an (adjusted) 2019 annual ex-vessel price.

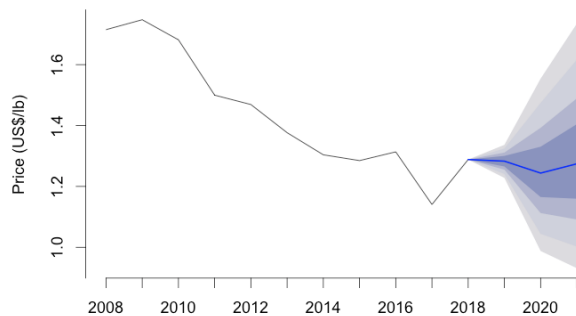
Ex-vessel price projection 2018 validation (\$/lb)

	2018 nowcast	2018 realized	Absolute difference	Percent difference	With 95% Bounds
Pacific cod BSAI fixed	\$ 0.406	\$ 0.410	\$ 0.004	0.98%	Yes
Pacific cod BSAI trawl	\$ 0.370	\$ 0.384	\$ 0.014	3.65%	No
Pacific cod GOA fixed	\$ 0.447	\$ 0.465	\$ 0.018	3.87%	No
Pacific cod GOA trawl	\$ 0.393	\$ 0.412	\$ 0.019	4.61%	No
Pollock BSAI trawl	\$ 0.151	\$ 0.156	\$ 0.006	3.21%	No
Pollock GOA trawl	\$ 0.116	\$ 0.123	\$ 0.007	5.69%	Yes
Sablefish GOA fixed	\$ 4.005	\$ 3.929	\$ 0.076	1.93%	Yes

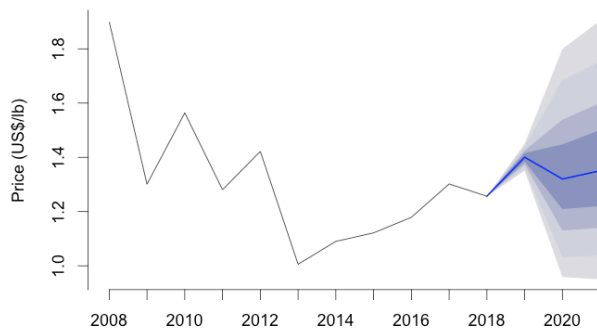
Pollock

- Substantial yoy increases in 2018 ex-vessel prices bring back towards normal.
- 2019 ex-vessel will increase again though more modest.
- With good prices and catch levels revenues can be expected to remain strong in 2019.

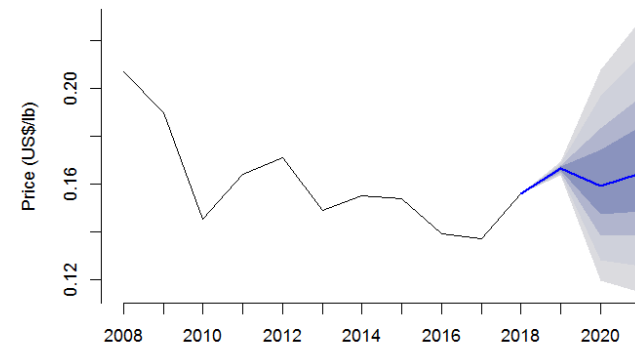
Pollock fillet price projection



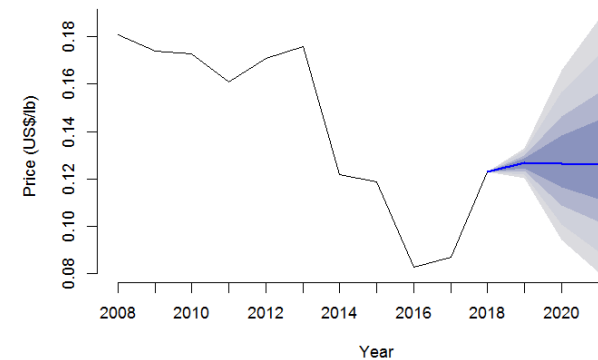
Pollock surimi price projection



Pollock BSAI trawl price projection



Pollock GOA trawl price projection

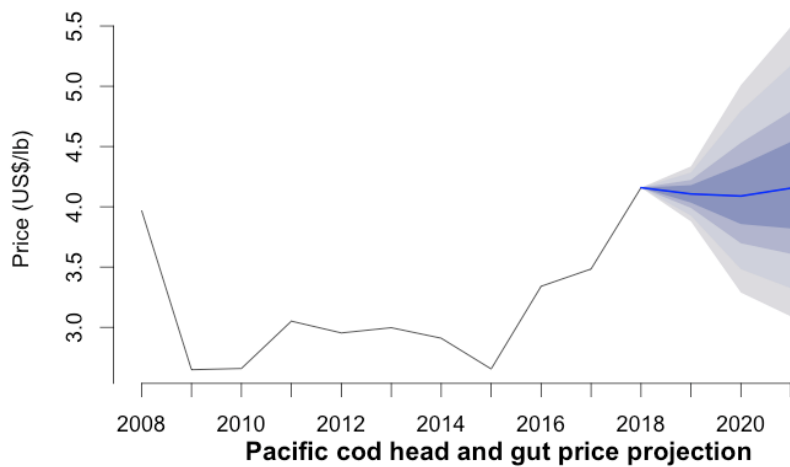


- Increases in wholesale prices of fillet and H&G prices in 2018.
- First-wholesale prices for 2019 show stable or modest price increases for fillets and H&G, increasing prices for surimi and decreasing price for roe.

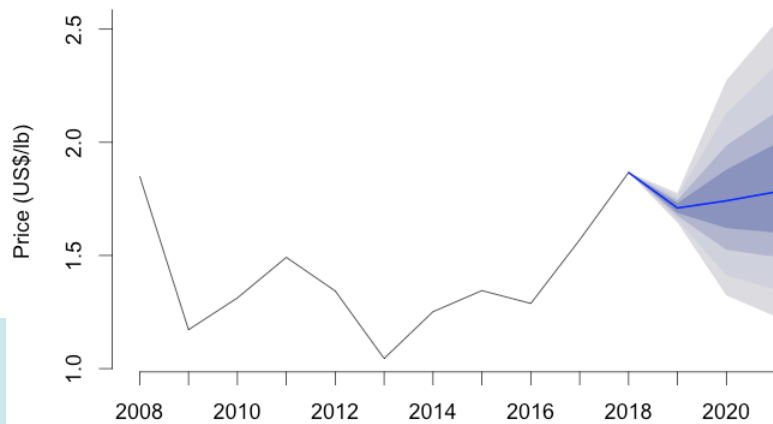
Pacific cod

- Substantial yoy 2018 price increases both ex-vessel and first-wholesale largely driven by global supply constraints.
- Ex-vessel prices expected to show modest increase in 2019.

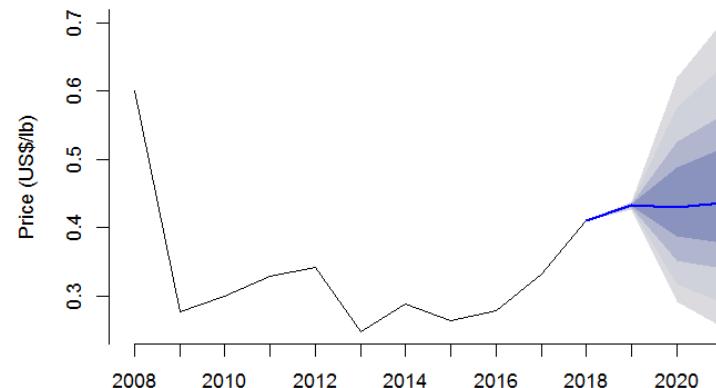
Pacific cod fillet price projection



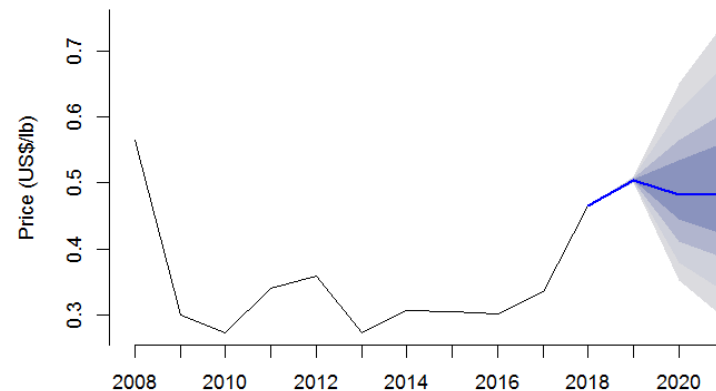
Pacific cod head and gut price projection



Pacific cod BSAI fixed price projection



Pacific cod GOA fixed price projection



- High 2018 wholesale prices may have overshoot as 2019 prices level off or decrease.
- Strong prices have helped to maintain value. In the GOA where volumes have declined substantially not enough to offset. BSAI value increased despite modest decrease in volume.

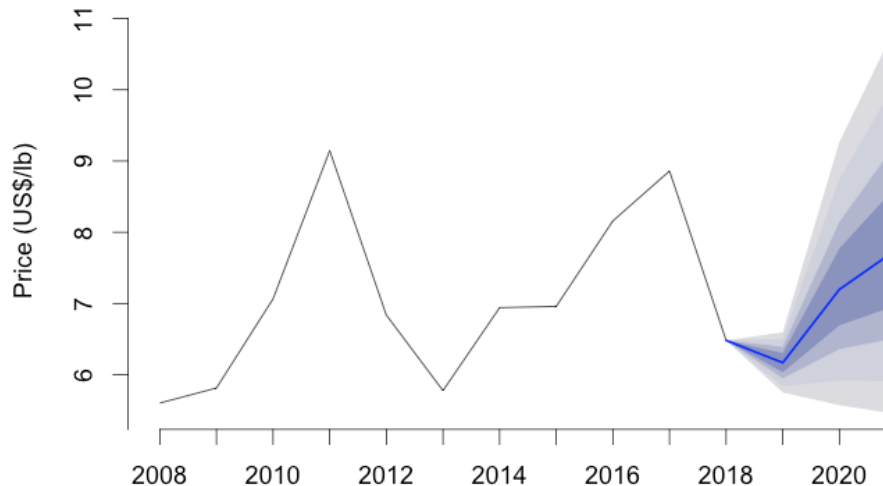
Sablefish

- Revenues down in 2018 with substantial decrease in the average price of sablefish.
- Decrease driven by decreases in size of average fish.
- Increase in the price margin between fish sizes.

Sablefish GOA fixed price projection



Sablefish head and gut price projection



GOA fixed-gear sablefish prices (\$/lb)

	2015	2016	2017	2018 (partial)
3-4 lbs	\$ 4.52	\$ 5.04	\$ 6.34	\$ 3.71
5-7 lbs	\$ 6.49	\$ 7.15	\$ 8.30	\$ 7.22
Margin	\$ 1.97	\$ 2.11	\$ 1.96	\$ 3.51

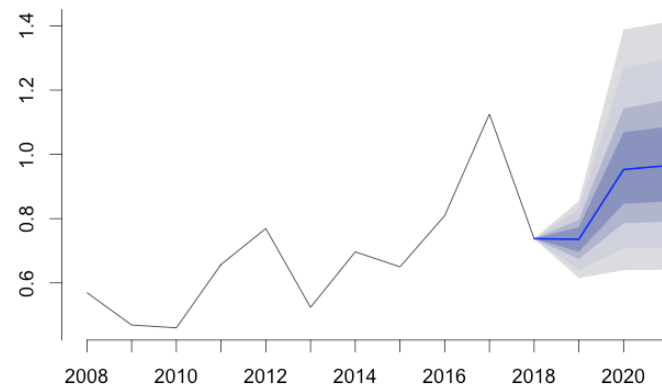
D8 Discussion Paper: Sablefish Discard Allowance March 22, 2019

- 2019 prices expected to decrease further.

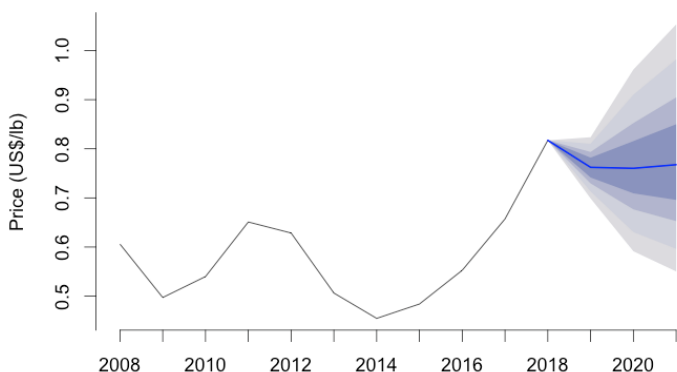
Flatfish

- Most flatfish prices were increasing in 2018.
 - Except arrowtooth price 2018 price reverted back follow increase in 2017.

Arrowtooth head and gut price projection



Yellowfin (BSAI) head and gut price projection



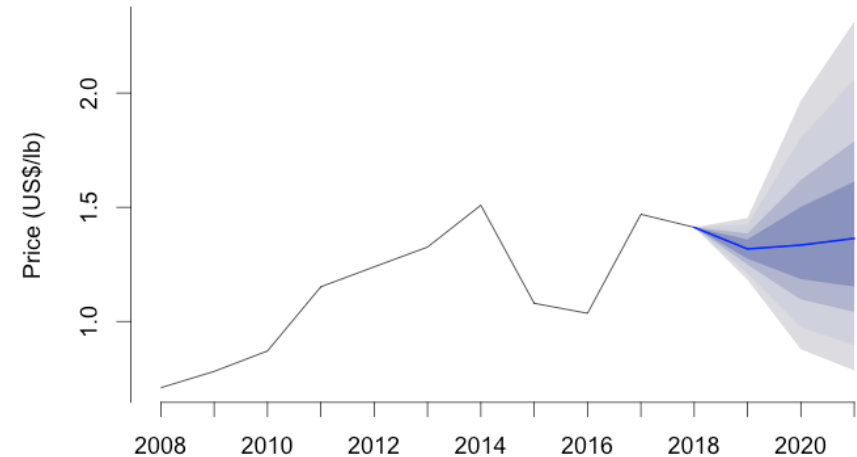
- Projections for 2019 show prices decrease or stable.
- Tariff may be a contributing factor.
- Flatfish mostly processed in China and caught up in trade dispute.
 - Modest decrease in 2018 exports. Prices remain fairly strong though.

	2009-2013 Average	2014	2015	2016	2017	2018	2019 (thru June)
Export quantity of yellowfin sole and rock sole K mt	65.4	91.6	87.0	94.8	81.4	72.0	50.8
Export price/lb of yellowfin sole and rock sole US\$	\$0.59	\$0.64	\$0.62	\$0.65	\$0.64	\$0.67	\$0.72
China's share of yellowfin sole and rock sole export value	80%	87%	82%	78%	82%	79%	77%
Export quantity of NSPF Frozen Flatfish K mt	14.7	20.0	12.1	18.3	22.9	14.1	6.8
Export price/lb of NSPF Frozen Flatfish US\$	\$0.69	\$0.88	\$0.86	\$0.78	\$0.87	\$0.85	\$0.87
Share of U.S. exports of NSPF Frozen Flatfish to China ²	48.3%	81%	76%	62%	77%	81%	81%

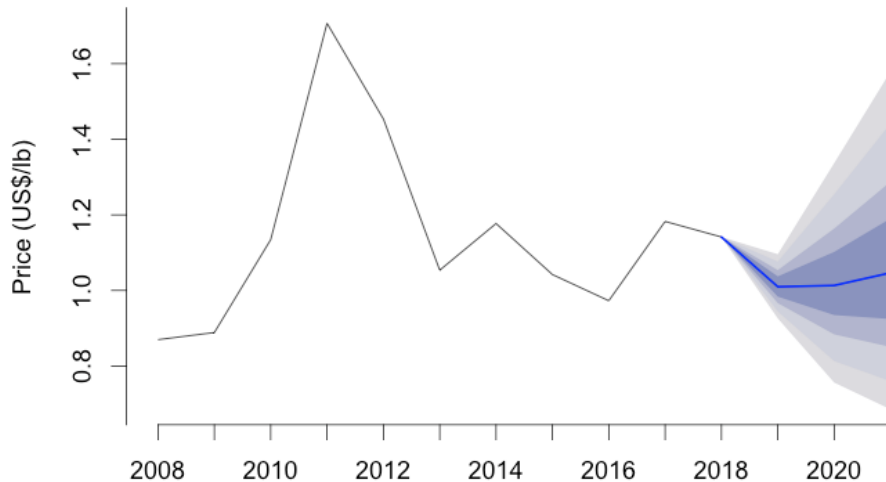
Atka and rockfish

- Atka price decreased moderately in 2018 but remains strong
- Projections indicate marginal decreases but fairly stable in 2019

Atka mackerel head and gut price projection



Rockfish head and gut price projection



- Projections for 2019 show prices decrease
- Tariff may be a contributing factor.
- Rockfish mostly processed in China and caught up in trade dispute.
 - Modest increase in 2018 exports.
 - Export prices decreasing.

	2009-2013 average	2014	2015	2016	2017	2018	2019 (thru June)
Export volume of Pac. Ocn. perch K mt	12.5	23.8	22.7	25.6	22.7	27.8	4.1
Export price/lb of Pac. Ocn. perch US\$	\$1.08	\$1.52	\$1.55	\$1.50	\$1.52	\$1.46	\$1.14
China's share of U.S. Pac. Ocn. perch export value	56%	65%	52%	67%	55%	62%	79%



Economic Status Report, 2018



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The Economic Status Report serves many purposes.
Among them is to provide information to the Plan Team.

Please give us your feedback.

- We invite feedback -- Ben.Fissel@noaa.gov

Thanks

- Economic Groundfish SAFE is a product of the Economics and Social Sciences Research Program (ESSRP)
- Authors: Ben Fissel, Michael Dalton, Brian Garber-Yonts, Alan Haynie, Stephen Kasperski, Jean Lee, Dan Lew, Chang Seung, Kim Sparks and Sarah Wise.
- Alaska Fisheries Information Network (AKFIN) provided database programming, data management services and support.