

# Pacific Region

- California
- Oregon
- Washington



Catcher-processor vessel, Washington  
(photo credit: Leif Anderson)



## MANAGEMENT CONTEXT

The Pacific Region includes California, Oregon and Washington. Federal fisheries in this region are managed by the Pacific Fishery Management Council (PFMC) and NOAA Fisheries under four fishery management plans (FMPs).

### Pacific Region FMPs

1. Coastal pelagic species
2. Pacific coast salmon
1. Pacific coast groundfish
2. West Coast highly migratory species

Four of the stocks or stock complexes covered in these FMPs were listed as overfished in 2014: canary rockfish, Pacific ocean perch, yelloweye rockfish and Pacific bluefin tuna. Two stock complexes were subject to overfishing in 2014: bigeye tuna and Pacific bluefin tuna.

Interesting management techniques are employed in the Pacific Region's fisheries. For example, the Pacific groundfish and salmon fisheries are subject to "weak stock management," where access to the harvestable surplus of healthier stocks is of 10 restricted to protect weaker stocks with which they co-mingle in the ocean. These weaker stocks include seven rebuilding groundfish stocks, salmon (listed under the Endangered Species Act), and other non-listed stocks that constrain the fishery.

Salmon management is further complicated by the need to ensure equitable allocation of harvest among diverse user groups and coordination with other entities that have jurisdiction over other aspects of salmon management. Decades of habitat modification, hatchery practices, harvest, and growing competition for water have affected the viability of salmon stocks and made them more vulnerable to adverse environmental conditions. These conditions include the prolonged drought and adverse ocean conditions experienced in recent years. Low returns of salmon to the Klamath River in 2006, and to the Sacramento River in 2008 and 2009, resulted in unprecedented closures of ocean and in-river fisheries, leading to federal disaster relief for affected entities.

Coastal pelagic species (CPS) are highly variable, environmentally sensitive stocks that provide forage for

marine mammals, birds and fish. These species include Pacific sardine, northern anchovy, Pacific and jack mackerel, and market squid. Of these, Pacific sardine is the most commonly targeted CPS finfish and is managed via an innovative harvest control rule: allowable harvest varies with sea surface temperature. Because the geographic range of sardine tends to expand with abundance, harvest allocation between the California and Pacific Northwest fisheries is an ongoing and dynamic issue. The annual sardine harvest guideline is allocated coast-wide on a seasonal basis. Recent decreases in harvest guideline limits have contributed to the development of an intense derby fishery.

Catch limits for Pacific halibut, a transboundary fish stock, are set in January by the International Pacific Halibut Commission (IPHC). This bilateral commission between the U.S. and Canada determines total allowable catch levels (TACs) for Pacific halibut that will be caught in the U.S. and Canadian exclusive economic zones (EEZs). After catch levels are determined, the PFMC develops a catch-sharing plan for tribal and non-tribal (commercial and recreational) fisheries conducted in the federal waters of California, Oregon and Washington.

The Highly Migratory Species (HMS) FMP includes tunas, billfish and pelagic sharks as managed species. The albacore surface hook-and-line fishery is by far the most economically important commercial HMS fishery, followed by the drift gillnet fishery for swordfish and thresher shark. HMS is also a very important component of the catch for the Pacific Region's recreational commercial passenger fishing vessel fleet and the private recreational boat fleet.

## CATCH SHARE PROGRAMS

Market-based management tools are used by fishery managers to reduce over-capitalization, increase the economic viability of fisheries, and promote individual accountability for harvest and harvesting practices. Limited access privilege programs (LAPPs) and other catch share programs make up a category of such tools. Eco-labels are another market-based management tool that encourages fishermen to adopt harvest practices that are considered sustainable by an organization, such as the Marine Stewardship Council (MSC). The Pacific hake

midwater trawl, Oregon pink shrimp, Oregon Dungeness crab, American Albacore Fishing Association albacore tuna, North Pacific halibut, and West Coast limited entry trawl groundfish fisheries have all received certifications from the MSC.

The Pacific Region has two catch share programs: 1) the Pacific Sablefish Permit Stacking Program; and 2) the Pacific Groundfish Trawl Rationalization Program. The landings revenues for these programs totaled more than \$257 million in 2013. Following is a description of these catch share programs and their performance.

**Pacific Sablefish Permit Stacking Program:** This catch share program was implemented in 2001 and allows vessels to stack multiple vessel permits on a single vessel. The goal of this approach is to improve economic efficiency through rationalization of the fixed gear fleet, increase benefit for fishing communities, promote equity, mitigate reallocation effects of previous harvest regulations, promote safety, and improve product quality and value. Results for this program show that in 2013, the number of active vessels, landings, and inflation-adjusted revenue decreased compared with the Baseline period (average of the 3-year period prior to start date). However, inflation-adjusted revenue per vessel increased during this period.

**Pacific Trawl Rationalization Program:** This catch share program was implemented by the PFMF in January 2011. This Program involves individual fishing quotas (IFQs) for non-whiting groundfish and whiting trawlers, and cooperatives for whiting mothership and catcher processor sectors. The objectives of this program are to provide a mechanism for total catch accounting; provide a viable, profitable and efficient groundfish fishery; promote practices that reduce by-catch and discard mortality, and minimize ecological impacts; increase operational flexibility; minimize adverse effects from the IFQ program on fishing communities and other fisheries; promote measurable economic and employment benefits through the seafood catching, processing, distribution elements and support sectors of the industry; provide quality product for the consumer; and increase safety in the fishery.

The economic performance of the Program has been strong - net revenue per active catcher vessel increased 65 percent relative to the pre-catch share period (2009-2010) for the non-whiting groundfish fishery, and 400 percent for the whiting fishery. Meanwhile, motherships experienced a 62 percent increase and catcher-processors experienced a 7 percent decrease in net revenue. Expanded observer coverage and dockside monitoring, which were implemented coincident to the catch share program, coupled with long-term adherence to catch targets and improved stock assessment models have also contributed, to varying degrees, to improved fishery performance. For example, in the first three years of catch shares, the total catch of rebuilding stocks (of which three-- canary rockfish, widow rockfish and petrale sole-- are now declared rebuilt) was 50 percent lower than the previous three years.

## POLICY UPDATES

In April 2015, after reviewing the best available science and hearing from fishery participants and environmental groups, the PFMF closed the Pacific sardine fishery for the 2015-2016 season. The fishery was scheduled to start on July 1, 2015, but the biomass was estimated to be 97,000 metric tons after reaching a peak of approximately one million metric tons in 2006. Although commercial fishing is closed, the PFMF allowed up to 7,000 tons of sardine to account for small amounts taken as incidental catch in other fisheries, live bait harvest, tribal harvest and research. However, if the allocated amount of incidental harvest is reached, those other fisheries will also be shut down.

In June 2015, the PFMF announced that two important West Coast groundfish stocks—canary rockfish and petrale sole—were rebuilt. These stocks had been subject to strict rebuilding plans that severely constrained West Coast fisheries for more than a decade. The canary rockfish was declared overfished in 2000, and a rebuilding plan was put in place in 2001. Under the rebuilding plan, catch quotas were dramatically reduced and large area closures put in place, and the stock was expected to rebuild by 2057. However, the new 2015 canary rockfish assessment showed that the coast-wide canary stock is already rebuilt. Petrale sole was declared overfished in 2010, and a rebuilding plan was put in place in 2011 to rebuild the stock by 2016. The petrale sole harvest

limit was cut by half; fisheries in which petrale sole could be caught were reduced. Area closures were also implemented. The 2015 stock assessment showed that the rebuilding plan was successful, and the stock had increased over the target level.

## COMMERCIAL FISHERIES

In 2014, commercial fishermen in the Pacific Region landed 1.2 billion pounds of finfish and shellfish, earning \$754 million in landings revenue. Crab (\$199 million) and other shellfish (\$166 million) dominated landings revenue (48%), but made up only 7 percent of Pacific Region landings. These species groups commanded ex-vessel prices of \$3.82 and \$5.83 per pound, respectively. Washington had the highest landings revenue in the region (\$326 million) in 2014, followed by California (\$235 million) and Oregon (\$158 million). California had the highest landings (358 million pounds), followed by Oregon (292 million pounds) and Washington (191 million pounds).

### Key Pacific Region Commercial Species

- Albacore tuna
- Crab
- Flatfish
- Hake
- Other shellfish
- Rockfish
- Sablefish
- Salmon
- Shrimp
- Squid

## Economic Impacts

In this report, the U.S. seafood industry includes the commercial harvest sector, seafood processors and dealers, seafood wholesalers and distributors, importers, and seafood retailers.<sup>1</sup> In 2014, the Pacific Region's seafood industry impacts were largest in California, followed by Washington and Oregon. The seafood industry generated the following sales impacts: \$23 billion in California, \$7.3 billion in Washington and \$1.4 billion in Oregon. Income impacts were \$5 billion in California, \$2 billion in Washington and \$0.5 billion in Oregon. Value added impacts were \$8.3 billion in California, \$3 billion in Washington and \$0.7 billion in Oregon. Employment impacts were 143,000 jobs in California, 63,000 jobs in Washington and 20,000 jobs in Oregon.

The importers sector generated the greatest employment impacts in California (63,000 jobs), followed by the retail sector with 58,000 jobs. In Washington, the

retail sector (23,000 jobs) generated the largest employment impacts, followed by the seafood processors and dealers sector (16,000 jobs). In Oregon, the retail sector (10,000 jobs) generated the largest employment impacts, followed by the commercial harvesters sector (5,600 jobs). The importers sector contributed more to the total value-added impacts than any other single sector in both California and Washington.

## Landings Revenue

Landings revenue in the Pacific Region totaled \$754 million in 2014. This was an 82 percent increase (a 55% increase in real terms after adjusting for inflation) from 2005 levels and a 10 percent decrease from 2013. Totaling \$492 million in 2014, shellfish revenue experienced a 99 percent increase (a 69% increase in real terms) from 2005 to 2014, and experienced an 11 percent decrease from 2013 to 2014. Crab (\$199 million) and other shellfish (\$166 million) had the highest landings revenue in the Pacific Region in 2014. Together, they accounted for 48 percent of total landings revenue but only 7 percent of total landings in the Pacific Region.

Between 2005 and 2014, the landings revenue for crab increased 105 percent (74% in real terms) and increased 54 percent (31% in real terms) for other shellfish. From 2005 to 2014, shrimp experienced the largest increase in landings revenue (289% nominal, 230% real). Oregon accounted for almost half (48%) of the region's shrimp landings revenue in 2014, increasing 21 percent from 2013 levels and 325 percent from 2005 levels. The Oregon pink shrimp fishery was certified as a sustainable fishery by the MSC in 2007 and recertified in 2013 as sustainable. The Washington State pink shrimp fishery was certified as sustainable for the first time in 2013.

Landings revenue for squid also increased substantially (130% nominal, 95% real) largely due to favorable ocean conditions and high demand in foreign markets. Only flatfish (-2%) experienced a decline in landings revenue from 2005 to 2014. Between 2013 and 2014, only shrimp (43%) and sablefish (24%) experienced an increase in revenue. Crab (-20%), albacore tuna (-19%) and other shellfish (-16%) experienced the largest decreases in landings revenue during this peri-

<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)).



od. Washington had the highest finfish landings revenue (\$88 million), followed by Oregon (\$78 million) and California (\$61 million). Shellfish landings revenue was also dominated by Washington (\$238 million), followed by California (\$174 million) and Oregon (\$80 million).

## Landings

Fishermen in the Pacific Region landed 1.2 billion pounds of finfish and shellfish in 2014. This was a 7 percent decrease from 2005 and a 5 percent year-over-year decrease from 2013. Finfish landings contributed 68 percent of total landings in the Pacific Region (816 million pounds) in 2014. Finfish landed volume decreased 24 percent over the 10-year period (2005 to 2014), and decreased 4 percent from 2013 to 2014. Shellfish landings increased 69 percent from 2005 to 2014, but declined 6 percent from 2013 to 2014 to 390 million pounds. Hake (Pacific whiting) at 575 million pounds, and squid at 228 million pounds were the species or species groups with the largest landings volume in the Pacific region in 2014.

Shrimp landings more than tripled (257%) and squid landings almost doubled (85%) from 2005 to 2014. Sablefish (-30%), flatfish (-24%), and crab (-16%) had the largest landings declines during this period. From 2013 to 2014, only hake, shrimp, and sablefish landings increased, up 14 percent, 30 percent, and 5 percent respectively. Salmon landings declined 35 percent from 2013 to 2014, largely due to the decline in pink salmon landings, which tend to have weak runs in even years. Landings of the high-valued chinook and coho salmon both increased in 2014 compared to 2013, reflecting projected increases in abundance. Crab landings (-40%) and other shellfish landings (-29%) also declined significantly during this period.

## Prices

The ex-vessel prices for the Pacific Region's key species and species groups in 2014 were higher than their 10-year average for nine of the 10 key species (in real terms, prices increased for eight of the 10 key species). Ex-vessel prices for crab (143%, 106% in real terms), followed by hake (100%, 67% in real terms) and sablefish (70%, 45% in real terms) experienced the biggest increases between 2005 and 2014. Compared with the ex-vessel prices in 2013, prices for the Pacific Region's salmon (up

41%) and crab (up 34%) experienced the largest increases. Only prices for hake and albacore tuna (down 17% and 16%, respectively) declined from 2013 to 2014.

### Commercial Fisheries Facts

#### Landings revenue

- On average between 2005 and 2014, the key species or species groups accounted for 93 percent of total revenue, generating \$548 million in the Pacific Region.
- On average, landings revenue in the Pacific region was split between shellfish (63%) and finfish (37%).
- Crab had the highest annual average landings revenue in the region from 2005 to 2014 at \$153 million.

#### Landings

- Key species or species groups contributed an average of 80 percent annually to total landings between 2005 and 2014, or 903 million pounds.
- On average, landings volume in the Pacific region was split between shellfish (28%) and finfish (72%).
- Hake (whiting), contributed the most to landings in the region, averaging 465 million pounds from 2005 to 2014.

#### Prices

- Other shellfish had the highest average annual ex-vessel price per pound (\$4.80) between 2005 to 2014, followed by crab (\$2.50) and sablefish (\$2.19).
- Hake (whiting) had the lowest average annual ex-vessel price per pound (\$0.09) during the period, followed by squid (\$0.28) and flatfish (\$0.45).

## RECREATIONAL FISHERIES

In 2014, almost 1.5 million recreational anglers took 6.4 million fishing trips in the Pacific Region. About 69 percent of these anglers were residents of a regional coastal county. Of the total saltwater fishing trips taken, 53 percent were in the shore sector and another 30 percent were in the private boat sector. The most frequently caught species or species groups in the Pacific Region included rockfishes & scorpionfishes; surfperches; and barracuda, bass & bonito.

## Economic Impacts and Expenditures

The contribution of recreational fishing activities in the Pacific Region<sup>2</sup> are reported in terms of economic impacts at the state level (employment, sales, income

and value-added impacts) and expenditures on fishing trips and durable equipment at the regional level. Employment impacts in California were the highest in the Region, with 22,737 full- and part-time employment impacts generated by recreational fishing activities in the state. Washington (6,180 jobs) and Oregon (3,333 jobs) followed in terms of employment impacts generated by recreational fishing activities.

### Recreational Fishing Facts

#### Participation

- An average of 1.6 million anglers fished in the Pacific Region annually from 2005 to 2014.
- Residents of coastal counties within the Pacific Region accounted for an average of 71 percent of total anglers annually during the 10-year period.

#### Fishing trips

- In the Pacific Region, an average of 6.5 million fishing trips were taken annually from 2005 to 2014.
- Private or rental boat and shore-based fishing trips accounted for an annual average of 1.7 million and 4.1 million fishing trips, respectively, from 2005 to 2014.

#### Harvest and release

- Rockfish and scorpionfish was the most commonly caught key species or species group, averaging 2.5 million fish during the 10-year period.
- Of the 10 commonly caught key species or species groups, six were harvested more often than released during this period.

In addition to employment impacts, the contribution of recreational fishing activities to the Pacific Region's economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value-added impacts). In 2014, sales impacts were highest in California (\$2.7 billion), followed by Washington (\$690 million) and Oregon (\$298 million).

The total saltwater fishing trip and durable equipment expenditures were \$3 billion across the Pacific Region in 2014. Approximately 77 percent of these expenditures were durable equipment purchases. The greatest durable goods expenditures were for boat expenses (\$1.1 billion), followed by fishing tackle (\$546.3 million) and vehicle expenses (\$315.7 million). Fishing trip-related

expenditures by the Pacific Region's non-residents totaled \$65.4 million, of which the greatest portion can be attributed to trips in the for-hire sector (\$48.9 million). Residents of the Pacific Region spent \$627.8 million on trip-related expenses, with the greatest of these expenses related to the private boat sector (\$220.2 million).

### Key Pacific Region Recreational Species

- |                              |                                 |
|------------------------------|---------------------------------|
| • Albacore and other tunas   | • Mackerel                      |
| • Barracuda, bass and bonito | • Rockfishes and scorpionfishes |
| • Croakers                   | • Salmon                        |
| • Flatfishes                 | • Sculpins                      |
| • Greenlings                 | • Surfperches                   |

### Participation

There were 1.5 million recreational anglers who fished in the Pacific Region in 2014. This was a 3 percent increase from 2005 (1.4 million anglers). These anglers were Pacific Region residents from either a coastal (1 million anglers) or non-coastal county (459,000 anglers). Approximately 69 percent of total anglers in 2014 were residents of a coastal county. Coastal county angler participation in 2014 remained unchanged from 2005 (1 million anglers) and experienced an 11 percent decrease between 2013 and 2014. Non-coastal county angler participation experienced a 12 percent increase from 2005 (409,000 anglers) and experienced a 10 percent decrease from 2013 (511,000 anglers).

### Fishing Trips

Recreational fishermen took 6.4 million fishing trips in the Pacific Region in 2014. This remained unchanged from 2005 and was a 14 percent decrease from 2013. Of the total trips taken in the Pacific Region in 2014, 53 percent of the trips were from the shore sector and 30 percent of the trips were from the private boat sector.

### Harvest and Release

The Pacific Region's species and species groups caught most frequently in 2014 were rockfishes & scorpionfishes (4.5 million fish), surfperches (2.4 million fish) and barracuda, bass & bonito (2.1 million fish). Between 2005 and 2014, five of the Pacific Region's key species or species groups showed decreases in catch totals, with the largest decreases occurring among croakers

<sup>2</sup> 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>).



(-73%), salmon (-55%) and mackerel (-40%). Large increases in the number of fish caught between 2005 and 2014 were observed in albacore & other tunas (590%), flatfishes (25%), and greenlings (15%).

## MARINE ECONOMY

Across all sectors of the economy in California, Oregon and Washington, about 17 million full- and part-time employees were employed by about 1.2 million establishments in 2013.<sup>3</sup> Annual payroll totaled \$934 billion. Total employee compensation in the Pacific Region totaled \$1.5 trillion, and the combined gross state product of all states totaled about \$2.8 trillion.<sup>4</sup>

The Commercial Fishing Location Quotient (CFLQ) provides a measure of the proportional size of this sector in a state's economy relative to the size of the commercial fishing sector in the national economy.<sup>5</sup> 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 national CFLQ is 1. If a state CFLQ is less than 1, then less commercial fishing occurs in this state than the national average. If a state CFLQ is greater than 1, then more commercial fishing occurs in this state than the national average.

In 2013, the CFLQ for Washington was the highest in the region at 12.13. Washington's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 12.13 times higher than the level of employment in these industries nationwide. The 2013 CFLQ in Oregon was second highest in the region at 4.07.

## Seafood Sales and Processing

From 2005 to 2013, the number of non-employer firms (businesses that have no paid employees and are subject to federal income tax) engaged in seafood product preparation and packaging in the Pacific Region increased 39 percent to 210 firms. The greatest number of these non-employer firms was located in California (157). Annual receipts decreased 11 percent to about \$14 million in 2013 (a 32% decrease in real terms).

From 2005 to 2013, employer establishments en-

gaged in seafood product preparation and packaging decreased 10 percent, to 149 firms. The biggest number of Pacific Region employer firms in this sector was located in Washington (86). The number of employees decreased 5 percent to 9,002. Annual payroll increased 17 percent to about \$410 million in 2013 (a 10% decrease in real terms).

Employer establishments in the wholesale seafood sales sector increased 12 percent from 2005 to 2013, to 455. The largest number of wholesaling establishments was located in California (320). The number of employees decreased 3 percent to 4,859. Annual payroll increased 35 percent to about \$239 million in 2013 (a 4% increase in real terms).

The number of non-employer firms in the retail seafood sector in the Pacific Region increased 27 percent to 259 firms in 2013. The greatest number of these non-employer firms was located in California (218). Annual receipts increased 10 percent to about \$22 million in 2013 (a 16% decrease in real terms). Employer establishments engaged in seafood retail decreased 16 percent from 2005 to 2013, to 210 firms. The biggest number of Pacific Region employer firms in this sector was located in California (155). The number of employees increased 3 percent to 1,532. Annual payroll increased 27 percent to about \$40 million in 2013 (a 3% decrease in real terms).

## Transport, Support and Marine Operations

The size of the Transport, Support and Marine Operations sectors in the Pacific Region is difficult to assess because much of the state-level data is suppressed for confidentiality purposes. It is clear, however, that these sectors play an important role in the regional economy. For example, there were 394 establishments classified as marinas, employing 2,832 workers and spending \$95 million on payroll in 2013 in Washington, Oregon, and California combined. The Ship and Boat Building Sector consisted of 283 establishments, employing 19,444 workers and contributing \$891 million in payroll across all three states in the region.

<sup>3</sup> Unless otherwise stated, data is from the U.S. Census Bureau, <http://censtats.census.gov/> (accessed September 15, 2014).

<sup>4</sup> 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](http://www.bea.gov/iTable/index_nipa.cfm) (accessed September 15, 2014).

<sup>5</sup> U.S. Bureau of Labor Statistics, "Location Quotient Calculator," [http://data.bls.gov/location\\_quotient/](http://data.bls.gov/location_quotient/) (accessed September 15, 2014).





# Tables | Pacific Region



**2014 Economic Impacts of the Pacific Seafood Industry (thousands of dollars)**

	Landings Revenue	With Imports				Without Imports			
		#Jobs	Sales	Income	Value Added	#Jobs	Sales	Income	Value Added
California	234,780	143,440	23,195,894	5,017,023	8,305,666	18,178	1,332,882	500,573	688,257
Oregon	157,912	20,051	1,404,355	469,255	665,609	16,619	852,810	356,155	474,845
Washington	326,248	63,382	7,330,457	2,015,266	3,041,830	27,467	1,764,743	730,773	988,672

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Revenue	414,584	471,788	459,772	500,447	501,938	566,579	729,785	674,465	833,790	754,081
Finfish & Other	166,922	176,425	176,104	215,784	168,495	202,527	260,625	245,668	278,569	262,294
Shellfish	247,662	295,363	283,668	284,663	333,442	364,052	469,160	428,798	555,222	491,787
<b>Key Species</b>										
Albacore tuna	20,574	23,767	21,612	28,845	27,541	28,780	43,347	45,827	41,930	33,819
Crab	97,127	143,758	121,136	107,107	123,865	132,843	182,085	176,880	249,569	198,694
Flatfish	13,816	12,974	14,462	15,738	14,155	10,511	11,225	11,636	15,479	13,570
Hake (whiting)	29,139	34,425	32,603	58,492	14,104	27,316	52,869	47,054	61,321	58,630
Other shellfish	107,438	116,161	120,569	129,947	142,348	142,227	181,122	150,197	196,121	165,501
Rockfish	6,559	6,848	7,541	9,257	8,974	9,226	9,446	9,421	9,871	9,810
Sablefish	20,366	22,991	20,984	27,279	34,481	35,977	44,873	28,108	19,574	24,272
Salmon	37,188	34,306	33,865	26,992	24,986	48,986	53,456	47,542	76,993	70,431
Shrimp	15,706	12,433	17,298	25,132	16,594	21,941	40,638	40,326	42,614	61,041
Squid	31,516	26,998	29,169	26,585	56,928	71,173	66,557	63,894	73,720	72,412

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Landings	1,301,649	1,169,906	1,109,222	1,091,673	899,043	1,065,499	1,176,780	1,070,065	1,264,760	1,205,691
Finfish & Other	1,070,529	935,523	902,887	906,773	582,120	650,822	756,733	719,517	848,991	815,882
Shellfish	231,120	234,383	206,335	184,900	316,923	414,677	420,047	350,548	415,770	389,809
<b>Key Species</b>										
Albacore tuna	19,649	28,117	25,483	24,507	27,055	25,477	24,284	30,638	28,471	27,596
Crab	61,849	85,301	51,888	45,075	59,158	61,668	66,518	52,860	87,154	52,055
Flatfish	31,495	27,689	33,502	37,409	40,599	33,281	25,557	24,439	28,778	23,844
Hake (whiting)	569,273	558,078	454,533	531,277	253,053	355,216	496,363	347,171	505,614	574,921
Other shellfish	30,907	30,611	29,543	28,557	30,733	28,166	29,318	27,245	39,779	28,407
Rockfish	7,406	6,633	7,447	9,469	10,458	11,038	9,910	10,406	10,794	10,719
Sablefish	13,742	13,718	11,630	12,978	15,822	15,055	14,139	11,580	9,156	9,622
Salmon	27,249	29,172	24,600	19,040	33,742	30,693	41,799	24,307	56,553	36,666
Shrimp	26,069	20,290	26,497	35,799	33,456	46,191	66,686	66,319	71,505	93,098
Squid	123,090	108,561	109,464	85,200	205,643	288,678	267,983	214,988	230,365	227,979

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Albacore tuna	1.05	0.85	0.85	1.18	1.02	1.13	1.78	1.50	1.47	1.23
Crab	1.57	1.69	2.33	2.38	2.09	2.15	2.74	3.35	2.86	3.82
Flatfish	0.44	0.47	0.43	0.42	0.35	0.32	0.44	0.48	0.54	0.57
Hake (whiting)	0.05	0.06	0.07	0.11	0.06	0.08	0.11	0.14	0.12	0.10
Other shellfish	3.48	3.79	4.08	4.55	4.63	5.05	6.18	5.51	4.93	5.83
Rockfish	0.89	1.03	1.01	0.98	0.86	0.84	0.95	0.91	0.91	0.92
Sablefish	1.48	1.68	1.80	2.10	2.18	2.39	3.17	2.43	2.14	2.52
Salmon	1.36	1.18	1.38	1.42	0.74	1.60	1.28	1.96	1.36	1.92
Shrimp	0.60	0.61	0.65	0.70	0.50	0.48	0.61	0.61	0.60	0.66
Squid	0.26	0.25	0.27	0.31	0.28	0.25	0.25	0.30	0.32	0.32



**2014 Economic Impacts of the Pacific Recreational Fishing Expenditures (thousands of dollars, trips)**

	<b>Trips</b>	<b>#Jobs</b>	<b>Sales</b>	<b>Income</b>	<b>Value Added</b>
California	4,401	22,737	2,657,497	1,139,897	1,777,155
Oregon	731	3,333	297,993	143,382	203,335
Washington	1,300	6,180	690,425	287,917	477,561

**2014 Angler Trip & Durable Goods Expenditures (thousands of dollars)**

<b>Fishing Mode</b>	<b>Trip Expenditures</b>		<b>Equipment</b>	<b>Durable Goods Expenditures</b>
	Non-residents	Residents	Fishing Tackle	546,312
For-Hire	48,882	207,820	Other Equipment	274,943
Private Boat	10,603	220,241	Boat Expenses	1,121,769
Shore	5,947	199,784	Vehicle Expenses	315,711
Total	65,431	627,846	Second Home Expenses	4,116
			Total Durable Expenditures	2,262,848
Total State Trip and Durable Goods Expenditures				2,956,125

**Recreational Anglers by Residential Area (thousands of anglers)<sup>1</sup>**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Coastal	1,028	1,257	1,184	1,065	1,136	1,047	1,069	1,181	1,151	1,027
Non-Coastal	409	481	379	385	638	384	390	468	511	459
Out-of-State	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Anglers	1,437	1,738	1,563	1,450	1,774	1,431	1,459	1,649	1,662	1,486

**Recreational Fishing Effort by Mode (thousands of angler trips)**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
For-Hire	624	635	605	514	492	455	654	647	725	1,082
Private	1,849	1,761	1,828	1,421	1,471	1,432	1,659	1,806	1,912	1,935
Shore	3,962	4,548	3,818	3,846	4,345	3,739	3,792	4,973	4,859	3,415
Total Trips	6,435	6,944	6,251	5,781	6,308	5,626	6,105	7,426	7,496	6,432

**Harvest (H) & Release (R) of Key Species/Species Groups (thousands of fish)<sup>2</sup>**

		<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Albacore & other tunas	H	18	33	47	27	37	52	24	90	74	112
	R	2	3	7	0	13	2	6	36	53	26
Barracuda, bass & bonito	H	1015	668	537	434	412	373	435	371	215	453
	R	2011	1660	1407	1093	1211	991	738	775	1112	1658
Croakers	H	572	456	427	321	427	173	128	256	173	136
	R	618	553	631	272	362	340	98	231	257	181
Flatfishes	H	560	325	260	344	329	417	641	561	713	994
	R	513	520	338	361	297	277	222	296	459	350
Greenlings	H	268	234	192	169	188	158	227	272	316	350
	R	283	209	153	141	194	197	292	306	283	284
Mackerel	H	1023	1158	823	940	753	479	590	438	246	483
	R	1872	3287	1209	1765	1267	1272	1050	806	656	1260
Rockfishes & scorpionfishes	H	3032	2173	1934	1534	1628	1821	2583	3039	3472	3588
	R	1091	691	475	418	638	520	505	861	1002	949
Salmon <sup>3</sup>	H	432	223	450	104	808	162	384	467	549	193
	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sculpins	H	72	55	49	60	59	53	91	68	70	60
	R	238	222	208	228	200	198	238	229	298	199
Surfperches	H	945	1164	861	832	752	638	1017	1144	1034	1125
	R	1242	1675	861	817	706	452	931	1279	1006	1281

<sup>1</sup> NA = data are not available because out-of-state resident information is collected for individual states, but whether an angler is a resident of a region is not specified.

<sup>2</sup> In this table, '0' = 0-999 fish.

<sup>3</sup> Salmon harvest estimates exclude release mortality.



# Tables | California





## California | Commercial Fisheries

## 2014 Economic Impacts of the California Seafood Industry (thousands of dollars)

	With Imports				Without Imports			
	#Jobs	Sales	Income	Value Added	#Jobs	Sales	Income	Value Added
Total Impacts	143,440	23,195,894	5,017,023	8,305,666	18,178	1,332,882	500,573	688,257
Commercial Harvesters	4,996	471,324	160,798	235,741	4,996	471,324	160,798	235,741
Seafood Processors & Dealers	5,364	548,555	203,409	269,904	2,082	212,945	78,962	104,774
Importers	62,820	17,280,401	2,769,514	5,267,823	-	-	-	-
Seafood Wholesalers & Distributors	12,643	1,782,354	578,107	807,655	711	100,257	32,518	45,430
Retail	57,617	3,113,261	1,305,196	1,724,543	10,388	548,356	228,295	302,311

Total Landings Revenue & Landings Revenue of Key Species/Species Groups (thousands of dollars)<sup>1</sup>

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Revenue	116,084	129,907	127,580	120,861	159,253	187,263	222,160	243,963	255,444	234,780
Finfish & Other	46,640	43,164	50,363	46,968	46,682	44,291	55,805	55,245	65,075	60,746
Shellfish	69,444	86,743	77,217	73,893	112,571	142,971	166,355	188,718	190,370	174,034
<b>Key Species</b>										
Crab	19,653	46,483	28,626	24,227	32,508	43,016	53,762	88,207	91,851	70,258
Pacific sardine	3,150	5,100	8,218	7,575	5,544	4,366	4,398	4,249	1,510	2,002
Rockfish	4,145	4,630	4,924	5,781	5,330	5,453	5,644	5,170	5,748	5,595
Sablefish	4,295	4,892	4,873	6,224	9,765	11,491	15,121	8,988	7,047	8,942
Salmon	12,804	5,261	7,835	6	NA	1,215	5,096	12,850	22,957	12,124
Sea urchins	6,156	5,145	5,400	6,550	7,806	7,413	8,102	8,320	9,832	9,058
Shrimp	4,338	4,213	4,064	5,696	5,462	4,951	8,598	8,492	9,520	11,778
Spiny lobster	6,039	8,111	6,916	8,008	7,934	11,386	12,972	13,749	13,842	18,239
Squid	31,467	26,959	29,131	26,477	56,877	71,165	66,546	63,886	73,701	72,383
Swordfish	1,896	2,695	3,127	2,365	1,932	2,203	3,350	2,090	2,699	2,920

Total Landings & Landings of Key Species/Species Groups (thousands of pounds)<sup>1</sup>

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Landings	442,353	341,661	384,826	323,884	376,053	439,440	409,837	353,875	363,798	358,451
Finfish & Other	301,993	203,107	258,625	223,912	147,934	120,103	108,131	101,789	89,744	98,674
Shellfish	140,360	138,554	126,200	99,972	228,120	319,336	301,706	252,086	274,054	259,778
<b>Key Species</b>										
Crab	12,028	27,391	12,393	9,845	16,660	23,352	22,206	27,589	33,094	20,826
Pacific sardine	76,324	102,683	178,480	126,945	82,842	73,814	60,993	50,660	15,636	17,106
Rockfish	3,181	3,252	3,136	3,933	3,984	3,949	3,450	3,457	3,862	3,553
Sablefish	3,645	3,617	3,240	3,507	5,089	5,501	5,646	3,916	3,291	3,959
Salmon	4,962	1,184	1,743	1	NA	255	1,133	2,862	4,337	2,558
Sea urchins	11,304	10,664	11,131	10,283	12,205	11,230	11,465	11,443	12,945	11,834
Shrimp	2,944	1,197	2,015	3,011	3,596	4,522	8,217	7,255	9,712	9,872
Spiny lobster	761	886	663	741	706	716	751	876	764	952
Squid	122,887	108,410	109,150	84,071	205,278	288,497	267,890	214,867	230,061	227,781
Swordfish	653	1,187	1,210	1,168	898	815	1,365	887	1,174	1,191

Average Annual Price of Key Species/Species Groups (dollars per pound)<sup>1</sup>

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Crab	1.63	1.70	2.31	2.46	1.95	1.84	2.42	3.20	2.78	3.37
Pacific sardine	0.04	0.05	0.05	0.06	0.07	0.06	0.07	0.08	0.10	0.12
Rockfish	1.30	1.42	1.57	1.47	1.34	1.38	1.64	1.50	1.49	1.57
Sablefish	1.18	1.35	1.50	1.77	1.92	2.09	2.68	2.29	2.14	2.26
Salmon	2.58	4.44	4.50	4.16	NA	4.76	4.50	4.49	5.29	4.74
Sea urchins	0.54	0.48	0.49	0.64	0.64	0.66	0.71	0.73	0.76	0.77
Shrimp	1.47	3.52	2.02	1.89	1.52	1.09	1.05	1.17	0.98	1.19
Spiny lobster	7.93	9.15	10.44	10.80	11.24	15.91	17.27	15.69	18.11	19.16
Squid	0.26	0.25	0.27	0.31	0.28	0.25	0.25	0.30	0.32	0.32
Swordfish	2.90	2.27	2.58	2.03	2.15	2.70	2.46	2.36	2.30	2.45

<sup>1</sup> NA = these data are confidential and therefore not disclosable.

**2014 Economic Impacts of California Recreational Fishing Expenditures (thousands of dollars)**

		#Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode	For-Hire	3,158	399,310	176,688	248,046
	Private Boat	891	140,151	48,872	83,640
	Shore	1,743	244,352	86,110	143,229
Total Durable Expenditures		16,945	1,873,684	828,227	1,302,240
Total State Economic Impacts		22,737	2,657,497	1,139,897	1,777,155

**2014 Angler Trip & Durable Goods Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Goods Expenditures
	Non-Residents	Residents	Fishing Tackle	429,591
For-Hire	43,192	170,457	Other Equipment	213,697
Private Boat	5,058	92,881	Boat Expenses	682,634
Shore	4,088	168,477	Vehicle Expenses	218,172
Total	52,337	431,815	Second Home Expenses	0
Total Durable Expenditures				1,544,093
Total State Trip and Durable Goods Expenditures				2,028,245

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Coastal	740	991	878	819	888	803	714	921	873	705
Non-Coastal	263	335	226	246	490	241	238	316	352	299
Out-of-State	79	109	65	83	71	69	93	86	95	132
Total Anglers	1,082	1,435	1,169	1,148	1,449	1,113	1,045	1,323	1,320	1,136

**Recreational Fishing Effort by Mode (thousands of angler trips)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
For-Hire	504	522	489	424	385	357	560	544	609	929
Private	902	896	768	640	676	655	682	799	797	803
Shore	3,216	3,802	3,072	3,100	3,599	2,993	3,046	4,227	4,113	2,669
Total Trips	4,622	5,220	4,329	4,164	4,660	4,005	4,288	5,570	5,519	4,401

**Harvest (H) & Release (R) of Key Species/Species Groups (thousands of fish)<sup>1,4</sup>**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Flatfishes	H	478	241	187	276	258	353	575	492	642	924
	R	465	471	292	313	241	231	176	249	411	303
Rockfishes & scorpionfishes	H	2,725	1,891	1,674	1,318	1,383	1,613	2,348	2,780	3,197	3,284
	R	1,058	668	456	402	605	494	483	839	977	919
Greenlings	H	125	104	69	48	64	38	88	118	144	194
	R	179	113	67	53	83	96	178	200	180	196
Salmon <sup>2</sup>	H	144	98	48	0	1	15	50	123	114	75
	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sculpins	H	39	25	19	29	27	21	58	37	40	32
	R	87	74	58	78	50	46	86	77	144	48
Surfperches	H	694	913	610	581	501	387	766	892	782	873
	R	1,083	1,516	702	658	546	292	771	1,119	846	1,121
Albacore & other tunas	H	6	9	22	5	13	20	8	39	19	37
	R	2	3	7	0	13	2	6	36	36	26
Barracuda, bass & bonito <sup>3</sup>	H	1,015	668	537	434	412	373	435	371	215	453
	R	2,011	1,660	1,407	1,093	1,211	991	738	775	1,112	1,658
Mackerel	H	1,023	1,158	823	940	753	479	590	438	246	483
	R	1,872	3,287	1,209	1,765	1,267	1,272	1,050	806	656	1,260
Croakers	H	572	456	427	321	427	173	128	256	173	136
	R	618	553	631	272	362	340	98	231	257	181

<sup>1</sup> In this table, '0' = 0-999 fish and '1' = 1,000-1,499 thousand fish.<sup>2</sup> Salmon harvest estimates exclude release mortality.<sup>3</sup> This species may not be equivalent to species with similar names listed in the commercial tables.<sup>4</sup> NA = not available.

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

	#Establishments	#Employees	Annual Payroll (\$ billions)	Employee Compensation (\$ billions)	Gross State Product (\$ billions)	Commercial Fishing Location Quotient <sup>1</sup>
2005	860,866 (11.5%)	13,382,470 (11.5%)	588.45 (13.1%)	930.65 (13.1%)	1,760.51 (13.5%)	0.73
2013	874,243 (11.7%)	13,401,863 (11.3%)	742.52 (13.2%)	1,160.08 (13.1%)	2,212.99 (13.3%)	0.6
%Change	1.5	0.1	20.7	19.8	20.4	-17.8

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

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Seafood product prep. & packaging	Firms	88	91	121	139	159	184	187	151	157
	Receipts	10,207	8,298	10,842	11,460	10,852	9,695	9,788	9,283	9,866
Seafood sales, retail	Firms	166	163	222	210	202	203	209	236	218
	Receipts	16,892	19,875	19,703	19,892	17,095	19,021	18,006	18,238	18,581

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

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Seafood product prep. & packaging	Establishments	48	47	49	45	47	48	48	41	44
	Employees	2,963	2,592	2,229	2,024	2,167	1,820	1,842	1,668	1,871
	Payroll	92,642	78,065	75,886	65,215	69,529	62,480	60,411	52,977	57,603
Seafood sales, wholesale	Establishments	258	252	300	278	289	314	404	275	320
	Employees	3,925	4,063	4,429	3,321	3,183	3,223	3,505	3,441	3,671
	Payroll	134,576	144,758	159,672	132,139	128,813	137,810	149,302	173,959	181,698
Seafood sales, retail	Establishments	180	184	182	161	153	158	157	149	155
	Employees	999	1,031	1,004	932	976	985	1,088	1,043	1,119
	Payroll	18,832	19,900	21,224	20,585	21,785	22,718	25,168	24,221	26,702

Transport, Support & Marine Operations - Employer Establishments (thousands of dollars)<sup>2</sup>

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Coastal & Great Lakes freight transportation	Establishments	26	22	29	28	30	25	21	22	24
	Employees	1,346	ds	ds	ds	ds	554	395	ds	ds
	Payroll	129,262	ds	ds	ds	ds	30,431	24,708	ds	ds
Deep sea freight transportation	Establishments	54	54	51	43	41	54	51	45	34
	Employees	ds	957	1,643	ds	ds	2,562	2,464	2,431	2,073
	Payroll	ds	84,199	116,628	ds	ds	236,235	256,962	236,423	218,054
Deep sea passenger transportation	Establishments	15	16	13	5	5	3	2	2	4
	Employees	ds	1,552	ds	ds	ds	ds	ds	ds	ds
	Payroll	ds	72,119	ds	ds	ds	ds	ds	ds	ds
Marinas	Establishments	263	268	276	277	276	270	269	251	250
	Employees	2,426	2,457	2,680	2,652	2,514	2,390	2,401	2,237	2,199
	Payroll	71,318	74,778	80,216	85,315	78,890	80,631	82,958	71,777	72,737
Marine cargo handling	Establishments	54	52	56	61	62	63	71	38	64
	Employees	19,303	20,975	22,395	22,086	17,428	18,449	18,812	18,759	ds
	Payroll	1,273,698	1,448,623	1,484,308	1,453,281	1,211,572	1,273,268	1,333,805	1,351,874	ds
Navigational services to shipping	Establishments	37	36	39	40	39	41	45	35	36
	Employees	ds	817	858	815	804	765	760	800	805
	Payroll	ds	63,893	63,610	65,225	61,720	58,899	62,065	61,166	67,665
Port & harbor operations	Establishments	20	20	18	17	19	21	19	59	31
	Employees	ds	582	443	256	345	435	508	ds	651
	Payroll	ds	32,523	30,001	23,316	26,889	37,560	41,688	ds	52,401
Ship & boat building	Establishments	141	132	136	136	123	117	108	120	113
	Employees	10,132	9,801	9,250	11,630	10,483	9,720	9,165	12,681	12,651
	Payroll	410,446	453,255	433,846	477,300	460,239	448,338	434,449	544,819	537,438

<sup>1</sup> 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.

<sup>2</sup> ds = these data are suppressed.

# Tables | Oregon





**2014 Economic Impacts of the Oregon Seafood Industry (thousands of dollars)**

	With Imports				Without Imports			
	#Jobs	Sales	Income	Value Added	#Jobs	Sales	Income	Value Added
Total Impacts	20,051	1,404,355	469,255	665,609	16,619	852,810	356,155	474,845
Commercial Harvesters	5,616	295,216	125,258	173,485	5,616	295,216	125,258	173,485
Seafood Processors & Dealers	1,846	156,388	60,062	78,475	1,695	143,565	55,138	72,041
Importers	1,629	448,198	71,832	136,630	-	-	-	-
Seafood Wholesalers & Distributors	750	89,526	30,370	40,734	462	55,134	18,703	25,086
Retail	10,208	415,027	181,732	236,284	8,846	358,895	157,056	204,233

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Revenue	88,196	106,093	97,298	103,042	106,959	106,378	148,354	128,222	179,215	157,912
Finfish & Other	53,192	46,326	47,589	56,912	52,749	58,730	76,718	72,327	81,445	78,247
Shellfish	35,005	59,767	49,709	46,130	54,210	47,648	71,636	55,895	97,770	79,665
<b>Key Species</b>										
Albacore tuna	8,815	8,067	9,468	10,666	10,191	12,425	18,766	15,168	16,085	11,028
Crab	26,603	53,810	38,208	29,168	42,413	32,757	44,696	29,189	71,208	47,991
Flatfish	7,281	7,547	7,930	9,163	8,468	6,861	6,780	7,315	9,854	8,651
Hake (whiting)	7,107	7,974	6,501	6,830	3,783	5,414	16,518	14,611	20,405	18,274
Oysters	1,232	1,163	1,847	2,748	4,506	3,317	1,869	1,661	1,798	1,774
Pacific sardine	6,199	3,743	4,551	5,665	5,291	5,252	3,192	8,979	6,299	3,522
Rockfish	1,387	1,564	2,002	2,610	2,500	2,520	2,473	2,661	3,023	3,245
Sablefish	8,657	9,787	9,494	13,737	15,919	15,069	17,351	11,530	7,595	8,076
Salmon	10,437	4,940	4,647	4,166	3,546	7,698	6,737	6,950	12,422	20,131
Shrimp	6,901	4,494	9,365	13,937	6,813	11,006	24,607	24,685	24,153	29,326

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Landings	312,636	282,846	253,543	195,688	199,458	201,974	274,533	296,091	339,589	291,623
Finfish & Other	278,646	236,998	216,134	155,837	154,147	153,588	208,445	237,821	265,454	227,339
Shellfish	33,990	45,848	37,410	39,851	45,311	48,386	66,088	58,270	74,136	64,284
<b>Key Species</b>										
Albacore tuna	8,087	8,534	10,468	8,876	10,082	10,703	9,682	9,938	10,209	8,777
Crab	17,734	33,291	17,007	13,875	21,848	15,817	17,240	8,681	26,016	11,907
Flatfish	16,910	16,385	19,697	23,842	26,047	22,226	15,958	15,322	18,965	15,955
Hake (whiting)	135,503	122,804	81,481	55,511	53,466	57,017	142,092	102,651	160,098	161,589
Oysters	308	255	197	162	1,127	829	467	415	449	443
Pacific sardine	99,450	74,669	90,037	49,298	45,902	44,743	23,479	91,459	57,022	16,938
Rockfish	2,007	1,967	2,905	3,820	4,207	4,533	3,819	3,918	4,745	5,293
Sablefish	5,834	5,838	5,349	6,514	7,219	6,269	5,074	4,739	3,840	3,293
Salmon	4,666	1,810	1,370	1,860	2,311	2,765	2,386	1,918	3,505	6,383
Shrimp	15,784	12,128	19,990	25,400	22,019	31,429	48,198	49,009	47,472	51,728

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Albacore tuna	1.09	0.95	0.90	1.20	1.01	1.16	1.94	1.53	1.58	1.26
Crab	1.50	1.62	2.25	2.10	1.94	2.07	2.59	3.36	2.74	4.03
Flatfish	0.43	0.46	0.40	0.38	0.33	0.31	0.42	0.48	0.52	0.54
Hake (whiting)	0.05	0.06	0.08	0.12	0.07	0.09	0.12	0.14	0.13	0.11
Oysters	4.00	4.56	9.40	16.96	4.00	4.00	4.00	4.00	4.00	4.00
Pacific sardine	0.06	0.05	0.05	0.11	0.12	0.12	0.14	0.10	0.11	0.21
Rockfish	0.69	0.80	0.69	0.68	0.59	0.56	0.65	0.68	0.64	0.61
Sablefish	1.48	1.68	1.78	2.11	2.21	2.40	3.42	2.43	1.98	2.45
Salmon	2.24	2.73	3.39	2.24	1.53	2.78	2.82	3.62	3.54	3.15
Shrimp	0.44	0.37	0.47	0.55	0.31	0.35	0.51	0.50	0.51	0.57

**2014 Economic Impacts of Oregon Recreational Fishing Expenditures (thousands of dollars)**

		#Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode	For-Hire	255	23,975	9,869	13,438
	Private Boat	465	44,970	18,292	27,557
	Shore	140	13,325	5,289	7,979
Total Durable Expenditures		2,473	215,723	109,932	154,361
Total State Economic Impacts		3,333	297,993	143,382	203,335

**2014 Angler Trip & Durable Goods Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Goods Expenditures
	Non-Residents	Residents		
For-Hire	725	13,495	Fishing Tackle	47,888
Private Boat	2,901	37,037	Other Equipment	26,690
Shore	1,141	10,209	Boat Expenses	80,379
Total	4,767	60,741	Vehicle Expenses	64,812
			Second Home Expenses	4,116
			Total Durable Expenditures	223,884
Total State Trip and Durable Goods Expenditures				289,392

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Coastal	87	82	86	79	85	82	81	84	89	91
Non-Coastal	123	125	130	120	128	124	122	128	133	136
Out-of-State	14	15	15	14	15	14	14	15	16	16
Total Anglers	224	222	231	213	228	220	217	227	238	243

**Recreational Fishing Effort by Mode (thousands of angler trips)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
For-Hire	58	56	61	48	56	51	52	57	64	67
Private	382	373	399	353	396	378	370	389	414	431
Shore	233	233	233	233	233	233	233	233	233	233
Total Trips	673	662	693	634	685	662	655	679	711	731

**Harvest (H) & Release (R) of Key Species/Species Groups (thousands of fish)<sup>1,3</sup>**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Baitfishes	H	220	220	220	220	220	223	221	220	220	221
	R	124	124	124	124	124	125	125	125	125	125
Flatfishes	H	21	21	22	21	17	14	15	17	18	15
	R	7	7	6	8	9	5	5	6	6	5
Greenlings	H	104	97	95	92	90	90	97	111	132	114
	R	79	74	67	69	72	79	85	83	87	73
Rockfishes	H	400	331	321	307	363	373	290	320	402	411
	R	58	40	38	47	51	64	53	50	66	73
Salmon <sup>2</sup>	H	42	16	68	14	91	23	24	35	45	118
	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sculpins	H	16	14	15	16	16	16	16	15	14	12
	R	60	57	59	59	59	61	61	61	63	60
Sturgeon	H	12	12	12	12	12	12	12	12	12	12
	R	24	24	24	24	24	25	25	25	25	25
Surfperches	H	118	118	118	118	118	118	118	118	118	118
	R	39	39	39	39	39	39	39	39	39	39
Albacore tuna	H	5	12	59	24	43	38	29	63	22	48
	R	0	0	0	0	0	0	0	0	0	0

<sup>1</sup> In this table, '0' = 0-999 fish.<sup>2</sup> Salmon estimates exclude release mortality.<sup>3</sup> NA = not available.

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

	Establishments	Employees	Annual Payroll (\$ billions)	Employee Compensation (\$ billions)	Gross State Product (\$ billions)	Commercial Fishing Location Quotient <sup>1</sup>
2005	108,571 (1.4%)	1,409,576 (1.2%)	50.02 (1.1%)	80.62 (1.1%)	147.58 (1.1%)	2.87
2013	108,527 (1.4%)	1,396,563 (1.2%)	61.06 (1.1%)	100.37 (1.1%)	204.87 (1.2%)	4.07
%Change	0.0	-0.9	18.1	19.7	28.0	41.8

Seafood Sales & Processing - Non-Employer Firms (thousands of dollars)<sup>2</sup>

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Seafood product prep. & packaging	Firms	9	7	ds	19	15	15	16	14	11
	Receipts	309	54	ds	957	466	510	467	346	319
Seafood sales, retail	Firms	7	11	11	16	12	15	16	11	ds
	Receipts	985	914	1,210	2,101	1,140	1,907	1,896	1,600	ds

Seafood Sales & Processing - Employer Establishments (thousands of dollars)<sup>2</sup>

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Seafood product prep. & packaging	Establishments	20	21	22	23	20	21	22	18	19
	Employees	762	896	819	850	812	806	805	934	907
	Payroll	19,022	25,881	27,394	27,616	26,202	27,007	32,438	31,970	37,265
Seafood sales, wholesale	Establishments	23	16	18	18	19	22	27	21	19
	Employees	0	0	0	0	0	0	0	180	189
	Payroll	0	0	0	0	0	0	0	7,602	8,065
Seafood sales, retail	Establishments	24	22	23	21	23	21	20	18	20
	Employees	204	306	171	178	151	162	163	126	147
	Payroll	3,464	3,294	3,185	3,370	3,515	3,651	3,613	2,851	4,238

Transport, Support & Marine Operations - Employer Establishments (thousands of dollars)<sup>2,3</sup>

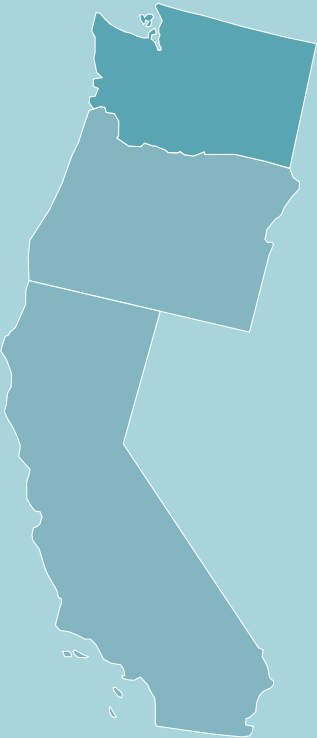
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Coastal & Great Lakes freight transportation	Establishments	9	9	13	8	9	8	8	8	7
	Employees	ds	ds	476	ds	ds	ds	ds	ds	ds
	Payroll	ds	ds	25,206	ds	ds	ds	ds	ds	ds
Deep sea freight transportation	Establishments	6	6	5	4	3	3	3	3	3
	Employees	ds	ds	ds	ds	ds	ds	ds	ds	ds
	Payroll	ds	ds	ds	ds	ds	ds	ds	ds	ds
Deep sea passenger transportation	Establishments	0	0	2	0	0	0	0	0	0
	Employees	NA	NA	ds	NA	NA	NA	NA	NA	NA
	Payroll	NA	NA	ds	NA	NA	NA	NA	NA	NA
Marinas	Establishments	40	37	38	37	33	30	33	32	34
	Employees	113	ds	138	106	109	102	102	119	104
	Payroll	3,550	ds	3,754	2,178	2,602	2,290	2,382	3,034	3,148
Marine cargo handling	Establishments	8	9	9	13	13	12	13	5	8
	Employees	ds	ds	ds	ds	ds	ds	ds	ds	ds
	Payroll	ds	ds	ds	ds	ds	ds	ds	ds	ds
Navigational services to shipping	Establishments	21	20	17	20	17	18	18	20	15
	Employees	ds	ds	183	200	189	144	152	176	81
	Payroll	ds	ds	11,331	11,808	10,154	9,577	9,592	12,219	6,534
Port & harbor operations	Establishments	0	0	2	1	1	3	3	10	5
	Employees	NA	NA	ds	ds	ds	ds	ds	90	ds
	Payroll	NA	NA	ds	ds	ds	ds	ds	6,512	ds
Ship & boat building	Establishments	43	41	40	41	35	34	34	33	32
	Employees	1,298	1,230	1,441	1,692	1,886	980	1,179	1,504	1,406
	Payroll	45,183	43,416	47,950	74,583	90,446	42,004	55,068	77,718	79,913

<sup>1</sup> 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.

<sup>2</sup> ds = these data are suppressed.

<sup>3</sup> NA = not applicable.

# Tables | Washington





## Washington | Commercial Fisheries

## 2014 Economic Impacts of the Washington Seafood Industry (thousands of dollars)

	With Imports				Without Imports			
	#Jobs	Sales	Income	Value Added	#Jobs	Sales	Income	Value Added
Total Impacts	63,382	7,330,457	2,015,266	3,041,830	27,467	1,764,743	730,773	988,672
Commercial Harvesters	7,941	648,782	277,742	390,461	7,941	648,782	277,742	390,461
Seafood Processors & Dealers	15,720	1,489,810	559,551	740,480	3,020	286,201	107,493	142,251
Importers	13,800	3,796,022	608,385	1,157,194	-	-	-	-
Seafood Wholesalers & Distributors	2,608	334,095	111,935	152,717	967	123,943	41,526	56,655
Retail	23,313	1,061,747	457,653	600,978	15,539	705,817	304,012	399,306

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Revenue	193,317	217,030	216,119	232,841	227,773	255,332	329,785	275,585	365,450	326,248
Finfish & Other	50,145	68,201	59,386	68,213	61,115	81,902	98,627	91,409	98,385	88,178
Shellfish	143,172	148,829	156,733	164,628	166,658	173,430	231,159	184,177	267,066	238,070
<b>Key Species</b>										
Clams	48,503	55,786	56,428	64,141	72,646	73,625	88,739	69,412	84,398	81,250
Crab	50,872	43,464	54,302	53,712	48,944	57,070	83,627	59,485	86,510	80,445
Hake (Whiting)	4,937	7,296	7,121	7,249	2,334	4,105	7,183	5,882	7,452	5,431
Halibut	6,512	8,303	8,842	7,525	4,879	5,764	6,740	6,122	4,929	6,984
Mussels	3,729	6,564	3,820	5,293	4,851	4,318	4,740	6,065	9,230	6,830
Oysters	33,697	38,302	37,437	34,794	34,993	30,370	43,021	37,576	75,744	47,234
Sablefish	7,395	8,307	6,608	7,312	8,796	9,402	12,378	7,578	4,902	7,194
Salmon	14,319	24,586	22,026	23,376	22,003	40,622	42,434	28,398	42,375	38,998
Shrimp	4,335	3,602	3,746	5,380	4,139	5,677	7,140	6,986	8,664	19,701
Tuna, albacore	10,643	15,176	10,439	17,225	16,390	14,575	22,253	28,440	24,745	21,177

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Landings	213,502	241,606	194,449	173,176	163,937	189,486	210,282	213,578	273,796	191,142
Finfish & Other	156,902	191,717	151,762	128,208	120,452	142,608	158,113	173,506	206,511	125,566
Shellfish	56,600	49,889	42,687	44,968	43,485	46,878	52,169	40,072	67,285	65,576
<b>Key Species</b>										
Clams	3,621	4,617	3,363	4,070	4,266	3,876	4,023	3,664	3,975	4,305
Crab	32,086	24,619	22,487	21,355	20,651	22,500	27,072	16,590	28,043	19,322
Hake (Whiting)	93,654	120,058	91,272	67,159	36,378	58,900	73,494	38,524	58,696	49,654
Halibut	1,948	2,451	2,428	2,055	1,731	1,371	1,301	1,295	1,065	1,284
Mussels	504	774	475	593	568	589	547	559	731	579
Oysters	12,190	12,306	11,189	10,258	9,386	8,650	9,389	8,143	19,587	9,231
Sablefish	4,240	4,259	3,035	2,954	3,514	3,277	3,410	2,916	2,003	2,335
Salmon	17,926	26,570	21,938	17,641	31,821	28,086	38,706	19,839	49,049	28,140
Shrimp	7,279	6,926	4,455	7,355	7,775	10,153	10,193	10,009	14,259	31,441
Tuna, albacore	10,505	19,133	13,129	14,801	16,112	13,148	13,209	19,275	17,552	18,039

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Clams	13.40	12.08	16.78	15.76	17.03	19.00	22.06	18.95	21.23	18.87
Crab	1.59	1.77	2.41	2.52	2.37	2.54	3.09	3.59	3.08	4.16
Hake (Whiting)	0.05	0.06	0.08	0.11	0.06	0.07	0.10	0.15	0.13	0.11
Halibut	3.34	3.39	3.64	3.66	2.82	4.20	5.18	4.73	4.63	5.44
Mussels	7.40	8.48	8.05	8.93	8.54	7.33	8.66	10.85	12.62	11.79
Oysters	2.76	3.11	3.35	3.39	3.73	3.51	4.58	4.61	3.87	5.12
Sablefish	1.74	1.95	2.18	2.48	2.50	2.87	3.63	2.60	2.45	3.08
Salmon	0.80	0.93	1.00	1.33	0.69	1.45	1.10	1.43	0.86	1.39
Shrimp	0.60	0.52	0.84	0.73	0.53	0.56	0.70	0.70	0.61	0.63
Tuna, albacore	1.01	0.79	0.80	1.16	1.02	1.11	1.68	1.48	1.41	1.17

**2014 Economic Impacts of Washington Recreational Fishing Expenditures (thousands of dollars)**

		#Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode	For-Hire	372	48,497	21,452	31,024
	Private Boat	792	117,045	37,838	69,818
	Shore	205	26,899	9,075	16,078
Total Durable Expenditures		4,811	497,984	219,552	360,641
Total State Economic Impacts		6,180	690,425	287,917	477,561

**2014 Angler Trip & Durable Goods Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Goods Expenditures
	Non-Residents	Residents	Fishing Tackle	68,833
For-Hire	4,965	23,868	Other Equipment	34,556
Private Boat	2,644	90,323	Boat Expenses	358,756
Shore	718	21,098	Vehicle Expenses	32,727
Total	8,327	135,290	Second Home Expenses	0
			Total Durable Expenditures	494,871
Total State Trip and Durable Goods Expenditures				638,488

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Coastal	201	184	220	167	163	162	274	176	189	231
Non-Coastal	23	21	23	19	20	19	30	24	26	24
Out-of-State	18	17	19	15	16	15	17	19	20	19
Total Anglers	242	222	262	201	199	196	321	219	235	274

**Recreational Fishing Effort by Mode (thousands of angler trips)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
For-Hire	62	57	55	42	51	47	42	46	52	86
Private	565	492	661	428	399	399	607	618	701	701
Shore	513	513	513	513	513	513	513	513	513	513
Total Trips	1,140	1,062	1,229	983	963	959	1,162	1,177	1,266	1,300

**Harvest (H) & Release (R) of Key Species Species Groups (thousands of fish)<sup>1,4</sup>**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Flatfishes	H	61	63	51	47	54	50	51	52	53	55
	R	41	42	40	40	47	41	41	41	42	42
Rockfishes <sup>2</sup>	H	307	282	260	216	245	208	235	259	275	304
	R	33	23	19	16	33	26	22	22	25	30
Greenlings	H	39	33	28	29	34	30	42	43	40	42
	R	25	22	19	19	39	22	29	23	16	15
Sculpins	H	17	16	15	15	16	16	17	16	16	16
	R	91	91	91	91	91	91	91	91	91	91
Sturgeon <sup>3</sup>	H	8	7	8	8	9	NA	NA	NA	NA	NA
	R	30	21	18	12	17	NA	NA	NA	NA	NA
Surfperches	H	133	133	133	133	133	133	133	134	134	134
	R	120	120	120	120	121	121	121	121	121	121
Albacore tuna	H	12	24	25	22	24	32	16	51	55	75
	R	0	0	0	0	0	0	0	0	17	0
Smelt & herring	H	2,486	2,486	2,486	2,486	2,486	2,486	2,486	2,486	2,486	2,486
	R	126	126	126	126	126	126	126	126	126	126
Sharks & Skates	H	1	1	0	1	1	0	0	0	0	0
	R	12	14	9	12	10	3	1	3	2	4
Salmon <sup>3</sup>	H	246	109	334	90	716	124	310	309	390	NA
	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

<sup>1</sup> In this table, '0' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.<sup>2</sup> This species may not be equivalent to species with similar names listed in the commercial tables<sup>3</sup> Data on sturgeon harvest not available for 2010-2013; Salmon harvest estimates exclude release mortality.<sup>4</sup> NA = not available.

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

	#Establishments	#Employees	Annual Payroll (\$ billions)	Employee Compensation (\$ billions)	Gross State Product (\$ billions)	Commercial Fishing Location Quotient <sup>1</sup>
2005	175,658 (2.3%)	2,316,296 (2%)	94.93 (2.1%)	156.15 (2.2%)	296.73 (2.3%)	14
2013	176,815 (2.4%)	2,444,098 (2.1%)	130.76 (2.3%)	214.39 (2.4%)	407.16 (2.4%)	12.13
%Change	0.7	5.2	27.4	27.2	27.1	-13.4

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

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Seafood product prep. & packaging	Firms	54	53	63	44	47	39	37	42	42
	Receipts	5,568	4,149	4,698	5,167	5,022	4,228	3,859	4,377	4,094
Seafood sales, retail	Firms	31	29	32	33	42	30	34	42	41
	Receipts	1,836	1,727	1,458	1,807	2,462	1,273	2,370	1,871	3,017

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

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Seafood product prep. & packaging	Establishments	98	96	98	96	86	93	90	90	86
	Employees	5,743	5,705	5,249	5,893	4,860	5,296	5,387	6,118	6,224
	Payroll	239,962	255,129	275,662	306,213	232,543	254,592	293,112	326,827	315,379
Seafood sales, wholesale	Establishments	126	115	127	107	108	105	107	101	116
	Employees	1,094	1,015	1,086	996	1,103	970	911	1,085	999
	Payroll	42,852	42,934	46,085	48,251	48,044	45,871	45,543	51,508	49,683
Seafood sales, retail	Establishments	47	49	50	44	43	47	44	40	35
	Employees	291	292	244	247	239	282	253	256	266
	Payroll	9,322	8,998	8,001	7,947	8,324	9,098	7,786	8,210	9,069

Transport, Support & Marine Operations - Employer Establishments (thousands of dollars)<sup>2</sup>

		2005	2006	2007	2008	2009	2010	2011	2012	2013
Coastal & Great Lakes freight transportation	Establishments	41	43	37	24	24	30	28	28	35
	Employees	1,672	2,353	1,903	2,222	2,245	1,731	1,684	1,557	2,186
	Payroll	122,000	145,144	136,543	168,832	168,783	130,398	132,068	126,401	170,003
Deep sea freight transportation	Establishments	24	23	30	21	25	20	14	12	8
	Employees	378	197	227	263	305	209	ds	ds	200
	Payroll	22,655	14,390	19,692	24,843	28,897	24,711	ds	14,014	14,892
Deep sea passenger transportation	Establishments	3	3	3	4	5	4	2	2	5
	Employees	ds	ds	ds	ds	ds	ds	ds	ds	ds
	Payroll	ds	ds	ds	ds	ds	ds	ds	ds	ds
Marinas	Establishments	96	103	114	116	110	117	114	100	110
	Employees	442	466	485	573	570	560	517	479	529
	Payroll	13,556	14,269	15,623	18,931	18,811	18,783	18,364	18,038	18,914
Marine cargo handling	Establishments	30	29	28	25	27	26	32	13	30
	Employees	4,459	3,764	4,913	4,821	2,953	ds	3,910	ds	ds
	Payroll	318,873	303,375	334,601	334,193	239,490	ds	323,286	ds	ds
Navigational services to shipping	Establishments	53	56	61	76	69	79	78	72	73
	Employees	841	942	950	1,213	1,168	1,225	1,207	ds	ds
	Payroll	60,034	72,120	72,912	100,542	102,934	102,766	94,781	ds	ds
Port & harbor operations	Establishments	6	5	6	11	11	9	9	48	28
	Employees	ds	53	129	111	118	74	75	1,509	181
	Payroll	ds	3,436	4,631	6,359	6,437	4,662	4,937	85,042	11,894
Ship & boat building	Establishments	154	164	167	169	162	152	135	141	138
	Employees	7,154	7,669	7,742	8,067	6,710	5,406	5,232	5,294	5,387
	Payroll	307,735	313,230	354,084	402,253	312,240	284,759	276,402	290,400	273,825

<sup>1</sup> 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.

<sup>2</sup> ds = these data are suppressed.