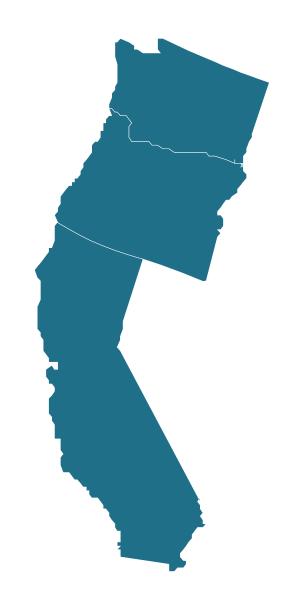
Pacific

- California
- OregonWashington



Regional Summary Pacific Region

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 (NMFS) under four fishery management plans (FMPs).

Pacific Region Fishery Management Plans

- 1. Pacific coast groundfish
- 2. Pacific coast salmon
- 3. Coastal pelagic species
- 4. West coast highly migratory species

Of the stocks or stock complexes covered in these fishery management plans, seven are currently listed as overfished: canary rockfish, Chinook salmon (one stock), coho salmon (two stocks), cowcod, petrale sole, and yelloweye rockfish. One stock complex is currently subject to overfishing: yellowfin tuna. Interesting management techniques are employed in the Pacific Region's fisheries. The Pacific groundfish and salmon fisheries are subject to 'weak stock management' where access to the harvestable surplus of healthier stocks is often restricted to protect weaker stocks with which they co-mingle in the ocean. These weaker stocks include eight rebuilding groundfish stocks and salmon listed under the Endangered Species Act as well as other non-listed stocks that also constrain the fishery.

Salmon management is further complicated by the need to ensure equitable allocation of harvest among diverse user groups and to coordinate 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 including 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 and federal disaster relief to 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 whereby allowable harvest varies with sea surface temperature. Because the geographic range of sardine tends to expand with abundance, harvest allocation between 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 has contributed to the development of an intense derby fishery.

The Fishery Management Plan for Highly Migratory Species (HMS) 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 are also a very important component of the catch for West Coast recreational commercial passenger fishing vessel fleet, and the private recreational boat fishery.

Management of West Coast HMS fisheries poses unique challenges because nearly all of the managed HMS species range far beyond the 200 nautical mile limit of the West Coast Exclusive Economic Zone; the same HMS stocks which are targeted by West Coast fisheries are shared with Hawaii-based U.S. fisheries, as well as the fleets of other Pacific Rim nations. As such, the management of the HMS fisheries s coordinated by the Pacific Fishery Management Council through cooperation with Regional Fishery Management Organizations with overarching management jurisdiction over North Pacific stocks, including the Inter-American Tropical Tuna Commission, for the Eastern Pacific Ocean, and the Western and Central Pacific Fishery Commission, for the Western Pacific.

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)¹. Once 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 whiting industry voluntarily instituted the Pacific Whiting Conservation Cooperative in 1997. In 2001, the PFMC implemented the Pacific sablefish permit stacking program, whereby vessels are allowed to stack multiple vessel permits on a single vessel in order to obtain additional trip limits for that vessel. The trawl rationalization program involving individual fishing quotas (IFQs) for non-whiting groundfish and whiting trawlers, and coops for whiting mothership and catcher processor sectors was implemented in January 2011. The shore-based commercial groundfish fishery had an ex-vessel value of \$66.1 million in 2009.

Ecolabels are another market-based management tool that is intended to encourage fishermen to adopt harvest practices that are considered sustainable by an organization such as the Marine Stewardship Council (MSC). The Oregon pink shrimp fishery, Pacific hake midwater trawl, the American Albacore Fishing Association albacore tuna fishery and the Oregon dungeness crab fishery have received certifications from the MSC.

Commercial Fisheries

In 2009, commercial fishermen in the Pacific Region landed roughly 894 million pounds of finfish and shellfish, earning \$488 million in landings revenue. Landings revenue was dominated by other shellfish (\$129 million) and crab (\$124 million). These species groups commanded ex-vessel prices of \$4.56 and \$2.09

¹Waters off the coasts of California, Oregon, Washington, and Alaska comprise the U.S. EEZ subject to management by the IPHC

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per pound, respectively, and comprised 52% of total landings revenue, but only 9.8% of total landings in the Pacific Region.

Key Pacific Region Commercial Species

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

Washington had the highest landings revenue in the region with \$228 million in 2009, followed by California (\$150 million) and Oregon (\$102 million). In terms of pounds landed, California contributed the most (372 million pounds), followed by Oregon (198 million pounds) and Washington (164 million pounds).

Economic Impacts¹

In 2009, the Pacific Region's seafood industry generated \$20 billion in sales impacts in California, \$1.1 billion in sales impacts in Oregon, and \$7.3 billion in sales impacts in Washington. California also generated the largest income, value added, and employment impacts (\$4.3 billion; \$7.1 billion; 121,000 jobs). The smallest income impacts were generated in Oregon (\$341 million) and the smallest employment impacts were also generated in Oregon (14,000 jobs).

The sector that generated the greatest employment impacts in California was the seafood importers sector (55,000 jobs) followed by the retail sector with 47,000 jobs. In Washington, the retail, seafood processors and dealers, and importers sectors generated the greatest employment impacts, ranging between 15,000 and 19,000 jobs. The retail sector in Oregon generated nearly two times the employment impacts (6,700 jobs) as the commercial harvester sector, which generated the next highest employment impacts in the state (3,500 jobs).

The importers sector contributed more to the total value added impacts than any other single sector in California and Washington. In California, the importers sector generated \$4.6 billion, followed by the retail sector with \$1.4 billion in value added impacts. The commercial harvester sector generated a larger portion (22%) of total state value added impacts in Oregon, than in any other state in the Pacific Region. In Washington, other than the importers sector, the seafood processors and dealers sector contributed the most to value added impacts (26%).

Landings Revenue

Landings revenue in the Pacific Region totaled \$488 million in 2009. This was a 29% increase (a 10% increase in real terms) from 2000 levels (\$380 million) and a 2.5% decrease (a 2.1% decrease in real terms) relative to 2008 (\$500 million). Totaling \$320 million in 2009, shellfish revenue experienced a 58% increase (a 36% increase in real terms) from 2000 to 2009 and experienced a 12% increase (13% increase in real terms) from 2008 to 2009.

In terms of finfish, Washington contributed the most (\$61 million) followed by Oregon (\$53 million), and California (\$46 million). Shellfish landings revenue was also dominated by Washington, which contributed the most (\$167 million) followed by California (\$104 million), and Oregon (\$50 million).

Other shellfish and crab had the highest landings revenue in the Pacific Region in 2009, with \$129 million and \$124 million, respectively. Together they accounted for 52% of the total landings revenue generated in 2009. Between 2000 and 2009, the landings revenue for other shellfish increased 55% and increased 60% for crab.

From 2000 to 2009, species or species groups with large changes in landings revenue include squid (increased 107%), sablefish (increased 63%), and albacore tuna (increased 61%). Species or species groups with large changes in landings revenue between 2008 and 2009 include squid (increasing 113%), hake (decreasing 76%), and shrimp (decreasing 34%).

Between 2008 and 2009, hake experienced a 76% decrease in landings revenue from \$58.5 million to \$14 million. A major driver in this decrease was the 52% reduction in landings resulting from a forecast of lower stocks and rockfish bycatch restrictions. Other drivers of this decrease in revenue include international economic conditions and the conditions in fisheries which produce product closely related to hake such as walleye pollock.

Landings

Fishermen in the Pacific Region landed 894 million pounds of finfish and shellfish in 2009. This was a 32% decrease from the 1.3 billion pounds landed in 2000 and a 18% decrease from the 1.1 billion landed in 2008. Finfish landings contributed 65% of total landings in the Pacific Region (581 million pounds) in 2009. From 2008 to 2009, finfish landings experienced a 36% decrease. Over the same time period, shellfish landings experienced a 69% increase from 185 million pounds in 2008 to 313 million in 2009 and a 16% decrease from 371 million pounds in 2000.

Hake and squid had the highest annual landings in the Pacific Region in 2009, with 253 million pounds and 204 million pounds, respectively. Although they together accounted for 51% of the total landings in the Pacific Region, they only accounted for 14% of the total landings revenue generated in 2009. Between 2000 and 2009, the greatest changes in landings were experienced by salmon (increasing 63%), crab (increasing 61%), and rockfish (decreasing 59%). In the short term, between 2008 and 2009 the largest changes were experienced by squid (increasing 139%), salmon (increasing 77%), and hake (decreasing 52%).

Prices

The ex-vessel prices for the Pacific Region's key species and species groups in 2009 were higher than their 10 year average for five of the key species (four of the species in real terms). Ex-vessel prices for squid and other shellfish experienced the biggest increases between 2000 and 2009, increasing 180% (140% in real terms) and 70% (45% in real terms), respectively. Relative

¹The 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)

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to the ex-vessel prices in 2008, the Pacific Region's sablefish experienced the greatest increase (3.81%, 4.17% in real terms) from \$2.10 in 2008 to \$2.18 in 2009; salmon experienced the greatest decrease (48%, 48% in real terms) from \$1.42 to \$0.74.

Commercial Fisheries Facts

Landings revenue

- On average, between 2000 and 2009, the key species or species groups accounted for 91% of total revenue, generating \$390 million in the Pacific Region.
- <u>Crab</u> had higher landings revenues than any other species or species group, averaging \$106 million in landings revenue from 2000 to 2009.
- Shrimp had the largest annual increase in landings revenue over the 10 year time period, increasing 245% from \$24 million in 2001 to \$83 million in 2002.
- Hake had the largest annual decrease in landings revenue over the 10 year time period, decreasing 76% from \$58 million in 2008 to \$14 million in 2009. The magnitude of the decrease in hake landings revenue was driven by the high revenue in 2008, which was almost 2 times higher than the next highest landings revenue (\$34 million in 2006).

Landings

- Key species or species groups contributed an average of 72% annually to total landings between 2000 and 2009.
- Hake (whiting), contributed the most to landings in the region, averaging 427 million pounds from 2000 to 2009
- <u>Squid</u> had the largest annual increase in landings over the 10 year time period, increasing 139% from 85 million in 2008 pounds to 204 million pounds in 2009.
- Shrimp had the largest annual decrease in landings over the 10 year time period, decreasing 52% from 82 million pounds in 2002 to 39 million pounds in 2003.

Prices

- Other shellfish had the highest average annual ex-vessel price per pound (\$3.52) over the time period, followed by crab (\$1.92), and sablefish (\$1.64).
- <u>Hake (whiting)</u> had the lowest average annual ex-vessel price per pound (\$0.06) over the time period, followed by <u>squid</u> (\$0.21), and <u>flatfish</u> (\$0.42).
- Shrimp had the largest annual increase in ex-vessel price over the 10 year time period, increasing 152% from \$0.40 per pound in 2001 to \$1.01 in 2002.
- <u>Salmon</u> had the largest annual decrease in ex-vessel price over the 10 year time period, decreasing 48% from \$1.42 per pound in 2008 to \$0.74 in 2009.

In California, the species or species group with the largest change in ex-vessel price from 2000 to 2009 was squid (180% increase, 140% increase in real terms) from \$0.10 to \$0.28. The largest change in ex-vessel price experienced in Oregon was for Pacific sardine (140% increase, 105% increase in real terms from \$0.05 to \$0.12 and in Washington the largest change in ex-vessel price

was experienced by hake (50% increase, 28% increase in real terms from \$0.04 to \$0.06).

Recreational Fishing

In 2009, almost 1.8 million recreational anglers took 6.3 million fishing trips in the Pacific Region. Over 64% of these anglers were residents of a regional coastal county. Of the total saltwater fishing trips taken, 23% of them were taken from a private or rental boat and another 69% were shore-based. Rockfishes and scorpionfishes were the most frequently caught species or species group with 2.7 million fish caught in 2009, which represented 24% of total fish caught in the region. Of the rockfishes and scorpionfishes caught, 26% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in the Pacific Region 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 almost 14,000 full- and part-time employment impacts generated by recreational fishing activities in the state. Washington (3,300 jobs), and Oregon (1,600 jobs) followed in terms of employment impacts generated by recreational fishing activities.

In addition to employment impacts, the contribution of recreational fishing activities to 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 2009, sales impacts were also the highest in California (\$2 billion in sales impacts), followed by Washington (\$347 million), and Oregon (\$168 million). In California, shore-based fishing trips had the highest employment impacts relative to the other fishing modes; in Oregon and Washington, private boat fishing trips contributed the most to employment impacts.

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) or expenditures on durable equipment. Throughout the Pacific Region, most of the employment impacts in 2009 were generated by expenditures on durable equipment: 72% in Washington, 68% in California, and 38% in Oregon. In the same year value added impacts were the highest in California (\$1.1 billion in value added impacts), followed by Washington (\$186 million), and Oregon (\$93 million).

The total saltwater fishing trip and durable equipment expenditures were \$2.2 billion across the Pacific Region in 2009. Approximately 77% of these expenditures were related to durable equipment purchases. The greatest expenditures were for fishing tackle (\$674 million), followed by boat expenses (\$386 million), and other equipment (\$282 million). Fishing trip related expenditures by Pacific Region's non-residents totaled over \$22 million of which the greatest portion can be attributed

¹Expenditures and economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see Marine Angler Expenditures in the United States, 2006, available at: http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf)

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to for-hire-based fishing trips (\$16 million). Residents of the Pacific Region spent \$476 million on trip-related expenses with the majority of these expenses related to shore trips (\$229 million).

Key Pacific Region Recreational Species

- Albacore and other tunas
- Barracuda, bass and bonito
- Croakers
- Flatfishes
- Greenlings

- Mackerel
- Rockfishes and scorpionfishes
- Salmon
- Sculpins
- Surfperches

Participation

There were 1.8 million recreational anglers who fished in the Pacific Region in 2009. This was a 9.3% increase from 2000 (1.6 million anglers). These anglers were Pacific Region residents from either a coastal (1.1 million anglers) or non-coastal county (638,000 anglers). Over 64% of total anglers in 2009 were residents of a coastal county. Coastal county angler participation in 2009 experienced a 7.8% decrease relative to 2000 (1.2 million anglers) and experienced a 6.7% increase between 2008 and 2009. Non-coastal county angler participation experienced a 63% increase relative to 2000 (391,000 anglers) and experienced a 66% increase relative to 2008 (385,000 anglers).

Fishing Trips

Recreational fishermen took 6.3 million fishing trips in the Pacific Region in 2009. This was a 13% decrease from 2000 (7.3 million trips) and was 527,000 more trips than were taken in 2008. Of the total trips taken in the Pacific Region in 2009, approximately 69% of the trips were shore based (4.3 million trips). The other most popular mode of fishing was private or rental boat based with 1.5 million trips in 2009.

Harvest and Release

In terms of the Pacific Region's key species and species groups, rockfishes and scorpionfishes (2.7 million fish), mackerel (2 million fish), barracuda, bass and bonito (1.6 million fish) and surfperches (1.5 million fish) were the most often caught by anglers in 2009. Sculpins (75.2% released), barracuda, bass and bonito (74.6% released), mackerel (62.7% released), and greenlings (50% released) were the species that were most often released rather than harvested. Anglers harvested more often than released albacore and other tunas (86% harvested), salmon (79.6% harvested) and rockfishes and scorpionfishes (74.3% harvested). Most of the rockfishes and scorpionfishes in the Pacific region were caught in California while most of the salmon and other tunas were caught in Washington and Oregon. Between 2000 and 2009, seven of the Pacific Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were barracuda, bass and bonito (76%), flatfishes (70%), and albacore and other tunas (56%).

Recreational Fishing Facts

Participation

- An average of 1.7 million anglers fished in Pacific Region annually from 2000 to 2009.
- In 2009, coastal county residents made up 64% of total anglers in this region. These anglers averaged 73% of total anglers annually over the 10 year time period.
- The largest annual increase in the number of coastal anglers during the 10 year time period occurred between 2005 and 2006, increasing 22%, from 1 million anglers to 1.3 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2003 and 2004, decreasing 19%, from 1.4 million anglers to 1.2 million anglers.

Fishing trips

- In the Pacific Region, an average of 7.1 million fishing trips were taken annually from 2000 to 2009.
- Private or rental boat and shore-based fishing trips accounted for 1.5 million and 4.3 million fishing trips, respectively, in 2009. Together these made up 92% of the fishing trips taken in that year.
- The largest annual increase in the number of total trips taken annually over the 10 year time period occurred between 2000 and 2001, increasing 21%, from 7.3 million trips to 8.8 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2003 and 2004, decreasing 20%, from 8.3 million trips to 6.7 million trips.

Harvest and release

- Barracuda, bass and bonito was the most commonly caught key species or species group, averaging 3.9 million fish over the 10 year time period. Of these, 66% were released rather than harvested.
- Of the ten commonly caught key species or species groups, seven were released more often than harvested over this time period. The species or species group that was most commonly released was sculpins (77% released).
- Albacore and other tunas (83% harvested), followed by rockfishes and scorpionfishes (77% harvested), and salmon (74% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.
- The largest annual change in the number of fish released was for releases of <u>albacore</u> and <u>other tunas</u>, which increased 1283% between 2002 and 2003; the largest annual change in number of fish harvested occurred in salmon, which increased 599% from 2008 to 2009.

Marine Economy

The sum of the gross domestic products by state for California, Oregon, and Washington was \$2.4 trillion in 2008. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$832 billion. These economic measures experienced increases of 46%, 36%, and 29% respectively, between 2000 and 2008, and experienced a 2.2% increase, a 1.4% increase, and a 1.2% increase, respectively between 2007 and 2008. Approximately 1.2

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million establishments employed 18 million full- and part-time employees across the region in 2008. This was a 10% increase in establishment numbers and a 7.6% increase in employee numbers from 2000 to 2008. In 2008, California had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the Pacific Region. California's approximately 879,000 establishments employed approximately 14 million employees in 2008. Gross state product in California was \$1.9 trillion, followed by Washington (\$336 billion) and Oregon (\$169 billion).

In 2008, the commercial fishing location quotient (CFLQ) for Washington was the highest in the region at 13.54. This was an 8.7% increase from 2001 and a 2.3% increase from 2007. Washington's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 14 times higher than the level of employment in these industries nationwide. The CFLQ 2008 in Oregon was 3.27 (a 3.3% decrease from 2000 and a 12% increase from 2007), while the CFLQ in 2007 in California was 0.74 (a 26% decrease from 2000; and a 4.2% increase from 2007).

Seafood Sales and Processing

In 2008, there were 202 nonemployer firms engaged in seafood product preparation and packaging across the Pacific Region. This was a 73% increase from 2000 levels, and a 138% increase in the number of firms in Oregon over this time period. In 2007, 69% of these firms were located in California. Region-wide, annual receipts totaled \$18 million in 2008 and increased 18% from 2000 to 2008. Annual receipt totals experienced a 69% increase in Washington over the same time period.

In contrast to the increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 27% from 224 in 2000 to 164 in 2008. Approximately 59% of these establishments were located in Washington. The numbers of employees in these industries also decreased across the region, decreasing 21% to approximately 8,800 full- and part-time workers in 2008, despite an annual payroll increase of 26% to \$399 million.

There were 403 seafood wholesale establishments in 2008. The number of employees was not available at the region level. From 2000 to 2008, the number of seafood wholesale establishments decreased 28% across the Pacific Region.

Nonemployer firms engaged in seafood retail in the Pacific Region totaled 259 in 2008, a 23% increase relative to 2000. Of

these firms, 81% were located in California. At the state level, these firms increased 18% in Washington and increased 27% in California between 2000 and 2008. Oregon did not experience a change in number of retail seafood firms. Annual receipts from the nonemployer retail sector in the region totaled \$24 million in 2008 a 8% increase from 2000 (a 7.9% decrease in real terms) and a 6.4% increase from 2007 (a 3.9% decrease in real terms).

Employer establishments engaged in seafood retail increased 3.7% from 2000 to 2008, totaling 226 in 2008. These establishments employed 1,357 workers. Over 71% of these establishments were located in California. Region-wide, the numbers of employees in the seafood retail sector increased 21% between 2000 and 2008. All states in the region experienced increases, with the largest increase seen in Oregon (58% increase). Annual payroll also increased across the Pacific Region, a 61% increase region-wide (37% increase in real terms), to \$32 million in 2008.

Transport, Support, and Marine Operations

For sectors in which there were data available for all states in the region, the ship and boat building employed more people than any other industry in the transport, support, and marine operations sector, employing approximately 21,000 people in 2008. This industry also had the highest annual payroll in the region totaling \$954 million. Marinas had the highest number of establishments (430), followed by the ship and boat building industries with 346 establishments and the navigational services to shipping industries with 136 establishments. Of all of the industries, port and harbor operations had the fewest number of establishments (29).

In California, industries with large changes in establishment numbers, employees, or annual payroll from 2007 to 2008 were: deep sea passenger transportation (62% decrease in establishments), port and harbor operations (42% decrease in employees), ship and boat building (26% increase in employees) and port and harbor operations (22% decrease in payroll). In Oregon, large changes were seen for ship and boat building (56% increase in payroll), port and harbor operations (50% decrease in establishments), marine cargo handling (44% increase in establishments) and marinas (42% decrease in employees). In Washington, large changes were seen in the port and harbor operations (83% increase in establishments), navigational services to shipping (38% increase in payroll), port and harbor operations (37% increase in payroll) and coastal and Great Lakes freight transportation (35% decrease in establishments).

Pacific Commercial Fisheries

2009 Economic Impacts of the Pacific Region Seafood Industry (thousands of dollars)

	Landings Revenue	Jobs	Sales	Income	Value Added
California	149,977	120,583	20,101,324	4,288,949	7,139,844
Oregon	102,453	13,754	1,127,435	341,248	500,498
Washington	227,773	57,643	7,300,279	1,906,483	2,924,888

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total revenue	379,742	335,635	393,571	423,244	440,474	414,584	471,788	459,772	500,447	488,155
Finfish & other	177,856	153,777	141,259	156,596	178,693	166,922	176,425	176,104	215,784	168,213
Shellfish	201,887	181,858	252,312	266,647	261,781	247,662	295,363	283,668	284,663	319,942
Albacore tuna	17,140	20,623	14,219	24,366	27,242	20,574	23,767	21,612	28,845	27,527
Crab	77,271	67,677	73,073	130,952	115,365	97,127	143,758	121,136	107,107	123,812
Flatfish	14,267	12,982	12,004	13,441	12,741	13,816	12,974	14,462	15,738	14,146
Hake (whiting)	20,851	13,881	13,576	17,150	21,819	29,139	34,425	32,603	58,492	14,104
Other shellfish	83,524	84,867	88,164	89,222	102,423	107,438	116,161	120,569	129,947	129,330
Rockfish	16,744	12,685	11,365	7,803	6,832	6,559	6,848	7,541	9,257	8,969
Sablefish	21,104	18,175	12,323	18,817	17,230	20,366	22,991	20,984	27,279	34,477
Salmon	23,838	20,667	26,170	30,773	47,676	37,188	34,306	33,865	26,992	24,992
Shrimp	28,949	23,942	82,634	28,175	30,586	15,706	12,433	17,298	25,132	16,588
Squid	27,246	16,948	18,260	25,340	19,748	31,516	26,998	29,169	26,585	56,504

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total landings	1,313,698	1,153,941	1,092,377	993,985	1,138,763	1,301,649	1,169,906	1,109,222	1,091,673	894,200
Finfish & other	942,839	853,058	789,574	756,538	932,610	1,070,529	935,523	902,887	906,773	581,373
Shellfish	370,858	300,883	302,803	237,447	206,153	231,120	234,383	206,335	184,900	312,828
Albacore tuna	19,916	24,589	21,996	36,577	31,764	19,649	28,117	25,483	24,507	27,048
Crab	36,645	33,619	42,441	81,892	69,247	61,849	85,301	51,888	45,075	59,145
Flatfish	36,837	31,584	29,365	31,849	29,895	31,495	27,689	33,502	37,409	40,574
Hake (whiting)	452,752	379,165	285,547	309,300	474,460	569,273	558,078	454,533	531,277	253,053
Other shellfish	31,051	30,459	31,813	27,884	31,275	30,907	30,611	29,543	28,557	28,345
Rockfish	25,738	18,114	13,346	9,275	8,057	7,406	6,633	7,447	9,469	10,456
Sablefish	14,212	12,761	8,677	12,204	12,905	13,742	13,718	11,630	12,978	15,820
Salmon	20,697	30,838	38,077	39,234	40,609	27,249	29,172	24,600	19,040	33,743
Shrimp	56,897	60,288	81,909	38,997	29,422	26,069	20,290	26,497	35,799	33,455
Squid	262,146	190,282	160,669	99,115	88,215	123,090	108,561	109,464	85,200	203,947

7 to Grange 7 tillings	2005	2006	2007	2008	2009					
	2000	2001	2002	2003	2004	2005	2000	2007	2000	2009
Albacore tuna	0.86	0.84	0.65	0.67	0.86	1.05	0.85	0.85	1.18	1.02
Crab	2.11	2.01	1.72	1.60	1.67	1.57	1.69	2.33	2.38	2.09
Flatfish	0.39	0.41	0.41	0.42	0.43	0.44	0.47	0.43	0.42	0.35
Hake (whiting)	0.05	0.04	0.05	0.06	0.05	0.05	0.06	0.07	0.11	0.06
Other shellfish	2.69	2.79	2.77	3.20	3.27	3.48	3.79	4.08	4.55	4.56
Rockfish	0.65	0.70	0.85	0.84	0.85	0.89	1.03	1.01	0.98	0.86
Sablefish	1.49	1.42	1.42	1.54	1.34	1.48	1.68	1.80	2.10	2.18
Salmon	1.15	0.67	0.69	0.78	1.17	1.36	1.18	1.38	1.42	0.74
Shrimp	0.51	0.40	1.01	0.72	1.04	0.60	0.61	0.65	0.70	0.50
Squid	0.10	0.09	0.11	0.26	0.22	0.26	0.25	0.27	0.31	0.28

	Trips	Jobs	Sales	Value Added	Income
California	4,660,000	13,567	2,043,304	710,221	1,067,736
Oregon	685,000	1,649	167,603	59,777	92,982
Washington	963,000	3,348	346,679	118,478	186,006

2009 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	674,289
For-Hire	16,216	89,138	Other Equipment	281,791
Private Boat	3,291	157,734	Boat Expenses	386,138
Shore	2,636	229,310	Vehicle Expenses	220,492
Total Trip Expenditures	22,145	476,183	Second Home Expenses	101,750
			Total Durable Equipment Expenditures	1,664,461
Total State Trip and Dura	ble Equipment Exp	enditures		2,162,789

Recreational Anglers by Residential Area (thousands of anglers)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	1,232	1,497	1,463	1,437	1,168	1,028	1,257	1,184	1,065	1,136
Non-Coastal	391	506	559	538	429	409	481	379	385	638
Out-of-State	NA^1									
Total Anglers	1,623	2,003	2,022	1,975	1,597	1,437	1,738	1,563	1,450	1,774

Recreational Fishing Effort by Mode (thousands of trips)²

	_	•		• ,						
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	752	700	695	619	649	624	635	605	514	492
Private Boat	3,852	4,835	3,990	4,247	1,752	1,849	1,761	1,828	1,421	1,471
Shore	2,675	3,265	3,507	3,445	4,255	3,962	4,548	3,818	3,846	4,345
Total Trips	7,279	8,800	8,192	8,311	6,656	6,435	6,944	6,251	5,781	6,308

Harvest (H) and Release (R) of Key Species Species Groups (thousands of fish)

<u> </u>		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Albacore & other	Н	174	140	116	168	80	23	45	106	51	80
tunas	R	37	33	6	83	10	2	4	7	0	13
Barracuda, bass &	Н	2,493	1,720	1,965	1,888	2,126	1,015	668	537	434	412
bonito ³	R	4,210	3,502	4,427	3,727	2,597	2,011	1,660	1,407	1,093	1,211
Croakers	Н	541	631	1,513	758	619	572	456	427	321	427
Cloakers	R	751	737	1,016	871	660	618	553	631	272	362
Flatfishes	Н	947	691	1,209	680	499	560	325	260	344	329
i latiisiles	R	1,140	1,116	2,061	948	343	513	520	338	361	297
Greenlings	Н	297	288	454	512	210	270	236	194	171	190
Greenings	R	371	446	958	858	342	281	207	151	139	192
Mackerel	Н	587	1,356	800	918	945	1,023	1,158	823	940	753
Mackerer	R	1,319	2,600	1,730	2,011	1,715	1,872	3,287	1,209	1,765	1,267
Rockfishes &	Н	3,568	3,241	2,736	3,624	2,413	3,433	2,504	2,256	1,842	1,990
scorpionfishes	R	680	787	930	1,664	750	1,148	730	513	465	687
Salmon	Н	496	995	598	853	744	494	275	505	131	916
Saimon	R	124	274	244	314	386	171	127	177	45	235
Sculpins	Н	85	113	116	110	78	78	61	54	65	64
Sculpins	R	389	349	403	291	240	232	216	202	222	194
Surfperches	Н	731	914	829	1,143	1,301	949	1,168	865	836	756
Jumperches	R	509	579	728	1,175	1,556	1,237	1,670	856	812	701

 $^{^{1}}NA = data$ 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

 $^{^2}$ Due to changes in data collection methods, the Pacific Region's effort (number of trips) and catch (number of fish harvested or released) estimates for 2000-2003 are not comparable to the 2004-2009 estimates.

³This species may not be equivalent to species with similar names listed in the commercial tables.

California Commercial Fisheries

2009 Economic Impacts of the California Seafood Industry (thousands of dollars)

	Jobs	Sales	Income	Value Added
Total Impacts	120,583	20,101,324	4,288,949	7,139,844
Commercial Harvesters	3,203	302,962	104,918	153,440
Seafood Processors & Dealers	4,200	431,108	159,858	212,116
Importers	55,442	15,250,828	2,444,236	4,649,120
Seafood Wholesalers & Distributors	10,858	1,548,920	502,393	701,877
Retail	46,880	2,567,507	1,077,545	1,423,291

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total revenue	142,451	107,890	111,923	136,152	140,615	116,084	129,907	127,580	120,861	149,977
Finfish & other	82,530	65,335	59,888	56,402	58,798	46,640	43,164	50,363	46,968	46,399
Shellfish	59,920	42,554	52,035	79,750	81,816	69,444	86,743	77,217	73,893	103,578
Crab	15,264	10,635	15,074	37,455	43,381	19,653	46,483	28,626	24,227	32,454
Pacific sardine	5,468	6,281	5,848	2,874	3,957	3,150	5,100	8,218	7,575	5,590
Rockfish	7,152	5,798	6,560	4,761	4,447	4,145	4,630	4,924	5,781	5,325
Sablefish	5,263	4,175	3,508	4,721	3,724	4,295	4,892	4,873	6,224	9,761
Salmon	10,319	4,761	7,611	12,153	17,770	12,804	5,261	7,835	6	6
Sea urchins	15,083	11,704	10,411	7,906	7,300	6,156	5,145	5,400	6,550	7,804
Shrimp	7,409	5,950	5,901	3,520	3,783	4,338	4,213	4,064	5,696	5,455
Spiny lobster	4,711	4,475	4,784	5,278	6,160	6,039	8,111	6,916	8,008	7,926
Squid	27,243	16,948	18,259	25,333	19,740	31,467	26,959	29,131	26,477	56,453
Swordfish	11,791	8,696	6,401	7,850	4,834	1,896	2,695	3,127	2,365	1,919

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Tatal landinas										
Total landings	650,596	524,833	499,676	382,146	379,591	442,353	341,661	384,826	323,884	372,337
Finfish & other	372,270	321,527	321,539	252,764	257,944	301,993	203,107	258,625	223,912	147,186
Shellfish	278,326	203,306	178,138	129,381	121,647	140,360	138,554	126,200	99,972	225,150
Crab	7,671	4,841	8,609	23,922	27,016	12,028	27,391	12,393	9,845	16,647
Pacific sardine	118,193	114,235	128,584	76,528	97,509	76,324	102,683	178,480	126,945	82,449
Rockfish	7,194	5,291	5,991	4,399	3,843	3,181	3,252	3,136	3,933	3,982
Sablefish	4,176	3,434	2,893	3,636	3,158	3,645	3,617	3,240	3,507	5,086
Salmon	5,912	2,761	5,661	7,328	7,113	4,962	1,184	1,743	1	1
Sea urchins	15,210	13,128	14,176	11,107	12,219	11,304	10,664	11,131	10,283	12,203
Shrimp	5,793	5,598	5,867	3,498	3,520	2,944	1,197	2,015	3,011	3,595
Spiny lobster	707	697	702	736	860	761	886	663	741	705
Squid	262,134	190,278	160,665	99,088	88,167	122,887	108,410	109,150	84,071	203,582
Swordfish	5,856	4,837	3,803	4,706	2,613	653	1,187	1,210	1,168	894

Average Amia	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Crab	1.99	2.20	1.75	1.57	1.61	1.63	1.70	2.31	2.46	1.95
Pacific sardine	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.06	0.07
Rockfish	0.99	1.10	1.10	1.08	1.16	1.30	1.42	1.57	1.47	1.34
Sablefish	1.26	1.22	1.21	1.30	1.18	1.18	1.35	1.50	1.77	1.92
Salmon	1.75	1.72	1.34	1.66	2.50	2.58	4.44	4.50	4.16	4.15
Sea urchins	0.99	0.89	0.73	0.71	0.60	0.54	0.48	0.49	0.64	0.64
Shrimp	1.28	1.06	1.01	1.01	1.07	1.47	3.52	2.02	1.89	1.52
Spiny lobster	6.67	6.42	6.81	7.18	7.16	7.93	9.15	10.44	10.80	11.24
Squid	0.10	0.09	0.11	0.26	0.22	0.26	0.25	0.27	0.31	0.28
Swordfish	2.01	1.80	1.68	1.67	1.85	2.90	2.27	2.58	2.03	2.15

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,229	133,298	44,427	76,073
Private Boat	842	112,737	35,063	60,139
Shore	2,276	262,999	86,758	143,467
Total Durable Equipment Impacts	9,221	1,534,270	543,973	788,056
Total State Trip and Durable Equipment Economic Impacts	13,567	2,043,304	710,221	1,067,736

2009 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	614,406
For-Hire	14,540	68,485	Other Equipment	239,286
Private Boat	348	80,419	Boat Expenses	152,358
Shore	1,152	191,089	Vehicle Expenses	199,262
Total Trip Expenditures	16,041	339,993	Second Home Expenses	80,102
			Total Durable Equipment Expenditures	1,285,415
Total State Trip and Dura	ble Equipment Exp	enditures		1,641,449

Recreational Anglers by Residential Area (thousands of anglers)

	•		`		· ,					
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	959	948	1110	1113	865	740	991	878	819	888
Non-Coastal	244	298	379	378	280	263	335	226	246	490
Out of State	109	117	111	115	98	79	109	65	83	71
Total Anglers	1312	1362	1600	1606	1243	1082	1435	1168	1148	1449

Recreational Fishing Effort by Mode (thousands of trips)¹

		·								
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	631	588	569	483	521	504	522	489	424	385
Private	2,812	2,861	2,905	3,117	708	902	896	768	640	676
Shore	2,006	2,238	2,501	2,699	3,509	3,216	3,802	3,072	3,100	3,599
Total Trips	5,449	5,687	5,975	6,299	4,738	4,622	5,220	4,329	4,164	4,660

Harvest (H) and Release (R) of Key Species Species Groups (thousands of fish)

Trairese (TT) and T		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Albacore & other	Н	164	127	107	146	49	6	9	22	5	13
tunas	R	37	33	6	83	10	2	3	7	(1)	13
Barracuda, bass &	Н	2,493	1,720	1,965	1,888	2,126	1,015	668	537	434	412
bonito ²	R	4,210	3,502	4,427	3,727	2,597	2,011	1,660	1,407	1,093	1,211
Croakers	Н	541	631	1,513	758	619	572	456	427	321	427
Cloakers	R	751	737	1,016	871	660	618	553	631	272	362
Flatfishes	Н	780	556	962	603	410	478	241	187	276	258
i latiisiles	R	1,034	1,043	1,844	850	295	465	471	292	313	241
Greenlings	Н	102	109	215	357	72	125	104	69	48	64
Greenings	R	249	297	641	717	239	179	113	67	53	83
Mackerel	Н	587	1,356	800	918	945	1,023	1,158	823	940	753
Mackerer	R	1,319	2,600	1,730	2,011	1,715	1,872	3,287	1,209	1,765	1,267
Rockfishes &	Н	2,753	2,585	2,116	3,035	1,778	2,725	1,891	1,674	1,318	1,383
scorpionfishes	R	582	720	844	1,621	701	1,058	668	456	402	605
Salmon	Н	206	115	201	109	256	167	119	59	(1)	1
Samon	R	49	46	40	39	103	71	74	36	(1)	(1)
Sculpins	Н	46	82	60	70	41	39	25	19	29	27
Sculpins	R	132	206	184	140	98	87	74	58	78	50
Surfperches	Н	404	630	586	878	1,046	694	913	610	581	501
Jumperenes	R	264	432	563	1,016	1,402	1,083	1,516	702	658	546

¹Due to changes in data collection methods, California's participation (number of anglers), effort(number of trips), and catch (number of fish harvested or released) estimates for 2000-2003 are not comparable to 2004-2009 estimates.

²This species may not be equivalent to species with similar names listed in the commercial tables.

California Marine Economy

California's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2000	799,863 (11%)	12,884,692 (11%)	514,360 (13%)	759,206 (13%)	1,320,000 (13%)	12
2008	879,025 (12%)	13,742,925 (11%)	659,926 (13%)	1,030,000 (13%)	1,920,000 (13%)	0.74
% change	9.9%	6.66%	28.3%	35.7%	45.5%	-26%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product	Firms	72	71	70	77	98	88	91	121	139
prep. & packaging	Receipts	11,405	12,983	9,123	9,858	14,312	10,207	8,298	10,842	11,460
Seafood Sales,	Firms	166	157	165	192	193	166	163	222	210
retail	Receipts	19,270	18,138	18,225	19,771	19,092	16,892	19,875	19,703	19,892

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	78	73	63	60	55	48	47	49	45
	Employees	3,289	2,962	3,357	2,896	2,931	2,963	2,592	2,229	2,024
	Payroll	75,858	66,387	82,116	74,637	72,178	92,642	78,065	75,886	65,215
Seafood sales,	Establishments	360	361	334	269	263	258	252	300	278
wholesale	Employees	4,174	4,507	4,539	3,536	3,744	3,925	4,063	4,429	3,321
Wilolesale	Payroll	128,092	142,656	151,789	115,669	124,657	134,576	144,758	159,672	132,139
Soafood sales	Establishments	172	165	186	175	169	180	184	182	161
Seafood sales, retail	Employees	828	917	988	968	945	999	1,031	1,004	932
retail	Payroll	13,815	15,172	16,775	19,919	16,686	18,832	19,900	21,224	20,585

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great	Establishments	24	31	31	22	20	26	22	29	28
Lakes freight	Employees	1,394	1,648	1,776	1,341	ND^3	1,346	ND^3	ND^3	ND^3
transportation	Payroll	99,106	119,808	132,432	117,982	ND^3	129,262	ND^3	ND^3	ND^3
Deep sea freight	Establishments	44	43	44	51	50	54	54	51	43
transportation	Employees	1,323	1,117	ND^3	902	901	ND^3	957	1,643	ND^3
transportation	Payroll	51,131	63,891	ND^3	62,417	69,815	ND^3	84,199	116,628	ND^3
Deep sea passenger	Establishments	8	9	11	14	15	15	16	13	5
transportation	Employees	ND^3	ND^3	ND^3	ND^3	ND^3	ND^3	1,552	ND^3	ND^3
transportation	Payroll	ND^3	ND^3	ND^3	ND^3	ND^3	ND^3	72,119	ND^3	ND^3
	Establishments	266	249	248	263	271	263	268	276	277
Marinas	Employees	2,000	1,862	1,851	2,485	2,476	2,426	2,457	2,680	2,652
	Payroll	50,106	52,602	57,393	70,640	73,338	71,318	74,778	80,216	85,315
Marine cargo	Establishments	66	70	64	56	54	54	52	56	61
handling	Employees	15,330	15,076	15,274	15,557	20,456	19,303	20,975	22,395	22,086
Handing	Payroll	880,397	944,374	1,000,809	1,040,515	1,179,221	1,273,698	1,448,623	1,484,308	1,453,281
Navigational	Establishments	42	37	30	35	38	37	36	39	40
services to shipping	Employees	702	647	476	850	ND^3	ND^3	817	858	815
services to sinpping	Payroll	35,480	33,764	28,197	53,162	ND^3	ND^3	63,893	63,610	65,225
Port & harbor	Establishments	23	21	23	19	20	20	20	18	17
	Employees	650	163	139	417	ND^3	ND^3	582	443	256
operations -	Payroll	19,056	9,990	7,668	23,110	ND^3	ND^3	32,523	30,001	23,316
Ship & boat	Establishments	143	155	145	141	143	141	132	136	136
building	Employees	9,204	8,589	7,782	8,574	8,865	10,132	9,801	9,250	11,630
bullullig	Payroll	335,172	322,296	315,090	314,706	354,404	410,446	453,255	433,846	477,300

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

 $^{^2\}mathrm{CFLQ}$ data for 2000 were not available. Data from 2001 are reported here.

 $^{^3 {}m ND} = {
m these}$ data are confidential thus not disclosable

2009 Economic Impacts of the Oregon Seafood Industry (thousands of dollars)

	Jobs	Sales	Income	Value Added
Total Impacts	13,754	1,127,435	341,248	500,498
Commercial Harvesters	3,507	194,345	78,859	111,666
Seafood Processors & Dealers	1,173	100,377	38,551	50,369
Importers	1,749	481,081	77,102	146,655
Seafood Wholesalers & Distributors	618	74,547	25,289	33,919
Retail	6,708	277,085	121,447	157,890

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total revenue	83,276	72,651	68,292	86,779	101,022	88,196	106,093	97,298	103,042	102,453
Finfish & other	45,060	41,451	32,073	40,889	49,634	53,192	46,326	47,589	56,912	52,749
Shellfish	38,216	31,200	36,218	45,890	51,388	35,005	59,767	49,709	46,130	49,704
Albacore tuna	7,489	7,559	2,952	6,169	9,145	8,815	8,067	9,468	10,666	10,191
Crab	23,745	19,361	20,767	37,122	42,960	26,603	53,810	38,208	29,168	42,413
Flatfish	6,643	6,103	5,156	6,632	6,460	7,281	7,547	7,930	9,163	8,468
Hake (whiting)	6,081	4,132	3,219	3,642	4,641	7,107	7,974	6,501	6,830	3,783
Oysters	3,540	3,536	3,143	3,292	3,292	1,232	1,163	1,847	2,748	ND^1
Pacific sardine	1,149	1,619	2,819	2,941	4,870	6,199	3,743	4,551	5,665	5,291
Rockfish	7,595	5,287	3,511	2,327	1,633	1,387	1,564	2,002	2,610	2,500
Sablefish	9,266	7,986	4,405	7,381	6,935	8,657	9,787	9,494	13,737	15,919
Salmon	4,030	5,846	6,933	8,869	12,995	10,437	4,940	4,647	4,166	3,546
Shrimp	10,192	7,560	11,353	5,051	4,740	6,901	4,494	9,365	13,937	6,813

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total landings	264,105	234,474	210,750	226,317	294,866	312,636	282,846	253,543	195,688	198,331
Finfish & other	226,357	195,121	155,609	180,788	254,330	278,646	236,998	216,134	155,837	154,147
Shellfish	37,747	39,352	55,140	45,529	40,536	33,990	45,848	37,410	39,851	44,184
Albacore tuna	8,757	8,959	4,362	9,165	10,754	8,087	8,534	10,468	8,876	10,082
Crab	11,223	9,754	12,452	23,934	27,276	17,734	33,291	17,007	13,875	21,848
Flatfish	16,470	14,488	11,489	14,372	14,846	16,910	16,385	19,697	23,842	26,047
Hake (whiting)	151,461	117,673	71,220	80,648	130,238	135,503	122,804	81,481	55,511	53,466
Oysters	834	884	786	823	823	308	255	197	162	ND^3
Pacific sardine	21,005	28,176	50,069	55,683	79,610	99,450	74,669	90,037	49,298	45,902
Rockfish	14,231	9,400	4,653	3,434	2,574	2,007	1,967	2,905	3,820	4,207
Sablefish	6,256	5,697	3,185	4,798	5,627	5,834	5,838	5,349	6,514	7,219
Salmon	3,133	5,261	6,117	6,720	5,914	4,666	1,810	1,370	1,860	2,311
Shrimp	25,462	28,482	41,584	20,546	12,207	15,784	12,128	19,990	25,400	22,019

Average Annual Frice of Test Species Groups (donars per pound)												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Albacore tuna	0.86	0.84	0.68	0.67	0.85	1.09	0.95	0.90	1.20	1.01		
Crab	2.12	1.98	1.67	1.55	1.58	1.50	1.62	2.25	2.10	1.94		
Flatfish	0.40	0.42	0.45	0.46	0.44	0.43	0.46	0.40	0.38	0.33		
Hake (whiting)	0.04	0.04	0.05	0.05	0.04	0.05	0.06	0.08	0.12	0.07		
Oysters	4.24	4.00	4.00	4.00	4.00	4.00	4.56	9.40	16.96	ND^3		
Pacific sardine	0.05	0.06	0.06	0.05	0.06	0.06	0.05	0.05	0.11	0.12		
Rockfish	0.53	0.56	0.75	0.68	0.63	0.69	0.80	0.69	0.68	0.59		
Sablefish	1.48	1.40	1.38	1.54	1.23	1.48	1.68	1.78	2.11	2.21		
Salmon	1.29	1.11	1.13	1.32	2.20	2.24	2.73	3.39	2.24	1.53		
Shrimp	0.40	0.27	0.27	0.25	0.39	0.44	0.37	0.47	0.55	0.31		

 $^{^{1}}$ ND = these data are confidential thus not disclosable

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	222	17,046	5,550	9,610
Private Boat	576	50,149	17,049	28,915
Shore	228	19,405	6,572	11,056
Total Durable Equipment Impacts	624	81,003	30,607	43,401
Total State Trip and Durable Equipment Economic Impacts	1,649	167,603	59,777	92,982

2009 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	25,177
For-Hire	494	10,514	Other Equipment	18,488
Private Boat	1,939	39,099	Boat Expenses	9,744
Shore	488	15,605	Vehicle Expenses	8,666
Total Trip Expenditures	2,922	65,219	Second Home Expenses	13,818
			Total Durable Equipment Expenditures	75,892
Total State Trip and Dura	144,033			

Recreational Anglers by Residential Area (thousands of anglers)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	70	122	101	91	90	87	82	86	79	85
Non-Coastal	122	175	153	135	125	123	125	130	120	128
Out of State	13	20	21	15	16	14	15	15	14	15
Total Anglers	206	317	275	242	231	224	222	231	213	228

Recreational Fishing Effort by Mode (thousands of trips)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	69	79	67	67	64	58	56	61	48	56
Private	355	520	448	426	426	382	373	399	353	396
Shore	214	357	295	233	233	233	233	233	233	233
Total Trips	638	956	810	726	723	673	662	693	634	685

Harvest (H) and Release (R) of Key Species Species Groups (thousands of fish)¹

riarvest (11) una 1		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Albacore tuna	Н	3	9	3	11	17	5	12	59	24	43
Albacore tulia	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Baitfishes	Н	54	499	772	320	322	320	320	320	320	320
Daithshes	R	(1)	88	21	24	24	24	24	24	24	24
Flatfishes	Н	9	16	31	15	27	21	21	22	21	17
i latiisiles	R	4	7	8	6	7	7	7	6	8	9
Greenlings	Н	95	106	154	96	99	106	99	97	94	92
Greenings	R	86	116	176	77	78	77	72	65	67	70
Rockfishes	Н	547	457	383	405	379	401	331	322	308	362
Nockrisiles	R	90	53	36	23	24	57	39	38	47	49
Salmon	Н	79	217	118	235	186	61	37	92	28	157
Sallion	R	23	97	67	146	148	23	16	55	16	120
Sculpins	Н	15	21	21	23	20	22	20	20	21	21
Sculpins	R	55	58	77	50	51	54	51	53	53	53
Sturgeon	Н	13	17	12	12	12	12	12	12	12	12
Sturgeon	R	24	30	27	24	24	24	24	24	24	24
Surfperches	Н	129	195	139	122	122	122	122	122	122	122
Jumperches	R	18	46	60	34	34	34	34	34	34	34

 $^{^{1}}$ In this table, '(1)'=0-999 thousand fish and '1'=1,000-1,499 thousand fish.

Oregon's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2000	100,645 (1.4%)	1,355,442 (1.2%)	43,690 (1.1%)	67,048 (1.1%)	112,974 (1.2%)	3.38 ²
2008	111,550 (1.5%)	1,482,968 (1.2%)	56,824 (1.1%)	91,443 (1.2%)	169,479 (1.1%)	3.27
% change	10.8%	9.41%	30.1%	36.4%	50%	-3.25%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product	Firms	8	11	0	0	0	9	7	0	19
prep. & packaging	Receipts	461	424	ND^3	ND^3	ND^3	309	54	ND^3	957
Seafood Sales,	Firms	16	14	13	10	11	7	11	11	16
retail	Receipts	628	851	644	428	507	985	914	1,210	2,101

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

				•		,				
		2000	2001	2002	2003	2004	2005	2006	2007	2008
Cfddd	Establishments	27	27	19	19	18	20	21	22	23
Seafood product prep. & packaging	Employees	1,036	875	707	720	738	762	896	819	850
prop. & packaging	Payroll	22,718	23,616	20,867	21,980	20,593	19,022	25,881	27,394	27,616
Seafood sales,	Establishments	25	29	33	26	21	23	16	18	18
wholesale	Employees	ND^3	295	ND^3	ND^3	126	ND^3	ND^3	ND^3	ND^3
Wilolesale	Payroll	ND^3	8,698	ND^3	ND^3	4,446	ND^3	ND^3	ND^3	ND^3
Seafood sales,	Establishments	18	16	28	21	24	24	22	23	21
retail	Employees	113	116	129	ND^3	171	204	306	171	178
ICLAII	Payroll	1,844	1,945	2,311	ND^3	3,259	3,464	3,294	3,185	3,370

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
			2001						1	
Coastal & Great	Establishments	8	7	10	8	8	9	9	13	8
Lakes freight	Employees	ND^3	476	ND^3						
transportation	Payroll	ND^3	25,206	ND^3						
Doon oos fusialet	Establishments	5	4	7	6	6	6	6	5	4
Deep sea freight transportation	Employees	ND^3								
transportation	Payroll	ND^3								
Dann ann massannan	Establishments	1	NA^4	NA^4	NA^4	NA^4	NA^4	NA^4	2	NA^4
Deep sea passenger transportation	Employees	ND^3	NA^4	NA^4	NA^4	NA^4	NA^4	NA^4	ND^3	NA^4
transportation	Payroll	ND^3	NA^4	NA^4	NA^4	NA^4	NA^4	NA^4	ND^3	NA^4
	Establishments	38	33	41	42	41	40	37	38	37
Marinas	Employees	93	ND^3	ND^3	122	133	113	ND^3	138	106
	Payroll	1,830	ND^3	ND^3	2,742	2,988	3,550	ND^3	3,754	2,178
Marina saura	Establishments	9	9	7	8	8	8	9	9	13
Marine cargo handling	Employees	ND^3								
nanunng	Payroll	ND^3								
Navigational	Establishments	23	21	18	21	21	21	20	17	20
Navigational services to shipping	Employees	ND^3	183	200						
services to shipping	Payroll	ND^3	11,331	11,808						
D . 0 . 1	Establishments	1	1	1	1	NA^4	NA^4	NA^4	2	1
Port & harbor operations	Employees	ND^3	ND^3	ND^3	ND^3	NA^4	NA^4	NA^4	ND^3	ND^3
operations	Payroll	ND^3	ND^3	ND^3	ND^3	NA^4	NA^4	NA^4	ND^3	ND^3
Ship & host	Establishments	48	51	44	43	50	43	41	40	41
Ship & boat building	Employees	2,506	1,969	1,323	1,284	1,285	1,298	1,230	1,441	1,692
Dunumb	Payroll	87,018	69,200	47,303	42,270	43,357	45,183	43,416	47,950	74,583

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.

²CFLQ data for 2000 were not available. Data from 2001 are reported here.

 $^{^3\}mathrm{ND} = \mathrm{these}\ \mathrm{data}\ \mathrm{are}\ \mathrm{confidential}\ \mathrm{thus}\ \mathrm{not}\ \mathrm{disclosable}$

 $^{{}^4{}m NA}={
m these}$ data are not available

Washington Commercial Fisheries

2009 Economic Impacts of the Washington Seafood Industry (thousands of dollars)

	Jobs	Sales	Income	Value Added
Total Impacts	57,643	7,300,279	1,906,483	2,924,888
Commercial Harvesters	5,491	453,326	194,295	273,190
Seafood Processors & Dealers	15,928	1,511,828	567,820	751,423
Importers	15,104	4,154,866	665,897	1,266,585
Seafood Wholesalers & Distributors	2,454	318,067	106,565	145,391
Retail	18,667	862,193	371,905	488,299

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

			-		· · ·		- \			
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total revenue	133,499	140,382	143,720	172,829	166,247	193,317	217,030	216,119	232,841	227,773
Finfish & other	36,828	38,342	39,854	47,415	55,906	50,145	68,201	59,386	68,213	61,115
Shellfish	96,671	102,040	103,867	125,414	110,342	143,172	148,829	156,733	164,628	166,658
Clams	27,920	32,677	34,339	36,060	42,297	48,503	55,786	56,428	64,141	72,646
Crab	38,262	37,681	37,232	56,374	29,024	50,872	43,464	54,302	53,712	48,944
Hake (Whiting)	1,022	1,299	1,022	1,601	2,341	4,937	7,296	7,121	7,249	2,334
Halibut	6,729	5,759	6,777	5,991	7,264	6,512	8,303	8,842	7,525	4,879
Mussels	3,564	2,426	1,613	2,513	3,096	3,729	6,564	3,820	5,293	4,851
Oysters	22,473	24,642	25,578	26,142	31,257	33,697	38,302	37,437	34,794	34,993
Sablefish	6,545	5,984	4,354	6,675	6,517	7,395	8,307	6,608	7,312	8,796
Salmon	9,709	10,332	11,780	9,941	17,316	14,319	24,586	22,026	23,376	22,003
Shrimp	3,611	3,697	4,473	3,723	3,648	4,335	3,602	3,746	5,380	4,139
Tuna, Albacore	5,821	7,917	7,375	15,621	15,657	10,643	15,176	10,439	17,225	16,390

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total landings	112,181	154,701	172,277	189,479	192,181	213,502	241,606	194,449	173,176	163,937
Finfish & other	77,359	114,764	125,903	132,940	155,224	156,902	191,717	151,762	128,208	120,452
Shellfish	34,822	39,937	46,374	56,539	36,957	56,600	49,889	42,687	44,968	43,485
Clams	2,109	2,632	3,087	3,127	3,319	3,621	4,617	3,363	4,070	4,266
Crab	17,752	19,024	21,380	34,037	14,955	32,086	24,619	22,487	21,355	20,651
Hake (Whiting)	24,399	35,593	22,564	35,124	69,117	93,654	120,058	91,272	67,159	36,378
Halibut	2,289	2,490	2,487	1,868	2,254	1,948	2,451	2,428	2,055	1,731
Mussels	374	332	214	337	427	504	774	475	593	568
Oysters	8,458	9,497	9,935	9,649	11,058	12,190	12,306	11,189	10,258	9,386
Sablefish	3,755	3,589	2,559	3,736	4,064	4,240	4,259	3,035	2,954	3,514
Salmon	11,971	23,291	26,626	25,493	27,918	17,926	26,570	21,938	17,641	31,821
Shrimp	5,520	7,764	11,149	8,867	6,599	7,279	6,926	4,455	7,355	7,775
Tuna, Albacore	7,003	9,110	11,708	23,672	18,044	10,505	19,133	13,129	14,801	16,112

Average Annual Frice of Frey Species Groups (donars per pound)												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Clams	13.24	12.42	11.12	11.53	12.74	13.40	12.08	16.78	15.76	17.03		
Crab	2.16	1.98	1.74	1.66	1.94	1.59	1.77	2.41	2.52	2.37		
Hake (Whiting)	0.04	0.04	0.05	0.05	0.03	0.05	0.06	0.08	0.11	0.06		
Halibut	2.94	2.31	2.73	3.21	3.22	3.34	3.39	3.64	3.66	2.82		
Mussels	9.52	7.30	7.53	7.46	7.26	7.40	8.48	8.05	8.93	8.54		
Oysters	2.66	2.59	2.57	2.71	2.83	2.76	3.11	3.35	3.39	3.73		
Sablefish	1.74	1.67	1.70	1.79	1.60	1.74	1.95	2.18	2.48	2.50		
Salmon	0.81	0.44	0.44	0.39	0.62	0.80	0.93	1.00	1.33	0.69		
Shrimp	0.65	0.48	0.40	0.42	0.55	0.60	0.52	0.84	0.73	0.53		
Tuna, Albacore	0.83	0.87	0.63	0.66	0.87	1.01	0.79	0.80	1.16	1.02		

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	187	17,378	5,586	9,703
Private Boat	466	53,292	16,473	27,849
Shore	286	29,772	9,711	15,971
Total Durable Equipment Impacts	2,409	246,236	86,707	132,483
Total State Trip and Durable Equipment Economic Impacts	3,348	346,679	118,478	186,006

2009 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	34,706
For-Hire	1,182	10,139	Other Equipment	24,017
Private Boat	1,004	38,216	Boat Expenses	224,036
Shore	996	22,616	Vehicle Expenses	12,564
Total Trip Expenditures	3,182	70,971	Second Home Expenses	7,830
			Total Durable Equipment Expenditures	303,154
Total State Trip and Dura	ble Equipment Exp	enditures		377,307

Recreational Anglers by Residential Area (thousands of anglers)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	203	427	252	233	213	201	184	220	167	163
Non-Coastal	25	33	27	25	24	23	21	23	19	20
Out of State	13	22	24	20	19	18	17	19	15	16
Total Anglers	240	481	303	278	255	242	222	262	201	198

Recreational Fishing Effort by Mode (thousands of trips)¹

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	52	33	59	69	64	62	57	55	42	51
Private	685	1,454	637	704	618	565	492	661	428	399
Shore	455	670	711	513	513	513	513	513	513	513
Total Trips	1,192	2,157	1,407	1,286	1,195	1,140	1,062	1,229	983	963

Harvest (H) and Release (R) of Key Species Species Groups (thousands of fish)

		` '	, .	•	•	`	,				
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Albacore tuna	Н	7	4	6	11	14	12	24	25	22	24
Albacole tulia	R	(1)	(1)	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)
Flatfishes	Н	158	119	216	62	62	61	63	51	47	54
i latilistics	R	102	66	209	92	41	41	42	40	40	47
Greenlings	Н	100	73	85	59	39	39	33	28	29	34
Greenings	R	36	33	141	64	25	25	22	19	19	39
Rockfishes ²	Н	268	199	237	184	256	307	282	260	216	245
Nockrisiles	R	8	14	50	20	25	33	23	19	16	33
Salmon	Н	211	663	279	509	302	266	119	354	103	758
Jaimon	R	52	131	137	129	135	77	37	86	29	115
Sculpins	Н	24	10	35	17	17	17	16	15	15	16
Sculpins	R	202	85	142	101	91	91	91	91	91	91
Sharks & Skates	Н	22	36	27	15	1	1	1	(1)	1	1
Silaiks & Skates	R	286	445	331	203	14	12	14	9	12	10
Smelt & herring	Н	2,065	3,649	3,254	2,487	2,486	2,486	2,486	2,486	2,486	2,486
Silient & lierning	R	60	161	196	136	126	126	126	126	126	126
Sturgeon	Н	13	10	11	8	8	8	7	8	8	9
Juigeon	R	31	20	30	18	25	30	21	18	12	17
Surfperches	Н	198	89	104	143	133	133	133	133	133	133
Jumperenes	R	227	101	105	125	120	120	120	120	120	121

 $^{^{1}}$ In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish. 2 This species may not be equivalent to species with similar names listed in the commercial tables.

Washington Marine Economy

Washington's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2000	164,018 (2.3%)	2,267,485 (2%)	87,746 (2.3%)	133,146 (2.3%)	227,828 (2.3%)	12.5 ²
2008	182,207 (2.4%)	2,536,645 (2.1%)	115,285 (2.2%)	186,864 (2.4%)	336,137 (2.3%)	13.5
% change	11.1%	11.9%	31.4%	40.3%	47.5%	8.67%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product	Firms	37	41	48	59	53	54	53	63	44
prep. & packaging	Receipts	3,052	3,432	2,763	5,680	4,446	5,568	4,149	4,698	5,167
Seafood Sales,	Firms	28	29	30	32	30	31	29	32	33
retail	Receipts	2,139	2,465	2,681	1,623	2,202	1,836	1,727	1,458	1,807

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

	_			•		,				
		2000	2001	2002	2003	2004	2005	2006	2007	2008
Confood product	Establishments	119	112	106	110	101	98	96	98	96
Seafood product prep. & packaging	Employees	6,784	6,498	6,728	5,968	5,851	5,743	5,705	5,249	5,893
prop. & packaging	Payroll	218,517	216,660	221,978	231,153	247,316	239,962	255,129	275,662	306,213
Seafood sales,	Establishments	176	176	175	121	116	126	115	127	107
wholesale	Employees	1,654	1,444	1,185	1,112	883	1,094	1,015	1,086	996
Wilolesale	Payroll	64,074	56,122	51,959	39,206	37,292	42,852	42,934	46,085	48,251
Seafood sales,	Establishments	28	32	44	37	40	47	49	50	44
retail	Employees	182	198	235	284	222	291	292	244	247
Totali	Payroll	4,122	4,503	6,379	6,363	6,578	9,322	8,998	8,001	7,947

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great	Establishments	32	30	33	36	38	41	43	37	24
Lakes freight	Employees	2,356	2,330	2,173	1,607	2,039	1,672	2,353	1,903	2,222
transportation	Payroll	128,747	129,997	130,456	112,319	128,786	122,000	145,144	136,543	168,832
Deep sea freight	Establishments	21	22	23	27	23	24	23	30	21
transportation	Employees	736	584	ND^3	276	311	378	197	227	263
transportation	Payroll	41,689	29,209	ND^3	16,147	20,559	22,655	14,390	19,692	24,843
Deep sea passenger	Establishments	7	8	7	3	2	3	3	3	4
transportation	Employees	435	494	ND^3						
transportation	Payroll	18,145	20,543	ND^3						
	Establishments	116	119	111	102	96	96	103	114	116
Marinas	Employees	575	573	406	430	449	442	466	485	573
	Payroll	15,714	14,516	11,283	12,400	12,763	13,556	14,269	15,623	18,931
Marine cargo	Establishments	36	36	33	23	30	30	29	28	25
handling	Employees	3,322	2,847	2,538	ND^3	ND^3	4,459	3,764	4,913	4,821
nananng	Payroll	238,138	213,946	194,398	ND^3	ND^3	318,873	303,375	334,601	334,193
Navigational	Establishments	56	57	55	52	53	53	56	61	76
services to shipping	Employees	ND^3	239	218	834	ND^3	841	942	950	1,213
services to silipping	Payroll	ND^3	20,235	20,962	51,092	ND^3	60,034	72,120	72,912	100,542
Port & harbor	Establishments	6	5	4	3	4	6	5	6	11
operations	Employees	ND^3	ND^3	37	ND^3	ND^3	ND^3	53	129	111
operations	Payroll	ND^3	ND^3	1,565	ND^3	ND^3	ND^3	3,436	4,631	6,359
Chin & host	Establishments	132	134	135	138	141	154	164	167	169
Ship & boat building	Employees	6,442	5,532	4,974	6,056	6,474	7,154	7,669	7,742	8,067
Dullullig	Payroll	225,433	194,050	219,980	244,124	272,336	307,735	313,230	354,084	402,253

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

 $^{^2\}mathrm{CFLQ}$ data for 2000 were not available. Data from 2001 are reported here.

 $^{^3 {}m ND} = {
m these}$ data are confidential thus not disclosable