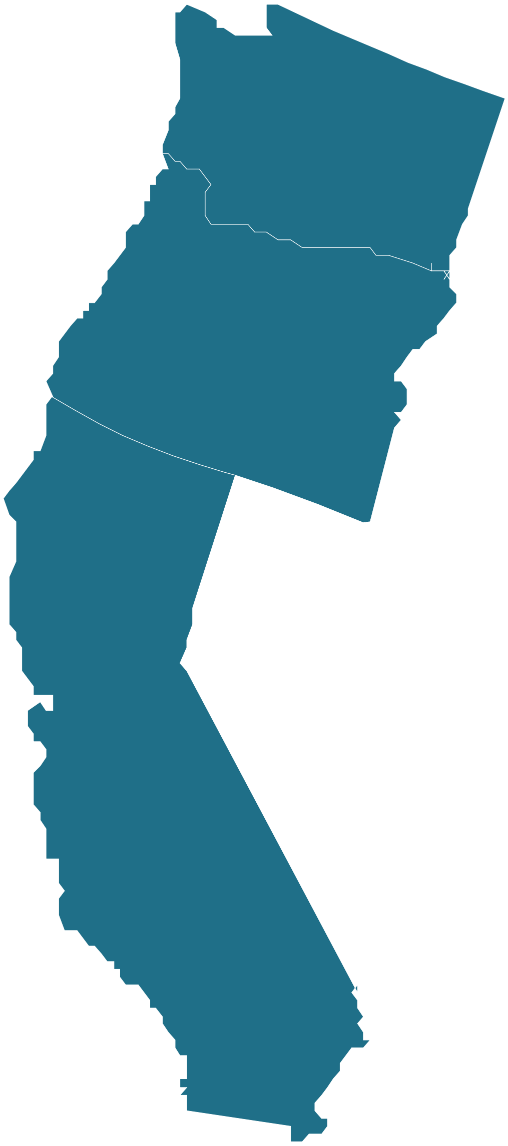
Pacific

- California
- Oregon
- Washington



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 Fishery Management Plans

1. Pacific Coast Groundfish
2. Pacific Coast Salmon
3. Coastal Pelagic Species
4. West Coast Highly Migratory Species

Of the stocks covered in these fishery management plans, canary and yelloweye rockfish, petrale sole and cowcod are currently overfished. Bocaccio, Pacific ocean perch, cowcod, and darkblotched and widow rockfish are currently in rebuilding plans. These stocks are subject to unprecedented harvest, season, and depth-based area restrictions to address rebuilding requirements for these overfished species.[1] Eastern Pacific yellowfin tuna and Pacific bigeye tuna stocks[2] which are internationally managed are currently characterized as subject to overfishing.[3]

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 overfished groundfish stocks and salmon is 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 resulted in unprecedented closures of ocean and in-river fisheries and federal disaster relief to affected entities.

[1]These species are part of the Pacific Coast groundfish fishery, a multispecies fishery involving multiple commercial gear groups (trawl, line, and pot vessels) and recreational for-hire (party/charter) and private boat anglers.
[2]These stocks are part of the West Coast highly migratory species (HMS) fishery that includes tunas, sharks, marlin, swordfish, and dorado. Longline and drift gillnet activity has been severely restricted due to potential interactions with marine mammals, turtles, and seabirds.
[3]In contrast to Inter-American Tropical Tuna Commission's recent stock assessments, the scientific committee of the International Seafood Sustainability Foundation, a tuna fishing industry organization, recently suggested that the Eastern Pacific yellowfin tuna stock is not overfished nor subject to overfishing.

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.

Key Pacific Commercial Species

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

Catch limits for Pacific halibut, a transboundary fish stock, are set every 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).[4] 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.

Market-based management tools are used by fishery managers to reduce overcapitalization, 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 comprise a category of such tools. LAPPs are used in various sectors of the groundfish fishery. 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 permits in order to obtain additional trip limits. The PFMC is now considering a trawl rationalization program involving individual fishing quotas (IFQs) for non-whiting groundfish trawlers and coops and/or IFQs for whiting trawlers. The shore-based commercial groundfish fishery had an ex-vessel value of $59.3 million in 2007.

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 and the American Albacore Fishing Association albacore tuna fishery have received certifications from the MSC. The California and Oregon dungeness crab fisheries are currently undergoing assessment to receive MSC certification.

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

Commercial Fisheries

In 2008, commercial fishermen in the Pacific Region landed 1.1 billion pounds of finfish and shellfish, generating $504 million in ex-vessel revenue. Landings revenue was dominated by crab ($107 million) and other shellfish ($133 million). These high value species groups commanded an annual average price of $2.38 and $4.56 per pound, respectively, and comprised 48% of landings revenue but only 7% of total landings. Hake landings were the highest at 531 million pounds in 2008. However, with an annual price of $0.11 per pound, hake contributed less than 12% to total landings revenue.

Washington contributed most to landings revenue in the region with over $243 million in 2008, followed by California ($113 million), and Oregon ($103 million). In terms of pounds landed, California contributed the most (315 million pounds), followed by Oregon (196 million pounds), and Washington (174 million pounds).

Commercial Fish Facts

Landings revenue

- On average, the key species or species groups accounted for 90% of total revenue ($459 million) generated in the Pacific Region over the 1999 to 2008 time period.
- Crab contributed more than any other species or species group, averaging $101 million in landings revenue from 1999-2008. In 2008, Washington contributed the most to crab revenue in the region, followed by Oregon and California.
- Hake had the largest annual increase during the 10 year time period, increasing 80% from $33 million in 2007 to $59 million in 2008. Shrimp had the largest annual decrease in landings revenue (44%) from 2002 to 2003.

Landings

- Key species and species groups in the Pacific Region contributed an average of 76% annually to total landings.
- Hake, also known as whiting, contributed the most to landings in the region, averaging 446 million pounds from 1999-2008. In 2008, commercial fishermen in Washington harvested the more of this species than any other state.
- The largest annual changes in landings both occurred between 2002 and 2003. Crab experienced the greatest increase (93%) from 42 to 82 million pounds and shrimp experienced the greatest decrease (44%) from 59 to 33 million pounds.

Prices

- Other shellfish had the highest average annual ex-vessel price per pound ($4.56) in 2008, followed by crab ($2.38) and sablefish ($2.10).
- Hake ($0.11), squid ($0.31), and flatfish ($0.42) had the lowest average annual ex-vessel price per pound.
- The largest annual increase in annual ex-vessel price was for squid, a 136% increase from 2002-2003. The largest annual decrease in price was for salmon, dropping 42% from 2000-2001.

Economic Impacts

In 2008, the Pacific Region's seafood industry generated $9.1 billion in sales impacts in California, $3.7 billion in Washington, and $960 million in Oregon. California generated the largest income and employment impacts ($4.7 billion; 160,000 full and part-time jobs), followed by Washington ($2.0 billion; 72,000 jobs) and Oregon ($517 million; 19,000 jobs).

Landings Revenue

In 2008, ex-vessel revenue for finfish and shellfish totaled $503 million, a 43% increase (14% in real terms) from landings revenue in 1999 ($353 million). However, this was a 13% increase from $445 million in 2007. Shellfish revenue ($288 million) accounted for 57% of the 2008 revenue generated. There was a 47% increase in revenue (18% in real terms) generated by shellfish compared to revenue in 1999 ($210 million). Finfish revenue totaled $215 million, a 37% increase (10% in real terms) from 1999 ($157 million).

Washington contributed the most to shellfish revenue, generating $176 million in 2008. This was a 93% increase (54% in real terms) from 1999 ($91 million). Landings revenues from shellfish decreased 3.9% (23% in real terms) in California and increased 28% (3% in real terms) in Oregon during this period. In contrast, finfish revenue increased modestly across the region despite a drop in finfish revenue in California (42% from 1999 to 2008). Finfish landings revenue in Oregon (61%, 28% in real terms) and Washington (140%, 89% in real terms) increased between 1999 and 2008.

Between 1999 and 2008, the ex-vessel revenue from crab increased 32% and from other shellfish increased 81%. Other species or species groups with large increases in landings revenue between 1999 and 2008 includes hake (209%), salmon (87%), albacore tuna (62%), and sablefish (53%). Rockfish (47%) were the only species or species group to experience a large decrease in landings revenue.

Landings

Fishermen in the Pacific Region landed over 1 billion pounds of finfish and shellfish in 2008. This was a 15% decrease from the nearly 1.3 billion pounds landed in 1999 and a 2% drop from the 1.1 billion landed in 2007. Finfish landings contributed 83% of total landings in the Pacific (900 million pounds) in 2008, a 10% decrease from 1999. From 2007 to 2008, finfish landings dropped 0.4%. Shellfish landings decreased substantially during this period, from 290 million pounds in 1999 to 186 million pounds in 2008, a 36% decrease. Shellfish landings dropped 10% between 2007 and 2008.

Decreases in finfish landings in the Pacific Region occurred in California (50%) and Oregon (22%) between 1999 and 2008, while Washington experienced a 127% increase. Landings of shellfish increased 19% in Oregon and 42% in Washington, but decreased 56% in California. Washington contributed the most to both finfish (127 million pounds) and shellfish (47 million pounds) landings in 2008.

Of the Pacific Region's key species and groups, hake and squid contributed the most to total landings, with 531 million and 85 million pounds, respectively. Together, these species made up 57% of total landings in 2008. Washington and Oregon fishermen were major contributors to hake landings, while squid landings were mostly harvested by California fishermen.

Key species or groups with the largest increases in annual landings totals from 1999 to 2008 were salmon (42%), albacore tuna (14%), hake (11%), crab (10%) and shrimp (9.3%). Total landings of rockfish (70%), squid (58%) and sablefish (14%) dropped during this period. The decrease in rockfish landings is partly attributable to the establishment of rockfish conservation areas[5] that were instituted in response to declining populations of this long-lived, slow-growing species group.

Prices

All ex-vessel prices in 2008 for each of the Pacific Region's key species and groups was higher than their 10 year average annual price per pound. Ex-vessel prices for hake, squid and sable fish, saw the biggest increases between 1999 and 2008, increasing 175% (120% in real terms), 94% (55% in real terms) and 76% (41% in real terms) respectively. Hake prices increased 175% (120% in real terms) in Washington from $0.04 to $0.11 and 200% (140% in real terms) in Oregon during this time period ($0.04 to $0.12 per pound).

In California, the species or species group with the largest increase in ex-vessel price from 1999 to 2008 was salmon (148%, 98% in real terms, from $1.68 to $4.16), squid (94%, 55% in real terms, from $0.16 to $0.31), and rockfish (86%, 49% in real terms, from $0.79 to $1.47). The largest increases in species prices in Oregon were oysters (300%, 220% in real terms), hake (200%, 140% in real terms), and Pacific sardine (120%, 76% in real terms). There were no decreases in price in Oregon between 1999 and 2008. Hake and salmon experienced the greatest increases in Washington at 175% (120% in real terms) and 100% (60% in real terms). Mussels were the only species or species group to experience a decrease in both nominal and real prices (20%, 36% in real terms) in Washington.

Relative to ex-vessel prices in 2007, albacore tuna (39%, 25% in real terms), hake (57%, 42% in real terms), and other shellfish (26%, 14% in real terms) prices increased in 2008. Flatfish (2.3%, 12% in real terms) and rockfish (3.0%, 12% in real terms) prices decreased.

Recreational Fishing

In 2008, over 1.45 million recreational anglers took 5.8 million fishing trips in the Pacific Region. Most of these anglers (73%) were residents of a regional coastal county. Of the total fishing trips taken, 67% of them were shore-based. Mackerels were the most caught key species or species group with over 2.7 million fish caught in 2008, 26% of total fish caught in the region. Rockfishes and scorpion fish (2.3 million fish), surfperches (1.6 million fish), and barracuda, bass and bonito (1.5 million fish) were also species groups caught in large numbers.

Economic Impacts and Expenditures

Recreational fishing activities in California supported more jobs than in any other state in the region with approximately 12,000 full- and part-time jobs supported in 2008. Washington (3,700 jobs) and Oregon (1,500 jobs) followed in terms of employment impacts from recreational fishing activities. The majority of these jobs in each of these states were related to durable equipment expenditures (versus trip-related expenditures): 75% of jobs in Washington, 65% of jobs in California, and 39% of jobs in Oregon.

Key Pacific Recreational Species

- Barracuda, bass, and bonito
- Croakers
- Flatfishes
- Greenlings
- Mackerels
- Rockfishes and scorpionfishes
- Salmon
- Sculpins
- Surfperches
- Albacore and other tuna

In terms of employment impacts related to fishing trips taken by anglers, shore fishing trips supported most of the trip-related full-and part-time jobs in California (1,961 jobs). Trip-related employment impacts were highest for the private boat mode in Oregon (515 jobs) and in Washington (501 jobs).

The contribution of recreational fishing activities in the Pacific are also reported in terms of state level sales and value-added impacts, and direct expenditures on fishing trips and durable equipment. In 2008, in-state sales and value-added impacts were highest in California ($1.8 billion in sales impacts; $924,000 million in value-added impacts). Washington ($386 million; $207 million) and Oregon ($158 million; $87 million) followed in terms of sales and value-added impacts. Across the region, these economic impacts were largely generated from durable equipment expenditures made by anglers rather than trip-related impacts.

Total fishing trip and durable equipment expenditures generated $1.97 billion across the Pacific Region in 2008. Approximately 76% of these expenditures were related to durable equipment purchases. Boat-related ($409 million) and fishing tackle expenses ($537 million) accounted for the majority of durable equipment expenditures. Expenditures by Pacific Region residents related to fishing trips totaled $448 million. Most of these purchases were related to fishing trips taken from shore (45% of trip-related expenditures by residents). The region's non-resident anglers generated $24 million in trip-related expenditures with most of these expenses related to for-hire fishing trips (74% of trip-related expenditures by non-residents).

[5]More information about these rockfish conservation areas is available at: http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/Groundfish-Closed-Areas/.

Participation[6,7]

In 2008, there were 1.45 million recreational fishermen from either a coastal or non-coastal county in the Pacific Region. This was a 9% decrease from 2004 (1.6 million anglers) and a 7% decrease from 2007 (1.56 million anglers). Over 73% of total anglers in 2008 were a resident of a coastal county. Over 79% of Pacific Region coastal and non-coastal county resident anglers resided in California.

In 2007, the majority of recreational fishermen who fished in California and Washington were residents of coastal counties within their respective states. In California, 71% of total anglers were coastal county residents and in Washington, 83% of total anglers were from coastal counties. In contrast, most of Oregon's anglers were residents of non-coastal counties within the state. Approximately 57% of anglers in Oregon in 2007 were from non-coastal counties. In all three states, out-of-state resident anglers were the minority accounting for 7.2%, 6.6%, and 7.4% of total anglers in California, Oregon, and Washington, respectively.

Fishing Trips

In the Pacific Region, anglers took 5.78 million fishing trips in 2008. This was a 13% decrease from 2004 (6.7 million trips) and an 8% decrease from 2007 (6.25 million trips). In the Pacific Region overall, fishing trips taken from each fishing trip mode decreased relative to 2004. In 2008, most fishing trips were taken from shore (3.84 million trips). Shore-based fishing trips accounted for 67% of total fishing trips taken in the Pacific Region. Fishing trips from a private or rental boat (1.4 million trips) and a for-hire boat (514,000 trips) followed. The majority of fishing trips were taken in California: 4.2 million fishing trips or 72% of total trips in the region.

Shore-based fishing trips were the most popular fishing trip mode in California and Washington. In 2008, these trips comprised 74% of total trips taken in California and 52% of total trips taken in Washington. In 2008, California's shore-based fishing trips increased 1% while Washington's shore-based fishing trips did not change. Anglers who fished in Oregon in 2007 favored fishing trips taken from a private or rental boat. This fishing mode made up 56% of total trips in 2008 despite dropping 12% relative to 2007.

Harvest and Release[7]

Of the Pacific Region's key species and species groups, mackerels; rockfishes and scorpionfishes; surfperches; and barracuda, bass and bonito were the most often caught by anglers. In 2008, 2.7 million mackerels, 2.3 million rockfishes and scorpionfishes, and 1.64 million surfperches were caught by anglers fishing in the region. Sculpins (78% released), mackerels (65%), and barracuda, bass, and bonito (72%) were more often released than harvested. Anglers harvested rockfishes and scorpionfishes (80% harvested), greenlings (55%), and albacore and other tunas (100%) more often than releasing these species groups. Most of the rockfishes and scorpionfishes in the Pacific region were caught in California while most of the albacore and other tunas were caught in Washington and Oregon.

Recreational Fishing Facts

Participation

- An average of 1.6 million anglers fished in the Pacific region annually from 2004 to 2008. Most of these anglers lived in California.
- Coastal county residents accounted for 73% of total anglers in both 2008 and on average between 2004 and 2008.
- Coastal county resident anglers increased 22% from 2005 to 2006, the largest annual increase in participation. Coastal county resident anglers decreased 21% from 2006 to 2007, the largest annual decrease.

Fishing trips

- In the Pacific Region, an average of 6 million fishing trips were taken annually between 2004 and 2008. Most of these trips were taken in California.
- Shore-based fishing trips were the most popular fishing trip mode with over 3.8 million of these trips taken in 2008. Shore-based trips accounted for 67% of trips taken in the region.
- From 2004 to 2008, shore-based fishing trips increased 24%, the largest annual increase in trips taken by anglers. Private or rental boat trips decreased 59% from 2003-2004, the largest annual decrease.

Harvest and release

- On average, 3 million mackerels were caught annually from 2004 to 2008. Of these, 67% were released rather than harvested.
- Five of the Pacific's ten key species or groups were more often released by anglers rather than harvested in 2008. Sculpins (78% released), mackerels (65%), and barracuda, bass, and bonito (72%) are examples.
- Tuna (albacore and others) (99% harvested), rockfishes and scorpionfishes (80%), and surfperches (51%) were key species or groups that were more often harvested than released by recreational fishermen in the Pacific.
- Tuna (albacore and others) had the largest annual increase in catch, increasing 141% from 2006 to 2007. The largest annual decrease in catch was also for tunas, dropping 74% from 2004 to 2005.

Between 2004 and 2008, nine of the Pacific Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were salmon (79%), barracuda (68%), croakers (54%), and greenlings (44%).

Mackerels and rockfishes were the most caught key species or species group in California and Oregon, respectively. In 2008, approximately 2.7 million mackerels were caught in California, a 33% increase relative to 2007 totals. Of these fish caught in 2008, 65% were released by anglers. In Oregon, 355,000 rockfishes were caught in 2008 with 87% of these harvested. Relative to 2007, this catch total was a 2% decrease. Herring and smelt was the key species most commonly caught in Washington with 2.6 million fish caught in 2008. Over 95% of these fish were

[6] In *Fisheries Economics of the U.S., 2006* (FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1999-2008 angler participation totals exclude these anglers.

[7] Due to changes in data collection methods, the Pacific Region's participation, effort, and catch estimates for 1999-2003 are not comparable to 2004-2008 estimates.

harvested. Catch totals for herring and smelt remained constant between 2004 and 2008.

Relative to 2007, catch totals for three of the Pacific's key species or species groups increased: mackerels (33% increase), flatfish (18%), and sculpins (12%). Catch totals for all other key species or groups declined for 2007-2008 with the largest decreases seen for salmon (66%) albacore tuna (56%), croakers (44%) and barracuda, bass, and bonito (22%).

Marine Economy[8]

The sum of the gross domestic products by state for Washington, Oregon, and California was $2.27 trillion in 2007. Employee compensation totaled $1.3 trillion and annual payroll totaled $822 billion. These economic measures increased 64%, 32%, and 59%, respectively, between 1998 and 2007, and 3.9%, 4.6%, and 3.9% between 2006 and 2007. Approximately 1.2 million establishments employed 18 million full- and part-time employees across the region in 2007. This was a 15% increase in establishment numbers and a 15% increase in employee numbers from 1998-2007. A small increase in these numbers was observed from 2006 to 2007 (1.8% and 0.2%, respectively).

In 2007, California had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the Pacific. California's approximately 890,000 establishments employed approximately 14 million employees in 2007. Gross state product in California was $1.8 trillion, followed by Washington ($310 billion) and Oregon ($158 billion).

When considering commercial fishing-related industries in 2007, the commercial fishing location quotient (CFLQ) for Washington was highest in the region at 13.2. This was an 6.3% increase from 1998 and a 4.5% decrease from 2006. Washington's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 13 times higher than the level of employment in these industries nationwide.[9] The 2007 CFLQ in Oregon was 2.92 (a 14% decrease from 1998 and a 1.4% decrease from 2006), while the 2007 CFLQ in California was 0.71 (a 29% decrease from 2006; and a 2.7% decrease from 2006).

Seafood Sales and Processing

In 2007, there were 184 nonemployer firms engaged in seafood product preparation and packaging across the Pacific Region. This was a 77% increase from 1999 levels, despite a 100% decrease in number of firm in Oregon over this time period. In 2007, 66% of these firms were located in California. Region-wide, annual receipts totaled $16 million in 2007 and increased 20% from 1999-2007. Annual receipt totals experienced large increases in Washington (139%) over the same time period.

In contrast to an increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 21% from 214 in 1999 to 169 in 2007. Approximately 58% of these establishments were located in Washington. Employee numbers also decreased across the region, decreasing 25% to approximately 8,300 full- and part-time workers in 2007, despite annual payroll increasing 31% to $379 million.

There were 445 seafood wholesale establishments in 2007 that employed approximately 5,500 full- and part-time workers. However, from 1999 to 2007, the number of seafood wholesale establishments and employees declined 18% and 4%, respectively across the Pacific Region.

In 2007, 75% of establishments and 78% of employees were located in California. Across the region, the number of establishments and the number of employees both increased between 13% and 17% from 1998 to 2007. Annual payroll totaled $822 million in 2007, region-wide. This was a 59% increase from 1998 to 2007. California's total annual payroll increased 61% during this time period while Washington's total increased 53% and Oregon experienced a 48% increase. Almost 80% of annual payroll in the region was generated in California.

Nonemployer firms engaged in seafood retail in the Pacific Region totaled 265 in 2007, a 20% increase relative to 1999. Eighty-four percent of these firms were located in California. At the state level, these firms showed double-digit increases in Washington in California between 1999 and 2007. Oregon experienced a 15% decrease. Annual receipts in the region totaled $22 million in 2007, a 1% increase from 1999 (10% decrease in real terms) and a 1% decrease from 2006 (6% real terms). Despite region-wide decrease of 10% in real terms, Oregon experienced a 25% increase in real terms.

Compared to nonemployer firms, employer establishments engaged in seafood retail increased 18% from 1999-2007, totaling 255 in 2007. These establishments employed 1,400 workers. Over 71% of these establishments and employees were located in California. Region-wide, the numbers of employees increased 20% between 1999 and 2007 with the largest increase seen in Oregon (73% increase). Annual payroll also increased across the Pacific, a 71% increase region-wide (51% in real terms), to $32 million in 2007. The largest increases were seen in Washington (86% increase) and Oregon (78%).

Transport, Support, and Marine Operations

Marine cargo handling industries employed more people than any other industry in this sector, employing approximately 27,000 people in 2007. This industry also had the highest annual payroll in the region, totaling $1.8 billion. Marina industries had the highest number of establishments in 2006 with 428 establishments, followed by the ship and boat building sector with 343 establishments. Deep sea passenger transportation had the fewest number of establishments (18).

In California, industries with large changes in establishment numbers, employees, or annual payroll from 1999-2007 were: marine cargo handling (141% increase in

[8]Information for 2007 is reported in this section; 2008 data were not available for this report.
[9]The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

employees, 78% increase (57% in real terms) in annual payroll); navigational services to shipping (92% increase (70% in real terms) in annual payroll); deep sea passenger transportation (30% increase in establishment numbers); and marina operations (80% increase (60% in real terms) in annual payroll), and port and harbor operations (58% increase (40% in real terms) in payroll). Large decreases occurred in number of establishments (30%) and employees (20%) in the seafood product preparation and packaging industry and in the number of employees in the port and harbor operations (32%).

In Oregon, large changes were seen for coastal and Great Lakes freight transportation (117% increase in establishments). Modest changes were seen in the ship and boat building industries (31% decrease in employees; and a 40% decrease (47% in real terms) in annual payroll).

In Washington, large changes were seen in the coastal and Great Lakes freight transportation (89% decrease (91% in real terms) in annual payroll); in marine cargo handling (108% increase in employees and a 79% increase (59% in real terms) in payroll).

2008 Economic Impacts of the Pacific Region Seafood Industry *(thousands of dollars)*

	Total Landings Revenue	Total Sales Impacts	Total Income Impacts	Total Job Impacts
California	113,429	9,104,910	4,733,803	162,609
Oregon	103,096	962,534	516,948	18,693
Washington	243,426	3,703,605	2,045,064	71,517

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Revenue	353,151	372,663	329,572	333,379	407,651	422,240	414,584	471,788	445,674	503,653
Finfish & Other	156,955	177,856	153,777	141,259	156,596	178,693	166,922	176,425	175,712	215,307
Shellfish	196,196	194,807	175,794	192,120	251,054	243,547	247,662	295,363	269,962	288,347
Crab	80,864	77,271	67,677	73,073	130,952	115,365	97,127	143,758	121,148	107,097
Flatfish	13,322	14,267	12,982	12,004	13,441	12,741	13,816	12,974	14,462	15,736
Hake (Whiting)	18,294	20,851	13,881	13,576	17,150	21,819	29,139	34,425	32,603	58,559
Other Shellfish	73,854	83,524	84,867	88,164	89,222	102,423	107,438	116,161	106,851	133,735
Rockfish	17,437	16,744	12,685	11,365	7,803	6,832	6,559	6,848	7,541	9,253
Sablefish	17,813	21,104	18,175	12,323	18,817	17,230	20,366	22,991	20,984	27,277
Salmon	14,155	23,838	20,667	26,170	30,773	47,676	37,188	34,306	33,473	26,528
Shrimp	21,288	21,869	17,879	22,443	12,582	12,351	15,706	12,433	17,297	25,055
Squid	33,403	27,246	16,948	18,260	25,340	19,748	31,516	26,998	29,169	26,585
Tuna, Albacore	17,720	17,140	20,623	14,219	24,366	27,242	20,574	23,767	21,612	28,758

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Landings	1,286,588	1,293,735	1,135,653	1,069,227	987,988	1,131,749	1,301,649	1,169,906	1,108,133	1,084,057
Finfish & Other	996,689	942,839	853,058	789,574	756,538	932,610	1,070,529	935,523	901,837	898,449
Shellfish	289,900	350,895	282,595	279,652	231,449	199,139	231,120	234,383	206,296	185,609
Crab	40,949	36,645	33,619	42,441	81,892	69,247	61,849	85,301	51,887	45,058
Flatfish	41,126	36,837	31,584	29,365	31,849	29,895	31,495	27,689	33,502	37,408
Hake (Whiting)	478,154	452,752	379,165	285,547	309,300	474,460	569,273	558,078	454,533	531,277
Other Shellfish	27,103	31,051	30,459	31,813	27,884	31,275	30,907	30,611	29,504	29,314
Rockfish	31,199	25,738	18,114	13,346	9,275	8,057	7,406	6,633	7,447	9,468
Sablefish	15,019	14,212	12,761	8,677	12,204	12,905	13,742	13,718	11,630	12,977
Salmon	12,828	20,697	30,838	38,077	39,234	40,609	27,249	29,172	23,550	18,248
Shrimp	32,760	36,934	42,001	58,758	33,000	22,408	26,069	20,290	26,497	35,802
Squid	203,060	262,146	190,282	160,669	99,115	88,215	123,090	108,561	109,464	85,201
Tuna, Albacore	21,470	19,916	24,589	21,996	36,577	31,764	19,649	28,117	25,483	24,439

Average Annual Price for Key Species / Species Groups

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Crab	1.97	2.11	2.01	1.72	1.60	1.67	1.57	1.69	2.33	2.38
Flatfish	0.32	0.39	0.41	0.41	0.42	0.43	0.44	0.47	0.43	0.42
Hake (Whiting)	0.04	0.05	0.04	0.05	0.06	0.05	0.05	0.06	0.07	0.11
Other Shellfish	2.72	2.69	2.79	2.77	3.20	3.27	3.48	3.79	3.62	4.56
Rockfish	0.56	0.65	0.70	0.85	0.84	0.85	0.89	1.03	1.01	0.98
Sablefish	1.19	1.49	1.42	1.42	1.54	1.34	1.48	1.68	1.80	2.10
Salmon	1.10	1.15	0.67	0.69	0.78	1.17	1.36	1.18	1.42	1.45
Shrimp	0.65	0.59	0.43	0.38	0.38	0.55	0.60	0.61	0.65	0.70
Squid	0.16	0.10	0.09	0.11	0.26	0.22	0.26	0.25	0.27	0.31
Tuna, Albacore	0.83	0.86	0.84	0.65	0.67	0.86	1.05	0.85	0.85	1.18

Note: The Pacific Region includes landings by Pacific at-sea processors. However, revenue from these landings are not included in the California, Oregon, and Washington information presented in the "2008 Economic Impacts of the Pacific Region Seafood Industry" table above.

2008 Economic Impacts of Recreational Fishing Expenditures *(thousands of dollars)*

	Trips	Jobs	Total Sales	Value Added
California	4,164,000	11,830	1,764,010	923,811
Oregon	634,000	1,541	157,752	87,426
Washington	982,000	3,725	386,010	207,043

2008 Angler Trip & Durable Equipment Expenditures *(thousands of dollars)*

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	*Residents*	Fishing Tackle	537,119
For-Hire	17,616	93,029	Other Equipment	230,593
Private Boat	3,110	152,650	Boat Expenses	409,266
Shore	2,962	202,517	Vehicle Expenses	208,513
Total Trip Expenditures	23,688	448,196	Second Home Expenses	113,103
			Total Durable Equipment Expenditures	1,498,594
Total State Trip and Durable Equipment Expenditures				1,970,478

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal	947	1,233	1,497	1,462	1,437	1,168	1,028	1,258	1,184	1,064
Non-Coastal	297	391	505	559	539	428	408	482	379	385
Out-of-State	NA[1]	NA[2]	NA[2]	NA[2]	NA[2]	NA[2]	NA[2]	NA[2]	NA[2]	NA[2]
Total Anglers	1,244	1,624	2,002	2,021	1,976	1,596	1,436	1,739	1,563	1,450

Recreational Fishing Effort by Mode *(thousands of trips)*[2]

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
For-Hire	731	752	700	695	619	650	625	635	605	514
Private Boat	2,880	3,852	4,835	3,990	4,247	1,752	1,849	1,761	1,828	1,421
Shore	1,914	2,675	3,265	3,507	3,443	4,253	3,960	4,546	3,817	3,845
Total Trips	5,525	7,280	8,800	8,192	8,309	6,655	6,434	6,942	6,250	5,780

Harvest (H) and Release (R) of Key Species / Species Groups *(number of fish in thousands)*[2,3]

Species/Groups		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Barracuda, Bass, & Bonito[4]	H	1,262	2,493	1,720	1,965	1,888	2,126	1,015	668	537	434
	R	2,087	4,210	3,502	4,427	3,727	2,597	2,011	1,660	1,407	1,093
Croakers	H	524	541	631	1,513	758	619	572	456	427	321
	R	600	751	737	1,016	871	660	618	553	631	272
Flatfishes	H	485	947	691	1,209	681	499	559	326	261	344
	R	740	1,139	1,115	2,063	948	344	513	519	339	362
Greenlings	H	250	296	288	455	512	211	270	236	194	172
	R	160	372	446	957	858	341	282	207	150	139
Mackerels	H	479	587	1,356	800	918	945	1,023	1,158	823	940
	R	812	1,319	2,600	1,730	2,011	1,715	1,872	3,287	1,209	1,765
Rockfishes & Scorpionfishes	H	4,569	3,569	3,241	2,737	3,624	2,416	3,433	2,506	2,257	1,842
	R	741	681	787	931	1,665	757	1,148	731	513	465
Salmon	H	293	515	1,037	621	865	768	526	317	539	167
	R	120	155	344	246	383	410	205	169	206	86
Sculpins	H	94	85	114	116	107	77	75	59	52	63
	R	209	389	349	404	291	239	232	217	202	222
Surfperches	H	679	731	915	829	1,144	1,302	950	1,168	865	837
	R	382	508	579	729	1,174	1,556	1,237	1,670	856	812
Tuna, Albacore, & Other	H	182	175	140	117	168	81	24	45	109	52
	R	15	39	36	8	83	10	2	4	9	(1)

[1]Out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified; NA = data are not available.
[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 1999-2003 are not comparable to 2004-2008 estimates.
[3]In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.
[4]Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

2008 Economic Impacts of the California Seafood Industry *(thousands of dollars)*

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	9,104,910	4,733,803	162,609
Commercial Harvesters	128,308	57,385	1,576
Seafood Processors & Dealers	782,495	246,983	5,168
Seafood Wholesalers & Distributors	2,110,097	1,003,895	17,636
Retail Sector	6,084,010	3,425,541	138,229

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Revenue	149,796	142,451	107,890	111,923	136,152	140,615	116,084	129,907	120,212	113,429
Finfish & Other	80,621	82,530	65,335	59,888	56,402	58,798	46,640	43,164	50,363	46,979
Shellfish	69,175	59,920	42,554	52,035	79,750	81,816	69,444	86,743	69,850	66,450
Crab	18,258	15,264	10,635	15,074	37,455	43,381	19,653	46,483	28,626	24,208
Lobster, Spiny	3,648	4,711	4,475	4,784	5,278	6,160	6,039	8,111	6,916	7,969
Rockfish	7,596	7,152	5,798	6,560	4,761	4,447	4,145	4,630	4,924	5,778
Sablefish	4,310	5,263	4,175	3,508	4,721	3,724	4,295	4,892	4,873	6,222
Salmon	7,427	10,319	4,761	7,611	12,153	17,770	12,804	5,261	7,835	6
Sardine, Pacific	5,101	5,468	6,281	5,848	2,874	3,957	3,150	5,100	8,218	7,587
Sea Urchins	13,469	15,083	11,704	10,411	7,906	7,300	6,156	5,145	5,400	6,550
Shrimp	8,615	7,409	5,950	5,901	3,520	3,783	4,338	4,213	4,064	5,695
Squid	33,403	27,243	16,948	18,259	25,333	19,740	31,467	26,959	29,131	26,477
Swordfish	8,389	11,791	8,696	6,401	7,850	4,834	1,896	2,695	3,127	2,365

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Landings	652,889	650,596	524,833	499,676	382,146	379,591	442,353	341,661	383,595	315,139
Finfish &	429,579	372,270	321,527	321,539	252,764	257,944	301,993	203,107	258,625	216,450
Shellfish	223,310	278,326	203,306	178,138	129,381	121,647	140,360	138,554	124,970	98,689
Crab	9,605	7,671	4,841	8,609	23,922	27,016	12,028	27,391	12,393	9,830
Lobster, Spiny	493	707	697	702	736	860	761	886	663	738
Rockfish	9,660	7,194	5,291	5,991	4,399	3,843	3,181	3,252	3,136	3,933
Sablefish	4,357	4,176	3,434	2,893	3,636	3,158	3,645	3,617	3,240	3,506
Salmon	4,422	5,912	2,761	5,661	7,328	7,113	4,962	1,184	1,743	1
Sardine, Pacific	131,614	118,193	114,235	128,584	76,528	97,509	76,324	102,683	178,480	127,435
Sea Urchins	14,218	15,210	13,128	14,176	11,107	12,219	11,304	10,664	11,131	10,283
Shrimp	8,063	5,793	5,598	5,867	3,498	3,520	2,944	1,197	2,015	3,011
Squid	203,059	262,134	190,278	160,665	99,088	88,167	122,887	108,410	109,150	84,072
Swordfish	4,455	5,856	4,837	3,803	4,706	2,613	653	1,187	1,210	1,168

Average Annual Price for Key Species / Species Groups *(price per pound)*

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Crab	1.90	1.99	2.20	1.75	1.57	1.61	1.63	1.70	2.31	2.46
Lobster, Spiny	7.39	6.67	6.42	6.81	7.18	7.16	7.93	9.15	10.44	10.80
Rockfish	0.79	0.99	1.10	1.10	1.08	1.16	1.30	1.42	1.57	1.47
Sablefish	0.99	1.26	1.22	1.21	1.30	1.18	1.18	1.35	1.50	1.77
Salmon	1.68	1.75	1.72	1.34	1.66	2.50	2.58	4.44	4.50	4.16
Sardine, Pacific	0.04	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.06
Sea Urchins	0.95	0.99	0.89	0.73	0.71	0.60	0.54	0.48	0.49	0.64
Shrimp	1.07	1.28	1.06	1.01	1.01	1.07	1.47	3.52	2.02	1.89
Squid	0.16	0.10	0.09	0.11	0.26	0.22	0.26	0.25	0.27	0.31
Swordfish	1.88	2.01	1.80	1.68	1.67	1.85	2.90	2.27	2.58	2.02

2008 Economic Impacts of Recreational Fishing Expenditures *(thousands of dollars)*

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
For-Hire	1,358	147,341	84,088
Private Boat	800	107,194	57,182
Shore	1,961	226,582	123,602
Total Durable Equipment Impacts	7,710	1,282,892	658,940
Total State Trip and Durable Equipment Economic Impacts	11,830	1,764,010	923,811

2008 Angler Trip & Durable Equipment Expenditures *(thousands of dollars)*

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	*Residents*	Fishing Tackle	478,003
For-Hire	16,188	75,584	Other Equipment	188,723
Private Boat	242	76,555	Boat Expenses	131,898
Shore	1,492	164,130	Vehicle Expenses	184,394
Total Trip Expenditures	17,923	316,268	Second Home Expenses	91,791
			Total Durable Equipment Expenditures	1,074,810
Total State Trip and Durable Equipment Expenditures				1,409,001

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal	748	959	948	1,110	1,113	865	740	991	878	819
Non-Coastal	184	244	298	379	378	280	263	335	226	246
Out of State	92	109	117	111	115	98	79	109	65	83
Total Anglers	1,024	1,312	1,362	1,600	1,606	1,243	1,082	1,435	1,168	1,148

Recreational Fishing Effort by Mode *(thousands of trips)*[1]

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
For-Hire	615	631	588	569	483	521	504	522	489	424
Private Boat	2,113	2,812	2,861	2,905	3,117	708	902	896	768	640
Shore	1,447	2,006	2,238	2,501	2,699	3,509	3,216	3,802	3,072	3,100
Total Trips	4,175	5,449	5,687	5,975	6,299	4,738	4,622	5,220	4,329	4,164

Harvest (H) and Release (R) of Key Species / Species Groups *(number of fish in thousands)*[1,2]

Species/Groups		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Barracuda, Bass, & Bonito[3]	H	1,262	2,493	1,720	1,965	1,888	2,126	1,015	668	537	434
	R	2,087	4,210	3,502	4,427	3,727	2,597	2,011	1,660	1,407	1,093
Croakers	H	524	541	631	1,513	758	619	572	456	427	321
	R	600	751	737	1,016	871	660	618	553	631	272
Flatfishes	H	336	780	556	962	603	410	478	241	187	276
	R	644	1,034	1,043	1,844	850	295	465	471	292	313
Greenlings	H	122	102	109	215	357	72	125	104	69	48
	R	101	249	297	641	717	239	179	113	67	53
Mackerels	H	479	587	1,356	800	918	945	1,023	1,158	823	940
	R	812	1,319	2,600	1,730	2,011	1,715	1,872	3,287	1,209	1,765
Rockfishes & Scorpionfishes	H	3,737	2,753	2,585	2,116	3,035	1,778	2,725	1,891	1,674	1,318
	R	721	582	720	844	1621	701	1058	668	456	402
Salmon	H	103	206	115	201	109	256	167	119	59	(1)
	R	48	49	46	40	39	103	71	74	36	(1)
Sculpins	H	60	46	82	60	70	41	39	25	19	29
	R	126	132	206	184	140	98	87	74	58	78
Surfperches	H	498	404	630	586	878	1,046	694	913	610	581
	R	213	264	432	563	1,016	1,402	1,083	1,516	702	658
Tuna, Albacore, & Other	H	175	164	127	107	146	49	6	9	22	5
	R	14	37	33	6	83	10	2	3	7	(1)

[1]Due to changes in data collection methods, California's effort (number of trips) and catch (number of fish harvested or released) estimates for 1999-2003 are not comparable to 2004-2008 estimates.
[2]In this table, "(1)" = 0-999 fish were harvested or released.
[3]Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

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

	Establishments	Employees	Annual Payroll ($ millions)	Employee Compensation ($ millions) [1]	Gross State Product ($ millions)	Commercial Location Quotient[2]
1998	773,925 (11%)	12,026,989 (11%)	406,481 (12%)	769,101 (13%)	1,085,884 (13%)	1.0
2007	891,997 (112%)	13,771,650 (11%)	653,887 (13%)	1,014,973 (17%)	1,801,762 (13%)	0.71
% change	15.3%	14.5%	60.9%	31.9%	65.9%	-29.0%

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Firms	61	72	71	70	77	98	88	91	121
	Receipts	10,592	11,405	12,983	9,123	9,858	14,312	10,207	8,298	10,842
Seafood Sales, retail	Firms	180	166	157	165	192	193	166	163	222
	Receipts	19,315	19,270	18,138	18,225	19,771	19,092	16,892	19,875	19,703

Seafood Sales & Processing – Employer Establishment *(thousands of dollars)*

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Establishments	70	78	73	63	60	55	48	47	49
	Employees	2,777	3,289	2,962	3,357	2,896	2,931	2,963	2,592	2,229
	Payroll	60,251	75,858	66,387	82,116	74,637	72,178	92,642	78,065	75,886
Seafood sales, wholesale	Establishments	337	360	361	334	269	263	258	252	300
	Employees	3,793	4,174	4,507	4,539	3,536	3,744	3,925	4,063	4,429
	Payroll	115,021	128,092	142,656	151,789	115,669	124,657	134,576	144,758	159,672
Seafood sales, retail	Establishments	170	172	165	186	175	169	180	184	182
	Employees	902	828	917	988	968	945	999	1,031	1,004
	Payroll	12,906	13,815	15,172	16,775	19,919	16,686	18,832	19,900	21,224

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal & Great Lakes freight transportation	Establishments	22	24	31	31	22	20	26	22	29
	Employees	ND[3]	1,394	1,648	1,776	1,341	ND	1,346	ND	ND
	Payroll	ND	99,106	119,808	132,432	117,982	ND	129,262	ND	ND
Deep sea freight transportation	Establishments	50	44	43	44	51	50	54	54	51
	Employees	ND	1,323	1,117	ND	902	901	ND	957	1,643
	Payroll	ND	51,131	63,891	ND	62,417	69,815	ND	84,199	116,628
Deep sea passenger transportation	Establishments	10	8	9	11	14	15	15	16	13
	Employees	ND	ND	ND	ND	ND	ND	ND	1,552	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	72,119	ND
Marinas	Establishments	265	266	249	248	263	271	263	268	276
	Employees	1,925	2,000	1,862	1,851	2,485	2,476	2,426	2,457	2,680
	Payroll	44,511	50,106	52,602	57,393	70,640	73,338	71,318	74,778	80,216
Marine cargo handling	Establishments	53	66	70	64	56	54	54	52	56
	Employees	9,288	15,330	15,076	15,274	15,557	20,456	19,303	20,975	22,395
	Payroll	836,880	880,397	944,374	1,000,809	1,040,515	1,179,221	1,273,698	1,448,623	1,484,308
Navigational services to shipping	Establishments	49	42	37	30	35	38	37	36	39
	Employees	806	702	647	476	850	ND	ND	817	858
	Payroll	33,164	35,480	33,764	28,197	53,162	ND	ND	63,893	63,610
Port & harbor operations	Establishments	24	23	21	23	19	20	20	20	18
	Employees	649	650	163	139	417	ND	ND	582	443
	Payroll	19,023	19,056	9,990	7,668	23,110	ND	ND	32,523	30,001
Ship & boat building	Establishments	144	143	155	145	141	143	141	132	136
	Employees	9,166	9,204	8,589	7,782	8,574	8,865	10,132	9,801	9,250
	Payroll	329,705	335,172	322,296	315,090	314,706	354,404	410,446	453,255	433,846

[1] Employee Compensation data for 1998 were not available. Data from 2001 are reported here.
[2] The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.
[3] ND = Data are suppressed due to confidentiality restrictions.

2008 Economic Impacts of the Oregon Seafood Industry *(thousands of dollars)*

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	962,534	516,948	18,693
Commercial Harvesters	110,623	58,243	1,409
Seafood Processors & Dealers	114,391	42,873	1,265
Seafood Wholesalers & Distributors	129,692	63,834	1,206
Retail Sectors	607,827	351,998	14,814

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Revenue	71,298	83,276	72,651	68,292	86,779	101,022	88,196	106,093	97,314	103,096
Finfish & Other	35,494	45,060	41,451	32,073	40,889	49,634	53,192	46,326	47,604	56,966
Shellfish	35,804	38,216	31,200	36,218	45,890	51,388	35,005	59,767	49,710	46,130
Crab	23,108	23,745	19,361	20,767	37,122	42,960	26,603	53,810	38,208	29,166
Flatfish	5,902	6,643	6,103	5,156	6,632	6,460	7,281	7,547	7,930	9,161
Hake (Whiting)	5,917	6,081	4,132	3,219	3,642	4,641	7,107	7,974	6,501	6,830
Oysters	2,857	3,540	3,536	3,143	3,292	3,292	1,232	1,163	1,847	2,748
Rockfish	7,724	7,595	5,287	3,511	2,327	1,633	1,387	1,564	2,002	2,610
Sablefish	7,764	9,266	7,986	4,405	7,381	6,935	8,657	9,787	9,494	13,737
Salmon	2,042	4,030	5,846	6,933	8,869	12,995	10,437	4,940	4,661	4,240
Sardine, Pacific	86	1,149	1,619	2,819	2,941	4,870	6,199	3,743	4,551	5,665
Shrimp	9,571	10,192	7,560	11,353	5,051	4,740	6,901	4,494	9,365	13,939
Tuna, Albacore	3,784	7,489	7,559	2,952	6,169	9,145	8,815	8,067	9,468	10,651

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Landings	234,054	264,105	234,474	210,750	226,317	294,866	312,636	282,846	253,551	195,733
Finfish & Other	200,475	226,357	195,121	155,609	180,788	254,330	278,646	236,998	216,142	155,879
Shellfish	33,579	37,747	39,352	55,140	45,529	40,536	33,990	45,848	37,410	39,854
Crab	12,340	11,223	9,754	12,452	23,934	27,276	17,734	33,291	17,007	13,874
Flatfish	17,860	16,470	14,488	11,489	14,372	14,846	16,910	16,385	19,696	23,840
Hake (Whiting)	147,873	151,461	117,673	71,220	80,648	130,238	135,503	122,804	81,481	55,511
Oysters	674	834	884	786	823	823	308	255	197	162
Rockfish	16,274	14,231	9,400	4,653	3,434	2,574	2,007	1,967	2,905	3,820
Sablefish	6,582	6,256	5,697	3,185	4,798	5,627	5,834	5,838	5,349	6,514
Salmon	1,552	3,133	5,261	6,117	6,720	5,914	4,666	1,810	1,378	1,917
Sardine, Pacific	1,709	21,005	28,176	50,069	55,683	79,610	99,450	74,669	90,037	49,298
Shrimp	20,436	25,462	28,482	41,584	20,546	12,207	15,784	12,128	19,990	25,404
Tuna, Albacore	4,553	8,757	8,959	4,362	9,165	10,754	8,087	8,534	10,468	8,864

Average Annual Price for Key Species / Species Groups *(price per pound)*

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Crab	1.87	2.12	1.98	1.67	1.55	1.58	1.50	1.62	2.25	2.10
Flatfish	0.33	0.40	0.42	0.45	0.46	0.44	0.43	0.46	0.40	0.38
Hake (Whiting)	0.04	0.04	0.04	0.05	0.05	0.04	0.05	0.06	0.08	0.12
Oysters	4.24	4.24	4.00	4.00	4.00	4.00	4.00	4.56	9.40	16.96
Rockfish	0.47	0.53	0.56	0.75	0.68	0.63	0.69	0.80	0.69	0.68
Sablefish	1.18	1.48	1.40	1.38	1.54	1.23	1.48	1.68	1.78	2.11
Salmon	1.32	1.29	1.11	1.13	1.32	2.20	2.24	2.73	3.38	2.21
Sardine, Pacific	0.05	0.05	0.06	0.06	0.05	0.06	0.06	0.05	0.05	0.11
Shrimp	0.47	0.40	0.27	0.27	0.25	0.39	0.44	0.37	0.47	0.55
Tuna, Albacore	0.83	0.86	0.84	0.68	0.67	0.85	1.09	0.95	0.90	1.20

2008 Economic Impacts of Recreational Fishing Expenditures *(thousands of dollars)*

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
For-Hire	191	14,703	8,289
Private Boat	515	44,874	25,873
Shore	229	19,481	11,099
Total Durable Equipment Impacts	606	78,694	42,164
Total State Trip and Durable Equipment Economic Impacts	1,541	157,752	87,426

2008 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	*Residents*	Fishing Tackle	23,598
For-Hire	521	8,975	Other Equipment	17,330
Private Boat	1,736	34,985	Boat Expenses	10,267
Shore	470	15,687	Vehicle Expenses	9,448
Total Trip Expenditures	2,727	59,646	Second Home Expenses	13,087
			Total Durable Equipment Expenditures	73,729
Total State Trip and Durable Equipment Expenditures				136,102

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal	57	70	122	101	91	90	87	82	86	79
Non-Coastal	96	122	175	153	135	125	123	125	130	120
Out-of-State	10	13	20	21	15	16	14	15	15	14
Total Anglers	163	206	317	275	242	231	224	222	231	213

Recreational Fishing Effort *(thousands of days fished)*

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
For-Hire	67	69	79	67	67	64	58	56	61	48
Private Boat	257	355	520	448	426	426	382	373	399	353
Shore	141	214	357	295	232	232	232	232	233	233
Total Trips	465	638	956	810	726	723	673	662	693	634

Harvest (H) and Release (R) of Key Species / Species Groups *(number of fish in thousands)*[1]

Species/Groups		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Baitfishes	H	12	54	500	774	318	318	318	318	318	318
	R	8	(1)	88	21	24	24	24	24	24	24
Flatfishes	H	8	9	16	31	16	27	20	21	23	21
	R	3	3	6	10	6	8	7	7	7	9
Greenlings	H	64	95	106	155	96	100	106	99	97	95
	R	49	86	116	175	77	77	78	72	64	67
Rockfishes	H	528	548	457	384	406	382	401	333	323	308
	R	11	91	53	37	24	31	57	40	38	47
Salmon	H	41	92	259	148	241	215	95	79	129	64
	R	27	33	167	98	187	193	65	59	96	56
Sculpins	H	12	15	22	21	21	19	19	18	18	19
	R	18	55	58	78	51	51	54	52	53	53
Sturgeons	H	4	13	18	12	12	12	12	12	12	12
	R	7	24	30	27	25	25	25	25	25	25
Surfperches	H	73	129	196	139	122	122	122	122	122	122
	R	17	17	46	61	34	34	34	34	34	34
Tuna, Albacore	H	3	4	9	4	11	18	6	12	62	25
	R	1	2	3	2	(1)	(1)	(1)	(1)	2	(1)

[1]In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

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

	Establishments	Employees	Annual Payroll ($ millions)	Employee Compensation ($ millions) [1]	Gross State Product ($ millions)	Commercial Location Quotient[2]
1998	99,183 (1.43%)	1,310,750 (1.21%)	37,723 (1.14%)	67,370 (1.14%)	100,951 (1.16%)	3.38
2007	113,389 (1.47%)	1,477,553 (1.23%)	56,033 (1.11%)	88,369 (1.13%)	158,268 (1.15%)	2.92
% change	14.3%	12.7%	48.5%	31.1%	56.7%	-13.6%

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Firms	11	8	11	NA[3]	NA	NA	9	7	NA
	Receipts	369	461	424	ND[4]	ND	ND	309	54	ND
Seafood Sales, retail	Firms	13	16	14	13	10	11	7	11	11
	Receipts	858	628	851	644	428	507	985	914	1,210

Seafood Sales & Processing – Employer Establishment *(thousands of dollars)*

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Establishments	28	27	27	19	19	18	20	21	22
	Employees	980	1,036	875	707	720	738	762	896	819
	Payroll	20,753	22,718	23,616	20,867	21,980	20,593	19,022	25,881	27,394
Seafood sales, wholesale	Establishments	21	25	29	33	26	21	23	16	18
	Employees	310	ND	295	ND	ND	126	ND	ND	ND
	Payroll	8,174	ND	8,698	ND	ND	4,446	ND	ND	ND
Seafood sales, retail	Establishments	16	18	16	28	21	24	24	22	23
	Employees	99	113	116	129	ND	171	204	306	171
	Payroll	1,794	1,844	1,945	2,311	ND	3,259	3,464	3,294	3,185

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal & Great Lakes freight transportation	Establishments	6	8	7	10	8	8	9	9	13
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	476
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	25,206
Deep sea freight transportation	Establishments	7	5	4	7	6	6	6	6	5
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	NA	1	NA	NA	NA	NA	NA	NA	2
	Employees	NA	ND	NA	NA	NA	NA	NA	NA	ND
	Payroll	NA	ND	NA	NA	NA	NA	NA	NA	ND
Marinas	Establishments	43	38	33	41	42	41	40	37	38
	Employees	ND	93	ND	ND	122	133	113	ND	138
	Payroll	ND	1,830	ND	ND	2,742	2,988	3,550	ND	3,754
Marine cargo handling	Establishments	9	9	9	7	8	8	8	9	9
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Navigational services to shipping	Establishments	25	23	21	18	21	21	21	20	17
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	183
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	11,331
Port & harbor operations	Establishments	1	1	1	1	1	NA	NA	NA	2
	Employees	ND	ND	ND	ND	ND	NA	NA	NA	ND
	Payroll	ND	ND	ND	ND	ND	NA	NA	NA	ND
Ship & boat building	Establishments	51	48	51	44	43	50	43	41	40
	Employees	2,095	2,506	1,969	1,323	1,284	1,285	1,298	1,230	1,441
	Payroll	79,567	87,018	69,200	47,303	42,270	43,357	45,183	43,416	47,950

[1]Employee Compensation data for 1998 were not available. Data from 2001 are reported here.
[2]The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.
[3]NA = Data are not available.
[4]ND = Data are suppressed due to confidentiality restrictions.

2008 Economic Impacts of the Washington Seafood Industry *(thousands of dollars)*

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	3,717,090	2,052,509	71,775
Commercial Harvesters	77,874	138,627	3,649
Seafood Processors & Dealers	456,604	227,154	4,890
Seafood Wholesalers & Distributors	619,247	04,388	5,521
Retail Sector	2,363,364	1,382,339	57,715

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Revenue	119,869	133,499	140,382	143,720	172,829	166,247	193,317	217,030	209,372	243,426
Finfish & Other	28,652	36,828	38,342	39,854	47,415	55,906	50,145	68,201	58,980	67,671
Shellfish	91,217	96,671	102,040	103,867	125,414	110,342	143,172	148,829	150,392	175,755
Clams	26,730	27,920	32,677	34,339	36,060	42,297	48,503	55,786	52,080	80,468
Crab	39,498	38,262	37,681	37,232	56,374	29,024	50,872	43,464	54,315	53,722
Hake (Whiting)	748	1,022	1,299	1,022	1,601	2,341	4,937	7,296	7,121	7,316
Halibut	7,903	6,729	5,759	6,777	5,991	7,264	6,512	8,303	8,842	7,525
Mussels	3,720	3,564	2,426	1,613	2,513	3,096	3,729	6,564	3,820	5,293
Oysters	17,798	22,473	24,642	25,578	26,142	31,257	33,697	38,302	35,433	29,661
Sablefish	5,738	6,545	5,984	4,354	6,675	6,517	7,395	8,307	6,608	7,312
Salmon	4,863	9,709	10,332	11,780	9,941	17,316	14,319	24,586	21,620	22,839
Shrimp	2,882	3,611	3,697	4,473	3,723	3,648	4,335	3,602	3,745	5,303
Tuna, Albacore	3,600	5,821	7,917	7,375	15,621	15,657	10,643	15,176	10,439	17,154

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Landings	89,156	112,181	154,701	172,277	189,479	192,181	213,502	241,606	194,582	174,262
Finfish & Other	56,145	77,359	114,764	125,903	132,940	155,224	156,902	191,717	150,704	127,304
Shellfish	33,011	34,822	39,937	46,374	56,539	36,957	56,600	49,889	43,878	46,958
Clams	2,224	2,109	2,632	3,087	3,127	3,319	3,621	4,617	3,908	5,903
Crab	19,004	17,752	19,024	21,380	34,037	14,955	32,086	24,619	22,487	21,353
Hake (Whiting)	18,698	24,399	35,593	22,564	35,124	69,117	93,654	120,058	91,272	67,159
Halibut	3,060	2,289	2,490	2,487	1,868	2,254	1,948	2,451	2,428	2,055
Mussels	332	374	332	214	337	427	504	774	475	593
Oysters	6,769	8,458	9,497	9,935	9,649	11,058	12,190	12,306	11,836	10,417
Sablefish	4,078	3,755	3,589	2,559	3,736	4,064	4,240	4,259	3,035	2,954
Salmon	7,112	11,971	23,291	26,626	25,493	27,918	17,926	26,570	20,880	16,793
Shrimp	4,175	5,520	7,764	11,149	8,867	6,599	7,279	6,926	4,455	7,355
Tuna, Albacore	4,519	7,003	9,110	11,708	23,672	18,044	10,505	19,133	13,129	14,745

Average Annual Price for Key Species / Species Groups *(price per pound)*

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Clams	12.02	13.24	12.42	11.12	11.53	12.74	13.40	12.08	13.33	13.63
Crab	2.08	2.16	1.98	1.74	1.66	1.94	1.59	1.77	2.42	2.52
Hake (Whiting)	0.04	0.04	0.04	0.05	0.05	0.03	0.05	0.06	0.08	0.11
Halibut	2.58	2.94	2.31	2.73	3.21	3.22	3.34	3.39	3.64	3.66
Mussels	11.21	9.52	7.30	7.53	7.46	7.26	7.40	8.48	8.05	8.93
Oysters	2.63	2.66	2.59	2.57	2.71	2.83	2.76	3.11	2.99	2.85
Sablefish	1.41	1.74	1.67	1.70	1.79	1.60	1.74	1.95	2.18	2.48
Salmon	0.68	0.81	0.44	0.44	0.39	0.62	0.80	0.93	1.04	1.36
Shrimp	0.69	0.65	0.48	0.40	0.42	0.55	0.60	0.52	0.84	0.72
Tuna, Albacore	0.80	0.83	0.87	0.63	0.66	0.87	1.01	0.79	0.80	1.16

2008 Economic Impacts of Recreational Fishing Expenditures *(thousands of dollars)*

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
For-Hire	155	14,394	8,037
Private Boat	501	57,399	29,995
Shore	287	29,885	16,031
Total Durable Equipment Impacts	2,782	284,331	152,980
Total State Trip and Durable Equipment Economic Impacts	3,725	386,010	207,043

2008 Angler Trip & Durable Equipment Expenditures *(thousands of dollars)* [2]

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	*Residents*	Fishing Tackle	35,518
For-Hire	907	8,470	Vehicle Expenses	24,540
Private Boat	1,132	41,110	Other Equipment	267,101
Shore	1,000	22,700	Boat Expenses	14,671
Total Trip Expenditures	3,039	72,280	Second Home Expenses	8,225
			Total Durable Equipment Expenditures	350,055
Total State Trip and Durable Equipment Expenditures				425,374

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal	141	203	427	252	233	213	201	184	220	167
Non-Coastal	17	25	33	27	25	24	23	21	23	19
Out of State	14	13	22	24	20	19	18	17	19	15
Total Anglers	172	240	481	303	278	255	242	222	262	201

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
For-Hire	49	52	33	59	69	64	62	57	55	42
Private Boat	510	685	1,454	637	704	618	565	492	661	428
Shore	326	455	670	711	512	512	512	512	512	512
Total Trips	885	1,192	2,157	1,407	1,285	1,194	1,139	1,061	1,228	982

Harvest (H) and Release (R) of Key Species / Species Groups *(number of fish in thousands)* [1,2]

Species/Groups		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Flatfishes	H	141	158	119	216	62	62	61	63	51	47
	R	93	102	66	209	92	41	41	42	40	40
Greenlings	H	65	100	73	85	59	39	39	33	28	29
	R	9	36	33	141	64	25	25	22	19	19
Herring & Smelt[3]	H	1,545	2,065	3,649	3,254	2,487	2,486	2,486	2,486	2,486	2,486
	R	174	60	161	196	136	126	126	126	126	126
Rockfishes	H	304	268	199	237	184	256	307	282	260	216
	R	9	8	14	50	20	25	33	23	19	16
Salmon	H	149	217	663	272	516	297	264	119	351	103
	R	46	73	131	108	157	114	70	36	73	30
Sculpins	H	23	24	10	35	17	17	17	16	15	15
	R	64	202	85	142	101	91	91	91	91	91
Sharks & Skates	H	32	22	36	27	15	1	1	1	(1)	1
	R	372	286	445	331	203	14	12	14	5	7
Sturgeon	H	12	13	10	11	8	8	8	7	8	8
	R	32	31	20	30	18	25	30	21	18	12
Surfperches	H	108	198	89	104	143	133	133	133	133	133
	R	152	227	101	105	125	120	120	120	120	120
Tuna, Albacore	H	4	7	4	6	11	14	12	24	25	22
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	(1)	(1)

[1] In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.
[2] Salmon catches include all retained and released catch except Puget Sound released catch (dead or alive), which was unavailable.
[3] Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

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

	Establishments	Employees	Annual Payroll *($ millions)*	Employee Compensation *($ millions)* [1]	Gross State Product *($ millions)*	Commercial Location Quotient [2]
1998	161,473 (2.33%)	2,134,598 (1.97%)	73,268 (2.21%)	133,974 (2.26%)	195,794 (2.26%)	12.46
2007	184,542 (2.40%)	2,501,684 (2.07%)	112,308 (2.23%)	181,666 (2.33%)	310,279 (2.26%)	13.24
% change	14.3%	17.2%	53.3%	35.5%	58.4%	6.2%

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Firms	32	37	41	48	59	53	54	53	63
	Receipts	1,965	3,052	3,432	2,763	5,680	4,446	5,568	4,149	4,698
Seafood Sales, retail	Firms	28	28	29	30	32	30	31	29	32
	Receipts	1,887	2,139	2,465	2,681	1,623	2,202	1,836	1,727	1,458

Seafood Sales & Processing – Employer Establishment *(thousands of dollars)*

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Establishments	116	119	112	106	110	101	98	96	98
	Employees	7,276	6,784	6,498	6,728	5,968	5,851	5,743	5,705	5,249
	Payroll	207,487	218,517	216,660	221,978	231,153	247,316	239,962	255,129	275,662
Seafood sales, wholesale	Establishments	184	176	176	175	121	116	126	115	127
	Employees	1,617	1,654	1,444	1,185	1,112	883	1,094	1,015	1,086
	Payroll	61,101	64,074	56,122	51,959	39,206	37,292	42,852	42,934	46,085
Seafood sales, retail	Establishments	31	28	32	44	37	40	47	49	50
	Employees	179	182	198	235	284	222	291	292	244
	Payroll	4,296	4,122	4,503	6,379	6,363	6,578	9,322	8,998	8,001

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal & Great Lakes freight transportation	Establishments	28	32	30	33	36	38	41	43	37
	Employees	2,484	2,356	2,330	2,173	1,607	2,039	1,672	2,353	1,903
	Payroll	128,253	128,747	129,997	130,456	112,319	128,786	122,000	145,144	136,543
Deep sea freight transportation	Establishments	27	21	22	23	27	23	24	23	30
	Employees	877	736	584	ND[3]	276	311	378	197	227
	Payroll	53,319	41,689	29,209	ND	16,147	20,559	22,655	14,390	19,692
Deep sea passenger transportation	Establishments	6	7	8	7	3	2	3	3	3
	Employees	419	435	494	ND	ND	ND	ND	ND	ND
	Payroll	15,633	18,145	20,543	ND	ND	ND	ND	ND	ND
Marinas	Establishments	123	116	119	111	102	96	96	103	114
	Employees	574	575	573	406	430	449	442	466	485
	Payroll	14,211	15,714	14,516	11,283	12,400	12,763	13,556	14,269	15,623
Marine cargo handling	Establishments	33	36	36	33	23	30	30	29	28
	Employees	2,361	3,322	2,847	2,538	ND	ND	4,459	3,764	4,913
	Payroll	186,461	238,138	213,946	194,398	ND	ND	318,873	303,375	334,601
Navigational services to shipping	Establishments	57	56	57	55	52	53	53	56	61
	Employees	ND	ND	239	218	834	ND	841	942	950
	Payroll	ND	ND	20,235	20,962	51,092	ND	60,034	72,120	72,912
Port & harbor operations	Establishments	7	6	5	4	3	4	6	5	6
	Employees	ND	ND	ND	37	ND	ND	ND	53	129
	Payroll	ND	ND	ND	1,565	ND	ND	ND	3,436	4,631
Ship & boat building	Establishments	141	132	134	135	138	141	154	164	167
	Employees	6,036	6,442	5,532	4,974	6,056	6,474	7,154	7,669	7,742
	Payroll	219,467	225,433	194,050	219,980	244,124	272,336	307,735	313,230	354,084

[1] Employee Compensation data for 1998 were not available. Data from 2001 are reported here.
[2] The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.
[3] ND = Data are suppressed due to confidentiality restrictions