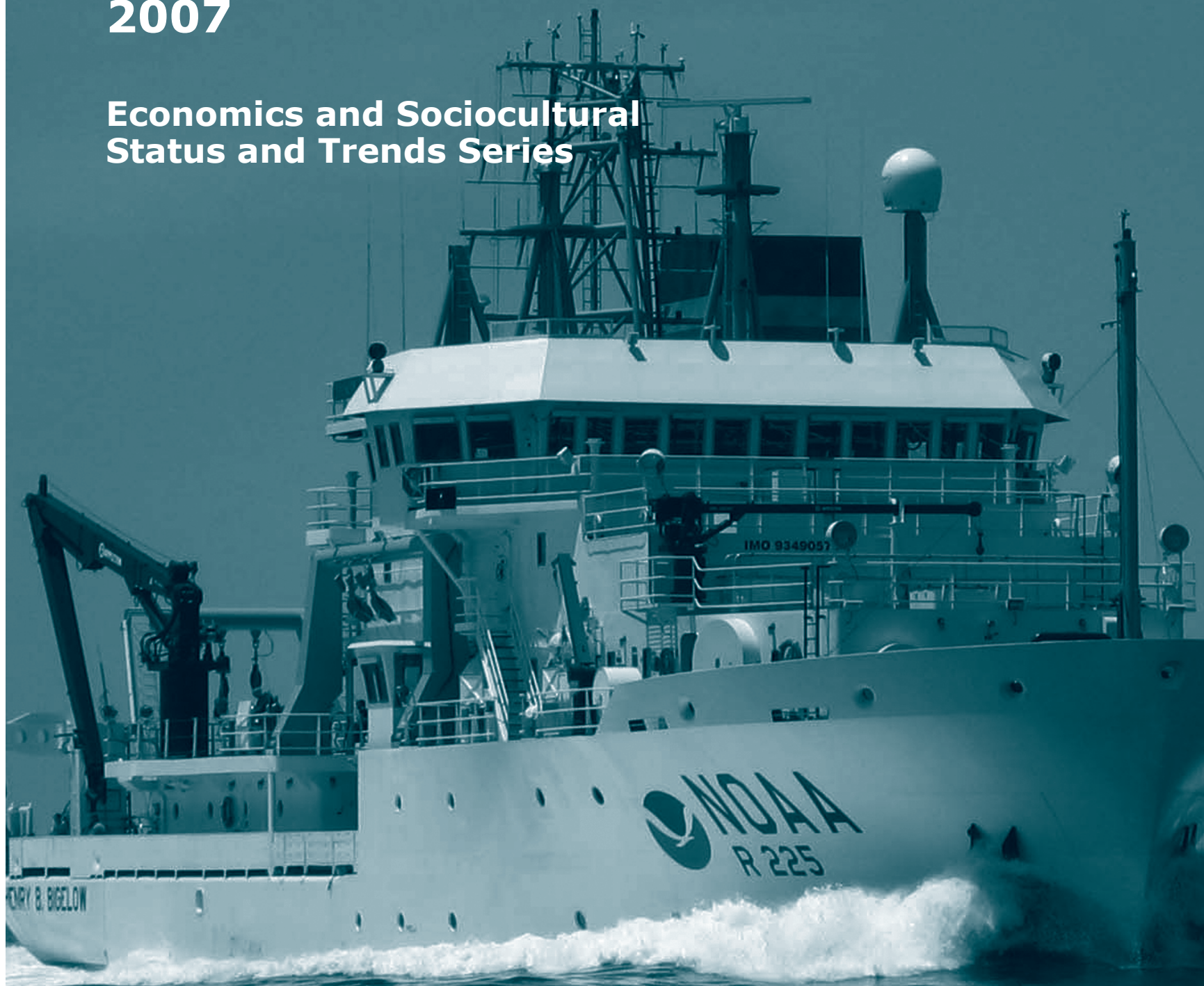


Fisheries Economics of the United States 2007

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-104
January 2010





Fisheries Economics of the United States, 2007

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-104
January 2010**



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Front cover photo: NOAA ship Henry B. Bigelow (photo credit: A. Shimada)

Inside front cover photo: Fishing lures used on a research cruise (photo credit: A. Shimada)

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Preface

Fisheries Economics of the U.S., 2007

Fisheries Economics of the U.S., 2007 is the second volume in this new 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 1998-2007 time period is covered in this report and descriptive statistics are provided for the following categories: economic impacts of the commercial seafood industry, commercial fisheries landings, revenue, and price trends; economic impacts of the recreational fishing industry, recreational fishing catch, effort, and participation rates; and employer and non-employer establishment, payroll, 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; 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.

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Deck of NOAA ship *Henry B. Bigelow* (photo credit: A. Shimada)

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 (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 46 fishery management plans¹ that provide a framework for managing the harvest of 230 major fish stocks or stock complexes² 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 a FMP is developed, it must be approved by the Secretary of Commerce, in consultation with the NMFS, before it is implemented and enforced.

Regional Fishery Management Councils

1. North Pacific Fishery Management Council
2. Western Pacific Fishery Management Council
3. Pacific Fishery Management Council
4. New England Fishery Management Council
5. Mid-Atlantic Fishery Management Council
6. South Atlantic Fishery Management Council
7. Gulf of Mexico Fishery Management Council
8. Caribbean Fishery Management Council

Of the 230 major fish stocks and stock complexes currently managed under a FMP, the overfished status of 173 stocks or stock complexes and the overfishing status of 188 stocks or stock complexes is known. Currently, 45 stocks or stock complexes are categorized as overfished and 40 are categorized as subject to overfishing.

Less is known about the 301 minor stocks or stock complexes. The overfished status of 26 of these stocks or stock complexes is known and one of these is currently considered overfished (Atlantic salmon). The

¹Fishery 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).

²Generally, a fish stock is equivalent to a single species. Stock complexes, on the other hand, contain multiple species with similar geographic distributions, co-occurrence in fisheries, and life history.

overfishing status of 63 of the 301 minor stocks or stock complexes is known and one of these (parrotfishes) is currently considered to be subject to overfishing.

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). Examples of transboundary areas include the Gulf of Alaska and the Gulf of Maine. An example of international waters include ocean areas adjacent to the Antarctic.

Regional Fishery Management Organizations (RFMOs) are multinational organizations with interests in transboundary and international fish stocks and associated fishing activities. NOAA Fisheries has an interest in 14 RFMOs globally.³ 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 non-target fish 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.

Regional Fisheries Management Organizations

1. Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
2. Commission for the Conservation of Southern Bluefin Tuna (CCSBT)
3. Council of the Eastern Pacific Tuna Fishing Agreement (CEPTFA)
4. Inter-American Tropical Tuna Commission (IATTC)
5. International Commission for the Conservation of Atlantic Tunas (ICCAT)
6. Indian Ocean Tuna Commission (IOTC)
7. International Pacific Halibut Commission (IPHC)
8. International Whaling Commission (IWC)
9. Northwest Atlantic Fisheries Organization (NAFO)
10. North Atlantic Salmon Conservation Organization (NASCO)
11. North Pacific Anadromous Fishery Commission (NPAFC)
12. Pacific Salmon Commission (PSC)
13. Southeast Atlantic Fisheries Organization (SEAFO)
14. Western and Central Pacific Fisheries Commission (WCPFC)

³For more detailed information about international agreements that NOAA Fisheries has an interest in, please go to: http://www.nmfs.noaa.gov/ia/docs/2008_International_Agreements.pdf

Another issue of particular concern for NOAA Fisheries is the problem of illegal, unreported, and unregulated (IUU) fishing activities in international waters. Currently, 70 vessels flying the national flags of 18 nations are estimated to participate in IUU fishing activities.⁴ NMFS is actively working bilaterally and multilaterally with other nations on the adoption of strategies to reduce the level of IUU fishing around the world.⁵

Threatened and Endangered Species

NOAA Fisheries is also the lead agency for the conservation and protection of over 68 fish and non-fish species which fall within the purview of the Endangered Species Act (ESA). Status determinations related to the viability and health of these populations have been made and the status of these populations have been determined as “threatened” or “endangered,” and in one case, “recovered.”

Currently, there are 34 marine and anadromous fish species and subspecies⁶ 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	34
Marine Mammals: Whales	11
Marine Mammals: Dolphins	3
Marine Mammals: Porpoise	1
Marine Mammals: Seals	4
Marine Mammals: Sea Lions	2
Sea Turtles	8
Marine Invertebrates	4
Marine Plants	1
Total	68

In addition to threatened and endangered fish species, the National Marine Fisheries Service 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 a marine plant are listed. There are currently 12 “candidate species” for listing and 2 species proposed for listing.

⁴An additional 45 vessels with unknown country affiliation also participate in IUU fishing activities.

⁵For more information about NOAA Fisheries’ response to IUU fishing activities, please see *Implementation of Title IV of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006* available at: http://www.nmfs.noaa.gov/msa2007/docs/msra_biennial_report_011309.pdf

⁶Subspecies includes “distinct population segments” and “evolutionarily significant units,” terms defined under the ESA.

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, the NMFS is also responsible for providing protection for marine mammals under the Marine Mammal Protection Act. Passed in 1972, Congress recognized that protecting populations of marine mammals contributes to the overall health of marine ecosystems.

NOAA Fisheries is responsible for preventing the harrassment, capture, or killing of whales, dolphins, porpoises, seals, and sea lions.⁷ 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.⁸ Habitat areas that are necessary for a fish species’ growth, reproduction, and development are considered EFH. To the extent practicable, NMFS 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. HAPCs are a subset of EFH and are particularly vulnerable or ecologically-important. The purpose of HAPCs is to help focus EFH conservation efforts. To date, approximately 100 HAPCs have been designated including specific coral, seamount, and spawning areas.

Market-based Tools for Sustainable Fisheries

A variety of market-based tools are available to fishery managers. The many types of catch share programs are examples of these tools. In the U.S., catch share programs include: 1) limited access privilege programs (LAPPs), which include individual fishing quota programs (IFQs), regional fishery associations, and fishing community quotas;⁹ 2) community development quota programs (CDQs);

⁷The U.S. Fish and Wildlife Service provides protection for walrus, manatees, otters, and polar bears.

⁸The 1996 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act included this requirement.

⁹See Section 303(A) of the Magnuson-Stevens Act for more information.

3) fishing cooperatives; and 4) sector allocation programs.¹⁰

Existing LAPPs and other Catch Share Programs (2007)

Region	Program	First Year	Ex-vessel Value (\$ millions)
Mid-Atlantic	Surfclam and ocean quahog IFQ	1990	49.0
South Atlantic	Wreckfish IFQ	1992	0.3
North Pacific	Western Alaska CDQ	1992	68.0
North Pacific	Pacific halibut and sablefish IFQ	1995	237.0
Pacific	Pacific whiting catcher/processor cooperative	1997	21.8
North Pacific	Bering Sea pollock cooperatives	1998	266.0
Pacific	Sablefish permit stacking program	2001	6.4
North Pacific	AK weathervane scallop cooperative	2001	1.0
New England	Georges Bank hook gear sector	2004	0.6
North Pacific	Bering Sea king and Tanner crab; IFQ and cooperative	2005	65.0
New England	Georges Bank cod fixed gear sector	2006	0.9
Gulf of Mexico	Gulf of Mexico red snapper IFQ	2007	\$9.0
North Pacific	Central Gulf of Alaska rockfish pilot sector program	2007	\$8.5
North Pacific	Bering Sea groundfish (non-pollock) trawl catcher/processor cooperative	2008	\$120.6

With many catch share programs, the assigned harvest privileges can be used or transferred (that is, sold or leased) to those who can use them more beneficially. In contrast, the two sector allocation programs currently in place for the Northeast multispecies fishery do not assign harvest privileges that can be sold or leased by individual fishermen. Instead, a group of vessel permit holders voluntarily agree to adhere to fishing restrictions in exchange for the opportunity to catch a portion of the total catch allocated to the fishing industry. However, a sector could assign shares of its allocation to individual fishermen and allow transfers among its members or potentially to another sector. Some of the sector allocation programs that are being developed for this fishery are expected to include some of these features.¹¹

¹⁰For 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 and *National Assessment of Excess Harvesting Capacity in Federally Managed Commercial Fisheries* available at: <http://spo.nmfs.noaa.gov/tm/spo93.pdf>.

¹¹Proposed changes to the existing sector-based management program for the Northeast multispecies fishery would expand the number of sectors from 2 to 19.

Nationwide, there are 14 such programs currently in operation in six different regions.¹² The total ex-vessel value of these fisheries was greater than \$854 million in 2007, 21% of the total ex-vessel value for all U.S. commercial fisheries.

In addition to these existing programs, there are other catch share programs or groups of programs in development: the Atlantic sea scallops general category vessel program (New England); 17 Northeast multispecies sector allocation programs (New England); Mid-Atlantic tilefish; Gulf of Mexico grouper; and West Coast trawl groundfish (Pacific).

Ecolabels are another market-based tool available to improve fisheries management. An ecolabeling program entitles a fishery product to bear a distinctive logo or statement which certifies that 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 consumer to potentially influence the sustainable harvest of fishery resources through the purchase of such ecolabeled seafood products.

The Marine Stewardship Council (MSC) has one of the most recognizable ecolabeling programs in the world. There are currently 42 international fisheries that meet MSC sustainability standards,¹³ nine of which are U.S. fisheries.

U.S. Fisheries with MSC Certification

Region	Fishery	Certified
North Pacific	Alaskan salmon	Sept 2000; Nov 2007
North Pacific	Bering Sea/Aleutian Islands (BSAI) pollock	Feb 2005
North Pacific	Gulf of Alaska pollock	April 2005
North Pacific	BSAI Pacific cod	Feb 2006
North Pacific	Pacific halibut	April 2006
North Pacific	Sablefish	May 2006
Pacific	Pacific albacore tuna - north (American Albacore Fishing Association)	Aug 2007
Pacific	Pacific albacore tuna - south (American Albacore Fishing Association)	Aug 2007
Pacific	Oregon pink shrimp	Dec 2007

Other Market-based Management Tools

Vessel or permit buyback programs are another market-based tool used by fishery managers. Often, the intent of a buyback program is to ease fishing-related pressure on marine resources by limiting fishing effort. That is, fishing vessels are purchased

¹²Currently, only the Western Pacific and Caribbean regions do not have a LAPP or another catch share program in place.

¹³More information about the Marine Stewardship Council and its certification process is available at: <http://www.msc.org/track-a-fishery/certified>.

by the government or by the fishing industry itself, and then removed from a specific fishery where fish stocks or stock complexes are overfished or subject to overfishing. Though NOAA Fisheries does not view buybacks as an effective stand-alone management tool, they may play a helpful role in reducing overcapacity in a fishery. To date, there have been ten buyback programs instituted nationwide. The cost of seven¹⁴ of these buyback programs cost a 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.

Buyback Programs in the U.S. (1995-2007)

Program	Year	Buyback amount (\$ millions)	Govt funding (\$ millions)
Northwest Pacific salmon disaster	1994 1995 1998	NA	NA
Northeast multispecies	1995 1996 2002	1.9 22.5 10.0	1.9 22.5 10.0
Bering Sea/ Aleutian Islands (BSAI) pollock	1998	90.0	15.0
Pacific Coast groundfish	2003	45.7	10.0
BSAI crab	2004	97.4	NA
BSAI groundfish freezer longliners	2007	35.0	NA

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, rather than simply open to whoever might be interested in fishing. Unlike LAPPs and other 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.

Commercial Fisheries

Commercial fishermen in the U.S. harvested 9.3 billion pounds of finfish and shellfish in 2007, earning over \$4.2 billion for their catch. Shrimp (\$433 million), sea scallop (\$386 million), walleye pollock (\$383 million), Pacific salmon (\$381 million), and American lobster (\$360 million) contributed most to total revenue in the U.S. In terms of pounds landed, walleye pollock (3.1 billion pounds) and menhaden (1.4 billion pounds) comprised the majority of total pounds landed in 2007. Sea scallop had the highest ex-vessel price in 2007 at \$6.59 per pound.

Alaska fishermen had the highest total revenue and total pounds landed in the U.S. in 2007, generating \$1.5 billion in revenue and landing 5.3 billion pounds. Alaska also contributed most to total revenue and landings of

sablefish (\$79 million, 32 million pounds) and walleye pollock (\$383 million, 3.1 billion pounds) in 2007.

When looking at other key species or species groups, commercial fishermen in Washington caught the most salmon (21 million pounds) and earned \$22 million for their catch in 2007. Tunas were caught in large numbers in Hawai'i (18 million pounds) and generated \$51 million in ex-vessel revenue.

On the East Coast of the U.S., Maine fishermen contributed most to total landings of American lobster (59 million pounds) and earned \$260 million for their catch in 2007. In Massachusetts, sea scallop was a major contributor to total revenue, generating \$218 million for 32 million pounds landed. The majority of blue crab was caught in Maryland (21 million pounds) earning fishermen in this state over \$30 million in revenue.

Virginia landed most of the menhaden in 2007, with fishermen landing 420 million pounds and generating \$25 million in total revenue. In the Gulf of Mexico, shrimp was a highly valued species. Fishermen in Texas earned \$145 million for their catch (71 million pounds). However, the majority of shrimp was landed in Louisiana (109 million pounds, \$138 million in total revenue).

When looking at key commercial species or species groups with the highest ex-vessel price per pound in 2007, Eastern oyster averaged the highest annual price: \$35.19 per pound in Massachusetts, \$21.21 per pound in New York, \$16.43 per pound in Connecticut, and \$9.73 per pound in Maryland. Other key species or groups with ex-vessel prices over \$10 per pound in 2007 included: clams (\$12.97 per pound in Washington), lobsters (\$11.84 per pound in Hawai'i), spiny lobsters (\$10.44 per pound in California), and bloodworms (\$10.97 per pound in Maine).

Key U.S. Commercial Species

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

Economic Impacts

In this report, the U.S. commercial seafood industry includes the commercial harvest sector, seafood processors and dealers, seafood wholesalers and distributors, and seafood retailers. In 2007, this industry supported approximately 1.5 million full- and part-time jobs and generated \$99 billion in sales impacts and \$43 billion in income impacts.

Seafood retailers contributed most to these totals relative to the other commercial seafood sectors. This sector employed approximately 1.1 million workers (75% of total employees) in 2007 and

¹⁴This total excludes three buyback programs associated with Northwest Pacific salmon disasters in 1994, 1995, and 1998; data was not available.

generated \$57 billion in sales (57% of total sales impacts) and \$27 billion in income (62% of total income impacts). Seafood wholesalers and distributors (150,000 employees), commercial harvesters (114,000 employees), and seafood processors and dealers (103,000 employees) followed in terms of jobs supported across the U.S.

Jobs supported by the U.S. Commercial Seafood Industry (2007)

State	Jobs	State	Jobs
California	156,387	North Carolina	15,943
Florida	101,168	Rhode Island	11,755
Washington	73,379	Hawai'i	11,618
Massachusetts	73,196	Georgia	11,196
Louisiana	47,081	Maryland	11,041
Alaska	43,341	Alabama	10,979
Texas	42,240	Mississippi	8,244
New York	39,585	New Hampshire	7,121
New Jersey	36,618	Connecticut	6,499
Virginia	33,439	South Carolina	1,860
Maine	24,847	Delaware	1,582
Oregon	18,821		

Relative to 2006, employment, sales, and income impacts from the commercial seafood industry decreased in 2007: -3.7%, -1.3%, and -1.3%, respectively.¹⁵ Increases were observed in the commercial harvesting sector with increases in employment (1.7%), sales impacts (3.4%), and income impacts (4.2%). The largest decreases from 2006-2007 were seen for the seafood wholesalers and distributors sector with jobs decreasing 5.8%, sales impacts decreasing 3.3%, and income impacts decreasing 3.3%. In the retail sector, job impacts decreased 4% and decreased 3.2% in the seafood processors and dealers sector.

Total Sales Generated by the U.S. Commercial Seafood Industry (2007)
(thousands of dollars)

State	In-State Sales	State	In-State Sales
California	8,503,228	North Carolina	655,032
Florida	5,109,134	Maryland	594,294
Massachusetts	3,865,974	Rhode Island	556,874
Washington	3,688,407	Georgia	555,374
Alaska	3,283,940	Hawai'i	516,180
Louisiana	2,125,898	Alabama	488,264
New Jersey	1,927,389	Mississippi	362,963
Texas	1,942,379	New Hampshire	343,078
New York	1,830,881	Connecticut	335,092
Virginia	1,448,353	South Carolina	78,315
Maine	1,226,135	Delaware	73,890
Oregon	943,563		

Landings Revenue

Ex-vessel revenue in the U.S. totaled \$4.2 billion in 2007. This was a 33% increase (11% in real terms) from 1998 levels (\$4.2 billion) and a 3.2% increase (-2.5% in real terms) relative to 2006 (\$4.1 billion). Finfish and shellfish revenues mirrored this increasing trend. Totaling \$2.1 billion in 2007, finfish revenue increased 44% (20% in real terms) from 1998-2007 and 5% (-0.5% in real terms) from 2006-2007. U.S. shellfish revenue totaled \$2.1 billion in 2007, increasing 24% (3% in real terms) from 1998-2007 and 12% (-4.3% in real terms) from 2006-2007.

Total Landings Revenue by Region (2007)
(thousands of dollars)

Region	Total Revenue	Region	Total Revenue
U.S. total	4,240,796	Pacific	415,631
North Pacific	1,549,353	Mid-Atlantic	401,913
New England	915,918	South Atlantic	151,177
Gulf of Mexico	681,074	Western Pacific	75,703

Overall, most of the nation's ex-vessel revenue was generated in Alaska (\$1.5 billion) which contributed 37% to the U.S. total. Alaska also contributed more than any other state to total U.S. finfish revenue (\$1.4 billion), accounting for 64% to total finfish revenue. Most of Alaska's landings revenue came from walleye pollock and salmon. Massachusetts (\$349 million) and Louisiana (\$222 million) contributed most to total U.S. shellfish revenue, contributing 16% and 10%, respectively. Sea scallops accounted for most of the revenue generated in Massachusetts and shrimp contributed the most to revenue in Louisiana.

Total Landings Revenue by State (2007)
(thousands of dollars)

State	Total Revenue	State	Total Revenue
Alaska	1,549,353	Rhode Island	76,882
Massachusetts	458,347	Hawai'i	75,703
Maine	319,522	New York	58,940
Louisiana	287,012	Maryland	52,273
Washington	198,124	Alabama	48,168
Texas	174,356	East Florida	42,747
New Jersey	152,560	Connecticut	42,079
West Florida	132,198	Mississippi	39,340
Virginia	130,562	New Hampshire	19,088
California	120,193	South Carolina	16,017
Oregon	97,314	Georgia	10,081
North Carolina	82,332	Delaware	7,578

¹⁵Percent change between 2006 and 2007 was calculated using employment, sales, and income impacts normalized to 2006 dollars using the seafood producer price index.

The ten U.S. key species and species groups comprised 61% of total revenue in 2007. Of these, shrimp, sea scallop, walleye pollock, Pacific salmon, and American lobster contributed most to total revenue in the U.S. in 2007. These species or groups totaled approximately \$1.9 billion in 2007 or 46% of total revenue.

Key species or species groups with large increases in total revenue from 1998-2007 include: sea scallop (414% increase, 329% in real terms), Pacific halibut (200%, 151% in real terms), walleye pollock (111%, 76% in real terms), and sablefish (54%, 29% in real terms). Decreases in total revenue over the 10 year time period were observed for shrimp (25% decrease, -37% in real terms), blue crab (-17%, -31% in real terms), menhaden (-12%, -26% in real terms), and tunas (-1%, -17% in real terms).

Relative to 2006 totals, key species or species groups with the largest changes in total revenue in 2007 include: menhaden (33% increase, 26% in real terms), Pacific salmon (23%, 15% in real terms), and walleye pollock (-11%, -16% in real terms).

Landings

In 2007, U.S. commercial fishermen landed 9.3 billion pounds of finfish and shellfish. Relative to 1998 levels, this total did not change but there was a small decrease (-1.9%) relative to 2006 (9.5 billion pounds). Finfish landings totaled 8.2 billion pounds in 2007, a 2.1% increase from 1998 (8.1 billion pounds) and a 0.8% decrease from 2006 (8.3 billion pounds). The largest decrease in landings from 1998-2006 was seen for shellfish. Shellfish landings in 2007 (1.1 billion pounds) were a 15% decrease from 1998 levels (1.2 billion pounds) and a 9.6% decrease from 2006 levels (1.2 billion pounds).

Total Landings by Region (2007)
(thousands of pounds)

Region	Total Landings	Region	Total Landings
U.S. total	9,298,204	Mid-Atlantic	728,291
North Pacific	5,314,742	New England	584,193
Gulf of Mexico	1,398,602	South Atlantic	104,599
Pacific	829,982	Western Pacific	28,937

Most of the nation's total landings was harvested by Alaskan fishermen. Alaska contributed 57% to the U.S. total in 2007, landing 5.3 billion pounds of finfish and shellfish. Alaska also contributed most to the U.S. finfish total, landing 5.2 billion pounds or 64% of the U.S. finfish total. Walleye pollock comprised most of this Alaskan catch. In terms of shellfish, most were landed in Louisiana. With 183 million pounds landed in 2007, Louisiana's total accounted for 17% of the U.S. shellfish total. Shrimp accounted for most of this harvest.

Over 66% of total revenue in 2007 was made up of the ten U.S. key species and species groups. Walleye pollock and menhaden had the highest landings totals in 2007 with 3.1 billion pounds and 1.5 billion pounds landed, respectively. These two species accounted for approximately 49% of total U.S. landings in 2007.

Total Landings by State (2007)
(thousands of pounds)

State	Total Landings	State	Total Landings
Alaska	5,314,742	North Carolina	62,923
Louisiana	997,613	West Florida	59,244
Virginia	484,388	Maryland	48,575
California	383,586	New York	36,275
Massachusetts	313,895	Alabama	28,971
Oregon	253,551	Hawai'i	28,937
Mississippi	227,834	East Florida	25,186
Washington	192,845	Connecticut	10,263
Maine	176,005	South Carolina	9,310
New Jersey	153,964	New Hampshire	8,395
Texas	84,940	Georgia	7,180
Rhode Island	75,635	Delaware	5,089

Relative to 1998, landings totals for six of the ten U.S. key species or species groups decreased in 2007. The largest decreases were seen for tunas (41% decrease) and blue crab (-34%). However, a significant increase in landings was observed for sea scallop (383% increase). Pacific salmon experienced a more modest increase in landings (37%).

Key species or species groups with large changes in total landings from 2006-2007 include: Pacific salmon (33% increase), menhaden (14%), American lobster (15% decrease), and blue crab (-11%).

Prices

Of the ten U.S. key species and species groups, sea scallop, American lobster, and Pacific halibut received the highest ex-vessel prices in 2007 at \$6.59 per pound, \$4.57 per pound, and \$3.25 per pound, respectively. Significant increases in price were observed for Pacific halibut which increased 225% (171% in real terms) from 1998-2007 and 16% (9.3% in real terms) from 2006-2007. American lobster ex-vessel price also increased, increasing 44% (20% in real terms) from 1998-2007 and 7.0% (1.1% in real terms) from 2006-2007. Sea scallop prices experienced smaller increases at 6.5% from 1989-2007 (-11% in real terms) and 1.1% from 2006-2007 (-4.5 in real terms).

Menhaden and walleye pollock had the lowest ex-vessel prices in 2007 at \$0.06 per pound and \$0.12 per pound, respectively. However, total landings of menhaden and walleye pollock were the largest among the U.S. key species and groups: 1.5 billion pounds of menhaden and 3.1 billion pounds of walleye pollock. Ex-vessel price for menhaden stayed

flat from 1998-2007 (-17% in real terms) but increased 20% from 2006-2007 (13% in real terms). Walleye pollock experienced a larger change, increasing 89% from 1998-2007 (58% in real terms) but decreasing 1.1% from 2006-2007 (-6.5% in real terms).

Overall, nine of the ten U.S. key species or species groups experienced an increase in ex-vessel price from 1998 and 2007. In addition to those mentioned above, tunas (68% increase, 40% in real terms), sablefish (64%, 37% in real terms), and blue crab (26%, 4.9% in real terms) experienced large or modest increases. Pacific salmon prices remained flat from 1998-2007 (-17% in real terms) and shrimp prices decreased 15% (-29% in real terms), the only nominal price decrease over this time period.

Between 2006 and 2007, ex-vessel price for eight of the ten U.S. key species or groups increased, with blue crab increasing the most (29%, 22% in real terms). Pacific salmon prices decreased 8.1% from 2006-2007 (-13% in real terms) and as mentioned above, walleye pollock prices decreased 1.1% (-6.5% in real terms).

Recreational Fishing

In 2007, there were approximately 13 million recreational anglers across the U.S. who took 86 million saltwater fishing trips around the country. These anglers spent \$4.6 billion on fishing trips and \$27 billion on durable fishing-related equipment. These expenditures contributed \$72 billion in sales impacts to the U.S. economy, generated \$33 billion in value-added impacts, and supported over 465,000 jobs. Of the U.S. key recreational species or species groups, Atlantic croaker (51 million fish) and seatrouts (48 million fish) were the most often caught by recreational anglers in 2007.

Key U.S. Recreational Species

- Atlantic croaker
- Alaskan halibut spot
- Large Atlantic tunas
- Salmon
- Little tunny and Atlantic bonito
- Seatrouts
- Sharks
- Striped bass
- Summer flounder
- Pacific rockfishes and scorpionfishes

Commercial Fish Facts

Landings revenue

- The ten U.S. key species or species groups accounted for 61% of total landings revenue in 2007.
- Finfish and other fishery products and shellfish contributed equally to total landings revenue in the U.S. with each generating \$2.1 billion in 2007.
- Walleye pollock and Pacific salmon each accounted for 18% of total finfish revenue in 2007, more than any other key species or group.
- Shrimp, sea scallops, and American lobster contributed most to total shellfish revenue in 2007, contributing 20%, 18%, and 17%, respectively.
- The largest annual increase in revenue was 66% for Pacific halibut (1998-1999). The largest annual decrease in revenue was -26% for shrimp (2000-2001).

Landings

- The U.S. key species and species groups accounted for 66% of total landings in 2007.
- Finfish and other fishery products accounted for 89% of total U.S. landings in 2007 or 8.2 billion pounds.
- Walleye pollock and menhaden contributed 37% and 18%, respectively, to U.S. finfish landings, more than any other key species or group.
- Shrimp and blue crab accounted for most of the U.S. shellfish landings: 26% and 14%, respectively.
- Sea scallop landings increased 82% from 1998-1999, the largest annual increase over the 10 year time period. Tunas had the largest annual decrease in landings, decreasing 29% from 1998-1999.

Prices

- Sea scallop (\$6.59), American lobster (\$4.57), and Pacific halibut (\$3.25) had the highest ex-vessel price per pound in 2007.
- Menhaden (\$0.06) and walleye pollock (\$0.12) had the lowest ex-vessel price per pound in 2007.
- The largest annual increase in price was 58% for Pacific halibut (1998-1999). Pacific salmon had the largest annual decrease in price, decreasing 32% (2000-2001).

Expenditures and Economic Impacts

U.S. anglers spent a total of \$4.6 billion on expenditures related to fishing trips in 2007. Of this total, expenditures for a private or rental boat fishing trip contributed the most (\$2.1 billion), followed by shore-based fishing trips (\$1.8 billion), and for-hire fishing trips (\$685,000). Expenditures on durable fishing-related equipment totaled over \$27 billion in 2007. Boat expenses contributed the most to this total with \$8.6 billion spent. Vehicle-related expenditures (\$5.8 billion), second home expenses (\$4.6 billion), and fishing tackle expenditures (\$3.0 billion) followed.

Jobs supported by the U.S. Recreational Fishing Industry (2007)

State	Jobs	State	Jobs
West Florida	65,799	South Carolina	6,134
East Florida	64,673	Massachusetts	6,124
Louisiana	27,446	Hawai'i	5,726
California*	23,454	Alaska	5,389
Texas	23,382	Mississippi	4,707
North Carolina	21,748	Connecticut	3,848
Washington*	11,025	Oregon*	2,527
New Jersey	10,893	Georgia	2,154
Maryland	9,228	Maine	1,972
Virginia	7,267	Delaware	1,784
Alabama	6,759	Rhode Island	1,286
New York	6,493	New Hampshire	488

*Employment estimates for California, Oregon, and Washington are for 2006.

Relative to 2006, angler expenditures on fishing trips increased 27% with double digit increases in expenditures observed in each of the three fishing modes (private boat, shore-based, and for-hire). Total expenditures on durable fishing-related equipment decreased 11% from 2006-2007. Each of the durable expenditure categories mirrored this trend, ranging from -0.8% decreases in fishing tackle and other equipment expenditures, to -17% in vehicle expenses.

Economic impacts from recreational fishing activities (impacts from fishing trips and durable equipment combined) supported over 465,000 full- and part-time jobs across the U.S. in 2007. Sales impacts from recreational angling expenditures totaled \$72 billion and value-added impacts totaled \$33 billion. Durable equipment impacts contributed most to these totals, accounting for 82% of jobs, 85% of total sales impacts, and 83% of value-added impacts. Of the three fishing trip modes, shore-based fishing trips contributed most to the number of jobs supported by recreational angling, contributing 7.6% of jobs. Total sales and value-added impacts from private or rental boat trips was higher than the other fishing modes, accounting for 6.5% of sales impacts and 7.1% of value-added impacts.

Relative to 2006 totals, economic impacts from recreational angling nationwide increased in terms of jobs supported (15% increase), total sales (14%), and value-added impacts (14%). The largest increases from 2006-2007 were observed for for-hire (36% increase) and shore-based (32% increase) fishing modes in terms of jobs, total sales, and value-added impacts.

Total Sales generated by the U.S. Recreational Fishing Industry (2007)
(thousands of dollars)

State	In-State Sales	State	In-State Sales
East Florida	7,426,702	Alabama	654,353
West Florida	6,829,434	Hawai'i	622,111
California*	3,699,176	Mississippi	616,930
Texas	3,004,862	Connecticut	584,424
North Carolina	2,295,623	South Carolina	550,531
Louisiana	2,453,392	Alaska	480,899
New Jersey	1,806,606	Oregon*	283,578
Maryland	1,299,104	Delaware	273,433
Washington*	1,126,920	Georgia	263,073
New York	979,186	Maine	166,799
Virginia	822,986	Rhode Island	145,467
Massachusetts	805,956	New Hampshire	54,657

*Sales estimates for California, Oregon, and Washington are for 2006.

Participation¹⁶

Nationwide, there were approximately 13 million recreational anglers who fished in 2007. Approximately 11 million of these anglers were residents of a U.S. coastal county and 1.2 million anglers were residents of a non-coastal county. Between 1998 and 2007, the total number of U.S. anglers increased 53%. However, the number of anglers decreased 7.4% between 2006 and 2007. The number of coastal county anglers increased 58% from 1998-2007 and decreased 4.2% from 2006-2007. A more modest increase was observed for non-coastal county anglers during the 10 year time period (19%) but a larger decrease was observed between 2006 and 2007 (-30%).

The majority of U.S. anglers fished in the South Atlantic (3.7 million anglers), Gulf of Mexico (3.4 million anglers), and Mid-Atlantic Regions (3.4 million anglers). Pacific (1.8 million anglers)¹⁷, New England (1.6 million anglers), North Pacific (332,000 anglers), and Western Pacific (317,000 anglers) followed in terms of total anglers.

Fishing Trips¹⁸

Approximately 86 million fishing trips were taken in the U.S. in 2007. Of these, 46 million were fishing trips taken from a private or rental boat (53% of total fishing trips). Approximately 37 million trips were taken from shore and 3.4 million trips were taken from a for-hire fishing boat. Most of these trips were taken in the South Atlantic (26 million trips), Gulf of Mexico (24 million trips), and Mid-Atlantic (23 million trips). New England (9.7 million trips), the Pacific (5.9 million trips)¹⁹, and Western Pacific Regions (2.6 million trips) followed. Anglers in the North Pacific fished approximately 1.1 million fishing days in 2007.²⁰

The total number of fishing trips taken in the U.S. increased 41% from 1998-2007. Increases were also observed for two fishing modes: 47% increase in private or rental boat trips and 41% increase in shore-based trips. For-hire fishing trips decreased 12% during this time period, the only fishing mode to experience a decrease.

¹⁶Participation estimates do not include Alaska and Texas. Hawai'i is included for 2003-2007; Pacific coast states are included for 2003-2007. Numbers include the Caribbean for 2000-2007.

¹⁷This estimate reflects 2006 participation (number of anglers); 2007 estimates for the Pacific Region were not available for this report.

¹⁸Effort numbers do not include Alaska and Texas. They include Hawai'i only for 2003-2007. California numbers were estimated differently from 2004-2007.

¹⁹This estimate reflects 2006 fishing effort (number of trips); 2007 estimates for the Pacific Region were not available for this report.

²⁰In Alaska, fishing effort information is collected as the number of fishing days rather than the number of fishing trips taken.

Relative to 2006, total fishing trips taken in the U.S. decreased 2.4%, with larger decreases observed for for-hire trips (-11%) and shore-based trips (-9.4%). Private or rental boat trips experienced a small increase from 2006-2007, increasing 4.8%.

Recreational Fishing Facts

Participation

- There were 13 million anglers in the U.S. in 2007. Of these, 11 million anglers were coastal county residents and 1.2 million were residents of a non-coastal counties. The majority of anglers in the U.S. fished in the South Atlantic, Gulf of Mexico, and Mid-Atlantic Regions.

Fishing trips

- Approximately 86 million fishing trips were taken nationwide in 2007. Most of these trips were taken in the South Atlantic, Gulf of Mexico, and Mid-Atlantic.
- Private or rental boat trips accounted for most of the fishing trips taken in the U.S., comprising 53% of total U.S. fishing trips or 46 million trips. This fishing mode comprised most of the trips in the Gulf of Mexico (60% of trips), Mid-Atlantic (55% of trips), South Atlantic (51% of trips), and New England (50% of trips).
- Shore-based fishing trips accounted for 43% of total U.S. fishing trips or 37 million trips. This was the most popular fishing mode in the Western Pacific (82% of trips) and Pacific (65% of trips) Regions.
- For-hire fishing boat trips accounted for 3.9% of total trips taken or 3.4 million trips taken.
- In the North Pacific, anglers spent approximately 1.1 million days fishing in 2007.

Harvest and release

- Atlantic croaker and seatrouts were the most caught by anglers in 2007 with approximately 51,000 and 48,000 fish caught, respectively. Most of these fish were caught in the Mid-Atlantic and Gulf Regions.
- The least caught key species or species group were large Atlantic tunas (662,000 fish caught) and Alaskan halibut (1.0 million fish caught). Most of these fish were caught in New England.
- Large Atlantic tunas experienced the largest annual increase in catch from 1998-2007, increasing 145% from 2002-2003. Little tunny experienced the largest annual decrease in catch, decreasing 46% from 2004-2005.

Harvest and Release

Among the ten key U.S. recreational species or species groups, Atlantic croaker, seatrouts, summer flounder, and striped bass were the most caught by anglers in 2007. These species or groups were caught in large numbers relative to the other key species or groups: Atlantic croaker (52 million fish), seatrouts (48 million fish), summer flounder (23 million fish), and striped bass (19 million fish). Anglers fishing in the Mid-Atlantic and New England caught most of the Atlantic croaker, summer flounder, and striped bass in 2007, while most seatrout were caught in the Gulf of Mexico and the South Atlantic.

In the North Pacific Region, halibut and salmon species (chinook, chum, coho, pink, and sockeye) were the most caught species or group in 2007 with 1.0 million

fish and 1.3 million fish caught, respectively. Mackerels (5.1 million fish), rockfishes (3.7 million fish), and surfperches (3.5 million fish) were caught in high numbers in the Pacific Region, while bigeye and mackerel scad (1.1 million) comprised 42% of fish caught by anglers in the Western Pacific.

Recreational catch of requiem sharks increased 203% between 1998 and 2007, the largest increase during this 10 year time period. Over 6.2 million requiem sharks were caught in 2007. Other key species or groups with large increases in recreational catch include: Alaskan halibut (60% increase), Atlantic croaker (57%), seatrouts (42%), and little tunny (40%). Recreational catch of salmon (-34%) and rockfishes (-8.6%) decreased from 1998-2007, the only key species or groups experience a decreasing trend.

From 2006-2007, recreational catch of salmon (-44%), striped bass (-33%), seatrouts (-9.7%), and large Atlantic tunas (-6.4%) decreased, the only species or groups to do so. All other U.S. key recreational species or groups increased from 2006-2007, with the largest increases observed for little tunny (28%) and Alaskan halibut (25%).

Marine Economy²¹

In 2006, there were 7.6 million establishments in the U.S. These establishments employed approximately 120 million full- and part-time employees and had a total annual payroll of \$4.8 trillion. From 1998-2006, the number of establishments increased 9.5%, employee numbers increased 11%, and total annual payroll increased 45% nationwide. More modest increases were seen from 2005-2006: 1.4%, 3.1%, and 6.9%, respectively.

The nation's gross domestic product was \$13 trillion in 2006, a 51% increase relative to 1998 levels (\$8.7 trillion) and a 6.0% increase relative to 2005 levels (\$12 trillion). Employee compensation in 2006 was \$7.4 trillion, a 25% increase from 1998 (\$5.9 trillion) and a 6.0% increase from 2005 (\$7.0 trillion).

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.

²¹Information for 2006 is reported in this section; 2007 data was not available for this report.

Seafood Sales and Processing

In 2006, there were 1,300 nonemployer firms engaged in seafood product preparation and packaging, a 111% increase from 1998 levels. Annual receipts increased 81% (60% in real terms) from \$49 million (1998) to \$88 million (2006). Most of these firms were located in Florida (174 firms).²²

In contrast to nonemployer firms, the number of employer establishments decreased 20% from 838 in 1998 to 670 in 2006. These firms employed approximately 36,000 full- and part-time employees in 2006 and had a total annual payroll of \$1.2 billion. Relative to 1998 levels, this was an 18% decrease in workers but a 26% increase (11% in real terms) in annual payroll. Most of these establishments were located in Alaska (113 establishments), Washington (96 establishments), and Oregon (91 establishments).

There were over 2,200 employer establishments involved in seafood wholesale activities in 2006. Most of these establishments were in Florida (259 establishments), California (252 establishments), and Maine (167 establishments). These establishments employed 22,000 workers and had an annual payroll of \$827 million. From 1998-2006, the number of establishments and employees decreased (-28% and -19%, respectively) but annual payroll increased (12%, -1% in real terms).

Nonemployer firms and employer establishments engaged in seafood retail activities saw increasing trends from 1998-2006. There was a 12% increase in firms (2,600 in 2006) and a 19% increase in establishments (2,100 in 2006). Annual receipts for nonemployer firms totaled \$232 million in 2006, a 23% increase (9% in real terms) relative to 1998 levels. Annual payroll for employer establishments totaled \$201 million, a 65% increase (46% in real terms) relative to 1998 levels. Approximately 11,000 full- and part-time workers were employed by the 2,100 establishments in 2006, a 34% increase from 1998. These establishments were primarily located in California (184 establishments) and Florida (173 establishments), while most firms were located in Florida (251 firms), California (173 firms), and North Carolina (115 firms).

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 2006, there were over 4,000 marina industries that employed over 28,000 full- and part-time workers. Compared to 1998 levels, this was a 5% decrease in establishment numbers and a 22% increase in employees. Annual payroll for this industry was \$894 million in 2006, a 58% increase (40% in real terms) over 1998 levels. Most of these marina industries were located in Florida

(513 establishments), California (268 establishments), and North Carolina (103 establishments).

In terms of employees, the marine cargo handling industry employed the most people in this industry sector nationwide. In 2006, approximately 62,000 full- and part-time employees worked in this industry, a 38% increase over 1998 levels. Most of these workers were located in Florida (66 establishments) and California (52 establishments). There were 540 establishments engaged in this industry in 2006, a 13% decrease from 1998 levels. This industry had an annual payroll of \$3.3 billion in 2006, a 61% increase (42% in real terms) relative to 1998.

In terms of which industry within this sector had the highest total annual payroll in 2006, ship and boat building operations ranked at the top with \$5.9 billion in annual payroll. Over 1,700 establishments engaged in this industry employed over 142,000 workers in 2006. Relative to 1998 levels, establishment numbers decreased 4% nationwide, employee numbers remained flat, and annual payroll increased 23%. Most of this annual payroll was generated in Florida (301 establishments), Washington (164 establishments), and California (132 establishments).

Between 1998 and 2006, the largest change in establishment numbers within this sector was seen in the deep sea passenger transportation industry. There was a 22% decrease in establishments from 87 in 1998 to 70 in 2006. This industry also saw a large change in annual payroll, a 44% decrease (-50% in real terms) from 1998 levels. The largest change in employee numbers during this period was in deep sea freight transportation industries which saw a 42% decrease in full- and part-time employees. In terms of changes in total annual payroll, large changes were seen for industries engaged in navigational services to shipping (63% increase), marine cargo handling (61%), and marinas (58%).

²²Due to data availability, information reported in this section is for the state of Florida and not East or West Florida as is discussed in other sections.

2007 Economic Impacts of US Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	98,666,539	42,582,044	1,453,633
Commercial Harvesters	9,177,779	3,513,627	113,526
Seafood Processors & Dealers	14,464,561	4,648,518	103,421
Seafood Wholesalers & Distributors	18,368,996	7,834,280	150,154
Retail Sector	56,655,203	26,585,619	1,086,533

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	3,186,931	3,686,567	3,848,973	3,390,208	3,330,800	3,470,372	3,776,338	4,032,528	4,108,748	4,240,796
Finfish & Other	1,478,589	1,724,654	1,826,616	1,660,459	1,601,271	1,658,226	1,802,755	1,940,073	2,018,854	2,124,784
Shellfish	1,708,342	1,961,913	2,022,357	1,729,748	1,729,529	1,812,145	1,973,583	2,092,455	2,089,894	2,116,011
Crab, Blue	174,849	167,284	164,370	158,220	146,974	153,685	145,905	140,818	126,043	145,257
Halibut, Pacific	75,774	125,596	142,314	115,365	136,789	172,846	176,893	177,599	202,163	227,348
Lobster, American	252,893	327,147	313,766	249,510	293,894	283,516	374,262	415,408	395,175	360,390
Menhaden	105,176	114,457	114,344	104,791	81,607	71,988	75,045	62,520	69,683	92,717
Pollock, Walleye	181,710	211,899	298,124	334,938	359,159	312,344	347,405	414,257	429,445	383,155
Sablefish	65,009	75,399	98,023	80,444	76,926	100,307	90,537	100,229	106,824	100,315
Salmon, Pacific	277,743	359,915	270,706	209,429	156,193	198,947	302,775	330,815	310,898	381,242
Scallop, Sea	75,114	120,984	160,886	172,583	202,092	229,097	320,015	432,399	384,799	385,923
Shrimp	576,226	589,408	776,177	578,208	523,882	441,622	446,043	412,718	454,570	433,041
Tunas	94,899	90,848	99,277	94,091	85,473	86,818	89,950	86,358	86,758	93,884

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	9,313,888	9,399,210	9,142,869	9,511,792	9,436,477	9,505,337	9,689,571	9,713,328	9,481,137	9,298,204
Finfish & Other	8,065,584	8,027,263	7,828,416	8,348,260	8,232,370	8,367,711	8,517,101	8,631,096	8,300,788	8,231,336
Shellfish	1,248,304	1,371,947	1,314,453	1,163,532	1,204,107	1,137,626	1,172,470	1,082,232	1,180,349	1,066,868
Crab, Blue	223,890	220,489	186,036	159,004	175,574	170,890	174,561	159,242	166,133	148,161
Halibut, Pacific	75,549	79,288	74,370	77,147	80,977	78,862	79,181	76,264	71,897	69,967
Lobster, American	79,462	88,551	86,804	71,193	83,087	71,683	90,065	87,808	92,615	78,776
Menhaden	1,699,873	1,989,517	1,764,373	1,739,963	1,755,398	1,590,510	1,495,240	1,243,807	1,304,250	1,483,697
Pollock, Walleye	2,752,656	2,325,889	2,606,800	3,179,407	3,341,095	3,361,802	3,353,374	3,411,307	3,400,812	3,066,603
Sablefish	46,559	48,335	49,774	44,057	40,895	47,909	52,848	51,093	47,227	43,875
Salmon, Pacific	644,129	814,743	628,132	717,762	561,489	669,998	738,746	899,759	663,567	884,999
Scallop, Sea	12,125	22,022	32,163	46,414	52,672	55,968	64,101	56,609	59,024	58,559
Shrimp	318,854	316,347	386,497	346,288	345,249	324,170	316,570	264,173	336,912	281,847
Tunas	86,058	61,101	50,861	51,783	49,632	61,762	56,324	44,253	49,930	50,740

Average Annual Price for Key Species / Species Groups

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab, Blue	0.78	0.76	0.88	1.00	0.84	0.90	0.84	0.88	0.76	0.98
Halibut, Pacific	1.00	1.58	1.91	1.50	1.69	2.19	2.23	2.33	2.81	3.25
Lobster,	3.18	3.69	3.61	3.50	3.54	3.96	4.16	4.73	4.27	4.57
Menhaden	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.06
Pollock, Walleye	0.07	0.09	0.11	0.11	0.11	0.09	0.10	0.12	0.13	0.12
Sablefish	1.40	1.56	1.97	1.83	1.88	2.09	1.71	1.96	2.26	2.29
Salmon, Pacific	0.43	0.44	0.43	0.29	0.28	0.30	0.41	0.37	0.47	0.43
Scallop, Sea	6.19	5.49	5.00	3.72	3.84	4.09	4.99	7.64	6.52	6.59
Shrimp	1.81	1.86	2.01	1.67	1.52	1.36	1.41	1.56	1.35	1.54
Tunas	1.10	1.49	1.95	1.82	1.72	1.41	1.60	1.95	1.74	1.85

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)¹

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	34,255	4,662,681	2,371,603
Shore	35,498	4,337,932	2,256,081
For-Hire	15,441	1,717,900	932,474
Total Durable Equipment Impacts	380,217	61,444,083	27,731,390
Total State Trip and Durable Equipment Economic Impacts	465,411	72,162,596	33,291,547

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)¹

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents ²	Residents ³		
Private Boat	NA	2,059,609	Fishing Tackle	2,971,940
Shore	NA	1,829,736	Other Equipment	980,604
For-Hire	NA	684,530	Boat Expenses	8,573,164
Total Trip Expenditures	4,573,875		Vehicle Expenses	5,808,826
			Second Home Expenses	4,588,543
			Total Durable Equipment Expenditures	22,923,077
Total State Trip and Durable Equipment Expenditures				27,496,952

Recreational Anglers by Residential Area (thousands of anglers)^{4,5}

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	7,217	6,680	9,247	10,187	8,933	10,814	10,311	11,415	11,866	11,370
Non-Coastal	1,043	1,060	1,396	1,757	1,478	1,744	1,676	1,574	1,754	1,237
Total Anglers	8,260	7,740	10,642	11,944	10,411	12,557	11,987	12,989	13,620	12,607

Recreational Fishing Effort by Mode (thousands of trips)^{4,6}

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	3,865	3,567	4,003	3,804	3,212	3,495	3,536	3,525	3,817	3,389
Private or Rental	31,150	29,866	40,995	43,485	38,138	44,518	41,385	41,735	43,817	45,914
Shore	25,970	22,895	33,095	37,247	30,439	36,198	37,067	37,058	40,508	36,690
Total Trips	60,985	56,328	78,094	84,535	71,788	84,211	81,988	82,318	88,142	85,993

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)⁷

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	1,395	1,368	1,993	2,039	1,841	2,515	2,536	2,340	2,688	2,203
	R	15,179	12,793	16,933	13,521	13,802	14,863	17,467	18,986	25,927	16,904
Drum (Atlantic Croaker & Sandspot)	H	17,189	13,939	17,678	22,207	17,833	20,879	20,473	21,334	23,175	28,003
	R	15,528	17,356	23,231	17,515	16,432	18,199	16,669	21,109	20,421	23,195
Drum (Seatrouts) ^{8,9}	H	14,076	19,376	21,130	16,263	13,749	15,029	15,838	15,781	21,887	17,843
	R	19,623	24,138	27,491	19,608	22,366	25,156	25,510	29,268	30,994	29,932
Flounder, Summer	H	7,003	4,123	7,820	5,307	3,281	4,578	4,653	4,110	4,227	3,397
	R	15,111	17,275	17,594	22,895	13,418	15,978	16,338	22,886	18,061	19,791
Halibut, Alaskan	H	350	333	403	366	351	403	483	500	463	585
	R	290	229	303	254	233	290	369	380	353	438
Little Tunny/ Atlantic Bonito ⁹	H	421	421	421	329	323	254	363	202	310	320
	R	623	851	873	685	1,025	865	1,049	567	829	1,141
Rockfishes/ Scorpionfishes (Pacific)	H	3,776	4,689	3,701	3,358	2,858	3,743	2,593	2,643	2,985	NA ¹⁰
	R	801	1,032	980	1,040	1,187	1,915	1,158	1,181	1,200	NA ¹⁰
Salmon ¹¹	H	880	1,028	1,159	1,896	1,406	1,716	1,674	1,561	985	799
	R	1,174	1,575	1,441	2,086	1,716	2,030	2,240	2,059	1,467	567
Sharks (Requiem, Mackerel, & Unidentified) ^{9,12}	H	246	153	247	284	229	178	189	200	164	223
	R	1,806	1,346	2,173	3,755	2,631	3,816	4,149	4,990	4,951	5,987
Tunas (Large Atlantic Species) ¹³	H	395	486	524	485	310	726	740	692	610	563
	R	170	52	49	36	31	110	110	112	97	99

¹Economic impact and expenditures estimates were calculated based on 2007 participation except for California, Oregon, and Washington. For these states, 2006 participation data was used.

²All anglers reported in this table are U.S. residents; NA = not applicable.

³2007 participation data was available for all states except California, Oregon, and Washington. For these states, 2006 estimates were used.

⁴This table includes information from multiple data sources: NOAA Fisheries' Marine Recreational Information Program (MRIP) data was used for the New England, Mid-Atlantic, and South Atlantic Regions, and for all states but Texas within the Gulf of Mexico Region; MRIP data was also included for the Caribbean Region (2000-2007 only) and Hawaii (2003-2007 only); data for California, Oregon, and Washington (1998-2006 only) came from the data collection programs of these states and 2007 data was not available for this report; and data from Alaska and Texas were not included in this table.

⁵Participation estimates (number of anglers) for 1998-2002 that were reported in *Fisheries Economics of the U.S., 2006* differ from estimates reported in this table. For this report, an updated method for calculating these estimates was used.

⁶Effort data (number of fishing trips) for the Caribbean Region was not included in the U.S. totals reported in *Fisheries Economics of the U.S., 2006*.

⁷This table includes information from multiple data sources: MRIP data was used for the New England, Mid-Atlantic, and South Atlantic Regions, and for all states but Texas within the Gulf of Mexico Region; data for Atlantic croaker, sand seatrout, and spotted seatrout caught in Texas was provided by the Texas Department of Parks and Wildlife; and data for California, Oregon, Washington, and Alaska came from the data collection programs of these states.

⁸Seatrouts include all species of the Cynoscion family such as spotted, silver, and sand seatrouts, and weakfish.

⁹Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

¹⁰ 2007 data from the Pacific Region was not available for this report.

¹¹This information combines salmon catch data for Alaska, California, Oregon, and Washington from 1998-2006. 2007 information only includes Alaskan coho, chum, Chinook, pink, and sockeye salmon species; 2007 data from California, Oregon, and Washington were not available for this report.

¹²Requiem sharks include all species in the Carcharhinidae family and mackerel sharks include all species in the Lamnidae family.

¹³Large Atlantic tunas include all tunas in the Thunnus family such as albacore, bluefin, yellowfin, and bigeye caught in the Atlantic Ocean. This species group does not include Pacific tuna.

National Economy

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross Domestic Product (\$ millions)	Commercial Location Quotient ¹
1998	6,941,822	108,117,731	3,309,406	5,930,254 ²	8,679,657	1.0
2006	7,601,160	119,917,165	4,792,430	7,434,004	13,119,938	1.0
% change	10.99%	11.55%	51.89%	31.46%	62.19%	--

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	617	693	714	780	903	1,038	1,110	1,080	1,303
	Receipts	48,658	55,332	60,790	60,417	55,750	70,071	81,871	78,745	88,230
Seafood sales, retail	Firms	2,340	2,207	2,161	2,119	2,210	2,346	2,260	2,098	2,610
	Receipts	188,031	194,115	188,870	190,629	199,937	210,231	210,450	203,951	231,776

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	838	842	854	823	754	764	734	717	670
	Employees	43,805	42,534	41,770	39,855	38,663	39,580	38,102	37,684	35,894
	Payroll	956,356	988,801	1,070,573	1,057,737	1,092,500	1,177,582	1,151,780	1,180,396	1,205,890
Seafood sales, wholesale	Establishments	3,070	3,048	2,992	2,980	2,883	2,456	2,330	2,314	2,222
	Employees	27,234	27,706	28,710	28,405	26,719	23,091	22,501	22,666	22,013
	Payroll	736,100	797,304	854,649	882,232	895,718	743,479	771,749	781,459	826,720
Seafood sales, retail	Establishments	1,772	1,807	1,853	1,940	2,238	2,125	2,151	2,155	2,115
	Employees	7,855	8,299	8,458	8,990	9,771	10,346	10,714	10,381	10,545
	Payroll	121,537	137,701	137,306	149,310	167,634	186,087	192,187	194,602	200,971

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

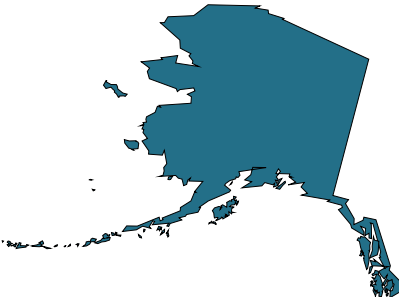
		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	559	554	546	544	520	606	579	610	579
	Employees	22,035	23,256	20,240	24,126	20,149	22,449	21,928	21,025	22,172
	Payroll	993,491	1,095,499	1,027,497	1,188,800	1,096,771	1,183,071	1,179,549	1,232,342	1,376,033
Deep sea freight transportation	Establishments	513	535	485	456	471	472	435	465	456
	Employees	19,754	14,784	13,014	11,964	12,916	12,175	11,314	11,357	11,473
	Payroll	960,259	714,701	650,148	697,266	784,149	734,781	735,804	801,863	825,752
Marinas	Establishments	4,226	4,170	4,126	4,121	4,021	4,150	4,092	4,143	4,025
	Employees	23,167	24,016	24,824	24,660	23,047	27,928	28,100	27,511	28,339
	Payroll	564,458	599,112	640,131	674,576	675,529	773,538	814,821	839,848	894,097
Marine cargo handling	Establishments	619	601	607	612	595	542	551	549	540
	Employees	44,967	43,785	53,496	50,273	50,428	50,644	58,618	59,670	61,905
	Payroll	2,029,910	2,016,081	2,194,692	2,249,516	2,425,187	2,422,537	2,899,703	3,034,672	3,261,953
Navigational services to shipping	Establishments	906	891	863	830	828	782	804	803	802
	Employees	11,535	11,393	11,775	11,957	11,224	11,795	11,881	10,819	12,043
	Payroll	429,598	430,114	478,748	507,806	509,953	629,541	591,510	584,689	699,375
Port & harbor operations	Establishments	196	199	196	201	212	223	234	244	229
	Employees	7,471	7,427	7,445	7,304	6,304	6,413	6,888	7,453	7,002
	Payroll	277,692	264,651	265,766	254,864	245,979	279,970	300,692	319,338	323,554
Ship & boat building	Establishments	1,834	1,779	1,763	1,815	1,736	1,739	1,793	1,799	1,764
	Employees	142,682	145,065	146,969	138,962	131,292	133,395	137,633	141,620	142,057
	Payroll	4,761,819	4,804,405	5,044,270	5,094,086	5,111,708	5,119,596	5,499,783	5,654,818	5,877,830

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

North Pacific

- Alaska



Management Context

The North Pacific Region includes the state of Alaska. Federal fisheries in this region are managed by the North Pacific Fishery Management Council (NPFMC) and the National Marine Fisheries Service under one of four fishery management plans (FMPs). Catch limits for Pacific halibut are established by the International Pacific Halibut Commission and are implemented by the NPFMC. Salmon fishing in federal waters is limited to a few vessels using troll gear and management of salmon fisheries is deferred to the Alaska Department of Fish and Game.

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

Of the species or species groups managed under these FMPs, blue king crab from the Pribilof Islands is currently characterized as overfished. No stocks in this region are currently subject to overfishing.

The North Pacific Region has eight catch share programs, more than any other region.¹ These are the: 1) Western Alaska community development quota (CDQ) program; 2) Pacific halibut and sablefish individual fishing quota (IFQ) program; 3) Pacific whiting cooperative; 4) Bering Sea pollock cooperative; 5) Alaska weathervane scallop cooperative; 6) Bering Sea king and tanner crab (crab rationalization) program that includes both an IFQ and a fishing cooperative; 7) Central Gulf of Alaska rockfish pilot sector program; and 8) Bering Sea groundfish (non-pollock) cooperative. The ex-vessel values for these programs totaled over \$766.1 million in 2007.

Ecolabels are another form of market-based management, encouraging fishermen to adopt harvest practices that are considered sustainable by an organization such as the Marine Stewardship Council (MSC).² The idea is that as the general public becomes more aware of issues related to the harvest of marine resources, consumers will be willing to pay higher prices for seafood carrying an ecolabel that indicates that the product was sustainably-caught. The Alaskan salmon, BSAI pollock, GOA pollock, North Pacific halibut, and North Pacific sablefish fisheries, as well as components of the BSAI Pacific cod fishery, have received certifications from the MSC.³

¹Information about the ex-vessel values of these fisheries as well as the first year of implementation is available in the "U.S. Summary" found in this report.

²More information about the Marine Stewardship Council and its certification process is available at: <http://www.msc.org/track-a-fishery/certified>.

³It is yet unclear whether ecolabels are enough to entice consumers to purchase ecolabeled products over non-ecolabeled products. Other factors that may influence a consumer's purchasing decision include how much more an

Commercial Fisheries

Alaska fishermen earned over \$1.5 billion from their commercial harvest (5.3 billion pounds) in 2007. Landings revenue was dominated by walleye pollock (\$383 million), salmon (\$348 million), Pacific halibut (\$217 million), and Pacific cod (\$210 million). Walleye pollock contributed the most to landings in 2007, accounting for roughly 58% of total landings (3.1 billion pounds) and 25% of landings revenue, with an average annual price of \$0.12 per pound. In contrast, salmon accounted for 16% of total landings (861,000 pounds) and generated 22% of landings revenue, with an average annual price of \$0.40 per pound in 2007.

Key North Pacific Commercial Species

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

Economic Impacts

Alaska's seafood industry generated \$3.3 billion in sales impacts, \$1.1 billion in income impacts, and over 43,000 jobs in 2007. Seafood processing and dealer operations contributed over 58% to in-state sales for Alaskan businesses with over \$1.9 billion generated in 2007. This sector also accounted for most of the income impacts in the North Pacific with over \$588 million generated, or 51% of the region's total income impacts. In terms of employment, the commercial harvest sector supported the most full- and part-time jobs: 21,000 jobs or 49% of the region's total job impacts.

Landings Revenue

In 2007, ex-vessel revenue for finfish and shellfish totaled over \$1.5 billion, a 63% increase from total revenue generated in 1998. When adjusting for inflation, real ex-vessel revenues increased 36%. Ex-vessel revenue in 2007 was a 9.9% increase relative to 2006 (\$1.4 billion). Finfish and other catch contributed more than shellfish to this 2007 total, accounting for 88% or \$1.4 billion. This was an 86% increase from 1998 finfish revenue totals, a 56% increase in real terms. In contrast, shellfish revenues decreased 16% (-30% in real terms) from \$214 million in 1998 to \$181 million in 2007. A 72% decrease in shellfish landings from 1998-2007 likely contributed to this decrease in revenue.

When considering the contribution of key species and species groups to 2007 landings revenue, walleye pollock (\$383 million), salmon (\$348 million), Pacific halibut (\$217 million), and Pacific cod (\$210 million) generated the most revenue. The largest increases in

ecolabeled product costs and whether the fish species that is ecolabeled is itself a desirable seafood product relative to other available options. That is, an ecolabeled tilapia fillet may not be as desirable as a non-ecolabeled salmon fillet.

landings revenue between 1998 and 2007 were for Pacific halibut (218%), Atka mackerel (147%), and rockfish (126%). Of the key species and species groups in this region, only crab landings revenue declined, decreasing 17%, a 31% decrease in real terms.

Commercial Fish Facts

Landings revenue

- On average, key species or species groups accounted for 99% of total revenue generated in the North Pacific.
- Five of the key species (walleye pollock, salmon, crab, Pacific cod, and Pacific halibut) had average annual ex-vessel revenue in excess of \$140 million.
- Walleye pollock and salmon accounted for 48% of average annual total landings revenue.
- The largest annual increase in landings revenue during the 10 year period was 122% for Atka mackerel (2000-2001). The largest annual decrease was -50% for crab (1999-2000).

Landings

- On average, key species or species groups accounted for almost 100% of total landings in this region.
- Four of the key species (walleye pollock, salmon, Pacific cod, and flatfish) had average annual landings of >300 million pounds.
- Annual landings of walleye pollock averaged over 3 billion pounds during the 10 year period, contributing over 60% to total average annual landings.
- Salmon landings increased 36% from 2006-2007, the largest annual increase in the 10 year period. Crab landings decreased 75% from 1999-2000, the largest annual decrease.

Prices

- Crab (\$2.17), sablefish (\$2.06), and Pacific halibut (\$2.02) had the highest average annual prices per pound.
- Walleye pollock (\$0.11), Atka mackerel (\$0.12), Pacific herring (\$0.15), and flatfish (\$0.15) had the lowest average annual prices per pound.
- The largest annual price decrease was a 40% decrease in Pacific herring prices (2005-2006), only to be followed by a 136% increase the following year (2006-2007).

Landings

In 2007, North Pacific commercial fishermen landed over 5.3 billion pounds of finfish and shellfish, a 7.7% increase from 1998 totals. This was a 2.0% decrease from the 5.4 billion pounds landed in 2006. Finfish and other catch accounted for 99% of this total (5.2 billion pounds), a 12% increase from 1998 but a 2.0% decrease from 2006. Shellfish landings in 2007 decreased 72% from 278 million pounds in 1998 to 78 million pounds in 2007. Between 2006 and 2007, shellfish landings decreased 0.8%. Overall, an average of 5.1 billion pounds was landed annually in the North Pacific from 1998-2007, ranging from a low of 4.5 billion pounds (2000) to a high of 5.7 billion pounds (2005). On average, finfish contributed 98% annually to this total.

In terms of key species or species groups, walleye pollock landings contributed the most to landings during

the 10 year period, accounting for 58% of total landings in 2007 (3.1 billion pounds). Landings of salmon (861 million pounds), Pacific cod (488 million pounds), and flatfish (424 million pounds) were also a significant share of total landings.

Relative to 1998, landings of flatfish, rockfish, and salmon in 2007 increased more than any other key species or group, increasing 42%, 40%, and 38%, respectively. In contrast, crab landings declined significantly between 1998 and 2007, decreasing 74% from 270 million pounds to 71 million pounds. Pacific herring, Pacific cod, and sablefish landings also declined over this period, decreasing 23%, 17%, and 12%, respectively.

Prices

Overall, 2007 ex-vessel prices per pound for each of the key species and species groups were above their average annual price for the 10 year time period. This was true despite a 3.8% decrease in salmon prices (-20% in real terms) from \$0.42 per pound (1998) to \$0.40 per pound (2007). When comparing 2007 ex-vessel prices to those in 1998, Pacific halibut (\$3.23 per pound), crab (\$2.38), Pacific cod (\$0.43), and Atka mackerel (\$0.12) had the largest increases. These species or groups increased 236%, 217%, 160%, and 120%, respectively, relative to 1998 prices.

Relative to ex-vessel prices in 2006, Pacific herring (136%), crab (48%), Atka mackerel (23%), Pacific cod (20%), and Pacific halibut (16%) all had double-digit increases in 2007. Rockfish prices decreased 19% from 2006 prices. Small declines were observed for salmon (-7%), flatfish (-3%), sablefish (-2%), and walleye pollock (-1%).

Recreational Fishing

Recreational fishermen spent approximately 1.1 million days fishing in Alaska in 2007. These anglers numbered over 332,000 with 62% of them non-residents. Halibut was the most caught key species or species group with over 1.0 million harvested or released in 2007. Coho salmon and pink salmon were also caught in large numbers with 628,000 and 413,000 caught, respectively. Together, these key species accounted for 63% of fish caught by anglers in the North Pacific Region.

Key North Pacific Recreational Species

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

Economic Impacts and Expenditures

In 2007, approximately 5.4 million jobs in the North Pacific were related to recreational fishing activities and over \$442 million was spent by anglers who

fished in the region. Most of these jobs were related to industries that provided services to anglers who fished from a for-hire boat (2.0 million jobs) or a private boat (1.3 million jobs). These fishing trip modes also generated the most in trip-related expenditures: \$107 million for for-hire fishing trips (51% of total trip expenditures) and \$88 million for private boat trips (43% of total trip expenditures). Over 64% of total trip-related expenditures in Alaska came from non-resident anglers.

In addition to jobs related to 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 \$162 million in sales (53% of total trip-related sales) and \$90 million in value-added impacts (54% of total trip-related value-added impacts) in 2007. Private boat fishing activities contributed \$125 million in sales (41%) and \$67 million (41%) in value-added impacts. Shore-based fishing trips contributed \$17 million in trip-related sales (5.5%) and \$9.1 million in trip-related value-added impacts (5.5%).

Anglers spent over \$235 million on durable equipment in 2007, contributing 53% to total expenditures in the region (trip and durable equipment combined). Most of this was spent on boat or vehicle expenses, \$76 million and \$51 million, respectively. Expenditures related to second home expenses (\$37 million), other equipment (\$36 million), and fishing tackle (\$35 million) followed.

Economic impacts from durable equipment expenditures in 2007 include approximately 1.9 million jobs, \$178 million in sales impacts, and \$121 million in value-added impacts.

Participation

In 2007, there were 332,000 recreational anglers who fished in Alaska. This was an 18% increase from 1998 (281,000 anglers) and a 4.7% increase from 2006 (317,000 anglers). Recreational fishermen in Alaska are categorized as either a resident of Alaska or a non-resident. In 2007, non-resident anglers made up 62% of total anglers (205,000 anglers). This was a 32% increase from 1998 (155,000 anglers) and a 4.0% increase from 2006 (197,000 anglers). In terms of resident anglers, there were 127,000 resident anglers who fished in the North Pacific in 2007. This was a small increase from 1998 (0.8%) and 2006 (5.8%).

Days Fished⁴

Anglers who fished in Alaska spent approximately 1.1 million days fishing in 2007. This was a 49% increase from the 704,000 days spent fishing in 1998. From 2006-2007, there was a 12% increase in the number of days fished (941,000 days in 2006) but this increase was preceded by an 11% decrease in days fished (1.1 million days in 2005).

⁴In Alaska, information related to how often a recreational fishermen goes fishing is collected in terms of the number of days spent fishing rather than the number of fishing trips that were taken.

Recreational Fishing Facts

Participation

- Approximately 300,000 anglers fished in Alaska annually over the 1998-2007 time period.
- In Alaska, out-of-state residents made up 62% of total anglers in 2007 and averaged 59% of total anglers annually from 1998-2007.
- The largest annual increase in anglers was a 14% increase in Alaska resident anglers from 2002-2003. Resident anglers also experienced the largest annual decrease in participation, decreasing 6% from 1998-1999.

Days fished

- On average, recreational fishermen spent 927,000 days fishing annually in Alaska from 1998-2007.
- The largest annual increase in total days fished was 31% from 704,000 days fishing (1998) to 924,000 days fishing (1999). The largest annual decrease in total days fished was an 11% decrease from 1.1 million days fishing (2005) to 941,000 days fishing (2006).

Harvest and release

- Halibut was the most caught key species or group, averaging 738,000 fish annually over the 10 year period. Of these, 57% were harvested rather than released in 2007.
- On average, over 99% of razor clams were harvested rather than released by recreational fishermen annually. Other key species or groups that were more often harvested than released were coho salmon (81% harvested), sockeye salmon (60% harvested), and halibut (57% harvested).
- Sockeye salmon had the largest annual increase in catch, increasing 89% from 2006-2007. Pink salmon had the largest annual decrease in catch, decreasing 53% from 2005-2006.

Harvest and Release

Of Alaska's key species and species groups, halibut, coho salmon, and pink salmon were most often caught by recreational fishermen. In 2007, 1.0 million halibut, 628,000 coho salmon, and 413,000 pink salmon were caught by anglers in Alaska. Razor clams (100% harvested), coho salmon (81%), and sockeye salmon (60%) were most often harvested than released, while pink salmon was most often released (68% released).

Seven of the North Pacific's key species or groups had large increases in catch totals between 1998 and 2007: greenlings and lingcod (144% increase), rockfish (83%), pink salmon (62%), halibut (60%), chinook salmon (56%), coho salmon (56%), and sockeye salmon (51%). Only razor clam (45% decrease) and chum salmon (-13%) catch totals decreased.

Relative to 2006, other key species or groups with notable changes in catch totals include: sockeye salmon (89% increase), pink salmon (78%), razor clam (-20%), and chinook salmon (-0.5%). All other key species or groups experienced modest increases in catch totals. Pink salmon and sockeye salmon experienced large changes in their harvest or release totals from 2006-2007. Pink salmon harvest

increased 105% and sockeye salmon release increased 200% during this time.

Marine Economy⁵

In Alaska, approximately 242,000 full- and part-time employees were employed by 20,000 establishments in 2006. Annual payroll totaled \$11 billion, employee compensation totaled \$19 billion, and gross domestic product by state totaled \$43 billion. Between 1998 and 2006, the largest changes were observed for gross state product (86% increase) and annual payroll (57%). Employee compensation (35% increase), employee numbers (23%), and establishment numbers (9.2%) also experienced modest increases. Relative to 2005 levels, each of these economic measures increased slightly in 2006, ranging from a 0.4% increase in establishment numbers to a 10% increase in annual payroll. The commercial fishing location quotient was not available for Alaska.

Seafood Sales and Processing

The number of nonemployer firms engaged in seafood product preparation and packaging increased 29% from 17 firms in 1998 to 22 firms in 2006. Despite this, annual receipts decreased 26% to \$1.1 million in 2006 (a 34% decrease in real terms). When considering employer establishments engaged in seafood product preparation and packaging, the number of establishments decreased 3.4% from 1998-2006 to 113 establishments and employee numbers decreased 20% from 1999-2006 to approximately 6,900 full- and part-time employees.⁶ Annual payroll, on the other hand, increased 23% (15% in real terms) from 1999-2006 to \$246 million.

There were 77 seafood wholesale establishments in 2006. This was a 21% decrease relative to 1998 levels. Employee numbers also declined, decreasing 7% to 224 workers, while annual payroll increased 22% (8% in real terms) to \$8.5 million in 2006.

There were 12 nonemployer firms involved in seafood retail activities with an annual receipt total of \$649,000 in 2006. From 2000-2006, the number of nonemployer firms increased 71% and annual receipts increased 98%.⁷ In contrast, the number of employer establishments engaged in seafood retail activities decreased 30% from 10 establishments in 1998 to 7 establishments in 2006. Employee and annual payroll information for this industry was not available for 2006.

Transport, Support, and Marine Operations

Data was largely unavailable for industries in this sector. When looking at available data, coastal and Great Lakes freight transportation industries had the

highest number of establishments with 46 establishments in 2006. This was a 77% increase relative to 1998 totals. Large changes in establishment numbers were also observed in industries engaged in port and harbor operations (100% increase) and ship and boat building (31% increase). There were 2 establishments engaged in port and harbor operations and 17 engaged in ship and boat building in 2006.

Marine cargo handling operations had the most complete information in this industry sector. With an annual payroll total of \$23 million, there were 11 establishments that employed 503 people in 2006. Between 1998 and 2006, establishment numbers decreased 21%, employee numbers decreased 4%, and annual payroll totals decreased 15% (-24% in real terms).

⁵Data for 2007 was unavailable for this report therefore 2006 information is reported in this section.

⁶Employee numbers and annual payroll information for 1998 was not available thus the 1999-2006 time period is discussed here.

⁷Information was not available for 1998 or 1999 thus the 2000-2006 time period is discussed here.

2007 Economic Impacts of Alaska Seafood Industry (*thousands of dollars*)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	3,283,940	1,141,553	43,341
Commercial Harvesters	1,021,383	365,149	20,746
Seafood Processors & Dealers	1,891,882	588,254	15,235
Seafood Wholesalers & Distributors	154,423	79,857	1,499
Retail Sector	216,252	108,292	5,861

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	948,412	1,211,877	1,136,316	1,016,762	1,038,328	1,129,674	1,227,003	1,367,616	1,409,374	1,549,353
Finfish & Other	734,177	940,107	994,562	894,132	890,433	954,216	1,061,244	1,208,127	1,284,978	1,368,428
Shellfish	214,235	271,770	141,754	122,630	147,895	175,458	165,759	159,489	124,396	180,925
Atka Mackerel	7,891	9,825	9,483	21,060	11,159	10,479	12,479	15,481	16,350	19,500
Cod, Pacific	97,581	142,599	163,257	126,863	135,775	150,384	132,910	141,281	185,354	210,405
Crab	202,716	261,107	130,427	115,670	139,828	165,833	153,742	146,131	110,572	168,209
Flatfish	37,927	31,051	42,770	31,376	37,481	37,639	41,983	62,215	70,830	75,907
Halibut, Pacific	68,432	116,913	134,825	109,053	128,922	165,906	168,658	170,075	192,905	217,399
Herring, Pacific	12,824	12,835	9,647	10,385	9,139	8,930	14,029	13,429	7,455	14,817
Pollock, Walleye	181,710	211,899	298,124	334,938	359,159	312,344	347,405	414,257	429,445	383,155
Rockfish	8,289	9,992	11,015	8,344	10,802	11,840	12,542	16,295	19,934	18,756
Sablefish	53,027	57,586	76,919	62,269	64,603	81,490	73,307	79,863	83,829	79,330
Salmon	262,674	345,686	246,641	188,497	129,902	168,093	255,000	293,562	276,512	347,626

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	4,935,227	4,492,648	4,465,988	5,036,340	5,066,264	5,305,959	5,354,645	5,651,307	5,421,264	5,314,742
Finfish & Other	4,657,089	4,279,599	4,408,826	4,983,621	5,001,781	5,242,033	5,294,442	5,583,797	5,342,241	5,236,373
Shellfish	278,138	213,049	57,162	52,719	64,483	63,926	60,203	67,510	79,023	78,369
Atka Mackerel	112,871	113,396	98,308	125,874	83,244	99,542	108,423	129,482	130,814	126,592
Cod, Pacific	588,272	523,281	529,664	470,768	510,759	564,562	587,337	546,748	517,799	488,073
Crab	270,127	206,231	52,372	47,192	57,878	56,955	52,642	57,310	69,002	70,703
Flatfish	299,374	242,001	316,616	257,080	284,718	277,327	270,348	341,204	383,111	424,247
Halibut, Pacific	71,044	75,851	71,727	74,380	77,939	76,616	76,558	73,922	69,154	67,242
Herring, Pacific	86,790	85,276	68,005	84,754	69,858	68,984	70,893	85,701	79,845	67,111
Pollock, Walleye	2,752,656	2,325,888	2,606,800	3,178,821	3,333,647	3,361,261	3,353,236	3,410,065	3,400,810	3,066,149
Rockfish	61,561	74,431	64,484	61,718	68,054	73,495	68,399	65,513	74,316	86,226
Sablefish	36,480	33,316	35,563	31,296	32,217	35,705	39,942	37,352	33,509	32,228
Salmon	626,065	801,671	606,717	686,388	523,057	630,527	697,897	872,318	634,227	861,253

Average Annual Price for Key Species / Species Groups

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Atka Mackerel	0.07	0.09	0.10	0.17	0.13	0.11	0.12	0.12	0.12	0.15
Cod, Pacific	0.17	0.27	0.31	0.27	0.27	0.27	0.23	0.26	0.36	0.43
Crab	0.75	1.27	2.49	2.45	2.42	2.91	2.92	2.55	1.60	2.38
Flatfish	0.13	0.13	0.14	0.12	0.13	0.14	0.16	0.18	0.18	0.18
Halibut, Pacific	0.96	1.54	1.88	1.47	1.65	2.17	2.20	2.30	2.79	3.23
Herring, Pacific	0.15	0.15	0.14	0.12	0.13	0.13	0.20	0.16	0.09	0.22
Pollock, Walleye	0.07	0.09	0.11	0.11	0.11	0.09	0.10	0.12	0.13	0.12
Rockfish	0.13	0.13	0.17	0.14	0.16	0.16	0.18	0.25	0.27	0.22
Sablefish	1.45	1.73	2.16	1.99	2.01	2.28	1.84	2.14	2.50	2.46
Salmon	0.42	0.43	0.41	0.27	0.25	0.27	0.37	0.34	0.44	0.40

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	1,308	124,749	67,230
Shore	187	16,692	9,094
For-Hire	2,025	161,818	89,668
Total Durable Equipment Impacts	1,870	177,641	120,918
Total State Trip and Durable Equipment Economic Impacts	5,389	480,899	286,910

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	34,060	54,351	Fishing Tackle	35,106
Shore	7,047	5,269	Other Equipment	35,787
For-Hire	90,608	16,097	Boat Expenses	76,334
Total Trip Expenditures	131,715	75,717	Vehicle Expenses	50,900
			Second Home Expenses	36,571
			Total Durable Equipment Expenditures	234,698
Total State Trip and Durable Equipment Expenditures				442,130

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal/Non-Coastal	126	118	123	120	113	129	130	127	120	127
Out-of-State	155	153	158	163	162	170	193	207	197	205
Total Anglers	281	270	281	283	275	299	323	334	317	332

Recreational Fishing Effort (thousands of days fished)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Days Fished	704	924	978	889	855	868	1,007	1,054	941	1,052

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)^{1,2}

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clam, Razor	H	661	774	883	678	791	591	554	451	483	389
	R	48	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Greenlings (Lingcod)	H	25	31	35	27	20	22	31	38	35	42
	R	21	32	33	30	43	44	52	67	53	70
Halibut	H	350	333	403	366	351	403	483	500	463	585
	R	290	229	303	254	233	290	369	380	353	438
Rockfish	H	87	120	132	117	120	118	180	184	173	198
	R	118	171	168	136	135	132	227	199	165	178
Salmon, Chinook	H	74	90	83	89	89	96	110	116	117	110
	R	67	114	91	105	104	105	124	127	104	110
Salmon, Chum	H	24	13	28	24	14	23	24	17	14	18
	R	36	43	52	51	31	51	61	42	34	34
Salmon, Coho	H	299	433	364	537	497	537	560	695	395	506
	R	104	124	108	154	136	156	193	191	107	122
Salmon, Pink	H	98	143	105	111	114	111	132	149	65	133
	R	157	312	213	224	194	291	297	343	167	280
Salmon, Sockeye	H	22	28	25	25	24	29	24	27	21	32
	R	13	10	14	13	14	14	10	11	7	21

Note: Data reported in these tables includes saltwater fishing activities only.

¹Information reported in this table is from the Sport Fish Division of the Alaska Department of Fish and Game (ADFG).

²In this table, "(1)" = 0-999 fish were harvested or released.

Alaska's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	18,212 (0.3%)	196,135 (0.2%)	6,884 (0.2%)	14,151 (0.2%) ²	23,165 (0.3%)	ND
2006	19,892 (0.3%)	241,621 (0.2%)	10,780 (0.2%)	19,069 (0.3%)	43,117 (0.3%)	ND
% change	9.2%	23.2%	56.6%	34.8%	86.1%	--

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	17	20	19	27	25	34	26	17	22
	Receipts	1,420	2,076	1,780	1,815	2,140	1,864	1,731	1,315	1,055
Seafood sales, retail	Firms	NA ³	NA	7	10	NA	16	NA	11	12
	Receipts	ND ⁴	ND	327	392	ND	625	ND	752	649

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	117	121	113	105	105	109	113	124	113
	Employees	ND	8,563	ND	ND	ND	6,493	6,749	6,621	6,866
	Payroll	ND	200,794	ND	ND	ND	205,702	216,599	235,457	246,067
Seafood sales, wholesale	Establishments	97	85	79	71	99	90	93	88	77
	Employees	240	180	271	235	179	228	187	177	224
	Payroll	6,955	8,256	11,144	11,321	10,232	7,103	7,561	7,928	8,509
Seafood sales, retail	Establishments	10	9	8	9	12	8	6	11	7
	Employees	52	ND	ND	ND	37	21	ND	22	ND
	Payroll	945	ND	ND	ND	1,669	1,340	ND	1,175	ND

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	26	26	25	27	23	30	30	43	46
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	7	6	7	6	10	5	4	5	5
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	NA	NA	NA	NA	NA	NA	1	1	1
	Employees	NA	NA	NA	NA	NA	NA	ND	ND	ND
	Payroll	NA	NA	NA	NA	NA	NA	ND	ND	ND
Marinas	Establishments	24	26	23	24	22	22	22	22	21
	Employees	ND	ND	ND	ND	101	ND	62	71	ND
	Payroll	ND	ND	ND	ND	3,625	ND	2,367	2,612	ND
Marine cargo handling	Establishments	14	15	15	16	16	15	13	13	11
	Employees	524	653	738	1,087	ND	621	488	703	503
	Payroll	26,759	22,217	21,238	28,358	ND	20,443	21,078	20,827	22,876
Navigational services to shipping	Establishments	34	33	35	27	25	28	29	32	31
	Employees	ND	176	ND	ND	271	273	280	318	ND
	Payroll	ND	8,150	ND	ND	19,251	20,758	20,676	20,334	ND
Port & harbor operations	Establishments	1	1	1	2	4	2	3	2	2
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ship & boat building	Establishments	13	9	10	12	12	10	14	14	17
	Employees	ND	ND	ND	ND	ND	ND	286	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	8,815	ND	ND

ND = Data is suppressed due to confidentiality restrictions. NA = Data is not available.

¹The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. ND = data is not disclosable.

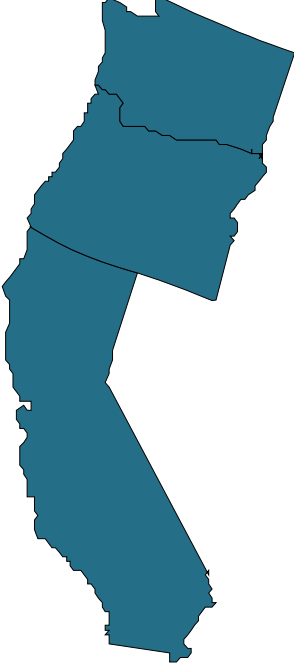
²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³NA = Data are not available.

⁴ND = Data are suppressed due to confidentiality restrictions.

Pacific

- California
- Oregon
- Washington



Management Context

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

Pacific Fishery Management Plans

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

Of the stocks covered in these fishery management plans, bocaccio, darkblotched rockfish, cowcod, and yelloweye rockfish are currently characterized as overfished. These stocks are subject to unprecedented harvest, season, and depth-based area restrictions to address rebuilding requirements for these overfished species.¹ Eastern Pacific yellowfin tuna and Pacific bigeye tuna stocks² – which are internationally managed – are currently characterized as subject to overfishing.³

Several species of Pacific salmon are listed as threatened or endangered under the Endangered Species Act (ESA). Endangered or threatened salmon are sometimes caught in the sardine fisheries off of Oregon and Washington and their incidental harvest is an example of bycatch.

Interesting management techniques are employed in two of the Pacific Region's fisheries. The Pacific salmon fishery is 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 those listed under the Endangered Species Act. 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, 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

¹These stocks are part of the Pacific Coast groundfish fishery, a multispecies fishery involving multiple commercial gear groups (trawl, line, and pot vessels) and recreational for-hire (party/charter) and private boat anglers.

²These stocks are part of the West Coast highly migratory species (HMS) fishery that includes tunas, sharks, marlin, swordfish, and dorado. Longline and drift gillnet activity has been severely restricted due to potential interactions with marine mammals, turtles, and seabirds.

³In contrast to NOAA Fisheries' recent stock assessments, the scientific committee of the International Seafood Sustainability Foundation, a tuna fishing industry organization, recently suggested that the Eastern Pacific yellowfin tuna stock is not overfished nor subject to overfishing.

salmon to the Klamath River in 2006 and to the Sacramento River in 2008 and 2009 resulted in unprecedented closures of ocean and inriver 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.

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).⁴ Once catch levels are determined, the PFMC develops a catch-sharing plan for tribal and non-tribal (commercial and recreational) fisheries conducted in the federal waters of California, Oregon, and Washington.

Market-based management tools are used by fishery managers to reduce overcapitalization, increase the economic viability of fisheries, and promote individual accountability for harvest and harvesting practices. Limited access privilege programs (LAPPs) and other catch share programs comprise a category of such tools. Two LAPPs are currently operating in the region. Put into place in 1997, the Pacific whiting cooperative was implemented by the PFMC. In 2001, the Pacific sablefish permit stacking program was implemented whereby vessels are allowed to stack permits in order to obtain additional trip limits. These fisheries had an ex-vessel value of \$21.8 million and \$6.4 million, respectively, in 2007.

Ecolabels are another market-based management tool that is intended to encourage fishermen to adopt harvest practices that are considered sustainable by an organization such as the Marine Stewardship Council (MSC).⁵ The idea is that as the general public becomes more aware of issues related to the harvest of marine resources, consumers will be willing to pay higher prices for seafood carrying an ecolabel that indicates that the product was sustainably-caught.⁶

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

⁵More information about the Marine Stewardship Council and its certification process is available at: <http://www.msc.org/track-a-fishery/certified>.

⁶It is yet unclear whether ecolabels are enough to entice consumers to purchase ecolabeled products over non-ecolabeled products. Other factors that may influence a consumer's purchasing decision include how much more an ecolabeled product costs and whether the fish species that is

The Oregon pink shrimp fishery and the American Albacore Fishing Association albacore tuna fishery have received certifications from the MSC. Additional Pacific fisheries that are being considered for certification include the California and Oregon Dungeness crab, California Chinook, and Pacific whiting (hake) midwater trawl fisheries.

Commercial Fisheries

In 2007, commercial fishermen in the Pacific Region landed roughly 1.1 billion pounds of finfish and shellfish, generating \$446 million in ex-vessel revenue. Landings revenue was dominated by crab (\$121.2 million) and other shellfish (\$107 million). These high value species groups commanded an average annual price of \$2.33 and \$3.62 per pound, respectively, and comprised 51% of landings revenue but only 8% of total landings. Hake landings were the highest at 455 million pounds in 2007. However, with an average annual price of \$0.07 per pound, hake contributed only 7% to total landings revenue.

Washington contributed most to landings revenue in the region with over \$209 million in 2007, followed by California (\$120 million), and Oregon (\$97 million). In terms of pounds landed, California contributed the most (384 million pounds), followed by Oregon (254 million pounds), and Washington (193 million pounds).

Key Pacific Commercial Species

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

Economic Impacts

In 2007, the Pacific Region's seafood industry generated \$8.5 billion in sales impacts in California, \$3.7 billion in Washington, and \$9.4 million in Oregon. California also generated the largest income and employment impacts (\$4.4 billion; 156,000 full- and part-time jobs), followed by Washington (\$2.0 billion; 73,000 jobs) and Oregon (\$506 million; 19,000 jobs).

Landings Revenue

In 2007, ex-vessel revenue for finfish and shellfish totaled \$446 million, a 60% increase (33% in real terms) from landings revenue in 1998 (\$279 million). However, this was a 6% decrease from \$472 million in 2006. Shellfish revenue accounted for most of the 2007 revenue generated: \$270 million or 61% of the total. This was a 108% increase (74% in real terms) in shellfish revenue from 1998 (\$130 million). Finfish revenue totaled \$176 million, an 18% increase (-1.6% in real terms) from 1998 (\$149 million).

Washington contributed the most to shellfish revenue, generating \$150 million in 2007. This was a 105% increase from 1998 (\$73 million). Landings revenue in California (76%) and Oregon (194%) also increased significantly during this period. In contrast, finfish revenue increased modestly across the region despite a drop in finfish revenue in California (-29% from 1998-2007). Finfish landings revenue in Oregon (42%) and Washington (63%) increased.

Crab and other shellfish had the highest landings revenue in the Pacific Region in 2007, with \$121 million and \$107 million, respectively. Together, they accounted for 51% of the total landings revenue generated in 2007. Between 1998 and 2007, the ex-vessel revenue from these species groups increased 105% for crab and 73% for other shellfish.

Other species or groups with large changes in landings revenue between 1998 and 2007 include squid (1617% increase), hake (149% increase), sablefish (75% increase), and rockfish (66% decrease).

Commercial Fish Facts

Landings revenue

- On average, the key species or species groups accounted for 89% of total revenue (\$327 million) generated in the Pacific Region.
- Crab contributed more than any other species or group, averaging \$97 million in landings revenue from 1998-2007. In 2007, Washington contributed the most to crab revenue in the region, followed by Oregon and California.
- Squid had the largest annual increase during the 10 year time period, increasing 1,866% from \$1.7 million in 1998 to \$33 million in 1999. Shrimp had the largest annual decrease in landings revenue, dropping 44% from 2002-2003.

Landings

- Key species and species groups in the Pacific Region contributed an average of 62% annually to total landings.
- Hake, also known as whiting, contributed the most to landings in the region, averaging 445 million pounds from 1998-2007. In 2007, commercial fishermen in Washington harvested the majority of this species.
- Landings of squid increased dramatically from 1998-1999, increasing 2,961%, the largest annual increase in the region. Most of this was harvested in California which had a 2,967% increase in squid landings. In contrast, shrimp landings dropped 44% from 2002-2003, the largest annual decrease.

Prices

- Other shellfish had the highest average annual ex-vessel price per pound (\$3.11) over the time period, followed by crab (\$1.85) and sablefish (\$1.46).
- Hake (\$0.05), squid (\$0.20), and flatfish (\$0.41) had the lowest average annual ex-vessel price per pound.
- The largest annual increase in annual ex-vessel price was for squid, a 136% increase from 2002-2003. The largest annual decrease in price was for salmon, dropping 42% from 2000-2001.

ecolabeled is itself a desirable seafood product relative to other available options. That is, an ecolabeled tilapia fillet may not be as desirable as a non-ecolabeled salmon fillet.

Landings

Fishermen in the Pacific Region landed 1.1 billion pounds of finfish and shellfish in 2007. This was a 14% increase from the 970 million pounds landed in 1998, but a 5% decrease from the 1.2 billion landed in 2006. Finfish landings contributed 79% of total landings in the Pacific (902 million pounds) in 2007, with no change (0%) from 1998. From 2006-2007, finfish landings decreased 4%. Shellfish landings increased substantially during this period, from 65 million pounds in 1998 to 206 million pounds in 2007, a 217% increase. However, shellfish landings decreased 12% between 2006 and 2007.

With the exception of California where there was a 19% decrease in finfish landings between 1998 and 2007, these landings increased in Oregon (42%) and Washington (98%). Landings of shellfish increased in all three states: 194% in Oregon, 71% in Washington, and 76% in California. Washington contributed the most to both finfish (150 million pounds) and shellfish (44 million pounds) landings in 2007.

Of the Pacific Region's key species and groups, hake and squid contributed the most to total landings, with 445 million and 109 million pounds, respectively. Together, these species made up 51% of total landings in 2007. Washington and Oregon fishermen were major contributors to hake landings, while squid landings were mostly harvested by California fishermen.

Key species or groups with the largest increases in annual landings totals from 1998-2007 were squid (1,550% increase), shrimp (92%), and crab (59%). Total landings of rockfish (84% decrease), albacore tuna (-16%), and flatfish (-3.4%) dropped during this period, the only key species or groups to show a decline in landings. The decrease in rockfish landings is partly attributable to the establishment of rockfish conservation areas⁷ that were put into place in response to declining populations of this long-lived, slow-growing species group.

Prices

Overall, 2007 ex-vessel price for each of the Pacific Region's key species and groups was higher than their 10 year average annual price per pound. Ex-vessel prices for hake and rockfish experienced the biggest increases between 1998 and 2007, increasing 133% (95% in real terms) and 106% (72% in real terms), respectively. Hake prices increased 167% (123% in real terms) in both Oregon and Washington during this time period (\$0.03 to \$0.08 per pound). Rockfish prices increased 171% (126% in real terms) in California (\$0.58 to \$1.57 per pound) and 57% (31% in real terms) in Oregon (\$0.44 to \$0.69 per pound).

Relative to ex-vessel prices in 2006, the Pacific Region's crab (38%), hake (17%), and salmon (21%) prices

⁷More information about these rockfish conservation areas is available at: <http://www.nwr.noaa.gov/Groundfish-Halibut/Fishery-Management/Groundfish-Closed-Areas/>.

increased in 2007. Albacore tuna prices remained stable from 2006-2007, and flatfish (-9%), other shellfish (-4%), and rockfish (-2%) prices decreased.

Key species or groups with declining ex-vessel prices in both current and/or real terms include shrimp (-40%, -50% in real terms) and squid (3.8%, -13% in real terms). Annual price per pound for flatfish was up 19% in 2007 but in real terms, there was no change in flatfish prices from 1998-2007.

At the state level, key species or groups with large changes in ex-vessel price between 1998 and 2007 include: squid (213% increase) and sea urchin (36% decrease) landings in California; oysters (276% increase) and salmon (158% increase) in Oregon; and halibut (131% increase) landings in Washington.

Recreational Fishing⁸

In 2006, there were over 1.8 million resident recreational anglers in the Pacific Region. Resident and non-resident anglers took 5.9 million fishing trips in the Pacific Region. Most of these anglers (70%) were residents of a regional coastal county. Of the total fishing trips taken, 65% of them were shore-based. Mackerels were the most caught key species or species group with over 5.1 million fish caught in 2006, 28% of total fish caught in the region. Rockfishes (3.7 million fish) and surfperches (3.5 million fish) were also species groups caught in large numbers.

Key Pacific Recreational Species

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

Economic Impacts and Expenditures⁸

Recreational fishing activities in California supported more jobs than in any other state in the region with approximately 23,000 full- and part-time jobs supported in 2006. Washington (11,000 jobs) and Oregon (2,500 jobs) followed in terms of employment impacts from recreational fishing activities. The majority of these jobs in each of these states were related to durable equipment expenditures (versus trip-related expenditures): 95% of jobs in Washington, 82% of jobs in California, and 61% of jobs in Oregon.

In terms of employment impacts related to fishing trips taken by anglers, industries that provided services for for-hire fishing trips supported most of the trip-related full-and part-time jobs in California

⁸Data related to 2007 recreational fishing activities was not available for this report therefore 2006 information is reported in this section.

(1,600 jobs). In Oregon, trip-related employment impacts were related to the private boat industry (544 jobs), while in Washington, shore-based fishing trips supported most of the trip-related jobs (293 jobs).

The contribution of recreational fishing activities in the Pacific are also reported in terms of state level sales and value-added impacts, and direct expenditures on fishing trips and durable equipment. In 2006, in-state sales and value-added impacts were highest in California (\$3.7 billion in sales impacts; \$1.9 billion in value-added impacts). Washington (\$1.1 billion; \$606 million) and Oregon (\$284 million; \$155 million) followed in terms of sales and value-added impacts. Across the region, these economic impacts were largely generated from durable equipment expenditures made by anglers (versus trip-related impacts).

Total fishing trip and durable equipment expenditures generated \$4.6 billion across the Pacific Region in 2006. Approximately 90% of these expenditures were related to durable equipment purchases. Boat-related (\$1.4 billion) and fishing tackle expenses (\$1.1 billion) accounted for the majority of durable equipment expenditures. Expenditures by Pacific Region residents related to fishing trips totaled \$332 million. Most of these purchases were related to fishing trips taken from shore (40% of trip-related expenditures by residents). The region's non-resident anglers generated \$111 million in trip-related expenditures with most of these expenses related to for-hire fishing trips (37% of trip-related expenditures by non-residents).

Participation^{8,9}

In 2006, there were 1.8 million recreational fishermen from either a coastal or non-coastal county in the Pacific Region.¹⁰ This was a 10% increase from 2004 (1.7 million anglers) and a 23% increase from 2005 (1.5 million anglers). Over 70% of total anglers in 2006 were coastal county residents. When looking at where most recreational anglers fished, over 77% of Pacific Region coastal and non-coastal county resident anglers fished in California.

In 2006, the majority of recreational fishermen who fished in California and Washington were residents of coastal counties within their respective states. In California, 71% of total anglers were coastal county residents and in Washington, 68% of total anglers were from coastal counties. In contrast, most of Oregon's anglers were residents of non-coastal counties within the state. Approximately 58% of anglers in Oregon in 2006 were from non-coastal counties. In all three

states, out-of-state resident anglers were the minority accounting for 6.4%, 8.1%, and 6.0% of total anglers in California, Oregon, and Washington, respectively.

Recreational Fishing Facts

Participation

- Approximately 1.7 million resident anglers fished in the Pacific Region annually from 2004-2006. Most of these anglers fished in California.
- Coastal county residents accounted for 70% of total anglers in 2006. On average, these recreational fishermen accounted for 69% of anglers annually between 2004 and 2006.
- Non-coastal county resident anglers increased 47% from 2000-2001, the largest annual increase in participation. Coastal county resident anglers decreased 30% from 2003-2004, the largest annual decrease.

Fishing trips

- In the Pacific Region, an average of 5.5 million fishing trips were taken annually between 2004 and 2006. Most of these trips were taken in California.
- Shore-based fishing trips were the most popular fishing trip mode with over 3.8 million of these trips taken in 2006. Shore-based trips accounted for 65% of trips taken in the region.
- From 1999-2000, shore-based fishing trips increased 40%, the largest annual increase in trips taken by anglers. Private or rental boat trips decreased 66% from 2003-2004, the largest annual decrease.

Harvest and release

- On average, 3.4 million mackerels were caught annually from 2004-2006. Of these, 72% were released rather than harvested.
- Seven of the Pacific's ten key species or groups were released by anglers rather than harvested. Sculpins (76% released), mackerels (69%), and barracuda, bass, and bonito (65%) are examples.
- Tuna, albacore, and other tunas (77% harvested), rockfishes and scorpionfishes (77%), and surfperches (53%) were key species or groups that were more often harvested than released by recreational fishermen in the Pacific.
- Mackerels had the largest annual increase in catch, increasing 108% from 1998-1999. The largest annual decrease in catch was for greenlings, dropping 61% from 2003-2004.

Fishing Trips^{8,9}

In the Pacific Region, resident and non-resident anglers took 5.9 million fishing trips in 2006. This was a 7.5% increase from 2004 (5.5 million trips) and a 12% increase from 2005 (5.2 million trips). In the Pacific Region overall, fishing trips taken from each fishing trip mode increased relative to 2005. In 2006, most fishing trips were taken from shore (3.8 million trips). Shore-based fishing trips accounted for 65% of total fishing trips taken in the Pacific Region. Fishing trips from a private or rental boat (1.4 million trips) and a for-hire boat (630,000 trips) followed. The majority of fishing trips were taken in California: 4.5 million fishing trips or 77% of total trips in the region.

⁹Due to changes in data collection methods, the Pacific Region's participation, effort, and catch estimates for 1997-2003 are not comparable to 2004-2006 estimates.

¹⁰At the state level, out-of-state anglers are estimated. However at the region level, out-of-region anglers are not estimated thus only Pacific Region resident anglers are discussed here. In *Fisheries Economics of the U.S., 2006* (FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1998-2007 angler participation totals excludes these anglers therefore the annual region totals reported here are smaller than those reported in FEUS 2006.

Shore-based fishing trips were the most popular fishing trip mode in California and Washington. In 2006, these trips comprised 67% of total trips taken in California and 78% of total trips taken in Washington. However, compared to 2005, California's shore-based fishing trips increased 21% while Washington's shore-based fishing trips remained flat (no change). Anglers who fished in Oregon in 2006 favored fishing trips taken from a private or rental boat. This fishing mode made up 57% of total trips in 2006 despite dropping 2.6% relative to 2005.

Harvest and Release^{8,9}

Of the Pacific Region's key species and species groups, mackerels, rockfishes and scorpionfishes, and surfperches were the most often caught by anglers. In 2006, 5.1 million mackerels, 3.7 million rockfishes and scorpionfishes, and 3.5 million surfperches were caught by anglers fishing in the region. Sculpins (80% released), mackerels (72%), and barracuda, bass, and bonito (71%) were most often released than harvested. Most of these key species or species groups were caught in California. Anglers most often harvested rockfishes and scorpionfishes (74% harvested) and albacore and other tunas (73%). Most of the rockfishes and scorpionfishes in the Pacific region were caught in California while most of the albacore and other tunas were caught in Washington.

Between 2004 and 2006, seven of the Pacific Region's key species or species groups showed increases in catch totals. Key species or groups with the largest increases include surfperches (150% increase), mackerels (132%), and croakers (84%). Catch totals for salmon (-303%), flatfishes (-67%), and greenlings (-11%) decreased from 2004-2006.

Mackerels and rockfishes were the most caught key species or species group in California and Oregon, respectively. In 2006, approximately 5.1 million mackerels were caught in California, a 78% increase relative to 2005 totals. Of these fish caught in 2006, 72% were released by anglers. In Oregon, 373,000 rockfishes were caught in 2006 with 89% of these harvested. Relative to 2005, this catch total was a 19% decrease. Washington's most caught key species or group was herring and smelt with 2.6 million fish caught in 2006. Over 95% of these fish were harvested. Catch totals for herring and smelt remained constant between 2005 and 2006.

Relative to 2005, catch totals for five of the Pacific's key species or species groups increased: mackerels (78% increase), albacore tuna (50%), sculpins (28%), surfperches (24%), and rockfishes and scorpionfishes (13%). Catch totals for all other key species or groups declined from 2005-2006 with the largest decreases seen for flatfishes (28% drop) and barracuda, bass, and bonito (-24%).

Marine Economy¹¹

Across the Pacific Region, gross domestic product by state was \$2.2 trillion in 2006. Employee compensation totaled \$1.2 trillion and annual payroll totaled \$792 billion. These economic measures increased 58%, 27%, and 53%, respectively, between 1998 and 2006, and 7.6%, 6.2%, and 7.9% between 2005 and 2006. Approximately 1.2 million establishments employed 18 million full- and part-time employees across the region in 2006. This was a 13% increase in establishment numbers and a 15% increase in employee numbers from 1998-2006. A small increase in these numbers was observed from 2005-2006 (2.1% and 3.6%, respectively).

In 2006, California had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the Pacific. California's approximately 878,000 establishments employed approximately 14 million employees in 2006. Gross state product in California was \$1.7 trillion, followed by Washington (\$291 billion) and Oregon (\$151 billion).

When considering commercial fishing-related industries in 2006, the commercial fishing location quotient (CFLQ) for Washington was highest in the region at 13.9. This was an 11% increase from 2001 and a 1.0% decrease from 2005. 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.¹² The 2006 CFLQ in Oregon was 2.96 (a 12% decrease from 2001; a 3.1% increase from 2005), while the 2006 CFLQ in California was 0.7 (a 27% decrease from 2001; no change from 2005).

Seafood Sales and Processing

In 2006, there were 151 nonemployer firms engaged in seafood product preparation and packaging across the Pacific Region. This was a 36% increase from 1998 levels, despite a 30% decrease in firm numbers in Oregon over this time period. In 2006, 60% of these firms were located in California. Regionwide, annual receipts totaled \$13 million in 2006 and decreased 7% from 1998-2006. Annual receipt totals experienced large decreases in Oregon (-77%) and Washington (-24%).

In contrast to an increase in nonemployer firms regionwide, the number of employer establishments engaged in seafood product preparation and packaging decreased 24% from 217 in 1998 to 164 in 2006. Approximately 59% of these establishments were located in Washington. Employee numbers also decreased across the region, decreasing 29% to approximately 9,200 full- and part-time workers in

¹¹Data for 2007 was unavailable for this report, therefore, 2006 information is reported in this section.

¹²The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

2006, despite annual payroll increasing 21% to \$360 million.

There were 383 seafood wholesale establishments in 2006 that employed approximately 5,100 full- and part-time workers. However, from 1998-2006, the number of seafood wholesale establishments and employees declined 27% and 8%, respectively across the Pacific Region. In 2006, 66% of establishments and 80% of employees were located in California. At the state level, Washington saw the largest decreases in establishments (39% decline) and employees (-35%). Across the region, annual payroll totaled \$188 million in 2006. This was a 12% from 1998-2006. California's total annual payroll increased 40% during this time period but Washington's total decreased 20%. Over 77% of annual payroll in the region was generated in California.

Nonemployer firms engaged in seafood retail in the Pacific Region totaled 203 in 2006, a 26% decrease relative to 1998. Over 80% of these firms were located in California. At the state level, these firms showed double digit declines in all three states between 1998 and 2006. Annual receipts in the region totaled \$23 million in 2006, a 9% decrease from 1998 (-20% in real terms) but a 14% increase from 2005 (remained flat in real terms). Despite this regionwide decline in annual receipts, Oregon's total increased 49% and Washington's total increased 17% from 1998-2006.

Compared to nonemployer firms, employer establishments engaged in seafood retail increased 21% from 1998-2006, totaling 255 in 2006. These establishments employed 1,600 workers. Over 72% of these establishments and 63% of these employees were located in California. Regionwide employee numbers increased 44% between 1998 and 2006 with the largest increase seen in Oregon (256% increase). Annual payroll also increased across the Pacific, a 74% increase regionwide, to \$32 million in 2006. The largest increases were seen in Oregon (131% increase) and Washington (102%).

Transport, Support, and Marine Operations

Marine cargo handling industries employed more people than any other industry in this sector, employing approximately 25,000 people in 2006. This industry also had the highest annual payroll in the Region, totaling \$1.8 billion. Marina industries had the highest number of establishments in 2006 with 408 establishments. California contributed most to these totals.

In California, industries with large changes in establishment numbers, employees, or annual payroll from 1998-2006 were: marine cargo handling (123% increase in employees, 79% increase in annual payroll); navigational services to shipping (90% increase in annual payroll); deep sea passenger transportation (78% increase in establishment numbers, 47% decrease in employees); deep sea freight transportation (55% decrease in employees); and marina operations (53% increase in payroll).

In Oregon, large changes were seen for coastal and Great Lakes freight transportation (80% increase in

establishments). Modest changes were seen in the ship and boat building industries (35% decrease in employees; 41% decrease in annual payroll). In Washington, large changes were seen in the navigational services to shipping industry (294% increase in employees; 384% increase in annual payroll), deep sea freight transportation (80% decrease in employees; 74% decrease in annual payroll), and marine cargo handling (68% increase in annual payroll).

2007 Economic Impacts of Pacific Region Seafood Industry (thousands of dollars)

	Total Landings Revenue	Total Sales Impacts	Total Income Impacts	Total Job Impacts
California	120,193	8,503,228	4,419,327	156,387
Oregon	97,314	943,563	506,448	18,821
Washington	209,372	3,688,407	2,037,406	73,379

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	278,937	353,151	372,663	329,572	333,379	407,651	422,240	414,584	471,788	445,674
Finfish & Other	149,109	156,955	177,856	153,777	141,259	156,596	178,693	166,922	176,425	175,712
Shellfish	129,828	196,196	194,807	175,794	192,120	251,054	243,547	247,662	295,363	269,962
Crab	58,955	80,864	77,271	67,677	73,073	130,952	115,365	97,127	143,758	121,148
Flatfish	12,330	13,322	14,267	12,982	12,004	13,441	12,741	13,816	12,974	14,462
Hake (Whiting)	13,091	18,294	20,851	13,881	13,576	17,150	21,819	29,139	34,425	32,603
Other Shellfish	61,863	73,854	83,524	84,867	88,164	89,222	102,423	107,438	116,161	106,851
Rockfish	22,247	17,437	16,744	12,685	11,365	7,803	6,832	6,559	6,848	7,541
Sablefish	11,982	17,813	21,104	18,175	12,323	18,817	17,230	20,366	22,991	20,984
Salmon	14,897	14,155	23,838	20,667	26,170	30,773	47,676	37,188	34,306	33,473
Shrimp	15,030	21,288	21,869	17,879	22,443	12,582	12,351	15,706	12,433	17,297
Squid	1,699	33,403	27,246	16,948	18,260	25,340	19,748	31,516	26,998	29,169
Tuna, Albacore	18,713	17,720	17,140	20,623	14,219	24,366	27,242	20,574	23,767	21,612

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	970,223	1,286,588	1,293,735	1,135,653	1,069,227	987,988	1,131,749	1,301,649	1,169,906	1,108,133
Finfish & Other	905,184	996,689	942,839	853,058	789,574	756,538	932,610	1,070,529	935,523	901,837
Shellfish	65,039	289,900	350,895	282,595	279,652	231,449	199,139	231,120	234,383	206,296
Crab	32,711	40,949	36,645	33,619	42,441	81,892	69,247	61,849	85,301	51,887
Flatfish	34,700	41,126	36,837	31,584	29,365	31,849	29,895	31,495	27,689	33,502
Hake (Whiting)	490,601	478,154	452,752	379,165	285,547	309,300	474,460	569,273	558,078	454,533
Other Shellfish	22,129	27,103	31,051	30,459	31,813	27,884	31,275	30,907	30,611	29,504
Rockfish	45,071	31,199	25,738	18,114	13,346	9,275	8,057	7,406	6,633	7,447
Sablefish	10,079	15,019	14,212	12,761	8,677	12,204	12,905	13,742	13,718	11,630
Salmon	17,447	12,828	20,697	30,838	38,077	39,234	40,609	27,249	29,172	23,550
Shrimp	13,830	32,760	36,934	42,001	58,758	33,000	22,408	26,069	20,290	26,497
Squid	6,634	203,060	262,146	190,282	160,669	99,115	88,215	123,090	108,561	109,464
Tuna, Albacore	30,375	21,470	19,916	24,589	21,996	36,577	31,764	19,649	28,117	25,483

Average Annual Price for Key Species / Species Groups

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab	1.80	1.97	2.11	2.01	1.72	1.60	1.67	1.57	1.69	2.33
Flatfish	0.36	0.32	0.39	0.41	0.41	0.42	0.43	0.44	0.47	0.43
Hake (Whiting)	0.03	0.04	0.05	0.04	0.05	0.06	0.05	0.05	0.06	0.07
Other Shellfish	2.80	2.72	2.69	2.79	2.77	3.20	3.27	3.48	3.79	3.62
Rockfish	0.49	0.56	0.65	0.70	0.85	0.84	0.85	0.89	1.03	1.01
Sablefish	1.19	1.19	1.49	1.42	1.42	1.54	1.34	1.48	1.68	1.80
Salmon	0.85	1.10	1.15	0.67	0.69	0.78	1.17	1.36	1.18	1.42
Shrimp	1.09	0.65	0.59	0.43	0.38	0.38	0.55	0.60	0.61	0.65
Squid	0.26	0.16	0.10	0.09	0.11	0.26	0.22	0.26	0.25	0.27
Tuna, Albacore	0.62	0.83	0.86	0.84	0.65	0.67	0.86	1.05	0.85	0.85

Note: The Pacific Region includes landings by Pacific at-sea processors. However, revenue from these landings are not included in the California, Oregon, and Washington information presented in the "2007 Economic Impacts of Commercial Fishing Industry" table above.

2006 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)¹

	Trips	Jobs	Total Sales	Value Added
California	4,540,000	23,454	3,699,176	1,918,317
Oregon	667,733	2,527	283,578	154,957
Washington	653,000	11,025	1,126,920	606,474

2006 Angler Trip & Durable Equipment Expenditures (thousands of dollars)¹

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	37,025	107,063	Fishing Tackle	1,128,949
Shore	33,020	131,807	Other Equipment	499,916
For-Hire	40,676	92,780	Boat Expenses	1,445,827
Total Trip Expenditures	110,721	331,650	Vehicle Expenses	786,717
			Second Home Expenses	333,540
			Total Durable Equipment Expenditures	4,194,949
Total State Trip and Durable Equipment Expenditures				4,637,320

Recreational Anglers by Residential Area (thousands of anglers)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	1,196	1,048	1,419	1,558	1,591	1,632	1,139	1,004	1,287	NA ³
Non-Coastal	474	428	552	813	665	720	526	491	549	NA ³
Out-of-State	NA ⁴	NA ⁴	NA ⁴	NA ⁴	NA ⁴	NA ⁴	NA ⁴	NA ⁴	NA ⁴	NA ^{3,4}
Total Anglers	1,669	1,476	1,971	2,370	2,256	2,351	1,665	1,494	1,836	NA³

Recreational Fishing Effort by Mode (thousands of trips)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	958	891	1,212	927	714	869	638	623	630	NA ³
Private or Rental	2,724	2,611	3,535	4,205	3,600	3,752	1,277	1,328	1,426	NA ³
Shore	2,514	1,914	2,675	3,265	3,507	3,443	3,539	3,274	3,804	NA ³
Total Trips	6,196	5,416	7,422	8,397	7,821	8,065	5,455	5,226	5,861	NA³

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)²

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Barracuda, Bass, & Bonito ⁵	H	1,462	1,262	2,493	1,720	1,965	1,888	2,126	780	670	NA ³
	R	2,545	2,087	4,210	3,502	4,427	3,727	2,597	2,288	1,651	NA ³
Croakers	H	641	524	541	631	1,513	758	619	688	597	NA ³
	R	392	600	751	737	1,016	871	660	826	771	NA ³
Flatfishes	H	491	485	947	691	1,209	681	499	530	295	NA ³
	R	387	740	1,139	1,115	2,063	948	342	725	614	NA ³
Greenlings	H	247	250	296	288	455	512	210	256	259	NA ³
	R	172	160	372	446	957	858	329	265	225	NA ³
Mackerels	H	1,055	479	587	1,356	800	918	945	919	1,446	NA ³
	R	2,025	812	1,319	2,600	1,730	2,011	1,715	1,976	3,701	NA ³
Rockfishes & Scorpionfishes	H	3,689	4,569	3,569	3,241	2,737	3,624	2,413	2,459	2,811	NA ³
	R	596	741	681	787	931	1,665	751	798	862	NA ³
Salmon	H	364	321	552	1,110	669	920	824	556	374	NA ³
	R	281	265	358	754	500	616	705	339	435	NA ³
Sculpins	H	123	94	85	114	116	107	77	72	73	NA ³
	R	242	209	389	349	404	291	239	216	295	NA ³
Surfperches	H	1,411	679	731	915	829	1,144	1,302	1,331	1,588	NA ³
	R	529	382	508	579	729	1,174	1,556	1,463	1,889	NA ³
Tuna, Albacore, & Other	H	169	186	73	145	140	161	85	37	53	NA ³
	R	48	17	24	38	15	87	14	9	16	NA ³

¹2007 data was not available for this report; 2006 economic impact and expenditure information are reported here.²Due to changes in data collection methods, the Pacific Region's participation (number of anglers), effort (number of trips), and catch (number of fish harvested or released) estimates for 1997-2003 are not comparable to 2004-2006 estimates.³2007 data was not available for this report; NA = data is not available.⁴Out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified; NA = data is not available.⁵Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

2007 Economic Impacts of the California Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	8,503,228	4,419,327	156,387
Commercial Harvesters	135,285	60,056	1,705
Seafood Processors & Dealers	732,016	231,050	4,980
Seafood Wholesalers & Distributors	1,960,568	932,755	16,877
Retail Sector	5,675,359	3,195,466	132,825

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	110,419	149,796	142,451	107,890	111,923	136,152	140,615	116,084	129,907	120,193
Finfish & Other	70,832	80,621	82,530	65,335	59,888	56,402	58,798	46,640	43,164	50,344
Shellfish	39,587	69,175	59,920	42,554	52,035	79,750	81,816	69,444	86,743	69,850
Crab	21,523	18,258	15,264	10,635	15,074	37,455	43,381	19,653	46,483	28,626
Lobster, Spiny	4,705	3,648	4,711	4,475	4,784	5,278	6,160	6,039	8,111	6,916
Rockfish	11,259	7,596	7,152	5,798	6,560	4,761	4,447	4,145	4,630	4,924
Sablefish	3,389	4,310	5,263	4,175	3,508	4,721	3,724	4,295	4,892	4,873
Salmon	3,058	7,427	10,319	4,761	7,611	12,153	17,770	12,804	5,261	7,835
Sardine, Pacific	3,621	5,101	5,468	6,281	5,848	2,874	3,957	3,150	5,100	8,218
Sea Urchins	7,929	13,469	15,083	11,704	10,411	7,906	7,300	6,156	5,145	5,400
Shrimp	8,548	8,615	7,409	5,950	5,901	3,520	3,783	4,338	4,213	4,064
Squid	1,696	33,403	27,243	16,948	18,259	25,333	19,740	31,467	26,959	29,131
Swordfish	5,723	8,389	11,791	8,696	6,401	7,850	4,834	1,896	2,695	3,127

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	343,174	652,889	650,596	524,833	499,676	382,146	379,591	442,353	341,661	383,586
Finfish & Shellfish	317,741	429,579	372,270	321,527	321,539	252,764	257,944	301,993	203,107	258,616
Crab	12,100	9,605	7,671	4,841	8,609	23,922	27,016	12,028	27,391	12,393
Lobster, Spiny	739	493	707	697	702	736	860	761	886	663
Rockfish	19,438	9,660	7,194	5,291	5,991	4,399	3,843	3,181	3,252	3,136
Sablefish	3,204	4,357	4,176	3,434	2,893	3,636	3,158	3,645	3,617	3,240
Salmon	2,124	4,422	5,912	2,761	5,661	7,328	7,113	4,962	1,184	1,743
Sardine, Pacific	95,484	131,614	118,193	114,235	128,584	76,528	97,509	76,324	102,683	178,480
Sea Urchins	10,443	14,218	15,210	13,128	14,176	11,107	12,219	11,304	10,664	11,131
Shrimp	4,402	8,063	5,793	5,598	5,867	3,498	3,520	2,944	1,197	2,015
Squid	6,620	203,059	262,134	190,278	160,665	99,088	88,167	122,887	108,410	109,150
Swordfish	2,991	4,455	5,856	4,837	3,803	4,706	2,613	653	1,187	1,210

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab	1.78	1.90	1.99	2.20	1.75	1.57	1.61	1.63	1.70	2.31
Lobster, Spiny	6.37	7.39	6.67	6.42	6.81	7.18	7.16	7.93	9.15	10.44
Rockfish	0.58	0.79	0.99	1.10	1.10	1.08	1.16	1.30	1.42	1.57
Sablefish	1.06	0.99	1.26	1.22	1.21	1.30	1.18	1.18	1.35	1.50
Salmon	1.44	1.68	1.75	1.72	1.34	1.66	2.50	2.58	4.44	4.50
Sardine, Pacific	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.05
Sea Urchins	0.76	0.95	0.99	0.89	0.73	0.71	0.60	0.54	0.48	0.49
Shrimp	1.94	1.07	1.28	1.06	1.01	1.01	1.07	1.47	3.52	2.02
Squid	0.26	0.16	0.10	0.09	0.11	0.26	0.22	0.26	0.25	0.27
Swordfish	1.91	1.88	2.01	1.80	1.68	1.67	1.85	2.90	2.27	2.58

2006 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)¹

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	1,013	135,694	72,385
Shore	1,494	172,638	94,175
For-Hire	1,631	176,944	100,982
Total Durable Equipment Impacts	19,316	3,213,900	1,650,775
Total State Trip and Durable Equipment Economic Impacts	23,454	3,699,176	1,918,317

2006 Angler Trip & Durable Equipment Expenditures (thousands of dollars)¹

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	22,856	74,359	Fishing Tackle	995,275
Shore	24,321	101,869	Other Equipment	400,039
For-Hire	35,543	74,668	Boat Expenses	371,485
Total Trip Expenditures	82,720	250,896	Vehicle Expenses	649,882
			Second Home Expenses	275,934
			Total Durable Equipment Expenditures	2,692,613
Total State Trip and Durable Equipment Expenditures				3,026,229

Recreational Anglers by Residential Area (thousands of anglers)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	988	866	1,164	1,141	1,261	1,379	898	776	1,069	NA ³
Non-Coastal	304	240	324	401	444	493	310	285	346	NA ³
Out-of-State	104	102	146	134	114	141	92	74	97	NA ³
Total Anglers	1,396	1,208	1,635	1,676	1,818	2,014	1,300	1,135	1,512	NA³

Recreational Fishing Effort by Mode (thousands of trips)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	840	775	1,091	815	588	733	510	503	517	NA ³
Private or Rental	2,241	2,113	2,812	2,861	2,905	3,117	708	826	963	NA ³
Shore	1,884	1,447	2,006	2,238	2,501	2,699	2,795	2,530	3,060	NA ³
Total Trips	4,965	4,335	5,909	5,914	5,994	6,549	4,013	3,859	4,540	NA³

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)²

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Barracuda, Bass, & Bonito ⁴	H	1,462	1,262	2,493	1,720	1,965	1,888	2,126	780	670	NA ³
	R	2,545	2,087	4,210	3,502	4,427	3,727	2,597	2,288	1,651	NA ³
Croakers	H	641	524	541	631	1,513	758	619	688	597	NA ³
	R	392	600	751	737	1,016	871	660	826	771	NA ³
Flatfishes	H	239	336	780	556	962	603	410	449	211	NA ³
	R	282	644	1,034	1,043	1,844	850	295	677	565	NA ³
Greenlings	H	103	122	102	109	215	357	72	111	128	NA ³
	R	104	101	249	297	641	717	239	162	131	NA ³
Mackerels	H	1,055	479	587	1,356	800	918	945	919	1,446	NA ³
	R	2,025	812	1,319	2,600	1,730	2,011	1,715	1,976	3,701	NA ³
Rockfishes & Scorpionfishes	H	2,485	3,737	2,753	2,585	2,116	3,035	1,778	1,751	2,196	NA ³
	R	567	721	582	720	844	1,621	701	708	799	NA ³
Salmon	H	140	104	207	116	201	109	261	170	121	NA ³
	R	42	47	48	45	40	38	97	58	70	NA ³
Sculpins	H	74	60	46	82	60	70	41	35	38	NA ³
	R	83	126	132	206	184	140	98	72	153	NA ³
Surfperches	H	1,113	498	404	630	586	878	1,046	1,075	1,333	NA ³
	R	427	213	264	432	563	1,016	1,402	1,309	1,734	NA ³
Tuna, Albacore, & Other	H	136	174	57	125	103	134	44	5	8	NA ³
	R	39	14	21	32	5	81	8	2	8	NA ³

¹2007 data was not available for this report; 2006 economic impact and expenditure information are reported here.²Due 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 1997-2003 are not comparable to 2004-2006 estimates.³2007 data was not available for this report; NA = data is not available.⁴Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

California's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	773,925 (11.2%)	12,026,989 (11.1%)	406,481 (12.3%)	769,101 (13.0%) ²	1,085,884 (12.5%)	1.0
2006	878,128 (11.6%)	13,834,264 (11.6%)	633,802 (13.2%)	974,320 (13.1%)	1,742,172 (13.3%)	0.73
% change	13.5%	15.0%	55.9%	26.7%	60.4%	-27.0%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	65	61	72	71	70	77	98	88	91
	Receipts	7,777	10,592	11,405	12,983	9,123	9,858	14,312	10,207	8,298
Seafood sales, retail	Firms	223	180	166	157	165	192	193	166	163
	Receipts	22,725	19,315	19,270	18,138	18,225	19,771	19,092	16,892	19,875

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	74	70	78	73	63	60	55	48	47
	Employees	3,205	2,777	3,289	2,962	3,357	2,896	2,931	2,963	2,592
	Payroll	58,934	60,251	75,858	66,387	82,116	74,637	72,178	92,642	78,065
Seafood sales, wholesale	Establishments	317	337	360	361	334	269	263	258	252
	Employees	3,618	3,793	4,174	4,507	4,539	3,536	3,744	3,925	4,063
	Payroll	103,705	115,021	128,092	142,656	151,789	115,669	124,657	134,576	144,758
Seafood sales, retail	Establishments	170	170	172	165	186	175	169	180	184
	Employees	883	902	828	917	988	968	945	999	1,031
	Payroll	12,654	12,906	13,815	15,172	16,775	19,919	16,686	18,832	19,900

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	26	22	24	31	31	22	20	26	22
	Employees	1,477	ND ³	1,394	1,648	1,776	1,341	ND	1,346	ND
	Payroll	92,976	ND	99,106	119,808	132,432	117,982	ND	129,262	ND
Deep sea freight transportation	Establishments	47	50	44	43	44	51	50	54	54
	Employees	2,141	ND	1,323	1,117	ND	902	901	ND	957
	Payroll	117,289	ND	51,131	63,891	ND	62,417	69,815	ND	84,199
Deep sea passenger transportation	Establishments	9	10	8	9	11	14	15	15	16
	Employees	2,927	ND	ND	ND	ND	ND	ND	ND	1,552
	Payroll	68,500	ND	ND	ND	ND	ND	ND	ND	72,119
Marinas	Establishments	265	265	266	249	248	263	271	263	268
	Employees	2,020	1,925	2,000	1,862	1,851	2,485	2,476	2,426	2,457
	Payroll	48,856	44,511	50,106	52,602	57,393	70,640	73,338	71,318	74,778
Marine cargo handling	Establishments	53	53	66	70	64	56	54	54	52
	Employees	9,397	9,288	15,330	15,076	15,274	15,557	20,456	19,303	20,975
	Payroll	810,330	836,880	880,397	944,374	1,000,809	1,040,515	1,179,221	1,273,698	1,448,623
Navigational services to shipping	Establishments	47	49	42	37	30	35	38	37	36
	Employees	747	806	702	647	476	850	ND	ND	817
	Payroll	33,590	33,164	35,480	33,764	28,197	53,162	ND	ND	63,893
Port & harbor operations	Establishments	24	24	23	21	23	19	20	20	20
	Employees	806	649	650	163	139	417	ND	ND	582
	Payroll	29,102	19,023	19,056	9,990	7,668	23,110	ND	ND	32,523
Ship & boat building	Establishments	148	144	143	155	145	141	143	141	132
	Employees	9,864	9,166	9,204	8,589	7,782	8,574	8,865	10,132	9,801
	Payroll	334,276	329,705	335,172	322,296	315,090	314,706	354,404	410,446	453,255

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Oregon Seafood Industry (*thousands of dollars*)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	943,563	506,448	18,821
Commercial Harvesters	105,332	55,251	1,382
Seafood Processors & Dealers	110,842	41,543	1,262
Seafood Wholesalers & Distributors	133,229	65,575	1,276
Retail Sectors	594,160	344,079	14,901

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	50,500	71,298	83,276	72,651	68,292	86,779	101,022	88,196	107,523	97,314
Finfish & Other	33,571	35,494	45,060	41,451	32,073	40,889	49,634	53,192	47,687	47,604
Shellfish	16,929	35,804	38,216	31,200	36,218	45,890	51,388	35,005	59,837	49,710
Crab	12,521	23,108	23,745	19,361	20,767	37,122	42,960	26,603	53,856	38,208
Flatfish	5,407	5,902	6,643	6,103	5,156	6,632	6,460	7,281	7,757	7,930
Hake (Whiting)	3,756	5,917	6,081	4,132	3,219	3,642	4,641	7,107	8,781	6,501
Oysters	495	2,857	3,540	3,536	3,143	3,292	3,292	1,232	1,163	1,847
Rockfish	8,762	7,724	7,595	5,287	3,511	2,327	1,633	1,387	1,625	2,002
Sablefish	4,648	7,764	9,266	7,986	4,405	7,381	6,935	8,657	9,790	9,494
Salmon	2,590	2,042	4,030	5,846	6,933	8,869	12,995	10,437	4,955	4,661
Sardine, Pacific	ND ¹	86	1,149	1,619	2,819	2,941	4,870	6,199	3,944	4,551
Shrimp	3,189	9,571	10,192	7,560	11,353	5,051	4,740	6,901	4,518	9,365
Tuna, Albacore	6,540	3,784	7,489	7,559	2,952	6,169	9,145	8,815	8,069	9,468

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	208,653	234,054	264,105	234,474	210,750	226,317	294,866	312,636	300,701	253,551
Finfish & Other	194,705	200,475	226,357	195,121	155,609	180,788	254,330	278,646	254,756	216,142
Shellfish	13,948	33,579	37,747	39,352	55,140	45,529	40,536	33,990	45,945	37,410
Crab	7,406	12,340	11,223	9,754	12,452	23,934	27,276	17,734	33,319	17,007
Flatfish	15,042	17,860	16,470	14,488	11,489	14,372	14,846	16,910	16,907	19,696
Hake (Whiting)	139,011	147,873	151,461	117,673	71,220	80,648	130,238	135,503	135,186	81,481
Oysters	198	674	834	884	786	823	823	308	255	197
Rockfish	19,949	16,274	14,231	9,400	4,653	3,434	2,574	2,007	2,062	2,905
Sablefish	3,880	6,582	6,256	5,697	3,185	4,798	5,627	5,834	5,841	5,349
Salmon	1,978	1,552	3,133	5,261	6,117	6,720	5,914	4,666	1,813	1,378
Sardine, Pacific	ND ¹	1,709	21,005	28,176	50,069	55,683	79,610	99,450	78,634	90,037
Shrimp	6,090	20,436	25,462	28,482	41,584	20,546	12,207	15,784	12,195	19,990
Tuna, Albacore	10,587	4,553	8,757	8,959	4,362	9,165	10,754	8,087	8,536	10,468

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab	1.69	1.87	2.12	1.98	1.67	1.55	1.58	1.50	1.62	2.25
Flatfish	0.36	0.33	0.40	0.42	0.45	0.46	0.44	0.43	0.46	0.40
Hake (Whiting)	0.03	0.04	0.04	0.04	0.05	0.05	0.04	0.05	0.06	0.08
Oysters	2.50	4.24	4.24	4.00	4.00	4.00	4.00	4.00	4.56	9.40
Rockfish	0.44	0.47	0.53	0.56	0.75	0.68	0.63	0.69	0.79	0.69
Sablefish	1.20	1.18	1.48	1.40	1.38	1.54	1.23	1.48	1.68	1.78
Salmon	1.31	1.32	1.29	1.11	1.13	1.32	2.20	2.24	2.73	3.38
Sardine, Pacific	ND ¹	0.05	0.05	0.06	0.06	0.05	0.06	0.06	0.05	0.05
Shrimp	0.52	0.47	0.40	0.27	0.27	0.25	0.39	0.44	0.37	0.47
Tuna, Albacore	0.62	0.83	0.86	0.84	0.68	0.67	0.85	1.09	0.95	0.90

¹ND = data is confidential thus not disclosable.

2006 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)¹

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	544	47,397	27,328
Shore	205	17,448	9,941
For-Hire	228	17,523	9,879
Total Durable Equipment Impacts	1,550	201,211	107,809
Total State Trip and Durable Equipment Economic Impacts	2,527	283,578	154,957

2006 Angler Trip & Durable Equipment Expenditures (thousands of dollars)¹

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	12,907	25,879	Fishing Tackle	35,296
Shore	3,753	10,718	Other Equipment	30,992
For-Hire	4,036	7,280	Boat Expenses	22,255
Total Trip Expenditures	20,696	43,877	Vehicle Expenses	71,596
			Second Home Expenses	28,377
			Total Durable Equipment Expenditures	188,516
Total State Trip and Durable Equipment Expenditures				253,089

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	79	65	76	119	113	102	106	97	93	NA ²
Non-Coastal	127	124	163	200	179	169	164	156	156	NA ²
Out-of-State	20	20	19	29	27	24	25	22	22	NA ²
Total Anglers	226	210	258	348	320	294	294	274	271	NA²

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	73	67	69	79	67	67	64	58	56	NA ²
Private or Rental	301	257	355	520	448	426	434	389	379	NA ²
Shore	148	141	214	357	295	232	232	232	232	NA ²
Total Trips	522	465	638	956	810	726	731	680	668	NA²

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)³

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Baitfishes	H	227	12	54	500	774	318	318	318	318	NA ²
	R	4	8	(1)	88	21	24	24	24	24	NA ²
Flatfishes	H	12	8	9	16	31	16	27	20	21	NA ²
	R	9	3	3	6	10	6	6	7	7	NA ²
Greenlings	H	44	64	95	106	155	96	99	106	99	NA ²
	R	43	49	86	116	175	77	65	78	72	NA ²
Rockfishes	H	673	528	548	457	384	406	379	401	333	NA ²
	R	6	11	91	53	37	24	25	57	40	NA ²
Salmon	H	41	41	92	259	148	241	215	95	79	NA ²
	R	51	27	33	167	98	187	193	65	59	NA ²
Sculpins	H	19	12	15	22	21	21	19	19	18	NA ²
	R	40	18	55	58	78	51	51	54	52	NA ²
Sturgeons	H	14	4	13	18	12	12	12	12	12	NA ²
	R	33	7	24	30	27	25	25	25	25	NA ²
Surfperches	H	96	73	129	196	139	122	122	122	122	NA ²
	R	18	17	17	46	61	34	34	34	34	NA ²
Tuna, Albacore	H	12	3	4	9	4	11	18	6	12	NA ²
	R	4	1	2	3	2	(1)	(1)	(1)	(1)	NA ²

¹2007 data was not available for this report; 2006 economic impact and expenditure information are reported here.

²2007 data was not available for this report; NA = data is not available.

³In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

Oregon's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	99,183 (1.4%)	1,310,750 (1.2%)	37,723 (1.1%)	67,370 (1.1%) ²	100,951 (1.2%)	3.38
2006	110,684 (1.5%)	1,461,664 (1.2%)	53,563 (1.1%)	84,069 (1.1%)	150,984 (1.2%)	2.96
% change	11.6%	11.5%	42.0%	24.8%	49.6%	-12.4%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	10	11	8	11	NA ³	NA	NA	9	7
	Receipts	233	369	461	424	ND ⁴	ND	ND	309	54
Seafood sales, retail	Firms	17	13	16	14	13	10	11	7	11
	Receipts	613	858	628	851	644	428	507	985	914

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	27	28	27	27	19	19	18	20	21
	Employees	1,095	980	1,036	875	707	720	738	762	896
	Payroll	19,603	20,753	22,718	23,616	20,867	21,980	20,593	19,022	25,881
Seafood sales, wholesale	Establishments	22	21	25	29	33	26	21	23	16
	Employees	360	310	ND	295	ND	ND	126	ND	ND
	Payroll	9,364	8,174	ND	8,698	ND	ND	4,446	ND	ND
Seafood sales, retail	Establishments	13	16	18	16	28	21	24	24	22
	Employees	86	99	113	116	129	ND	171	204	306
	Payroll	1,423	1,794	1,844	1,945	2,311	ND	3,259	3,464	3,294

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	5	6	8	7	10	8	8	9	9
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	8	7	5	4	7	6	6	6	6
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	NA	NA	1	NA	NA	NA	NA	NA	NA
	Employees	NA	NA	ND	NA	NA	NA	NA	NA	NA
	Payroll	NA	NA	ND	NA	NA	NA	NA	NA	NA
Marinas	Establishments	44	43	38	33	41	42	41	40	37
	Employees	113	ND	93	ND	ND	122	133	113	ND
	Payroll	2,513	ND	1,830	ND	ND	2,742	2,988	3,550	ND
Marine cargo handling	Establishments	10	9	9	9	7	8	8	8	9
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Navigational services to shipping	Establishments	24	25	23	21	18	21	21	21	20
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	1	1	1	1	1	1	NA	NA	NA
	Employees	ND	ND	ND	ND	ND	ND	NA	NA	NA
	Payroll	ND	ND	ND	ND	ND	ND	NA	NA	NA
Ship & boat building	Establishments	54	51	48	51	44	43	50	43	41
	Employees	1,883	2,095	2,506	1,969	1,323	1,284	1,285	1,298	1,230
	Payroll	73,822	79,567	87,018	69,200	47,303	42,270	43,357	45,183	43,416

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³NA = Data are not available.

⁴ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of Washington Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	3,688,407	2,037,406	73,379
Commercial Harvesters	232,279	115,601	3,135
Seafood Processors & Dealers	460,967	229,325	5,085
Seafood Wholesalers & Distributors	636,082	312,663	5,841
Retail Sector	2,359,079	1,379,817	59,318

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	109,446	119,869	133,499	140,382	143,720	172,829	166,247	193,317	217,030	209,372
Finfish & Other	36,133	28,652	36,828	38,342	39,854	47,415	55,906	50,145	68,201	58,980
Shellfish	73,313	91,217	96,671	102,040	103,867	125,414	110,342	143,172	148,829	150,392
Clams	25,398	26,730	27,920	32,677	34,339	36,060	42,297	48,503	55,786	52,080
Crab	24,912	39,498	38,262	37,681	37,232	56,374	29,024	50,872	43,464	54,315
Hake (Whiting)	618	748	1,022	1,299	1,022	1,601	2,341	4,937	7,296	7,121
Halibut	6,955	7,903	6,729	5,759	6,777	5,991	7,264	6,512	8,303	8,842
Mussels	2,445	3,720	3,564	2,426	1,613	2,513	3,096	3,729	6,564	3,820
Oysters	17,308	17,798	22,473	24,642	25,578	26,142	31,257	33,697	38,302	35,433
Sablefish	3,931	5,738	6,545	5,984	4,354	6,675	6,517	7,395	8,307	6,608
Salmon	9,494	4,863	9,709	10,332	11,780	9,941	17,316	14,319	24,586	21,620
Shrimp	2,633	2,882	3,611	3,697	4,473	3,723	3,648	4,335	3,602	3,745
Tuna, Albacore	8,785	3,600	5,821	7,917	7,375	15,621	15,657	10,643	15,176	10,439

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	101,710	89,156	112,181	154,701	172,277	189,479	192,181	213,502	241,606	194,582
Finfish & Other	76,052	56,145	77,359	114,764	125,903	132,940	155,224	156,902	191,717	150,704
Shellfish	25,658	33,011	34,822	39,937	46,374	56,539	36,957	56,600	49,889	43,878
Clams	1,962	2,224	2,109	2,632	3,087	3,127	3,319	3,621	4,617	3,908
Crab	13,205	19,004	17,752	19,024	21,380	34,037	14,955	32,086	24,619	22,487
Hake (Whiting)	23,177	18,698	24,399	35,593	22,564	35,124	69,117	93,654	120,058	91,272
Halibut	4,244	3,060	2,289	2,490	2,487	1,868	2,254	1,948	2,451	2,428
Mussels	296	332	374	332	214	337	427	504	774	475
Oysters	6,518	6,769	8,458	9,497	9,935	9,649	11,058	12,190	12,306	11,836
Sablefish	2,958	4,078	3,755	3,589	2,559	3,736	4,064	4,240	4,259	3,035
Salmon	13,733	7,112	11,971	23,291	26,626	25,493	27,918	17,926	26,570	20,880
Shrimp	3,137	4,175	5,520	7,764	11,149	8,867	6,599	7,279	6,926	4,455
Tuna, Albacore	14,361	4,519	7,003	9,110	11,708	23,672	18,044	10,505	19,133	13,129

Average Annual Price for Key Species / Species Groups

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clams	12.95	12.02	13.24	12.42	11.12	11.53	12.74	13.40	12.08	13.33
Crab	1.89	2.08	2.16	1.98	1.74	1.66	1.94	1.59	1.77	2.42
Hake (Whiting)	0.03	0.04	0.04	0.04	0.05	0.05	0.03	0.05	0.06	0.08
Halibut	1.64	2.58	2.94	2.31	2.73	3.21	3.22	3.34	3.39	3.64
Mussels	8.26	11.21	9.52	7.30	7.53	7.46	7.26	7.40	8.48	8.05
Oysters	2.66	2.63	2.66	2.59	2.57	2.71	2.83	2.76	3.11	2.99
Sablefish	1.33	1.41	1.74	1.67	1.70	1.79	1.60	1.74	1.95	2.18
Salmon	0.69	0.68	0.81	0.44	0.44	0.39	0.62	0.80	0.93	1.04
Shrimp	0.84	0.69	0.65	0.48	0.40	0.42	0.55	0.60	0.52	0.84
Tuna, Albacore	0.61	0.80	0.83	0.87	0.63	0.66	0.87	1.01	0.79	0.80

2006 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)¹

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	96	10,990	5,743
Shore Mode	293	30,471	16,346
For-Hire	197	18,313	10,225
Total Durable Equipment Impacts	10,440	1,067,145	574,160
Total State Trip and Durable Equipment Economic Impacts	11,025	1,126,920	606,474

2006 Angler Trip & Durable Equipment Expenditures (thousands of dollars)¹

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	1,262	6,825	Fishing Tackle	98,378
Shore	4,946	19,220	Other Equipment	68,885
For-Hire	1,097	10,832	Boat Expenses	1,052,087
Total Trip Expenditures	7,305	36,877	Vehicle Expenses	65,239
			Second Home Expenses	29,229
			Total Durable Equipment Expenditures	1,313,819
Total State Trip and Durable Equipment Expenditures				1,358,001

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	128	117	179	297	217	150	136	131	125	NA ²
Non-Coastal	42	64	65	212	41	58	52	50	47	NA ²
Out-of-State	13	10	10	14	25	14	12	12	11	NA ²
Total Anglers	183	191	254	524	284	222	200	193	183	NA²

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	45	49	52	33	59	69	64	62	57	NA ²
Private or Rental	182	241	368	824	247	209	135	113	84	NA ²
Shore	482	326	455	670	711	512	512	512	512	NA ²
Total Trips	709	616	875	1,527	1,017	790	711	687	653	NA²

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)³

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Cod, Pacific	H	1	(1)	(1)	1	2	3	6	5	1	NA ²
	R	2	(1)	1	(1)	(1)	(1)	1	(1)	(1)	NA ²
Flatfishes	H	240	141	158	119	216	62	62	61	63	NA ²
	R	96	93	102	66	209	92	41	41	42	NA ²
Greenlings	H	100	65	100	73	85	59	39	39	33	NA ²
	R	25	9	36	33	141	64	25	25	22	NA ²
Herring & Smelt ⁴	H	3,511	1,545	2,065	3,649	3,254	2,487	2,486	2,486	2,486	NA ²
	R	204	174	60	161	196	136	126	126	126	NA ²
Rockfishes	H	531	304	268	199	237	184	256	307	282	NA ²
	R	23	9	8	14	50	20	25	33	23	NA ²
Salmon	H	183	176	253	735	320	570	348	291	174	NA ²
	R	188	191	277	542	362	391	415	216	306	NA ²
Sculpins	H	30	23	24	10	35	17	17	17	16	NA ²
	R	119	64	202	85	142	101	91	91	91	NA ²
Sturgeon	H	9	9	8	7	8	6	5	5	5	NA ²
	R	39	34	28	21	27	18	25	30	21	NA ²
Surfperches	H	202	108	198	89	104	143	133	133	133	NA ²
	R	84	152	227	101	105	125	120	120	120	NA ²
Tuna, Albacore	H	21	4	7	4	6	11	14	12	24	NA ²
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	NA ²

¹2007 data was not available for this report; 2006 economic impact and expenditure information are reported here.²2007 data was not available for this report; NA = data is not available.³In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.⁴Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

Washington's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	161,473 (2.3%)	2,134,598 (2.0%)	73,268 (2.2%)	133,974 (2.3%) ²	195,794 (2.3%)	12.46
2006	179,908 (2.4%)	2,421,269 (2.0%)	104,191 (2.2%)	169,797 (2.3%)	291,298 (2.2%)	13.86
% change	11.4%	13.4%	42.2%	26.7%	48.8%	11.2%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	36	32	37	41	48	59	53	54	53
	Receipts	5,455	1,965	3,052	3,432	2,763	5,680	4,446	5,568	4,149
Seafood sales, retail	Firms	33	28	28	29	30	32	30	31	29
	Receipts	1,477	1,887	2,139	2,465	2,681	1,623	2,202	1,836	1,727

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	116	116	119	112	106	110	101	98	96
	Employees	8,587	7,276	6,784	6,498	6,728	5,968	5,851	5,743	5,705
	Payroll	219,324	207,487	218,517	216,660	221,978	231,153	247,316	239,962	255,129
Seafood sales, wholesale	Establishments	189	184	176	176	175	121	116	126	115
	Employees	1,550	1,617	1,654	1,444	1,185	1,112	883	1,094	1,015
	Payroll	53,777	61,101	64,074	56,122	51,959	39,206	37,292	42,852	42,934
Seafood sales, retail	Establishments	28	31	28	32	44	37	40	47	49
	Employees	160	179	182	198	235	284	222	291	292
	Payroll	4,465	4,296	4,122	4,503	6,379	6,363	6,578	9,322	8,998

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	34	28	32	30	33	36	38	41	43
	Employees	2,543	2,484	2,356	2,330	2,173	1,607	2,039	1,672	2,353
	Payroll	122,338	128,253	128,747	129,997	130,456	112,319	128,786	122,000	145,144
Deep sea freight transportation	Establishments	25	27	21	22	23	27	23	24	23
	Employees	1,005	877	736	584	ND ³	276	311	378	197
	Payroll	55,802	53,319	41,689	29,209	ND	16,147	20,559	22,655	14,390
Deep sea passenger transportation	Establishments	5	6	7	8	7	3	2	3	3
	Employees	412	419	435	494	ND	ND	ND	ND	ND
	Payroll	11,949	15,633	18,145	20,543	ND	ND	ND	ND	ND
Marinas	Establishments	127	123	116	119	111	102	96	96	103
	Employees	515	574	575	573	406	430	449	442	466
	Payroll	12,951	14,211	15,714	14,516	11,283	12,400	12,763	13,556	14,269
Marine cargo handling	Establishments	32	33	36	36	33	23	30	30	29
	Employees	2,861	2,361	3,322	2,847	2,538	ND	ND	4,459	3,764
	Payroll	180,789	186,461	238,138	213,946	194,398	ND	ND	318,873	303,375
Navigational services to shipping	Establishments	62	57	56	57	55	52	53	53	56
	Employees	239	ND	ND	239	218	834	ND	841	942
	Payroll	14,899	ND	ND	20,235	20,962	51,092	ND	60,034	72,120
Port & harbor operations	Establishments	5	7	6	5	4	3	4	6	5
	Employees	ND	ND	ND	ND	37	ND	ND	ND	53
	Payroll	ND	ND	ND	ND	1,565	ND	ND	ND	3,436
Ship & boat building	Establishments	155	141	132	134	135	138	141	154	164
	Employees	6,063	6,036	6,442	5,532	4,974	6,056	6,474	7,154	7,669
	Payroll	210,994	219,467	225,433	194,050	219,980	244,124	272,336	307,735	313,230

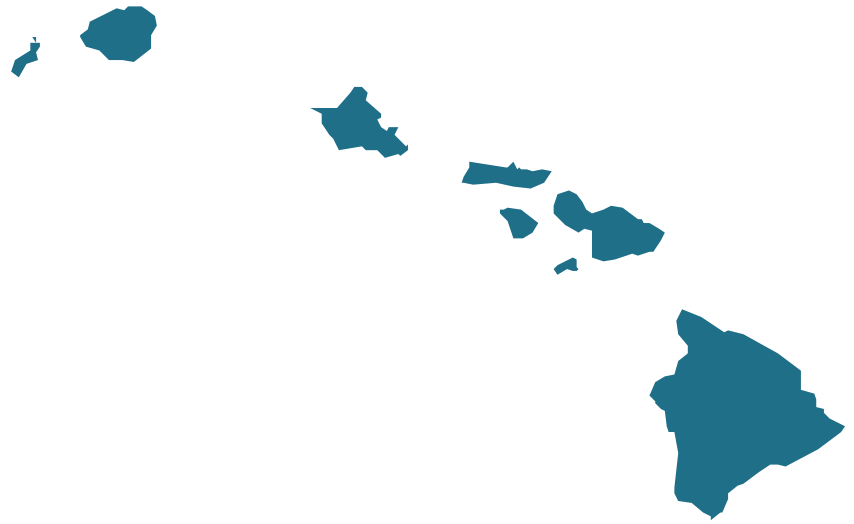
¹The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

Western Pacific

- Hawai'i



Management Context

The Western Pacific Region includes the state of Hawai'i.¹ 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 replace 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 Areas
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. Pacific bigeye tuna is currently subject to overfishing and this status is considered to be primarily due to international fishing pressure. The U.S. harvested 4.5% (or 22.5 million pounds) of the Pacific-wide (western-central and eastern Pacific Ocean) total of Pacific bigeye tuna landings reported in 2007. 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. Catch levels recommended by the WCPFC are not binding and are viewed as suggestions by the Western Pacific Fishery Management Council and by NOAA Fisheries. In contrast, harvest limits established by the IATTC for eastern tropical Pacific bigeye tuna must be carried out by NMFS.²

¹The 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.

²Under 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.

Commercial Fisheries

Fishermen in Hawai'i earned \$76 million from their commercial harvest in 2007, landing almost 29 million pounds of finfish and shellfish. Tunas comprised two-thirds of this ex-vessel revenue (\$51 million) as well as 61% of total landings (17.6 million pounds). Swordfish (\$7.7 million), mahimahi (\$3.5 million), moonfish (\$2.2 million), and marlin (\$2.0 million) also contributed to landings revenue. Lobsters commanded the highest ex-vessel price in 2007, with an average annual price of \$11.84 per pound.

Key Western Pacific Commercial Species

- Lobsters
- Mahimahi (dolphin)
- Marlin
- Moonfish (opah)
- Pomfret
- Scad
- Snappers
- Swordfish
- Tunas
- Wahoo

Economic Impacts

Economic impacts from Hawai'i's seafood industry generated \$516 million in sales impacts, \$262 million in income impacts, and approximately 12,000 full- and part-time jobs in 2007. The retail sector contributed most to sales (54% of the total), income (65%), and employment impacts (64%) with over \$280 million in sales, \$170 million in income, and 7,500 jobs. The commercial harvest sector followed with \$144 million in in-state sales, \$44 million in income impacts, and over 3,100 jobs.

Landings Revenue

Ex-vessel landings revenue for finfish and shellfish totaled over \$75.7 million in 2007, a 24% increase from total revenue generated in 1998. When adjusted for inflation, real ex-vessel revenues increased 3.5%. Ex-vessel revenue in 2007 was a 15% increase from 2006 (\$66.1 million). Finfish and other catch contributed almost 100% of total revenue in 2007 (\$75.5 million), a 28% increase from 1998 (7.0% in real terms). In contrast, revenue generated from shellfish landings decreased 92% (-93% in real terms) from \$2.1 million in 1998 to \$174,000 in 2007. Lobster revenue between 1998 and 2007 decreased 92%, contributing to this decrease in shellfish revenue.

Landings revenue in 2007 was dominated by tunas which contributed \$51.1 million or 68% of total ex-vessel revenue. On average, tunas contributed 64% to total revenue over the 10 year time period. The largest increases in landings revenue from 1998-2007 were for pomfret (341% or 268% in real terms), moonfish (147% or 106% in real terms), and mahimahi (105% or 71% in real terms). Landings revenue between 1998 and 2007 declined for five of the key species or groups

in the Western Pacific. The largest declines in revenue were for lobsters (-92%, -93% in real terms), swordfish (-46% or -55% in real terms), and scad (-45% or -54% in real terms).

Commercial Fish Facts

Landings revenue

- On average, the key species or species groups accounted for 96% of total revenue (\$59.3 million) generated in the Western Pacific.
- Eight of the key species or groups had average annual ex-vessel revenue in excess of \$1.2 million.
- Tunas averaged \$40 million annually over the 1998-2007 time period, accounting for 64% of total landings revenue (finfish and shellfish combined).
- Landings revenue from swordfish decreased 89% from 2000-2001, the largest annual decrease, only to increase 534% from 2004-2005, the largest annual increase of any key species or group.

Landings

- On average, the key species and species groups accounted for 95% of total landings in this region.
- Tunas averaged 15 million pounds annually over the time period, contributing an average of 56% to total landings.
- Landings for swordfish increased 580% from 2004-2005, the largest increase in landings in the 10 year period. This species also had the largest annual decrease in landings, declining 91% from 2000-2001.

Prices

- Lobsters had the highest average annual ex-vessel price at \$11.44 per pound, followed by snappers (\$4.03) and tunas (\$2.58).
- Marlin (\$1.20), moonfish (\$1.48), and pomfret (\$1.78) had the lowest average ex-vessel prices of the key species or groups.
- Marlin had both the largest annual price increase and decrease of any key species or group, decreasing 37% from 2002-2003 then increasing 58% from 2003-2004.

Landings

In 2007, Hawai'ian commercial fishermen landed 29 million pounds of finfish and shellfish, a 1.5% increase from 1998 landings totals. Compared to landings in 2006 (26 million pounds), this was a 13% increase. Finfish and other catch accounted for an average of almost 100% of total landings annually, increasing 2.6% from 1998-2007 and 13% from 2006-2007. Shellfish landings decreased 94% from 336,000 pounds landed in 1998 to 22,000 pounds in 2007, but increased 47% from 2006-2007.

Tunas contributed more to the Western Pacific's total landings than any other species or group with 17.6 million pounds landed in 2007. This was a 21% increase from 1998 total landings of tuna (14.6 million pounds). Swordfish followed with 3.6 million pounds landed in 2007. However, swordfish landings experienced dramatic changes from 1998-2007. From 2000-2001, swordfish landings decreased 91% from 6.4 million pounds to 572,000 pounds. A few years later (2004-2005), landings increased 561% from 520,000 pounds to 3.4 million pounds.

Prices

Overall, 2007 ex-vessel price for all but one key species or species groups was above their 10 year average annual price. Only swordfish had a lower price per pound (\$2.12) in 2007 relative to its annual average (\$2.21) over the time period, declining 7.4% (-23% in real terms). When adjusted for inflation, mahimahi and lobster prices also declined between 1998 and 2007, decreasing 8.9% and 1.9% in real terms, respectively.

Relative to ex-vessel prices in 2006, marlin (37%), lobsters (23%), and wahoo (12%) all had double-digit increases in 2007. Prices for mahimahi (-7%), snappers (-4%), and tunas (-3%) all decreased slightly from 2006 prices.

Recreational Fishing

In 2007, there were 317,000 recreational anglers who fished in the state of Hawai'i. These anglers took 2.6 million fishing trips and of these, 82% were shore-based trips. Bigeye and mackerel scad were the most caught key species or species group with over 1.0 million fish caught in 2007. Almost all of these fish were harvested by anglers rather than released.

Key Western Pacific Recreational Species

- Barracuda (smallmouth bonefish)
- Blue marlin
- Dolphinfin (mahimahi)
- Goatfishes
- Jacks (trevallys and other jacks)
- Bigeye and mackerel scad
- Snappers
- Skipjack tuna
- Yellowfin tuna
- Wahoo

Economic Impacts and Expenditures

Over 5.7 million jobs in Hawai'i were related to recreational fishing activities in 2007. Recreational anglers who fished in the region spent \$601 million in trip-related and durable equipment expenditures. Roughly 92% of the 5.7 million jobs were related to industries that provided support for durable equipment sales and services (4.0 million jobs) and shore-based fishing trip activities (1.2 million jobs).

Durable equipment expenditures contributed \$471 million to Hawai'i's economy or 78% of total trip and durable equipment expenditures. Shore-based fishing trip expenditures contributed \$90 million or 15% of total trip and durable equipment expenditures (or 69% of total trip expenditures). Resident anglers accounted for over 91% of total trip-related expenditures in Hawai'i.

In addition to jobs, the contribution of recreational fishing to Hawai'i's economy can also be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value-

added impacts). In 2007, shore-based fishing trips generated \$104 million in sales (68% of trip-related sales) and \$55 million in value-added impacts (68% of total trip-related value-added impacts). Private boat fishing activities contributed \$39 million in sales (26%) and \$20 million (25%) in value-added impacts. For-hire fishing trips contributed \$10 million in sales (6.5%) and \$5.5 million (6.8%) in value-added impacts.

Expenditures on durable equipment totaled \$471 million in 2007, contributing 78% to total expenditures in the region (trip and durable equipment combined). Expenditures on fishing tackle (\$168 million) and vehicle expenses (\$106 million) accounted for most of the durable equipment expenditures, contributing 36% and 23%, respectively. Other equipment (\$80 million), boat expenses (\$79 million), and second home expenses (\$38 million) also contributed to this total.

In 2007, economic impacts from durable equipment expenditures included over 4.0 million jobs, \$470 million in sales impacts, and \$228 million in value-added impacts.

Participation³

There were 317,000 recreational anglers who fished in Hawai'i in 2007. This was a 28% decrease from 2003 (440,000) and a 20% decrease from 2006 (396,000). Decreases in both coastal county resident⁴ and out-of-state anglers were observed. Coastal county angler participation in 2007 decreased 35% relative to 2003 and decreased 1.7% relative to 2006. Out-of-state angler participation decreased 19% relative to 2003 and decreased 35% relative to 2006.

Fishing Trips³

Recreational fishermen took 2.6 million private or rental boat and shore-based fishing trips in 2007. This was an 7.3% increase from 2003 and a 2.5% decrease from 2006. Shore-based fishing trips accounted for most of the trips taken in Hawai'i: 82% of total fishing trips or 2.1 million trips in 2007. This was a 11% increase from 2003 and a 1.4% increase from 2006. Fishing trips taken from a private or rental boat showed a decreasing trend between 2003 and 2007, decreasing 6.7%. However, between 2006 and 2007, this mode of fishing trip decreased 1.7%.

Harvest and Release³

Bigeye and mackerel scad had the highest catch totals of the Western Pacific's key species and species groups. In 2007, approximately 1.1 million of these fish were caught by anglers and over 99% of these were harvested rather than released. Overall, all of Hawai'i's key species and groups were more often harvested than released. Anglers harvested nearly every dolphinfish caught in 2007. Other key species or groups where a large proportion of fish were harvested include

yellowfin tuna (99%), wahoo (98%), skipjack tuna (98%), and goatfishes (97%).

Six of Hawai'i's ten key species or species groups experienced double-digit declines in the total number of fish caught from 2003-2007. The largest decrease in catch was for goatfishes where 62% less fish were caught by anglers in 2007 (307,000 fish) relative to 2003 (804,000 fish). A similar decline in catch occurred for this species between 2006 and 2007 (63%). Dolphinfish (mahimahi) and barracuda (smallmouth bonefish) experienced modest increases in catch from 2003-2007, increasing 23% and 14%, respectively. However, total catch for both of these species decreased between 2006 and 2007 with anglers catching 38% fewer dolphinfish and 49% fewer barracuda in 2007.

Relative to 2006, only four key species or groups experienced increases in their catch totals: yellowfin tuna (120% increase), blue marlin (50%), bigeye and mackerel scad (34%), and skipjack tuna (15%). Catch totals for all other key species or groups declined from 2006-2007.

Recreational Fishing Facts

Participation

- Over 386,000 anglers fished in Hawai'i annually over the 2003-2007 time period.
- In 2007, Hawai'ian residents made up 54% of total anglers active in the state and averaged 53% of total anglers annually from 2003-2007.
- The largest annual increase in angler participation was a 35% increase in out-of-state anglers from 2005-2006. Out-of-state anglers also experienced the largest annual decrease in participation, decreasing 35% from 2006-2007.

Fishing trips

- In Hawai'i, an average of 2.6 million fishing trips were taken annually from 2003-2007.
- Shore-based fishing trips were very popular with recreational fishermen with 2.1 million trips taken in 2007. Shore-based trips averaged 78% of total fishing trips taken annually in Hawai'i.
- From 2003-2004, private or rental boat fishing trips increased 39%, the largest annual increase in fishing trip mode. Private or rental boat trips also had the largest annual decrease, decreasing 19% from 2004-2005.

Harvest and release

- Bigeye and mackerel scad were the most caught key species or species group, averaging 954,000 fish over the 10 year period. Nearly all of these fish were harvested rather than released in 2007.
- Nine of Hawai'i's ten key species or groups were harvested rather than released with 83-100% of fish harvested. Only trevallies and other jacks were harvested at a lower quantity (57% harvested).
- Blue marlin had the largest annual increase in catch, increasing 350% from 2004-2005. Bigeye and mackerel scad had the largest annual decrease in catch, decreasing 91% from 2003-2004.

³Due to data availability, the time period discussed in this section from 2003-2007.

⁴All anglers in Hawaii are coastal county anglers.

Marine Economy⁵

In 2006, over 33,000 establishments employed approximately 513,000 full- and part-time employees in Hawai'i. Annual payroll totaled \$17 billion, employee compensation totaled \$35 billion, and gross domestic product by state totaled \$59 billion. Gross state product and annual payroll increased the most between 1998 and 2006, increasing 56% and 53%, respectively. Modest increases were observed for employee compensation (41% increase), employee numbers (23%), and establishment numbers (12%). From 2005-2006, each of these economic measures increased slightly, ranging from a 2.7% increase in establishment numbers and a 7.3% increase in total employee compensation.

The commercial fishing location quotient (CFLQ) for Hawai'i decreased 37% from 7.26 in 2002 to 4.61 in 2006. Between 2005 and 2006, the CFLQ mirrored this declining trend, decreasing 6.1%. Despite these declines, Hawai'i's level of commercial fishing-related employment was still higher than the national baseline.⁶

Seafood Sales and Processing

There were 11 nonemployer firms engaged in seafood product preparation and packaging in 2006. This was an 83% increase from 1998 levels. Annual receipts for this industry increased significantly, increasing 2,147% from \$45,000 in 1998 to \$1.0 million in 2006 (a 1,885% increase in real terms). The number of employer establishments engaged in this industry remained relatively constant during this time period with 3 establishments in 2006. Employee and annual payroll totals were not available.

In 2006, there were 33 seafood wholesale establishments that employed 462 full- and part-time workers with an annual payroll of \$17 million. The number of establishments and employees decreased 41% and 9%, respectively, from 1998-2006. Despite these declines in establishments and work force, annual payroll totals increased 12% (but a 1% decrease in real terms).

Nonemployer firms involved in seafood retail decreased 16% between 1998 and 2006 from 37 firms to 31 firms. Despite this, annual receipt totals increased 28% (13% in real terms) to \$3.6 million in 2006. In contrast, employer establishments involved in this industry increased 29% to 27 establishments in 2006. These establishments employed 315 workers with an annual payroll of \$5.6 million. Employee and annual payroll numbers also rose from 1998-2006, increasing 77% and 89% (67% in real terms), respectively.

Transport, Support, and Marine Operations

Data was generally unavailable for this industry sector. When looking at the available information, ship and

boat building industries had the highest number of establishments in 2006 (14 establishments) and employed the most workers (545 employees). With an annual payroll of \$23 million, it ranked second in terms of total annual payroll in 2006. Coastal and Great Lakes freight transportation had the highest annual payroll total (\$37 million).

In terms of large changes between 1998 and 2006, the number of establishments engaged in coastal and Great Lakes freight transportation and marina industries increased the most, increasing 30% and 29%, respectively. In 2006, there were 13 establishments involved in freight transportation for coastal and Great Lakes areas and 9 establishments for marina industries. Deep sea passenger transportation experienced the largest decline in establishment numbers, decreasing 33% over this time period from 3 to 2 establishments.

⁵Data for 2007 was unavailable for this report therefore 2006 information is reported in this section.

⁶The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

2007 Economic Impacts of the Hawai'i Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	516,180	262,253	11,618
Commercial Harvesters	144,205	43,845	3,144
Seafood Processors & Dealers	35,421	19,177	437
Seafood Wholesalers & Distributors	56,322	29,125	547
Retail Sector	280,232	170,106	7,490

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	61,041	62,900	68,196	48,134	52,398	52,678	57,679	71,033	66,119	75,703
Finfish & Other	58,932	61,557	67,833	47,912	52,092	52,416	57,273	70,669	66,013	75,529
Shellfish	2,109	1,343	363	222	306	262	406	364	106	174
Lobsters	1,099	835	99	98	122	68	91	111	61	93
Mahimahi (dolphin)	1,698	2,564	3,187	2,264	2,627	2,937	4,909	3,597	3,640	3,482
Marlin	2,187	2,314	2,235	2,139	2,010	1,986	2,472	2,512	2,558	2,028
Moonfish (Opah)	878	1,297	1,100	999	1,219	1,509	1,343	1,897	1,873	2,170
Pomfret	331	432	499	386	675	777	1,316	1,440	1,311	1,460
Scad	1,996	1,971	1,440	881	1,066	1,094	944	838	1,020	1,099
Snappers	2,113	2,201	2,479	2,034	2,078	2,060	2,234	2,033	1,780	1,699
Swordfish	14,327	14,244	12,280	1,368	1,381	691	1,225	7,768	5,125	7,726
Tunas	32,401	32,849	41,215	34,526	37,599	37,342	38,484	46,070	44,085	51,147
Wahoo	1,469	1,695	1,663	1,657	1,452	1,918	2,201	2,253	2,329	2,087

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	28,520	28,984	28,620	23,526	23,989	23,702	24,456	28,134	25,659	28,937
Finfish & Other	28,184	28,826	28,592	23,506	23,958	23,673	24,426	28,107	25,644	28,916
Shellfish	336	157	28	20	31	28	31	26	15	22
Lobsters	109	73	8	8	10	6	8	10	6	8
Mahimahi (dolphin)	739	1,135	1,528	1,247	1,378	1,325	2,225	1,440	1,342	1,388
Marlin	1,899	1,892	1,582	2,220	1,499	2,337	1,844	2,189	2,389	1,376
Moonfish (Opah)	847	1,105	687	765	912	1,095	786	1,086	1,071	1,226
Pomfret	230	313	277	272	490	459	766	646	576	593
Scad	1,399	1,258	874	503	570	624	478	398	442	463
Snappers	579	605	622	554	522	509	518	441	384	382
Swordfish	6,269	5,629	6,368	572	714	306	520	3,438	2,514	3,643
Tunas	14,570	14,734	15,015	15,300	15,873	14,395	14,965	16,116	14,631	17,588
Wahoo	680	844	654	906	661	989	852	818	891	715

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Lobsters	10.08	11.51	12.14	12.61	12.66	11.88	11.08	10.99	9.66	11.84
Mahimahi (dolphin)	2.30	2.26	2.09	1.82	1.91	2.22	2.21	2.50	2.71	2.51
Marlin	1.15	1.22	1.41	0.96	1.34	0.85	1.34	1.15	1.07	1.47
Moonfish (Opah)	1.04	1.17	1.60	1.31	1.34	1.38	1.71	1.75	1.75	1.77
Pomfret	1.44	1.38	1.80	1.42	1.38	1.69	1.72	2.23	2.28	2.46
Scad	1.43	1.57	1.65	1.75	1.87	1.75	1.97	2.11	2.30	2.37
Snappers	3.65	3.64	3.98	3.67	3.98	4.03	4.31	4.60	4.62	4.43
Swordfish	2.29	2.53	1.93	2.39	1.93	2.26	2.36	2.26	2.04	2.12
Tunas	2.22	2.23	2.74	2.26	2.37	2.59	2.57	2.86	3.01	2.91
Wahoo	2.16	2.01	2.54	1.83	2.20	1.94	2.58	2.75	2.61	2.92

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	367	38,771	19,826
Shore	1,212	103,571	54,676
For-Hire	104	9,956	5,474
Total Durable Equipment Impacts	4,043	469,813	227,523
Total State Trip and Durable Equipment Economic Impacts	5,726	622,111	307,499

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	1,326	31,691	Fishing Tackle	167,893
Shore	2,658	87,550	Other Equipment	79,915
For-Hire	7,199	31	Boat Expenses	78,888
Total Trip Expenditures	11,183	119,272	Vehicle Expenses	105,965
			Second Home Expenses	37,955
			Total Durable Equipment Expenditures	470,615
Total State Trip and Durable Equipment Expenditures				601,070

Recreational Anglers by Residential Area (thousands of anglers)¹

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal						261	223	204	173	170
Non-Coastal						NA ²	NA ²	NA ²	NA ²	NA ²
Out-of-State						180	183	166	224	146
Total Anglers						440	407	370	396	317

Recreational Fishing Effort by Mode (thousands of trips)^{1,3}

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Private or Rental						509	709	578	570	475
Shore						1,893	2,162	1,892	2,074	2,102
Total Trips						2,402	2,871	2,470	2,644	2,577

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)^{1,4}

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Barracuda (Smallmouth Bonefish)	H						25	61	25	63	20
	R						4	9	12	2	13
Dolphinfish (Mahimahi)	H						109	225	178	219	136
	R						1	(1)	1	(1)	(1)
Goatfishes ⁵	H						794	715	447	813	298
	R						10	17	8	16	9
Jacks (Trevallies & Other Jacks) ⁶	H						125	331	257	210	169
	R						171	146	182	210	130
Marlin, Blue	H						4	5	19	3	2
	R						(1)	(1)	(1)	(1)	1
Scad, Bigeye & Mackerel ⁷	H						1,951	179	726	812	1,089
	R						2	(1)	14	(1)	(1)
Snappers ⁸	H						233	236	223	177	104
	R						16	19	57	36	40
Tuna, Skipjack	H						440	420	302	201	228
	R						1	6	1	1	5
Tuna, Yellowfin	H						184	268	231	124	273
	R						5	(1)	9	1	2
Wahoo	H						105	97	54	62	57
	R						(1)	(1)	(1)	(1)	1

¹Participation (number of anglers), effort (number of trips), and catch (number of fish harvested or released) data was not available for 1998-2002.

²All Hawai'i residents are considered coastal county residents thus this category is not applicable (NA).

³Effort data (number of trips) for for-hire boat trips was not available.

⁴In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

⁵Goatfishes include yellowstripe, yellowfin, pflugers, bandtail, doublebar, sidespot, whitesaddle, manybar, blue, and "Goatfish family/genus."

⁶Trevallies & Other Jacks includes bluefin trevally, giant trevally, bigeye trevally, black trevally, African pompano, greater amberjack, island jack, and "Other Jack family/genus."

⁷Scad (Jacks) includes bigeye scad and mackerel scad.

⁸Snappers 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 (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	29,603 (0.4%)	416,571 (0.4%)	11,292 (0.3%)	24,568 (0.4%) ²	37,549 (0.4%)	7.26 ³
2006	33,118 (0.4%)	512,543 (0.4%)	17,287 (0.4%)	34,662 (0.5%)	58,676 (0.4%)	4.61
% change	11.9%	23.0%	53.1%	41.1%	56.3%	-36.5%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	6	8	3	7	7	9	11	5	11
	Receipts	45	160	44	231	1,566	1,034	1,309	409	1,011
Seafood sales, retail	Firms	37	29	23	34	ND ⁴	36	33	29	31
	Receipts	2,829	2,829	3,670	2,497	ND	4,753	2,875	3,487	3,627

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	3	3	3	3	4	4	4	3	3
	Employees	ND	ND	ND	ND	86	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	2,584	ND	ND	ND	ND
Seafood sales, wholesale	Establishments	56	50	49	51	44	33	36	32	33
	Employees	507	493	510	812	525	654	404	485	462
	Payroll	14,958	16,186	17,805	17,656	15,203	12,653	13,949	15,163	16,786
Seafood sales, retail	Establishments	21	21	23	27	29	31	31	29	27
	Employees	178	181	183	235	229	317	321	326	315
	Payroll	2,947	3,063	2,969	3,773	3,737	5,187	5,038	5,007	5,564

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	10	13	13	11	11	10	11	13	13
	Employees	ND	ND	507	463	ND	ND	ND	ND	543
	Payroll	ND	ND	30,087	25,782	ND	ND	ND	ND	36,941
Deep sea freight transportation	Establishments	2	2	2	2	2	1	NA ⁵	NA	NA
	Employees	ND	ND	ND	ND	ND	ND	NA	NA	NA
	Payroll	ND	ND	ND	ND	ND	ND	NA	NA	NA
Deep sea passenger transportation	Establishments	3	2	2	1	1	1	1	2	2
	Employees	646	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	14,819	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	7	6	10	7	8	11	11	10	9
	Employees	66	76	ND	ND	56	177	178	181	152
	Payroll	1,145	1,257	ND	ND	1,414	3,285	3,439	3,354	3,719
Marine cargo handling	Establishments	7	7	7	6	7	8	8	8	7
	Employees	601	673	663	426	756	ND	ND	694	ND
	Payroll	33,008	32,743	37,306	24,920	49,975	ND	ND	53,061	ND
Navigational services to shipping	Establishments	6	6	6	5	7	7	6	6	6
	Employees	ND	126	63	103	ND	ND	ND	ND	ND
	Payroll	ND	6,601	2,637	5,926	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	2	2	2	2	2	2	2	2	2
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ship & boat building	Establishments	17	19	17	17	16	14	17	16	14
	Employees	ND	ND	ND	ND	ND	480	589	ND	545
	Payroll	ND	ND	ND	ND	ND	22,053	20,908	ND	23,134

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

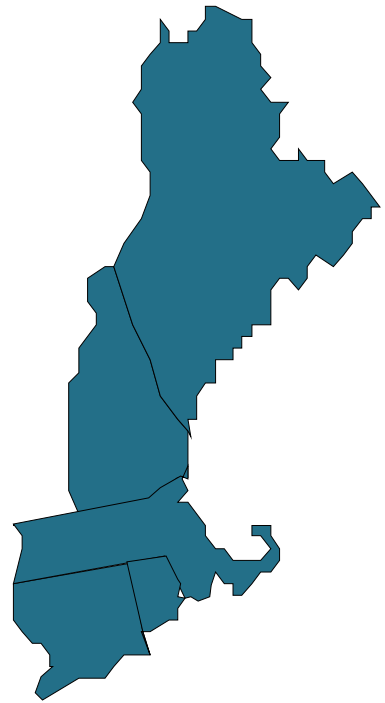
³CFLQ for 1998 was not available; 2002 data were used here.

⁴ND = Data are suppressed due to confidentiality restrictions.

⁵NA = Data are not available.

New England

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



Management Context

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

New England Fishery Management Plans

1. Northeast Multispecies
2. Sea Scallops
3. Monkfish (with the MAFMC)
4. Atlantic Herring
5. Small Mesh Multispecies
6. 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, 17 are currently listed as overfished: cod (2 stocks), haddock (2 stocks), American plaice, yellowtail flounder (3 stocks), white hake, windowpane flounder, winter flounder, ocean pout, Atlantic halibut, winter skate, thorny skate, smooth skate, and Atlantic salmon. Nine stocks or stock complexes are currently subject to overfishing: cod (2 stocks), yellowtail flounder (3 stocks), white hake, winter flounder (2 stocks), and thorny skate.

Currently, expansion of the existing sector-based management program, a type of catch share program, initiated during 2004 for the Northeast Multispecies Plan is under development in New England.¹ The proposed changes would expand the number of sectors from 2 to 19. The two sectors currently operating include the Georges Bank cod hook gear sector fishery, which was implemented in 2004, and the Georges Bank cod fixed gear sector fishery, established in 2006. The ex-vessel value of these fisheries totaled over \$1.5 million in 2007. In the sea scallop fishery, a new individual fishing quota (IFQ) program for the general category vessel program is anticipated to start in 2010.

Commercial Fisheries

In 2007, New England commercial fishermen harvested 584 million pounds of finfish and shellfish and generated \$916 million in ex-vessel revenue. Landings revenue was dominated by shellfish such as lobster (\$364 million) and sea scallop (\$236 million). With ex-vessel price in 2007 at \$4.74 and \$6.70, respectively, lobster contributed 40% to total landings revenue while sea scallops contributed 26%. These and other shellfish

¹The Northeast Multispecies Fishery Management Plan defines a sector as being a group of self selected vessel owners where a catch share is allocated to the group rather than to individual vessels.

species and groups made up 81% of total revenue in New England. Atlantic herring was a significant component of total landings in 2007, making up 27% of the total. However, with an average annual price of \$0.12 per pound in 2007, Atlantic herring contributed only 2.0% to total landings revenue.

Of the five New England states covered in this report, Massachusetts contributed the most to landings revenue and pounds landed with over \$458 million and 314 million pounds landed in 2007. Maine (\$320 million, 176 million pounds), Rhode Island (\$77 million, 76 million pounds), Connecticut (\$42 million, 10 million pounds), and New Hampshire (\$19 million, 8.4 million pounds) followed.

Key New England Commercial Species

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

Economic Impacts

Massachusetts led the region in terms of sales, income, and job impacts related to the seafood industry in 2007. In-state sales in Massachusetts generated nearly \$3.9 billion in 2007 with income impacts totaling \$2.1 billion. Over 73,000 full- and part-time jobs were generated from the seafood industry in this state. Sales impacts in Maine also totaled over a billion dollars (\$1.2 billion). Income (\$641 million) and job impacts (25,000 full- and part-time jobs) in Maine ranked second in New England. In terms of employment, Rhode Island (12,000 jobs), New Hampshire (7,100 jobs), and Connecticut (6,500 jobs) followed.

Landings Revenue

In 2007, ex-vessel revenue from finfish and shellfish harvest totaled \$916 million, a 70% increase (42% in real terms) from landings revenue in 1998 (\$540 million) but a 4% decrease (-9.1% in real terms) from 2006 (\$953 million). Massachusetts fishermen generated most of this revenue. Shellfish revenue accounted for 81% of total revenue in New England, bringing in \$740 million in 2007. This was an 114% increase (79% in real terms) relative to 1998 (\$345 million), but a 3.9% (-9.1% in real terms) decrease relative to 2006 (\$769 million). Finfish revenue decreased 9.6% (-25% in real terms) from \$195 million (1998) to \$176 million (2007). Finfish revenue between 2006 and 2007 mirrored this decreasing trend, decreasing 4.1% (-9.4% in real terms).

Across New England, finfish revenue decreased in each state between 1998 and 2007 in either current and/or real terms. Maine had the largest

decrease with finfish revenue decreasing 34% (-45% in real terms), followed by Connecticut (-29%, -41% in real terms), New Hampshire (-21%, -34% in real terms), Rhode Island (0.9%, -16% in real terms), and Massachusetts (1.3%, -15% in real terms).

In contrast, shellfish revenue increased across the region, with the largest gain in Massachusetts (257% increase, 198% in real terms). New Hampshire (152%, 110% in real terms), Maine (73%, 45% in real terms), Connecticut (31%, 9.2% in real terms), and Rhode Island (9.9%, -8.3% in real terms) followed.

New England key species and species groups with large changes in total revenue over the 10 year time period include: sea scallop (433% increase, 345% in real terms), quahog clam (268%, 207% in real terms), Atlantic mackerel (152%, 111% in real terms), bluefin tuna (-83%, -85% in real terms), and flounders (-27%, -39% in real terms).

At the state level, key species or groups with large changes in landings revenue from 1998-2007 include: snails or conchs (1,980% increase), quahog clam (302%), sea scallop (230%), lobster (-74% decrease), and goosefish (-49% decrease) in Connecticut; bloodworms (123%), Atlantic herring (92%), lobster (90%), and sea urchins (-89%) in Maine; all other clams (1,184%), Atlantic mackerel (557%), sea scallop (504%), and Atlantic herring (110%) in Massachusetts; Atlantic herring (513%), haddock (109%), and shrimp (-60%) in New Hampshire; and scups or porgies (141%), quahog clam (104%), and Atlantic herring (-53%) in Rhode Island.

Landings

Fishermen in New England landed over 584 million pounds in 2007. This was a 3% decrease from the 602 million pounds landed in 1998, and a 17% decrease from the 701 million landed in 2006. Finfish contributed 63% of total landings in 2007 (371 million pounds), a 13% decrease from 1998. From 2006-2007, finfish landings decreased 20%. Shellfish landings increased 21% from 1998-2007, from 176 million pounds (1998) to 213 million pounds (2007). Shellfish landings decreased 10% between 2006 and 2007.

Finfish landings decreased in four of the five New England states between 1998 and 2007. Connecticut had the largest decrease (-59%) followed by Rhode Island (-52%), New Hampshire (-29%), and Maine (-17%). Massachusetts showed a small increase in finfish landings with a 7.6% increase between 1998 and 2007.

Shellfish landings increased in Massachusetts (89%), Maine (16%), and New Hampshire (12%), but decreased in Rhode Island (-29%) and Connecticut (-22%).

Of New England's key species and species groups, Atlantic herring contributed the most to total landings with 155 million pounds landed in 2007. This was a 13% decrease in landings relative to 1998 totals and a 24% decrease relative to 2006. Despite these declines, Atlantic herring is a significant component of New

England's harvest, contributing 27% of total landings in 2007. Fishermen in Massachusetts and Maine harvest the majority of this species, landing 73 million pounds and 72 million pounds, respectively.

Key species or groups with the largest increases in annual landings totals from 1998-2007 were: Atlantic mackerel (515%), sea scallop (408%), and quahog clam (108%). Total landings of bluefin tuna (-87%), squid (-57%), goosefish (-55%), and flounders (-51%) decreased during this period.

Commercial Fish Facts

Landings revenue

- On average, New England's key species or species groups accounted for 84% of total revenue generated in the region.
- Lobster and sea scallops contributed the most to total revenue, averaging \$315 million and \$145 million, respectively, from 1998-2007. In 2007, fishermen in Maine generated most of the revenue from lobsters that year, while Massachusetts fishermen led the region in sea scallop revenue.
- The largest annual increase in revenue was 764% for Atlantic mackerel, which increased from \$437,000 to \$3.8 million from 2001-2002. The largest annual decrease was a 72% decrease in Atlantic mackerel revenue (2004-2005).

Landings

- New England's key species and groups contributed an average of 73% to total landings annually.
- Atlantic herring contributed the most to landings in the region, averaging 182 million pounds from 1998-2007. Commercial fishermen in Massachusetts and Maine harvested the majority of this species in 2007.
- Landings of Atlantic mackerel increased dramatically from 2001-2002, increasing 1,575% largely due to an increase in landings in Rhode Island. The largest annual decrease in landings was for Atlantic mackerel which decreased 91% from 2004-2005.

Prices

- Bluefin tuna (\$6.03) had the highest average ex-vessel price per pound from 1998-2007, followed by sea scallop (\$5.58), quahog clam (\$4.34), and lobster (\$3.93).
- Atlantic herring and Atlantic mackerel had the lowest average ex-vessel price per pound at \$0.08 and \$0.21, respectively.
- Atlantic mackerel had the largest annual increase in ex-vessel price, increasing 200% between 2004 and 2005. This was followed by a 61% decline in price between 2005 and 2006.

Prices

With the exception of Atlantic mackerel, 2007 ex-vessel prices for New England's key species and groups was higher than their 10 year average price per pound. Large double-digit increases in prices were observed for eight of the ten key species and groups between 1998 and 2007. The largest increases were for Atlantic herring (100%),

67% in real terms), goosefish (90%, 58% in real terms), and quahog clam (77%, 48% in real terms).

Atlantic mackerel and sea scallops experienced a decrease in ex-vessel price in current and/or real terms. Atlantic mackerel decreased 59% from \$0.29 to \$0.12 per pound from 1998-2007 (66% in real terms). Sea scallops increased slightly during this period from \$6.40 to \$6.70 per pound (4.7% increase), but in real terms decreased 13%.

Relative to ex-vessel prices in 2006, the New England Region’s Atlantic herring (20%), lobster (12%), and bluefin tuna (11%) experienced double-digit increases in 2007. In contrast, Atlantic mackerel (-14%) and cod and haddock (-2%) prices decreased from 2006-2007.

At the state level, key species or groups with large changes in ex-vessel price from 1998-2007 include: snails or conchs (505% increase), Eastern oyster (153%), quahog clam (96%), and scups or porgies (-37% decrease) in Connecticut; goosefish (102%), bloodworms (100%), blue mussel (95%), and pollock (-23%) in Maine; Eastern oyster (5152%), all other clams (439%), Atlantic herring (120%), and Atlantic mackerel (-68%) in Massachusetts; Atlantic herring (78%), Atlantic cod (63%), and shrimp (-54%) in New Hampshire; and Atlantic herring (117%), goosefish (100%), quahog clam (75%), and scups or porgies (-51%) in Rhode Island.

Recreational Fishing

In 2007, over 1.6 million resident recreational anglers fished in the New England Region. Both resident and non-resident anglers took 9.7 million fishing trips in New England in 2007. Over 87% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 50% of them were taken from a private or rental boat and another 45% were shore-based. Striped bass were the most caught key species or species group with over 10 million fish caught in 2007, 38% of total fish caught in the region. Almost all of these fish, over 94% of them, were released rather than harvested.

Key New England Recreational Species	
• Striped bass	• Little tunny
• Bluefish	• Atlantic mackerel
• Atlantic cod	• Porgies (scup)
• Summer flounder	• Bluefin tuna
• Winter flounder	• Wrasses (tautog)

Economic Impacts and Expenditures

The contribution of recreational fishing activities in New England are reported in terms of economic impacts at the state level (employment, sales, and value-added impacts) and expenditures on fishing trips and durable equipment at the region level. Employment impacts in Massachusetts were highest in the region with over

6,100 full- and part-time jobs supported by recreational fishing activities in this state. Connecticut (3,800 full- and part-time jobs), Maine (2,000 jobs), Rhode Island (1,300 jobs), and New Hampshire (488 jobs) followed in terms of jobs supported by recreational fishing activities.

Overall, these jobs were related to recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) or expenditures on durable equipment. Throughout New England, most of the jobs supported in 2007 were related to expenditures on durable equipment: 91% of jobs in Connecticut, 49% of jobs in Rhode Island, 45% of jobs in Massachusetts, 43% of jobs in New Hampshire, and 41% of jobs in Maine. When looking at which fishing mode contributed most to jobs in each state, shore-based fishing trips supported most of the jobs in Rhode Island, Maine, and Massachusetts. Most of the fishing trip-related jobs in Connecticut were related to private or rental boat trips and in New Hampshire, for-hire boat trips supported most trip-related jobs.

In addition to jobs, the contribution of recreational fishing activities to New England’s economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value-added impacts). In 2007, sales and value-added impacts were highest in Massachusetts (\$806 million in sales impacts; \$439 million in value-added impacts) and Connecticut (\$584 million; \$336 million). These states were followed by Maine (\$167 million; \$87 million), Rhode Island (\$145 million; \$72 million), and New Hampshire (\$55 million; \$30 million). Most of these sales and value-added impacts were related to expenditures on durable equipment. In terms of which fishing mode contributed the most to sales and value-added impacts at the state level: shore-based fishing trips contributed the most in Massachusetts, Maine, and Rhode Island; private or rental boat trips in Connecticut; and for-hire boat trips in New Hampshire.

Overall, total fishing trip and durable equipment expenditures generated \$1.8 billion across New England in 2007. Approximately 75% of these expenditures were related to durable equipment purchases. Vehicle (\$487 million), fishing tackle (\$379 million), and boat-related expenses (\$334 million) accounted for the majority of durable equipment expenditures. Fishing-trip related expenditures by New England’s non-residents totaled over \$245 million and most of this was related to shore-based fishing trips (\$177 million). New Englanders generated \$199 million in trip-related expenditures with most of these expenses related to private or rental boat trips (\$114 million).

Participation

There were 1.6 million resident recreational anglers who fished in New England in 2007. This was a 65% increase from 1998 (976,000 anglers) and equaled the number of anglers who fished in 2006. These anglers were New England residents from either a coastal (1.4 million anglers) or non-coastal county (205,000 anglers).² Over 87% of total anglers in 2007 were residents of a coastal county. Coastal county angler participation in 2007 increased 59% relative to 1998 (887,000 anglers) and remained constant between 2006 and 2007. Non-coastal county angler participation increased 130% relative to 1998 (89,000 anglers) and increased 9.0% relative to 2006 (188,000 anglers). When looking at where most anglers fished in 2007, over 81% of New England's anglers fished in Massachusetts.

In 2007, the majority of recreational fishermen in Massachusetts, Connecticut, and New Hampshire were residents of a coastal county within their respective state. These anglers comprised 83% of total anglers in Connecticut, 56% of total anglers in New Hampshire, and 51% of total anglers in Massachusetts. In contrast, most of Maine and Rhode Island's anglers in 2007 were out-of-state residents: 260,000 anglers or 58% of total anglers in Maine, and 229,000 anglers or 57% of total anglers in Rhode Island. Throughout New England, anglers from a non-coastal county³ accounted for a minority of total anglers in 2007: 2.9% in Maine, 7.6% in New Hampshire, and 14% in Massachusetts.

Fishing Trips

Recreational fishermen took 9.7 million fishing trips in New England in 2007. This was a 43% increase from 1998 (6.8 million trips) and equaled the number of trips taken in 2006. In 2007, approximately half of total trips in the region were taken from a private or rental boat (4.9 million trips). Shore-based fishing trips were also popular with 4.4 million trips taken in 2007 or 45% of total trips in New England. This fishing mode was the only one to see a decrease from 2006-2007, decreasing 3.4%. There were 480,000 fishing trips taken from a for-hire boat in 2007.

There were 4.7 million fishing trips taken in Massachusetts in 2007. Trips taken from this state comprised most of the fishing trips taken in New England: 49% of total trips in the region. Private or rental boat trips were the most popular fishing mode in Massachusetts (2.4 million trips) despite a 1% decrease from 2006-2007. Connecticut ranked second in terms of the total number of fishing trips taken in New England

²At the state level, out-of-state anglers are estimated. However at the region level, out-of-region anglers are not estimated thus only New England resident anglers are discussed here. In *Fisheries Economics of the U.S., 2006* (FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1998-2007 angler participation totals excludes these anglers therefore the annual region totals reported here are smaller than those reported in FEUS 2006.

³All resident anglers in Rhode Island and Connecticut are coastal county anglers.

with 1.7 million trips taken by anglers in 2007. Rhode Island (1.5 million trips), Maine (1.2 million trips), and New Hampshire (538,000 trips) followed. Private or rental boat trips accounted for most of the trips taken in Connecticut and New Hampshire, while shore-based trips were the most popular mode in Rhode Island and Maine.

Recreational Fishing Facts

Participation

- An average of 1.3 million resident anglers fished in New England annually from 1998-2007. Most of these anglers fished in Massachusetts.
- In 2007, coastal county residents made up 87% of total anglers in this region. These anglers averaged 89% of total anglers annually over the 10 year time period.
- Non-coastal county resident anglers had the largest annual decrease in participation, decreasing 16% from 1998-1999. These anglers also had the largest annual increase in participation, increasing 61% from 1999-2000.

Fishing trips

- In New England, an average of 8.6 million fishing trips were taken annually from 1998-2007. Most of these trips were taken in Massachusetts.
- Private or rental boat and shore-based fishing trips accounted for 4.9 million and 4.4 million fishing trips, respectively, in 2007. Together, these made up 95% of fishing trips taken in that year.
- From 1999-2000, private or rental boat trips increased 44%, the largest annual increase in fishing trip mode. From 2001-2002, for-hire fishing trips declined 23%, the largest annual decrease.

Harvest and release

- Striped bass was the most caught key species or species group, averaging 10 million fish caught over the 10 year time period. Of these, 95% were released rather than harvested.
- Seven of New England's ten key species or groups were released by anglers rather than harvested. Examples include striped bass (95% released), little tunny (92%), and bluefish (69%).
- Atlantic mackerel (90% harvested), winter flounder (61%), and porgies or scup (53%) were key species or groups more often harvested by anglers than released.
- Little tunny had the largest annual increase in catch, increasing 239% from 2003-2004. Bluefin tuna had the largest annual decrease in catch, decreasing 350% from 1999-2000.

Harvest and Release

Striped bass had the highest catch totals of any key species and species group in New England. In 2007, approximately 10.4 million fish were caught by anglers fishing in the region and 94% of these fish were released rather than harvested. Over 59% of the striped bass caught in the region were caught in Massachusetts. Little tunny were also released in large numbers (94% released rather

than harvested). Overall, most of New England's key species or groups were released rather than harvested. Only Atlantic mackerel (94% harvested), bluefin tuna (61%), and winter flounder (55%) were harvested more often than released.

Many of New England's key species and species groups had dramatic changes in catch totals from 1998-2007. Total catch of bluefin tuna increased 2,200% during this period. Little tunny (356% increase), bluefish (190%), porgies or scup (173%), and wrasses or tautog (171%) all experienced significant increases in their catch totals. Total catch of winter flounder decreased substantially with anglers catching 83% fewer fish in 2007.

Between 2006 and 2007, large changes in catch totals were observed for the following key species or species group: little tunny (105% increase), wrasses or tautog (56%), Atlantic cod (40%), summer flounder (45% decrease), striped bass (-39%), and Atlantic mackerel (-37%).

At the state level, striped bass was the most caught key species or species group in 2007 for Massachusetts (6.2 million fish), Connecticut (1.9 million fish), and New Hampshire (296,000 fish). The majority of these fish were released rather than harvested. Striped bass catch totals in Connecticut were a 10% increase from 2006 totals. However, a decrease in the number of striped bass caught from 2006-2007 was observed in New Hampshire (49% decrease) and Massachusetts (-32%).

Anglers in Maine caught more Atlantic mackerel than any other key species or group with over 1.2 million fish caught in 2007. This was an 156% increase relative to 2006 (482,000 fish). In Rhode Island, scup were caught in the largest numbers in 2007 with 1.2 million fish caught. This was a 9.5% decrease in catch relative to 2006 (1.3 million fish).

Marine Economy⁴

In 2006, New England's gross domestic product by state was \$688 billion. Employee compensation totaled \$414 billion and annual payroll totaled \$283 billion. Respectively, these totals were a 43%, 19%, and 40% increase from 1998 levels, and a 4.9%, 5.1%, and 5.1% increase from 2005 levels. There were approximately 381,000 establishments and 6.2 million full- and part-time employees across the region in 2006. Both of these economic indicators increased slightly between 1998 and 2006 (4.7% and 6.2%, respectively) and between 2005 and 2006 (0.1% and 2.1%, respectively).

At the state level, Massachusetts had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the region. Massachusetts' 175,000 establishments employed over 3.0 million employees in 2006. The gross state product in Massachusetts was \$335 billion,

followed by Connecticut (\$205 billion), New Hampshire (\$56 billion), Maine (\$46 billion), and Rhode Island (\$46 billion).

Among the New England states where data was available,⁵ Maine had the highest commercial fishing location quotient (CFLQ) at 12.43 in 2006. This was a 54% increase from 2001 (8.09) and a 7.2% increase from 2005 (11.59). Maine's CFLQ suggests that the level of employment in commercial fishing-related industries in Maine is over 12 times higher than the national level of employment in these industries.⁶ The CFLQ in 2006 was 3.91 in Rhode Island (a 36% increase relative to 2001) and 0.52 in Connecticut (a 13% decrease relative to 2001).

Seafood Sales and Processing

In 2006, there were 113 nonemployer firms engaged in seafood product preparation and packaging across New England. This was a 49% increase relative to 1998 levels. Most of these firms were located in Maine (48%). Regionwide, annual receipts for this industry totaled \$15 million in 2006, a 92% increase (70% in real terms) from 1998-2006.

Employer establishments engaged in this industry totaled 95 in 2006, with 50% of them located in Massachusetts. From 1998-2006, the number of establishments regionwide decreased 1%. Over 3,500 full- and part-time workers were employed by these establishments in 2006 (9% increase relative to 1998) and the annual payroll totaled \$144 million (51% increase).

In 2006, there were 370 seafood wholesale establishments that employed approximately 2,900 workers with an annual payroll totaling \$120 million. Across New England, these seafood wholesale establishments, employee numbers, and annual payroll decreased over the time period, -34%, -41%, and -17%, respectively. Declining trends were also experienced in all five New England states.

When looking at seafood retail firms (156 in 2006) and establishments (248 in 2006), the number of nonemployer firms remained flat from 1998-2006. A 71% increase in firm numbers was observed in Rhode Island but decreases occurred in Maine (-15%), Connecticut (-12%), and New Hampshire (-9%). Annual receipts for these firms, which totaled \$20 million in 2006, also remained flat during this time period.

Employer establishments engaged in seafood retail increased 27% regionwide from 1998-2006. Increases were observed in all states, with the largest increases in New Hampshire (114%) and

⁴Data for 2007 was unavailable for this report therefore 2006 information is reported in this section.

⁵The CFLQ for 2006 was not available for New Hampshire or Massachusetts.

⁶The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

Maine (96%). Employee numbers increased 53% across New England to 1,145 workers in 2006. Annual payroll increased to \$30 million, an 136% increase from 1998 totals (109% in real terms). Most of these establishments were located in Massachusetts.

harbor operations (300% increase in establishments in Massachusetts, 100% increase in Rhode Island).

Transport, Support, and Marine Operations

Marina industries had the highest number of establishments in 2006 with 442 establishments across New England. This was a 2% increase over 1998 levels. Most of these marina operations were located in Massachusetts and Connecticut. Ship and boat building industries employed the most people (8,100 full- and part-time workers) and had the highest annual payroll (\$373 million). Large increases were experienced in this industry, with employee numbers increasing 1,501% and annual payroll totals increasing 2,131% from 1998-2006 (1,871% in real terms). Most of the ship and boat building activity in the region occurred in Maine and Rhode Island.

Other industries with large or modest changes from 1998-2006 were: coastal and Great Lakes freight transportation (71% increase in establishments in Massachusetts, -69% in Connecticut, -50% in Maine); deep sea freight transportation (100% increase in establishments in Rhode Island, 75% in Connecticut, -50% in Maine); deep sea passenger transportation (100% increase in establishments in Massachusetts, -50% in Connecticut and Maine); marina operations (72% increase in annual payroll in Connecticut, 51% in Rhode Island); marine cargo handling (-50% increase in establishments in Maine); navigational services to shipping industries (200% increase in establishments in Connecticut, 100% in New Hampshire, 57% in Massachusetts, -36% in Rhode Island); and port and

2007 Economic Impacts of the New England Region Seafood Industry (thousands of dollars)

	Total Landings Revenue	Total Sales Impacts	Total Income Impacts	Total Job Impacts
Connecticut	42,079	335,092	174,907	6,499
Maine	319,522	1,226,135	640,886	24,847
Massachusetts	458,347	3,865,974	2,053,461	73,196
New Hampshire	19,088	343,078	191,639	7,121
Rhode Island	76,882	556,874	299,552	11,755

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	540,259	662,126	688,422	638,028	696,423	690,692	821,140	970,311	953,209	915,919
Finfish & Other	195,084	205,598	218,552	220,052	207,082	200,351	194,962	200,702	183,967	176,361
Shellfish	345,175	456,527	469,870	417,975	489,341	490,341	626,179	769,608	769,242	739,558
Clam, Quahog	9,302	11,179	17,456	17,716	17,193	16,857	16,723	6,710	26,865	34,183
Cod & Haddock	33,245	32,849	37,837	46,416	49,679	44,386	40,093	39,814	31,900	39,291
Flounders	46,325	42,602	48,340	49,845	49,201	47,221	43,762	42,312	37,724	33,651
Goosefish	24,708	36,210	44,160	35,721	29,194	30,031	27,970	34,394	26,591	21,202
Herring, Atlantic	10,775	11,014	9,655	12,634	9,005	15,274	14,957	20,086	21,328	18,691
Lobster	222,607	298,519	298,516	239,681	287,621	277,946	368,647	408,712	386,059	364,282
Mackerel, Atlantic	2,379	1,223	644	437	3,776	4,404	10,414	2,923	13,527	6,001
Scallop, Sea	44,393	78,823	94,604	95,616	109,634	116,454	157,808	250,675	263,665	236,393
Squid	22,581	19,416	14,597	12,915	15,786	17,283	28,016	20,207	19,984	15,825
Tuna, Bluefin	11,700	14,042	17,305	17,043	14,349	8,267	4,297	3,186	1,715	2,049

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	602,010	583,885	576,064	631,043	588,891	660,283	723,587	684,913	701,335	584,193
Finfish & Other	425,568	402,250	382,693	458,053	387,327	468,511	487,933	460,989	463,683	370,810
Shellfish	176,442	181,635	193,371	172,990	201,564	191,772	235,654	223,924	237,652	213,383
Clam, Quahog	2,456	2,425	5,447	4,684	6,116	5,173	6,231	1,088	4,216	5,095
Cod & Haddock	30,682	28,212	33,791	45,931	45,469	38,482	34,159	30,494	19,812	24,933
Flounders	32,974	32,047	43,733	48,435	41,758	39,782	40,980	30,272	19,540	16,100
Goosefish	43,474	43,930	38,803	43,008	41,975	46,751	39,745	34,858	26,144	19,587
Herring, Atlantic	177,850	174,384	155,849	208,232	134,605	209,933	188,348	212,389	204,496	155,370
Lobster	70,842	81,160	83,029	68,560	81,382	70,502	88,678	86,223	90,843	76,928
Mackerel, Atlantic	8,248	5,783	2,468	1,591	26,649	34,839	88,124	8,223	99,751	50,761
Scallop, Sea	6,941	13,667	17,871	24,741	27,394	27,587	30,425	32,026	40,596	35,271
Squid	42,985	25,203	28,870	24,959	27,893	29,405	47,743	26,748	25,333	18,574
Tuna, Bluefin	2,230	2,230	2,243	2,534	2,386	1,787	704	722	274	296

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clam, Quahog	3.79	4.61	3.20	3.78	2.81	3.26	2.68	6.17	6.37	6.71
Cod & Haddock	1.08	1.16	1.12	1.01	1.09	1.15	1.17	1.31	1.61	1.58
Flounders	1.40	1.33	1.11	1.03	1.18	1.19	1.07	1.40	1.93	2.09
Goosefish	0.57	0.82	1.14	0.83	0.70	0.64	0.70	0.99	1.02	1.08
Herring, Atlantic	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.09	0.10	0.12
Lobster	3.14	3.68	3.60	3.50	3.53	3.94	4.16	4.74	4.25	4.74
Mackerel, Atlantic	0.29	0.21	0.26	0.28	0.14	0.13	0.12	0.36	0.14	0.12
Scallop, Sea	6.40	5.77	5.29	3.86	4.00	4.22	5.19	7.83	6.49	6.70
Squid	0.53	0.77	0.51	0.52	0.57	0.59	0.59	0.76	0.79	0.85
Tuna, Bluefin	5.25	6.30	7.71	6.73	6.01	4.63	6.10	4.41	6.26	6.92

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Trips	Jobs	Total Sales	Value Added
Connecticut	1,683,284	3,848	584,424	336,199
Maine	1,222,302	1,972	166,799	87,024
Massachusetts	4,710,047	6,124	805,956	438,796
New Hampshire	537,684	488	54,657	29,921
Rhode Island	1,545,235	1,286	145,467	71,698

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	29,193	113,804	Fishing Tackle	379,141
Shore	177,012	64,067	Other Equipment	98,224
For-Hire	38,813	20,742	Boat Expenses	334,497
Total Trip Expenditures	245,018	198,613	Vehicle Expenses	487,269
			Second Home Expenses	13,660
			Total Durable Equipment Expenditures	1,312,791
Total State Trip and Durable Equipment Expenditures				1,756,422

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	887	756	1,042	969	1,069	1,198	1,155	1,349	1,408	1,408
Non-Coastal	89	75	121	108	124	152	165	169	188	205
Out-of-State	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
Total Anglers	976	831	1,163	1,077	1,194	1,349	1,319	1,518	1,596	1,614

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	252	223	309	303	235	319	300	418	458	480
Private or Rental	3,322	3,286	4,736	4,857	4,513	4,426	4,450	5,017	4,681	4,863
Shore	3,222	2,968	3,720	3,874	3,844	3,833	3,910	3,819	4,510	4,355
Total Trips	6,796	6,478	8,765	9,035	8,592	8,578	8,660	9,254	9,650	9,699

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)²

Species/Groups	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Bass, Striped	H	361	265	396	498	523	701	608	691	585	638
	R	9,759	6,436	10,002	7,931	8,577	6,760	8,586	10,831	16,327	9,739
Bluefish	H	637	734	669	974	865	1,167	1,279	1,234	1,541	1,359
	R	914	1,575	1,695	2,591	2,008	2,531	3,238	3,007	3,016	3,141
Cod, Atlantic	H	455	375	749	1,104	644	706	608	653	264	313
	R	672	583	1,193	1,378	1,143	1,175	945	1,525	802	1,184
Flounder, Summer	H	1,040	822	1,558	573	439	549	786	604	592	417
	R	749	1,162	1,809	1,008	1,559	1,071	1,048	1,491	2,503	1,290
Flounder, Winter	H	400	212	143	169	107	83	54	50	61	54
	R	171	110	136	155	74	41	32	43	65	44
Little Tunny ³	H	2	12	2	3	7	3	13	(1)	2	5
	R	16	48	108	38	54	33	109	52	38	77
Mackerel, Atlantic	H	1,705	2,797	4,067	3,851	3,543	2,399	1,588	3,062	4,849	3,079
	R	335	372	654	772	363	212	162	78	328	188
Porgies (Scup)	H	747	2,122	3,935	3,031	2,460	4,181	2,983	1,567	1,261	1,871
	R	873	1,073	2,549	2,837	2,382	2,829	1,759	1,902	2,548	2,543
Tuna, Bluefin	H	(1)	(1)	6	1	1	5	2	12	4	14
	R	2	(1)	(1)	(1)	(1)	4	15	12	13	9
Wrasses (Tautog)	H	148	159	137	172	265	335	294	228	321	452
	R	381	374	233	338	638	669	545	504	595	981

¹Out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified; NA = data is not available.

²In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

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

2007 Economic Impacts of the Connecticut Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	335,092	174,907	6,499
Commercial Harvesters	80,810	35,428	1,419
Seafood Processors & Dealers	20,141	6,417	138
Seafood Wholesalers & Distributors	58,528	28,777	515
Retail Sector	175,613	104,286	4,426

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	34,359	38,090	31,227	31,176	27,779	29,825	33,399	37,570	36,892	42,079
Finfish & Other	4,805	5,785	6,428	5,712	4,283	4,136	4,575	5,097	3,731	3,419
Shellfish	29,554	32,305	24,799	25,464	23,496	25,690	28,825	32,474	33,161	38,659
Clam, Quahog	5,106	6,500	9,415	9,930	9,202	10,470	10,690	ND ¹	18,135	20,531
Flounders	672	1,114	1,325	1,188	909	896	1,075	1,170	1,026	880
Goosefish	1,002	790	1,556	1,201	790	683	580	658	346	508
Hake	1,521	3,203	2,864	2,341	1,307	1,602	2,028	2,432	1,628	1,226
Lobster	12,129	9,603	5,501	5,450	4,226	3,170	3,166	3,821	4,031	3,220
Oyster, Eastern	8,978	11,050	4,839	3,245	2,012	2,274	1,356	ND ¹	2,206	5,142
Scallop, Sea	2,615	4,223	4,034	5,727	6,400	8,125	11,203	9,761	7,229	8,635
Scups or Porgies	189	177	175	171	195	167	191	263	302	311
Snails (Conchs)	15	73	45	95	199	119	209	233	533	312
Squid, Loligo	614	763	ND ¹	687	1,178	1,400	1,298	1,224	954	744

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	17,625	18,430	19,563	18,748	16,177	16,420	18,196	13,638	11,750	10,263
Finfish & Other	9,488	10,889	11,175	10,609	7,799	7,825	6,832	6,548	5,807	3,927
Shellfish	8,137	7,541	8,388	8,139	8,378	8,595	11,363	7,090	5,943	6,335
Clam, Quahog	1,543	1,560	4,021	3,382	3,435	4,038	5,137	ND ¹	2,665	3,160
Flounders	318	758	1,041	1,011	633	565	637	582	456	345
Goosefish	1,703	968	1,544	1,360	1,029	1,023	897	524	496	457
Hake	4,157	6,855	6,598	5,644	2,904	2,875	2,936	3,735	2,632	1,831
Lobster	3,715	2,596	1,394	1,330	1,067	671	647	714	793	568
Oyster, Eastern	1,383	1,309	624	434	247	279	186	ND ¹	77	313
Scallop, Sea	412	771	800	1,538	1,579	1,908	2,172	1,272	1,104	1,318
Scups or Porgies	98	96	142	220	314	292	256	328	298	256
Snails (Conchs)	35	116	70	36	128	70	31	50	101	117
Squid, Loligo	973	1,120	ND ¹	1,026	1,778	1,572	1,699	1,537	1,157	811

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clam, Quahog	3.31	4.17	2.34	2.94	2.68	2.59	2.08	ND ¹	6.80	6.50
Flounders	2.11	1.47	1.27	1.17	1.44	1.59	1.69	2.01	2.25	2.55
Goosefish	0.59	0.82	1.01	0.88	0.77	0.67	0.65	1.26	0.70	1.11
Hake	0.37	0.47	0.43	0.41	0.45	0.56	0.69	0.65	0.62	0.67
Lobster	3.26	3.70	3.95	4.10	3.96	4.72	4.89	5.35	5.08	5.67
Oyster, Eastern	6.49	8.44	7.76	7.48	8.16	8.14	7.30	ND ¹	28.61	16.43
Scallop, Sea	6.35	5.47	5.04	3.72	4.05	4.26	5.16	7.67	6.55	6.55
Scups or Porgies	1.93	1.84	1.23	0.77	0.62	0.57	0.75	0.80	1.01	1.22
Snails (Conchs)	0.44	0.63	0.64	2.65	1.55	1.69	6.69	4.66	5.28	2.66
Squid, Loligo	0.63	0.68	ND ¹	0.67	0.66	0.89	0.76	0.80	0.82	0.92

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	231	29,410	18,474
Shore	78	8,687	5,377
For-Hire	51	5,366	3,316
Total Durable Equipment Impacts	3,487	540,961	309,032
Total State Trip and Durable Equipment Economic Impacts	3,848	584,424	336,199

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	2,432	27,614	Fishing Tackle	130,839
Shore	1,526	7,379	Other Equipment	23,558
For-Hire	720	2,880	Boat Expenses	159,252
Total Trip Expenditures	4,678	37,873	Vehicle Expenses	228,475
			Second Home Expenses	0
			Total Durable Equipment Expenditures	542,123
Total State Trip and Durable Equipment Expenditures				584,674

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	290	243	222	246	283	361	297	323	336	302
Non-Coastal	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
Out-of-State	73	55	53	78	87	112	63	77	44	61
Total Anglers	363	297	275	324	371	473	359	400	380	363

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	30	22	46	46	51	64	39	38	45	50
Private or Rental	737	774	854	981	953	875	924	1073	863	1089
Shore	524	523	609	695	645	625	574	483	569	544
Total Trips	1,292	1,319	1,508	1,723	1,650	1,564	1,537	1,594	1,477	1,683

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)²

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	64	56	53	54	51	96	75	115	83	110
	R	1,026	704	926	1,108	697	843	1,079	1,714	1,682	1,832
Bluefish	H	201	196	166	229	269	437	529	293	476	375
	R	200	368	598	697	523	541	903	545	786	847
Cod, Atlantic	H	2	1	(1)	(1)	(1)	2	(1)	(1)	(1)	(1)
	R	3	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Flounder, Summer	H	261	215	372	153	93	166	217	213	107	109
	R	268	502	443	406	452	475	363	839	902	325
Flounder, Winter	H	235	67	10	15	16	24	4	4	8	4
	R	85	25	11	32	9	6	9	1	24	14
Little Tunny ³	H	(1)	1	(1)	1	(1)	1	2	(1)	(1)	(1)
	R	5	3	71	27	28	8	9	(1)	(1)	5
Perch, White	H	25	14	17	(1)	1	11	1	(1)	(1)	(1)
	R	23	14	140	7	27	28	30	3	3	88
Porgies (Scup)	H	190	374	1,318	1,016	882	1,529	564	724	519	690
	R	167	273	925	931	570	804	387	719	733	871
Shad, Hickory	H	50	40	(1)	16	71	71	28	52	80	57
	R	207	81	48	88	377	79	103	35	110	8
Wrasses (Tautog)	H	67	16	11	17	100	168	98	75	176	211
	R	208	68	29	59	219	283	329	144	141	445

¹All Connecticut residents are considered coastal county residents thus this category is not applicable (NA).

²In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

³This 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 (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	92,362 (1.3%)	1,493,964 (1.4%)	58,226 (1.8%)	96,391 (1.6%) ²	145,373 (1.7%)	0.6
2006	93,421 (1.2%)	1,585,843 (1.3%)	78,835 (1.6%)	116,070 (1.6%)	204,964 (1.6%)	0.52
% change	1.1%	6.2%	35.4%	20.4%	41.0%	-13.3%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	NA ³	NA	4	NA	NA	7	7	7	11
	Receipts	ND ⁴	ND	441	ND	ND	1,022	1,404	551	3,206
Seafood sales, retail	Firms	17	17	19	20	26	26	25	24	15
	Receipts	2,729	2,250	1,780	2,378	3,225	2,966	3,115	3,313	2,915

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	4	3	3	2	2	2	3	3	4
	Employees	ND	ND	ND	ND	ND	ND	ND	113	119
	Payroll	ND	ND	ND	ND	ND	ND	ND	3,656	4,242
Seafood sales, wholesale	Establishments	28	29	26	25	28	19	19	17	19
	Employees	194	187	ND	ND	ND	169	181	ND	ND
	Payroll	8,109	8,725	ND	ND	ND	7,738	7,688	ND	ND
Seafood sales, retail	Establishments	32	36	31	34	36	34	38	39	35
	Employees	89	ND	112	131	165	206	202	187	196
	Payroll	2,243	ND	2,760	3,403	3,859	5,110	5,060	5,028	4,937

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	13	11	10	8	5	6	5	5	4
	Employees	462	ND	396	506	ND	ND	ND	ND	ND
	Payroll	30,673	ND	22,291	31,940	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	8	10	13	12	11	12	13	11	14
	Employees	283	ND	ND	ND	238	270	260	310	235
	Payroll	22,681	ND	ND	ND	18,271	29,086	37,013	36,766	47,845
Deep sea passenger transportation	Establishments	2	1	1	2	2	2	2	2	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	115	107	101	101	108	116	117	117	119
	Employees	800	720	676	ND	722	1,006	1,016	994	1,024
	Payroll	26,045	24,243	24,375	ND	29,690	39,691	41,952	42,754	44,829
Marine cargo handling	Establishments	3	4	1	2	1	NA	1	3	3
	Employees	ND	ND	ND	ND	ND	NA	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	NA	ND	ND	ND
Navigational services to shipping	Establishments	3	6	5	4	8	6	6	8	9
	Employees	ND	ND	ND	ND	ND	ND	ND	45	69
	Payroll	ND	ND	ND	ND	ND	ND	ND	1,768	2,423
Port & harbor operations	Establishments	4	4	3	3	5	4	4	4	4
	Employees	ND	ND	ND	ND	185	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	5,527	ND	ND	ND	ND
Ship & boat building	Establishments	20	18	18	14	12	14	17	17	17
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³NA = Data are not available.

⁴ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Maine Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	1,226,135	640,886	24,847
Commercial Harvesters	236,601	89,414	2,934
Seafood Processors and Dealers	103,741	34,942	1,036
Seafood Wholesalers and Distributors	148,243	76,337	1,515
Retail Sectors	737,550	440,194	19,362

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	217,011	265,213	269,082	241,383	290,315	287,049	367,093	391,903	361,849	319,522
Finfish & Other	52,102	56,789	56,732	56,662	47,489	49,292	48,954	47,090	37,104	34,213
Shellfish	164,909	208,425	212,350	184,721	242,826	237,757	318,139	344,813	324,745	285,310
Bloodworms	2,702	2,888	1,592	4,851	5,759	5,292	7,524	6,039	5,037	6,011
Clam, Ocean Quahog	1,821	2,611	3,310	3,499	4,748	4,480	3,842	3,607	3,919	3,194
Clam, Softshell	10,082	10,465	9,546	16,609	14,370	15,859	16,628	14,081	13,165	11,729
Cod & Haddock	4,820	3,976	5,330	6,469	5,944	4,673	5,401	5,168	3,994	3,726
Goosefish	3,133	5,207	8,876	7,991	6,248	7,852	6,840	6,219	3,238	2,401
Herring, Atlantic	4,746	7,710	6,400	7,165	4,618	7,296	7,943	9,341	10,602	9,126
Lobster	137,189	184,614	187,715	153,982	210,950	205,715	289,079	317,948	297,165	260,328
Mussel, Blue	1,061	688	1,037	2,650	4,117	4,487	3,319	2,625	2,619	1,810
Pollock	3,098	3,111	3,258	2,448	2,386	2,206	2,347	3,105	2,309	2,159
Sea Urchins	17,072	20,300	17,739	12,694	7,657	8,569	7,866	5,142	3,693	1,919

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	184,085	229,604	228,213	236,240	202,483	223,533	228,388	214,424	217,712	176,005
Finfish & Other	114,011	155,592	144,484	167,022	113,132	141,621	130,407	121,239	121,340	94,568
Shellfish	70,074	74,012	83,729	69,218	89,351	81,912	97,981	93,185	96,372	81,437
Bloodworms	493	515	327	644	683	594	615	456	450	548
Clam, Ocean Quahog	728	948	1,208	1,083	1,287	1,194	1,013	1,001	1,214	1,011
Clam, Softshell	2,354	2,282	2,284	2,660	2,423	2,364	2,380	1,857	1,867	1,835
Cod & Haddock	4,198	3,163	4,295	5,741	5,172	3,860	4,594	4,039	2,448	2,349
Goosefish	6,237	7,629	8,601	10,983	11,127	13,291	10,567	7,115	3,666	2,378
Herring, Atlantic	68,255	111,416	100,097	115,825	67,169	96,681	89,687	87,451	96,214	72,356
Lobster	47,037	53,494	57,215	48,618	63,626	54,971	71,574	68,730	72,667	58,516
Mussel, Blue	2,795	1,809	2,838	2,749	4,793	4,287	4,102	3,357	2,898	2,440
Pollock	4,673	3,568	3,955	3,447	2,958	4,085	4,190	5,259	3,678	4,251
Sea Urchins	15,054	15,435	12,898	9,901	6,321	5,963	5,742	3,517	2,800	1,147

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bloodworms	5.49	5.61	4.87	7.53	8.43	8.91	12.24	13.24	11.20	10.97
Clam, Ocean Quahog	2.50	2.75	2.74	3.23	3.69	3.75	3.79	3.60	3.23	3.16
Clam, Softshell	4.28	4.59	4.18	6.25	5.93	6.71	6.99	7.58	7.05	6.39
Cod & Haddock	1.15	1.26	1.24	1.13	1.15	1.21	1.18	1.28	1.63	1.59
Goosefish	0.50	0.68	1.03	0.73	0.56	0.59	0.65	0.87	0.88	1.01
Herring, Atlantic	0.07	0.07	0.06	0.06	0.07	0.08	0.09	0.11	0.11	0.13
Lobster	2.92	3.45	3.28	3.17	3.32	3.74	4.04	4.63	4.09	4.45
Mussel, Blue	0.38	0.38	0.37	0.96	0.86	1.05	0.81	0.78	0.90	0.74
Pollock	0.66	0.87	0.82	0.71	0.81	0.54	0.56	0.59	0.63	0.51
Sea Urchins	1.13	1.32	1.38	1.28	1.21	1.44	1.37	1.46	1.32	1.67

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	119	10,048	5,932
Shore	934	66,765	36,800
For-Hire	118	8,656	4,891
Total Durable Equipment Impacts	802	81,330	39,401
Total State Trip and Durable Equipment Economic Impacts	1,972	166,799	87,024

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	2,212	7,819	Fishing Tackle	29,122
Shore	44,575	4,382	Other Equipment	13,216
For-Hire	5,706	491	Boat Expenses	51,706
Total Trip Expenditures	52,493	12,692	Vehicle Expenses	21,010
			Second Home Expenses	731
			Total Durable Equipment Expenditures	115,786
Total State Trip and Durable Equipment Expenditures				180,971

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	103	112	139	126	127	165	113	190	182	174
Non-Coastal	16	10	20	16	17	23	21	20	22	13
Out-of-State	115	95	150	166	172	170	148	173	285	260
Total Anglers	234	216	310	308	316	358	282	383	489	447

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	3	9	17	20	13	14	38	38	31	33
Private or Rental	259	270	482	444	422	410	315	552	517	486
Shore	415	350	396	469	471	495	406	499	649	703
Total Trips	676	629	895	932	906	919	758	1,089	1,197	1,222

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	38	21	62	60	72	58	37	69	73	71
	R	691	650	943	871	1,392	847	748	3,024	4,063	1,105
Bluefish	H	2	8	(1)	15	24	14	17	19	6	37
	R	(1)	20	4	40	42	23	38	51	42	72
Cod, Atlantic	H	2	13	41	92	15	11	42	26	12	22
	R	7	30	50	73	16	25	43	43	41	79
Flounder, Winter	H	1	(1)	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	1	(1)	3	(1)	1	(1)	(1)	1	(1)
Haddock	H	(1)	1	11	12	3	1	12	7	8	13
	R	(1)	1	16	17	4	4	3	3	4	13
Mackerel, Atlantic	H	571	881	1,406	1,175	1,207	616	778	761	387	1,139
	R	157	165	304	319	234	106	79	32	95	95
Pollock	H	45	16	74	58	76	10	57	45	78	43
	R	20	33	103	130	48	17	39	53	27	19
Shad, American	H	(1)	1	1	(1)	(1)	(1)	(1)	1	4	(1)
	R	(1)	(1)	1	2	(1)	1	2	(1)	20	3
Shark, Blue	H	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	3	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)
Tuna, Bluefin	H	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

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

Maine's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	38,334 (0.6%)	456,715 (0.4%)	11,559 (0.4%)	22,035 (0.4%) ²	31,731 (0.4%)	8.09
2006	42,038 (0.6%)	508,163 (0.4%)	16,665 (0.4%)	26,721 (0.4%)	46,340 (0.4%)	12.43
% change	9.7%	11.3%	44.2%	21.3%	46.0%	53.6%

Seafood Sales and Processing – Nonemployer Firms (thousands of dollars)

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	57	54	51	55	50	62	57	52	54
	Receipts	5,495	4,154	3,657	6,301	3,023	4,699	5,642	5,082	6,463
Seafood Sales, retail	Firms	53	56	60	51	62	60	55	51	45
	Receipts	5,782	6,602	9,505	8,486	8,980	8,365	8,621	7,331	7,115

Seafood Sales and Processing – Employer Establishments (thousands of dollars)

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	35	43	40	36	33	35	28	27	27
	Employees	1,084	1,024	992	1,007	639	656	576	614	616
	Payroll	12,153	12,676	12,110	13,125	11,301	13,999	19,767	12,349	12,304
Seafood sales, wholesale	Establishments	210	201	194	182	190	181	177	177	167
	Employees	1,840	1,722	1,631	1,235	1,256	985	1,048	1,152	996
	Payroll	33,912	34,045	36,325	32,599	36,043	29,643	30,108	30,513	32,192
Seafood sales, retail	Establishments	28	32	34	41	47	51	50	49	55
	Employees	138	146	ND	ND	173	181	189	184	179
	Payroll	2,119	2,512	ND	ND	3,971	4,663	5,112	4,678	4,753

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	6	7	6	6	4	5	4	3	3
	Employees	ND ³	ND	ND	ND	30	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	939	ND	ND	ND	ND
Deep sea freight transportation	Establishments	2	3	3	4	3	2	2	1	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	2	1	2	2	4	1	1	1	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	88	91	91	89	85	79	84	84	84
	Employees	467	508	592	600	503	416	406	411	417
	Payroll	13,208	14,712	16,454	18,121	16,055	12,853	13,369	14,215	15,353
Marine cargo handling	Establishments	6	5	4	4	4	4	4	3	3
	Employees	ND	ND	ND	ND	91	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	3,183	ND	ND	ND	ND
Navigational services to shipping	Establishments	17	16	14	16	18	17	16	16	12
	Employees	60	55	49	45	88	106	91	88	93
	Payroll	2,934	3,015	3,175	3,371	4,341	5,521	4,927	5,890	6,260
Port & harbor operations	Establishments	1	1	1	1	NA	1	1	1	1
	Employees	ND	ND	ND	ND	NA	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	NA	ND	ND	ND	ND
Ship & boat building	Establishments	76	75	72	79	87	91	86	92	89
	Employees	ND	ND	ND	8,242	ND	7,630	7,753	ND	6,808
	Payroll	ND	ND	ND	300,378	ND	332,332	328,179	ND	320,288

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Massachusetts Seafood Industry (*thousands of dollars*)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	3,865,974	2,053,461	73,196
Commercial Harvesters	375,552	155,130	3,267
Seafood Processors and Dealers	443,173	173,662	3,711
Seafood Wholesalers and Distributors	574,303	279,907	5,000
Retail Sectors	2,472,945	1,444,762	61,216

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	205,712	260,250	290,950	278,946	296,922	292,602	325,982	427,340	437,047	458,347
Finfish & Other	108,129	110,159	120,595	122,944	122,845	116,767	109,158	117,000	110,169	109,567
Shellfish	97,582	150,091	170,356	156,002	174,077	175,835	216,824	310,340	326,879	348,780
Clam, Ocean Quahog	8,048	6,905	5,235	ND ¹	ND ¹	7,325	6,919	ND ¹	8,297	10,100
Clams, All Other	1,191	653	581	5,927	8,169	823	4,721	19,027	14,071	15,290
Cod & Haddock	26,215	27,372	29,573	36,905	40,550	36,668	31,447	31,954	25,452	32,009
Flounders	31,034	27,425	30,521	33,086	33,092	32,995	29,898	28,815	24,593	22,028
Goosefish	15,807	21,847	24,121	18,263	15,546	15,585	15,676	21,485	17,712	14,369
Herring, Atlantic	3,922	1	604	2,769	2,285	5,461	4,570	8,280	7,828	8,234
Lobster	48,576	66,770	70,116	53,430	56,569	52,329	51,581	49,556	52,557	88,587
Mackerel, Atlantic	721	331	184	141	713	1,888	6,542	3,907	10,202	4,736
Oyster, Eastern	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	24	2,738	4,620	4,547
Scallop, Sea	36,037	70,226	85,294	87,357	100,551	106,938	144,728	226,948	234,797	217,589

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	256,645	198,677	189,031	240,759	243,501	295,439	338,215	338,006	348,651	313,895
Finfish & Other	210,215	143,932	130,095	182,473	175,490	231,978	267,338	267,302	268,293	226,263
Shellfish	46,431	54,745	58,937	58,286	68,011	63,461	70,877	70,704	80,357	87,632
Clam, Ocean Quahog	19,189	16,530	12,397	ND ¹	ND ¹	14,226	14,085	ND ¹	16,798	20,158
Clams, All Other	1,675	880	734	10,836	17,057	1,045	6,315	19,830	4,515	3,996
Cod & Haddock	24,262	23,616	26,685	37,162	37,521	32,013	26,922	24,539	15,862	20,369
Flounders	22,904	21,384	29,041	33,989	28,987	29,418	30,704	22,115	13,182	10,987
Goosefish	27,564	26,422	20,888	22,120	22,794	23,979	22,357	21,849	17,496	13,314
Herring, Atlantic	74,672	3	9,615	48,960	40,508	79,873	68,424	99,449	82,821	73,021
Lobster	13,277	15,534	15,803	12,133	12,853	11,385	11,295	9,879	10,967	15,542
Mackerel, Atlantic	2,329	1,302	479	387	5,549	23,451	72,687	52,246	89,535	46,240
Oyster, Eastern	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	9	105	213	129
Scallop, Sea	5,751	12,254	16,175	22,640	25,290	25,371	27,940	29,045	36,108	32,439

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clam, Ocean Quahog	0.42	0.42	0.42	ND ¹	ND ¹	0.51	0.49	ND ¹	0.49	0.50
Clams, All Other	0.71	0.74	0.79	0.55	0.48	0.79	0.75	0.96	3.12	3.83
Cod & Haddock	1.08	1.16	1.11	0.99	1.08	1.15	1.17	1.30	1.60	1.57
Flounders	1.35	1.28	1.05	0.97	1.14	1.12	0.97	1.30	1.87	2.01
Goosefish	0.57	0.83	1.15	0.83	0.68	0.65	0.70	0.98	1.01	1.08
Herring, Atlantic	0.05	0.20	0.06	0.06	0.06	0.07	0.07	0.08	0.09	0.11
Lobster	3.66	4.30	4.44	4.40	4.40	4.60	4.57	5.02	4.79	5.70
Mackerel, Atlantic	0.31	0.25	0.38	0.36	0.13	0.08	0.09	0.07	0.11	0.10
Oyster, Eastern	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	2.74	26.09	21.74	35.19
Scallop, Sea	6.27	5.73	5.27	3.86	3.98	4.21	5.18	7.81	6.50	6.71

¹ND = data is confidential thus not disclosable.²NA = data is not available.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	706	82,564	50,621
Shore	2,125	219,105	129,729
For-Hire	556	53,477	31,905
Total Durable Equipment Impacts	2,738	450,810	226,541
Total State Trip and Durable Equipment Economic Impacts	6,124	805,956	438,796

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	13,424	60,403	Fishing Tackle	154,846
Shore	110,349	42,254	Other Equipment	41,839
For-Hire	22,948	12,461	Boat Expenses	97,473
Total Trip Expenditures	146,721	115,118	Vehicle Expenses	205,281
			Second Home Expenses	11,355
			Total Durable Equipment Expenditures	510,794
Total State Trip and Durable Equipment Expenditures				772,633

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	342	240	493	392	465	434	535	585	623	664
Non-Coastal	65	57	90	79	96	112	131	135	151	179
Out-of-State	228	174	265	279	344	306	335	391	484	465
Total Anglers	635	471	848	750	906	852	1,000	1,112	1,258	1,309

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	142	146	172	134	106	145	133	246	242	242
Private or Rental	1,765	1,552	2,518	2,569	2,399	2,329	2,456	2,383	2,438	2,419
Shore	1,544	1,285	1,931	1,821	1,701	1,611	1,913	1,809	2,044	2,049
Total Trips	3,451	2,983	4,622	4,524	4,206	4,085	4,502	4,439	4,724	4,710

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Atlantic Bonito	H	(1)	1	4	13	6	11	4	15	5	4
	R	1	1	8	8	17	(1)	3	12	18	12
Bass, Striped	H	208	127	181	288	309	407	400	368	340	347
	R	7,184	4,576	7,382	5,411	5,719	4,362	5,892	4,840	8,657	5,772
Bluefish	H	237	197	221	357	229	374	406	589	686	587
	R	510	397	596	948	628	1,019	1,468	1,812	1,507	1,344
Cod, Atlantic	H	370	284	599	842	585	583	519	558	188	239
	R	558	471	975	1,119	1,049	937	843	1,337	534	883
Flounder, Summer	H	383	175	379	152	155	177	281	203	219	76
	R	234	219	445	210	336	244	388	308	556	99
Flounder, Winter	H	97	60	74	61	53	45	40	42	43	37
	R	57	46	100	97	34	30	17	39	35	17
Haddock	H	23	6	81	73	61	75	215	334	151	291
	R	12	12	88	45	125	130	104	87	89	55
Mackerel, Atlantic	H	786	1,321	2,049	1,811	2,024	1,313	722	1,967	4,296	1,789
	R	89	77	231	157	61	45	73	21	203	83
Porgies (Scup)	H	322	1,029	1,382	881	975	1,624	1,511	397	314	729
	R	422	521	748	832	879	1,221	855	516	931	936
Wrasses (Tautog)	H	25	91	88	116	103	47	23	48	63	76
	R	81	152	139	205	284	190	63	148	266	331

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

Massachusetts' State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	167,929 (2.4%)	2,924,913 (2.7%)	105,871 (3.2%)	181,507 (3.1%) ²	236,079 (2.7%)	7.54
2006	175,463 (2.3%)	3,044,080 (2.5%)	148,086 (3.1%)	211,988 (2.9%)	335,313 (2.6%)	ND ³
% change	4.5%	4.1%	39.9%	16.8%	42.0%	26.5%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	19	31	22	29	26	23	25	28	36
	Receipts	2,291	3,455	2,684	1,762	1,296	676	2,284	2,266	2,525
Seafood sales, retail	Firms	61	70	62	62	78	59	64	59	62
	Receipts	8,727	9,075	6,128	6,171	7,314	5,409	5,933	5,528	4,905

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	41	42	42	41	45	55	53	50	47
	Employees	1,841	1,880	2,251	2,164	2,231	2,717	2,743	2,671	2,607
	Payroll	72,700	77,625	82,907	83,249	92,776	110,917	112,642	115,704	120,912
Seafood sales, wholesale	Establishments	256	247	229	212	207	163	148	151	139
	Employees	2,408	2,486	2,685	2,508	2,393	1,880	1,890	1,836	1,706
	Payroll	88,551	99,482	104,358	105,904	107,871	74,431	75,689	76,070	77,106
Seafood sales, retail	Establishments	107	111	109	115	126	124	128	116	115
	Employees	442	451	435	451	490	720	686	677	692
	Payroll	6,974	7,071	7,401	8,224	10,673	17,760	17,454	17,725	18,165

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	7	9	9	12	10	13	13	10	12
	Employees	ND	585	ND	ND	ND	ND	688	ND	623
	Payroll	ND	27,494	ND	ND	ND	ND	36,533	ND	38,421
Deep sea freight transportation	Establishments	15	14	12	14	12	10	10	10	11
	Employees	ND	375	368	ND	ND	ND	ND	ND	509
	Payroll	ND	24,000	31,434	ND	ND	ND	ND	ND	38,982
Deep sea passenger transportation	Establishments	2	2	2	2	2	1	1	4	4
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	132	133	131	136	139	145	135	139	141
	Employees	856	838	865	996	988	969	989	973	1,064
	Payroll	25,022	28,090	30,790	34,865	35,169	40,700	41,474	43,103	45,894
Marine cargo handling	Establishments	4	3	6	7	7	6	6	5	4
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Navigational services to shipping	Establishments	7	6	4	5	5	5	7	6	11
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	1	NA ⁴	NA	NA	NA	3	3	3	4
	Employees	ND	NA	NA	NA	NA	ND	ND	ND	ND
	Payroll	ND	NA	NA	NA	NA	ND	ND	ND	ND
Ship & boat building	Establishments	53	51	54	56	50	53	55	50	47
	Employees	508	601	599	577	617	ND	ND	588	ND
	Payroll	16,715	21,068	18,503	18,813	21,710	ND	ND	20,050	ND

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the New Hampshire Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	343,078	191,639	7,121
Commercial Harvesters	36,372	16,227	653
Seafood Processors and Dealers	39,800	20,492	458
Seafood Wholesalers and Distributors	56,399	28,734	543
Retail Sectors	210,506	126,186	5,467

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	11,186	12,538	16,197	17,865	16,689	15,127	17,214	22,084	18,844	19,088
Finfish & Other	5,253	5,514	7,848	8,231	7,350	5,748	6,449	6,840	4,785	4,138
Shellfish	5,933	7,024	8,349	9,634	9,339	9,380	10,765	15,244	14,059	14,951
Cod, Atlantic	1,550	394	1,807	2,017	1,983	1,853	2,244	1,913	1,708	1,972
Goosefish	671	1,714	2,715	2,812	1,853	1,097	1,456	1,484	794	375
Haddock	59	104	187	181	134	144	157	136	132	123
Hake	174	550	463	367	321	303	200	279	219	244
Herring, Atlantic	24	ND ¹	306	399	783	1,170	1,147	1,255	199	147
Lobster	4,702	5,916	7,081	8,072	ND ¹	ND ¹	10,199	14,377	13,915	ND ¹
Pollock	970	1,430	1,045	891	847	589	569	1,138	1,221	902
Scallop, Sea	51	ND ¹	ND ¹	689	726	375	276	527	24	30
Shark, Spiny Dogfish	350	205	605	148	85	27	ND ¹	ND ¹	183	ND ¹
Shrimp	791	282	375	369	104	212	222	340	120	315

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	10,172	11,251	17,886	18,584	23,200	27,435	23,796	21,281	10,339	8,395
Finfish & Other	7,304	8,753	14,931	15,078	20,354	24,747	21,074	18,081	7,375	5,181
Shellfish	2,868	2,498	2,954	3,505	2,846	2,688	2,722	3,200	2,963	3,215
Cod, Atlantic	1,491	350	1,756	1,976	1,583	1,458	1,633	1,293	1,024	1,170
Goosefish	821	1,384	1,873	2,463	1,876	1,629	1,640	1,226	621	318
Haddock	44	74	134	135	95	108	123	99	73	62
Hake	308	888	1,094	820	557	729	405	372	241	313
Herring, Atlantic	260	ND ¹	5,582	7,015	14,125	18,933	15,589	12,562	2,020	936
Lobster	1,195	1,380	1,710	2,028	ND ¹	ND ¹	2,097	2,556	2,666	ND ¹
Pollock	1,413	1,641	1,337	1,183	997	1,109	1,202	1,997	2,566	2,037
Scallop, Sea	7	ND ¹	ND ¹	171	177	100	44	76	3	4
Shark, Spiny Dogfish	1,893	1,238	2,334	536	349	175	ND ¹	ND ¹	620	ND ¹
Shrimp	887	376	468	506	90	223	432	567	294	768

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Cod, Atlantic	1.04	1.13	1.03	1.02	1.25	1.27	1.37	1.48	1.67	1.69
Goosefish	0.82	1.24	1.45	1.14	0.99	0.67	0.89	1.21	1.28	1.18
Haddock	1.35	1.41	1.39	1.35	1.41	1.33	1.27	1.38	1.82	1.99
Hake	0.56	0.62	0.42	0.45	0.58	0.41	0.49	0.75	0.91	0.78
Herring, Atlantic	0.09	ND ¹	0.05	0.06	0.06	0.06	0.07	0.10	0.10	0.16
Lobster	3.94	4.29	4.14	3.98	ND ¹	ND ¹	4.86	5.62	5.22	ND ¹
Pollock	0.69	0.87	0.78	0.75	0.85	0.53	0.47	0.57	0.48	0.44
Scallop, Sea	7.38	ND ¹	ND ¹	4.04	4.10	3.76	6.22	6.89	7.44	8.25
Shark, Spiny Dogfish	0.19	0.17	0.26	0.28	0.24	0.16	ND ¹	ND ¹	0.30	ND ¹
Shrimp	0.89	0.75	0.80	0.73	1.16	0.95	0.51	0.60	0.41	0.41

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	75	7,808	4,719
Shore Mode	59	5,378	3,186
For-Hire	141	11,572	6,780
Total Durable Equipment Impacts	212	29,898	15,235
Total State Trip and Durable Equipment Economic Impacts	488	54,657	29,921

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	1,220	6,669	Fishing Tackle	15,065
Shore	2,490	2,559	Other Equipment	4,206
For-Hire	4,441	3,604	Boat Expenses	7,109
Total Trip Expenditures	8,151	12,832	Vehicle Expenses	11,984
			Second Home Expenses	0
			Total Durable Equipment Expenditures	38,364
Total State Trip and Durable Equipment Expenditures				59,347

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	57	55	77	68	60	91	81	105	90	97
Non-Coastal	8	8	10	13	11	16	13	14	15	13
Out-of-State	58	60	85	74	65	75	69	84	82	63
Total Anglers	123	123	172	154	137	182	163	203	187	172

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	30	25	34	83	29	35	39	47	88	94
Private or Rental	121	112	145	177	143	230	141	236	192	248
Shore	127	147	189	100	147	150	181	237	267	196
Total Trips	277	285	368	360	318	416	360	520	547	538

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	6	5	4	15	13	25	10	26	15	7
	R	243	146	210	164	238	260	197	513	568	289
Bluefish	H	3	4	1	8	19	8	21	23	10	32
	R	1	5	1	14	14	17	10	42	26	18
Bottomfish, Unidentified	H	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Cod, Atlantic	H	24	39	70	164	39	108	44	69	61	51
	R	51	68	148	184	70	208	56	143	225	221
Flounder or Sole, Unidentified	H	29	11	8	9	8	7	2	3	10	13
	R	12	6	8	6	10	3	2	3	5	10
Flounder, Winter	H	(1)	(1)	4	(1)	(1)	(1)	2	1	(1)	5
	R	(1)	1	9	2	5	1	2	4	6	2
Haddock	H	10	7	17	36	19	44	51	107	120	95
	R	4	7	29	50	43	128	17	36	86	41
Mackerel, Atlantic	H	255	446	581	828	212	409	86	333	153	151
	R	73	109	120	297	69	61	10	25	31	11
Pollock	H	63	74	177	167	89	63	53	49	80	56
	R	79	110	293	265	63	42	28	29	39	15
Tuna, Bluefin	H	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

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

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

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	36,842 (0.5%)	518,526 (0.5%)	14,864 (0.5%)	26,752 (0.5%) ²	39,102 (0.5%)	0.08
2006	39,376 (0.5%)	577,415 (0.5%)	21,898 (0.5%)	33,629 (0.5%)	56,073 (0.4%)	ND
% change	6.9%	11.4%	47.3%	25.7%	43.4%	--

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	NA ³	NA	NA	NA	NA	7	4	4	4
	Receipts	ND ⁴	ND	NA	NA	ND	1,205	1,147	842	1,087
Seafood sales, retail	Firms	11	7	6	8	9	14	15	11	10
	Receipts	735	850	419	1,055	862	960	1,438	1,330	1,496

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	8	8	10	8	9	11	10	10	10
	Employees	340	298	298	ND	368	322	448	418	ND
	Payroll	10,076	9,377	9,952	ND	13,452	13,676	18,886	16,275	ND
Seafood sales, wholesale	Establishments	17	16	14	14	14	11	12	10	9
	Employees	81	ND	68	75	78	ND	82	ND	ND
	Payroll	2,045	ND	1,813	2,222	2,093	ND	2,511	ND	ND
Seafood sales, retail	Establishments	7	7	7	9	9	12	12	12	15
	Employees	ND	ND	ND	ND	ND	ND	ND	79	78
	Payroll	ND	ND	ND	ND	ND	ND	ND	2,053	2,201

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	NA	NA	1	1	1	NA	NA	1	1
	Employees	NA	NA	ND	ND	ND	NA	NA	ND	ND
	Payroll	NA	NA	ND	ND	ND	NA	NA	ND	ND
Deep sea freight transportation	Establishments	NA	1	2	1	1	1	1	2	2
	Employees	NA	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	NA	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	NA	1	1	1	1	NA	NA	NA	NA
	Employees	NA	ND	ND	ND	ND	NA	NA	NA	NA
	Payroll	NA	ND	ND	ND	ND	NA	NA	NA	NA
Marinas	Establishments	42	43	39	42	36	40	40	38	35
	Employees	210	233	249	209	228	196	226	194	ND
	Payroll	5,845	6,757	7,768	8,135	10,872	9,043	9,315	8,871	ND
Navigational services to shipping	Establishments	2	2	2	2	2	3	3	4	4
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	1	1	1	1	1	NA	NA	NA	NA
	Employees	ND	ND	ND	ND	ND	NA	NA	NA	NA
	Payroll	ND	ND	ND	ND	ND	NA	NA	NA	NA
Ship & boat building	Establishments	5	4	5	6	8	10	8	6	6
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³NA = Data are not available.

⁴ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Rhode Island Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	556,874	299,552	11,755
Commercial Harvesters	121,098	52,580	2,286
Seafood Processors & Dealers	40,865	14,825	373
Seafood Wholesalers & Distributors	81,912	42,256	792
Retail Sector	312,999	189,890	8,305

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	71,991	86,034	80,965	68,657	64,718	66,088	77,452	91,414	98,576	76,882
Finfish & Other	24,794	27,353	26,949	26,503	25,115	24,408	25,826	24,676	28,178	25,024
Shellfish	47,197	58,682	54,016	42,154	39,602	41,679	51,627	66,738	70,397	51,858
Clam, Quahog	4,099	4,665	7,991	7,208	7,043	6,370	5,870	3,439	3,528	8,369
Flounder, Summer	3,914	3,766	3,800	3,787	3,992	4,060	5,308	5,868	5,045	4,415
Flounders, Other	2,899	3,337	3,962	3,085	3,194	2,728	2,137	1,734	3,502	3,585
Goosefish	4,095	6,652	6,892	5,455	4,757	4,813	3,418	4,547	4,501	3,550
Herring, Atlantic	2,065	1,865	2,337	2,295	1,312	1,195	1,213	1,075	2,667	982
Lobster	20,011	31,616	28,103	18,747	15,875	16,731	14,623	23,009	18,392	12,146
Mackerel, Atlantic	1,626	848	444	280	3,031	2,385	3,813	2,888	3,293	1,182
Scallop, Sea	ND ¹	ND ¹	1,392	684	ND ¹	279	1,511	13,268	20,783	8,963
Scups or Porgies	1,156	1,672	1,252	1,282	2,229	2,098	1,982	2,323	2,785	2,783
Squid	20,059	16,128	12,937	11,596	13,208	14,319	25,015	16,974	16,731	13,454

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	133,482	125,924	121,371	116,713	103,530	97,456	114,993	97,564	112,884	75,635
Finfish & Other	84,550	83,085	82,008	82,871	70,552	62,340	62,282	47,819	60,868	40,871
Shellfish	48,933	42,839	39,363	33,842	32,978	35,116	52,711	49,745	52,016	34,764
Clam, Quahog	881	860	1,409	1,220	1,192	1,131	1,080	642	679	1,027
Flounder, Summer	1,712	1,635	1,704	1,799	2,286	2,178	3,085	2,925	2,123	1,516
Flounders, Other	2,379	2,899	4,070	3,148	2,781	2,428	2,360	1,315	1,850	1,872
Goosefish	7,150	7,526	5,897	6,081	5,148	6,830	4,284	4,143	3,864	3,122
Herring, Atlantic	34,322	36,362	40,414	36,400	12,774	13,440	13,639	11,605	23,150	7,537
Lobster	5,618	8,156	6,908	4,452	3,835	3,475	3,064	4,344	3,750	2,301
Mackerel, Atlantic	5,771	4,335	1,939	1,131	20,930	10,768	15,269	8,075	10,143	4,242
Scallop, Sea	ND ¹	ND ¹	238	181	ND ¹	76	249	1,612	3,290	1,357
Scups or Porgies	795	1,280	1,017	1,617	3,675	3,814	3,425	3,424	3,643	3,934
Squid	38,559	20,233	26,051	22,769	23,713	25,862	43,539	22,135	21,296	15,873

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clam, Quahog	4.65	5.42	5.67	5.91	5.91	5.63	5.44	5.35	5.20	8.15
Flounder, Summer	2.29	2.30	2.23	2.11	1.75	1.86	1.72	2.01	2.38	2.91
Flounders, Other	1.22	1.15	0.97	0.98	1.15	1.12	0.91	1.32	1.89	1.91
Goosefish	0.57	0.88	1.17	0.90	0.92	0.70	0.80	1.10	1.16	1.14
Herring, Atlantic	0.06	0.05	0.06	0.06	0.10	0.09	0.09	0.09	0.12	0.13
Lobster	3.56	3.88	4.07	4.21	4.14	4.82	4.77	5.30	4.91	5.28
Mackerel, Atlantic	0.28	0.20	0.23	0.25	0.14	0.22	0.25	0.36	0.32	0.28
Scallop, Sea	ND ¹	ND ¹	5.86	3.78	ND ¹	3.67	6.07	8.23	6.32	6.61
Scups or Porgies	1.45	1.31	1.23	0.79	0.61	0.55	0.58	0.68	0.76	0.71
Squid	0.52	0.80	0.50	0.51	0.56	0.55	0.57	0.77	0.79	0.85

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	220	20,718	12,411
Shore	339	28,449	16,358
For-Hire	91	8,364	5,001
Total Durable Equipment Impacts	636	87,937	37,929
Total State Trip and Durable Equipment Economic Impacts	1,286	145,467	71,698

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	9,905	11,299	Fishing Tackle	49,269
Shore	18,072	7,493	Other Equipment	15,405
For-Hire	4,998	1,306	Boat Expenses	18,957
Total Trip Expenditures	32,975	20,098	Vehicle Expenses	20,519
			Second Home Expenses	1,574
			Total Durable Equipment Expenditures	105,724
Total State Trip and Durable Equipment Expenditures				158,797

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	96	108	112	137	134	147	129	145	177	171
Non-Coastal	NA ¹	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²
Out-of-State	187	214	184	260	214	253	237	241	291	229
Total Anglers	283	321	296	397	348	400	366	386	468	401

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	47	22	40	20	37	60	51	48	52	61
Private or Rental	441	577	737	687	595	582	615	772	671	621
Shore	612	663	596	789	880	952	836	790	982	863
Total Trips	1,100	1,262	1,373	1,496	1,512	1,595	1,503	1,611	1,704	1,545

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)²

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Atlantic Bonito	H	5	25	3	2	11	2	6	1	(1)	4
	R	3	26	1	1	1	4	5	1	(1)	5
Bass, Striped	H	45	56	95	80	78	115	85	113	74	102
	R	613	360	542	377	530	449	670	741	1,356	741
Bluefish	H	194	330	280	365	325	334	307	310	362	327
	R	203	784	497	893	801	932	818	558	655	860
Cod, Atlantic	H	59	37	39	6	6	1	3	1	2	1
	R	52	13	20	2	8	5	3	2	2	1
Flounder, Summer	H	395	432	807	268	191	205	288	188	264	232
	R	245	440	921	392	770	351	297	341	1,044	867
Flounder, Winter	H	38	74	51	82	30	8	8	1	1	1
	R	17	32	17	17	20	1	3	(1)	(1)	3
Porgies (Scup)	H	235	719	1,235	1,134	603	1,027	908	446	428	452
	R	284	279	876	1,074	933	805	517	666	884	736
Sea Bass, Black	H	26	25	197	123	78	70	53	56	53	54
	R	26	121	401	151	241	205	39	52	259	162
Tuna, Yellowfin	H	(1)	2	5	1	1	2	(1)	1	(1)	(1)
	R	(1)	(1)	(1)	(1)	(1)	11	(1)	1	(1)	(1)
Wrasses (Tautog)	H	56	52	39	40	62	120	173	106	81	164
	R	91	153	64	74	135	197	153	212	188	205

¹All Rhode Island residents are considered coastal county residents thus this category is not applicable (NA).

²In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

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

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	28,245 (0.4%)	402,485 (0.4%)	11,116 (0.3%)	20,063 (0.3%) ²	29,537 (0.3%)	2.88
2006	30,398 (0.4%)	440,797 (0.4%)	17,073 (0.4%)	25,402 (0.3%)	45,733 (0.3%)	3.91
% change	7.6%	9.5%	53.6%	26.6%	54.8%	35.8%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	NA ³	NA	NA	NA	NA	NA	NA	6	8
	Receipts	ND ⁴	ND	ND	ND	ND	ND	ND	2,024	1,662
Seafood Sales, retail	Firms	14	11	14	17	20	16	14	16	24
	Receipts	1,806	1,505	1,860	2,577	2,433	2,227	2,186	2,215	3,266

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	8	6	6	6	9	7	7	7	7
	Employees	ND	241	227	240	184	355	355	270	231
	Payroll	ND	6,681	7,184	7,581	7,284	10,381	10,867	5,549	6,137
Seafood sales, wholesale	Establishments	49	43	40	41	39	38	35	32	36
	Employees	401	393	411	382	380	394	259	206	188
	Payroll	12,162	12,471	13,153	14,250	14,505	15,724	12,269	9,851	10,209
Seafood sales, retail	Establishments	22	24	26	26	27	29	34	31	28
	Employees	79	102	97	ND	151	162	163	140	ND
	Payroll	1,400	2,018	2,596	ND	3,015	2,870	2,707	2,447	ND

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	1	1	1	1	2	1	1	1	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	1	1	2	2	1	1	2	2	2
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	1	3	3	3	2	3	NA	NA	NA
	Employees	ND	ND	ND	ND	ND	ND	NA	NA	NA
	Payroll	ND	ND	ND	ND	ND	ND	NA	NA	NA
Marinas	Establishments	55	51	55	54	56	61	60	66	63
	Employees	388	414	504	555	522	405	475	408	457
	Payroll	12,452	13,146	14,698	18,967	17,609	14,456	15,111	15,843	18,748
Marine cargo handling	Establishments	2	3	4	3	3	1	1	1	2
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Navigational services to shipping	Establishments	11	8	8	9	10	8	8	8	7
	Employees	ND	ND	ND	ND	36	46	ND	ND	ND
	Payroll	ND	ND	ND	ND	2,162	2,585	ND	ND	ND
Port & harbor operations	Establishments	1	1	1	NA	NA	2	2	2	2
	Employees	ND	ND	ND	NA	NA	ND	ND	ND	ND
	Payroll	ND	ND	ND	NA	NA	ND	ND	ND	ND
Ship & boat building	Establishments	35	32	28	33	31	37	38	36	38
	Employees	ND	ND	1,079	ND	1,329	ND	ND	ND	1,325
	Payroll	ND	ND	37,259	ND	47,328	ND	ND	ND	52,682

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³Data are not available.

⁴Data are suppressed due to confidentiality restrictions.

Mid-Atlantic

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



Management Context

The Mid-Atlantic Region includes the states of New York, New Jersey, Delaware, Maryland, 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 with the New England Fishery 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 Fishery Management Plans

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. Tilefish
7. Monkfish (with the NEFMC)

Of the stocks or stock complexes covered in these fishery management plans, scup and Atlantic butterfish are currently considered overfished. Scup is currently subject to overfishing.

Currently, there is one limited access privilege program (LAPP), a type of catch share program, in the Mid-Atlantic Region: the surfclam and ocean quahog individual fishing quota (IFQ) program. This LAPP was implemented in 1990 and had an ex-vessel value of \$49.0 million in 2007. A second catch share program for the tilefish fishery is scheduled to be implemented in November 2009.

Commercial Fisheries

Mid-Atlantic fishermen earned over \$402 million for their catch in 2007, and harvested over 728 million pounds of finfish and shellfish. Sea scallop was a significant component of ex-vessel revenue, generating \$147 million in 2007 or 37% of total revenue. Despite accounting for just 3.1% of the total landings in the Mid-Atlantic, sea scallops averaged \$6.42 per pound in 2007, the highest annual price of any key species or species group. In terms of landings, menhaden accounted for 64% of total landings in the Mid-Atlantic, over 469 million pounds in 2007. This low value species had an average ex-vessel price of \$0.07 per pound in 2007, and contributed 7.7% to total revenue in the region.

In 2007, total revenue in New Jersey was the highest with fishermen generating \$153 million for their catch. Total landings in Virginia (484 million pounds) contributed 67% to total landings in the Mid-Atlantic. Menhaden made up over 87% of these landings. In terms of finfish revenue and catch, Virginia fishermen generated the most and received \$46 million for 452 million pounds harvested in 2007. Fishermen in New Jersey accounted for most of the shellfish revenue (\$127 million) and landings (89 million pounds). New

York, Maryland, and Delaware followed in both revenue generated and catch harvested.

Key Mid-Atlantic Commercial Species

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

Economic Impacts

In 2007, the Mid-Atlantic Region's seafood industry generated over a billion dollars in sales in New Jersey (\$1.9 billion), New York (\$1.8 billion) and Virginia (\$1.4 billion). Most of the seafood industry-related jobs in this region were also sustained in these states with 40,000 full- and part-time jobs in New York, 37,000 jobs in New Jersey, and 33,000 jobs in Virginia. Maryland (11,000 jobs) and Delaware (1,600 jobs) followed in terms of employment supported by the seafood industry. New Jersey also led the region in income impacts with over a billion dollars generated by the seafood industry in 2007.

Landings Revenue

Ex-vessel revenue for finfish and shellfish totaled \$402 million in 2007, a 13% increase (-5.7% in real terms) from landings revenue in 1998 (\$356 million), and an 11% increase over revenue generated in 2006 (\$362 million). New Jersey and Virginia fishermen generated most of the 2007 revenue with \$153 million and \$131 million, respectively. Shellfish revenue contributed 74% to total revenue in the Mid-Atlantic, totaling \$298 million in 2007. This was a 26% increase over 1998 totals (\$236 million) and a 12% increase over 2006 (\$267 million). Finfish revenue decreased from \$120 million in 1998 to \$104 million in 2007, a 14% decrease over this period. However, finfish revenue from 2006-2007 increased 8.5% from \$96 million to \$104 million.

Total revenue trends over the 10 year time period varied by state. Total revenue generated by fishermen in New Jersey (57%, 31% in real terms), Delaware (30%, 8.4% in real terms), and Virginia (16%, -3.6% in real terms) increased from 1998-2007. These increases were largely due to shellfish revenue. New Jersey shellfish revenue increased 78% (48% in real terms). Virginia (58%, 32% in real terms) and Delaware (44%, 20% in real terms) also experienced large increases.

Despite significant increases in sea scallop revenue from 1998-2007 generated in New York and Maryland (76,140% and 19,964%, respectively), total shellfish revenue decreased 35% (-46% in real terms) in New York and 12% (-27% in real terms) in Maryland. This mirrored declines in total revenue

from 1998-2007. New York experienced a 28% (-40% in real terms) decrease in total revenue, while Maryland's revenue decreased 9.8% (-25% in real terms).

In contrast to shellfish revenue, finfish revenue declined in current and/or real terms across the Mid-Atlantic: Virginia (-23%, -36% in real terms), Delaware (-12%, -26% in real terms), New York (-9.9%, -25% in real terms), New Jersey (-0.8%, -17% in real terms), and Maryland (0.5%, -16% in real terms).

Sea scallop contributed more to the Mid-Atlantic's total revenue in 2007 than any other key species or group: \$147 million or 37% of total revenue. This was a 382% increase (302% in real terms) from 1998 sea scallop revenue (\$30 million) and a 22% increase (15% in real terms) from 2006 (\$120 million). Striped bass (43%, 19% in real terms), American lobster (-73%, -77% in real terms), and squid (-62%, -68% in real terms) also experienced large changes in revenue between 1998 and 2007.

At the state level, key species or groups with large changes in landings revenue between 1998 and 2007 include: striped bass (75% increase), spot (65%), and weakfish (-89%) in Delaware; sea scallop (19,964%), menhaden (182%), Eastern oyster (-67%), and white perch (-53%) in Maryland; sea scallop (688%), Atlantic herring (106%), and quahog clam (-89%) in New Jersey; sea scallop (76,140%), Atlantic surf clam (138%), softshell clam (129%), scups or porgies (113%), Eastern oyster (94%), and lobster (-85%) in New York; and sea scallop (204%), catfishes and bullhead (175%), spot (107%), and blue crab (-46%) in Virginia.

Landings

Fishermen in the Mid-Atlantic landed over 728 million pounds of finfish and shellfish in 2007. This was a 21% decrease from the 916 million pounds landed in 1998, and a 9.1% increase from the 667 million pounds landed in 2006. Finfish accounted for 76% of total landings (553 million pounds) in 2007, despite a 20% decrease from 1998 (693 million pounds). From 2006-2007, finfish landings increased 13%. Shellfish landings decreased 22% from 223 million pounds in 1998 to 175 million pounds in 2007. These landings decreased 2.3% between 2006 and 2007.

Finfish landings between 1998 and 2007 decreased in all five states across the Mid-Atlantic. The largest decreases were in Delaware where landings decreased 68% and in New York which had a 48% decrease in landings. These decreases were followed by New Jersey (-23%), Virginia (-18%), and Maryland (-16%).

Shellfish landings across the Mid-Atlantic Region also declined over the 10 year time period. The largest decreases were in Maryland (-24%), followed by Virginia (-22%), New York (-21%), New Jersey (-21%), and Delaware (-11%).

Of the Mid-Atlantic's key species and groups, menhaden's contribution to total landings was the most significant with 469 million pounds landed in 2007. Menhaden accounted for 64% of total landings that year. This was a 14% decrease from 1998 (547 million pounds) but a 17% increase from 2006 (401 million pounds). Fishermen in Virginia harvested the majority of menhaden, 89% of the total landed in 2007 (420 million pounds).

Of the Mid-Atlantic's key species and species groups, only sea scallop (345%), Atlantic surf clam (11%), and striped bass (2.2%) increased in total landings from 1998-2007. Decreases in landings totals were experienced for all other key species or groups with the largest decrease in American lobster (-84%), squid (-83%), and Eastern oyster (-69%) landings. Landings totals in 2007 increased for menhaden (17%), Eastern oyster (13%), and quahog clam (9%) relative to 2006 totals.

Commercial Fish Facts

Landings revenue

- On average, the key species and species groups accounted for 82% of total revenue in the Mid-Atlantic Region.
- Sea scallops contributed the most to landings revenue in the region, averaging \$103 million over the 10 year time period. In 2007, fishermen in New Jersey generated most of this revenue, contributing 53% to the \$147 million generated from sea scallops that year.
- Squid had the largest annual increase in revenue from 1998-2007, increasing 120% from \$6.5 million to \$14 million (2003-2004). American lobster had the largest annual decrease in revenue, decreasing 47% from 1999-2000.

Landings

- Key species and species groups in the Mid-Atlantic Region contributed an average of 83% annually to total landings.
- Menhaden was a significant contributor to landings, averaging 438 million pounds or 58% of total landings from 1998-2007. New Jersey fishermen harvested the majority of this species.
- Landings of squid increased 298% from 2003-2004, only to decrease 70% from 2004-2005. These changes were the largest annual increase and decrease of any key species or group in the region.

Prices

- Quahog clam (\$5.82 per pound), Eastern oyster (\$5.28), sea scallop (\$5.20), and American lobster (\$4.29) had the highest average ex-vessel prices over the time period.
- Menhaden (\$0.07 per pound), Atlantic surf clam (\$0.55), and squid (\$0.61) had the lowest average ex-vessel prices from 1998-2007.
- Squid prices were variable over the 10 year time period, decreasing 45% from 2003-2004, the largest annual decrease, only to increase 121% from 2004-2005, the largest annual increase.

Prices

With the exception of quahog clam, 2007 ex-vessel prices for the Mid-Atlantic’s key species and species groups were higher than their 10 year average price per pound. Between 1998 and 2007, Eastern oyster, squid, and American lobster experienced the largest increases in price per pound, increasing 150% (109% in real terms), 121% (84% in real terms), and 70% (42% in real terms), respectively.

Key species or groups with declining price trends from 1998-2007 in current and/or real terms were: quahog clam (-20%, -33% in real terms), menhaden (-13%, -27% in real terms), and sea scallop (8.3%, -9.6% in real terms).

Relative to ex-vessel prices in 2006, prices for seven of the ten key species and species groups increased in 2007. Blue crab (30%), Eastern oyster (29%), and summer flounder (22%) had the largest increases. Price per pound for quahog clam (-13%), striped bass (-4%), and sea scallop (-2%) declined between 2006 and 2007.

At the state level, key species or groups with large changes in ex-vessel price from 1998-2007 include: weakfish (139%) and spot (81%) in Delaware; Eastern oyster (214%), Atlantic croaker (76%), and clams or bivalves (-15%) in Maryland; American lobster (63%), summer flounder (60%), and Atlantic herring (-18%) in New Jersey; Eastern oyster (270%), sea scallop (245%), softshell clam (141%), and scups or porgies (-43%) in New York; and catfishes and bullhead (165%), goosefish (153%), black sea bass (118%), spot (108%), and menhaden (-25%) in Virginia.

Recreational Fishing

There were 3.4 million resident recreational fishermen who took a fishing trip in the Mid-Atlantic Region in 2007. Over 94% of these anglers were residents of a regional coastal county. Of the 23 million fishing trips taken in 2007, over 55% of them were taken from a private or rental boat. Atlantic croaker and summer flounder were the most caught key species or species group with over 21 million of each harvested or released in 2007. Together, these key species accounted for 45% of fish caught by anglers in the Mid-Atlantic.

Key Mid-Atlantic Recreational Species	
• Striped bass	• Summer flounder
• Bluefish	• Winter flounder
• Drum (Atlantic croaker)	• Porgies (scup)
• Drum (spot)	• Black sea bass
• Drum (weakfish)	• Wrasses (tautog)

Economic Impacts and Expenditures

Recreational fishing activities in New Jersey supported more jobs than any other state in the Mid-Atlantic with

approximately 11,000 full- and part-time jobs supported in 2007. Maryland (9,200 jobs), Virginia (7,300 jobs), New York (6,500 jobs), and Delaware (1,800 jobs) followed in terms of employment impacts from recreational fishing activities. The majority of these jobs were related to durable equipment expenditures (versus trip-related expenditures): 74% of jobs in Maryland; 71% of jobs in New York; 67% of jobs in Virginia; 66% of jobs in New Jersey; and 51% of jobs in Delaware.

In terms of employment impacts related to fishing trips taken by anglers, industries that provided services for shore-based fishing trips supported most of the trip-related full- and part-time jobs in Maryland (1,100 jobs) and Delaware (420 jobs). In New York, trip-related employment impacts were related to the for-hire boat industry (750 jobs). Private or rental boat trips supported most of the trip-related jobs in Virginia (1,800 jobs) and New Jersey (1,700 jobs).

The contribution of recreational fishing activities in the Mid-Atlantic are also reported in terms of state level sales and value-added impacts, and direct expenditures on fishing trips and durable equipment. In 2007, in-state sales and value-added impacts were highest in New Jersey (\$1.8 billion in sales impacts; \$931 million in value-added impacts) and Maryland (\$1.3 billion; \$650 million). New York (\$979 million; \$511 million), Virginia (\$823 million; \$433 million), and Delaware (\$273 million; \$125 million) followed in terms of sales and value-added impacts. Across the region, these economic impacts were largely generated from durable equipment expenditures made by anglers (versus trip-related impacts).

Total fishing trip and durable equipment expenditures generated \$4.9 billion across the Mid-Atlantic in 2007. Approximately 79% of these expenditures were related to durable equipment purchases. Vehicle (\$1.4 billion), fishing tackle (\$990 million), and boat-related expenses (\$908 million) accounted for the majority of durable equipment expenditures. Expenditures by Mid-Atlantic residents related to fishing trips totaled \$642 million. Most of these purchases were related to fishing trips taken from a private or rental boat (59% of trip-related expenditures by residents). The region’s non-resident anglers generated \$380 million in trip-related expenditures with most of these expenses related to private or rental boat trips (47% of trip-related expenditures by non-residents).

Participation

In 2007, there were 3.4 million resident recreational fishermen from either a coastal or non-coastal county in the Mid-Atlantic Region.¹ This was a 96%

¹At the state level, out-of-state anglers are estimated. However at the region level, out-of-region anglers are not estimated thus only Mid-Atlantic Region resident anglers are discussed here. In *Fisheries Economics of the U.S., 2006*

increase from 1998 (1.8 million anglers) and an 11% increase from 2006 (3.1 million anglers). In 2007, 94% of total anglers who fished in the Mid-Atlantic were residents of a coastal county. The number of coastal county anglers in 2007 increased 95% relative to 1998 (1.7 million anglers) and increased 12% relative to 2006 (2.9 million anglers). Non-coastal county angler participation increased 108% relative to 1998 (102,000 anglers) and decreased 5.4% relative to 2006 (224,000 anglers). Approximately 42% of total anglers who fished in the Mid-Atlantic took a fishing trip in the state of Maryland.

The majority of recreational fishermen in Maryland, New Jersey, New York, and Virginia were residents of a coastal county within their respective state. These anglers accounted for 83% of total anglers in New York, 62% of anglers in New Jersey, 58% of anglers in Maryland, and 55% of anglers in Virginia. In contrast, the majority of anglers who fished in Delaware were out-of-state residents (60% of total anglers). Anglers from the Mid-Atlantic's non-coastal counties² comprised a minority of total anglers in 2007: 1.3% of anglers in New Jersey, 3.7% of anglers in New York, 5.4% of total anglers in Maryland, and 9.1% of anglers in Virginia.

Fishing Trips

Resident and non-resident anglers took 22.7 million fishing trips in 2007. This was a 57% increase from 1998 (14.5 million trips) and a 6.4% increase from 2006 (21.4 million trips). In 2007, most fishing trips were taken from a private or rental boat: 12.6 million trips or 55% of total fishing trips taken in the Mid-Atlantic. Shore-based fishing trips were also popular with 8.8 million trips taken in 2007, followed by 1.4 million fishing trips taken from a for-hire boat.

Most of the fishing trips in the region were taken in New Jersey (33% of total trips in the region) and New York (27% of total trips). In these states, a private or rental boat trip was the most popular fishing mode: 49% of trips taken in New Jersey and 52% of trips taken in New York. This mode also accounted for the majority of trips taken in Virginia (67% of trips), Maryland (60% of total trips), and Delaware (56% of trips). Shore-based trips were the second most popular fishing mode in these states: 44% of trips in New Jersey, 40% of trips in Delaware, 40% of trips in New York, 34% of trips in Maryland, and 31% of trips in Virginia.

Harvest and Release

Of the Mid-Atlantic Region's key species and species groups, Atlantic croaker and summer flounder were the most often caught by anglers. In 2007, 22 million Atlantic croaker and 21 million summer flounder were caught by anglers fishing in the region. Together, these

species accounted for 45% of the key species or species groups caught by recreational anglers and both species were more often released than harvested. In terms of where these fish were caught, the majority of Atlantic croaker were caught in Virginia (79% of fish caught in the region) and most of the summer flounder were caught in New Jersey (40% of fish caught).

Recreational Fishing Facts

Participation

- In the Mid-Atlantic, an average of 2.5 million resident anglers fished annually from 1998-2007. Most of these anglers fished in Maryland and New Jersey.
- The region's coastal county residents made up 94% of total anglers in 2007. These anglers averaged 93% of total anglers annually over the time period.
- Non-coastal county resident anglers increased 61% from 2004-2005, the largest annual increase in participation in the Mid-Atlantic. Coastal county residents decreased 28% from 2001-2002, the largest annual decrease.

Fishing trips

- An average of 19 million fishing trips were taken annually in the Mid-Atlantic between 1998 and 2007. Most of these trips were taken in New Jersey and New York.
- Private or rental boat trips accounted for 12.6 million fishing trips in 2007. This mode of fishing trip made up 55% of trips taken that year.
- The largest annual increase in fishing trip mode was a 43% increase in private or rental boat trips from 1999-2000. The largest annual decrease was a 23% decrease in shore-based fishing trips from 2001-2002.

Harvest and release

- The most caught key species or species group in the Mid-Atlantic were summer flounder and Atlantic croaker. Anglers caught an average of 20 million of each fish annually from 1998-2007. Most of these fish were released rather than harvested.
- Most of the Mid-Atlantic's key species or groups were released by anglers rather than harvested. Striped bass (83% released), summer flounder (81%), and black sea bass (79%) are examples.
- Key species or groups more often harvested by anglers were spot (67% harvested), winter flounder (62%), and scup (51%).
- Scup had the largest annual increase in catch, increasing 233% from 1999-2000. Wrasses or tautog had the largest annual decrease in catch, decreasing 63% from 2002-2003.

In 2007, only two of the Mid-Atlantic's key species or groups were most often harvested rather than released by anglers: spot (73% harvested) and winter flounder (79% harvested). Summer flounder (87% released), black sea bass (83% released), and striped bass (83% released) were examples of key species or groups with a large percentage of fish released rather than harvested.

Most of the Mid-Atlantic's key species and groups experienced large changes in catch totals between 1998 and 2007. Scup (284% increase), spot (189%), wrasses or tautog (169%), bluefish

(FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1998-2007 angler participation totals excludes these anglers therefore the annual region totals reported here are smaller than those reported in FEUS 2006.

²All resident anglers in Delaware are considered coastal county anglers.

(161%), and black sea bass (90%) all experienced large increases in recreational catch. Only weakfish and winter flounder showed decreases in total recreational catch with a 74% and 51% decrease, respectively.

Between 2006 and 2007, large changes in catch totals were observed for spot (64% increase), winter flounder (50% decrease), and weakfish (-43%). All other key species and species groups experienced changes in catch totals ranging from a 25% decline in striped bass caught and a 29% increase in bluefish caught.

At the state level, summer flounder was the most caught key species or species group in 2007 with 8.5 million fish caught in New Jersey, 6.0 million fish caught in New York, and 1.2 million fish caught in Delaware. Atlantic croaker was the key species most often caught by recreational fishermen in Virginia with 17.3 million fish caught in 2007. In Maryland, there were 8.1 million white perch caught by anglers, the key species most often caught in this state.

Marine Economy³

The Mid-Atlantic's gross domestic product by state was \$2.2 trillion in 2006. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$814 billion. These economic measures increased 52%, 25%, and 47%, respectively, between 1998 and 2006, and 6.0%, 6.8%, and 6.5% between 2005 and 2006. Over 1.1 million establishments employed approximately 17 million full- and part-time employees across the region in 2006. This was a 8.5% increase in establishment numbers and a 11% increase in employee numbers from 1998-2006. A small increase in these numbers occurred from 2005-2006 (0.8% and 2.0%, respectively).

In 2006, New York had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the Mid-Atlantic. New York's approximately 516,000 establishments employed 7.5 million employees in 2006. Gross state product in New York was \$1.0 trillion, followed by New Jersey (\$448 billion), Virginia (\$369 billion), Maryland (\$258 billion), and Delaware (\$60 billion).

Among the Mid-Atlantic states where data was available,⁴ New Jersey had the highest commercial fishing location quotient (CFLQ) at 0.89 in 2006. This was a 24% decrease from 2001 and a 9.2% decrease from 2005. New Jersey's CFLQ suggests that the level of employment in commercial fishing-related industries is lower than the level of employment in these industries nationwide.⁵ Across the Mid-Atlantic, the CFLQ was lower than the national baseline of 1.0: 0.71 in Maryland (4.1% decrease relative to 2001), 0.48 in

Virginia (26% increase relative to 2001), and 0.12 in New York (46% decrease relative to 2001).

Seafood Sales and Processing

In 2006, there were 220 nonemployer firms engaged in seafood product preparation and packaging with annual receipt totals of \$14 million. Respectively, this was a 206% and 246% increase (205% in real terms) relative to 1998 levels. Most of these firms were located in Virginia and this state experienced the largest increases from 1998-2006 in this industry: 517% increase in firm numbers and 1,637% increase in annual receipt totals.

Employer establishments engaged in seafood product preparation and packaging totaled 84 in 2006. These establishments employed approximately 2,900 full- and part-time workers and generated \$96 million in annual payroll. Regionwide, there was a 21% decrease in establishments engaged in this industry, a 21% decrease in employees, and a 16% increase in annual payroll totals.

At the state level, most of these establishments were located in Virginia (33 establishments in 2006). However, Maryland employed more people (1,100 versus 870 workers in VA) and had a slightly higher annual payroll (\$28.9 million versus \$28.5 million in VA). Modest changes in this industry occurred in these states from 1998-2006: a 32% decrease in establishments in Maryland, a 43% decrease in employees in Virginia, and a 33% increase in annual payroll in Maryland.

The Mid-Atlantic's seafood wholesale annual payroll totals increased 21% from 1998-2006 to \$174 million in 2006. Despite this, establishment and employee numbers decreased (-23% and -17%, respectively) to 485 establishments and 4,300 full- and part-time employees. These trends were mirrored at the state level with the largest declines in Delaware (57% decrease in establishments), Maryland (37% decrease in establishments, 31% decrease in employees), and Virginia (44% decrease in employees). The largest increase was observed in Maryland (40% increase in annual payroll).

In 2006, there were 446 seafood retail nonemployer firms with total annual receipts of \$50 million across the region. This was a 14% decrease in firm numbers regionwide from 1998-2006, despite a 50% increase in firms located in Delaware. In terms of annual receipts, these totals increased 17% relative to 1998 totals, with the largest state level increases in Virginia (112%) and Maryland (43%). Approximately 46% of these firms were located in New York.

Employer establishments engaged in seafood retail increased 28% across the Mid-Atlantic to 704 establishments in 2006. Most of these establishments were located in New York (55%). Regionwide, this industry employed over 3,000 full-

³Data for 2007 was unavailable for this report therefore 2006 information is reported in this section.

⁴The CFLQ for Delaware was not available for this report.

⁵The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

and part-time workers with an annual payroll of \$61 million in 2006. From 1998-2006, employee numbers increased 70% and annual payroll totals increased 106% (82% in real terms). Large and modest increases were also experienced at the state level. The largest changes were in Delaware (55% increase in establishments), and Maryland (65% increase in employees, 109% increase in annual payroll).

Transport, Support, and Marine Operations

Marina industries had the highest number of establishments in this industry sector with 936 establishments regionwide in 2006. This was a 2% decrease relative to 1998 levels. Most of these industries were located in New York. Ship and boat building industries employed the most people in 2006 (25,000 full- and part-time workers) and had the highest annual payroll (\$1.1 billion). Employment numbers decreased 4% from 1998-2006, with a 34% decrease in employment in Maryland. Annual payroll totals increased 12% over this time period (-1% in real terms) with a 43% increase in New Jersey and a 35% decrease in Maryland.

Other industries with large and modest changes from 1998-2006 were: coastal and Great Lakes freight transportation (200% increase in establishments in Delaware); deep sea passenger transportation (100% increase in New York, 80% increase regionwide); marina industries (46% increase in employees and 104% increase in annual payroll regionwide); marine cargo handling (37% decrease in New York); port and harbor operations (175% increase in establishments in Maryland); and ship and boat building (75% decrease in establishments in Delaware).

2007 Economic Impacts of the Mid-Atlantic Region Seafood Industry (*thousands of dollars*)

	Total Landings Revenue	Total Sales Impacts	Total Income Impacts	Total Job Impacts
Delaware	7,578	73,890	39,266	1,582
Maryland	52,273	594,294	298,185	11,041
New Jersey	152,560	1,927,389	1,038,127	36,618
New York	58,940	1,830,881	972,022	39,585
Virginia	130,562	1,448,353	807,255	33,439

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	356,016	350,661	347,357	348,231	342,397	357,210	407,793	440,398	362,198	402,040
Finfish & Other	119,851	106,459	98,479	90,643	84,091	87,702	88,003	101,874	95,516	103,636
Shellfish	236,165	244,202	248,878	257,589	258,306	269,508	319,790	338,524	266,683	298,404
Bass, Striped	7,775	8,469	9,238	8,616	8,215	9,751	7,671	11,332	10,045	11,086
Clam, Atlantic Surf	25,558	27,574	34,973	34,211	34,692	35,366	26,760	27,084	29,580	32,479
Clam, Quahog	31,370	29,278	27,655	22,744	16,935	20,160	19,918	20,773	20,229	19,131
Crab, Blue	71,650	75,568	66,278	70,871	61,660	60,799	69,364	71,073	55,638	56,923
Flounder, Summer	8,041	7,952	7,769	7,078	8,700	10,678	13,094	13,810	12,365	10,316
Lobster, American	30,286	28,629	15,250	9,828	6,273	5,569	5,615	6,696	9,116	8,340
Menhaden	44,160	33,125	30,041	27,783	24,123	24,352	25,570	28,188	24,466	30,922
Oyster, Eastern	12,335	10,042	9,949	8,587	9,814	8,903	5,663	6,703	6,485	9,475
Scallop, Sea	30,492	42,104	66,135	75,275	91,237	111,969	160,847	181,299	120,140	146,832
Squid	19,577	14,918	13,189	9,904	9,287	6,497	14,302	9,169	7,727	7,445

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	916,095	753,212	715,376	835,425	702,234	710,738	757,468	709,023	667,314	728,338
Finfish & Other	692,883	545,711	511,997	631,288	496,430	514,804	529,762	518,166	488,018	553,228
Shellfish	223,211	207,501	203,379	204,137	205,804	195,934	227,707	190,857	179,297	175,110
Bass, Striped	5,386	4,956	5,602	4,930	4,591	5,273	3,945	5,708	4,788	5,507
Clam, Atlantic Surf	48,610	54,178	63,614	60,421	62,134	64,601	50,984	50,921	50,556	53,952
Clam, Quahog	5,314	5,263	4,560	3,857	2,318	3,311	3,537	3,735	3,728	4,056
Crab, Blue	76,844	78,715	62,360	61,045	63,076	56,047	68,979	70,983	61,873	48,859
Flounder, Summer	5,311	4,922	4,879	5,164	6,433	7,315	8,337	8,564	6,609	4,501
Lobster, American	8,620	7,390	3,775	2,633	1,705	1,181	1,386	1,585	1,772	1,397
Menhaden	546,567	415,006	403,599	518,487	394,606	398,744	421,309	412,672	400,784	469,277
Oyster, Eastern	3,623	3,266	2,883	2,217	1,713	1,493	859	1,202	984	1,114
Scallop, Sea	5,141	8,341	14,258	21,160	24,887	28,213	33,411	24,520	18,282	22,885
Squid	50,294	24,333	28,238	15,465	15,187	10,462	41,622	12,279	9,744	8,607

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	1.44	1.71	1.65	1.75	1.79	1.85	1.94	1.99	2.10	2.01
Clam, Atlantic Surf	0.53	0.51	0.55	0.57	0.56	0.55	0.52	0.53	0.59	0.60
Clam, Quahog	5.90	5.56	6.06	5.90	7.31	6.09	5.63	5.56	5.43	4.72
Crab, Blue	0.93	0.96	1.06	1.16	0.98	1.08	1.01	1.00	0.90	1.17
Flounder, Summer	1.51	1.62	1.59	1.37	1.35	1.46	1.57	1.61	1.87	2.29
Lobster, American	3.51	3.87	4.04	3.73	3.68	4.71	4.05	4.22	5.15	5.97
Menhaden	0.08	0.08	0.07	0.05	0.06	0.06	0.06	0.07	0.06	0.07
Oyster, Eastern	3.40	3.08	3.45	3.87	5.73	5.96	6.59	5.58	6.59	8.50
Scallop, Sea	5.93	5.05	4.64	3.56	3.67	3.97	4.81	7.39	6.57	6.42
Squid	0.39	0.61	0.47	0.64	0.61	0.62	0.34	0.75	0.79	0.86

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Trips	Jobs	Total Sales	Value Added
Delaware	1,295,658	1,784	273,433	125,328
Maryland	4,045,324	9,228	1,299,104	650,364
New Jersey	7,435,594	10,893	1,806,606	930,794
New York	6,218,085	6,493	979,186	511,312
Virginia	3,723,442	7,267	822,986	432,573

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	179,281	380,835	Fishing Tackle	990,169
Shore	137,808	178,093	Other Equipment	274,792
For-Hire	62,995	82,581	Boat Expenses	907,688
Total Trip Expenditures	380,084	641,509	Vehicle Expenses	1,359,885
			Second Home Expenses	303,043
			Total Durable Equipment Expenditures	3,835,577
Total State Trip and Durable Equipment Expenditures				4,857,170

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	1,655	1,591	1,944	2,290	1,643	2,229	2,363	3,002	2,876	3,234
Non-Coastal	102	148	148	190	139	144	157	252	224	212
Out-of-State	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
Total Anglers	1,757	1,739	2,091	2,480	1,783	2,372	2,520	3,254	3,100	3,446

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	975	910	1,134	1,323	1,024	1,182	1,323	1,152	1,339	1,399
Private or Rental	8,630	7,935	11,324	11,982	9,551	11,286	11,084	11,730	12,123	12,551
Shore	4,848	5,259	6,993	7,901	6,071	7,383	6,327	7,935	7,895	8,768
Total Trips	14,453	14,105	19,451	21,206	16,646	19,852	18,734	20,817	21,357	22,718

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	960	1,008	1,554	1,475	1,252	1,662	1,574	1,503	1,994	1,512
	R	4,996	5,815	6,677	5,464	5,053	7,802	8,474	8,009	9,511	7,114
Bluefish	H	2,243	1,904	2,580	3,227	2,518	3,193	4,274	5,176	4,037	4,556
	R	2,462	4,135	6,311	6,519	4,579	4,196	5,793	7,121	5,513	7,736
Drum (Atlantic Croaker)	H	8,391	8,111	9,702	12,145	10,868	9,349	9,830	10,790	9,464	9,602
	R	9,074	10,031	14,162	9,811	10,361	9,425	7,928	11,136	8,059	12,331
Drum (Spot)	H	3,447	1,244	2,763	2,196	2,314	4,772	3,725	5,245	6,347	10,694
	R	1,623	975	1,788	1,562	1,016	1,657	1,591	4,163	2,587	3,933
Drum (Weakfish) ²	H	2,151	1,396	1,876	1,315	918	308	331	1,125	497	276
	R	3,128	2,531	4,284	2,732	1,689	1,363	1,387	1,906	1,877	1,079
Flounder, Summer	H	5,548	3,048	5,869	4,393	2,633	3,922	3,598	3,303	3,393	2,792
	R	14,345	16,109	15,773	21,881	11,852	14,902	15,235	21,311	15,419	18,489
Flounder, Winter	H	247	511	1,317	795	362	541	331	196	248	209
	R	298	346	678	475	266	183	85	264	288	57
Porgies (Scup)	H	460	1,129	3,309	2,058	1,187	5,271	1,713	821	1,528	1,715
	R	585	312	1,491	1,983	1,551	2,379	2,857	1,839	3,145	2,296
Sea Bass, Black	H	1,090	1,275	3,330	2,636	3,057	3,033	1,590	1,060	1,317	1,515
	R	3,684	5,401	12,381	10,519	10,328	8,381	5,668	5,405	5,966	7,534
Wrasses (Tautog)	H	201	520	710	617	1,231	384	832	376	721	808
	R	1,018	1,908	1,493	1,694	2,534	1,010	1,648	1,221	2,239	2,472

¹Out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified; NA = data is not available.

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

2007 Economic Impacts of the Delaware Seafood Industry (*thousands of dollars*)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	73,890	39,266	1,582
Commercial Harvesters	15,402	5,349	294
Seafood Processors & Dealers	6,915	3,696	82
Seafood Wholesalers & Distributors	10,111	5,153	96
Retail Sector	41,461	25,068	1,110

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	5,837	6,800	6,833	7,660	6,067	5,204	5,234	6,113	5,692	7,578
Finfish & Other	1,464	1,617	1,379	1,080	986	1,465	1,121	1,273	1,330	1,294
Shellfish	4,374	5,183	5,454	6,580	5,081	3,739	4,113	4,840	4,361	6,284
Bass, Striped	245	271	245	365	336	479	497	494	507	429
Clam, Quahog	218	215	243	233	392	435	175	220	193	ND ¹
Crab, Blue	4,018	4,599	5,086	5,140	3,511	1,899	2,839	3,429	2,961	5,007
Eel, American	296	182	192	126	118	230	167	100	275	313
Oyster, Eastern	ND ¹	ND ¹	ND ¹	172	478	305	361	485	459	466
Scallop, Sea	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	7	102	121	ND ¹
Sea Bass, Black	ND ¹	ND ¹	142	42	21	181	48	157	190	201
Spot	60	24	17	51	8	46	38	98	58	99
Weakfish	337	352	318	133	176	83	61	82	56	36
Whelks	121	330	113	1,015	694	1,079	690	562	601	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	7,866	8,372	6,741	7,140	5,857	5,018	4,208	4,851	4,380	5,089
Finfish & Other	3,344	3,129	2,497	2,078	1,933	2,264	1,279	1,470	1,156	1,068
Shellfish	4,523	5,243	4,244	5,062	3,925	2,754	2,929	3,381	3,224	4,020
Bass, Striped	163	176	145	199	146	191	176	174	184	188
Clam, Quahog	74	70	76	64	134	141	54	69	60	ND ¹
Crab, Blue	4,360	4,993	4,092	4,085	3,062	1,792	2,276	2,924	2,856	3,580
Eel, American	131	129	119	121	90	156	137	110	120	136
Oyster, Eastern	ND ¹	ND ¹	ND ¹	78	133	76	79	84	75	76
Scallop, Sea	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	1	13	20	ND ¹
Sea Bass, Black	ND ¹	ND ¹	94	25	12	98	20	73	87	73
Spot	140	52	32	78	14	77	59	155	63	128
Weakfish	553	440	329	188	173	91	51	71	34	25
Whelks	75	162	65	828	590	729	491	276	203	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	1.50	1.53	1.69	1.84	2.30	2.50	2.82	2.84	2.75	2.28
Clam, Quahog	2.97	3.07	3.21	3.67	2.92	3.09	3.26	3.18	3.22	ND ¹
Crab, Blue	0.92	0.92	1.24	1.26	1.15	1.06	1.25	1.17	1.04	1.40
Eel, American	2.25	1.41	1.61	1.04	1.31	1.48	1.22	0.91	2.28	2.30
Oyster, Eastern	ND ¹	ND ¹	ND ¹	2.21	3.60	4.00	4.57	5.76	6.10	6.14
Scallop, Sea	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	5.05	8.08	6.19	ND ¹
Sea Bass, Black	ND ¹	ND ¹	1.52	1.66	1.69	1.86	2.35	2.15	2.18	2.76
Spot	0.43	0.47	0.52	0.66	0.59	0.60	0.65	0.63	0.92	0.78
Weakfish	0.61	0.80	0.97	0.71	1.02	0.91	1.18	1.16	1.63	1.46
Whelks	1.61	2.04	1.73	1.23	1.18	1.48	1.41	2.04	2.96	ND ¹

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	374	44,115	21,992
Shore Mode	416	39,967	21,226
For-Hire	82	7,776	4,446
Total Durable Equipment Impacts	912	181,574	77,663
Total State Trip and Durable Equipment Economic Impacts	1,784	273,433	125,328

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	24,515	14,573	Fishing Tackle	43,650
Shore	27,400	7,962	Other Equipment	13,644
For-Hire	3,938	1,693	Boat Expenses	14,108
Total Trip Expenditures	55,853	24,228	Vehicle Expenses	136,522
			Second Home Expenses	12,317
			Total Durable Equipment Expenditures	220,241
Total State Trip and Durable Equipment Expenditures				300,322

Recreational Anglers by Residential Area (thousands of anglers)¹

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	103	69	82	107	89	127	116	120	137	150
Non-Coastal	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²	NA ²
Out-of-State	188	168	201	226	177	199	243	191	205	224
Total Anglers	291	237	283	333	266	326	359	311	342	374

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	31	43	42	71	63	38	65	48	42	53
Private or Rental	419	383	606	672	535	552	679	568	671	731
Shore	469	375	448	436	429	514	434	459	465	512
Total Trips	920	800	1,096	1,180	1,028	1,104	1,177	1,074	1,179	1,296

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)³

Species/Groups	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Bass, Striped	H	19	9	40	41	29	30	25	20	19	10
	R	185	106	152	163	115	169	151	225	246	251
Bluefish	H	150	84	132	102	117	89	136	152	96	172
	R	275	323	303	221	435	120	322	217	322	479
Drum (Atlantic Croaker)	H	391	663	518	312	262	341	494	934	863	401
	R	840	1,017	695	285	361	655	483	761	1,034	618
Drum (Weakfish) ⁴	H	456	224	312	72	122	20	7	19	11	4
	R	614	372	465	227	101	39	79	111	121	19
Flounder, Summer	H	219	181	336	146	107	106	124	91	110	118
	R	736	433	797	1,051	498	415	850	841	534	1,096
Mackerel, Atlantic	H	5	(1)	1	23	6	(1)	7	(1)	(1)	(1)
	R	(1)	(1)	(1)	1	1	(1)	(1)	(1)	(1)	(1)
Perch, White	H	63	107	48	44	40	30	63	43	65	27
	R	175	312	140	117	72	134	187	116	147	143
Sea Bass, Black	H	52	41	151	203	607	307	106	62	128	76
	R	284	213	820	1,003	1,233	832	448	250	460	544
Tuna, Yellowfin	H	1	(1)	6	16	10	2	1	3	2	(1)
	R	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)
Wrasses (Tautog)	H	63	95	114	51	186	63	143	72	117	89
	R	169	202	324	209	412	167	263	251	216	267

¹In this table, "(1)" = 0-999 anglers.²All Delaware residents are considered coastal county residents thus this category is not applicable (NA).³In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.⁴This 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 (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	22,871 (0.3%)	354,643 (0.3%)	11,831 (0.4%)	19,738 (0.3%) ²	36,831 (0.4%)	ND ³
2006	25,613 (0.3%)	388,250 (0.3%)	17,449 (0.4%)	25,263 (0.3%)	59,589 (0.5%)	ND
% change	12.0%	9.5%	47.5%	28.0%	61.8%	--

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	NA ⁴	NA	NA	NA	NA	NA	NA	3	3
	Receipts	NA	NA	NA	ND	ND	ND	ND	64	214
Seafood sales, retail	Firms	6	4	NA	5	5	7	9	12	9
	Receipts	676	562	ND	214	435	959	803	1,523	835

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	1	1	1	1	1	1	1	1	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Seafood sales, wholesale	Establishments	7	5	4	5	7	5	2	3	3
	Employees	ND	ND	ND	ND	65	ND	ND	ND	9
	Payroll	ND	ND	ND	ND	2,279	ND	ND	ND	337
Seafood sales, retail	Establishments	11	11	13	12	15	18	16	14	17
	Employees	ND	64	ND	65	94	ND	144	138	135
	Payroll	ND	1,123	ND	1,243	1,779	ND	3,363	3,264	3,133

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	1	1	1	4	8	5	3	3	3
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	2	3	3	3	2	2	1	1	NA
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	NA
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	NA
Deep sea passenger transportation	Establishments	1	1	1	1	1	NA	NA	1	NA
	Employees	ND	ND	ND	ND	ND	NA	NA	ND	NA
	Payroll	ND	ND	ND	ND	ND	NA	NA	ND	NA
Marinas	Establishments	15	12	14	12	13	17	17	16	18
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marine cargo handling	Establishments	5	6	6	5	6	5	5	4	4
	Employees	ND	ND	272	257	199	513	ND	ND	597
	Payroll	ND	ND	4,570	4,482	14,718	14,879	ND	ND	18,812
Navigational services to shipping	Establishments	9	9	8	10	10	10	9	9	8
	Employees	69	ND	ND	ND	ND	ND	ND	ND	75
	Payroll	3,057	ND	ND	ND	ND	ND	ND	ND	4,783
Port & harbor operations	Establishments	NA	NA	NA	NA	NA	1	2	2	3
	Employees	NA	NA	NA	NA	NA	ND	ND	ND	ND
	Payroll	NA	NA	NA	NA	NA	ND	ND	ND	ND
Ship & boat building	Establishments	4	4	4	3	1	1	1	1	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the Maryland Seafood Industry (*thousands of dollars*)

	Sales Impacts	Income Impacts	Employment Impacts
Total Impacts	594,294	298,185	11,041
Commercial Harvesters	117,757	40,545	2,502
Seafood Processors & Dealers	88,672	38,219	983
Seafood Wholesalers & Distributors	140,584	70,530	1,295
Retail Sector	247,282	148,890	6,262

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	57,962	62,927	53,874	55,591	49,013	49,038	49,294	63,670	53,581	52,273
Finfish & Other	10,958	11,278	10,010	8,574	8,135	8,095	4,763	10,718	9,897	11,010
Shellfish	47,003	51,649	43,864	47,017	40,878	40,943	44,531	52,952	43,685	41,263
Bass, Striped	3,717	3,886	4,216	3,418	3,759	3,916	1,576	4,234	4,591	5,307
Clams or Bivalves	4,817	5,221	5,094	8,073	8,002	5,170	2,579	4,784	4,889	5,074
Crab, Blue	34,269	38,859	30,843	34,681	30,338	34,532	39,104	39,962	31,141	30,444
Croaker, Atlantic	453	482	569	676	512	576	751	543	440	269
Flounder, Summer	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	527	ND ¹	673	549	ND ¹
Menhaden	426	463	523	382	423	337	232	1,514	609	1,203
Oyster, Eastern	7,635	7,111	7,192	3,789	2,172	706	181	3,435	1,238	2,524
Perch, White	884	763	941	801	559	556	347	848	569	420
Scallop, Sea	14	24	108	108	96	ND ¹	418	4,513	6,200	2,809
Sea Bass, Black	451	681	475	244	436	555	ND ¹	706	811	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	61,479	66,419	48,913	55,539	53,185	49,350	49,557	67,460	51,227	48,575
Finfish & Other	21,405	21,666	16,164	16,089	15,275	13,468	8,103	24,977	12,720	18,054
Shellfish	40,074	44,754	32,749	39,450	37,909	35,882	41,454	42,483	38,507	30,521
Bass, Striped	2,883	2,430	2,705	2,049	2,085	2,193	897	2,339	2,485	2,627
Clams or Bivalves	6,454	6,644	7,111	11,911	10,663	7,527	3,676	6,112	7,756	7,948
Crab, Blue	30,870	35,371	22,847	25,933	26,481	27,816	33,826	34,914	29,446	21,386
Croaker, Atlantic	1,376	1,584	1,502	2,233	1,513	1,532	1,801	1,389	877	467
Flounder, Summer	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	329	ND ¹	333	248	ND ¹
Menhaden	4,464	5,721	4,871	4,619	4,850	4,232	3,336	15,806	5,263	11,431
Oyster, Eastern	2,461	2,440	2,368	1,274	567	159	43	738	274	259
Perch, White	1,457	1,516	1,921	1,947	1,583	1,477	453	1,524	688	712
Scallop, Sea	2	4	21	28	27	ND ¹	93	584	931	450
Sea Bass, Black	315	439	305	150	280	313	ND ¹	330	350	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	1.29	1.60	1.56	1.67	1.80	1.79	1.76	1.81	1.85	2.02
Clams or Bivalves	0.75	0.79	0.72	0.68	0.75	0.69	0.70	0.78	0.63	0.64
Crab, Blue	1.11	1.10	1.35	1.34	1.15	1.24	1.16	1.14	1.06	1.42
Croaker, Atlantic	0.33	0.30	0.38	0.30	0.34	0.38	0.42	0.39	0.50	0.58
Flounder, Summer	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	1.60	ND ¹	2.02	2.22	ND ¹
Menhaden	0.10	0.08	0.11	0.08	0.09	0.08	0.07	0.10	0.12	0.11
Oyster, Eastern	3.10	2.91	3.04	2.97	3.83	4.45	4.23	4.66	4.52	9.73
Perch, White	0.61	0.50	0.49	0.41	0.35	0.38	0.77	0.56	0.83	0.59
Scallop, Sea	6.64	6.61	5.10	3.81	3.52	ND ¹	4.48	7.72	6.66	6.25
Sea Bass, Black	1.43	1.55	1.56	1.62	1.56	1.77	ND ¹	2.14	2.31	ND ¹

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	839	90,426	55,135
Shore	1,140	105,619	62,298
For-Hire	442	38,387	22,566
Total Durable Equipment Impacts	6,806	1,064,672	510,366
Total State Trip and Durable Equipment Economic Impacts	9,228	1,299,104	650,364

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	26,290	60,706	Fishing Tackle	251,487
Shore	54,190	33,799	Other Equipment	60,207
For-Hire	10,578	15,317	Boat Expenses	165,596
Total Trip Expenditures	91,058	109,822	Vehicle Expenses	548,320
			Second Home Expenses	136,653
			Total Durable Equipment Expenditures	1,162,263
Total State Trip and Durable Equipment Expenditures				1,363,143

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	423	383	461	565	430	526	442	620	733	850
Non-Coastal	29	41	51	50	41	53	39	49	84	78
Out-of-State	307	349	481	426	330	418	333	425	447	528
Total Anglers	759	773	994	1,041	801	997	815	1,095	1,264	1,456

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	160	126	204	174	182	187	264	181	235	219
Private or Rental	1,554	1,413	2,204	2,340	1,596	2,033	1,499	1,933	1,980	2,440
Shore	1,124	1,343	1,442	1,275	1,059	1,110	881	1,066	1,374	1,387
Total Trips	2,839	2,883	3,851	3,790	2,837	3,330	2,645	3,180	3,589	4,045

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	392	263	506	383	282	525	380	490	649	679
	R	2,642	2,388	3,245	2,890	2,929	4,653	3,739	3,753	3,896	2,998
Bluefish	H	284	167	344	429	199	214	373	240	509	705
	R	492	605	1,150	1,074	577	518	683	344	850	1,381
Drum (Atlantic Croaker)	H	1,126	1,210	2,675	1,320	1,223	1,620	871	810	833	1,093
	R	3,022	2,484	4,968	1,586	2,523	1,393	819	951	1,792	1,631
Drum (Spot)	H	1,327	655	1,390	1,089	691	3,301	1,375	2,007	2,645	3,843
	R	634	619	1,080	577	501	670	577	2,186	1,467	1,422
Drum (Weakfish) ²	H	290	340	475	303	100	41	30	22	(1)	10
	R	462	753	1,209	737	286	181	132	55	57	106
Flounder, Summer	H	206	227	258	139	69	41	66	85	58	157
	R	1,716	1,012	1,513	1,245	383	373	952	433	511	1,626
Perch, White	H	1,692	838	1,611	565	1,156	2,020	1,441	2,436	2,558	2,990
	R	2,886	2,098	3,721	1,583	1,754	3,698	3,035	5,394	4,331	5,101
Sea Bass, Black	H	354	160	434	119	337	241	158	81	104	53
	R	754	1,487	3,224	2,324	925	773	618	784	799	1,331
Tuna, Yellowfin	H	20	8	9	26	18	26	4	11	21	7
	R	3	1	(1)	2	(1)	(1)	(1)	2	(1)	1
Wrasses (Tautog)	H	7	20	20	24	42	14	14	40	14	107
	R	29	183	128	138	295	96	36	255	211	390

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

²This 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 (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	126,577 (1.8%)	1,938,727 (1.8%)	59,818 (1.8%)	119,732 (2.0%) ²	161,954 (1.9%)	0.74
2006	140,292 (1.9%)	2,232,215 (1.9%)	93,719 (2.0%)	156,004 (2.1%)	257,577 (2.0%)	0.71
% change	10.8%	15.1%	56.7%	30.3%	59.0%	-4.1%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	28	25	28	25	50	47	51	57	55
	Receipts	1,563	2,027	1,325	1,997	3,199	2,487	2,301	2,727	2,751
Seafood sales, retail	Firms	65	71	71	62	79	78	70	78	73
	Receipts	5,433	6,856	7,012	5,904	8,629	6,771	10,100	6,976	7,755

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	28	27	27	26	24	23	23	23	19
	Employees	1,006	967	894	889	807	762	895	1,141	1,053
	Payroll	21,651	22,947	22,309	23,686	20,618	20,399	23,039	24,986	28,852
Seafood sales, wholesale	Establishments	94	93	92	94	77	63	58	59	59
	Employees	1,001	950	903	913	870	686	733	709	694
	Payroll	23,498	24,214	26,940	28,847	33,072	27,934	29,813	30,148	32,943
Seafood sales, retail	Establishments	65	65	71	78	88	97	96	95	97
	Employees	375	399	474	475	488	459	579	576	617
	Payroll	6,801	7,786	8,309	8,853	10,033	10,634	12,328	13,019	14,190

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	7	9	9	10	8	9	11	10	10
	Employees	ND ³	ND	155	178	ND	ND	ND	ND	ND
	Payroll	ND	ND	7,372	7,969	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	11	12	12	12	14	16	15	16	14
	Employees	104	ND	ND	ND	123	ND	281	316	ND
	Payroll	5,501	ND	ND	ND	9,216	ND	18,983	14,131	ND
Deep sea passenger transportation	Establishments	NA ⁴	NA	1	1	4	3	2	1	1
	Employees	NA	NA	ND	ND	ND	ND	ND	ND	ND
	Payroll	NA	NA	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	193	196	187	185	188	180	183	185	179
	Employees	1,142	1,103	1,172	1,240	1,232	1,296	1,321	1,228	1,260
	Payroll	26,924	28,289	30,207	32,088	33,621	34,024	36,598	36,590	40,866
Marine cargo handling	Establishments	17	14	13	15	16	14	11	12	13
	Employees	1,824	1,794	1,751	1,505	1,487	1,862	1,725	1,639	1,659
	Payroll	68,008	60,105	60,915	63,172	66,525	69,084	75,911	81,219	73,367
Navigational services to shipping	Establishments	13	13	12	13	13	11	8	9	9
	Employees	ND	311	ND	275	ND	195	ND	ND	ND
	Payroll	ND	13,125	ND	18,710	ND	38,619	ND	ND	ND
Port & harbor operations	Establishments	4	4	4	4	7	8	10	11	11
	Employees	217	236	ND	319	259	376	479	ND	ND
	Payroll	6,109	8,708	ND	9,545	11,655	16,099	19,218	ND	ND
Ship & boat building	Establishments	41	36	38	40	44	55	58	57	55
	Employees	1,697	1,902	ND	1,421	1,223	1,426	1,022	ND	1,119
	Payroll	51,552	56,547	ND	48,561	40,743	36,444	35,364	ND	33,463

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the New Jersey Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	1,927,389	1,038,127	36,618
Commercial Harvesters	164,081	65,287	1,909
Seafood Processors & Dealers	112,984	55,491	1,267
Seafood Wholesalers & Distributors	446,142	214,554	3,809
Retail Sector	1,204,183	702,794	29,634

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	97,235	97,857	107,163	110,246	112,708	120,670	145,832	159,113	136,053	152,560
Finfish & Other	25,539	26,403	23,308	19,858	20,062	22,017	21,772	22,938	24,483	25,323
Shellfish	71,696	71,453	83,855	90,389	92,646	98,653	124,061	136,175	111,570	127,237
Clam, Quahog	8,712	7,363	6,757	5,636	ND ¹	5,228	7,409	7,556	7,615	968
Clams, Ocean Quahog & Surf	29,755	32,536	37,766	41,193	39,804	38,054	31,379	25,567	31,038	32,362
Crab, Blue	5,279	4,911	5,490	4,802	6,725	4,736	5,330	6,773	6,359	6,004
Flounder, Summer	2,732	3,038	2,604	2,313	3,504	3,683	4,429	4,649	4,926	3,989
Goosefish	5,809	7,782	6,505	6,135	5,896	6,200	3,496	4,492	4,416	4,485
Herring, Atlantic	274	8	ND ¹	32	60	145	6	371	389	563
Lobster, American	2,633	3,632	3,694	2,471	1,139	1,028	1,802	2,002	2,533	4,056
Mackerel, Atlantic	2,203	2,207	1,205	1,695	1,780	2,855	3,398	3,958	3,717	668
Oyster, Eastern	2,686	1,572	967	1,918	1,853	3,366	1,558	823	2,288	2,231
Scallop, Sea	9,816	14,528	24,108	29,983	33,336	43,507	67,498	88,494	57,471	77,320

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	197,143	168,644	171,803	168,541	162,139	170,133	187,772	156,976	152,783	153,964
Finfish & Other	84,899	77,525	71,574	71,867	65,737	75,471	71,782	74,454	66,317	65,288
Shellfish	112,243	91,119	100,229	96,674	96,401	94,662	115,990	82,522	86,466	88,677
Clam, Quahog	2,193	1,880	1,622	1,357	ND ¹	1,260	1,796	1,852	1,844	240
Clams, Ocean Quahog & Surf	60,498	66,114	72,858	73,900	73,949	71,683	61,155	49,849	55,286	55,746
Crab, Blue	5,829	5,579	5,093	4,724	6,229	4,012	4,350	6,333	5,981	4,821
Flounder, Summer	1,863	1,917	1,848	1,745	2,407	2,385	2,829	2,529	2,380	1,698
Goosefish	8,141	6,358	4,414	5,855	5,697	7,185	4,230	3,922	3,841	4,234
Herring, Atlantic	2,545	47	ND ¹	708	1,138	1,805	114	2,263	2,451	6,039
Lobster, American	722	931	891	580	264	210	371	369	471	681
Mackerel, Atlantic	18,233	20,035	9,645	25,224	20,486	33,056	36,091	32,415	24,977	5,384
Oyster, Eastern	703	411	202	412	379	714	323	162	350	444
Scallop, Sea	1,588	2,748	4,949	8,219	8,644	10,638	13,737	11,832	8,440	11,801

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clam, Quahog	3.97	3.92	4.17	4.15	ND ¹	4.15	4.13	4.08	4.13	4.04
Clams, Ocean Quahog & Surf	0.49	0.49	0.52	0.56	0.54	0.53	0.51	0.51	0.56	0.58
Crab, Blue	0.91	0.88	1.08	1.02	1.08	1.18	1.23	1.07	1.06	1.25
Flounder, Summer	1.47	1.58	1.41	1.32	1.46	1.54	1.57	1.84	2.07	2.35
Goosefish	0.71	1.22	1.47	1.05	1.03	0.86	0.83	1.15	1.15	1.06
Herring, Atlantic	0.11	0.16	ND ¹	0.05	0.05	0.08	0.05	0.16	0.16	0.09
Lobster, American	3.65	3.90	4.14	4.26	4.31	4.90	4.86	5.42	5.38	5.96
Mackerel, Atlantic	0.12	0.11	0.12	0.07	0.09	0.09	0.09	0.12	0.15	0.12
Oyster, Eastern	3.82	3.82	4.77	4.65	4.88	4.72	4.82	5.09	6.53	5.02
Scallop, Sea	6.18	5.29	4.87	3.65	3.86	4.09	4.91	7.48	6.81	6.55

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	1,709	242,167	125,283
Shore	1,127	135,067	73,433
For-Hire	848	91,446	53,163
Total Durable Equipment Impacts	7,209	1,337,926	678,915
Total State Trip and Durable Equipment Economic Impacts	10,893	1,806,606	930,794

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	53,729	137,673	Fishing Tackle	378,814
Shore	39,409	70,950	Other Equipment	78,186
For-Hire	34,235	25,182	Boat Expenses	296,190
Total Trip Expenditures	127,373	233,805	Vehicle Expenses	405,725
			Second Home Expenses	52,466
			Total Durable Equipment Expenditures	1,211,381
Total State Trip and Durable Equipment Expenditures				1,572,559

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	400	493	544	721	400	592	708	818	693	890
Non-Coastal	29	30	17	42	17	20	31	39	25	19
Out-of-State	357	303	430	543	239	462	379	471	481	518
Total Anglers	786	827	990	1,306	656	1,074	1,117	1,328	1,199	1,427

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	459	419	518	643	368	466	501	408	630	545
Private or Rental	2,669	2,487	3,727	4,025	2,992	3,602	3,892	3,765	3,859	3,634
Shore	1,180	1,919	2,224	2,817	2,049	2,711	2,152	2,476	2,803	3,256
Total Trips	4,308	4,825	6,469	7,484	5,409	6,779	6,544	6,649	7,292	7,436

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	89	237	402	560	416	392	449	327	489	206
	R	488	1,153	885	966	715	926	1,324	1,197	2,102	1,495
Bluefish	H	817	809	1,236	1,431	1,321	1,571	2,012	2,035	1,457	1,645
	R	702	1,824	1,907	2,056	2,168	1,913	2,403	2,644	1,930	3,146
Drum (Weakfish) ²	H	921	584	760	736	493	151	184	1,053	418	209
	R	778	551	1,605	1,065	351	631	607	1,280	1,231	581
Flounder, Summer	H	2,728	1,503	3,023	2,070	989	1,784	1,887	1,396	1,561	1,328
	R	6,520	9,220	7,261	10,343	4,205	5,807	7,212	9,931	6,823	7,125
Flounder, Winter	H	169	376	1,080	562	208	307	95	46	43	194
	R	193	191	441	188	124	110	29	42	192	42
Hake, Red	H	79	116	96	51	12	16	12	6	111	1
	R	2	4	5	5	(1)	15	6	6	15	(1)
Sea Bass, Black	H	273	449	1,962	1,919	1,760	1,903	1,173	667	692	1,006
	R	1,235	1,728	5,545	4,371	4,318	4,295	2,833	2,463	2,090	2,882
Tuna, Bluefin	H	(1)	3	8	11	7	9	9	8	4	5
	R	(1)	(1)	(1)	4	(1)	(1)	31	26	35	1
Tuna, Yellowfin	H	4	19	55	9	14	22	25	22	41	25
	R	(1)	(1)	(1)	(1)	4	(1)	1	(1)	1	(1)
Wrasses (Tautog)	H	12	166	462	468	348	103	131	37	195	342
	R	225	671	627	1,006	836	394	426	335	563	1,353

¹In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.²This 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 (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	230,860 (3.3%)	3,368,365 (3.1%)	125,787 (3.8%)	211,925 (3.6%) ²	314,117 (3.6%)	1.17
2006	243,055 (3.2%)	3,645,381 (3.0%)	175,502 (3.7%)	257,419 (3.5%)	448,426 (3.4%)	0.89
% change	5.3%	8.2%	39.5%	21.5%	42.8%	-23.9%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	15	16	17	14	21	23	23	26	27
	Receipts	1,098	1,913	2,545	2,878	2,673	2,279	2,694	3,086	3,027
Seafood sales, retail	Firms	93	98	94	87	92	100	89	93	72
	Receipts	8,707	8,457	8,289	8,368	8,348	8,822	9,219	9,194	8,916

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	14	18	16	18	17	16	15	17	16
	Employees	803	863	816	1,100	928	846	749	969	667
	Payroll	17,990	18,491	20,655	27,302	23,045	20,794	21,029	28,235	22,097
Seafood sales, wholesale	Establishments	101	110	107	112	102	84	85	85	89
	Employees	936	1,027	1,028	1,023	969	920	948	914	941
	Payroll	32,296	35,333	37,609	39,677	37,394	35,991	38,066	37,828	41,506
Seafood sales, retail	Establishments	118	123	125	125	149	133	134	128	127
	Employees	428	429	571	549	559	454	547	524	493
	Payroll	7,655	8,188	9,621	10,183	10,225	10,513	11,952	11,787	11,373

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	20	19	18	21	13	15	17	18	18
	Employees	ND ³	ND	ND	532	ND	768	ND	914	1,040
	Payroll	ND	ND	ND	36,912	ND	45,024	ND	54,097	68,096
Deep sea freight transportation	Establishments	35	38	37	33	35	37	33	38	39
	Employees	3,807	1,484	1,373	1,451	1,397	1,287	1,028	948	648
	Payroll	146,969	79,060	74,915	86,618	78,258	70,996	65,691	68,633	45,940
Deep sea passenger transportation	Establishments	3	2	3	4	4	5	4	5	4
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	224	220	209	211	199	203	201	206	204
	Employees	ND	ND	ND	ND	927	951	945	978	940
	Payroll	ND	ND	ND	ND	32,480	34,777	36,862	38,323	39,154
Marine cargo handling	Establishments	24	24	26	26	29	27	26	26	25
	Employees	3,526	2,907	3,887	3,418	3,408	4,108	4,685	4,972	4,599
	Payroll	158,301	166,705	227,064	187,150	247,217	318,325	340,085	363,714	345,784
Navigational services to shipping	Establishments	15	17	22	21	22	16	17	16	19
	Employees	ND	ND	408	183	ND	210	ND	169	ND
	Payroll	ND	ND	22,315	10,359	ND	8,028	ND	9,673	ND
Port & harbor operations	Establishments	7	6	6	5	5	5	6	7	6
	Employees	ND	ND	375	376	ND	240	ND	194	ND
	Payroll	ND	ND	18,804	21,855	ND	10,644	ND	11,599	ND
Ship & boat building	Establishments	44	43	43	45	41	37	35	37	34
	Employees	1,796	1,992	2,178	2,185	2,223	2,005	2,040	2,320	2,307
	Payroll	61,814	66,141	71,918	70,980	76,607	75,149	80,301	89,421	88,367

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the New York Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	1,830,881	972,022	39,585
Commercial Harvesters	116,428	39,860	2,435
Seafood Processors & Dealers	94,356	39,847	696
Seafood Wholesalers & Distributors	424,823	208,571	3,658
Retail Sector	1,195,273	683,744	32,796

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	81,828	74,787	61,121	55,072	51,264	51,601	46,874	56,368	57,706	58,940
Finfish & Other	22,319	19,363	16,495	18,864	15,924	16,426	16,762	18,317	19,123	20,099
Shellfish	59,509	55,424	44,626	36,208	35,341	35,175	30,112	38,051	38,583	38,841
Clam, Atlantic Surf	2,497	2,203	3,602	4,885	5,520	7,934	4,475	7,055	4,473	5,932
Clam, Quahog	19,185	17,777	17,547	13,502	12,245	12,399	10,673	12,696	12,237	14,224
Clam, Softshell	712	975	848	561	679	888	1,227	1,468	2,055	1,628
Flounder, Summer	1,967	1,832	2,007	1,778	2,042	2,240	3,275	3,797	3,418	3,129
Lobster	27,649	24,970	11,555	7,357	5,131	4,426	3,722	4,396	6,288	4,283
Oyster, Eastern	1,356	392	1,311	2,137	4,995	4,263	3,367	1,961	2,390	2,627
Scallop, Sea	5	68	239	718	90	164	720	3,617	3,518	3,812
Scups or Porgies	1,099	713	909	703	1,185	1,330	1,637	2,027	2,448	2,348
Squid, Loligo	6,720	8,052	8,423	6,035	6,247	4,353	5,425	6,054	5,844	5,158
Tilefishes	3,329	1,885	2,053	3,191	3,195	2,736	2,082	2,765	3,323	3,845

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	56,501	49,490	44,702	42,388	38,548	39,388	34,513	38,150	32,651	36,275
Finfish & Other	31,490	23,568	18,585	21,018	16,540	17,223	16,530	14,631	14,029	16,458
Shellfish	25,011	25,922	26,116	21,370	22,008	22,165	17,983	23,519	18,622	19,817
Clam, Atlantic Surf	3,859	4,878	5,567	7,549	8,544	13,264	7,462	11,953	6,913	9,161
Clam, Quahog	2,504	2,647	2,349	1,828	1,502	1,553	1,346	1,617	1,650	1,592
Clam, Softshell	208	229	181	106	132	163	234	270	393	198
Flounder, Summer	822	801	812	752	1,053	1,073	1,594	1,799	1,220	941
Lobster	7,897	6,452	2,883	2,053	1,440	946	996	1,154	1,243	716
Oyster, Eastern	237	68	150	244	537	466	370	219	269	124
Scallop, Sea	3	18	111	259	26	39	170	647	577	610
Scups or Porgies	621	455	634	655	1,558	1,850	1,907	2,186	2,416	2,325
Squid, Loligo	8,300	10,197	13,208	7,625	9,613	4,603	6,363	6,693	6,460	5,437
Tilefishes	1,962	798	916	1,835	1,593	1,755	1,335	1,142	1,297	1,394

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clam, Atlantic Surf	0.65	0.45	0.65	0.65	0.65	0.60	0.60	0.59	0.65	0.65
Clam, Quahog	7.66	6.72	7.47	7.39	8.15	7.98	7.93	7.85	7.42	8.94
Clam, Softshell	3.42	4.25	4.70	5.30	5.15	5.45	5.24	5.43	5.23	8.23
Flounder, Summer	2.39	2.29	2.47	2.36	1.94	2.09	2.05	2.11	2.80	3.33
Lobster	3.50	3.87	4.01	3.58	3.56	4.68	3.74	3.81	5.06	5.98
Oyster, Eastern	5.73	5.76	8.77	8.77	9.30	9.15	9.10	8.97	8.87	21.21
Scallop, Sea	1.81	3.90	2.15	2.77	3.43	4.19	4.24	5.59	6.10	6.25
Scups or Porgies	1.77	1.57	1.43	1.07	0.76	0.72	0.86	0.93	1.01	1.01
Squid, Loligo	0.81	0.79	0.64	0.79	0.65	0.95	0.85	0.90	0.90	0.95
Tilefishes	1.70	2.36	2.24	1.74	2.01	1.56	1.56	2.42	2.56	2.76

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	710	85,949	53,810
Shore	421	45,391	27,710
For-Hire	746	73,572	44,550
Total Durable Equipment Impacts	4,617	774,274	385,242
Total State Trip and Durable Equipment Economic Impacts	6,493	979,186	511,312

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	4,297	83,481	Fishing Tackle	215,057
Shore	3,672	41,513	Other Equipment	86,322
For-Hire	8,978	38,432	Boat Expenses	251,835
Total Trip Expenditures	16,947	163,426	Vehicle Expenses	126,049
			Second Home Expenses	66,428
			Total Durable Equipment Expenditures	745,690
Total State Trip and Durable Equipment Expenditures				926,063

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	427	337	469	474	387	599	587	885	735	881
Non-Coastal	6	11	12	11	8	19	18	27	25	39
Out-of-State	42	28	20	29	41	82	76	110	114	147
Total Anglers	476	376	500	513	436	700	681	1,022	874	1,067

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	244	281	306	344	339	406	397	475	398	522
Private or Rental	2,012	1,749	2,496	2,365	2,172	3,030	2,600	3,032	3,058	3,237
Shore	1,175	873	1,844	1,915	1,607	2,090	1,777	2,566	1,943	2,459
Total Trips	3,431	2,903	4,645	4,624	4,118	5,525	4,774	6,073	5,399	6,218

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	167	195	271	190	202	314	243	298	313	371
	R	885	1,229	1,373	824	588	1,084	1,493	1,348	1,578	1,456
Bluefish	H	768	710	718	1,005	751	1,147	1,499	2,376	1,534	1,660
	R	589	1,156	2,629	2,543	1,017	1,305	1,883	3,314	1,839	1,919
Drum (Weakfish) ²	H	21	18	42	28	25	9	8	(1)	9	7
	R	30	35	69	69	63	7	40	194	12	201
Flounder, Summer	H	1,230	760	1,671	700	696	1,539	937	1,147	802	711
	R	1,522	3,260	3,574	5,228	4,100	5,722	2,682	7,767	5,277	5,255
Flounder, Winter	H	78	136	237	233	154	234	236	150	204	15
	R	104	152	237	286	141	73	56	222	95	14
Herring, Atlantic ²	H	111	142	67	39	26	30	73	140	39	315
	R	5	118	83	48	14	(1)	4	2	3	176
Porgies (Scup)	H	444	875	3,126	1,734	1,091	5,112	1,581	686	1,277	1,601
	R	483	197	1,301	1,666	1,246	1,805	2,508	1,263	2,498	1,590
Sea Bass, Black	H	12	89	335	164	221	318	105	176	277	312
	R	79	731	1,222	641	1,411	739	490	963	1,634	1,513
Shortfin Mako	H	2	1	5	(1)	1	3	(1)	(1)	1	1
	R	3	9	13	2	4	3	2	5	2	(1)
Wrasses (Tautog)	H	69	197	79	46	630	129	381	119	253	202
	R	517	787	401	314	953	297	783	272	1,020	368

¹In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.²This 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 (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	481,962 (7.0%)	6,993,814 (6.5%)	274,635 (8.3%)	482,888 (8.1%) ²	686,906 (7.9%)	0.22
2006	515,950 (6.8%)	7,532,764 (6.3%)	398,192 (8.3%)	594,223 (8.0%)	1,028,320 (7.8%)	0.12
% change	7.1%	7.7%	45.0%	23.1%	49.7%	-45.5%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	17	43	39	45	40	62	49	57	61
	Receipts	1,093	3,621	3,538	2,607	1,730	2,580	3,517	2,652	3,044
Seafood sales, retail	Firms	279	274	268	262	244	272	241	219	206
	Receipts	24,314	28,922	30,580	31,218	29,832	29,321	28,640	24,987	24,790

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	18	19	18	21	16	18	17	18	15
	Employees	339	452	ND ³	370	352	271	323	324	298
	Payroll	13,404	15,350	ND	18,258	20,430	15,676	14,782	14,810	16,491
Seafood sales, wholesale	Establishments	323	313	305	296	315	291	274	269	254
	Employees	2,195	2,189	2,265	2,158	2,269	2,183	2,091	2,003	2,066
	Payroll	67,377	71,437	75,538	76,881	84,367	75,063	75,411	76,177	78,198
Seafood sales, retail	Establishments	302	297	307	323	381	376	386	392	388
	Employees	1,004	1,026	1,113	1,154	1,421	1,518	1,602	1,513	1,495
	Payroll	15,037	16,110	17,304	18,609	22,867	25,422	26,489	25,665	26,701

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	72	71	69	67	69	60	60	57	55
	Employees	ND	1,687	1,653	2,182	2,284	1,751	1,452	1,448	1,464
	Payroll	ND	91,895	91,296	129,403	141,213	115,452	94,074	91,347	109,315
Deep sea freight transportation	Establishments	48	42	43	40	38	35	36	39	38
	Employees	1,123	769	ND	621	1,084	927	600	602	ND
	Payroll	91,731	49,402	ND	42,874	52,516	58,350	38,246	39,309	ND
Deep sea passenger transportation	Establishments	2	2	4	5	4	8	7	6	4
	Employees	ND	ND	ND	160	ND	212	ND	ND	ND
	Payroll	ND	ND	ND	5,646	ND	6,673	ND	ND	ND
Marinas	Establishments	405	389	392	386	386	417	413	416	404
	Employees	1,811	1,682	1,778	1,805	1,680	2,167	2,185	2,093	2,112
	Payroll	53,425	55,844	64,661	66,508	69,242	77,398	81,737	84,832	83,807
Marine cargo handling	Establishments	19	20	22	19	11	14	14	12	12
	Employees	1,126	1,290	1,677	ND	ND	951	1,099	ND	ND
	Payroll	40,018	43,649	56,242	ND	ND	50,015	48,529	ND	ND
Navigational services to shipping	Establishments	41	36	41	41	32	34	34	35	36
	Employees	ND	ND	487	554	ND	ND	ND	ND	ND
	Payroll	ND	ND	27,872	29,646	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	3	3	3	3	4	3	3	3	3
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	6
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	119
Ship & boat building	Establishments	50	52	48	44	41	44	45	47	48
	Employees	976	841	880	759	ND	ND	ND	590	ND
	Payroll	28,550	28,262	28,320	26,072	ND	ND	ND	21,514	ND

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Virginia Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	1,448,353	807,255	33,439
Commercial Harvesters	107,917	46,959	2,203
Seafood Processors & Dealers	179,333	94,186	2,544
Seafood Wholesalers & Distributors	223,917	112,069	2,118
Retail Sector	937,185	554,041	26,574

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	113,049	108,247	118,336	119,618	123,308	130,657	160,491	155,096	109,071	130,562
Finfish & Other	59,520	47,754	47,258	42,222	38,947	39,661	43,522	48,589	40,597	45,783
Shellfish	53,530	60,492	71,078	77,395	84,361	90,996	116,970	106,507	68,474	84,779
Bass, Striped	2,559	3,088	3,266	3,250	2,823	3,389	3,659	4,478	2,907	3,835
Catfishes & Bullhead	355	330	389	987	1,005	372	649	900	1,570	977
Crab, Blue	27,195	26,525	24,115	25,600	21,083	19,130	21,822	20,578	14,067	14,800
Croaker, Atlantic	4,162	3,499	5,598	3,126	3,815	2,822	3,013	3,691	4,344	4,616
Flounder, Summer	3,316	3,067	3,131	2,973	3,150	4,220	5,376	4,680	3,460	3,186
Goosefish	1,076	940	843	700	704	879	599	1,143	688	750
Menhaden	40,744	30,222	27,566	25,860	22,113	22,511	24,144	25,259	22,269	25,351
Scallop, Sea	20,658	27,483	41,680	44,466	57,715	68,298	92,203	84,574	52,819	62,892
Sea Bass, Black	1,307	1,195	1,335	1,317	1,589	1,306	1,167	1,243	1,072	663
Spot	1,536	1,040	2,256	1,326	1,256	1,688	2,236	2,227	1,762	3,175

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	592,732	460,254	443,197	561,792	442,490	446,828	481,373	441,568	426,235	484,388
Finfish & Other	551,710	419,790	403,157	520,211	396,929	406,359	432,023	402,616	393,760	452,313
Shellfish	41,022	40,464	40,041	41,581	45,560	40,469	49,350	38,952	32,475	32,075
Bass, Striped	1,855	1,859	2,209	2,050	1,841	2,104	2,126	2,484	1,431	1,967
Catfishes & Bullhead	1,577	1,455	1,680	1,964	1,886	1,799	1,922	1,622	1,360	1,596
Crab, Blue	34,599	31,437	28,846	25,057	27,301	21,464	27,642	26,064	22,719	18,481
Croaker, Atlantic	12,007	12,850	12,889	12,929	12,448	10,936	9,488	9,272	7,829	10,899
Flounder, Summer	2,616	2,196	2,207	2,660	2,970	3,522	3,906	3,897	2,757	1,857
Goosefish	2,995	2,629	942	887	970	1,270	1,002	1,159	677	825
Menhaden	508,728	378,158	367,131	487,144	364,941	373,868	399,798	372,578	370,989	419,997
Scallop, Sea	3,548	5,572	9,176	12,654	16,189	17,536	19,409	11,444	8,312	10,024
Sea Bass, Black	816	740	648	661	771	507	498	476	328	190
Spot	4,277	2,962	3,765	3,248	3,062	3,471	4,338	3,103	1,696	4,249

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	1.38	1.66	1.48	1.59	1.53	1.61	1.72	1.80	2.03	1.95
Catfishes & Bullhead	0.23	0.23	0.23	0.50	0.53	0.21	0.34	0.55	1.15	0.61
Crab, Blue	0.79	0.84	0.84	1.02	0.77	0.89	0.79	0.79	0.62	0.80
Croaker, Atlantic	0.35	0.27	0.43	0.24	0.31	0.26	0.32	0.40	0.55	0.42
Flounder, Summer	1.27	1.40	1.42	1.12	1.06	1.20	1.38	1.20	1.26	1.72
Goosefish	0.36	0.36	0.90	0.79	0.73	0.69	0.60	0.99	1.02	0.91
Menhaden	0.08	0.08	0.08	0.05	0.06	0.06	0.06	0.07	0.06	0.06
Scallop, Sea	5.82	4.93	4.54	3.51	3.56	3.89	4.75	7.39	6.35	6.27
Sea Bass, Black	1.60	1.61	2.06	1.99	2.06	2.58	2.34	2.61	3.27	3.49
Spot	0.36	0.35	0.60	0.41	0.41	0.49	0.52	0.72	1.04	0.75

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	1,786	175,564	101,912
Shore	463	42,646	24,452
For-Hire	136	10,771	6,145
Total Durable Equipment Impacts	4,883	594,005	300,064
Total State Trip and Durable Equipment Economic Impacts	7,267	822,986	432,573

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	70,450	84,402	Fishing Tackle	101,161
Shore	13,137	23,869	Other Equipment	36,433
For-Hire	5,266	1,957	Boat Expenses	179,959
Total Trip Expenditures	88,853	110,228	Vehicle Expenses	143,269
			Second Home Expenses	35,179
			Total Durable Equipment Expenditures	496,001
Total State Trip and Durable Equipment Expenditures				695,082

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	302	309	388	423	337	384	510	559	578	463
Non-Coastal	38	66	68	88	73	52	69	137	90	76
Out-of-State	291	187	262	520	407	288	428	511	364	297
Total Anglers	631	562	717	1,031	817	724	1,007	1,206	1,033	836

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	80	41	64	91	72	86	96	41	34	59
Private or Rental	1,976	1,904	2,291	2,579	2,255	2,068	2,415	2,432	2,555	2,510
Shore	900	749	1,036	1,458	927	958	1,083	1,368	1,310	1,154
Total Trips	2,956	2,694	3,391	4,128	3,254	3,113	3,594	3,841	3,900	3,723

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	294	304	335	301	321	402	477	368	523	246
	R	796	941	1,022	621	707	971	1,768	1,485	1,690	914
Cobia	H	4	5	10	9	3	2	3	14	8	10
	R	9	16	8	10	10	15	7	23	29	8
Drum (Atlantic Croaker)	H	6,730	5,882	5,486	9,335	9,129	6,695	7,293	7,791	7,069	7,753
	R	4,991	5,669	7,811	7,087	7,108	6,544	5,791	8,144	4,599	9,511
Drum, Red	H	13	12	23	7	50	14	5	3	15	71
	R	94	233	197	30	801	43	34	31	159	166
Drum (Spot)	H	2,024	569	527	1,056	1,602	1,441	2,323	2,994	3,510	6,609
	R	900	340	503	969	482	934	975	1,799	921	2,311
Drum (Spotted Seatrout)	H	35	138	90	13	16	102	75	31	56	146
	R	75	152	265	110	136	207	296	277	125	415
Drum (Weakfish) ¹	H	464	229	287	176	178	86	103	30	59	45
	R	1,245	819	936	633	888	504	528	267	456	172
Flounder, Summer	H	1,165	378	581	1,338	772	451	584	584	862	479
	R	3,852	2,183	2,629	4,014	2,666	2,585	3,539	2,340	2,274	3,388
Sea Bass, Black	H	398	536	448	231	132	265	48	75	115	67
	R	1,332	1,242	1,570	2,180	2,441	1,742	1,280	945	983	1,265
Wrasses (Tautog)	H	51	43	35	29	26	76	163	108	142	67
	R	77	66	13	27	38	55	141	107	229	94

¹This 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 (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	172,182 (2.5%)	2,700,589 (2.5%)	81,261 (2.5%)	167,476 (2.8%) ²	226,569 (2.6%)	0.38
2005	197,263 (2.6%)	3,174,363 (2.7%)	128,999 (2.7%)	220,087 (3.0%)	368,604 (2.8%)	0.48
% change	14.6%	17.5%	58.7%	31.4%	62.7%	26.3%

Seafood Sales and Processing – Nonemployer Firms (thousands of dollars)

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	12	14	16	20	35	53	68	65	74
	Receipts	283	854	613	1,185	1,406	2,370	3,456	3,665	4,916
Seafood Sales, retail	Firms	76	73	68	89	94	88	89	80	86
	Receipts	3,788	4,707	5,505	10,148	8,266	7,193	8,346	8,762	8,027

Seafood Sales and Processing – Employer Establishments (thousands of dollars)

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	46	42	41	42	39	38	42	39	33
	Employees	1,515	1,515	1,230	1,259	1,035	1,256	1,231	1,336	871
	Payroll	29,441	30,554	34,642	35,228	35,828	37,386	38,731	39,980	28,530
Seafood sales, wholesale	Establishments	108	108	105	100	89	84	86	86	80
	Employees	1,087	1,056	1,072	875	790	742	756	675	605
	Payroll	20,721	22,086	21,054	21,138	21,591	20,133	22,235	21,864	21,388
Seafood sales, retail	Establishments	53	52	57	59	74	61	68	69	75
	Employees	ND	ND	243	203	259	165	297	286	334
	Payroll	ND	ND	3,262	3,104	3,662	3,146	4,479	4,865	5,348

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	16	15	15	14	13	16	13	15	13
	Employees	501	ND ³	ND	ND	ND	591	ND	ND	ND
	Payroll	18,281	ND	ND	ND	ND	26,881	ND	ND	ND
Deep sea freight transportation	Establishments	20	26	24	22	23	22	21	24	22
	Employees	895	953	1,172	ND	1,254	1,087	1,124	1,090	1,564
	Payroll	49,207	71,298	72,961	ND	92,591	87,099	91,978	95,871	141,085
Deep sea passenger transportation	Establishments	NA ⁴	NA	NA	NA	2	2	2	1	1
	Employees	NA	NA	NA	NA	ND	ND	ND	ND	ND
	Payroll	NA	NA	NA	NA	ND	ND	ND	ND	ND
Marinas	Establishments	121	119	121	129	122	136	137	141	131
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marine cargo handling	Establishments	16	17	16	16	18	19	19	18	17
	Employees	1,387	ND	1,820	1,284	ND	ND	ND	1,516	1,110
	Payroll	52,862	ND	53,584	50,553	ND	ND	ND	52,254	51,654
Navigational services to shipping	Establishments	13	13	14	13	17	15	20	21	17
	Employees	374	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	9,359	ND	ND	ND	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	8	9	9	9	8	8	9	9	10
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ship & boat building	Establishments	53	54	52	63	62	50	52	50	51
	Employees	21,711	21,176	21,429	20,198	21,240	20,720	21,022	21,230	21,741
	Payroll	853,817	765,462	856,081	989,524	963,644	901,156	920,372	938,375	993,066

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

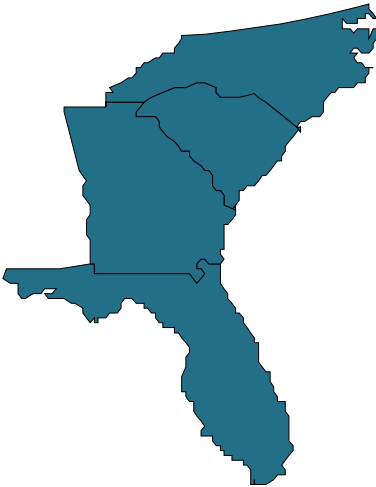
²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

South Atlantic

- East Florida
- Georgia
- North Carolina
- South Carolina



Management Context

The South Atlantic Region is comprised of Georgia, North Carolina, South Carolina, and East Florida. Federal fisheries in this region are managed by the South Atlantic Fishery Management Council (SAFMC) and NOAA Fisheries (NMFS) under eight fishery management plans (FMPs).¹ 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).

South Atlantic Fishery Management Plans

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 species or species groups covered in these fishery management plans, pink shrimp, snowy grouper, black sea bass, red porgy, and red snapper are currently considered overfished. For short-lived species such as pink shrimp, environmental conditions are generally believed to have a more significant effect than from fishing. Species or species groups currently subject to overfishing are: vermillion snapper, red snapper, snowy grouper, tilefish, red grouper, black sea bass, gag, black grouper, speckled hind, and warsaw grouper.

The South Atlantic wreckfish fishery is managed as an individual fishing quota (IFQ) fishery. This limited access privilege program (LAPP) is a type of catch share program and was put into place in 1992. The fishery had an ex-vessel value of \$300,000 in 2007.

Commercial Fisheries

Commercial fishermen in the South Atlantic harvested 105 million pounds of finfish and shellfish in 2007, earning over \$151 million for their catch. Shrimp and blue crab were a major source of ex-vessel revenue in 2007, generating a combined \$76 million or 51% of total catch. These species also contributed the most to total landings in the region, with 34 million pounds of blue crab and 21 million pounds of shrimp landed in 2007. High value species such as clams and oysters accounted for less than 2% of total landings in 2007, but generated 5% of total revenue that year due to their high ex-vessel price per pound (\$6.09 and \$4.92, respectively).

¹The authority to manage red drum was transferred to the Atlantic States Marine Fisheries Commission (ASMFC) in 2008.

North Carolina contributed most to the ex-vessel revenue and landings in the region, with \$82 million earned for 63 million pounds landed in 2007. East Florida (\$43 million, 25 million pounds), South Carolina (\$16 million, 9.3 million pounds), and Georgia (\$10 million, 7.2 million pounds) followed.

Key South Atlantic Commercial Species

- Clams
- Blue crab
- Flounders
- Groupers
- King mackerel
- Oysters
- Shrimp
- Snappers
- Swordfish
- Tunas

Economic Impacts²

Florida led the region in terms of sales, income, and job impacts related to the seafood industry in 2007. In-state sales in Florida generated over \$5.1 billion in 2007 with income impacts totaling \$2.8 billion. Over 101,000 full- and part-time jobs were generated from the seafood industry in this state. North Carolina ranked second in the South Atlantic in terms of economic impacts with \$655 million in in-state sales, \$352 million in income impacts, and 16,000 full- and part-time jobs. In terms of employment, Georgia (11,000 jobs) and South Carolina (1,900 jobs) followed.

Landings Revenue

Ex-vessel revenue for finfish and shellfish totaled \$151 million in 2007, a 24% decrease (-68% in real terms) from landings revenue in 1998 (\$198 million) but a 7.4% increase from 2006 (\$141 million). Shellfish revenue accounted for 59% of total revenue in the South Atlantic, bringing in \$90 million in 2007. This was a 34% decrease (-45% in real terms) relative to 1998 (\$136 million) but a 12% increase (6% in real terms) from 2006 (\$80 million). Finfish revenue totaled \$61 million, a 0.8% decrease (-17% in real terms) from 1998, and a 1% increase (-4.5% in real terms) from 2006.

Fishermen in North Carolina accounted for 54% of the region's landings revenue in 2007. This was a 19% decrease relative to total revenue in 1998 (\$101 million) but a 17% increase relative to 2006 (\$70 million). Blue crab (\$21 million), shrimp (\$18 million), and flounders (\$11 million) contributed the most to total revenue in North Carolina. Georgia (-58%), South Carolina (-45%), and East Florida (-3.2%) also had declining revenue trends from 1998-2007. Only East Florida had an increase in total revenue from 2006-2007, a 2% increase, but in real terms, East Florida experienced a 3.8% decrease. Most of the revenue generated in these three states came from shrimp and blue crab landings.

²Economic impacts reported here are for the state of Florida, not East Florida.

Revenue from shrimp and blue crab was the highest of the key species and species groups in 2007, contributing 51% to total revenue in the South Atlantic. This was true despite declining revenue trends over the 10 year time period. Shrimp landings revenue declined 30% (-42% in real terms) and blue crab declined 43% (-52% in real terms) relative to 1998 landings revenue for these species. However, both species experienced an increase in revenue from 2006-2007: 9.1% for shrimp (3.1% in real terms) and 23% for blue crab (16% in real terms).

Across the South Atlantic, the only other key species or group to have declining revenue trends from 1998-2007 are clams (-62%, -68% in real terms) and flounders (-9.4%, -24% in real terms). In contrast to these declines, tuna revenue increased 150% (109% in real terms), oyster revenue increased 114% (79% in real terms), and snapper revenue increased 55% (30% in real terms). However, oyster revenue decreased slightly between 2006 and 2007 (-1.7%, -7.1 in real terms).

At the state level, large changes in landings revenue over the 10 year period occurred for: Spanish mackerel (85%) and clams (-88%) in East Florida; groupers (6,050%), clams (122%), snails or conchs (-100%), and shrimp (-70%) in Georgia; tunas (199%), snappers (88%), and blue crab (-52%) in North Carolina; and oysters (88%), sharks (77%), tilefish (-97%), and clams (-74%) in South Carolina.

Commercial Fish Facts

Landings revenue

- On average, the South Atlantic's key species and species groups accounted for 78% of total landings revenue.
- Shrimp and blue crab contributed the most to total revenue from 1998-2007, averaging \$43 million and \$33 million, respectively. Fishermen in North Carolina generated most of this revenue.
- The largest annual increase in revenue was 109% for tunas, which increased from \$2.0 million to \$4.2 million from 1999-2000. The largest annual decrease was a 37% decrease in shrimp revenue (2000-2001).

Landings

- The South Atlantic's key species and groups contributed an average of 52% to total landings annually.
- Blue crab and shrimp contributed the most to total landings in the region, averaging 34 million pounds and 21 million pounds from 1998-2007. North Carolina fishermen harvested the majority of these species.
- Landings of tunas increased 50% from 2005-2006, the largest annual increase. Most of these landings were harvested in North Carolina. The largest annual decrease in landings was for shrimp which decreased 39% from 2004-2005.

Prices

- Clams (\$6.69) and oysters (\$4.17) had the highest average ex-vessel price per pound from 1998-2007.
- Blue crab (\$0.85) and king mackerel (\$1.66) had the lowest average ex-vessel price of the region's key species or groups.
- Swordfish had the largest annual increase in ex-vessel price, increasing 52% from 1999-2000. This was followed by a 20% decrease from 2000-2001, the largest annual decrease.

Landings

Across the South Atlantic, commercial fishermen harvested 105 million pounds of finfish and shellfish in 2007. This was a 57% decrease from 1998 (241 million pounds) and a -8.8% decrease from 2006 (115 million pounds). Shellfish accounted for 55% of total landings (58 million pounds) in 2007. However, this was a 47% decrease from 1998 harvest levels (109 million pounds) and a 7.5% decrease from 2006 (63 million pounds). Finfish harvest decreased 65% from 132 million pounds in 1998 to 47 million pounds in 2007. From 2006-2007, finfish landings declined 10%.

Finfish and shellfish landings experienced double digit declines in all four South Atlantic states between 1998 and 2007. The largest changes were in North Carolina where finfish landings decreased 73% and shellfish landings decreased 53%. Finfish and shellfish landings decreased as follows: -32% and -50%, respectively, in South Carolina; -43% and -46% in Georgia; and -19% and -12% in East Florida.

Blue crab and shrimp were a major component to landings totals across the South Atlantic. In 2007, 34 million pounds of blue crab and 21 million pounds of shrimp were harvested. These species accounted for 52% of the total harvest in 2007. Fishermen in North Carolina landed 64% of blue crabs harvested across the region. However, blue crab harvests declined 66% from 1998-2007. North Carolina and East Florida fishermen harvested 75% of total shrimp landings in 2007, harvesting 9.6 million and 6.2 million pounds, respectively. Relative to 1998 landings totals, this was a 106% increase in North Carolina and an 11% decrease in East Florida.

Other South Atlantic key species and groups with large changes in landings totals over the 10 year period include: a 62% increase in oysters, a 56% increase in tunas, and a 52% decrease in clams.

At the state level, dramatic changes in landings totals occurred for the following key species or groups: an 87% decrease in clams in East Florida; a 3,600% increase in groupers, a 177% increase in clams, and a 100% decrease in snails or conchs in Georgia; a 106% increase in shrimp, a 76% increase in tunas, and a 66% decrease in blue crab in North Carolina; and a 97% decrease in tilefish in South Carolina.

Prices

With the exception of clams and shrimp, 2007 ex-vessel prices for the South Atlantic's key species and species groups were higher than their 10 year average price per pound. Ex-vessel prices for clam decreased 22% (-35% in real terms) and shrimp prices decreased 18% (-31% in real terms) between 1998 and 2007. Tuna prices had the

largest increase of any key species or group during this period, increasing 61% (34% in real terms) from \$1.32 per pound (1998) to \$2.12 per pound (2007).

Across the region and at the state level, only clam and shrimp prices declined between 1998 and 2007. The largest decreases in clam prices were in South Carolina (-36%, -47% in real terms) and Georgia (-18%, -31% in real terms). The largest decreases in shrimp prices were 20% (-33% in real terms) in both North Carolina and Georgia.

All other key species or species groups increased in ex-vessel price. Relative to ex-vessel prices in 2006, grouper in the South Atlantic experienced the largest increase, increasing 16% from \$3.41 (2006) to \$3.96 per pound (2007). The price of snappers remained stable between 2006 and 2007, and tilefish (-30%) and shark (-23%) prices decreased.

The largest increases during this period were for: lobsters (81%, 51% in real terms) in East Florida; snail or conches (74%, 46% in real terms) in Georgia; black sea bass (71%, 43% in real terms) and tunas (69%, 41% in real terms) in North Carolina; and groupers (60%, 34% in real terms) in South Carolina.

Recreational Fishing

In 2007, there were 3.7 million resident recreational anglers in the South Atlantic. Residents and non-residents took 26 million fishing trips in the region in 2007. Over 86% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 51% of them were taken from a private or rental boat and another 46% were shore-based. Atlantic croaker and spot were the most caught key species or species group with 11 million fish caught in 2007. This key species group accounted for 26% of the total fish caught in the region. Just over half of these fish (59%) were harvested rather than released.

Key South Atlantic Recreational Species

- Bluefish
- King mackerel
- Dolphinfinh
- Spanish mackerel
- Drum (Atlantic croaker and spot)
- Porgies (sheepshead)
- Red drum
- Black sea bass
- Drum (spotted seatrout)
- Sharks

Economic Impacts and Expenditures

In 2007, recreational fishing activities in East Florida supported more jobs than in any other state in the South Atlantic with approximately 65,000 full- and part-time jobs supported. North Carolina (22,000 jobs), South Carolina (6,100 jobs), and Georgia (2,200 jobs) followed in terms of employment impacts from recreational fishing activities. The majority of these jobs were related to durable equipment expenditures (versus trip-related expenditures): 94% of jobs in Georgia; 91% of jobs in East Florida; 62% of jobs in South Carolina; and 52% of jobs in North Carolina.

When looking at trip-related employment impacts, industries that provided services for shore-based fishing trips supported most of the trip-related full- and part-time jobs in North Carolina (7,500 jobs) and South Carolina (1,100 jobs). Private or rental boat trips supported most of the trip-related jobs in East Florida (3,000 jobs) and Georgia (70 jobs).

In addition to jobs, the contribution of recreational fishing activities to the South Atlantic’s economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value-added impacts). In 2007, sales and value-added impacts were highest in East Florida (\$7.4 billion in sales impacts; \$3.9 billion in value-added impacts). North Carolina (\$2.3 billion in sales impacts; \$1.1 billion in value-added impacts), South Carolina (\$551 million; \$298 million); and Georgia (\$263 million; \$136 million) followed. The majority of these sales and value-added impacts were supported by expenditures on durable equipment. When looking at which fishing mode contributed the most to sales and value-added impacts, shore-based fishing trips generated most of these economic impacts in North Carolina and South Carolina. In East Florida and Georgia, private or rental boat fishing trips contributed more to trip-related economic impacts than shore-based or for-hire fishing modes.

Across the South Atlantic Region, total fishing trip and durable equipment expenditures generated approximately \$12 billion in 2007. Approximately 89% of this was related to durable equipment purchases. Boat-related expenses (\$5.1 billion), vehicle (\$2.7 billion) and fishing tackle expenses (\$1.6 billion) accounted for the majority of these durable equipment expenditures. Fishing trip-related expenditures by South Atlantic resident and non-resident anglers totaled \$645 million and \$676 million, respectively. Most of the expenditures by resident anglers were related to private or rental boat fishing trips (\$377 million). Non-resident anglers spent most of their trip-related expenditures towards shore-based fishing trips (\$455 million).

Participation

There were 3.7 million resident recreational fishermen who fished in the South Atlantic in 2007. This was a 97% increase from 1998 (1.9 million anglers) and a 19% increase from 2006 (3.1 million anglers). These anglers were residents of either a coastal (3.2 million anglers) or non-coastal county (493,000 anglers) in the South Atlantic Region.³ The number of coastal

³At the state level, out-of-state anglers are estimated. However at the region level, out-of-region anglers are not estimated thus only South Atlantic Region resident anglers are discussed here. In *Fisheries Economics of the U.S., 2006* (FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1998-2007 angler

county anglers in 2007 increased 98% from 1998 (1.6 million anglers) and increased 21% from 2006 (2.6 million anglers). Non-coastal county angler participation increased 93% from 1998 (256,000 anglers) and increased 3.4% from 2006 (477,000 anglers). When looking at where most anglers fished in 2007, 87% of the South Atlantic's total anglers fished in East Florida.

In 2007, the majority of recreational fishermen in East Florida and Georgia were residents of a coastal county⁴ within their respective state. These anglers comprised 68% of total anglers in East Florida and 48% of total anglers in Georgia. In contrast, most of North Carolina and South Carolina's anglers were out-of-state residents: 1.1 million anglers or 57% of total anglers in North Carolina and 550,000 anglers or 59% of total anglers in South Carolina. Non-coastal county residents accounted for a minority of total anglers in South Carolina (12%) and North Carolina (14%). Out-of-state residents comprised the smallest group of anglers in Georgia (15% of total anglers).

Fishing Trips

Resident and non-resident recreational fishermen took 26 million fishing trips in the South Atlantic in 2007. This was a 52% increase from 1998 (17 million trips) and a 7.7% increase from 2006 (24 million trips). In 2007, over 51% of total trips taken in the region were taken from a private or rental boat (13 million trips). Shore-based fishing trips were also popular with 12 million trips taken in 2007 or 46% of total trips in the region. This fishing mode was the only one to see a decrease between 2006 and 2007, decreasing 4.9%. Fishing trips taken from a for-hire boat was the only fishing mode to see a decrease between 1998 and 2007, decreasing 20%.

At the state level, there were 15 million fishing trips taken in East Florida in 2007. Trips taken in East Florida accounted for most of the fishing trips in the South Atlantic: 59% of total trips in the region. Private or rental boat trips were the most popular fishing mode in East Florida (8.3 million trips). North Carolina ranked second in terms of the total number of fishing trips taken in the South Atlantic with 7.0 million trips taken by anglers in 2007. South Carolina (2.6 million trips) and Georgia (926,000 trips) followed. Private or rental boat trips accounted for most of the trips taken in South Carolina and Georgia, while shore-based trips were the most popular mode in North Carolina.

participation totals excludes these anglers therefore the annual region totals reported here are smaller than those reported in FEUS 2006.

⁴All resident anglers in Florida are considered coastal county anglers.

Recreational Fishing Facts

Participation

- An average of 2.6 million resident anglers fished in the South Atlantic annually from 1998-2007. Most of these anglers were fishing in East Florida.
- In 2007, coastal county residents made up 87% of total anglers in this region. These anglers averaged 84% of total anglers annually over the 10 year time period.
- Non-coastal county resident anglers had the largest annual increase in participation, increasing 49% from 1999-2000. These anglers also had the largest annual decrease in participation, decreasing 20% from 2001-2002.

Fishing trips

- In the South Atlantic, an average of 20 million trips were taken annually between 1998 and 2007. Most of these fishing trips were taken in East Florida.
- Private or rental boat and shore-based fishing trips accounted for 13 million and 12 million fishing trips, respectively, in 2007. Together, these made up 98% of fishing trips taken that year.
- From 1999-2000, shore-based fishing trips increased 53%, the largest annual increase in fishing trip mode. From 1999-2000, for-hire fishing trips declined 22%, the largest annual decrease.

Harvest and release

- Atlantic croaker and spot was the most caught key species or species group in the region, averaging 8.7 million fish caught from 1998-2007. Of these, 59% were harvested rather than released in 2007.
- Half of the key species or groups caught from 1998-2007 were most often harvested rather than released. Dolphinfish (88% harvested), king mackerel (76%), and Spanish mackerel (66%) are examples.
- Key species or groups that are most often released rather than harvested from 1998-2007 include sharks (98% released), spotted seatrout (81%), and black sea bass (79%).
- Black sea bass had the largest annual increase in catch, increasing 95% from 2003-2004. The largest annual decrease in catch was for sharks. Their catch total decreased 49% from 1998-1999.

Harvest and Release

Atlantic croaker and spot had the highest catch totals of any key species or species groups in the South Atlantic. In 2007, approximately 11 million fish were caught by anglers in the region and 59% of these fish were harvested rather than released. Over 72% of these fish were caught in North Carolina. Spotted seatrout (7.6 million fish) and bluefish (7.0 million fish) were other key species that were caught in large numbers in 2007. Both of these species were most often released by anglers rather than harvested: 81% of spotted seatrout and 65% of bluefish. Sharks were also released in large numbers (99% of fish caught). In contrast, dolphinfish (83% harvested) and king mackerel (73%) were most often harvested rather than released.

All of the South Atlantic's key species and species groups showed increases in catch totals between

1998 and 2007. Key species or groups with dramatic changes included a 254% increase in total catch of spotted seatrout, 209% increase in black sea bass, and 173% increase in bluefish.

Between 2006 and 2007, only Atlantic croaker and spot decreased in total catch, decreasing 18% from 13 million fish to 11 million fish. All other key species or species groups increased during this period with the largest increases observed for Spanish mackerel (62% increase) and king mackerel (57%).

At the state level, Atlantic croaker and spot was the most caught key species or species group in 2007 for North Carolina (7.6 million fish). The majority of these fish were harvested rather than released. Spotted seatrout was the most caught key species or species groups in East Florida (3.9 million fish) and Georgia (1.5 million fish). The majority of these fish were released rather than harvested. In South Carolina, southern kingfish was the most caught key species or species group (2.1 million fish). Over 60% of these fish were harvested by anglers rather than released.

Marine Economy⁵

In 2006, the South Atlantic's gross domestic product by state totaled \$1.6 trillion. Employee compensation totaled \$894 billion and annual payroll totaled \$575 billion. These totals were all an increase from 1998 levels (59%, 31%, and 55%, respectively) and 2005 levels (6.9%, 6.4%, and 7.8%, respectively). Across the region, there were approximately 1.1 million establishments that employed over 16 million full- and part-time employees in 2006. Both of these economic measures increased from 1998-2006 (18% and 19%, respectively) and from 2005-2006 (2.4% and 4.7%, respectively).

At the state level, Florida⁶ had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the region. Florida's 517,000 establishments employed over 7.5 million employees in 2006. The gross state product in Florida was \$717 billion followed by North Carolina (\$381 billion), Georgia (\$376 billion), and South Carolina (\$146 billion).

Florida had the highest commercial fishing location quotient (CFLQ) in the South Atlantic region: 1.01 in 2006. This was a 26% decrease from 2001 (1.36) but a 1.0% increase from 2005 (1.0). Florida's CFLQ suggests that the level of employment in commercial fishing-related industries in Florida is slightly higher than the level of employment in these industries nationwide.⁷ The CFLQ in 2006 was 0.17 in South Carolina (61% decrease relative to 2001), 0.12 in Georgia (no change relative to 2001), and 0.09 in North Carolina (a 61% decrease relative to 2001).

⁵Data for 2007 was unavailable for this report therefore 2006 information is reported in this section.

⁶Information reported here is for the state of Florida, not East Florida.

⁷The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

Seafood Sales and Processing

There were 234 nonemployer firms engaged in seafood product preparation and packaging across the South Atlantic in 2006. These firms had an annual receipt total of \$15 million in 2006. Most of these firms were located in Florida (74%). The number of firms increased 111% regionwide from 1998-2006, and increased 200% in Florida and 163% in Georgia. Regionwide annual receipt totals increased 78% (57% in real terms) relative to 1998 levels, with large state level increases in South Carolina (604%) and Florida (104%).

In 2006, 51 employer establishments involved in seafood product preparation and packaging employed approximately 3,300 employees regionwide. These establishments had a total annual payroll of \$118 million. From 1998-2006, the number of establishments decreased 46% regionwide and this trend was mirrored at the state level. The number of employees engaged in this industry decreased 20% regionwide but annual payroll increased 27% (12% in real terms). Most of these establishments were located in Florida (43%) and North Carolina (35%) but Florida and Georgia employed the most people (51% and 35%, respectively).

There were 378 establishments engaged in the seafood wholesale industry that employed over 3,500 full- and part-time workers across the South Atlantic in 2006. Over two-thirds of these firms were located in Florida (68%). From 1998-2006, the region's seafood wholesale establishment and employee numbers decreased 28% and 22%, respectively. With the exception of Georgia where employee numbers increased 18%, double digit declines were observed in all state level establishment and employee numbers. Regionwide annual payroll totaled \$128 million in 2006, a 20% increase (6% in real terms) from 1998 levels. Georgia had the largest increase in annual payroll totals in the region, increasing 113% from 1998-2006.

Nonemployer seafood retail firms experienced a small increase in numbers, increasing 5% to 520 firms in 2006. The largest increase in firm numbers was in South Carolina (27%). Most firms were located in Florida (48%) and North Carolina (22%). Annual receipts totaled \$43 million regionwide, a 15% increase from 1998-2006. The largest increase in annual receipts was in Georgia (48%).

Employer establishments engaged in seafood retail increased 28% regionwide from 1998-2006. Double digit increases were also observed at the state level. These 379 establishments employed approximately 1,600 full- and part-time employees and had an annual payroll totaling \$29 million. Most of these establishments, employees, and annual payroll were located in Florida (46%, 60%, and 67%, respectively). Regionwide, employee numbers increased 31% from 1998-

2006 with the largest increase in Florida (57%). Annual payroll totals increased 78% (57% in real terms) across the South Atlantic with modest (for example, 30% in South Carolina) and large (e.g., 98% in Florida) double digit increases at the state level.

Transport, Support, and Marine Operations

Within this industry sector, marina industries had the highest number of establishments in 2006 with 753 establishments across the South Atlantic. This was a 2% increase over 1998 levels. Most of these marina operations were located in Florida (68%) and North Carolina (14%). The number of people employed by this industry and annual payroll totals also increased, 87% and 132% (105% in real terms), respectively. Most of this growth was in Florida.

Ship and boat building industries employed the most people in 2006 (21,000 full- and part-time workers) and had the highest annual payroll (\$738 million). Modest increases were observed for this industry, with employee numbers increasing 14% and annual payroll totals increasing 40% from 1998-2006 (23% in real terms). Most of the ship and boat building activity in the region occurred in Florida (69%). At the state level, large changes were in Georgia (45% decrease in establishments), North Carolina (71% increase in employees, 125% increase in annual payroll), and South Carolina (78% increase in annual payroll).

Other industries with large changes from 1998-2006 were: coastal and Great Lakes freight transportation (100% increase in establishments in Georgia, 300% in South Carolina); deep sea freight transportation (43% decrease in establishments in North Carolina); and deep sea passenger transportation (50% decrease in establishments regionwide, -50% in North and South Carolina).

2007 Economic Impacts of the South Atlantic Region Seafood Industry (thousands of dollars)

	Total Landings Revenue	Total Sales Impacts	Total Income Impacts	Total Job Impacts
Florida ¹	174,945	5,109,134	2,805,289	101,168
Georgia	10,081	555,374	301,205	11,196
North Carolina	82,332	655,032	351,549	15,943
South Carolina	16,017	78,315	37,966	1,860

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	198,212	204,900	220,080	177,880	171,034	156,703	159,444	131,410	140,671	151,166
Finfish & Shellfish	61,838	59,139	71,544	65,350	63,906	54,820	66,858	56,907	60,706	61,343
Shellfish	136,390	145,775	148,551	112,534	107,140	101,882	92,592	74,507	79,974	89,834
Clams	10,611	8,234	8,745	7,926	6,132	6,248	5,561	4,779	4,221	4,021
Crab, Blue	57,497	48,585	50,517	44,487	42,397	46,643	34,249	31,784	27,050	33,070
Flounders	12,553	10,157	11,684	10,164	11,308	9,718	11,530	10,974	13,317	11,375
Groupers	3,486	3,323	2,928	2,802	2,831	2,851	2,728	2,814	3,194	4,133
Mackerel, King	5,059	5,028	5,062	4,592	4,067	4,102	5,260	5,551	6,495	6,872
Oysters	1,770	2,030	2,045	2,261	2,138	2,353	2,912	3,305	3,853	3,786
Shrimp	61,977	80,662	82,354	51,918	51,699	42,707	44,797	31,035	39,653	43,273
Snappers	2,524	2,846	4,027	4,668	3,618	2,331	3,208	3,314	2,748	3,920
Swordfish	3,931	5,596	5,384	3,582	3,248	4,113	3,555	3,134	2,753	4,298
Tunas	1,958	2,012	4,204	3,402	2,808	2,423	3,671	3,904	4,692	4,894

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	241,085	215,799	221,639	199,256	216,204	197,486	199,033	123,421	114,661	104,598
Finfish & Other	132,079	105,217	129,977	125,525	138,277	116,081	121,214	64,925	52,056	46,660
Shellfish	109,006	110,583	91,662	73,730	77,926	81,405	77,820	58,497	62,604	57,939
Clams	1,363	1,115	1,151	1,169	1,004	983	886	747	685	661
Crab, Blue	79,464	72,775	54,777	43,459	46,479	50,881	45,001	38,218	36,779	33,568
Flounders	6,948	5,811	6,608	6,319	7,586	5,799	7,325	5,944	6,282	4,778
Groupers	1,504	1,460	1,242	1,148	1,166	1,134	1,057	1,007	1,079	1,288
Mackerel, King	3,244	3,202	2,971	2,675	2,474	2,848	3,269	3,106	3,792	3,736
Oysters	476	517	533	575	551	595	689	730	808	770
Shrimp	24,833	32,325	33,128	24,559	26,503	24,343	26,472	16,048	22,080	21,011
Snappers	1,108	1,233	1,690	2,068	1,529	958	1,285	1,286	967	1,354
Swordfish	1,493	2,230	1,972	1,371	1,429	1,575	1,314	1,152	1,036	1,417
Tunas	1,481	1,577	2,161	2,181	1,418	1,235	1,739	1,569	2,360	2,310

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clams	7.79	7.39	7.60	6.78	6.11	6.35	6.27	6.40	6.16	6.09
Crab, Blue	0.72	0.67	0.92	1.02	0.91	0.92	0.76	0.83	0.74	0.99
Flounders	1.81	1.75	1.77	1.61	1.49	1.68	1.57	1.85	2.12	2.38
Groupers	2.32	2.28	2.36	2.44	2.43	2.51	2.58	2.79	2.96	3.21
Mackerel, King	1.56	1.57	1.70	1.72	1.64	1.44	1.61	1.79	1.71	1.84
Oysters	3.72	3.92	3.84	3.93	3.88	3.96	4.22	4.53	4.77	4.92
Shrimp	2.50	2.50	2.49	2.11	1.95	1.75	1.69	1.93	1.80	2.06
Snappers	2.28	2.31	2.38	2.26	2.37	2.43	2.50	2.58	2.84	2.90
Swordfish	2.63	2.51	2.73	2.61	2.27	2.61	2.71	2.72	2.66	3.03
Tunas	1.32	1.28	1.95	1.56	1.98	1.96	2.11	2.49	1.99	2.12

¹In this table, Florida's total sales, income, and job impacts and total landings revenue are for the state of Florida, not East Florida.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Trips	Jobs	Total Sales	Value Added
East Florida	15,169,108	64,673	7,426,702	3,865,983
Georgia	926,484	2,154	263,073	136,404
North Carolina	6,979,308	21,748	2,295,623	1,134,579
South Carolina	2,577,099	6,134	550,531	298,456

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	116,077	377,065	Fishing Tackle	1,646,982
Shore	455,311	230,792	Other Equipment	438,105
For-Hire	104,996	37,391	Boat Expenses	5,107,944
Total Trip Expenditures	676,384	645,248	Vehicle Expenses	2,742,964
			Second Home Expenses	411,461
			Total Durable Equipment Expenditures	10,347,456
Total State Trip and Durable Equipment Expenditures				11,669,088

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	1,595	1,451	2,089	2,279	1,948	2,271	2,105	2,615	2,603	3,157
Non-Coastal	256	257	384	419	334	473	511	472	477	493
Out-of-State	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
Total Anglers	1,852	1,708	2,473	2,698	2,282	2,744	2,616	3,087	3,080	3,650

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	778	665	520	497	440	412	434	601	552	623
Private or Rental	7,535	6,935	9,119	9,565	8,266	9,963	9,369	10,073	10,749	13,137
Shore	8,525	6,835	10,436	11,534	9,057	10,872	11,060	11,138	12,511	11,893
Total Trips	16,837	14,435	20,075	21,596	17,763	21,246	20,862	21,813	23,813	25,652

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bluefish	H	1,137	799	1,425	1,974	1,617	1,664	1,657	2,210	1,969	2,453
	R	1,421	1,720	3,092	3,906	3,190	2,276	2,723	3,005	3,707	4,540
Dolphinfish	H	1,068	1,387	1,860	1,526	1,297	1,138	891	1,134	1,127	1,217
	R	78	153	239	234	81	146	107	219	232	255
Drum (Atlantic Croaker & Spot)	H	4,339	3,385	3,222	6,146	3,702	5,520	5,881	4,440	5,509	6,272
	R	2,668	3,772	2,933	3,231	2,270	4,653	3,719	3,881	7,291	4,273
Drum, Red	H	294	302	384	353	294	470	469	498	356	456
	R	799	919	1,120	1,560	1,617	1,527	1,899	2,412	2,111	2,071
Drum (Spotted Seatrout)	H	806	1,408	1,245	806	760	825	1,100	1,350	1,624	1,450
	R	1,330	2,084	3,317	2,594	3,217	2,892	3,212	5,337	4,989	6,115
Mackerel, King	H	541	472	580	394	363	600	398	428	511	807
	R	97	108	99	99	99	256	156	208	196	303
Mackerel, Spanish	H	577	840	1,267	1,229	1,355	1,170	994	1,091	790	1,211
	R	208	438	717	459	770	840	453	705	322	587
Porgies (Sheepshead)	H	400	533	814	787	409	728	492	614	489	749
	R	407	435	436	604	454	558	382	436	438	604
Sea Bass, Black	H	358	321	377	550	340	423	892	811	783	612
	R	1,058	1,417	1,824	2,000	1,457	1,406	2,677	2,484	2,967	3,764
Sharks ²	H	34	15	19	27	8	24	29	58	6	27
	R	788	479	778	1,451	1,020	1,366	1,653	2,049	1,792	2,057

¹Out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified; NA = data is not available.

²Sharks includes "Requiem Shark Genus," "Requiem Shark Family," blacktip sharks, and "Unidentified Sharks." Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

2007 Economic Impacts of the Florida Seafood Industry (thousands of dollars)¹

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	5,109,134	2,805,289	101,168
Commercial Harvesters	176,275	76,727	3,174
Seafood Processors & Dealers	382,863	183,873	3,679
Seafood Wholesalers & Distributors	1,137,997	564,616	10,810
Retail Sector	3,411,999	1,980,073	83,504

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	44,167	50,349	52,281	42,639	34,420	33,111	39,978	35,489	42,002	42,747
Finfish & Other	18,046	18,116	18,592	15,111	14,599	14,246	15,324	16,496	17,422	19,765
Shellfish	26,120	32,233	33,689	27,528	19,821	18,865	24,654	18,993	24,580	22,982
Clams	3,265	1,495	1,211	960	879	791	506	390	435	391
Crab, Blue	4,078	3,828	4,580	2,916	2,723	2,507	3,685	4,648	3,701	4,913
Groupers	1,215	1,020	956	906	719	658	584	587	521	923
Lobsters	2,060	3,064	2,828	2,190	1,939	1,779	2,148	1,624	2,462	2,488
Mackerel, King	3,180	3,207	3,272	3,163	2,816	2,853	3,650	3,456	4,318	4,833
Mackerel, Spanish	1,263	981	979	1,152	1,131	1,437	1,827	2,198	2,094	2,332
Sharks	1,071	1,241	1,503	1,483	1,496	1,362	1,149	1,201	1,364	726
Shrimp	15,760	21,323	23,537	20,103	13,224	12,721	17,360	11,118	16,390	13,821
Snappers	968	835	966	1,178	1,113	919	1,098	1,009	972	1,279
Swordfish	3,264	3,559	3,643	1,609	1,642	1,698	1,491	1,625	1,219	2,529

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	29,928	31,083	31,409	27,134	21,693	23,432	28,707	22,964	27,021	25,186
Finfish & Other	17,159	15,399	13,945	12,663	12,144	12,874	12,497	12,815	13,848	13,891
Shellfish	12,769	15,684	17,464	14,471	9,549	10,558	16,209	10,149	13,173	11,296
Clams	323	183	132	105	109	99	54	42	47	41
Crab, Blue	4,533	4,415	4,748	2,672	2,233	1,988	3,536	4,045	3,130	4,057
Groupers	516	432	397	354	281	250	216	207	166	274
Lobsters	541	709	592	450	414	395	456	313	407	361
Mackerel, King	2,023	2,044	1,839	1,789	1,645	2,061	2,291	1,833	2,572	2,631
Mackerel, Spanish	2,498	1,567	1,675	2,116	1,995	2,741	3,066	3,134	3,143	3,264
Sharks	1,514	1,644	1,737	1,912	1,795	1,509	1,273	1,292	1,472	818
Shrimp	6,906	8,351	11,158	10,329	6,217	6,451	11,728	5,203	8,843	6,174
Snappers	444	381	422	525	494	398	453	407	355	461
Swordfish	1,228	1,244	1,262	545	708	725	511	543	407	772

Average Annual Price for Key Species / Species Groups (price per pound)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clams	10.11	8.17	9.20	9.12	8.09	8.00	9.30	9.27	9.20	9.52
Crab, Blue	0.90	0.87	0.96	1.09	1.22	1.26	1.04	1.15	1.18	1.21
Groupers	2.35	2.36	2.41	2.56	2.56	2.63	2.70	2.84	3.14	3.37
Lobsters	3.81	4.32	4.78	4.87	4.68	4.50	4.71	5.18	6.06	6.90
Mackerel, King	1.57	1.57	1.78	1.77	1.71	1.38	1.59	1.89	1.68	1.84
Mackerel, Spanish	0.51	0.63	0.58	0.54	0.57	0.52	0.60	0.70	0.67	0.71
Sharks	0.71	0.75	0.87	0.78	0.83	0.90	0.90	0.93	0.93	0.89
Shrimp	2.28	2.55	2.11	1.95	2.13	1.97	1.48	2.14	1.85	2.24
Snappers	2.18	2.19	2.29	2.24	2.25	2.31	2.42	2.48	2.74	2.78
Swordfish	2.66	2.86	2.89	2.95	2.32	2.34	2.92	2.99	3.00	3.28

¹Information reported in this table is for the state of Florida, not East Florida.²Information reported in this table is for East Florida.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	3,191	303,518	181,368
Shore	1,951	184,009	106,827
For-Hire	670	65,150	38,356
Total Durable Equipment Impacts	58,861	6,874,024	3,539,432
Total State Trip and Durable Equipment Economic Impacts	64,673	7,426,702	3,865,983

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	47,261	240,090	Fishing Tackle	1,198,309
Shore	56,242	93,404	Other Equipment	304,450
For-Hire	24,876	14,887	Boat Expenses	4,428,374
Total Trip Expenditures	128,379	348,381	Vehicle Expenses	2,531,798
			Second Home Expenses	7,581
			Total Durable Equipment Expenditures	8,470,513
Total State Trip and Durable Equipment Expenditures				8,947,273

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	1,077	936	1,394	1,561	1,304	1,413	1,161	1,565	1,660	2,168
Non-Coastal	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
Out-of-State	742	574	894	1,088	784	793	685	945	935	1,008
Total Anglers	1,819	1,510	2,288	2,649	2,089	2,206	1,847	2,510	2,595	3,176

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	430	371	279	251	216	187	198	201	173	178
Private or Rental	4,890	4,196	5,753	5,994	5,430	6,212	5,313	6,230	6,503	8,317
Shore	4,770	3,627	5,448	6,219	4,657	5,045	5,149	5,618	6,439	6,674
Total Trips	10,090	8,194	11,479	12,464	10,303	11,444	10,660	12,049	13,115	15,169

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bluefish	H	418	235	439	581	759	644	494	549	640	807
	R	615	661	1,201	1,376	1,392	622	451	416	892	932
Dolphinfish	H	595	801	1,164	993	659	788	482	435	533	573
	R	60	141	221	220	72	129	105	216	209	231
Drum (Kingfish ²)	H	442	732	1,009	1,366	930	590	970	1,103	1,004	1,078
	R	408	372	714	799	588	368	628	758	811	1,136
Drum, Red	H	108	126	191	178	119	159	164	196	150	199
	R	481	566	693	850	664	749	1,138	1,271	894	897
Drum, (Spotted Seatrout)	H	190	241	288	251	206	170	200	338	299	303
	R	1,005	1,577	2,310	1,996	2,326	1,708	1,970	3,446	2,889	3,623
Jack (Florida Pompano)	H	263	166	242	141	141	374	275	226	176	178
	R	182	151	84	234	175	306	341	222	125	199
Mackerel, King	H	244	328	547	774	927	784	533	677	439	601
	R	88	185	353	286	555	446	214	368	192	198
Mackerel, Spanish	H	325	370	386	256	282	463	271	261	379	537
	R	80	72	71	70	83	233	106	128	163	220
Porgies (Sheepshead)	H	282	373	381	465	290	353	231	461	291	330
	R	334	368	311	511	352	351	308	337	299	371
Snapper, Gray	H	234	421	471	302	400	446	340	454	554	882
	R	1,371	1,633	1,658	1,302	1,438	1,654	1,396	1,228	1,457	2,929

¹All Florida residents are considered coastal county residents thus this category is not applicable (NA).²Kingfish includes "Kingfish Genus" and Gulf kingfish.

Florida's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	420,638 (6.1%)	5,756,353 (5.3%)	149,937 (4.5%)	286,753 (4.8%) ²	417,169 (4.8%)	1.36
2006	517,069 (6.8%)	7,535,515 (6.3%)	260,444 (5.4%)	395,591 (5.3%)	716,505 (5.5%)	1.01
% change	22.9%	30.9%	73.7%	38.0%	71.8%	-25.7%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	58	65	102	104	116	142	177	164	174
	Receipts	4,995	7,153	8,330	6,350	5,064	8,047	8,652	8,756	10,184
Seafood sales, retail	Firms	239	221	219	212	243	240	247	247	251
	Receipts	19,361	20,274	18,978	17,935	20,837	18,064	18,004	22,787	20,708

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishment	47	43	41	43	33	27	24	25	22
	Employees	2,488	2,336	2,188	2,033	2,359	2,084	2,193	1,616	1,704
	Payroll	51,439	52,842	58,821	58,977	65,914	61,452	65,881	47,529	62,801
Seafood sales, wholesale	Establishment	346	349	329	323	314	293	261	258	259
	Employees	2,826	2,733	2,915	2,670	2,395	1,835	1,948	1,883	2,091
	Payroll	66,264	69,139	76,363	76,717	78,160	55,874	63,276	65,339	73,897
Seafood sales, retail	Establishment	135	133	135	159	190	174	190	176	173
	Employees	595	869	575	697	908	952	977	970	936
	Payroll	9,841	20,664	10,359	13,403	17,186	15,673	17,575	19,192	19,513

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	49	55	54	58	51	66	59	59	54
	Employees	772	3,404	2,391	3,208	2,856	ND ³	1,132	1,150	1,217
	Payroll	32,288	190,731	108,638	150,964	143,185	ND	80,422	71,420	91,638
Deep sea freight transportation	Establishments	67	69	58	51	62	61	63	69	73
	Employees	3,576	3,622	2,209	2,123	1,858	2,535	2,567	2,622	3,729
	Payroll	154,115	119,744	99,384	106,848	107,564	131,904	150,701	207,300	226,810
Deep sea passenger transportation	Establishments	30	31	30	30	31	36	32	31	37
	Employees	6,775	7,846	9,165	8,719	7,863	8,879	8,849	8,492	9,077
	Payroll	272,287	306,202	349,974	394,932	315,551	428,941	536,753	504,625	571,590
Marinas	Establishments	496	484	476	509	481	528	532	551	513
	Employees	3,536	3,750	3,799	3,876	3,449	5,079	5,067	5,069	5,494
	Payroll	74,657	82,790	88,436	88,274	90,662	111,324	125,763	133,384	146,390
Marine cargo handling	Establishments	75	67	65	71	74	68	66	63	66
	Employees	4,988	4,209	4,549	4,863	4,405	5,651	5,671	6,409	7,266
	Payroll	101,915	96,650	92,843	124,760	109,555	171,481	175,257	177,983	189,020
Navigational services to shipping	Establishments	139	142	142	133	141	140	149	148	142
	Employees	651	749	866	755	714	817	686	660	781
	Payroll	29,634	35,977	36,730	35,854	34,040	39,524	39,309	42,200	48,370
Port & harbor operations	Establishments	22	18	22	25	29	26	29	31	27
	Employees	542	556	914	1,355	1,180	592	1,045	973	584
	Payroll	22,160	17,401	19,082	25,246	26,928	19,071	24,327	22,606	19,417
Ship & boat building	Establishments	291	301	300	313	291	290	306	312	301
	Employees	12,089	13,755	14,773	13,182	11,407	11,830	12,503	12,729	12,385
	Payroll	350,304	391,289	447,253	405,856	379,828	393,985	443,379	454,209	427,888

Note: Information reported in these tables are for the entire state of Florida, not East Florida.

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Georgia Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	555,374	301,205	11,196
Commercial Harvesters	21,220	6,053	512
Seafood Processors & Dealers	75,735	37,433	832
Seafood Wholesalers & Distributors	97,375	48,048	909
Retail Sector	361,044	209,671	8,943

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	24,053	22,958	21,674	15,440	14,703	13,685	14,374	13,465	11,533	10,081
Finfish & Other	696	827	926	953	960	649	747	729	574	617
Shellfish	23,357	22,131	20,748	14,486	13,743	13,036	13,627	12,736	10,959	9,463
Clams	123	153	213	187	319	521	426	658	296	273
Crab, Blue	3,088	2,474	2,477	2,902	2,166	1,970	2,508	3,096	2,959	3,287
Groupers	2	3	4	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	123
Shrimp	19,715	19,031	17,771	11,037	11,048	10,320	10,589	8,936	7,640	5,829
Snails (Conchs)	407	415	277	245	50	69	4	3	6	1
Snappers	168	231	517	533	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	266

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	13,196	12,219	9,841	9,308	9,177	9,437	9,659	9,638	8,293	7,180
Finfish & Other	528	549	557	546	596	409	420	401	285	299
Shellfish	12,668	11,670	9,284	8,762	8,582	9,028	9,239	9,237	8,009	6,880
Clams	17	25	25	25	49	75	70	112	46	47
Crab, Blue	5,170	3,993	3,296	2,771	1,989	1,713	2,963	4,302	4,091	3,963
Groupers	1	1	2	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	37
Shrimp	6,885	6,907	5,537	4,476	5,079	5,591	5,090	4,531	3,851	2,548
Snails (Conchs)	583	591	421	326	64	90	4	3	5	1
Snappers	77	100	229	255	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	92

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clams	7.06	6.14	8.39	7.50	6.57	6.94	6.10	5.85	6.48	5.82
Crab, Blue	0.60	0.62	0.75	1.05	1.09	1.15	0.85	0.72	0.72	0.83
Groupers	2.62	2.10	2.02	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	3.33
Shrimp	2.86	2.76	3.21	2.47	2.18	1.85	2.08	1.97	1.98	2.29
Snails (Conchs)	0.70	0.70	0.66	0.75	0.78	0.77	1.10	1.03	1.22	1.22
Snappers	2.17	2.31	2.26	2.09	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	2.89

¹NA = data is not available.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	73	8,378	5,082
Shore	48	5,240	3,142
For-Hire	18	1,563	912
Total Durable Equipment Impacts	2,014	247,891	127,267
Total State Trip and Durable Equipment Economic Impacts	2,154	263,073	136,404

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	227	8,416	Fishing Tackle	51,837
Shore	844	4,178	Other Equipment	18,180
For-Hire	308	726	Boat Expenses	126,970
Total Trip Expenditures	1,379	13,320	Vehicle Expenses	22,862
			Second Home Expenses	11,949
			Total Durable Equipment Expenditures	231,798
Total State Trip and Durable Equipment Expenditures				246,497

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	69	59	89	83	58	112	104	135	121	149
Non-Coastal	28	32	86	91	54	113	120	67	66	115
Out-of-State	19	20	44	38	37	42	53	43	33	45
Total Anglers	115	111	219	212	148	268	278	245	219	308

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	17	11	6	6	9	12	19	25	28	26
Private or Rental	345	292	435	449	338	549	442	501	472	553
Shore	210	170	355	352	272	410	475	326	291	348
Total Trips	572	473	796	807	619	971	936	852	791	926

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bluefish	H	22	12	20	10	2	1	1	3	3	11
	R	71	14	79	48	26	23	16	22	33	92
Drum (Atlantic Croaker)	H	65	104	129	22	36	249	45	40	40	47
	R	160	58	170	192	194	965	165	266	311	222
Drum, Black	H	5	6	63	13	23	44	26	22	23	51
	R	6	3	21	14	19	28	30	12	29	31
Drum, Red	H	25	67	94	90	91	122	140	108	82	103
	R	34	19	129	250	169	273	166	331	148	192
Drum (Southern Kingfish)	H	256	665	646	741	427	504	679	556	511	663
	R	117	32	561	598	379	847	624	547	630	670
Drum (Spotted Seatrout)	H	197	655	487	309	271	426	336	231	453	500
	R	100	161	548	365	358	738	608	678	872	958
Flounder, Southern	H	10	11	29	48	29	84	58	45	31	81
	R	2	1	15	15	11	16	29	13	25	(1)
Porgies (Sheepshead)	H	21	10	75	138	25	129	101	80	51	65
	R	7	3	13	37	39	122	38	42	61	67
Sea bass, Black	H	39	7	52	102	23	104	66	91	77	36
	R	9	9	235	177	83	238	134	222	235	231
Sharks ²	H	4	3	2	3	1	3	1	2	(1)	3
	R	57	24	153	168	195	212	254	340	329	512

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

²Sharks includes "Requiem Shark Genus," "Requiem Shark Family," blacktip sharks, and "Unidentified Sharks." Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

Georgia's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	194,213 (2.8%)	3,198,950 (3.0%)	94,687 (2.9%)	172,723 (2.9%) ²	255,612 (2.9%)	0.12
2006	225,996 (3.0%)	3,623,210 (3.0%)	137,927 (2.9%)	214,476 (2.9%)	376,410 (2.9%)	0.12
% change	16.4%	13.3%	45.7%	24.2%	47.3%	0.0%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	8	11	12	14	20	24	29	24	21
	Receipts	2,044	1,303	1,705	1,104	1,560	2,249	2,030	2,642	1,957
Seafood sales, retail	Firms	72	62	61	67	77	72	69	64	78
	Receipts	4,837	4,503	4,651	4,516	5,027	4,668	4,855	6,625	7,180

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	9	8	9	10	11	11	11	11	8
	Employees	1,214	1,139	ND ³	1,131	1,014	994	ND	1,155	1,164
	Payroll	27,125	29,175	ND	30,187	29,867	28,432	ND	39,839	43,637
Seafood sales, wholesale	Establishments	52	56	51	50	53	39	36	29	30
	Employees	559	540	565	609	572	580	619	640	659
	Payroll	14,858	17,443	17,996	19,178	19,616	32,047	31,012	32,781	31,654
Seafood sales, retail	Establishments	47	51	48	46	52	46	50	59	55
	Employees	169	167	225	181	161	152	159	185	184
	Payroll	1,828	1,806	1,948	1,874	2,002	2,243	2,437	2,753	2,724

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	3	4	5	5	5	6	6	7	6
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	16	18	15	15	19	23	18	19	15
	Employees	ND	ND	ND	ND	ND	256	185	193	ND
	Payroll	ND	ND	ND	ND	ND	12,201	10,306	10,658	ND
Marinas	Establishments	67	66	63	64	63	69	57	60	66
	Employees	ND	ND	ND	ND	ND	642	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	12,870	ND	ND	ND
Marine cargo handling	Establishments	19	18	18	17	15	14	18	17	17
	Employees	2,235	2,010	2,316	1,747	3,197	ND	2,018	2,350	3,003
	Payroll	48,394	39,257	53,102	48,346	75,368	ND	68,696	80,706	104,596
Navigational services to shipping	Establishments	9	12	9	7	9	9	8	8	10
	Employees	ND	ND	ND	ND	107	ND	ND	136	ND
	Payroll	ND	ND	ND	ND	5,109	ND	ND	7,784	ND
Port & harbor operations	Establishments	4	3	3	4	4	4	7	6	5
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	196
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	3,303
Ship & boat building	Establishments	29	28	30	28	20	18	20	17	16
	Employees	2,064	2,060	ND	ND	ND	1,580	ND	ND	1,967
	Payroll	57,888	57,200	ND	ND	ND	40,768	ND	ND	64,667

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the North Carolina Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	655,032	351,549	15,943
Commercial Harvesters	72,801	34,838	1,538
Seafood Processors & Dealers	82,394	31,984	1,246
Seafood Wholesalers & Distributors	78,869	39,095	756
Retail Sector	420,970	245,633	12,404

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	101,020	99,306	108,326	88,141	94,747	84,926	79,703	64,890	70,121	82,332
Finfish & Other	38,628	34,770	39,613	36,090	37,274	31,560	38,910	34,901	37,716	36,217
Shellfish	62,392	64,537	68,713	52,051	57,473	53,366	40,793	29,989	32,405	46,115
Clams	4,590	3,788	4,696	5,036	3,534	3,399	3,390	2,798	2,656	2,660
Crab, Blue	44,960	37,812	37,438	32,231	33,149	37,108	24,465	20,274	17,087	21,432
Croaker, Atlantic	3,450	3,120	2,987	3,080	3,234	2,924	3,528	3,409	3,563	2,726
Flounders	12,538	10,149	11,652	10,142	11,270	9,671	11,503	10,963	13,301	11,335
Groupers	1,440	1,393	1,180	1,050	1,302	1,200	1,124	1,214	1,559	1,995
Mackerel, King	1,749	1,696	1,662	1,351	1,177	1,214	1,573	2,054	2,120	1,967
Sea Bass, Black	1,100	1,079	973	1,062	878	1,417	1,486	1,332	1,715	1,195
Shrimp	10,856	21,737	25,406	11,911	18,365	10,931	9,463	4,409	9,141	17,938
Snappers	851	1,067	1,281	1,219	1,186	686	873	1,116	953	1,601
Tunas	1,353	1,217	3,396	2,589	2,158	1,989	3,317	3,321	4,060	4,046

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	180,217	153,709	154,202	137,147	160,142	139,401	134,078	79,607	68,744	62,923
Finfish & Other	111,457	86,144	102,086	98,055	110,944	88,721	91,383	49,435	35,675	30,476
Shellfish	68,759	67,564	52,116	39,092	49,198	50,681	42,696	30,172	33,069	32,447
Clams	699	581	681	772	627	547	551	418	427	438
Crab, Blue	62,076	57,546	40,639	32,180	37,737	42,770	34,129	25,430	25,343	21,425
Croaker, Atlantic	10,866	10,186	10,123	12,017	10,189	14,429	11,993	11,903	10,397	7,301
Flounders	6,936	5,804	6,593	6,307	7,568	5,772	7,302	5,937	6,272	4,754
Groupers	652	653	537	471	581	518	478	481	587	701
Mackerel, King	1,143	1,083	1,049	837	778	765	955	1,246	1,186	1,059
Sea Bass, Black	742	613	567	644	592	851	881	690	778	473
Shrimp	4,636	9,004	10,335	5,254	9,969	6,167	4,881	2,358	5,737	9,552
Snappers	352	442	511	524	490	269	339	433	345	550
Tunas	1,043	1,085	1,714	1,713	1,000	914	1,424	1,271	1,982	1,836

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clams	6.57	6.52	6.90	6.52	5.64	6.22	6.15	6.69	6.21	6.07
Crab, Blue	0.72	0.66	0.92	1.00	0.88	0.87	0.72	0.80	0.67	1.00
Croaker, Atlantic	0.32	0.31	0.30	0.26	0.32	0.20	0.29	0.29	0.34	0.37
Flounders	1.81	1.75	1.77	1.61	1.49	1.68	1.58	1.85	2.12	2.38
Groupers	2.21	2.13	2.20	2.23	2.24	2.32	2.35	2.52	2.65	2.84
Mackerel, King	1.53	1.57	1.58	1.61	1.51	1.59	1.65	1.65	1.79	1.86
Sea Bass, Black	1.48	1.76	1.72	1.65	1.48	1.67	1.69	1.93	2.21	2.53
Shrimp	2.34	2.41	2.46	2.27	1.84	1.77	1.94	1.87	1.59	1.88
Snappers	2.42	2.42	2.51	2.33	2.42	2.55	2.57	2.58	2.76	2.91
Tunas	1.30	1.12	1.98	1.51	2.16	2.18	2.33	2.61	2.05	2.20

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	1,631	151,717	85,548
Shore	7,521	623,292	347,083
For-Hire	1,357	106,643	59,848
Total Durable Equipment Impacts	11,239	1,413,973	642,100
Total State Trip and Durable Equipment Economic Impacts	21,748	2,295,623	1,134,579

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	43,523	90,334	Fishing Tackle	321,999
Shore	347,881	111,433	Other Equipment	92,864
For-Hire	54,833	16,722	Boat Expenses	254,164
Total Trip Expenditures	446,237	218,489	Vehicle Expenses	135,605
			Second Home Expenses	385,581
			Total Durable Equipment Expenditures	1,190,212
Total State Trip and Durable Equipment Expenditures				1,854,938

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	312	324	416	454	409	524	613	685	588	564
Non-Coastal	143	164	229	251	226	281	290	285	265	265
Out-of-State	635	805	1,277	1,301	1,130	1,298	1,156	1,280	1,374	1,079
Total Anglers	1,091	1,293	1,922	2,007	1,765	2,103	2,058	2,250	2,227	1,908

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	241	221	193	202	183	174	178	304	290	286
Private or Rental	1,638	1,861	2,224	2,169	1,941	2,181	2,543	2,354	2,656	2,784
Shore	2,582	2,473	4,043	4,279	3,462	4,379	4,306	4,129	4,300	3,910
Total Trips	4,461	4,555	6,460	6,650	5,586	6,733	7,027	6,786	7,247	6,979

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bass, Striped	H	70	92	41	66	60	138	352	145	107	51
	R	421	521	252	119	155	285	398	130	83	44
Bluefish	H	527	518	878	1,266	777	953	1,044	1,374	1,128	1,338
	R	534	986	1,630	2,329	1,610	1,416	1,907	2,206	1,875	2,496
Dolphinfish	H	462	561	683	492	621	335	387	686	590	608
	R	10	11	16	4	4	14	2	2	23	8
Drum (Atlantic Croaker & Spot)	H	3,253	1,750	2,315	4,286	2,995	4,287	4,533	3,419	3,205	4,667
	R	1,711	2,002	2,051	2,401	1,597	2,685	2,584	2,829	5,436	2,959
Drum (Spotted Seatrout)	H	295	410	250	182	197	106	317	512	578	525
	R	73	253	90	195	385	132	300	817	560	974
Flounder, Lefteye and Summer	H	416	263	414	363	216	110	200	164	186	222
	R	2,065	635	1,558	1,566	1,285	829	1,669	1,043	1,051	1,293
Mackerel, King	H	239	476	671	401	402	349	309	332	305	491
	R	81	206	300	161	197	165	122	174	90	278
Mackerel, Spanish	H	100	76	137	114	67	114	105	153	119	229
	R	6	26	13	9	7	22	45	71	22	39
Sea bass, Black	H	133	88	148	175	84	166	264	241	156	122
	R	674	624	770	790	530	418	1,020	1,056	1,204	1,208
Tuna, Yellowfin	H	163	281	271	237	135	328	204	216	244	115
	R	27	14	6	1	8	56	12	10	15	1

¹In this table, "1" = 1000-1499 fish were harvested or released.

North Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	198,690 (2.9%)	3,223,178 (3.0%)	86,781 (2.6%)	156,137 (2.6%) ²	242,904 (2.8%)	0.23
2006	222,431 (2.9%)	3,524,814 (2.9%)	124,107 (2.6%)	198,611 (2.7%)	380,932 (2.9%)	0.09
% change	11.9%	9.4%	43.0%	27.2%	56.8%	-60.9%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	38	39	25	17	25	33	27	26	27
	Receipts	951	1,728	1,450	1,335	1,385	1,646	1,515	1,106	1,084
Seafood sales, retail	Firms	122	127	140	116	117	133	144	130	115
	Receipts	9,706	11,928	9,408	9,395	11,560	11,565	12,294	10,913	11,342

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	33	27	32	27	21	18	18	17	18
	Employees	448	383	474	381	280	ND ³	ND	ND	475
	Payroll	13,806	11,033	9,337	8,510	8,547	ND	ND	ND	11,563
Seafood sales, wholesale	Establishments	97	90	86	84	84	68	72	77	70
	Employees	905	880	969	983	961	628	627	703	582
	Payroll	20,516	22,639	24,943	22,597	21,716	16,170	17,411	17,577	16,543
Seafood sales, retail	Establishments	64	66	61	70	81	87	88	90	89
	Employees	250	240	238	245	301	304	340	316	250
	Payroll	2,532	2,548	2,976	3,512	3,890	3,982	4,234	4,185	4,129

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	4	6	6	3	6	5	5	5	4
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	14	11	13	13	15	7	7	7	8
	Employees	ND	ND	142	104	168	ND	ND	ND	ND
	Payroll	ND	ND	9,995	8,154	52,665	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	2	3	2	5	3	3	2	2	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	113	113	114	111	103	104	97	103	103
	Employees	ND	533	557	616	557	ND	644	654	681
	Payroll	ND	12,037	13,505	14,720	13,186	ND	16,529	16,530	16,616
Marine cargo handling	Establishments	10	10	9	8	6	7	10	12	9
	Employees	930	698	712	ND	ND	433	668	641	757
	Payroll	14,705	11,393	11,045	ND	ND	16,001	28,676	25,988	19,736
Navigational services to shipping	Establishments	7	6	5	6	4	6	6	8	7
	Employees	ND	ND	85	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	1,860	ND	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	5	5	6	5	7	6	5	5	5
	Employees	ND	ND	50	ND	ND	271	ND	ND	ND
	Payroll	ND	ND	1,996	ND	ND	12,650	ND	ND	ND
Ship & boat building	Establishments	54	52	55	59	62	55	62	65	74
	Employees	2,482	2,790	3,050	3,383	3,566	3,290	3,622	3,957	4,232
	Payroll	68,431	79,630	91,996	100,341	103,506	106,656	127,472	133,665	153,672

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the South Carolina Seafood Industry (*thousands of dollars*)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	78,315	37,966	1,860
Commercial Harvesters	29,464	11,008	614
Seafood Processors & Dealers	5,070	1,602	59
Seafood Wholesalers & Distributors	6,781	3,403	66
Retail Sector	36,999	21,953	1,122

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	28,883	32,126	30,533	23,908	21,340	21,242	18,542	17,570	17,025	16,017
Finfish & Other	4,467	5,425	5,506	5,741	5,375	4,650	5,042	4,781	4,995	4,744
Shellfish	24,416	26,701	25,027	18,166	15,965	16,592	13,499	12,789	12,031	11,274
Clams	2,633	2,798	2,625	1,744	1,399	1,537	1,238	934	834	697
Crab, Blue	5,269	4,299	5,652	6,141	4,239	5,057	3,591	3,766	3,304	3,438
Groupers	830	907	788	846	811	993	1,020	1,013	1,113	1,093
Oysters	730	986	1,092	1,074	1,025	1,199	1,229	1,471	1,369	1,375
Sea Bass, Black	190	282	143	132	95	168	302	191	168	236
Sharks	44	78	43	129	78	66	128	136	144	78
Shrimp	15,642	18,568	15,640	8,865	9,062	8,736	7,385	6,572	6,481	5,686
Snappers	537	713	1,264	1,738	1,319	725	1,237	1,190	823	774
Swordfish	ND ¹	993	803	660	670	616	555	ND ¹	ND ¹	ND ¹
Tilefish	191	265	24	292	423	287	221	143	271	5

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	17,652	18,573	15,897	14,273	13,559	13,728	12,439	11,212	10,602	9,310
Finfish & Other	2,935	3,123	3,380	3,152	3,052	2,598	2,768	2,274	2,249	1,994
Shellfish	14,717	15,450	12,517	11,120	10,507	11,130	9,670	8,938	8,353	7,316
Clams	324	326	313	266	219	263	211	175	165	135
Crab, Blue	7,596	6,608	5,818	5,566	4,435	4,411	4,374	4,440	4,215	4,123
Groupers	335	374	305	323	304	366	363	319	326	276
Oysters	204	254	274	272	262	283	275	308	291	285
Sea Bass, Black	122	185	82	97	60	104	212	115	86	114
Sharks	82	123	77	150	109	124	206	174	147	105
Shrimp	6,403	8,062	6,098	4,498	5,238	6,133	4,773	3,957	3,650	2,736
Snappers	235	310	528	765	544	290	492	447	267	251
Swordfish	ND ¹	375	295	229	240	219	200	ND ¹	ND ¹	ND ¹
Tilefish	124	151	22	149	195	145	124	80	139	4

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clams	8.13	8.59	8.38	6.55	6.38	5.85	5.86	5.34	5.06	5.17
Crab, Blue	0.69	0.65	0.97	1.10	0.96	1.15	0.82	0.85	0.78	0.83
Groupers	2.47	2.43	2.58	2.62	2.67	2.71	2.81	3.17	3.41	3.96
Oysters	3.59	3.89	3.99	3.95	3.91	4.24	4.46	4.78	4.71	4.82
Sea Bass, Black	1.56	1.53	1.74	1.37	1.56	1.61	1.42	1.66	1.97	2.07
Sharks	0.54	0.63	0.56	0.86	0.71	0.53	0.62	0.78	0.98	0.75
Shrimp	2.44	2.30	2.56	1.97	1.73	1.42	1.55	1.66	1.78	2.08
Snappers	2.29	2.30	2.39	2.27	2.42	2.50	2.51	2.66	3.08	3.09
Swordfish	ND ¹	2.65	2.73	2.88	2.79	2.81	2.78	ND ¹	ND ¹	ND ¹
Tilefish	1.54	1.75	1.10	1.96	2.17	1.98	1.78	1.78	1.95	1.36

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	736	64,731	37,770
Shore	1,068	87,288	48,604
For-Hire	533	41,734	23,578
Total Durable Equipment Impacts	3,796	356,778	188,504
Total State Trip and Durable Equipment Economic Impacts	6,134	550,531	298,456

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	25,066	38,225	Fishing Tackle	74,837
Shore	50,344	21,777	Other Equipment	22,611
For-Hire	24,979	5,056	Boat Expenses	298,436
Total Trip Expenditures	100,389	65,058	Vehicle Expenses	52,699
			Second Home Expenses	6,350
			Total Durable Equipment Expenditures	454,934
Total State Trip and Durable Equipment Expenditures				620,381

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	137	132	190	180	177	222	227	230	234	277
Non-Coastal	85	61	70	77	55	79	101	120	146	113
Out-of-State	416	221	250	224	161	270	334	448	617	551
Total Anglers	639	414	510	481	392	571	662	798	997	941

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	90	62	42	38	32	39	39	72	61	132
Private or Rental	661	587	707	954	557	1,021	1,070	989	1,118	1,483
Shore	963	565	590	684	665	1,038	1,130	1,066	1,481	961
Total Trips	1,714	1,213	1,339	1,676	1,254	2,098	2,239	2,126	2,661	2,577

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bluefish	H	171	34	88	118	79	66	118	284	197	297
	R	200	59	182	152	163	215	349	362	907	1,020
Drum (Atlantic Croaker & Spot)	H	660	857	279	755	460	723	793	593	1,996	1,044
	R	574	204	212	269	196	672	699	455	1,289	592
Drum, Red	H	47	44	37	61	41	162	134	141	72	88
	R	84	88	94	221	143	430	401	492	607	537
Drum (Southern Kingfish)	H	224	177	166	359	226	982	1,026	1,058	1,113	1,281
	R	240	104	176	125	136	1,049	497	439	1,350	849
Drum (Spotted Seatrout)	H	125	101	220	63	85	123	247	268	294	122
	R	152	93	368	39	148	315	334	395	667	560
Flounder, Southern	H	117	48	103	82	112	111	237	104	148	136
	R	27	23	26	28	73	52	133	86	217	184
Mackerel, Spanish	H	66	27	28	44	24	25	144	70	43	105
	R	32	46	47	10	9	223	114	154	33	84
Porgies (Sheepshead)	H	15	37	173	113	31	129	107	28	88	133
	R	14	15	66	24	21	51	20	26	49	47
Sea Bass, Black	H	97	77	75	103	113	44	276	173	307	189
	R	179	225	314	421	335	289	952	680	812	1,356
Sharks ²	H	4	1	3	14	(1)	(1)	20	27	(1)	10
	R	390	177	124	520	276	380	368	339	493	252

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

²Sharks include "Requiem Shark Family" and "Unidentified Sharks." Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

South Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	94,985 (1.4%)	1,526,106 (1.4%)	38,559 (1.2%)	67,746 (1.1%) ²	102,945 (1.2%)	0.44
2006	105,296 (1.4%)	1,633,441 (1.4%)	52,189 (1.1%)	85,599 (1.2%)	146,211 (1.1%)	0.17
% change	10.9%	7.0%	35.3%	26.4%	42.0%	-61.4%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	7	9	13	13	20	19	22	14	12
	Receipts	185	182	1,277	304	547	1,115	1,797	2,234	1,303
Seafood sales, retail	Firms	60	56	56	59	64	74	74	61	76
	Receipts	3,261	2,491	3,014	2,848	3,484	4,599	4,612	3,588	3,427

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	6	8	6	5	4	3	4	3	3
	Employees	19	44	54	ND ³	ND	ND	28	7	ND
	Payroll	390	969	1,206	ND	ND	ND	805	145	ND
Seafood sales, wholesale	Establishments	30	30	29	31	28	22	18	22	19
	Employees	219	230	262	177	ND	ND	ND	211	191
	Payroll	4,495	5,136	4,261	3,330	ND	ND	ND	5,818	5,542
Seafood sales, retail	Establishments	50	47	49	52	58	55	58	64	62
	Employees	179	ND	147	166	175	244	ND	206	190
	Payroll	2,228	ND	1,925	2,250	2,391	2,911	ND	2,773	2,905

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	1	2	2	2	1	3	4	4	4
	Employees	ND	ND	ND	ND	ND	ND	ND	45	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	1,882	ND
Deep sea freight transportation	Establishments	10	12	9	8	10	8	7	10	9
	Employees	ND	ND	ND	ND	ND	ND	ND	113	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	4,600	ND
Deep sea passenger transportation	Establishments	2	3	2	1	1	3	1	1	1
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	64	65	61	64	62	63	69	70	71
	Employees	ND	ND	ND	343	357	365	378	398	452
	Payroll	ND	ND	ND	6,807	6,395	6,696	7,645	8,050	10,105
Marine cargo handling	Establishments	14	14	13	14	16	15	17	18	17
	Employees	2,166	2,340	2,407	2,330	1,793	2,415	2,253	1,994	2,707
	Payroll	46,635	48,245	54,198	60,755	54,609	78,941	81,691	66,767	83,142
Navigational services to shipping	Establishments	10	12	12	12	11	6	5	7	8
	Employees	ND	ND	ND	89	83	144	ND	ND	155
	Payroll	ND	ND	ND	3,051	3,422	5,716	ND	ND	7,588
Port & harbor operations	Establishments	1	1	NA ⁴	NA	NA	1	1	1	1
	Employees	ND	ND	NA	NA	NA	ND	ND	ND	ND
	Payroll	ND	ND	NA	NA	NA	ND	ND	ND	ND
Ship & boat building	Establishments	39	42	37	40	43	41	46	48	45
	Employees	1,801	2,011	2,187	1,801	1,570	2,253	2,380	2,672	2,425
	Payroll	51,598	60,415	61,246	54,654	61,045	78,963	90,974	97,087	92,098

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

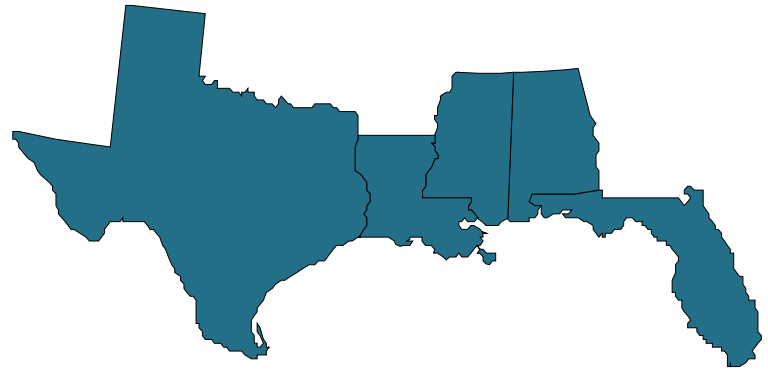
²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

Gulf of Mexico

- Alabama
- West Florida
- Louisiana
- Mississippi
- Texas



Management Context

The Gulf Region is comprised of 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 seven fishery management plans (FMPs). The spiny lobster and coastal migratory pelagic resources fisheries are managed with the South Atlantic Fishery Management Council (SAFMC).

Gulf of Mexico Fishery Management Plans

1. Red Drum
2. Shrimp
3. Stone Crab
4. Reef Fish
5. Coastal Migratory Pelagic Resources (with SAFMC)
6. Spiny Lobster (with SAFMC)
7. Coral and Coral Reefs

Of the species or species groups covered in these fishery management plans, red snapper, greater amberjack, and gray triggerfish are currently overfished. Red snapper, greater amberjack, gag, gray triggerfish, and pink shrimp from the Gulf of Mexico are species or species groups currently subject to overfishing. For short-lived species such as pink shrimp, environmental conditions are generally believed to have a more significant effect than fishing.

There is one limited access privilege program (LAPP), a type of catch share program, currently in operation in the Gulf Region. The Gulf of Mexico red snapper fishery has been managed as an individual fishing quota (IFQ) fishery since 2007 and had an ex-vessel value of \$9.0 million that year. An additional IFQ program is being developed for Gulf of Mexico grouper and tilefish. This catch share program will be implemented in 2010.

Commercial Fisheries

In 2007, commercial fishermen in the Gulf of Mexico harvested 1.4 million pounds of finfish and shellfish that earned \$681 million in ex-vessel revenue. Shellfish landings generated 79% of total revenue in the region (\$536 million). Shellfish such as shrimp was a significant component of total revenue (53% of total revenue), generating \$360 million in 2007 for 221 million pounds of catch. Menhaden had the highest landings of any key species or species group with over 1 billion pounds landed in 2007. This species accounted for 74% of total landings in the Gulf. At \$0.06 per pound, this low value species generated \$62 million in revenue or 9.1% of total revenue generated across the region.

Total revenue generated by fishermen in Louisiana and Texas was highest in the Gulf with \$287 million and \$174 million, respectively. Shrimp contributed \$138 million to Louisiana's landings revenue with 109 million pounds harvested in 2007. However, shrimp revenue in Texas was higher at \$145 million for 71 million pounds landed. West Florida (\$132 million), Alabama (\$48

million), and Mississippi (\$39 million) followed in total revenue. Notably, Mississippi landings revenue increased 82% over 2006 landings revenue, returning to almost pre-Hurricane Katrina levels of 2004. In terms of landings, Louisiana (998 million pounds) and Mississippi (228 million pounds) harvested the most catch in the region. Menhaden contributed most to these total landings with 790 million pounds and 215 million pounds landed, respectively. Texas (85 million pounds), West Florida (59 million pounds), and Alabama (29 million pounds) followed.

Key Gulf of Mexico Commercial Species

- Blue crab
- Stone crab
- Crawfish
- Groupers
- Menhaden
- Mulletts
- Oyster
- Shrimp
- Red snapper
- Tunas

Economic Impacts¹

In 2007, the Gulf Region's seafood industry generated over a billion in sales in Florida (\$5.1 billion), Louisiana (\$2.1 billion), and Texas (\$1.9 billion). Most of the seafood industry-related jobs in this region were also sustained in these states with 101,000 full- and part-time jobs in Florida, 47,000 jobs in Louisiana, and 42,000 jobs in Texas. Alabama (11,000 jobs) and Mississippi (8,200 jobs) followed in terms of employment supported by the seafood industry. Florida, Louisiana, and Texas also led the region in income impacts generated by the seafood industry with \$2.8 billion, \$1.1 billion, and \$959 million, respectively.

Landings Revenue

In 2007, ex-vessel revenue from finfish and shellfish harvest totaled \$681 million, a 13% decrease (-28% in real terms) from 1998 (\$786 million) and a 2.1% decrease (-7.5% in real terms) from 2006 (\$695 million). Louisiana fishermen generated 42% of this revenue in 2007 (\$287 million). Shellfish revenue accounted for 79% of total revenue in the Gulf, bringing in \$536 million in 2007. This was a 17% decrease (-31% in real terms) from 1998 (\$644 million) and a 4.2% decrease (-9.5% in real terms) from 2006 (\$559 million). Finfish revenue increased 2.1% (-15% in real terms) from \$142 million in 1998 to \$145 million in 2007. Finfish revenue between 2006 and 2007 increased 6.8% (0.9% in real terms).

Total revenue decreased in current and/or real terms in all Gulf states from 1998-2007: -22% (-34% in real terms) in West Florida, -19% (-32% in real terms) in Mississippi, -17% (-31% in real terms) in Texas, -7.9% (-23% in real terms) in Louisiana, and 2.5% (-15% in real terms) in Alabama. Shellfish revenue followed this declining trend with the largest decrease in Mississippi (-52%, -60 in real terms), followed by West Florida (-31%, -42 in real terms),

¹Economic impacts reported here are for the state of Florida, not West Florida.

Texas (-18%, -32% in real terms), Louisiana (-5.7%, -21% in real terms), and Alabama (-1.0%, -17% in real terms) all experienced declines in shellfish revenue.

Finfish revenue trends were more variable across the Gulf states largely due to lost oyster beds from Hurricane Katrina in 2005. Mississippi (90%, 59% in real terms) and Alabama (80%, 50% in real terms) experienced large increases over the 10 year period. In Mississippi, this increase was largely due to menhaden revenue which increased 128% (91% in real terms) from \$9.1 million (1998) to \$21 million (2006). Large increases in revenue generated from sharks (10,100%, 8,416% in real terms), vermillion snapper (3,100%, 2,572% in real terms), and Spanish mackerel (228%, 174% in real terms) drove Alabama's finfish revenue trend. In contrast, finfish revenue in West Florida (5.1%, -12% in real terms) and Texas (-18%, -22% in real terms) experienced more modest increases, and Louisiana's finfish revenue decreased 15% (-29% in real terms).

Shrimp contributed more to the Gulf Region's total revenue in 2007 than any other key species or group: \$360 million or 53% of total revenue. This was a 26% decrease (-38% in real terms) from 1998 shrimp revenue (\$486 million) and a -10% decrease (-15% in real terms) relative to 2006 (\$402 million). Oyster (47%, 23% in real terms), crawfish (-37%, -48% in real terms), and mullets (-35%, -46% in real terms) also experienced large changes in revenue between 1998 and 2007.

Other Gulf of Mexico key species or species groups with large changes in state landings revenue from 1998-2007 include: oysters (245%), red snapper (65%), and menhaden (-77%) in Alabama; red snapper (565%), oyster (172%), quahog clams (-82%), and shrimp (-66%) in West Florida; king mackerel (53%), mullets (-72%), and red snapper (-59%) in Louisiana; blue crab (72%), mullets (-79%), oysters (-79%), and shrimp (-50%) in Mississippi; and vermillion snapper (137%), oysters (114%), Atlantic croaker (109%), and flounders (-85%) in Texas.

Landings

Commercial fishermen in the Gulf Region landed over 1.4 billion pounds of finfish and shellfish in 2007. This was an 11% decrease from the 1.6 billion pounds landed in 1998 and a 2.5% increase from 2006. Over 71% of total landings was harvested in Louisiana. Finfish was a significant component of landings totals (77% of total landings) with Gulf fishermen harvesting one billion pounds in 2007. This was a 9.6% decrease from 1998 (1.1 billion pounds) but a 9.8% increase from 2006 (975 million pounds). Shellfish landings also declined, decreasing 16% from 1998-2007 and decreasing 16% from 2006-2007.

Finfish landings decreased in four of the five Gulf states between 1998 and 2007. Texas had the largest decrease (-25%), followed by West Florida (-24%), Alabama (-22%), and Louisiana (-14%). Mississippi experienced an increase in finfish landings, increasing 13% over the 10 year time period.

Commercial Fish Facts

Landings revenue

- The Gulf's key species and species groups accounted for an average of 91% of total landings revenue from 1998-2007.
- Shrimp accounted for the majority of total landings revenue in the region, averaging \$436 million over the 10 year time period. Fishermen in Texas generated most of this total in 2007, followed by Louisiana, Alabama, West Florida, and Mississippi.
- Crawfish revenue decreased 93% from 1999-2000, the largest annual decrease. This was followed by an 1.144% increase from 2000-2001, the largest annual increase.

Landings

- The Gulf's key species and species groups accounted for an average of 96% of total landings annually between 1998 and 2007.
- Menhaden was a significant component of total landings over the 10 year time period, averaging 1.1 billion pounds annually. Fishermen in Louisiana harvested the majority of this species.
- Crawfish landings decreased 97% from 1999-2000, the largest annual decrease, only to have the largest annual increase the following year, increasing 2.549% from 2000-2001.

Prices

- Stone crab had the highest ex-vessel price over the 10 year time period, averaging \$4.14 per pound. Tunas (\$2.73), red snapper (\$2.43), oyster (\$2.42), and groupers (\$2.24) all averaged over \$2 per pound.
- Menhaden had the lowest average ex-vessel price at \$0.05 per pound. Mullets (\$0.66), blue crab (\$0.71), and crawfish (\$0.77) averaged under \$1 per pound.
- The largest annual increase in ex-vessel price was 120% for crawfish from 1999-2000. Crawfish also had the largest annual decrease the following year, decreasing -53% from 2000-2001.

Shellfish landings also decreased across four of the five states in the region. The largest decrease was observed in West Florida (-52%), followed by Mississippi (-40%), Texas (-18%), and Louisiana (-4.0%). Alabama had a small increase in shellfish landings, increasing 1.0% from 1998-2007.

Menhaden contributed 74% to total landings in 2007 with most of this catch harvested in Louisiana (790 million pounds) and Mississippi (215 million pounds). Between 1998 and 2007, menhaden harvest decreased 8.0% but increased 12% from 2006-2007. Menhaden catch in Louisiana mirrored these trends, decreasing 13% from 1998-2007 and increasing 14% from 2006-2007. In contrast, Mississippi's menhaden harvest increased 19% from 1998-2007 and 1.9% from 2006-2007.

Other key species or species groups in the Gulf Region with large changes in landings include: sharks (5,150%), vermillion snapper (2,460%), Spanish mackerel (159%), and oysters (126%) in Alabama; red snapper (324%), oyster (93%), quahog clam (-79%), and shrimp (-70%) in West Florida; mullets (-78%) and red snapper (-73%) in Louisiana; oysters (-88%) and mullets (-78%) in

Mississippi; and vermillion snapper (96%) and flounders (-89%) in Texas.

Prices

Overall, 2007 ex-vessel price for seven of the ten key species or species groups was higher than their 10 year average annual price per pound. Only crawfish, mullets, and shrimp had 2007 prices below their 10 year average. Ex-vessel price per pound for crawfish and shrimp decreased 12% (-27% in real terms) and 11% (-26% in real terms), respectively, between 1998 and 2007. All other key species or groups experienced double-digit increases. Red snapper experienced the largest increase, increasing 53% (27% in real terms) from \$2.09 per pound (1998) to \$3.19 per pound (2007).

Relative to ex-vessel prices in 2006, blue crab and menhaden experienced the largest increases, increasing 23% and 20%, respectively. Crawfish (-35%), mullets (-18%), stone crab (-11%), and oyster (-3%) decreased in price, the only key species or group to decline from 2006-2007.

Across the Gulf Region, other key species or groups with large changes in ex-vessel price from 1998-2007 include: sharks (86%), menhaden (67%), red snapper (60%), oyster (53%), and shrimp (-8.1%) in Alabama; lobsters (92%), red snapper (58%), blue crab (53%), and quahog clam (-14%) in West Florida; red snapper (51%), king mackerel (47%), crawfish (-12%), and shrimp (-11%) in Louisiana; menhaden (100%), oyster (71%), blue crab (38%), and shrimp (-23%) in Mississippi; and Atlantic croaker (51%), red snapper (47%), oysters (42%), shrimp (-7.3%), and black drum (-6.7%) in Texas.

Recreational Fishing

There were 3.6 million resident recreational fishermen who took a fishing trip in the Gulf of Mexico Region in 2007. Over 91% of these anglers were residents of a regional coastal county. Of the 24 million fishing trips taken in 2007, over 59% of them were taken from a private or rental boat. The most caught key species or species group was spotted seatrout with 31 million fish harvested or released in 2007. This key species accounted for 49% of fish caught by anglers in the Gulf Region.

Key Gulf Recreational Species

- Drum (Atlantic croaker)
- Drum (Gulf and southern kingfish)
- Drum (sand and silver seatrout)
- Drum (spotted seatrout)
- Red drum
- Southern flounder
- Spanish mackerel
- Striped mullet
- Porgies (sheepshead)
- Red snapper

Economic Impacts and Expenditures

Recreational fishing activities in West Florida supported more jobs than any other state in the Gulf Region with approximately 66,000 full- and part-time jobs supported in 2007. Louisiana (27,000 jobs), Texas (23,000 jobs), Alabama (6,800 jobs), and Mississippi (4,700 jobs) followed in terms of employment impacts from angler fishing trips and durable equipment expenditures. The majority of these jobs were related to durable equipment expenditures: 93% in Mississippi, 90% in Texas, 86% of jobs in Louisiana, 83% of jobs in West Florida, and 71% in Alabama.

In terms of employment impacts related to fishing trips taken by anglers, industries that provided services for shore-based fishing trips supported most of the trip-related full-and part-times jobs in West Florida (4,700 jobs) and Alabama (900 jobs). Private or rental boat trips supported most of the trip-related jobs in Louisiana (2,300 jobs), Texas (1,300 jobs), and Mississippi (200 jobs).

The contribution of recreational fishing activities in the Gulf Region are also reported in terms of state level sales and value-added impacts as well as expenditures on fishing trips and durable equipment. In 2007, in-state sales and value-added impacts were highest in West Florida (\$6.8 billion in sales impacts; \$3.7 billion in value-added impacts) and Texas (\$3.0 billion; \$1.5 billion). Louisiana (\$2.5 billion in sales impacts; \$1.2 billion in value-added impacts), Alabama (\$654 million; \$337 million), and Mississippi (\$617 million; \$239 million) followed in sales and value-added impacts. Across the region, these economic impacts were largely generated from direct expenditures on durable equipment made by anglers (versus fishing trip-related expenditures).

Total fishing trip and durable equipment expenditures generated \$14 billion across the Gulf of Mexico Region in 2007. Approximately 90% of these expenditures were related to durable equipment purchases. Boat (\$7.4 billion), fishing tackle (\$1.8 billion), and vehicle expenses (\$1.9 billion) accounted for the majority of durable equipment expenditures. Expenditures by Gulf of Mexico residents related to fishing trips totaled \$847 million. Most of these purchases were related to fishing trips taken from a private or rental boat (68% of trip-related expenditures by residents). The region's non-resident anglers generated \$602 million in trip-related expenditures with most of these expenses related to fishing trips taken from shore (49% of trip-related expenditures by non-residents).

Participation²

In 2007, there were nearly 3.6 million recreational fishermen from either a coastal or non-coastal

²These estimates do not include Texas. Participation (number of anglers) and effort (number of fishing trips) information for Texas was not available for this report.

county in the Gulf of Mexico Region.³ This was a 78% increase from 1998 (2.0 million anglers) but a 2.2% decrease from 2006 (over 3.6 million anglers). Most of these anglers (91% of total anglers) resided in a coastal county within the region. The number of coastal county anglers in 2007 (3.2 million anglers) increased 72% relative to 1998 (1.9 million anglers) but decreased 2.8% relative to 2006 (3.3 million anglers). Non-coastal county angler participation in 2007 (326,000 anglers) increased 167% relative to 1998 (122,000 anglers) and increased 3.5% relative to 2006 (315,000 anglers). Approximately 54% of total anglers who fished in the Gulf of Mexico Region took a fishing trip in West Florida.

The majority of recreational fishermen in Louisiana and Mississippi were residents of a coastal county within their respective state. These anglers accounted for 75% of total anglers in Louisiana (853,000 anglers) and 69% of anglers in Mississippi (196,000 anglers). Out-of-state residents made up the majority of anglers in West Florida and Alabama: 53% of total anglers in West Florida (2.2 million anglers) and 41% of total anglers in Alabama (291,000 anglers). Anglers from the Gulf Region's non-coastal counties⁴ comprised a minority of total anglers in 2007: 11% of anglers in Louisiana, 12% of anglers in Mississippi, and 24% of anglers in Alabama.

Fishing Trips²

Resident and non-resident anglers took 24 million fishing trips in 2007. This was a 45% increase from 1998 (17 million trips) and a 1.7% increase from 2006 (23.9 million trips). In 2007, most fishing trips were taken from a private or rental boat: 14 million fishing trips or 59% of total trips taken in the Gulf of Mexico. Shore-based fishing trips ranked second in popularity with 9.0 million trips taken in 2007 despite a 2.7% decrease in trips taken between 2006 and 2007. Approximately 876,000 fishing trips were taken from a for-hire boat.

There were approximately 16 million fishing trips taken in West Florida in 2007. This represented 68% of total trips taken in the region and most of these trips were taken from a private or rental boat (57% of trips taken in West Florida). Private or rental boat trips were also popular in Louisiana and Mississippi: 70% of trips in Louisiana and 69% of trips in Mississippi. Shore-based (49% of trips) and private or rental boat trips (48% of trips) were equally popular in Alabama with anglers taking over a million trips in each fishing mode in 2007.

Harvest and Release

³At the state level, out-of-state anglers are estimated. However at the region level, out-of-region anglers are not estimated thus only Gulf Region resident anglers are discussed here. In *Fisheries Economics of the U.S., 2006* (FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1998-2007 angler participation totals excludes these anglers therefore the annual region totals reported here are smaller than those reported in FEUS 2006.

⁴All resident anglers in Florida are considered coastal county anglers.

Of the Gulf Region's key species and species groups, spotted seatrout was the most often caught by anglers with 31 million fish caught in 2007. This key species accounted for 49% of the key species or species groups caught by recreational fishermen. Over 62% of these spotted seatrout were most often released by anglers rather than harvested. Red drum was another key species that was caught in large numbers: over 9.0 million fish caught in 2007 with 67% of these fish released rather than harvested. These fish were most often caught in West Florida and Louisiana.

In 2007, five of the Gulf Region's key species or species groups were more often harvested rather than released by anglers: striped mullet (85% harvested), southern flounder (76% harvested), Gulf and southern kingfish (65% harvested), sand and silver seatrout (63% harvested), and sheepshead (55% harvested). Red snapper (71% released) and Atlantic croaker (67% released) were examples of key species or groups with a greater percentage of fish released rather than harvested.

Of the Gulf's key species or species groups, Spanish mackerel (103% increase), southern flounder (57%), and spotted seatrout (52%) experienced the largest increases in recreational catch between 1998 and 2007. With the exception of sheepshead (20% decrease in catch), catch totals for all other key species or groups increased during this period.

Between 2006 and 2007, five key species or species groups experienced double digit declines: Gulf and southern kingfish (-25%), Spanish mackerel (-23%), sheepshead (-20%), spotted seatrout (-16%), and striped mullet (-11%). Catch totals for the other key species or groups experienced changes in catch totals of less than 10%.

At the state level, spotted seatrout was the most caught key species or species group in Louisiana, West Florida, Mississippi, and Texas. In 2007, 17 million fish were caught in Louisiana, 12 million fish were caught in West Florida, 1.1 million fish were caught in Mississippi, and 916,000 fish were caught in Texas. Atlantic croaker was the most caught key species by recreational fishermen in Alabama with 1.2 million fish caught in 2007.

Marine Economy⁵

The Gulf of Mexico's gross domestic product by state was \$2.2 trillion in 2006. Employee compensation totaled \$1.2 trillion and annual payroll totaled \$747 billion. These economic measures increased 68%, 31%, and 55%, respectively, from 1998-2006, and 7.9%, 7.6%, and 9.1%, from 2005-2006. Approximately 1.3 million establishments employed 20 million full- and part-time employees in 2006. This was a 13% increase in establishment numbers and a 17% increase in employee numbers from

⁵Data for 2007 was unavailable for this report therefore 2006 information is reported in this section.

1998-2006. Increases were also observed from 2005-2006, 1.9% and 4.2%, respectively.

In 2006, Texas had the highest employee numbers, annual payroll, employee compensation, and gross state product levels in the region, while Florida⁶ had the highest establishment numbers. Florida had over 517,000 establishments that employed 7.5 million employees and Texas had 509,000 establishments that employed 8.7 million employees. Gross state product in Texas was \$1.1 trillion, followed by Florida (\$717 billion), Louisiana (\$203 billion), Alabama (\$159 billion), and Mississippi (\$85 billion).

Louisiana had the highest commercial fishing location quotient (CFLQ) at 2.28 in 2006. This was a 24% increase from 1998 and no change from 2005. Louisiana's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is more than two times higher than the level of employment in these industries nationwide.⁷ Across the Gulf region, the CFLQ was also higher than the national baseline in Mississippi (1.96) and Florida (1.01), but lower than the national CFLQ in Texas (0.34) and Alabama (0.32).

Seafood Sales and Processing

In 2006, there were 438 nonemployer firms engaged in seafood product preparation and packaging with annual receipt totals of \$24 million. Respectively, this was a 114% and 54% increase (36% in real terms) relative to 1998 levels. Most of these firms were located in Florida and this state experienced the largest increases from 1998-2006 in this industry: 200% increase in firm numbers and 104% increase in annual receipt totals. Louisiana also experienced large increases in firms (125%) and annual receipts (78%), while Texas experienced a 43% decrease in annual receipts during this time period.

Employer establishments engaged in seafood product preparation and packaging totaled 131 in 2006. These establishments employed approximately 9,300 full- and part-time workers and generated \$228 million in annual payroll. Regionwide, there was a 28% decrease in establishments engaged in this industry, a 10% decrease in employees, and a 21% increase in annual payroll totals (7% in real terms). Most of these establishments were located in Louisiana (31%) but the largest change in establishment numbers was observed in Florida (a 53% decrease from 1998 levels).

The South Atlantic's seafood wholesale annual payroll totals increased 3% (-9% in real terms) from 1998-2006 to \$132 million in 2006. Establishment and employee numbers decreased (-28% and -29%, respectively) to 512 establishments and approximately 4,200 full- and part-time employees. These declining trends were mirrored at the state level with the largest declines in Alabama (45% decrease in establishments)

and Mississippi (73% decrease in employees, -42% in annual payroll).

In 2006, there were 683 seafood retail nonemployer firms with total annual receipts of \$68 million across the region. This was a 3% increase in firm numbers regionwide from 1998-2006. In terms of annual receipts, these totals increased 36% relative to 1998 totals (20% in real terms), with the largest state level increases in Mississippi (98%) and Alabama (91%). Most of these firms were located in Florida (37%).

Employer establishments engaged in seafood retail increased 15% across the South Atlantic to 372 establishments in 2006. Most of these establishments were located in Florida (47%). Regionwide, this industry employed over 1,900 full- and part-time workers with an annual payroll of \$34 million in 2006. From 1998-2006, employee numbers increased 36% and annual payroll totals increased 59% (40% in real terms). At the state level, the largest changes were observed in Mississippi (37% decrease in establishments), Alabama (59% increase in employees), Florida (57% increase in employees, 98% increase in annual payroll), Louisiana (114% increase in annual payroll), and Texas (39% decrease in annual payroll).

Transport, Support, and Marine Operations

Marina industries had the highest number of establishments in this industry sector with 772 establishments regionwide in 2006. This was a 9% decrease relative to 1998 levels. Most of these industries were located in Florida (66%). At the state level, the largest decrease in marina-related establishments was in Louisiana (-48%). Ship and boat building industries employed the most people in 2006 (42,000 full- and part-time workers) and had the highest annual payroll (\$1.7 billion). Employment numbers decreased 15% from 1998-2006. Annual payroll totals increased 9% over this time period (-4% in real terms) despite a 40% increase in Alabama.

Other industries with large and modest changes from 1998-2006 were: coastal and Great Lakes freight transportation (33% decrease in establishments in Alabama); deep sea passenger transportation (200% increase in establishments in Alabama and Mississippi, 30% decrease in Texas); deep sea passenger transportation (50% increase in establishments in Texas); marina industries (55% increase in employees in Florida, 68% increase in annual payroll in Alabama and 96% increase in Florida); marine cargo handling (58% decrease in establishments in Mississippi, 33% decrease in Alabama); and port and harbor operations (78% increase in establishments in Texas).

⁶Information reported here is for the state of Florida, not East Florida.

⁷The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

2007 Economic Impacts of the Gulf of Mexico Region Seafood Industry (thousands of dollars)

	Total Landings Revenue	Total Sales Impacts	Total Income Impacts	Total Job Impacts
Alabama	48,168	488,264	268,020	10,979
Florida ¹	174,945	5,109,134	2,805,289	101,168
Louisiana	287,012	2,125,898	1,107,049	47,081
Mississippi	39,340	362,963	184,401	8,244
Texas	174,356	1,942,379	959,363	42,240

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	786,450	823,364	997,270	807,403	681,646	662,902	669,002	625,038	695,494	681,074
Finfish & Other	142,175	177,997	179,109	164,959	147,338	139,373	143,479	122,642	135,975	145,168
Shellfish	644,274	645,367	818,161	642,444	534,308	523,530	525,523	502,396	559,520	535,906
Crab, Blue	45,701	43,128	47,573	42,862	42,913	46,243	42,292	37,961	43,354	45,731
Crab, Stone	22,963	24,080	28,670	20,477	23,091	23,043	26,704	21,223	24,063	26,156
Crawfish	14,392	10,480	684	8,511	8,070	4,845	4,810	8,360	1,290	9,011
Groupers	18,192	22,684	24,124	25,986	24,631	24,257	25,807	24,692	22,793	20,240
Menhaden	56,655	78,514	80,674	72,366	52,116	45,863	44,921	32,938	44,946	62,109
Mulletts	8,297	14,129	11,697	10,206	8,877	8,265	8,956	6,593	9,428	5,395
Oyster	46,313	48,568	53,115	52,285	50,756	61,634	60,845	56,510	62,316	68,043
Shrimp	486,116	479,079	655,759	497,202	385,679	365,434	366,426	360,513	402,040	360,247
Snapper, Red	9,801	9,589	10,368	10,251	10,714	10,447	11,676	11,336	13,167	9,572
Tunas	9,646	11,635	14,017	9,187	13,227	12,000	12,335	9,431	8,461	10,535

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	1,576,301	2,004,446	1,795,396	1,613,163	1,728,899	1,595,895	1,475,139	1,198,203	1,364,521	1,398,602
Finfish & Other	1,184,895	1,637,524	1,397,440	1,254,170	1,377,421	1,228,816	1,110,240	887,920	974,964	1,070,681
Shellfish	391,405	366,922	397,955	358,993	351,478	367,080	364,899	310,283	389,558	327,922
Crab, Blue	67,580	68,996	68,898	54,500	66,019	63,961	60,581	50,041	67,480	57,560
Crab, Stone	6,978	5,654	6,848	6,682	6,433	5,292	5,971	4,534	4,795	5,859
Crawfish	21,978	13,226	393	10,410	15,602	8,337	8,537	15,177	1,469	15,802
Groupers	8,852	11,185	11,418	12,167	12,003	10,933	11,912	10,776	9,091	7,307
Menhaden	1,092,670	1,530,487	1,303,895	1,165,244	1,290,407	1,142,747	1,023,260	815,495	901,398	1,005,324
Mulletts	15,770	20,045	16,812	16,084	12,661	12,957	13,750	9,023	12,726	8,790
Oyster	20,560	24,016	25,767	25,621	24,110	27,033	25,052	20,174	19,674	22,071
Shrimp	264,211	242,795	288,628	257,088	233,759	256,357	255,782	216,291	291,186	221,030
Snapper, Red	4,694	4,888	4,844	4,642	4,803	4,435	4,677	4,109	4,637	2,999
Tunas	4,175	5,959	4,631	3,463	4,877	5,063	3,882	3,050	2,851	3,426

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab, Blue	0.68	0.63	0.69	0.79	0.65	0.72	0.70	0.76	0.64	0.79
Crab, Stone	3.29	4.26	4.19	3.06	3.59	4.35	4.47	4.68	5.02	4.46
Crawfish	0.65	0.79	1.74	0.82	0.52	0.58	0.56	0.55	0.88	0.57
Groupers	2.06	2.03	2.11	2.14	2.05	2.22	2.17	2.29	2.51	2.77
Menhaden	0.05	0.05	0.06	0.06	0.04	0.04	0.04	0.04	0.05	0.06
Mulletts	0.53	0.70	0.70	0.63	0.70	0.64	0.65	0.73	0.74	0.61
Oyster	2.25	2.02	2.06	2.04	2.11	2.28	2.43	2.80	3.17	3.08
Shrimp	1.84	1.97	2.27	1.93	1.65	1.43	1.43	1.67	1.38	1.63
Snapper, Red	2.09	1.96	2.14	2.21	2.23	2.36	2.50	2.76	2.84	3.19
Tunas	2.31	1.95	3.03	2.65	2.71	2.37	3.18	3.09	2.97	3.07

¹In this table, Florida's total sales, income, and job impacts and total landings revenue are for the state of Florida, not West Florida.

2007 Economic Impacts of Recreational Fishing Expenditures (*thousands of dollars*)

	Trips	Jobs	Total Sales	Value Added
Alabama	2,119,649	6,759	654,353	337,493
Louisiana	4,515,757	27,446	2,453,392	1,234,449
Mississippi	1,233,459	4,707	616,930	239,021
Texas ¹	1,445,106	23,382	3,004,862	1,514,791
West Florida	16,398,566	65,799	6,829,434	3,704,818

2007 Angler Trip & Durable Equipment Expenditures (*thousands of dollars*)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	169,011	572,920	Fishing Tackle	1,753,687
Shore	296,576	187,552	Other Equipment	664,776
For-Hire	136,459	86,617	Boat Expenses	7,365,456
Total Trip Expenditures	602,046	847,089	Vehicle Expenses	1,852,679
			Second Home Expenses	1,343,847
			Total Durable Equipment Expenditures	12,980,445
Total State Trip and Durable Equipment Expenditures				14,429,580

Recreational Anglers by Residential Area (*thousands of anglers*)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	1,884	1,834	2,539	2,898	2,485	3,039	3,185	3,133	3,328	3,235
Non-Coastal	122	151	191	227	216	256	318	190	315	326
Out-of-State	NA ³	NA ³	NA ³	NA ³	NA ³	NA ³	NA ³	NA ³	NA ³	NA ³
Total Anglers	2,006	1,985	2,730	3,125	2,701	3,294	3,503	3,323	3,643	3,562

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	903	877	812	742	764	691	818	712	820	876
Private or Rental	8,939	9,098	11,728	12,371	11,635	14,110	14,107	12,629	13,837	14,435
Shore	6,861	5,919	8,478	9,776	7,266	8,155	9,430	8,530	9,206	8,957
Total Trips	16,703	15,894	21,018	22,890	19,666	22,957	24,355	21,871	23,863	24,267

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Drum (Atlantic Croaker)	H	760	974	1,783	1,432	832	1,057	938	747	1,430	1,332
	R	2,021	2,427	4,302	2,755	2,757	2,431	3,404	1,913	2,476	2,648
Drum (Gulf & Southern Kingfish)	H	1,219	1,670	1,652	2,552	1,205	1,802	1,886	1,636	1,494	1,260
	R	398	679	432	1,044	477	538	911	884	1,063	671
Drum, Red	H	1,845	2,134	3,266	3,115	2,478	2,673	2,850	2,173	2,814	2,973
	R	4,623	3,991	5,469	5,146	4,874	5,915	5,538	5,319	7,024	6,057
Drum (Sand & Silver Seatrout)	H	2,927	5,272	4,711	3,360	3,256	3,111	2,292	1,825	2,726	2,998
	R	965	1,738	1,596	1,063	1,069	1,003	1,064	790	1,677	1,739
Drum (Spotted Seatrout)	H	6,840	9,055	11,608	9,381	7,366	9,568	10,569	9,977	15,564	11,575
	R	13,337	16,167	16,758	11,202	15,298	19,217	18,282	19,702	20,872	19,036
Flounder, Southern	H	423	646	563	732	506	659	706	507	560	609
	R	88	101	108	171	117	252	212	185	178	194
Mackerel, Spanish	H	1,170	1,621	1,714	2,477	1,962	1,504	2,120	1,134	1,936	1,708
	R	714	1,243	1,497	1,845	1,920	2,211	2,183	1,385	3,011	2,110
Mullet, Striped ⁴	H	970	1,303	1,478	1,561	1,264	1,587	1,141	1,112	1,146	986
	R	90	148	390	733	76	280	116	211	157	176
Porgies (Sheepshead)	H	1,342	1,366	1,298	1,478	1,552	1,941	2,475	1,979	1,452	1,324
	R	1,654	1,433	1,728	1,649	1,701	2,004	2,194	1,982	1,541	1,073
Snapper, Red	H	1,319	1,207	767	848	1,106	993	1,077	829	969	1,117
	R	1,360	1,997	1,427	1,807	2,091	1,942	2,140	1,904	2,558	2,755

¹2007 effort data (number of trips) for Texas was estimated from data provided by the Texas Parks and Wildlife Department (TPWD).

²Excludes Texas; effort (number of trips), participation (number of anglers), and key species (number of species harvested or released) data from Texas was either not compatible with the other Gulf states or was not available.

³Out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified; NA = data is not available.

⁴This species may not be equivalent to species with similar names listed in the commercial tables.

2007 Economic Impacts of the Alabama Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	488,264	268,020	10,979
Commercial Harvesters	42,790	16,165	989
Seafood Processors & Dealers	94,848	47,373	1,085
Seafood Wholesalers & Distributors	17,828	8,800	171
Retail Sectors	332,798	195,682	8,734

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	47,013	50,488	64,075	44,941	35,925	36,844	37,036	39,726	48,504	48,168
Finfish & Other	1,997	2,818	2,560	3,361	3,175	3,185	3,905	3,982	4,572	3,595
Shellfish	45,016	47,670	61,515	41,580	32,751	33,658	33,131	35,744	43,933	44,573
Crab, Blue	1,948	2,079	3,086	1,744	1,490	1,715	1,774	663	1,319	1,711
Flounders	254	264	285	238	291	210	230	247	223	261
Mackerel, Spanish	134	138	229	310	371	443	554	401	573	440
Menhaden	301	198	147	130	102	104	89	63	48	70
Mulletts	840	1,656	1,072	1,448	985	772	1,187	1,117	1,171	981
Oysters	783	919	1,755	1,235	1,602	1,623	2,120	3,020	3,639	2,698
Sharks	2	1	36	14	275	337	431	478	463	204
Shrimp	42,277	44,669	56,661	38,592	29,603	30,284	29,197	32,002	38,969	40,155
Snapper, Red	126	140	218	280	368	359	382	638	536	208
Snapper, Vermilion	10	29	25	55	54	83	152	149	318	320

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	30,099	27,438	30,530	25,858	23,658	25,535	26,559	23,985	33,749	28,971
Finfish & Other	6,177	5,568	4,837	6,253	5,451	5,982	6,248	5,552	6,498	4,810
Shellfish	23,922	21,870	25,693	19,605	18,207	19,553	20,311	18,432	27,251	24,161
Crab, Blue	3,478	3,768	4,784	2,458	2,575	2,958	3,329	1,024	2,384	2,557
Flounders	148	155	159	137	176	118	138	130	118	133
Mackerel, Spanish	218	243	384	506	762	858	914	568	873	565
Menhaden	3,530	2,387	1,642	1,589	982	1,022	828	521	350	469
Mulletts	1,607	2,069	1,739	2,539	1,949	1,700	2,133	1,976	1,913	1,793
Oysters	340	377	792	575	759	816	908	1,041	940	769
Sharks	6	3	69	24	329	803	716	800	1,227	315
Shrimp	20,094	17,721	20,103	16,566	14,857	15,770	16,064	16,260	23,917	20,830
Snapper, Red	56	68	94	118	152	132	138	214	177	58
Snapper, Vermilion	5	16	13	27	28	36	66	66	122	128

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab, Blue	0.56	0.55	0.65	0.71	0.58	0.58	0.53	0.65	0.55	0.67
Flounders	1.72	1.70	1.79	1.74	1.65	1.78	1.67	1.91	1.89	1.97
Mackerel, Spanish	0.62	0.57	0.60	0.61	0.49	0.52	0.61	0.71	0.66	0.78
Menhaden	0.09	0.08	0.09	0.08	0.10	0.10	0.11	0.12	0.14	0.15
Mulletts	0.52	0.80	0.62	0.57	0.51	0.45	0.56	0.57	0.61	0.55
Oysters	2.30	2.44	2.22	2.15	2.11	1.99	2.33	2.90	3.87	3.51
Sharks	0.35	0.39	0.52	0.58	0.83	0.42	0.60	0.60	0.38	0.65
Shrimp	2.10	2.52	2.82	2.33	1.99	1.92	1.82	1.97	1.63	1.93
Snapper, Red	2.26	2.05	2.32	2.37	2.41	2.72	2.78	2.98	3.03	3.61
Snapper, Vermilion	1.89	1.81	2.01	2.04	1.92	2.31	2.32	2.26	2.61	2.50

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	582	55,415	30,339
Shore	903	73,520	39,549
For-Hire	495	37,018	20,377
Total Durable Equipment Impacts	4,779	488,400	247,228
Total State Trip and Durable Equipment Economic Impacts	6,759	654,353	337,493

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	12,795	41,534	Fishing Tackle	80,913
Shore	33,187	26,131	Other Equipment	35,141
For-Hire	15,297	9,407	Boat Expenses	360,597
Total Trip Expenditures	61,279	77,072	Vehicle Expenses	51,568
			Second Home Expenses	29,424
			Total Durable Equipment Expenditures	557,643
Total State Trip and Durable Equipment Expenditures				695,994

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	101	131	143	213	123	187	223	231	233	253
Non-Coastal	56	92	94	113	97	123	159	93	184	169
Out-of-State	100	143	148	227	193	214	345	161	320	291
Total Anglers	257	367	385	553	413	524	728	485	736	712

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	71	80	62	63	68	67	77	55	77	74
Private or Rental	509	613	545	825	606	846	907	806	857	1,007
Shore	389	477	479	748	516	588	1,056	705	1,209	1,038
Total Trips	968	1,170	1,087	1,636	1,190	1,500	2,040	1,566	2,143	2,120

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bluefish	H	112	86	62	89	51	45	167	24	26	33
	R	57	76	59	113	64	126	187	93	264	208
Drum (Atlantic Croaker)	H	211	212	225	360	187	244	132	159	330	289
	R	356	605	539	546	467	512	786	748	683	930
Drum (Kingfishes) ¹	H	445	386	433	1,202	412	486	813	483	572	514
	R	114	214	193	368	162	185	382	300	589	247
Drum, Red	H	80	85	58	136	84	114	119	127	112	99
	R	79	95	73	172	104	245	145	160	176	128
Drum (Sand Seatrout)	H	868	892	557	712	428	709	716	410	725	688
	R	142	269	185	180	130	225	345	333	506	428
Drum (Spotted Seatrout)	H	72	155	166	295	193	345	199	344	308	308
	R	52	250	245	356	167	431	142	367	449	418
Flounder, Southern	H	63	126	65	182	82	113	114	114	113	98
	R	10	40	16	45	16	68	58	74	51	38
Mackerel, Spanish	H	143	341	185	328	106	122	398	94	143	99
	R	19	120	57	115	16	100	253	58	89	30
Porgies (Sheepshead)	H	96	130	141	313	191	299	383	284	216	282
	R	42	18	60	109	81	88	98	89	75	33
Snapper, Red	H	363	402	267	349	473	380	411	277	197	232
	R	487	618	685	910	983	665	654	560	688	659

¹Kingfishes include southern kingfish and Gulf kingfish.

Alabama's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	100,316 (1.5%)	1,604,110 (1.5%)	40,331 (1.2%)	71,810 (1.2%) ²	106,656 (1.2%)	0.4
2006	103,460 (1.4%)	1,713,399 (1.4%)	55,942 (1.2%)	92,659 (1.2%)	158,566 (1.2%)	0.32
% change	3.1%	6.8%	38.7%	29.0%	48.7%	-20.0%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	27	47	46	39	44	36	43	40	34
	Receipts	1,076	2,598	3,677	2,711	3,603	1,168	3,413	3,414	1,558
Seafood Sales, retail	Firms	44	44	44	50	58	55	61	44	57
	Receipts	2,508	3,503	3,878	3,633	3,456	3,812	3,645	3,855	4,802

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishment	24	16	17	21	22	24	23	26	24
	Employees	1,799	1,776	1,725	1,880	1,951	2,057	2,037	1,925	1,629
	Payroll	28,604	29,809	33,811	32,692	36,198	36,766	36,130	38,229	34,703
Seafood sales, wholesale	Establishment	47	47	47	45	36	33	31	26	26
	Employees	577	ND ³	887	692	547	611	588	607	395
	Payroll	7,669	ND	10,252	9,597	7,062	6,148	6,752	6,345	6,195
Seafood sales, retail	Establishment	24	22	28	30	35	37	35	34	28
	Employees	47	53	ND	95	110	ND	96	95	ND
	Payroll	655	625	ND	1,244	1,589	ND	1,401	1,399	ND

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishment	9	10	8	9	6	13	10	10	6
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	15
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	754
Deep sea freight transportation	Establishment	1	4	3	2	2	5	3	3	3
	Employees	ND	ND	ND	ND	ND	53	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	3,661	ND	ND	ND
Deep sea passenger transportation	Establishment	NA ⁴	1	1	2	NA	1	1	1	1
	Employees	NA	ND	ND	ND	NA	ND	ND	ND	ND
	Payroll	NA	ND	ND	ND	NA	ND	ND	ND	ND
Marinas	Establishment	61	57	59	61	48	53	52	58	52
	Employees	263	276	ND	ND	242	287	341	347	312
	Payroll	4,981	5,153	ND	ND	4,966	6,218	7,631	8,047	8,388
Marine cargo handling	Establishment	21	22	21	19	19	17	18	17	14
	Employees	733	687	ND	617	635	445	577	672	ND
	Payroll	27,624	23,312	ND	20,809	20,592	19,642	26,201	28,458	ND
Navigational services to shipping	Establishment	19	19	16	11	15	12	16	17	18
	Employees	173	184	ND	ND	220	410	ND	ND	ND
	Payroll	6,343	5,116	ND	ND	9,317	19,602	ND	ND	ND
Port & harbor operations	Establishment	3	5	5	7	6	3	1	3	3
	Employees	ND	16	ND	ND	162	ND	ND	ND	ND
	Payroll	ND	668	ND	ND	6,321	ND	ND	ND	ND
Ship & boat building	Establishment	45	42	41	41	45	41	42	45	47
	Employees	3,201	2,954	2,421	2,575	2,901	2,781	2,195	2,591	3,027
	Payroll	86,700	83,325	78,014	105,756	92,916	81,092	83,756	86,453	121,185

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the Florida Seafood Industry (thousands of dollars)¹

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	5,109,134	2,805,289	101,168
Commercial Harvesters	176,275	76,727	3,174
Seafood Processors & Dealers	382,863	183,873	3,679
Seafood Wholesalers & Distributors	1,137,997	564,616	10,810
Retail Sectors	3,411,999	1,980,073	83,504

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	168,552	165,864	159,635	146,558	144,185	141,185	148,058	137,912	150,001	132,198
Finfish & Other	43,459	50,748	48,344	52,707	51,609	51,451	52,331	50,600	50,351	45,663
Shellfish	125,093	115,116	111,291	93,851	92,576	89,734	95,727	87,312	99,650	86,535
Clams, Quahog	4,989	6,816	5,225	4,740	3,606	3,870	2,074	1,736	807	914
Crab, Blue	8,027	7,863	6,154	4,855	5,644	7,061	7,316	7,035	7,042	5,817
Crab, Stone	22,856	23,914	28,353	20,136	22,874	22,913	26,507	21,074	23,977	26,127
Gag	6,074	4,837	5,521	8,050	7,380	6,855	7,615	7,084	4,151	4,348
Grouper, Red	8,751	13,286	13,324	13,519	12,859	11,695	13,281	13,376	14,382	11,023
Lobsters	19,945	29,758	25,362	14,847	18,932	17,138	20,724	15,077	24,885	24,545
Mulletts	4,762	6,727	5,121	6,126	6,059	4,755	4,891	4,355	6,021	3,529
Oyster	2,440	3,595	3,873	3,855	3,125	2,932	2,884	2,854	5,415	6,631
Shrimp	63,057	39,875	40,660	44,021	37,252	34,893	34,737	38,625	36,792	21,277
Snapper, Red	461	978	1,303	1,509	2,188	2,284	2,168	1,671	1,991	3,066

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	99,933	91,765	77,342	80,336	82,075	79,163	83,894	73,038	73,422	59,244
Finfish & Other	39,059	44,504	39,296	44,498	43,586	41,697	41,134	36,543	35,882	29,899
Shellfish	60,875	47,261	38,046	35,838	38,489	37,466	42,760	36,496	37,540	29,345
Clams, Quahog	540	755	549	509	480	558	266	212	96	116
Crab, Blue	12,863	11,169	6,573	4,647	5,567	7,225	8,083	7,370	8,609	6,113
Crab, Stone	6,951	5,606	6,747	6,594	6,385	5,253	5,933	4,502	4,773	5,838
Gag	2,613	2,039	2,234	3,281	3,136	2,691	3,054	2,688	1,436	1,339
Grouper, Red	4,709	7,085	6,916	7,031	6,987	5,841	6,789	6,386	6,061	4,351
Lobsters	5,312	6,880	5,184	2,966	4,080	3,886	4,565	3,059	4,372	3,405
Mulletts	7,506	8,434	7,493	8,989	8,020	6,577	6,660	5,635	7,307	5,378
Oyster	1,537	2,307	2,520	2,559	1,944	1,753	1,644	1,417	2,394	2,959
Shrimp	29,520	16,097	14,906	17,471	19,128	18,131	18,258	19,297	16,849	8,876
Snapper, Red	217	469	563	652	948	928	811	584	649	919

Average Annual Price for Key Species / Species Groups (price per pound)²

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clams, Quahog	9.23	9.02	9.52	9.31	7.51	6.93	7.79	8.17	8.44	7.90
Crab, Blue	0.62	0.70	0.94	1.04	1.01	0.98	0.91	0.95	0.82	0.95
Crab, Stone	3.29	4.27	4.20	3.05	3.58	4.36	4.47	4.68	5.02	4.48
Gag	2.32	2.37	2.47	2.45	2.35	2.55	2.49	2.64	2.89	3.25
Grouper, Red	1.86	1.88	1.93	1.92	1.84	2.00	1.96	2.09	2.37	2.53
Lobsters	3.75	4.33	4.89	5.01	4.64	4.41	4.54	4.93	5.69	7.21
Mulletts	0.63	0.80	0.68	0.68	0.76	0.72	0.73	0.77	0.82	0.66
Oyster	1.59	1.56	1.54	1.51	1.61	1.67	1.75	2.02	2.26	2.24
Shrimp	2.14	2.48	2.73	2.52	1.95	1.92	1.90	2.00	2.18	2.40
Snapper, Red	2.12	2.08	2.32	2.31	2.31	2.46	2.67	2.86	3.07	3.34

¹Information reported in this table is for the state of Florida, not West Florida.²Information reported in this table is for West Florida.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	4,252	425,890	253,250
Shore	4,749	447,726	260,114
For-Hire	1,991	193,769	114,885
Total Durable Equipment Impacts	54,807	5,762,049	3,076,569
Total State Trip and Durable Equipment Economic Impacts	65,799	6,829,434	3,704,818

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	128,708	250,652	Fishing Tackle	1,118,478
Shore	256,612	67,215	Other Equipment	375,237
For-Hire	96,494	23,436	Boat Expenses	4,306,467
Total Trip Expenditures	481,814	341,303	Vehicle Expenses	942,562
			Second Home Expenses	187,915
			Total Durable Equipment Expenditures	6,930,659
Total State Trip and Durable Equipment Expenditures				7,753,776

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	1,266	1,218	1,683	1,894	1,703	1,965	2,023	2,088	2,084	1,934
Non-Coastal	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹	NA ¹
Out-of-State	1,696	1,708	2,387	2,552	1,990	2,318	2,141	2,008	1,988	2,151
Total Anglers	2,963	2,926	4,071	4,447	3,693	4,283	4,165	4,096	4,072	4,085

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	733	694	628	543	581	496	590	522	560	641
Private or Rental	6,096	6,079	7,893	8,225	8,235	9,222	9,161	8,720	8,932	9,415
Shore	5,406	4,524	6,566	7,621	5,602	6,291	6,680	6,246	6,738	6,343
Total Trips	12,235	11,297	15,086	16,389	14,418	16,009	16,431	15,489	16,230	16,399

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

Species/Groups	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Drum, Red	H	274	229	377	266	292	365	323	459	378	430
	R	1,448	1,161	1,453	1,462	1,376	1,938	2,160	2,637	2,898	2,493
Drum (Sand & Silver Seatrouts)	H	639	1,961	1,841	1,047	1,354	751	571	372	412	867
	R	283	824	604	389	321	146	190	105	297	450
Drum (Spotted Seatrout)	H	1,439	1,497	1,610	1,080	1,532	1,629	1,841	1,964	1,506	1,569
	R	7,978	9,451	9,377	6,201	10,710	10,470	9,601	11,507	8,733	10,432
Gag	H	533	504	671	453	490	470	614	458	262	299
	R	2,066	1,437	1,416	1,905	2,449	3,359	3,530	2,377	1,793	2,923
Mackerel, King	H	371	285	213	212	262	196	189	175	368	252
	R	67	64	81	249	139	96	108	134	463	79
Mackerel, Spanish	H	959	1,197	1,346	2,122	1,810	1,317	1,687	985	1,754	1,582
	R	673	1,088	1,218	1,705	1,865	2,084	1,913	1,275	2,879	2,058
Mullet ²	H	900	1,210	1,109	1,436	1,010	840	1,112	1,017	1,241	729
	R	167	119	166	342	93	187	282	260	139	214
Porgies (Sheepshead)	H	697	884	725	745	686	761	871	798	732	709
	R	1,104	1,129	1,272	961	1,125	1,370	1,547	1,390	938	740
Snapper, Gray	H	795	552	682	805	655	980	881	838	654	890
	R	3,261	2,221	3,223	2,562	2,998	4,808	3,429	4,751	2,646	4,360
Snook, Common	H	63	57	42	36	50	45	69	65	38	30
	R	530	679	1,302	1,290	1,292	1,359	2,039	2,283	1,575	1,574

¹All Florida residents are considered coastal county residents thus this category is not applicable (NA).

²Mulletts include "Mullet Genus" and striped mulletts.

Florida's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	420,638 (6.1%)	5,756,353 (5.3%)	149,937 (4.5%)	286,753 (4.8%) ²	417,169 (4.8%)	1.36
2006	517,069 (6.8%)	7,535,515 (6.3%)	260,444 (5.4%)	395,591 (5.3%)	716,505 (5.5%)	1.01
% change	22.9%	30.9%	73.7%	38.0%	71.8%	-25.7%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	58	65	102	104	116	142	177	164	174
	Receipts	4,995	7,153	8,330	6,350	5,064	8,047	8,652	8,756	10,184
Seafood Sales, retail	Firms	239	221	219	212	243	240	247	247	251
	Receipts	19,361	20,274	18,978	17,935	20,837	18,064	18,004	22,787	20,708

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	47	43	41	43	33	27	24	25	22
	Employees	2,488	2,336	2,188	2,033	2,359	2,084	2,193	1,616	1,704
	Payroll	51,439	52,842	58,821	58,977	65,914	61,452	65,881	47,529	62,801
Seafood sales, wholesale	Establishments	346	349	329	323	314	293	261	258	259
	Employees	2,826	2,733	2,915	2,670	2,395	1,835	1,948	1,883	2,091
	Payroll	66,264	69,139	76,363	76,717	78,160	55,874	63,276	65,339	73,897
Seafood sales, retail	Establishments	135	133	135	159	190	174	190	176	173
	Employees	595	869	575	697	908	952	977	970	936
	Payroll	9,841	20,664	10,359	13,403	17,186	15,673	17,575	19,192	19,513

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	49	55	54	58	51	66	59	59	54
	Employees	772	3,404	2,391	3,208	2,856	ND ³	1,132	1,150	1,217
	Payroll	32,288	190,731	108,638	150,964	143,185	ND	80,422	71,420	91,638
Deep sea freight transportation	Establishments	67	69	58	51	62	61	63	69	73
	Employees	3,576	3,622	2,209	2,123	1,858	2,535	2,567	2,622	3,729
	Payroll	154,115	119,744	99,384	106,848	107,564	131,904	150,701	207,300	226,810
Deep sea passenger transportation	Establishments	30	31	30	30	31	36	32	31	37
	Employees	6,775	7,846	9,165	8,719	7,863	8,879	8,849	8,492	9,077
	Payroll	272,287	306,202	349,974	394,932	315,551	428,941	536,753	504,625	571,590
Marinas	Establishments	496	484	476	509	481	528	532	551	513
	Employees	3,536	3,750	3,799	3,876	3,449	5,079	5,067	5,069	5,494
	Payroll	74,657	82,790	88,436	88,274	90,662	111,324	125,763	133,384	146,390
Marine cargo handling	Establishments	75	67	65	71	74	68	66	63	66
	Employees	4,988	4,209	4,549	4,863	4,405	5,651	5,671	6,409	7,266
	Payroll	101,915	96,650	92,843	124,760	109,555	171,481	175,257	177,983	189,020
Navigational services to shipping	Establishments	139	142	142	133	141	140	149	148	142
	Employees	651	749	866	755	714	817	686	660	781
	Payroll	29,634	35,977	36,730	35,854	34,040	39,524	39,309	42,200	48,370
Port & harbor operations	Establishments	22	18	22	25	29	26	29	31	27
	Employees	542	556	914	1,355	1,180	592	1,045	973	584
	Payroll	22,160	17,401	19,082	25,246	26,928	19,071	24,327	22,606	19,417
Ship & boat building	Establishments	291	301	300	313	291	290	306	312	301
	Employees	12,089	13,755	14,773	13,182	11,407	11,830	12,503	12,729	12,385
	Payroll	350,304	391,289	447,253	405,856	379,828	393,985	443,379	454,209	427,888

Note: Information reported in these tables are for the entire state of Florida, not West Florida.

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Louisiana Seafood Industry (*thousands of dollars*)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	2,125,898	1,107,049	47,081
Commercial Harvesters	307,500	130,440	6,694
Seafood Processors & Dealers	286,861	90,835	2,982
Seafood Wholesalers & Distributors	151,430	75,119	1,483
Retail Sectors	1,380,107	810,656	35,922

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	311,643	336,963	421,199	347,253	280,630	270,408	274,082	251,678	278,112	287,012
Finfish & Other	76,293	100,860	105,389	86,823	70,327	63,299	66,074	49,443	60,735	65,180
Shellfish	235,350	236,104	315,810	260,430	210,303	207,109	208,008	202,235	217,377	221,832
Crab, Blue	30,744	28,210	34,395	31,967	30,685	33,623	29,881	27,419	32,605	34,801
Crawfish	14,392	10,480	684	8,511	8,070	4,845	4,810	8,360	1,290	9,011
Mackerel, King	851	790	1,017	996	1,046	990	1,198	1,273	1,112	1,298
Menhaden	47,292	66,327	68,586	58,961	40,378	34,464	35,249	25,776	36,441	41,368
Mulletts	2,473	5,307	5,265	2,417	1,688	2,592	2,681	946	2,061	686
Oysters	30,994	25,777	27,526	31,853	30,296	33,358	34,814	33,305	35,999	40,136
Shrimp	159,176	171,481	253,032	187,969	141,213	135,153	138,466	133,143	147,472	137,862
Snapper, Red	6,166	5,644	5,841	5,411	4,696	3,960	3,861	3,568	4,472	2,529
Snapper, Vermilion	901	1,332	932	1,114	1,308	1,896	1,663	1,137	762	991
Tunas	7,612	9,081	12,027	7,895	10,845	9,471	10,739	7,687	7,040	8,334

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	1,131,978	1,524,728	1,359,242	1,195,654	1,312,139	1,181,607	1,095,571	849,280	918,498	997,613
Finfish & Other	941,464	1,331,608	1,148,595	1,003,402	1,124,627	985,164	895,336	681,322	714,545	814,643
Shellfish	190,514	193,121	210,647	192,252	187,511	196,443	200,235	167,959	203,953	182,970
Crab, Blue	43,657	46,664	52,047	41,799	50,123	48,089	44,397	38,100	53,394	44,844
Crawfish	21,978	13,226	393	10,410	15,602	8,337	8,537	15,177	1,469	15,802
Mackerel, King	843	838	949	818	866	911	984	867	971	879
Menhaden	908,070	1,288,558	1,111,979	971,102	1,093,997	953,714	862,947	657,702	689,853	789,621
Mulletts	6,252	8,954	7,253	4,260	2,555	4,524	4,754	1,238	3,361	1,375
Oysters	12,856	12,128	12,718	15,133	13,962	13,609	13,902	12,099	11,417	12,857
Shrimp	111,996	121,004	145,385	124,813	107,795	125,730	133,370	102,576	137,662	109,441
Snapper, Red	2,965	2,965	2,784	2,436	2,178	1,725	1,560	1,316	1,653	807
Snapper, Vermilion	458	741	504	601	755	1,053	921	588	365	517
Tunas	3,177	4,594	3,871	2,706	3,587	3,184	3,230	2,296	2,143	2,476

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab, Blue	0.70	0.60	0.66	0.76	0.61	0.70	0.67	0.72	0.61	0.78
Crawfish	0.65	0.79	1.74	0.82	0.52	0.58	0.56	0.55	0.88	0.57
Mackerel, King	1.01	0.94	1.07	1.22	1.21	1.09	1.22	1.47	1.15	1.48
Menhaden	0.05	0.05	0.06	0.06	0.04	0.04	0.04	0.04	0.05	0.05
Mulletts	0.40	0.59	0.73	0.57	0.66	0.57	0.56	0.76	0.61	0.50
Oysters	2.41	2.13	2.16	2.10	2.17	2.45	2.50	2.75	3.15	3.12
Shrimp	1.42	1.42	1.74	1.51	1.31	1.07	1.04	1.30	1.07	1.26
Snapper, Red	2.08	1.90	2.10	2.22	2.16	2.30	2.47	2.71	2.71	3.13
Snapper, Vermilion	1.97	1.80	1.85	1.86	1.73	1.80	1.81	1.93	2.09	1.92
Tunas	2.40	1.98	3.11	2.92	3.02	2.97	3.33	3.35	3.29	3.37

2007 Economic Impacts of Recreational Fishing Expenditures (*thousands of dollars*)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	2,331	247,899	121,925
Shore	860	82,498	41,645
For-Hire	675	64,151	36,425
Total Durable Equipment Impacts	23,579	2,058,844	1,034,453
Total State Trip and Durable Equipment Economic Impacts	27,446	2,453,392	1,234,449

2007 Angler Trip & Durable Equipment Expenditures (*thousands of dollars*)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	21,477	167,404	Fishing Tackle	345,061
Shore	3,240	63,820	Other Equipment	165,375
For-Hire	21,278	20,229	Boat Expenses	1,835,105
Total Trip Expenditures	45,995	251,453	Vehicle Expenses	131,109
			Second Home Expenses	175,563
			Total Durable Equipment Expenditures	2,652,213
Total State Trip and Durable Equipment Expenditures				2,949,661

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	434	409	552	593	484	727	747	706	868	853
Non-Coastal	41	33	67	67	68	79	133	68	108	124
Out-of-State	106	91	118	137	117	204	179	138	198	157
Total Anglers	581	533	737	797	669	1,011	1,059	911	1,174	1,134

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	65	64	94	118	94	104	139	128	176	141
Private or Rental	1,862	1,979	2,722	2,646	2,251	3,295	3,446	2,639	3,381	3,165
Shore	746	579	935	851	674	872	1,209	1,159	934	1,210
Total Trips	2,673	2,621	3,752	3,615	3,019	4,271	4,795	3,926	4,491	4,516

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Drum (Atlantic Croaker)	H	407	369	958	532	281	379	405	528	914	856
	R	923	1,037	2,967	1,157	1,055	1,011	2,011	919	1,411	1,173
Drum, Black	H	401	351	679	446	511	485	509	314	389	351
	R	747	401	1,079	828	885	834	904	525	657	682
Drum, Red	H	1,427	1,763	2,774	2,652	2,042	2,143	2,349	1,554	2,254	2,390
	R	2,953	2,663	3,866	3,380	3,277	3,545	3,103	2,445	3,848	3,360
Drum (Sand Seatrout)	H	851	999	1,257	449	599	983	601	773	1,161	1,122
	R	409	402	610	205	506	302	419	204	651	578
Drum (Southern Kingfish)	H	81	160	153	145	105	159	309	335	153	118
	R	41	110	67	180	23	63	112	286	166	34
Drum (Spotted Seatrout)	H	4,996	7,025	9,616	7,698	5,270	7,318	8,082	7,317	13,230	9,337
	R	4,863	6,089	6,726	4,007	3,862	7,484	7,794	7,046	10,644	7,401
Flounder, Southern	H	230	380	388	258	272	407	475	290	387	356
	R	53	41	71	65	48	115	102	64	80	83
Porgies (Sheepshead)	H	478	322	389	326	607	805	1,174	867	474	309
	R	468	266	384	453	433	520	525	482	507	290
Snapper, Red	H	131	80	98	55	47	71	83	104	201	148
	R	99	198	112	48	40	166	240	308	438	277
Tuna, Yellowfin	H	5	7	3	14	8	14	8	14	11	8
	R	(1)	1	(1)	1	(1)	(1)	(1)	2	(1)	1

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

Louisiana's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	100,667 (1.5%)	1,577,220 (1.5%)	40,802 (1.2%)	70,219 (1.2%) ²	118,085 (1.4%)	1.84
2006	101,802 (1.3%)	1,593,033 (1.3%)	55,518 (1.2%)	88,075 (1.2%)	203,167 (1.5%)	2.28
% change	1.1%	1.0%	36.1%	25.4%	72.1%	23.9%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	44	46	39	58	66	73	75	76	99
	Receipts	4,593	3,050	3,466	2,918	3,006	4,678	10,097	8,513	8,179
Seafood sales, retail	Firms	148	165	172	170	185	208	204	156	181
	Receipts	13,155	13,847	11,806	12,586	15,201	22,637	18,148	14,585	20,046

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	59	56	56	50	50	54	54	50	40
	Employees	1,582	1,755	1,282	1,141	1,185	1,693	1,519	1,556	1,506
	Payroll	34,819	34,496	45,285	48,331	52,861	56,562	47,016	43,801	45,439
Seafood sales, wholesale	Establishments	176	163	162	164	152	134	133	128	112
	Employees	1,264	1,354	1,187	1,245	1,270	1,001	975	1,037	807
	Payroll	18,886	19,741	21,717	23,053	22,363	19,539	19,639	17,649	21,243
Seafood sales, retail	Establishments	90	89	88	88	123	109	111	106	101
	Employees	478	502	438	518	640	796	745	723	759
	Payroll	4,934	4,954	5,162	5,636	7,033	9,406	9,567	8,277	10,560

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	141	137	131	118	109	160	148	136	137
	Employees	7,513	6,672	5,925	5,689	5,494	6,779	6,656	5,771	6,397
	Payroll	265,831	238,036	239,195	267,470	236,730	287,415	300,547	294,941	386,136
Deep sea freight transportation	Establishments	34	35	34	31	28	25	22	25	24
	Employees	769	900	ND ³	860	647	831	705	ND	595
	Payroll	26,650	32,851	ND	37,269	29,432	43,634	38,949	ND	35,269
Deep sea passenger transportation	Establishments	NA ⁴	7	9	8	6	4	3	3	2
	Employees	NA	ND	ND	ND	66	ND	ND	ND	ND
	Payroll	NA	ND	ND	ND	2,748	ND	ND	ND	ND
Marinas	Establishments	79	78	74	74	57	53	52	53	41
	Employees	466	ND	ND	ND	345	409	ND	352	ND
	Payroll	9,284	ND	ND	ND	8,724	11,019	ND	10,213	ND
Marine cargo handling	Establishments	67	59	59	58	47	47	47	46	51
	Employees	2,898	3,343	3,183	3,313	3,089	3,784	3,278	3,263	3,100
	Payroll	94,749	94,890	94,375	102,484	114,659	131,274	127,896	110,129	118,748
Navigational services to shipping	Establishments	162	155	142	142	148	118	127	120	129
	Employees	3,610	3,434	3,288	3,614	3,371	2,738	2,472	2,136	2,204
	Payroll	122,977	118,525	120,337	133,061	135,223	112,412	109,008	96,202	115,222
Port & harbor operations	Establishments	17	18	18	19	15	13	18	18	18
	Employees	1,415	1,769	1,413	1,292	1,136	363	ND	418	436
	Payroll	47,768	48,919	49,875	51,443	47,191	18,331	ND	19,510	29,676
Ship & boat building	Establishments	129	117	121	116	113	113	113	111	108
	Employees	15,572	14,596	14,023	13,643	12,786	12,910	13,206	11,016	11,521
	Payroll	471,197	457,339	434,510	477,137	448,749	452,315	460,606	376,407	437,028

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the Mississippi Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	362,963	184,401	8,244
Commercial Harvesters	77,395	23,826	1,499
Seafood Processors & Dealers	55,988	27,959	1,097
Seafood Wholesalers & Distributors	22,983	11,346	224
Retail Sectors	206,597	121,270	5,424

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	48,402	48,609	58,751	50,633	47,565	46,149	43,618	23,386	21,586	39,340
Finfish & Other	11,222	14,036	13,706	14,432	12,627	12,396	10,485	7,804	8,959	21,359
Shellfish	37,181	34,573	45,046	36,201	34,938	33,753	33,133	15,582	12,628	17,981
Crab, Blue	432	682	637	391	572	687	658	433	928	741
Flounders	94	164	184	131	63	49	32	20	36	58
Menhaden	9,051	11,965	11,922	13,252	11,625	11,277	9,564	7,074	8,447	20,658
Mulletts	166	366	167	114	22	34	54	38	23	35
Oysters	3,813	4,457	6,113	4,195	4,456	7,228	6,073	1,447	ND ¹	819
Shrimp	32,935	29,433	38,294	31,614	29,910	25,619	26,353	13,698	11,699	16,418
Snapper, Red	415	146	220	106	100	88	71	115	ND ¹	ND ¹
Snapper, Vermilion	230	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	210,727	267,591	217,764	213,922	217,968	213,469	183,558	167,610	221,720	227,834
Finfish & Other	191,624	249,384	198,559	194,885	197,691	190,733	161,669	158,721	212,213	216,375
Shellfish	19,103	18,207	19,204	19,037	20,277	22,736	21,889	8,889	9,507	11,459
Crab, Blue	593	923	840	434	717	877	811	429	1,127	737
Flounders	54	93	110	84	46	31	18	10	16	25
Menhaden	181,021	239,297	190,168	192,467	195,371	187,956	159,392	157,194	211,163	215,182
Mulletts	319	522	256	233	64	94	128	99	66	70
Oysters	2,389	2,793	3,548	2,653	2,738	4,042	3,029	610	ND ¹	299
Shrimp	16,120	14,490	14,814	15,949	16,822	17,560	17,992	7,848	8,380	10,421
Snapper, Red	209	79	103	52	46	43	35	54	ND ¹	ND ¹
Snapper, Vermilion	138	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab, Blue	0.73	0.74	0.76	0.90	0.80	0.78	0.81	1.01	0.82	1.01
Flounders	1.75	1.75	1.68	1.56	1.35	1.57	1.73	1.88	2.22	2.38
Menhaden	0.05	0.05	0.06	0.07	0.06	0.06	0.06	0.05	0.04	0.10
Mulletts	0.52	0.70	0.65	0.49	0.34	0.36	0.42	0.38	0.35	0.50
Oysters	1.60	1.60	1.72	1.58	1.63	1.79	2.00	2.37	ND ¹	2.74
Shrimp	2.04	2.03	2.58	1.98	1.78	1.46	1.46	1.75	1.40	1.58
Snapper, Red	1.98	1.85	2.15	2.04	2.17	2.06	2.05	2.13	ND ¹	ND ¹
Snapper, Vermilion	1.67	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	202	23,278	11,156
Shore	50	4,755	2,371
For-Hire	69	6,045	3,406
Total Durable Equipment Impacts	4,387	582,852	222,088
Total State Trip and Durable Equipment Economic Impacts	4,707	616,930	239,021

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	963	19,532	Fishing Tackle	73,548
Shore	821	4,090	Other Equipment	17,972
For-Hire	2,978	987	Boat Expenses	28,976
Total Trip Expenditures	4,762	24,609	Vehicle Expenses	512,176
			Second Home Expenses	0
			Total Durable Equipment Expenditures	632,672
Total State Trip and Durable Equipment Expenditures				662,043

Recreational Anglers by Residential Area (thousands of anglers)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal	82	76	161	198	175	159	191	108	143	196
Non-Coastal	25	26	30	48	52	53	26	29	23	34
Out-of-State	68	75	57	82	49	48	46	39	27	55
Total Anglers	175	177	248	327	276	261	263	176	193	284

Recreational Fishing Effort by Mode (thousands of trips)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
For-Hire	35	40	27	18	21	24	12	8	7	20
Private or Rental	472	427	568	676	542	748	592	463	666	848
Shore	321	339	498	556	475	405	485	419	325	366
Total Trips	828	806	1,093	1,250	1,038	1,177	1,089	891	998	1,233

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

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Drum (Atlantic Croaker)	H	90	209	192	238	206	197	215	30	53	80
	R	604	398	540	818	937	701	351	158	233	274
Drum (Kingfishes) ²	H	276	537	497	490	278	327	316	198	178	169
	R	69	70	27	154	118	61	87	83	47	61
Drum, Red	H	64	56	56	60	60	50	59	33	70	54
	R	144	73	77	132	117	186	130	77	102	77
Drum (Sand & Silver Seatrout)	H	559	1,380	1,053	1,150	866	666	404	267	422	280
	R	131	241	197	288	111	330	109	149	221	254
Drum (Spotted Seatrout)	H	332	378	217	308	372	276	447	352	520	361
	R	444	378	409	638	559	832	745	783	1,046	786
Flounder, Southern	H	118	132	93	275	142	119	103	69	44	118
	R	20	18	20	51	48	67	46	40	26	35
Mullet, Striped ³	H	16	154	232	383	212	550	241	31	5	71
	R	(1)	9	9	516	12	65	1	(1)	4	22
Porgies (Sheepshead)	H	71	29	43	95	69	77	47	30	30	25
	R	39	19	11	127	62	27	24	22	21	11
Sharks ⁴	H	19	5	26	24	13	10	7	7	4	5
	R	84	26	163	65	118	59	46	39	44	41
Snapper, Red	H	39	30	9	21	43	39	16	1	5	7
	R	107	36	40	61	166	90	79	47	32	24

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

²Kingfishes include southern kingfish and Gulf kingfish.

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

⁴Sharks include "Requiem Shark family," "Unidentified Sharks," blacktip sharks, and Atlantic sharpnose sharks. Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

Mississippi's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	59,771 (0.9%)	937,023 (0.9%)	21,067 (0.6%)	38,081 (0.6%) ²	60,513 (0.7%)	1.69
2006	60,590 (0.8%)	940,609 (0.8%)	27,439 (0.6%)	47,680 (0.6%)	84,586 (0.6%)	ND ³
% change	1.4%	0.4%	30.2%	25.2%	39.8%	16.0%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	NA ⁴	NA	10	13	15	23	18	12	22
	Receipts	ND	ND	1,300	1,186	915	1,561	1,056	1,045	1,537
Seafood sales, retail	Firms	44	41	52	NA	51	51	47	41	53
	Receipts	2,027	2,394	1,665	ND	2,486	2,984	3,595	2,934	4,021

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	33	37	37	33	34	37	33	28	24
	Employees	3,483	4,335	4,339	4,053	3,675	4,438	3,728	3,637	3,353
	Payroll	55,274	69,197	73,350	65,237	70,792	80,229	66,047	63,957	60,510
Seafood sales, wholesale	Establishments	32	32	30	28	29	26	29	30	23
	Employees	217	223	232	226	226	176	166	145	58
	Payroll	3,554	3,805	3,716	4,056	3,791	3,067	3,631	1,822	2,063
Seafood sales, retail	Establishments	19	18	12	17	28	19	17	21	12
	Employees	45	ND	ND	45	ND	47	55	57	41
	Payroll	551	ND	ND	356	ND	468	532	521	395

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	6	6	5	5	5	5	6	5	5
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea freight transportation	Establishments	1	1	2	1	1	2	2	3	3
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Deep sea passenger transportation	Establishments	NA	NA	NA	NA	NA	1	1	1	1
	Employees	NA	NA	NA	NA	NA	ND	ND	ND	ND
	Payroll	NA	NA	NA	NA	NA	ND	ND	ND	ND
Marinas	Establishments	16	17	14	17	18	22	22	25	16
	Employees	117	ND	ND	ND	86	141	220	158	ND
	Payroll	1,507	ND	ND	ND	1,388	2,532	2,603	2,358	ND
Marine cargo handling	Establishments	12	10	9	9	7	4	5	6	5
	Employees	505	ND	300	315	251	ND	ND	ND	238
	Payroll	11,907	ND	9,261	10,478	9,284	ND	ND	ND	8,621
Navigational services to shipping	Establishments	10	10	8	8	8	10	9	8	8
	Employees	209	ND	61	ND	ND	ND	ND	ND	ND
	Payroll	6,380	ND	2,360	ND	ND	ND	ND	ND	ND
Port & harbor operations	Establishments	NA	2	1	1	1	1	2	2	1
	Employees	NA	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	NA	ND	ND	ND	ND	ND	ND	ND	ND
Ship & boat building	Establishments	26	23	24	24	26	21	19	17	20
	Employees	13,798	14,059	12,358	11,531	11,663	ND	ND	11,845	11,909
	Payroll	472,369	461,139	462,533	465,845	473,191	ND	ND	471,243	498,660

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the Texas Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	1,942,379	959,363	42,240
Commercial Harvesters	258,719	97,343	2,931
Seafood Processors & Dealers	277,594	81,835	2,348
Seafood Wholesalers & Distributors	137,473	65,577	1,230
Retail Sectors	1,268,593	714,608	35,731

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue	210,839	221,440	293,609	218,019	173,340	168,317	166,208	172,337	197,291	174,356
Finfish & Other	9,205	9,536	9,110	7,637	9,600	9,041	10,684	10,813	11,359	9,371
Shellfish	201,634	211,905	284,499	210,382	163,741	159,276	155,524	161,523	185,932	164,985
Crab, Blue	4,549	4,295	3,301	3,905	4,523	3,157	2,663	2,410	1,459	2,660
Croacker, Atlantic	200	306	315	385	451	489	382	415	500	417
Drum, Black	2,816	2,743	2,350	1,703	1,820	1,365	1,444	1,917	2,013	1,657
Flounders	423	603	322	249	371	336	325	276	164	63
Groupers	330	480	374	405	664	1,028	785	795	628	417
Oysters	8,282	13,820	13,847	11,146	11,276	16,493	14,954	15,883	17,263	17,760
Shrimp	188,670	193,621	267,112	195,006	147,701	139,485	137,674	143,045	167,108	144,536
Snapper, Red	2,633	2,680	2,786	2,945	3,363	3,757	5,193	5,345	6,168	3,770
Snapper, Vermilion	648	598	498	456	386	349	611	571	642	1,535
Tunas	697	1,081	1,331	617	1,190	720	ND ¹	340	ND ¹	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Landings	103,563	92,923	110,518	97,393	93,059	96,122	85,557	84,289	117,131	84,940
Finfish & Other	6,572	6,460	6,153	5,132	6,066	5,240	5,852	5,782	5,825	4,953
Shellfish	96,992	86,463	104,365	92,261	86,993	90,883	79,705	78,507	111,306	79,987
Crab, Blue	6,989	6,472	4,653	5,163	7,037	4,811	3,961	3,119	1,966	3,309
Croacker, Atlantic	40	52	52	62	70	75	60	58	67	55
Drum, Black	2,691	2,838	2,837	2,320	2,331	1,677	1,717	2,077	2,212	1,684
Flounders	218	288	160	121	173	159	151	144	68	25
Groupers	162	237	182	187	274	416	329	303	220	141
Oysters	3,438	6,411	6,188	4,700	4,708	6,813	5,569	5,007	4,923	5,188
Shrimp	86,482	73,483	93,420	82,290	75,158	79,166	70,098	70,310	104,378	71,461
Snapper, Red	1,247	1,306	1,300	1,384	1,478	1,607	2,133	1,940	2,158	1,215
Snapper, Vermilion	339	316	251	242	217	192	322	279	273	664
Tunas	310	473	446	209	430	275	ND ¹	112	ND ¹	ND ¹

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Crab, Blue	0.65	0.66	0.71	0.76	0.64	0.66	0.67	0.77	0.74	0.80
Croacker, Atlantic	5.02	5.90	6.09	6.21	6.46	6.49	6.35	7.14	7.43	7.60
Drum, Black	1.05	0.97	0.83	0.73	0.78	0.81	0.84	0.92	0.91	0.98
Flounders	1.94	2.10	2.02	2.06	2.14	2.12	2.15	1.92	2.42	2.48
Groupers	2.04	2.02	2.06	2.17	2.43	2.47	2.39	2.62	2.85	2.96
Oysters	2.41	2.16	2.24	2.37	2.40	2.42	2.69	3.17	3.51	3.42
Shrimp	2.18	2.63	2.86	2.37	1.97	1.76	1.96	2.03	1.60	2.02
Snapper, Red	2.11	2.05	2.14	2.13	2.27	2.34	2.43	2.76	2.86	3.10
Snapper, Vermilion	1.91	1.89	1.98	1.89	1.78	1.82	1.90	2.05	2.35	2.31
Tunas	2.25	2.29	2.98	2.95	2.76	2.62	ND ¹	3.04	ND ¹	ND ¹

¹ND = data is confidential thus not disclosable.

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
Private Boat	1,278	146,803	78,450
Shore	383	41,927	22,637
For-Hire	604	55,524	30,950
Total Durable Equipment Impacts	21,116	2,760,607	1,382,754
Total State Trip and Durable Equipment Economic Impacts	23,382	3,004,862	1,514,791

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars) ¹

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents	Residents		
Private Boat	5,068	93,798	Fishing Tackle	135,687
Shore	2,716	26,296	Other Equipment	71,051
For-Hire	412	32,558	Boat Expenses	834,311
Total Trip Expenditures	8,196	152,652	Vehicle Expenses	215,264
			Second Home Expenses	950,945
			Total Durable Equipment Expenditures	2,207,258
Total State Trip and Durable Equipment Expenditures				2,368,106

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)²

Species/Groups		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Drum (Atlantic Croaker)	H	187	115	170	218	108	96	94	97	96	95
Drum, Black	H	49	48	101	135	64	78	60	56	76	66
Drum, Red	H	184	250	245	211	179	232	214	213	266	289
Drum (Sand Seatrout)	H	100	155	199	58	129	92	133	124	83	95
Drum (Spotted Seatrout)	H	904	1,275	992	983	845	799	763	842	1,017	916
Flounder, Southern	H	81	129	61	61	65	81	81	53	46	49
Mackerel, King	H	40	37	32	17	23	24	27	20	43	11
Porgies (Sheepshead)	H	51	56	37	30	51	41	35	46	33	46
Snapper, Red	H	107	53	57	62	77	52	53	68	86	45

Note: Participation (number of anglers) and effort (number of trips) information were not available for this report.

¹The 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 2007 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.

²Data collected by the TPWD 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 website for more information: <http://www.tpwd.state.tx.us/fishboat/>.

Texas' State Economy (% of national total)

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation (\$ millions)	Gross State Product (\$ millions)	Commercial Location Quotient ¹
1998	462,875 (6.7%)	7,570,820 (7.0%)	229,186 (6.9%)	424,133 (7.2%) ²	629,209 (7.2%)	0.6
2006	509,080 (6.7%)	8,711,476 (7.3%)	347,736 (7.3%)	546,931 (7.4%)	1,068,119 (8.1%)	0.34
% change	10.0%	15.1%	51.7%	29.0	69.8%	-43.3%

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Firms	76	86	85	108	104	99	100	108	109
	Receipts	5,188	5,008	5,596	5,575	3,901	5,234	1,989	2,228	2,974
Seafood sales, retail	Firms	188	172	165	159	152	170	159	159	141
	Receipts	12,935	14,023	14,386	13,079	13,516	16,636	19,131	19,534	18,355

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Seafood product preparation & packaging	Establishments	20	26	31	29	27	23	24	23	21
	Employees	1,043	1,165	1,305	1,506	1,453	1,274	1,177	1,288	1,155
	Payroll	17,707	19,037	24,374	24,507	25,772	25,426	24,394	23,842	24,302
Seafood sales, wholesale	Establishments	112	112	113	129	115	99	103	97	92
	Employees	1,074	1,155	1,187	1,102	999	1,057	1,009	1,001	897
	Payroll	31,318	32,576	32,857	33,552	29,430	27,016	27,730	26,408	28,586
Seafood sales, retail	Establishments	56	56	60	63	73	67	60	59	58
	Employees	264	258	271	295	287	227	219	176	207
	Payroll	5,258	5,132	4,863	3,908	3,748	2,985	2,993	3,162	3,229

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

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Coastal & Great Lakes freight transportation	Establishments	39	33	32	37	39	43	43	61	45
	Employees	ND ³	ND	846	1,071	866	2,705	2,565	ND	2,270
	Payroll	ND	ND	43,979	49,992	42,377	88,033	91,995	ND	107,328
Deep sea freight transportation	Establishments	57	54	44	43	45	48	41	43	40
	Employees	3,812	ND	1,759	1,130	1,287	ND	891	ND	751
	Payroll	179,749	ND	58,832	61,830	70,194	ND	38,553	ND	41,969
Deep sea passenger transportation	Establishments	2	1	2	1	5	5	3	4	3
	Employees	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Payroll	ND	ND	ND	ND	ND	ND	ND	ND	ND
Marinas	Establishments	201	194	186	185	179	170	165	166	150
	Employees	1,158	1,198	1,221	1,107	1,255	1,410	ND	ND	ND
	Payroll	27,150	26,044	26,051	29,083	28,471	31,197	ND	ND	ND
Marine cargo handling	Establishments	63	60	51	54	56	59	60	60	64
	Employees	4,364	4,227	5,047	4,725	4,549	5,091	4,539	5,200	5,349
	Payroll	90,074	75,033	99,615	100,101	113,894	108,142	138,630	151,522	161,386
Navigational services to shipping	Establishments	109	103	99	96	95	92	92	87	84
	Employees	1,063	ND	969	1,129	1,082	1,099	1,213	1,064	1,373
	Payroll	49,493	ND	47,475	55,549	49,825	60,714	68,741	75,914	98,244
Port & harbor operations	Establishments	9	10	10	11	13	16	15	15	16
	Employees	ND	ND	141	ND	ND	ND	215	ND	112
	Payroll	ND	ND	6,875	ND	ND	ND	7,128	ND	4,992
Ship & boat building	Establishments	119	115	125	122	110	107	103	99	90
	Employees	4,934	3,686	3,402	3,599	3,360	4,062	4,204	3,564	3,515
	Payroll	136,772	110,317	117,071	135,405	137,129	156,565	163,800	156,259	170,308

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

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

³ND = Data are suppressed due to confidentiality restrictions.

Fish brought up in a research net (photo credit: T. Turk)

A large pile of various fish, including a prominent dark fish in the foreground, with the text "Data Sources" overlaid. The image is a monochromatic, teal-toned photograph of a large quantity of fish, likely a catch from a fishing vessel. In the foreground, a large, dark fish, possibly a sea bream or similar species, is the central focus, its head and side visible. Behind it, a dense crowd of smaller, lighter-colored fish, possibly sea breams or similar species, fills the frame. The fish are piled together, creating a sense of abundance. The text "Data Sources" is overlaid in a bold, white, sans-serif font in the upper right quadrant of the image.

Data Sources

Data Sources

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Selected publications by NOAA Fisheries Economics & Social Sciences Program staff are grouped by geographic region of focus then organized under the following categories:

Commercial Fisheries Economics Research
Seafood, Marketing & Trade Research
U.S. Territories & International Fisheries Research
Recreational Fisheries Economics Research
Coastal & Marine Recreation Research
Sociocultural Research

Habitat Economics Research
Marine Protected Areas Research
Climate Change Research
Ocean Policy & Management Research
Other Marine Environmental Research

U.S.

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Fishing hooks ready for use on a research cruise (photo credit: A. Shimada)

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Mid-Atlantic

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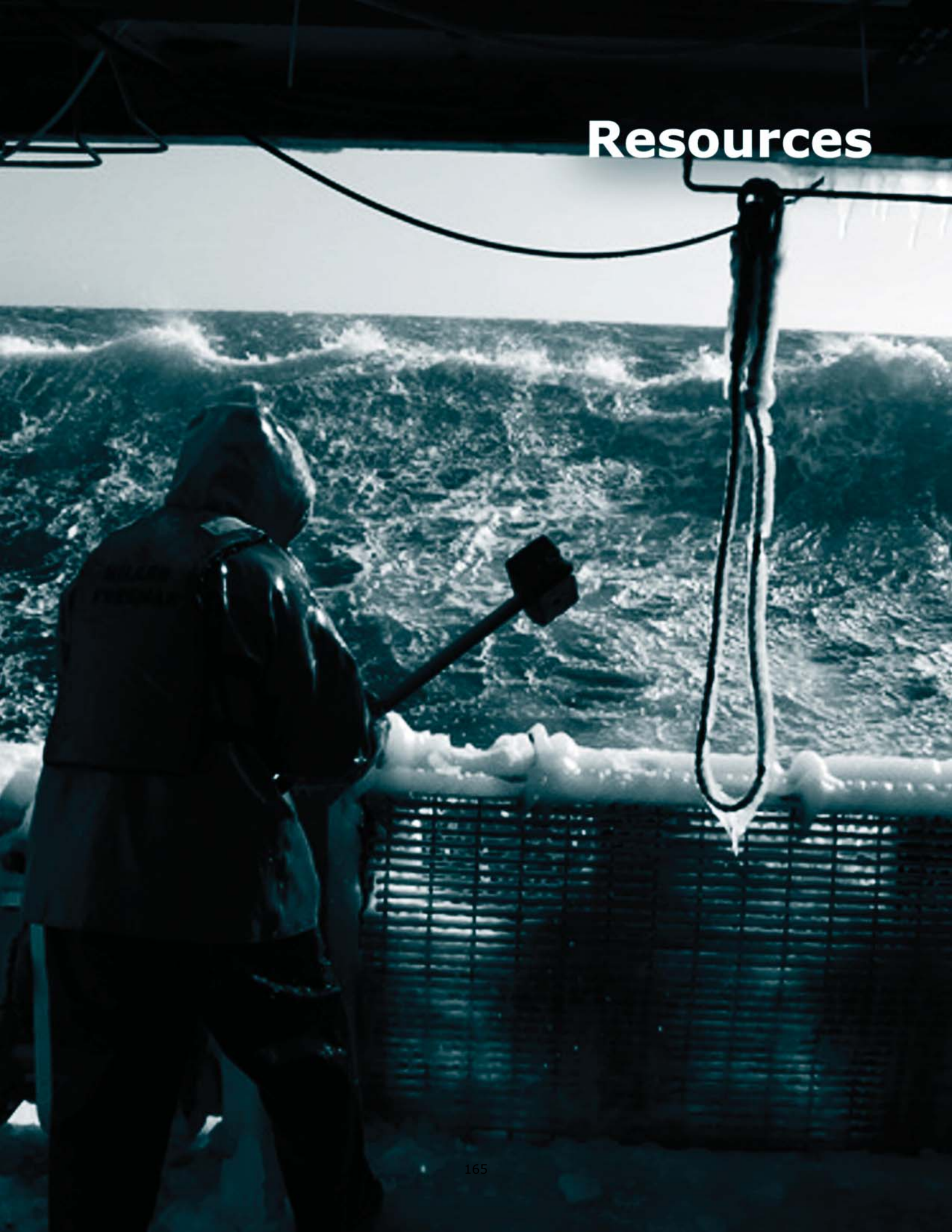
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LCDR Mark Boland removing ice from the NOAA ship *Miller Freeman* (photo credit: unknown crew member)

Resources



Resources

U.S.

Federal Agencies

Economics & Social Analysis Division
Office of Science & Technology, NOAA Fisheries
<http://www.st.nmfs.gov/st5/index.html>

Office of Science & Technology, NOAA Fisheries
<http://www.st.nmfs.gov/index.html>

Marine Recreational Information Program
<http://www.st.nmfs.noaa.gov/mrip/index.html>

Office of International Affairs, NOAA Fisheries
<http://www.nmfs.noaa.gov/ia/index.htm>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/q/oes/ocns/>

North Pacific

Federal Agencies

Economic & Social Sciences Research
Alaska Fisheries Science Center, NOAA Fisheries
<http://www.afsc.noaa.gov/REFM/Socioeconomics/Default.php>

Alaska Fisheries Science Center, NOAA Fisheries
<http://www.afsc.noaa.gov/>

Alaska Regional Office, NOAA Fisheries
<http://www.fakr.noaa.gov/>

Alaska Region, U.S. Fish & Wildlife Service
<http://alaska.fws.gov/>

District 17, U.S. Coast Guard
<http://www.uscg.mil/D17/>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/q/oes/ocns/>

State Agencies

Alaska Department of Fish & Game
<http://www.adfg.state.ak.us/>

Councils & Commissions

North Pacific Fishery Management Council
<http://www.fakr.noaa.gov/npfmc/>

Pacific States Marine Fisheries Commission
<http://www.psmfc.org/index.php>

Fisheries Economics Data Program
Pacific States Marine Fisheries Commission
<http://www.psmfc.org/efin/>

International Pacific Halibut Commission
<http://www.iphc.washington.edu/halcom/default.htm>

Pacific

Federal Agencies

Human Dimensions Program
Northwest Fisheries Science Center, NOAA Fisheries
<http://www.nwfsc.noaa.gov/research/divisions/cbd/humandim.cfm>

Economics, Groundfish Analysis Program
Northwest Fisheries Science Center, NOAA Fisheries
<http://www.nwfsc.noaa.gov/research/divisions/fram/economics.cfm>

Northwest Fisheries Science Center, NOAA Fisheries
<http://www.nwfsc.noaa.gov/>

Northwest Regional Office, NOAA Fisheries
<http://www.nwr.noaa.gov/>

Socioeconomics Research
Southwest Fisheries Science Center, NOAA Fisheries
<http://swfsc.noaa.gov/textblock.aspx?id=1038&ParentMenuId=109>

Southwest Fisheries Science Center
<http://swfsc.noaa.gov/>

Southwest Regional Office
<http://swr.nmfs.noaa.gov/>

Pacific Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/pacific/>

California & Nevada, U.S. Fish & Wildlife Service
<http://www.fws.gov/cno/>

District 13, U.S. Coast Guard
<http://www.uscg.mil/D13/>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/q/oes/ocns/>

State Agencies

California Department of Fish & Game
<http://www.dfg.ca.gov/>

Oregon Department of Fish & Wildlife
<http://www.dfw.state.or.us/>

Washington Department of Fish & Wildlife
<http://wdfw.wa.gov/>

Councils & Commissions

Pacific Fishery Management Council
<http://www.pcouncil.org/>

Pacific States Marine Fisheries Commission
<http://www.psmfc.org/index.php>

Fisheries Economics Data Program
Pacific States Marine Fisheries Commission
<http://www.psmfc.org/efin/>

Resources

International Pacific Halibut Commission
<http://www.iphc.washington.edu/halcom/default.htm>

Western Pacific

Federal Agencies

Fisheries Monitoring & Socioeconomics Division
Pacific Islands Fisheries Science Center,
NOAA Fisheries
<http://www.pifsc.noaa.gov/fmsd/>

Pacific Islands Fisheries Science Center,
NOAA Fisheries
<http://www.pifsc.noaa.gov/index.php>

Pacific Islands Regional Office, NOAA Fisheries
<http://www.fpir.noaa.gov/>

Pacific Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/pacific/>

District 14, U.S. Coast Guard
<http://www.uscg.mil/d14/>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/g/oes/ocns/>

State Agencies

Hawaii Department of Land & Natural Resources
<http://www.hawaii.gov/dlnr/>

Guam Office of the Governor
<http://www.guamgovernor.net/>

Department of Marine & Wildlife Resources
American Samoa Office of the Governor
<http://americansamoa.gov/departments/depts/mwr.htm>

Division of Fish & Wildlife
Commonwealth of the Northern Mariana Islands
<http://www.dfw.gov.mp/>

Councils & Commissions

Western Pacific Fishery Management Council
<http://www.wpcouncil.org/>

New England

Federal Agencies

Social Sciences Branch
Northeast Fisheries Science Center, NOAA Fisheries
<http://www.nefsc.noaa.gov/read/socialsci/>

Northeast Fisheries Science Center, NOAA Fisheries
<http://www.nefsc.noaa.gov/>

Northeast Regional Office, NOAA Fisheries
<http://www.nero.noaa.gov/nero/>

Northeast Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/northeast/>

District 1, U.S. Coast Guard
<http://www.uscg.mil/D1/>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/g/oes/ocns/>

State Agencies

Maine Department of Marine Resources
<http://www.maine.gov/dmr/index.htm>

Rhode Island Department of Environmental
Management
<http://www.dem.ri.gov/>

Massachusetts Division of Marine Fisheries
<http://www.mass.gov/dfwele/dmf/>

Connecticut Department of Environmental Protection
<http://www.ct.gov/dep/site/default.asp>

New Hampshire Fish & Game Department
<http://www.wildlife.state.nh.us/>

Councils & Commissions

New England Fishery Management Council
<http://www.nefmc.org/>

Atlantic States Marine Fisheries Commission
<http://www.asmfmc.org/>

Mid-Atlantic

Federal Agencies

Social Sciences Branch
Northeast Fisheries Science Center, NOAA Fisheries
<http://www.nefsc.noaa.gov/read/socialsci/>

Northeast Fisheries Science Center, NOAA Fisheries
<http://www.nefsc.noaa.gov/>

Northeast Regional Office, NOAA Fisheries
<http://www.nero.noaa.gov/nero/>

Northeast Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/northeast/>

District 5, U.S. Coast Guard
<http://www.uscg.mil/D5/>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/g/oes/ocns/>

Resources

State Agencies

Bureau of Marine Resources
New York Department of Environmental Conservation
<http://www.dec.ny.gov/about/796.html>

New Jersey Division of Fish & Wildlife
<http://www.state.nj.us/dep/fqw/>

Pennsylvania Fish & Boat Commission
<http://www.dfg.ca.gov/>

Delaware Division of Fish & Wildlife
<http://www.fw.delaware.gov/>

Fisheries Service
Maryland Department of Natural Resources
<http://www.dnr.state.md.us/fisheries/>

Virginia Marine Resources Commission
<http://www.mrc.state.va.us/>

Division of Marine Fisheries
North Carolina Department of Environment & Natural Resources
<http://www.ncfisheries.net/>

Councils & Commissions

Mid-Atlantic Fishery Management Council
<http://www.mafmc.org/>

Atlantic States Marine Fisheries Commission
<http://www.asmfc.org/>

South Atlantic

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
<http://www.sefsc.noaa.gov/>

Southeast Regional Office, NOAA Fisheries
<http://sero.nmfs.noaa.gov/>

Southeast Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/southeast/>

Southwest Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/southwest/>

District 7, U.S. Coast Guard
<http://www.uscg.mil/D7/>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/g/oes/ocns/>

State Agencies

North Carolina Division of Marine Fisheries
<http://www.ncfisheries.net/>

Marine Resources Division,
South Carolina Department of Natural Resources
<http://www.dnr.sc.gov/>

Coastal Resources Division
Georgia Department of Natural Resources
<http://crd.dnr.state.ga.us/>

Florida Fish & Wildlife Conservation Commission
<http://myfwc.com/>

Councils & Commissions

South Atlantic Fishery Management Council
<http://www.safmc.net/>

Atlantic States Marine Fisheries Commission
<http://www.asmfc.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
<http://www.sefsc.noaa.gov/>

Southeast Regional Office, NOAA Fisheries
<http://sero.nmfs.noaa.gov/>

Southeast Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/southeast/>

Southwest Region, U.S. Fish & Wildlife Service
<http://www.fws.gov/southwest/>

District 8, U.S. Coast Guard
<http://www.uscg.mil/D8/>

Office of Marine Conservation
U.S. Department of State
<http://www.state.gov/g/oes/ocns/>

State Agencies

Division of Marine Fisheries
Florida Fish & Wildlife Conservation Commission
http://myfwc.com/RECREATION/Saltwater_index.htm

Marine Resources Division
Alabama Department of Conservation & Natural Resources
<http://www.outdooralabama.com/>

Mississippi Department of Marine Resources
<http://www.dmr.state.ms.us/>

Resources

Louisiana Department of Wildlife & Fisheries
<http://www.wlf.state.la.us/>

Texas Parks & Wildlife Department
<http://www.tpwd.state.tx.us/>

Councils & Commissions

Gulf of Mexico Fishery Management Council
<http://www.gulfcouncil.org/>

Gulf States Marine Fisheries Commission
<http://www.gsmfc.org/>

International Organizations

Pacific Salmon Commission
<http://www.psc.org>

North Atlantic Salmon Conservation Organization
<http://www.nasco.int/>

International Pacific Halibut Commission
<http://www.iphc.washington.edu/halcom/default.htm>

InterAmerican Tropical Tuna Commission
<http://www.iattc.org/HomeENG.htm>

Western & Central Pacific Fisheries Commission
<http://www.wcpfc.int/>

International Commission for the Conservation of
Atlantic Tunas
<http://www.iccat.int/en/>

Commission for the Conservation of Antarctic Marine
Living Resources
<http://www.ccamlr.org/>

International Maritime Organization
<http://www.imo.org/>

International Pacific Halibut Commission
<http://www.iphc.washington.edu/halcom/default.htm>

Red List of Threatened Species
<http://www.iucnredlist.org/>

Professional Organizations

North American Association of Fisheries Economists
<http://oregonstate.edu/Dept/IIFET/NAAFE/Home.html>

International Institute of Fisheries Economics &
Trade
<http://oregonstate.edu/dept/iifet/>

Other Organizations & Information

The Center for Independent Experts
University of Miami
Rosenstiel School of Marine & Atmospheric Science
<http://www.ciereviews.com/index.html>

Organisation for Economic Co-operation &
Development
<http://www.oecd.org/home/>

FishWatch – U.S. Seafood Facts
<http://www.nmfs.noaa.gov/fishwatch/>

Marine Stewardship Council
<http://www.msc.org/>

Fish caught on a research cruise (photo credit: T. Turk)

Glossary



Glossary

Angler¹

A person catching fish or shellfish with no intent to sell, including people releasing the catch. Also known as a recreational fisherman.

Annual Payroll²

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 Receipts³

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 Program¹⁰

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.

Bycatch¹

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.

Catch¹

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 Program¹⁶

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 County⁷

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 fisherman 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.

Glossary

Community Development Quota Program (CDQ)¹

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)¹⁵

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.

Discards¹

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 Expenditures⁸

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 Scheme⁶

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 Model¹⁴

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.

For this report, the economic impacts of the commercial fishing sector and seafood industry were obtained from an IMPLAN model developed by Dr. James Kirkley (Virginia Institute of Marine Science, College of William and Mary) for NMFS. Expenditures related to commercial fishing activities were allocated to IMPLAN sectors and aggregated into the following categories: commercial harvesters, seafood processors and dealers, seafood wholesalers and distributors, and retail sectors. For more information about this model and how industries were grouped into each sector, please see *The NMFS Commercial Fishing & Seafood Industry Input/Output Model* available at: <http://www.st.nmfs.noaa.gov/st5/publication/index.html>

The economic impacts of the saltwater angling were derived from IMPLAN models modified by Scott Steinback (Northeast Fisheries Science Center, NOAA Fisheries Service) and Brad Gentner (Gentner Consulting Group).

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Angler expenditures were allocated to IMPLAN sectors and aggregated into durable equipment expenditures (fishing tackle, other equipment, boat expenses, vehicle expenses, and second home expenses), and fishing trip expenditures (by fishing mode and residency). For more information about this model, please contact Scott.Steinback@noaa.gov, or refer to *The Economic Contribution of Marine Angler Expenditures in the United States, 2006* that is available at: http://www.st.nmfs.noaa.gov/st5/publication/marine_angler.html.

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.¹

Employee Compensation⁴

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 Establishments²

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^{1, 17}

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)^{1, 17}

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-vessel¹

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)¹

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 Stock¹

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.

Glossary

Fish Stock Complex¹¹

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^{1, 12}

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)^{1, 12}

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 Cooperatives¹⁰

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 Effort⁶

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)⁴

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.

Harvest¹

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). See also "Catch" and "Release."

Individual Fishing Quota (IFQ)¹

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)¹

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."

Glossary

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.

Landings¹

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 System¹²

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 Program¹

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 Quotient⁵

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)¹

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.

Glossary

Market-based Management^{9, 12}

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 Firms³

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 refers to a recreational fisherman (angler) who resides outside of the U.S.

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.

Overcapitalization⁶

When the amount of harvesting capacity in a fishery exceeds the amount needed to harvest the desired amount of fish at least cost.

Overfished¹

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."

Overfishing¹

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.

Glossary

Protected Species¹

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)¹²

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 governments, 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 is then thrown back into the sea. See also "Catch" and "Harvest."

Resident

For this report, a resident refers to a recreational fisherman (angler) who resides within the U.S.

Sector Allocation Program¹³

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."

Species¹

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 Group¹

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 Species¹⁷

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-added¹

A firm's sales minus the cost of the goods and services it purchases from other industries to produce its outputs.

Glossary

Glossary Source Materials

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