

# North Pacific

- Alaska



### Management Context

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

#### North Pacific Region FMPs

1. Bering Sea/Aleutian Islands (BSAI) Groundfish
2. Gulf of Alaska (GOA) Groundfish
3. BSAI King and Tanner Crabs
4. Alaska Scallop Fishery
5. Salmon in the EEZ
6. Arctic

Of the stocks or stock complexes covered in these fishery management plans, only the Blue king crab - Pribilof Islands stock is currently listed as overfished, and the Bering Sea/Aleutian Island octopus complex is currently subject to overfishing. The North Pacific Region has six catch share programs, more than any other region. These are the: 1) Western Alaska community development quota program; 2) Pacific halibut and sablefish individual fishing quota program; 3) Bering Sea pollock cooperative; 4) Bering Sea king and tanner crab (Crab Rationalization) program; 5) Central Gulf of Alaska rockfish pilot sector program; and 6) Bering Sea groundfish (non-pollock) cooperative. The landings revenues for these programs totaled over \$1.1 billion in 2011, which exceeds the total landings revenue of any other state. Below is a description of these catch share programs and their performance.

**Western Alaska Community Development Quota (CDQ) Program** This program was originally implemented in 1992 as part of a restructuring of the Bering Sea/Aleutian Islands (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 purpose of the program is to 1) support economic development in western Alaska; 2) alleviate poverty and provide economic and social benefits to residents; and 3) achieve sustainable and diversified local economies.

Annual CDQ allocations provide a revenue stream for CDQ groups through various channels, including the direct catch and sale of some species and the leasing of quota to various harvesting partners. CDQ groups use the revenue derived from the harvest of their fisheries allocations to fund economic development activities and provide employment opportunities. In 2011, 261 million pounds of pollock were caught under the BSAI CDQ program, with an estimated ex-vessel value of approximately \$43 million.

**Pacific Halibut and Sable fish Individual Fishing Quota (IFQ) Program** The Pacific Halibut and Sablefish IFQ Program was developed by the North Pacific Fishery Management Council and implemented by NMFS in 1995. The primary objectives of the IFQ Program are to 1) eliminate gear conflicts; 2) address safety

concerns; and 3) improve product quality. The performance results of the Halibut IFQ program since implementation through 2011, show that Halibut quota, landings and active vessels decreased while Halibut revenue and price per fish increased. Similarly, the performance results of the Sable fish IFQ program show that Sable fish quota, landings and active vessels decreased while Sable fish revenue and price per fish increased between 1995 and 2011.

**Bering Sea Pollock Cooperative** This program was established 1998 and manages two allocations of Bering Sea and Aleutian Islands walleye pollock. The program objectives were to settle allocation disputes between inshore (catcher vessels) and offshore (catcher/processors) sectors and rationalize the fishery. Key performance indicators of this program show that since the program implementation in 1999 through 2011, quota, landings, revenue and price per fish have increased while the number of active vessels has decreased.

**Central Gulf of Alaska Rockfish Pilot Sector Program** The Central Gulf of Alaska Rockfish Program was initially established as a two-year (2007 - 2008) pilot program by the U.S. Congress and later extended to five years. The North Pacific Council modified this program and 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. Since this program was just recently implemented, not enough data has been collected to evaluate its performance.

**Bering Sea Groundfish (non-Pollock) Cooperative** This program began implementation in 2008 to create economic incentives to improve retention of all fish caught and reduce bycatch by commercial fishing vessels using trawl gear in the non-pollock groundfish fisheries. The key performance indicators of this program show that since implementation from 2008 through 2011, active vessels and average price per fish have remained constant while revenue and revenue per active vessel increased. Also, fish discards were reduced by 52%.

**Bering Sea and Aleutian Islands Crab Rationalization** In 2005, the BSAI Crab Rationalization Program was implemented to address the race to harvest, high bycatch and discard mortality, product quality issues and balance the interests of those who depend on crab fisheries. The BSAI Crab Rationalization 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. Community interests are protected by Community Development Quota (CDQ) and Adak Community allocations, and regional landings and processing requirements, as well as several community protection measures.

**Commercial Fisheries**

(211% increase), and salmon (163% increase).

North Pacific fishermen earned over \$1.7 billion from their commercial harvest (5.3 billion pounds) in 2012. Landings revenue was dominated by salmon (\$441 million), walleye pollock (\$343 million), crab (\$276 million), and Pacific cod (\$191 million). Walleye pollock contributed the most to landings in 2012, accounting for 55% of total landings (2.9 billion pounds) and 20% of landings revenue, with an average annual price of \$0.12 per pound. In contrast, salmon accounted for 12% of total landings (611 million pounds) and generated 26% of landings revenue, with an average annual price of \$0.72 per pound in 2012.

The North Pacific groundfish fishery is different from most other fisheries in the nation 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 are estimated by using prices obtained from the shore-side sector. These species include Pacific cod, flatfish, atka mackerel, walleye pollock, rockfish, and sablefish. 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.

*Economic Impacts<sup>1</sup>*

Alaska’s seafood industry generated \$4.2 billion in sales impacts, \$1.8 billion in income impacts, and over 56,000 jobs in 2012. Seafood processing and dealer operations contributed 25% to in-state sales for Alaskan businesses, with over \$1.1 billion generated in 2012. The commercial harvester sector generated more impacts than any other sector with approximately 69% of total impacts. The importer sector consisted of less than one percent of the total impacts for the state in 2012.

**Key North Pacific Commercial Species**

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

*Landings Revenue*

In 2012, landings revenue for finfish and shellfish totaled over \$1.7 billion, a 66% increase from total revenue generated in 2003. When adjusting for inflation, real landings revenue increased 19%. Landings revenue in 2012 was a 7.7% decrease relative to 2011 (\$1.8 billion). Finfish and other catch contributed more than shellfish to the 2012 total, accounting for 83% or \$1.4 billion. This was a 66% increase (19% increase in real terms) from 2003 finfish revenue totals. Similarly, shellfish revenues increased 68% (20% increase in real terms) from \$174 million in 2003 to \$293 million in 2012. The largest changes in landings revenue between 2003 and 2012 were for Atka mackerel (400% increase), flatfish

**Commercial Fisheries Facts**

*Landings revenue*

- On average, the key species or species groups account for 98% of total revenue, (\$1.7 billion) generated in the North Pacific Region.
- Salmon contributed more than any other species or species group, averaging \$357 million in landings revenue from 2003 to 2012.
- Atka mackerel had the largest one-year increase in landings revenue over the 10 year time period, increasing 257% from \$3 million in 2003 to \$11 million in 2004.
- Pacific cod had the largest decrease in landings revenue over the 10 year time period, decreasing 60% from \$241 million in 2008 to \$97 million in 2009.

*Landings*

- Key species or species groups contributed an average of 99% annually to total landings between 2003 and 2012.
- Walleye pollock, contributed the most to landings in the region, averaging 2.8 billion pounds from 2003 to 2012.
- Walleye pollock had the largest one-year increase in landings over the 10 year time period, increasing 44% from 1.9 billion pounds in 2010 to 2.8 billion pounds in 2011.
- Salmon had the largest one-year decrease in landings over the 10 year time period, decreasing 27% from 872 million pounds in 2005 to 634 million pounds in 2006.

*Prices*

- Pacific halibut had the highest average annual ex-vessel price per pound (\$3.13) over the time period, followed by sablefish (\$2.92), and crab (\$2.47).
- Walleye pollock had the lowest average annual ex-vessel price per pound (\$0.11) over the time period, followed by Atka mackerel (\$0.13), and flatfish (\$0.16).
- The largest annual increase in ex-vessel price during the 10 year period was for Atka mackerel had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 228% from \$0.03 per pound in 2003 to \$0.10 in 2004.
- Pacific cod had the largest decrease in ex-vessel price over the 10 year time period, decreasing 60% from \$0.49 per pound in 2008 to \$0.20 in 2009.

*Landings*

In 2012, North Pacific commercial fishermen landed 5.3 billion pounds of finfish and shellfish, a 0.3% decrease from 2003 totals. Finfish and catch other than shellfish accounted for 98% of this total (5.1 billion) and decreased 1.3% from 2003 (5.2 billion pounds) and decreased 1% from 2011 (5.2 billion pounds). Shellfish landings in 2012 increased 88% from 62 million pounds in 2003 to 117 million pounds in 2012. Between 2011 and 2012, shellfish landings increased 38%. Overall, an average of 5 billion pounds were landed annually in the North Pacific from 2003 to

<sup>1</sup>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](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))

2012, ranging from a low of 4 billion pounds (2009) to a high of 5.6 billion pounds (2005).

In terms of key species or species groups, walleye pollock landings contributed the most to landings during the 10 year period, accounting for 55% of total landings in 2012 (2.9 billion pounds). Landings of Pacific cod (717 million pounds), flatfish (647 million pounds), and salmon (611 million pounds) also significantly contributed to the total landings.

Relative to 2003, landings of flatfish, crab, and Pacific cod in 2012 increased more than any other key species or group, increasing 123%, 96.5%, and 26% respectively. In contrast, the largest decreases between 2003 and 2012 were experienced by Pacific halibut (58%) and sablefish (17%).

#### *Prices*

In all, 2012 ex-vessel prices per pound for seven of the key species and species groups were above their average annual price for the 10 year time period. When comparing 2012 ex-vessel prices to those in 2003 the largest changes occurred in Atka mackerel (379% increase, 243% increase in real terms), salmon (171% increase, 94% increase in real terms), Pacific halibut (106% increase, 48% increase in real terms), and Pacific herring (100% increase, 43% increase in real terms). Relative to ex-vessel prices in 2011 the largest changes in the ex-vessel values were for Pacific herring (107% increase, 108% increase in real terms), Atka mackerel (30% decrease, 30% decrease in real terms), sablefish (21% decrease, 21% decrease in real terms), and crab (20% decrease, 20% decrease in real terms),

#### **Recreational Fisheries**

Recreational fishermen spent approximately 808,000 days fishing in Alaska in 2012. These anglers numbered over 278,000, with 58% of them non-residents. Pacific halibut was the most caught species or species group, with approximately 711,000 harvested or released in 2012. Rockfish and coho salmon were also caught in large numbers, with 351,000 and 313,000 caught, respectively. Together, these three species accounted for 74% of total catch by anglers in the North Pacific Region.

#### *Economic Impacts and Expenditures<sup>2</sup>*

In 2012, approximately 4,800 jobs in the North Pacific were generated by recreational fishing activities and over \$397 million was spent by anglers who fished in the region. Most of these employment impacts were generated by industries that provided services to anglers who fished from a for-hire boat (2,000 jobs) or a private boat (1,500). These fishing trip modes also generated the most in trip-related expenditures: \$148 million for for-hire fishing trips (55% of total trip expenditures) and \$109 million for private boat trips (40% of total trip expenditures). Over 75% of total trip-related expenditures in Alaska came from non-resident anglers.

#### **Key North Pacific Recreational Species**

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

In addition to jobs generated by recreational fishing activities, other economic impacts include sales impacts and the contribution of recreational fishing activities to gross domestic product (value added impacts). For-hire fishing trips generated \$212 million in sales (49% of total trip-related sales) and \$145 million in value added impacts (56% of total trip-related value added impacts) in 2012. Private boat trips contributed \$204 million in sales (47%) and \$104 million (40%) in value added impacts. Shore-based fishing trips contributed \$17 million in trip-related sales (4%) and \$9 million in trip-related value added impacts (3.5%).

Anglers spent almost \$126 million on durable equipment in 2012, contributing 32% to total expenditures in the region (trip and durable equipment combined). Most of this was spent on boat expenses (\$79 million). Expenditures related to vehicles were \$1.8 million; second home expenses, \$2.18 million; other equipment, \$20.2 million; and fishing tackle, \$23 million.

Economic impacts from durable equipment expenditures in 2012 include over 1,100 jobs, \$125 million in sales impacts, and \$81 million in value added impacts. These impacts represented 23% of the employment impacts, 22% of the sales impacts, 24% of the income impacts, and 24% of the value added impacts generated by recreational fishing activities.

#### *Participation*

In 2012, there were 278,000 recreational saltwater anglers who fished in Alaska. This was a 6.9% decrease from 2003 (299,000 anglers) and a 2.6% decrease from 2011 (286,000 anglers). Recreational fishermen in Alaska are categorized as either a resident of Alaska or a non-resident. In 2012, non-resident anglers made up 58% of total anglers (160,000 anglers). There was a 5.6% decrease in the number non-resident of anglers from 2003 and a 0.6% decrease from 2011 (161,000 anglers). In terms of resident anglers, there were 118,000 resident anglers who fished in the North Pacific Region in 2012, which was a 8.7% decrease from 2003 and a 5.2% decrease from 2011.

#### *Days Fished<sup>1</sup>*

Anglers who fished in Alaska spent approximately 808,000 days fishing in 2012. This was a 6.9% decrease from the 868,000 days spent fishing in 2003. From 2011 to 2012, there was a 0.4% decrease in the number of days fished (811,000 days) in 2011.

#### *Harvest and Release*

<sup>2</sup>Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure 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, 2006, available at: <http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006>)

<sup>1</sup>In Alaska, information related to how often a recreational fisherman fishes is collected in terms of the number of days spent fishing rather than the number of fishing trips taken.

Of Alaska's key species and species groups, Pacific halibut, rockfish, and coho salmon were most frequently caught by recreational fishermen. In 2012, 711,000 Pacific halibut, 351,000 rockfish, and 313,000 coho salmon were caught by anglers in Alaska. Coho salmon (84% harvested), sockeye salmon (77%), and rockfish (65%) were more often harvested than released, while chum salmon were more often released (66% released).

### Recreational Fish Facts

#### Participation

- An average of 304,000 anglers fished in North Pacific annually between 2003 to 2012.
- In 2012, residents made up 42% of total anglers in this region and averaged 41% of total anglers annually over the 10 year time period.
- The largest annual increase in anglers was a 14% increase in Alaska non-resident anglers from 2003 to 2004.
- The largest annual decrease in anglers was a 17% decrease in the number of non-resident anglers from 2008 to 2009.

#### Harvest and release

- Pacific halibut was the most commonly caught key species or species group, averaging 802,000 fish caught over the 10 year time period.
- Chum salmon had the largest annual increase in catch, increasing 98% from 2010 to 2011. Pink salmon had the largest annual decrease in catch, decreasing 53% from 2005 to 2006.

Between 2003 and 2012, three of the North Pacific's key species or groups experienced increases in catch totals. Those with the largest increases include: rockfish (40%), greenlings (lingcod) (6%), and Pacific halibut (3%). Over the same time period, decreases were experienced by sockeye salmon (16%) and chinook salmon (38%).

In the short term, the largest increases were experienced by pink salmon and rockfish from 2011 to 2012. Decreases over the same time period occurred in four species or species groups, the largest of which were experienced by chum salmon (48%) and coho salmon (34%). The dramatic changes in pink salmon catch between 2011 and 2012 can at least be partially attributed to the biannual biological cycle.

## Marine Economy<sup>2</sup>

Across the entire economy in Alaska, approximately 255,000 full- and part-time employees were employed by about 20,000 establishments in 2011. Annual payroll totaled \$13 billion, employee compensation totaled \$24 billion and gross state product totaled \$51 billion. The Bureau of Labor Statistics did not disclose Commercial Fishing Location Quotient data for Alaska for 2011.

### Seafood Sales and Processing

The number of nonemployer firms (businesses that have no paid employees and are subject to federal income tax) engaged in seafood product preparation and packaging decreased 24% from 34 firms in 2003 to 26 firms in 2011. However, annual receipts increased 55% to \$2.9 million in 2011 (a 30% increase in real terms).

Employer establishments engaged in seafood product preparation and packaging increased 12% from 109 firms in 2003 to 122 firms in 2011. The number of employees increased 32% to 8,600 in 2011. Annual payroll increased 44% to \$297 million in 2011 (a 21% increase in real terms).

Employer establishments in the wholesale seafood sales sector decreased 47% from 90 firms in 2003 to 48 firms in 2011. The number of employees decreased 30% to 159 in 2011. Annual payroll, however, increased 41% to \$10 million in 2011 (a 18% increase in real terms).

The number of nonemployer firms in the seafood retail sales sector decreased 6.2% from 16 firms in 2003 to 15 firms in 2011. However, annual receipts increased 44% to \$903,000 in 2011 (a 21% increase in real terms).

Employer establishments in the seafood retail sales sector increased 25% from 8 firms in 2003 to 10 firms in 2011. Annual payroll increased 86% to \$2.5 million in 2011 (a 56% increase 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. However, Navigational Services to Shipping plays an important role in Alaska's economy, with over \$27 million in payroll in 2011.

<sup>2</sup>Information for 2011 is reported in this section; 2012 data were not available for this report.

**2012 Economic Impacts of the Alaska Seafood Industry (thousands of dollars)**

|                                    | Jobs   | Sales     | Income    | Value Added |
|------------------------------------|--------|-----------|-----------|-------------|
| <b>Total Impacts</b>               | 55,890 | 4,232,307 | 1,781,616 | 2,228,884   |
| Commercial Harvesters              | 39,177 | 2,933,218 | 1,228,011 | 1,534,902   |
| Seafood Processors & Dealers       | 13,083 | 1,074,127 | 468,745   | 581,151     |
| Importers                          | 134    | 36,801    | 5,898     | 11,219      |
| Seafood Wholesalers & Distributors | 404    | 43,110    | 14,761    | 19,275      |
| Retail                             | 3,093  | 145,052   | 64,201    | 82,338      |

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

|                      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Total Revenue</b> | 1,026,015 | 1,118,334 | 1,205,235 | 1,245,485 | 1,412,817 | 1,628,212 | 1,257,795 | 1,570,325 | 1,846,216 | 1,703,726 |
| Finfish & other      | 851,572   | 952,928   | 1,045,850 | 1,121,518 | 1,231,971 | 1,376,574 | 1,064,561 | 1,368,465 | 1,583,617 | 1,410,972 |
| Shellfish            | 174,443   | 165,406   | 159,385   | 123,967   | 180,846   | 251,638   | 193,234   | 201,860   | 262,599   | 292,754   |
| Atka mackerel        | 3,022     | 10,795    | 14,893    | 15,703    | 14,253    | 19,523    | 26,732    | 27,523    | 23,499    | 15,106    |
| Pacific cod          | 162,397   | 104,170   | 101,532   | 142,391   | 178,798   | 241,050   | 96,555    | 143,285   | 159,857   | 191,358   |
| Crab                 | 165,834   | 153,430   | 146,131   | 110,572   | 168,195   | 240,747   | 180,264   | 189,553   | 248,693   | 275,746   |
| Flatfish             | 39,945    | 41,502    | 61,305    | 68,159    | 74,497    | 96,358    | 69,301    | 79,486    | 110,073   | 124,198   |
| Pacific halibut      | 165,906   | 168,658   | 170,075   | 192,905   | 217,399   | 208,983   | 134,603   | 200,454   | 205,211   | 144,801   |
| Pacific herring      | 8,930     | 14,029    | 13,429    | 7,455     | 14,817    | 22,912    | 29,294    | 23,026    | 12,305    | 19,430    |
| Rockfish             | 7,968     | 6,582     | 5,663     | 7,237     | 7,082     | 7,854     | 7,599     | 9,099     | 6,927     | 9,076     |
| Sablefish            | 84,166    | 77,296    | 76,711    | 78,487    | 78,455    | 85,527    | 81,018    | 90,556    | 131,113   | 113,076   |
| Salmon               | 168,093   | 255,000   | 293,562   | 276,513   | 347,625   | 368,218   | 344,655   | 505,693   | 564,788   | 441,284   |
| Walleye pollock      | 203,018   | 271,612   | 306,906   | 329,879   | 297,460   | 323,212   | 270,595   | 282,399   | 362,592   | 343,311   |

**Total Landings and Landings of Key Species/Species Groups (thousands of pounds)**

|                       | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Total Landings</b> | 5,276,714 | 5,306,169 | 5,610,287 | 5,373,085 | 5,253,164 | 4,471,034 | 4,005,498 | 4,275,477 | 5,272,554 | 5,261,421 |
| Finfish & other       | 5,214,835 | 5,247,370 | 5,545,864 | 5,299,194 | 5,177,143 | 4,366,531 | 3,910,859 | 4,190,949 | 5,187,877 | 5,144,866 |
| Shellfish             | 61,879    | 58,799    | 64,423    | 73,891    | 76,021    | 104,503   | 94,639    | 84,528    | 84,677    | 116,555   |
| Atka mackerel         | 99,542    | 108,423   | 129,482   | 130,814   | 126,961   | 127,029   | 156,887   | 145,206   | 112,596   | 103,987   |
| Pacific cod           | 568,660   | 583,747   | 547,849   | 520,955   | 488,496   | 494,429   | 490,568   | 538,201   | 662,976   | 716,725   |
| Crab                  | 56,956    | 52,434    | 57,310    | 69,002    | 70,700    | 99,445    | 89,532    | 79,875    | 80,463    | 111,914   |
| Flatfish              | 290,926   | 270,675   | 341,699   | 383,194   | 423,338   | 599,882   | 506,393   | 564,170   | 649,689   | 647,396   |
| Pacific halibut       | 76,616    | 76,558    | 73,922    | 69,154    | 67,242    | 64,639    | 57,749    | 54,857    | 41,291    | 32,422    |
| Pacific herring       | 68,984    | 70,893    | 85,701    | 79,845    | 67,137    | 83,787    | 86,951    | 108,116   | 98,600    | 75,058    |
| Rockfish              | 26,465    | 23,197    | 22,694    | 23,308    | 24,424    | 25,725    | 24,974    | 28,626    | 25,441    | 31,710    |
| Sablefish             | 35,794    | 39,946    | 37,554    | 33,124    | 32,254    | 30,336    | 27,004    | 25,263    | 27,139    | 29,712    |
| Salmon                | 630,527   | 697,897   | 872,318   | 634,227   | 861,254   | 640,070   | 671,181   | 756,826   | 738,122   | 611,163   |
| Walleye pollock       | 3,361,261 | 3,353,236 | 3,410,065 | 3,400,810 | 3,066,600 | 2,276,144 | 1,866,171 | 1,947,578 | 2,810,787 | 2,872,186 |

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

|                 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------|------|------|------|------|------|------|------|------|------|------|
| Atka mackerel   | 0.03 | 0.10 | 0.12 | 0.12 | 0.11 | 0.15 | 0.17 | 0.19 | 0.21 | 0.15 |
| Pacific cod     | 0.29 | 0.18 | 0.19 | 0.27 | 0.37 | 0.49 | 0.20 | 0.27 | 0.24 | 0.27 |
| Crab            | 2.91 | 2.93 | 2.55 | 1.60 | 2.38 | 2.42 | 2.01 | 2.37 | 3.09 | 2.46 |
| Flatfish        | 0.14 | 0.15 | 0.18 | 0.18 | 0.18 | 0.16 | 0.14 | 0.14 | 0.17 | 0.19 |
| Pacific halibut | 2.17 | 2.20 | 2.30 | 2.79 | 3.23 | 3.23 | 2.33 | 3.65 | 4.97 | 4.47 |
| Pacific herring | 0.13 | 0.20 | 0.16 | 0.09 | 0.22 | 0.27 | 0.34 | 0.21 | 0.12 | 0.26 |
| Rockfish        | 0.30 | 0.28 | 0.25 | 0.31 | 0.29 | 0.31 | 0.30 | 0.32 | 0.27 | 0.29 |
| Sablefish       | 2.35 | 1.94 | 2.04 | 2.37 | 2.43 | 2.82 | 3.00 | 3.58 | 4.83 | 3.81 |
| Salmon          | 0.27 | 0.37 | 0.34 | 0.44 | 0.40 | 0.58 | 0.51 | 0.67 | 0.77 | 0.72 |
| Walleye pollock | 0.06 | 0.08 | 0.09 | 0.10 | 0.10 | 0.14 | 0.15 | 0.15 | 0.13 | 0.12 |

**2012 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)<sup>3</sup>**

|  | Jobs         | Sales          | Income         | Value Added    |
|--|--------------|----------------|----------------|----------------|
| Trip Impacts by Fishing Mode:                                  |              |                |                |                |
| For-Hire   | 2,030        | 211,838        | 97,327         | 144,512        |
| Private Boat   | 1,541        | 203,725        | 59,890         | 103,629        |
| Shore  | 142          | 17,339         | 5,332          | 8,995          |
| Total Durable Equipment Impacts                                | 1,111        | 125,176        | 50,975         | 80,605         |
| <b>Total State Trip and Durable Equipment Economic Impacts</b> | <b>4,824</b> | <b>558,078</b> | <b>213,524</b> | <b>337,741</b> |

**2012 Angler Trip & Durable Expenditures (thousands of dollars)**

| Fishing Mode   | Trip Expenditures |               | Equipment                                   | Durable Expenditures |
|--|-------------------|---------------|---|----------------------|
|  | Non-Residents     | Residents     |   |                      |
|  |                   |               | Fishing Tackle                              | 22,555               |
| For-Hire   | 129,615           | 18,302        | Other Equipment                             | 20,244               |
| Private Boat   | 62,424            | 47,045        | Boat Expenses                               | 78,769               |
| Shore  | 10,250            | 3,709         | Vehicle Expenses                            | 1,803                |
| <i>Total Trip Expenditures</i>                             | <i>202,289</i>    | <i>69,056</i> | Second Home Expenses                        | 2,181                |
|  |                   |               | <i>Total Durable Equipment Expenditures</i> | <i>125,553</i>       |
| <b>Total State Trip and Durable Equipment Expenditures</b> |                   |               |   | <b>396,898</b>       |

**Recreational Anglers by Residential Area (thousands of anglers)**

|                      | 2003       | 2004       | 2005       | 2006       | 2007       | 2008       | 2009       | 2010       | 2011       | 2012       |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Out of State         | 170        | 193        | 207        | 197        | 205        | 190        | 158        | 159        | 161        | 160        |
| In State             | 129        | 130        | 127        | 120        | 127        | 119        | 127        | 122        | 124        | 118        |
| <b>Total Anglers</b> | <b>299</b> | <b>323</b> | <b>334</b> | <b>317</b> | <b>332</b> | <b>309</b> | <b>284</b> | <b>281</b> | <b>286</b> | <b>278</b> |

**Recreational Fishing Effort by Mode (thousands of days)**

|                          | 2003       | 2004         | 2005         | 2006       | 2007         | 2008       | 2009       | 2010       | 2011       | 2012       |
|--------------------------|------------|--------------|--------------|------------|--------------|------------|------------|------------|------------|------------|
| <b>Total Days Fished</b> | <b>868</b> | <b>1,007</b> | <b>1,054</b> | <b>941</b> | <b>1,052</b> | <b>935</b> | <b>914</b> | <b>811</b> | <b>811</b> | <b>808</b> |

**Harvest (H) and Release (R) of Key Species Species Groups (thousands of fish)<sup>1,1</sup>**

|                      |   | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------|---|------|------|------|------|------|------|------|------|------|------|
| Chinook salmon       | H | 96   | 110  | 116  | 117  | 110  | 71   | 89   | 78   | 85   | 63   |
|                      | R | 105  | 124  | 127  | 104  | 110  | 80   | 96   | 66   | 95   | 62   |
| Chum salmon          | H | 23   | 24   | 17   | 14   | 18   | 12   | 22   | 11   | 21   | 11   |
|                      | R | 51   | 61   | 42   | 34   | 34   | 28   | 34   | 19   | 38   | 20   |
| Coho salmon          | H | 537  | 560  | 695  | 395  | 506  | 403  | 418  | 350  | 386  | 263  |
|                      | R | 156  | 193  | 191  | 107  | 122  | 89   | 94   | 74   | 88   | 50   |
| Greenlings (lingcod) | H | 22   | 31   | 38   | 35   | 42   | 37   | 32   | 32   | 33   | 33   |
|                      | R | 44   | 52   | 67   | 53   | 70   | 65   | 46   | 39   | 36   | 36   |
| Pacific halibut      | H | 403  | 483  | 500  | 463  | 585  | 516  | 440  | 398  | 394  | 388  |
|                      | R | 290  | 369  | 380  | 353  | 438  | 359  | 321  | 304  | 311  | 324  |
| Pink salmon          | H | 111  | 132  | 149  | 65   | 133  | 88   | 117  | 82   | 72   | 78   |
|                      | R | 291  | 297  | 343  | 167  | 280  | 151  | 224  | 121  | 135  | 141  |
| Razor clam           | H | 590  | 551  | 451  | 483  | 389  | 593  | 556  | 357  | 436  | NA   |
|                      | R | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | NA   |
| Rockfish             | H | 118  | 180  | 184  | 173  | 198  | 226  | 209  | 224  | 211  | 230  |
|                      | R | 132  | 227  | 199  | 165  | 178  | 171  | 149  | 151  | 122  | 121  |
| Sockeye salmon       | H | 29   | 24   | 27   | 21   | 32   | 29   | 34   | 28   | 31   | 28   |
|                      | R | 14   | 10   | 11   | 7    | 21   | 10   | 10   | 6    | 10   | 8    |

<sup>3</sup>Data reported in this table includes saltwater fishing activities only.<sup>1</sup>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<sup>1</sup>In this table, '(1)' = 0-999 fish.

## Alaska's State Economy (% of national total)

|         | Establishments | Employees      | Annual Payroll<br>(million \$) | Employee<br>Compensation<br>(million \$) | Gross State<br>Product (million \$) | Commercial<br>Location<br>Quotient <sup>1</sup> |
|---------|----------------|----------------|--------------------------------|--|-------------------------------------|---|
| 2003    | 19,176 (0.3%)  | 216,807 (0.2%) | 8,694 (0.2%)                   | 16,048 (0.3%)                            | 30,886 (0.3%)                       | 4.63  |
| 2011    | 20,119 (0.3%)  | 254,996 (0.2%) | 13,394 (0.3%)                  | 24,032 (0.3%)                            | 51,237 (0.3%)                       | ND  |
| %change | 4.92%          | 17.61%         | 54.06%                         | 49.75%                                   | 65.89%                              | NA  |

## Seafood Sales &amp; Processing - Nonemployer Firms (thousands of dollars)

|                                      |          | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  |
|--------------------------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Seafood product<br>prep. & packaging | Firms    | 34    | 26    | 17    | 22    | 33    | 31    | 32    | 28    | 26    |
|                                      | Receipts | 1,864 | 1,731 | 1,315 | 1,055 | 1,837 | 1,455 | 1,699 | 2,482 | 2,882 |
| Seafood sales,<br>retail             | Firms    | 16    | ND    | 11    | 12    | 12    | 13    | ND    | 23    | 15    |
|                                      | Receipts | 625   | ND    | 752   | 649   | 1,358 | 1,431 | ND    | 1,595 | 903   |

## Seafood Sales &amp; Processing - Employer Establishments (thousands of dollars)

|                                      |                | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    |
|--------------------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Seafood product<br>prep. & packaging | Establishments | 109     | 113     | 124     | 113     | 114     | 122     | 121     | 119     | 122     |
|                                      | Employees      | 6,493   | 6,749   | 6,621   | 6,866   | 6,506   | 7,707   | 7,572   | 8,074   | 8,578   |
|                                      | Payroll        | 205,702 | 216,599 | 235,457 | 246,067 | 262,127 | 254,894 | 255,403 | 268,208 | 296,851 |
| Seafood Sales,<br>wholesale          | Establishments | 90      | 93      | 88      | 77      | 68      | 57      | 54      | 52      | 48      |
|                                      | Employees      | 228     | 187     | 177     | 224     | 167     | 143     | ND      | ND      | 159     |
|                                      | Payroll        | 7,103   | 7,561   | 7,928   | 8,509   | 8,528   | 8,389   | 8,445   | 9,141   | 9,985   |
| Seafood sales,<br>retail             | Establishments | 8       | 6       | 11      | 7       | 7       | 9       | 10      | 10      | 10      |
|                                      | Employees      | 21      | ND      | 22      | ND      | ND      | 37      | 44      | ND      | ND      |
|                                      | Payroll        | 1,340   | ND      | 1,175   | ND      | ND      | 1,839   | 1,824   | 1,986   | 2,487   |

## Transport, Support, &amp; Marine Operations - Employer Establishments (thousands of dollars)

|  |                | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   |
|--|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Coastal & Great<br>Lakes freight<br>transportation | Establishments | 30     | 30     | 43     | 46     | 46     | 49     | 50     | 55     | 63     |
|  | Employees      | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     |
|  | Payroll        | ND     | ND     | ND     | ND     | 27,357 | 33,888 | 33,132 | ND     | ND     |
| Deep sea freight<br>transportation                 | Establishments | 5      | 4      | 5      | 5      | 3      | 3      | 3      | 3      | 1      |
|  | Employees      | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     |
|  | Payroll        | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     |
| Deep sea passenger<br>transportation               | Establishments | NA     | 1      | 1      | 1      | 6      | 1      | 1      | NA     | 1      |
|  | Employees      | NA     | ND     | ND     | ND     | ND     | ND     | ND     | NA     | ND     |
|  | Payroll        | NA     | ND     | ND     | ND     | ND     | ND     | ND     | NA     | ND     |
| Marinas  | Establishments | 22     | 22     | 22     | 21     | 13     | 14     | 13     | 14     | 14     |
|  | Employees      | ND     | 62     | 71     | ND     | 48     | 66     | 56     | ND     | ND     |
|  | Payroll        | ND     | 2,367  | 2,612  | ND     | 1,763  | 2,303  | 2,181  | 1,932  | 2,053  |
| Marine cargo<br>handling                           | Establishments | 15     | 13     | 13     | 11     | 17     | 12     | 13     | 13     | 14     |
|  | Employees      | 621    | 488    | 703    | 503    | 677    | ND     | ND     | ND     | ND     |
|  | Payroll        | 20,443 | 21,078 | 20,827 | 22,876 | 35,345 | ND     | ND     | ND     | ND     |
| Navigational<br>services to<br>shipping            | Establishments | 28     | 29     | 32     | 31     | 31     | 25     | 23     | 25     | 22     |
|  | Employees      | 273    | 280    | 318    | ND     | ND     | 296    | 312    | 303    | 321    |
|  | Payroll        | 20,758 | 20,676 | 20,334 | ND     | 25,058 | 23,233 | 25,630 | 27,543 | 27,156 |
| Port & harbor<br>operations                        | Establishments | 2      | 3      | 2      | 2      | 2      | 7      | 8      | 9      | 8      |
|  | Employees      | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     |
|  | Payroll        | ND     | ND     | ND     | ND     | ND     | ND     | ND     | ND     | 1,790  |
| Ship & boat<br>building                            | Establishments | 10     | 14     | 14     | 17     | 16     | 17     | 21     | 22     | 23     |
|  | Employees      | ND     | 286    | ND     | ND     | ND     | ND     | ND     | ND     | ND     |
|  | Payroll        | ND     | 8,815  | ND     | ND     | ND     | ND     | ND     | ND     | ND     |

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which states CFLQs can be compared.

ND- these data are confidential and therefore not available

NA- these data are not available