

National Overview



Management Context

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

Nationwide, there are 44 fishery management plans¹ that provide a framework for managing the harvest of 230 major fish stocks or stock complexes that comprise 90% of the commercial harvest. These fishery management plans (FMPs) are developed by Regional Fishery Management Councils (FMCs) in each of eight regions nationwide: the North Pacific, Western Pacific, Pacific, New England, Mid-Atlantic, South Atlantic, Gulf of Mexico, and Caribbean Regions. Once a FMP is developed, it must be approved by the Secretary of Commerce in consultation with NOAA Fisheries before it is implemented and enforced.

Regional Fishery Management Councils

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 176 stocks or stock complexes and the overfishing status of 190 stocks or stock complexes is known. Currently, 43 stocks or stock complexes are categorized as overfished and 37 are categorized as subject to overfishing.

Less is known about the 292 minor stocks or stock complexes. The overfished status of 27 of these stocks or stock complexes is known and three of these are currently considered overfished. The overfishing status of 60 of the 292 minor stocks or stock complexes is known and one of these (parrotfishes) is currently considered to be subject to overfishing.

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).

Transboundary and International Fisheries

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

Regional Fisheries Management Organizations

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

Regional Fishery Management Organizations (RFMOs) are multinational organizations with interests in transboundary and international fish stocks and associated fishing activities. NOAA Fisheries is party to 8 RFMOs globally.² 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.

Another issue of particular concern for NOAA Fisheries is the problem of illegal, unreported, and unregulated (IUU) fishing activities in international waters. The RFMOs report estimates that in 2008, there were 42 vessels flying the national flags of 14 nations participating in IUU fishing activities.³ NOAA Fisheries is actively working bilaterally and multilaterally with other nations on the adoption of strategies to reduce the level of IUU fishing around the world.⁴

²For more detailed information about international agreements in relation to NOAA Fisheries, please go to: http://www.nmfs.noaa.gov/ia/docs/2009_International_agreement_s.pdf

³An additional 51 vessels with unknown country affiliation also participate in IUU fishing activities.

⁴For more information about NOAA Fisheries’ response to IUU fishing activities, please see *Implementation of Title IV of the*

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. 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 subspecies⁵ 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.

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.

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.

Endangered and Threatened Species under NMFS’ Jurisdiction

Species Group	Number of Species
Marine and Anadromous Fish	34
Marine Mammals: Whales	12
Marine Mammals: Dolphins	2
Marine Mammals: Porpoise	1
Marine Mammals: Seals	4
Marine Mammals: Sea Lions	2
Sea Turtles	8
Marine Invertebrates	4
Marine Plants	1
Total	68

In addition to endangered and threatened species under the Endangered Species Act, the NOAA Fisheries 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.

Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 available at: http://www.nmfs.noaa.gov/msa2007/docs/msra_biennial_report_011309.pdf

⁵Subspecies includes “distinct population segments” and “evolutionarily significant units,” terms defined under the ESA.

NOAA Fisheries is responsible for preventing the harrassment, capture, or killing of whales, dolphins, porpoises, seals, and sea lions.⁶ 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.⁷ Habitat areas that are necessary for a fish species’ growth, reproduction, and development is considered EFH. To the extent practicable, NOAA Fisheries and the Councils must minimize adverse effects to EFH caused by fishing activities.

Though not required, habitat areas of particular concern (HAPC) can be identified. 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.

A recent effort undertaken by the NOAA Fisheries Office of Science and Technology is to create a Habitat Assessment Improvement Plan⁸ to advance NOAA Fisheries’ ability to identify EFH and HAPCs and to provide information needed to assess impacts to EFH.

Catch Share Programs

A variety of market-based tools are available to fishery managers. NOAA Fisheries is currently implementing several different types of catch share programs such as limited access privilege programs (LAPPs) which include individual fishing quota programs (IFQs), regional fishery associations, and fishing community quotas;⁹ community development quota programs (CDQs); fishing cooperatives; and 4) sector allocation programs.¹⁰ In 2009, NOAA formed a catch shares task force and released a draft catch shares policy to encourage the development of well-designed catch share programs to help rebuild fisheries and sustain fishermen, communities and vibrant working waterfronts.

⁶The U.S. Fish and Wildlife Service provides protection for walrus, manatees, otters, and polar bears.

⁷The 1996 reauthorization of the Magnuson-Stevens Fishery-Conservation and Management Act included this requirement.

⁸The Habitat Assessment Improvement Plan will be available: <http://www.st.nmfs.noaa.gov/>

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

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>.

With many catch share programs, the assigned harvest privileges can be used or transferred (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. A sector could, however, 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

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 (BS) pollock cooperative	1999	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	2007	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	BS groundfish (non-pollock) trawl catcher/processor cooperative	2008	120.6
Mid-Atlantic	Golden Tilefish	2009	
Gulf of Mexico	Grouper and tilefish	2010	

Nationwide, there are 16 catch share 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.

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

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

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); and West Coast trawl groundfish (Pacific).

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 (GOA) pollock	April 2005; Jan 2009
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 (AAFA))	Aug 2007
Pacific	Pacific albacore tuna - south (AAFA)	Aug 2007
Pacific	Oregon pink shrimp	Dec 2007
Mid-Atlantic	Atlantic deep sea red crab	Sep 2009
Pacific	Pacific hake mid water trawl	Oct 2009
North Pacific	GOA Alaska Pacific cod	Jan 2010

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 63 fisheries worldwide that meet MSC sustainability standards,¹³ fourteen of which are U.S. fisheries.

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. Under these programs, fishing vessels or permits are purchased by the government to permanently decrease the number of participants in the fishery. Although 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

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

programs instituted nationwide. The cost of seven¹⁴ of these buyback programs totaled of \$397 million. Eighty-five percent of this total cost was funded by loans from the Federal Government that will be repaid by the commercial fishing industry.

Buyback Programs in the U.S. (1995-2008)

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 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 8.3 billion pounds of finfish and shellfish in 2008, earning over \$4.4 billion for their catch. Shrimp (\$450 million), Pacific salmon (\$390 million), sea scallop (\$370 million), walleye pollock (\$320 million), and American lobster (\$320 million) contributed most to total revenue in the U.S. In terms of pounds landed, walleye pollock (2.3 billion pounds) and menhaden (1.3 billion pounds) comprised the majority of total pounds landed in 2008.

Key U.S. Commercial Species

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

Alaska fishermen had the highest total revenue and total pounds landed in the U.S. in 2008, generating \$1.7 billion in revenue and landing 4.5 billion pounds. Alaska also contributed most to total revenue and landings of sablefish (\$84 million, 30 million pounds) and walleye pollock (\$384 million, 2.3 billion pounds) in 2008.

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

When looking at other key species or species groups, commercial fishermen in Alaska caught the most salmon (370 million pounds) and earned \$640 million for their catch in 2008. Tuna was caught in large numbers in Hawai'i (18 million pounds) and generated \$61 million in ex-vessel revenue.

On the East Coast of the U.S., Maine fishermen contributed most to total landings of American lobster (67 million pounds) and earned \$235 million for their catch in 2008. In Massachusetts, sea scallop was a major contributor to total revenue, generating \$190 million for 27 million pounds landed. The majority of blue crab was caught in Maryland (37 million pounds) earning fishermen in this state over \$52 million in revenue.

Virginia landed most of the menhaden in 2008, with fishermen landing 350 million pounds and generating \$21 million in total revenue.

In the Gulf of Mexico, shrimp was a highly valued species. Fishermen in Texas earned \$157 million for their catch (64 million pounds). However, more shrimp was landed in Louisiana (89 million pounds) with a total landings revenue of \$130 million in total revenue). The exvessel price in Texas (\$2.46) was greater than that in Louisiana (\$1.46).

The highest ex-vessel price per pound in 2008 was for Eastern oyster, which received \$36.64 per pound in Massachusetts, \$21.21 per pound in New York, and \$9.13 per pound in Maryland. Other key species or groups with ex-vessel prices over \$10 per pound in 2008 included: clams (\$13.63 per pound in Washington), lobsters (\$12.14 per pound in Hawai'i), spiny lobsters (\$10.80 per pound in California), and bloodworms (\$11.00 per pound in Maine).

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 2008, this industry supported approximately 1.5 million full- and part-time jobs and generated \$104 billion in sales impacts and \$45 billion in income impacts.

Jobs supported by the U.S. Commercial Seafood Industry (2008)

State	Jobs	State	Jobs
California	162,609	North Carolina	15,083
Florida	108,695	Hawai'i	12,258
Massachusetts	73,029	Georgia	11,621
Washington	71,775	Maryland	10,946
Alaska	47,725	Rhode Island	10,626
Louisiana	43,711	Alabama	9,750
Texas	42,541	Mississippi	8,575
New York	41,517	New Hampshire	7,492
New Jersey	40,061	Connecticut	4,416
Virginia	30,734	South Carolina	1,939
Maine	19,806	Delaware	1,134
Oregon	18,693		

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 2008 and generated \$60 billion in sales (58% of total sales impacts) and \$28 billion in income (62% of total income impacts). Seafood wholesalers and distributors (155,000 employees), commercial harvesters (115,000 employees), and seafood processors and dealers (105,000 employees) followed in terms of jobs supported across the U.S.

Relative to 2007, sales and income impacts from the commercial seafood industry increased in 2008: 5.4%, 5.5%, respectively.¹⁵ Increases in sales and income impacts were experienced across all of the sectors. The commercial harvester sector experienced the smallest increase, with a 3.8% sales impacts and a 4.3% increase in income. The largest increase was seen in the seafood wholesalers and distributors which experienced a 6.6% increase in sales and income impacts. Total employment impacts increased 2.4%, and increases in employment were seen across all sectors. These increases ranged from 1.2% in the commercial harvester sector to 3.4% in the seafood wholesalers and distributor sector.

Total Sales generated by the U.S. Commercial Seafood Industry (2008)
(thousands of dollars)

State	In-State Sales	State	In-State Sales
California	9,104,910	North Carolina	635,530
Florida	5,657,246	Maryland	615,041
Massachusetts	3,965,159	Georgia	592,976
Alaska	3,732,488	Hawai'i	560,191
Washington	3,717,090	Rhode Island	520,340
New Jersey	2,170,232	Alabama	445,449
Louisiana	2,033,587	Mississippi	390,702
Texas	2,013,272	New Hampshire	371,868
New York	1,978,974	Connecticut	235,908
Virginia	1,369,390	South Carolina	84,022
Maine	1,009,250	Delaware	54,497
Oregon	962,534		

Landings Revenue

Ex-vessel revenue in the U.S. totaled \$4.4 billion in 2008. This was a 23% increase (2.0% decrease in real terms) from 1999 levels (\$3.6 billion) and a 5% increase (5.3% decrease in real terms) relative to 2007 (\$4.2 billion). Finfish and shellfish revenues mirrored this increasing trend. Totalling \$2.3 billion in 2008, finfish revenue increased 40% (12% in real terms) from 1999 to 2008 and increased 9.1% (1.5% decrease in real terms) from 2007 to 2008. U.S. shellfish revenue totaled \$2.1 billion in 2008, increasing 8.6% (13% decrease in real terms) from 1999 to 2008 and less than 1% increase (9.1% decrease in real terms) from 2007 to 2008.

Overall, the greatest portion of the nation's ex-vessel revenue was generated in Alaska (\$1.7 billion) which contributed 39% to the U.S. total. Alaska also contributed more than any other state to total U.S. finfish revenue (\$1.5 billion), accounting for 66% of total finfish revenue. More than half of Alaska's finfish landings revenue came from walleye pollock and salmon. Massachusetts (\$278

million) and Louisiana (\$209 million) contributed most to total U.S. shellfish revenue, contributing 13% 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 Region (2008)
(thousands of dollars)

Region	Total Revenue	Region	Total Revenue
U.S. total	4,386,692	Pacific	503,653
North Pacific	1,700,851	Mid-Atlantic	451,817
New England	805,343	South Atlantic	164,456
Gulf of Mexico	659,104	Western Pacific	85,120

The ten U.S. key species and species groups comprised 58% of total revenue in 2008. Of these, shrimp, Pacific salmon, sea scallop, walleye pollock, and American lobster contributed most to total revenue in the U.S. in 2008. These species or groups totaled approximately \$1.9 billion in 2008 or 42% of total revenue.

Total Landings Revenue by State (2008)
(thousands of dollars)

State	Total Revenue	State	Total Revenue
Alaska	1,700,851	Rhode Island	66,647
Massachusetts	399,735	Hawai'i	85,120
Maine	301,021	Maryland	73,505
Louisiana	272,884	New York	57,231
Washington	243,426	Alabama	44,317
Texas	176,098	Connecticut	17,147
Florida	169,711	Mississippi	43,696
New Jersey	168,676	New Hampshire	20,793
Virginia	145,552	South Carolina	17,525
California	113,429	Georgia	12,523
Oregon	103,096	Delaware	6,713
North Carolina	86,815		

Key species or species groups with large increases in total revenue from 1999 to 2008 include: sea scallop (206% increase, 144% in real terms), walleye pollock (99%, 59% in real terms), Pacific halibut (73%, 39% in real terms), and sablefish (28%, 2.5% in real terms). Decreases in total revenue over the 10 year time period were observed for shrimp (24%, 39% in real terms), menhaden (23%, 38% in real terms), blue crab (2.6%, 22% in real terms), and American lobster (2.5%, 22% in real terms).

Relative to 2007 totals, key species or species groups with the largest changes in total revenue in 2008 include: increases in tunas (14%, 2.8% in real terms) and blue crab (12%, 1.3% in real terms); and decreases in American lobster (11.5%, 20% in real terms), menhaden (4.6%, 14% in real terms), and Pacific halibut (4.2%, 14% in real terms).

Landings

In 2008, U.S. commercial fishermen landed 8.3 billion pounds of finfish and shellfish. Relative to 1999 levels, this was an 11% decrease and a 10% decrease relative to

¹⁵Percent change between 2007 and 2008 was calculated using employment, sales, and income impacts normalized to 2006 dollars using the seafood producer price index.

2007 (9.4 billion pounds). Finfish landings totaled 7.3 billion pounds in 2008, a 9.3% decrease from 1999 (8.0 billion pounds) and a 12% one-year decrease from 2007 (8.2 billion pounds). The largest one-year decrease in landings seen over the last ten years was for finfish which experienced a 12% decrease from 8.2 million pounds in 2007 to 7.3 million pounds in 2008. The largest increase in landings was for shellfish between 2005 and 2006 which experienced a 9.1% decrease.

Total Landings by Region (2008)
(thousands of pounds)

Region	Total Landings	Region	Total Landings
U.S. total	8,329,597	Mid-Atlantic	678,113
North Pacific	4,533,627	New England	594,362
Gulf of Mexico	1,274,652	South Atlantic	115,985
Pacific	1,084,057	Western Pacific	30,682

Alaskan fishermen harvested the majority of the nation’s total landings. Alaska contributed 54% to the U.S. total in 2008, landing 4.5 billion pounds of finfish and shellfish. Alaska also contributed most to the U.S. finfish total, landing 4.4 billion pounds or 61% of the U.S. finfish total. Walleye pollock comprised most of this Alaskan catch (51%). There was more shellfish landed in Louisiana than any other single state. With 157 million pounds landed in 2008, Louisiana’s total accounted for 15% of the U.S. shellfish total. Shrimp accounted for over half of this harvest.

Total Landings by State (2008)
(thousands of pounds)

State	Total Landings	State	Total Landings
Alaska	4,533,627	North Carolina	71,205
Louisiana	915,956	Maryland	61,372
Virginia	415,719	West Florida	59,402
Massachusetts	326,082	New York	33,903
California	315,139	Alabama	24,423
Mississippi	201,822	Hawai’i	30,682
Oregon	195,733	East Florida	26,194
Washington	174,262	New Hampshire	10,953
Maine	178,545	South Carolina	9,948
New Jersey	162,470	Georgia	8,639
Texas	73,048	Connecticut	7,074
Rhode Island	71,709	Delaware	4,598

Over 60% of total catch in 2008 was made up of the ten U.S. key species and species groups. Walleye pollock and menhaden had the highest landings totals in 2008 with 2.3 billion pounds and 1.3 billion pounds landed, respectively. These two species accounted for 43% of total U.S. landings in 2008.

Sea scallops (143% increase) were the only species or species group to experience an increase in total landings between 1999 and 2008. The largest decreases were seen for menhaden (34%), blue crab (29%), and tuna (22%). Pacific salmon and shrimp both saw a 19% decrease in landings between 1999 and 2008.

Blue crab (6%) and American lobster (9%) were the only key species or species groups to experience increases in total landings between 2007 and 2008. Large decreases were seen in walleye pollock and Pacific salmon, which both experienced 26% decreases.

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 2008 at \$6.91 per pound, \$3.72 per pound, and \$3.25 per pound, respectively. Significant increases in price were observed for Pacific halibut which increased 106% (65% in real terms) from 1999 to 2008 but decreased 10% in real terms from 2007 to 2008. Walleye pollock ex-vessel price also increased, increasing 100% (60% in real terms) from 1999 to 2008 and 40% (26% in real terms) from 2007 to 2008. Shrimp (25%), American lobster (19%) and menhaden (7%) were the only species groups to experience decreases in real ex-vessel prices between 1999 and 2008.

Menhaden and walleye pollock had the lowest ex-vessel prices in 2008 at \$0.07 per pound and \$0.14 per pound, respectively. However, total landings of menhaden and walleye pollock were the largest among the U.S. key species and groups: 1.3 billion pounds of menhaden and 2.3 billion pounds of walleye pollock. Ex-vessel price for menhaden increased from 1999 to 2008 (17%, 7% decrease in real terms). Between 2007 and 2008, the ex-vessel also increased 17%, but with a 5% increase in real terms.

Overall, seven of the ten U.S. key species or species groups experienced an increase in real ex-vessel price from 1999 to 2008. In addition to those mentioned above, Pacific halibut (106% increase, 65% in real terms), tunas (50%, 20% in real terms), and sablefish (43%, 15% in real terms) experienced large or modest increases. The largest decrease in ex-vessel price was experienced by shrimp (6%, 25% in real terms) followed by American lobster (1%, 19% in real terms).

Between 2007 and 2008, ex-vessel price for half of U.S. key species or groups increased, with walleye pollock increasing the most (40%, 26% in real terms). American lobster prices decreased 19% from 2007 to 2008 (27% decrease in real terms).

Recreational Fishing

In 2008, there were approximately 12 million recreational anglers across the U.S. who took 85 million saltwater fishing trips around the country. These anglers spent \$4.9 billion on fishing trips and \$18 billion on durable fishing-related equipment. These expenditures contributed \$59 billion in sales impacts to the U.S. economy, generated \$27 billion in value-added impacts, and supported over 384,000 jobs. Of the U.S. key recreational species or species groups, Atlantic croaker (47 million fish) and seatrouts (51 million fish) were the most often caught by recreational anglers in 2008.

Expenditures and Economic Impacts

U.S. anglers spent a total of \$4.9 billion on expenditures related for fishing trips in 2008. Of this total, expenditures

for a private or rental boat fishing trips contributed the most (\$2.2 billion), followed by shore-based fishing trips (\$2.0 billion), and for-hire fishing trips (\$746,000). Expenditures on durable fishing-related equipment totaled over \$23 billion in 2008. Boat expenses contributed the most to this total with \$6.2 billion spent. Vehicle-related expenditures (\$4.5 billion), second home expenses (\$3.5 billion), and fishing tackle expenditures (\$2.7 billion) followed.

Key U.S. Recreational Species

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

Relative to 2007, angler expenditures on fishing trips increased 7% with single 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 30% from 2007 to 2008. Each of the durable expenditure categories mirrored this trend, ranging from 10% decreases in fishing tackle and other equipment expenditures, to a 39% decrease in boat expenses.

Jobs supported by the U.S. Recreational Fishing Industry (2008)

State	Jobs	State	Jobs
West Florida	54,589	South Carolina	5,509
East Florida	35,467	Massachusetts	5,952
Louisiana	25,590	Hawai'i	5,623
California*	11,830	Alaska	4,821
Texas	25,544	Mississippi	2,930
North Carolina	22,201	Connecticut	4,884
Washington	3,725	Oregon	1,541
New Jersey	9,612	Georgia	2,549
Maryland	7,244	Maine	1,286
Virginia	5,564	Delaware	1,462
Alabama	4,719	Rhode Island	1,467
New York	5,766	New Hampshire	357

Economic impacts from recreational fishing activities (impacts from fishing trips and durable equipment combined) supported over 384,000 full- and part-time jobs across the U.S. in 2008. Sales impacts from recreational angling expenditures totaled \$59 billion and value-added impacts totaled \$27 billion. Durable equipment impacts contributed most to these totals, accounting for 76% of jobs, 81% of total sales impacts, and 78% of value-added impacts. Of the three fishing trip modes, shore fishing trips contributed most to the number of jobs supported by recreational angling with 10% of jobs. Total sales and value-added impacts from private or rental boat trips were higher than the other fishing modes, accounting for 8.3% of sales impacts and 9.1% of value-added impacts.

Relative to 2007 totals, economic impacts from recreational angling nationwide decreased 23% in terms of jobs supported, total sales, and value-added impacts. The largest increases from 2007 to 2008 were observed for the

shore fishing mode in terms of jobs, total sales, and value-added impacts. Shore based total sales increased by 9.2%.

Total Sales generated by the U.S. Recreational Fishing Industry (2008)
(thousands of dollars)

State	In-State Sales	State	In-State Sales
East Florida	4,042,417	Alabama	455,093
West Florida	5,650,068	Hawai'i	610,433
California	1,764,010	Mississippi	382,778
Texas	3,288,135	Connecticut	742,753
North Carolina	2,291,227	South Carolina	487,545
Louisiana	2,297,078	Alaska	429,368
New Jersey	1,592,965	Oregon	157,752
Maryland	999,402	Delaware	223,519
Washington	386,010	Georgia	311,224
New York	875,449	Maine	108,242
Virginia	618,884	Rhode Island	166,457
Massachusetts	785,893	New Hampshire	39,009

Participation¹⁶

Nationwide, there were approximately 12.4 million recreational anglers who fished in 2008. Approximately 11 million of these anglers were residents of a U.S. coastal county and 1.6 million anglers were residents of a non-coastal county. Between 1999 and 2008, the total number of U.S. anglers increased 66%. However, the number of anglers decreased 12% between 2007 and 2008. The number of coastal county anglers increased 65% from 1999 to 2008 and decreased 14% from 2007 to 2008. A similar increase was observed for non-coastal county anglers during the 10 year time period (72%) and a slight decrease was observed between 2007 and 2008 (1.4%).

The majority of U.S. anglers fished in Gulf of Mexico (3.2 million anglers), the South Atlantic (2.9 million anglers), and Mid-Atlantic Regions (3 million anglers). Pacific (1.45 million anglers), New England (1.6 million anglers), North Pacific (309,000 anglers), and Western Pacific (329,000 anglers) followed in terms of total anglers.

Fishing Trips¹⁷

Approximately 85 million fishing trips were taken in the U.S. in 2008. Of these, 46 million were fishing trips taken from a private or rental boat (52% 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 Gulf of Mexico (24 million), South Atlantic (22 million), and Mid-Atlantic (20.6 million). New England (9.2 million), the Pacific (5.8 million), and Western Pacific Regions (2.5 million) followed in number of trips taken. Anglers in the North Pacific fished approximately 935,000 thousand fishing days in 2008.¹⁸

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

¹⁷Effort numbers do not include Alaska and Texas. They include Hawai'i only for 2003-2007. California numbers were estimated differently from 2004-2008.

¹⁸In Alaska, fishing effort information is collected as the number of fishing days rather than the number of fishing trips taken.

The total number of fishing trips taken in the U.S. increased 51% from 1999 to 2008. Increases were also observed for two fishing modes; there was a 48% increase in private or rental boat trips and 63% increase in shore-based trips. For-hire fishing trips decreased 1.4% during this time period, the only fishing mode to experience a decrease. Relative to 2007, total fishing trips taken in the U.S. decreased 8%, with larger decreases observed in the for-hire mode (16%).

Recreational Fishing Facts

Participation

- There were 12.4 million anglers in the U.S. in 2008. Of these, 11 million anglers were coastal county residents and 1.6 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 85 million fishing trips were taken nationwide in 2008. 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 52% of total U.S. fishing trips or 44.5 million trips. This fishing mode comprised the majority of the trips in the Gulf of Mexico (60% of trips), Mid-Atlantic (57% of trips), South Atlantic (50% of trips), and New England (54% of trips).
- Shore-based fishing trips accounted for 44% of total U.S. fishing trips or 37 million trips. This was the most popular fishing mode in the Western Pacific (78% of trips) and Pacific (67% of trips) regions.
- For-hire fishing boat trips accounted for 3.9% of total trips taken with 3.4 million trips.
- In the North Pacific, anglers spent approximately 935,000 thousand days fishing in 2008.

Harvest and release

- Atlantic croaker and seatrouts were the most commonly caught species or species group by anglers in 2008 with approximately 47,000 and 51,000 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 (791,000 fish caught) and Alaskan halibut (875 million fish caught). Most of these tuna 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 to 2005. From 2007 to 2008, salmon experienced the largest decrease (43%) and large Atlantic tunas experienced the largest increase (20%).

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 2008. These species or groups were caught in large numbers relative to the other key species or groups: Atlantic croaker (47 million fish), seatrouts (51 million fish), summer flounder (25 million fish), and striped bass (14 million fish). Anglers fishing in the Mid-Atlantic and New England caught most of the Atlantic croaker, summer flounder, and striped bass in 2008, while most seatrout were caught in the Gulf of Mexico and the South Atlantic.

In the North Pacific Region, Pacific halibut and salmon species (Chinook, chum, coho, pink, and sockeye) were the most commonly caught species or group in 2008 with 875,000 fish and 961,000 fish caught, respectively. Mackerels (2.7 million fish), rockfishes (2.3 million fish), and surfperches (1.6 million fish) were caught in high numbers in the Pacific Region, while bigeye and mackerel scad (402 million) comprised 42% of fish caught by anglers in the Western Pacific.

Recreational catch of requiem sharks increased 266% between 1999 and 2008, the largest increase during this 10 year time period. There were 5.5 million requiem sharks caught in 2008. Other key species or groups with large increases in recreational catch include: Pacific halibut (56% increase), Atlantic croaker (49%), and large Atlantic tuna (47%). Recreational catches decreased for little tunny (20%) salmon (30%) and rockfishes (57%) between 1999 to 2008.

From 2007 to 2008, decreases occurred in the recreational catch of salmon (43%), striped bass (27%), little tunny (30%), requiem sharks (11.6%), rockfish and scorpion fish (17%), Pacific halibut (15%), and Atlantic Croaker (9%). All other U.S. key recreational species or groups increased from 2007 to 2008, with the largest increases in large Atlantic tuna (20%).

Marine Economy¹⁹

In 2007, there were 7.7 million establishments in the U.S, including marine and non-marine related establishments. These establishments employed over 120 million full- and part-time employees and had a total annual payroll of \$5.0 trillion. From 1999-2007, the number of establishments increased 11%, employee numbers increased 12%, and total annual payroll increased 52% (27% in real terms) nationwide. More modest increases were seen from 2006 to 2007: 1.4%, 0.57%, and 4.9% (0.88% decrease in real terms), respectively.

The nation's gross domestic product was \$14 trillion in 2007, a 62% increase (32% in real terms) relative to 1998 levels (\$8.7 trillion) and a 4.5% (12% decrease in real terms) increase relative to 2006 levels (\$13 trillion). Employee compensation in 2007 was \$7.8 trillion, a 32% (10% in real terms) increase from 1998 (\$5.9 trillion) and a 4.9% (0.90% decrease in real terms) increase from 2006 (\$7.4 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.

¹⁹Information for 2007 is reported in this section; 2008 data were not available for this report.

Seafood Sales and Processing

In 2007, there were 1,300 nonemployer firms engaged in seafood product preparation and packaging, a 88% increase from 1999 levels. Annual receipts increased 59% (49% in real terms) from \$55 million (1999) to \$79 million (2007). Most of these firms were located in Florida (173 firms).

In contrast to nonemployer firms, the number of employer establishments decreased 20% from 842 in 1999 to 685 in 2007. These firms employed approximately 33,000 full- and part-time employees in 2007 and had a total annual payroll of \$1.2 billion. Relative to 1999 levels, this was an 19% decrease in workers but a 21% increase (7% in real terms) in annual payroll. Most of these establishments were located in Alaska (114 establishments) followed by Washington (98 establishments).

There were over 2,400 employer establishments involved in seafood wholesale activities in 2007. Most of these establishments were in California (300), New York (294), and Florida (267). These establishments employed 24,200 workers and had an annual payroll of \$925 million. From 1999 to 2007, the number of establishments and employees decreased 20% and 13%, respectively) but annual payroll increased (16%, 3% in real terms).

Nonemployer firms and employer establishments engaged in seafood retail activities saw increasing trends from 1999 to 2007. There was a 18% increase in firms (2,600 in 2007) and a 16% increase in employer establishments (2,100 in 2007). Annual receipts for nonemployer firms totaled \$232 million in 2007, a 19% increase (6% in real terms) relative to 1999 levels. Annual payroll for employer establishments totaled almost \$210 million, a 52% increase (35% in real terms) relative to 1999 levels. Approximately 10,000 full- and part-time workers were employed by the 2,100 establishments in 2007, 25% and 16% increases, respectively from 1999. The employer establishments were primarily located in New York (372), California (182) and Florida (169), while most non-employer firms were located in Florida (319 firms), New York (266), California (222), and Louisiana (196).

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 2007, there were over 4,000 marina industries that employed almost 29,000 full- and part-time workers. Compared to 1999 levels, this was a 2% decrease in establishment numbers and a 20% increase in number of employees. Annual payroll for this industry was \$945 million in 2007, a 58% increase (40% in real terms) over 1999 levels. Most of these marina industries were located in Florida (493), California (276), and New Jersey (216).

The ship and boat building industry employed the most people and had the largest number of establishments in the transport, support and marine operations sector nationwide. In 2007, almost 150,000 full- and part-time employees worked in this industry, a 3% increase over 1999 levels. Most of these workers were located in Mississippi (14,578 employees), Louisiana (12,808), and

Florida (12,332). There were 1,771 establishments engaged in this industry in 2007, a 0.45% decrease from 1999 levels. This industry had an annual payroll of \$6.4 billion in 2007, a 33% increase (18% in real terms) relative to 1999. The same states with the largest number of employers in the ship and boat building industry, Mississippi, Louisiana, and Florida also had the highest payroll totaling \$1.6 billion.

Between 1999 and 2007, the largest change in establishment numbers within this sector was seen in the deep sea freight transportation industry. There was a 20% decrease in establishments from 535 in 1999 to 427 in 2007. Despite the declines in establishments the annual payroll increased 20% (6% in real terms) over the same time period. The largest change in employee numbers during this period was in the marine cargo industry which saw a 44% increase 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 (76% increase, 56% in real terms), marine cargo handling (70%, 51% in real terms), and marinas (58%, 40% in real terms). There were no decreases in annual payroll in either nominal or real terms between 1999 and 2007.

2008 Economic Impacts of US Seafood Industry (thousands of dollars)

	Sales Impacts	Income Impacts	Job Impacts
Total Impacts	104,034,970	44,943,002	1,488,880
Commercial Harvesters	9,528,637	3,665,954	114,878
Seafood Processors & Dealers	15,100,930	4,853,029	104,826
Seafood Wholesalers & Distributors	19,572,431	8,347,540	155,331
Retail Sector	59,832,971	28,076,478	1,113,845

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Revenue	3,579,526	3,676,718	3,249,399	3,164,209	3,346,066	3,770,031	3,952,801	4,041,614	4,184,708	4,386,692
Finfish & Other	1,615,908	1,647,281	1,513,585	1,374,489	1,518,330	1,778,214	1,860,346	1,950,513	2,067,302	2,254,564
Shellfish	1,963,618	2,029,437	1,735,814	1,789,720	1,827,736	1,991,817	2,092,455	2,091,101	2,117,406	2,132,128
Crab, Blue	167,284	164,370	158,220	146,974	153,685	145,905	140,818	126,043	145,249	162,943
Halibut, Pacific	125,596	142,314	115,365	136,789	172,846	176,893	177,599	202,163	227,348	217,702
Lobster, American	327,147	313,766	249,510	293,894	283,516	374,262	415,408	395,175	360,390	319,010
Menhaden	114,457	114,344	104,791	81,607	71,988	75,045	62,520	69,683	92,717	88,483
Pollock, Walleye	162,812	160,525	230,727	203,633	203,183	271,630	306,972	329,879	297,461	323,212
Sablefish	97,243	101,282	80,375	78,132	100,172	135,316	136,240	132,156	115,610	124,588
Salmon, Pacific	359,958	270,722	209,441	156,194	198,946	302,775	330,816	310,865	381,197	394,789
Scallop, Sea	120,984	160,886	172,583	202,092	229,097	320,015	432,399	384,799	385,923	369,983
Shrimp	589,408	776,177	578,208	523,882	441,622	446,043	412,718	454,570	433,041	448,048
Tunas	90,848	99,277	94,091	85,473	86,818	89,950	86,358	86,758	93,884	106,920

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Revenue	9,399,210	9,142,869	9,511,792	9,436,477	9,505,337	9,689,571	9,713,328	9,481,137	9,297,746	8,329,597
Finfish & Other	8,027,263	7,828,416	8,348,260	8,232,370	8,367,711	8,517,101	8,631,096	8,300,788	8,231,258	7,282,107
Shellfish	1,371,947	1,314,453	1,163,532	1,204,107	1,137,626	1,172,470	1,082,232	1,180,349	1,066,488	1,047,490
Crab, Blue	220,489	186,036	159,004	175,574	170,890	174,561	159,242	166,133	148,106	156,894
Halibut, Pacific	79,288	74,370	77,147	80,977	78,862	79,181	76,264	71,897	69,967	66,992
Lobster, American	88,551	86,804	71,193	83,087	71,683	90,065	87,808	92,615	78,754	85,670
Menhaden	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	1,307,586
Pollock, Walleye	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	2,276,144
Sablefish	48,335	49,774	44,057	40,895	47,909	52,848	51,093	47,227	43,875	43,284
Salmon, Pacific	814,743	628,132	717,762	561,489	669,998	738,746	899,759	663,567	885,005	658,404
Scallop, Sea	22,022	32,163	46,414	52,672	55,968	64,101	56,609	59,024	58,558	53,546
Shrimp	316,347	386,497	346,288	345,249	324,170	316,570	264,173	336,912	281,847	257,139
Tunas	61,101	50,861	51,783	49,632	61,762	56,324	44,253	49,930	50,739	47,881

Average Annual Price for Key Species / Species Groups

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Crab, Blue	0.76	0.88	1.00	0.84	0.90	0.84	0.88	0.76	0.98	1.04
Halibut, Pacific	1.58	1.91	1.50	1.69	2.19	2.23	2.33	2.81	3.25	3.25
Lobster,	3.69	3.61	3.50	3.54	3.96	4.16	4.73	4.27	4.58	3.72
Menhaden	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.06	0.07
Pollock, Walleye	0.07	0.06	0.07	0.06	0.06	0.08	0.09	0.10	0.10	0.14
Sablefish	2.01	2.03	1.82	1.91	2.09	2.56	2.67	2.80	2.63	2.88
Salmon, Pacific	0.44	0.43	0.29	0.28	0.30	0.41	0.37	0.47	0.43	0.60
Scallop, Sea	5.49	5.00	3.72	3.84	4.09	4.99	7.64	6.52	6.59	6.91
Shrimp	1.86	2.01	1.67	1.52	1.36	1.41	1.56	1.35	1.54	1.74
Tunas	1.49	1.95	1.82	1.72	1.41	1.60	1.95	1.74	1.85	2.23

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

Impact Category	Jobs	Total Sales	Value Added
Trip Impacts by Fishing Mode:			
For-Hire	16,823	1,871,630	1,015,918
Private Boat	35,980	4,897,536	2,491,059
Shore	38,780	4,738,972	2,464,655
Total Durable Equipment Impacts	293,124	47,369,509	21,379,151
Total State Trip and Durable Equipment Economic Impacts	384,707	58,877,646	27,350,781

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

Fishing Mode	Trip Expenditures		Durable Equipment Expenditures	Expenditures
	Non-Residents ¹	Residents		
For-Hire	NA	745,786	Fishing Tackle	2,704,847
Private Boat	NA	2,163,350	Other Equipment	892,555
Shore	NA	1,998,894	Boat Expenses	6,162,791
Total Trip Expenditures		4,908,030	Vehicle Expenses	4,453,713
			Second Home Expenses	3,458,338
			Total Durable Equipment Expenditures	17,672,245
Total State Trip and Durable Equipment Expenditures				22,580,275

Recreational Anglers by Residential Area (thousands of anglers)²

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Coastal	6,579	9,044	10,126	8,805	10,619	10,340	11,439	11,837	12,555	10,852
Non-Coastal	928	1,235	1,450	1,372	1,563	1,578	1,491	1,686	1,615	1,592
Total Anglers	7,507	10,279	11,576	10,177	12,181	11,919	12,931	13,523	14,170	12,444

Recreational Fishing Effort by Mode (thousands of trips)²

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
For-Hire	3,407	3,544	3,577	3,193	3,245	3,547	3,527	3,822	3,993	3,358
Private Boat	30,135	41,313	44,114	38,527	45,013	41,860	42,256	44,152	47,743	44,562
Shore	22,895	33,095	37,247	30,439	36,198	37,781	37,744	41,250	40,507	37,336
Total Trips	56,437	77,951	84,938	72,159	84,456	83,188	83,526	89,224	92,243	85,256

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

Species/Groups	Region		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Bass, Striped	Atlantic Ocean ³ and Gulf of Mexico ⁴	H	1,368	1,993	2,039	1,841	2,515	2,536	2,340	2,688	2,203	2,056
		R	12,793	16,933	13,521	13,802	14,863	17,467	18,986	25,927	16,904	11,930
Drum (Atlantic Croaker & Sandspot)	Atlantic Ocean and Gulf of Mexico	H	13,939	17,678	22,207	17,833	20,879	20,473	21,334	23,175	28,003	23,172
		R	17,356	23,231	17,515	16,432	18,199	16,669	21,109	20,421	23,195	23,416
Drum (Seatrouts)	Atlantic Ocean and Gulf of Mexico	H	19,376	21,130	16,263	13,749	15,029	15,838	15,781	21,887	17,843	20,121
		R	24,138	27,491	19,608	22,366	25,156	25,510	29,268	30,994	29,932	30,567
Flounder, Summer	Atlantic Ocean and Gulf of Mexico	H	4,123	7,820	5,307	3,281	4,578	4,653	4,110	4,227	3,397	2,312
		R	17,275	17,594	22,895	13,418	15,978	16,338	22,886	18,061	19,791	22,207
Halibut, Pacific	Alaska	H	333	403	366	351	403	483	500	463	585	516
		R	229	303	254	233	290	369	380	353	438	359
Little Tunny/ Atlantic Bonito ⁵	Atlantic Ocean and Gulf of Mexico	H	421	421	329	323	254	363	202	310	320	210
		R	851	873	685	1,025	865	1,049	567	829	1,141	817
Rockfishes/ Scorpionfishes	Pacific Region	H	4,569	3,569	3,241	2,737	3,624	2,416	3,433	2,506	2,257	1,842
		R	741	681	787	931	1,665	757	1,148	731	513	465
Salmon	Pacific Region and Alaska	H	1,000	1,120	1,823	1,359	1,661	1,618	1,530	929	1,338	770
		R	723	633	891	725	1,000	1,095	919	588	773	444
Sharks ⁶	Atlantic Ocean and Gulf of Mexico	H	153	247	284	229	178	189	200	164	223	200
		R	1,346	2,173	3,755	2,631	3,816	4,149	4,990	4,951	5,987	5,288
Large Tunas ⁷	Atlantic Ocean and Gulf of Mexico	H	486	524	485	310	726	740	692	610	563	720
		R	52	49	36	31	110	110	112	97	99	71

¹All anglers reported in this table are U.S. residents; NA = not applicable.

²The number of anglers and trips were not available for the Caribbean in 1999 and from 1999 to 2003 for Hawai'i; data from Alaska and Texas were not included in these tables.

³Includes New England, Mid-Atlantic, and South Atlantic Regions

⁴Excluded Texas

⁵Species included in this group may not be equivalent to species with similar names listed in the commercial tables.

⁶Includes requiem (all species in the carcharhinidae family), mackerel sharks (all species in the lamnidae family) and unidentified sharks.

⁷Includes all tunas in the thunnus family.

National Economy

	Establishments	Employees	Annual Payroll (\$ millions)	Employee Compensation ¹ (\$ millions)	Gross Domestic Product (\$ millions)	Commercial Location Quotient ²
1998	6,941,822	108,117,731	3,309,406	5,930,254	8,679,657	1.0
2007	7,705,018	120,604,265	5,026,778	7,796,114	13,715,741	1.0
% change	10.99%	11.55%	51.89%	31.46%	62.19%	--

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Firms	693	714	780	903	1,038	1,110	1,080	1,142	1,303
	Receipts	55,332	60,790	60,417	55,750	70,071	81,871	78,745	80,066	88,230
Seafood sales, retail	Firms	2,207	2,161	2,119	2,210	2,346	2,260	2,098	2,089	2,610
	Receipts	194,115	188,870	190,629	199,937	210,231	210,450	203,951	211,186	231,776

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Seafood product preparation & packaging	Establishments	842	854	823	754	764	734	717	670	685
	Employees	42,534	41,770	39,855	38,663	39,580	38,102	37,684	35,894	33,169
	Payroll	988,801	1,070,573	1,057,737	1,092,500	1,177,582	1,151,780	1,180,396	1,205,890	1,196,086
Seafood sales, wholesale	Establishments	3,048	2,992	2,980	2,883	2,456	2,330	2,314	2,222	2,438
	Employees	27,706	28,710	28,405	26,719	23,091	22,501	22,666	22,013	24,232
	Payroll	797,304	854,649	882,232	895,718	743,479	771,749	781,459	826,720	924,654
Seafood sales, retail	Establishments	1,807	1,853	1,940	2,238	2,125	2,151	2,155	2,115	2,094
	Employees	8,299	8,458	8,990	9,771	10,346	10,714	10,381	10,545,00	10,380
	Payroll	137,701	137,306	149,310	167,634	186,087	192,187	194,602	200,971	209,404

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

		1999	2000	2001	2002	2003	2004	2005	2006	2007
Coastal & Great Lakes freight transportation	Establishments	554	546	544	520	606	579	610	579	573
	Employees	23,256	20,240	24,126	20,149	22,449	21,928	21,025	22,172	22,568
	Payroll	1,095,499	1,027,497	1,188,800	1,096,771	1,183,071	1,179,549	1,232,342	1,376,033	1,552,467
Deep sea freight transportation	Establishments	535	485	456	471	472	435	465	456.00	427
	Employees	14,784	13,014	11,964	12,916	12,175	11,314	11,357	11,473	11,308
	Payroll	714,701	650,148	697,266	784,149	734,781	735,804	801,863	825,752	855,683
Marinas	Establishments	4,170	4,126	4,121	4,021	4,150	4,092	4,143	4,025	4,085
	Employees	24,016	24,824	24,660	23,047	27,928	28,100	27,511	28,339.00	28,788
	Payroll	599,112	640,131	674,576	675,529	773,538	814,821	839,848	894,097	945,355
Marine cargo handling	Establishments	601	607	612	595	542	551	549	540	552
	Employees	43,785	53,496	50,273	50,428	50,644	58,618	59,670	61,905	62,941
	Payroll	2,016,081	2,194,692	2,249,516	2,425,187	2,422,537	2,899,703	3,034,672	3,261,953	3,428,126
Navigational services to shipping	Establishments	891	863	830	828	782	804	803	802	830
	Employees	11,393	11,775	11,957	11,224	11,795	11,881	10,819	12,043	12,997
	Payroll	430,114	478,748	507,806	509,953	629,541	591,510	584,689	699,375	756,552
Port & harbor operations	Establishments	199	196	201	212	223	234	244	229.00	223
	Employees	7,427	7,445	7,304	6,304	6,413	6,888	7,453	7,002	6,573
	Payroll	264,651	265,766	254,864	245,979	279,970	300,692	319,338	323,554	318,608
Ship & boat building	Establishments	1,779	1,763	1,815	1,736	1,739	1,793	1,799	1,764	1,771
	Employees	145,065	146,969	138,962	131,292	133,395	137,633	141,620	142,057	148,864
	Payroll	4,804,405	5,044,270	5,094,086	5,111,708	5,119,596	5,499,783	5,654,818	5,877,830	6,405,570

¹Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

²The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.