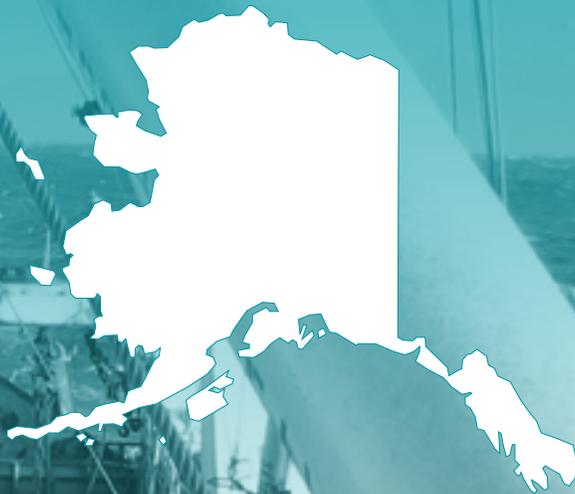


North Pacific Region

- Alaska



Scientific survey on a commercial fishing vessel
(photo credit: Kimberly Rand)

MANAGEMENT CONTEXT

The North Pacific Region includes the fisheries in the Exclusive Economic Zone (EEZ) off the state of Alaska. Federal fisheries in this region are managed by the North Pacific Fishery Management Council (NPFMC) and NOAA Fisheries under six fishery management plans (FMPs).

North Pacific Region FMPs

- Bering Sea/ Aleutian Islands (BSAI) groundfish
- Gulf of Alaska (GOA) groundfish
- BSAI king and tanner crabs
- Alaska scallop
- Salmon in the EEZ
- Arctic

Of the stocks or stock complexes covered in these FMPs, only the blue king crab-Pribilof Islands stock is listed as overfished. No stocks or stock complexes in this region are subject to overfishing.

Catch Share Programs

The North Pacific Region has six catch share programs, more than any other region. These are the: 1) Western Alaska Community Development Quota (CDQ) Program; 2) Alaska Halibut and Sablefish Individual Fishing Quota (IFQ) Program; 3) American Fisheries Act (AFA) Pollock Cooperatives; 4) Bering Sea and Aleutian Islands (BSAI) Crab Rationalization Program; 5) Bering Sea and Aleutian Islands (BSAI) Non-Pollock Trawl Catcher/Processor Groundfish Cooperatives (Amendment 80); and 6) Central Gulf of Alaska Rockfish Program. The landings revenues for these programs totaled \$981.9 million in 2014, exceeding the total landings revenue of any other state. Following are descriptions of these catch share programs and their performance.

Western Alaska Community Development

Quota (CDQ) Program: The program was originally implemented in 1992 as part of a restructuring of the BSAI groundfish fishery. Under this program, a percentage of the total allowable catch for groundfish, prohibited species, halibut, and crab is apportioned to 65 eligible villages in Western Alaska that are organized into six CDQ groups. The program has the following goals: 1) Provide eligible Western Alaska villages with

the opportunity to participate and invest in fisheries in the Bering Sea and Aleutian Islands Management Area; 2) Support economic development in Western Alaska; 3) Alleviate poverty and provide economic and social benefits to residents; and 4) Achieve a sustainable and diversified local economy.

Alaska Halibut and Sablefish IFQ Program: The program was implemented in 1995. The primary objectives of this IFQ program include the following: 1) Eliminate gear conflicts; 2) Address safety concerns; and 3) Improve product quality. The performance results of the halibut fishery show that, relative to its baseline period (3-year period prior to implementation), the following indicators decreased: 2014 quota, landings, and active vessels. However, inflation-adjusted halibut revenue and revenue per vessel increased. The 2014 performance results for the sablefish fishery show that quota, landings, inflation-adjusted revenue, and number of active vessels decreased, while inflation-adjusted revenue per vessel increased.

American Fisheries Act (AFA) Pollock

Cooperatives: The program was established in 1999 and 2000 with the goals of settling allocation disputes between inshore (catcher vessels), offshore (catcher/processors), and mothership sectors and ending the race for fish. Key performance indicators of this program show that relative to its baseline, the 2014 quota, landings, inflation-adjusted revenue, and revenue per vessel increased. However, the number of active vessels decreased.

Bering Sea and Aleutian Islands (BSAI) Crab

Rationalization Program: The program was implemented for the 2005–2006 crab fishing season to address the race to harvest; high bycatch and discard mortality; and product quality issues. The program also aims to balance the interests of those who depend on crab fisheries. This program includes share allocations to harvesters and processors. Processor quota was incorporated to preserve the viability of processing facilities in dependent communities and, particularly, to maintain competitive conditions in ex-vessel markets. The CDQ and Adak Community allocations, regional

landings and processing requirements, and several community protection measures protect community interests. The key 2014 performance indicators of this program show that, relative to its baseline, the quota, landings, and number of active vessels decreased. However, inflation-adjusted revenue and revenue per active vessel increased.

BSAI Non-Pollock Trawl Catcher/Processor

Groundfish Cooperatives: The program, commonly referred to as the Amendment 80 Program, was implemented in 2008 to create economic incentives that would improve retention of all fish caught. The cooperatives also seek to reduce bycatch by commercial fishing vessels using trawl gear in the non-pollock groundfish fisheries. Key 2014 performance indicators of this program show that, relative to its baseline, quota, landings, and inflation-adjusted revenue per vessel increased. However, the number of active vessels and inflation-adjusted revenue declined.

Central Gulf of Alaska Rockfish Program: The program was initially established as a 2-year (2007–2008) pilot program by the U.S. Congress and was later extended to 5 years. NOAA Fisheries implemented this catch share program in 2012. The objectives of this program are to reduce bycatch and discards, encourage conservation-minded practices, improve product quality and value, and provide stability to the processing labor force. Results show that in 2014, the quota, landings, number of active vessels, inflation-adjusted revenue, and revenue per active vessel increased relative to the baseline.

Policy Updates

Salmon bycatch in the Bering Sea pollock fishery is an important management challenge in the North Pacific. On one hand, this challenge involves the largest fishery in the United States with approximately 25% of total landings. On the other hand, salmon, especially Chinook in Western Alaska rivers, is arguably the most important subsistence fishery in the United States. Prior to 2011, fixed salmon time-area closures and dynamic “rolling hot spot” closures were used to protect salmon. However, the council concluded that these measures were not reducing bycatch sufficiently. In 2011,

Amendment 91 to the BSAI Fishery Management Plan established Chinook catch limits (“hard caps”) that were allocated at the cooperative and vessel level. These and other vessel-level incentives were implemented to encourage bycatch reduction at lower levels of salmon encounters and abundance when the hard cap might not strongly constrain the fishery. In 2015, the council passed additional measures to reduce Chinook and chum bycatch, including penalties for vessels with high bycatch rates, salmon excluder device requirements, seasonal reallocation of pollock quota, and hard cap reductions in years of low Chinook in-river abundance.

In June 2015, the NPFMC also recommended the reduction of halibut bycatch limits in the BSAI groundfish fisheries. The bycatch limits were reduced 21%, from 4,426 metric tons to 3,515 metric tons. The new limits were apportioned among sector and gear types and different reductions were applied to each. The Gulf of Alaska halibut bycatch limits incorporate measures to minimize adverse economic impacts on fishing industry sectors and will be phased in during a 3-year period that started in 2014.

Also in 2015, NOAA Fisheries proposed regulations to implement a cost-recovery fee program for the Western Alaska CDQ Program for groundfish and three limited access privilege programs (LAPPs; AFA, Aleutian Islands Pollock, and Amendment 80 fisheries). The cost-recovery fees will make up for the actual costs directly related to the management, data collection efforts, and enforcement of the programs. However, the fees cannot exceed 3% of the annual ex-vessel value of fish harvested by a program that is subject to the cost-recovery fee. The cost-recovery programs were subsequently implemented in February 2016.

COMMERCIAL FISHERIES

In this report, commercial fisheries refer to fishing operations that sell their catch for profit. It does not include saltwater anglers that fish for sport or subsistence fishermen. It also excludes the for hire sector, which earns its revenue from selling recreational fishing trips to saltwater anglers. The commercial fisheries section reports on economic impacts, landings revenue, landings, and ex-vessel prices of key species/species groups.

Key North Pacific Commercial Species

- Atka mackerel
- Crab
- Flatfish
- Pacific cod
- Pacific halibut
- Pacific herring
- Rockfish
- Sablefish
- Salmon
- Walleye pollock

The North Pacific groundfish fishery is different from most other United States fisheries in that a large portion of the fishery is processed at sea and, therefore, no landings revenues are reported. The landings revenue for the species landed and processed at sea is estimated by using prices obtained from the shore-side sector. These species include Atka mackerel, flatfish, Pacific cod, rockfish, sablefish, and walleye pollock. When data from the shore-side sector are inadequate, historical information about the relationship between the ex-vessel price and the wholesale price of finished products is used to estimate ex-vessel prices and revenue for portions of the fishery mostly processed at sea.

In this report, the United States seafood industry includes the commercial harvest sector, seafood processors and dealers, seafood wholesalers and distributors, importers, and seafood retailers.

Economic Impacts

The premise behind economic impact modeling is that every dollar spent in a regional economy (direct impact) is either saved or respent on additional goods or services. If those dollars are respent on other goods and services in the regional economy, this spending generates additional economic activity in the region. This report provides estimates of total economic impacts for the Nation and for each of the 23 coastal states. Total economic impacts for each state and the Nation represent the sum of direct impacts; indirect impacts (in this case, the impact from suppliers to the seafood industry); and induced impacts (spending by employees on personal and household expenditures, where employees of both seafood businesses and its full supply chain are included). That is, impacts from the seafood industry as well as the economic activity generated throughout each region's broader economy from this industry.

Four different measures are commonly used to show commercial fisheries landings affect the economy in a region (state or nationwide): sales, income, value-added, and employment. Sales refer to the gross value of all sales by regional businesses affected by an activity, such as commercial fishing. It includes both the direct sales of fish landed and sales made between businesses and households resulting from the original sale. Income includes personal income (wages and salaries) and proprietors' income (income from self-employment). Value-added is the contribution made to the gross domestic product in a region. Employment is specified on the basis of full-time and part-time jobs supported directly or indirectly by the sales of seafood or purchases of inputs to commercial fishing. The first three types of measures are calculated in terms of dollars, whereas employment impacts are measured in terms of numbers of jobs. Note that these categories are not additive. The United States seafood industry is defined here as the commercial fishing sector, seafood processors and dealers, seafood wholesalers and distributors, importers, and seafood retailers.¹

In 2015, Alaska's commercial fishing and seafood industry generated \$4.4 billion in sales impacts, \$1.9 billion in income impacts, \$2.4 billion in value-added impacts, and 53,400 full- and part-time jobs. The commercial harvesters sector generated the largest employment impacts across sectors with 38,000 jobs. The commercial harvesters sector generated the largest sales impacts (\$3.1 billion), the largest income impacts (\$1.3 billion), and the largest value-added impacts (\$1.6 billion).

Landings Trends

While total landings revenue were unchanged from 2014, at the species/species group level there was considerable variation. Most notably salmon landings revenue was down \$133 million (24%) from 2014 levels despite records landings, which almost doubled from 2014 levels. Market reports attributed landings revenue declines to a strong dollar, which weakened demand in Japan and the European Union (EU), as well as the Russian import ban on food products from the US, Canada, Norway and the EU. Surging supplies of pink salmon (up 95%), which is consistent with the biennial cycle of pink salmon runs, and chum salmon

¹ The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

Landings Revenue: Largest Increases*From 2006:*

- Crab (157%, 122% in real terms)
- Atka mackerel (106%, 78% in real terms)
- Rockfish (62%, 40% in real terms)

From 2014:

- Crab (157%, 122% in real terms)
- Atka mackerel (106%, 78% in real terms)
- Rockfish (62%, 40% in real terms)

Landings Revenue: Largest Decreases*From 2006:*

- Pacific halibut (-43%, -50% in real terms)
- Pacific herring (-6%, -18% in real terms)

From 2014:

- Pacific herring (-39%)
- Salmon (-24%)
- Flatfish (-23%)

Landings: Largest Increases*From 2006:*

- Rockfish (90%)
- Crab (76%)
- Salmon (64%)

From 2014:

- Atka mackerel (69%)
- Salmon (52%)
- Crab (42%)

Landings: Largest Decreases*From 2006:*

- Pacific halibut (-67%)
- Sablefish (-33%)
- Pacific herring (-14%)

From 2014:

- Pacific herring (-29%)
- Flatfish (-23%)
- Sablefish (-7%)

(up 49%) coupled with significant increases in sockeye salmon landings (up 18%) in an already weak market only served to further dampen prices. With the Russia ban also covering farmed salmon, the market for wild caught salmon faced further pressure from that source. The USDA purchase of \$30 million of canned sockeye salmon helped reduce inventories but was not sufficient to prevent sockeye prices falling from \$1.39 per pound in 2014 to \$0.69 in 2015.

Pacific herring landings revenue was down 39% (\$4.5 million) during this period. A soft market, in part due to the Russia import ban, had an effect on both landings and price. In addition, a reduction in the harvest limit for the Sitka Sound sac roe fishery of almost 50% (7,600 tons) also contributed to the decline in landings revenue.

After adjusting for inflation, crab landings revenue (\$284 million) was at its highest level since 1999. Southern tanner crab landings revenue (\$41 million) increased \$20 million from 2014; snow crab landings revenue (\$133 million) was up \$18 million; and king crab (\$99 million) was up \$13 million. Only dungeness crab landings revenue fell relative to 2014, which had been a somewhat anomalous year for that species that included near record high prices (second highest on

record after adjusting for inflation) and landings that exceeded the most recent 5-year average by 51%.

Walleye pollock landings revenue (\$509 million), up 21% or \$87 million from 2014, was also a bright spot for 2015. An uptick in landings revenue largely attributable to the 3.39% increase in the BSAI TAC and slightly higher prices drove pollock landings revenue up. Also noteworthy in 2015, the legal market name of "Alaska pollock" was changed to "pollock." This change prevents pollock caught elsewhere such as in Russia from being labeled "Alaska pollock" and thus provides greater clarity to consumers on where their seafood was harvested.

Landings Revenue

In 2015, landings revenue totaled about \$1.7 billion, a 32% increase from 2006 (a 25% increase in real terms after adjusting for inflation) and remained unchanged from 2014. Finfish landings revenue accounted for 83% of all landings revenue. In 2015, walleye pollock (\$509 million), salmon (\$413 million), and crab (\$284 million) dominated landings revenue. From 2006 to 2015, crab (157%, 122% in real terms); Atka mackerel (106%, 78% in real terms); and rockfish (62%, 40% in real terms) had the largest revenue increases, while Pacific halibut (-43%, -50% in real terms) and Pacific herring

(-6%, -18% in real terms) had the largest decreases. From 2014 to 2015, Atka mackerel (23%), walleye pollock (21%), and crab (20%) had the largest revenue increases, while Pacific herring (-39%), salmon (-24%), and flatfish (-23%) had the largest decreases.

Landings

In 2015, commercial fishermen in the North Pacific Region landed more than 6 billion pounds of finfish and shellfish, an 11% increase from 2006 and a 6% increase from 2014. Walleye pollock contributed the most to landings, accounting for 54% of total volume. From 2006 to 2015, rockfish (90%), crab (76%), and salmon (64%) had the largest landings increases, while Pacific halibut (-67%), sablefish (-33%), and Pacific herring (-14%) had the largest decreases. From 2014 to 2015, Atka mackerel (69%), salmon (52%), and crab (42%) had the largest landings increases, while Pacific herring (-29%), flatfish (-23%), and sablefish (-7%) had the largest decreases.

Price

In 2015, Pacific halibut (\$4.85 per pound) received the highest ex-vessel price in the North Pacific Region. Landings of Pacific herring (\$0.1 per pound) had the lowest ex-vessel price. From 2006 to 2015, Atka mackerel (129%, 98% in real terms); Pacific halibut (74%, 50% in real terms); and sablefish (52%, 32% in real terms) had the largest price increases, while flatfish (-24%, -35% in real terms); rockfish (-15%, -26% in real terms); and Pacific cod (-10%, -22% in real terms) had the largest decreases. From 2014 to 2015, walleye pollock (16%), Pacific cod (16%), and sablefish (7%) had the largest price increases, while salmon (-50%), Atka mackerel (-27%), and crab (-16%) had the largest decreases.

RECREATIONAL FISHERIES

In this report, recreational fisheries refer to fishing for fun rather than to resell fish (commercial fishing) or for subsistence. The recreational fisheries section reports on economic impacts and expenditures, angler participation, trips, and catch of key species/species groups.

Key North Pacific Recreational Species

- Chinook salmon
- Chum salmon
- Coho salmon
- Greenlings (lingcod)
- Pacific halibut
- Pink salmon
- Razor clams
- Rockfish
- Sockeye salmon

Economic Impacts and Expenditures

The contribution of recreational fishing activities² in the United States are reported in terms of economic impacts from angler expenditures. Total annual trip expenditures are estimated by multiplying mean trip expenditures by the estimated number of adult trips in each trip mode (for-hire, private boat, and shore). Total annual durable expenditures are estimated by multiplying mean durable expenditures by the estimated annual number of adult participants in a given state.

Four different measures are commonly used to show how angler expenditures affect the economy in a region (state or nationwide): sales, income, value-added, and employment. Sales refer to the gross value of all sales by regional businesses affected by an activity, such as recreational fishing. It includes both the direct sales made by the angler and sales made between businesses and households resulting from that original sale by the angler. Income includes personal income (wages and salaries) and proprietors' income (income from self-employment). Value-added is the contribution made to the gross domestic product in a region. Employment is specified on the basis of full- and part-time jobs supported directly or indirectly by the purchases made by anglers. The first three measures are calculated in terms of dollars, whereas employment impacts are measured in terms of number of jobs. Note that these categories are not additive. NOAA Fisheries uses a regional impact modeling software, called IMPLAN, to estimate these four types of impacts.

Economic impacts from recreational fishing activities in Alaska totaled 5,407 jobs in 2015 and generated \$619 million in sales, \$223 million in income, and \$362 million in value-added impacts. Impacts from durable

² Trip expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Durable good expenditure impacts were generated from the 2014 National Marine Recreational Fishing Expenditure Survey (see <http://www.st.nmfs.noaa.gov/economics/fisheries/recreational/Marine-Angler-Durable-Expenditures/2014-durable-expenditures-survey>). Economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2011, available at <http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2011>).

equipment expenditures (e.g., rods and reels, fishing-related equipment, boats, vehicles, and second homes) accounted for 29% of employment, 19% of sales, 21% of income, and 20% of value-added impacts. Of the three fishing trip modes, trips in the for-hire mode had the greatest economic impact, accounting for 37% of employment impacts.

Expenditures for fishing trips and durable equipment across Alaska in 2015 totaled more than \$469 million. Approximately \$347 million of these expenditures were related to trip expenses, with a large portion coming from trips in the private boat (48%) and for-hire (47%) sectors. In 2015, durable goods expenditures were more than \$122 million, with the largest portion coming from boat expenses (\$57 million).

Days Fished

The state of Alaska records recreational fishing effort in terms of the number of days fished rather than the number of fishing trips. Anglers who fished in Alaska spent approximately 975,000 days fishing in 2015.³ This number was a 4% increase from the days spent fishing in 2006. From 2014 to 2015, there was a 2% increase in the number of days fished.

Participation

In 2015, 309,000 recreational saltwater anglers fished in Alaska. This number was a 3% decrease from 2006 and an 8% increase from 2014. These anglers are categorized as either residents of coastal/non-coastal counties (41%) or out-of-state anglers (59%).

Harvest and Release

Of Alaska's key species and species groups, Pacific halibut (691,000 fish), coho salmon (578,000 fish), and rockfish species (475,000 fish) were most frequently caught by recreational anglers. From 2006 to 2015, sockeye salmon (50%), rockfish species (41%), and pink salmon (35%) had the largest increases in catch, while razor clams (-92%), lingcod (-38%), and chum salmon (-21%) had the largest decreases. From 2014 to 2015, pink salmon (68%), coho salmon (28%), and chum salmon (23%) had the largest increases in catch, while razor clams (-58%), sockeye salmon (-11%), and lingcod (-10%) had the largest decreases.

Recreational Catch: Largest Increases

From 2006:

- Sockeye salmon (50%)
- Rockfish species (41%)
- Pink salmon (35%)

From 2014:

- Pink salmon (68%)
- Coho salmon (28%)
- Chum salmon (23%)

Recreational Catch: Largest Decreases

From 2006:

- Razor clams (-92%)
- Lingcod (-38%)
- Chum salmon (-21%)

From 2014:

- Razor clams (-58%)
- Sockeye salmon (-11%)
- Lingcod (-10%)

MARINE ECONOMY

For this report, the marine economy refers to the economic activity generated by fishing and marine-related industries in a coastal state. The state marine economy consists of two industry sectors: 1) seafood sales and processing (employer establishments and non-employer firms); and 2) transport, support, and marine operations (employer establishments). These sectors include several different marine-related industries.^{4,5}

To measure the size of the commercial fishing sector in a state's economy relative to the size of the commercial fishing sector in the national economy⁶, researchers use an index called the Commercial Fishing Location Quotient (CFLQ). The CFLQ is calculated as the ratio of the percentage of regional employment in the commercial fishing sector relative to the percentage of national employment in the commercial fishing sector. The U.S. CFLQ is 1. If a state's CFLQ is less than 1, then less commercial fishing occurs in this state than the national average. If a state's CFLQ is greater than 1, then more commercial fishing occurs in this state than the national average. The Bureau of Labor Statistics did not disclose CFLQ data for Alaska for 2014.

³ In Alaska, recreational fishing data is collected in terms of the number of days spent fishing rather than the number of fishing trips taken.

⁴ Unless otherwise stated, data is from the U.S. Census Bureau, <http://censtats.census.gov/> (accessed May 31, 2016).

⁵ U.S. Bureau of Economic Analysis, "Table 1.1.5 Gross Domestic Product" and "Table SA6N Compensation of Employees by NAICS Industry," http://www.bea.gov/iTable/index_nipa.cfm (accessed May 31, 2016).

⁶ U.S. Bureau of Labor Statistics, "Location Quotient Calculator," http://data.bls.gov/location_quotient/ (accessed May 31, 2016).

In 2014, 21,000 establishments operated throughout Alaska, including marine and non-marine-related establishments. These establishments employed 267,000 workers and had a total annual payroll of more than \$15 billion. The region's gross domestic product was approximately \$57 billion in 2014.

Seafood Sales and Processing

Seafood Product Preparation and Packaging:

In 2014 there were 31 non-employer firms (a 41% increase from 2006) and annual receipts totaled \$2.5 million (a 104% increase from 2006 in real terms). There were 108 employer establishments (a 4% decrease from 2006) in 2014. These establishments employed approximately 9,115 workers (a 33% increase from 2006) and had a total annual payroll of \$337 million (a 20% increase from 2006 in real terms).

Seafood Sales, Retail: In 2014 there were 17 non-employer firms (a 42% increase from 2006) and annual receipts totaled \$1.5 million (a 107% increase from 2006 in real terms).

There were 14 employer establishments (a 100% increase from 2006) in 2014. These establishments had a total annual payroll of \$2.7 million. Data on the number of employees were suppressed for confidentiality purposes for this section.

Seafood Sales, Wholesale: There were 43 establishments (a 44% decrease from 2006) in 2014. These establishments employed 120 workers (a 46% decrease from 2006) and had a total annual payroll of \$7 million (a 28% decrease from 2006 in real terms).

Transport, Support, and Marine Operations

Data for the Transport, Support, and Marine Operations sector of Alaska's economy were largely suppressed for confidentiality reasons. It is clear, however, that these sectors play an important role in the regional economy. For example, the Coastal and Great Lakes Freight Transportation sector accounted for \$89 million in payroll in 2014.

Tables | Alaska



2015 Economic Impacts of the Alaska Seafood Industry (thousands of dollars)

	With Imports				Without Imports			
	#Jobs	Sales	Income	Value Added	#Jobs	Sales	Income	Value Added
Total Impacts	53,441	4,420,929	1,877,131	2,354,239	53,131	4,387,825	1,864,729	2,338,087
Commercial Harvesters	37,762	3,102,617	1,306,980	1,642,776	37,762	3,102,617	1,306,980	1,642,776
Seafood Processors & Dealers	12,384	1,118,501	488,109	605,159	12,109	1,093,619	477,227	591,688
Importers	24	7,351	1,178	2,241	0	0	0	0
Seafood Wholesalers & Distributors	365	42,771	14,645	19,123	360	42,260	14,470	18,895
Retail	2,905	149,689	66,220	84,941	2,899	149,329	66,052	84,729

Total Landings Revenue & Landings Revenue of Key Species/Species Groups (thousands of dollars)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Revenue	1,314,856	1,485,703	1,759,670	1,259,446	1,592,775	1,930,551	1,839,324	1,926,853	1,730,807	1,732,545
Finfish & Other	1,190,460	1,304,790	1,507,952	1,063,867	1,386,142	1,663,708	1,553,063	1,686,719	1,482,338	1,438,799
Shellfish	124,396	180,912	251,718	195,579	206,633	266,843	286,261	240,134	248,469	293,746
Key Species										
Atka mackerel	14,816	17,506	21,688	29,734	30,535	30,031	30,638	16,647	24,803	30,582
Crab	110,572	168,195	240,747	180,264	189,553	248,693	275,745	230,139	237,813	284,283
Flatfish	68,200	74,507	96,326	69,233	79,518	109,661	123,319	103,456	89,553	68,932
Pacific cod	144,678	181,325	241,933	98,507	145,907	163,424	171,192	190,015	155,150	174,380
Pacific halibut	192,905	217,399	208,983	134,603	200,454	205,211	144,801	111,483	106,674	110,709
Pacific herring	7,455	14,817	22,912	29,294	23,026	12,305	19,430	16,280	11,492	7,040
Rockfish	18,003	17,422	16,755	14,446	21,576	33,628	33,240	27,157	31,590	29,125
Sablefish	85,023	88,500	92,205	87,236	97,262	139,741	120,163	82,291	87,373	86,436
Salmon	276,512	347,625	368,219	344,655	505,695	564,788	441,284	679,528	546,022	413,199
Walleye pollock	380,510	344,170	436,074	254,295	279,999	401,912	453,172	446,558	421,087	508,560

Total Landings & Landings of Key Species/Species Groups (thousands of pounds)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Landings	5,430,208	5,323,296	4,538,906	4,069,788	4,348,788	5,354,950	5,345,454	5,791,752	5,671,323	6,038,170
Finfish & Other	5,351,184	5,244,927	4,431,960	3,973,816	4,262,927	5,269,122	5,229,228	5,700,699	5,580,283	5,908,919
Shellfish	79,023	78,369	106,946	95,972	85,861	85,828	116,226	91,053	91,040	129,251
Key Species										
Atka mackerel	130,840	126,962	127,030	156,888	145,205	112,594	103,994	51,425	69,512	117,678
Crab	69,002	70,699	99,445	89,531	79,875	80,463	111,914	87,089	85,106	121,204
Flatfish	383,194	423,340	599,585	506,166	563,837	649,451	646,680	659,799	663,893	510,860
Pacific cod	521,047	491,020	494,975	491,073	538,761	663,115	716,882	681,407	716,564	697,161
Pacific halibut	69,154	67,242	64,639	57,749	54,857	41,291	32,422	28,696	21,616	22,850
Pacific herring	79,845	67,137	83,787	86,951	108,116	98,600	75,058	85,076	96,789	68,461
Rockfish	74,631	86,569	89,761	83,987	100,070	106,287	114,581	122,950	133,320	141,854
Sablefish	35,719	36,103	32,540	28,960	27,026	28,847	31,427	30,150	25,679	23,845
Salmon	634,227	861,253	640,070	671,181	756,825	738,122	611,163	1,012,612	683,318	1,040,772
Walleye pollock	3,403,895	3,068,211	2,277,527	1,869,214	1,947,456	2,810,728	2,872,187	3,003,183	3,145,639	3,262,568

Average Annual Price of Key Species/Species Groups (dollars per pound)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Atka mackerel	0.11	0.14	0.17	0.19	0.21	0.27	0.29	0.32	0.36	0.26
Crab	1.60	2.38	2.42	2.01	2.37	3.09	2.46	2.64	2.79	2.35
Flatfish	0.18	0.18	0.16	0.14	0.14	0.17	0.19	0.16	0.13	0.13
Pacific cod	0.28	0.37	0.49	0.20	0.27	0.25	0.24	0.28	0.22	0.25
Pacific halibut	2.79	3.23	3.23	2.33	3.65	4.97	4.47	3.89	4.93	4.85
Pacific herring	0.09	0.22	0.27	0.34	0.21	0.12	0.26	0.19	0.12	0.10
Rockfish	0.24	0.20	0.19	0.17	0.22	0.32	0.29	0.22	0.24	0.21
Sablefish	2.38	2.45	2.83	3.01	3.60	4.84	3.82	2.73	3.40	3.62
Salmon	0.44	0.4	0.58	0.51	0.67	0.77	0.72	0.67	0.80	0.40
Walleye pollock	0.11	0.11	0.19	0.14	0.14	0.14	0.16	0.15	0.13	0.16

2015 Economic Impacts of Alaska Recreational Fishing Expenditures (thousands of dollars)¹

		#Jobs	Sales	Income	Value-Added
Trip Impacts by Fishing Mode	For-Hire	2,015	268,617	100,752	149,990
	Private Boat	1,458	191,178	60,520	114,574
	Shore	351	40,963	14,035	24,399
Total Durable Expenditures		1,583	118,101	47,803	72,988
Total State Economic Impacts		5,407	618,859	223,110	361,951

2015 Angler Trip & Durable Goods Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures	Equipment	Durable Goods Expenditures
For-Hire	162,503	Fishing Tackle	26,351
Private Boat	165,809	Other Equipment	33,992
Shore	19,017	Boat Expenses	57,278
Total	347,329	Vehicle Expenses	4,637
		Second Home Expenses	0
		Total Durable Expenditures	122,258
Total State Trip and Durable Goods Expenditures			469,587

Recreational Anglers by Residential Area (thousands of anglers)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Out-of-State	120	127	119	127	122	124	118	121	118	181
Coastal/Non-Coastal	197	205	190	158	159	161	160	176	169	128
Total Anglers	317	332	309	284	281	286	278	298	287	309

Recreational Fishing Effort by Mode (thousands of angler fishing days)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Days Fished	941	1,052	935	914	811	811	808	980	960	975

Harvest (H) & Release (R) of Key Species/Species Groups (thousands of fish)^{2,3,4}

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Lingcod	H	35	42	37	32	32	33	33	34	32	28
	R	53	70	65	46	39	36	36	33	29	27
Pacific halibut	H	463	585	516	440	398	394	388	454	408	420
	R	353	438	359	321	304	311	324	324	251	271
Razor clams	H	483	389	593	556	357	436	NA	291	90	39
	R	0	0	0	0	0	0	NA	3	3	0
Rockfish species	H	173	198	226	209	224	211	230	256	335	332
	R	165	178	171	149	151	122	121	121	148	143
Chinook salmon	H	117	110	71	89	78	85	63	81	111	111
	R	104	110	80	96	66	95	62	120	94	116
Chum salmon	H	14	18	12	22	11	21	11	25	12	13
	R	34	34	28	34	19	38	20	39	19	25
Coho salmon	H	395	506	403	418	350	386	263	493	390	479
	R	107	122	89	94	74	88	50	122	60	99
Pink salmon	H	65	133	88	117	82	72	78	113	69	110
	R	167	280	151	224	121	135	141	203	118	204
Sockeye salmon	H	21	32	29	34	28	31	28	40	35	33
	R	7	21	10	10	6	10	8	13	12	9

¹ Data reported in this table includes saltwater fishing activities only.² Information reported in this table is from the Sport Fish Division of the Alaska Department of Fish and Game (ADF&G) and includes saltwater fishing activities only.³ In this table, '<1' = 0-999 fish and '1' = 1,000-1,499 fish.⁴ NA = data not available

2014 Alaska State Economy (% of national total)^{1,3}

	#Establishments	#Employees	Annual Payroll (\$ billions)	Employee Compensation (\$ billions)	Gross State Product (\$ billions)	Commercial Fishing Location Quotient ²
Totals	20,752 (0.3%)	266,886 (0.2%)	15.28 (0.3%)	27.26 (0.3%)	56.65 (0.3%)	ds

Seafood Sales & Processing - Non-Employer Firms (thousands of dollars)

		2006	2007	2008	2009	2010	2011	2012	2013	2014
Seafood product prep. & packaging	Firms	22	33	31	32	28	26	25	35	31
	Receipts	1,055	1,837	1,455	1,693	2,482	2,882	2,708	3,268	2,472
Seafood sales, retail	Firms	12	12	13	16	23	15	15	11	17
	Receipts	649	1,358	1,431	1,350	1,595	903	1,626	1,458	1,539

Seafood Sales & Processing - Employer Establishments (thousands of dollars)³

		2006	2007	2008	2009	2010	2011	2012	2013	2014
Seafood product prep. & packaging	Establishments	113	114	122	121	119	122	116	115	108
	Employees	6,866	6,506	7,707	7,572	8,074	8,578	8,289	8,638	9,115
	Payroll	246,067	262,127	254,894	255,403	268,208	296,851	297,284	308,961	337,171
Seafood sales, wholesale	Establishments	77	68	57	54	52	48	47	43	43
	Employees	224	167	143	ds	ds	159	143	102	120
	Payroll	8,509	8,528	8,389	8,445	9,141	9,985	10,943	7,205	7,024
Seafood sales, retail	Establishments	7	7	9	10	10	10	15	14	14
	Employees	ds	ds	37	44	ds	ds	ds	ds	ds
	Payroll	ds	ds	1,839	1,824	1,986	2,487	2,019	2,337	2,687

Transport, Support, & Marine Operations - Employer Establishments (thousands of dollars)^{3,4}

		2006	2007	2008	2009	2010	2011	2012	2013	2014
Coastal & Great Lakes freight transportation	Establishments	46	46	49	50	55	63	47	53	72
	Employees	ds								
	Payroll	ds	27,357	33,888	33,132	ds	ds	ds	82,692	89,020
Deep sea freight transportation	Establishments	5	3	3	3	3	1	2	3	6
	Employees	ds								
	Payroll	ds								
Deep sea passenger transportation	Establishments	1	6	1	1	0	1	1	2	1
	Employees	ds	ds	ds	ds	NA	ds	ds	ds	ds
	Payroll	ds	ds	ds	ds	NA	ds	ds	ds	ds
Marinas	Establishments	21	13	14	13	14	14	13	12	11
	Employees	ds	48	66	56	ds	ds	ds	ds	ds
	Payroll	ds	1,763	2,303	2,181	1,932	2,053	1,613	1,449	ds
Marine cargo handling	Establishments	11	17	12	13	13	14	8	9	9
	Employees	503	677	ds	ds	ds	ds	334	ds	ds
	Payroll	22,876	35,345	ds	ds	ds	ds	26,481	ds	ds
Navigational services to shipping	Establishments	31	31	25	23	25	22	21	22	25
	Employees	ds	ds	296	312	303	321	97	103	138
	Payroll	ds	25,058	23,233	25,630	27,543	27,156	9,938	10,805	13,015
Port & harbor operations	Establishments	2	2	7	8	9	8	18	13	12
	Employees	ds	ds	ds	ds	ds	ds	582	ds	ds
	Payroll	ds	ds	ds	ds	ds	1,790	25,545	ds	ds
Ship & boat building	Establishments	17	16	17	21	22	23	23	20	27
	Employees	ds	335							
	Payroll	ds	15,845							

¹ Census Bureau data for the Marine Economy section of this report is available only through 2014.

² The U.S. Commercial Fishing Location Quotient (CFLQ) is 1. A CFLQ greater than 1 indicates that more commercial fishing occurs in this state than the national average. A CFLQ less than 1 indicates that less commercial fishing occurs in this state than the national average.

³ ds = these data are suppressed.

⁴ NA = not applicable.