

# Fisheries Economics of the United States 2009

Economics and Sociocultural  
Status and Trends Series

U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
NOAA Technical Memorandum NMFS-F/SPO-118  
May 2011





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# Fisheries Economics of the United States, 2009

Economics and Social Analysis Division  
Office of Science and Technology  
National Marine Fisheries Service  
1315 East-West Highway, 12th floor  
Silver Spring, MD 20910

**NOAA Technical Memorandum NMFS-F/SPO-118**  
**May 2011**



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# Preface

## **Fisheries Economics of the U.S., 2009**

*Fisheries Economics of the U.S., 2009* is the fourth volume in this series which is intended to provide the public with easily accessible economic information about the Nation's commercial and recreational fishing activities, and fishing-related industries. The 2000 to 2009 time period is covered in this report and descriptive statistics are provided for the following categories: economic impacts of the seafood industry, commercial fisheries landings, revenue, and price trends; angler expenditures and economic impacts of recreational fishing, recreational fishing catch, effort, and participation rates; and employer and non-employer establishment, payroll, employees, and annual receipt information for fishing-related industries.

## **Sources of Data**

Information in this report came from many sources. Commercial landings, revenue, and price data, and recreational fishing effort and participation data was primarily obtained from the Fisheries Statistics Division, Office of Science and Technology, NOAA Fisheries. Other data sources included the: Alaska Fisheries Science Center, NOAA Fisheries; Alaska Department of Fish and Game; California Department of Fish and Game; Oregon Department of Fish and Wildlife; Washington Department of Fish and Wildlife; the Pacific Coast Fisheries Information Network (PacFIN); Texas Department of Parks and Wildlife Department; and Western Pacific Fisheries Information Network (WPacFIN). Economic impacts from the commercial fishing industry and recreational fisheries are from two separate national IMPLAN models of the Economics and Sociocultural Analysis Division, Office of Science and Technology, NOAA Fisheries. Fishing related industry information was obtained from the: U.S. Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics.

## **Acknowledgments**

Many people helped put this publication together. Rita Curtis is Division Chief and originator of this series. Erin Steiner served as the editor and author for this report. Primary analysts and collaborators included Sabrina Lovell, Alan Lowther, and Lauren Dolinger Few. Other analysts and contributors included Rita Curtis, Michael Lewis, Melissa Yenko, Kathy Cuff, Avi Litwack, and Shelley Arenas.

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Slidell, LA (photo credit: A. Miller, Gulf States Marine Fisheries Commission)



# National Overview



## Management Context

The authority to manage federal fisheries in the United States was granted to the Secretary of Commerce by the Magnuson-Stevens Fishery Conservation and Management Act, also known as the Magnuson-Stevens Act (P.L. 94-265 as amended by P.L. 109-479). NOAA Fisheries or the National Marine Fisheries Service (NMFS) is the federal agency delegated authority from the Secretary of Commerce to oversee fishing activities in federal waters. Federal fisheries are generally defined as fishing activities that are prosecuted between 3 and 200 nautical miles from the coastline. Generally, individual states retain management authority over fishing activities within 3 nautical miles of their coasts.

Nationwide, there are 47 fishery management plans<sup>1</sup> that provide a framework for managing the harvest of 230 major fish stocks or stock complexes that comprise 90% of the commercial harvest. These fishery management plans (FMPs) are developed by Regional Fishery Management Councils (FMCs) in each of eight regions nationwide: the North Pacific, Western Pacific, Pacific, New England, Mid-Atlantic, South Atlantic, Gulf of Mexico, and Caribbean Regions. Once an FMP is developed, it must be approved by the Secretary of Commerce in consultation with NOAA Fisheries before it is implemented and enforced.

### Regional Fishery Management Councils

- North Pacific Fishery Management Council
- Western Pacific Fishery Management Council
- Gulf of Mexico Fishery Management Council
- Mid-Atlantic Fishery Management Council
- New England Fishery Management Council
- Pacific Fishery Management Council
- South Atlantic Fishery Management Council
- Caribbean Fishery Management Council

Of the 230 major fish stocks and stock complexes currently managed under a FMP, the overfished status of 179 stocks or stock complexes and the overfishing status of 192 stocks or stock complexes is known. Currently, 43 stocks or stock complexes are categorized as overfished and 39 are categorized as subject to overfishing<sup>2</sup>.

Less is known about the 302 minor stocks or stock complexes. The overfished status of 28 of these stocks or stock complexes is known and five of these are currently considered overfished. The overfishing status of 61 of the 302 minor stocks or stock complexes is known and two of these are currently considered to be subject to overfishing<sup>2</sup>.

<sup>1</sup>Fishery management plans and fishery ecosystem plans for each region covered in this report are listed in their respective sections. The Caribbean region and its four FMPs are not currently included in this report. These FMPs are developed by the Caribbean Fishery Management Council (San Juan, Puerto Rico). In addition, the Atlantic Highly Migratory Species FMP is not listed in this report. This FMP is developed by the Office of Sustainable Fisheries at NOAA Fisheries Headquarters (Silver Spring, MD).

<sup>2</sup>Fish Stock Sustainability Index (FSSI) - 2010 Quarter 3 Update through September 30, 2010. The NOAA Fisheries Office of Sustainable Fisheries. <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>

<sup>3</sup>For more detailed information about international agreements in relation to NOAA Fisheries, please go to: [http://www.nmfs.noaa.gov/ia/docs/2009\\_International\\_agreements.pdf](http://www.nmfs.noaa.gov/ia/docs/2009_International_agreements.pdf)

## Transboundary and International Fisheries

NOAA Fisheries is also actively involved in negotiating conservation measures and fishery allocations for fisheries conducted in areas where the Exclusive Economic Zone (EEZ) of the U.S. overlaps with other nations (transboundary areas), and in areas beyond the U.S. EEZ (international waters or the high seas). The Gulf of Alaska and the Gulf of Maine are examples of these transboundary areas. An area in the Bering Sea outside of EEZs of Canada, Japan, and Russia, called the Donut Hole, is an example of international waters. Loss of sea ice will create new transboundary areas and international waters in the Arctic.

### Regional Fishery Management Organizations

- International Convention for the Conservation of Atlantic Tunas (Basic Instrument for the International Commission for the Conservation of Atlantic Tunas - ICCAT),
- Convention for the Conservation of Salmon in the North Atlantic Ocean (Basic Instrument for the North Atlantic Salmon Conservation Organization - NASCO),
- Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries (Basic Instrument for the Northwest Atlantic Fisheries Organization - NAFO),
- Convention for the Establishment of an Inter-American Tropical Tuna Commission (IATTC),
- Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean (Basic Instrument for the North Pacific Anadromous Fish Commission - NPAFC),
- Western and Central Pacific Fisheries Convention (WCPFC),
- Asia-Pacific Fishery Commission (APFIC),
- Fishery Committee for the Eastern Central Atlantic (CECAF)

Regional Fishery Management Organizations (RFMOs) are multinational organizations with interests in transboundary and international fish stocks and associated fishing activities. NOAA Fisheries is party to eight RFMOs globally<sup>3</sup>. The goal of these RFMOs is to adopt measures for the conservation and coordinated management of target species such as bluefin tuna. RFMOs also provide measures for the conservation and scientific assessment of non-target species. Also known as bycatch, non-target species include seabirds, marine mammals, sea turtles, and fish species caught incidentally to target species. The commitment to conserving and protecting all species associated with, or affected by, fishing activities is outlined in the Food and Agricultural Organization's (FAO's) Code of Conduct for Responsible Fisheries

established in 1995.

Another issue of particular concern for NOAA Fisheries is the problem of illegal, unreported, and unregulated (IUU) fishing activities in international waters. The RFMOs report estimates that in 2009, there were 42 vessels flying the national flags of 14 nations participating in IUU fishing activities.<sup>1</sup> NOAA Fisheries is actively working bilaterally and multilaterally with other nations on the adoption of strategies to reduce the level of IUU fishing around the world.

### *Threatened and Engangered Species*

NOAA Fisheries is also the lead agency for the conservation and protection of over 69 fish and non-fish species that fall within the purview of the Endangered Species Act (ESA). Status determinations related to the viability and health of these populations have been made. The status of these populations have been determined as 'threatened' or 'endangered', and, in one case, 'recovered'.

Currently, there are 35 marine and anadromous fish species and subspecies<sup>2</sup> that are protected under the ESA. These species include: Atlantic salmon, coho salmon, green sturgeon, shortnose sturgeon, smalltooth sawfish, steelhead trout, and totoaba. Many of these species are further delineated into distinct population segments or evolutionarily significant units that are based on genetic similarities within geographically- or reproductively-isolated populations.

### **Endangered and Threatened Species under NMFS Jurisdiction**

Species Group	Number of Species
Marine and Anadromous Fish	35
Marine Mammals: Whales	12
Marine Mammals: Dolphins	2
Marine Mammals: Porpoise	1
Marine Mammals: Seals	4
Marine Mammals: Sea Lions	2
Sea Turtles	8
Marine Invertebrates	4
Marine Plants	1
<b>Total</b>	<b>69</b>

In addition to threatened and endangered fish species, NOAA Fisheries is also involved in the conservation and protection of ESA-listed non-fish species. Marine mammals such as whales, dolphins, and seals, as well as species of sea turtles, marine invertebrates, and one marine plant are listed. There are currently 90 candidate species for listing (82 are coral species) and 17 species proposed for listing.

In 1970, the Eastern North Pacific gray whale was listed under the ESA, but has since made a comeback and was considered 'recovered' in 1994. The Caribbean monk seal, listed in 1967, was delisted in 2008. This species is considered to be extinct. In addition to endangered and threatened species under the Endangered Species Act, NOAA Fisheries is also responsible for providing protection for marine mammals under the Marine Mammal Protection Act.

NOAA Fisheries is responsible for preventing the harrassment, capture, or killing of whales, dolphins, porpoises, seals, and sea lions.<sup>3</sup> However, exceptions are made for scientific research, unintended interactions with commercial fisheries, subsistence and traditional uses by Alaska natives, and public display at some aquaria.

### *Essential Fish Habitats*

Sustainable commercial and recreational fisheries depend on healthy habitats. These habitats include rivers, estuaries, and the open ocean where marine and anadromous species feed, grow, and reproduce. Consideration of these habitat areas are part of an ecosystem-based management approach for managing fisheries in a more sustainable and holistic manner. Since 1996, federal fishery management plans are required to identify and describe essential fish habitat (EFH) for all federally-managed species.<sup>4</sup> Habitat areas that are necessary for a fish species' growth, reproduction, and development are considered EFH. To the extent practicable, NOAA Fisheries and the Councils must minimize adverse effects to EFH caused by fishing activities.

Though not required, habitat areas of particular concern (HAPC) can be identified to help focus EFH conservation efforts. HAPCs are a subset of EFH and are particularly vulnerable or ecologically important. To date, approximately 100 HAPCs have been designated including specific coral, seamount, and spawning areas.

A recent effort undertaken by the NOAA Fisheries Office of Science and Technology was to create a Habitat Assessment Improvement Plan<sup>5</sup> to advance NOAA Fisheries' ability to identify EFH and HAPCs and to provide information needed to assess impacts to EFH.

### *Catch Share Programs*

A variety of market-based tools are available to fishery managers. NOAA Fisheries is currently implementing several different types of catch share programs such as limited access privilege programs (LAPPs), which include individual fishing quota programs (IFQs), regional fishery associations, and fishing community quotas<sup>6</sup>; community development quota programs (CDQs); fishing cooperatives; and sector allocation programs<sup>7</sup>.

<sup>1</sup>An additional 51 vessels with unknown country affiliation also participate in IUU fishing activities.

<sup>2</sup>Subspecies includes distinct population segments and evolutionarily significant units, terms defined under the ESA.

<sup>3</sup>The U.S. Fish and Wildlife Service provides protection for walrus, manatees, otters, and polar bears.

<sup>4</sup>The 1996 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act included this requirement.

<sup>5</sup>The Habitat Assessment Improvement Plan is available at: [http://www.st.nmfs.noaa.gov/st4/documents/HabitatAssesmentImprovementPlan\\_052110.PDF](http://www.st.nmfs.noaa.gov/st4/documents/HabitatAssesmentImprovementPlan_052110.PDF)

<sup>6</sup>See Section 303(A) of the Magnuson-Stevens Act for more information

<sup>7</sup>For more information about LAPPs and other catch share programs, please see *Excess Harvesting Capacity in U.S. Fisheries: A Report to Congress* available at: [www.nmfs.noaa.gov/msa2007/docs/042808.312\\_b.6\\_report.pdf](http://www.nmfs.noaa.gov/msa2007/docs/042808.312_b.6_report.pdf) and *National Assessment of Excess Harvesting Capacity in Federally Managed Commercial Fisheries* available at: <http://spo.nmfs.noaa.gov/tm/spo93.pdf>.

## Existing Catch Shares Programs (2009)

Region	Program	First Year	Ex-vessel Value (\$ millions)
Mid-Atlantic	Surfclam and ocean quahog IFQ	1990	52.9
South Atlantic	Wreckfish IFQ	1991	ND <sup>1</sup>
North Pacific	Western Alaska CDQ	1992	46.9
North Pacific	Pacific halibut and sablefish IFQ	1995	209.9
Pacific	Pacific whiting catcher/processor cooperative	1997	4.1
North Pacific	Bering Sea (BS) pollock cooperative	1999	291.3
Pacific	Sablefish permit stacking program	2001	11.5
North Pacific	Alaska weathervane scallop cooperative	2001	ND <sup>3</sup>
New England	George's Bank cod hook gear sector <sup>2</sup>	2004	ND <sup>3</sup>
North Pacific	Bering Sea king and ranner crab IFQ and cooperative	2005	148.5
New England	George's Bank cod fixed gear sector <sup>2</sup>	2007	ND <sup>3</sup>
Gulf of Mexico	Red snapper IFQ	2007	8
North Pacific	Central Gulf of Alaska rockfish pilot sector program	2007	5.9
North Pacific	BS groundfish (non-pollock) trawl catcher/processor cooperative	2008	96
Mid-Atlantic	Golden Tilefish	2009	4.2
Gulf of Mexico	Grouper and tilefish	2010	--
New England	Multispecies sector <sup>3</sup>	2010	--
Pacific	Pacific Coast Groundfish Trawl Rationalization	2011	--

In 2010, the NOAA catch shares policy<sup>4</sup> was released to encourage well-designed catch share programs to help maintain or rebuild fisheries, and sustain fishermen, communities and vibrant working waterfronts, including the cultural and resource access traditions that have been part of this country since its founding. The

<sup>1</sup>ND = these data are confidential thus not disclosable

<sup>2</sup>The George's Bank cod hook gear and cod fixed gear sectors were merged into one sector within the Multispecies sector program in 2010.

<sup>3</sup>Amendment 16 to Northeast Multispecies Fishery Management Plan expanded the number of sectors from 2 to 17.

<sup>4</sup>[http://www.nmfs.noaa.gov/sfa/domes\\_fish/catchshare/index.htm](http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/index.htm)

<sup>5</sup>This total excludes three buyback programs associated with Northwest Pacific salmon disasters in 1994, 1995, and 1998 because data were not available.

Pacific Coast groundfish trawl rationalization program is the Nation's newest catch share program.

With many catch share programs, the individually-assigned harvest privileges can be transferred (sold or leased) to those who can use them more beneficially. In contrast, the sector allocation program currently in place for the Northeast multispecies fishery does not assign harvest privileges that can be sold or leased by individual fishermen. Instead, a group of vessel permit holders voluntarily agree to form a sector and request exemptions from certain fishing restrictions in exchange for the opportunity to catch a portion of the total catch allocated to the fishing industry. A sector could, however, assign shares of its allocation to individual fishermen and allow transfers among its members or potentially to another sector.

Nationwide, there are 18 catch share programs currently in operation in six different regions. The total landings revenue of the fisheries for which information was available was \$879 million in 2009 amounting to 23% of the total landings revenue for all U.S. commercial fisheries.

#### Other Market-based Management Tools

Vessel or permit buyback programs are another market-based tool used by fishery managers. Under these programs, fishing vessels or permits are purchased by the government to permanently decrease the number of participants in the fishery to ease fishing-related pressure on marine resources. To date, there have been ten buyback programs instituted nationwide. The cost of seven<sup>5</sup> of these buyback programs totaled of \$397 million. Eighty-five percent of this total cost was funded by loans from the federal government that will be repaid by the commercial fishing industry.

License limitation programs, also known as limited entry programs, are another management tool available to fishery managers. In these programs, the number of fishing vessels allowed to harvest a specific fish stock or stock complex is limited to a fishermen or vessels with permission to fish. Unlike catch share programs, license limitation programs have been implemented for almost all federally-managed commercial fisheries and have been implemented in every region except the Caribbean.

Ecolabels are a market-based tool available to improve fisheries sustainability. An ecolabeling program entitles a fishery product to bear a distinctive logo or statement that certifies the fishery resource was harvested in compliance with specified conservation and sustainability standards. This ecolabel is intended to inform the consumer or purchaser of the fishery product of this compliance. It allows the buyer to potentially influence the sustainable harvest of fishery resources through the purchase of such ecolabeled seafood products at a price premium.

The Marine Stewardship Council (MSC) has one of the most recognizable ecolabeling programs in the world. There are

currently 102 fisheries worldwide that meet MSC sustainability standards<sup>1</sup>, 16 of which are U.S. fisheries.

### U.S. Fisheries with MSC Certification

Region	Fishery	Certified
North Pacific	Alaskan salmon	Sep 2000; Nov 2010
North Pacific	Bering Sea/Aleutian Islands (BSAI) pollock	Feb 2005; Dec 2010
North Pacific	Gulf of Alaska (GOA) pollock	Apr 2005; Sep 2010
North Pacific	US North Pacific halibut	Apr 2006
North Pacific	US North Pacific sablefish	May 2006
Pacific	Pacific albacore tuna - (American Albacore Fishing Association)	Aug 2007
Pacific	Oregon pink shrimp	Dec 2007
Mid-Atlantic	Atlantic deep sea red crab	Sep 2009
North Pacific	BSAI Pacific cod	Jan 2010
North Pacific	GOA Pacific cod	Jan 2010
North Pacific	North Pacific albacore tuna (American Western Fish Boat Owners Association)	Mar 2010
North Pacific	Bering Sea and Aleutian Islands flatfish	Jun 2010
North Pacific	Gulf of Alaska flatfish	Jun 2010
North Pacific	Gulf of Alaska Pacific cod	Jan 2010
Pacific	Pacific hake mid-water trawl	Oct 2009
Pacific	Oregon dungeness crab	Dec 2010

### Commercial Fisheries

Commercial fishermen in the U.S. harvested 7.9 billion pounds of finfish and shellfish in 2009, earning \$3.9 billion for their catch. Shrimp (\$378 million) followed by sea scallop (\$376 million), Pacific salmon (\$370 million), and walleye pollock (\$308 million) contributed the most to total revenue in the U.S. In terms of pounds landed, walleye pollock (1.9 billion pounds), menhaden (1.4 billion), and Pacific salmon (705 million) comprised over half of total pounds landed in 2009.

#### Key U.S. Commercial Species

- American lobster
- Blue crab
- Menhaden
- Pacific halibut
- Pacific salmon
- Sablefish
- Sea scallop
- Shrimp
- Tunas
- Walleye pollock

When looking at key species or species groups, commercial fishermen in Alaska caught the most salmon (671 million pounds)

and earned \$345 million for their catch in 2009. Tuna was caught in large numbers in Hawai'i (15 million pounds) and generated \$48 million in landings revenue.

On the East Coast, Maine fishermen contributed the most to the total landings of American lobster (79 million pounds) and earned \$231 million for their catch in 2009. In Massachusetts, sea scallop was a major contributor to total revenue, earning \$197 million for 30 million pounds landed. More blue crab was caught in Louisiana (51 million pounds) than any other state, earning fishermen in this state over \$36 million. Louisiana landed over half of the menhaden in 2009 with fisherman landing 786 million pounds and generating \$43 million in landings revenue.

The highest ex-vessel price per pound in 2009 was for Eastern oyster, which received \$40.37 per pound in Massachusetts, \$22.23 per pound in New York, and \$7.73 per pound in Maryland, with price differences largely attributable to difference in product form. Other key species or groups with high ex-vessel prices included: lobsters (\$12.37 per pound in Hawai'i), spiny lobster (\$11.24 per pound in California) and bloodworms (\$10.79 per pound in Maine).

In the Gulf of Mexico, shrimp was a highly valued species. Fishermen in Texas earned \$131 million for their catch (90 million pounds). Although, more shrimp was landed in Louisiana (114 million pounds) the total landings revenue was less (\$121 million). The ex-vessel price in Texas (\$1.46) was greater than that in Louisiana (\$1.06).

### Economic Impacts<sup>2</sup>

In this report, the U.S. seafood industry includes the commercial harvest sector, seafood processors and dealers, seafood wholesalers and distributors, importers, and seafood retailers. In 2009, this industry supported approximately 1 million full- and part-time jobs and generated \$116 billion in sales impacts, \$32 billion in income impacts, and \$48 billion in value added impacts.

### Commercial Economic Impacts Trends for the United States (thousands of dollars)

	2006	2007	2008	2009
Jobs	1,350,498	1,141,921	1,144,353	1,029,542
Income	46,174,306	34,258,018	34,544,909	31,556,643
Sales	104,770,788	126,261,815	126,175,684	116,224,548
Value Added	NA	52,423,024	52,726,594	48,282,319
Total Revenue	4,041,780	4,199,319	4,399,439	3,899,692

Seafood retailers generated the highest job and income impacts, contributing 484,000 jobs and \$10 billion in 2009. In contrast, the largest sales (\$49 billion) and value added impacts (\$15 billion) came from the importer sector. The seafood wholesalers and distributors sector contributed the least to the national seafood industry impacts with 47,000 employees, \$6.5 billion in sales impacts, \$2.1 billion in income impacts, and \$3.1 billion in value added impacts.

<sup>1</sup> More information about the Marine Stewardship Council and its certification process is available at: <http://www.msc.org/track-a-fishery/certified>.

<sup>2</sup> In earlier years, the NMFS Commercial Fishing & Seafood Industry Input/Output Model did not separate out the import sector but rather only included the commercial harvester, seafood processors and dealers, seafood wholesalers and distributors and retail sectors. Note that 2007 and 2008 estimates have been updated using the newer version of the model. For more information, see: [http://www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

### Commercial Fisheries Facts

#### Landings revenue

- The ten key U.S. key species or species groups accounted for 60% of total landings revenue in 2009.
- Finfish and other fishery products (\$1.9 billion) contributed slightly less than shellfish (\$2 billion) to total landings revenue in the U.S. in 2009.
- Together, Pacific salmon and walleye pollock accounted for 36% of total finfish revenue.
- Shrimp, sea scallop, and American lobster earned the most in shellfish revenue in 2009, contributing 18.7% 18.6%, and 15%, respectively.
- Pacific salmon had the largest annual increase in landings revenue over the 10 year time period, increasing 52% from \$199 million in 2003 to \$303 million in 2004.
- Pacific halibut had the largest decrease in landings revenue over the 10 year time period, decreasing 35% from \$218 million in 2008 to \$141 million in 2009.

#### Landings

- The U.S. key species and species groups accounted for 60% of total landings in 2009.
- Finfish and other fishery products accounted for 84% of total U.S. landings in 2009 or 6.6 billion pounds.
- Walleye pollock and menhaden contributed 28% and 21%, respectively, to U.S. finfish landings.
- Shrimp and blue crab contributed 25% and 14%, respectively, to shellfish landings.
- Sea scallop had the largest annual increase in landings over the 10 year time period, increasing 44% from 32 million in 2000 pounds to 46 million pounds in 2001.
- Pacific salmon had the largest annual decrease in landings over the 10 year time period, decreasing 26% from 900 million pounds in 2005 to 664 million pounds in 2006.

#### Prices

- Of the top ten key species or species groups, sea scallop (\$6.49), American lobster (\$3.09), and sablefish (\$2.87) had the highest ex-vessel price per pound in 2009.
- Walleye pollock (\$0.16) and menhaden (\$0.06) had the lowest ex-vessel price per pound in 2009.
- Walleye pollock had the largest annual increase in ex-vessel price over the 10 year time period, increasing 59% from \$0.13 per pound in 2007 to \$0.20 in 2008.
- Pacific salmon had the largest decrease in ex-vessel price over the 10 year time period, decreasing 33% from \$0.43 per pound in 2000 to \$0.29 in 2001.

Relative to 2008, decreases were experienced by all impact types in all industry sectors. The employment impacts decreased 10% from 1.1 million to 1 million jobs. The decreases in employment impacts ranged from 6.1% in the importers sector to 14% in the commercial harvesters sector. Overall, there was a 7.9% decrease in sales impacts, a 8.7% decrease in income impacts, and a 8.4 decrease in valued added impacts between 2008 and 2009. The smallest decrease across impact types and sectors occurred in the importers sector with a 6.1% decrease in employment, sales, output and value added impacts.

The greatest employment impacts generated by the seafood industry were generated in California with 121,000 jobs, followed by Massachusetts (78,000 jobs), Florida (65,000 jobs), and Washington (58,000 jobs). The lowest number of jobs were supported in Delaware (407 jobs). The importers sector generated the greatest job impacts in California, Massachusetts, Florida, and Washington.

#### Jobs supported by the U.S. Seafood Industry (2009)

State	Jobs	State	Jobs
United States	1,029,542	Maryland	14,778
California	120,583	Oregon	13,754
Massachusetts	77,820	Alabama	8,759
Florida	64,744	North Carolina	8,479
Washington	57,643	Rhode Island	7,888
Alaska	44,297	Georgia	7,390
New York	44,172	Hawai'i	7,270
New Jersey	37,887	Mississippi	6,392
Louisiana	29,185	New Hampshire	4,951
Maine	21,200	Connecticut	3,806
Virginia	19,064	South Carolina	1,169
Texas	18,874	Delaware	407

The highest sales impacts were generated by the seafood industry in California with \$20 billion in sales, followed by Florida (\$13 billion), Washington (\$7.3 billion), and Massachusetts (\$6.7 billion). The importers sector generated the highest level of sales impacts in all four states. The lowest sales were generated in Delaware (\$57 million).

#### Total sales generated by the U.S. Seafood Industry (2009)

(thousands of dollars)

State	In-State Sales	State	In-State Sales
United States	116,224,548	Maine	1,203,248
California	20,101,324	Oregon	1,127,435
Florida	12,988,379	Georgia	1,007,118
Washington	7,300,279	Rhode Island	905,714
Massachusetts	6,711,215	North Carolina	696,091
New Jersey	5,831,812	New Hampshire	651,278
New York	5,317,630	Hawai'i	628,717
Alaska	3,300,925	Connecticut	621,496
Virginia	1,736,517	Alabama	391,300
Louisiana	1,691,033	Mississippi	289,241
Texas	1,682,135	South Carolina	70,202
Maryland	1,654,072	Delaware	57,286

The greatest value added impacts were generated by the seafood industry in California with \$7.1 billion in value added impacts, followed by Florida (\$4.3 billion), Washington (\$2.9 billion), and Massachusetts (\$2.6 billion). The importers sector generated the greatest value added impacts in all four states. The smallest value added impacts were generated in Delaware (\$19 million).

### Total value added impacts generated by the U.S. Seafood Industry (2009)

(thousands of dollars)

State	Value Added	State	Value Added
United States	48,282,319	Maine	570,452
California	7,139,844	Oregon	500,498
Florida	4,341,208	Georgia	369,134
Washington	2,924,888	Rhode Island	347,570
Massachusetts	2,614,296	North Carolina	298,805
New Jersey	2,120,274	Hawai'i	273,116
New York	1,882,974	New Hampshire	242,845
Alaska	1,742,391	Connecticut	216,641
Louisiana	803,135	Alabama	196,785
Virginia	722,111	Mississippi	146,527
Texas	716,100	South Carolina	35,869
Maryland	634,712	Delaware	19,011

### Landings Revenue

Landings revenue in the U.S. totaled \$3.9 billion in 2009. This was a 6.1% increase (9.3% decrease in real terms) from 2000 levels (\$3.7 billion) and a 11% decrease (11% decrease in real terms) relative to 2008 (\$4.4 billion). Finfish and shellfish revenues mirrored this increasing trend. Totalling \$1.9 billion in 2009, finfish revenue experienced a 14% increase (2.8% decrease in real terms) from 2000 to 2009, but decreased 17% (17% decrease in real terms) from 2008 to 2009. U.S. shellfish revenue totaled \$2 billion in 2009, decreasing 0.1% (15% decrease in real terms) from 2000 to 2009 and decreased 5% (a 5.1% decrease in real terms) from 2008 to 2009.

### Total Landings Revenue by Region (2009)

(thousands of dollars)

Region	Total Revenue	Region	Total Revenue
United States	3,899,692	Pacific	488,155
North Pacific	1,340,996	Mid-Atlantic	434,763
New England	782,170	South Atlantic	144,143
Gulf of Mexico	629,276	Western Pacific	71,168

The ten U.S. key species and species groups comprised 60% of total revenue in 2009. Of these, shrimp, sea scallop, Pacific salmon, walleye pollock, and American lobster contributed the most to total revenue in the U.S. in 2009. These species or groups totaled approximately \$1.7 billion in 2009 or 45% of total revenue. The largest increases in total revenue among the national key species or species groups from 2000 to 2009 were experienced by: sea scallop (134%, 100% in real terms), Pacific salmon (37%, 17% in real terms), and sablefish (13%, 3.7% in real terms).

The largest decreases in total revenue over the 10 year time period were observed for shrimp (51%, 58% in real terms), menhaden (22%, 33% in real terms), and American lobster (3.3%, 17% in real terms). Relative to 2008 totals, key species or species groups with the largest increases in total revenue in 2009 were: sablefish (2%, 2.4% in real terms), sea scallop (1.7%, 2.1% in real terms), and blue crab (1.2%, 1.5% in real terms).

### Total Landings Revenue by State (2009)

(thousands of dollars)

State	Total Revenue	State	Total Revenue
Alaska	1,340,996	Maryland	76,057
Massachusetts	400,248	Hawai'i	71,168
Maine	285,925	Rhode Island	61,663
Louisiana	284,425	New York	49,271
Washington	227,773	East Florida	40,933
Virginia	152,730	Alabama	40,530
Texas	150,232	Mississippi	37,998
California	149,977	New Hampshire	17,708
New Jersey	149,032	South Carolina	16,916
West Florida	116,091	Connecticut	16,626
Oregon	102,453	Georgia	9,296
North Carolina	77,011	Delaware	7,536

Over the same time period, the largest decreases in total revenue occurred in Pacific halibut (35%, 35% in real terms), walleye pollock (33%, 32% in real terms), and shrimp (16%, 15% in real terms).

Overall, the greatest portion of the nation's landings revenue was generated in Alaska (\$1.3 billion), which contributed 35% to the U.S. total. Alaska also contributed more than any other state to total U.S. finfish revenue (\$1.1 billion), accounting for 62% of total finfish revenue. More than half of Alaska's finfish landings revenue came from walleye pollock and salmon. Massachusetts (\$285 million) and Maine (\$255 million) contributed the most to total U.S. shellfish revenue, contributing 14% and 13%, respectively. Sea scallop accounted for most of the revenue generated in Massachusetts and American lobster contributed the most to revenue in Maine.

### Landings

In 2009, U.S. commercial fishermen landed 7.9 billion pounds of finfish and shellfish. Relative to 2000 levels, this was an 14% decrease and a 5.6% decrease relative to 2008 (8.4 billion pounds). Finfish landings totaled 6.6 billion pounds in 2009, a 15% decrease from 7.8 billion pounds in 2000 and a 9.1% decrease from 2008 (7.3 billion pounds).

### Total Landings by Region (2009)

(thousands of dollars)

Region	Total Landings	Region	Total Landings
United States	7,885,626	Mid-Atlantic	695,636
North Pacific	4,064,224	New England	646,876
Gulf of Mexico	1,429,933	South Atlantic	110,899
Pacific	894,200	Western Pacific	26,906

Over 60% of total catch in 2009 was made up of the ten U.S. key species and species groups. Walleye pollock and menhaden had the highest landings totals in 2009 with 1.9 billion pounds and 1.4 billion pounds landed, respectively. These two species accounted for 42% of total U.S. landings in 2009.

**Total Landings by State (2009)**  
(thousands of pounds)

State	Total Landings	State	Total Landings
Alaska	4,064,224	North Carolina	68,635
Louisiana	1,005,145	Maryland	68,313
Virginia	426,252	West Florida	65,314
California	372,337	New York	34,413
Massachusetts	355,965	Alabama	29,693
Mississippi	230,284	East Florida	27,460
Oregon	198,331	Hawai'i	26,906
Maine	184,558	New Hampshire	13,886
Washington	163,937	South Carolina	9,438
New Jersey	161,599	Connecticut	7,972
Texas	99,497	Georgia	5,366
Rhode Island	84,495	Delaware	5,010

The greatest increases in landings between 2000 and 2009 occurred in sea scallop (80%), American lobster (13%), and Pacific salmon (12%). During the same time period, decreases were seen in walleye pollock (29%), menhaden (20%), and Pacific halibut (20%). The largest increase in landings of key species or groups between 2008 and 2009 was experienced by shrimp (20%) and the largest decrease was experienced by walleye pollock (18%).

Alaskan fishermen harvested the majority of the Nation's total landings. Alaska contributed 53% to the U.S. total in 2009, landing 4.1 billion pounds of finfish and shellfish. Alaska also contributed the most to the U.S. finfish total, landing 4 billion pounds or 61% of the U.S. finfish total. Walleye pollock comprised much of the landings in Alaska (46%). More shellfish was landed in California (225 million pounds) and Louisiana (199 million pounds) than any other single state. The landings in these two states comprised 34% of all shellfish landed in the United States in 2009.

#### Prices

Of the ten U.S. key species and species groups, sea scallop, American lobster, and sablefish received the highest ex-vessel prices in 2009 at \$6.49 per pound, \$3.09 per pound, and \$2.87 per pound respectively.

Significant increases in price were observed for walleye pollock, which increased 43% (22% in real terms) from 2000 to 2009, but experienced a decrease of 17.8% (17.5% in real terms) from 2008 to 2009. Shrimp ex-vessel price experienced the next largest change between 2000 and 2009, with a decrease of 39% (48% in real terms). The greatest change in price between 2008 and 2009 was also experienced by shrimp (29.3% decrease a 29.1% decrease in real terms), followed by Pacific halibut with a 27.7% decrease (a 27.4% decrease in real terms).

Menhaden and walleye pollock had the lowest ex-vessel prices in 2009 at \$0.06 and \$0.16 per pound, respectively. However,

landings of menhaden and walleye pollock were the largest among the U.S. key species and groups: 1.4 billion pounds of menhaden and 1.9 billion pounds of walleye pollock.

#### Recreational Fisheries

In 2009, there were approximately 11 million recreational anglers across the U.S. who took 74 million saltwater fishing trips around the country. These anglers spent \$4.5 billion on fishing trips and \$15 billion on durable fishing-related equipment. These expenditures contributed \$50 billion in sales impacts to the U.S. economy, generated \$23 billion in value added impacts, and supported over 327,000 job impacts. Of the U.S. key recreational species or species groups, seatrout (44 million fish), and Atlantic croaker and spot (36 million fish) were the most often caught by recreational anglers in 2009.

#### Key United States Recreational Species

- Atlantic croaker and spot
- Seatrout
- Little tunny and Atlantic bonito
- Pacific halibut
- Pacific salmon
- Rockfishes and scorpionfishes
- Sharks
- Striped bass
- Summer flounder
- Large Atlantic tuna

#### Expenditures and Economic Impacts<sup>1</sup>

Economic impacts from recreational fishing activities (impacts from fishing trips and durable equipment combined) supported over 327,000 full- and part-time jobs across the U.S. in 2009. Sales impacts from recreational angling trips and durable expenditures totaled \$50 billion and value added impacts totaled \$23 billion. Durable equipment impacts contributed the most to these totals, accounting for 74% of employment impacts, 79% of total sales impacts, and 77% of value added impacts. Of the three fishing trip modes, shore-based fishing trips contributed the most to the number of jobs supported by recreational angling with 11% of employment impacts. For-hire sales (\$1.9 billion) and value added impacts (\$1 billion) were approximately half the magnitude of impacts generated by either private boat (\$4.2 billion, \$2.2 billion) or shore-based trips (\$4.3 billion, \$2.2 billion).

#### Recreational Economic Impacts Trends for the United States (thousands of dollars)

	2006	2007	2008	2009
Jobs	533,813	468,298	384,707	327,124
Income	NA	NA	NA	14,574,464
Sales	82,323,771	72,254,430	58,877,647	49,811,961
Value Added	38,080,224	33,418,845	27,350,783	23,196,423
Total Trips <sup>2</sup>	88,203,216	88,587,085	84,397,961	74,437,656

U.S. anglers spent a total of \$4.5 billion on expenditures related for fishing trips in 2009. Of this total, expenditures for private boat-based fishing trips contributed the most (\$1.9

<sup>1</sup>Expenditures and economic impacts from recreational fishing activities were generated using the The Economic Contribution of Marine Angler Expenditures in the United States, 2006 model developed by Brad Gentner and Scott Steinback: [http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport\\_ALL.pdf](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf)

<sup>2</sup>The number of trips excludes Alaska and Texas.



billion), followed by shore-based fishing trips (\$1.8 billion), and for-hire-based fishing trips (\$763 million). Expenditures on fishing-related equipment totaled over \$15 billion in 2009. Anglers spent more on boat expenses (\$4.5 billion) than any other durable good. Other major expenditures include vehicle expenses (\$4 billion), second home expenses (\$3 billion) and fishing tackle (\$2.4 billion).

#### Jobs supported by the U.S. Recreational Fishing Industry (2009)

State	Jobs	State	Jobs
West Florida	42,314	Massachusetts	4,987
East Florida	27,445	Alabama	4,924
Texas	22,127	New York	4,568
Louisiana	19,688	Hawai'i	4,286
North Carolina	17,221	Washington	3,348
California	13,567	Mississippi	3,188
New Jersey	8,513	Maine	2,039
Maryland	5,714	Oregon	1,649
Alaska	5,338	Georgia	1,613
Connecticut	5,212	Delaware	1,270
Virginia	5,167	Rhode Island	1,005
South Carolina	5,035	New Hampshire	418

#### Total Sales generated by the U.S. Recreational Fishing Industry (2009)

(thousands of dollars)

State	Jobs	State	Job
West Florida	4,369,022	Alabama	474,746
East Florida	3,112,439	Alaska	469,507
Texas	2,846,858	Hawai'i	460,808
California	2,043,304	South Carolina	441,442
North Carolina	1,785,194	Mississippi	417,080
Louisiana	1,774,692	Washington	346,679
New Jersey	1,412,488	Georgia	196,836
Connecticut	797,209	Delaware	193,334
Maryland	769,979	Oregon	167,603
New York	680,460	Maine	166,564
Massachusetts	656,958	Rhode Island	113,817
Virginia	579,911	New Hampshire	45,516

#### Participation<sup>1</sup>

Nationwide, there were 11 million recreational anglers who fished in their home states in 2009. Approximately 9.4 million of these anglers were residents of a U.S. coastal county and 1.7 million anglers were residents of a non-coastal county. Between 2000 and 2009, the total number of U.S. anglers fishing in their home states increased 12%. However, the number of anglers decreased 10% between 2008 and 2009. The number of coastal county anglers increased 6.4% from 2000 to 2009 and decreased 12% from 2008 to 2009. The number of non-coastal county anglers increased 41% between 2000 and 2009 and from 2008 to 2009, there was a 10% increase.

The majority of U.S. anglers fished in the Gulf of Mexico (2.8 million anglers), the Mid-Atlantic (2.6 million anglers), and the South Atlantic (2.4 million anglers). The Pacific (1.8 million anglers) New England (1.4 million), North Pacific (284,000), and the Western Pacific (246,000) Regions followed in terms of total anglers.

#### Fishing Trips<sup>2</sup>

Approximately 74 million fishing trips were taken in the U.S. in 2009. Of these, 39 million were fishing trips taken from a private or rental boat (53% of total fishing trips). Approximately 34 million trips were taken from shore and 6 million trips were taken from a for-hire fishing boat. Most of these trips were taken in the Gulf of Mexico (22 million trips), the South Atlantic (19 million trips), and the Mid-Atlantic (17 million trips). New England (7.5 million trips), the Pacific (6.3 million trips) and the Western Pacific (2.2 million trips) Regions followed in number of trips taken. Anglers in the North Pacific fished approximately 914,000 fishing days<sup>3</sup> in 2009.

The total number of fishing trips taken in the U.S. decreased 5.8% from 2000 to 2009. Relative to 2008, total fishing trips taken in the U.S. decreased 12% with the largest increase occurring in the for-hire mode (81%).

#### Harvest and Release

Among the ten key U.S. recreational species or species groups, seatrout, Atlantic croaker and spot, summer flounder, and striped bass were the most commonly caught by anglers in 2009. These species or groups were caught in large numbers relative to the other key species or groups: seatrout (44 million fish), Atlantic croaker and spot (36 million fish), summer flounder (25 million fish), and striped bass (9.9 million fish). Anglers fishing in the Mid-Atlantic and New England caught most of the Atlantic croaker, summer flounder, and striped bass in 2009, while most seatrout were caught in the Gulf of Mexico and the South Atlantic.

In the North Pacific Region, salmon (Chinook, chum, coho, pink, and sockeye) and Pacific halibut were the most commonly caught species or group in 2009 with 1.1 million fish and 761,000 fish caught, respectively. Rockfishes and scorpionfishes (2.7 million fish), mackerel (2 million fish), and barracuda, bass and bonito (1.6 million fish) were caught in high numbers in the Pacific Region, while bigeye and mackerel (1.1 million fish) comprised 39% of fish caught by anglers in the Western Pacific.

Recreational catch of sharks experienced a 73% increase between 2000 and 2009, the largest change during this 10 year time period. There were 5.3 million sharks caught in 2009. Other key species or groups with large changes in recreational catch include: striped bass (48% decrease), Pacific salmon (38% increase), rockfishes and scorpionfishes (33% decrease), and large Atlantic tuna (26% decrease).

<sup>1</sup>Participation estimates do not include Alaska and Texas. Hawai'i is included for 2003-2009; Numbers include the Caribbean.

<sup>2</sup>Effort numbers do not include Alaska and Texas. They include Hawai'i only for 2003-2008. California numbers were estimated differently from 2004-2009.

<sup>3</sup>In Alaska, fishing effort information is collected as the number of fishing days rather than the number of fishing trips taken.

### Recreational Fishing Facts

#### Participation

- An average of 12 million anglers fished in United States annually from 2000 to 2009.
- In 2009, coastal county residents made up 84% of total anglers. These anglers averaged 86% 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 was between 2002 and 2003, increasing 21%, from 8.6 million anglers to 10 million anglers. The largest annual decrease during the same period for coastal anglers occurred between 2007 and 2008, decreasing 13%, from 12 million anglers to 11 million anglers.

#### Fishing trips

- In the United States, an average of 82 million fishing trips were taken annually from 2000 to 2009.
- Private or rental boat and shore-based fishing trips accounted for 39 million and 34 million fishing trips, respectively in 2009. Together, these made up 99% of the fishing trips taken in that year.
- The largest increase in number of total trips taken annually over the 10 year time period occurred between 2002 and 2003, increasing 18%, from 71 million trips to 83 million trips. The largest annual decrease in total trips taken during this period in total trips taken occurred between 2001 and 2002, decreasing 18%, from 86 million trips to 71 million trips.

#### Harvest and release

- Seatrout was the most commonly caught key species or species group, averaging 44 million fish caught over the 10 year time period. Of these, 60% were released rather than harvested.
- Of the ten commonly caught key species or species groups, five were released more often than harvested over this time period. The species or species group that was most commonly released was sharks (95% released).
- Large Atlantic tuna (89% harvested), followed by rockfishes and scorpionfishes (75% harvested), and Pacific salmon (65% 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 large Atlantic tuna which increased 257% between 2002 and 2003; the largest annual change in number of fish harvested occurred in Pacific salmon, which increased 118% from 2008 to 2009.

From 2008 to 2009, decreases occurred in the recreational catch of Atlantic croaker and spot, seatrout, little tunny and Atlantic bonito, Pacific halibut, sharks, striped bass, and large Atlantic tuna. Of these, the largest decreases occurred in large Atlantic tuna (31%), striped bass (29%), and Atlantic croaker and spot (22%). The largest increase observed for this time period was for Pacific salmon, which experienced a 104% increase.

### Marine Economy<sup>1</sup>

In 2008, there were 7.6 billion establishments in the U.S, including marine and non-marine related establishments. These establishments employed almost 121 million full- and part-time employees and had a total annual payroll of \$5.1 trillion. From 2000 to 2008, the number of establishments increased 7.5%, employee numbers increased 6%, and total annual payroll increased 32% (a 13% increase in real terms) nationwide. More modest changes were seen from 2007 to 2008: 1.3% decrease, 0.2% increase, and 2.1% increase (a 7.8% decrease in real terms), respectively.

The Nation's gross domestic product was \$14.3 trillion in 2008, a 45% increase (a 23% increase in real terms) relative to 2000 levels (\$9.9 trillion) and a 2.1% increase (a 7.8% decrease in real terms) relative to 2007 levels (\$14 trillion). Employee compensation in 2000 was \$5.8 trillion, a 39% increase (a 18% increase in real terms).

For this report, the marine economy, a subset of the national economy, is comprised of two industry sectors: 1) seafood sales and processing (employer establishments and nonemployer firms) and 2) transport, support, and marine operations (employer establishments). These sectors are comprised of several different marine-related industries. The following sections discuss the contribution of these industries to the national marine economy in terms of the number of establishments or firms, employees, and total annual payroll or receipts.

#### Seafood Sales and Processing

In 2008, there were 1,308 nonemployer firms engaged in seafood product preparation and packaging, a 83% increase from 2000 levels. Annual receipts increased 48% (26% increase in real terms) from \$61 million (2000) to \$90 million (2008). More of these firms were located in Florida (202 firms) than any other state.

In contrast to nonemployer firms, the number of employer establishments decreased 22% from 854 in 2000 to 663 in 2008. These firms employed approximately 33,000 full- and part-time employees in 2008 and had a total annual payroll of \$1.2 billion. Relative to 2000 levels, this was an 20% decrease in workers but a 8.5% increase (a 7.5% decrease in real terms) in annual payroll. More of these establishments were located in Alaska (122 establishments) and Washington (96 establishments) than any other states.

There were over 2,000 employer establishments involved in seafood wholesale activities in 2008. Most of these establishments were in California (278 firms), New York (231 firms), and Florida (229 firms). These establishments employed 20,116 workers and had an annual payroll of \$782 million. From 2000 to 2008, the number of establishments in the seafood wholesale sector decreased 31%, the number of employees decreased 30%, and the annual payroll decreased 8.5% (a 22% decrease in real terms).

Nonemployer firms and employer establishments engaged in

<sup>1</sup>Information for 2008 is reported in this section; 2009 data were not available for this report.

seafood retail activities both saw increasing trends from 2000 to 2008. There was a 17% increase in firms (2,522 in 2008) and a 10% increase in establishments (2,044 in 2008). Annual receipts for nonemployer firms totaled \$233 million in 2008, a 23% increase (5.2% increase in real terms) relative to 2000 levels. Annual payroll for employer establishments totaled over \$205 million, a 50% increase (28% increase in real terms) relative to 2000 levels. Approximately 9,732 full- and part-time workers were employed by the 2,044 establishments in 2008, a 15% increase and a 10% increase, respectively from 2000. The employer establishments for retail seafood sales were primarily located in New York (368), Florida (168), and California (161), while most non-employer firms were located in Florida (331), New York (247), and California (210).

### *Transport, Support, and Marine Operations*

In the U.S. transport, support, and marine operations industry sector, industries involved in marina activities had the highest number of establishments. In 2008, there were almost 4,000 marina industries that employed 29,000 full- and part-time workers. Compared to 2000 levels, this was a 3.7% decrease in establishment numbers and a 16% increase in number of employees. Annual payroll for this industry was \$954 million in 2008, a 49% increase (27% increase in real terms) over 2000 levels. Most of these marina industries were located in Florida (442), New York (419), and California (277).

**2009 Economic Impacts of the United States Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	1,029,542	116,224,548	31,556,643	48,282,319
Commercial Harvesters	135,466	10,349,446	3,435,027	5,340,116
Seafood Processors & Dealers	183,895	25,240,441	7,965,719	11,073,240
Importers	178,387	49,070,476	7,864,480	14,958,830
Seafood Wholesalers & Distributors	47,405	6,505,383	2,137,714	3,058,777
Retail	484,389	25,058,802	10,153,704	13,851,356

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	3,676,718	3,249,399	3,164,209	3,346,066	3,769,942	3,952,692	4,041,780	4,199,319	4,399,439	3,899,692
Finfish & other	1,647,281	1,513,585	1,374,489	1,518,330	1,777,802	1,860,060	1,950,757	2,067,960	2,254,666	1,871,289
Shellfish	2,029,437	1,735,814	1,789,720	1,827,736	1,992,140	2,092,632	2,091,023	2,131,359	2,144,773	2,028,403
American lobster	313,766	249,510	293,894	283,516	374,306	415,415	395,150	354,993	326,754	303,321
Blue crab	164,370	158,220	146,974	153,685	145,905	140,818	126,043	148,788	162,739	164,684
Menhaden	114,344	104,791	81,607	71,988	75,045	62,520	69,683	92,725	88,767	89,341
Pacific halibut	142,314	115,365	136,789	172,846	176,893	177,599	202,163	227,348	217,722	140,613
Pacific salmon	270,722	209,441	156,194	198,946	302,775	330,816	310,865	381,589	395,253	369,749
Sablefish	109,634	84,219	78,142	102,324	98,409	100,537	107,956	105,729	120,998	123,426
Sea scallop	160,886	172,583	202,092	229,097	320,039	432,514	384,758	386,025	369,896	376,351
Shrimp	776,177	578,208	523,882	441,622	446,043	412,718	454,610	433,314	448,979	378,412
Tunas	99,277	94,091	85,473	86,818	89,952	86,358	86,760	93,887	107,040	96,234
Walleye pollock	301,558	335,089	369,078	356,822	347,675	414,198	430,345	386,136	456,826	307,864

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	9,142,869	9,511,792	9,436,477	9,505,337	9,688,745	9,712,427	9,484,055	9,302,424	8,352,317	7,885,626
Finfish & other	7,828,416	8,348,260	8,232,370	8,367,711	8,516,634	8,630,877	8,303,972	8,232,708	7,297,504	6,634,357
Shellfish	1,314,453	1,163,532	1,204,107	1,137,626	1,172,111	1,081,550	1,180,083	1,069,716	1,054,813	1,251,269
American lobster	86,804	71,193	83,087	71,683	90,073	87,809	92,609	78,368	88,087	98,216
Blue crab	186,036	159,004	175,574	170,890	174,561	159,242	166,133	151,175	157,372	173,513
Menhaden	1,764,373	1,739,963	1,755,398	1,590,510	1,495,240	1,243,807	1,304,250	1,483,785	1,310,164	1,407,822
Pacific halibut	74,370	77,147	80,977	78,862	79,181	76,264	71,897	69,967	66,996	59,812
Pacific salmon	628,132	717,762	561,489	669,998	738,746	899,759	663,567	886,054	659,196	705,064
Sablefish	49,775	44,080	40,734	47,998	52,851	51,296	46,825	43,881	43,281	43,071
Sea scallop	32,163	46,414	52,672	55,968	64,108	56,626	59,013	58,573	53,541	58,001
Shrimp	386,497	346,288	345,249	324,170	316,566	264,163	337,012	281,959	257,712	308,641
Tunas	50,861	51,783	49,632	61,762	56,323	44,252	49,923	50,651	47,910	49,058
Walleye pollock	2,614,006	3,180,078	3,332,836	3,361,721	3,353,035	3,409,905	3,403,055	3,065,898	2,276,167	1,865,975

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	3.61	3.50	3.54	3.96	4.16	4.73	4.27	4.53	3.71	3.09
Blue crab	0.88	1.00	0.84	0.90	0.84	0.88	0.76	0.98	1.03	0.95
Menhaden	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.06
Pacific halibut	1.91	1.50	1.69	2.19	2.23	2.33	2.81	3.25	3.25	2.35
Pacific salmon	0.43	0.29	0.28	0.30	0.41	0.37	0.47	0.43	0.60	0.52
Sablefish	2.20	1.91	1.92	2.13	1.86	1.96	2.31	2.41	2.80	2.87
Sea scallop	5.00	3.72	3.84	4.09	4.99	7.64	6.52	6.59	6.91	6.49
Shrimp	2.01	1.67	1.52	1.36	1.41	1.56	1.35	1.54	1.74	1.23
Tunas	1.95	1.82	1.72	1.41	1.60	1.95	1.74	1.85	2.23	1.96
Walleye pollock	0.12	0.11	0.11	0.11	0.10	0.12	0.13	0.13	0.20	0.16

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	17,217	1,915,452	606,983	1,039,705
Private Boat	31,176	4,243,541	1,253,804	2,158,414
Shore	35,293	4,312,850	1,319,865	2,243,036
Total Durable Equipment Impacts	243,438	39,340,118	11,393,812	17,755,268
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>327,123</b>	<b>49,811,961</b>	<b>14,574,464</b>	<b>23,196,422</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)<sup>1</sup>**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
For-Hire	NA	763,248	Fishing Tackle	2,448,941
Private Boat	NA	1,874,466	Other Equipment	808,159
Shore	NA	1,819,156	Boat Expenses	4,470,294
<i>Total Trip Expenditures</i>	NA	4,456,871	Vehicle Expenses	3,957,974
			Second Home Expenses	2,991,334
			<i>Total Durable Equipment Expenditures</i>	14,676,703
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>19,133,574</b>

**Recreational Anglers by Residential Area (thousands of anglers)<sup>2</sup>**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	8,845	9,933	8,608	10,434	10,199	11,330	11,644	12,389	10,725	9,408
Non-Coastal	1,235	1,451	1,372	1,562	1,579	1,492	1,685	1,616	1,591	1,747
<b>Total Anglers</b>	<b>10,081</b>	<b>11,383</b>	<b>9,981</b>	<b>12,175</b>	<b>11,962</b>	<b>12,988</b>	<b>13,553</b>	<b>14,151</b>	<b>12,453</b>	<b>11,260</b>

**Recreational Fishing Effort by Mode (thousands of trips)<sup>2</sup>**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	3,527	6,437	5,689	3,223	6,168	3,508	6,676	6,513	3,345	6,040
Private Boat	40,759	46,081	40,118	46,434	43,338	41,298	45,621	48,977	46,037	39,495
Shore	32,302	38,994	29,745	36,560	37,512	35,384	41,315	37,791	37,818	34,491
<b>Total Trips</b>	<b>78,990</b>	<b>86,103</b>	<b>70,858</b>	<b>83,414</b>	<b>81,431</b>	<b>82,592</b>	<b>88,203</b>	<b>88,587</b>	<b>84,398</b>	<b>74,438</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Drum (Atlantic croaker and spot)	H	17,716	22,219	17,837	20,879	20,488	21,331	23,179	28,003	23,172	16,879
	R	23,231	17,515	16,432	18,199	16,669	21,109	20,421	23,195	23,416	19,346
Drum (seatrouts)	H	21,392	16,310	13,948	15,227	16,056	15,801	21,910	17,847	20,122	19,453
	R	27,624	19,680	22,471	25,552	25,543	29,315	31,056	29,946	30,582	24,930
Little tunny & Atlantic bonito <sup>4</sup>	H	422	330	323	254	364	203	311	320	210	267
	R	873	685	1,025	865	1,049	567	829	1,141	817	746
Pacific halibut	H	403	366	351	403	483	500	463	585	516	440
	R	303	254	233	290	369	380	353	438	359	321
Pacific salmon	H	1,074	1,757	1,321	1,626	1,569	1,481	873	1,286	722	1,574
	R	549	770	692	881	1,010	844	513	710	375	659
Rockfishes & scorpionfishes	H	3,700	3,358	2,856	3,742	2,593	3,617	2,677	2,454	2,068	2,199
	R	848	923	1,065	1,796	977	1,347	895	691	636	836
Sharks <sup>5</sup>	H	276	310	250	194	195	207	172	229	204	146
	R	2,814	4,322	3,264	4,223	4,204	5,056	5,022	6,039	5,353	5,199
Striped bass	H	2,090	2,084	1,901	2,580	2,561	2,392	2,706	2,224	2,077	1,971
	R	17,076	13,660	13,976	14,997	17,531	19,084	25,956	16,938	11,947	7,928
Summer flounder	H	7,820	5,307	3,281	4,578	4,653	4,110	4,227	3,397	2,312	1,930
	R	17,594	22,895	13,418	15,978	16,338	22,886	18,061	19,791	22,207	23,352
Tunas (large Atlantic species) <sup>6</sup>	H	727	658	425	883	803	718	657	676	771	509
	R	50	44	31	112	112	113	99	100	72	69

<sup>1</sup>All anglers reported in this table are U.S. residents; NA = not applicable<sup>2</sup>Information was included for all states but Alaska and Texas. Most information was provided by the Marine Recreational Information Program (MRIP). Pacific data were provided by the Pacific states and Hawaii data were not included from 2000 to 2002.<sup>3</sup>This table excludes all Texas data and Hawaii data from 2000 to 2002.<sup>4</sup>This species may not be equivalent to species with similar names listed in the commercial tables.<sup>5</sup>Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.<sup>6</sup>Includes all tunas in the thunnus family.

## United States's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	7,070,048	114,064,976	3,879,430	5,780,000	9,880,000	1 <sup>2</sup>
2008	7,601,169	120,903,551	5,130,509	8,020,000	14,300,000	1
% change	7.51%	6%	32.2%	38.8%	44.7%	--

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	714	780	903	1,038	1,110	1,080	1,142	1,303	1,308
	Receipts	60,790	60,417	55,750	70,071	81,871	78,745	80,066	88,230	89,670
Seafood Sales, retail	Firms	2,161	2,119	2,210	2,346	2,260	2,098	2,089	2,610	2,522
	Receipts	188,870	190,629	199,937	210,231	210,450	203,951	211,186	231,776	233,002

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	854	823	754	764	734	717	670	685	663
	Employees	41,770	39,855	38,663	39,580	38,102	37,684	35,894	33,169	33,323
	Payroll	1,070,573	1,057,737	1,092,500	1,177,582	1,151,780	1,180,396	1,205,890	1,196,086	1,161,637
Seafood sales, wholesale	Establishments	2,992	2,980	2,883	2,456	2,330	2,314	2,222	2,438	2,063
	Employees	28,710	28,405	26,719	23,091	22,501	22,666	22,013	24,232	20,116
	Payroll	854,649	882,232	895,718	743,479	771,749	781,459	826,720	924,654	782,178
Seafood sales, retail	Establishments	1,853	1,940	2,238	2,125	2,151	2,155	2,115	2,094	2,044
	Employees	8,458	8,990	9,771	10,346	10,714	10,381	10,545	10,380	9,732
	Payroll	137,306	149,310	167,634	186,087	192,187	194,602	200,971	209,404	205,423

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	546	544	520	606	579	610	579	573	513
	Employees	20,240	24,126	20,149	22,449	21,928	21,025	22,172	22,568	21,019
	Payroll	1,027,497	1,188,800	1,096,771	1,183,071	1,179,549	1,232,342	1,376,033	1,552,467	1,694,613
Deep sea freight transportation	Establishments	485	456	471	472	435	465	456	427	365
	Employees	13,014	11,964	12,916	12,175	11,314	11,357	11,473	11,308	10,231
	Payroll	650,148	697,266	784,149	734,781	735,804	801,863	825,752	855,683	852,063
Marinas	Establishments	4,126	4,121	4,021	4,150	4,092	4,143	4,025	4,085	3,972
	Employees	24,824	24,660	23,047	27,928	28,100	27,511	28,339	28,788	28,686
	Payroll	640,131	674,576	675,529	773,538	814,821	839,848	894,097	945,355	954,032
Marine cargo handling	Establishments	607	612	595	542	551	549	540	552	532
	Employees	53,496	50,273	50,428	50,644	58,618	59,670	61,905	62,941	63,736
	Payroll	2,194,692	2,249,516	2,425,187	2,422,537	2,899,703	3,034,672	3,261,953	3,428,126	3,272,723
Navigational services to shipping	Establishments	863	830	828	782	804	803	802	830	868
	Employees	11,775	11,957	11,224	11,795	11,881	10,819	12,043	12,997	13,419
	Payroll	478,748	507,806	509,953	629,541	591,510	584,689	699,375	756,552	847,938
Port & harbor operations	Establishments	196	201	212	223	234	244	229	223	268
	Employees	7,445	7,304	6,304	6,413	6,888	7,453	7,002	6,573	5,608
	Payroll	265,766	254,864	245,979	279,970	300,692	319,338	323,554	318,608	282,671
Ship & boat building	Establishments	1,763	1,815	1,736	1,739	1,793	1,799	1,764	1,771	1,782
	Employees	146,969	138,962	131,292	133,395	137,633	141,620	142,057	148,864	157,512
	Payroll	5,044,270	5,094,086	5,111,708	5,119,596	5,499,783	5,654,818	5,877,830	6,405,570	7,269,306

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

# North Pacific

- Alaska



### Management Context

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

#### North Pacific Fishery Management Plans

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

Of the stocks or stock complexes covered in these fishery management plans, none are currently listed as overfished. No stocks in this region are currently subject to overfishing. The North Pacific Region has seven catch share programs (a type of market-based management), more than any other region. These are the: 1) Western Alaska community development quota program; 2) Pacific halibut and sablefish individual fishing quota program; 3) Bering Sea pollock cooperative; 4) Alaska weathervane scallop cooperative; 5) Bering Sea king and tanner crab (crab rationalization) program that includes both an individual fishing quota program and a fishing cooperative; 6) Central Gulf of Alaska rockfish pilot sector program; and 7) Bering Sea groundfish (non-pollock) cooperative. The landings revenues for these programs totaled almost \$798 million in 2009, which exceeds the total landings revenue of any other state.

A particularly interesting management measure is the western Alaska Community Development Quota (CDQ) program, which is unique to Alaska. This program was originally implemented in 1992 as part of a restructuring of the Bering Sea/Aleutian Islands (BSAI) groundfish fishery. Under this program, a percentage of the total allowable catch for groundfish, prohibited species, halibut, and crab is apportioned to the coastal western Alaskan native communities. The purpose of the program is to provide western Alaskan communities the opportunity to participate and invest in BSAI fisheries, to support economic development in western Alaska, to alleviate poverty and provide economic and social benefits for residents of western Alaska, and to achieve sustainable and diversified local economies in western Alaska.

Annual CDQ allocations provide a revenue stream for CDQ groups through various channels, including the direct catch and sale of some species and the leasing of quota to various harvesting partners. These communities participate in the CDQ Program through six non-profit corporations (CDQ groups), which manage and administer the CDQ allocations, investments, and economic development projects. CDQ groups use the revenue derived from the harvest of their fisheries allocations to fund economic

development activities and provide employment opportunities. In 2009, 180 million pounds of pollock were caught under the BSAI CDQ program, with a value of approximately \$35 million.

### Commercial Fisheries

North Pacific fishermen earned over \$1.3 billion from their commercial harvest (4.1 billion pounds) in 2009. Landings revenue was dominated by salmon (\$345 million), walleye pollock (\$308 million), crab (\$180 million), and Pacific halibut (\$135 million). Walleye pollock contributed the most to landings in 2009, accounting for 46% of total landings (1.9 billion pounds) and 23% of landings revenue, with an average annual price of \$0.16 per pound. In contrast, salmon accounted for 17% of total landings (671 million pounds) and generated 26% of landings revenue, with an average annual price of \$0.51 per pound in 2009.

The North Pacific groundfish fishery is different from most other fisheries in the nation in that a large portion of the fishery is processed at sea and, therefore, no landings revenues are reported. The landings revenue for the species landed and processed at sea are estimated by using prices obtained from the shore-side sector. These species include Pacific cod, flatfish, atka mackerel, walleye pollock, rockfish, and sablefish.

When data from the shore-side sector are inadequate, historical information about the relationship between the ex-vessel price and the wholesale price of finished products is used to estimate ex-vessel prices and revenue for portions of the fishery mostly processed at sea.

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

Alaska's seafood industry generated \$3.3 billion in sales impacts, \$1.4 billion in income impacts, and over 44,000 jobs in 2009. Seafood processing and dealer operations contributed 26% to in-state sales for Alaskan businesses, with over \$844 million generated in 2009. The commercial harvester sector generated more impacts than any other sector with approximately 70% of total impacts. The importer sector consisted of less than one percent of the total impacts for the state in 2009.

#### Key North Pacific Commercial Species

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

#### *Landings Revenue*

In 2009, landings revenue for finfish and shellfish totaled over \$1.3 billion, a 17% increase from total revenue generated in 2000. When adjusting for inflation, real landings revenue decreased 0.2%. Landings revenue in 2009 was a 26% decrease relative to 2008 (\$1.8 billion). Finfish and other catch contributed more than shellfish to the 2009 total, accounting for 86% or \$1.1 billion. This was a 14% increase (2.5% decrease in real terms)

<sup>1</sup>The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: [www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))



from 2000 finfish revenue totals. Similarly, shellfish revenues increased 36% (17% increase in real terms) from \$142 million in 2000 to \$193 million in 2009. The largest changes in landings revenue between 2000 and 2009 were for Atka mackerel (214% increase), Pacific herring (204% increase), and flatfish (66% increase).

The two species or species groups that generated the highest landings revenue were salmon (\$344 million) and walleye pollock (\$308 million).

### Commercial Fisheries Facts

#### Landings revenue

- On average, the ten key species or species groups account for 99% of total revenue, (\$1.3 billion) generated in the North Pacific Region.
- Walleye pollock contributed more than any other species or species group, averaging \$371 million in landings revenue from 2000 to 2009.
- Atka mackerel had the largest annual increase in landings revenue over the 10 year time period, increasing 122% from \$9.5 million in 2000 to \$21 million in 2001.
- Pacific cod had the largest annual decrease in landings revenue over the 10 year time period, decreasing 56% from \$275 million in 2008 to \$121 million in 2009.

#### Landings

- Key species or species groups contributed an average of 99% annually to total landings between 2000 and 2009.
- Walleye pollock, contributed the most to landings in the region, averaging 3 billion pounds from 2000 to 2009.
- Flatfish had the largest annual increase in landings over the 10 year time period, increasing 42% from 423 million in 2007 pounds to 599 million pounds in 2008.
- Atka mackerel had the largest annual decrease in landings over the 10 year time period, decreasing 34% from 126 million pounds in 2001 to 83 million pounds in 2002.

#### Prices

- Sablefish had the highest average annual ex-vessel price per pound (\$2.47) over the time period, followed by crab (\$2.42), and Pacific halibut (\$2.33).
- Walleye pollock had the lowest average annual ex-vessel price per pound (\$0.13) over the time period, followed by Atka mackerel (\$0.14), and flatfish (\$0.15).
- The largest annual increase in annual ex-vessel price during the 10 year period was for Pacific herring, increasing 136% from \$0.09 per pound in 2006 to \$0.22 in 2007.
- Pacific cod had the largest annual decrease in ex-vessel price over the 10 year time period, decreasing 56% from \$0.56 per pound in 2008 to \$0.25 in 2009.

In terms of key species or species groups, walleye pollock landings contributed the most to landings during the 10 year period, accounting for 46% of total landings in 2009 (1.9 billion pounds). Landings of salmon (671 million pounds), flatfish (506 million

pounds), and Pacific cod (491 million pounds) also significantly contributed to the total landings.

Relative to 2000, landings of crab, flatfish, and Atka mackerel in 2009 increased more than any other key species or group, increasing 71%, 59.9%, and 59.6% respectively. In contrast, the largest decreases between 2000 and 2009 were experienced by walleye pollock (29%) and sablefish (23%).

#### Landings

In 2009, North Pacific commercial fishermen landed over 4.1 billion pounds of finfish and shellfish, a 9.1% decrease from 2000 totals. Finfish and catch other than shellfish accounted for 98% of this total (4 billion) and decreased 10% from 2000 (4.4 billion pounds) and decreased 10% from 2008 (4.4 billion pounds). Shellfish landings in 2009 increased 66% from 57 million pounds in 2000 to 95 million pounds in 2009. Between 2008 and 2009, shellfish landings decreased 9%. Overall, an average of 5 billion pounds were landed annually in the North Pacific from 2000 to 2009, ranging from a low of 4.1 billion pounds (2009) to a high of 5.7 billion pounds (2005).

#### Prices

In all, 2009 ex-vessel prices per pound for six of the key species and species groups were above their average annual price for the 10 year time period. When comparing 2009 ex-vessel prices to those in 2000 the largest changes occurred in Pacific herring (137% increase, 103% increase in real terms), Atka mackerel (96% increase, 68% increase in real terms), walleye pollock (43% increase, 22% increase in real terms), and sablefish (31% increase, 12% increase in real terms). Relative to ex-vessel prices in 2008 the largest changes in the ex-vessel values were for Pacific cod (56% decrease, 56% decrease in real terms), Pacific halibut (28% decrease, 28% decrease in real terms), Pacific herring (23% increase, 24% increase in real terms), and walleye pollock (18% decrease, 18% decrease in real terms),

### Recreational Fisheries

Recreational saltwater anglers spent approximately 914,000 days fishing in Alaska in 2009. These anglers numbered over 284,000, with 55% of them non-residents. Pacific halibut was the most caught species or species group, with approximately 761,000 harvested or released in 2009. Razor clam and coho salmon were also caught in large numbers, with 556,000 and 513,000 caught, respectively. Together, these three species accounted for 63% of total catch by saltwater anglers in the North Pacific Region.

#### Economic Impacts and Expenditures<sup>1</sup>

In 2009, approximately 5,300 jobs in the North Pacific were generated by recreational fishing activities and over \$406 million was spent by saltwater anglers who fished in the region. Most of these employment impacts were generated by industries that provided services to anglers who fished from a for-hire boat (2,500) or a private boat (1,300). These fishing trip modes also generated the most in trip-related expenditures: \$129 million for for-hire fishing trips (57% of total trip expenditures) and \$86

<sup>1</sup>Expenditures 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](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf))

million for private boat trips (38% of total trip expenditures). Over 75% of total trip-related expenditures in Alaska came from non-resident anglers.

#### Key North Pacific Recreational Species

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

In addition to jobs generated by recreational fishing activities, other economic impacts include sales impacts and the contribution of recreational fishing activities to gross domestic product (value added impacts). For-hire fishing trips generated \$196 million in sales (59% of total trip-related sales) and \$109 million in value added impacts (59% of total trip-related value added impacts) in 2009. Private boat trips contributed \$121 million in sales (36%) and \$65 million (36%) in value added impacts. Shore-based fishing trips contributed \$18 million in trip-related sales (5.3%) and \$9.7 million in trip-related value added impacts (5.3%).

Anglers spent over \$178 million on durable equipment in 2009, contributing 44% to total expenditures in the region (trip and durable equipment combined). Most of this was spent on boat expenses (\$59 million). Expenditures related to vehicles were \$24 million; second home expenses, \$31 million; other equipment, \$31 million; and fishing tackle, \$33 million.

Economic impacts from durable equipment expenditures in 2009 include over 1,400 jobs, \$135 million in sales impacts, and \$92 million in value added impacts. These impacts represented 27% of the employment impacts, 29% of the sales impacts, 37% of the income impacts, and 33% of the value added impacts generated by recreational fishing activities.

#### Participation

In 2009, there were 284,000 recreational saltwater anglers who fished in Alaska. This was an 1.3% increase from 2000 (281,000 anglers) and a 8% decrease from 2008 (309,000 anglers). Recreational fishermen in Alaska are categorized as either a resident of Alaska or a non-resident. In 2009, non-resident anglers made up 55% of total anglers (158,000 anglers). There was no change in number of anglers from 2000 and a 17% decrease from 2008 (190,000 anglers). In terms of resident anglers, there were 127,000 resident anglers who fished in the North Pacific Region in 2009, which was a 3.2% increase from 2000 and a 6.4% increase from 2008.

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

Anglers who fished in Alaska spent approximately 914,000 fishing in saltwater in 2009. This was a 6.6% decrease from the 978,000 days spent fishing in 2000. From 2008 to 2009, there was a 2.2%

decrease in the number of days fished (935,000 days) in 2008.

#### Recreational Fish Facts

##### Participation

- An average of 304,000 saltwater anglers fished in North Pacific annually from 2000 to 2009.
- In 2009, residents made up 45% of total anglers in this region and averaged 41% of total anglers annually over the 10 year time period.
- The largest annual increase in saltwater anglers was a 14% increase in Alaska resident anglers from 2002 to 2003.
- The largest annual decrease in saltwater anglers was a 17% decrease in the number of non-resident anglers from 2008 to 2009.

##### Fishing trips

- On average, recreational saltwater fishermen spent 949,000 days fishing annually in Alaska from 2000 to 2009.
- The largest annual increase in total days fished in saltwater was 16% from 868,000 days in 2003 to 1 million in 2004. The largest annual decreases in total days fished was an 11% decrease from 1.1 million days in 2007 to 935,000 days in 2008.

##### Harvest and release

- Pacific halibut was the most commonly caught key species or species group, averaging 781,000 fish caught over the 10 year time period. Of these, 42% were released rather than harvested.
- Of the nine commonly caught key species or species groups five were released more often than harvested over this time period. The species or species group that was most commonly released was chum salmon (68% released on average).
- Sockeye salmon had the largest annual increase in catch, increasing 91% from 2006 to 2007. Pink salmon had the largest annual decrease in catch, decreasing 53% from 2005 to 2006.

#### Harvest and Release

Of Alaska's key species and species groups, Pacific halibut, razor clam, and coho salmon were most frequently caught by recreational fishermen. In 2009, 761,000 Pacific halibut, 556,000 razor clam, and 513,000 coho salmon were caught by anglers in Alaska. Razor clam (100% harvested), coho salmon (82%), and sockeye salmon (78%) were more often harvested than released, while pink salmon were more often released (66%).

Between 2000 and 2009, seven of the North Pacific's key species or groups experienced increases in catch totals. Those with the largest increases include: rockfish (20%), greenlings (lingcod) (15%), and sockeye salmon (12%). Over the same time period, decreases were experienced by chum salmon (29%) and razor clam (37%).

In the short term, the largest increases in catch were experienced by chum salmon and pink salmon from 2008 to 2009. Decreases

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

over the same time period occurred in four species or species groups, the largest of which were experienced by greenlings (lingcod) (23%) and Pacific halibut (13%). The dramatic changes in pink salmon catch between 2008 and 2009 can at least be partially attributed to the biannual biological cycle.

### Marine Economy<sup>1</sup>

In Alaska, approximately 248,000 full- and part-time employees were employed by 20,000 establishments in 2008. Annual payroll totaled \$12 billion, employee compensation totaled \$21 billion and gross state product totaled \$49 billion. Between 2003 and 2008 the commercial fishing location quotient (CFLQ<sup>2</sup>) for Alaska experienced a 12% increase.

#### *Seafood Sales and Processing*

The number of nonemployer firms, businesses that have no paid employees and are subject to federal income tax, engaged in seafood product preparation and packaging increased 63% from 19 firms in 2000 to 31 firms in 2008. Despite this, annual receipts decreased 18% to \$1.5 million in 2008 (a 30% decrease in real terms). When considering employer establishments engaged in seafood product preparation and packaging, the number of establishments increased 8% from 2000 to 2008 to 122 establishments and employee numbers increased 19% from

2003 to 2008 to 7,707 full- and part-time employees. Similarly, annual payroll increased 24% (a 0.5% decrease in real terms) from 2000 to 2008 to \$255 million.

There were 57 seafood wholesale establishments in 2008. This was a 28% decrease relative to 2000 levels. Employee numbers decreased 47% to 143 workers, while annual payroll decreased 25% (a 36% decrease in real terms) to \$8.4 million in 2008.

There were 13 nonemployer seafood retail firms with an annual receipt total of \$1.4 million in 2008. From 2000 to 2008, the number of nonemployer firms increased 86% and annual receipts increased 338%. Likewise, the number of employer establishments engaged in seafood retail activities increased 12% from 8 establishments in 2000 to 9 establishments in 2008. Employee and annual payroll information for this industry was not available for 2007 due to confidentiality restrictions.

#### *Transport, Support, and Marine Operations*

Data were largely unavailable for industries in this sector. When looking at available data, coastal and Great Lakes freight transportation had the highest number of establishments with 49 establishments in 2008. This was a 96% increase relative to 2000 totals.

<sup>1</sup>Information for 2008 is reported in this section; 2009 data were not available for this report.

<sup>2</sup>The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

**2009 Economic Impacts of the Alaska Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	44,297	3,300,925	1,395,745	1,742,391
Commercial Harvesters	31,153	2,308,518	965,865	1,206,224
Seafood Processors & Dealers	10,389	844,088	368,355	456,689
Importers	11	3,087	495	941
Seafood Wholesalers & Distributors	305	32,173	11,016	14,385
Retail	2,439	113,060	50,015	64,153

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total Revenue</b>	1,145,373	1,014,445	1,030,075	1,183,030	1,237,769	1,368,694	1,414,689	1,562,499	1,810,040	1,332,441
Finfish & other	1,003,619	892,302	883,622	1,008,587	1,072,363	1,209,309	1,290,722	1,381,653	1,558,402	1,139,207
Shellfish	141,754	122,143	146,453	174,443	165,406	159,385	123,967	180,846	251,638	193,234
Atka mackerel	9,483	21,060	11,159	10,543	12,491	15,608	16,353	19,500	21,626	29,732
Pacific cod	161,241	121,849	120,194	160,079	140,947	151,695	200,426	225,785	274,546	120,744
Crab	130,427	115,669	139,828	165,834	153,430	146,131	110,572	168,195	240,747	180,264
Flatfish	43,061	32,020	38,017	38,612	42,518	63,134	71,734	76,979	100,781	71,558
Pacific halibut	134,825	109,053	128,922	165,906	168,658	170,075	192,905	217,399	208,983	134,603
Pacific herring	9,647	10,385	9,139	8,930	14,029	13,429	7,455	14,817	22,912	29,294
Rockfish	6,747	6,467	6,459	7,959	6,577	5,663	7,237	7,082	7,854	7,595
Sablefish	88,530	66,044	65,819	83,507	81,179	80,171	84,965	84,745	93,719	88,949
Salmon	246,641	188,496	129,902	168,093	255,000	293,562	276,513	347,625	368,218	344,655
Walleye pollock	301,558	335,089	369,078	356,822	347,675	414,198	430,345	386,136	456,826	307,864

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total Landings</b>	4,433,932	4,999,100	5,019,009	5,277,564	5,305,969	5,609,937	5,375,339	5,252,453	4,470,183	4,005,567
Finfish & other	4,376,770	4,948,331	4,956,451	5,215,685	5,247,170	5,545,514	5,301,448	5,176,432	4,365,680	3,910,928
Shellfish	57,162	50,769	62,558	61,879	58,799	64,423	73,891	76,021	104,503	94,639
Atka mackerel	98,309	125,875	83,244	99,931	108,423	129,292	130,840	126,962	127,030	156,888
Pacific cod	529,665	470,777	509,574	568,660	583,747	547,849	520,955	488,491	494,012	490,595
Crab	52,373	47,192	57,879	56,956	52,434	57,310	69,002	70,700	99,445	89,532
Flatfish	316,641	257,094	284,767	290,926	270,675	341,699	383,194	423,336	599,457	506,384
Pacific halibut	71,727	74,380	77,939	76,616	76,558	73,922	69,154	67,242	64,639	57,749
Pacific herring	68,005	84,754	69,858	68,984	70,893	85,701	79,845	67,137	83,787	86,951
Rockfish	25,182	23,113	22,901	26,435	23,188	22,693	23,308	24,424	25,725	24,965
Sablefish	35,563	31,319	32,057	35,794	39,946	37,554	33,107	32,251	30,303	27,251
Salmon	606,716	686,389	523,057	630,527	697,897	872,318	634,227	861,254	640,070	671,181
Walleye pollock	2,614,006	3,180,078	3,332,836	3,361,721	3,353,035	3,409,905	3,403,055	3,065,898	2,276,167	1,865,975

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atka mackerel	0.10	0.17	0.13	0.11	0.12	0.12	0.12	0.15	0.17	0.19
Pacific cod	0.30	0.26	0.24	0.28	0.24	0.28	0.38	0.46	0.56	0.25
Crab	2.49	2.45	2.42	2.91	2.93	2.55	1.60	2.38	2.42	2.01
Flatfish	0.14	0.12	0.13	0.13	0.16	0.18	0.19	0.18	0.17	0.14
Pacific halibut	1.88	1.47	1.65	2.17	2.20	2.30	2.79	3.23	3.23	2.33
Pacific herring	0.14	0.12	0.13	0.13	0.20	0.16	0.09	0.22	0.27	0.34
Rockfish	0.27	0.28	0.28	0.30	0.28	0.25	0.31	0.29	0.31	0.30
Sablefish	2.49	2.11	2.05	2.33	2.03	2.13	2.57	2.63	3.09	3.26
Salmon	0.41	0.27	0.25	0.27	0.37	0.34	0.44	0.40	0.58	0.51
Walleye pollock	0.12	0.11	0.11	0.11	0.10	0.12	0.13	0.13	0.20	0.16

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)<sup>1</sup>**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	2,451	195,877	62,799	108,541
Private Boat	1,267	120,896	38,338	65,154
Shore	200	17,891	5,843	9,748
Total Durable Equipment Impacts	1,420	134,843	62,998	91,786
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>5,338</b>	<b>469,507</b>	<b>169,978</b>	<b>275,228</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	33,122
For-Hire	116,987	12,178	Other Equipment	31,118
Private Boat	45,136	40,545	Boat Expenses	59,019
Shore	9,281	3,920	Vehicle Expenses	24,374
<i>Total Trip Expenditures</i>	<i>171,403</i>	<i>56,643</i>	Second Home Expenses	30,520
			<i>Total Durable Equipment Expenditures</i>	<i>178,153</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>406,199</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Out of State	158	163	162	170	193	207	197	205	190	158
In State	123	120	113	129	130	127	120	127	119	127
<b>Total Anglers</b>	<b>281</b>	<b>283</b>	<b>275</b>	<b>299</b>	<b>323</b>	<b>334</b>	<b>317</b>	<b>332</b>	<b>309</b>	<b>284</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total Days Fished</b>	<b>978</b>	<b>889</b>	<b>855</b>	<b>868</b>	<b>1,007</b>	<b>1,054</b>	<b>941</b>	<b>1,052</b>	<b>935</b>	<b>914</b>

**Harvest (H) and Release (R) of Key Species Species Groups (thousands of fish)<sup>2,3</sup>**

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Chinook salmon	H	83	89	89	96	110	116	117	110	71	89
	R	91	105	104	105	124	127	104	110	80	96
Chum salmon	H	28	24	14	23	24	17	14	18	12	22
	R	52	51	31	51	61	42	34	34	28	34
Coho salmon	H	364	537	497	537	560	695	395	506	403	418
	R	108	154	136	156	193	191	107	122	89	94
Greenlings (lingcod)	H	35	27	20	22	31	38	35	42	37	32
	R	33	30	43	44	52	67	53	70	65	46
Pacific halibut	H	403	366	351	403	483	500	463	585	516	440
	R	303	254	233	290	369	380	353	438	359	321
Pink salmon	H	105	111	114	111	132	149	65	133	88	117
	R	213	224	194	291	297	343	167	280	151	224
Razor clam	H	879	674	789	590	551	451	483	389	593	556
	R	0	0	0	0	0	0	0	0	0	0
Rockfish	H	132	117	120	118	180	184	173	198	226	209
	R	168	136	135	132	227	199	165	178	171	149
Sockeye salmon	H	25	25	24	29	24	27	21	32	29	34
	R	14	13	14	14	10	11	7	21	10	10

<sup>1</sup>Data reported in this table includes saltwater fishing activities only.<sup>2</sup>Information reported in this table is from the Sport Fish Division of the Alaska Department of Fish and Game (ADF&G) and includes saltwater fishing activities only<sup>3</sup>In this table, '(1)' = 0-999 fish.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	18,501 (0.26%)	204,887 (0.18%)	7,650 (0.2%)	13,412 (0.26%)	25,913 (0.23%)	ND <sup>2</sup>
2008	19,934 (0.26%)	248,387 (0.21%)	12,113 (0.24%)	21,474 (0.34%)	48,551 (0.27%)	5.18
% change	7.75%	21.2%	58.3%	60.1%	87.4%	--

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	19	27	25	34	26	17	22	33	31
	Receipts	1,780	1,815	2,140	1,864	1,731	1,315	1,055	1,837	1,455
Seafood Sales, retail	Firms	7	10	0	16	0	11	12	12	13
	Receipts	327	392	ND <sup>3</sup>	625	ND <sup>3</sup>	752	649	1,358	1,431

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	113	105	105	109	113	124	113	114	122
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	6,493	6,749	6,621	6,866	6,506	7,707
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	205,702	216,599	235,457	246,067	262,127	254,894
Seafood sales, wholesale	Establishments	79	71	99	90	93	88	77	68	57
	Employees	271	235	179	228	187	177	224	167	143
	Payroll	11,144	11,321	10,232	7,103	7,561	7,928	8,509	8,528	8,389
Seafood sales, retail	Establishments	8	9	12	8	6	11	7	7	9
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	37	21	ND <sup>3</sup>	22	ND <sup>3</sup>	ND <sup>3</sup>	37
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	1,669	1,340	ND <sup>3</sup>	1,175	ND <sup>3</sup>	ND <sup>3</sup>	1,839

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	25	27	23	30	30	43	46	46	49
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	27,357	33,888
Deep sea freight transportation	Establishments	7	6	10	5	4	5	5	3	3
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	NA <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1	1	1	6	1
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	23	24	22	22	22	22	21	13	14
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	101	ND <sup>3</sup>	62	71	ND <sup>3</sup>	48	66
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	3,625	ND <sup>3</sup>	2,367	2,612	ND <sup>3</sup>	1,763	2,303
Marine cargo handling	Establishments	15	16	16	15	13	13	11	17	12
	Employees	738	1,087	ND <sup>3</sup>	621	488	703	503	677	ND <sup>3</sup>
	Payroll	21,238	28,358	ND <sup>3</sup>	20,443	21,078	20,827	22,876	35,345	ND <sup>3</sup>
Navigational services to shipping	Establishments	35	27	25	28	29	32	31	31	25
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	271	273	280	318	ND <sup>3</sup>	ND <sup>3</sup>	296
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	19,251	20,758	20,676	20,334	ND <sup>3</sup>	25,058	23,233
Port & harbor operations	Establishments	1	2	4	2	3	2	2	2	7
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	10	12	12	10	14	14	17	16	17
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	286	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	8,815	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>

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

<sup>2</sup>ND = these data are confidential thus not disclosable

<sup>3</sup>NA = these data are not available

# 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 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 is 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)<sup>1</sup>. 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

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



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 Impacts<sup>1</sup>*

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

<sup>1</sup>The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: [www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))

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.
- Crab 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.
- Squid 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).
- Hake (whiting) had the lowest average annual ex-vessel price per pound (\$0.06) over the time period, followed by squid (\$0.21), and flatfish (\$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.
- Salmon 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 Expenditures<sup>1</sup>*

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

<sup>1</sup>Expenditures 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](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf))

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 albacore and other tunas, 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

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).

**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

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	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

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	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 Expenditures		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
<i>Total Trip Expenditures</i>	22,145	476,183	Second Home Expenses	101,750
			<i>Total Durable Equipment Expenditures</i>	1,664,461
<b>Total State Trip and Durable Equipment Expenditures</b>				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 <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
<b>Total Anglers</b>	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)<sup>2</sup>**

	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
<b>Total Trips</b>	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)**

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

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

<sup>2</sup>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.

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

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

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	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
<b>Total revenue</b>	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
<b>Total landings</b>	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 Annual Price of Key Species/Species Groups (dollars per pound)**

	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

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	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
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>13,567</b>	<b>2,043,304</b>	<b>710,221</b>	<b>1,067,736</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		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
<i>Total Trip Expenditures</i>	<i>16,041</i>	<i>339,993</i>	Second Home Expenses	80,102
			<i>Total Durable Equipment Expenditures</i>	<i>1,285,415</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>1,641,449</b>

**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
<b>Total Anglers</b>	<b>1312</b>	<b>1362</b>	<b>1600</b>	<b>1606</b>	<b>1243</b>	<b>1082</b>	<b>1435</b>	<b>1168</b>	<b>1148</b>	<b>1449</b>

**Recreational Fishing Effort by Mode (thousands of trips)<sup>1</sup>**

	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
<b>Total Trips</b>	<b>5,449</b>	<b>5,687</b>	<b>5,975</b>	<b>6,299</b>	<b>4,738</b>	<b>4,622</b>	<b>5,220</b>	<b>4,329</b>	<b>4,164</b>	<b>4,660</b>

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

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

<sup>1</sup>Due 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.

<sup>2</sup>This species 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 (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	799,863 (11%)	12,884,692 (11%)	514,360 (13%)	759,206 (13%)	1,320,000 (13%)	1 <sup>2</sup>
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 &amp; Processing - Nonemployer Firms (thousands of dollars)

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

## Seafood Sales &amp; 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, wholesale	Establishments	360	361	334	269	263	258	252	300	278
	Employees	4,174	4,507	4,539	3,536	3,744	3,925	4,063	4,429	3,321
	Payroll	128,092	142,656	151,789	115,669	124,657	134,576	144,758	159,672	132,139
Seafood sales, retail	Establishments	172	165	186	175	169	180	184	182	161
	Employees	828	917	988	968	945	999	1,031	1,004	932
	Payroll	13,815	15,172	16,775	19,919	16,686	18,832	19,900	21,224	20,585

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	24	31	31	22	20	26	22	29	28
	Employees	1,394	1,648	1,776	1,341	ND <sup>3</sup>	1,346	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	99,106	119,808	132,432	117,982	ND <sup>3</sup>	129,262	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea freight transportation	Establishments	44	43	44	51	50	54	54	51	43
	Employees	1,323	1,117	ND <sup>3</sup>	902	901	ND <sup>3</sup>	957	1,643	ND <sup>3</sup>
	Payroll	51,131	63,891	ND <sup>3</sup>	62,417	69,815	ND <sup>3</sup>	84,199	116,628	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	8	9	11	14	15	15	16	13	5
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,552	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	72,119	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	266	249	248	263	271	263	268	276	277
	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 handling	Establishments	66	70	64	56	54	54	52	56	61
	Employees	15,330	15,076	15,274	15,557	20,456	19,303	20,975	22,395	22,086
	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 services to shipping	Establishments	42	37	30	35	38	37	36	39	40
	Employees	702	647	476	850	ND <sup>3</sup>	ND <sup>3</sup>	817	858	815
	Payroll	35,480	33,764	28,197	53,162	ND <sup>3</sup>	ND <sup>3</sup>	63,893	63,610	65,225
Port & harbor operations	Establishments	23	21	23	19	20	20	20	18	17
	Employees	650	163	139	417	ND <sup>3</sup>	ND <sup>3</sup>	582	443	256
	Payroll	19,056	9,990	7,668	23,110	ND <sup>3</sup>	ND <sup>3</sup>	32,523	30,001	23,316
Ship & boat building	Establishments	143	155	145	141	143	141	132	136	136
	Employees	9,204	8,589	7,782	8,574	8,865	10,132	9,801	9,250	11,630
	Payroll	335,172	322,296	315,090	314,706	354,404	410,446	453,255	433,846	477,300

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable

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

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	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
<b>Total revenue</b>	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 <sup>1</sup>
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
<b>Total landings</b>	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 <sup>3</sup>
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 Price of Key Species/Species Groups (dollars 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 <sup>3</sup>
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

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	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
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>1,649</b>	<b>167,603</b>	<b>59,777</b>	<b>92,982</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		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
<i>Total Trip Expenditures</i>	<i>2,922</i>	<i>65,219</i>	Second Home Expenses	13,818
			<i>Total Durable Equipment Expenditures</i>	<i>75,892</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>144,033</b>

**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
<b>Total Anglers</b>	<b>206</b>	<b>317</b>	<b>275</b>	<b>242</b>	<b>231</b>	<b>224</b>	<b>222</b>	<b>231</b>	<b>213</b>	<b>228</b>

**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
<b>Total Trips</b>	<b>638</b>	<b>956</b>	<b>810</b>	<b>726</b>	<b>723</b>	<b>673</b>	<b>662</b>	<b>693</b>	<b>634</b>	<b>685</b>

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

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

<sup>1</sup>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 <sup>1</sup>
2000	100,645 (1.4%)	1,355,442 (1.2%)	43,690 (1.1%)	67,048 (1.1%)	112,974 (1.2%)	3.38 <sup>2</sup>
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 &amp; Processing - Nonemployer Firms (thousands of dollars)

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

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

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

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

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

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

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

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	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
<b>Total revenue</b>	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
<b>Total landings</b>	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 Price of Key Species/Species Groups (dollars 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

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	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
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>3,348</b>	<b>346,679</b>	<b>118,478</b>	<b>186,006</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		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
<i>Total Trip Expenditures</i>	<i>3,182</i>	<i>70,971</i>	Second Home Expenses	7,830
			<i>Total Durable Equipment Expenditures</i>	<i>303,154</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>377,307</b>

**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
<b>Total Anglers</b>	<b>240</b>	<b>481</b>	<b>303</b>	<b>278</b>	<b>255</b>	<b>242</b>	<b>222</b>	<b>262</b>	<b>201</b>	<b>198</b>

**Recreational Fishing Effort by Mode (thousands of trips)<sup>1</sup>**

	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
<b>Total Trips</b>	<b>1,192</b>	<b>2,157</b>	<b>1,407</b>	<b>1,286</b>	<b>1,195</b>	<b>1,140</b>	<b>1,062</b>	<b>1,229</b>	<b>983</b>	<b>963</b>

**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	H	7	4	6	11	14	12	24	25	22	24
	R	(1)	(1)	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)
Flatfishes	H	158	119	216	62	62	61	63	51	47	54
	R	102	66	209	92	41	41	42	40	40	47
Greenlings	H	100	73	85	59	39	39	33	28	29	34
	R	36	33	141	64	25	25	22	19	19	39
Rockfishes <sup>2</sup>	H	268	199	237	184	256	307	282	260	216	245
	R	8	14	50	20	25	33	23	19	16	33
Salmon	H	211	663	279	509	302	266	119	354	103	758
	R	52	131	137	129	135	77	37	86	29	115
Sculpins	H	24	10	35	17	17	17	16	15	15	16
	R	202	85	142	101	91	91	91	91	91	91
Sharks & Skates	H	22	36	27	15	1	1	1	(1)	1	1
	R	286	445	331	203	14	12	14	9	12	10
Smelt & herring	H	2,065	3,649	3,254	2,487	2,486	2,486	2,486	2,486	2,486	2,486
	R	60	161	196	136	126	126	126	126	126	126
Sturgeon	H	13	10	11	8	8	8	7	8	8	9
	R	31	20	30	18	25	30	21	18	12	17
Surfperches	H	198	89	104	143	133	133	133	133	133	133
	R	227	101	105	125	120	120	120	120	120	121

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

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	164,018 (2.3%)	2,267,485 (2%)	87,746 (2.3%)	133,146 (2.3%)	227,828 (2.3%)	12.5 <sup>2</sup>
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 &amp; Processing - Nonemployer Firms (thousands of dollars)

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

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

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

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

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

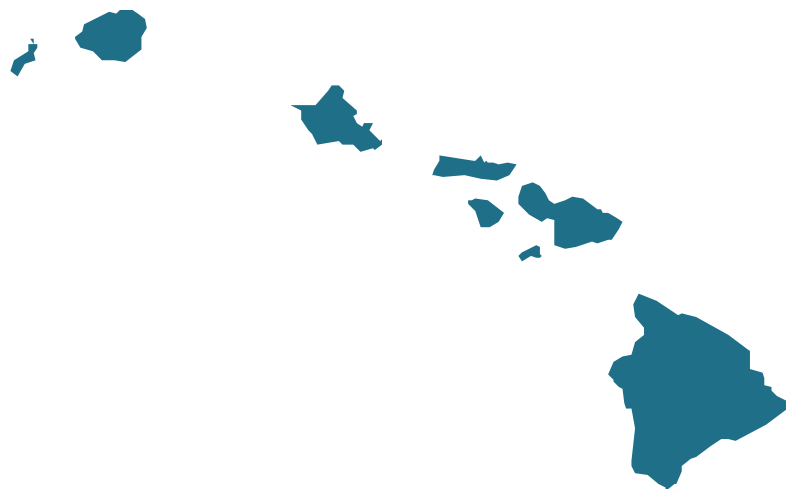
<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable





# Western Pacific

- Hawai'i



### Management Context

The Western Pacific Region includes the state of Hawai'i<sup>1</sup>. Federal fisheries in this region are managed by the Western Pacific Fishery Management Council (WPFMC) and NOAA Fisheries (NMFS) under five fishery ecosystem plans (FEPs). Fishery ecosystem plans manage marine resources from a place-based perspective rather than managing fishing activities in terms of targeted species. These FEPs replaced the Council's existing fishery management plans (FMPs) for Bottomfish and Seamount Groundfish, Coral Reef Ecosystems, Crustaceans, and Precious Corals.

#### Western Pacific Fishery Ecosystem Plans

1. American Samoa Archipelago
2. Hawai'i Archipelago
3. Mariana Archipelago
4. Pacific Remote Island Area
5. Pacific Pelagics

Of the stocks covered in these fishery ecosystem plans, the Hancock Seamount Groundfish Complex is currently considered overfished. This fishery has been closed since 1986. Bigeye tuna is currently subject to overfishing and this status is considered to be primarily due to international fishing pressure. The U.S. harvested 5% (12 million pounds) of the Pacific-wide (western-central and eastern Pacific Ocean) total of Pacific bigeye tuna landings reported in 2009. Currently, there are no catch share programs in place in this region.

In addition to management oversight provided by the WPFMC and NOAA Fisheries, pelagic fish species such as bigeye and yellowfin tunas are also managed by two regional fishery management organizations (RFMOs). The Western and Central Pacific Fisheries Commission (WCPFC) is active in the western and central Pacific Ocean and the Inter-American Tropical Tuna Commission (IATTC) is active in the eastern Pacific Ocean. Species under the purview of the WCPFC and IATTC migrate across international boundaries and require coordinated management between countries with fishing interests in the Pacific Ocean.

The annual bigeye tuna catch limit recommended by WCPFC for the U.S. longline fleet in the Western and Central Pacific Ocean is 8.3 million pounds. NMFS responded to the measure by establishing a quota of 8.3 million pounds of bigeye tuna that may be caught in the Western and Central Pacific Ocean and retained by U.S. longline vessels beginning in 2009. The fishery was closely monitored during the year. The quota in the Western Pacific ocean was reached toward the end of the year and, therefore, the Hawai'i longline fishery was only closed for three days in 2009. In the meantime, the harvest limit established by the IATTC for the U.S. longline fleet in eastern tropical Pacific

bigeye tuna is 1.1 million pounds. However, this quota is only applied to U.S. longline vessels greater than 78.7 feet in length. The U.S. longline vessels less than or equal to 24 meters are not bound by any catch limit in the Eastern tropical Pacific.<sup>2</sup>

### Commercial Fisheries

Fishermen in Hawai'i earned \$71 million from their commercial harvest in 2009, landing almost 27 million pounds of finfish and shellfish. Tunas comprised 67% of this landings revenue (\$48 million) as well as 54% of total landings (15 million pounds). Swordfish (\$7.3 million), mahimahi (\$2.9 million), moonfish (\$2.4 million), and marlin (\$2.1 million) also contributed to landings revenue. Lobsters commanded the highest ex-vessel price in 2009, with an average annual price of \$12.37 per pound.

#### Key Western Pacific Commercial Species

- Lobsters
- Mahimahi
- Marlin
- Moonfish
- Pomfret
- Scad
- Snappers
- Swordfish
- Tunas
- Wahoo

#### Economic Impacts<sup>3</sup>

In 2009, the Western Pacific's seafood industry generated \$629 million in sales impacts, \$184 million in income impacts, and approximately 7,300 full- and part-time jobs. Importers contributed the most to sales (44% of the total), while the retail sector contributed the most to employment impacts (40%), income impacts (35%), and valued added impacts (31%). In contrast, the retail sector contributed most to income (35%) and employment impacts (40% of total jobs) with \$65 million in income and 2,900 jobs. The commercial harvest sector generated 2,500 jobs, \$124 million in sales, \$45 million in income, and \$65 million in value added impacts.

#### Landings Revenue

Landings revenue for finfish and shellfish totaled over \$71 million in 2009, a 4.3% increase from total revenue generated in 2000. When adjusted for inflation, real landings revenues decreased 11%. Landings revenue in 2009 decreased 16% (16% decrease in real terms) from the 2008 level (\$85 million). Finfish and other catch contributed nearly 100% of total revenue in 2009 (\$71 million), a 4.6% increase from 2000 (11% decrease in real terms). Revenue earned from shellfish landings decreased 50% (a 57% decrease in real terms) from \$363,000 in 2000 to \$183,000 in 2009. Landings revenue in 2009 was dominated by tunas which contributed \$48 million or 67% of total landings revenue.

<sup>1</sup>The Western Pacific Region also includes the U.S. territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. However, due to data availability, only information from Hawai'i is reported here.

<sup>2</sup>Under the Tuna Conventions Act of 1950 (64 Stat. 777) as amended (16 U.S.C., 951-961), NMFS must publish regulations that carry out IATTC recommendations and resolutions that have been approved by the Department of State.

<sup>3</sup>The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: [www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))

On average, tunas contributed 68% to total revenue over the 10 year time period. The largest increases in landings revenue from 2000 to 2009 were for pomfret (176% or 136% in real terms) and moonfish (119% or 87% in real terms).

### Commercial Fisheries Facts

#### Landings revenue

- On average, the key species or species groups account for 96% of total revenue, (\$68 million) generated in the Western Pacific Region.
- Tunas contributed more than any other species or species group, averaging \$44 million in landings revenue from 2000 to 2009.
- Swordfish had the largest annual increase in landings revenue over the 10 year time period, increasing 534% from \$1.2 million in 2004 to \$7.8 million in 2005.
- Swordfish had the largest annual decrease in landings revenue over the 10 year time period, decreasing 89% from \$12 million in 2000 to \$1.4 million in 2001.

#### Landings

- Key species or species groups contributed an average of 94% annually to total landings between 2000 and 2009.
- Tunas, contributed the most to landings in the region, averaging 16 million pounds from 2000 to 2009.
- Swordfish had the largest annual increase in landings over the 10 year time period, increasing 561% from 520,000 in 2004 pounds to 3.4 million pounds in 2005.
- Swordfish had the largest annual decrease in landings over the 10 year time period, decreasing 91% from 6.4 million pounds in 2000 to 559,000 pounds in 2001.

#### Prices

- Lobsters had the highest average annual ex-vessel price per pound (\$11.74) over the time period, followed by snappers (\$4.31), and tunas (\$2.79).
- Marlin had the lowest average annual ex-vessel price per pound (\$1.19) over the time period, followed by moonfish (\$1.56), and pomfret (\$1.97).
- Marlin had the largest annual increase in ex-vessel price over the 10 year time period, increasing 58% from \$0.85 per pound in 2003 to \$1.34 in 2004.
- Marlin had the largest decrease in ex-vessel price over the 10 year time period, decreasing 37% from \$1.34 per pound in 2002 to \$0.85 in 2003.

#### Landings

In 2009, Hawai'ian commercial fishermen landed 27 million pounds of finfish and shellfish, a 6% decrease from 2000 landings totals. This was a 12% decrease compared to landings in 2008 (31 million pounds). Finfish and other catch accounted for nearly 100% of total landings annually. Shellfish landings decreased 22% from 28,000 pounds landed in 2000 to 22,000 pounds in 2009 and also decreased 24% from 2008 to 2009.

Tunas contributed more to the Western Pacific's total landings than any other species or group with 15 million pounds landed in 2009. This was a 2.8% decrease from 2000 total landings of tunas

(15 million pounds). Swordfish followed with 3.9 million pounds landed in 2009. Swordfish landings experienced dramatic changes from 2000 to 2009. From 2000 to 2001, landings decreased 91% from 6.4 million pounds to 559,000 pounds when the Hawai'i longline fishery was largely closed to protect sea turtles. Landings increased 561% between 2004 and 2005 from 520,000 pounds to 3.4 million pounds when the swordfish fishery was reopened. Swordfish landings between 2001 and 2004 averaged approximately a half million pounds, while in 2000, and between 2005 and 2009 the average was 3.9 million pounds.

#### Prices

Overall, the 2009 ex-vessel price for seven of the key species or species groups were above their ten year average annual price. Mahimahi (dolphin) had a lower price per pound (\$2.21) in 2009 relative to its annual average (\$2.27) over the time period, the price per pound for moonfish was \$1.28 which was \$0.28 less than the ten year average, and the ex-vessel price for swordfish in 2009 was \$0.22 less than the ten year average. Relative to ex-vessel prices in 2008, marlin (21%) experienced a double digit increase in 2009. Double digit decreases between 2008 and 2009 occurred in pomfret, mahimahi, and moonfish declining 11%, 13%, and 23% respectively. In real terms, mahimahi, moonfish, pomfret, scad, and tunas experienced declines in ex-vessel prices between 2008 and 2009.

### Recreational Fisheries

In 2009, there were 246,000 recreational anglers who fished in the state of Hawai'i. These anglers took 2.2 million fishing trips and of these, 80% were shore-based trips. Scads (bigeye and mackerel) was the most caught species group with 1.1 million fish caught in 2009. Almost all of these fish were harvested by anglers rather than released. The most released species or species group was trevallys and other jacks (41%). All others were harvested at least 86% of the time in 2009.

#### Economic Impacts and Expenditures<sup>1</sup>

In 2009, approximately 4,300 jobs in the Western Pacific were generated by recreational fishing activities and over \$442 million was spent by anglers who fished in the region. Most of these employment impacts were generated by industries that provided services to anglers who fished from shore (1,019) or a private boat (353). These fishing trip modes also generated the most in trip-related expenditures: \$76 million for shore-based fishing trips (66% of total trip expenditures) and \$32 million for private boat trips (28% of total trip expenditures). Only 8.5% of total trip-related expenditures in the Western Pacific came from non-resident anglers.

In addition to employment impacts generated by recreational fishing activities, other economic impacts include sales impacts and the contribution of recreational fishing activities to gross domestic product (value added impacts). For-hire fishing trips generated \$10 million in sales impacts (7.7% of total trip-related sales) and \$5.7 million in value added impacts (8% of total trip-related value added impacts) in 2009. Private boat trips

<sup>1</sup>Expenditures 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](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf))

contributed \$37 million in sales (28%) and \$19 million (27%) in value added impacts. Shore-based fishing trips contributed \$87 million in trip-related sales (65%) and \$46 million in trip-related value added impacts (65%).

Anglers spent almost \$327 million on durable equipment in 2009, contributing 74% to total expenditures in the region (trip and durable equipment combined). Fishermen spent more on fishing tackle (\$136 million) than any other durable good. Expenditures related to vehicle expenses (\$71 million), other equipment (\$62 million), and boat expenses (\$39 million) followed in size of expenditures.

Economic impacts from durable equipment expenditures in 2009 include almost 2,800 jobs, \$326 million in sales impacts, and \$158 million in value added impacts.

**Key Western Pacific Recreational Species**

- Blue marlin
- Dolphinfish
- Goatfishes
- Trevallys and other jacks
- Bigeye and mackerel scad
- Skipjack tuna
- Smallmouth bonefish
- Snappers
- Wahoo
- Yellowfin funa

*Participation<sup>1</sup>*

In 2009, there were 246,000 recreational anglers who fished in Hawai'i. This was an 44% decrease from 2003 (440,000 anglers) and a 25% decrease from 2008 (329,000 anglers). In 2009, non-resident anglers made up 43% of total anglers (106,000 anglers). There was a 41% decrease in non-resident anglers from 2003 (180,000 anglers) and a 23% decrease from 2008 (137,000 anglers). In terms of resident anglers, there were 140,000 resident anglers who fished in Hawai'i in 2009, which was a 46% decrease from 2003 and a 27% decrease from 2008.

*Fishing Trips<sup>1</sup>*

Anglers who fished in Hawai'i took approximately 2.2 million fishing trips in 2009. This was a 10% decrease from the 2.4 million fishing trips taken in 2003. From 2008 to 2009, there was a 15% decrease in the number of trips taken (2.5 million trips) in 2008.

*Harvest and Release<sup>1</sup>*

Of Hawai'i's key species and species groups, bigeye and mackerel scad, goatfishes, and skipjack tuna were most frequently caught by recreational fishermen. In 2009, 1.1 million bigeye and mackerel scad, 720,000 goatfishes, and 230,000 skipjack tuna were caught by anglers in Hawai'i. Dolphinfish (100% harvested), bigeye and mackerel scad (100%), and skipjack tuna (100%) were more often harvested than released, while trevallys and

other jacks were released more often (41%) than any of the other key species or species groups.

Between 2003 and 2009 two of Hawai'i's key species or groups experienced increases in catch totals: smallmouth bonefish (33%) and yellowfin funa (6%). Over the same time period, the largest decreases were experienced by: skipjack tuna (48%), bigeye and mackerel scad (44%), and wahoo (42%).

In the short term, the largest increases in catch were experienced by bigeye and mackerel scad (175%) and goatfishes (52%) from 2008 to 2009. Decreases over the same time period occurred in seven of the species or species groups, the largest of which were experienced by blue marlin (72%) and skipjack tuna (60%).

**Recreational Fishing Facts**

*Participation*

- An average of 358,000 anglers fished in the Western Pacific annually from 2003 to 2009.
- In 2009, in-state residents made up 57% of total anglers in this region. These anglers averaged 54% of total anglers annually over the seven year time period.

*Fishing trips*

- In the Western Pacific, an average of 2.5 million fishing trips were taken annually from 2003 to 2009.
- Private or rental boat and shore-based fishing trips accounted for 441,000 and 1.7 million fishing trips, respectively in 2009.

*Harvest and release*

- The bigeye and mackerel scad species group was the most commonly caught key species or species group, averaging 897,000 fish caught over the 10 year time period. Of these, 0.26% were released rather than harvested.
- Of the ten commonly caught key species or species groups none were released more often than harvested over this time period. The species or species group that was most commonly released was trevallys and other jacks (41% released).
- Species or species groups that were harvested 100% of the time included wahoo, dolphinfish, and bigeye and mackerel scad
- Between 2008 and 2009, bigeye and mackerel scad experienced the largest annual increase in catch (175%), and blue marlin had the largest decrease (72%).

**Marine Economy<sup>2</sup>**

In 2008, almost 33,000 establishments employed approximately 518,000 full- and part-time employees in Hawai'i. Annual payroll totaled \$19 billion, employee compensation totaled \$38 billion, and gross product by state totaled \$66 billion. Gross state product, annual payroll, and employee compensation increased 60%, 50%, and 59%, respectively between 2000 and 2008. The commercial fishing location quotient (CFLQ) for Hawai'i was not available for

<sup>1</sup>Due to data availability, the time period 2003 to 2009 is discussed in this section

<sup>2</sup>Information for 2008 is reported in this section; 2009 data were not available for this report.

<sup>1</sup>The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

2008. Between 2002 and 2007, the CFLQ for Hawai'i decreased 37% from 7.26 to 4.55. Between 2006 and 2007, the CFLQ mirrored this declining trend, decreasing 1.3%. Despite these declines, Hawai'i's level of commercial fishing-related employment was still higher than the national baseline.<sup>1</sup>

#### *Seafood Sales and Processing*

There were 9 nonemployer firms, businesses that have no paid employees and are subject to federal income tax, engaged in seafood product preparation and packaging in 2008. This was a 200% increase from 2000 levels. Annual receipts for this industry increased 2218% from \$44,000 in 2000 to \$1 million in 2008 (a 1876% increase in real terms). The number of employer establishments engaged in this industry decreased to one establishment in 2008. Employee and annual payroll totals were not available. In 2008, there were 37 seafood wholesale establishments that employed 695 full- and part-time workers with an annual payroll of \$21 million. The number of employees increased 36% and the annual payroll increased 16% (a 1.1% decrease in real terms) from 2000 to 2008. Despite the change in employment, the number of establishments decreased 24%.

Nonemployer firms involved in seafood retail increased 61% between 2000 and 2008 from 23 firms to 37 firms. Annual receipt totals also increased 20% (a 2.1% increase in real terms) to \$4.4 million in 2008. Similarly, employer establishments involved in this industry increased 8.7% to 25 in 2008. These establishments employed 173 workers with an annual payroll of \$3.7 million. Employee numbers decreased 5.5% while the annual payroll increased 24% (5.5% increase in real terms) from 2000 to 2008.

#### *Transport, Support, and Marine Operations*

Data were largely unavailable for the transport, support, and marine operations sector. According to the available information, the ship and boat building had the highest numbers of establishments in 2008 (14 establishments). The marine cargo handling sector had the largest payroll (\$89 million) and the largest number of employees was also in the marine cargo handling sector (1,098). The largest increase in number of establishments between 2000 and 2008 was in the port and harbor operations sector (100%) and the greatest decrease occurred in the coastal and Great Lakes freight transportation sector (62%).

**2009 Economic Impacts of the Hawai'i Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	7,270	628,717	184,375	273,116
Commercial Harvesters	2,468	124,013	45,260	65,052
Seafood Processors & Dealers	436	38,162	15,106	19,483
Importers	1,009	277,463	44,469	84,583
Seafood Wholesalers & Distributors	426	40,526	14,214	18,908
Retail	2,932	148,553	65,326	85,090

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	68,206	48,080	52,384	52,755	57,679	71,040	66,120	75,705	85,120	71,168
Finfish & other	67,843	47,839	52,078	52,493	57,274	70,677	66,013	75,531	84,753	70,985
Shellfish	363	241	306	262	406	364	106	174	367	183
Lobsters	99	98	122	68	91	111	61	93	120	136
Mahimahi (dolphin)	3,188	2,262	2,630	2,940	4,909	3,597	3,640	3,482	3,182	2,850
Marlin	2,235	2,139	2,010	1,986	2,472	2,512	2,558	2,028	2,072	2,141
Moonfish (opah)	1,100	999	1,219	1,509	1,343	1,897	1,873	2,170	2,197	2,408
Pomfret	499	386	675	777	1,316	1,440	1,311	1,460	1,665	1,379
Scad	1,441	882	1,067	1,105	944	839	1,020	1,099	896	555
Snappers	2,414	1,965	2,009	2,035	2,201	2,005	1,756	1,680	1,710	1,844
Swordfish	12,280	1,354	1,371	691	1,225	7,768	5,125	7,726	7,176	7,334
Tunas	41,215	34,491	37,598	37,381	38,484	46,071	44,085	51,148	60,874	47,674
Wahoo	1,663	1,657	1,452	1,919	2,201	2,253	2,329	2,087	2,235	1,672

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	28,622	23,484	23,968	23,740	24,456	28,140	25,659	28,938	30,682	26,906
Finfish & other	28,594	23,460	23,937	23,711	24,426	28,113	25,644	28,916	30,653	26,884
Shellfish	28	24	31	28	31	26	15	22	29	22
Lobsters	8	8	10	6	8	10	6	8	10	11
Mahimahi (dolphin)	1,528	1,245	1,376	1,326	2,225	1,440	1,342	1,388	1,252	1,287
Marlin	1,582	2,220	1,497	2,337	1,844	2,190	2,389	1,376	1,951	1,678
Moonfish (opah)	687	765	912	1,095	786	1,086	1,071	1,226	1,313	1,884
Pomfret	277	272	490	459	766	646	576	593	672	627
Scad	874	505	571	630	478	398	442	463	320	205
Snappers	600	526	499	501	508	436	377	376	376	386
Swordfish	6,368	559	703	306	520	3,439	2,514	3,643	3,835	3,881
Tunas	15,015	15,288	15,871	14,421	14,965	16,118	14,631	17,589	18,303	14,589
Wahoo	654	906	660	990	852	818	891	715	853	605

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Lobsters	12.14	12.61	12.66	11.88	11.08	10.99	9.66	11.84	12.14	12.37
Mahimahi (dolphin)	2.09	1.82	1.91	2.22	2.21	2.50	2.71	2.51	2.54	2.21
Marlin	1.41	0.96	1.34	0.85	1.34	1.15	1.07	1.47	1.06	1.28
Moonfish (opah)	1.60	1.31	1.34	1.38	1.71	1.75	1.75	1.77	1.67	1.28
Pomfret	1.80	1.42	1.38	1.69	1.72	2.23	2.28	2.46	2.48	2.20
Scad	1.65	1.75	1.87	1.75	1.97	2.11	2.30	2.37	2.80	2.71
Snappers	4.02	3.73	4.02	4.06	4.33	4.59	4.64	4.44	4.54	4.78
Swordfish	1.93	2.42	1.95	2.26	2.36	2.26	2.04	2.12	1.87	1.89
Tunas	2.74	2.26	2.37	2.59	2.57	2.86	3.01	2.91	3.33	3.27
Wahoo	2.54	1.83	2.20	1.94	2.58	2.75	2.61	2.92	2.62	2.76

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	107	10,305	3,336	5,666
Private Boat	353	37,213	11,191	19,029
Shore	1,019	87,097	28,665	45,979
Total Durable Equipment Impacts	2,807	326,193	107,703	157,970
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>4,286</b>	<b>460,808</b>	<b>150,893</b>	<b>228,644</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
For-Hire	7,451	32	Fishing Tackle	136,053
Private Boat	1,212	30,478	Other Equipment	61,844
Shore	1,073	74,787	Boat Expenses	39,391
<i>Total Trip Expenditures</i>	<i>9,736</i>	<i>105,297</i>	Vehicle Expenses	71,116
			Second Home Expenses	18,347
			<i>Total Durable Equipment Expenditures</i>	<i>326,750</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>441,783</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal				261	223	204	173	170	192	140
Non-Coastal				NA <sup>2</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
Out of State				180	183	166	224	146	137	106
<b>Total Anglers</b>				<b>440</b>	<b>407</b>	<b>370</b>	<b>396</b>	<b>317</b>	<b>329</b>	<b>246</b>

**Recreational Fishing Effort by Mode (thousands of trips)<sup>1,3</sup>**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Private				509	709	578	570	475	564	441
Shore				1,893	2,162	1,892	2,074	2,102	1,966	1,722
<b>Total Trips</b>				<b>2,402</b>	<b>2,871</b>	<b>2,470</b>	<b>2,644</b>	<b>2,577</b>	<b>2,531</b>	<b>2,163</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue marlin	H				4	5	19	3	2	11	3
	R				(1)	(1)	(1)	(1)	1	(1)	(1)
Dolphinfish (mahimahi)	H				109	225	178	219	136	184	103
	R				1	(1)	1	(1)	(1)	(1)	(1)
Goatfishes <sup>5</sup>	H				794	715	447	813	298	468	713
	R				10	17	8	16	9	6	7
Jacks (trevallies and other jacks) <sup>6</sup>	H				125	331	257	210	169	277	123
	R				171	146	182	210	130	120	85
Scads (bigeye and mackerel)	H				1,951	179	726	812	1,089	402	1,102
	R				2	(1)	14	(1)	(1)	(1)	(1)
Skipjack tuna	H				440	420	302	201	228	568	230
	R				1	6	1	1	5	2	(1)
Smallmouth bonefish	H				25	61	25	63	20	50	37
	R				4	9	12	2	13	4	2
Snappers <sup>7</sup>	H				233	236	223	177	104	138	147
	R				16	19	57	36	40	7	24
Wahoo	H				105	97	54	62	57	78	61
	R				(1)	(1)	(1)	(1)	1	(1)	(1)
Yellowfin funa	H				184	268	231	124	273	461	198
	R				5	(1)	9	1	2	(1)	1

<sup>1</sup>Participation (number of anglers), effort (number of trips), and catch (number of fish harvested or released) data were not available for 2000-2002<sup>2</sup>NA = not applicable because all Hawai'i residents are considered coastal county residents<sup>3</sup>Effort data (number of trips) for for-hire boat trips were not available.<sup>4</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.<sup>5</sup>Goatfishes include yellowstripe, yellowfin, pfulgers, bandtail, doublebar, diespot, whitesaddle, manybar, blue, and 'Goatfish famil/genus'<sup>6</sup>Trevallies & other jacks includes bluefin trevally, giant trevally, bigeye trevally, black trevally, African pompano, greater amberjack, island jack, and other species in the jack family.<sup>7</sup>Snappers include bluestip, blacktail, ruby, longtailed, pink, VonSiebolds, Bingham, green jobfish, ironjaw, and smalltooth jobfish.

## Hawai'i's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	29,853 (0.42%)	432,092 (0.38%)	12,331 (0.32%)	23,587 (0.42%)	41,372 (0.41%)	ND <sup>2</sup>
2008	32,904 (0.43%)	518,168 (0.43%)	18,539 (0.36%)	37,609 (0.46%)	66,139 (0.47%)	<sup>3</sup>
% change	10.2%	19.9%	50.3%	59.4%	59.9%	--

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	3	7	7	9	11	5	11	10	9
	Receipts	44	231	1,566	1,034	1,309	409	1,011	1,023	1,020
Seafood Sales, retail	Firms	23	34	0	36	33	29	31	41	37
	Receipts	3,670	2,497	ND <sup>3</sup>	4,753	2,875	3,487	3,627	4,353	4,394

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	3	3	4	4	4	3	3	1	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	86	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	2,584	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Seafood sales, wholesale	Establishments	49	51	44	33	36	32	33	36	37
	Employees	510	812	525	654	404	485	462	550	695
	Payroll	17,805	17,656	15,203	12,653	13,949	15,163	16,786	18,932	20,665
Seafood sales, retail	Establishments	23	27	29	31	31	29	27	25	25
	Employees	183	235	229	317	321	326	315	393	173
	Payroll	2,969	3,773	3,737	5,187	5,038	5,007	5,564	7,209	3,674

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

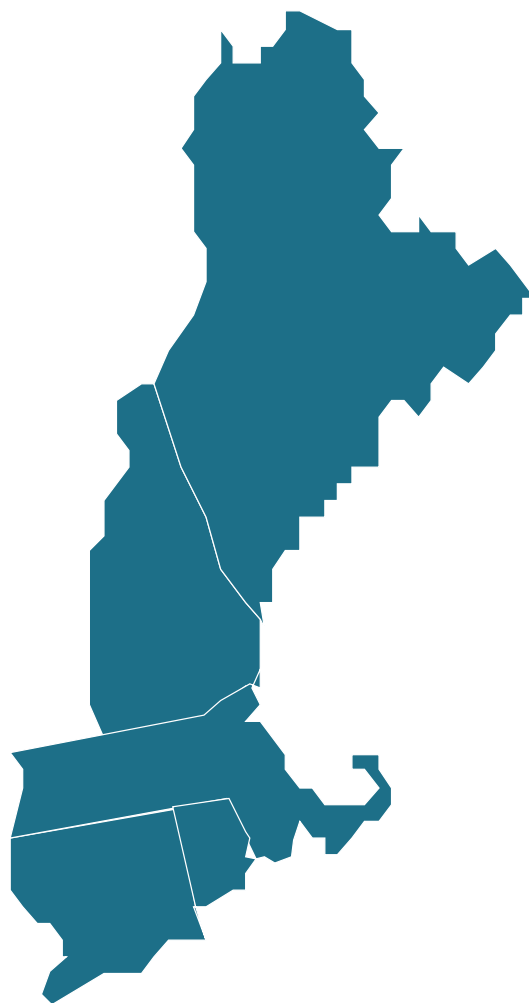
		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	13	11	11	10	11	13	13	11	5
	Employees	507	463	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	543	557	478
	Payroll	30,087	25,782	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	36,941	36,635	34,544
Deep sea freight transportation	Establishments	2	2	2	1	NA <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	2	1	1	1	1	2	2	1	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	10	7	8	11	11	10	9	11	9
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	56	177	178	181	152	167	156
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	1,414	3,285	3,439	3,354	3,719	4,151	4,317
Marine cargo handling	Establishments	7	6	7	8	8	8	7	8	11
	Employees	663	426	756	ND <sup>3</sup>	ND <sup>3</sup>	694	ND <sup>3</sup>	1,048	1,098
	Payroll	37,306	24,920	49,975	ND <sup>3</sup>	ND <sup>3</sup>	53,061	ND <sup>3</sup>	87,770	89,104
Navigational services to shipping	Establishments	6	5	7	7	6	6	6	8	11
	Employees	63	103	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	105
	Payroll	2,637	5,926	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	3,340	5,846
Port & harbor operations	Establishments	2	2	2	2	2	2	2	2	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	3,218
Ship & boat building	Establishments	17	17	16	14	17	16	14	13	14
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	480	589	ND <sup>3</sup>	545	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	22,053	20,908	ND <sup>3</sup>	23,134	ND <sup>3</sup>	ND <sup>3</sup>

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>ND = these data are confidential thus not disclosable<sup>3</sup>NA = these data are not available



# New England

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island



### Management Context

The New England Region includes Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island. Federal fisheries in this region are managed by the New England Fishery Management Council (NEFMC) and NOAA Fisheries (NMFS) under nine fishery management plans (FMPs). Two of these FMPs are developed in conjunction with the Mid-Atlantic Fisheries Management Council (MAFMC). The MAFMC is the lead Council for the Dogfish FMP and the NEFMC is the lead for the Monkfish FMP.

#### New England Region FMPs

1. Northeast multispecies
2. Sea scallops
3. Monkfish (with the MAFMC)
4. Atlantic herring
5. Small mesh multispecies
6. Spiny dogfish (with the MAFMC)
7. Red crab
8. Northeast skate complex
9. Atlantic salmon

Of the stocks or stock complexes covered in these fishery management plans, sixteen are currently listed as overfished: Atlantic cod, Atlantic halibut, Atlantic salmon, Atlantic wolffish, ocean pout, pollock, smooth skate, thorny skate, white hake, windowpane, winter flounder (two stocks), witch flounder, and yellowtail flounder (three stocks). Twelve stocks or stock complexes are currently subject to overfishing: Atlantic cod (two stocks), Atlantic wolffish, pollock, white hake, windowpane (two stocks), winter flounder (two stocks), witch flounder, and yellowtail flounder (two stocks).

### Commercial Fisheries

In 2009, commercial fishermen in the New England Region landed 647 million pounds of finfish and shellfish, earning \$782 million in landings revenue. Landings revenue was dominated by American lobster (\$298 million) and sea scallop (\$210 million). These species groups commanded ex-vessel prices of \$3.08 and \$6.63 per pound, respectively and comprised 65% of total landings revenue, but only 20% of total landings in the New England Region.

Massachusetts had the highest landings revenue in the region with \$400 million in 2009, followed by Maine (\$286 million) and Rhode Island (\$62 million). In terms of pounds landed, Massachusetts also contributed the most (356 million pounds), followed by Maine (185 million pounds) and Rhode Island (84 million pounds).

#### Economic Impacts<sup>1</sup>

In 2009, the New England Region's seafood industry generated \$621 million in sales impacts in Connecticut, \$1.2 billion in sales

impacts in Maine, \$6.7 billion in sales impacts in Massachusetts, \$651 million in sales impacts in New Hampshire, and \$906 million in sales impacts in Rhode Island. Massachusetts generated the largest impacts across the three other impact categories, generating 78,000 jobs, \$1.7 billion in income, and \$2.6 billion in value added impacts. The smallest income impacts were generated in Connecticut (\$130 million) and the smallest employment impacts were also generated in Connecticut (3,800 jobs).

#### Key New England Region Commercial Species

- American lobster
- Atlantic herring
- Atlantic mackerel
- Bluefin tuna
- Cod and haddock
- Flounders
- Goosefish
- Quahog clam
- Sea scallop
- Squid

The sector that generated the greatest employment impacts by state was the retail sector with 46,000 employment impacts in Massachusetts and 9,000 employment impacts in Maine. The harvest sector in Maine generated 9,500 employment impacts. More sales impacts were generated by importers in Massachusetts than any other sector in any another state in the region at \$3.8 billion and the greatest value added impacts were also generated by importers in Massachusetts (\$1.2 billion).

#### Landings Revenue

Landings revenue in the New England Region totaled \$782 million in 2009. This was a 14% increase (a 2.8% decrease in real terms) from 2000 levels (\$688 million) and a 3.6% decrease (a 3.3% decrease in real terms) relative to 2008 (\$811 million). Totalling \$604 million in 2009, shellfish revenue experienced a 29% increase (a 10% increase in real terms) from 2000 to 2009 and experienced a 2.7% decrease (2.4% decrease in real terms) from 2008 to 2009.

In the New England Region, Massachusetts had the highest finfish landings revenue (\$115 million) followed by Maine (\$30 million), and Rhode Island (\$23 million). Shellfish landings revenue was also dominated by Massachusetts, which contributed the most (\$285 million) followed by Maine (\$255 million), and Rhode Island (\$38 million).

American lobster and sea scallop had the highest landings revenue in the New England Region in 2009, with \$298 million and \$210 million, respectively. Together they accounted for 65% of total landings revenue in 2009. Between 2000 and 2009, the landings revenue from these species experienced a 0.1% decrease for American lobster and 122% increase for sea scallop.

From 2000 to 2009, species or species groups with large changes in landings revenue include Atlantic mackerel (increased 1131%), Atlantic herring (increased 156%), and bluefin tuna (decreased 74%). Species or species groups with large changes in landings revenue between 2008 and 2009 include squid (167%

<sup>1</sup>The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: [www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))

increase), Atlantic mackerel (84% increase), and bluefin tuna (54% increase).

### Landings

Fishermen in the New England Region landed 647 million pounds of finfish and shellfish in 2009. This was a 12% increase from the 576 million pounds landed in 2000 and a 7.6% increase from the 601 million landed in 2008. Finfish landings contributed 66% of total landings in the New England Region (428 million pounds) in 2009. From 2008 to 2009, finfish landings experienced a 8.4% increase. Shellfish landings experienced a 6.2% increase from 206 million pounds in 2008 to 219 million in 2009 and a 13% increase from 193 million pounds in 2000.

### Commercial Fisheries Facts

#### Landings revenue

- On average, between 2000 and 2009, the key species or species groups accounted for 84% of total revenue, generating \$669 million in the New England Region.
- American lobster had higher landings revenues than any other species or species group, averaging \$323 million in landings revenue from 2000 to 2009.
- Atlantic mackerel had the largest annual increase in landings revenue over the 10 year time period, increasing 764% from \$437,000 in 2001 to \$3.8 million in 2002.
- Squid had the largest annual decrease in landings revenue over the 10 year time period, decreasing 88% from \$20 million in 2006 to \$2.4 million in 2007.

#### Landings

- Key species or species groups contributed an average of 72% annually to total landings between 2000 and 2009.
- Atlantic herring, contributed the most to landings in the region, averaging 185 million pounds from 2000 to 2009.
- Atlantic mackerel had the largest annual increase in landings over the 10 year time period, increasing 1575% from 1.6 million in 2001 pounds to 27 million pounds in 2002.
- Atlantic mackerel had the largest annual decrease in landings over the 10 year time period, decreasing 91% from 88 million pounds in 2004 to 8.2 million pounds in 2005.

#### Prices

- Bluefin tuna had the highest average annual ex-vessel price per pound (\$6.15) over the time period, followed by sea scallop (\$5.73), and quahog clam (\$4.83).
- Atlantic herring had the lowest average annual ex-vessel price per pound (\$0.09) over the time period, followed by Atlantic mackerel (\$0.19), and squid (\$0.63).
- Atlantic mackerel had the largest annual increase in ex-vessel price over the 10 year time period, increasing 200% from \$0.12 per pound in 2004 to \$0.36 in 2005.
- Atlantic mackerel had the largest decrease in ex-vessel price over the 10 year time period, decreasing 61% from \$0.36 per pound in 2005 to \$0.14 in 2006.

Atlantic herring and American lobster had the highest annual landings in the New England Region in 2009, with 209 million

pounds and 97 million pounds, respectively. Together they accounted for 47% of the total landings in 2009. Atlantic herring landings increased 34% and American lobster landings increased 17% during this period.

From 2000 to 2009, species or species groups with large changes in landings include Atlantic mackerel (increasing 1498%), sea scallop (increasing 77%), and quahog clam (decreasing 70%). Species or species groups with large changes in landings between 2008 and 2009 include squid (increasing 102%), bluefin tuna (increasing 81%), and Atlantic herring (increasing 27%).

Between 1990 and 1994, there was a 68% drop in total landings of sea scallop in the New England Region from 24 million pounds to 7.6 million pounds. Additionally, an Emergency Action was enacted in December 1994, which closed three large fishing grounds on the Northeast Continental Shelf to rebuild certain groundfish stocks, but which also affected a large percentage of the scallop biomass. Portions of these closed areas were reopened to scallop fishing in 1999, resulting in a total catch of 13.7 million pounds. Building on the success from the previous closure management system, Amendment 10 to the Atlantic Sea Scallop FMP was implemented in 2004, which uses rotational area management. Since that time, total landings have continued to increase, reaching a peak of 40.6 million pounds in 2006.

### Prices

The ex-vessel prices for the New England Region's key species and species groups in 2009 were higher than their 10 year average for six of the key species (four of the species in real terms). Ex-vessel prices for Atlantic herring and quahog clam experienced the biggest increases between 2000 and 2009, increasing 100% (71% in real terms) and 73% (48% in real terms), respectively. Relative to 2008 ex-vessel prices, New England's Atlantic mackerel experienced the greatest increase (66.7%, 67.2% in real terms) from \$0.12 in 2008 to \$0.20 in 2009. Quahog clam experienced the greatest price decrease between 2008 and 2009 declining from \$7.81 to \$5.53 (29.2%, 28.9% in real terms). Relative to ex-vessel prices in 2008, two species or species groups experienced increases, including Atlantic mackerel (67%), and squid (33%).

In Connecticut, the species or species group with the largest change in ex-vessel price from 2000 to 2009 was flounders (91% increase, 63% increase in real terms) from \$1.27 to \$2.42. The largest change in ex-vessel price experienced in Maine was for bloodworms (122% increase, 90% increase in real terms) from \$4.87 to \$10.79 and in Massachusetts the largest change in ex-vessel price was experienced by clams, all other (224% increase, 177% increase in real terms) from \$0.79 to \$2.56).

### Recreational Fishing

In 2009, almost 1.4 million recreational anglers took 7.5 million fishing trips in the New England Region. Over 88% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 46% were taken from a private or rental boat and another 48% were shore-based. Striped bass was the most frequently caught species or species group with 5 million fish caught in 2009 and represented 28% of total fish caught in the region. Of the striped bass caught, 89% of them were released rather than harvested.

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

The contribution of recreational fishing activities in New England 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 Connecticut were the highest in the region with over 5,200 full- and part-time jobs generated by recreational fishing activities in the state. Massachusetts (5,000 jobs), and Maine (2,000 jobs), followed in terms of employment impacts.

**Key New England Region Recreational Species**

- Atlantic cod
- Atlantic mackerel
- Bluefin tuna
- Bluefish
- Little tunny
- Scup
- Striped bass
- Summer flounder
- Winter flounder
- Tautog

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 New England Region, expenditures on durable equipment in 2009 generated more employment impacts than any other expenditure: 94% in Connecticut, 50% in Rhode Island, and 45% in Massachusetts.

In addition to jobs, the contribution of recreational fishing activities to New England 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 the highest in Connecticut (\$797 million in sales impacts), followed by Massachusetts (\$657 million), Maine (\$167 million), Rhode Island (\$114 million), and New Hampshire (\$46 million). In the same year, value added impacts were the highest in Connecticut (\$457 million in value added impacts), followed by Massachusetts (\$357 million), Maine (\$88 million), Rhode Island (\$56 million), and New Hampshire (\$25 million).

Overall, there were \$1.8 billion in expenditures on fishing trip and durable equipment expenditures across the New England Region in 2009. Approximately 78% of these expenditures were durable equipment purchases. The greatest expenditures were for vehicle expenses (\$612 million), followed by fishing tackle (\$402 million), boat expenses (\$264 million), other equipment (\$100 million), and second home expenses (\$12 million). Fishing trip expenditures by New England's non-residents totaled almost \$233 million, of which the greatest portion can be attributed to shore-based fishing trips (\$164 million). Residents of the New England Region spent \$149 million on saltwater fishing trips, with the most of these expenses related to private boat trips (\$80 million).

<sup>1</sup>Expenditures 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](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf))

**Recreational Fishing Facts***Participation*

- An average of 1.4 million anglers fished in New England Region annually from 2000 to 2009.
- In 2009, coastal county residents made up 88% of total anglers in this region. These anglers averaged 89% 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 2004 and 2005, increasing 17%, from 1.2 million anglers to 1.3 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2008 and 2009, decreasing 12%, from 1.4 million anglers to 1.2 million anglers.

*Fishing trips*

- In the New England Region, an average of 8.9 million fishing trips were taken annually from 2000 to 2009.
- Private or rental boat and shore-based fishing trips accounted for 3.5 million and 3.6 million fishing trips, respectively, in 2009. Together these made up 94% 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 2004 and 2005, increasing 6.9%, from 8.7 million trips to 9.3 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2008 and 2009, decreasing 18%, from 9.2 million trips to 7.5 million trips.

*Harvest and release*

- Striped bass was the most commonly caught key species or species group, averaging 9.6 million fish over the 10 year time period. Of these, 94% 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 little tunny (94% released).
- Atlantic mackerel (90% harvested), followed by winter flounder (57% harvested), and bluefin tuna (51% 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 bluefin tuna, which increased 4616% between 2002 and 2003; the largest annual change in number of fish harvested occurred in little tunny, which increased 6985% from 2005 to 2006.

*Participation*

There were 1.4 million recreational anglers who fished in the New England Region in 2009. This was a 19% increase from 2000 (1.2 million anglers). These anglers were New England Region residents from either a coastal (1.2 million anglers) or non-coastal county (165,000 anglers). Over 88% of total anglers in 2009 were

residents of a coastal county. Coastal county angler participation in 2009 increased 17% relative to 2000 (1 million anglers) and decreased 12% between 2008 and 2009. Non-coastal county angler participation increased 36% relative to 2000 (121,000 anglers) and decreased 12% relative to 2008 (187,000 anglers).

### *Fishing Trips*

Recreational fishermen took 7.5 million fishing trips in New England Region in 2009. This was a 14% decrease from the 2000 (8.8 million trips) and was 1.7 million fewer trips than those taken in 2008. Approximately 48% of the saltwater trips were shore based (3.6 million trips). The other most popular mode of fishing was private or rental boat-based with 3.5 million trips in 2009.

### *Harvest and Release*

The New England Region's species and species groups caught most frequently in 2009 were striped bass (5 million fish), scup (3.7 million fish), Atlantic mackerel (3.6 million fish), and bluefish (2.2 million fish) in 2009. Little tunny (97% released), striped bass (89% released), summer flounder (86% released), Atlantic cod (70% released), scup (69% released), tautog (68% released), bluefish (65% released), and bluefin tuna (54% released) were more often released rather than harvested.

Anglers harvested more often than released Atlantic mackerel (89% harvested) and winter flounder (54% harvested). In 2009, most of the striped bass were caught in Massachusetts (2.8 million fish) and Connecticut (1.4 million), making up 84% of the total catch. Atlantic mackerel were caught in large numbers in Maine and New Hampshire which represented 75% of the total catch of Atlantic mackerel in the New England Region. Between 2000 and 2009, eight of the New England Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were little tunny (79%), summer flounder (65%), and striped bass (52%).

### **Marine Economy**

The sum of the gross domestic products by state for Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island was \$753 billion in 2008. Employee compensation totaled \$444 billion and annual payroll totaled \$305 billion. These economic measures experienced increases of 37%, 32%, and 26% respectively, between 2000 and 2008, and experienced a 2.9% increase, a 2.3% increase, and a 3.1% increase, respectively, between 2007 and 2008. Approximately 377,000 establishments employed 6.2 million full- and part-time employees across the region in 2008. This was a 0.9% increase in establishment numbers and a 1.3% increase in employee numbers from 2000 to 2008.

In 2008, the commercial fishing location quotient (CFLQ) for Maine was the highest in the region at 14.01. This was a 73% increase from 2001 and a 2.6% decrease from 2007. Maine'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 in 2008 in Rhode Island was 2.59 (a 10% decrease from 2000 and a 15% decrease from 2007).

### *Seafood Sales and Processing*

In 2008, there were 115 nonemployer firms engaged in seafood product preparation and packaging across the New England Region, a 51% increase from 2002 levels. There was no change in the number of firms in Massachusetts over this time period. In 2008, 56% of these firms were located in Maine. Region-wide, annual receipts totaled \$15 million in 2006 and increased 39% from 2005 to 2006. Annual receipt totals experienced a 439% increase in Connecticut between 2000 and 2008. In contrast to the increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 7.1% from 101 in 2002 to 91 in 2008. Approximately 48% of these establishments were located in Massachusetts in 2008.

There were 370 seafood wholesale establishments in 2008 that employed 3,164 full- and part-time workers. From 2007 to 2008, the number of seafood wholesale establishments decreased 5.9% and the number of employees decreased 4.6% in the New England Region.

Nonemployer firms engaged in seafood retail in the New England Region totaled 171 in 2008, a 6.2% increase relative to 2000. Of these firms, 37% were located in Massachusetts. At the state level, these firms showed a 32% increase in Connecticut and a 36% increase in Rhode Island between 2000 and 2008. Annual receipts in the region totaled \$20 million in 2008, a 1.1% increase from 2000 (a 14% decrease in real terms) and a 0.3% increase from 2008 (a 9.4% decrease in real terms). Employer establishments engaged in seafood retail increased 14% from 2000 to 2008, totaling 235 in 2008. These establishments employed 1,077 workers. Over 50% of these establishments were located in Massachusetts.

Region-wide, the numbers of employees in the seafood retail sector decreased 15% between 2005 and 2008. Across the states within the region, the largest change occurred in Rhode Island (33% decrease). Annual payroll decreased in the New England Region, with a 11% decrease region-wide (24% decrease in real terms) to \$28 million in 2008.

### *Transport, Support, and Marine Operations*

For the sectors where information was available, marinas employed more people than any other industry in this sector, employing approximately 3,600 people in 2008. This industry also had the highest annual payroll in the region totaling \$160 million. Marinas had the highest number of establishments (497), followed by the ship and boat building industries with 196 establishments and the navigational services to shipping industries with 39 establishments.

In Massachusetts, industries with large changes in establishment numbers, employees, or annual payroll from 2007 to 2008 were: port and harbor operations (99% increase in payroll), coastal and Great Lakes freight transportation (40% decrease in employees), marine cargo handling (40% decrease in establishments) and coastal and Great Lakes freight transportation (37% decrease in payroll). In Maine, large changes were seen for coastal and Great Lakes freight transportation (67% increase in

establishments), deep sea passenger transportation (50% decrease in establishments), navigational services to shipping (31% increase in employees) and marinas (18% decrease in payroll). In Connecticut, large changes were seen in the port and harbor operations (100% increase in establishments), deep sea passenger transportation (50% decrease in establishments), ship and boat building (32% decrease in establishments) and coastal and Great Lakes freight transportation (25% increase in establishments).

**2009 Economic Impacts of the New England Region Seafood Industry (thousands of dollars)**

	Landings Revenue	Jobs	Sales	Income	Value Added
Connecticut	16,626	3,806	621,496	129,597	216,641
Massachusetts	400,248	77,820	6,711,215	1,696,208	2,614,296
Maine	285,925	21,200	1,203,248	393,282	570,452
New Hampshire	17,708	4,951	651,278	152,553	242,845
Rhode Island	61,663	7,888	905,714	219,489	347,570

**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	688,422	638,028	696,423	690,692	821,573	970,516	953,372	896,597	811,351	782,170
Finfish & other	218,552	220,052	207,082	200,351	194,911	200,751	184,219	178,935	190,397	178,042
Shellfish	469,870	417,975	489,341	490,341	626,662	769,765	769,153	717,662	620,955	604,128
American lobster	298,516	239,681	287,621	277,946	368,649	408,719	386,034	347,298	317,877	298,293
Atlantic herring	9,655	12,634	9,005	15,274	14,931	20,085	21,593	18,766	20,352	24,720
Atlantic mackerel	644	437	3,776	4,404	10,416	2,923	13,528	6,001	4,303	7,926
Bluefin tuna	17,305	17,043	14,349	8,267	4,297	3,864	1,715	2,077	2,887	4,450
Cod & haddock	37,837	46,416	49,679	44,386	40,089	39,824	31,885	39,317	43,006	36,661
Flounders	48,340	49,845	49,201	47,221	43,737	42,339	37,717	33,716	30,460	27,336
Goosefish	44,160	35,721	29,194	30,031	27,960	34,408	26,571	21,203	18,467	13,138
Quahog clam	17,456	17,716	17,193	16,857	16,721	6,707	26,811	31,102	11,531	9,019
Sea scallop	94,604	95,616	109,634	116,454	158,014	250,762	263,623	237,280	202,964	209,989
Squid	14,597	12,915	15,786	17,283	28,133	20,206	20,006	2,371	6,311	16,820

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total landings	576,064	631,043	588,891	660,283	723,130	684,292	704,258	582,249	600,987	646,876
Finfish & other	382,693	458,053	387,327	468,511	487,785	461,038	466,873	373,715	395,323	428,369
Shellfish	193,371	172,990	201,564	191,772	235,345	223,254	237,385	208,534	205,664	218,507
American lobster	83,029	68,560	81,382	70,502	88,679	86,224	90,837	76,971	86,210	96,930
Atlantic herring	155,849	208,232	134,605	209,933	188,201	212,389	207,530	155,986	165,067	209,263
Atlantic mackerel	2,468	1,591	26,649	34,839	88,124	8,223	99,751	50,761	35,524	39,427
Bluefin tuna	2,243	2,534	2,386	1,787	704	837	274	300	426	772
Cod & haddock	33,791	45,931	45,469	38,482	34,158	30,500	19,810	24,848	31,461	30,819
Flounders	43,733	48,435	41,758	39,782	40,966	30,290	19,538	16,078	15,286	16,218
Goosefish	38,803	43,008	41,975	46,751	39,735	34,873	26,136	19,579	16,224	12,783
Quahog clam	5,447	4,684	6,116	5,173	6,231	1,088	4,216	4,622	1,476	1,631
Sea scallop	17,871	24,741	27,394	27,587	30,462	32,038	40,587	35,387	28,872	31,691
Squid	28,870	24,959	27,893	29,405	47,901	26,748	25,330	2,701	13,957	28,124

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	3.60	3.50	3.53	3.94	4.16	4.74	4.25	4.51	3.69	3.08
Atlantic herring	0.06	0.06	0.07	0.07	0.08	0.09	0.10	0.12	0.12	0.12
Atlantic mackerel	0.26	0.28	0.14	0.13	0.12	0.36	0.14	0.12	0.12	0.20
Bluefin tuna	7.71	6.73	6.01	4.63	6.10	4.62	6.26	6.93	6.78	5.76
Cod & haddock	1.12	1.01	1.09	1.15	1.17	1.31	1.61	1.58	1.37	1.19
Flounders	1.11	1.03	1.18	1.19	1.07	1.40	1.93	2.10	1.99	1.69
Goosefish	1.14	0.83	0.70	0.64	0.70	0.99	1.02	1.08	1.14	1.03
Quahog clam	3.20	3.78	2.81	3.26	2.68	6.16	6.36	6.73	7.81	5.53
Sea scallop	5.29	3.86	4.00	4.22	5.19	7.83	6.50	6.71	7.03	6.63
Squid	0.51	0.52	0.57	0.59	0.59	0.76	0.79	0.88	0.45	0.60

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Trips		Jobs	Sales	Value Added	Income
Connecticut	1,436,407		5,212	797,209	304,833	457,344
Massachusetts	3,605,741		4,987	656,958	229,069	357,440
Maine	1,013,724		2,039	166,564	54,551	87,774
New Hampshire	414,337		418	45,516	15,768	25,016
Rhode Island	1,041,782		1,005	113,817	35,744	56,055

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	402,151
For-Hire	39,479	18,579	Other Equipment	99,569
Private Boat	29,037	79,565	Boat Expenses	263,640
Shore	164,107	50,478	Vehicle Expenses	612,215
<i>Total Trip Expenditures</i>	232,622	148,621	Second Home Expenses	11,589
			<i>Total Durable Equipment Expenditures</i>	1,389,165
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>1,770,408</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	1,042	969	1,069	1,198	1,155	1,349	1,408	1,408	1,389	1,222
Non-Coastal	121	108	124	152	165	169	188	205	187	165
Out-of-State	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
<b>Total Anglers</b>	<b>1,163</b>	<b>1,077</b>	<b>1,194</b>	<b>1,349</b>	<b>1,319</b>	<b>1,518</b>	<b>1,596</b>	<b>1,614</b>	<b>1,576</b>	<b>1,387</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	309	303	235	319	300	418	458	480	471	449
Private Boat	4,736	4,857	4,513	4,426	4,450	5,017	4,681	4,863	4,921	3,489
Shore	3,720	3,874	3,844	3,833	3,910	3,819	4,510	4,355	3,793	3,574
<b>Total Trips</b>	<b>8,765</b>	<b>9,035</b>	<b>8,592</b>	<b>8,578</b>	<b>8,660</b>	<b>9,254</b>	<b>9,650</b>	<b>9,699</b>	<b>9,185</b>	<b>7,512</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic cod	H	749	1,104	644	706	NA	653	264	313	481	483
	R	1,193	1,378	1,143	1,175	945	1,525	802	1,184	1,287	1,139
Atlantic mackerel	H	4,067	3,851	3,543	2,399	1,588	3,062	4,849	3,079	3,459	3,151
	R	654	772	363	212	162	78	328	188	546	400
Bluefin tuna	H	6	1	1	5	2	12	4	14	14	10
	R	(1)	(1)	(1)	4	15	12	13	9	2	12
Bluefish	H	893	1,462	1,166	1,188	1,284	1,359	1,541	1,359	1,209	776
	R	1,960	3,324	2,148	2,532	3,281	3,451	3,016	3,141	2,899	1,449
Little tunny <sup>2</sup>	H	2	3	7	3	13	(1)	2	5	3	1
	R	108	38	54	33	109	52	38	77	76	22
Porgies (scup)	H	3,935	3,031	2,460	4,181	2,983	1,567	1,261	1,871	1,901	1,173
	R	2,549	2,837	2,382	2,829	1,759	1,902	2,548	2,543	3,595	2,563
Striped bass	H	396	498	523	701	608	691	585	638	568	548
	R	10,002	7,931	8,577	6,760	8,586	10,831	16,327	9,739	7,003	4,443
Summer flounder	H	1,558	573	439	549	786	604	592	417	473	161
	R	1,809	1,008	1,559	1,071	1,048	1,491	2,503	1,290	1,941	1,023
Winter flounder	H	143	169	107	83	54	50	61	54	169	121
	R	136	155	74	41	32	43	65	44	76	103
Wrasses (tautog)	H	137	172	265	335	294	228	321	452	299	180
	R	233	338	638	669	545	504	595	981	420	378

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

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



**2009 Economic Impacts of the Connecticut Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	3,806	621,496	129,597	216,641
Commercial Harvesters	494	29,483	8,087	12,460
Seafood Processors & Dealers	156	16,112	6,153	7,954
Importers	1,736	477,632	76,550	145,603
Seafood Wholesalers & Distributors	250	40,085	13,121	17,629
Retail	1,171	58,184	25,687	32,996

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	31,227	31,176	27,779	29,825	33,399	37,570	36,892	42,053	16,927	16,626
Finfish & other	6,428	5,712	4,283	4,136	4,575	5,097	3,731	3,421	3,904	3,778
Shellfish	24,799	25,464	23,496	25,690	28,825	32,474	33,161	38,632	13,022	12,848
American lobster	5,501	5,450	4,226	3,170	3,166	3,821	4,031	3,222	2,101	1,914
Eastern oyster	4,839	3,245	2,012	2,274	1,356	ND <sup>1</sup>	2,206	5,142	ND <sup>3</sup>	ND <sup>3</sup>
Flounders	1,325	1,188	909	896	1,075	1,170	1,026	881	851	760
Goosefish	1,556	1,201	790	683	580	658	346	512	551	ND <sup>3</sup>
Hake	2,864	2,341	1,307	1,602	2,028	2,432	1,628	1,226	1,545	1,354
Quahog clam	9,415	9,930	9,202	10,470	10,690	ND <sup>3</sup>	18,135	20,531	ND <sup>3</sup>	ND <sup>3</sup>
Scups or Porgies	175	171	195	167	191	263	302	311	386	364
Sea scallop	4,034	5,727	6,400	8,125	11,203	9,761	7,229	8,605	9,840	9,762
Snails (conchs)	45	95	199	119	209	233	533	312	481	ND <sup>3</sup>
Squid, loligo	ND <sup>3</sup>	687	1,178	1,400	1,298	1,224	954	744	ND <sup>3</sup>	384

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	19,563	18,748	16,177	16,420	18,192	13,628	11,747	10,050	7,115	7,972
Finfish & other	11,175	10,609	7,799	7,825	6,832	6,548	5,807	3,931	4,535	5,388
Shellfish	8,388	8,139	8,378	8,595	11,359	7,080	5,940	6,119	2,580	2,584
American lobster	1,394	1,330	1,067	671	647	714	793	569	426	479
Eastern oyster	624	434	247	279	186	ND <sup>3</sup>	77	193	ND <sup>3</sup>	ND <sup>3</sup>
Flounders	1,041	1,011	633	565	637	582	456	345	307	314
Goosefish	1,544	1,360	1,029	1,023	897	524	496	460	409	ND <sup>3</sup>
Hake	6,598	5,644	2,904	2,875	2,936	3,735	2,632	1,831	2,480	2,492
Quahog clam	4,021	3,382	3,435	4,038	5,137	ND <sup>3</sup>	2,665	3,067	ND <sup>3</sup>	ND <sup>3</sup>
Scups or Porgies	142	220	314	292	256	328	298	256	283	347
Sea scallop	800	1,538	1,579	1,908	2,172	1,272	1,104	1,313	1,407	1,475
Snails (conchs)	70	36	128	70	31	50	101	117	184	ND <sup>3</sup>
Squid, loligo	ND <sup>3</sup>	1,026	1,778	1,572	1,699	1,537	1,157	811	ND <sup>3</sup>	366

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	3.95	4.10	3.96	4.72	4.89	5.35	5.08	5.67	4.93	3.99
Eastern oyster	7.76	7.48	8.16	8.14	7.30	ND <sup>3</sup>	28.61	26.64	ND <sup>3</sup>	ND <sup>3</sup>
Flounders	1.27	1.17	1.44	1.59	1.69	2.01	2.25	2.55	2.77	2.42
Goosefish	1.01	0.88	0.77	0.67	0.65	1.26	0.70	1.11	1.35	ND <sup>3</sup>
Hake	0.43	0.41	0.45	0.56	0.69	0.65	0.62	0.67	0.62	0.54
Quahog clam	2.34	2.94	2.68	2.59	2.08	ND <sup>3</sup>	6.80	6.69	ND <sup>3</sup>	ND <sup>3</sup>
Scups or Porgies	1.23	0.77	0.62	0.57	0.75	0.80	1.01	1.22	1.36	1.05
Sea scallop	5.04	3.72	4.05	4.26	5.16	7.67	6.55	6.55	6.99	6.62
Snails (conchs)	0.64	2.65	1.55	1.69	6.69	4.66	5.28	2.66	2.62	ND <sup>3</sup>
Squid, loligo	ND <sup>3</sup>	0.67	0.66	0.89	0.76	0.80	0.82	0.92	ND <sup>3</sup>	1.05

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	47	4,861	1,723	3,004
Private Boat	161	20,432	7,448	12,834
Shore	101	11,271	4,177	6,976
Total Durable Equipment Impacts	4,903	760,645	291,485	434,530
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>5,212</b>	<b>797,209</b>	<b>304,833</b>	<b>457,344</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	197,138
For-Hire	739	2,523	Other Equipment	35,627
Private Boat	1,426	19,448	Boat Expenses	160,925
Shore	2,368	9,186	Vehicle Expenses	368,588
<i>Total Trip Expenditures</i>	<i>4,533</i>	<i>31,157</i>	Second Home Expenses	0
			<i>Total Durable Equipment Expenditures</i>	<i>762,278</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>797,968</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	222	246	283	361	297	323	336	302	381	438
Non-Coastal	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
Out of State	53	78	87	112	63	77	44	61	123	93
<b>Total Anglers</b>	<b>275</b>	<b>324</b>	<b>371</b>	<b>473</b>	<b>359</b>	<b>400</b>	<b>380</b>	<b>363</b>	<b>504</b>	<b>531</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	46	46	51	64	39	38	45	50	62	43
Private	854	981	953	875	924	1,073	863	1,089	1,286	725
Shore	609	695	645	625	574	483	569	544	562	668
<b>Total Trips</b>	<b>1,508</b>	<b>1,723</b>	<b>1,650</b>	<b>1,564</b>	<b>1,537</b>	<b>1,594</b>	<b>1,477</b>	<b>1,683</b>	<b>1,911</b>	<b>1,436</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic cod	H	(1)	(1)	(1)	2	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	H	390	716	569	458	534	418	476	375	428	332
	R	863	1,429	662	542	947	989	786	847	1,132	415
Hickory shad	H	(1)	16	71	71	28	52	80	57	5	(1)
	R	48	88	377	79	103	35	110	8	24	2
Little tunny <sup>3</sup>	H	(1)	1	(1)	1	2	(1)	(1)	(1)	(1)	(1)
	R	71	27	28	8	9	(1)	(1)	5	(1)	7
Porgies (scup)	H	1,318	1,016	882	1,529	564	724	519	690	672	229
	R	925	931	570	804	387	719	733	871	1,131	949
Striped bass	H	53	54	51	96	75	115	83	110	113	73
	R	926	1,108	697	843	1,079	1,714	1,682	1,832	2,372	1,281
Summer flounder	H	372	153	93	166	217	213	107	109	116	62
	R	443	406	452	475	363	839	902	325	792	552
White perch	H	17	(1)	1	11	1	(1)	(1)	(1)	74	114
	R	140	7	27	28	30	3	3	88	138	101
Winter flounder	H	10	15	16	24	4	4	8	4	(1)	4
	R	11	32	9	6	9	1	24	14	(1)	2
Wrasses (tautog)	H	11	17	100	168	98	75	176	211	177	66
	R	29	59	219	283	329	144	141	445	200	67

<sup>1</sup>NA = not applicable because all Connecticut residents are considered coastal county residents<sup>2</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.<sup>3</sup>This species may not be equivalent to species with similar names listed in the commercial tables.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	92,436 (1.3%)	1,546,250 (1.4%)	67,385 (1.7%)	92,817 (1.7%)	163,943 (1.6%)	0.6 <sup>2</sup>
2008	92,597 (1.2%)	1,551,305 (1.3%)	82,769 (1.6%)	123,218 (1.6%)	230,101 (1.5%)	ND <sup>3</sup>
% change	0.174%	0.327%	22.8%	32.8%	40.4%	NA <sup>4</sup>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	4	0	0	7	7	7	11	0	18
	Receipts	441	ND <sup>3</sup>	ND <sup>3</sup>	1,022	1,404	551	3,206	ND <sup>3</sup>	2,375
Seafood Sales, retail	Firms	19	20	26	26	25	24	15	26	25
	Receipts	1,780	2,378	3,225	2,966	3,115	3,313	2,915	4,436	3,247

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	3	2	2	2	3	3	4	3	3
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	113	119	ND <sup>3</sup>	59
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	3,656	4,242	ND <sup>3</sup>	1,040
Seafood sales, wholesale	Establishments	26	25	28	19	19	17	19	20	24
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	169	181	ND <sup>3</sup>	ND <sup>3</sup>	183	185
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	7,738	7,688	ND <sup>3</sup>	ND <sup>3</sup>	8,347	8,551
Seafood sales, retail	Establishments	31	34	36	34	38	39	35	36	35
	Employees	112	131	165	206	202	187	196	177	203
	Payroll	2,760	3,403	3,859	5,110	5,060	5,028	4,937	5,252	5,248

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	10	8	5	6	5	5	4	4	5
	Employees	396	506	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	22,291	31,940	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea freight transportation	Establishments	13	12	11	12	13	11	14	14	12
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	238	270	260	310	235	228	243
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	18,271	29,086	37,013	36,766	47,845	48,110	46,595
Deep sea passenger transportation	Establishments	1	2	2	2	2	2	1	2	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	101	101	108	116	117	117	119	124	125
	Employees	676	ND <sup>3</sup>	722	1,006	1,016	994	1,024	1,224	1,352
	Payroll	24,375	ND <sup>3</sup>	29,690	39,691	41,952	42,754	44,829	50,809	60,016
Marine cargo handling	Establishments	1	2	1	NA <sup>4</sup>	1	3	3	5	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	5,925	ND <sup>3</sup>
Navigational services to shipping	Establishments	5	4	8	6	6	8	9	6	6
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	45	69	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,768	2,423	432	338
Port & harbor operations	Establishments	3	3	5	4	4	4	4	4	8
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	185	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	179
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	5,527	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	6,136
Ship & boat building	Establishments	18	14	12	14	17	17	17	22	15
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the Maine Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	21,200	1,203,248	393,282	570,452
Commercial Harvesters	9,473	548,895	149,995	245,414
Seafood Processors & Dealers	1,606	112,779	45,280	57,857
Importers	476	130,819	20,966	39,879
Seafood Wholesalers & Distributors	684	65,633	23,543	30,636
Retail	8,962	345,121	153,498	196,666

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	269,082	241,383	290,315	287,049	367,459	392,122	361,920	343,872	308,146	285,925
Finfish & other	56,732	56,662	47,489	49,292	48,904	47,141	37,084	36,930	36,679	30,488
Shellfish	212,350	184,721	242,826	237,757	318,555	344,982	324,836	306,942	271,467	255,437
American lobster	187,715	153,982	210,950	205,715	289,079	317,948	297,143	280,667	245,098	231,170
Atlantic herring	6,400	7,165	4,618	7,296	8,019	9,408	10,602	9,176	8,305	7,838
Bloodworms	1,592	4,851	5,759	5,292	7,524	6,039	5,037	6,051	5,913	6,197
Blue mussel	1,037	2,650	4,117	4,487	3,319	2,625	2,618	1,934	1,627	2,203
Cod & haddock	5,330	6,469	5,944	4,673	5,392	5,177	3,982	3,728	1,482	216
Goosefish	8,876	7,991	6,248	7,852	6,828	6,232	3,238	2,402	ND <sup>1</sup>	ND <sup>3</sup>
Ocean quahog clam	3,310	3,499	4,748	4,480	3,842	3,607	3,919	3,194	2,195	1,821
Pollock	3,258	2,448	2,386	2,206	2,346	3,106	2,309	2,160	ND <sup>3</sup>	2,045
Sea Urchins	17,739	12,694	7,657	8,569	7,866	5,142	3,693	4,368	5,410	5,866
Softshell clam	9,546	16,609	14,370	15,859	16,628	14,081	13,163	12,476	12,826	ND <sup>3</sup>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	228,213	236,240	202,483	223,533	228,502	214,514	217,659	184,191	185,212	184,558
Finfish & other	144,484	167,022	113,132	141,621	130,368	121,278	121,268	96,541	93,510	87,248
Shellfish	83,729	69,218	89,351	81,912	98,134	93,236	96,391	87,650	91,703	97,310
American lobster	57,215	48,618	63,626	54,971	71,574	68,730	72,662	63,965	69,847	78,994
Atlantic herring	100,097	115,825	67,169	96,681	90,598	88,010	96,214	72,757	65,570	63,084
Bloodworms	327	644	683	594	615	456	450	549	537	574
Blue mussel	2,838	2,749	4,793	4,287	4,102	3,357	2,897	2,643	2,289	2,760
Cod & haddock	4,295	5,741	5,172	3,860	4,588	4,045	2,448	2,345	1,131	162
Goosefish	8,601	10,983	11,127	13,291	10,552	7,130	3,666	2,376	ND <sup>3</sup>	ND <sup>3</sup>
Ocean quahog clam	1,208	1,083	1,287	1,194	1,013	1,001	1,214	1,011	669	556
Pollock	3,955	3,447	2,958	4,085	4,189	5,260	3,678	4,245	ND <sup>3</sup>	3,039
Sea Urchins	12,898	9,901	6,321	5,963	5,742	3,517	2,800	2,762	2,900	3,487
Softshell clam	2,284	2,660	2,423	2,364	2,380	1,857	1,868	1,931	1,998	ND <sup>3</sup>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	3.28	3.17	3.32	3.74	4.04	4.63	4.09	4.39	3.51	2.93
Atlantic herring	0.06	0.06	0.07	0.08	0.09	0.11	0.11	0.13	0.13	0.12
Bloodworms	4.87	7.53	8.43	8.91	12.24	13.24	11.20	11.02	11.01	10.79
Blue mussel	0.37	0.96	0.86	1.05	0.81	0.78	0.90	0.73	0.71	0.80
Cod & haddock	1.24	1.13	1.15	1.21	1.18	1.28	1.63	1.59	1.31	1.33
Goosefish	1.03	0.73	0.56	0.59	0.65	0.87	0.88	1.01	ND <sup>3</sup>	ND <sup>3</sup>
Ocean quahog clam	2.74	3.23	3.69	3.75	3.79	3.60	3.23	3.16	3.28	3.27
Pollock	0.82	0.71	0.81	0.54	0.56	0.59	0.63	0.51	ND <sup>3</sup>	0.67
Sea Urchins	1.38	1.28	1.21	1.44	1.37	1.46	1.32	1.58	1.87	1.68
Softshell clam	4.18	6.25	5.93	6.71	6.99	7.58	7.05	6.46	6.42	ND <sup>3</sup>

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	94	6,932	2,265	3,917
Private Boat	84	7,122	2,458	4,204
Shore	1,209	86,444	28,266	47,646
Total Durable Equipment Impacts	651	66,066	21,562	32,006
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>2,039</b>	<b>166,564</b>	<b>54,551</b>	<b>87,774</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	27,994
For-Hire	4,603	361	Other Equipment	13,941
Private Boat	1,957	5,154	Boat Expenses	33,240
Shore	60,640	2,747	Vehicle Expenses	17,995
<i>Total Trip Expenditures</i>	<i>67,199</i>	<i>8,262</i>	Second Home Expenses	885
			<i>Total Durable Equipment Expenditures</i>	<i>94,055</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>169,516</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	139	126	127	165	113	190	182	174	121	117
Non-Coastal	20	16	17	23	21	20	22	13	9	12
Out of State	150	166	172	170	148	173	285	260	180	324
<b>Total Anglers</b>	<b>310</b>	<b>308</b>	<b>316</b>	<b>358</b>	<b>282</b>	<b>383</b>	<b>489</b>	<b>447</b>	<b>310</b>	<b>453</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	17	20	13	14	38	38	31	33	31	26
Private	482	444	422	410	315	552	517	486	382	330
Shore	396	469	471	495	406	499	649	703	426	658
<b>Total Trips</b>	<b>895</b>	<b>932</b>	<b>906</b>	<b>919</b>	<b>758</b>	<b>1,089</b>	<b>1,197</b>	<b>1,222</b>	<b>840</b>	<b>1,014</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American Shad	H	1	(1)	(1)	(1)	(1)	1	4	(1)	(1)	2
	R	1	2	(1)	1	2	(1)	20	3	4	20
Atlantic cod	H	41	92	15	11	42	26	12	22	35	45
	R	50	73	16	25	43	43	41	79	59	54
Atlantic mackerel	H	1,406	1,175	1,207	616	778	761	387	1,139	839	1,290
	R	304	319	234	106	79	32	95	95	227	162
Blue shark	H	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)	1
Bluefin tuna	H	(1)	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	H	(1)	15	24	14	17	19	6	37	24	5
	R	4	40	42	23	38	51	42	72	65	30
Haddock	H	11	12	3	1	12	7	8	13	15	11
	R	16	17	4	4	3	3	4	13	3	2
Pollock	H	74	58	76	10	57	45	78	43	90	55
	R	103	130	48	17	39	53	27	19	162	36
Striped bass	H	62	60	72	58	37	69	73	71	49	53
	R	943	871	1,392	847	748	3,024	4,063	1,105	470	247
Winter flounder	H	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	3	(1)	1	(1)	(1)	1	(1)	1	4

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	39,466 (0.56%)	491,780 (0.43%)	13,490 (0.35%)	21,307 (0.37%)	36,395 (0.37%)	8.09 <sup>2</sup>
2008	41,755 (0.55%)	509,093 (0.42%)	17,685 (0.34%)	29,608 (0.36%)	51,010 (0.37%)	14
% change	5.8%	3.52%	31.1%	39%	40.2%	73.2%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	51	55	50	62	57	52	54	65	64
	Receipts	3,657	6,301	3,023	4,699	5,642	5,082	6,463	7,177	4,261
Seafood Sales, retail	Firms	60	51	62	60	55	51	45	55	46
	Receipts	9,505	8,486	8,980	8,365	8,621	7,331	7,115	5,905	4,035

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	40	36	33	35	28	27	27	27	29
	Employees	992	1,007	639	656	576	614	616	536	490
	Payroll	12,110	13,125	11,301	13,999	19,767	12,349	12,304	9,351	9,288
Seafood sales, wholesale	Establishments	194	182	190	181	177	177	167	170	168
	Employees	1,631	1,235	1,256	985	1,048	1,152	996	1,015	1,210
	Payroll	36,325	32,599	36,043	29,643	30,108	30,513	32,192	32,005	36,185
Seafood sales, retail	Establishments	34	41	47	51	50	49	55	50	45
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	173	181	189	184	179	181	148
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	3,971	4,663	5,112	4,678	4,753	4,635	4,148

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	6	6	4	5	4	3	3	3	5
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	30	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	939	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,058
Deep sea freight transportation	Establishments	3	4	3	2	2	1	1	NA <sup>4</sup>	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	2	2	4	1	1	1	1	2	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	91	89	85	79	84	84	84	86	87
	Employees	592	600	503	416	406	411	417	464	411
	Payroll	16,454	18,121	16,055	12,853	13,369	14,215	15,353	18,600	15,206
Marine cargo handling	Establishments	4	4	4	4	4	3	3	3	3
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	91	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	3,183	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Navigational services to shipping	Establishments	14	16	18	17	16	16	12	15	15
	Employees	49	45	88	106	91	88	93	105	138
	Payroll	3,175	3,371	4,341	5,521	4,927	5,890	6,260	6,737	6,148
Port & harbor operations	Establishments	1	1	NA <sup>4</sup>	1	1	1	1	2	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	72	79	87	91	86	92	89	94	90
	Employees	ND <sup>3</sup>	8,242	ND <sup>3</sup>	7,630	7,753	ND <sup>3</sup>	6,808	6,751	6,930
	Payroll	ND <sup>3</sup>	300,378	ND <sup>3</sup>	332,332	328,179	ND <sup>3</sup>	320,288	345,036	354,899

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the Massachusetts Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	77,820	6,711,215	1,696,208	2,614,296
Commercial Harvesters	9,243	732,903	230,418	339,474
Seafood Processors & Dealers	6,687	860,484	328,068	426,546
Importers	13,742	3,780,147	605,841	1,152,354
Seafood Wholesalers & Distributors	2,648	421,491	137,736	186,887
Retail	45,501	916,190	394,145	509,035

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	290,950	278,946	296,922	292,602	325,937	427,332	437,157	420,079	399,922	400,248
Finfish & other	120,595	122,944	122,845	116,767	109,163	117,003	110,426	109,434	122,000	114,784
Shellfish	170,356	156,002	174,077	175,835	216,774	310,330	326,731	310,645	277,923	285,464
American lobster	70,116	53,430	56,569	52,329	51,581	49,563	52,553	51,258	45,423	42,074
Atlantic herring	604	2,769	2,285	5,461	4	69	ND <sup>1</sup>	8,265	11,336	15,322
Atlantic mackerel	184	141	713	1,888	6,542	ND <sup>3</sup>	10,203	4,736	4,258	4,548
Clams, all other	581	5,927	8,169	823	4,721	19,010	14,064	15,707	24,860	16,742
Cod & haddock	29,573	36,905	40,550	36,668	31,452	31,954	25,451	32,033	38,694	33,668
Eastern oyster	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	24	2,738	4,618	4,559	5,477	6,432
Flounders	30,521	33,086	33,092	32,995	29,897	28,815	24,592	22,091	20,926	19,635
Goosefish	24,121	18,263	15,546	15,585	15,675	21,485	17,712	14,381	14,036	9,902
Ocean quahog clam	5,235	ND <sup>3</sup>	ND <sup>3</sup>	7,325	6,919	ND <sup>3</sup>	8,297	10,100	ND <sup>3</sup>	10,710
Sea scallop	85,294	87,357	100,551	106,938	144,748	226,949	234,668	218,292	189,923	197,296

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	189,031	240,759	243,501	295,439	337,603	337,304	351,426	304,401	326,261	355,965
Finfish & other	130,095	182,473	175,490	231,978	267,342	267,311	271,352	227,229	255,635	279,324
Shellfish	58,937	58,286	68,011	63,461	70,261	69,993	80,074	77,171	70,626	76,641
American lobster	15,803	12,133	12,853	11,385	11,295	9,880	10,966	10,143	10,598	11,641
Atlantic herring	9,615	48,960	40,508	79,873	40	700	ND <sup>3</sup>	73,268	94,233	133,531
Atlantic mackerel	479	387	5,549	23,451	72,687	ND <sup>3</sup>	89,535	46,240	35,438	30,199
Clams, all other	734	10,836	17,057	1,045	6,315	19,881	4,593	4,215	22,492	6,553
Cod & haddock	26,685	37,162	37,521	32,013	26,926	24,539	15,862	20,290	28,523	28,498
Eastern oyster	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	9	105	212	127	149	159
Flounders	29,041	33,989	28,987	29,418	30,704	22,115	13,182	10,965	11,589	12,390
Goosefish	20,888	22,120	22,794	23,979	22,357	21,849	17,495	13,308	12,446	9,829
Ocean quahog clam	12,397	ND <sup>3</sup>	ND <sup>3</sup>	14,226	14,085	ND <sup>3</sup>	16,798	20,158	ND <sup>3</sup>	18,691
Sea scallop	16,175	22,640	25,290	25,371	27,944	29,045	36,088	32,540	27,016	29,782

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	4.44	4.40	4.40	4.60	4.57	5.02	4.79	5.05	4.29	3.61
Atlantic herring	0.06	0.06	0.06	0.07	0.09	0.10	ND <sup>3</sup>	0.11	0.12	0.11
Atlantic mackerel	0.38	0.36	0.13	0.08	0.09	ND <sup>3</sup>	0.11	0.10	0.12	0.15
Clams, all other	0.79	0.55	0.48	0.79	0.75	0.96	3.06	3.73	1.11	2.56
Cod & haddock	1.11	0.99	1.08	1.15	1.17	1.30	1.60	1.58	1.36	1.18
Eastern oyster	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2.74	26.09	21.75	36.02	36.67	40.37
Flounders	1.05	0.97	1.14	1.12	0.97	1.30	1.87	2.01	1.81	1.58
Goosefish	1.15	0.83	0.68	0.65	0.70	0.98	1.01	1.08	1.13	1.01
Ocean quahog clam	0.42	ND <sup>3</sup>	ND <sup>3</sup>	0.51	0.49	ND <sup>3</sup>	0.49	0.50	ND <sup>3</sup>	0.57
Sea scallop	5.27	3.86	3.98	4.21	5.18	7.81	6.50	6.71	7.03	6.62

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	554	53,315	18,691	31,808
Private Boat	577	67,483	24,712	41,375
Shore	1,605	165,529	59,240	98,007
Total Durable Equipment Impacts	2,251	370,631	126,425	186,250
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>4,987</b>	<b>656,958</b>	<b>229,069</b>	<b>357,440</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	124,424
For-Hire	24,050	11,253	Other Equipment	33,935
Private Boat	16,531	43,810	Boat Expenses	54,541
Shore	83,006	32,282	Vehicle Expenses	197,660
<i>Total Trip Expenditures</i>	<i>123,587</i>	<i>87,345</i>	Second Home Expenses	9,387
			<i>Total Durable Equipment Expenditures</i>	<i>419,947</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>630,879</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	493	392	465	434	535	585	623	664	655	489
Non-Coastal	90	79	96	112	131	135	151	179	170	144
Out of State	265	279	344	306	335	391	484	465	469	421
<b>Total Anglers</b>	<b>848</b>	<b>750</b>	<b>906</b>	<b>852</b>	<b>1000</b>	<b>1112</b>	<b>1258</b>	<b>1309</b>	<b>1293</b>	<b>1054</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	172	134	106	145	133	246	242	242	235	227
Private	2,518	2,569	2,399	2,329	2,456	2,383	2,438	2,419	2,322	1,872
Shore	1,931	1,821	1,701	1,611	1,913	1,809	2,044	2,049	1,907	1,507
<b>Total Trips</b>	<b>4,622</b>	<b>4,524</b>	<b>4,206</b>	<b>4,085</b>	<b>4,502</b>	<b>4,439</b>	<b>4,724</b>	<b>4,710</b>	<b>4,465</b>	<b>3,606</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic bonito	H	4	13	6	11	4	15	5	4	3	4
	R	8	8	17	(1)	3	12	18	12	5	1
Atlantic cod	H	599	842	585	583	519	558	188	239	372	286
	R	975	1,119	1,049	937	843	1,337	534	883	1,029	834
Atlantic mackerel	H	2,049	1,811	2,024	1,313	722	1,967	4,296	1,789	2,047	726
	R	231	157	61	45	73	21	203	83	261	152
Bluefish	H	221	357	229	374	406	589	686	587	414	377
	R	596	948	628	1,019	1,468	1,812	1,507	1,344	1,242	814
Haddock	H	81	73	61	75	215	334	151	291	263	196
	R	88	45	125	130	104	87	89	55	108	43
Porgies (scup)	H	1,382	881	975	1,624	1,511	397	314	729	660	772
	R	748	832	879	1,221	855	516	931	936	1,177	1,282
Striped bass	H	181	288	309	407	400	368	340	347	343	336
	R	7,382	5,411	5,719	4,362	5,892	4,840	8,657	5,772	3,641	2,490
Summer flounder	H	379	152	155	177	281	203	219	76	150	48
	R	445	210	336	244	388	308	556	99	181	122
Winter flounder	H	74	61	53	45	40	42	43	37	155	105
	R	100	97	34	30	17	39	35	17	65	91
Wrasses (tautog)	H	88	116	103	47	23	48	63	76	24	27
	R	139	205	284	190	63	148	266	331	86	122

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.



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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	176,222 (2.5%)	3,087,044 (2.7%)	131,444 (3.4%)	177,393 (2.8%)	272,680 (3.1%)	7.54 <sup>2</sup>
2008	174,290 (2.3%)	3,074,569 (2.5%)	161,821 (3.2%)	228,829 (2.6%)	364,818 (2.9%)	ND <sup>3</sup>
% change	-1.1%	-0.404%	23.1%	29%	33.8%	NA <sup>4</sup>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	22	29	26	23	25	28	36	24	26
	Receipts	2,684	1,762	1,296	676	2,284	2,266	2,525	908	1,250
Seafood Sales, retail	Firms	62	62	78	59	64	59	62	57	64
	Receipts	6,128	6,171	7,314	5,409	5,933	5,528	4,905	4,421	7,982

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	42	41	45	55	53	50	47	52	44
	Employees	2,251	2,164	2,231	2,717	2,743	2,671	2,607	2,684	2,355
	Payroll	82,907	83,249	92,776	110,917	112,642	115,704	120,912	113,580	109,747
Seafood sales, wholesale	Establishments	229	212	207	163	148	151	139	160	141
	Employees	2,685	2,508	2,393	1,880	1,890	1,836	1,706	1,803	1,442
	Payroll	104,358	105,904	107,871	74,431	75,689	76,070	77,106	81,863	68,898
Seafood sales, retail	Establishments	109	115	126	124	128	116	115	126	118
	Employees	435	451	490	720	686	677	692	737	549
	Payroll	7,401	8,224	10,673	17,760	17,454	17,725	18,165	19,267	15,017

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	9	12	10	13	13	10	12	14	14
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	688	ND <sup>3</sup>	623	283	169
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	36,533	ND <sup>3</sup>	38,421	18,620	11,701
Deep sea freight transportation	Establishments	12	14	12	10	10	10	11	12	8
	Employees	368	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	509	ND <sup>3</sup>	361
	Payroll	31,434	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	38,982	ND <sup>3</sup>	38,908
Deep sea passenger transportation	Establishments	2	2	2	1	1	4	4	1	NA <sup>4</sup>
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
Marinas	Establishments	131	136	139	145	135	139	141	173	175
	Employees	865	996	988	969	989	973	1,064	1,154	1,138
	Payroll	30,790	34,865	35,169	40,700	41,474	43,103	45,894	51,705	53,694
Marine cargo handling	Establishments	6	7	7	6	6	5	4	5	3
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	69	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2,867	2,271
Navigational services to shipping	Establishments	4	5	5	5	7	6	11	9	8
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	65	75
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	4,540	4,355
Port & harbor operations	Establishments	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	3	3	3	4	3	4
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	69	63
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	647	1,289
Ship & boat building	Establishments	54	56	50	53	55	50	47	49	43
	Employees	599	577	617	ND <sup>3</sup>	ND <sup>3</sup>	588	ND <sup>3</sup>	588	603
	Payroll	18,503	18,813	21,710	ND <sup>3</sup>	ND <sup>3</sup>	20,050	ND <sup>3</sup>	26,445	28,402

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the New Hampshire Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	4,951	651,278	152,553	242,845
Commercial Harvesters	527	31,058	8,778	13,632
Seafood Processors & Dealers	525	56,689	22,276	28,723
Importers	1,600	440,203	70,551	134,193
Seafood Wholesalers & Distributors	307	39,363	13,876	18,260
Retail	1,992	83,963	37,072	48,037

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	16,197	17,865	16,689	15,127	17,214	22,084	18,915	17,045	17,466	17,708
Finfish & other	7,848	8,231	7,350	5,748	6,449	6,840	4,855	4,151	4,819	5,528
Shellfish	8,349	9,634	9,339	9,380	10,765	15,244	14,059	12,895	12,647	12,181
American lobster	7,081	8,072	2	ND <sup>1</sup>	10,199	14,377	13,915	ND <sup>3</sup>	12,267	11,914
Atlantic cod	1,807	2,017	1,983	1,853	2,244	1,913	1,705	1,972	2,311	2,587
Atlantic herring	306	399	783	1,170	1,150	1,255	199	147	ND <sup>3</sup>	271
Goosefish	2,715	2,812	1,853	1,097	1,456	1,484	794	375	290	280
Haddock	187	181	134	144	157	136	132	123	89	68
Hake	463	367	321	303	200	279	219	244	ND <sup>3</sup>	215
Pollock	1,045	891	847	589	569	1,138	1,221	902	ND <sup>3</sup>	1,284
Sea scallop	ND <sup>3</sup>	689	726	375	276	527	24	30	16	4
Shrimp	375	369	104	212	222	340	120	322	291	188
Spiny dogfish	605	148	85	27	0	ND <sup>3</sup>	183	ND <sup>3</sup>	414	514

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	17,886	18,584	23,200	27,435	23,796	21,281	10,820	8,422	10,463	13,886
Finfish & other	14,931	15,078	20,354	24,747	21,074	18,081	7,857	5,166	7,178	10,094
Shellfish	2,954	3,505	2,846	2,688	2,722	3,200	2,963	3,256	3,284	3,792
American lobster	1,710	2,028	0	ND <sup>3</sup>	2,097	2,556	2,666	ND <sup>3</sup>	2,567	2,984
Atlantic cod	1,756	1,976	1,583	1,458	1,633	1,293	1,023	1,168	1,479	1,985
Atlantic herring	5,582	7,015	14,125	18,933	15,621	12,562	2,020	936	ND <sup>3</sup>	3,120
Goosefish	1,873	2,463	1,876	1,629	1,640	1,226	621	317	249	249
Haddock	134	135	95	108	123	99	73	61	53	45
Hake	1,094	820	557	729	405	372	241	313	ND <sup>3</sup>	424
Pollock	1,337	1,183	997	1,109	1,202	1,997	2,566	2,025	ND <sup>3</sup>	2,019
Sea scallop	ND <sup>3</sup>	171	177	100	44	76	3	4	2	1
Shrimp	468	506	90	223	432	567	294	783	572	359
Spiny dogfish	2,334	536	349	175	0	ND <sup>3</sup>	620	ND <sup>3</sup>	1,370	1,885

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	4.14	3.98	3.86	ND <sup>3</sup>	4.86	5.62	5.22	ND <sup>3</sup>	4.78	3.99
Atlantic cod	1.03	1.02	1.25	1.27	1.37	1.48	1.67	1.69	1.56	1.30
Atlantic herring	0.05	0.06	0.06	0.06	0.07	0.10	0.10	0.16	ND <sup>3</sup>	0.09
Goosefish	1.45	1.14	0.99	0.67	0.89	1.21	1.28	1.18	1.17	1.13
Haddock	1.39	1.35	1.41	1.33	1.27	1.38	1.82	2.01	1.70	1.52
Hake	0.42	0.45	0.58	0.41	0.49	0.75	0.91	0.78	ND <sup>3</sup>	0.51
Pollock	0.78	0.75	0.85	0.53	0.47	0.57	0.48	0.45	ND <sup>3</sup>	0.64
Sea scallop	ND <sup>3</sup>	4.04	4.10	3.76	6.22	6.89	7.44	8.26	7.68	7.22
Shrimp	0.80	0.73	1.16	0.95	0.51	0.60	0.41	0.41	0.51	0.52
Spiny dogfish	0.26	0.28	0.24	0.16	0.18	ND <sup>3</sup>	0.30	ND <sup>3</sup>	0.30	0.27

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	152	12,524	4,181	7,338
Private Boat	47	4,851	1,678	2,932
Shore	54	4,908	1,716	2,908
Total Durable Equipment Impacts	165	23,233	8,192	11,839
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>418</b>	<b>45,516</b>	<b>15,768</b>	<b>25,016</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	12,555
For-Hire	5,507	3,201	Other Equipment	3,465
Private Boat	777	4,124	Boat Expenses	3,886
Shore	2,549	2,060	Vehicle Expenses	9,905
<i>Total Trip Expenditures</i>	<i>8,833</i>	<i>9,384</i>	Second Home Expenses	0
			<i>Total Durable Equipment Expenditures</i>	<i>29,811</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>48,028</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	77	68	60	91	81	105	90	97	63	67
Non-Coastal	10	13	11	16	13	14	15	13	8	9
Out of State	85	74	65	75	69	84	82	63	46	58
<b>Total Anglers</b>	<b>172</b>	<b>154</b>	<b>137</b>	<b>182</b>	<b>163</b>	<b>203</b>	<b>187</b>	<b>172</b>	<b>118</b>	<b>134</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	34	83	29	35	39	47	88	94	82	98
Private	145	177	143	230	141	236	192	248	147	149
Shore	189	100	147	150	181	237	267	196	119	167
<b>Total Trips</b>	<b>368</b>	<b>360</b>	<b>318</b>	<b>416</b>	<b>360</b>	<b>520</b>	<b>547</b>	<b>538</b>	<b>349</b>	<b>414</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic cod	H	70	164	39	108	44	69	61	51	73	148
	R	148	184	70	208	56	143	225	221	198	244
Atlantic mackerel	H	581	828	212	409	86	333	153	151	573	1,135
	R	120	297	69	61	10	25	31	11	58	86
Bluefin tuna	H	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	H	1	8	19	8	21	23	10	32	6	1
	R	1	14	14	17	10	42	26	18	2	2
Bottomfish, unidentified	H	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Flounder or sole, unidentified	H	4	(1)	(1)	(1)	2	1	(1)	5	(1)	(1)
	R	9	2	5	1	2	4	6	2	2	(1)
Haddock	H	17	36	19	44	51	107	120	95	81	105
	R	29	50	43	128	17	36	86	41	18	29
Pollock	H	177	167	89	63	53	49	80	56	53	41
	R	293	265	63	42	28	29	39	15	18	46
Striped bass	H	4	15	13	25	10	26	15	7	7	11
	R	210	164	238	260	197	513	568	289	84	66
Winter flounder	H	8	9	8	7	2	3	10	13	14	9
	R	8	6	10	3	2	3	5	10	8	5

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.

## New Hampshire's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	37,414 (0.53%)	546,400 (0.48%)	17,826 (0.46%)	25,727 (0.45%)	44,067 (0.45%)	0.08 <sup>2</sup>
2008	38,906 (0.51%)	595,384 (0.49%)	24,970 (0.49%)	35,377 (0.41%)	59,131 (0.44%)	ND <sup>3</sup>
% change	3.99%	8.96%	40.1%	37.5%	34.2%	NA <sup>4</sup>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	NA <sup>4</sup>	NA <sup>4</sup>	0	7	4	4	4	5	0
	Receipts	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	1,205	1,147	842	1,087	927	ND <sup>3</sup>
Seafood Sales, retail	Firms	6	8	9	14	15	11	10	11	17
	Receipts	419	1,055	862	960	1,438	1,330	1,496	1,540	1,894

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	10	8	9	11	10	10	10	7	7
	Employees	298	ND <sup>3</sup>	368	322	448	418	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	9,952	ND <sup>3</sup>	13,452	13,676	18,886	16,275	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Seafood sales, wholesale	Establishments	14	14	14	11	12	10	9	8	8
	Employees	68	75	78	ND <sup>3</sup>	82	ND <sup>3</sup>	ND <sup>3</sup>	92	101
	Payroll	1,813	2,222	2,093	ND <sup>3</sup>	2,511	ND <sup>3</sup>	ND <sup>3</sup>	3,360	4,142
Seafood sales, retail	Establishments	7	9	9	12	12	12	15	15	14
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	79	78	93	83
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2,053	2,201	2,077	2,011

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	1	1	1	NA <sup>4</sup>	NA <sup>4</sup>	1	1	1	NA <sup>4</sup>
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
Deep sea freight transportation	Establishments	2	1	1	1	1	2	2	1	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	1	1	1	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
Marinas	Establishments	39	42	36	40	40	38	35	35	37
	Employees	249	209	228	196	226	194	ND <sup>3</sup>	171	173
	Payroll	7,768	8,135	10,872	9,043	9,315	8,871	ND <sup>3</sup>	7,774	8,114
Marine cargo handling	Establishments	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1	NA <sup>4</sup>
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	NA <sup>4</sup>
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	NA <sup>4</sup>
Navigational services to shipping	Establishments	2	2	2	3	3	4	4	2	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Port & harbor operations	Establishments	1	1	1	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
Ship & boat building	Establishments	5	6	8	10	8	6	6	8	9
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the Rhode Island Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	7,888	905,714	219,489	347,570
Commercial Harvesters	1,664	106,208	31,603	49,609
Seafood Processors & Dealers	393	41,186	15,960	20,740
Importers	2,044	562,327	90,124	171,422
Seafood Wholesalers & Distributors	429	51,853	18,373	24,175
Retail	3,357	144,139	63,429	81,624

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	80,965	68,657	64,718	66,088	77,565	91,408	98,488	73,548	68,890	61,663
Finfish & other	26,949	26,503	25,115	24,408	25,821	24,672	28,123	24,999	22,994	23,465
Shellfish	54,016	42,154	39,602	41,679	51,744	66,736	70,366	48,548	45,896	38,198
All other flounders	3,962	3,085	3,194	2,728	2,136	1,734	3,499	3,585	2,138	1,455
American lobster	28,103	18,747	15,875	16,731	14,624	23,009	18,391	12,152	12,988	11,221
Atlantic herring	2,337	2,295	1,312	1,195	1,187	1,075	2,667	982	634	1,260
Atlantic mackerel	444	280	3,031	2,385	3,815	2,888	3,293	1,182	ND <sup>1</sup>	3,301
Goosefish	6,892	5,455	4,757	4,813	3,421	4,549	4,481	3,533	3,590	2,956
Quahog clam	7,991	7,208	7,043	6,370	5,868	3,438	3,481	5,081	5,856	2,862
Scups or porgies	1,252	1,282	2,229	2,098	1,990	2,319	2,778	2,783	2,335	2,689
Sea scallop	1,392	684	ND <sup>3</sup>	279	1,512	13,268	20,783	8,963	2,170	2,342
Squid	12,937	11,596	13,208	14,319	25,133	16,973	16,753	ND <sup>3</sup>	4,147	15,249
Summer flounder	3,800	3,787	3,992	4,060	5,309	5,866	5,042	4,416	4,592	4,543

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	121,371	116,713	103,530	97,456	115,037	97,565	112,606	75,186	71,935	84,495
Finfish & other	82,008	82,871	70,552	62,340	62,169	47,820	60,590	40,849	34,465	46,314
Shellfish	39,363	33,842	32,978	35,116	52,868	49,745	52,016	34,338	37,471	38,180
All other flounders	4,070	3,148	2,781	2,428	2,360	1,315	1,848	1,871	1,115	1,027
American lobster	6,908	4,452	3,835	3,475	3,064	4,344	3,749	2,294	2,772	2,832
Atlantic herring	40,414	36,400	12,774	13,440	13,491	11,605	23,150	7,537	4,511	9,528
Atlantic mackerel	1,939	1,131	20,930	10,768	15,269	8,075	10,143	4,242	ND <sup>3</sup>	9,057
Goosefish	5,897	6,081	5,148	6,830	4,288	4,143	3,858	3,117	3,120	2,705
Quahog clam	1,409	1,220	1,192	1,131	1,080	642	679	614	567	511
Scups or porgies	1,017	1,617	3,675	3,814	3,425	3,424	3,643	3,933	2,152	3,619
Sea scallop	238	181	ND <sup>3</sup>	76	249	1,612	3,290	1,357	310	356
Squid	26,051	22,769	23,713	25,862	43,697	22,135	21,294	ND <sup>3</sup>	11,757	26,452
Summer flounder	1,704	1,799	2,286	2,178	3,085	2,925	2,123	1,516	1,473	1,794

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All other flounders	0.97	0.98	1.15	1.12	0.90	1.32	1.89	1.92	1.92	1.42
American lobster	4.07	4.21	4.14	4.82	4.77	5.30	4.91	5.30	4.69	3.96
Atlantic herring	0.06	0.06	0.10	0.09	0.09	0.09	0.12	0.13	0.14	0.13
Atlantic mackerel	0.23	0.25	0.14	0.22	0.25	0.36	0.32	0.28	ND <sup>3</sup>	0.36
Goosefish	1.17	0.90	0.92	0.70	0.80	1.10	1.16	1.13	1.15	1.09
Quahog clam	5.67	5.91	5.91	5.63	5.43	5.35	5.13	8.27	10.33	5.60
Scups or porgies	1.23	0.79	0.61	0.55	0.58	0.68	0.76	0.71	1.09	0.74
Sea scallop	5.86	3.78	ND <sup>3</sup>	3.67	6.07	8.23	6.32	6.61	7.00	6.58
Squid	0.50	0.51	0.56	0.55	0.58	0.77	0.79	ND <sup>3</sup>	0.35	0.58
Summer flounder	2.23	2.11	1.75	1.86	1.72	2.01	2.38	2.91	3.12	2.53

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	84	7,723	2,619	4,617
Private Boat	160	15,023	5,300	8,999
Shore	262	21,974	7,622	12,635
Total Durable Equipment Impacts	500	69,098	20,203	29,803
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>1,005</b>	<b>113,817</b>	<b>35,744</b>	<b>56,055</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	40,040
For-Hire	4,580	1,241	Other Equipment	12,601
Private Boat	8,346	7,029	Boat Expenses	11,048
Shore	15,544	4,203	Vehicle Expenses	18,067
<i>Total Trip Expenditures</i>	<i>28,470</i>	<i>12,473</i>	Second Home Expenses	1,317
			<i>Total Durable Equipment Expenditures</i>	<i>83,074</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>124,017</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	112	137	134	147	129	145	177	171	169	111
Non-Coastal	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
Out of State	184	260	214	253	237	241	291	229	297	209
<b>Total Anglers</b>	<b>296</b>	<b>397</b>	<b>348</b>	<b>400</b>	<b>366</b>	<b>386</b>	<b>468</b>	<b>401</b>	<b>465</b>	<b>320</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	40	20	37	60	51	48	52	61	60	55
Private	737	687	595	582	615	772	671	621	783	414
Shore	596	789	880	952	836	790	982	863	778	572
<b>Total Trips</b>	<b>1,373</b>	<b>1,496</b>	<b>1,512</b>	<b>1,595</b>	<b>1,503</b>	<b>1,611</b>	<b>1,704</b>	<b>1,545</b>	<b>1,621</b>	<b>1,042</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic bonito	H	3	2	11	2	6	1	(1)	4	(1)	(1)
	R	1	1	1	4	5	1	(1)	5	1	(1)
Atlantic cod	H	39	6	6	1	3	1	2	1	2	4
	R	20	2	8	5	3	2	2	1	1	7
Black seabass	H	197	123	78	70	53	56	53	54	51	32
	R	401	151	241	205	39	52	259	162	168	119
Bluefish	H	280	365	325	334	307	310	362	327	337	62
	R	497	893	801	932	818	558	655	860	459	188
Porgies (scup)	H	1,235	1,134	603	1,027	908	446	428	452	569	171
	R	876	1,074	933	805	517	666	884	736	1,286	332
Striped bass	H	95	80	78	115	85	113	74	102	56	75
	R	542	377	530	449	670	741	1,356	741	436	358
Summer flounder	H	807	268	191	205	288	188	264	232	207	51
	R	921	392	770	351	297	341	1,044	867	968	348
Winter flounder	H	51	82	30	8	8	1	1	1	1	2
	R	17	17	20	1	3	(1)	(1)	3	1	1
Wrasses (tautog)	H	39	40	62	120	173	106	81	164	99	87
	R	64	74	135	197	153	212	188	205	134	190
Yellowfin tuna	H	5	1	1	2	(1)	1	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	11	(1)	1	(1)	(1)	(1)	(1)

<sup>1</sup>NA = not applicable because all Rhode Island residents are considered coastal county residents<sup>2</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.

## Rhode Island's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	28,534 (0.4%)	415,168 (0.36%)	12,586 (0.32%)	19,646 (0.34%)	33,522 (0.34%)	2.88 <sup>2</sup>
2008	29,759 (0.39%)	433,562 (0.36%)	17,469 (0.34%)	27,005 (0.33%)	47,769 (0.34%)	2.59
% change	4.29%	4.43%	38.8%	37.5%	42.5%	-10.1%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	0	0	0	0	0	6	8	8	7
	Receipts	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2,024	1,662	2,291	1,376
Seafood Sales, retail	Firms	14	17	20	16	14	16	24	23	19
	Receipts	1,860	2,577	2,433	2,227	2,186	2,215	3,266	3,536	2,748

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	6	6	9	7	7	7	7	6	8
	Employees	227	240	184	355	355	270	231	196	270
	Payroll	7,184	7,581	7,284	10,381	10,867	5,549	6,137	6,876	6,354
Seafood sales, wholesale	Establishments	40	41	39	38	35	32	36	35	29
	Employees	411	382	380	394	259	206	188	224	226
	Payroll	13,153	14,250	14,505	15,724	12,269	9,851	10,209	11,447	10,505
Seafood sales, retail	Establishments	26	26	27	29	34	31	28	27	23
	Employees	97	ND <sup>3</sup>	151	162	163	140	ND <sup>3</sup>	109	94
	Payroll	2,596	ND <sup>3</sup>	3,015	2,870	2,707	2,447	ND <sup>3</sup>	2,207	2,027

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	1	1	2	1	1	1	1	1	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea freight transportation	Establishments	2	2	1	1	2	2	2	2	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	3	3	2	3	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	55	54	56	61	60	66	63	68	73
	Employees	504	555	522	405	475	408	457	463	476
	Payroll	14,698	18,967	17,609	14,456	15,111	15,843	18,748	22,029	23,204
Marine cargo handling	Establishments	4	3	3	1	1	1	2	2	5
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Navigational services to shipping	Establishments	8	9	10	8	8	8	7	7	8
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	36	46	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	2,162	2,585	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	5,904
Port & harbor operations	Establishments	1	NA <sup>4</sup>	NA <sup>4</sup>	2	2	2	2	2	2
	Employees	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	28	33	31	37	38	36	38	37	39
	Employees	1,079	ND <sup>3</sup>	1,329	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,325	1,374	1,342
	Payroll	37,259	ND <sup>3</sup>	47,328	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	52,682	55,788	54,225

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available





# Mid-Atlantic

- Delaware
- Maryland
- New Jersey
- New York
- Virginia



### Management Context

The Mid-Atlantic Region includes Delaware, Maryland, New Jersey, New York, and Virginia. Federal fisheries in this region are managed by the Mid-Atlantic Fishery Management Council (MAFMC) and NOAA Fisheries (NMFS) under seven fishery management plans (FMPs). Two of these FMPs are developed in conjunction with the New England Fisheries Management Council (NEFMC). The MAFMC is the lead Council for the Dogfish FMP and the NEFMC is the lead for the Monkfish FMP.

#### Mid-Atlantic Region FMPs

1. Atlantic mackerel squids and butterfish
2. Bluefish
3. Spiny dogfish (with the NEFMC)
4. Summer flounder scup and black sea bass
5. Surfclam and ocean quahog
6. Golden tilefish
7. Monkfish (with the NEFMC)

Of the stocks or stock complexes covered in these fishery management plans, one is currently listed as overfished: butterfish. No stocks in this region are currently subject to overfishing.

### Commercial Fisheries

In 2009, commercial fishermen in the Mid-Atlantic Region landed 696 million pounds of finfish and shellfish, earning \$435 million in landings revenue. Landings revenue was dominated by sea scallop (\$162 million) and blue crab (\$85 million). These species commanded ex-vessel prices of \$6.31 and \$1.10 per pound, respectively, and comprised 57% of total landings revenue, but only 15% of total landings in the Mid-Atlantic Region.

#### Key Mid-Atlantic Region Commercial Species

- |                      |                   |
|----------------------|-------------------|
| • American lobster   | • Quahog clam     |
| • Atlantic surf clam | • Sea scallop     |
| • Blue crab          | • Squid           |
| • Eastern oyster     | • Striped Bass    |
| • Menhaden           | • Summer flounder |

Virginia and New Jersey had the highest landings revenue in the region in 2009, \$153 million and \$149 million, respectively. The next greatest landings revenue came from Maryland with \$76 million in landings revenue. In terms of pounds landed, Virginia had the highest landings (426 million pounds), followed by New Jersey (162 million pounds) and Maryland (68 million pounds).

#### Economic Impacts<sup>1</sup>

In 2009, the Mid-Atlantic Region's seafood industry generated 407 in employment impacts in Delaware, 15,000 in employment impacts in Maryland, 38,000 in employment impacts in New Jersey, 44,000 in employment impacts in New York, and 19,000

in employment impacts in Virginia. New Jersey generated the largest impacts across the three other impact categories, generating \$5.8 billion sales impacts, \$1.3 billion in income, and \$2.1 billion in value added impacts. The smallest income impacts were generated in Delaware (\$11 million) and the smallest employment impacts were also generated in Delaware (407 jobs).

The sector that generated the greatest employment impacts by state was the retail sector with 22,000 jobs in New York and 13,000 jobs in New Jersey. The harvest sector in Maryland generated 2,800 jobs. More sales impacts were generated by importers in New York than any other sector in any another state in the region at \$4.1 billion and the greatest value added impacts were also generated by importers in New York (\$1.2 billion).

#### Landings Revenue

Landings revenue in the Mid-Atlantic Region totaled \$435 million in 2009. This was a 25% increase (a 7.1% increase in real terms) from 2000 levels (\$347 million) and a 5% decrease (a 4.6% decrease in real terms) relative to 2008 (\$458 million). Totaling \$339 million in 2009, shellfish revenue experienced a 36% increase (a 17% increase in real terms) from 2000 to 2009 and experienced a 7.3% decrease (7% decrease in real terms) from 2008 to 2009.

In terms of finfish, Virginia contributed the most (\$42 million), followed by New Jersey (\$23 million), and New York (\$17 million). Shellfish landings revenue was dominated by New Jersey (\$126 million), followed by Virginia (\$111 million), and Maryland (\$64 million).

Sea scallop and blue crab had the highest landings revenue in the Mid-Atlantic Region in 2009. Between 2000 and 2009, the landings revenue from sea scallop increased 145% (a 109% increase in real terms) and the landings revenue for blue crab 28% increase (a 9.5% increase in real terms).

From 2000 to 2009, species or species groups with large changes in landings revenue include American lobster (decreased 67%), squid (decreased 46%), and summer flounder (increased 32%). Species or species groups with large changes in landings revenue between 2008 and 2009 include Atlantic surf clam (increasing 366%), American lobster (decreasing 43%), and squid (decreasing 40%).

#### Landings

Fishermen in the Mid-Atlantic Region landed 696 million pounds of finfish and shellfish in 2009. This was a 2.8% decrease from the 715 million pounds landed in 2000 but a 1.9% increase from the 682 million pounds landed in 2008. Finfish landings contributed 71% of total landings in the Mid-Atlantic Region (491 million pounds) in 2009. From 2008 to 2009, finfish landings experienced a 1.9% increase. Over the same time period, shellfish landings experienced a 2% increase from 201 million pounds in 2008 to 205 million pounds in 2009 and a 0.6% increase from 203 million pounds in 2000.

<sup>1</sup>The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: [www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))

### Commercial Fisheries Facts

#### Landings revenue

- On average, between 2000 and 2009, the key species or species groups accounted for 82% of total revenue, generating \$322 million in the Mid-Atlantic Region.
- Sea scallop had higher landings revenues than any other species or species group, averaging \$128 million in landings revenue from 2000 to 2009.
- Atlantic surf clam had the largest annual increase in landings revenue over the 10 year time period, increasing 366% from \$5.7 million in 2008 to \$26 million in 2009.
- Atlantic surf clam had the largest annual decrease in landings revenue over the 10 year time period, decreasing 83% from \$32 million in 2007 to \$5.7 million in 2008.

#### Landings

- Key species or species groups contributed an average of 82% annually to total landings between 2000 and 2009.
- Menhaden, contributed the most to landings in the region, averaging 418 million pounds from 2000 to 2009.
- Atlantic surf clam had the largest annual increase in landings over the 10 year time period, increasing 376% from 8.8 million in 2008 pounds to 42 million pounds in 2009.
- Atlantic surf clam had the largest annual decrease in landings over the 10 year time period, decreasing 84% from 54 million pounds in 2007 to 8.8 million pounds in 2008.

#### Prices

- Eastern oyster had the highest average annual ex-vessel price per pound (\$6.32) over the time period, followed by quahog clam (\$6.20), and sea scallop (\$5.41).
- Menhaden had the lowest average annual ex-vessel price per pound (\$0.06) over the time period, followed by Atlantic surf clam (\$0.57), and squid (\$0.63).
- Squid had the largest annual increase in ex-vessel price over the 10 year time period, increasing 126% from \$0.38 per pound in 2008 to \$0.86 in 2009.
- Squid had the largest decrease in ex-vessel price over the 10 year time period, decreasing 56% from \$0.86 per pound in 2007 to \$0.38 in 2008.

Menhaden and blue crab had the highest annual landings in the Mid-Atlantic Region in 2009, with 396 million pounds and 77 million pounds, respectively. Together they accounted for 68% of the total landings in 2009. Menhaden landings decreased 2% and blue crab landings increased 24% from 2000 to 2009.

From 2000 to 2009, species or species groups with large changes in landings include sea scallop (increasing 80%), squid (decreasing 71%), and American lobster (decreasing 66%). Species or species groups with large changes in landings between 2008 and 2009 include Atlantic surf clam (increasing 376%), squid (decreasing 73%), and quahog clam (decreasing 38%).

### Prices

The ex-vessel prices for the Mid-Atlantic Region's key species and species groups in 2009 were higher than their 10 year average for eight of the key species (four of the species in real terms). Ex-vessel prices for Eastern oyster and squid experienced the biggest increases between 2000 and 2009, increasing 154% (118% in real terms) and 83% (57% in real terms), respectively. Relative to the ex-vessel prices in 2008, the Mid-Atlantic Region's squid experienced the greatest increase (126%, 127% in real terms) from \$0.38 in 2008 to \$0.86 in 2009. Of the changes in ex-vessel price experienced by species or species groups between 2008 and 2009, American lobster experienced the greatest decrease (17.3%, 17% in real terms) from \$4.73 to \$3.91. Relative to ex-vessel prices in 2008, four species or species groups experienced increases, including squid (126%), and menhaden (17%).

In Delaware, the species or species group with the largest change in ex-vessel price from 2000 to 2009 was weakfish (94% increase, 66% increase in real terms) from \$0.97 to \$1.88. The largest change in ex-vessel price experienced in Maryland was for Eastern oyster (154% increase, 117% increase in real terms) from \$3.04 to \$7.73 and in New Jersey the largest change in ex-vessel price was experienced by blue crab (33% decrease, 43% decrease in real terms) from \$1.08 to \$0.72).

### Recreational Fishing

In 2009, over 2.6 million recreational anglers took 17 million fishing trips in the Mid-Atlantic Region. Over 93% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 57% of them were taken from a private or rental boat and another 36% were shore-based. Summer flounder were the most frequently caught species or species group with 24 million fish caught in 2009, and represented 33% of total fish caught in the region. Of the summer flounder caught, 93% of them were released rather than harvested.

#### Economic Impacts and Expenditures<sup>1</sup>

The contribution of recreational fishing activities in Mid-Atlantic 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 New Jersey were the highest in the region with over 8,500 full- and part-time jobs generated by recreational fishing activities in the state. Maryland (5,700 jobs), and Virginia (5,200 jobs), followed in terms of 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) and expenditures on durable equipment. Throughout the Mid-Atlantic Region, most of the employment impacts in 2009 were generated by expenditures on durable equipment: 67% in New York, 66% in New Jersey, and 64% in Maryland. In addition to employment impacts, the contribution of recreational fishing activities to Mid-Atlantic Region's economy can be measured in terms of

<sup>1</sup>Expenditures 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](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf))

sales impacts and the contribution of these activities to gross domestic product (value added impacts). In 2009, sales impacts were the highest in New Jersey (\$1.4 billion in sales impacts), followed by Maryland (\$770 million), New York (\$680 million), Virginia (\$580 million), and Delaware (\$193 million). In the same year, value added impacts were the highest in New Jersey (\$728 million in value added impacts), followed by Maryland (\$392 million), New York (\$358 million), Virginia (\$306 million), and Delaware (\$89 million).

Overall, total fishing trip and durable equipment expenditures across the Mid-Atlantic Region in 2009 were \$3.5 billion. Approximately 77% of these expenditures were generated by durable equipment purchases. The greatest expenditures were for vehicle expenses (\$995 million), followed by fishing tackle (\$767 million), boat expenses (\$523 million), other equipment (\$214 million), and second home expenses (\$193 million). Fishing trip-related expenditures by the Mid-Atlantic Region's non-residents totaled over \$302 million of which the greatest portion can be attributed to private boat-based fishing trips (\$134 million). Residents of the Mid-Atlantic Region spent \$506 million on saltwater fishing trips, with the most of these expenses generated by private boat trips (\$310 million).

#### Key Mid-Atlantic Region Recreational Species

- Black seabass
- Bluefish
- Atlantic croaker
- Spot
- Scup
- Striped bass
- Summer flounder
- Weakfish drum
- Winter flounder
- Tautog

#### Participation

There were 2.6 million recreational anglers who fished in the Mid-Atlantic Region in 2009. This was a 25% increase from 2000 (2.1 million anglers). These anglers were Mid-Atlantic Region residents from either a coastal county (2.4 million anglers) or non-coastal county (187,000 anglers). Almost 93% of total anglers in 2009 were residents of a coastal county. Coastal county angler participation in 2009 increased 25% relative to 2000 (1.9 million anglers) and decreased 14% between 2008 and 2009. Non-coastal county angler participation increased 26% relative to 2000 (148,000 anglers) and decreased 5% relative to 2008 (197,000 anglers).

#### Fishing Trips

Recreational fishermen took 17 million fishing trips in the Mid-Atlantic Region in 2009. This was a 12% decrease from the 2000 (19 million trips) and was 3.5 million fewer trips than taken in 2008. Of the total trips taken in the Mid-Atlantic Region in 2009, approximately 57% of the trips were private or rental boat-based (9.8 million trips). The other most popular mode of fishing was shore based with 6.2 million trips in 2009.

#### Recreational Fishing Facts

##### Participation

- An average of 2.7 million anglers fished in Mid-Atlantic Region annually from 2000 to 2009.
- In 2009, coastal county residents made up 93% of total anglers in this region. These anglers averaged 93% 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 2002 and 2003, increasing 36%, from 1.6 million anglers to 2.2 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2001 and 2002, decreasing 28%, from 2.3 million anglers to 1.6 million anglers.

##### Fishing trips

- In the Mid-Atlantic Region, an average of 20 million fishing trips were taken annually from 2000 to 2009.
- Private or rental boat and shore-based fishing trips accounted for 9.8 million and 6.2 million fishing trips, respectively, in 2009. Together these made up 94% 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 2002 and 2003, increasing 19%, from 17 million trips to 20 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2001 and 2002, decreasing 22%, from 21 million trips to 17 million trips.

##### Harvest and release

- Summer flounder was the most commonly caught key species or species group, averaging 21 million fish over the 10 year time period. Of these, 84% were released rather than harvested.
- Of the ten commonly caught key species or species groups, eight were released more often than harvested over this time period. The species or species group that was most commonly released was summer flounder (84% released).
- Spot (67% harvested), followed by winter flounder (63% harvested), and Atlantic croaker (48% 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 winter flounder, which increased 240% between 2008 and 2009; the largest annual change in number of fish harvested occurred in scup, which increased 344% from 2002 to 2003.

#### Harvest and Release

Of the Mid-Atlantic Region's key species and species groups, summer flounder (24 million fish), Atlantic croaker (15 million fish), black seabass (7.8 million fish) and spot (7.7 million fish) were the most often caught by anglers in 2009. Summer flounder (93% released), black seabass (84% released), weakfish drum (82% released), tautog (74% released), striped bass (71% released), bluefish (63% released), scup (61% released), winter flounder (56% released), and Atlantic croaker (55% released) were more often released rather than harvested. The only species

harvested more often than released was spot (71% harvested).

Releases of winter flounder increased 240% between 2008 and 2009. This increase was partially driven by an addendum to Amendment 1 to the Interstate Fishery Management Plan for Inshore Stocks of Winter Flounder in 2009, which reduced the harvest limit from ten fish to two fish per day. The effect of the management action was compounded by a 111% increase in catch overall.

At the state level, summer flounder was the most often caught key species or species group in the Mid-Atlantic Region with 24 million fish caught, region-wide. Most of these fish were caught in New Jersey, New York, and Delaware with 12 million, 6.1 million, and 1.1 million fish, respectively. The most frequently caught fish in Maryland was spot with 3 million fish and Atlantic croaker was the most commonly caught fish in Virginia (12 million) in 2009.

Between 2000 and 2009, seven of the Mid-Atlantic Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were weakfish drum (97%), winter flounder (88%), and black seabass (50%).

### Marine Economy

The sum of the gross domestic products by state for Delaware, Maryland, New Jersey, New York, and Virginia was \$2.3 trillion in 2009. Employee compensation totaled \$1.4 trillion and annual payroll totaled \$882 billion. These economic measures increased 40% (a 20% increase in real terms) and 34% (a 14% increase in real terms), respectively between 2000 and 2008; and experienced a 2.4% increase (a 7.5% decrease in real terms), and 1.7% increase (a 8.2% decrease in real terms), respectively between 2007 and 2008. Approximately 1.1 million establishments employed 17 million full- and part-time employees across the region in 2008. This was a 6.2% increase in establishment numbers and a 5.1% increase in employee numbers from 2000 to 2008.

In 2008, the commercial fishing location quotient (CFLQ) for New Jersey was the highest in the region at 1.11. This was an 5.1% decrease from 2001 and a 23% increase from 2007. New Jersey's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 1.1 times higher than the level of employment in these industries nationwide. The CFLQ 2008 in Virginia was 0.54 (a 42% increase from 2001).

#### *Seafood Sales and Processing*

In 2008, there were 228 nonemployer firms, businesses that have no paid employees and are subject to federal income tax, engaged in seafood product preparation and packaging across the Mid-Atlantic Region. This was a 119% increase from 2001 levels. In 2008, 32% of these firms were located in New York. Region-wide, annual receipts totaled \$14 million in

2008 and increased 11% from 2005 to 2009. Annual receipt totals experienced a 150% increase in Maryland between 2000 and 2008 from \$1.3 million to \$3.3 million. In contrast to an increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 26% from 108 in 2001 to 80 in 2008. Approximately 28% of these establishments were located in Maryland. The number of employees was not available for the seafood product preparation and packaging sector in the Mid-Atlantic Region.

here were 447 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 27% across the Mid-Atlantic Region.

Nonemployer firms engaged in seafood retail in the Mid-Atlantic Region totaled 512 in 2008, a 2.2% increase relative to 2000. Of these firms, 16% were located in Maryland. At the state level, these firms showed a 2.1% decrease in New Jersey and increased 18% in Virginia between 2000 and 2008. Annual receipts in the region totaled \$53 million in 2008.

Employer establishments engaged in seafood retail increased 16% from 2000 to 2008, totaling 666 in 2008. These establishments employed 3,047 workers in 2007. In the Mid-Atlantic Region, annual payroll for seafood retail increased 39% from \$42 million in 2001 to \$58 million in 2008.

#### *Transport, Support, and Marine Operations*

For industries where data were available, marinas employed more people than any other industry in this sector, employing approximately 5,600 people in 2008. This industry also had the highest annual payroll in the region totaling \$213 million. Marinas had the highest number of establishments (947), followed by the ship and boat building industries with 186 establishments and the navigational services to shipping industries with 93 establishments.

In Maryland, industries with large changes in establishment numbers, employees, or annual payroll from 2007 to 2008 were: deep sea passenger transportation (200% increase in establishments), port and harbor operations (62% decrease in establishments), marine cargo handling (43% decrease in payroll) and navigational services to shipping (41% decrease in employees). In New Jersey, large changes were seen for deep sea freight transportation (97% increase in employees), deep sea freight transportation (72% increase in payroll), port and harbor operations (47% decrease in employees) and navigational services to shipping (32% decrease in payroll). In New York, large changes were seen in the deep sea freight transportation (66% increase in payroll), navigational services to shipping (43% decrease in payroll), port and harbor operations (40% decrease in establishments) and navigational services to shipping (33% decrease in employees).

**2009 Economic Impacts of the Mid-Atlantic Region Seafood Industry (thousands of dollars)**

	Landings Revenue	Jobs	Sales	Income	Value Added
Delaware	7,536	407	57,286	11,408	19,011
Maryland	76,057	14,778	1,654,072	408,338	634,712
New Jersey	149,032	37,887	5,831,812	1,306,417	2,120,274
New York	49,271	44,172	5,317,630	1,138,576	1,882,974
Virginia	152,730	19,064	1,736,517	482,440	722,111

**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	347,357	348,231	342,397	357,210	407,276	440,084	362,198	416,866	457,517	434,763
Finfish & other	98,479	90,643	84,091	87,702	87,648	101,538	95,508	103,724	91,340	95,408
Shellfish	248,878	257,589	258,306	269,508	319,628	338,547	266,689	313,141	366,176	339,355
American lobster	15,250	9,828	6,273	5,569	5,656	6,696	9,116	7,695	8,876	5,028
Atlantic surf clam	34,973	34,211	34,692	35,366	26,760	27,084	29,580	32,479	5,670	26,426
Blue crab	66,278	70,871	61,660	60,799	69,364	71,073	55,638	69,122	82,861	84,826
Eastern oyster	9,949	8,587	9,814	8,903	5,663	6,703	6,485	10,301	11,064	8,974
Menhaden	30,041	27,783	24,123	24,352	25,570	28,188	24,466	29,918	22,229	27,590
Quahog clam	27,655	22,744	16,935	20,160	19,918	20,773	20,229	21,176	37,443	24,685
Sea scallop	66,135	75,275	91,237	111,969	160,665	181,327	120,142	147,052	165,919	161,775
Squid	13,189	9,904	9,287	6,497	14,278	9,163	7,729	7,446	11,865	7,161
Striped Bass	9,238	8,616	8,215	9,751	7,633	11,335	9,947	10,851	10,305	10,499
Summer flounder	7,769	7,078	8,700	10,678	13,244	13,615	12,364	10,319	9,825	10,281

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total landings	715,376	835,425	702,234	710,738	757,107	708,741	667,307	741,428	682,448	695,636
Finfish & other	511,997	631,288	496,430	514,804	529,453	517,898	488,011	556,640	481,817	490,952
Shellfish	203,379	204,137	205,804	195,934	227,654	190,843	179,296	184,788	200,631	204,684
American lobster	3,775	2,633	1,705	1,181	1,394	1,585	1,772	1,397	1,877	1,286
Atlantic surf clam	63,614	60,421	62,134	64,601	50,984	50,921	50,556	53,952	8,753	41,692
Blue crab	62,360	61,045	63,076	56,047	68,979	70,983	61,873	59,164	63,133	77,404
Eastern oyster	2,883	2,217	1,713	1,493	859	1,202	984	1,194	1,384	1,023
Menhaden	403,599	518,487	394,606	398,744	421,309	412,672	400,784	471,641	363,233	395,643
Quahog clam	4,560	3,857	2,318	3,311	3,537	3,735	3,728	4,085	5,185	3,239
Sea scallop	14,258	21,160	24,887	28,213	33,381	24,526	18,279	22,918	24,507	25,639
Squid	28,238	15,465	15,187	10,462	41,586	12,260	9,746	8,608	31,263	8,314
Striped Bass	5,602	4,930	4,591	5,273	3,927	5,706	4,746	5,396	5,512	5,860
Summer flounder	4,879	5,164	6,433	7,315	8,400	8,360	6,609	4,502	4,336	5,258

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	4.04	3.73	3.68	4.71	4.06	4.22	5.15	5.51	4.73	3.91
Atlantic surf clam	0.55	0.57	0.56	0.55	0.52	0.53	0.59	0.60	0.65	0.63
Blue crab	1.06	1.16	0.98	1.08	1.01	1.00	0.90	1.17	1.31	1.10
Eastern oyster	3.45	3.87	5.73	5.96	6.59	5.58	6.59	8.63	7.99	8.78
Menhaden	0.07	0.05	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.07
Quahog clam	6.06	5.90	7.31	6.09	5.63	5.56	5.43	5.18	7.22	7.62
Sea scallop	4.64	3.56	3.67	3.97	4.81	7.39	6.57	6.42	6.77	6.31
Squid	0.47	0.64	0.61	0.62	0.34	0.75	0.79	0.86	0.38	0.86
Striped Bass	1.65	1.75	1.79	1.85	1.94	1.99	2.10	2.01	1.87	1.79
Summer flounder	1.59	1.37	1.35	1.46	1.58	1.63	1.87	2.29	2.27	1.96

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Trips	Jobs	Sales	Value Added	Income
Delaware	919,745	1,270	193,334	57,868	88,837
Maryland	2,810,856	5,714	769,979	256,712	391,707
New Jersey	5,444,283	8,513	1,412,488	460,214	727,751
New York	4,916,892	4,568	680,460	231,727	358,112
Virginia	2,984,055	5,167	579,911	195,045	306,436

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	766,528
For-Hire	52,609	66,863	Other Equipment	214,316
Private Boat	134,319	309,688	Boat Expenses	522,711
Shore	115,268	129,524	Vehicle Expenses	995,246
<i>Total Trip Expenditures</i>	302,199	506,075	Second Home Expenses	193,030
			<i>Total Durable Equipment Expenditures</i>	2,691,832
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>3,500,106</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	1,944	2,290	1,643	2,229	2,363	3,002	2,876	3,234	2,823	2,437
Non-Coastal	148	190	139	144	157	252	224	212	197	187
Out-of-State	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
<b>Total Anglers</b>	<b>2,091</b>	<b>2,480</b>	<b>1,783</b>	<b>2,372</b>	<b>2,520</b>	<b>3,254</b>	<b>3,100</b>	<b>3,446</b>	<b>3,020</b>	<b>2,623</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	1,134	1,323	1,024	1,182	1,323	1,152	1,339	1,399	940	1,100
Private Boat	11,324	11,982	9,551	11,286	11,084	11,730	12,123	12,551	11,710	9,759
Shore	6,993	7,901	6,071	7,383	6,327	7,935	7,895	8,768	7,949	6,217
<b>Total Trips</b>	<b>19,451</b>	<b>21,206</b>	<b>16,646</b>	<b>19,852</b>	<b>18,734</b>	<b>20,817</b>	<b>21,357</b>	<b>22,718</b>	<b>20,599</b>	<b>17,076</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black seabass	H	3,330	2,636	3,057	3,033	1,590	1,060	1,317	1,515	817	1,246
	R	12,381	10,519	10,328	8,381	5,668	5,405	5,966	7,534	8,981	6,570
Bluefish	H	2,580	3,227	2,518	3,193	4,274	5,176	4,037	4,556	3,837	2,449
	R	6,311	6,519	4,579	4,196	5,793	7,121	5,513	7,736	7,187	4,252
Drum (Atlantic croaker)	H	9,702	12,145	10,868	9,349	9,830	10,790	9,464	9,602	8,039	6,752
	R	14,162	9,811	10,361	9,425	7,928	11,136	8,059	12,331	11,522	8,302
Drum (spot)	H	2,763	2,196	2,314	4,772	3,725	5,245	6,347	10,694	7,724	5,468
	R	1,788	1,562	1,016	1,657	1,591	4,163	2,587	3,933	4,879	2,258
Porgies (scup)	H	3,309	2,058	1,187	5,271	1,713	821	1,528	1,715	1,753	1,595
	R	1,491	1,983	1,551	2,379	2,857	1,839	3,145	2,296	3,861	2,480
Striped bass	H	1,554	1,475	1,252	1,662	1,574	1,503	1,994	1,512	1,432	1,364
	R	6,677	5,464	5,053	7,802	8,474	8,009	9,511	7,114	4,838	3,367
Summer flounder	H	5,869	4,393	2,633	3,922	3,598	3,303	3,393	2,792	1,768	1,691
	R	15,773	21,881	11,852	14,902	15,235	21,311	15,419	18,489	20,260	22,294
Weakfish drum	H	1,876	1,315	918	308	331	1,125	497	276	336	37
	R	4,284	2,732	1,689	1,363	1,387	1,906	1,877	1,079	1,687	170
Winter flounder	H	1,317	795	362	541	331	196	248	209	75	107
	R	678	475	266	183	85	264	288	57	40	137
Wrasses (tautog)	H	710	617	1,231	384	832	376	721	808	630	698
	R	1,493	1,694	2,534	1,010	1,648	1,221	2,239	2,472	2,057	2,015

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

**2009 Economic Impacts of the Delaware Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	407	57,286	11,408	19,011
Commercial Harvesters	158	13,807	3,285	4,449
Seafood Processors & Dealers	32	5,671	998	1,918
Importers	63	17,303	2,773	5,275
Seafood Wholesalers & Distributors	30	4,086	1,553	1,852
Retail	125	16,420	2,798	5,518

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	6,833	7,660	6,067	5,204	5,419	6,113	5,677	7,266	6,390	7,536
Finfish & other	1,379	1,080	986	1,465	1,258	1,273	1,315	642	635	1,061
Shellfish	5,454	6,580	5,081	3,739	4,161	4,840	4,361	6,624	5,755	6,475
American eel	192	126	118	230	169	100	275	133	190	134
Black sea bass	142	42	21	181	181	157	190	185	141	144
Blue crab	5,086	5,140	3,511	1,899	2,839	3,429	2,961	5,329	4,605	5,435
Eastern oyster	ND <sup>1</sup>	172	478	305	361	485	459	490	410	334
Quahog clam	243	233	392	435	175	220	193	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Sea scallop	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	12	102	121	ND <sup>3</sup>	256	173
Spot	17	51	8	46	38	98	53	43	0	54
Striped bass	245	365	336	479	497	494	501	137	52	356
Weakfish	318	133	176	83	61	82	55	22	11	6
Whelks	113	1,015	694	1,079	690	562	601	ND <sup>3</sup>	312	ND <sup>3</sup>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	6,741	7,140	5,857	5,018	4,288	4,851	4,369	4,881	4,371	5,010
Finfish & other	2,497	2,078	1,933	2,264	1,349	1,470	1,144	640	527	1,154
Shellfish	4,244	5,062	3,925	2,754	2,938	3,381	3,224	4,240	3,844	3,856
American eel	119	121	90	156	142	110	120	59	80	60
Black sea bass	94	25	12	98	84	73	87	63	51	50
Blue crab	4,092	4,085	3,062	1,792	2,276	2,924	2,856	3,799	3,508	3,414
Eastern oyster	ND <sup>3</sup>	78	133	76	79	84	75	80	67	67
Quahog clam	76	64	134	141	54	69	60	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Sea scallop	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2	13	20	ND <sup>3</sup>	38	25
Spot	32	78	14	77	59	155	57	67	0	71
Striped bass	145	199	146	191	176	174	182	49	22	193
Weakfish	329	188	173	91	51	71	33	13	5	3
Whelks	65	828	590	729	491	276	203	ND <sup>3</sup>	203	ND <sup>3</sup>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American eel	1.61	1.04	1.31	1.48	1.19	0.91	2.28	2.24	2.38	2.24
Black sea bass	1.52	1.66	1.69	1.86	2.17	2.15	2.18	2.92	2.76	2.87
Blue crab	1.24	1.26	1.15	1.06	1.25	1.17	1.04	1.40	1.31	1.59
Eastern oyster	ND <sup>3</sup>	2.21	3.60	4.00	4.57	5.76	6.10	6.14	6.09	4.97
Quahog clam	3.21	3.67	2.92	3.09	3.26	3.18	3.22	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Sea scallop	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	5.18	8.08	6.19	ND <sup>3</sup>	6.81	6.80
Spot	0.52	0.66	0.59	0.60	0.65	0.63	0.92	0.65	0.70	0.76
Striped bass	1.69	1.84	2.30	2.50	2.82	2.84	2.75	2.82	2.39	1.84
Weakfish	0.97	0.71	1.02	0.91	1.18	1.16	1.64	1.68	1.96	1.88
Whelks	1.73	1.23	1.18	1.48	1.41	2.04	2.96	ND <sup>3</sup>	1.54	ND <sup>3</sup>

<sup>1</sup>ND = these data are confidential thus not disclosable



**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	71	6,792	2,210	3,883
Private Boat	258	30,396	8,777	15,153
Shore	304	29,155	9,185	15,484
Total Durable Equipment Impacts	638	126,991	37,695	54,317
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>1,270</b>	<b>193,334</b>	<b>57,868</b>	<b>88,837</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	34,635
For-Hire	3,753	1,164	Other Equipment	10,858
Private Boat	16,042	10,890	Boat Expenses	9,961
Shore	19,310	6,486	Vehicle Expenses	91,169
<i>Total Trip Expenditures</i>	<i>39,106</i>	<i>18,540</i>	Second Home Expenses	7,411
			<i>Total Durable Equipment Expenditures</i>	<i>154,034</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>211,680</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	82	107	89	127	116	120	137	150	134	114
Non-Coastal	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
Out of State	201	226	177	199	243	191	205	224	182	173
<b>Total Anglers</b>	<b>283</b>	<b>333</b>	<b>266</b>	<b>326</b>	<b>359</b>	<b>311</b>	<b>342</b>	<b>374</b>	<b>315</b>	<b>287</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	42	71	63	38	65	48	42	53	46	43
Private	606	672	535	552	679	568	671	731	553	498
Shore	448	436	429	514	434	459	465	512	468	379
<b>Total Trips</b>	<b>1,096</b>	<b>1,180</b>	<b>1,028</b>	<b>1,104</b>	<b>1,177</b>	<b>1,074</b>	<b>1,179</b>	<b>1,296</b>	<b>1,067</b>	<b>920</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic mackerel	H	1	23	6	(1)	7	(1)	(1)	(1)	(1)	(1)
	R	(1)	1	1	(1)	(1)	(1)	(1)	(1)	(1)	2
Black seabass	H	151	203	607	307	106	62	128	76	25	50
	R	820	1,003	1,233	832	448	250	460	544	477	330
Bluefish	H	132	102	117	89	136	152	96	172	82	122
	R	303	221	435	120	322	217	322	479	246	207
Drum (Atlantic croaker)	H	518	312	262	341	494	934	863	401	349	427
	R	695	285	361	655	483	761	1,034	618	609	516
Drum (weakfish) <sup>3</sup>	H	312	72	122	20	7	19	11	4	4	5
	R	465	227	101	39	79	111	121	19	61	5
Striped bass	H	40	41	29	30	25	20	19	10	17	22
	R	152	163	115	169	151	225	246	251	261	153
Summer flounder	H	336	146	107	106	124	91	110	118	33	92
	R	797	1,051	498	415	850	841	534	1,096	722	978
White perch	H	48	44	40	30	63	43	65	27	55	52
	R	140	117	72	134	187	116	147	143	162	81
Wrasses (tautog)	H	114	51	186	63	143	72	117	89	122	117
	R	324	209	412	167	263	251	216	267	206	180
Yellowfin tuna	H	6	16	10	2	1	3	2	(1)	1	(1)
	R	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

<sup>1</sup>NA = not applicable because all Delaware residents are considered coastal county residents<sup>2</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.<sup>3</sup>This species may not be equivalent to species with similar names listed in the commercial tables.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	23,771 (0.34%)	377,277 (0.33%)	14,320 (0.37%)	18,784 (0.41%)	40,957 (0.32%)	ND <sup>2</sup>
2008	25,174 (0.33%)	389,510 (0.32%)	17,566 (0.34%)	25,937 (0.42%)	60,534 (0.32%)	0.14
% change	5.9%	3.24%	22.7%	38.1%	47.8%	--

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	NA <sup>3</sup>	0	0	0	0	3	3	0	3
	Receipts	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	64	214	ND <sup>3</sup>	27
Seafood Sales, retail	Firms	0	5	5	7	9	12	9	12	9
	Receipts	ND <sup>3</sup>	214	435	959	803	1,523	835	1,025	418

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	1	1	1	1	1	1	1	1	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Seafood sales, wholesale	Establishments	4	5	7	5	2	3	3	3	6
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	65	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	9	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	2,279	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	337	ND <sup>3</sup>	ND <sup>3</sup>
Seafood sales, retail	Establishments	13	12	15	18	16	14	17	19	18
	Employees	ND <sup>3</sup>	65	94	ND <sup>3</sup>	144	138	135	105	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	1,243	1,779	ND <sup>3</sup>	3,363	3,264	3,133	2,997	1,498

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	1	4	8	5	3	3	3	3	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea freight transportation	Establishments	3	3	2	2	1	1	NA <sup>4</sup>	NA <sup>4</sup>	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	1	1	1	NA <sup>4</sup>	NA <sup>4</sup>	1	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>
Marinas	Establishments	14	12	13	17	17	16	18	17	19
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	88	65
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2,540	1,738
Marine cargo handling	Establishments	6	5	6	5	5	4	4	3	3
	Employees	272	257	199	513	ND <sup>3</sup>	ND <sup>3</sup>	597	527	629
	Payroll	4,570	4,482	14,718	14,879	ND <sup>3</sup>	ND <sup>3</sup>	18,812	19,027	19,204
Navigational services to shipping	Establishments	8	10	10	10	9	9	8	8	9
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	75	76	79
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	4,783	4,961	5,360
Port & harbor operations	Establishments	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1	2	2	3	2	2
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	4	3	1	1	1	1	1	1	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>ND = these data are confidential thus not disclosable<sup>3</sup>NA = these data are not available<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the Maryland Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	14,778	1,654,072	408,338	634,712
Commercial Harvesters	2,789	134,094	38,458	59,861
Seafood Processors & Dealers	1,744	154,404	60,170	76,834
Importers	3,649	1,003,664	160,856	305,961
Seafood Wholesalers & Distributors	785	104,164	35,408	47,015
Retail	5,812	257,746	113,446	145,042

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	53,874	55,591	49,013	49,038	49,200	63,754	53,579	65,609	73,434	76,057
Finfish & other	10,010	8,574	8,135	8,095	4,670	10,766	9,896	12,410	11,300	11,957
Shellfish	43,864	47,017	40,878	40,943	44,530	52,988	43,684	53,199	62,134	64,100
Atlantic croaker	569	676	512	576	751	543	440	389	498	444
Black sea bass	475	244	436	555	573	724	811	ND <sup>1</sup>	ND <sup>3</sup>	421
Blue crab	30,843	34,681	30,338	34,532	39,104	39,962	31,141	41,700	50,115	52,020
Clams or bivalves	5,094	8,073	8,002	5,170	4,654	4,784	4,889	5,074	5,436	4,403
Eastern oyster	7,192	3,789	2,172	706	181	3,435	1,238	3,146	2,277	3,849
Menhaden	523	382	423	337	232	1,514	609	1,379	921	909
Sea scallop	108	108	96	ND <sup>3</sup>	417	4,549	6,200	2,809	3,758	3,160
Striped bass	4,216	3,418	3,759	3,916	1,549	4,259	4,591	5,333	5,232	5,181
Summer flounder	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	527	444	677	549	ND <sup>3</sup>	703	876
White perch	941	801	559	556	347	848	568	619	776	943

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	48,913	55,539	53,185	49,350	49,509	67,489	51,226	61,813	63,692	68,313
Finfish & other	16,164	16,089	15,275	13,468	8,055	25,000	12,719	21,785	18,773	20,420
Shellfish	32,749	39,450	37,909	35,882	41,454	42,489	38,507	40,028	44,919	47,893
Atlantic croaker	1,502	2,233	1,513	1,532	1,801	1,389	877	655	872	597
Black sea bass	305	150	280	313	284	337	350	ND <sup>3</sup>	ND <sup>3</sup>	119
Blue crab	22,847	25,933	26,481	27,816	33,826	34,914	29,446	30,784	34,872	40,284
Clams or bivalves	7,111	11,911	10,663	7,527	7,270	6,112	7,756	7,947	8,600	6,292
Eastern oyster	2,368	1,274	567	159	43	738	274	317	249	498
Menhaden	4,871	4,619	4,850	4,232	3,336	15,806	5,263	13,752	9,660	9,562
Sea scallop	21	28	27	ND <sup>3</sup>	94	591	931	450	569	521
Striped bass	2,705	2,049	2,085	2,193	885	2,349	2,485	2,640	2,655	2,813
Summer flounder	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	329	262	338	248	ND <sup>3</sup>	282	329
White perch	1,921	1,947	1,583	1,477	453	1,524	688	973	858	1,301

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic croaker	0.38	0.30	0.34	0.38	0.42	0.39	0.50	0.59	0.57	0.74
Black sea bass	1.56	1.62	1.56	1.77	2.02	2.15	2.31	ND <sup>3</sup>	ND <sup>3</sup>	3.54
Blue crab	1.35	1.34	1.15	1.24	1.16	1.14	1.06	1.35	1.44	1.29
Clams or bivalves	0.72	0.68	0.75	0.69	0.64	0.78	0.63	0.64	0.63	0.70
Eastern oyster	3.04	2.97	3.83	4.45	4.23	4.66	4.52	9.92	9.13	7.73
Menhaden	0.11	0.08	0.09	0.08	0.07	0.10	0.12	0.10	0.10	0.10
Sea scallop	5.10	3.81	3.52	ND <sup>3</sup>	4.44	7.70	6.66	6.25	6.60	6.06
Striped bass	1.56	1.67	1.80	1.79	1.75	1.81	1.85	2.02	1.97	1.84
Summer flounder	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1.60	1.69	2.01	2.22	ND <sup>3</sup>	2.49	2.66
White perch	0.49	0.41	0.35	0.38	0.77	0.56	0.83	0.64	0.90	0.72

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	431	37,442	12,713	22,010
Private Boat	564	60,713	21,206	37,018
Shore	1,039	96,225	33,564	56,757
Total Durable Equipment Impacts	3,680	575,600	189,229	275,922
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>5,714</b>	<b>769,979</b>	<b>256,712</b>	<b>391,707</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	156,664
For-Hire	11,238	14,019	Other Equipment	37,579
Private Boat	15,865	42,545	Boat Expenses	74,412
Shore	57,639	22,524	Vehicle Expenses	296,513
<i>Total Trip Expenditures</i>	<i>84,743</i>	<i>79,088</i>	Second Home Expenses	63,193
			<i>Total Durable Equipment Expenditures</i>	<i>628,361</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>792,192</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	461	565	430	526	442	620	733	850	643	514
Non-Coastal	51	50	41	53	39	49	84	78	50	43
Out of State	481	426	330	418	333	425	447	528	507	327
<b>Total Anglers</b>	<b>994</b>	<b>1041</b>	<b>801</b>	<b>997</b>	<b>815</b>	<b>1095</b>	<b>1264</b>	<b>1456</b>	<b>1200</b>	<b>884</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	204	174	182	187	264	181	235	219	142	205
Private	2,204	2,340	1,596	2,033	1,499	1,933	1,980	2,440	1,965	1,598
Shore	1,442	1,275	1,059	1,110	881	1,066	1,374	1,387	1,286	1,008
<b>Total Trips</b>	<b>3,851</b>	<b>3,790</b>	<b>2,837</b>	<b>3,330</b>	<b>2,645</b>	<b>3,180</b>	<b>3,589</b>	<b>4,045</b>	<b>3,393</b>	<b>2,811</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black seabass	H	434	119	337	241	158	81	104	53	34	30
	R	3,224	2,324	925	773	618	784	799	1,331	1,128	462
Bluefish	H	344	429	199	214	373	240	509	705	660	335
	R	1,150	1,074	577	518	683	344	850	1,381	1,855	494
Drum (Atlantic croaker)	H	2,675	1,320	1,223	1,620	871	810	833	1,093	689	1,038
	R	4,968	1,586	2,523	1,393	819	951	1,792	1,631	2,069	780
Drum (spot)	H	1,390	1,089	691	3,301	1,375	2,007	2,645	3,843	2,297	2,171
	R	1,080	577	501	670	577	2,186	1,467	1,422	2,040	784
Drum (weakfish) <sup>2</sup>	H	475	303	100	41	30	22	(1)	10	3	2
	R	1,209	737	286	181	132	55	57	106	30	7
Striped bass	H	506	383	282	525	380	490	649	679	442	530
	R	3,245	2,890	2,929	4,653	3,739	3,753	3,896	2,998	1,406	1,218
Summer flounder	H	258	139	69	41	66	85	58	157	90	90
	R	1,513	1,245	383	373	952	433	511	1,626	1,306	1,029
White perch	H	1,611	565	1,156	2,020	1,441	2,436	2,558	2,990	1,418	727
	R	3,721	1,583	1,754	3,698	3,035	5,394	4,331	5,101	3,557	1,141
Wrasses (tautog)	H	20	24	42	14	14	40	14	107	24	45
	R	128	138	295	96	36	255	211	390	335	168
Yellowfin tuna	H	9	26	18	26	4	11	21	7	(1)	7
	R	(1)	2	(1)	(1)	(1)	2	(1)	1	(1)	2

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

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	128,467 (1.8%)	2,058,304 (1.8%)	70,877 (1.8%)	114,789 (1.9%)	182,953 (2%)	0.74 <sup>2</sup>
2008	138,607 (1.8%)	2,232,490 (1.8%)	99,650 (1.9%)	170,903 (2%)	281,472 (2.1%)	0.46
% change	7.89%	8.46%	40.6%	48.9%	53.8%	-37.8%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	28	25	50	47	51	57	55	56	56
	Receipts	1,325	1,997	3,199	2,487	2,301	2,727	2,751	3,940	3,310
Seafood Sales, retail	Firms	71	62	79	78	70	78	73	99	84
	Receipts	7,012	5,904	8,629	6,771	10,100	6,976	7,755	10,493	9,010

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	27	26	24	23	23	23	19	22	22
	Employees	894	889	807	762	895	1,141	1,053	1,296	1,003
	Payroll	22,309	23,686	20,618	20,399	23,039	24,986	28,852	32,386	39,328
Seafood sales, wholesale	Establishments	92	94	77	63	58	59	59	62	60
	Employees	903	913	870	686	733	709	694	978	851
	Payroll	26,940	28,847	33,072	27,934	29,813	30,148	32,943	50,353	42,296
Seafood sales, retail	Establishments	71	78	88	97	96	95	97	102	94
	Employees	474	475	488	459	579	576	617	613	590
	Payroll	8,309	8,853	10,033	10,634	12,328	13,019	14,190	14,777	11,510

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	9	10	8	9	11	10	10	8	6
	Employees	155	178	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	7,372	7,969	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Deep sea freight transportation	Establishments	12	12	14	16	15	16	14	14	13
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	123	ND <sup>3</sup>	281	316	ND <sup>3</sup>	244	250
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	9,216	ND <sup>3</sup>	18,983	14,131	ND <sup>3</sup>	14,905	19,765
Deep sea passenger transportation	Establishments	1	1	4	3	2	1	1	1	3
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	187	185	188	180	183	185	179	183	179
	Employees	1,172	1,240	1,232	1,296	1,321	1,228	1,260	1,326	1,383
	Payroll	30,207	32,088	33,621	34,024	36,598	36,590	40,866	48,752	45,965
Marine cargo handling	Establishments	13	15	16	14	11	12	13	15	15
	Employees	1,751	1,505	1,487	1,862	1,725	1,639	1,659	1,791	1,572
	Payroll	60,915	63,172	66,525	69,084	75,911	81,219	73,367	85,328	48,382
Navigational services to shipping	Establishments	12	13	13	11	8	9	9	8	9
	Employees	ND <sup>3</sup>	275	ND <sup>3</sup>	195	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	157	92
	Payroll	ND <sup>3</sup>	18,710	ND <sup>3</sup>	38,619	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	4,882	3,968
Port & harbor operations	Establishments	4	4	7	8	10	11	11	8	3
	Employees	ND <sup>3</sup>	319	259	376	479	ND <sup>3</sup>	ND <sup>3</sup>	323	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	9,545	11,655	16,099	19,218	ND <sup>3</sup>	ND <sup>3</sup>	13,427	ND <sup>3</sup>
Ship & boat building	Establishments	38	40	44	55	58	57	55	48	46
	Employees	ND <sup>3</sup>	1,421	1,223	1,426	1,022	ND <sup>3</sup>	1,119	874	677
	Payroll	ND <sup>3</sup>	48,561	40,743	36,444	35,364	ND <sup>3</sup>	33,463	29,500	22,363

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of the New Jersey Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	37,887	5,831,812	1,306,417	2,120,274
Commercial Harvesters	2,517	297,009	78,029	126,560
Seafood Processors & Dealers	5,336	494,194	187,161	244,283
Importers	14,662	4,033,309	646,415	1,229,529
Seafood Wholesalers & Distributors	2,271	365,477	117,464	159,728
Retail	13,101	641,823	277,348	360,174

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	107,163	110,246	112,708	120,670	145,217	158,746	136,039	151,445	168,519	149,032
Finfish & other	23,308	19,858	20,062	22,017	21,369	22,585	24,476	24,171	19,946	23,033
Shellfish	83,855	90,389	92,646	98,653	123,847	136,161	111,563	127,274	148,573	125,999
American lobster	3,694	2,471	1,139	1,028	1,800	2,001	2,533	4,056	3,214	850
Atlantic herring	ND <sup>1</sup>	32	60	145	7	298	389	563	ND <sup>3</sup>	1,564
Atlantic mackerel	1,205	1,695	1,780	2,855	3,398	3,957	3,709	668	ND <sup>3</sup>	1,539
Blue crab	5,490	4,802	6,725	4,736	5,330	6,773	6,359	6,004	7,284	185
Eastern oyster	967	1,918	1,853	3,366	1,558	823	2,288	2,231	2,547	ND <sup>3</sup>
Goosefish	6,505	6,135	5,896	6,200	3,446	4,451	4,415	4,484	4,005	3,018
Ocean quahog & surf clams	37,766	41,193	39,804	38,054	31,379	25,567	31,038	32,362	ND <sup>3</sup>	27,496
Quahog clam	6,757	5,636	ND <sup>3</sup>	5,228	7,409	7,556	7,615	968	6,306	ND <sup>3</sup>
Sea scallop	24,108	29,983	33,336	43,507	67,309	88,486	57,465	77,359	91,320	90,111
Summer flounder	2,604	2,313	3,504	3,683	4,134	4,478	4,926	3,989	3,461	3,377

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	171,803	168,541	162,139	170,133	187,377	156,695	152,781	153,838	162,301	161,599
Finfish & other	71,574	71,867	65,737	75,471	71,450	74,193	66,316	65,155	62,816	73,605
Shellfish	100,229	96,674	96,401	94,662	115,926	82,502	86,465	88,683	99,484	87,994
American lobster	891	580	264	210	370	369	471	680	633	180
Atlantic herring	ND <sup>3</sup>	708	1,138	1,805	119	2,264	2,451	6,039	ND <sup>3</sup>	13,692
Atlantic mackerel	9,645	25,224	20,486	33,056	36,091	32,414	24,977	5,384	ND <sup>3</sup>	10,255
Blue crab	5,093	4,724	6,229	4,012	4,350	6,333	5,981	4,821	5,816	257
Eastern oyster	202	412	379	714	323	162	350	444	550	ND <sup>3</sup>
Goosefish	4,414	5,855	5,697	7,185	4,177	3,881	3,841	4,229	3,694	2,687
Ocean quahog & surf clams	72,858	73,900	73,949	71,683	61,155	49,849	55,286	55,746	ND <sup>3</sup>	45,306
Quahog clam	1,622	1,357	ND <sup>3</sup>	1,260	1,796	1,852	1,844	240	1,529	ND <sup>3</sup>
Sea scallop	4,949	8,219	8,644	10,638	13,705	11,831	8,439	11,808	13,279	14,038
Summer flounder	1,848	1,745	2,407	2,385	2,630	2,349	2,380	1,697	1,541	1,799

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	4.14	4.26	4.31	4.90	4.86	5.42	5.38	5.96	5.08	4.73
Atlantic herring	ND <sup>3</sup>	0.05	0.05	0.08	0.06	0.13	0.16	0.09	ND <sup>3</sup>	0.11
Atlantic mackerel	0.12	0.07	0.09	0.09	0.09	0.12	0.15	0.12	ND <sup>3</sup>	0.15
Blue crab	1.08	1.02	1.08	1.18	1.23	1.07	1.06	1.25	1.25	0.72
Eastern oyster	4.77	4.65	4.88	4.72	4.82	5.09	6.53	5.02	4.63	ND <sup>3</sup>
Goosefish	1.47	1.05	1.03	0.86	0.83	1.15	1.15	1.06	1.08	1.12
Ocean quahog & surf clams	0.52	0.56	0.54	0.53	0.51	0.51	0.56	0.58	ND <sup>3</sup>	0.61
Quahog clam	4.17	4.15	ND <sup>3</sup>	4.15	4.13	4.08	4.13	4.04	4.12	ND <sup>3</sup>
Sea scallop	4.87	3.65	3.86	4.09	4.91	7.48	6.81	6.55	6.88	6.42
Summer flounder	1.41	1.32	1.46	1.54	1.57	1.91	2.07	2.35	2.25	1.88

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	696	75,112	25,297	43,667
Private Boat	1,355	192,034	57,842	99,347
Shore	817	97,885	31,778	53,218
Total Durable Equipment Impacts	5,644	1,047,456	345,297	531,519
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>8,513</b>	<b>1,412,488</b>	<b>460,214</b>	<b>727,751</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	306,360
For-Hire	27,805	20,999	Other Equipment	63,500
Private Boat	47,250	104,528	Boat Expenses	180,973
Shore	30,201	49,778	Vehicle Expenses	358,442
<i>Total Trip Expenditures</i>	<i>105,256</i>	<i>175,305</i>	Second Home Expenses	39,110
			<i>Total Durable Equipment Expenditures</i>	<i>948,385</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>1,228,946</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	544	721	400	592	708	818	693	890	765	656
Non-Coastal	17	42	17	20	31	39	25	19	26	35
Out of State	430	543	239	462	379	471	481	518	456	454
<b>Total Anglers</b>	<b>990</b>	<b>1306</b>	<b>656</b>	<b>1074</b>	<b>1117</b>	<b>1328</b>	<b>1199</b>	<b>1427</b>	<b>1246</b>	<b>1145</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	518	643	368	466	501	408	630	545	388	434
Private	3,727	4,025	2,992	3,602	3,892	3,765	3,859	3,634	3,567	2,753
Shore	2,224	2,817	2,049	2,711	2,152	2,476	2,803	3,256	2,804	2,257
<b>Total Trips</b>	<b>6,469</b>	<b>7,484</b>	<b>5,409</b>	<b>6,779</b>	<b>6,544</b>	<b>6,649</b>	<b>7,292</b>	<b>7,436</b>	<b>6,760</b>	<b>5,444</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black seabass	H	1,962	1,919	1,760	1,903	1,173	667	692	1,006	456	608
	R	5,545	4,371	4,318	4,295	2,833	2,463	2,090	2,882	4,221	3,003
Bluefin tuna	H	8	11	7	9	9	8	4	5	3	9
	R	(1)	4	(1)	(1)	31	26	35	1	(1)	2
Bluefish	H	1,236	1,431	1,321	1,571	2,012	2,035	1,457	1,645	1,296	762
	R	1,907	2,056	2,168	1,913	2,403	2,644	1,930	3,146	1,752	1,386
Drum (weakfish) <sup>2</sup>	H	760	736	493	151	184	1,053	418	209	270	11
	R	1,605	1,065	351	631	607	1,280	1,231	581	1,255	82
Red hake	H	96	51	12	16	12	6	111	1	175	218
	R	5	5	(1)	15	6	6	15	(1)	24	24
Striped bass	H	402	560	416	392	449	327	489	206	318	269
	R	885	966	715	926	1,324	1,197	2,102	1,495	1,452	719
Summer flounder	H	3,023	2,070	989	1,784	1,887	1,396	1,561	1,328	851	1,013
	R	7,261	10,343	4,205	5,807	7,212	9,931	6,823	7,125	9,349	11,294
Winter flounder	H	1,080	562	208	307	95	46	43	194	14	5
	R	441	188	124	110	29	42	192	42	10	35
Wrasses (tautog)	H	462	468	348	103	131	37	195	342	183	153
	R	627	1,006	836	394	426	335	563	1,353	709	1,007
Yellowfin tuna	H	55	9	14	22	25	22	41	25	6	5
	R	(1)	(1)	4	(1)	1	(1)	1	(1)	1	7

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

## New Jersey's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	233,559 (3.3%)	3,548,429 (3.1%)	147,082 (3.8%)	206,136 (3.5%)	349,334 (3.6%)	1.17 <sup>2</sup>
2008	238,440 (3.1%)	3,640,654 (3%)	185,394 (3.6%)	272,957 (3.4%)	486,556 (3.4%)	1.11
% change	2.09%	2.6%	26%	32.4%	39.3%	-5.13%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	17	14	21	23	23	26	27	25	22
	Receipts	2,545	2,878	2,673	2,279	2,694	3,086	3,027	2,399	1,851
Seafood Sales, retail	Firms	94	87	92	100	89	93	72	90	92
	Receipts	8,289	8,368	8,348	8,822	9,219	9,194	8,916	11,320	11,196

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	16	18	17	16	15	17	16	16	14
	Employees	816	1,100	928	846	749	969	667	628	566
	Payroll	20,655	27,302	23,045	20,794	21,029	28,235	22,097	18,403	18,703
Seafood sales, wholesale	Establishments	107	112	102	84	85	85	89	101	81
	Employees	1,028	1,023	969	920	948	914	941	978	856
	Payroll	37,609	39,677	37,394	35,991	38,066	37,828	41,506	41,994	37,462
Seafood sales, retail	Establishments	125	125	149	133	134	128	127	124	118
	Employees	571	549	559	454	547	524	493	472	368
	Payroll	9,621	10,183	10,225	10,513	11,952	11,787	11,373	10,352	9,372

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	18	21	13	15	17	18	18	23	18
	Employees	ND <sup>3</sup>	532	ND <sup>3</sup>	768	ND <sup>3</sup>	914	1,040	778	645
	Payroll	ND <sup>3</sup>	36,912	ND <sup>3</sup>	45,024	ND <sup>3</sup>	54,097	68,096	56,017	48,911
Deep sea freight transportation	Establishments	37	33	35	37	33	38	39	31	27
	Employees	1,373	1,451	1,397	1,287	1,028	948	648	566	1,115
	Payroll	74,915	86,618	78,258	70,996	65,691	68,633	45,940	44,133	75,848
Deep sea passenger transportation	Establishments	3	4	4	5	4	5	4	2	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	209	211	199	203	201	206	204	216	211
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	927	951	945	978	940	1,045	916
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	32,480	34,777	36,862	38,323	39,154	41,624	39,596
Marine cargo handling	Establishments	26	26	29	27	26	26	25	23	21
	Employees	3,887	3,418	3,408	4,108	4,685	4,972	4,599	4,781	4,244
	Payroll	227,064	187,150	247,217	318,325	340,085	363,714	345,784	350,690	278,189
Navigational services to shipping	Establishments	22	21	22	16	17	16	19	26	20
	Employees	408	183	ND <sup>3</sup>	210	ND <sup>3</sup>	169	ND <sup>3</sup>	227	191
	Payroll	22,315	10,359	ND <sup>3</sup>	8,028	ND <sup>3</sup>	9,673	ND <sup>3</sup>	11,403	7,776
Port & harbor operations	Establishments	6	5	5	5	6	7	6	8	6
	Employees	375	376	ND <sup>3</sup>	240	ND <sup>3</sup>	194	ND <sup>3</sup>	271	143
	Payroll	18,804	21,855	ND <sup>3</sup>	10,644	ND <sup>3</sup>	11,599	ND <sup>3</sup>	12,197	12,446
Ship & boat building	Establishments	43	45	41	37	35	37	34	31	30
	Employees	2,178	2,185	2,223	2,005	2,040	2,320	2,307	2,305	2,019
	Payroll	71,918	70,980	76,607	75,149	80,301	89,421	88,367	91,460	79,309

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable



**2009 Economic Impacts of the New York Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	44,172	5,317,630	1,138,576	1,882,974
Commercial Harvesters	1,819	88,203	25,356	38,994
Seafood Processors & Dealers	941	135,292	51,440	66,909
Importers	14,766	4,061,750	650,973	1,238,199
Seafood Wholesalers & Distributors	4,342	316,258	106,915	144,157
Retail	22,303	716,128	303,893	394,715

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	61,121	55,072	51,264	51,601	46,878	56,367	57,725	58,964	58,943	49,271
Finfish & other	16,495	18,864	15,924	16,426	16,765	18,317	19,143	20,480	18,839	17,495
Shellfish	44,626	36,208	35,341	35,175	30,113	38,051	38,582	38,484	40,103	31,777
American lobster	11,555	7,357	5,131	4,426	3,722	4,396	6,289	3,639	5,498	3,936
Atlantic surf clam	3,602	4,885	5,520	7,934	4,475	7,055	4,473	5,932	5,670	5,858
Eastern oyster	1,311	2,137	4,995	4,263	3,367	1,961	2,390	2,627	2,870	1,428
Flounder, Summer	2,007	1,778	2,042	2,240	3,275	3,797	3,418	3,133	2,933	3,088
Loligo squid	8,423	6,035	6,247	4,353	5,426	6,054	5,846	5,159	5,290	4,169
Quahog clam	17,547	13,502	12,245	12,399	10,673	12,696	12,237	14,224	13,185	8,397
Scups or porgies	909	703	1,185	1,330	1,637	2,027	2,457	2,349	1,710	1,887
Sea scallop	239	718	90	164	720	3,617	3,518	3,872	5,050	5,018
Softshell clam	848	561	679	888	1,227	1,468	2,055	1,628	1,076	ND <sup>1</sup>
Tilefishes	2,053	3,191	3,195	2,736	2,082	2,765	3,323	3,845	3,343	3,240

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	44,702	42,388	38,548	39,388	34,514	38,150	32,659	35,594	34,521	34,413
Finfish & other	18,585	21,018	16,540	17,223	16,531	14,631	14,036	16,495	15,069	16,186
Shellfish	26,116	21,370	22,008	22,165	17,983	23,519	18,623	19,099	19,451	18,227
American lobster	2,883	2,053	1,440	946	996	1,154	1,243	716	1,210	1,047
Atlantic surf clam	5,567	7,549	8,544	13,264	7,462	11,953	6,913	9,161	8,753	8,799
Eastern oyster	150	244	537	466	370	219	269	124	135	64
Flounder, Summer	812	752	1,053	1,073	1,594	1,799	1,220	942	856	1,140
Loligo squid	13,208	7,625	9,613	4,603	6,363	6,693	6,462	5,438	5,469	4,100
Quahog clam	2,349	1,828	1,502	1,553	1,346	1,617	1,650	1,592	1,476	1,410
Scups or porgies	634	655	1,558	1,850	1,907	2,186	2,423	2,325	1,214	1,848
Sea scallop	111	259	26	39	170	647	577	619	782	918
Softshell clam	181	106	132	163	234	270	393	198	131	ND <sup>3</sup>
Tilefishes	916	1,835	1,593	1,755	1,335	1,142	1,297	1,394	1,199	1,427

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
American lobster	4.01	3.58	3.56	4.68	3.74	3.81	5.06	5.08	4.54	3.76
Atlantic surf clam	0.65	0.65	0.65	0.60	0.60	0.59	0.65	0.65	0.65	0.67
Eastern oyster	8.77	8.77	9.30	9.15	9.10	8.97	8.87	21.21	21.21	22.23
Flounder, Summer	2.47	2.36	1.94	2.09	2.05	2.11	2.80	3.33	3.43	2.71
Loligo squid	0.64	0.79	0.65	0.95	0.85	0.90	0.90	0.95	0.97	1.02
Quahog clam	7.47	7.39	8.15	7.98	7.93	7.85	7.42	8.94	8.93	5.96
Scups or porgies	1.43	1.07	0.76	0.72	0.86	0.93	1.01	1.01	1.41	1.02
Sea scallop	2.15	2.77	3.43	4.19	4.24	5.59	6.10	6.25	6.46	5.47
Softshell clam	4.70	5.30	5.15	5.45	5.24	5.43	5.23	8.23	8.24	ND <sup>3</sup>
Tilefishes	2.24	1.74	2.01	1.56	1.56	2.42	2.56	2.76	2.79	2.27

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	547	53,963	18,899	32,677
Private Boat	658	79,624	28,589	49,850
Shore	286	30,885	11,189	18,854
Total Durable Equipment Impacts	3,077	515,987	173,050	256,731
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>4,568</b>	<b>680,460</b>	<b>231,727</b>	<b>358,112</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	153,649
For-Hire	5,794	28,979	Other Equipment	61,563
Private Boat	2,448	78,871	Boat Expenses	127,891
Shore	964	29,781	Vehicle Expenses	104,687
<i>Total Trip Expenditures</i>	<i>9,207</i>	<i>137,632</i>	Second Home Expenses	49,148
			<i>Total Durable Equipment Expenditures</i>	<i>496,938</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>643,777</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	469	474	387	599	587	885	735	881	817	638
Non-Coastal	12	11	8	19	18	27	25	39	32	21
Out of State	20	29	41	82	76	110	114	147	118	58
<b>Total Anglers</b>	<b>500</b>	<b>513</b>	<b>436</b>	<b>700</b>	<b>681</b>	<b>1022</b>	<b>874</b>	<b>1067</b>	<b>967</b>	<b>717</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	306	344	339	406	397	475	398	522	312	372
Private	2,496	2,365	2,172	3,030	2,600	3,032	3,058	3,237	3,276	2,889
Shore	1,844	1,915	1,607	2,090	1,777	2,566	1,943	2,459	2,365	1,656
<b>Total Trips</b>	<b>4,645</b>	<b>4,624</b>	<b>4,118</b>	<b>5,525</b>	<b>4,774</b>	<b>6,073</b>	<b>5,399</b>	<b>6,218</b>	<b>5,954</b>	<b>4,917</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic herring <sup>2</sup>	H	67	39	26	30	73	140	39	315	111	6
	R	83	48	14	(1)	4	2	3	176	41	(1)
Black seabass	H	335	164	221	318	105	176	277	312	245	454
	R	1,222	641	1,411	739	490	963	1,634	1,513	1,829	1,500
Bluefish	H	718	1,005	751	1,147	1,499	2,376	1,534	1,660	1,320	1,119
	R	2,629	2,543	1,017	1,305	1,883	3,314	1,839	1,919	2,514	1,822
Drum (weakfish) <sup>2</sup>	H	42	28	25	9	8	(1)	9	7	31	(1)
	R	69	69	63	7	40	194	12	201	27	6
Porgies (scup)	H	3,126	1,734	1,091	5,112	1,581	686	1,277	1,601	1,617	1,312
	R	1,301	1,666	1,246	1,805	2,508	1,263	2,498	1,590	3,282	2,191
Shortfin mako shark	H	5	(1)	1	3	(1)	(1)	1	1	(1)	(1)
	R	13	2	4	3	2	5	2	(1)	(1)	(1)
Striped bass	H	271	190	202	314	243	298	313	371	448	329
	R	1,373	824	588	1,084	1,493	1,348	1,578	1,456	1,277	922
Summer flounder	H	1,671	700	696	1,539	937	1,147	802	711	565	265
	R	3,574	5,228	4,100	5,722	2,682	7,767	5,277	5,255	6,124	5,793
Winter flounder	H	237	233	154	234	236	150	204	15	61	102
	R	237	286	141	73	56	222	95	14	30	101
Wrasses (tautog)	H	79	46	630	129	381	119	253	202	256	330
	R	401	314	953	297	783	272	1,020	368	775	621

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

## New York's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	492,073 (7%)	7,353,209 (6.4%)	330,587 (8.5%)	465,418 (7.8%)	770,621 (8.1%)	0.22 <sup>2</sup>
2008	518,632 (6.8%)	7,617,164 (6.3%)	440,632 (8.6%)	646,834 (7.8%)	1,120,000 (8.1%)	0.11
% change	5.4%	3.59%	33.3%	39%	45.3%	-50%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	39	45	40	62	49	57	61	68	73
	Receipts	3,538	2,607	1,730	2,580	3,517	2,652	3,044	3,516	3,383
Seafood Sales, retail	Firms	268	262	244	272	241	219	206	266	247
	Receipts	30,580	31,218	29,832	29,321	28,640	24,987	24,790	23,157	23,983

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	18	21	16	18	17	18	15	15	17
	Employees	ND <sup>3</sup>	370	352	271	323	324	298	294	379
	Payroll	ND <sup>3</sup>	18,258	20,430	15,676	14,782	14,810	16,491	18,723	18,570
Seafood sales, wholesale	Establishments	305	296	315	291	274	269	254	291	231
	Employees	2,265	2,158	2,269	2,183	2,091	2,003	2,066	2,058	1,627
	Payroll	75,538	76,881	84,367	75,063	75,411	76,177	78,198	84,361	72,233
Seafood sales, retail	Establishments	307	323	381	376	386	392	388	372	368
	Employees	1,113	1,154	1,421	1,518	1,602	1,513	1,495	1,575	1,470
	Payroll	17,304	18,609	22,867	25,422	26,489	25,665	26,701	28,497	30,741

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	69	67	69	60	60	57	55	50	50
	Employees	1,653	2,182	2,284	1,751	1,452	1,448	1,464	1,746	1,759
	Payroll	91,296	129,403	141,213	115,452	94,074	91,347	109,315	125,570	160,735
Deep sea freight transportation	Establishments	43	40	38	35	36	39	38	34	29
	Employees	ND <sup>3</sup>	621	1,084	927	600	602	ND <sup>3</sup>	ND <sup>3</sup>	732
	Payroll	ND <sup>3</sup>	42,874	52,516	58,350	38,246	39,309	ND <sup>3</sup>	65,632	108,744
Deep sea passenger transportation	Establishments	4	5	4	8	7	6	4	4	3
	Employees	ND <sup>3</sup>	160	ND <sup>3</sup>	212	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	7	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	5,646	ND <sup>3</sup>	6,673	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	240	316
Marinas	Establishments	392	386	386	417	413	416	404	411	419
	Employees	1,778	1,805	1,680	2,167	2,185	2,093	2,112	2,070	2,263
	Payroll	64,661	66,508	69,242	77,398	81,737	84,832	83,807	88,862	100,910
Marine cargo handling	Establishments	22	19	11	14	14	12	12	12	10
	Employees	1,677	ND <sup>3</sup>	ND <sup>3</sup>	951	1,099	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	56,242	ND <sup>3</sup>	ND <sup>3</sup>	50,015	48,529	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Navigational services to shipping	Establishments	41	41	32	34	34	35	36	36	32
	Employees	487	554	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	578	386
	Payroll	27,872	29,646	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	40,976	23,294
Port & harbor operations	Establishments	3	3	4	3	3	3	3	5	3
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	6	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	119	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	48	44	41	44	45	47	48	53	49
	Employees	880	759	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	590	ND <sup>3</sup>	643	688
	Payroll	28,320	26,072	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	21,514	ND <sup>3</sup>	26,653	30,462

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of the Virginia Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	19,064	1,736,517	482,440	722,111
Commercial Harvesters	4,199	259,440	87,158	126,935
Seafood Processors & Dealers	1,402	124,051	48,265	62,291
Importers	3,083	848,039	135,914	258,519
Seafood Wholesalers & Distributors	1,020	124,952	43,196	57,569
Retail	9,361	380,035	167,907	216,796

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	118,336	119,618	123,308	130,657	160,496	155,066	109,082	133,454	150,091	152,730
Finfish & other	47,258	42,222	38,947	39,661	43,522	48,559	40,593	45,895	40,480	41,725
Shellfish	71,078	77,395	84,361	90,996	116,973	106,507	68,489	87,560	109,611	111,005
Atlantic croaker	5,598	3,126	3,815	2,822	3,013	3,691	4,345	4,641	5,291	4,308
Black sea bass	1,335	1,317	1,589	1,306	1,167	1,242	1,070	663	763	581
Blue crab	24,115	25,600	21,083	19,130	21,822	20,578	14,067	15,288	20,155	26,005
Catfishes & bullhea	389	987	1,005	372	649	900	1,570	978	1,188	1,254
Goosefish	843	700	704	879	599	1,142	688	750	ND <sup>1</sup>	639
Menhaden	27,566	25,860	22,113	22,511	24,144	25,259	22,269	25,317	21,272	23,550
Sea Scallop	41,680	44,466	57,715	68,298	92,207	84,574	52,828	63,013	65,534	63,312
Spot	2,256	1,326	1,256	1,688	2,236	2,227	1,762	3,221	1,184	2,127
Striped bass	3,266	3,250	2,823	3,389	3,648	4,457	2,816	3,852	3,351	3,282
Summer flounder	3,131	2,973	3,150	4,220	5,376	4,652	3,460	3,189	2,725	2,934

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	443,197	561,792	442,490	446,828	481,374	441,538	426,235	485,256	417,514	426,252
Finfish & other	403,157	520,211	396,929	406,359	432,023	402,586	393,760	452,518	384,581	379,538
Shellfish	40,041	41,581	45,560	40,469	49,351	38,952	32,475	32,739	32,933	46,714
Atlantic croaker	12,889	12,929	12,448	10,936	9,488	9,272	7,830	10,973	11,261	8,609
Black sea bass	648	661	771	507	498	475	327	189	215	164
Blue crab	28,846	25,057	27,301	21,464	27,642	26,064	22,719	19,045	18,401	32,581
Catfishes & bullhea	1,680	1,964	1,886	1,799	1,922	1,622	1,360	1,597	1,769	1,870
Goosefish	942	887	970	1,270	1,002	1,157	676	827	ND <sup>3</sup>	742
Menhaden	367,131	487,144	364,941	373,868	399,798	372,578	370,989	420,032	353,384	351,397
Sea Scallop	9,176	12,654	16,189	17,536	19,410	11,444	8,310	10,041	9,840	10,137
Spot	3,765	3,248	3,062	3,471	4,338	3,103	1,696	4,305	1,997	3,908
Striped bass	2,209	2,050	1,841	2,104	2,120	2,472	1,391	1,976	2,182	2,106
Summer flounder	2,207	2,660	2,970	3,522	3,906	3,869	2,757	1,859	1,657	1,987

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic croaker	0.43	0.24	0.31	0.26	0.32	0.40	0.55	0.42	0.47	0.50
Black sea bass	2.06	1.99	2.06	2.58	2.34	2.61	3.27	3.50	3.54	3.53
Blue crab	0.84	1.02	0.77	0.89	0.79	0.79	0.62	0.80	1.10	0.80
Catfishes & bullhea	0.23	0.50	0.53	0.21	0.34	0.55	1.15	0.61	0.67	0.67
Goosefish	0.90	0.79	0.73	0.69	0.60	0.99	1.02	0.91	ND <sup>3</sup>	0.86
Menhaden	0.08	0.05	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.07
Sea Scallop	4.54	3.51	3.56	3.89	4.75	7.39	6.36	6.28	6.66	6.25
Spot	0.60	0.41	0.41	0.49	0.52	0.72	1.04	0.75	0.59	0.54
Striped bass	1.48	1.59	1.53	1.61	1.72	1.80	2.02	1.95	1.54	1.56
Summer flounder	1.42	1.12	1.06	1.20	1.38	1.20	1.26	1.72	1.65	1.48

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	107	8,531	2,782	4,867
Private Boat	1,448	142,363	47,267	82,640
Shore	351	32,393	10,776	18,574
Total Durable Equipment Impacts	3,260	396,624	134,220	200,356
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>5,167</b>	<b>579,911</b>	<b>195,045</b>	<b>306,436</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	115,220
For-Hire	4,019	1,702	Other Equipment	40,816
Private Boat	52,714	72,854	Boat Expenses	129,474
Shore	7,154	20,955	Vehicle Expenses	144,435
<i>Total Trip Expenditures</i>	<i>63,887</i>	<i>95,510</i>	Second Home Expenses	34,168
			<i>Total Durable Equipment Expenditures</i>	<i>464,114</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>623,511</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	388	423	337	384	510	559	578	463	464	515
Non-Coastal	68	88	73	52	69	137	90	76	89	87
Out of State	262	520	407	288	428	511	364	297	338	305
<b>Total Anglers</b>	<b>717</b>	<b>1031</b>	<b>817</b>	<b>724</b>	<b>1007</b>	<b>1206</b>	<b>1033</b>	<b>836</b>	<b>891</b>	<b>907</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	64	91	72	86	96	41	34	59	53	47
Private	2,291	2,579	2,255	2,068	2,415	2,432	2,555	2,510	2,348	2,021
Shore	1,036	1,458	927	958	1,083	1,368	1,310	1,154	1,025	917
<b>Total Trips</b>	<b>3,391</b>	<b>4,128</b>	<b>3,254</b>	<b>3,113</b>	<b>3,594</b>	<b>3,841</b>	<b>3,900</b>	<b>3,723</b>	<b>3,425</b>	<b>2,984</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black seabass	H	448	231	132	265	48	75	115	67	58	102
	R	1,570	2,180	2,441	1,742	1,280	945	983	1,265	1,327	1,275
Cobia	H	10	9	3	2	3	14	8	10	7	12
	R	8	10	10	15	7	23	29	8	7	11
Drum (Atlantic croaker)	H	5,486	9,335	9,129	6,695	7,293	7,791	7,069	7,753	6,525	5,128
	R	7,811	7,087	7,108	6,544	5,791	8,144	4,599	9,511	7,035	6,860
Drum (spot)	H	527	1,056	1,602	1,441	2,323	2,994	3,510	6,609	5,061	3,146
	R	503	969	482	934	975	1,799	921	2,311	1,721	1,381
Drum (spotted seatrout)	H	90	13	16	102	75	31	56	146	80	40
	R	265	110	136	207	296	277	125	415	373	333
Drum (weakfish) <sup>1</sup>	H	287	176	178	86	103	30	59	45	29	18
	R	936	633	888	504	528	267	456	172	314	69
Red drum	H	23	7	50	14	5	3	15	71	27	64
	R	197	30	801	43	34	31	159	166	238	224
Striped bass	H	335	301	321	402	477	368	523	246	207	213
	R	1,022	621	707	971	1,768	1,485	1,690	914	442	355
Summer flounder	H	581	1,338	772	451	584	584	862	479	229	232
	R	2,629	4,014	2,666	2,585	3,539	2,340	2,274	3,388	2,758	3,199
Wrasses (tautog)	H	35	29	26	76	163	108	142	67	45	53
	R	13	27	38	55	141	107	229	94	32	40

<sup>1</sup>This species may not be equivalent to species with similar names listed in the commercial tables.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	175,582 (2.5%)	2,903,548 (2.5%)	97,692 (2.5%)	161,365 (2.7%)	261,894 (2.8%)	0.38 <sup>2</sup>
2008	197,716 (2.6%)	3,184,234 (2.6%)	138,927 (2.7%)	241,182 (2.8%)	400,110 (3%)	0.54
% change	12.6%	9.67%	42.2%	49.5%	52.8%	42.1%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	16	20	35	53	68	65	74	62	74
	Receipts	613	1,185	1,406	2,370	3,456	3,665	4,916	4,845	5,020
Seafood Sales, retail	Firms	68	89	94	88	89	80	86	84	80
	Receipts	5,505	10,148	8,266	7,193	8,346	8,762	8,027	7,265	8,273

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	41	42	39	38	42	39	33	30	26
	Employees	1,230	1,259	1,035	1,256	1,231	1,336	871	955	490
	Payroll	34,642	35,228	35,828	37,386	38,731	39,980	28,530	34,520	11,366
Seafood sales, wholesale	Establishments	105	100	89	84	86	86	80	83	69
	Employees	1,072	875	790	742	756	675	605	734	621
	Payroll	21,054	21,138	21,591	20,133	22,235	21,864	21,388	25,365	17,667
Seafood sales, retail	Establishments	57	59	74	61	68	69	75	73	68
	Employees	243	203	259	165	297	286	334	282	251
	Payroll	3,262	3,104	3,662	3,146	4,479	4,865	5,348	5,227	5,170

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	15	14	13	16	13	15	13	15	10
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	591	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	565	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	26,881	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	30,704	ND <sup>3</sup>
Deep sea freight transportation	Establishments	24	22	23	22	21	24	22	20	18
	Employees	1,172	ND <sup>3</sup>	1,254	1,087	1,124	1,090	1,564	1,611	409
	Payroll	72,961	ND <sup>3</sup>	92,591	87,099	91,978	95,871	141,085	148,502	32,473
Deep sea passenger transportation	Establishments	NA <sup>4</sup>	NA <sup>4</sup>	2	2	2	1	1	1	2
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	121	129	122	136	137	141	131	126	119
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	992	964
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	26,186	24,326
Marine cargo handling	Establishments	16	16	18	19	19	18	17	15	12
	Employees	1,820	1,284	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,516	1,110	1,085	ND <sup>3</sup>
	Payroll	53,584	50,553	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	52,254	51,654	56,696	ND <sup>3</sup>
Navigational services to shipping	Establishments	14	13	17	15	20	21	17	18	23
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	216	375
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	11,700	21,014
Port & harbor operations	Establishments	9	9	8	8	9	9	10	10	8
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	52	63	62	50	52	50	51	52	59
	Employees	21,429	20,198	21,240	20,720	21,022	21,230	21,741	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	856,081	989,524	963,644	901,156	920,372	938,375	993,066	ND <sup>3</sup>	ND <sup>3</sup>

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

# South Atlantic

- East Florida
- Georgia
- North Carolina
- South Carolina



### Management Context

The South Atlantic Region includes East Florida, Georgia, North Carolina, and South Carolina. Federal fisheries in this region are managed by the South Atlantic Fishery Management Council (SAFMC) and NOAA Fisheries (NMFS) under four fishery management plans (FMPs). The spiny lobster and coastal migratory pelagic resources fisheries are managed with the Gulf of Mexico Fishery Management Council (GMFMC). The Dolphin Wahoo FMP is managed with the Mid-Atlantic Fishery Management Council (MAFMC) and the New England Fishery management Council (NEFMC)<sup>1</sup>

#### South Atlantic Region FMPs

1. Coastal migratory pelagic resources (with GMFMC)
2. Coral coral reef and live/hardbottom habitat plan
3. Dolphin wahoo (with MAFMC and NEFMC)
4. Golden crab
5. Pelagic Sargassum habitat
6. Shrimp
7. Snapper grouper
8. Spiny lobster (with GMFMC)

Of the stocks or stock complexes covered in these fishery management plans, six are currently listed as overfished: black sea bass, pink shrimp, red grouper, red porgy, red snapper, and snowy grouper. Nine stocks or stock complexes are currently subject to overfishing: black sea bass, gag, red grouper, red snapper, snowy grouper, speckled hind, tilefish, vermilion snapper, and warsaw grouper.

### Commercial Fisheries

In 2009, commercial fishermen in the South Atlantic Region landed 111 million pounds of finfish and shellfish, earning \$144 million in landings revenue. Landings revenue was dominated by blue crab (\$35 million) and shrimp (\$33 million). These species groups commanded ex-vessel prices of \$0.96 and \$1.64 per pound, respectively, and together comprised 47% of total landings revenue, and 51% of total landings in the South Atlantic Region.

#### Key South Atlantic Region Commercial Species

- Blue crab
- Clams
- Flounders
- Groupers
- King mackerels
- Oysters
- Shrimp
- Snappers
- Swordfish
- Tunas

North Carolina and East Florida had the highest landings revenue in the region in 2009 with \$77 million and \$41 million, respectively. The next greatest landings revenue came from South Carolina with \$17 million in landings revenue. In terms of pounds landed, North Carolina also had the highest landings (69 million pounds), followed by East Florida (27 million pounds) and South Carolina (9.4 million pounds).

Shrimp experienced a 34% decrease in ex-vessel price (44% decrease in real terms) from \$2.49 per pound in 2000 to \$1.64 per pound in 2009. Over the same time period, the ex-vessel price per pound for blue crab only increased 4.3% (11% decrease in real terms), from \$0.92 to \$0.96 per pound. The decline in value of shrimp is mostly attributable to increases in competition from imports of farmed shrimp. Blue crab in the South Atlantic Region has not experienced an increase in competition, but rather has maintained its ex-vessel price due to declining harvest in the Mid-Atlantic, South Atlantic and Gulf of Mexico.

#### Economic Impacts<sup>2</sup>

In 2009, the South Atlantic Region's seafood industry generated \$13 billion in sales impacts in Florida, \$1 billion in sales impacts in Georgia, \$696 million in sales impacts in North Carolina, and \$70 million in sales impacts in South Carolina. Florida generated the largest employment, income, and value added impacts, generating 65,000 jobs, \$2.4 billion, and \$4.3 billion, respectively. The smallest income impacts were generated in South Carolina (\$26 million) and the smallest employment impacts were also generated in South Carolina (1,200 jobs).

The sector that generated the greatest employment impacts by state was the importers sector with 34,000 jobs in Florida and 2,700 jobs in Georgia. The harvest sector in North Carolina generated 2,400 jobs. More sales impacts were generated by importers in Florida than any other sector in any another state in the region at \$9.5 billion and the greatest value added impacts were also generated by importers in Florida (\$2.9 billion).

#### Landings Revenue

Landings revenue in the South Atlantic Region totaled \$144 million in 2009. This was a 35% decrease (a 44% decrease in real terms) from 2000 levels (\$220 million) and a 13% decrease (a 13% decrease in real terms) relative to 2008 (\$166 million).

Totaling \$81 million in 2009, shellfish revenue experienced a 45% decrease (a 53% decrease in real terms) from 2000 to 2009 and experienced a 23% decrease (22% decrease in real terms) from 2008 to 2009.

Blue crab and shrimp had the highest landings revenue in the South Atlantic Region in 2009, with \$35 million and \$33 million, respectively. Together they accounted for 47% of the total landings revenue earned in 2009. Between 2000 and 2009, the landings revenue from blue crab decreased 30% (a 40% decrease in real terms), landings revenue from shrimp decreased 60% (a 66% decrease in real terms), and landings revenue from clams

<sup>1</sup>The authority to manage red drum was transferred to the Atlantic States Marine Fisheries Commission (ASMFC) in 2008.

<sup>2</sup>The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: [www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))



decreased 59% (a 65% decrease in real terms).

In terms of finfish, North Carolina contributed the most (\$34 million) followed by East Florida (\$23 million), and South Carolina (\$5.2 million). Shellfish landings revenue was dominated by North Carolina, which also contributed the most (\$43 million) followed by East Florida (\$18 million), and South Carolina (\$12 million).

### Commercial Fisheries Facts

#### Landings revenue

- On average, between 2000 and 2009, the key species or species groups accounted for 78% of total revenue, generating \$126 million in the South Atlantic Region.
- Shrimp had higher landings revenues than any other species or species group, averaging \$47 million in landings revenue from 2000 to 2009.
- Swordfish had the largest annual increase in landings revenue over the 10 year time period, increasing 56% from \$2.8 million in 2006 to \$4.3 million in 2007.
- Shrimp had the largest annual decrease in landings revenue over the 10 year time period, decreasing 37% from \$82 million in 2000 to \$52 million in 2001.

#### Landings

- Key species or species groups contributed an average of 52% annually to total landings between 2000 and 2009.
- Blue crab, contributed the most to landings in the region, averaging 43 million pounds from 2000 to 2009.
- Tunas had the largest annual increase in landings over the 10 year time period, increasing 50% from 1.6 million in 2005 pounds to 2.4 million pounds in 2006.
- Shrimp had the largest annual decrease in landings over the 10 year time period, decreasing 39% from 26 million pounds in 2004 to 16 million pounds in 2005.

#### Prices

- Clams had the highest average annual ex-vessel price per pound (\$6.37) over the time period, followed by oysters (\$4.37), and groupers (\$2.78).
- Blue crab had the lowest average annual ex-vessel price per pound (\$0.89) over the time period, followed by king mackerels (\$1.69), and flounders (\$1.86).
- Blue crab had the largest annual increase in ex-vessel price over the 10 year time period, increasing 34% from \$0.74 per pound in 2006 to \$0.99 in 2007.
- Shrimp had the largest decrease in ex-vessel price over the 10 year time period, decreasing 25% from \$2.19 per pound in 2008 to \$1.64 in 2009.

From 2000 to 2009, species or species groups with large changes in landings revenue include oysters (increased 119%), shrimp (decreased 60%), and king mackerels (increased 60%). Species or species groups with large changes in landings revenue between 2008 and 2009 include shrimp (decreasing 36%), swordfish (increasing 30%), and groupers (decreasing 21%).

### Landings

Fishermen in the South Atlantic Region landed 111 million pounds of finfish and shellfish in 2009. This was a 50% decrease from the 222 million pounds landed in 2000 and a 4.8% decrease from the 117 million landed in 2008. Finfish landings contributed 46% of total landings in the South Atlantic Region (51 million pounds) in 2009. From 2008 to 2009, finfish landings experienced a 16% increase. Over the same time period, shellfish landings experienced a 18% decrease from 73 million pounds in 2008 to 60 million in 2009 and a 35% decrease from 92 million pounds in 2000.

Blue crab and shrimp had the highest annual landings in the South Atlantic Region in 2009, with 37 million pounds and 20 million pounds, respectively. Together they accounted for 51% of the total landings in 2009. Blue crab landings decreased 33% and shrimp landings decreased 40% during this period.

From 2000 to 2009, species or species groups with large changes in landings include oysters (increasing 71%), king mackerels (increasing 63%), and clams (decreasing 46%). Species or species groups with large changes in landings between 2008 and 2009 include swordfish (increasing 36%), groupers (decreasing 22%), and blue crab (decreasing 18%).

### Prices

The ex-vessel prices for the South Atlantic Region's key species and species groups in 2009 were higher than their 10 year average for six of the key species (two of the species in real terms). Ex-vessel prices for groupers and tunas experienced the biggest increases between 2000 and 2009, increasing 37% (17% in real terms) and 29% (10% in real terms), respectively. Relative to the ex-vessel prices in 2008, the South Atlantic Region's blue crab experienced the greatest increase (7.87%, 8.24% in real terms) from \$0.89 in 2008 to \$0.96 in 2009. Shrimp experienced the greatest decrease in ex-vessel price during this period (25.1%, 24.9% in real terms) from \$2.19 to \$1.64. Relative to ex-vessel prices in 2008, three species or species groups experienced increases, including oysters (4.5%), and groupers (0.3%).

In East Florida, the species or species group with the largest change in ex-vessel price from 2000 to 2009 was blue crab (51% increase, 29% increase in real terms) from \$0.96 to \$1.45. The largest change in ex-vessel price experienced in Georgia was for snails (conchs) (52% increase, 30% increase in real terms) from \$0.66 to \$1.00 and in North Carolina the largest change in ex-vessel price was experienced by Atlantic croaker (63% increase, 40% increase in real terms from \$0.30 to \$0.49).

### Recreational Fishing

In 2009, almost 2.4 million recreational anglers took 19 million fishing trips in the South Atlantic Region. Over 81% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 47% of them were taken from a private or rental boat and another 50% were shore-based. Atlantic croaker and spot were the most frequently caught species or species

<sup>1</sup>Expenditures and economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see

group with 8 million fish caught in 2009, and represented 28% of total fish caught in the region. Of the Atlantic croaker and spot caught, 62% of them were released rather than harvested.

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

The contribution of recreational fishing activities in South Atlantic 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 East Florida were the highest in the region with over 27,000 full- and part-time jobs generated by recreational fishing activities in the state. North Carolina (17,000 jobs), and South Carolina (5,000 jobs), followed in terms of 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) and expenditures on durable equipment. Throughout the South Atlantic Region, most of the employment impacts in 2009 were generated by expenditures on durable equipment: 92% in Georgia, 84% in East Florida, and 47% in North Carolina.

Key South Atlantic Region Recreational Species	
<ul style="list-style-type: none"> <li>● Black sea bass</li> <li>● Bluefish</li> <li>● Dolphinfish</li> <li>● Atlantic croaker and spot</li> <li>● Spotted seatrout</li> </ul>	<ul style="list-style-type: none"> <li>● King mackerel</li> <li>● Sheepshead porgy</li> <li>● Red drum</li> <li>● Sharks</li> <li>● Spanish mackerel</li> </ul>

In addition to jobs, the contribution of recreational fishing activities to South Atlantic 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 the highest in East Florida (\$3.1 billion in sales impacts), followed by North Carolina (\$1.8 billion), South Carolina (\$441 million), and Georgia (\$197 million). In the same year, value added impacts were the highest in East Florida (\$1.6 billion in value added impacts), followed by North Carolina (\$890 million), South Carolina (\$241 million), and Georgia (\$102 million).

Overall, total fishing trip and durable equipment expenditures across the South Atlantic Region in 2009 were \$5.8 billion. Approximately 81% of these expenditures were related to durable equipment purchases. The greatest expenditures were for boat expenses (\$1.7 billion), followed by vehicle expenses (\$1.3 billion), fishing tackle (\$1.1 billion), and other equipment (\$290 million). Fishing trip-related expenditures by the South Atlantic Region's non-residents totaled over \$608 million of which the greatest portion can be attributed to shore-based fishing trips (\$444 million). Residents of the South Atlantic Region spent \$501

million on saltwater fishing trips, with the most of these expenses related to private boat trips (\$275 million).

**Recreational Fishing Facts**

*Participation*

- An average of 2.8 million anglers fished in South Atlantic Region annually from 2000 to 2009.
- In 2009, coastal county residents made up 81% of total anglers in this region. These anglers averaged 84% 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 2004 and 2005, increasing 24%, from 2.1 million anglers to 2.6 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2007 and 2008, decreasing 26%, from 3.2 million anglers to 2.3 million anglers.

*Fishing trips*

- In the South Atlantic Region, an average of 21 million fishing trips were taken annually from 2000 to 2009.
- Private or rental boat and shore-based fishing trips accounted for 9 million and 9.5 million fishing trips, respectively, in 2009. Together these made up 97% 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 2002 and 2003, increasing 20%, from 18 million trips to 21 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2001 and 2002, decreasing 18%, from 22 million trips to 18 million trips.

*Harvest and release*

- Atlantic croaker and spot was the most commonly caught key species or species group, averaging 9.1 million fish over the 10 year time period. Of these, 45% were released rather than harvested.
- Of the ten commonly caught key species or species groups, five were released more often than harvested over this time period. The species or species group that was most commonly released was sharks (99% released).
- Dolphinfish (87% harvested), followed by king mackerel (75% harvested), and Spanish mackerel (65% 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 king mackerel, which increased 159% between 2002 and 2003; the largest annual change in number of fish harvested occurred in sharks, which increased 357% from 2006 to 2007.

*Participation*

There were 2.4 million recreational anglers who fished in the South Atlantic Region in 2009. This was a 3.6% decrease from 2000 (2.5 million anglers). These anglers were South Atlantic Region residents from either a coastal county (1.9 million anglers)

Marine Angler Expenditures in the United States, 2006, available at: [http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport\\_ALL.pdf](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf)

or non-coastal county (462,000 anglers). Almost 81% of total anglers in 2009 were residents of a coastal county. Coastal county angler participation in 2009 decreased 8% relative to 2000 (2.1 million anglers) and decreased 17% between 2008 and 2009. Non-coastal county angler participation increased 20% relative to 2000 (384,000 anglers) and decreased 18% relative to 2008 (560,000 anglers).

### *Fishing Trips*

Recreational fishermen took 19 million fishing trips in the South Atlantic Region in 2009. This was a 4.9% decrease from the 2000 (20 million trips) and was 3.2 million fewer trips than taken in 2008. Of the total trips taken in the South Atlantic Region in 2009, approximately 50% of the trips were shore based (9.5 million trips). The other most popular mode of fishing was private or rental boat-based with 9 million trips in 2009.

### *Harvest and Release*

Of the South Atlantic Region's key species and species groups, Atlantic croaker and spot (8 million fish), spotted seatrout (5.1 million fish), bluefish (3.9 million fish) and black sea bass (3 million fish) were the most often caught by anglers in 2009. Sharks (99% released), black sea bass (90% released), red drum (85% released), spotted seatrout (74% released), Atlantic croaker and spot (62% released), and bluefish (61% released) were most often released rather than harvested. Anglers harvested more often than released dolphinfish (91% harvested) and king mackerel (78% harvested).

At the state level Atlantic croaker and spot was the most commonly caught species in North and South Carolina with a total of 6.4 million fish caught across the two states in 2009. In East Florida, the most commonly caught fish was gray snapper (2 million fish) and spotted seatrout was the most commonly caught fish in Georgia (1.3 million fish) in the same year. Between 2000 and 2009, five of the South Atlantic Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were dolphinfish (61%), Spanish mackerel (19%), and king mackerel (16%).

### **Marine Economy**

The sum of the gross domestic products by state for Florida, Georgia, North Carolina, and South Carolina was \$1.7 trillion in 2008. Employee compensation totaled \$958 billion and annual payroll totaled \$598 billion. These economic measures increased 43% (a 22% increase in real terms) and 38% (a 18% increase in real terms), respectively, between 2000 and 2008; and experienced a 0.6% increase (a 9.2% decrease in real terms), and 0.4% increase (a 9.4% decrease in real terms), respectively between 2007 and 2008. Approximately 1.1 million establishments employed 16 million full- and part-time employees across the region in 2008. This was a 15% increase in establishment numbers and a 11% increase in employee numbers from 2000 to 2008.

In 2008, the commercial fishing location quotient (CFLQ) for Florida was the highest in the region at 0.97. This was an 29% decrease from 2001 and a 2% decrease from 2007. Florida's CFLQ suggests that the level of employment in commercial

fishing-related industries in this state is approximately equal to the level of employment in these industries nationwide. The CFLQ in South Carolina in 2008 was 0.17 (a 61% decrease from 2000).

### *Seafood Sales and Processing*

Annual receipts for nonemployer firms, businesses that have no paid employees and are subject to federal income tax, engaged in seafood product preparation and packaging across the South Atlantic Region totaled \$15 million in 2007 and increased 5.7% from 2006 to 2007. Annual receipts totals experienced a 10% decrease in South Carolina between 2000 and 2008. There were 344 seafood wholesale establishments across the South Atlantic Region in 2008 that employed 3,145 full- and part-time workers. From 2000 to 2008, the number of seafood wholesale establishments decreased 31% and the number of employees decreased 33%.

Nonemployer firms engaged in seafood retail in the South Atlantic Region totaled 610 in 2008, a 28% increase relative to 2000. Of these firms, 17% were located in Georgia. At the state level, these firms showed a 51% increase in Florida and a 19% decrease in North Carolina between 2000 and 2008. Annual receipts in the region totaled \$49 million in 2008, a 35% increase from 2000 (a 15% increase in real terms) and a 12% decrease from 2007 (a 20% decrease in real terms).

Employer establishments engaged in seafood retail increased 26% from 2000 to 2008, totaling 370 in 2008. These establishments employed 1,662 workers. Region-wide, the numbers of employees in the seafood retail sector increased 40% between 2000 and 2008. Across the states within the region, the largest change occurred in South Carolina (42% increase).

### *Transport, Support, and Marine Operations*

The ship and boat building employed more people than any other industry in this sector, employing approximately 22,000 people in 2008. This industry also had the highest annual payroll in the region totaling \$747 million. Marinas had the highest number of establishments (677), followed by the ship and boat building industries with 440 establishments and the navigational services to shipping industries with 176 establishments.

In Florida, industries with large changes in establishment numbers, employees, or annual payroll from 2007 to 2008 were: port and harbor operations (92% increase in payroll), port and harbor operations (55% increase in employees), coastal and Great Lakes freight transportation (47% decrease in payroll) and navigational services to shipping (40% decrease in employees). In Georgia, large changes were seen for port and harbor operations (25% increase in establishments), marinas (23% increase in payroll), deep sea freight transportation (18% increase in employees) and navigational services to shipping (16% decrease in payroll). In South Carolina, large changes were seen in the deep sea passenger transportation (600% increase in establishments), deep sea freight transportation (81% decrease in payroll), navigational services to shipping (62% increase in payroll) and navigational services to shipping (49% increase in employees).

**2009 Economic Impacts of the South Atlantic Region Seafood Industry (thousands of dollars)**

	Landings Revenue	Jobs	Sales	Income	Value Added
Florida	40,933	64,744	12,988,379	2,426,410	4,341,208
Georgia	9,296	7,390	1,007,118	224,956	369,134
North Carolina	77,011	8,479	696,091	203,365	298,805
South Carolina	16,916	1,169	70,202	26,299	35,869

**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	220,080	177,880	171,034	156,703	159,444	131,410	140,674	152,438	165,713	144,143
Finfish & other	71,544	65,350	63,906	54,820	66,858	56,907	60,707	61,353	60,811	62,955
Shellfish	148,551	112,534	107,140	101,882	92,592	74,507	79,976	91,094	104,904	81,201
Blue crab	50,517	44,487	42,397	46,643	34,249	31,784	27,050	33,634	40,073	35,278
Clams	8,745	7,926	6,132	6,248	5,561	4,779	4,223	4,039	3,861	3,564
Flounders	11,684	10,164	11,308	9,718	11,530	10,974	13,317	11,375	10,928	10,171
Groupers	2,928	2,802	2,831	2,851	2,728	2,814	3,416	4,565	4,084	3,207
King mackerels	5,062	4,592	4,067	4,102	5,260	5,551	6,495	6,872	7,695	8,086
Oysters	2,045	2,261	2,138	2,353	2,912	3,305	3,853	3,806	4,028	4,478
Shrimp	82,354	51,918	51,699	42,707	44,797	31,035	39,653	43,840	51,064	32,775
Snappers	4,027	4,668	3,618	2,331	3,208	3,314	2,748	3,922	4,554	4,016
Swordfish	5,384	3,582	3,248	4,113	3,555	3,134	2,753	4,298	3,661	4,766
Tunas	4,204	3,402	2,808	2,423	3,671	3,904	4,692	4,894	4,672	4,805

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total landings	221,639	199,256	216,204	197,486	199,033	123,421	114,661	105,337	116,541	110,899
Finfish & other	129,977	125,525	138,277	116,081	121,214	64,925	52,056	46,668	44,023	51,137
Shellfish	91,662	73,730	77,926	81,405	77,820	58,497	62,604	58,669	72,518	59,761
Blue crab	54,777	43,459	46,479	50,881	45,001	38,218	36,779	34,045	44,984	36,709
Clams	1,151	1,169	1,004	983	886	747	685	663	628	618
Flounders	6,608	6,319	7,586	5,799	7,325	5,944	6,282	4,778	5,034	5,278
Groupers	1,242	1,148	1,166	1,134	1,057	1,007	1,152	1,416	1,266	990
King mackerels	2,971	2,675	2,474	2,848	3,269	3,106	3,792	3,736	4,352	4,856
Oysters	533	575	551	595	689	730	808	776	857	913
Shrimp	33,128	24,559	26,503	24,343	26,472	16,048	22,080	21,250	23,341	19,945
Snappers	1,690	2,068	1,529	958	1,285	1,286	967	1,354	1,515	1,371
Swordfish	1,972	1,371	1,429	1,575	1,314	1,152	1,036	1,417	1,307	1,779
Tunas	2,161	2,181	1,418	1,235	1,739	1,569	2,360	2,310	1,658	1,915

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.92	1.02	0.91	0.92	0.76	0.83	0.74	0.99	0.89	0.96
Clams	7.60	6.78	6.11	6.35	6.27	6.40	6.16	6.09	6.15	5.77
Flounders	1.77	1.61	1.49	1.68	1.57	1.85	2.12	2.38	2.17	1.93
Groupers	2.36	2.44	2.43	2.51	2.58	2.79	2.97	3.22	3.23	3.24
King mackerels	1.70	1.72	1.64	1.44	1.61	1.79	1.71	1.84	1.77	1.67
Oysters	3.84	3.93	3.88	3.96	4.22	4.53	4.77	4.91	4.70	4.91
Shrimp	2.49	2.11	1.95	1.75	1.69	1.93	1.80	2.06	2.19	1.64
Snappers	2.38	2.26	2.37	2.43	2.50	2.58	2.84	2.90	3.01	2.93
Swordfish	2.73	2.61	2.27	2.61	2.71	2.72	2.66	3.03	2.80	2.68
Tunas	1.95	1.56	1.98	1.96	2.11	2.49	1.99	2.12	2.82	2.51

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Trips	Jobs	Sales	Value Added	Income
East Florida	10,141,669	27,445	3,112,439	1,045,755	1,633,460
Georgia	851,462	1,613	196,836	67,228	102,305
North Carolina	5,697,516	17,221	1,785,194	555,353	889,598
South Carolina	2,391,327	5,035	441,442	147,604	240,955

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	1,057,128
For-Hire	103,329	32,287	Other Equipment	290,167
Private Boat	60,312	274,923	Boat Expenses	1,686,140
Shore	444,166	193,568	Vehicle Expenses	1,348,151
<i>Total Trip Expenditures</i>	607,805	500,778	Second Home Expenses	270,536
			<i>Total Durable Equipment Expenditures</i>	4,652,121
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>5,760,704</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	2,089	2,279	1,948	2,271	2,105	2,615	2,603	3,157	2,330	1,922
Non-Coastal	384	419	334	473	511	472	477	493	560	462
Out-of-State	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
<b>Total Anglers</b>	<b>2,473</b>	<b>2,698</b>	<b>2,282</b>	<b>2,744</b>	<b>2,616</b>	<b>3,087</b>	<b>3,080</b>	<b>3,650</b>	<b>2,890</b>	<b>2,384</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	520	497	440	412	434	601	552	623	580	563
Private Boat	9,119	9,565	8,266	9,963	9,369	10,073	10,749	13,137	11,009	8,988
Shore	10,436	11,534	9,057	10,872	11,060	11,138	12,511	11,893	10,665	9,531
<b>Total Trips</b>	<b>20,075</b>	<b>21,596</b>	<b>17,763</b>	<b>21,246</b>	<b>20,862</b>	<b>21,813</b>	<b>23,813</b>	<b>25,652</b>	<b>22,254</b>	<b>19,082</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black sea bass	H	377	550	340	423	892	811	783	612	379	311
	R	1,824	2,000	1,457	1,406	2,677	2,484	2,967	3,764	2,941	2,716
Bluefish	H	1,425	1,974	1,617	1,664	1,657	2,210	1,969	2,453	1,881	1,524
	R	3,092	3,906	3,190	2,276	2,723	3,005	3,707	4,540	3,441	2,337
Dolphinfish	H	1,860	1,526	1,297	1,138	891	1,134	1,127	1,217	1,058	745
	R	239	234	81	146	107	219	232	255	201	75
Drum (Atlantic croaker and spot)	H	3,222	6,146	3,702	5,520	5,881	4,440	5,509	6,272	5,917	3,071
	R	2,933	3,231	2,270	4,653	3,719	3,881	7,291	4,273	4,086	4,912
Drum (spotted seatrout)	H	1,245	806	760	825	1,100	1,350	1,624	1,450	1,544	1,318
	R	3,317	2,594	3,217	2,892	3,212	5,337	4,989	6,115	4,716	3,783
King mackerel	H	580	394	363	600	398	428	511	807	490	441
	R	99	99	99	256	156	208	196	303	167	127
Porgies (sheepshead)	H	814	787	409	728	492	614	489	749	850	599
	R	436	604	454	558	382	436	438	604	774	521
Red drum	H	384	353	294	470	469	498	356	456	473	337
	R	1,120	1,560	1,617	1,527	1,899	2,412	2,111	2,071	2,333	1,980
Sharks <sup>3</sup>	H	19	27	8	24	29	58	6	27	8	26
	R	778	1,451	1,020	1,366	1,653	2,049	1,792	2,057	2,392	1,988
Spanish mackerel	H	1,267	1,229	1,355	1,170	994	1,091	790	1,211	1,326	1,146
	R	717	459	770	840	453	705	322	587	995	467

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

<sup>2</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.

**2009 Economic Impacts of the Florida<sup>1</sup> Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	64,744	12,988,379	2,426,410	4,341,208
Commercial Harvesters	4,775	312,239	97,964	130,331
Seafood Processors & Dealers	3,781	606,528	117,381	230,761
Importers	34,493	9,488,366	1,520,692	2,892,469
Seafood Wholesalers & Distributors	8,243	949,957	372,950	463,999
Retail	13,452	1,631,289	317,424	623,649

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	52,281	42,639	34,420	33,111	39,978	35,489	42,002	42,767	47,855	40,933
Finfish & other	18,592	15,111	14,599	14,246	15,324	16,496	17,422	19,768	21,131	23,152
Shellfish	33,689	27,528	19,821	18,865	24,654	18,993	24,580	23,000	26,724	17,781
Blue crab	4,580	2,916	2,723	2,507	3,685	4,648	3,701	4,924	4,333	2,334
Clams	1,211	960	879	791	506	390	435	391	508	415
Groupers	956	906	719	658	584	587	521	923	724	583
King mackerel	3,272	3,163	2,816	2,853	3,650	3,456	4,318	4,833	6,036	6,563
Lobsters	2,828	2,190	1,939	1,779	2,148	1,624	2,462	2,488	3,312	1,089
Sharks	1,503	1,483	1,496	1,362	1,149	1,201	1,364	726	636	949
Shrimp	23,537	20,103	13,224	12,721	17,360	11,118	16,390	13,821	17,225	12,452
Snappers	966	1,178	1,113	919	1,098	1,009	972	1,279	1,905	2,377
Spanish mackerel	979	1,152	1,131	1,437	1,827	2,198	2,094	2,332	1,827	2,004
Swordfish	3,643	1,609	1,642	1,698	1,491	1,625	1,219	2,529	2,339	2,384

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	31,409	27,134	21,693	23,432	28,707	22,964	27,021	25,196	26,306	27,460
Finfish & other	13,945	12,663	12,144	12,874	12,497	12,815	13,848	13,893	14,111	16,100
Shellfish	17,464	14,471	9,549	10,558	16,209	10,149	13,173	11,303	12,196	11,360
Blue crab	4,748	2,672	2,233	1,988	3,536	4,045	3,130	4,063	3,342	1,606
Clams	132	105	109	99	54	42	47	41	55	54
Groupers	397	354	281	250	216	207	166	274	204	165
King mackerel	1,839	1,789	1,645	2,061	2,291	1,833	2,572	2,631	3,299	4,064
Lobsters	592	450	414	395	456	313	407	361	506	298
Sharks	1,737	1,912	1,795	1,509	1,273	1,292	1,472	818	776	1,109
Shrimp	11,158	10,329	6,217	6,451	11,728	5,203	8,843	6,174	7,619	8,660
Snappers	422	525	494	398	453	407	355	461	635	803
Spanish mackerel	1,675	2,116	1,995	2,741	3,066	3,134	3,143	3,264	2,263	2,629
Swordfish	1,262	545	708	725	511	543	407	772	791	838

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.96	1.09	1.22	1.26	1.04	1.15	1.18	1.21	1.30	1.45
Clams	9.20	9.12	8.09	8.00	9.30	9.27	9.20	9.52	9.30	7.73
Groupers	2.41	2.56	2.56	2.63	2.70	2.84	3.14	3.37	3.55	3.53
King mackerel	1.78	1.77	1.71	1.38	1.59	1.89	1.68	1.84	1.83	1.61
Lobsters	4.78	4.87	4.68	4.50	4.71	5.18	6.06	6.90	6.55	3.65
Sharks	0.87	0.78	0.83	0.90	0.90	0.93	0.93	0.89	0.82	0.86
Shrimp	2.11	1.95	2.13	1.97	1.48	2.14	1.85	2.24	2.26	1.44
Snappers	2.29	2.24	2.25	2.31	2.42	2.48	2.74	2.78	3.00	2.96
Spanish mackerel	0.58	0.54	0.57	0.52	0.60	0.70	0.67	0.71	0.81	0.76
Swordfish	2.89	2.95	2.32	2.34	2.92	2.99	3.00	3.28	2.96	2.84

<sup>1</sup>Information reported in this table is for the state of Florida, not East Florida

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	724	70,382	24,023	41,436
Private Boat	2,120	201,668	70,940	120,507
Shore	1,454	137,108	47,275	79,599
Total Durable Equipment Impacts	23,148	2,703,281	903,517	1,391,918
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>27,445</b>	<b>3,112,439</b>	<b>1,045,755</b>	<b>1,633,460</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	648,927
For-Hire	29,256	13,700	Other Equipment	167,345
Private Boat	28,478	162,447	Boat Expenses	1,333,473
Shore	47,070	64,434	Vehicle Expenses	1,176,475
<i>Total Trip Expenditures</i>	104,804	240,581	Second Home Expenses	4,897
			<i>Total Durable Equipment Expenditures</i>	3,331,117
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>3,676,502</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	1394	1561	1304	1413	1161	1565	1660	2168	1317	1099
Non-Coastal	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
Out of State	894	1088	784	793	685	945	935	1008	703	643
<b>Total Anglers</b>	<b>2288</b>	<b>2649</b>	<b>2089</b>	<b>2206</b>	<b>1847</b>	<b>2510</b>	<b>2595</b>	<b>3176</b>	<b>2021</b>	<b>1741</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	279	251	216	187	198	201	173	178	161	180
Private	5,753	5,994	5,430	6,212	5,313	6,230	6,503	8,317	6,451	5,401
Shore	5,448	6,219	4,657	5,045	5,149	5,618	6,439	6,674	4,603	4,561
<b>Total Trips</b>	<b>11,479</b>	<b>12,464</b>	<b>10,303</b>	<b>11,444</b>	<b>10,660</b>	<b>12,049</b>	<b>13,115</b>	<b>15,169</b>	<b>11,215</b>	<b>10,142</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bluefish	H	439	581	759	644	494	549	640	807	425	546
	R	1,201	1,376	1,392	622	451	416	892	932	609	672
Dolphinfish	H	1,164	993	659	788	482	435	533	573	666	316
	R	221	220	72	129	105	216	209	231	194	57
Drum (kingfish)	H	1,009	1,366	930	590	970	1,103	1,004	1,078	627	467
	R	714	799	588	368	628	758	811	1,136	475	603
Drum (spotted seatrout)	H	288	251	206	170	200	338	299	303	160	183
	R	2,310	1,996	2,326	1,708	1,970	3,446	2,889	3,623	2,141	1,558
Gray snapper	H	471	302	400	446	340	454	554	882	433	293
	R	1,658	1,302	1,438	1,654	1,396	1,228	1,457	2,929	1,827	1,716
Jack (Florida pompano)	H	242	141	141	374	275	226	176	178	170	116
	R	84	234	175	306	341	222	125	199	287	84
King mackerel	H	386	256	282	463	271	261	379	537	353	321
	R	71	70	83	233	106	128	163	220	119	76
Porgies (sheepshead)	H	381	465	290	353	231	461	291	330	331	246
	R	311	511	352	351	308	337	299	371	547	336
Red drum	H	191	178	119	159	164	196	150	199	164	98
	R	693	850	664	749	1,138	1,271	894	897	822	648
Spanish mackerel	H	547	774	927	784	533	677	439	601	566	376
	R	353	286	555	446	214	368	192	198	353	175

<sup>1</sup>NA = not applicable because all East Florida residents are considered coastal county residents

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	428,438 (6.1%)	6,217,386 (5.5%)	177,379 (4.6%)	277,562 (4.9%)	481,115 (4.8%)	1.36 <sup>2</sup>
2008	507,027 (6.7%)	7,366,571 (6.1%)	267,430 (5.2%)	412,724 (5.2%)	749,778 (5.1%)	0.97
% change	18.3%	18.5%	50.8%	48.7%	55.8%	-28.7%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	102	104	116	142	177	164	174	173	202
	Receipts	8,330	6,350	5,064	8,047	8,652	8,756	10,184	10,497	11,065
Seafood Sales, retail	Firms	219	212	243	240	247	247	251	319	331
	Receipts	18,978	17,935	20,837	18,064	18,004	22,787	20,708	27,557	26,087

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	41	43	33	27	24	25	22	20	23
	Employees	2,188	2,033	2,359	2,084	2,193	1,616	1,704	1,748	1,637
	Payroll	58,821	58,977	65,914	61,452	65,881	47,529	62,801	58,233	53,455
Seafood sales, wholesale	Establishments	329	323	314	293	261	258	259	267	229
	Employees	2,915	2,670	2,395	1,835	1,948	1,883	2,091	2,308	1,913
	Payroll	76,363	76,717	78,160	55,874	63,276	65,339	73,897	85,019	75,203
Seafood sales, retail	Establishments	135	159	190	174	190	176	173	169	168
	Employees	575	697	908	952	977	970	936	989	991
	Payroll	10,359	13,403	17,186	15,673	17,575	19,192	19,513	20,595	21,604

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	54	58	51	66	59	59	54	47	42
	Employees	2,391	3,208	2,856	ND <sup>3</sup>	1,132	1,150	1,217	1,242	1,106
	Payroll	108,638	150,964	143,185	ND <sup>3</sup>	80,422	71,420	91,638	94,429	50,115
Deep sea freight transportation	Establishments	58	51	62	61	63	69	73	69	57
	Employees	2,209	2,123	1,858	2,535	2,567	2,622	3,729	3,190	2,486
	Payroll	99,384	106,848	107,564	131,904	150,701	207,300	226,810	208,144	169,055
Deep sea passenger transportation	Establishments	30	30	31	36	32	31	37	34	31
	Employees	9,165	8,719	7,863	8,879	8,849	8,492	9,077	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	349,974	394,932	315,551	428,941	536,753	504,625	571,590	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	476	509	481	528	532	551	513	493	442
	Employees	3,799	3,876	3,449	5,079	5,067	5,069	5,494	4,935	5,024
	Payroll	88,436	88,274	90,662	111,324	125,763	133,384	146,390	148,592	151,677
Marine cargo handling	Establishments	65	71	74	68	66	63	66	53	56
	Employees	4,549	4,863	4,405	5,651	5,671	6,409	7,266	6,585	8,052
	Payroll	92,843	124,760	109,555	171,481	175,257	177,983	189,020	173,788	192,473
Navigational services to shipping	Establishments	142	133	141	140	149	148	142	145	147
	Employees	866	755	714	817	686	660	781	1,484	894
	Payroll	36,730	35,854	34,040	39,524	39,309	42,200	48,370	61,470	56,917
Port & harbor operations	Establishments	22	25	29	26	29	31	27	29	40
	Employees	914	1,355	1,180	592	1,045	973	584	459	712
	Payroll	19,082	25,246	26,928	19,071	24,327	22,606	19,417	12,872	24,668
Ship & boat building	Establishments	300	313	291	290	306	312	301	296	297
	Employees	14,773	13,182	11,407	11,830	12,503	12,729	12,385	12,332	12,419
	Payroll	447,253	405,856	379,828	393,985	443,379	454,209	427,888	469,382	442,096

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable



**2009 Economic Impacts of the Georgia Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	7,390	1,007,118	224,956	369,134
Commercial Harvesters	419	16,139	5,483	7,885
Seafood Processors & Dealers	643	50,334	19,398	25,606
Importers	2,683	738,060	118,288	224,993
Seafood Wholesalers & Distributors	567	69,932	24,117	33,892
Retail	3,079	132,653	57,669	76,757

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	21,674	15,440	14,703	13,685	14,374	13,465	11,534	11,331	13,166	9,296
Finfish & other	926	953	960	649	747	729	574	625	622	624
Shellfish	20,748	14,486	13,743	13,036	13,627	12,736	10,960	10,706	12,544	8,672
Blue crab	2,477	2,902	2,166	1,970	2,508	3,096	2,959	3,767	3,997	1,735
Clams	213	187	319	521	426	658	298	290	383	473
Groupers	4	ND <sup>1</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	123	ND <sup>3</sup>	ND <sup>3</sup>
Shrimp	17,771	11,037	11,048	10,320	10,589	8,936	7,640	6,446	7,876	6,328
Snails (conchs)	277	245	50	69	4	3	6	1	6	11
Snappers	517	533	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	269	ND <sup>3</sup>	ND <sup>3</sup>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	9,841	9,308	9,177	9,437	9,659	9,638	8,294	7,908	8,945	5,366
Finfish & other	557	546	596	409	420	401	285	304	267	305
Shellfish	9,284	8,762	8,582	9,028	9,239	9,237	8,009	7,603	8,678	5,061
Blue crab	3,296	2,771	1,989	1,713	2,963	4,302	4,091	4,421	4,242	1,769
Clams	25	25	49	75	70	112	46	49	54	76
Groupers	2	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	37	ND <sup>3</sup>	ND <sup>3</sup>
Shrimp	5,537	4,476	5,079	5,591	5,090	4,531	3,851	2,797	3,132	3,171
Snails (conchs)	421	326	64	90	4	3	5	1	4	11
Snappers	229	255	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	93	ND <sup>3</sup>	ND <sup>3</sup>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.75	1.05	1.09	1.15	0.85	0.72	0.72	0.85	0.94	0.98
Clams	8.39	7.50	6.57	6.94	6.10	5.85	6.49	5.89	7.03	6.24
Groupers	2.02	ND	ND	ND	ND	ND	ND	3.33	ND	ND
Shrimp	3.21	2.47	2.18	1.85	2.08	1.97	1.98	2.30	2.51	2.00
Snails (conchs)	0.66	0.75	0.78	0.77	1.10	1.03	1.22	1.25	1.31	1.00
Snappers	2.26	2.09 <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2.89	ND <sup>3</sup>	ND <sup>3</sup>

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	12	1,012	331	590
Private Boat	69	7,868	2,670	4,773
Shore	47	5,162	1,739	3,095
Total Durable Equipment Impacts	1,485	182,794	62,489	93,847
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>1,613</b>	<b>196,836</b>	<b>67,228</b>	<b>102,305</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	48,462
For-Hire	184	485	Other Equipment	17,120
Private Boat	290	7,827	Boat Expenses	74,908
Shore	793	4,154	Vehicle Expenses	19,325
<i>Total Trip Expenditures</i>	<i>1,267</i>	<i>12,467</i>	Second Home Expenses	11,113
			<i>Total Durable Equipment Expenditures</i>	<i>170,927</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>184,661</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	89	83	58	112	104	135	121	149	190	146
Non-Coastal	86	91	54	113	120	67	66	115	154	91
Out of State	44	38	37	42	53	43	33	45	98	45
<b>Total Anglers</b>	<b>219</b>	<b>212</b>	<b>148</b>	<b>268</b>	<b>278</b>	<b>245</b>	<b>219</b>	<b>308</b>	<b>441</b>	<b>282</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	6	6	9	12	19	25	28	26	17	16
Private	435	449	338	549	442	501	472	553	747	503
Shore	355	352	272	410	475	326	291	348	517	332
<b>Total Trips</b>	<b>796</b>	<b>807</b>	<b>619</b>	<b>971</b>	<b>936</b>	<b>851</b>	<b>790</b>	<b>926</b>	<b>1,282</b>	<b>851</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black drum	H	63	13	23	44	26	22	23	51	104	21
	R	21	14	19	28	30	12	29	31	69	28
Black sea bass	H	52	102	23	104	66	91	77	36	107	27
	R	235	177	83	238	134	222	235	231	566	121
Bluefish	H	20	10	2	1	1	3	3	11	7	2
	R	79	48	26	23	16	22	33	92	128	66
Drum (Atlantic croaker)	H	129	22	36	249	45	40	40	47	46	77
	R	170	192	194	965	165	266	311	222	337	474
Drum (southern kingfish)	H	646	741	427	504	679	556	511	663	875	522
	R	561	598	379	847	624	547	630	670	922	533
Drum (spotted seatrout)	H	487	309	271	426	336	231	453	500	624	479
	R	548	365	358	738	608	678	872	958	720	831
Porgies (sheepshead)	H	75	138	25	129	101	80	51	65	78	46
	R	13	37	39	122	38	42	61	67	93	38
Red drum	H	94	90	91	122	140	108	82	103	143	82
	R	129	250	169	273	166	331	148	192	365	238
Sharks <sup>2</sup>	H	2	3	1	3	1	2	(1)	3	2	1
	R	153	168	195	212	254	340	329	512	581	350
Southern flounder	H	29	48	29	84	58	45	31	81	57	38
	R	15	15	11	16	29	13	25	(1)	1	9

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.<sup>2</sup>Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	200,442 (2.8%)	3,483,500 (3.1%)	112,899 (2.9%)	169,377 (3%)	294,479 (2.9%)	0.12 <sup>2</sup>
2008	227,593 (3%)	3,633,431 (3%)	142,780 (2.8%)	231,272 (2.8%)	401,436 (2.9%)	0.06
% change	13.5%	4.3%	26.5%	36.5%	36.3%	-50%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	12	14	20	24	29	24	21	34	45
	Receipts	1,705	1,104	1,560	2,249	2,030	2,642	1,957	2,187	3,489
Seafood Sales, retail	Firms	61	67	77	72	69	64	78	87	101
	Receipts	4,651	4,516	5,027	4,668	4,855	6,625	7,180	8,671	6,922

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	9	10	11	11	11	11	8	6	7
	Employees	ND <sup>3</sup>	1,131	1,014	994	ND <sup>3</sup>	1,155	1,164	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	30,187	29,867	28,432	ND <sup>3</sup>	39,839	43,637	ND <sup>3</sup>	ND <sup>3</sup>
Seafood sales, wholesale	Establishments	51	50	53	39	36	29	30	42	30
	Employees	565	609	572	580	619	640	659	688	565
	Payroll	17,996	19,178	19,616	32,047	31,012	32,781	31,654	31,033	20,122
Seafood sales, retail	Establishments	48	46	52	46	50	59	55	44	48
	Employees	225	181	161	152	159	185	184	179	160
	Payroll	1,948	1,874	2,002	2,243	2,437	2,753	2,724	2,633	2,433

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	5	5	5	6	6	7	6	6	6
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	33	28
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,883	2,040
Deep sea freight transportation	Establishments	15	15	19	23	18	19	15	13	14
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	256	185	193	ND <sup>3</sup>	132	156
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	12,201	10,306	10,658	ND <sup>3</sup>	10,090	11,275
Deep sea passenger transportation	Establishments	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1	NA <sup>4</sup>
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	NA <sup>4</sup>
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	NA <sup>4</sup>
Marinas	Establishments	63	64	63	69	57	60	66	68	60
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	642	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	569	527
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	12,870	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	12,701	15,571
Marine cargo handling	Establishments	18	17	15	14	18	17	17	17	17
	Employees	2,316	1,747	3,197	ND <sup>3</sup>	2,018	2,350	3,003	2,501	2,660
	Payroll	53,102	48,346	75,368	ND <sup>3</sup>	68,696	80,706	104,596	110,857	97,869
Navigational services to shipping	Establishments	9	7	9	9	8	8	10	11	11
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	107	ND <sup>3</sup>	ND <sup>3</sup>	136	ND <sup>3</sup>	217	182
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	5,109	ND <sup>3</sup>	ND <sup>3</sup>	7,784	ND <sup>3</sup>	11,141	10,193
Port & harbor operations	Establishments	3	4	4	4	7	6	5	4	5
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	196	98	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	3,303	3,108	ND <sup>3</sup>
Ship & boat building	Establishments	30	28	20	18	20	17	16	21	20
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,580	ND <sup>3</sup>	ND <sup>3</sup>	1,967	2,225	2,159
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	40,768	ND <sup>3</sup>	ND <sup>3</sup>	64,667	68,646	69,096

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the North Carolina Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	8,479	696,091	203,365	298,805
Commercial Harvesters	2,371	130,036	53,804	72,776
Seafood Processors & Dealers	944	63,142	24,550	31,724
Importers	1,208	332,180	53,238	101,263
Seafood Wholesalers & Distributors	376	40,843	14,324	18,907
Retail	3,580	129,889	57,448	74,135

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	108,326	88,141	94,747	84,926	79,703	64,890	70,121	82,332	86,822	77,011
Finfish & other	39,613	36,090	37,274	31,560	38,910	34,901	37,716	36,217	34,445	33,993
Shellfish	68,713	52,051	57,473	53,366	40,793	29,989	32,405	46,115	52,377	43,018
Atlantic croaker	2,987	3,080	3,234	2,924	3,528	3,409	3,563	2,726	3,142	3,004
Black sea bass	973	1,062	878	1,417	1,486	1,332	1,715	1,195	1,156	1,401
Blue crab	37,438	32,231	33,149	37,108	24,465	20,274	17,087	21,432	27,555	27,201
Clams	4,696	5,036	3,534	3,399	3,390	2,798	2,656	2,660	2,435	2,141
Flounders	11,652	10,142	11,270	9,671	11,503	10,963	13,301	11,335	10,886	10,124
Groupers	1,180	1,050	1,302	1,200	1,124	1,214	1,559	1,995	1,939	1,609
King mackerel	1,662	1,351	1,177	1,214	1,573	2,054	2,120	1,967	1,632	1,500
Shrimp	25,406	11,911	18,365	10,931	9,463	4,409	9,141	17,938	19,251	8,528
Snappers	1,281	1,219	1,186	686	873	1,116	953	1,601	1,784	1,073
Tunas	3,396	2,589	2,158	1,989	3,317	3,321	4,060	4,046	3,393	2,922

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	154,202	137,147	160,142	139,401	134,078	79,607	68,744	62,923	71,209	68,635
Finfish & other	102,086	98,055	110,944	88,721	91,383	49,435	35,675	30,476	27,706	32,413
Shellfish	52,116	39,092	49,198	50,681	42,696	30,172	33,069	32,447	43,503	36,222
Atlantic croaker	10,123	12,017	10,189	14,429	11,993	11,903	10,397	7,301	5,792	6,135
Black sea bass	567	644	592	851	881	690	778	473	485	615
Blue crab	40,639	32,180	37,737	42,770	34,129	25,430	25,343	21,425	32,917	29,386
Clams	681	772	627	547	551	418	427	438	400	367
Flounders	6,593	6,307	7,568	5,772	7,302	5,937	6,272	4,754	5,009	5,256
Groupers	537	471	581	518	478	481	587	701	683	553
King mackerel	1,049	837	778	765	955	1,246	1,186	1,059	1,037	778
Shrimp	10,335	5,254	9,969	6,167	4,881	2,358	5,737	9,552	9,427	5,408
Snappers	511	524	490	269	339	433	345	550	603	374
Tunas	1,714	1,713	1,000	914	1,424	1,271	1,982	1,836	1,041	1,028

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic croaker	0.30	0.26	0.32	0.20	0.29	0.29	0.34	0.37	0.54	0.49
Black sea bass	1.72	1.65	1.48	1.67	1.69	1.93	2.21	2.53	2.39	2.28
Blue crab	0.92	1.00	0.88	0.87	0.72	0.80	0.67	1.00	0.84	0.93
Clams	6.90	6.52	5.64	6.22	6.15	6.69	6.21	6.08	6.09	5.83
Flounders	1.77	1.61	1.49	1.68	1.58	1.85	2.12	2.38	2.17	1.93
Groupers	2.20	2.23	2.24	2.32	2.35	2.52	2.65	2.84	2.84	2.91
King mackerel	1.58	1.61	1.51	1.59	1.65	1.65	1.79	1.86	1.57	1.93
Shrimp	2.46	2.27	1.84	1.77	1.94	1.87	1.59	1.88	2.04	1.58
Snappers	2.51	2.33	2.42	2.55	2.57	2.58	2.76	2.91	2.96	2.87
Tunas	1.98	1.51	2.16	2.18	2.33	2.61	2.05	2.20	3.26	2.84

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,081	84,998	27,066	47,701
Private Boat	1,163	108,140	34,707	60,977
Shore	6,806	564,030	180,073	314,082
Total Durable Equipment Impacts	8,171	1,028,026	313,506	466,837
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>17,221</b>	<b>1,785,194</b>	<b>555,353</b>	<b>889,598</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	288,933
For-Hire	44,429	12,603	Other Equipment	83,895
Private Boat	22,303	73,107	Boat Expenses	135,360
Shore	312,496	103,148	Vehicle Expenses	107,926
<i>Total Trip Expenditures</i>	<i>379,227</i>	<i>188,857</i>	Second Home Expenses	249,227
			<i>Total Durable Equipment Expenditures</i>	<i>865,341</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>1,433,425</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	416	454	409	524	613	685	588	564	587	446
Non-Coastal	229	251	226	281	290	285	265	265	303	259
Out of State	1277	1301	1130	1298	1156	1280	1374	1079	1079	976
<b>Total Anglers</b>	<b>1922</b>	<b>2007</b>	<b>1765</b>	<b>2103</b>	<b>2058</b>	<b>2250</b>	<b>2227</b>	<b>1908</b>	<b>1970</b>	<b>1681</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	193	202	183	174	178	304	290	286	283	219
Private	2,224	2,169	1,941	2,181	2,543	2,354	2,656	2,784	2,550	2,032
Shore	4,043	4,279	3,462	4,379	4,306	4,129	4,300	3,910	4,348	3,446
<b>Total Trips</b>	<b>6,460</b>	<b>6,650</b>	<b>5,586</b>	<b>6,733</b>	<b>7,027</b>	<b>6,786</b>	<b>7,247</b>	<b>6,979</b>	<b>7,181</b>	<b>5,698</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black sea bass	H	148	175	84	166	264	241	156	122	69	116
	R	770	790	530	418	1,020	1,056	1,204	1,208	854	953
Bluefish	H	878	1,266	777	953	1,044	1,374	1,128	1,338	1,299	856
	R	1,630	2,329	1,610	1,416	1,907	2,206	1,875	2,496	2,285	1,388
Dolphinfish	H	683	492	621	335	387	686	590	608	382	376
	R	16	4	4	14	2	2	23	8	5	3
Drum (Atlantic croaker and spot)	H	2,315	4,286	2,995	4,287	4,533	3,419	3,205	4,667	2,718	1,519
	R	2,051	2,401	1,597	2,685	2,584	2,829	5,436	2,959	2,696	2,924
Drum (spotted seatrout)	H	250	182	197	106	317	512	578	525	584	509
	R	90	195	385	132	300	817	560	974	1,005	933
Flounder (lefteye and summer)	H	414	363	216	110	200	164	186	222	83	78
	R	1,558	1,566	1,285	829	1,669	1,043	1,051	1,293	1,627	1,239
King mackerel	H	137	114	67	114	105	153	119	229	109	80
	R	13	9	7	22	45	71	22	39	21	13
Spanish mackerel	H	671	401	402	349	309	332	305	491	687	703
	R	300	161	197	165	122	174	90	278	542	242
Striped bass	H	41	66	60	138	352	145	107	51	53	11
	R	252	119	155	285	398	130	83	44	86	86
Yellowfin tuna	H	271	237	135	328	204	216	244	115	27	30
	R	6	1	8	56	12	10	15	1	(1)	2

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.

## North Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	203,903 (2.9%)	3,385,492 (3%)	99,687 (2.6%)	155,145 (2.8%)	281,418 (2.7%)	0.23 <sup>2</sup>
2008	225,158 (3%)	3,585,123 (3%)	132,401 (2.6%)	220,378 (2.8%)	404,567 (2.7%)	0.08
% change	10.4%	5.9%	32.8%	42%	43.8%	-65.2%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	25	17	25	33	27	26	27	30	ND <sup>3</sup>
	Receipts	1,450	1,335	1,385	1,646	1,515	1,106	1,084	1,813	ND <sup>3</sup>
Seafood Sales, retail	Firms	140	116	117	133	144	130	115	150	114
	Receipts	9,408	9,395	11,560	11,565	12,294	10,913	11,342	14,999	10,918

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	32	27	21	18	18	17	18	22	18
	Employees	474	381	280	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	475	ND <sup>3</sup>	232
	Payroll	9,337	8,510	8,547	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	11,563	12,659	5,373
Seafood sales, wholesale	Establishments	86	84	84	68	72	77	70	71	65
	Employees	969	983	961	628	627	703	582	597	559
	Payroll	24,943	22,597	21,716	16,170	17,411	17,577	16,543	15,655	16,843
Seafood sales, retail	Establishments	61	70	81	87	88	90	89	86	90
	Employees	238	245	301	304	340	316	250	241	219
	Payroll	2,976	3,512	3,890	3,982	4,234	4,185	4,129	4,170	4,143

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	6	3	6	5	5	5	4	6	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	54	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2,061	ND <sup>3</sup>
Deep sea freight transportation	Establishments	13	13	15	7	7	7	8	6	5
	Employees	142	104	168	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	9,995	8,154	52,665	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	510	533
Deep sea passenger transportation	Establishments	2	5	3	3	2	2	1	1	NA <sup>4</sup>
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
Marinas	Establishments	114	111	103	104	97	103	103	96	107
	Employees	557	616	557	ND <sup>3</sup>	644	654	681	522	656
	Payroll	13,505	14,720	13,186	ND <sup>3</sup>	16,529	16,530	16,616	14,922	17,164
Marine cargo handling	Establishments	9	8	6	7	10	12	9	13	13
	Employees	712	ND <sup>3</sup>	ND <sup>3</sup>	433	668	641	757	652	760
	Payroll	11,045	ND <sup>3</sup>	ND <sup>3</sup>	16,001	28,676	25,988	19,736	25,164	23,328
Navigational services to shipping	Establishments	5	6	4	6	6	8	7	14	10
	Employees	85	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	102	87
	Payroll	1,860	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	3,773	3,668
Port & harbor operations	Establishments	6	5	7	6	5	5	5	3	3
	Employees	50	ND <sup>3</sup>	ND <sup>3</sup>	271	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	1,996	ND <sup>3</sup>	ND <sup>3</sup>	12,650	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	55	59	62	55	62	65	74	78	77
	Employees	3,050	3,383	3,566	3,290	3,622	3,957	4,232	ND <sup>3</sup>	4,281
	Payroll	91,996	100,341	103,506	106,656	127,472	133,665	153,672	ND <sup>3</sup>	138,243

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the South Carolina Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	1,169	70,202	26,299	35,869
Commercial Harvesters	399	28,030	11,032	15,182
Seafood Processors & Dealers	84	6,432	2,516	3,235
Importers	36	9,857	1,580	3,005
Seafood Wholesalers & Distributors	35	3,587	1,260	1,655
Retail	615	22,296	9,911	12,792

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	30,533	23,908	21,340	21,242	18,542	17,570	17,025	16,017	17,872	16,916
Finfish & other	5,506	5,741	5,375	4,650	5,042	4,781	4,995	4,744	4,614	5,186
Shellfish	25,027	18,166	15,965	16,592	13,499	12,789	12,031	11,274	13,259	11,730
Black sea bass	143	132	95	168	302	191	168	236	257	362
Blue crab	5,652	6,141	4,239	5,057	3,591	3,766	3,304	3,511	4,187	4,007
Clams	2,625	1,744	1,399	1,537	1,238	934	834	697	535	535
Groupers	788	846	811	993	1,020	1,013	1,335	1,524	1,421	1,014
Oysters	1,092	1,074	1,025	1,199	1,229	1,471	1,369	1,375	1,739	1,627
Sharks	43	129	78	66	128	136	144	78	78	55
Shrimp	15,640	8,865	9,062	8,736	7,385	6,572	6,481	5,634	6,712	5,467
Snappers	1,264	1,738	1,319	725	1,237	1,190	823	773	864	566
Swordfish	803	660	670	616	555	ND <sup>1</sup>	ND <sup>3</sup>	ND <sup>3</sup>	187	1,062
Tilefish	24	292	423	287	221	143	271	5	66	9

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	15,897	14,273	13,559	13,728	12,439	11,212	10,602	9,310	10,081	9,438
Finfish & other	3,380	3,152	3,052	2,598	2,768	2,274	2,249	1,994	1,940	2,319
Shellfish	12,517	11,120	10,507	11,130	9,670	8,938	8,353	7,316	8,141	7,119
Black sea bass	82	97	60	104	212	115	86	114	132	168
Blue crab	5,818	5,566	4,435	4,411	4,374	4,440	4,215	4,137	4,484	3,947
Clams	313	266	219	263	211	175	165	135	119	121
Groupers	305	323	304	366	363	319	399	404	379	272
Oysters	274	272	262	283	275	308	291	285	324	286
Sharks	77	150	109	124	206	174	147	105	110	62
Shrimp	6,098	4,498	5,238	6,133	4,773	3,957	3,650	2,727	3,162	2,707
Snappers	528	765	544	290	492	447	267	250	277	194
Swordfish	295	229	240	219	200	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	71	438
Tilefish	22	149	195	145	124	80	139	4	28	5

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black sea bass	1.74	1.37	1.56	1.61	1.42	1.66	1.97	2.07	1.94	2.15
Blue crab	0.97	1.10	0.96	1.15	0.82	0.85	0.78	0.85	0.93	1.02
Clams	8.38	6.55	6.38	5.85	5.86	5.34	5.06	5.17	4.51	4.42
Groupers	2.58	2.62	2.67	2.71	2.81	3.17	3.35	3.77	3.75	3.73
Oysters	3.99	3.95	3.91	4.24	4.46	4.78	4.71	4.82	5.36	5.69
Sharks	0.56	0.86	0.71	0.53	0.62	0.78	0.98	0.74	0.71	0.89
Shrimp	2.56	1.97	1.73	1.42	1.55	1.66	1.78	2.07	2.12	2.02
Snappers	2.39	2.27	2.42	2.50	2.51	2.66	3.08	3.09	3.12	2.92
Swordfish	2.73	2.88	2.79	2.81	2.78	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2.64	2.42
Tilefish	1.10	1.96	2.17	1.98	1.78	1.78	1.95	1.36	2.30	2.00

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	620	48,576	15,625	27,443
Private Boat	474	41,710	13,758	24,337
Shore	1,565	127,855	40,996	71,193
Total Durable Equipment Impacts	2,376	223,302	77,225	117,982
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>5,035</b>	<b>441,442</b>	<b>147,604</b>	<b>240,955</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	70,806
For-Hire	29,460	5,499	Other Equipment	21,807
Private Boat	9,241	31,542	Boat Expenses	142,399
Shore	83,807	21,832	Vehicle Expenses	44,425
<i>Total Trip Expenditures</i>	<i>122,507</i>	<i>58,873</i>	Second Home Expenses	5,299
			<i>Total Durable Equipment Expenditures</i>	<i>284,736</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>466,116</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	190	180	177	222	227	230	234	277	236	231
Non-Coastal	70	77	55	79	101	120	146	113	103	112
Out of State	250	224	161	270	334	448	617	551	604	554
<b>Total Anglers</b>	<b>510</b>	<b>481</b>	<b>392</b>	<b>571</b>	<b>662</b>	<b>798</b>	<b>997</b>	<b>941</b>	<b>942</b>	<b>898</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	42	38	32	39	39	72	61	132	120	148
Private	707	954	557	1,021	1,070	989	1,118	1,483	1,260	1,051
Shore	590	684	665	1,038	1,130	1,066	1,481	961	1,196	1,192
<b>Total Trips</b>	<b>1,340</b>	<b>1,676</b>	<b>1,254</b>	<b>2,098</b>	<b>2,239</b>	<b>2,126</b>	<b>2,661</b>	<b>2,577</b>	<b>2,576</b>	<b>2,391</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black sea bass	H	75	103	113	44	276	173	307	189	110	67
	R	314	421	335	289	952	680	812	1,356	1,011	918
Bluefish	H	88	118	79	66	118	284	197	297	150	118
	R	182	152	163	215	349	362	907	1,020	418	211
Drum (Atlantic croaker and spot)	H	279	755	460	723	793	593	1,996	1,044	2,445	996
	R	212	269	196	672	699	455	1,289	592	395	962
Drum (southern kingfish)	H	166	359	226	982	1,026	1,058	1,113	1,281	819	759
	R	176	125	136	1,049	497	439	1,350	849	688	661
Drum (spotted seatrout)	H	220	63	85	123	247	268	294	122	176	147
	R	368	39	148	315	334	395	667	560	850	460
Porgies (sheepshead)	H	173	113	31	129	107	28	88	133	252	159
	R	66	24	21	51	20	26	49	47	56	40
Red drum	H	37	61	41	162	134	141	72	88	109	83
	R	94	221	143	430	401	492	607	537	524	684
Sharks <sup>2</sup>	H	3	14	(1)	(1)	20	27	(1)	10	1	17
	R	124	520	276	380	368	339	493	252	293	332
Southern flounder	H	103	82	112	111	237	104	148	136	91	85
	R	26	28	73	52	133	86	217	184	124	92
Spanish mackerel	H	28	44	24	25	144	70	43	105	58	61
	R	47	10	9	223	114	154	33	84	93	49

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.<sup>2</sup>Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.



## South Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	97,146 (1.4%)	1,601,532 (1.4%)	43,362 (1.1%)	66,939 (1.2%)	115,392 (1.2%)	0.44 <sup>2</sup>
2008	106,678 (1.4%)	1,654,414 (1.4%)	55,089 (1.1%)	93,781 (1.1%)	160,836 (1.2%)	0.17
% change	9.81%	3.3%	27%	40.1%	39.4%	-61.4%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	13	13	20	19	22	14	12	12	15
	Receipts	1,277	304	547	1,115	1,797	2,234	1,303	857	1,155
Seafood Sales, retail	Firms	56	59	64	74	74	61	76	75	64
	Receipts	3,014	2,848	3,484	4,599	4,612	3,588	3,427	3,876	4,650

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	6	5	4	3	4	3	3	5	2
	Employees	54	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	28	7	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	1,206	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	805	145	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Seafood sales, wholesale	Establishments	29	31	28	22	18	22	19	26	20
	Employees	262	177	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	211	191	220	108
	Payroll	4,261	3,330	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	5,818	5,542	6,186	3,770
Seafood sales, retail	Establishments	49	52	58	55	58	64	62	60	64
	Employees	147	166	175	244	ND <sup>3</sup>	206	190	210	292
	Payroll	1,925	2,250	2,391	2,911	ND <sup>3</sup>	2,773	2,905	3,155	4,871

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

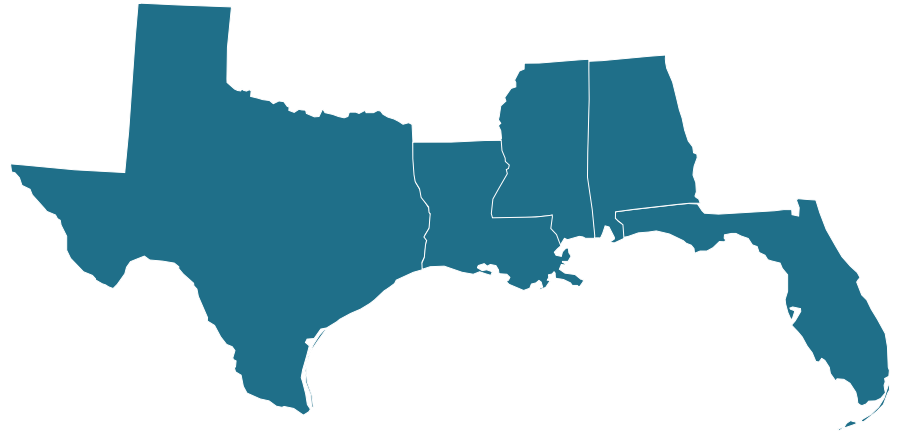
		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	2	2	1	3	4	4	4	5	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	45	ND <sup>3</sup>	60	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,882	ND <sup>3</sup>	2,352	ND <sup>3</sup>
Deep sea freight transportation	Establishments	9	8	10	8	7	10	9	6	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	113	ND <sup>3</sup>	67	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	4,600	ND <sup>3</sup>	3,419	659
Deep sea passenger transportation	Establishments	2	1	1	3	1	1	1	1	7
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	61	64	62	63	69	70	71	72	68
	Employees	ND <sup>3</sup>	343	357	365	378	398	452	469	588
	Payroll	ND <sup>3</sup>	6,807	6,395	6,696	7,645	8,050	10,105	11,498	13,753
Marine cargo handling	Establishments	13	14	16	15	17	18	17	15	17
	Employees	2,407	2,330	1,793	2,415	2,253	1,994	2,707	1,419	1,282
	Payroll	54,198	60,755	54,609	78,941	81,691	66,767	83,142	75,967	56,812
Navigational services to shipping	Establishments	12	12	11	6	5	7	8	6	8
	Employees	ND <sup>3</sup>	89	83	144	ND <sup>3</sup>	ND <sup>3</sup>	155	152	227
	Payroll	ND <sup>3</sup>	3,051	3,422	5,716	ND <sup>3</sup>	ND <sup>3</sup>	7,588	7,369	11,916
Port & harbor operations	Establishments	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1	1	1	1	3	3
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	113	ND <sup>3</sup>
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	7,058	ND <sup>3</sup>
Ship & boat building	Establishments	37	40	43	41	46	48	45	41	46
	Employees	2,187	1,801	1,570	2,253	2,380	2,672	2,425	2,962	3,001
	Payroll	61,246	54,654	61,045	78,963	90,974	97,087	92,098	102,531	97,743

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable<sup>4</sup>NA = these data are not available



# Gulf of Mexico

- Alabama
- West Florida
- Louisiana
- Mississippi
- Texas



### Management Context

The Gulf of Mexico Region includes Alabama, Louisiana, Mississippi, Texas, and West Florida. Federal fisheries in this region are managed by the Gulf of Mexico Fishery Management Council (GMFMC) and NOAA Fisheries (NMFS) under eight fishery management plans (FMPs). The spiny lobster and coastal migratory pelagic resources fisheries are managed in conjunction with the South Atlantic Fishery Management Council (SAFMC).

#### Gulf of Mexico Region FMPs

1. Red Drum
2. Shrimp
3. Stone Crab
4. Reef Fish
5. Coastal Migratory Pelagic Resources (with SAFMC)
6. Spiny Lobster (with SAFMC)
7. Corals
8. Aquaculture

Of the stocks or stock complexes covered in these fishery management plans, four are currently listed as overfished: gag, gray triggerfish, greater amberjack, and red snapper. Four stocks or stock complexes are currently subject to overfishing: gag, gray triggerfish, greater amberjack, and red snapper.

The Aquaculture FMP was approved in 2009 and is the only federal FMP to solely address aquaculture. The purpose of the plan is to develop a regional permitting process to ensure that the aquaculture industry is environmentally sound and economically sustainable. As of May 2011, the FMP had not yet been implemented.

### Commercial Fisheries

In 2009, commercial fishermen in the Gulf of Mexico Region landed 1.4 billion pounds of finfish and shellfish, earning \$629 million in landings revenue. Landings revenue was dominated by shrimp (\$325 million) and oyster (\$72 million). These species commanded ex-vessel prices of \$1.30 and \$3.21 per pound, respectively, and comprised 63% of total landings revenue, but only 19% of total landings in the Gulf of Mexico Region.

#### Key Gulf of Mexico Region Commercial Species

- Blue crab
- Crawfish
- Groupers
- Menhaden
- Mulletts
- Oyster
- Red snapper
- Shrimp
- Stone crab
- Tunas

Louisiana and Texas had the highest landings revenue in the region in 2009, \$284 million and \$150 million, respectively. The next greatest landings revenue came from West Florida with

\$116 million in landings revenue. In terms of pounds landed, Louisiana had the highest landings (1 billion pounds), followed by Mississippi (230 million pounds) and Texas (99 million pounds).

#### Economic Impacts<sup>1</sup>

In 2009, the Gulf of Mexico Region's seafood industry generated \$391 million in sales impacts in Alabama, \$1.7 billion in sales impacts in Louisiana, \$289 million in sales impacts in Mississippi, \$1.7 billion in sales impacts in Texas, and \$13 billion in sales impacts in Florida. Florida generated the largest employment, income, and value added impacts, generating 65,000 jobs, \$2.4 billion, and \$4.3 billion, respectively. The smallest income impacts were generated in Mississippi (\$113 million) and the smallest employment impacts were also generated in Mississippi (6,400 jobs).

The sector that generated the greatest employment impacts by state was the importers sector with 34,000 jobs in Florida and 2,500 jobs in Texas. The harvest sector in Texas generated 3,700 jobs. More sales impacts were generated by importers in Florida than any other sector in any another state in the region at \$9.5 billion and the greatest value added impacts were also generated by importers in Florida (\$2.9 billion).

#### Landings Revenue

Landings revenue in the Gulf of Mexico Region totaled \$629 million in 2009. This was a 37% decrease (a 46% decrease in real terms) from 2000 levels (\$997 million) and a 5% decrease (a 4.6% decrease in real terms) relative to 2008 (\$662 million). Totaling \$488 million in 2009, shellfish revenue experienced a 40% decrease (a 49% decrease in real terms) from 2000 to 2009 and experienced a 5.5% decrease (5.1% decrease in real terms) from 2008 to 2009.

Between 2000 and 2009, the landings revenue from shrimp decreased 50% (a 58% decrease in real terms) and the landings revenue for oyster increased 36% (a 17% increase in real terms).

Shrimp landings revenue and shrimp landings declined in the face of falling ex-vessel prices (decreasing 43%, a 33% decrease in real terms, from 2000 to 2009). This decrease in ex-vessel price can be partly attributed to loss of market share to shrimp imports, which increased 59% from 2000 to 2009, while landings of shrimp in the Gulf decreased 14% over the same time period.

In terms of finfish, Louisiana contributed the most (\$62 million) followed by West Florida (\$49 million), and Mississippi (\$19 million). Shellfish landings revenue was dominated by Louisiana, which also contributed the most (\$222 million) followed by Texas (\$143 million), and West Florida (\$67 million).

From 2000 to 2009, species or species groups with large changes in landings revenue include crawfish (increased 2090%), mulletts (decreased 51%), and shrimp (decreased 50%). Species or species groups with large changes in landings revenue between 2008 and 2009 include crawfish (increasing 59%), tunas (increasing 35%), and groupers (decreasing 25%).

<sup>1</sup>The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: [www.st.nmfs.noaa.gov/documents/commercial\\_seafood\\_impacts\\_2007-2009.pdf](http://www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf))

### Landings

Fishermen in the Gulf of Mexico Region landed 1.4 billion pounds of finfish and shellfish in 2009. This was a 20% decrease from the 1.8 billion pounds landed in 2000 but a 12% increase from the 1.3 billion pounds landed in 2008. Finfish landings contributed 75% of total landings in the Gulf of Mexico Region (1.1 billion pounds) in 2009. From 2008 to 2009, finfish landings experienced a 7.7% increase. Over the same time period, shellfish landings experienced a 27% increase from 284 million pounds in 2008 to 359 million in 2009 and a 10% decrease from 398 million pounds in 2000.

#### Commercial Fisheries Facts

##### Landings revenue

- On average, between 2000 and 2009, the key species or species groups accounted for 91% of total revenue, generating \$650 million in the Gulf of Mexico Region.
- Shrimp had higher landings revenues than any other species or species group, averaging \$409 million in landings revenue from 2000 to 2009.
- Crawfish had the largest annual increase in landings revenue over the 10 year time period, increasing 1144% from \$684,000 in 2000 to \$8.5 million in 2001.
- Crawfish had the largest annual decrease in landings revenue over the 10 year time period, decreasing 85% from \$8.4 million in 2005 to \$1.3 million in 2006.

##### Landings

- Key species or species groups contributed an average of 96% annually to total landings between 2000 and 2009.
- Menhaden, contributed the most to landings in the region, averaging 1.1 billion pounds from 2000 to 2009.
- Crawfish had the largest annual increase in landings over the 10 year time period, increasing 2549% from 393,000 in 2000 pounds to 10 million pounds in 2001.
- Crawfish had the largest annual decrease in landings over the 10 year time period, decreasing 90% from 15 million pounds in 2005 to 1.5 million pounds in 2006.

##### Prices

- Stone crab had the highest average annual ex-vessel price per pound (\$4.02) over the time period, followed by tunas (\$2.95), and red snapper (\$2.68).
- Menhaden had the lowest average annual ex-vessel price per pound (\$0.05) over the time period, followed by mulletts (\$0.65), and blue crab (\$0.73).
- Crawfish had the largest annual increase in ex-vessel price over the 10 year time period, increasing 60% from \$0.55 per pound in 2005 to \$0.88 in 2006.
- Crawfish had the largest decrease in ex-vessel price over the 10 year time period, decreasing 53% from \$1.74 per pound in 2000 to \$0.82 in 2001.

Menhaden and shrimp had the highest annual landings in the Gulf of Mexico Region in 2009, with 1 billion pounds and 249 million pounds, respectively. Together they accounted for 88% of the total landings in 2009. Menhaden landings decreased 23%

and shrimp landings decreased 14% during this period.

From 2000 to 2009, species or species groups with large changes in landings include crawfish (increasing 4633%), red snapper (decreasing 48%), and groupers (decreasing 42%). Species or species groups with large changes in landings between 2008 and 2009 include tunas (increasing 60%), shrimp (increasing 32%), and groupers (decreasing 22%).

#### Prices

The ex-vessel prices for the Gulf of Mexico Region's key species and species groups in 2009 were higher than their 10 year average for six of the key species (three of the species in real terms). Ex-vessel prices for oyster and red snapper increased the most between 2000 and 2009, increasing 56% (33% in real terms) and 49% (27% in real terms), respectively. Relative to ex-vessel prices in 2008, the Gulf of Mexico Region's crawfish experienced the greatest increase (35%, 35.5% in real terms) from \$0.60 in 2008 to \$0.81 in 2009. Of the changes in ex-vessel price experienced by species or species groups between 2008 and 2009, shrimp experienced the greatest decrease (33%, 32.8% in real terms) from \$1.94 to \$1.30. Relative to ex-vessel prices in 2008, three species or species groups experienced increases, including oyster (10%).

In Alabama, the species or species group with the largest change in ex-vessel price from 2000 to 2009 was menhaden (156% increase, 119% increase in real terms) from \$0.09 to \$0.23. The largest change in ex-vessel price experienced in Louisiana was for oysters (57% increase, 34% increase in real terms) from \$2.16 to \$3.39 and in Mississippi the largest change in ex-vessel price was experienced by oysters (62% increase, 38% increase in real terms) from \$1.72 to \$2.78.

#### Recreational Fishing

In 2009, over 2.8 million recreational anglers took 22 million fishing trips in the Gulf of Mexico Region. Almost 90% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 59% were taken from a private or rental boat and another 37% were shore-based. Spotted seatrout were the most frequently caught species or species group with 29 million fish caught in 2009, and represented 47% of total fish caught in the region. Of the spotted seatrout caught, 57% of them were released rather than harvested.

#### Economic Impacts and Expenditures<sup>1</sup>

The contribution of recreational fishing activities in the Gulf of Mexico 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 West Florida were the highest in the region with over 42,000 full- and part-time jobs generated by recreational fishing activities in the state. Texas (22,000 jobs), and Louisiana (20,000 jobs) followed in terms of employment impacts.

<sup>1</sup>Expenditures 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](http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf))

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) and expenditures on durable equipment. Throughout the Gulf of Mexico Region, most of the employment impacts in 2009 were generated by expenditures on durable equipment: 92% in Mississippi, 91% in Texas, and 81% in Louisiana.

In addition to employment impacts, the contribution of recreational fishing activities to the Gulf of Mexico 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 the highest in West Florida (\$4.4 billion in sales impacts), followed by Texas (\$2.8 billion), Louisiana (\$1.8 billion), Alabama (\$475 million), and Mississippi (\$417 million). In the same year, value added impacts were the highest in West Florida (\$2.4 billion in value added impacts), followed by Texas (\$1.4 billion), Louisiana (\$894 million), Alabama (\$245 million), and Mississippi (\$162 million).

#### Key Gulf of Mexico Region Recreational Species

- Atlantic croaker
- Gulf and southern kingfish
- Sand and silver seatrout
- Spotted seatrout
- Sheepshead porgy
- Red drum
- Red snapper
- Southern flounder
- Spanish mackerel
- Striped mullet

Overall, total fishing trip and durable equipment expenditures across the Gulf of Mexico Region in 2009 were \$10 billion. Approximately 87% of these expenditures were related to durable equipment purchases. The greatest expenditures were for boat expenses (\$4.1 billion), followed by fishing tackle (\$1.5 billion), vehicle expenses (\$1.4 billion), second home expenses (\$1.2 billion), and other equipment (\$570 million). Fishing trip-related expenditures by the Gulf of Mexico Region's non-residents totaled over \$523 million of which the greatest portion can be attributed to shore-based fishing trips (\$241 million). Residents of the Gulf of Mexico Region spent \$794 million on saltwater fishing trips, with most of these expenses related to private boat trips (\$561 million).

#### Participation

There were 2.8 million recreational anglers who fished in the Gulf of Mexico Region in 2009. This was a 4.3% increase from 2000 (2.7 million anglers). These anglers were Gulf of Mexico Region residents from either a coastal county (2.5 million anglers) or non-coastal county (296,000 anglers). Almost 90% of total anglers in 2009 were residents of a coastal county. Coastal county angler participation in 2009 increased 0.5% relative to 2000 (2.5 million anglers) and decreased 13% between 2008 and 2009. Non-coastal county angler participation increased 55% relative to 2000 (191,000 anglers) and increased 13% relative to 2008 (262,000 anglers).

#### Fishing Trips

Recreational fishermen took 22 million fishing trips in the Gulf of Mexico Region in 2009. This was a 6.1% increase from the 2000 (21 million trips) and was 1.8 million fewer trips than taken in 2008. Of the total trips taken in Gulf of Mexico Region in 2009, approximately 59% of the trips were private or rental boat based (13 million) trips. The other most popular mode of fishing was shore based with 8.3 million trips in 2009.

#### Recreational Fishing Facts

##### Participation

- An average of 3.2 million anglers fished in Gulf of Mexico Region annually from 2000 to 2009.
- In 2009, coastal county residents made up 90% of total anglers in this region. These anglers averaged 92% 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 2002 and 2003, increasing 22%, from 2.5 million anglers to 3 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2001 and 2002, decreasing 14%, from 2.9 million anglers to 2.5 million anglers.

##### Fishing trips

- In the Gulf of Mexico Region, an average of 23 million fishing trips were taken annually from 2000 to 2009.
- Private or rental boat and shore-based fishing trips accounted for 13 million and 8.3 million fishing trips, respectively, in 2009. Together these made up 96% 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 2002 and 2003, increasing 17%, from 20 million trips to 23 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2001 and 2002, decreasing 14%, from 23 million trips to 20 million trips.

##### Harvest and release

- Spotted seatrout was the most commonly caught key species or species group, averaging 29 million fish over the 10 year time period. Of these, 61% were released rather than harvested.
- Of the ten commonly caught key species or species groups, five were released more often than harvested over this time period. The species or species group that was most commonly released was Atlantic croaker (70% released).
- Striped mullet (82% harvested), followed by southern flounder (77% harvested), and gulf and southern kingfish (69% 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 striped mullet, which increased 269% between 2002 and 2003; the largest annual change in number of fish harvested occurred in Atlantic croaker, which increased 91% from 2005 to 2006.

*Harvest and Release*

Of the Gulf of Mexico Region's key species and species groups, spotted seatrout (29 million fish), red drum (8.1 million fish), sand and silver seatrout (6.5 million fish) and Atlantic croaker (5.3 million fish) were the most often caught by anglers in 2009. Red snapper (75% released), Atlantic croaker (73% released), red drum (68% released), spotted seatrout (57% released), and Spanish mackerel (53% released) were most often released rather than harvested. Species or species groups that were harvested more often than released by anglers include striped mullet (78% harvested) and southern flounder (77% harvested).

At the state level, spotted seatrout was the most commonly caught species in West Florida, Louisiana, and Mississippi with a total of 28 million fish caught across the three states. In Alabama, the most commonly caught fish was sand seatrout (2 million fish) and spotted seatrout was the most commonly harvested fish in Texas<sup>1</sup> (810,000 fish) in 2009.

Between 2000 and 2009, five of the Gulf of Mexico Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were striped mullet (48%), Atlantic croaker (12%), and gulf and southern kingfish (10%).

**Marine Economy**

The sum of the gross domestic products by state for Alabama, Louisiana, Mississippi, Texas, and Florida<sup>2</sup> was \$2.4 trillion in 2009. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$814 billion. These economic measures increased 49% (a 27% increase in real terms) and 46% (a 24% increase in real terms), respectively, between 2000 and 2008; and experienced a 2.9% increase (a 7.1% decrease in real terms), and 3.4% increase (a 6.6% decrease in real terms), respectively, between 2007 and 2008.

In 2008, the commercial fishing location quotient (CFLQ) for Louisiana was the highest in the region at 2.19. This was an 19% increase from 2001 and a 12% decrease from 2007. Louisiana's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 2 times higher than the level of employment in these industries nationwide. The CFLQ 2008 in West Florida was 0.97 (a 29% decrease from 2000).

*Seafood Sales and Processing*

In 2008, there were 414 nonemployer firms, businesses that have no paid employees and are subject to federal income tax, engaged in seafood product preparation and packaging across the Gulf of Mexico Region. This was a 47% increase from 2000 levels. Over the same time period, Louisiana experienced a 97% increase. In 2008, 8% of these firms were located in Alabama. Region-wide, annual receipts totaled \$25 million in 2008 and increased 11% from 2000 to 2008. Annual receipt totals experienced a 19%

decrease in Mississippi between 2000 and 2008 (31% decrease in real terms). In contrast to an increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 29% from 182 in 2000 to 129 in 2008. Approximately 28% of these establishments were located in Louisiana. The number of employees in the seafood product preparation and packaging sector decreased 23% from 10,839 employees in 2000 to 8,309 employees in 2009.

There were 443 seafood wholesale establishments in 2008 that employed 3,941 full- and part-time workers. From 2000 to 2008, the number of seafood wholesale establishments decreased 35% and the number of employees decreased 38% across the Gulf of Mexico Region.

Nonemployer firms engaged in seafood retail in the Gulf of Mexico Region totaled 806 in 2008, a 24% increase relative to 2000. Of these firms, 7.1% were located in Alabama. At the state level, these firms increased 5.8% in Louisiana and decreased 7.7% in Mississippi between 2000 and 2008. Annual receipts in the region totaled \$79 million in 2008 a 56% increase from 2000 (a 33% increase in real terms) and a 6.6% increase from 2008 (a 3.7% decrease in real terms).

Employer establishments engaged in seafood retail increased 20% from 2000 to 2008, totaling 386 in 2008. The number of employees was not available for the retail sector in the Gulf of Mexico Region in 2008.

*Transport, Support, and Marine Operations*

For the sectors in which information was available at the region level, marinas employed more people than any other industry in this sector, employing approximately 7,200 people in 2008. This industry also had the highest annual payroll in the region totaling \$207 million. Marinas had the highest number of establishments (701), followed by the ship and boat building industries with 582 establishments and the navigational services to shipping industries with 416 establishments.

In Alabama, industries with large changes in establishment numbers, employees, or annual payroll from 2007 to 2008 were: deep sea passenger transportation (100% increase in establishments), port and harbor operations (100% increase in establishments), marine cargo handling (58% increase in payroll) and marine cargo handling (54% increase in employees). In Texas, large changes were seen for port and harbor operations (104% increase in payroll), coastal and Great Lakes freight transportation (91% increase in payroll), port and harbor operations (60% increase in establishments) and deep sea freight transportation (44% decrease in employees). In Louisiana, large changes were seen in the deep sea freight transportation (120% increase in payroll), deep sea freight transportation (60% increase in employees), port and harbor operations (57% increase in establishments) and marinas (46% decrease in payroll).

<sup>1</sup>The Texas Department of Wildlife only collects information about harvest and not total catch.

<sup>2</sup>Marine Economy information was not available for West Florida, information for the entire state of Florida is provided here.

**2009 Economic Impacts of the Gulf of Mexico Region Seafood Industry (thousands of dollars)**

	Landings Revenue	Jobs	Sales	Income	Value Added
Alabama	40,530	8,759	391,300	148,409	196,785
Louisiana	284,425	29,185	1,691,033	574,212	803,135
Mississippi	37,998	6,392	289,241	112,625	146,527
Texas	150,232	18,874	1,682,135	473,749	716,100
Florida	116,091	64,744	12,988,379	2,426,410	4,341,208

**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	997,270	807,403	681,646	662,902	669,002	625,038	691,220	690,179	662,102	629,276
Finfish & other	179,109	164,959	147,338	139,373	143,479	122,642	135,982	145,553	146,067	141,419
Shellfish	818,161	642,444	534,308	523,530	525,523	502,396	555,238	544,626	516,035	487,857
Blue crab	47,573	42,862	42,913	46,243	42,292	37,961	43,355	46,028	39,804	44,575
Crawfish	684	8,511	8,070	4,845	4,810	8,360	1,290	9,034	9,435	14,980
Groupers	24,124	25,986	24,631	24,257	25,807	24,692	22,795	20,242	22,891	17,271
Menhaden	80,674	72,366	52,116	45,863	44,921	32,938	44,946	62,110	64,376	60,604
Mulletts	11,697	10,206	8,877	8,265	8,956	6,593	9,429	5,543	6,080	5,773
Oyster	53,115	52,285	50,756	61,634	60,845	56,510	62,316	69,542	60,272	72,455
Red snapper	10,368	10,251	10,714	10,447	11,676	11,336	13,167	9,569	7,964	7,964
Shrimp	655,759	497,202	385,679	365,434	366,426	360,513	397,706	367,060	366,576	324,715
Stone crab	28,670	20,477	23,091	23,043	26,704	21,223	24,115	26,242	18,898	17,568
Tunas	14,017	9,187	13,227	12,000	12,335	9,431	8,461	10,535	6,167	8,338

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total landings	1,795,396	1,613,163	1,728,899	1,595,895	1,475,139	1,198,203	1,362,326	1,404,304	1,278,236	1,429,933
Finfish & other	1,397,440	1,254,170	1,377,421	1,228,816	1,110,240	887,920	974,969	1,071,319	994,127	1,070,468
Shellfish	397,955	358,993	351,478	367,080	364,899	310,283	387,357	332,985	284,109	359,465
Blue crab	68,898	54,500	66,019	63,961	60,581	50,041	67,481	57,964	49,254	59,396
Crawfish	393	10,410	15,602	8,337	8,537	15,177	1,469	15,848	15,612	18,601
Groupers	11,418	12,167	12,003	10,933	11,912	10,776	9,092	7,308	8,547	6,626
Menhaden	1,303,895	1,165,244	1,290,407	1,142,747	1,023,260	815,495	901,398	1,005,325	927,517	1,002,567
Mulletts	16,812	16,084	12,661	12,957	13,750	9,023	12,727	8,933	10,569	10,495
Oyster	25,767	25,621	24,110	27,033	25,052	20,174	19,674	22,518	20,655	22,546
Red snapper	4,844	4,642	4,803	4,435	4,677	4,109	4,637	2,998	2,368	2,501
Shrimp	288,628	257,088	233,759	256,357	255,782	216,291	288,973	225,163	188,789	249,242
Stone crab	6,848	6,682	6,433	5,292	5,971	4,534	4,806	5,893	6,123	5,268
Tunas	4,631	3,463	4,877	5,063	3,882	3,050	2,851	3,426	1,782	2,847

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.69	0.79	0.65	0.72	0.70	0.76	0.64	0.79	0.81	0.75
Crawfish	1.74	0.82	0.52	0.58	0.56	0.55	0.88	0.57	0.60	0.81
Groupers	2.11	2.14	2.05	2.22	2.17	2.29	2.51	2.77	2.68	2.61
Menhaden	0.06	0.06	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.06
Mulletts	0.70	0.63	0.70	0.64	0.65	0.73	0.74	0.62	0.58	0.55
Oyster	2.06	2.04	2.11	2.28	2.43	2.80	3.17	3.09	2.92	3.21
Red snapper	2.14	2.21	2.23	2.36	2.50	2.76	2.84	3.19	3.36	3.18
Shrimp	2.27	1.93	1.65	1.43	1.43	1.67	1.38	1.63	1.94	1.30
Stone crab	4.19	3.06	3.59	4.35	4.47	4.68	5.02	4.45	3.09	3.33
Tunas	3.03	2.65	2.71	2.37	3.18	3.09	2.97	3.07	3.46	2.93



**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	<b>Trips</b>	<b>Jobs</b>	<b>Sales</b>	<b>Value Added</b>	<b>Income</b>
Alabama	1,717,030	4,924	474,746	155,663	245,437
Louisiana	3,999,971	19,688	1,774,692	578,767	894,123
Mississippi	1,062,475	3,188	417,080	105,472	162,099
Texas	NA <sup>1</sup>	22,127	2,846,858	910,011	1,434,733
West Florida	15,517,357	42,314	4,369,022	1,532,821	2,385,738

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

<b>Fishing Mode</b>	<b>Trip Expenditures</b>		<b>Equipment</b>	<b>Durable Expenditures</b>
	<b>Non-Residents</b>	<b>Residents</b>		
			Fishing Tackle	1,489,083
For-Hire	135,432	72,670	Other Equipment	569,505
Private Boat	146,978	561,248	Boat Expenses	4,128,470
Shore	240,650	160,387	Vehicle Expenses	1,383,478
<i>Total Trip Expenditures</i>	523,060	794,305	Second Home Expenses	1,223,346
			<i>Total Durable Equipment Expenditures</i>	8,793,882
<b>Total State Trip and Durable Equipment Expenditures</b>				10,111,247

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

	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Coastal	2,539	2,898	2,485	3,039	3,185	3,133	3,328	3,235	2,926	2,550
Non-Coastal	191	227	216	256	318	190	315	326	262	296
Out-of-State	NA <sup>2</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
<b>Total Anglers</b>	2,730	3,125	2,701	3,294	3,503	3,323	3,643	3,562	3,188	2,846

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

	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
For-Hire	812	742	764	691	818	712	820	876	839	792
Private Boat	11,728	12,371	11,635	14,110	14,107	12,629	13,837	14,435	14,574	13,211
Shore	8,478	9,776	7,266	8,155	9,430	8,530	9,206	8,957	8,695	8,294
<b>Total Trips</b>	21,018	22,890	19,666	22,957	24,355	21,871	23,863	24,267	24,109	22,297

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

		<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Drum (Atlantic croaker)	H	1,783	1,432	832	1,057	938	747	1,430	1,332	1,409	1,464
	R	4,302	2,755	2,757	2,431	3,404	1,913	2,476	2,648	2,836	3,867
Drum (Gulf and southern kingfish)	H	1,652	2,552	1,205	1,802	1,886	1,636	1,494	1,260	1,548	1,208
	R	432	1,044	477	538	911	884	1,063	671	700	661
Drum (sand and silver seatrouts)	H	4,711	3,360	3,256	3,111	2,292	1,825	2,726	2,998	3,565	4,287
	R	1,596	1,063	1,069	1,003	1,064	790	1,677	1,739	2,401	2,232
Drum (spotted seatrout)	H	11,608	9,381	7,366	9,568	10,569	9,977	15,564	11,575	13,150	12,567
	R	16,758	11,202	15,298	19,217	18,282	19,702	20,872	19,036	19,415	16,786
Porgies (sheepshead)	H	1,298	1,478	1,552	1,941	2,475	1,979	1,452	1,324	1,787	1,756
	R	1,728	1,649	1,701	2,004	2,194	1,982	1,541	1,073	1,442	1,433
Red drum	H	3,266	3,115	2,478	2,673	2,850	2,173	2,814	2,973	3,189	2,620
	R	5,469	5,146	4,874	5,915	5,538	5,319	7,024	6,057	6,512	5,444
Red snapper	H	767	848	1,106	993	1,077	829	969	1,117	709	722
	R	1,427	1,807	2,091	1,942	2,140	1,904	2,558	2,755	1,916	2,189
Southern flounder	H	563	732	506	659	706	507	560	609	540	585
	R	108	171	117	252	212	185	178	194	151	172
Spanish mackerel	H	1,714	2,477	1,962	1,504	2,120	1,134	1,936	1,708	1,873	1,416
	R	1,497	1,845	1,920	2,211	2,183	1,385	3,011	2,110	2,259	1,572
Striped mullet	H	1,478	1,561	1,264	1,587	1,141	1,112	1,146	986	1,006	751
	R	390	733	76	280	116	211	157	176	225	218

<sup>1</sup>The Marine Recreational Program (MRIP) does not collect effort data for Texas.<sup>2</sup>NA = data are not available because out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified

**2009 Economic Impacts of the Alabama Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	8,759	391,300	148,409	196,785
Commercial Harvesters	1,378	66,889	19,846	29,545
Seafood Processors & Dealers	1,656	105,157	41,191	52,344
Importers	126	34,702	5,562	10,579
Seafood Wholesalers & Distributors	132	6,253	2,192	2,824
Retail	5,468	178,298	79,619	101,493

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	64,075	44,941	35,925	36,844	37,036	39,726	48,558	48,814	44,314	40,530
Finfish & other	2,560	3,361	3,175	3,185	3,905	3,982	4,572	3,654	4,168	3,656
Shellfish	61,515	41,580	32,751	33,658	33,131	35,744	43,986	45,160	40,145	36,874
Blue crab	3,086	1,744	1,490	1,715	1,774	663	1,319	1,711	1,533	961
Flounders	285	238	291	210	230	247	223	261	214	197
Menhaden	147	130	102	104	89	63	48	71	59	40
Mulletts	1,072	1,448	985	772	1,187	1,117	1,171	984	1,011	764
Oysters	1,755	1,235	1,602	1,623	2,120	3,020	3,639	2,698	243	77
Red snapper	218	280	368	359	382	638	536	212	237	263
Sharks	36	14	275	337	431	478	463	223	345	275
Shrimp	56,661	38,592	29,603	30,284	29,197	32,002	39,022	40,742	38,355	35,806
Spanish mackerel	229	310	371	443	554	401	573	453	611	301
Vermillion snapper	25	55	54	83	152	149	318	321	500	841

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	30,530	25,858	23,658	25,535	26,559	23,985	34,033	29,432	24,420	29,693
Finfish & other	4,837	6,253	5,451	5,982	6,248	5,552	6,498	4,854	5,383	4,456
Shellfish	25,693	19,605	18,207	19,553	20,311	18,432	27,535	24,578	19,036	25,237
Blue crab	4,784	2,458	2,575	2,958	3,329	1,024	2,384	2,557	1,799	1,458
Flounders	159	137	176	118	138	130	118	133	107	97
Menhaden	1,642	1,589	982	1,022	828	521	350	470	268	177
Mulletts	1,739	2,539	1,949	1,700	2,133	1,976	1,913	1,798	1,977	1,813
Oysters	792	575	759	816	908	1,041	940	769	73	23
Red snapper	94	118	152	132	138	214	177	59	60	65
Sharks	69	24	329	803	716	800	1,227	315	423	328
Shrimp	20,103	16,566	14,857	15,770	16,064	16,260	24,201	21,247	17,154	23,730
Spanish mackerel	384	506	762	858	914	568	873	580	849	417
Vermillion snapper	13	27	28	36	66	66	122	129	196	346

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.65	0.71	0.58	0.58	0.53	0.65	0.55	0.67	0.85	0.66
Flounders	1.79	1.74	1.65	1.78	1.67	1.91	1.89	1.97	2.01	2.04
Menhaden	0.09	0.08	0.10	0.10	0.11	0.12	0.14	0.15	0.22	0.23
Mulletts	0.62	0.57	0.51	0.45	0.56	0.57	0.61	0.55	0.51	0.42
Oysters	2.22	2.15	2.11	1.99	2.33	2.90	3.87	3.51	3.34	3.33
Red snapper	2.32	2.37	2.41	2.72	2.78	2.98	3.03	3.61	3.93	4.04
Sharks	0.52	0.58	0.83	0.42	0.60	0.60	0.38	0.71	0.82	0.84
Shrimp	2.82	2.33	1.99	1.92	1.82	1.97	1.61	1.92	2.24	1.51
Spanish mackerel	0.60	0.61	0.49	0.52	0.61	0.71	0.66	0.78	0.72	0.72
Vermillion snapper	2.01	2.04	1.92	2.31	2.32	2.26	2.61	2.50	2.56	2.43

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	389	29,108	9,020	16,023
Private Boat	528	50,290	15,601	27,533
Shore	680	55,330	17,088	29,764
Total Durable Equipment Impacts	3,327	340,018	113,954	172,117
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>4,924</b>	<b>474,746</b>	<b>155,663</b>	<b>245,437</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	69,899
For-Hire	11,910	7,515	Other Equipment	28,781
Private Boat	9,411	39,893	Boat Expenses	221,709
Shore	24,611	20,030	Vehicle Expenses	42,064
<i>Total Trip Expenditures</i>	<i>45,932</i>	<i>67,438</i>	Second Home Expenses	25,771
			<i>Total Durable Equipment Expenditures</i>	<i>388,224</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>501,594</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	143	213	123	187	223	231	233	253	192	205
Non-Coastal	94	113	97	123	159	93	184	169	116	151
Out of State	148	227	193	214	345	161	320	291	237	209
<b>Total Anglers</b>	<b>385</b>	<b>553</b>	<b>413</b>	<b>524</b>	<b>728</b>	<b>485</b>	<b>736</b>	<b>712</b>	<b>545</b>	<b>566</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	62	63	68	67	77	55	77	74	56	57
Private	545	825	606	846	907	806	857	1,007	949	898
Shore	479	748	516	588	1,056	705	1,209	1,038	666	762
<b>Total Trips</b>	<b>1,087</b>	<b>1,636</b>	<b>1,190</b>	<b>1,500</b>	<b>2,040</b>	<b>1,566</b>	<b>2,143</b>	<b>2,120</b>	<b>1,671</b>	<b>1,717</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bluefish	H	62	89	51	45	167	24	26	33	24	21
	R	59	113	64	126	187	93	264	208	80	69
Drum (Atlantic croaker)	H	225	360	187	244	132	159	330	289	730	343
	R	539	546	467	512	786	748	683	930	1,287	1,506
Drum (kingfishes) <sup>1</sup>	H	433	1,202	412	486	813	483	572	514	821	735
	R	193	368	162	185	382	300	589	247	240	355
Drum (sand seatrout)	H	557	712	428	709	716	410	725	688	1,257	1,448
	R	185	180	130	225	345	333	506	428	493	599
Drum (spotted seatrout)	H	166	295	193	345	199	344	308	308	269	411
	R	245	356	167	431	142	367	449	418	684	607
Porgies (sheepshead)	H	141	313	191	299	383	284	216	282	314	174
	R	60	109	81	88	98	89	75	33	126	72
Red drum	H	58	136	84	114	119	127	112	99	94	58
	R	73	172	104	245	145	160	176	128	221	110
Red snapper	H	267	349	473	380	411	277	197	232	132	196
	R	685	910	983	665	654	560	688	659	435	487
Southern flounder	H	65	182	82	113	114	114	113	98	84	90
	R	16	45	16	68	58	74	51	38	36	20
Spanish mackerel	H	185	328	106	122	398	94	143	99	136	95
	R	57	115	16	100	253	58	89	30	36	74

<sup>1</sup>Kingfishes include southern kingfish and Gulf kingfish

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	99,817 (1.4%)	1,653,074 (1.4%)	43,958 (1.1%)	69,457 (1.2%)	116,014 (1.2%)	0.4 <sup>2</sup>
2008	103,875 (1.4%)	1,714,692 (1.4%)	59,827 (1.2%)	98,739 (1.2%)	171,748 (1.2%)	0.44
% change	4.07%	3.73%	36.1%	42.2%	48%	10%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	46	39	44	36	43	40	34	47	33
	Receipts	3,677	2,711	3,603	1,168	3,413	3,414	1,558	1,547	1,894
Seafood Sales, retail	Firms	44	50	58	55	61	44	57	61	57
	Receipts	3,878	3,633	3,456	3,812	3,645	3,855	4,802	4,279	5,632

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	17	21	22	24	23	26	24	23	23
	Employees	1,725	1,880	1,951	2,057	2,037	1,925	1,629	1,510	1,450
	Payroll	33,811	32,692	36,198	36,766	36,130	38,229	34,703	32,774	29,277
Seafood sales, wholesale	Establishments	47	45	36	33	31	26	26	31	29
	Employees	887	692	547	611	588	607	395	395	494
	Payroll	10,252	9,597	7,062	6,148	6,752	6,345	6,195	6,202	8,751
Seafood sales, retail	Establishments	28	30	35	37	35	34	28	33	33
	Employees	ND <sup>3</sup>	95	110	ND <sup>3</sup>	96	95	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	1,244	1,589	ND <sup>3</sup>	1,401	1,399	ND <sup>3</sup>	1,809	1,710

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	8	9	6	13	10	10	6	8	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	15	48	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	754	3,266	ND <sup>3</sup>
Deep sea freight transportation	Establishments	3	2	2	5	3	3	3	5	7
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	53	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	46	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	3,661	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	3,553	ND <sup>3</sup>
Deep sea passenger transportation	Establishments	1	2	NA <sup>4</sup>	1	1	1	1	1	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	59	61	48	53	52	58	52	52	56
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	242	287	341	347	312	364	316
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	4,966	6,218	7,631	8,047	8,388	9,382	9,170
Marine cargo handling	Establishments	21	19	19	17	18	17	14	19	20
	Employees	ND <sup>3</sup>	617	635	445	577	672	ND <sup>3</sup>	491	756
	Payroll	ND <sup>3</sup>	20,809	20,592	19,642	26,201	28,458	ND <sup>3</sup>	21,076	33,244
Navigational services to shipping	Establishments	16	11	15	12	16	17	18	16	17
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	220	410	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	338	287
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	9,317	19,602	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	17,554	16,712
Port & harbor operations	Establishments	5	7	6	3	1	3	3	2	4
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	162	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	6,321	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	41	41	45	41	42	45	47	42	42
	Employees	2,421	2,575	2,901	2,781	2,195	2,591	3,027	3,570	4,435
	Payroll	78,014	105,756	92,916	81,092	83,756	86,453	121,185	172,380	188,543

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the Florida<sup>1</sup> Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	64,744	12,988,379	2,426,410	4,341,208
Commercial Harvesters	4,775	312,239	97,964	130,331
Seafood Processors & Dealers	3,781	606,528	117,381	230,761
Importers	34,493	9,488,366	1,520,692	2,892,469
Seafood Wholesalers & Distributors	8,243	949,957	372,950	463,999
Retail	13,452	1,631,289	317,424	623,649

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	159,635	146,558	144,185	141,185	148,058	137,912	145,494	132,162	122,755	116,091
Finfish & other	48,344	52,707	51,609	51,451	52,331	50,600	50,358	45,890	50,842	49,164
Shellfish	111,291	93,851	92,576	89,734	95,727	87,312	95,136	86,272	71,913	66,927
Blue crab	6,154	4,855	5,644	7,061	7,316	7,035	7,043	5,769	3,281	4,170
Gag	5,521	8,050	7,380	6,855	7,615	7,084	4,151	4,348	4,898	2,751
Lobsters	25,362	14,847	18,932	17,138	20,724	15,077	24,885	24,546	19,175	12,177
Mulletts	5,121	6,126	6,059	4,755	4,891	4,355	6,021	3,663	4,172	4,740
Oyster	3,873	3,855	3,125	2,932	2,884	2,854	5,415	6,631	5,473	6,941
Quahog clam	5,225	4,740	3,606	3,870	2,074	1,736	807	914	1,009	915
Red grouper	13,324	13,519	12,859	11,695	13,281	13,376	14,384	11,024	13,569	10,476
Red snapper	1,303	1,509	2,188	2,284	2,168	1,671	1,991	3,066	2,945	2,978
Shrimp	40,660	44,021	37,252	34,893	34,737	38,625	32,225	20,976	23,265	24,842
Stone crab	28,353	20,136	22,874	22,913	26,507	21,074	24,029	26,213	18,877	17,464

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	77,342	80,336	82,075	79,163	83,894	73,038	70,766	59,783	60,119	65,314
Finfish & other	39,296	44,498	43,586	41,697	41,134	36,543	35,887	30,644	35,249	37,922
Shellfish	38,046	35,838	38,489	37,466	42,760	36,496	34,879	29,139	24,871	27,392
Blue crab	6,573	4,647	5,567	7,225	8,083	7,370	8,610	6,110	2,657	3,328
Gag	2,234	3,281	3,136	2,691	3,054	2,688	1,436	1,339	1,474	823
Lobsters	5,184	2,966	4,080	3,886	4,565	3,059	4,372	3,405	2,981	3,950
Mulletts	7,493	8,989	8,020	6,577	6,660	5,635	7,308	5,619	6,979	8,371
Oyster	2,520	2,559	1,944	1,753	1,644	1,417	2,394	2,959	2,501	2,867
Quahog clam	549	509	480	558	266	212	96	116	146	150
Red grouper	6,916	7,031	6,987	5,841	6,789	6,386	6,062	4,352	5,619	4,382
Red snapper	563	652	948	928	811	584	649	919	848	862
Shrimp	14,906	17,471	19,128	18,131	18,258	19,297	14,176	8,628	9,942	11,586
Stone crab	6,747	6,594	6,385	5,253	5,933	4,502	4,784	5,884	6,117	5,243

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.94	1.04	1.01	0.98	0.91	0.95	0.82	0.94	1.23	1.25
Gag	2.47	2.45	2.35	2.55	2.49	2.64	2.89	3.25	3.32	3.34
Lobsters	4.89	5.01	4.64	4.41	4.54	4.93	5.69	7.21	6.43	3.08
Mulletts	0.68	0.68	0.76	0.72	0.73	0.77	0.82	0.65	0.60	0.57
Oyster	1.54	1.51	1.61	1.67	1.75	2.02	2.26	2.24	2.19	2.42
Quahog clam	9.52	9.31	7.51	6.93	7.79	8.17	8.44	7.90	6.90	6.12
Red grouper	1.93	1.92	1.84	2.00	1.96	2.09	2.37	2.53	2.41	2.39
Red snapper	2.32	2.31	2.31	2.46	2.67	2.86	3.07	3.34	3.47	3.46
Shrimp	2.73	2.52	1.95	1.92	1.90	2.00	2.27	2.43	2.34	2.14
Stone crab	4.20	3.05	3.58	4.36	4.47	4.68	5.02	4.45	3.09	3.33

<sup>1</sup>Information reported in this table is for the state of Florida, not West Florida

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,831	178,124	60,811	105,609
Private Boat	3,893	389,923	134,078	231,863
Shore	4,237	399,457	135,699	232,071
Total Durable Equipment Impacts	32,354	3,401,518	1,202,232	1,816,195
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>42,314</b>	<b>4,369,022</b>	<b>1,532,821</b>	<b>2,385,738</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	922,548
For-Hire	89,788	20,459	Other Equipment	307,118
Private Boat	110,881	236,443	Boat Expenses	2,034,379
Shore	212,239	76,676	Vehicle Expenses	685,214
<i>Total Trip Expenditures</i>	<i>412,908</i>	<i>333,578</i>	Second Home Expenses	142,126
			<i>Total Durable Equipment Expenditures</i>	<i>4,091,385</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>4,837,871</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	1683	1894	1703	1965	2023	2088	2084	1934	1820	1551
Non-Coastal	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
Out of State	2387	2552	1990	2318	2141	2008	1988	2151	2029	1671
<b>Total Anglers</b>	<b>4071</b>	<b>4447</b>	<b>3693</b>	<b>4283</b>	<b>4165</b>	<b>4096</b>	<b>4072</b>	<b>4085</b>	<b>3849</b>	<b>3222</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	628	543	581	496	590	522	560	641	595	567
Private	7,893	8,225	8,235	9,222	9,161	8,720	8,932	9,415	9,617	8,495
Shore	6,566	7,621	5,602	6,291	6,680	6,246	6,738	6,343	6,716	6,455
<b>Total Trips</b>	<b>15,086</b>	<b>16,389</b>	<b>14,418</b>	<b>16,009</b>	<b>16,431</b>	<b>15,489</b>	<b>16,230</b>	<b>16,399</b>	<b>16,928</b>	<b>15,517</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Common snook	H	42	36	50	45	69	65	38	30	22	15
	R	1,302	1,290	1,292	1,359	2,039	2,283	1,575	1,574	1,665	1,569
Drum (sand and silver seatrouts)	H	1,841	1,047	1,354	751	571	372	412	867	739	828
	R	604	389	321	146	190	105	297	450	597	283
Drum (spotted seatrout)	H	1,610	1,080	1,532	1,629	1,841	1,964	1,506	1,569	1,532	1,438
	R	9,377	6,201	10,710	10,470	9,601	11,507	8,733	10,432	9,046	7,699
Gag	H	671	453	490	470	614	458	262	299	419	222
	R	1,416	1,905	2,449	3,359	3,530	2,377	1,793	2,923	4,270	2,657
Gray snapper	H	682	805	655	980	881	838	654	890	1,397	1,124
	R	3,223	2,562	2,998	4,808	3,429	4,751	2,646	4,360	6,017	3,036
King mackerel	H	213	212	262	196	189	175	368	252	195	368
	R	81	249	139	96	108	134	463	79	141	139
Mullet <sup>2</sup>	H	1,109	1,436	1,010	840	1,112	1,017	1,241	729	1,002	564
	R	166	342	93	187	282	260	139	214	240	194
Porgies (sheepshead)	H	725	745	686	761	871	798	732	709	743	764
	R	1,272	961	1,125	1,370	1,547	1,390	938	740	813	907
Red drum	H	377	266	292	365	323	459	378	430	472	256
	R	1,453	1,462	1,376	1,938	2,160	2,637	2,898	2,493	2,330	1,381
Spanish mackerel	H	1,346	2,122	1,810	1,317	1,687	985	1,754	1,582	1,705	1,286
	R	1,218	1,705	1,865	2,084	1,913	1,275	2,879	2,058	2,204	1,461

<sup>1</sup>NA = not applicable because all West Florida residents are considered coastal county residents<sup>2</sup>Mulletts include species within the mullet genus including striped mullets.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	428,438 (6.1%)	6,217,386 (5.5%)	177,379 (4.6%)	277,562 (4.9%)	481,115 (4.8%)	1.36 <sup>2</sup>
2008	507,027 (6.7%)	7,366,571 (6.1%)	267,430 (5.2%)	412,724 (5.2%)	749,778 (5.1%)	0.97
% change	18.3%	18.5%	50.8%	48.7%	55.8%	-28.7%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	102	104	116	142	177	164	174	173	202
	Receipts	8,330	6,350	5,064	8,047	8,652	8,756	10,184	10,497	11,065
Seafood Sales, retail	Firms	219	212	243	240	247	247	251	319	331
	Receipts	18,978	17,935	20,837	18,064	18,004	22,787	20,708	27,557	26,087

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	41	43	33	27	24	25	22	20	23
	Employees	2,188	2,033	2,359	2,084	2,193	1,616	1,704	1,748	1,637
	Payroll	58,821	58,977	65,914	61,452	65,881	47,529	62,801	58,233	53,455
Seafood sales, wholesale	Establishments	329	323	314	293	261	258	259	267	229
	Employees	2,915	2,670	2,395	1,835	1,948	1,883	2,091	2,308	1,913
	Payroll	76,363	76,717	78,160	55,874	63,276	65,339	73,897	85,019	75,203
Seafood sales, retail	Establishments	135	159	190	174	190	176	173	169	168
	Employees	575	697	908	952	977	970	936	989	991
	Payroll	10,359	13,403	17,186	15,673	17,575	19,192	19,513	20,595	21,604

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	54	58	51	66	59	59	54	47	42
	Employees	2,391	3,208	2,856	ND <sup>3</sup>	1,132	1,150	1,217	1,242	1,106
	Payroll	108,638	150,964	143,185	ND <sup>3</sup>	80,422	71,420	91,638	94,429	50,115
Deep sea freight transportation	Establishments	58	51	62	61	63	69	73	69	57
	Employees	2,209	2,123	1,858	2,535	2,567	2,622	3,729	3,190	2,486
	Payroll	99,384	106,848	107,564	131,904	150,701	207,300	226,810	208,144	169,055
Deep sea passenger transportation	Establishments	30	30	31	36	32	31	37	34	31
	Employees	9,165	8,719	7,863	8,879	8,849	8,492	9,077	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	349,974	394,932	315,551	428,941	536,753	504,625	571,590	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	476	509	481	528	532	551	513	493	442
	Employees	3,799	3,876	3,449	5,079	5,067	5,069	5,494	4,935	5,024
	Payroll	88,436	88,274	90,662	111,324	125,763	133,384	146,390	148,592	151,677
Marine cargo handling	Establishments	65	71	74	68	66	63	66	53	56
	Employees	4,549	4,863	4,405	5,651	5,671	6,409	7,266	6,585	8,052
	Payroll	92,843	124,760	109,555	171,481	175,257	177,983	189,020	173,788	192,473
Navigational services to shipping	Establishments	142	133	141	140	149	148	142	145	147
	Employees	866	755	714	817	686	660	781	1,484	894
	Payroll	36,730	35,854	34,040	39,524	39,309	42,200	48,370	61,470	56,917
Port & harbor operations	Establishments	22	25	29	26	29	31	27	29	40
	Employees	914	1,355	1,180	592	1,045	973	584	459	712
	Payroll	19,082	25,246	26,928	19,071	24,327	22,606	19,417	12,872	24,668
Ship & boat building	Establishments	300	313	291	290	306	312	301	296	297
	Employees	14,773	13,182	11,407	11,830	12,503	12,729	12,385	12,332	12,419
	Payroll	447,253	405,856	379,828	393,985	443,379	454,209	427,888	469,382	442,096

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of the Louisiana Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	29,185	1,691,033	574,212	803,135
Commercial Harvesters	10,587	534,681	177,295	262,396
Seafood Processors & Dealers	1,794	152,071	58,985	75,238
Importers	1,264	347,587	55,707	105,960
Seafood Wholesalers & Distributors	944	103,546	35,275	45,662
Retail	14,597	553,148	246,949	313,879

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	421,199	347,253	280,630	270,408	274,082	251,678	278,292	289,288	275,239	284,425
Finfish & other	105,389	86,823	70,327	63,299	66,074	49,443	60,735	65,198	64,116	62,445
Shellfish	315,810	260,430	210,303	207,109	208,008	202,235	217,557	224,090	211,124	221,981
Blue crab	34,395	31,967	30,685	33,623	29,881	27,419	32,605	35,044	32,202	36,418
Crawfish	684	8,511	8,070	4,845	4,810	8,360	1,290	9,034	9,435	14,980
King mackerel	1,017	996	1,046	990	1,198	1,273	1,112	1,298	1,307	950
Menhaden	68,586	58,961	40,378	34,464	35,249	25,776	36,441	41,368	45,768	42,555
Mulletts	5,265	2,417	1,688	2,592	2,681	946	2,061	690	749	71
Oysters	27,526	31,853	30,296	33,358	34,814	33,305	35,999	40,148	38,852	49,962
Red snapper	5,841	5,411	4,696	3,960	3,861	3,568	4,472	2,529	2,038	2,167
Shrimp	253,032	187,969	141,213	135,153	138,466	133,143	147,652	139,842	130,623	120,610
Tunas	12,027	7,895	10,845	9,471	10,739	7,687	7,040	8,334	4,409	6,496
Vermillion snapper	932	1,114	1,308	1,896	1,663	1,137	762	991	819	798

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	1,359,242	1,195,654	1,312,139	1,181,607	1,095,571	849,280	918,675	999,343	918,827	1,005,145
Finfish & other	1,148,595	1,003,402	1,124,627	985,164	895,336	681,322	714,545	814,645	759,438	806,494
Shellfish	210,647	192,252	187,511	196,443	200,235	167,959	204,130	184,698	159,389	198,651
Blue crab	52,047	41,799	50,123	48,089	44,397	38,100	53,394	45,107	41,713	51,220
Crawfish	393	10,410	15,602	8,337	8,537	15,177	1,469	15,848	15,612	18,601
King mackerel	949	818	866	911	984	867	971	879	789	927
Menhaden	1,111,979	971,102	1,093,997	953,714	862,947	657,702	689,853	789,621	738,092	785,575
Mulletts	7,253	4,260	2,555	4,524	4,754	1,238	3,361	1,375	1,503	179
Oysters	12,718	15,133	13,962	13,609	13,902	12,099	11,417	12,858	12,791	14,731
Red snapper	2,784	2,436	2,178	1,725	1,560	1,316	1,653	807	589	665
Shrimp	145,385	124,813	107,795	125,730	133,370	102,576	137,839	110,860	89,268	114,094
Tunas	3,871	2,706	3,587	3,184	3,230	2,296	2,143	2,476	1,248	2,019
Vermillion snapper	504	601	755	1,053	921	588	365	517	409	412

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.66	0.76	0.61	0.70	0.67	0.72	0.61	0.78	0.77	0.71
Crawfish	1.74	0.82	0.52	0.58	0.56	0.55	0.88	0.57	0.60	0.81
King mackerel	1.07	1.22	1.21	1.09	1.22	1.47	1.15	1.48	1.66	1.03
Menhaden	0.06	0.06	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.05
Mulletts	0.73	0.57	0.66	0.57	0.56	0.76	0.61	0.50	0.50	0.40
Oysters	2.16	2.10	2.17	2.45	2.50	2.75	3.15	3.12	3.04	3.39
Red snapper	2.10	2.22	2.16	2.30	2.47	2.71	2.71	3.13	3.46	3.26
Shrimp	1.74	1.51	1.31	1.07	1.04	1.30	1.07	1.26	1.46	1.06
Tunas	3.11	2.92	3.02	2.97	3.33	3.35	3.29	3.37	3.53	3.22
Vermillion snapper	1.85	1.86	1.73	1.80	1.81	1.93	2.09	1.92	2.00	1.93



**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	798	75,856	24,482	43,071
Private Boat	2,345	249,391	70,141	122,659
Shore	567	54,356	16,042	27,439
Total Durable Equipment Impacts	15,978	1,395,089	468,102	700,954
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>19,688</b>	<b>1,774,692</b>	<b>578,767</b>	<b>894,123</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	284,857
For-Hire	30,839	18,242	Other Equipment	137,384
Private Boat	21,947	168,071	Boat Expenses	1,137,994
Shore	1,559	42,625	Vehicle Expenses	102,598
<i>Total Trip Expenditures</i>	<i>54,345</i>	<i>228,937</i>	Second Home Expenses	134,328
			<i>Total Durable Equipment Expenditures</i>	<i>1,797,161</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>2,080,443</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	552	593	484	727	747	706	868	853	795	669
Non-Coastal	67	67	68	79	133	68	108	124	120	108
Out of State	118	137	117	204	179	138	198	157	170	139
<b>Total Anglers</b>	<b>737</b>	<b>797</b>	<b>669</b>	<b>1011</b>	<b>1059</b>	<b>911</b>	<b>1174</b>	<b>1134</b>	<b>1084</b>	<b>916</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	94	118	94	104	139	128	176	141	175	157
Private	2,722	2,646	2,251	3,295	3,446	2,639	3,381	3,165	3,416	3,074
Shore	935	851	674	872	1,209	1,159	934	1,210	950	769
<b>Total Trips</b>	<b>3,752</b>	<b>3,615</b>	<b>3,019</b>	<b>4,271</b>	<b>4,795</b>	<b>3,926</b>	<b>4,491</b>	<b>4,516</b>	<b>4,541</b>	<b>4,000</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Black drum	H	679	446	511	485	509	314	389	351	501	503
	R	1,079	828	885	834	904	525	657	682	967	857
Drum (Atlantic croaker)	H	958	532	281	379	405	528	914	856	373	624
	R	2,967	1,157	1,055	1,011	2,011	919	1,411	1,173	1,013	1,314
Drum (sand seatrout)	H	1,257	449	599	983	601	773	1,161	1,122	1,177	1,003
	R	610	205	506	302	419	204	651	578	1,130	949
Drum (spotted seatrout)	H	9,616	7,698	5,270	7,318	8,082	7,317	13,230	9,337	10,811	9,913
	R	6,726	4,007	3,862	7,484	7,794	7,046	10,644	7,401	8,993	7,732
Drum(southern kingfish)	H	153	145	105	159	309	335	153	118	103	133
	R	67	180	23	63	112	286	166	34	141	67
Porgies (sheepshead)	H	389	326	607	805	1,174	867	474	309	714	775
	R	384	453	433	520	525	482	507	290	485	447
Red drum	H	2,774	2,652	2,042	2,143	2,349	1,554	2,254	2,390	2,559	2,240
	R	3,866	3,380	3,277	3,545	3,103	2,445	3,848	3,360	3,819	3,717
Red snapper	H	98	55	47	71	83	104	201	148	90	104
	R	112	48	40	166	240	308	438	277	254	188
Southern flounder	H	388	258	272	407	475	290	387	356	309	308
	R	71	65	48	115	102	64	80	83	45	56
Yellowfin tuna	H	3	14	8	14	8	14	11	8	19	6
	R	(1)	1	(1)	(1)	(1)	2	(1)	1	8	(1)

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	101,016 (1.4%)	1,592,357 (1.4%)	42,975 (1.1%)	67,877 (1.3%)	131,430 (1.2%)	1.84 <sup>2</sup>
2008	104,007 (1.4%)	1,655,151 (1.4%)	62,393 (1.2%)	102,811 (1.5%)	211,327 (1.3%)	2.19
% change	2.96%	3.94%	45.2%	51.5%	60.8%	19%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	39	58	66	73	75	76	99	85	77
	Receipts	3,466	2,918	3,006	4,678	10,097	8,513	8,179	6,523	7,365
Seafood Sales, retail	Firms	172	170	185	208	204	156	181	196	182
	Receipts	11,806	12,586	15,201	22,637	18,148	14,585	20,046	20,932	25,900

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	56	50	50	54	54	50	40	41	36
	Employees	1,282	1,141	1,185	1,693	1,519	1,556	1,506	1,253	991
	Payroll	45,285	48,331	52,861	56,562	47,016	43,801	45,439	41,391	32,382
Seafood sales, wholesale	Establishments	162	164	152	134	133	128	112	119	98
	Employees	1,187	1,245	1,270	1,001	975	1,037	807	954	739
	Payroll	21,717	23,053	22,363	19,539	19,639	17,649	21,243	21,604	15,858
Seafood sales, retail	Establishments	88	88	123	109	111	106	101	101	107
	Employees	438	518	640	796	745	723	759	781	681
	Payroll	5,162	5,636	7,033	9,406	9,567	8,277	10,560	11,827	11,141

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	131	118	109	160	148	136	137	138	123
	Employees	5,925	5,689	5,494	6,779	6,656	5,771	6,397	7,680	6,506
	Payroll	239,195	267,470	236,730	287,415	300,547	294,941	386,136	527,290	549,388
Deep sea freight transportation	Establishments	34	31	28	25	22	25	24	22	18
	Employees	ND <sup>3</sup>	860	647	831	705	ND <sup>3</sup>	595	685	1,095
	Payroll	ND <sup>3</sup>	37,269	29,432	43,634	38,949	ND <sup>3</sup>	35,269	39,843	87,479
Deep sea passenger transportation	Establishments	9	8	6	4	3	3	2	3	2
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	66	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	2,748	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	74	74	57	53	52	53	41	50	43
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	345	409	ND <sup>3</sup>	352	ND <sup>3</sup>	378	274
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	8,724	11,019	ND <sup>3</sup>	10,213	ND <sup>3</sup>	17,794	9,581
Marine cargo handling	Establishments	59	58	47	47	47	46	51	49	39
	Employees	3,183	3,313	3,089	3,784	3,278	3,263	3,100	2,978	2,010
	Payroll	94,375	102,484	114,659	131,274	127,896	110,129	118,748	128,207	85,484
Navigational services to shipping	Establishments	142	142	148	118	127	120	129	128	145
	Employees	3,288	3,614	3,371	2,738	2,472	2,136	2,204	2,508	2,884
	Payroll	120,337	133,061	135,223	112,412	109,008	96,202	115,222	141,757	183,381
Port & harbor operations	Establishments	18	19	15	13	18	18	18	14	22
	Employees	1,413	1,292	1,136	363	ND <sup>3</sup>	418	436	467	517
	Payroll	49,875	51,443	47,191	18,331	ND <sup>3</sup>	19,510	29,676	31,734	37,181
Ship & boat building	Establishments	121	116	113	113	113	111	108	112	117
	Employees	14,023	13,643	12,786	12,910	13,206	11,016	11,521	12,808	12,815
	Payroll	434,510	477,137	448,749	452,315	460,606	376,407	437,028	503,199	619,606

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of the Mississippi Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	6,392	289,241	112,625	146,527
Commercial Harvesters	1,238	60,857	18,835	27,271
Seafood Processors & Dealers	1,046	78,907	31,217	39,116
Importers	50	13,652	2,188	4,162
Seafood Wholesalers & Distributors	112	10,450	3,688	4,646
Retail	3,946	125,376	56,697	71,333

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	58,751	50,633	47,565	46,149	43,618	23,386	21,586	39,340	43,696	37,998
Finfish & other	13,706	14,432	12,627	12,396	10,485	7,804	8,959	21,359	19,233	18,667
Shellfish	45,046	36,201	34,938	33,753	33,133	15,582	12,628	17,981	24,464	19,331
Blue crab	637	391	572	687	658	433	928	741	447	573
Flounders	184	131	63	49	32	20	36	58	40	58
Menhaden	11,922	13,252	11,625	11,277	9,564	7,074	8,447	20,658	18,534	17,987
Mulletts	167	114	22	34	54	38	23	35	32	30
Oysters	6,113	4,195	4,456	7,228	6,073	1,447	ND <sup>1</sup>	819	6,869	6,100
Red snapper	220	106	100	88	71	115	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	158
Shrimp	38,294	31,614	29,910	25,619	26,353	13,698	11,699	16,418	17,146	12,654

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	217,764	213,922	217,968	213,469	183,558	167,610	221,720	227,834	201,822	230,284
Finfish & other	198,559	194,885	197,691	190,733	161,669	158,721	212,213	216,375	190,191	217,461
Shellfish	19,204	19,037	20,277	22,736	21,889	8,889	9,507	11,459	11,631	12,823
Blue crab	840	434	717	877	811	429	1,127	737	450	545
Flounders	110	84	46	31	18	10	16	25	17	25
Menhaden	190,168	192,467	195,371	187,956	159,392	157,194	211,163	215,182	189,118	216,709
Mulletts	256	233	64	94	128	99	66	70	57	62
Oysters	3,548	2,653	2,738	4,042	3,029	610	ND <sup>3</sup>	299	2,610	2,192
Red snapper	103	52	46	43	35	54	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	57
Shrimp	14,814	15,949	16,822	17,560	17,992	7,848	8,380	10,421	8,570	10,084

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Blue crab	0.76	0.90	0.80	0.78	0.81	1.01	0.82	1.01	0.99	1.05
Flounders	1.68	1.56	1.35	1.57	1.73	1.88	2.22	2.38	2.36	2.34
Menhaden	0.06	0.07	0.06	0.06	0.06	0.05	0.04	0.10	0.10	0.08
Mulletts	0.65	0.49	0.34	0.36	0.42	0.38	0.35	0.50	0.57	0.48
Oysters	1.72	1.58	1.63	1.79	2.00	2.37	ND <sup>3</sup>	2.74	2.63	2.78
Red snapper	2.15	2.04	2.17	2.06	2.05	2.13	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	2.75
Shrimp	2.58	1.98	1.78	1.46	1.46	1.75	1.40	1.58	2.00	1.25

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	37	3,295	1,038	1,857
Private Boat	183	21,122	5,618	10,123
Shore	45	4,261	1,240	2,124
Total Durable Equipment Impacts	2,924	388,402	97,576	147,995
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>3,188</b>	<b>417,080</b>	<b>105,472</b>	<b>162,099</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	54,352
For-Hire	1,439	722	Other Equipment	13,398
Private Boat	893	17,704	Boat Expenses	16,051
Shore	932	3,468	Vehicle Expenses	337,800
<i>Total Trip Expenditures</i>	<i>3,264</i>	<i>21,895</i>	Second Home Expenses	0
			<i>Total Durable Equipment Expenditures</i>	<i>421,601</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>446,760</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal	161	198	175	159	191	108	143	196	119	125
Non-Coastal	30	48	52	53	26	29	23	34	26	36
Out of State	57	82	49	48	46	39	27	55	48	50
<b>Total Anglers</b>	<b>248</b>	<b>327</b>	<b>276</b>	<b>261</b>	<b>263</b>	<b>176</b>	<b>193</b>	<b>284</b>	<b>194</b>	<b>212</b>

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
For-Hire	27	18	21	24	12	8	7	20	13	11
Private	568	676	542	748	592	463	666	848	593	743
Shore	498	556	475	405	485	419	325	366	363	308
<b>Total Trips</b>	<b>1,093</b>	<b>1,250</b>	<b>1,038</b>	<b>1,177</b>	<b>1,089</b>	<b>891</b>	<b>998</b>	<b>1,233</b>	<b>969</b>	<b>1,062</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Drum (Atlantic croaker)	H	192	238	206	197	215	30	53	80	167	323
	R	540	818	937	701	351	158	233	274	395	814
Drum (kingfishes) <sup>2</sup>	H	497	490	278	327	316	198	178	169	179	159
	R	27	154	118	61	87	83	47	61	58	61
Drum (sand and silver seatrouts)	H	1,053	1,150	866	666	404	267	422	280	370	1,009
	R	197	288	111	330	109	149	221	254	173	401
Drum (spotted seatrout)	H	217	308	372	276	447	352	520	361	539	805
	R	409	638	559	832	745	783	1,046	786	692	747
Porgies (sheepshead)	H	43	95	69	77	47	30	30	25	16	44
	R	11	127	62	27	24	22	21	11	18	6
Red drum	H	56	60	60	50	59	33	70	54	63	66
	R	77	132	117	186	130	77	102	77	142	235
Red snapper	H	9	21	43	39	16	1	5	7	5	18
	R	40	61	166	90	79	47	32	24	45	116
Sharks <sup>3</sup>	H	26	24	13	10	7	7	4	5	3	12
	R	163	65	118	59	46	39	44	41	27	27
Southern flounder	H	93	275	142	119	103	69	44	118	116	178
	R	20	51	48	67	46	40	26	35	68	94
Striped mullet	H	232	383	212	550	241	31	5	71	111	194
	R	9	516	12	65	1	(1)	4	22	4	8

<sup>1</sup>In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.<sup>2</sup>Kingfishes include southern kingfish and Gulf kingfish<sup>3</sup>Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	59,788 (0.85%)	956,781 (0.84%)	22,844 (0.59%)	38,067 (0.66%)	65,615 (0.66%)	1.69 <sup>2</sup>
2008	60,918 (0.8%)	944,747 (0.78%)	29,277 (0.57%)	52,869 (0.67%)	96,320 (0.66%)	ND <sup>3</sup>
% change	1.89%	-1.26%	28.2%	38.9%	46.8%	NA <sup>4</sup>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	10	13	15	23	18	12	22	0	17
	Receipts	1,300	1,186	915	1,561	1,056	1,045	1,537	ND <sup>3</sup>	1,055
Seafood Sales, retail	Firms	52	0	51	51	47	41	53	57	48
	Receipts	1,665	ND <sup>3</sup>	2,486	2,984	3,595	2,934	4,021	4,126	3,437

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	37	33	34	37	33	28	24	22	20
	Employees	4,339	4,053	3,675	4,438	3,728	3,637	3,353	3,022	3,062
	Payroll	73,350	65,237	70,792	80,229	66,047	63,957	60,510	60,633	61,723
Seafood sales, wholesale	Establishments	30	28	29	26	29	30	23	25	18
	Employees	232	226	226	176	166	145	58	106	61
	Payroll	3,716	4,056	3,791	3,067	3,631	1,822	2,063	3,285	3,088
Seafood sales, retail	Establishments	12	17	28	19	17	21	12	15	18
	Employees	ND <sup>3</sup>	45	ND <sup>3</sup>	47	55	57	41	ND <sup>3</sup>	50
	Payroll	ND <sup>3</sup>	356	ND <sup>3</sup>	468	532	521	395	ND <sup>3</sup>	699

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	5	5	5	5	6	5	5	4	5
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	119
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	7,585	8,351
Deep sea freight transportation	Establishments	2	1	1	2	2	3	3	1	NA <sup>4</sup>
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
Deep sea passenger transportation	Establishments	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	1	1	1	1	1	NA <sup>4</sup>
	Employees	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
	Payroll	NA <sup>4</sup>	NA <sup>4</sup>	NA <sup>4</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	NA <sup>4</sup>
Marinas	Establishments	14	17	18	22	22	25	16	19	17
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	86	141	220	158	ND <sup>3</sup>	ND <sup>3</sup>	111
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	1,388	2,532	2,603	2,358	ND <sup>3</sup>	2,145	2,794
Marine cargo handling	Establishments	9	9	7	4	5	6	5	5	7
	Employees	300	315	251	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	238	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	9,261	10,478	9,284	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	8,621	ND <sup>3</sup>	ND <sup>3</sup>
Navigational services to shipping	Establishments	8	8	8	10	9	8	8	9	8
	Employees	61	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	2,360	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,754	ND <sup>3</sup>
Port & harbor operations	Establishments	1	1	1	1	2	2	1	1	1
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Ship & boat building	Establishments	24	24	26	21	19	17	20	23	24
	Employees	12,358	11,531	11,663	ND <sup>3</sup>	ND <sup>3</sup>	11,845	11,909	14,578	ND <sup>3</sup>
	Payroll	462,533	465,845	473,191	ND <sup>3</sup>	ND <sup>3</sup>	471,243	498,660	615,837	ND <sup>3</sup>

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

<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.

<sup>3</sup>ND = these data are confidential thus not disclosable

<sup>4</sup>NA = these data are not available

**2009 Economic Impacts of the Texas Seafood Industry (thousands of dollars)**

	Jobs	Sales	Income	Value Added
<b>Total Impacts</b>	18,874	1,682,135	473,749	716,100
Commercial Harvesters	3,674	318,549	91,226	146,845
Seafood Processors & Dealers	1,297	107,271	40,354	53,148
Importers	2,494	686,059	109,954	209,141
Seafood Wholesalers & Distributors	923	123,286	41,136	56,965
Retail	10,486	446,969	191,079	250,001

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total revenue</b>	293,609	218,019	173,340	168,317	166,208	172,337	197,291	180,575	176,098	150,232
Finfish & other	9,110	7,637	9,600	9,041	10,684	10,813	11,359	9,452	7,709	7,488
Shellfish	284,499	210,382	163,741	159,276	155,524	161,523	185,932	171,123	168,389	142,744
Atlantic croaker	315	385	451	489	382	415	500	450	446	484
Black drum	2,350	1,703	1,820	1,365	1,444	1,917	2,013	1,660	1,363	1,377
Blue crab	3,301	3,905	4,523	3,157	2,663	2,410	1,459	2,763	2,342	2,454
Flounders	322	249	371	336	325	276	164	62	144	91
Groupers	374	405	664	1,028	785	795	628	417	553	641
Oysters	13,847	11,146	11,276	16,493	14,954	15,883	17,263	19,246	8,835	9,376
Red snapper	2,786	2,945	3,363	3,757	5,193	5,345	6,168	3,762	2,744	2,398
Shrimp	267,112	195,006	147,701	139,485	137,674	143,045	167,108	149,084	157,187	130,801
Tunas	1,331	617	1,190	720	0	340	0	ND <sup>1</sup>	94	139
Vermilion snapper	498	456	386	349	611	571	642	1,554	1,430	1,233

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Total landings</b>	110,518	97,393	93,059	96,122	85,557	84,289	117,131	87,912	73,048	99,497
Finfish & other	6,153	5,132	6,066	5,240	5,852	5,782	5,825	4,800	3,866	4,134
Shellfish	104,365	92,261	86,993	90,883	79,705	78,507	111,306	83,111	69,182	95,363
Atlantic croaker	52	62	70	75	60	58	67	62	59	63
Black drum	2,837	2,320	2,331	1,677	1,717	2,077	2,212	1,687	1,468	1,610
Blue crab	4,653	5,163	7,037	4,811	3,961	3,119	1,966	3,454	2,635	2,844
Flounders	160	121	173	159	151	144	68	24	58	32
Groupers	182	187	274	416	329	303	220	141	170	208
Oysters	6,188	4,700	4,708	6,813	5,569	5,007	4,923	5,633	2,679	2,733
Red snapper	1,300	1,384	1,478	1,607	2,133	1,940	2,158	1,213	870	851
Shrimp	93,420	82,290	75,158	79,166	70,098	70,310	104,378	74,007	63,855	89,748
Tunas	446	209	430	275	0	112	0	ND <sup>3</sup>	22	45
Vermilion snapper	251	242	217	192	322	279	273	672	592	561

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic croaker	6.09	6.21	6.46	6.49	6.35	7.14	7.43	7.29	7.58	7.64
Black drum	0.83	0.73	0.78	0.81	0.84	0.92	0.91	0.98	0.93	0.86
Blue crab	0.71	0.76	0.64	0.66	0.67	0.77	0.74	0.80	0.89	0.86
Flounders	2.02	2.06	2.14	2.12	2.15	1.92	2.42	2.55	2.48	2.84
Groupers	2.06	2.17	2.43	2.47	2.39	2.62	2.85	2.96	3.25	3.07
Oysters	2.24	2.37	2.40	2.42	2.69	3.17	3.51	3.42	3.30	3.43
Red snapper	2.14	2.13	2.27	2.34	2.43	2.76	2.86	3.10	3.15	2.82
Shrimp	2.86	2.37	1.97	1.76	1.96	2.03	1.60	2.01	2.46	1.46
Tunas	2.98	2.95	2.76	2.62	0.80	3.04	0.69	ND <sup>3</sup>	4.26	3.08
Vermilion snapper	1.98	1.89	1.78	1.82	1.90	2.05	2.35	2.31	2.42	2.20

<sup>1</sup>ND = these data are confidential thus not disclosable

**2009 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)**

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	498	45,787	14,465	25,522
Private Boat	1,331	152,916	46,109	81,717
Shore	250	27,309	8,391	14,745
Total Durable Equipment Impacts	20,047	2,620,846	841,046	1,312,749
<b>Total State Trip and Durable Equipment Economic Impacts</b>	<b>22,127</b>	<b>2,846,858</b>	<b>910,011</b>	<b>1,434,733</b>

**2009 Angler Trip & Durable Expenditures (thousands of dollars)<sup>1</sup>**

Fishing Mode	Trip Expenditures		Equipment	Durable Expenditures
	Non-Residents	Residents		
			Fishing Tackle	157,427
For-Hire	1,456	25,732	Other Equipment	82,824
Private Boat	3,846	99,137	Boat Expenses	718,337
Shore	1,309	17,588	Vehicle Expenses	215,802
<i>Total Trip Expenditures</i>	<i>6,611</i>	<i>142,457</i>	Second Home Expenses	921,121
			<i>Total Durable Equipment Expenditures</i>	<i>2,095,511</i>
<b>Total State Trip and Durable Equipment Expenditures</b>				<b>2,244,579</b>

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Atlantic croaker	H	209	230	111	96	109	95	101	95	64	117
Black drum	H	104	130	72	85	68	53	73	66	82	98
King mackerel	H	19	15	16	19	15	14	29	11	8	16
Red drum	H	285	244	233	270	273	231	318	289	266	285
Red snapper	H	53	47	53	40	40	49	69	45	41	31
Sand seatrout	H	291	79	173	119	176	125	129	95	152	111
Sheepshead	H	78	80	84	76	67	81	78	46	46	34
Southern flounder	H	100	125	91	111	100	81	64	49	64	47
Spotted seatrout	H	1,128	966	965	939	934	855	987	916	917	810

<sup>1</sup>The Marine Recreational Information Program (MRIP) does not collect participation (number of anglers) or effort (number of trips) data for Texas. To calculate trip expenditure estimates, effort by fishing mode was estimated based on 2009 data provided by the Texas Parks and Wildlife Department (TPWD). These effort estimates were reviewed by the TPWD. To calculate angler expenditure estimates (durable equipment expenditures), participation estimates were based on the sum of saltwater licenses sold in Texas plus a proportion of combination licenses sold in Texas. A change in the method of reporting landings occurred in 2007 so data from 2007 is not comparable to earlier years.

<sup>2</sup>Data collected by the TPWG is reported in this table. The data collected by the TPWD differs from the data collected and reported in the MRIP. Please see the TPWD for more information: [www.tpwd.state.tx.us/fishboat/](http://www.tpwd.state.tx.us/fishboat/).

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient <sup>1</sup>
2000	471,509 (6.7%)	8,026,438 (7%)	269,918 (7%)	403,299 (7.4%)	732,987 (7%)	0.6 <sup>2</sup>
2008	522,336 (6.9%)	9,231,955 (7.6%)	394,696 (7.7%)	611,520 (8.4%)	1,200,000 (7.6%)	0.27
% change	10.8%	15%	46.2%	51.6%	63.7%	-55%

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Firms	85	108	104	99	100	108	109	94	85
	Receipts	5,596	5,575	3,901	5,234	1,989	2,228	2,974	5,386	3,466
Seafood Sales, retail	Firms	165	159	152	170	159	159	141	182	188
	Receipts	14,386	13,079	13,516	16,636	19,131	19,534	18,355	17,442	18,204

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Seafood product prep. & packaging	Establishments	31	29	27	23	24	23	21	26	27
	Employees	1,305	1,506	1,453	1,274	1,177	1,288	1,155	1,207	1,169
	Payroll	24,374	24,507	25,772	25,426	24,394	23,842	24,302	27,813	27,045
Seafood sales, wholesale	Establishments	113	129	115	99	103	97	92	104	69
	Employees	1,187	1,102	999	1,057	1,009	1,001	897	970	734
	Payroll	32,857	33,552	29,430	27,016	27,730	26,408	28,586	51,597	24,498
Seafood sales, retail	Establishments	60	63	73	67	60	59	58	62	60
	Employees	271	295	287	227	219	176	207	189	206
	Payroll	4,863	3,908	3,748	2,985	2,993	3,162	3,229	3,703	3,403

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

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal & Great Lakes freight transportation	Establishments	32	37	39	43	43	61	45	43	42
	Employees	846	1,071	866	2,705	2,565	ND <sup>3</sup>	2,270	2,513	2,815
	Payroll	43,979	49,992	42,377	88,033	91,995	ND <sup>3</sup>	107,328	131,946	251,997
Deep sea freight transportation	Establishments	44	43	45	48	41	43	40	41	35
	Employees	1,759	1,130	1,287	ND <sup>3</sup>	891	ND <sup>3</sup>	751	920	514
	Payroll	58,832	61,830	70,194	ND <sup>3</sup>	38,553	ND <sup>3</sup>	41,969	49,761	40,764
Deep sea passenger transportation	Establishments	2	1	5	5	3	4	3	4	3
	Employees	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
	Payroll	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>
Marinas	Establishments	186	185	179	170	165	166	150	141	143
	Employees	1,221	1,107	1,255	1,410	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	1,200	1,486
	Payroll	26,051	29,083	28,471	31,197	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	28,359	34,039
Marine cargo handling	Establishments	51	54	56	59	60	60	64	62	55
	Employees	5,047	4,725	4,549	5,091	4,539	5,200	5,349	6,237	6,313
	Payroll	99,615	100,101	113,894	108,142	138,630	151,522	161,386	186,416	196,006
Navigational services to shipping	Establishments	99	96	95	92	92	87	84	90	99
	Employees	969	1,129	1,082	1,099	1,213	1,064	1,373	1,709	1,884
	Payroll	47,475	55,549	49,825	60,714	68,741	75,914	98,244	125,061	137,962
Port & harbor operations	Establishments	10	11	13	16	15	15	16	15	24
	Employees	141	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	215	ND <sup>3</sup>	112	98	ND <sup>3</sup>
	Payroll	6,875	ND <sup>3</sup>	ND <sup>3</sup>	ND <sup>3</sup>	7,128	ND <sup>3</sup>	4,992	5,163	10,538
Ship & boat building	Establishments	125	122	110	107	103	99	90	96	102
	Employees	3,402	3,599	3,360	4,062	4,204	3,564	3,515	4,810	5,368
	Payroll	117,071	135,405	137,129	156,565	163,800	156,259	170,308	210,275	235,190

<sup>1</sup>The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.<sup>2</sup>CFLQ data for 2000 were not available. Data from 2001 are reported here.<sup>3</sup>ND = these data are confidential thus not disclosable



# Data Sources



Dana Point, Orange County, CA (photo credit: S. Lovell)

### Management Context

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# Publications

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## Publications

Selected publications by NOAA Fisheries Economics and Social Sciences Program staff are grouped by geographic region of focus and then organized under the following categories:

Climate Change Research  
Coastal & Marine Recreation Research  
Commercial Fisheries Economics Research  
Marine Protected Areas Research  
Ocean Policy & Management Research  
Other Marine Environmental Research

Recreational Fisheries Economics Research  
Habitat Economics Research  
Seafood Marketing & Trade Research  
Sociocultural Research  
U.S. Territories & International Fisheries Research  
Protected Resources Economics Research

### United States

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# Resources



## U.S.

### *Federal Agencies*

Economics & Social Analysis Division Office of Science & Technology, NOAA Fisheries

[www.st.nmfs.gov/st5/index.html](http://www.st.nmfs.gov/st5/index.html)

Office of Science & Technology, NOAA Fisheries [www.st.nmfs.gov/index.html](http://www.st.nmfs.gov/index.html)

Marine Recreational Information Program [www.st.nmfs.noaa.gov/mrip/index.html](http://www.st.nmfs.noaa.gov/mrip/index.html)

Office of International Affairs, NOAA Fisheries [www.nmfs.noaa.gov/ia/index.htm](http://www.nmfs.noaa.gov/ia/index.htm)

Office of Marine Conservation U.S. Department of State [www.state.gov/g/oes/ocns/](http://www.state.gov/g/oes/ocns/)

## North Pacific

*Federal Agencies* Economic & Social Sciences Research Alaska Fisheries Science Center, NOAA Fisheries [www.afsc.noaa.gov/REFM/Socioeconomics/Default.php](http://www.afsc.noaa.gov/REFM/Socioeconomics/Default.php)

Alaska Fisheries Science Center, NOAA Fisheries [www.afsc.noaa.gov](http://www.afsc.noaa.gov)

Alaska Regional Office, NOAA Fisheries [www.fakr.noaa.gov](http://www.fakr.noaa.gov)

Alaska Region, U.S. Fish & Wildlife Service [alaska.fws.gov](http://alaska.fws.gov)

District 17, U.S. Coast Guard [www.uscg.mil/D17](http://www.uscg.mil/D17)

### *State Agencies*

Alaska Department of Fish & Game [www.adfg.state.ak.us](http://www.adfg.state.ak.us)

### Councils & Commissions

North Pacific Fishery Management Council [www.fakr.noaa.gov/npfmc](http://www.fakr.noaa.gov/npfmc)

Pacific States Marine Fisheries Commission [www.psmfc.org/index.php](http://www.psmfc.org/index.php)

Fisheries Economics Data Program Pacific States Marine Fisheries Commission [www.psmfc.org/efin](http://www.psmfc.org/efin)

International Pacific Halibut Commission [www.iphc.washington.edu/halcom/default.htm](http://www.iphc.washington.edu/halcom/default.htm)

## Pacific

### *Federal Agencies*

Human Dimensions Program Northwest Fisheries Science Center, NOAA Fisheries [www.nwfsc.noaa.gov/research/divisions/cbd/humandim.cfm](http://www.nwfsc.noaa.gov/research/divisions/cbd/humandim.cfm)

Economics, Groundfish Analysis Program Northwest Fisheries Science Center, NOAA Fisheries [www.nwfsc.noaa.gov/research/divisions/fram/economics.cfm](http://www.nwfsc.noaa.gov/research/divisions/fram/economics.cfm)

Northwest Fisheries Science Center, NOAA Fisheries [www.nwfsc.noaa.gov](http://www.nwfsc.noaa.gov)

Northwest Regional Office, NOAA Fisheries [www.nwr.noaa.gov](http://www.nwr.noaa.gov)

Socioeconomics Research Southwest Fisheries Science Center, NOAA Fisheries [swfsc.noaa.gov](http://swfsc.noaa.gov)

Southwest Fisheries Science Center [swfsc.noaa.gov](http://swfsc.noaa.gov)

Southwest Regional Office [swr.nmfs.noaa.gov](http://swr.nmfs.noaa.gov)

Pacific Region, U.S. Fish & Wildlife Service [www.fws.gov/pacific](http://www.fws.gov/pacific)

California & Nevada, U.S. Fish & Wildlife Service [www.fws.gov/cno](http://www.fws.gov/cno)

District 13, U.S. Coast Guard <http://www.uscg.mil/D13/>

### *State Agencies*

California Department of Fish & Game [www.dfg.ca.gov](http://www.dfg.ca.gov)

Oregon Department of Fish & Wildlife [www.dfw.state.or.us](http://www.dfw.state.or.us)

Washington Department of Fish & Wildlife [wdfw.wa.gov](http://wdfw.wa.gov)

### *Councils & Commissions*

Pacific Fishery Management Council [www.pcouncil.org](http://www.pcouncil.org)



Pacific States Marine Fisheries Commission [www.psmfc.org/index.php](http://www.psmfc.org/index.php)  
 Fisheries Economics Data Program - Pacific States Marine Fisheries Commission [www.psmfc.org/efin](http://www.psmfc.org/efin)  
 International Pacific Halibut Commission [www.iphc.washington.edu/halcom/default.htm](http://www.iphc.washington.edu/halcom/default.htm)

## Western Pacific

### *Federal Agencies*

Fisheries Monitoring & Socioeconomics Division Pacific Islands Fisheries Science Center, NOAA Fisheries [www.pifsc.noaa.gov/fmsd](http://www.pifsc.noaa.gov/fmsd)

Pacific Islands Fisheries Science Center, NOAA Fisheries [www.pifsc.noaa.gov/index.php](http://www.pifsc.noaa.gov/index.php)

Pacific Islands Regional Office, NOAA Fisheries [www.fpir.noaa.gov](http://www.fpir.noaa.gov)

Pacific Region, U.S. Fish & Wildlife Service [www.fws.gov/pacific](http://www.fws.gov/pacific)

District 14, U.S. Coast Guard [www.uscg.mil/d14](http://www.uscg.mil/d14)

*State Agencies* Hawaii Department of Land & Natural Resources [www.hawaii.gov/dlnr](http://www.hawaii.gov/dlnr)

Guam Office of the Governor [www.guamgovernor.net](http://www.guamgovernor.net)

Department of Marine & Wildlife Resources, American Samoa Office of the Governor [americansamoa.gov/departments/depts/mwr.htm](http://americansamoa.gov/departments/depts/mwr.htm)

Division of Fish & Wildlife Commonwealth of the Northern Mariana Islands [www.dfw.gov.mp](http://www.dfw.gov.mp)

### *Councils & Commissions*

Western Pacific Fishery Management Council [www.wpcouncil.org](http://www.wpcouncil.org)

## New England

### *Federal Agencies*

Social Sciences Branch, Northeast Fisheries Science Center, NOAA Fisheries [www.nefsc.noaa.gov/read/socialsci](http://www.nefsc.noaa.gov/read/socialsci)

Northeast Fisheries Science Center, NOAA Fisheries [www.nefsc.noaa.gov](http://www.nefsc.noaa.gov)

Northeast Regional Office, NOAA Fisheries [www.nero.noaa.gov/nero](http://www.nero.noaa.gov/nero)

Northeast Region, U.S. Fish & Wildlife Service [www.fws.gov/northeast](http://www.fws.gov/northeast)

District 1, U.S. Coast Guard [www.uscg.mil/D1](http://www.uscg.mil/D1)

### *State Agencies*

Maine Department of Marine Resources [www.maine.gov/dmr/index.htm](http://www.maine.gov/dmr/index.htm)

Rhode Island Department of Environmental Management [www.dem.ri.gov](http://www.dem.ri.gov)

Massachusetts Division of Marine Fisheries [www.mass.gov/dfwele/dmf](http://www.mass.gov/dfwele/dmf)

Connecticut Department of Environmental Protection [www.ct.gov/dep/site/default.asp](http://www.ct.gov/dep/site/default.asp)

New Hampshire Fish & Game Department [www.wildlife.state.nh.us](http://www.wildlife.state.nh.us)

### *Councils & Commissions*

New England Fishery Management Council [www.nefmc.org](http://www.nefmc.org)

Atlantic States Marine Fisheries Commission [www.asafc.org](http://www.asafc.org)

## Mid-Atlantic

### *Federal Agencies*

Social Sciences Branch Northeast Fisheries Science Center, NOAA Fisheries [www.nefsc.noaa.gov/read/socialsci](http://www.nefsc.noaa.gov/read/socialsci)

Northeast Fisheries Science Center, NOAA Fisheries [www.nefsc.noaa.gov](http://www.nefsc.noaa.gov)

Northeast Regional Office, NOAA Fisheries [www.nero.noaa.gov/nero](http://www.nero.noaa.gov/nero)

Northeast Region, U.S. Fish & Wildlife Service [www.fws.gov/northeast](http://www.fws.gov/northeast)

District 5, U.S. Coast Guard [www.uscg.mil/D5](http://www.uscg.mil/D5)

### *State Agencies*

## Resources

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Bureau of Marine Resources, New York Department of Environmental Conservation [www.dec.ny.gov/about/796.html](http://www.dec.ny.gov/about/796.html)

New Jersey Division of Fish & Wildlife [www.state.nj.us/dep/fgw](http://www.state.nj.us/dep/fgw)

Pennsylvania Fish & Boat Commission [fishandboat.com/mpag1.htm](http://fishandboat.com/mpag1.htm)

Delaware Division of Fish & Wildlife [www.fw.delaware.gov](http://www.fw.delaware.gov)

Fisheries Service, Maryland Department of Natural Resources [www.dnr.state.md.us/fisheries](http://www.dnr.state.md.us/fisheries)

Virginia Marine Resources Commission [www.mrc.state.va.us](http://www.mrc.state.va.us)

Division of Marine Fisheries, North Carolina Department of Environment & Natural Resources [www.ncfisheries.net](http://www.ncfisheries.net)

### *Councils & Commissions*

Mid-Atlantic Fishery Management Council [www.mafmc.org](http://www.mafmc.org)

Atlantic States Marine Fisheries Commission [www.asafc.org](http://www.asafc.org)

## South Atlantic

### *Federal Agencies*

Social Science Research Group, Southeast Fisheries Science Center, NOAA Fisheries [www.sefsc.noaa.gov/socialscience.jsp](http://www.sefsc.noaa.gov/socialscience.jsp)

Southeast Fisheries Science Center, NOAA Fisheries [www.sefsc.noaa.gov](http://www.sefsc.noaa.gov)

Southeast Regional Office, NOAA Fisheries [sero.nmfs.noaa.gov](http://sero.nmfs.noaa.gov)

Southeast Region, U.S. Fish & Wildlife Service [www.fws.gov/southeast](http://www.fws.gov/southeast)

Southwest Region, U.S. Fish & Wildlife Service [www.fws.gov/southwest](http://www.fws.gov/southwest)

District 7, U.S. Coast Guard [www.uscg.mil/D7](http://www.uscg.mil/D7)

### *State Agencies*

North Carolina Division of Marine Fisheries [www.ncfisheries.net](http://www.ncfisheries.net)

Marine Resources Division, South Carolina Department of Natural Resources [www.dnr.sc.gov](http://www.dnr.sc.gov)

Coastal Resources Division Georgia Department of Natural Resources [crd.dnr.state.ga.us](http://crd.dnr.state.ga.us)

Florida Fish & Wildlife Conservation Commission [myfwc.com](http://myfwc.com)

### *Councils & Commissions*

South Atlantic Fishery Management Council [www.safmc.net](http://www.safmc.net)

Atlantic States Marine Fisheries Commission [www.asafc.org](http://www.asafc.org)

## Gulf of Mexico

### *Federal Agencies*

Social Science Research Group, Southeast Fisheries Science Center, NOAA Fisheries <http://www.sefsc.noaa.gov/socialscience.jsp>

Southeast Fisheries Science Center, NOAA Fisheries [www.sefsc.noaa.gov](http://www.sefsc.noaa.gov)

Southeast Regional Office, NOAA Fisheries [sero.nmfs.noaa.gov](http://sero.nmfs.noaa.gov)

Southeast Region, U.S. Fish & Wildlife Service [www.fws.gov/southeast](http://www.fws.gov/southeast)

Southwest Region, U.S. Fish & Wildlife Service [www.fws.gov/southwest](http://www.fws.gov/southwest)

District 8, U.S. Coast Guard [www.uscg.mil/D8](http://www.uscg.mil/D8)

### *State Agencies*

Division of Marine Fisheries, Florida Fish & Wildlife Conservation Commission [myfwc.com/RECREATION/Saltwater/\\_index.htm](http://myfwc.com/RECREATION/Saltwater/_index.htm)

Marine Resources Division, Alabama Department of Conservation & Natural Resources [www.outdooralabama.com](http://www.outdooralabama.com)

Mississippi Department of Marine Resources [www.dmr.state.ms.us](http://www.dmr.state.ms.us)

Louisiana Department of Wildlife & Fisheries [www.wlf.state.la.us](http://www.wlf.state.la.us)

Texas Parks & Wildlife Department [www.tpwd.state.tx.us](http://www.tpwd.state.tx.us)

### *Councils & Commissions*

Gulf of Mexico Fishery Management Council [www.gulfcouncil.org](http://www.gulfcouncil.org)

Gulf States Marine Fisheries Commission [www.gsmfc.org](http://www.gsmfc.org)

### **International Organizations**

Pacific Salmon Commission [www.psc.org](http://www.psc.org)

North Atlantic Salmon Conservation Organization [www.nasco.int](http://www.nasco.int)

International Pacific Halibut Commission [www.iphc.washington.edu/halcom/default.htm](http://www.iphc.washington.edu/halcom/default.htm)

InterAmerican Tropical Tuna Commission [www.iattc.org/HomeENG.htm](http://www.iattc.org/HomeENG.htm)

Western & Central Pacific Fisheries Commission [www.wcpfc.int](http://www.wcpfc.int)

International Commission for the Conservation of Atlantic Tunas [www.iccat.int/en](http://www.iccat.int/en)

Commission for the Conservation of Antarctic Marine Living Resources [www.ccamlr.org](http://www.ccamlr.org)

International Maritime Organization [www.imo.org](http://www.imo.org)

Red List of Threatened Species [www.iucnredlist.org](http://www.iucnredlist.org)

### **Professional Organizations**

North American Association of Fisheries Economists [oregonstate.edu/Dept/IIFET/NAAFE/Home.html](http://oregonstate.edu/Dept/IIFET/NAAFE/Home.html)

International Institute of Fisheries Economics & Trade [oregonstate.edu/dept/iifet](http://oregonstate.edu/dept/iifet)

### **Other Organizations & Information**

The Center for Independent Experts [www.ciereviews.org](http://www.ciereviews.org)

Organisation for Economic Co-operation & Development [www.oecd.org/home](http://www.oecd.org/home)

FishWatch - U.S. Seafood Facts [www.nmfs.noaa.gov/fishwatch](http://www.nmfs.noaa.gov/fishwatch)

Marine Stewardship Council [www.msc.org](http://www.msc.org)

Dutch Harbor, AK (photo credit: E.Steiner)

# Glossary



**Angler<sup>1</sup>**

A person catching fish or shellfish with no intent to sell, including people releasing the catch. Also known as a recreational fisherman.

**Annual Payroll<sup>2</sup>**

Total payroll includes all forms of compensation such as salaries, wages, reported tips, commissions, bonuses, vacation allowances, sick-leave pay, employee contributions to qualified pension plans, and the value of taxable fringe benefits. For corporations, it includes amounts paid to officers and executives; for unincorporated businesses, it does not include profit or other compensation of proprietors or partners. Payroll is reported before deductions for Social Security, income tax, insurance, union dues, etc.

**Annual Receipts<sup>3</sup>**

Includes gross receipts, sales, commissions, and income from trades and businesses, as reported on annual business income tax returns. Business income consists of all payments received for services rendered by nonemployer businesses such as payments received as independent agents and contractors. The composition of nonemployer receipts may differ from receipts data published for employer establishments. For example, for wholesale agents and brokers without payroll (nonemployers), the receipts item contains commissions received or earnings. In contrast, for wholesale agents and brokers with payroll (employers), the sales and receipts item published in the Economic Census represents the value of the goods involved in the transactions.

**Buyback Program<sup>4</sup>**

A management tool available to fishery managers intended to ease fishing-related pressure on marine resources. Fishing vessels are purchased by the government or by the fishing industry itself then removed from a specific fishery where fish stocks or stock complexes are considered overfished or subject to overfishing.

**Bycatch<sup>1</sup>**

Species other than the primary target species that are caught incidental to the harvest of the primary species. Bycatch may be retained or discarded; discards may occur for regulatory or economic reasons.

**Catch<sup>1</sup>**

1. To undertake any activity that results in taking fish out of its environment dead or alive, or to bring fish on board a vessel dead or alive; 2. The total number (or weight) of fish caught by fishing operations. Catch should include all fish killed by the act of fishing, not just those landed; 3. The component of fish encountering fishing gear, which is retained by the gear.

Catch is usually expressed in terms of wet weight. It refers sometimes to the total amount caught and sometimes only to the amount landed. The fish which are not landed, but returned to the sea, are called discards or bycatch. For recreational fishing activities, catch refers to the total number of individual fish released (thrown back into the sea) and harvested (not thrown back into the sea) by recreational fishermen (angler).

**Catch Share Program<sup>5</sup>**

This is a generic term used to describe a fishery management program that allocates a specific portion of the total fishery catch to individuals, cooperatives, communities, or other entities including sectors. The term encompasses more specific programs defined in legislation such as Limited Access Privilege Programs and Individual Fishing Quotas. Note that a catch share allocated to a sector is different than a general sectoral allocation or distribution to an entire segment of a fishery (such as a recreational sector allocation or a longline gear sector allocation) because the recipient of the catch share is responsible for terminating fishing activity when their specific share is reached.

**Coastal County<sup>6</sup>**

A coastal county meets one of the following criteria: 1) at least 15 percent of a county's total land area is located within the Nation's coastal watershed; or 2) a portion of or an entire county accounts for at least 15 percent of a coastal cataloging unit. Any U.S. county that meets these criteria is classified as coastal.

**Coastal County Angler**

For this report, a coastal county angler refers to a recreational fishermen who lives within a given state and within a coastal county of that state.

**Commercial Fishing Location Quotient (CFLQ)**

For this report, the CFLQ is calculated as the ratio of a state's distribution of employment in commercial fishing industries compared to the distribution of commercial fishing industries in the U.S. The CFLQ is calculated using the "Location Quotient Calculator" provided by the Bureau of Labor Statistics, U.S. Department of Labor.

**Community Development Quota Program (CDQ)<sup>1</sup>**

A program in western Alaska under which a percentage of the total allowable catch (TAC) of Bering Sea commercial fisheries is allocated to specific communities. Communities eligible for this program must be located

within 50 miles of the Bering Sea coast, or on an island within the Bering Sea; meet criteria established by the State of Alaska; be a village certified by the Secretary of the Interior pursuant to the Alaska Native Claims Settlement Act; and consist of residents who conduct more than half of their current commercial or subsistence fishing in the Bering Sea or waters surrounding the Aleutian Islands. Currently 7.5% of the TAC in the pollock, halibut, sablefish, crab, and groundfish fisheries is allocated to the CDQ program.

### **Dedicated Access Privileges (DAPs)<sup>7</sup>**

As defined by the U.S. Commission on Ocean Policy, a DAP program assigns an individual or other entity access to a pre-determined portion of the annual catch in a particular fishery. In some cases, the privilege is transferable and may be bought and sold, creating a market. The term encompasses a range of tools, including access privileges assigned to individuals (that is, individual transferable quotas), and to groups or communities (for example, community development quotas, cooperatives, and area-based quotas).

DAP programs are sometimes known as rights-based management, and are often synonymous with Limited Access Privilege Programs (see "Limited Access Privilege Program"). However, "rights-based management" implies granting an individual the "right" to fish. With the exception of certain tribes, U.S. fishermen do not have inalienable rights to fish because the fishery resources of the U.S. belong to all people of the U.S. Under current law, fishermen are granted a "privilege" to fish, subject to certain conditions.

### **Discards<sup>1</sup>**

To release or return a fish or other species to the sea, dead or alive, whether or not such fish or other species are brought fully on board a fishing vessel.

Estimates of discards can be made in a variety of ways, including samples from observers and logbook records. Fish (or parts of fish) can be discarded for a variety of reasons such as having physical damage, being a non-target species for the trip, and compliance with management regulations like minimum size limits or quotas.

### **Durable Equipment Expenditures or Durable Goods Expenditures<sup>8</sup>**

For this report, this term refers to expenses related to equipment used for recreational fishing activities. These expenses include the purchase of: semi-durable goods (tackle, rods, reels, line, etc.), durable goods (motor boats and accessories, non-motorized boats, boating electronics, mooring, boat storage, boat insurance, and vehicles or homes), and angling accessories and multi-purpose items (magazines, club dues, saltwater angling specific clothing and camping gear).

### **Ecolabel or Ecolabelling Scheme<sup>9</sup>**

In fisheries, ecolabelling schemes entitle a fishery product to bear a distinctive logo or statement which certifies that the fish has been harvested in compliance with specified conservation and sustainability standards. The logo or statement is intended to make provision for informed decisions by purchasers whose choice may promote and stimulate the sustainable use of fishery resources.

### **Economic Impact Model<sup>10 11</sup>**

Economic impact models capture how sales in a sector generate economic impacts directly in the sector in which the sale was made and then ripple throughout the state and national economy as each dollar spent generates additional sales by other firms and consumers. The NMFS Commercial Fishing & Seafood Industry Input / Output Model uses an IMPLAN platform to estimate the economic impacts associated with the harvesting of fish by U.S. commercial fishermen and the other major components of the U.S. seafood industry. As used here, the term fish refers to the entire range of finfish, shellfish, and other life (that is, sea urchins, seaweed, kelp, and worms) from marine and freshwaters that are included in the landings data maintained by the National Marine Fisheries Service. The NMFS Recreational Economic Impact Model, which also uses an IMPLAN platform, estimates the economic impacts generated by expenditures made by saltwater anglers.

### **Economic Impacts**

For this report, the economic impacts of the commercial fishing sector and seafood industry refer to the employment (full-time and part-time jobs), personal income, and output (sales by U.S. businesses) generated by the commercial harvest sector and other major components of the U.S. seafood industry including: processors and dealers; wholesalers and distributors; grocers; and restaurants.

Economic impacts of recreational fishing activities refer to the amount of sales generated the number of jobs supported, and the contribution to gross domestic product by state (also known as value-added impacts) from expenditures related to recreational fishing.

### **Effort**

For this report, effort refers to the number of fishing trips taken by recreational fishermen (anglers). The term can also refer to the amount of time and fishing power used to harvest fish in commercial fisheries, including gear size, boat size, and horsepower.

### **Employee Compensation<sup>12</sup>**

This is related to Gross Domestic Product (GDP) by State and is an estimate of the sum of employee wages and salaries and supplements to wages and salaries. Wages and salaries are measured on an accrual, or "when earned" basis, which may be different from the measure of wages and salaries measured on a disbursement, or "when paid" basis. Wages and salaries and supplements of Federal military and civilian government employees stationed abroad are excluded from the measure of GDP by state.

### **Employer Establishments**

An establishment is a single physical location at which business is conducted or services or industrial operations are performed. It is not necessarily identical with a company or enterprise, which may consist of one or more establishments. When two or more activities are carried on at a single location under a single ownership, all activities generally are grouped together as a single establishment. The entire establishment is classified on the basis of its major activity and all data are included in that classification.

### **Endangered Species<sup>13,1</sup>**

As defined by the Endangered Species Act, an endangered species is any species which is in danger of extinction throughout all or a significant portion of its range. A species classified as threatened is likely to become an endangered species. See also "Threatened Species."

### **Endangered Species Act (ESA)<sup>1,13</sup>**

The ESA is a statute which was enacted in 1973 to conserve species and ecosystems. Under its auspices, species facing possible extinction are listed as threatened or endangered, or as candidate species for such listings. When such a listing is made, recovery and conservation plans are drawn up to ensure the protection of the species and its habitat.

### **Expenditures**

For this report, expenditures are related to recreational fishing activities and described as being one of two types: 1) expenditures related to a specific fishing trip; or 2) durable equipment expenditures.

### **Ex-vessel<sup>1</sup>**

Refers to activities that occur when a commercial fishing boat lands or unloads a catch. For example, the price received by a captain (at the point of landing) for the catch is an ex-vessel price.

### **Exclusive Economic Zone (EEZ)<sup>1</sup>**

The EEZ is the area that extends from the seaward boundaries of the coastal states to 200 nautical miles. The seaward boundary for most states is 3 nautical miles with the exceptions of Texas, Puerto Rico, and the Gulf Coast of Florida which is 9 nautical miles. The U.S. claims and exercises sovereign rights and exclusive fishery management authority over all fish and continental shelf resources through this 200 nautical mile boundary.

### **Fish Stock<sup>1</sup>**

A fish stock refers to the living resources in the community or population from which catches are taken in a fishery. Use of the term fish stock usually implies that the particular population is more or less isolated from other stocks of the same species and hence self-sustaining. In a particular fishery, the fish stock may be one or several species of fish but here it is also intended to include commercial invertebrates and plants.

### **Fish Stock Complex<sup>14</sup>**

A group of fish stocks or species with similar geographic distribution, co-occurrence in fisheries, and life history.

### **Fishery Management Council (FMC) or Regional Fishery Management Council<sup>4,1</sup>**

A regional fisheries management body established by the Magnuson-Stevens Act to manage fishery resources in eight designated regions of the United States.

### **Fishery Management Plan (FMP)<sup>1,4</sup>**

1. A document prepared under supervision of the appropriate fishery management council (FMC) for management of stocks of fish judged to be in need of management. The plan must generally be formally approved. An FMP includes data, analyses, and management measures; 2. A plan containing conservation and management measures for fishery resources, and other provisions required by the Magnuson-Stevens Act, developed by fishery management councils or the Secretary of Commerce.

### **Fishing Cooperatives<sup>4</sup>**

A market-based fisheries management tool where access to fisheries resources is limited to a specific group of fishermen. See also "Catch Share Program."

### **Fishing Day**

For this report, a fishing day refers to a partial or full day spent recreational fishing and can be different than a fishing trip. For example, one fishing trip can consist of more than one fishing day. This term is used in the Alaska recreational fishing tables.



**Fishing Effort<sup>9</sup>**

The amount of fishing gear of a specific type used on the fishing grounds over a given unit of time. For example, hours trawled per day, number of hooks set per day, or number of hauls of a beach seine per day. When two or more kinds of gear are used, the respective efforts must be adjusted to some standard type before being added.

For recreational fishing activities, fishing effort refers to the number of participants (that is, recreational fishermen or anglers), who engage in recreational fishing activities.

**Fishing Mode**

For this report, fishing mode refers to the type of recreational fishing a recreational fisherman (angler) engaged in such as fishing from shore, a private or rental boat, or a for-hire boat.

**Fishing Trip**

For this report, a fishing trip refers to a recreational fishing excursion and can be different than a fishing day. For example, one fishing trip can consist of more than one fishing day. Fishing trips are classified as occurring in one of three fishing modes: 1) a shore-based fishing trip; 2) by a private or rental boat; or 3) on a for-hire fishing boat.

**For-hire Mode**

For this report, this fishing mode refers to trips taken by a recreational fishermen (angler) on a party (also referred to as a headboat) or charter boat.

**Gross Domestic Product (GDP) by State or Gross State Product (GSP)<sup>12</sup>**

Previously known as the Gross State Product, the GDP by state is the value added in production by the labor and capital located in a state. GDP for a state is derived as the sum of the GDP originating in all industries in the state.

**Harvest<sup>1</sup>**

The total number of weight or fish caught and kept from an area over a period of time. Note that landings, catch, and harvest are different.

For recreational fishing activities, harvest refers to the number of individual fish not thrown back into the sea by a recreational fishermen (angler), but includes fish thrown back dead in Hawaii and the Atlantic and Gulf states. See also "Catch" and "Release."

**Individual Fishing Quota (IFQ)<sup>1</sup>**

A type of limited entry, an allocation to an individual (a person or a legal entity, for example, a vessel owner or company) of a right [privilege] to harvest a certain amount of fish in a certain period of time. It is also often expressed as an individual share of an aggregate quota, or total allowable catch (TAC). See also "Individual Transferable Quota" and "Catch Share Program."

**Individual Transferable Quota (ITQ)<sup>1</sup>**

A type of individual fishing quota (IFQ) allocated to individual fishermen or vessel owners that can be transferred (sold or leased) to others. See also "Individual Transferable Quota."

**Industry Sector**

For this report, fishing- and marine-related industries were combined into industry sectors. Two industry sectors were included in this report: 1) seafood sales & processing, and 2) transport, support, & marine operations.

Fishing-and marine-related industries were chosen from the County Business Patterns Data Series based on data availability and perceived relevance to fishing or marine activities. These industries were then combined into one of these two industry sectors.

**Key Species or Species Groups**

For this report, up to ten species or species groups were chosen as "key" species or species groups due to their regional importance to commercial and recreational fisheries. The regional importance of these key species or species groups was chosen based on their economic and/or historical significance to a state or region.

**Landings<sup>1</sup>**

1. The number or poundage of fish unloaded by commercial fishermen or brought to shore by recreational fishermen for personal use. Landings are reported at the locations at which fish are brought to shore; 2. The part of the catch that is selected and kept during the sorting procedures on board vessels and successively discharged at dockside.

**Limited Access Privilege Program (LAPP) or Limited Access Privilege System<sup>4</sup>**

As defined in the Magnuson-Stevens Act, Limited Access Privilege Programs limit participation in a fishery to those satisfying certain eligibility criteria or requirements contained in a fishery management plan or associated regulation. A limited access privilege is a Federal permit, issued as part of a limited access system, to harvest a quantity of fish expressed by a unit or units representing a portion of the total allowable catch of the fishery that

may be received or held for exclusive use by a person. It includes an individual fishing quota (IFQ) or an individual tradable quota (ITQ) but does not include community development quotas (CDQs).

LAPPs are sometimes known as Dedicated Access Privileges or DAPs. However, unlike LAPPs, DAPs generally encompass community development quotas as well as individual fishing quotas (see "Dedicated Access Privileges"). LAPPs are a type of catch share program. See also "Catch Share Program."

**License Limitation Program or Limited Entry Program<sup>1</sup>**

A management tool available to fishery managers where the number of commercial fishermen or vessels licensed to participate in a fishery is legally restricted. A management agency often uses this management tool as a means of limiting entry into a fishery.

**Limited Entry Program**

Also known as a license limitation program; see "License Limitation Program."

**Location Quotient<sup>15</sup>**

Location Quotients (LQs) are ratios that allow an area's distribution of employment by industry to be compared to a reference or base area's distribution. The reference area is usually the U.S., but it can also be a state or a metropolitan area. The reference or base industry is usually the all industry total. The discussion below assumes the defaults are used. LQs also allow areas to be easily compared to each other. If an LQ is equal to 1, then the industry has the same share of its area employment as it does in the reference area. An LQ greater than 1 indicates an industry with a greater share of the local area employment than is the case in the reference area.

For example (assuming the U.S. as the reference area), Las Vegas will have an LQ greater than 1 in the Leisure and Hospitality industry because this industry makes up a larger share of the Las Vegas employment total than it does for the country as a whole. LQs are calculated by first dividing local industry employment by the all industry total of local employment. Second, reference area industry employment is divided by the all industry total for the reference area. Finally, the local ratio is divided by the reference area ratio.

**Magnuson-Stevens Fishery Conservation and Management Act or Magnuson-Stevens Act (MSA)<sup>1</sup>**

Federal legislation responsible for establishing the Regional Fishery Management Councils (FMCs) and the mandatory and discretionary guidelines for federal fishery management plans (FMPs). This legislation was originally enacted in 1976 as the Fishery Management and Conservation Act; its name was changed to the Magnuson Fishery Conservation and Management Act in 1980, and in 1996 it was renamed the Magnuson-Stevens Fishery Conservation and Management Act.

**Market-based Management<sup>16,4</sup>**

Market-based management is an umbrella term that encompasses approaches that provide economic incentives to protect fisheries from overharvest. These approaches are in contrast to conventional fisheries management approaches such as buyback programs and license limitation programs (see "Buyback Program" and "License Limitation Program"). One example of a market-based management approach for fisheries is a limited access privilege program (see "Limited Access Privilege Program") that includes an individual fishing quota. A limited access privilege program provides individual fishermen an exclusive, market-based share of a harvest quota or total allowable catch of a fishery.

**Marine Coastal County**

For this report, a marine coastal county is a coastal county that is adjacent to an ocean coastline. See also "Coastal County."

**Marine Economy**

For this report, the marine economy refers to the economic activity generated by fishing- and marine-related industries located in a coastal state. Fishing- and marine-related industries were chosen from industries characterized in the County Business Patterns Data Series provided by the U.S. Census Bureau. Industries listed in this report were chosen based on that industry's direct contribution to fishing and marine activities and whether data was available for that industry. Information such as the number of establishments and employees, and annual payroll for these fishing- and marine-related industries was used to characterize their relative levels of economic activity in a state. These industries were categorized into one of two industry sectors: 1) seafood sales & processing, and 2) transport, support, & marine operations. See also "Industry Sector."

**Non-coastal County Angler**

For this report, a non-coastal county angler refers to a recreational fisherman who lives within a given state but not in a coastal county of that state.

**Nonemployer Firms**

A nonemployer business is one that has no paid employees, has annual business receipts of \$1,000 or more (\$1 or more in the construction industries), and is subject to federal income taxes. Most nonemployers are self-employed

individuals operating very small unincorporated businesses which may or may not be the owner's principal source of income.

### **Non-resident**

For this report, a non-resident in the U.S. table refers to a recreational fisherman (angler) who resides outside of the U.S; a non-resident in the regional and state tables refers to an angler who did not reside in the state where they fished.

### **Out-of-state Angler**

For this report, an out-of-state angler is a recreational fisherman (angler) who does not reside within a given coastal state.

### **Overcapacity**

Overcapacity refers to a situation where the harvesting capability within a given fishery exceeds the level of harvest allowed for that fishery.

### **Overcapitalization<sup>9</sup>**

When the amount of harvesting capacity in a fishery exceeds the amount needed to harvest the desired amount of fish at least cost.

### **Overfished<sup>1</sup>**

1. An overfished stock or stock complex "whose size is sufficiently small that a change in management practices is required to achieve an appropriate level and rate of rebuilding." A stock or stock complex is considered overfished when its population size falls below the minimum stock size threshold (MSST). A rebuilding plan is required for stocks that are deemed overfished; 2. A stock is considered "overfished" when exploited beyond an explicit limit beyond which its abundance is considered 'too low' to ensure safe reproduction. In many fisheries the term is used when biomass has been estimated to be below a limit biological reference point that is used as the signpost defining an "overfished condition."

### **Overfishing<sup>1</sup>**

1. According to the National Standard Guidelines, "overfishing occurs whenever a stock or stock complex is subjected to a rate or level of fishing mortality that jeopardizes the capacity of a stock or stock complex to produce maximum sustainable yield (MSY) on a continuing basis." Overfishing is occurring if the maximum fishing mortality threshold (MFMT) is exceeded for 1 year or more; 2. In general, the action of exerting fishing pressure (fishing intensity) beyond the agreed optimum level. A reduction of fishing pressure would, in the medium term, lead to an increase in the total catch.

### **Protected Species<sup>1</sup>**

Refers to any species which is protected by either the Endangered Species Act (ESA) or the Marine Mammal Protection Act (MMPA), and which is under the jurisdiction of NOAA Fisheries (NMFS). This includes all threatened, endangered, and candidate species, as well as all cetaceans and pinnipeds, excluding walrus.

### **Regional Fishery Management Council or Fishery Management Council (FMC)<sup>4</sup>**

The Magnuson-Stevens Act established eight Regional Fishery Management Councils around the United States. Each Council consists of voting and non-voting members who represent various federal, state, and tribal government, fishing industry groups (commercial and/or recreational), and non-fishing groups (such as environmental organizations and academic institutions). Each Council is tasked with creating fishery management plans for important fisheries within their regions.

### **Release**

For this report, release refers to the number of individual fish caught by a recreational fisherman (angler) that are then returned to the sea (dead or alive). In Hawaii and the Atlantic and Gulf states, release does not include fish returned to the sea that are dead. See also "Catch" and "Harvest".

### **Resident**

For this report, a resident in the U.S. table refers to a recreational fisherman (angler) who resides inside of the U.S; a resident in the regional and state tables refers to an angler who resides in the state where they fished.

### **Sector Allocation Program<sup>17</sup>**

A fisheries management tool where a group of fishermen are allocated a quota or share of a total allowable catch, in accordance with an approved plan. It is considered a type of catch share program. See also "Catch Share Program."

### **Species<sup>1</sup>**

A group of animals or plants having common characteristics that are able to breed together to produce fertile (capable of reproducing) offspring and maintain their "separateness" from other groups.

**Species Group<sup>1</sup>**

Group of species considered together often because they are difficult to differentiate without detailed examination (very similar species) or because data for the separate species are not available (for example, in fishery statistics or commercial categories).

**Threatened Species<sup>13</sup>**

As defined by the Endangered Species Act, a threatened species is any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. See also "Endangered Species."

**Trip Expenditures**

For this report, trip expenditures refer to expenses incurred by recreational fishermen (anglers) on a fishing trip. Trip expenditures are described for residents (individuals who reside in a coastal or non-coastal county within a given state; a U.S. resident) and non-residents (individuals who do not reside within the U.S.).

**Value-added<sup>1</sup>**

A firm's sales minus the cost of the goods and services it purchases from other industries to produce its outputs.

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**Notes**

<sup>1</sup>NOAA Fisheries Glossary. October 2005. K. Blackhart, D.G. Stanton, and A.M. Shimada, eds. Revised edition, June 2006. National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Department of Commerce. NOAA Technical Memorandum NMFS-F/SPO-69. Available at: [http://www.st.nmfs.gov/st4/documents/F\\_Glossary.pdf](http://www.st.nmfs.gov/st4/documents/F_Glossary.pdf)[accessed 14 July 2009].

<sup>2</sup>CBP Definitions." County Business Patterns, U.S. Census Bureau, U.S. Department of Commerce. Available at: <http://www.census.gov/epcd/cbp/view/genexpl.html>[accessed 14 July 2009/]

<sup>3</sup>Nonemployer Definitions." Nonemployer Statistics, U.S. Census Bureau, U.S. Department of Commerce. Available at: <http://www.census.gov/epcd/nonemployer/view/define.html>[accessed 14 July 2009].

<sup>4</sup>Magnuson-Stevens Fishery Conservation and Management Act, as amended through January 12, 2007. (P.L. 94-265, as amended through P.L. 109-479). Available at: [http://www.nmfs.noaa.gov/msa2007/docs/act\\_draft.pdf](http://www.nmfs.noaa.gov/msa2007/docs/act_draft.pdf)[accessed 14 July 2009].

<sup>5</sup>What is a Catch Share? Office of Sustainable Fisheries, National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Department of Commerce. Available at: [http://www.nmfs.noaa.gov/sfa/domes\\_fish/catchshare/index.htm](http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/index.htm)[accessed 14 July 2009].

<sup>6</sup>"Coastal Counties." U.S. Census Bureau, U.S. Department of Commerce. Available at: [http://www.census.gov/geo/landview/lv6help/coastal\\_cty.html](http://www.census.gov/geo/landview/lv6help/coastal_cty.html) [accessed 14 July 2009].

<sup>7</sup>Pages 288-289 in: An Ocean Blueprint for the 21st Century, Final Report. 2004. U.S. Commission on Ocean Policy. Washington, D.C. Available at: <http://www.oceancommission.gov>[accessed 14 July 2009].

<sup>8</sup>Page 4 in: The Economic Contribution of Marine Angler Expenditures in the United States, 2006. 2008. B. Gentner and S. Steinback. National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Department of Commerce. NOAA Tech. Memo. NMFS-F/SPO-94. Available at: [http://www.st.nmfs.noaa.gov/st5/publication/marine\\_angler.html](http://www.st.nmfs.noaa.gov/st5/publication/marine_angler.html)[accessed 14 July 2009].

<sup>9</sup>"Fisheries Glossary." FAO Fisheries Department, United Nations Food & Agriculture Organization. Available at: <http://www.fao.org/fi/glossary/default.asp>[accessed 14 July 2009].

<sup>10</sup>The NMFS Commercial Fishing and Seafood Industry Input/Output Model (CFSI I/O Model). August 2009. J. Kirkley. Virginia Institute of Marine Science. Available at: [http://www.st.nmfs.noaa.gov/st5/publication/marine\\_angler.html](http://www.st.nmfs.noaa.gov/st5/publication/marine_angler.html) [accessed 14 July 2009].

<sup>11</sup>Pages 11-12 in: The Economic Contribution of Marine Angler Expenditures in the United States, 2006. November 2008. B. Gentner and S. Steinback. National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Dept. of Commerce. NOAA Technical Memorandum NMFS-F/SPO-94, 301p. Available at: <https://www.st.nmfs.noaa.gov/documents/Commercial%20Fishing%20I%20Model.pdf>[accessed 15 September 2010].

<sup>12</sup>"Regional Definitions." Regional Economic Accounts, Bureau of Economic Analysis, U.S. Department of Commerce. Available at: <http://www.bea.gov/regional/definitions>[accessed 14 July 2009].

<sup>13</sup>Endangered Species Act of 1973 (P.L. 93-205, as amended through P.L. 100-707). Available at: <http://www.nmfs.noaa.gov/pr/laws/esa/>[accessed 14 July 2009].

<sup>14</sup>"Status of U.S. Fisheries." Office of Sustainable Fisheries, National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Department of Commerce. Available at: <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>[accessed 16 March 2009].

<sup>15</sup>Location Quotient Calculator. Bureau of Labor Statistics, U.S. Department of Labor. Available at: [http://data.bls.gov/help/def/lq.htm#location\\_quotient\\_application](http://data.bls.gov/help/def/lq.htm#location_quotient_application)[accessed 14 July 2009].

<sup>16</sup>Market-based Management. In Fisheries Management: Building a Sustainable Future for America's Fisheries. National Oceanic & Atmospheric Administration, U.S. Department of Commerce. Available at: <http://celebrating200years.noaa.gov/visions/fisheries/welcome.html#impl>[accessed 14 July 2009].

<sup>17</sup>Sector Allocation as a Management Tool. Northeast Sea Grant. Available at: [http://seagrant.gso.uri.edu/fisheries/sector\\_allocation/index.html](http://seagrant.gso.uri.edu/fisheries/sector_allocation/index.html)[accessed 14 July 2009].