Fisheries Economics of the United States 2010

Economics and Sociocultural Status and Trends Series

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U.S. Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service NOAA Technical Memorandum NMFS-F/SPO-120 October 2011

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Fisheries Economics of the United States, 2010

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-120 October 2011



U.S. Department of Commerce Rebecca Blank, Acting Secretary of Commerce

National Ocean and Atmospheric Administration Jane Lubchenco, Ph.D., Administrator of NOAA

National Marine Fisheries Service Eric Schwaab, Assistant Administrator for Fisheries

Suggested Citation:

National Marine Fisheries Service. 2011. Fisheries Economics of the United States, 2010. U.S. Dept. Commerce, NOAA Tech. Memo. NMFS-F/SPO-118, 175p. Available at: https://www.st.nmfs.noaa.gov/st5/publication/index.html.

A copy of this report may be obtained from:

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Or online at:

https://www.st.nmfs.noaa.gov/st5/publication/index.html

Front cover photo: Honolulu (photo credit: J.Hosptial) Inside cover photo: Honolulu Fish Auction (photo credit: J.Hospital)

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Preface

Fisheries Economics of the U.S., 2010

Fisheries Economics of the U.S., 2010 is the fifth volume in this series which is intended to provide the public with easily accessible economic information about the Nation's commercial and recreational fishing activities, and fishing-related industries. The 2001 to 2010 time period is covered in this report and descriptive statistics are provided for the following categories: economic impacts of the seafood industry, commercial fisheries landings, revenue, and price trends; angler expenditures and economic impacts of recreational fishing, recreational fishing catch, effort, and participation rates; and employer and non-employer establishment, payroll, employees, and annual receipt information for fishing-related industries.

Sources of Data

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

Acknowledgments

Many people helped put this publication together. Rita Curtis is Division Chief and originator of this series. Erin Steiner served as the editor and author for this report. Primary analysts and collaborators included Sabrina Lovell, Alan Lowther, and Lauren Dolinger Few. Other analysts and contributors included Rita Curtis, Michael Lewis, Melissa Yencho, Kathy Cuff, Avi Litwack, and Shelley Arenas. Many NOAA Fisheries staff in the regional Fisheries Science Centers and Regional Offices provided expertise: Cindy Thomson, Mark Plummer, Jim Waters, Ron Felthoven, Sarah Malloy, Dale Squires, Matthew McPherson, Todd Lee, Terry Hiatt, Jennifer Mondragon, Karen Greene, and Steve Freese. Other colleagues who provided information and expertise included: Gretchen Jennings (Alaska Department of Fish and Game), Mark Fisher and Jeremy Leitz (Texas Department of Parks and Wildlife), and Elena Besedin and Dominick Tribone (Abt Associates). Jim Kirkley (Virginia Institute of Marine Science) created the input-ouput model for generating seafood impacts and Sabrina Lovell provided the estimates of recreational impacts and expenditures.

Address all comments and questions to:

Economics and Sociocultural Analysis Division Office of Science and Technology NOAA Fisheries (NMFS) 1315 East-West Highway, 12th floor Silver Spring, MD 20910-3282 Phone: 301-713-2328 / Fax: 301-713-4137

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

In Memory of Dr. Jim Kirkley

We would like to dedicate this volume of *Fisheries Economics of the U.S.* to Dr. Jim Kirkley, PhD, professor of Marine Science at the Virginia Institute of Marine Science, College of William and Mary. Dr. Kirkley provided invaluable expertise in development of the Commercial Seafood Impacts model.

The information obtained from his models have been an integral piece of the report since its inception. Over time, these data have become a fundamental component of the public's understanding of the role of the commercial seafood industry.

Today, this information is included in a wide array of documents including congressional briefing documents and nationally syndicated newspaper articles.

Dr. Kirkley was one of the first economists to develop models to demonstrate the comprehensive effects of fisheries in the national economy. The community of fisheries economists will always be in debt to Dr. Kirkley's contributions.

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



Management Context

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

Nationwide, there are 47 fishery management and ecosystem 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 an FMP is developed, it must be approved by the Secretary of Commerce in consultation with NOAA Fisheries before it is implemented and enforced.

Regional Fishery Management Councils

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

Of the 230 major fish stocks and stock complexes currently managed under a FMP, the overfished status of 179 stocks or stock complexes and the overfishing status of 192 stocks or stock complexes is known. Currently, 43 stocks or stock complexes are categorized as overfished and 39 are categorized as subject to overfishing².

Less is known about the 302 minor stocks or stock complexes. The overfished status of 28 of these stocks or stock complexes is known and five of these are currently considered overfished. The overfishing status of 61 of the 302 minor stocks or stock complexes is known and two of these are currently considered to be subject to overfishing².

Transboundary and International Fisheries

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

Regional Fishery Management Organizations

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

Regional Fishery Management Organizations (RFMOs) are multinational organizations with interests in transboundary and international fish stocks and associated fishing activities. NOAA Fisheries is party to eight RFMOs globally³. The goal of these RFMOs is to adopt measures for the conservation and coordinated management of target species such as bluefin tuna. RFMOs also provide measures for the conservation and scientific assessment of non-target species. Also known as bycatch, non-target species include seabirds, marine mammals, sea turtles, and fish species caught incidentally to target species. The commitment to conserving and protecting all species associated with, or affected by, fishing activities is outlined in the Food and Agricultural Organization's (FAO's) Code of Conduct for Responsible Fisheries established in 1995.

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).

²Fish Stock Sustainability Index (FSSI) - 2011 Quarter 2 Update through June 30, 2011. The NOAA Fisheries Office of Sustainable Fisheries. http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm

³http://www.nmfs.noaa.gov/ia/docs/2009_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. The RFMOs report estimates that in 2010, there were 37 vessels flying the national flags of 15 nations participating in IUU fishing activities.¹ NOAA Fisheries is actively working bilaterally and multilaterally with other nations on the adoption of strategies to reduce the level of IUU fishing around the world.

Threatened and Engangered Species

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

Currently, there are 82 marine and anadromous fish species and subspecies² 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	39
Marine Mammals: Whales	12
Marine Mammals: Dolphins	2
Marine Mammals: Porpoise	1
Marine Mammals: Seals	5
Marine Mammals: Sea Lions	2
Sea Turtles	8
Marine Invertebrates	4
Marine Plants	1
Total	69

In addition to threatened and endangered fish species, NOAA Fisheries is also involved in the conservation and protection of ESA-listed non-fish species. Marine mammals such as whales, dolphins, and seals, as well as species of sea turtles, marine invertebrates, and one marine plant are listed. There are currently 92 candidate species for listing (82 are coral species) and 9 species proposed for listing.

the ESA, but has since made a comeback and was considered 'recovered' in 1994. The Caribbean monk seal, listed in 1967, was delisted in 2008. This species is considered to be extinct. In addition to endangered and threatened species under the Endangered Species Act, NOAA Fisheries is also responsible for providing protection for marine mammals under the Marine Mammal Protection Act. 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.³ 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.⁴ Habitat areas that are necessary for a fish species' growth, reproduction, and development are considered EFH. To the extent practicable, NOAA Fisheries and the Councils must minimize adverse effects to EFH caused by fishing activities.

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

A recent effort undertaken by the NOAA Fisheries Office of Science and Technology was to create a Habitat Assessment Improvement Plan⁵ 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

In 1970, the Eastern North Pacific gray whale was listed under

¹An additional 43 vessels with unknown country affiliation also participate in IUU fishing activities.

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

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

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

⁵The Habitat Assessment Improvement Plan is available at: http://www.st.nmfs.noaa.gov/st4/documents/HabitatAssesmentImprovementPlan_052110.PDF

¹See Section 303(A) of the Magnuson-Stevens Act for more information

²For 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.

quotas¹; community development quota programs (CDQs); fishing cooperatives; and sector allocation programs².

Existing	Catch	Shares	Progr	ams	(2009)	
	-					

Region	Program	First Year	Ex-vessel Value (\$ millions)
Mid- Atlantic	Surfclam and ocean quahog IFQ	1990	52.9
South Atlantic	Wreckfish IFQ	1991	ND ³
North Pacific	Western Alaska CDQ	1992	46.9
North Pacific	Pacific halibut and sablefish IFQ	1995	209.9
Pacific	Pacific whiting catcher/processor cooperative	1997	4.1
North Pacific	Bering Sea (BS) pollock cooperative	1999	291.3
Pacific	Sablefish permit stacking program	2001	11.5
New England	George's Bank cod hook gear sector ⁴	2004	ND^2
North Pacific	Bering Sea king and Tanner crab; IFQ and cooperative	2005	148.5
New England	George's Bank cod fixed gear sector ⁴	2007	ND^2
Gulf of Mexico	Red snapper IFQ	2007	8
North Pacific	Central Gulf of Alaska rockfish pilot sector program	2007	5.9
North Pacific	BS groundfish (non-pollock) trawl catcher/ processor cooperative	2008	96
Mid- Atlantic	Golden Tilefish	2009	4.2
Gulf of Mexico	Grouper and tilefish	2010	
New England	Multispecies sector ⁵	2010	
Pacific	Pacific Coast Groundfish Trawl Rationalization	2011	

In 2010, the NOAA catch shares policy⁶ was released to encourage well-designed catch share programs to help maintain or rebuild fisheries, and sustain fishermen, communities and vibrant working waterfronts, including the cultural and resource access traditions that have been part of this country since its founding. The

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

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

Nationwide, there are fifteen catch share programs currently in operation in six different regions. In 2009, twelve programs were in existence. The total landings revenue of the fisheries for which information was available was \$879 million in 2009 amounting to 19% of the total landings revenue for all U.S. commercial fisheries.

Other Market-based Management Tools

Vessel or permit buyback programs are another market-based tool used by fishery managers. Under these programs, fishing vessels or permits are purchased by the government to permanently decrease the number of participants in the fishery to ease fishing-related pressure on marine resources. To date, there have been ten buyback programs instituted nationwide. The cost of seven⁷ of these buyback programs totaled of \$397 million. Eighty-five percent of this total cost was funded by loans from the federal government that will be repaid by the commercial fishing industry.

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

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

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

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

 $^{^4}$ The George's Bank cod hook gear and cod fixed gear sectors were merged into one sector within the Multispecies sector program in 2010.

⁵Amendment 16 to Northeast Multispecies Fishery Management Plan expanded the number of sectors from 2 to 17.

⁶http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/index.htm

⁷This total excludes three buyback programs associated with Northwest Pacific salmon disasters in 1994, 1995, and 1998 because data were not available.

currently 131 fisheries worldwide that meet MSC sustainability standards¹, 17 of which are U.S. fisheries.

Region	Fishery	Certified
North Pacific	Alaskan salmon	Sep 2000;
		Nov 2007
North Pacific	Bering Sea/Aleutian Islands	Feb 2005;
	(BSAI) pollock	Dec 2010
North Pacific	Gulf of Alaska (GOA)	Apr 2005;
	pollock	Sep 2010
North Pacific	US North Pacific halibut	Apr 2006
North Pacific	US North Pacific sablefish	May 2006
Pacific	Pacific albacore tuna - (American Albacore Fishing Association)	Aug 2007
Pacific	Oregon pink shrimp	Dec 2007
Mid-Atlantic	Atlantic deep sea red crab	Sep 2009
Pacific	Pacific hake mid-water trawl	Oct 2009
North Pacific	BSAI Pacific cod	Jan 2010
North Pacific	GOA Pacific cod	Jan 2010
North Pacific	North Pacific albacore tuna (American Western Fish Boat Owners Association)	Mar 2010
North Pacific	Bering Sea and Aleutian Islands flatfish	Jun 2010
North Pacific	Gulf of Alaska flatfish	Jun 2010
North Pacific	Gulf of Alaska Pacific cod	Jan 2010
Pacific	Oregon dungeness crab	Dec 2010
North Pacific	Annette Islands Reserve salmon	June 2011

U.S. Fisheries with MSC Certification

Commercial Fisheries

Commercial fishermen in the U.S. harvested 8.2 billion pounds of finfish and shellfish in 2010, earning \$4.5 billion for their catch. Pacific salmon (\$555 million) followed by sea scallop (\$455 million), shrimp (\$417 million), and American lobster (\$397 million) contributed most to total revenue in the U.S. In terms of pounds landed, walleve pollock (1.9 billion pounds), menhaden (1.5 billion), and Pacific salmon (788 million) comprised over half of total pounds landed in 2010.

Key U.S. Com	mercial Species
American Jobstor	 Sablafish

American lobster

Pacific halibut

- Blue crab Menhaden
- Shrimp
- Pacific salmon
- Sabletish
- Sea scallop
- Tunas
- Walleye pollock

When looking at key species or species groups, commercial fishermen in Alaska caught the most salmon (757 million pounds) and earned \$506 million for their catch in 2010. Tuna was caught in large numbers in Hawai'i (15 million pounds) and generated \$48 million in landings revenue.

On the East Coast, Maine fishermen contributed most to the total landings of American lobster (95 million pounds) and earned \$313 million for their catch in 2010. In Massachusetts, sea scallop was a major contributor to total revenue, earning \$252 million for 31 million pounds landed. More blue crab was caught in Maryland (63 million pounds) than any other state, earning fishermen in this state over \$75 million. Louisiana landed over half of the menhaden in 2010 with fisherman landing 862 million pounds and generating \$58 million in landings revenue.

The highest ex-vessel price per pound in 2010 was for Eastern oyster, which received \$38.25 per pound in Massachusetts, \$7.69 per pound in Maryland, and \$5.75 per pound in Delaware, with price differences largely attributable to difference in product form. Other key species or groups with high ex-vessel prices included: lobsters (\$12.37 per pound in Hawai'i), bloodworms (\$11.03 per pound in Maine) and sea scallop (\$8.84 per pound in New Hampshire).

In the Gulf of Mexico, shrimp is a highly valued species. Fishermen in Texas earned \$174 million for their catch (77 million pounds). Although, less shrimp was landed in Louisiana (74 million pounds) the total landings revenue was less (\$108 million). The ex-vessel price in Texas (\$2.26) was greater than that in Louisiana (\$1.46).

Economic Impacts²

In this report, the U.S. seafood industry includes the commercial harvest sector, seafood processors and dealers, seafood wholesalers and distributors, importers, and seafood retailers. In 2010, this industry supported approximately 1.2 million full- and part-time jobs and generated \$133 billion in sales impacts, \$36 billion in income impacts, and \$55 billion in value added impacts.

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

(uncubando or donaro)				
	2007	2008	2009	2010
Jobs	1,141,921	1,144,353	1,029,542	1,196,683
Income	34,258,018	34,544,909	31,556,643	36,269,724
Sales	126,261,815	126,175,684	116,224,548	133,135,986
Value Added	52,423,024	52,726,594	48,282,319	55,434,189
Total Revenue	4,199,303	4,399,402	3,894,864	4,511,171

Seafood retailers generated the highest job and income impacts, contributing 568,000 jobs and \$12 billion in 2010. In contrast, the largest sales impacts (\$56 billion) and value added impacts (\$17 billion) came from the importer sector. The seafood wholesalers and distributors sector contributed the least to the national seafood industry impacts with 55,000 employees, \$7.5 billion in sales impacts, \$2.5 billion in income impacts, and \$3.5 billion in

¹More information about the Marine Stewardship Council and its certification process is available at: http://www.msc.org/track-a-fishery/certified. ²In earlier years, the NMFS Commercial Fishing & Seafood Industry Input/Output Model did not separate out the import sector but rather only included the commercial harvester, seafood processors and dealers, seafood wholesalers and distributors and retail sectors. Note that 2007 and 2008 estimates have been updated using the newer version of the model. For more information, see: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_ 2007-2009.pdf

value added impacts.

Commercial Fisheries Facts

Landings revenue

- The ten key U.S. key species or species groups accounted for 64% of total landings revenue in 2010.
- Finfish and other fishery products (\$2.2 billion) contributed slightly less than shellfish (\$2.3 billion) to total landings revenue in the U.S. in 2010.
- Together, Pacific salmon and walleye pollock accounted for 38% of total finfish revenue.
- Sea scallop, shrimp, and American lobster earned the most in shellfish revenue in 2010, contributing 19.5% 17.9%, and 17%, respectively.
- Pacific salmon had the largest one-year increase in landings revenue over the 10 year time period, increasing 52% from \$199 million in 2003 to \$303 million in 2004.
- Pacific halibut had the largest decrease in landings revenue over the 10 year time period, decreasing 35% from \$218 million in 2008 to \$141 million in 2009.

Landings

- The U.S. key species and species groups accounted for 60% of total landings in 2010.
- Finfish and other fishery products accounted for 84% of total U.S. landings in 2010 or 6.9 billion pounds.
- Walleye pollock and menhaden contributed 28% and 21%, respectively, to U.S. finfish landings.
- Shrimp and blue crab contributed 20% and 14%, respectively, to shellfish landings.
- Pacific salmon had the largest one-year increase in landings over the 10 year time period, increasing 34% from 664 million pounds in 2006 to 886 million pounds in 2007.
- Pacific salmon had the largest one-year decrease in landings over the 10 year time period, decreasing 26% from 900 million pounds in 2005 to 664 million pounds in 2006.

Prices

- Of the top ten key species or species groups, sea scallop (\$7.92), Pacific halibut (\$3.67), and American lobster (\$3.44) had the highest ex-vessel price per pound in 2010.
- Walleye pollock (\$0.15) and menhaden (\$0.07) had the lowest ex-vessel price per pound in 2010.
- Pacific halibut had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 56% from \$2.35 per pound in 2009 to \$3.67 in 2010.
- Shrimp had the largest decrease in ex-vessel price over the 10 year time period, decreasing 29% from \$1.74 per pound in 2008 to \$1.24 in 2009.

Relative to 2009, increases were experienced by all impact types in all industry sectors. The employment impacts increased 16% from 1 million to 1.2 million jobs. The increases in employment impacts ranged from 18% in the commercial harvesters sector to 14% in the importers sector. Overall, there was a 15% increase in sales impacts, a 15% increase in income impacts, and a 15% increase in valued added impacts between 2009

and 2010. The greatest employment impacts generated by the seafood industry were generated in California with 122,000 jobs, followed by Massachusetts (90,000 jobs), Florida (71,000 jobs), and Washington (62,000 jobs). The lowest number of jobs were supported in Delaware (339 jobs). The importers sector generated the greatest job impacts in California, Massachusetts, Florida, and Washington.

State	Jobs	State	Jobs
United States	1,196,683	Maryland	17,283
California	121,973	Oregon	14,079
Massachusetts	90,018	Georgia	10,920
Florida	71,229	North Carolina	9,613
Washington	61,510	Rhode Island	8,454
Alaska	54,007	Hawai'i	8,206
New Jersey	42,506	Alabama	6,268
New York	41,794	New Hampshire	5,795
Maine	28,059	Connecticut	4,407
Louisiana	25,546	Mississippi	3,828
Texas	24,634	South Carolina	1,429
Virginia	22,987	Delaware	339

The highest sales impacts were generated by the seafood industry in California with \$20 billion in sales, followed by Florida (\$14 billion), Washington (\$7.6 billion), and Massachusetts (\$7.4 billion). The importers sector generated the highest level of sales impacts in all four states. The lowest sales were generated in Delaware (\$43 million).

Total sales generated by the U.S. Seafood Industry (2010) (thousands of dollars)

State	In-State Sales	State	In-State Sales
United States	133,135,986	Georgia	1,472,345
California	19,916,297	Louisiana	1,438,640
Florida	14,103,674	Oregon	1,105,885
Washington	7,612,936	Rhode Island	977,581
Massachusetts	7,383,443	North Carolina	825,122
New Jersey	6,425,332	New Hampshire	751,841
New York	5,090,068	Connecticut	730,401
Alaska	3,919,220	Hawai'i	664,361
Texas	2,064,282	Alabama	303,012
Virginia	1,900,724	Mississippi	174,584
Maryland	1,835,366	South Carolina	80,904
Maine	1,553,055	Delaware	43,122

The greatest value added impacts were generated by the seafood industry in California with \$7.1 billion in sales, followed by Florida (\$4.7 billion), Washington (\$3.1 billion), and Massachusetts (\$2.9 billion). The importers sector generated the greatest value added impacts in the same four states The smallest value added impacts were generated in Delaware (\$14 million).

6

Total value added impacts generated by the U.S. Seafood Industry (2010)

State	Value	State	Value
	Added		Added
United States	55,434,189	Louisiana	688,241
California	7,107,873	Georgia	540,246
Florida	4,721,012	Oregon	497,624
Washington	3,070,834	Rhode Island	373,235
Massachusetts	2,902,863	North Carolina	346,290
New Jersey	2,344,918	Hawai'i	295,289
Alaska	2,090,223	New Hampshire	280,837
New York	1,797,704	Connecticut	253,536
Texas	897,412	Alabama	147,178
Virginia	817,273	Mississippi	87,554
Maine	740,429	South Carolina	42,228
Maryland	712,947	Delaware	14,450

(thousands of dollars)

Landings Revenue

Landings revenue in the U.S. totaled \$4.5 billion in 2010. This was a 39% increase (7.5% increase in real terms) from 2001 levels (\$3.2 billion) and a 16% increase (11% increase in real terms) relative to 2009 (\$3.9 billion). Finfish and shellfish revenues mirrored this increasing trend. Totaling \$2.2 billion in 2010, finfish revenue experienced a 44% increase (11% increase in real terms) from 2001 to 2010, but increased 16% (11% increase in real terms) from 2009 to 2010. U.S. shellfish revenue totaled \$2.3 billion in 2010, increasing 34.3% (4% increase in real terms) from 2001 to 2010 and increased 16% (a 11% increase in real terms) from 2009 to 2010.

Total Landings Revenue by Region (2010) (thousands of dollars)

Region	Total	Region	Total
	Revenue		Revenue
United States	4,511,171	Pacific	553,743
North Pacific	1,578,289	Mid-Atlantic	513,720
New England	953,979	South Atlantic	164,665
Gulf of Mexico	639,196	Western Pacific	84,023

The ten U.S. key species and species groups comprised 64% of total revenue in 2010. Of these, Pacific salmon, sea scallop, shrimp, American lobster, and walleye pollock contributed most to total revenue in the U.S. in 2010. These species or groups totaled approximately \$2.1 billion in 2010 or 47% of total revenue. The largest increases in total revenue among the national key species or species groups from 2001 to 2010 were experienced by: Pacific salmon (165%, 105% in real terms), sea scallop (164%, 104% in real terms), and Pacific halibut (80%, 39% in real terms).

The largest decreases in total revenue over the 10 year time period were observed for shrimp (28%, 44% in real terms). Relative to 2009 totals, key species or species groups with the largest increases in total revenue in 2010 were: Pacific salmon (50%, 44% in real terms), Pacific halibut (47%, 41% in real terms), and American lobster (31%, 26% in real terms).

Total Landings Revenue by State (2010) (thousands of dollars)

State	Total	State	Total
	Revenue		Revenue
Alaska	1,578,289	Hawai'i	84,023
Massachusetts	478,468	North Carolina	79,825
Maine	375,148	Rhode Island	62,639
Washington	255,332	East Florida	50,442
Louisiana	248,616	New York	33,824
Texas	204,076	Alabama	27,240
Virginia	198,840	Mississippi	21,913
New Jersey	177,936	South Carolina	20,994
California	176,151	New Hampshire	20,609
West Florida	137,350	Connecticut	17,116
Oregon	104,653	Georgia	13,410
Maryland	95,962	Delaware	6,966

Overall, the greatest portion of the nation's landings revenue was generated in Alaska (\$1.6 billion), which contributed 35% to the U.S. total. Alaska also contributed more than any other state to total U.S. finfish revenue (\$2.2 billion), accounting for 63% of total finfish revenue. More than half of Alaska's finfish landings revenue came from walleye pollock and salmon. Massachusetts (\$352 million) and Maine (\$345 million) contributed most to total U.S. shellfish revenue, contributing 15.1% and 14.8%, respectively. Sea scallop accounted for most of the revenue generated in Massachusetts and American lobster contributed the most to revenue in Maine.

Landings

In 2010, U.S. commercial fishermen landed 8.2 billion pounds of finfish and shellfish. Relative to 2001 levels, this was an 14% decrease and a 2.4% increase relative to 2009 (8 billion pounds). Finfish landings totaled 6.9 billion pounds in 2010, a 17% decrease from 8.3 billion pounds in 2001 and a 2.1% increase from 2009 (6.8 billion pounds).

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Region	Total	Total						
	Landings		Landings					
United States	8,224,552	Mid-Atlantic	786,951					
North Pacific	4,276,050	New England	576,081					
Gulf of Mexico	1,284,416	South Atlantic	119,036					
Pacific	1,063,432	Western Pacific	28,069					

Total Landings by Region (2010) (thousands of pounds)

Over 60% of total catch in 2010 was made up of the ten U.S. key species and species groups. Walleye pollock and menhaden had the highest landings totals in 2010 with 1.9 billion pounds and 1.5 billion pounds landed, respectively. These two species accounted for 42% of total U.S. landings in 2010.

Total Landings by State (2010)

State	Total	State	Total
	Landings		Landings
Alaska	4,276,050	Rhode Island	77,469
Louisiana	1,005,289	North Carolina	71,989
Virginia	495,075	West Florida	63,529
California	437,869	East Florida	29,218
Massachusetts	282,601	Hawai'i	28,069
Oregon	201,479	New York	27,535
Maine	198,184	Alabama	14,454
Washington	189,486	New Hampshire	11,814
New Jersey	161,832	South Carolina	10,478
Mississippi	111,242	Georgia	7,351
Maryland	97,724	Connecticut	6,015
Texas	89,902	Delaware	4,718

The greatest increases in landings between 2001 and 2010 occurred in American lobster (62%), sea scallop (24%), and blue crab (16%). During the same time period, decreases were seen in walleye pollock (39%), Pacific halibut (27%), and shrimp (25%). The largest increase in landings of key species or groups between 2009 and 2010 was experienced by American lobster (18%) and the largest decrease was experienced by shrimp (10%).

Alaskan fishermen harvested the majority of the nation's total landings. Alaska contributed 54% to the U.S. total in 2010, landing 4.3 billion pounds of finfish and shellfish. Alaska also contributed most to the U.S. finfish total, landing 4.2 billion pounds or 60% of the U.S. finfish total. Walleye pollock comprised much of landings in Alaska (46%). More shellfish was landed in California (318 million pounds) and Louisiana (126 million pounds) than any other single state. The landings in these two states comprised 35% of all shellfish landed in the United States in 2010.

Prices

Of the ten U.S. key species and species groups, sea scallop, Pacific halibut, and American lobster received the highest ex-vessel prices in 2010 at \$7.92 per pound, \$3.67 per pound, and \$3.44 per pound respectively.

Significant increases in price were observed for Pacific halibut, which increased 145% (89% in real terms) from 2001 to 2010, and experienced an increase of 56.2% (49.9% in real terms) from 2009 to 2010. Pacific salmon ex-vessel price experienced the next largest change between 2001 and 2010, with an increase of 141% (87% in real terms). The greatest change in price between 2009 and 2010 was experienced by Pacific halibut (56.2% increase a 49.9% increase in real terms), followed by Pacific salmon with a 34.6% increase (a 29.2% increase in real terms).

Menhaden and walleye pollock had the lowest ex-vessel prices in 2010 at \$0.07 and \$0.15 per pound, respectively. However, landings of menhaden and walleye pollock were the largest among the U.S. key species and groups: 1.47 billion pounds of menhaden and 1.95 billion pounds of walleye pollock.

Recreational Fisheries

In 2010, there were approximately 11 million recreational saltwater anglers across the U.S. who took 73 million saltwater fishing trips around the country. These anglers spent \$4.3 billion on fishing trips and \$15 billion on durable fishing-related equipment. These expenditures contributed \$50 billion in sales impacts to the U.S. economy, generated \$23 billion in value added impacts, and supported over 326,000 job impacts. Of the U.S. key recreational species or species groups, seatrout (39 million fish), and Atlantic croaker and spot (29 million fish) were the most often caught by recreational saltwater anglers in 2010.

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

Expenditures and Economic Impacts

Economic impacts from recreational fishing activities (impacts from fishing trips and durable equipment combined) supported over 326,000 full- and part-time jobs across the U.S. in 2010. Sales impacts from recreational angling trips and durable expenditures totaled \$50 billion and value added impacts totaled \$23 billion. Durable equipment impacts contributed most to these totals, accounting for 75% of employment impacts, 80% of total sales impacts, and 77% 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 with 11% of employment impacts. For-hire sales (\$1.6 billion) and value added impacts (\$865 million) were approximately half the magnitude of impacts generated by either private boat (\$4.3 billion, \$2.2 billion) or shore-based trips (\$4.2 billion, \$2.2 billion).

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

	(thousands of donars)								
	2007	2008	2009	2010					
Jobs	468,298.0	384,707.0	327,124.0	326,187.5					
Income	NA	NA	14,574,464.0	14,570,210.2					
Sales	72,254,430.0	58,877,647.0	49,811,961.0	49,832,341.1					
Value Added	33,418,845.0	27,350,783.0	23,196,423.0	23,170,931.8					
Total Trips 1	91,117,683	81,927,558	74,918,722	72,740,055					

U.S. anglers spent a total of \$4.3 billion on expenditures related for fishing trips in 2010. Of this total, expenditures for private boat-based fishing trips contributed the most (\$1.9 billion), followed by shore-based fishing trips (\$1.8 billion), and for-hire-based fishing trips (\$635 million). Expenditures on fishing-related equipment totaled over \$15 billion in 2010. Anglers spent more on boat expenses (\$4.2 billion) than any other durable good. Other major expenditures include vehicle expenses (\$3.9 billion), second home expenses (\$3.5 billion) and fishing tackle (\$2.5 billion).

 $^{^1 {\}rm The}$ number of trips excludes Alaska and Texas.

(2010)				
State	Jobs	State	Jobs		
West Florida	39,319	Virginia	4,602		
East Florida	25,403	New York	4,459		
Texas	19,457	Alabama	4,440		
North Carolina	18,893	South Carolina	4,312		
Louisiana	16,177	Mississippi	3,280		
California	11,312	Washington	3,157		
New Jersey	9,089	Georgia	1,875		
Hawai'i	7,244	Oregon	1,614		
Maryland	6,793	Delaware	1,286		
Alaska	5,299	Rhode Island	1,190		
Massachusetts	4,697	Maine	1,130		
Connecticut	4,608	New Hampshire	261		

Jobs supported by the U.S. Recreational Fishing Industry (2010)

The greatest employment impacts from expenditures on recreational angling were generated in West Florida with 39,000 jobs, followed by East Florida(25,000 jobs), Texas(19,000 jobs), and North Carolina(19,000 jobs). The lowest number of jobs were supported in New Hampshire (261 jobs). The highest sales impacts from expenditures on recreational angling were also generated in West Florida with \$4.1 billion in sales, followed by East Florida(\$2.9 billion), Texas(\$2.5 billion, and North Carolina(\$2 billion). The lowest sales were generated in 28 million (\$28 million).

Total Sales generated by the U.S. Recreational Fishing Industry (2010)

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State	Sales	State	Sales		
West Florida	4,062,480	Virginia	516,718		
East Florida	2,876,867	Alaska	465,416		
Texas	2,498,115	Mississippi	429,206		
North Carolina	1,974,716	Alabama	425,866		
California	1,690,781	South Carolina	378,974		
New Jersey	1,518,517	Washington	327,439		
Louisiana	1,463,823	Georgia	229,062		
Maryland	914,851	Delaware	199,775		
Hawai'i	800,366	Oregon	164,512		
Connecticut	703,309	Rhode Island	135,262		
New York	667,852	Maine	94,483		
Massachusetts	636,157	New Hampshire	28,396		

Participation¹

Nationwide, there were 11 million recreational saltwater anglers who fished in their home states in 2010. Approximately 9.6 million of these anglers were residents of a U.S. coastal county and 1.5 million anglers were residents of a non-coastal county. Between 2001 and 2010, the total number of U.S. anglers fishing in their home states decreased 2.8%. In the same manner, the number of anglers decreased 0.9% between 2009 and 2010. The

number of coastal county anglers decreased 3.8% from 2001 to 2010 and increased 1.6% from 2009 to 2010. The number of non-coastal county anglers increased 3.6% between 2001 and 2010 and from 2009 to 2010, there was a 14% decrease.

Recreational Fishing Facts

Participation

- An average of <u>12 million anglers</u> fished in United States annually from 2001 to 2010.
- In 2010, coastal county residents made up 86% of total anglers. These anglers averaged 87% of total anglers annually over the 10 year time period.
- The largest annual increase in the number of coastal anglers during the 10 year time period was between 2002 and 2003, increasing 21%, from 8.6 million anglers to 10 million anglers. The largest one-year decrease during the same period for coastal anglers occurred between 2007 and 2008, decreasing 13%, from 12 million anglers to 11 million anglers.

Fishing trips

- In the United States, an average of <u>81 million fishing</u> trips were taken annually from 2001 to 2010.
- Private or rental boat and shore-based fishing trips accounted for <u>39 million</u> and <u>33 million</u> fishing trips, respectively in <u>2010</u>. Together, these made up <u>99.5%</u> of the fishing trips taken in that year.
- The largest increase in number of total trips taken annually over the 10 year time period occurred between 2002 and 2003, increasing 10%, from 73 million trips to 81 million trips.
- The largest one-year decrease in total trips taken during this period in total trips taken occurred between 2001 and 2002, decreasing 15%, from 86 million trips to 73 million trips.

Harvest and release

- <u>Seatrout</u> was the most commonly caught key species or species group, <u>averaging 43 million fish caught over</u> the 10 year time period. Of these, <u>60% were released</u> rather than harvested.
- Of the eight commonly caught key species or species groups, five were released more often than harvested over this time period. The species or species group that was most commonly released was sharks (95% released).
- Large Atlantic tuna (89% harvested), followed by Pacific halibut (58% harvested), and Atlantic croaker and spot (52% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.
- The largest one-year in the number of fish released was for large Atlantic tuna which increased 257% between 2002 and 2003; the largest one-year change in number of fish harvested occurred in large Atlantic tuna, which increased 108% from 2002 to 2003.

¹Participation estimates do not include Alaska and Texas. Hawai'i is included for 2003-2010; Numbers include the Caribbean.

¹Effort numbers do not include Alaska and Texas. They include Hawai'i only for 2003-2009. California numbers were estimated differently from 2004-2010.

Fishing Trips¹

The total number of fishing trips taken in the U.S. decreased 16% from 2001 to 2010. Relative to 2009, total fishing trips taken in the U.S. decreased 3% with largest decrease occurring in the for-hire mode (10%)

Harvest and Release

Among the ten key U.S. recreational species or species groups, seatrout, Atlantic croaker and spot, summer flounder, and striped bass were the most commonly caught by anglers in 2010. These species or groups were caught in large numbers relative to the other key species or groups: seatrout (39 million fish), Atlantic croaker and spot (29 million fish), summer flounder (24 million fish), and striped bass (8.5 million fish). Anglers fishing in the Mid-Atlantic and New England caught most of the Atlantic croaker, summer flounder, and striped bass in 2010, while most seatrout were caught in the Gulf of Mexico and the South Atlantic.

In the North Pacific Region, salmon (Chinook, chum, coho, pink, and sockeye) and Pacific halibut were the most commonly caught species or group in 2010 with 835,000 fish and 702,000 fish caught, respectively. Albacore and other tunas (2.7 million fish), mackerel (2 million fish), and barracuda, bass and bonito (1.6 million fish) were caught in high numbers in the Pacific Region in max(years), while bigeye and mackerel (840,000 fish) comprised 32% of fish caught by anglers in the Western Pacific in 2010.

Recreational catch of striped bass experienced a 46% decrease between 2001 and 2010, the largest change during this 10 year time period. There were 4 million sharks caught in 2010. Other key species or groups with large changes in recreational catch include: Atlantic croaker and spot (26% decrease), sharks (22% increase), little tunny and Atlantic bonito (18% decrease), and summer flounder (15% decrease).

From 2009 to 2010, decreases occurred in the recreational catch of Atlantic croaker and spot, seatrout, little tunny and Atlantic bonito, Pacific halibut, sharks, striped bass, and summer flounder. Of these, the largest decreases occurred in Atlantic croaker and spot (19%), little tunny and Atlantic bonito (18%), and striped bass (15%). The largest increase observed for this time period was for large Atlantic tuna, which experienced a 8% increase.

Marine Economy²

In 2009, there were 7.4 billion establishments in the U.S, including marine and non-marine related establishments. These establishments employed almost 115 million full- and part-time employees and had a total annual payroll of \$4.9 trillion. From 2001 to 2009, the number of establishments increased 4.8%, employee numbers decreased 0.48%, and total annual payroll increased 22% (a 1.8% decrease in real terms) nationwide. More modest changes were seen from 2008 to 2009: 2.2% decrease, 5.3% decrease, and 5.4% decrease (a 5% decrease in real terms), respectively.

The nation's gross domestic product was \$14 trillion in 2009, a 37% increase (a 11% increase in real terms) relative to 2001 levels (\$10 trillion) and a 1.8% decrease (a 1.4% decrease in real terms) relative to 2008 levels (\$14.3 trillion). Employee compensation in 2009 was \$7.8 trillion, a 31% increase (5.3% increase in real terms) relative to 2001.

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

Seafood Sales and Processing

In 2009, there were 1,383 nonemployer firms engaged in seafood product preparation and packaging, a 77% increase from 2001 levels. Annual receipts increased 53% (23% increase in real terms) from \$60 million (2001) to \$92 million (2009). More of these firms were located in Florida (216 firms) than any other state.

In contrast to nonemployer firms, the number of employer establishments decreased 22% from 823 in 2001 to 645 in 2009. These firms employed approximately 31,000 full- and part-time employees in 2009 and had a total annual payroll of \$1.1 billion. Relative to 2001 levels, this was an 22% decrease in workers but a 3.2% increase (a 17% decrease in real terms) in annual payroll. More of these establishments were located in Alaska (121 establishments) and Washington (86 establishments) than any other states.

There were over 2,000 employer establishments involved in seafood wholesale activities in 2009. Most of these establishments were in California (289 firms), New York (246 firms), and Florida (215 firms). These establishments employed 19,290 workers and had an annual payroll of \$758 million. From 2001 to 2009, the number of establishments in the seafood wholesale sector decreased 30%, the number of employees decreased 32%, and the annual payroll decreased 14% (a 31% decrease in real terms).

Nonemployer firms and employer establishments engaged in seafood retail activities both saw increasing trends from 2001 to 2009. There was a 14% increase in firms (2,407 in 2009) and a 1.4% increase in establishments (1,967 in 2009). Annual receipts for nonemployer firms totaled \$198 million in 2009, a 4.1% increase (16% decrease in real terms) relative to 2001 levels.

Annual payroll for employer establishments totaled over \$211 million, a 41% increase (14% increase in real terms) relative to 2001 levels. Approximately 9,439 full- and part-time workers were employed by the 1,967 establishments in 2009, a 5% increase and a 1.4% increase, respectively from 2001. The employer establishments for retail seafood sales were primarily located in

 $^{^{2}}$ Information for 2009 is reported in this section; 2010 data were not available for this report.

New York (386 establishments), Florida (158), and California (153), while most non-employer firms were located in Florida (308), California (200), and Texas (195).

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 2009, there were almost 3,900

marina industries that employed 27,000 full- and part-time workers. Compared to 2001 levels, this was a 5.6% decrease in establishment numbers and a 8% increase in number of employees.

Annual payroll for this industry was \$905 million in 2009, a 34% increase (8.3% increase in real terms) over 2001 levels. Most of these marina industries were located in Florida (428 industries), New York (418), and California (276).

Commercial Fisheries

2010 Economic Impacts of the United States Seafood Industry (thousands of dollars) United States

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		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	1,196,683	133,135,986	55,434,189	674,351	44,684,612	23,213,260		
Commercial Harvesters	159,739	11,976,461	6,203,217	159,490	11,956,780	6,193,378		
Seafood Processors & Dealers	210,689	28,836,597	12,650,910	51,291	7,020,150	3,079,812		
Importers	202,859	55,802,169	17,010,944	0	0	0		
Seafood Wholesalers & Distributors	55,043	7,464,995	3,509,979	23,904	3,241,952	1,524,339		
Retail	568,354	29,055,764	16,059,138	439,666	22,465,730	12,415,732		

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	3,249,399	3,164,209	3,346,066	3,769,942	3,952,692	4,041,780	4,199,303	4,399,402	3,894,864	4,511,171
Finfish & other	1,513,585	1,374,489	1,518,330	1,777,802	1,860,060	1,950,757	2,067,978	2,254,706	1,880,494	2,179,596
Shellfish	1,735,814	1,789,720	1,827,736	1,992,140	2,092,632	2,091,023	2,131,325	2,144,696	2,014,370	2,331,575
American lobster	249,510	293,894	283,516	374,306	415,415	395,150	354,993	326,754	303,321	396,746
Blue crab	158,220	146,974	153,685	145,905	140,818	126,043	148,788	162,660	166,585	215,752
Menhaden	104,791	81,607	71,988	75,045	62,520	69,683	92,725	88,767	98,192	107,184
Pacific halibut	115,365	136,789	172,846	176,893	177,599	202,163	227,348	217,722	140,613	207,233
Pacific salmon	209,441	156,194	198,946	302,775	330,816	310,865	381,589	395,253	369,749	554,797
Sablefish	84,410	77,637	103,069	99,217	101,751	108,900	106,298	121,745	124,180	131,426
Sea scallop	172,583	202,092	229,097	320,039	432,514	384,758	386,025	369,896	376,351	455,088
Shrimp	578,208	523,882	441,622	446,043	412,718	454,610	433,281	448,979	358,810	416,647
Tunas	94,091	85,473	86,818	89,952	86,358	86,760	93,887	107,040	96,155	108,237
Walleye pollock	230,636	203,263	203,018	271,612	306,906	329,879	297,460	323,212	270,595	282,399

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

				•	• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	9,511,792	9,436,477	9,505,337	9,688,745	9,712,427	9,484,055	9,302,374	8,352,370	8,034,206	8,224,552
Finfish & other	8,348,260	8,232,370	8,367,711	8,516,634	8,630,877	8,303,972	8,232,674	7,297,538	6,799,099	6,944,662
Shellfish	1,163,532	1,204,107	1,137,626	1,172,111	1,081,550	1,180,083	1,069,700	1,054,832	1,235,107	1,279,890
American lobster	71,193	83,087	71,683	90,073	87,809	92,609	78,368	88,087	98,216	115,429
Blue crab	159,004	175,574	170,890	174,561	159,242	166,133	151,175	157,391	175,351	184,986
Menhaden	1,739,963	1,755,398	1,590,510	1,495,240	1,243,807	1,304,250	1,483,785	1,310,164	1,571,204	1,471,712
Pacific halibut	77,147	80,977	78,862	79,181	76,264	71,897	69,967	66,996	59,812	56,460
Pacific salmon	717,762	561,489	669,998	738,746	899,759	663,567	886,054	659,196	705,064	787,712
Sablefish	44,080	40,734	47,998	52,851	51,296	46,825	43,881	43,281	43,073	40,303
Sea scallop	46,414	52,672	55,968	64,108	56,626	59,013	58,573	53,541	58,001	57,454
Shrimp	346,288	345,249	324,170	316,566	264,163	337,012	281,944	257,712	289,010	260,104
Tunas	51,783	49,632	61,762	56,323	44,252	49,923	50,651	47,910	49,087	47,991
Walleye pollock	3,178,821	3,333,647	3,361,261	3,353,236	3,410,065	3,400,810	3,066,600	2,276,144	1,866,171	1,947,578

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	3.50	3.54	3.96	4.16	4.73	4.27	4.53	3.71	3.09	3.44
Blue crab	1.00	0.84	0.90	0.84	0.88	0.76	0.98	1.03	0.95	1.17
Menhaden	0.06	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.06	0.07
Pacific halibut	1.50	1.69	2.19	2.23	2.33	2.81	3.25	3.25	2.35	3.67
Pacific salmon	0.29	0.28	0.30	0.41	0.37	0.47	0.43	0.60	0.52	0.70
Sablefish	1.91	1.91	2.15	1.88	1.98	2.33	2.42	2.81	2.88	3.26
Sea scallop	3.72	3.84	4.09	4.99	7.64	6.52	6.59	6.91	6.49	7.92
Shrimp	1.67	1.52	1.36	1.41	1.56	1.35	1.54	1.74	1.24	1.60
Tunas	1.82	1.72	1.41	1.60	1.95	1.74	1.85	2.23	1.96	2.26
Walleye pollock	0.07	0.06	0.06	0.08	0.09	0.10	0.10	0.14	0.15	0.15

United States

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditu	res (thousand	s of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	14,319	1,593,011	504,805	864,684
Private Boat	31,293	4,259,522	1,258,526	2,166,542
Shore	34,566	4,223,983	1,292,669	2,196,818
Total Durable Equipment Impacts	246,010	39,755,826	11,514,210	17,942,888
Total State Trip and Durable Equipment Economic Impacts	326,187	49,832,341	14,570,210	23,170,932

2010 Angler Trip & Durable Expenditures (thousands of dollars)¹

Fishing Mode	Trip Exper	nditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	2,455,150
For-Hire	NA	634,765	Other Equipment	809,975
Private Boat	NA	1,881,525	Boat Expenses	4,156,900
Shore	NA	1,781,672	Vehicle Expenses	3,926,707
total	NA	4,297,962	Second Home Expenses	3,483,060
			Total Durable Equipment Expenditures	14,831,792
Total State Trip and	Durable Equipment Exp	enditures	•	19,129,754

Recreational Anglers by Residential Area (thousands of anglers)²

0			•		U ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	9,933	8,608	10,434	10,199	11,330	11,644	12,389	10,725	9,408	9,557
Non-Coastal	1,451	1,372	1,562	1,579	1,492	1,685	1,616	1,591	1,747	1,502
Total Anglers	11,383	9,981	11,996	11,779	12,822	13,329	14,005	12,316	11,155	11,059

Recreational Fishing Effort by Mode (thousands of angler-trips)²

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	3,566	5,629	5,386	5,927	6,085	3,805	6,453	5,508	5,798	5,220
Private Boat	43,610	40,599	46,422	43,632	43,828	43,151	49,458	46,025	39,789	39,465
Shore	38,752	32,321	33,689	37,452	37,547	41,073	40,367	34,948	34,431	32,935
Total Trips	86,397	73,388	80,944	81,912	82,580	88,497	91,118	81,928	74,919	72,740

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Drum (Atlantic	Н	22,219	17,837	20,879	20,488	21,331	23,179	28,003	23,172	16,879	13,400
croaker and spot)	R	17,515	16,432	18,199	16,669	21,109	20,421	23,195	23,416	19,346	15,847
Drum (seatrouts)	Н	16,304	13,940	15,227	16,058	15,801	21,910	17,847	20,122	19,453	16,004
Drum (seatrouts)	R	19,674	22,458	25,552	25,558	29,315	31,056	29,946	30,582	24,930	23,212
Little tunny &	Н	330	323	254	364	203	311	320	210	267	199
Atlantic bonito 4	R	685	1,025	865	1,049	567	829	1,141	817	746	633
Pacific halibut	Н	366	351	403	483	500	463	585	516	440	398
	R	254	233	290	369	380	353	438	359	321	304
Pacific salmon	Н	1,757	1,321	1,626	1,569	1,481	873	1,286	722	1,574	NA
	R	770	692	881	1,010	844	513	710	375	659	NA
Rockfishes &	Н	3,358	2,856	3,742	2,593	3,617	2,677	2,454	2,068	2,199	NA
scorpionfishes	R	923	1,065	1,796	977	1,347	895	691	636	836	NA
$Sharks^5$	Н	278	156	171	154	184	132	191	116	129	142
Jildiks	R	3,031	2,078	2,799	2,809	3,616	3,470	4,299	4,086	4,019	3,897
Striped bass	Н	2,082	1,898	2,580	2,560	2,392	2,706	2,224	2,077	1,971	1,972
Striped bass	R	13,666	13,975	14,997	17,527	19,084	25,956	16,938	11,947	7,928	6,483
Summer flounder	Н	5,307	3,281	4,578	4,653	4,110	4,227	3,397	2,312	1,930	1,495
Jummer nounder	R	22,895	13,418	15,978	16,338	22,886	18,061	19,791	22,207	23,352	22,441
Tunas (large	Н	646	428	890	810	718	657	676	777	509	578
Atlantic species) ⁶	R	44	31	112	112	113	99	100	72	69	48

 $^1\mathsf{AII}$ anglers reported in this table are U.S. residents; $\mathsf{NA}=\mathsf{not}$ applicable

²Information was included for all states but Alaska and Texas. Most information was provided by the Marine Recreational Information Program (MRIP). Pacific data were provided by the Pacific states and Hawaii data were not included from 2000 to 2002.

³This table excludes all Texas data and Hawaii data for 2002.

⁵Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

⁶Includes all tunas in the thunnus family.

⁴This species may not be equivalent to species with similar names listed in the commercial tables.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	7,095,302	115,061,184	3,989,086	5,969,227	10,218,019	1
2009	7,433,465	114,509,626	4,855,545	7,792,622	14,014,849	1
% change	4.77%	-0.479%	21.7%	30.5%	37.2%	

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	780	903	1,038	1,110	1,080	1,142	1,303	1,308	1,383
prep. & packaging	Receipts	60,417	55,750	70,071	81,871	78,745	80,066	88,230	89,670	92,358
Seafood Sales,	Firms	2,119	2,210	2,346	2,260	2,098	2,089	2,610	2,522	2,407
retail	Receipts	190,629	199,937	210,231	210,450	203,951	211,186	231,776	233,002	198,495

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

						,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	823	754	764	734	717	670	685	663	645
prep. & packaging	Employees	39,855	38,663	39,580	38,102	37,684	35,894	33,169	33,323	30,894
prep. & packaging	Payroll	1,057,737	1,092,500	1,177,582	1,151,780	1,180,396	1,205,890	1,196,086	1,161,637	1,091,727
Seafood sales,	Establishments	2,980	2,883	2,456	2,330	2,314	2,222	2,438	2,063	2,099
wholesale	Employees	28,405	26,719	23,091	22,501	22,666	22,013	24,232	20,116	19,290
WIIOlesale	Payroll	882,232	895,718	743,479	771,749	781,459	826,720	924,654	782,178	758,332
Saafaad salas	Establishments	1,940	2,238	2,125	2,151	2,155	2,115	2,094	2,044	1,967
Seafood sales, retail	Employees	8,990	9,771	10,346	10,714	10,381	10,545	10,380	9,732	9,439
	Payroll	149,310	167,634	186,087	192,187	194,602	200,971	209,404	205,423	211,264

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	544	520	606	579	610	579	573	513	513
Lakes freight	Employees	24,126	20,149	22,449	21,928	21,025	22,172	22,568	21,019	20,919
transportation	Payroll	1,188,800	1,096,771	1,183,071	1,179,549	1,232,342	1,376,033	1,552,467	1,694,613	1,470,159
Deep sea freight	Establishments	456	471	472	435	465	456	427	365	376
transportation	Employees	11,964	12,916	12,175	11,314	11,357	11,473	11,308	10,231	11,180
transportation	Payroll	697,266	784,149	734,781	735,804	801,863	825,752	855,683	852,063	863,363
	Establishments	4,121	4,021	4,150	4,092	4,143	4,025	4,085	3,972	3,891
Marinas	Employees	24,660	23,047	27,928	28,100	27,511	28,339	28,788	28,686	26,643
	Payroll	674,576	675,529	773,538	814,821	839,848	894,097	945,355	954,032	905,488
Marine cargo	Establishments	612	595	542	551	549	540	552	532	541
handling	Employees	50,273	50,428	50,644	58,618	59,670	61,905	62,941	63,736	56,386
nanding	Payroll	2,249,516	2,425,187	2,422,537	2,899,703	3,034,672	3,261,953	3,428,126	3,272,723	2,776,791
Navigational	Establishments	830	828	782	804	803	802	830	868	846
services to shipping	Employees	11,957	11,224	11,795	11,881	10,819	12,043	12,997	13,419	12,689
services to simpping	Payroll	507,806	509,953	629,541	591,510	584,689	699,375	756,552	847,938	826,384
Port & harbor	Establishments	201	212	223	234	244	229	223	268	258
operations	Employees	7,304	6,304	6,413	6,888	7,453	7,002	6,573	5,608	5,100
operations	Payroll	254,864	245,979	279,970	300,692	319,338	323,554	318,608	282,671	250,358
Ship & heat	Establishments	1,815	1,736	1,739	1,793	1,799	1,764	1,771	1,782	1,615
Ship & boat building	Employees	138,962	131,292	133,395	137,633	141,620	142,057	148,864	157,512	137,759
building	Payroll	5,094,086	5,111,708	5,119,596	5,499,783	5,654,818	5,877,830	6,405,570	7,269,306	6,674,187

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

North Pacific

- Alaska



Management Context

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

North Pacific Fishery Management Plans

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

Of the stocks or stock complexes covered in these fishery management plans, none are currently listed as overfished. No stocks in this region are currently subject to overfishing. The North Pacific Region has seven catch share programs, more than any other region. These are the: 1) Western Alaska community development quota program; 2) Pacific halibut and sablefish individual fishing quota program; 3) Bering Sea pollock cooperative; 4) Alaska weathervane scallop cooperative; 5) Bering Sea king and tanner crab (Crab Rationalization) program that includes both an individual fishing quota program and a fishing cooperative; 6) Central Gulf of Alaska rockfish pilot sector program; and 7) Bering Sea groundfish (non-pollock) cooperative. The landings revenues for these programs totaled over \$650 million in 2009, which exceeds the total landings revenue of any other state.

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

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

2010, 180 million pounds of pollock were caught under the BSAI CDQ program, with a value of approximately \$57 million.

Commercial Fisheries

North Pacific fishermen earned over \$1.6 billion from their commercial harvest (4.3 billion pounds) in 2010. Landings revenue was dominated by salmon (\$506 million), walleye pollock (\$282 million), Pacific halibut (\$200 million), and crab (\$190 million). Walleye pollock contributed the most to landings in 2010, accounting for 46% of total landings (1.9 billion pounds) and 18% of landings revenue, with an average annual price of \$0.15 per pound. In contrast, salmon accounted for 18% of total landings (757 million pounds) and generated 32% of landings revenue, with an average annual price of \$0.67 per pound in 2010.

The North Pacific groundfish fishery is different from most other fisheries in the nation in that a large portion of the fishery is processed at sea and, therefore, no landings revenues are reported. The landings revenue for the species landed and processed at sea are estimated by using prices obtained from the shore-side sector. These species include Pacific cod, flatfish, atka mackerel, walleye pollock, rockfish, and sablefish. When data from the shore-side sector are inadequate, historical information about the relationship between the ex-vessel price and the wholesale price of finished products is used to estimate ex-vessel prices and revenue for portions of the fishery mostly processed at sea.

Economic Impacts¹

Alaska's seafood industry generated \$3.9 billion in sales impacts, \$1.7 billion in income impacts, and over 54,000 jobs in 2010. Seafood processing and dealer operations contributed 26% to in-state sales for Alaskan businesses, with over \$1 billion generated in 2010. The commercial harvester sector generated more impacts than any other sector with approximately 70% of total impacts. The importer sector consisted of less than one percent of the total impacts for the state in 2010.

Key North Pacific Commercial Species

- Atka mackerel
- Pacific cod

Pacific halibut

- Crab
- Flatfish
- Salmon

Rockfish

Sablefish

Walleye pollock

Pacific herring

Landings Revenue

In 2010, landings revenue for finfish and shellfish totaled over \$1.6 billion, a 77% increase from total revenue generated in 2001. When adjusting for inflation, real landings revenue increased 37%. Landings revenue in 2010 was a 22% increase relative to 2009 (\$1.3 billion). Finfish and other catch contributed more than shellfish to the 2010 total, accounting for 87% or \$1.4 billion. This was a 78% increase (38% increase in real terms) from 2001 finfish revenue totals. Similarly, shellfish revenues increased 65% (28% increase in real terms) from \$122 million in 2001 to \$202

¹The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

million in 2010. The largest changes in landings revenue between 2001 and 2010 were for Atka mackerel (1510% increase), salmon (168% increase), and flatfish (157% increase).

Commercial Fisheries Facts

Landings revenue

- On average, the key species or species groups account for <u>99% of total revenue</u>, (\$1.6 billion) generated in the North Pacific Region.
- <u>Salmon</u> contributed more than any other species or species group, averaging \$288 million in landings revenue from 2001 to 2010.
- Atka mackerel had the largest one-year increase in landings revenue over the 10 year time period, increasing 257% from \$3 million in 2003 to \$11 million in 2004.
- Pacific cod had the largest decrease in landings revenue over the 10 year time period, decreasing 54% from \$276 million in 2008 to \$126 million in 2009.

Landings

- Key species or species groups contributed an average of 99% annually to total landings between 2001 and 2010.
- Walleye pollock, contributed the most to landings in the region, averaging 2.9 billion pounds from 2001 to 2010.
- Flatfish had the largest one-year increase in landings over the 10 year time period, increasing 42% from 423 million pounds in 2007 to 599 million pounds in 2008.
- Atka mackerel had the largest one-year decrease in landings over the 10 year time period, decreasing 34% from 126 million pounds in 2001 to 83 million pounds in 2002.

Prices

- Sablefish had the highest average annual ex-vessel price per pound (\$2.62) over the time period, followed by Pacific halibut (\$2.50), and crab (\$2.40).
- Walleye pollock had the lowest average annual ex-vessel price per pound (\$0.10) over the time period, followed by Atka mackerel (\$0.10), and flatfish (\$0.16).
- The largest annual increase in ex-vessel price during the 10 year period was for Atka mackerel had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 228% from \$0.03 per pound in 2003 to \$0.10 in 2004.
- Pacific cod had the largest decrease in ex-vessel price over the 10 year time period, decreasing 54% from \$0.56 per pound in 2008 to \$0.26 in 2009.

Landings

In 2010, North Pacific commercial fishermen landed 4.3 billion pounds of finfish and shellfish, a 14% decrease from 2001 totals. Finfish and catch other than shellfish accounted for 98% of this total (4.2 billion) and decreased 15% from 2001 (4.9 billion pounds) and increased 7.2% from 2009 (3.9 billion pounds). Shellfish landings in 2010 increased 66% from 51 million pounds in 2001 to 85 million pounds in 2010. Between 2009 and 2010,

shellfish landings decreased 11%. Overall, an average of 5 billion pounds were landed annually in the North Pacific from 2001 to 2010, ranging from a low of 4 billion pounds (2009) to a high of 5.6 billion pounds (2005).

In terms of key species or species groups, walleye pollock landings contributed the most to landings during the 10 year period, accounting for 46% of total landings in 2010 (1.9 billion pounds). Landings of salmon (757 million pounds), flatfish (564 million pounds), and Pacific cod (539 million pounds) also significantly contributed to the total landings.

Relative to 2001, landings of flatfish, crab, and Pacific herring in 2010 increased more than any other key species or group, increasing 119%, 69.3%, and 27.6% respectively. In contrast, the largest decreases between 2001 and 2010 were experienced by walleye pollock (39%) and Pacific halibut (26%).

Prices

In all, 2010 ex-vessel prices per pound for seven of the key species and species groups were above their average annual price for the 10 year time period. When comparing 2010 ex-vessel prices to those in 2001 the largest changes occurred in Atka mackerel (1295% increase, 980% increase in real terms), Pacific halibut (149% increase, 93% increase in real terms), salmon (143% increase, 88% increase in real terms), and walleye pollock (100% increase, 55% increase in real terms). Relative to ex-vessel prices in 2009 the largest changes in the ex-vessel values were for Pacific halibut (57% increase, 50% increase in real terms), Pacific herring (37% decrease, 39% decrease in real terms), salmon (30% increase, 25% increase in real terms), and crab (18% increase, 13% increase in real terms),

Recreational Fisheries

Recreational fishermen spent approximately 811,000 days fishing in Alaska in 2010. These anglers numbered over 281,000, with 57% of them non-residents. Pacific halibut was the most caught species or species group, with approximately 702,000 harvested or released in 2010. Coho salmon and rockfish were also caught in large numbers, with 424,000 and 375,000 caught, respectively. Together, these three species accounted for 64% of total catch by anglers in the North Pacific Region.

Economic Impacts and Expenditures¹

In 2010, approximately 5,300 jobs in the North Pacific were generated by recreational fishing activities and over \$405 million was spent by anglers who fished in the region. Most of these employment impacts were generated by industries that provided services to anglers who fished from a for-hire boat (2,500 jobs) or a private boat (1,200). These fishing trip modes also generated the most in trip-related expenditures: \$131 million for for-hire fishing trips (59% of total trip expenditures) and \$80 million for private boat trips (36% of total trip expenditures). Over 79% of total trip-related expenditures in Alaska came from non-resident anglers.

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

Key North Pacific Recreational Species

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

In addition to jobs generated by recreational fishing activities, other economic impacts include sales impacts and the contribution of recreational fishing activities to gross domestic product (value added impacts). For-hire fishing trips generated \$198 million in sales (60% of total trip-related sales) and \$110 million in value added impacts (61% of total trip-related value added impacts) in 2010. Private boat trips contributed \$112 million in sales (34%) and \$61 million (34%) in value added impacts. Shore-based fishing trips contributed \$17 million in trip-related sales (5.3%) and \$9.4 million in trip-related value added impacts (5.2%).

Anglers spent almost \$182 million on durable equipment in 2010, contributing 45% to total expenditures in the region (trip and durable equipment combined). Most of this was spent on boat expenses (\$56 million). Expenditures related to vehicles were \$32 million; second home expenses, \$30.1 million; other equipment, \$31.3 million; and fishing tackle, \$33 million.

Economic impacts from durable equipment expenditures in 2010 include over 1,400 jobs, \$138 million in sales impacts, and \$94 million in value added impacts. These impacts represented 27% of the employment impacts, 30% of the sales impacts, 38% of the income impacts, and 34% of the value added impacts generated by recreational fishing activities.

Participation

In 2010, there were 281,000 recreational saltwater anglers who fished in Alaska. This was an 0.7% decrease from 2001 (283,000 anglers) and a 1.2% decrease from 2009 (284,000 anglers). Recreational fishermen in Alaska are categorized as either a resident of Alaska or a non-resident. In 2010, non-resident anglers made up 57% of total anglers (159,000 anglers). There was no change in number of anglers from 2001 and a 0.8% increase from 2009 (158,000 anglers). In terms of resident anglers, there were 122,000 resident anglers who fished in the North Pacific Region in 2010, which was a 1.5% increase from 2001 and a 3.7% decrease from 2009.

Days Fished¹

Anglers who fished in Alaska spent approximately 811,000 days fishing in 2010. This was a 8.8% decrease from the 889,000 days spent fishing in 2001. From 2009 to 2010, there was a 11% decrease in the number of days fished (914,000 days) in 2009.

Harvest and Release

Of Alaska's key species and species groups, Pacific halibut, coho salmon, and rockfish were most frequently caught by recreational

fishermen. In 2010, 702,000 Pacific halibut, 424,000 coho salmon, and 375,000 rockfish were caught by anglers in Alaska. Razor clam (100% harvested), sockeye salmon (83%), and coho salmon (83%) were more often harvested than released, while chum salmon were more often released (63% released).

Recreational Fish Facts

Participation

- An average of <u>304,000 anglers</u> fished in North Pacific annually between 2001 to 2010.
- In 2010, residents made up <u>43% of total anglers</u> in this region and averaged 41% of total anglers annually over the 10 year time period.
- The largest annual increase in anglers was a 14% increase in Alaska resident anglers from 2002 to 2003.
- The largest annual decrease in anglers was a 17% decrease in the number of non-resident anglers from 2008 to 2009.

Fishing trips

- On average, recreational fishermen spent an average of $\frac{933,000 \text{ days fishing}}{2010.}$ annually in Alaska from 2001 to $\frac{2010.}{2010.}$
- The largest annual increase in total days fished was 16% from 868,000 days in 2003 to 1 million in 2004.
- The largest annual decrease in total days fished was an $\frac{11\%}{\text{decrease}}$ from 914,000 days in 2009 to 811,000 days in 2010.

Harvest and release

- Pacific halibut was the most commonly caught key species or species group, <u>averaging 780,000 fish caught</u> over the 10 year time period. Of these, <u>42% were</u> released rather than harvested.
- Of the nine commonly caught key species or species groups, four were released more often than harvested over this time period. The species or species group that was most commonly released was chum salmon (68% released on average).
- Sockeye salmon had the largest annual increase in catch, increasing 91% from 2006 to 2007. Pink salmon had the largest annual decrease in catch, decreasing 53% from 2005 to 2006.

Between 2001 and 2010, three of the North Pacific's key species or groups experienced increases in catch totals. Those with the largest increases include: rockfish (48%), greenlings (lingcod) (26%), and Pacific halibut (13%). Over the same time period, decreases were experienced by sockeye salmon (11%) and chinook salmon (26%).

In the short term, the only increase in catch was experienced by rockfish from 2009 to 2010. Decreases over the same time period occurred in eight species or species groups, the largest of which were experienced by chum salmon (47%) and pink salmon (40%). The dramatic changes in pink salmon catch between 2009 and 2010 can at least be partially attributed to the biannual biological cycle.

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

Marine Economy¹

In Alaska, approximately 253,000 full- and part-time employees were employed by 20,000 establishments in 2009. Annual payroll totaled \$12 billion, employee compensation totaled \$22 billion and gross state product totaled \$46 billion. Between 2003 and 2009 the CFLQ for Alaska experienced a 12% increase.

Seafood Sales and Processing

The number of nonemployer firms, businesses that have no paid employees and are subject to federal income tax, engaged in seafood product preparation and packaging increased 19% from

27 firms in 2001 to 32 firms in 2009. Despite this, annual receipts decreased 6.4% to \$1.7 million in 2009 (a 25% decrease in real terms).

Transport, Support, and Marine Operations

Data were largely unavailable for industries in this sector. When looking at available data, coastal and Great Lakes freight transportation had the highest number of establishments with 50 establishments in 2009. This was a 85% increase relative to 2001 totals.

¹Information for 2009 is reported in this section; 2010 data were not available for this report.

Commercial Fisheries

2010 Economic Impacts of the Alaska Seafood Industry (thousands of dollars)

·		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	54,007	3,919,220	2,090,223	53,685	3,890,592	2,075,681		
Commercial Harvesters	38,162	2,736,209	1,451,149	38,162	2,736,209	1,451,149		
Seafood Processors & Dealers	12,532	1,006,527	544,577	12,231	982,344	531,484		
Importers	14	3,975	1,212	0	0	0		
Seafood Wholesalers & Distributors	366	38,238	17,096	364	37,962	16,973		
Retail	2,932	134,272	76,189	2,928	134,077	76,075		

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	893,366	844,763	1,024,783	1,160,390	1,259,954	1,325,699	1,470,878	1,677,403	1,298,760	1,578,289
Finfish & other	771,223	698,310	850,340	994,984	1,100,569	1,201,732	1,290,032	1,425,765	1,105,526	1,376,429
Shellfish	122,143	146,453	174,443	165,406	159,385	123,967	180,846	251,638	193,234	201,860
Atka mackerel	1,710	2,525	3,022	10,795	14,893	15,703	14,253	19,523	26,732	27,523
Pacific cod	122,311	107,188	160,186	140,449	148,345	210,355	226,291	275,518	125,549	138,257
Crab	115,669	139,828	165,834	153,430	146,131	110,572	168,195	240,747	180,264	189,553
Flatfish	34,091	40,665	40,838	42,588	64,537	72,987	78,206	102,142	72,591	87,542
Pacific halibut	109,053	128,922	165,906	168,658	170,075	192,905	217,399	208,983	134,603	200,454
Pacific herring	10,385	9,139	8,930	14,029	13,429	7,455	14,817	22,912	29,294	23,026
Rockfish	6,472	6,461	7,968	6,582	5,663	7,237	7,082	7,854	7,599	9,099
Sablefish	66,235	65,314	84,252	81,987	81,385	85,909	85,314	94,466	89,699	95,492
Salmon	188,496	129,902	168,093	255,000	293,562	276,513	347,625	368,218	344,655	505,693
Walleye pollock	230,636	203,263	203,018	271,612	306,906	329,879	297,460	323,212	270,595	282,399

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

			• /	•	• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Landings	4,997,842	5,019,820	5,276,714	5,306,169	5,610,287	5,373,068	5,253,154	4,470,159	4,005,763	4,276,050
Finfish & other	4,947,073	4,957,262	5,214,835	5,247,370	5,545,864	5,299,177	5,177,133	4,365,656	3,911,124	4,191,522
Shellfish	50,769	62,558	61,879	58,799	64,423	73,891	76,021	104,503	94,639	84,528
Atka mackerel	125,874	83,244	99,542	108,423	129,482	130,814	126,961	127,029	156,887	145,206
Pacific cod	470,777	509,574	568,660	583,747	547,849	520,955	488,491	494,012	490,595	538,774
Crab	47,192	57,879	56,956	52,434	57,310	69,002	70,700	99,445	89,532	79,875
Flatfish	257,094	284,767	290,926	270,675	341,699	383,194	423,336	599,457	506,384	564,172
Pacific halibut	74,380	77,939	76,616	76,558	73,922	69,154	67,242	64,639	57,749	54,857
Pacific herring	84,754	69,858	68,984	70,893	85,701	79,845	67,137	83,787	86,951	108,116
Rockfish	23,174	22,907	26,465	23,197	22,694	23,308	24,424	25,725	24,974	28,626
Sablefish	31,319	32,057	35,794	39,946	37,554	33,107	32,251	30,303	27,251	25,261
Salmon	686,389	523,057	630,527	697,897	872,318	634,227	861,254	640,070	671,181	756,826
Walleye pollock	3,178,821	3,333,647	3,361,261	3,353,236	3,410,065	3,400,810	3,066,600	2,276,144	1,866,171	1,947,578

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atka mackerel	0.01	0.03	0.03	0.10	0.12	0.12	0.11	0.15	0.17	0.19
Pacific cod	0.26	0.21	0.28	0.24	0.27	0.40	0.46	0.56	0.26	0.26
Crab	2.45	2.42	2.91	2.93	2.55	1.60	2.38	2.42	2.01	2.37
Flatfish	0.13	0.14	0.14	0.16	0.19	0.19	0.18	0.17	0.14	0.16
Pacific halibut	1.47	1.65	2.17	2.20	2.30	2.79	3.23	3.23	2.33	3.65
Pacific herring	0.12	0.13	0.13	0.20	0.16	0.09	0.22	0.27	0.34	0.21
Rockfish	0.28	0.28	0.30	0.28	0.25	0.31	0.29	0.31	0.30	0.32
Sablefish	2.11	2.04	2.35	2.05	2.17	2.59	2.65	3.12	3.29	3.78
Salmon	0.27	0.25	0.27	0.37	0.34	0.44	0.40	0.58	0.51	0.67
Walleye pollock	0.07	0.06	0.06	0.08	0.09	0.10	0.10	0.14	0.15	0.15

Alaska

Recreational Fisheries

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	2,479	198,168	63,533	109,810
Private Boat	1,178	112,371	35,635	60,560
Shore	193	17,314	5,655	9,433
Total Durable Equipment Impacts	1,448	137,563	64,269	93,637
Total State Trip and Durable Equipment Economic Impacts	5,299	465,416	169,091	273,440

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	32,849
For-Hire	120,748	9,927	Other Equipment	31,299
Private Boat	46,586	33,053	Boat Expenses	55,883
Shore	9,579	3,196	Vehicle Expenses	31,656
Total Trip Expenditures	176,914	46,175	Second Home Expenses	30,059
			Total Durable Equipment Expenditures	181,747
Total State Trip and Dura	ble Equipment Exp	enditures	•	404,836

Recreational Anglers by Residential Area (thousands of anglers)

0	5		•		0 /					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Out of State	163	162	170	193	207	197	205	190	158	159
In State	120	113	129	130	127	120	127	119	127	122
Total Anglers	283	275	299	323	334	317	332	309	284	281

Recreational Fishing Effort by Mode (thousands of days)

	-			- /						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Days Fished	889	855	868	1,007	1,054	941	1,052	935	914	811

Harvest (H) and Release (R) of Key Species Species Groups (thousands of fish)^{2,3}

						(
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Chinook salmon	H	89	89	96	110	116	117	110	71	89	78
Chillook saimon	R	105	104	105	124	127	104	110	80	96	66
Chum salmon	H	24	14	23	24	17	14	18	12	22	11
	R	51	31	51	61	42	34	34	28	34	19
Coho salmon	H	537	497	537	560	695	395	506	403	418	350
Collo Sallion	R	154	136	156	193	191	107	122	89	94	74
Greenlings	H	27	20	22	31	38	35	42	37	32	32
(lingcod)	R	30	43	44	52	67	53	70	65	46	39
Pacific halibut	H	366	351	403	483	500	463	585	516	440	398
r acific fialibut	R	254	233	290	369	380	353	438	359	321	304
Pink salmon	H	111	114	111	132	149	65	133	88	117	82
	R	224	194	291	297	343	167	280	151	224	121
Razor clam	H	674	789	590	551	451	483	389	593	556	357
	R	0	0	0	0	0	0	0	0	0	0
Rockfish	H	117	120	118	180	184	173	198	226	209	224
NUCKIISII	R	136	135	132	227	199	165	178	171	149	151
Sockeye salmon	Н	25	24	29	24	27	21	32	29	34	28
SUCKEYE SAIIIIOII	R	13	14	14	10	11	7	21	10	10	6

 $^{^1\}mbox{Data}$ reported in this table is includes saltwater fishing activities only.

 $^{^{2}}$ Information reported in this table is from the Sport Fish Division of the Alaska Department of Fish and Game (ADF&G) and includes saltwater fishing activities only

³In this table, '(1)' = 0-999 fish.

Alaska's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	18,589 (0.26%)	214,297 (0.19%)	8,335 (0.21%)	14,274 (0.27%)	27,747 (0.24%)	ND ²
2009	19,901 (0.27%)	252,882 (0.22%)	12,406 (0.26%)	22,270 (0.33%)	45,861 (0.29%)	5.19
% change	7.06%	18%	48.8%	56%	65.3%	

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	27	25	34	26	17	22	33	31	32
prep. & packaging	Receipts	1,815	2,140	1,864	1,731	1,315	1,055	1,837	1,455	1,699
Seafood Sales,	Firms	10	0	16	0	11	12	12	13	0
retail	Receipts	392	ND^2	625	ND^2	752	649	1,358	1,431	ND^2

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

	0			•		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	105	105	109	113	124	113	114	122	121
prep. & packaging	Employees	ND^2	ND^2	6,493	6,749	6,621	6,866	6,506	7,707	7,572
prep. & packaging	Payroll	ND^2	ND^2	205,702	216,599	235,457	246,067	262,127	254,894	255,403
Seafood sales,	Establishments	71	99	90	93	88	77	68	57	54
wholesale	Employees	235	179	228	187	177	224	167	143	ND^2
Wholesale	Payroll	11,321	10,232	7,103	7,561	7,928	8,509	8,528	8,389	8,445
Seafood sales,	Establishments	9	12	8	6	11	7	7	9	10
retail	Employees	ND^2	37	21	ND^2	22	ND^2	ND^2	37	44
	Payroll	ND^2	1,669	1,340	ND^2	1,175	ND^2	ND^2	1,839	1,824

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

· · · · · · · · · · · · · · · · · · ·						(thousand		,		
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	27	23	30	30	43	46	46	49	50
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	27,357	33,888	33,132
Deen ees fusiont	Establishments	6	10	5	4	5	5	3	3	3
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
D	Establishments	NA^3	NA^3	NA ³	1	1	1	6	1	1
Deep sea passenger transportation	Employees	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	24	22	22	22	22	21	13	14	13
Marinas	Employees	ND^2	101	ND^2	62	71	ND^2	48	66	56
	Payroll	ND^2	3,625	ND^2	2,367	2,612	ND^2	1,763	2,303	2,181
Maulia a saura	Establishments	16	16	15	13	13	11	17	12	13
Marine cargo handling	Employees	1,087	ND^2	621	488	703	503	677	ND^2	ND^2
nanunng	Payroll	28,358	ND^2	20,443	21,078	20,827	22,876	35,345	ND^2	ND^2
Neutrational	Establishments	27	25	28	29	32	31	31	25	23
Navigational services to shipping	Employees	ND^2	271	273	280	318	ND^2	ND^2	296	312
services to simpling	Payroll	ND^2	19,251	20,758	20,676	20,334	ND^2	25,058	23,233	25,630
	Establishments	2	4	2	3	2	2	2	7	8
Port & harbor operations	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Chin P. haat	Establishments	12	12	10	14	14	17	16	17	21
Ship & boat building	Employees	ND^2	ND^2	ND^2	286	ND^2	ND^2	ND^2	ND^2	ND^2
bullullig	Payroll	ND^2	ND^2	ND^2	8,815	ND^2	ND^2	ND^2	ND^2	ND^2

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable

Pacific

- California
- OregonWashington



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 six fishery management plans (FMPs).

Pacific Region Fishery Management Plans

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

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

Salmon management is further complicated by the need to ensure equitable allocation of harvest among diverse user groups and to coordinate with other entities that have jurisdiction over other aspects of salmon management. Decades of habitat modification, hatchery practices, harvest, and growing competition for water have affected the viability of salmon stocks and made them more vulnerable to adverse environmental conditions including the prolonged drought and adverse ocean conditions experienced in recent years. Low returns of salmon to the Klamath River in 2006 and to the Sacramento River in 2008 and 2009 resulted in unprecedented closures of ocean and in-river fisheries and federal disaster relief to affected entities.

Coastal pelagic species (CPS) are highly variable, environmentally sensitive stocks that provide forage for marine mammals, birds, and fish. These species include Pacific sardine, northern anchovy, Pacific and jack mackerel, and market squid. Of these, Pacific sardine is the most commonly targeted CPS finfish and is managed via an innovative harvest control rule whereby allowable harvest varies with sea surface temperature. Because the geographic range of sardine tends to expand with abundance, harvest allocation between California and Pacific Northwest fisheries is an ongoing and dynamic issue.

Catch limits for Pacific halibut, a transboundary fish stock, are set in January by the International Pacific Halibut Commission (IPHC). This bilateral commission between the U.S. and Canada determines total allowable catch levels (TACs) for Pacific halibut that will be caught in the U.S. and Canadian Exclusive Economic Zones (EEZs)¹. Once catch levels are determined, the PFMC

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

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

The annual sardine harvest guideline is allocated coast-wide on a seasonal basis. Recent decreases in harvest guideline limits has contributed to the development of an intense derby fishery.

The Fishery Management Plan for Highly Migratory Species (HMS) includes tunas, billfish and pelagic sharks as manage species. The albacore surface hook-and-line fishery is by far the most economically important commercial HMS fishery, followed by the drift gillnet fishery for swordfish and thresher shark. HMS are also a very important component of the catch for West Coast recreational commercial passenger fishing vessel fleet, and the private recreational boat fishery.

Market-based management tools are used by fishery managers to reduce overcapitalization, increase the economic viability of fisheries, and promote individual accountability for harvest and harvesting practices. Limited access privilege programs (LAPPs) and other catch share programs comprise a category of such tools. LAPPs are used in various sectors of the groundfish fishery. The whiting industry voluntarily instituted the Pacific Whiting Conservation Cooperative in 1997. In 2001, the PFMC implemented the Pacific sablefish permit stacking program, whereby vessels are allowed to stack multiple vessel permits on a single vessel in order to obtain additional trip limits for that vessel. The trawl rationalization program involving individual fishing quotas (IFQs) for non-whiting groundfish and whiting trawlers, and coops for whiting mothership and catcher processor sectors was implemented in January 2011. The shore-based commercial groundfish fishery had an ex-vessel value of \$66.1 million in 2009.

Commercial Fisheries

In 2010, commercial fishermen in the Pacific Region landed roughly 1.1 billion pounds of finfish and shellfish, earning \$554 million in landings revenue. Landings revenue was dominated by crab (\$133 million) and other shellfish (\$129 million). These species groups commanded ex-vessel prices of \$2.15 and \$4.95 per pound, respectively, and comprised 47% of total landings revenue, but only 8.3% of total landings in the Pacific Region.

Washington had the highest landings revenue in the region with \$255 million in 2010, followed by California (\$176 million) and Oregon (\$105 million). In terms of pounds landed, California contributed the most (438 million pounds), followed by Oregon (201 million pounds) and Washington (189 million pounds).

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

Key Pacific Region Commercial Species

- Albacore tuna
 Rockfish
 - Crab
- Flatfish
- Hake
- Shrimp • Squid
- Other shellfish

Sablefish

Salmon

Economic Impacts¹

In 2010, the Pacific Region's seafood industry generated \$20 billion in sales impacts in California, \$1.1 billion in sales impacts in Oregon, and \$7.6 billion in sales impacts in Washington. California also generated the largest income, value added, and employment impacts (\$4.3 billion; \$7.1 billion; 122,000 jobs). The smallest income impacts were generated in Oregon (\$342 million) and the smallest employment impacts were also generated in Oregon (14,000 jobs).

The sector that generated the greatest employment impacts in California was the importers sector (54,000 jobs) followed by the retail sector with 49,000 jobs. In Washington, the retail, seafood processors and dealers, and importers sectors generated the greatest employment impacts, ranging between 15,000 and 21,000 jobs. The retail sector in Oregon generated nearly two times the employment impacts (7,000 jobs) as the commercial harvester sector, which generated the next highest employment impacts in the state (3,700 jobs).

The importers sector contributed more to the total value added impacts than any other single sector in California and Washington. In California, the importers sector generated \$4.6 billion, followed by the retail sector with \$1.5 billion in value added impacts. The commercial harvester sector generated a larger portion (23%) of total state value added impacts in Oregon, than in any other state in the Pacific Region. In Washington, other than the importers sector, the seafood processors and dealers sector contributed the most to value added impacts (25%).

Landings Revenue

Landings revenue in the Pacific Region totaled \$554 million in 2010. This was a 65% increase (a 28% increase in real terms) from 2001 levels (\$336 million) and a 13% increase (a 8.3% increase in real terms) relative to 2009 (\$491 million). Totaling \$351 million in 2010, shellfish revenue experienced a 93% increase (a 50% increase in real terms) from 2001 to 2010 and experienced a 9% increase (4.6% increase in real terms) from 2009 to 2010.

Hake and squid had the highest annual landings in the Pacific Region in 2010, with 355 million pounds and 289 million pounds, respectively. Although they together accounted for 61% of the total landings in the Pacific Region, they only accounted for 18% of the total landings revenue generated in 2010.

Commercial Fisheries Facts

Landings revenue

- On average, between 2001 and 2010, the key species or species groups accounted for <u>91%</u> of total revenue, generating \$409 million in the Pacific Region.
- Crab had higher landings revenues than any other species or species group, averaging \$111 million in landings revenue from 2001 to 2010.
- <u>Shrimp</u> had the largest one-year increase in landings revenue over the 10 year time period, increasing 245% from \$24 million in 2001 to \$83 million in 2002.
- Hake had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 76% from \$58 million in 2008 to \$14 million in 2009.

Landings

- Key species or species groups contributed an average of 73% annually to total landings between 2001 and 2010.
- <u>Hake (whiting)</u>, contributed the most to landings in the region, <u>averaging 417 million pounds</u> from 2001 to 2010.
- Squid had the largest one-year increase in landings over the 10 year time period, increasing 140% from 85 million in 2008 pounds to 204 million pounds in 2009.
- <u>Shrimp</u> had the largest one-year decrease in landings over the 10 year time period, decreasing 52% from 82 million pounds in 2002 to 39 million pounds in 2003.

Prices

- Other shellfish had the highest average annual ex-vessel price per pound (\$3.74) over the time period, followed by crab (\$1.92), and sablefish (\$1.74).
- Hake (whiting) had the lowest average annual ex-vessel price per pound (\$0.06) over the time period, followed by squid (\$0.23), and flatfish (\$0.41).
- Shrimp had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 152% from \$0.40 per pound in 2001 to \$1.01 in 2002.
- <u>Salmon</u> had the largest decrease in ex-vessel price over the 10 year time period, decreasing 48% from \$1.42 per pound in 2008 to \$0.74 in 2009.

Between 2001 and 2010, the greatest changes in landings were experienced by crab (increasing 83%), squid (increasing 52%), and rockfish (decreasing 39%). In the short term, between 2009 and 2010 the largest changes were experienced by squid (increasing 41%), hake (increasing 40%), and shrimp (increasing 38%). In terms of finfish, Washington contributed the most (\$82 million) followed by Oregon (\$59 million), and California (\$44 million). Shellfish landings revenue was also dominated by Washington, which contributed the most (\$173 million) followed by California (\$132 million), and Oregon (\$46 million).

Crab and other shellfish had the highest landings revenue in the Pacific Region in 2010, with \$133 million and \$129 million, respectively. Together they accounted for 47% of the total landings revenue generated in 2010. Between 2001 and 2010, the landings revenue for crab increased 96% and increased 53%

¹The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

Pacific Region

for other shellfish.

From 2001 to 2010, species or species groups with large changes in landings revenue include squid (increased 320%), salmon (increased 137%), and sablefish (increased 98%). Species or species groups with large changes in landings revenue between 2009 and 2010 include salmon (increasing 96%), hake (increasing 94%), and shrimp (increasing 32%).

Between 2008 and 2009, hake experienced a 76% decrease in landings revenue from \$58 million to \$14 million (a 76% decrease in real terms). A major driver of this decrease was the 52% reduction in landings resulting from a forecast of lower stocks and rockfish bycatch restrictions. Other drivers of this decrease in revenue include international economic conditions and the conditions in fisheries which produce product closely related to hake such as walleye pollock.

Landings

Fishermen in the Pacific Region landed 1.1 billion pounds of finfish and shellfish in 2010. This was a 7.8% decrease from the 1.2 billion pounds landed in 2001 but a 19% increase from the 896 million landed in 2009. Finfish landings contributed 61% of total landings in the Pacific Region (651 million pounds) in 2010. From 2009 to 2010, finfish landings experienced a 12% increase. Over the same time period, shellfish landings experienced a 32% increase from 314 million pounds in 2009 to 413 million in 2010 and a 37% increase from 301 million pounds in 2001.

Prices

The ex-vessel prices for the Pacific Region's key species and species groups in 2010 were higher than their 10 year average for seven of the key species (five of the species in real terms). Ex-vessel prices for squid and salmon experienced the biggest increases between 2001 and 2010, increasing 180% (120% in real terms) and 140% (85% in real terms), respectively. Relative to the ex-vessel prices in 2009, the Pacific Region's salmon experienced the greatest increase (116%, 108% in real terms) from \$0.74 in 2009 to \$1.6 in 2010; squid experienced the greatest decrease (11%, 14% in real terms) from \$0.28 to \$0.25.

In California, the species or species group with the largest change in ex-vessel price from 2001 to 2010 was squid (178% increase, 115% increase in real terms) from \$0.09 to \$0.25. The largest change in ex-vessel price experienced in Oregon was for Salmon (150% increase, 94% increase in real terms from \$1.11 to \$2.78 and in Washington the largest change in ex-vessel price was experienced by salmon (230% increase, 155% increase in real terms from \$0.44 to \$1.45).

Recreational Fishing

In 2010, over 1.4 million recreational anglers took 5.6 million fishing trips in the Pacific Region. Over 73% of these anglers were residents of a regional coastal county. Of the total saltwater fishing trips taken, 25% of them were taken from a private or

rental boat and another 66% were shore-based. Rockfishes and scorpionfishes were the most frequently caught species or species group with 2.7 million fish caught in 2010, which represented 24% of total fish caught in the region. Of the rockfishes and scorpionfishes caught, 26% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in the Pacific Region are reported in terms of economic impacts at the state level (employment, sales, income, and value added impacts) and expenditures on fishing trips and durable equipment at the regional level. Employment impacts in California were the highest in the region with over 11,000 full- and part-time employment impacts generated by recreational fishing activities in the state. Washington (3,200 jobs), and Oregon (1,600 jobs) followed in terms of employment impacts generated by recreational fishing activities.

 Albacore and other 	 Mackerel
tunas	 Rockfishes and
 Barracuda, bass 	scorpionfishes
and bonito	Salmon
 Croakers 	 Sculpins
 Flatfishes 	 Surfperches
 Greenlings 	

In addition to employment impacts, the contribution of recreational fishing activities to Pacific Region's economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value added impacts). In 2010, sales impacts were also the highest in California (\$1.7 billion in sales impacts), followed by Washington (\$327 million), and Oregon (\$165 million). In California, shore-based fishing trips had the highest employment impacts relative to the other fishing models; in Oregon and Washington, private boat fishing trips contributed the most to employment impacts.

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) or expenditures on durable equipment. Throughout the Pacific Region, most of the employment impacts in 2010 were generated by expenditures on durable equipment: 70% in Washington, 65% in California, and 38% in Oregon. In the same year value added impacts were the highest in California (\$885 million in value added impacts), followed by Washington (\$176 million), and Oregon (\$91 million).

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

Participation

- An average of 1.7 million anglers fished in Pacific Region annually from 2001 to 2010.
- In 2010, coastal county residents made up 73% of total anglers in this region. These anglers averaged 72% of total anglers annually over the 10 year time period.
- The largest annual increase in the number of coastal anglers during the 10 year time period occurred between 2005 and 2006, increasing 22%, from 1 million anglers to 1.3 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2003 and 2004, decreasing 19%, from 1.4 million anglers to 1.2 million anglers.

Fishing trips

- In the Pacific Region, an average of 6.9 million fishing trips were taken annually from 2001 to 2010.
- Private or rental boat and shore-based fishing trips accounted for <u>1.4 million</u> and <u>3.7 million</u> fishing trips, respectively, in 2010. Together these made up 92% of the fishing trips taken in that year.
- The largest annual increase in the number of total trips taken annually over the 10 year time period occurred between 2008 and 2009, increasing 9.1%, from 5.8 million trips to 6.3 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2003 and 2004, decreasing 20%, from 8.3 million trips to 6.7 million trips.

Harvest and release

- Barracuda, bass and bonito was the most commonly caught key species or species group, <u>averaging 3.6</u> million fish over the 9 year time period. Of these, 67% were released rather than harvested.
- Of the ten commonly caught key species or species groups, <u>six were released more often</u> than harvested over this time period. The species or species group that was most commonly released was <u>sculpins (76% released)</u>.
- Albacore and other tunas (84% harvested), followed by rockfishes and scorpionfishes (76% harvested), and salmon (74% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.

The total saltwater fishing trip and durable equipment expenditures were \$1.8 billion across the Pacific Region in 2010. Approximately 75% of these expenditures were related to durable equipment purchases. The greatest expenditures were for fishing tackle (\$533 million), followed by boat expenses (\$320 million), and other equipment (\$228 million). Fishing trip related expenditures by Pacific Region's non-residents totaled over \$21 million of which the greatest portion can be attributed to for-hire-based fishing trips (\$16 million). Residents of the Pacific Region spent \$439 million on trip-related expenses with the majority of these expenses related to shore trips (\$200 million).

Participation

There were 1.4 million recreational anglers who fished in the Pacific Region in 2010. This was a 29% decrease from 2001 (2 million anglers). These anglers were Pacific Region residents from either a coastal (1 million anglers) or non-coastal county (384,000 anglers). Over 73% of total anglers in 2010 were residents of a coastal county. Coastal county angler participation in 2010 experienced a 30% decrease relative to 2001 (1.5 million anglers) and experienced a 7.8% decrease between 2009 and 2010. Non-coastal county angler participation experienced a 24% decrease relative to 2001 (506,000 anglers) and experienced a 40% decrease relative to 2009 (638,000 anglers).

Fishing Trips

Recreational fishermen took 5.6 million fishing trips in the Pacific Region in 2010. This was a 36% decrease from 2001 (8.8 million trips) and was 682,000 fewer trips than were taken in 2009. Of the total trips taken in the Pacific Region in 2010, approximately 66% of the trips were shore based (3.7 million trips). The other most popular mode of fishing was private or rental boat based with 1.4 million trips in 2010.

Harvest and Release

Harvest and release estimates were not available for the Pacific Region in 2010. In terms of the Pacific Region's key species and species groups, rockfishes and scorpionfishes (2.7 million fish), mackerel (2 million fish), barracuda, bass and bonito (1.6 million fish) and surfperches (1.5 million fish) were the most often caught by anglers in 2009. Sculpins (75.2% released), barracuda, bass and bonito (74.6% released), mackerel (62.7% released), and greenlings (50% released) were the species that were most often released rather than harvested. Anglers harvested more often than released albacore and other tunas (86% harvested), salmon (79.6% harvested) and rockfishes and scorpionfishes (74.3%) harvested). Most of the rockfishes and scorpionfishes in the Pacific region were caught in California while most of the salmon and other tunas were caught in Washington and Oregon. Between 2001 and 2009, ten of the Pacific Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were salmon (9.3%), barracuda, bass and bonito (69%), and flatfishes (65%).

Marine Economy¹

The sum of the gross domestic products by state for California, Oregon, and Washington was \$2.3 trillion in 2009. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$785 billion. These economic measures experienced increases of 40%, 29%, and 20% respectively, between 2001 and 2009, and experienced a 3.1% decrease, a 3.7% decrease, and a 5.6% decrease, respectively between 2008 and 2009. Approximately 1.1 million establishments employed 17 million full- and part-time employees across the region in 2009. This was a 6.7% increase in establishment numbers and a 1.9% decrease in employee numbers from 2001 to 2009. In 2009, California had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the Pacific Region. California's approximately 879,000 establishments employed approximately 14 million employees in 2009. Gross state product

¹Information for 2009 is reported in this section; 2010 data were not available for this report.

Pacific Region

In 2009, the commercial fishing location quotient (CFLQ) for Washington was the highest in the region at 13.54. This was an 8.7% increase from 2001 and a 2.3% increase from 2008. Washington's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 14 times higher than the level of employment in these industries nationwide. The CFLQ 2009 in Oregon was 3.27 (a 3.3% decrease from 2001 and a 12% increase from 2008), while the CFLQ in 2008 in California was 0.74 (a 26% decrease from 2001; and a 4.2% increase from 2008).

Seafood Sales and Processing

In 2009, there were 215 nonemployer firms engaged in seafood product preparation and packaging across the Pacific Region. This was a 75% increase from 2001 levels, and a 36% increase in the number of firms in Oregon over this time period. In 2008, 73% of these firms were located in California. Region-wide, annual receipts totaled \$15 million in 2009 and decreased 11% from 2001 to 2009. Annual receipt totals experienced a 17% increase in Washington over the same time period. In contrast to the increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 28% from 212 in 2001 to 153 in 2009. Approximately 56% of these establishments were located in Washington. The numbers of employees in these industries also decreased across the region, decreasing 24% to approximately 7,800 full- and part-time workers in 2009, despite an annual payroll increase of 7% to \$328 million.

There were 416 seafood wholesale establishments in 2009. The number of employees was not available at the region level. From 2001 to 2009, the number of seafood wholesale establishments decreased 27% across the Pacific Region.

Nonemployer firms engaged in seafood retail in the Pacific Region totaled 252 in 2009, a 26% increase relative to 2001. Of these firms, 79% were located in California. At the state level, these firms increased 38% in Washington and increased 27% in California between 2001 and 2009. Oregon experienced a 14%

decrease. Annual receipts from the nonemployer retail sector in the region totaled \$20 million in 2009 a 5.3% decrease from 2001 (a 24% decrease in real terms) and a 15% decrease from 2008 (a 14% decrease in real terms).

Employer establishments engaged in seafood retail increased 2.8% from 2001 to 2009, totaling 219 in 2009. These establishments employed 1,366 workers. Over 70% of these establishments were located in California. Region-wide, the numbers of employees in the seafood retail sector increased 11% between 2001 and 2009. All states in the region experienced increases, with the largest increase seen in Oregon (30% increase). Annual payroll also increased across the Pacific Region, a 56% increase region-wide (25% increase in real terms), to \$34 million in 2009.

Transport, Support, and Marine Operations

For sectors in which there were data available for all states in the region, the ship and boat building employed more people than any other industry in this sector, employing approximately 19,000 people in 2009. This industry also had the highest annual payroll in the region totaling \$863 million. Marinas had the highest number of establishments (419), followed by the ship and boat building industries with 320 establishments and the navigational services to shipping industries with 125 establishments. Of all of the industries, port and harbor operations had the fewest number of establishments (31).

In California, industries with large changes in establishment numbers, employees, or annual payroll from 2008 to 2009 were: port and harbor operations (35% increase in employees), marine cargo handling (21% decrease in employees), marine cargo handling (17% decrease in payroll) and port and harbor operations (15% increase in establishments). In Oregon, large changes were seen for deep sea freight transportation (25% decrease in establishments), ship and boat building (21% increase in payroll), marinas (19% increase in payroll) and navigational services to shipping (15% decrease in employees). In Washington, large changes were seen in the marine cargo handling (39% decrease in employees), marine cargo handling (22% decrease in employees).

2010 Economic Impacts of the Pacific Region Seafood Industry (thousands of dollars)

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	Landings Revenue	Jobs	Sales	Income	Valued Added
California	176,151	121,973	19,916,297	4,283,558	7,107,873
Oregon	104,653	14,079	1,105,885	341,883	497,624
Washington	255,332	61,510	7,612,936	2,007,978	3,070,834

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

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	335,635	393,571	423,244	440,474	414,584	471,788	459,772	500,447	490,814	553,743
Finfish & other	153,777	141,259	156,596	178,693	166,922	176,425	176,104	215,784	168,479	202,457
Shellfish	181,858	252,312	266,647	261,781	247,662	295,363	283,668	284,663	322,334	351,285
Albacore tuna	20,623	14,219	24,366	27,242	20,574	23,767	21,612	28,845	27,541	28,777
Crab	67,677	73,073	130,952	115,365	97,127	143,758	121,136	107,107	123,861	132,832
Flatfish	12,982	12,004	13,441	12,741	13,816	12,974	14,462	15,738	14,146	10,502
Hake (whiting)	13,881	13,576	17,150	21,819	29,139	34,425	32,603	58,492	14,104	27,316
Other shellfish	84,867	88,164	89,222	102,423	107,438	116,161	120,569	129,947	131,593	129,497
Rockfish	12,685	11,365	7,803	6,832	6,559	6,848	7,541	9,257	8,974	9,227
Sablefish	18,175	12,323	18,817	17,230	20,366	22,991	20,984	27,279	34,481	35,934
Salmon	20,667	26,170	30,773	47,676	37,188	34,306	33,865	26,992	24,992	48,985
Shrimp	23,942	82,634	28,175	30,586	15,706	12,433	17,298	25,132	16,594	21,918
Squid	16,948	18,260	25,340	19,748	31,516	26,998	29,169	26,585	56,579	71,173

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

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	1,153,941	1,092,377	993,985	1,138,763	1,301,649	1,169,906	1,109,222	1,091,673	895,797	1,063,432
Finfish & other	853,058	789,574	756,538	932,610	1,070,529	935,523	902,887	906,773	582,092	650,832
Shellfish	300,883	302,803	237,447	206,153	231,120	234,383	206,335	184,900	313,705	412,600
Albacore tuna	24,589	21,996	36,577	31,764	19,649	28,117	25,483	24,507	27,055	25,475
Crab	33,619	42,441	81,892	69,247	61,849	85,301	51,888	45,075	59,157	61,662
Flatfish	31,584	29,365	31,849	29,895	31,495	27,689	33,502	37,409	40,576	33,253
Hake (whiting)	379,165	285,547	309,300	474,460	569,273	558,078	454,533	531,277	253,053	355,216
Other shellfish	30,459	31,813	27,884	31,275	30,907	30,611	29,543	28,557	28,911	26,159
Rockfish	18,114	13,346	9,275	8,057	7,406	6,633	7,447	9,469	10,458	11,039
Sablefish	12,761	8,677	12,204	12,905	13,742	13,718	11,630	12,978	15,822	15,042
Salmon	30,838	38,077	39,234	40,609	27,249	29,172	24,600	19,040	33,743	30,693
Shrimp	60,288	81,909	38,997	29,422	26,069	20,290	26,497	35,799	33,456	46,126
Squid	190,282	160,669	99,115	88,215	123,090	108,561	109,464	85,200	204,247	288,678

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albacore tuna	0.84	0.65	0.67	0.86	1.05	0.85	0.85	1.18	1.02	1.13
Crab	2.01	1.72	1.60	1.67	1.57	1.69	2.33	2.38	2.09	2.15
Flatfish	0.41	0.41	0.42	0.43	0.44	0.47	0.43	0.42	0.35	0.32
Hake (whiting)	0.04	0.05	0.06	0.05	0.05	0.06	0.07	0.11	0.06	0.08
Other shellfish	2.79	2.77	3.20	3.27	3.48	3.79	4.08	4.55	4.55	4.95
Rockfish	0.70	0.85	0.84	0.85	0.89	1.03	1.01	0.98	0.86	0.84
Sablefish	1.42	1.42	1.54	1.34	1.48	1.68	1.80	2.10	2.18	2.39
Salmon	0.67	0.69	0.78	1.17	1.36	1.18	1.38	1.42	0.74	1.60
Shrimp	0.40	1.01	0.72	1.04	0.60	0.61	0.65	0.70	0.50	0.48
Squid	0.09	0.11	0.26	0.22	0.26	0.25	0.27	0.31	0.28	0.25

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

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	Trips	Jobs	Sales	Income	Value Added
California	4,005,000	11,312	1,690,781	586,497	884,879
Oregon	662,000	1,614	164,512	58,724	91,237
Washington	959,000	3,157	327,439	111,691	175,619

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures					
	Non-Residents	Residents	Fishing Tackle	533,062					
For-Hire	15,602	83,382	Other Equipment	228,114					
Private Boat	3,300	155,676	Boat Expenses	319,978					
Shore	2,568	199,913	Vehicle Expenses	207,452					
Total Trip Expenditures	21,468	438,972	Second Home Expenses	98,685					
			Total Durable Equipment Expenditures	1,387,290					
Total State Trip and Durable Equipment Expenditures									

Recreational Anglers by Residential Area (thousands of anglers)

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	1,497	1,463	1,437	1,168	1,028	1,257	1,184	1,065	1,136	1,047
Non-Coastal	506	559	538	429	409	481	379	385	638	384
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	2,003	2,022	1,975	1,597	1,437	1,738	1,563	1,450	1,774	1,431

Recreational Fishing Effort by Mode (thousands of angler-trips)²

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	700	695	619	649	624	635	605	514	492	455
Private Boat	4,835	3,990	4,247	1,752	1,849	1,761	1,828	1,421	1,471	1,432
Shore	3,265	3,507	3,445	4,255	3,962	4,548	3,818	3,846	4,345	3,739
Total Trips	8,800	8,192	8,311	6,656	6,435	6,944	6,251	5,781	6,308	5,626

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albacore & other	Н	140	116	168	80	23	45	106	51	80	NA
tunas	R	33	6	83	10	2	4	7	0	13	NA
Barracuda, bass &	Н	1,720	1,965	1,888	2,126	1,015	668	537	434	412	NA
bonito	R	3,502	4,427	3,727	2,597	2,011	1,660	1,407	1,093	1,211	NA
Croakers	Н	631	1,513	758	619	572	456	427	321	427	NA
Cloakers	R	737	1,016	871	660	618	553	631	272	362	NA
Flatfishes	Н	691	1,209	680	499	560	325	260	344	329	NA
Flatisties	R	1,116	2,061	948	343	513	520	338	361	297	NA
Greenlings	Н	288	454	512	210	270	236	194	171	190	NA
Greenings	R	446	958	858	342	281	207	151	139	192	NA
Mackerel	Н	1,356	800	918	945	1,023	1,158	823	940	753	NA
Mackerei	R	2,600	1,730	2,011	1,715	1,872	3,287	1,209	1,765	1,267	NA
Rockfishes &	Н	3,241	2,736	3,624	2,413	3,433	2,504	2,256	1,842	1,990	NA
scorpionfishes	R	787	930	1,664	750	1,148	730	513	465	687	NA
Salmon	Н	995	598	853	744	494	275	505	131	916	NA
Saimon	R	274	244	314	386	171	127	177	45	235	NA
Sculpins	Н	113	116	110	78	78	61	54	65	64	NA
Sculpins	R	349	403	291	240	232	216	202	222	194	NA
Surfperches	Н	914	829	1,143	1,301	949	1,168	865	836	756	NA
Juriperches	R	579	728	1,175	1,556	1,237	1,670	856	812	701	NA

 $^{^{1}}NA = data$ are not available because out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified

 $^{^{2}}$ Due to changes in data collection methods, the Pacific Region's effort (number of trips) and catch (number of fish harvested or released) estimates for 2001-2003 are not comparable to the 2004-2009 estimates.

2010 Economic Impacts of the California Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	121,973	19,916,297	7,107,873	13,567	995,406	515,544		
Commercial Harvesters	3,794	355,431	179,491	3,794	355,431	179,491		
Seafood Processors & Dealers	4,381	448,054	220,454	1,541	157,607	77,547		
Importers	54,366	14,954,965	4,558,928	0	0	0		
Seafood Wholesalers & Distributors	10,864	1,531,614	694,035	538	75,879	34,384		
Retail	48,568	2,626,232	1,454,964	7,694	406,489	224,123		

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

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	107,890	111,923	136,152	140,615	116,084	129,907	127,580	120,861	150,383	176,151
Finfish & other	65,335	59,888	56,402	58,798	46,640	43,164	50,363	46,968	46,666	44,264
Shellfish	42,554	52,035	79,750	81,816	69,444	86,743	77,217	73,893	103,717	131,887
Crab	10,635	15,074	37,455	43,381	19,653	46,483	28,626	24,227	32,503	43,006
Pacific sardine	6,281	5,848	2,874	3,957	3,150	5,100	8,218	7,575	5,544	4,370
Rockfish	5,798	6,560	4,761	4,447	4,145	4,630	4,924	5,781	5,330	5,452
Sablefish	4,175	3,508	4,721	3,724	4,295	4,892	4,873	6,224	9,765	11,490
Salmon	4,761	7,611	12,153	17,770	12,804	5,261	7,835	6	6	1,214
Sea urchins	11,704	10,411	7,906	7,300	6,156	5,145	5,400	6,550	7,806	7,412
Shrimp	5,950	5,901	3,520	3,783	4,338	4,213	4,064	5,696	5,462	4,951
Spiny lobster	4,475	4,784	5,278	6,160	6,039	8,111	6,916	8,008	7,934	11,322
Squid	16,948	18,259	25,333	19,740	31,467	26,959	29,131	26,477	56,528	71,165
Swordfish	8,696	6,401	7,850	4,834	1,896	2,695	3,127	2,365	1,925	2,203

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	524,833	499,676	382,146	379,591	442,353	341,661	384,826	323,884	373,370	437,869
Finfish & other	321,527	321,539	252,764	257,944	301,993	203,107	258,625	223,912	147,906	120,128
Shellfish	203,306	178,138	129,381	121,647	140,360	138,554	126,200	99,972	225,464	317,741
Crab	4,841	8,609	23,922	27,016	12,028	27,391	12,393	9,845	16,659	23,347
Pacific sardine	114,235	128,584	76,528	97,509	76,324	102,683	178,480	126,945	82,842	73,879
Rockfish	5,291	5,991	4,399	3,843	3,181	3,252	3,136	3,933	3,984	3,948
Sablefish	3,434	2,893	3,636	3,158	3,645	3,617	3,240	3,507	5,089	5,500
Salmon	2,761	5,661	7,328	7,113	4,962	1,184	1,743	1	1	255
Sea urchins	13,128	14,176	11,107	12,219	11,304	10,664	11,131	10,283	12,205	11,228
Shrimp	5,598	5,867	3,498	3,520	2,944	1,197	2,015	3,011	3,596	4,522
Spiny lobster	697	702	736	860	761	886	663	741	706	716
Squid	190,278	160,665	99,088	88,167	122,887	108,410	109,150	84,071	203,883	288,497
Swordfish	4,837	3,803	4,706	2,613	653	1,187	1,210	1,168	894	815

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

0					•					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	2.20	1.75	1.57	1.61	1.63	1.70	2.31	2.46	1.95	1.84
Pacific sardine	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.06
Rockfish	1.10	1.10	1.08	1.16	1.30	1.42	1.57	1.47	1.34	1.38
Sablefish	1.22	1.21	1.30	1.18	1.18	1.35	1.50	1.77	1.92	2.09
Salmon	1.72	1.34	1.66	2.50	2.58	4.44	4.50	4.16	4.15	4.76
Sea urchins	0.89	0.73	0.71	0.60	0.54	0.48	0.49	0.64	0.64	0.66
Shrimp	1.06	1.01	1.01	1.07	1.47	3.52	2.02	1.89	1.52	1.09
Spiny lobster	6.42	6.81	7.18	7.16	7.93	9.15	10.44	10.80	11.24	15.82
Squid	0.09	0.11	0.26	0.22	0.26	0.25	0.27	0.31	0.28	0.25
Swordfish	1.80	1.68	1.67	1.85	2.90	2.27	2.58	2.03	2.15	2.70

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)											
	Jobs	Sales	Income	Value Added							
Trip Impacts by Fishing Mode:											
For-Hire	1,158	125,580	41,855	71,669							
Private Boat	827	110,836	34,472	59,125							
Shore	1,920	221,868	73,190	121,030							
Total Durable Equipment Impacts	7,407	1,232,497	436,980	633,055							
Total State Trip and Durable Equipment Economic Impacts	11,312	1,690,781	586,497	884,879							

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	473,370
For-Hire	14,039	64,179	Other Equipment	185,771
Private Boat	402	79,004	Boat Expenses	113,188
Shore	1,061	161,115	Vehicle Expenses	182,771
Total Trip Expenditures	15,501	304,298	Second Home Expenses	77,490
			Total Durable Equipment Expenditures	1,032,589
Total State Trip and Dura	ble Equipment Exp	·	1,352,388	

Recreational Anglers by Residential Area (thousands of anglers)

0			•		0,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	948	1110	1113	865	740	991	878	819	888	803
Non-Coastal	298	379	378	280	263	335	226	246	490	241
Out of State	117	111	115	98	79	109	65	83	71	69
Total Anglers	1362	1600	1606	1243	1082	1435	1168	1148	1449	1113

Recreational Fishing Effort by Mode (thousands of angler-trips)¹

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	588	569	483	521	504	522	489	424	385	357
Private	2,861	2,905	3,117	708	902	896	768	640	676	655
Shore	2,238	2,501	2,699	3,509	3,216	3,802	3,072	3,100	3,599	2,993
Total Trips	5,687	5,975	6,299	4,738	4,622	5,220	4,329	4,164	4,660	4,005

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albacore & other	Н	127	107	146	49	6	9	22	5	13	NA
tunas	R	33	6	83	10	2	3	7	(1)	13	NA
Barracuda, bass &	Н	1,720	1,965	1,888	2,126	1,015	668	537	434	412	NA
bonito ²	R	3,502	4,427	3,727	2,597	2,011	1,660	1,407	1,093	1,211	NA
Croakers	Н	631	1,513	758	619	572	456	427	321	427	NA
Croakers	R	737	1,016	871	660	618	553	631	272	362	NA
Flatfishes	Н	556	962	603	410	478	241	187	276	258	NA
Tiattisties	R	1,043	1,844	850	295	465	471	292	313	241	NA
Greenlings	Н	109	215	357	72	125	104	69	48	64	NA
Greenings	R	297	641	717	239	179	113	67	53	83	NA
Mackerel	Н	1,356	800	918	945	1,023	1,158	823	940	753	NA
Mackerei	R	2,600	1,730	2,011	1,715	1,872	3,287	1,209	1,765	1,267	NA
Rockfishes &	Н	2,585	2,116	3,035	1,778	2,725	1,891	1,674	1,318	1,383	NA
scorpionfishes	R	720	844	1,621	701	1,058	668	456	402	605	NA
Salmon	Н	115	201	109	256	167	119	59	(1)	1	NA
Saimon	R	46	40	39	103	71	74	36	(1)	(1)	NA
Sculpins	Н	82	60	70	41	39	25	19	29	27	NA
Sculpins	R	206	184	140	98	87	74	58	78	50	NA
Surfperches	Н	630	586	878	1,046	694	913	610	581	501	NA
Jumperches	R	432	563	1,016	1,402	1,083	1,516	702	658	546	NA

¹Due to changes in data collection methods, California's participation (number of anglers), effort(number of trips), and catch (number of fish harvested or released) estimates for 2001-2003 are not comparable to 2004-2009 estimates.

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

California's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	806,733 (11%)	13,239,616 (12%)	521,765 (13%)	777,082 (13%)	1,338,051 (13%)	1
2009	857,831 (12%)	12,833,709 (11%)	621,735 (13%)	993,963 (13%)	1,847,048 (13%)	0.7
% change	6.33%	-3.07%	19.2%	27.9%	38%	-26%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	71	70	77	98	88	91	121	139	156
prep. & packaging	Receipts	12,983	9,123	9,858	14,312	10,207	8,298	10,842	11,460	10,432
Seafood Sales,	Firms	157	165	192	193	166	163	222	210	200
retail	Receipts	18,138	18,225	19,771	19,092	16,892	19,875	19,703	19,892	17,047

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

				· · ·						
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Saafaad product	Establishments	73	63	60	55	48	47	49	45	47
Seafood product prep. & packaging	Employees	2,962	3,357	2,896	2,931	2,963	2,592	2,229	2,024	2,167
	Payroll	66,387	82,116	74,637	72,178	92,642	78,065	75,886	65,215	69,529
Seafood sales,	Establishments	361	334	269	263	258	252	300	278	289
wholesale	Employees	4,507	4,539	3,536	3,744	3,925	4,063	4,429	3,321	3,183
WIDESale	Payroll	142,656	151,789	115,669	124,657	134,576	144,758	159,672	132,139	128,813
Saafaad aalaa	Establishments	165	186	175	169	180	184	182	161	153
Seafood sales, retail	Employees	917	988	968	945	999	1,031	1,004	932	976
	Payroll	15,172	16,775	19,919	16,686	18,832	19,900	21,224	20,585	21,785

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

······································		2001	2002	2003	2004	2005	2006	2007	2008	2009
								1		
Coastal & Great	Establishments	31	31	22	20	26	22	29	28	30
Lakes freight	Employees	1,648	1,776	1,341	ND^2	1,346	ND^2	ND^2	ND ²	ND^2
transportation	Payroll	119,808	132,432	117,982	ND^2	129,262	ND^2	ND^2	ND ²	ND^2
Deep sea freight	Establishments	43	44	51	50	54	54	51	43	41
transportation	Employees	1,117	ND^2	902	901	ND^2	957	1,643	ND ²	ND^2
	Payroll	63,891	ND^2	62,417	69,815	ND^2	84,199	116,628	ND ²	ND^2
Doop coo possonger	Establishments	9	11	14	15	15	16	13	5	5
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	1,552	ND^2	ND^2	ND^2
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	72,119	ND^2	ND^2	ND^2
	Establishments	249	248	263	271	263	268	276	277	276
Marinas	Employees	1,862	1,851	2,485	2,476	2,426	2,457	2,680	2,652	2,514
	Payroll	52,602	57,393	70,640	73,338	71,318	74,778	80,216	85,315	78,890
Marine cargo	Establishments	70	64	56	54	54	52	56	61	62
handling	Employees	15,076	15,274	15,557	20,456	19,303	20,975	22,395	22,086	17,428
nanunng	Payroll	944,374	1,000,809	1,040,515	1,179,221	1,273,698	1,448,623	1,484,308	1,453,281	1,211,572
Navigational	Establishments	37	30	35	38	37	36	39	40	39
services to shipping	Employees	647	476	850	ND^2	ND^2	817	858	815	804
services to simpping	Payroll	33,764	28,197	53,162	ND^2	ND^2	63,893	63,610	65,225	61,720
Port & harbor	Establishments	21	23	19	20	20	20	18	17	19
operations	Employees	163	139	417	ND^2	ND^2	582	443	256	345
operations	Payroll	9,990	7,668	23,110	ND^2	ND^2	32,523	30,001	23,316	26,889
Ship & heat	Establishments	155	145	141	143	141	132	136	136	123
Ship & boat building	Employees	8,589	7,782	8,574	8,865	10,132	9,801	9,250	11,630	10,483
building	Payroll	322,296	315,090	314,706	354,404	410,446	453,255	433,846	477,300	460,239

 $^{^1 {\}rm The}$ U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. $^2 {\rm ND} =$ these data are confidential thus not disclosable

Commercial Fisheries

2010 Economic Impacts of the Oregon Seafood Industry (thousands of dollars)

2010 Economic impacts of the oregon ocarood matshy (thousands of donars)											
		With Imports		Without Imports							
	Jobs	Sales	Value Added	Jobs	Sales	Value Added					
Total Impacts	14,079	1,105,885	497,624	10,643	553,599	306,603					
Commercial Harvesters	3,653	197,278	114,195	3,653	197,278	114,195					
Seafood Processors & Dealers	1,223	103,548	51,961	1,071	90,709	45,518					
Importers	1,632	448,800	136,814	0	0	0					
Seafood Wholesalers & Distributors	606	72,242	32,870	317	37,805	17,201					
Retail	6,967	284,016	161,784	5,602	227,808	129,689					

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	72,651	68,292	86,779	101,022	88,196	106,093	97,298	103,042	104,706	104,653
Finfish & other	41,451	32,073	40,889	49,634	53,192	46,326	47,589	56,912	52,749	58,688
Shellfish	31,200	36,218	45,890	51,388	35,005	59,767	49,709	46,130	51,957	45,965
Albacore tuna	7,559	2,952	6,169	9,145	8,815	8,067	9,468	10,666	10,191	12,422
Crab	19,361	20,767	37,122	42,960	26,603	53,810	38,208	29,168	42,413	32,756
Flatfish	6,103	5,156	6,632	6,460	7,281	7,547	7,930	9,163	8,468	6,861
Hake (whiting)	4,132	3,219	3,642	4,641	7,107	7,974	6,501	6,830	3,783	5,414
Oysters	3,536	3,143	3,292	3,292	1,232	1,163	1,847	2,748	2,253	1,658
Pacific sardine	1,619	2,819	2,941	4,870	6,199	3,743	4,551	5,665	5,291	5,252
Rockfish	5,287	3,511	2,327	1,633	1,387	1,564	2,002	2,610	2,500	2,522
Sablefish	7,986	4,405	7,381	6,935	8,657	9,787	9,494	13,737	15,919	15,028
Salmon	5,846	6,933	8,869	12,995	10,437	4,940	4,647	4,166	3,546	7,698
Shrimp	7,560	11,353	5,051	4,740	6,901	4,494	9,365	13,937	6,813	10,982

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

•		• •								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	234,474	210,750	226,317	294,866	312,636	282,846	253,543	195,688	198,895	201,479
Finfish & other	195,121	155,609	180,788	254,330	278,646	236,998	216,134	155,837	154,147	153,573
Shellfish	39,352	55,140	45,529	40,536	33,990	45,848	37,410	39,851	44,747	47,905
Albacore tuna	8,959	4,362	9,165	10,754	8,087	8,534	10,468	8,876	10,082	10,700
Crab	9,754	12,452	23,934	27,276	17,734	33,291	17,007	13,875	21,848	15,816
Flatfish	14,488	11,489	14,372	14,846	16,910	16,385	19,697	23,842	26,047	22,226
Hake (whiting)	117,673	71,220	80,648	130,238	135,503	122,804	81,481	55,511	53,466	57,017
Oysters	884	786	823	823	308	255	197	162	563	415
Pacific sardine	28,176	50,069	55,683	79,610	99,450	74,669	90,037	49,298	45,902	44,743
Rockfish	9,400	4,653	3,434	2,574	2,007	1,967	2,905	3,820	4,207	4,535
Sablefish	5,697	3,185	4,798	5,627	5,834	5,838	5,349	6,514	7,219	6,257
Salmon	5,261	6,117	6,720	5,914	4,666	1,810	1,370	1,860	2,311	2,765
Shrimp	28,482	41,584	20,546	12,207	15,784	12,128	19,990	25,400	22,019	31,364

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albacore tuna	0.84	0.68	0.67	0.85	1.09	0.95	0.90	1.20	1.01	1.16
Crab	1.98	1.67	1.55	1.58	1.50	1.62	2.25	2.10	1.94	2.07
Flatfish	0.42	0.45	0.46	0.44	0.43	0.46	0.40	0.38	0.33	0.31
Hake (whiting)	0.04	0.05	0.05	0.04	0.05	0.06	0.08	0.12	0.07	0.09
Oysters	4.00	4.00	4.00	4.00	4.00	4.56	9.40	16.96	4.00	4.00
Pacific sardine	0.06	0.06	0.05	0.06	0.06	0.05	0.05	0.11	0.12	0.12
Rockfish	0.56	0.75	0.68	0.63	0.69	0.80	0.69	0.68	0.59	0.56
Sablefish	1.40	1.38	1.54	1.23	1.48	1.68	1.78	2.11	2.21	2.40
Salmon	1.11	1.13	1.32	2.20	2.24	2.73	3.39	2.24	1.53	2.78
Shrimp	0.27	0.27	0.25	0.39	0.44	0.37	0.47	0.55	0.31	0.35

Oregon ~ ~ ~ -

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)										
	Jobs	Sales	Income	Value Added						
Trip Impacts by Fishing Mode:										
For-Hire	205	15,758	5,130	8,884						
Private Boat	558	48,591	16,519	28,016						
Shore	231	19,698	6,671	11,223						
Total Durable Equipment Impacts	620	80,466	30,404	43,114						
Total State Trip and Durable Equipment Economic Impacts	1,614	164,512	58,724	91,237						

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures				
	Non-Residents	Residents	Fishing Tackle	24,727				
For-Hire	457	9,719	Other Equipment	18,158				
Private Boat	1,879	37,884	Boat Expenses	8,936				
Shore	496	15,841	Vehicle Expenses	10,126				
Total Trip Expenditures	2,831	63,445	Second Home Expenses	13,442				
Total Durable Equipment Expenditures								
Total State Trip and Durable Equipment Expenditures								

Recreational Anglers by Residential Area (thousands of anglers)

0			· ·		υ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	122	101	91	90	87	82	86	79	85	82
Non-Coastal	175	153	135	125	123	125	130	120	128	124
Out of State	20	21	15	16	14	15	15	14	15	14
Total Anglers	317	275	242	231	224	222	231	213	228	221

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J		0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	79	67	67	64	58	56	61	48	56	51
Private	520	448	426	426	382	373	399	353	396	378
Shore	357	295	233	233	233	233	233	233	233	233
Total Trips	956	810	726	723	673	662	693	634	685	662

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albacore tuna	Н	9	3	11	17	5	12	59	24	43	NA
Albacore tulla	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	NA
Baitfishes	Н	499	772	320	322	320	320	320	320	320	NA
Daitinsiles	R	88	21	24	24	24	24	24	24	24	NA
Flatfishes	Н	16	31	15	27	21	21	22	21	17	NA
Tiatristies	R	7	8	6	7	7	7	6	8	9	NA
Greenlings	Н	106	154	96	99	106	99	97	94	92	NA
Greenings	R	116	176	77	78	77	72	65	67	70	NA
Rockfishes	Н	457	383	405	379	401	331	322	308	362	NA
ROCKIISIIES	R	53	36	23	24	57	39	38	47	49	NA
Salmon	Н	217	118	235	186	61	37	92	28	157	NA
Samon	R	97	67	146	148	23	16	55	16	120	NA
Sculpins	Н	21	21	23	20	22	20	20	21	21	NA
Sculpins	R	58	77	50	51	54	51	53	53	53	NA
Sturgeon	Н	17	12	12	12	12	12	12	12	12	NA
Juigeon	R	30	27	24	24	24	24	24	24	24	NA
Surfperches	Н	195	139	122	122	122	122	122	122	122	NA
Jumperches	R	46	60	34	34	34	34	34	34	34	NA

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

Oregon's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	101,003 (1.4%)	1,364,924 (1.2%)	44,082 (1.1%)	68,311 (1.1%)	112,383 (1.1%)	3.38
2009	108,040 (1.5%)	1,363,826 (1.2%)	53,367 (1.1%)	87,768 (1.2%)	167,481 (1.1%)	3.62
% change	6.97%	-0.0804%	21.1%	28.5%	49%	-3.25%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	11	0	0	0	9	7	0	19	15
prep. & packaging	Receipts	424	ND^2	ND^2	ND^2	309	54	ND^2	957	469
Seafood Sales,	Firms	14	13	10	11	7	11	11	16	12
retail	Receipts	851	644	428	507	985	914	1,210	2,101	1,133

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	27	19	19	18	20	21	22	23	20
prep. & packaging	Employees	875	707	720	738	762	896	819	850	812
prep. & packaging	Payroll	23,616	20,867	21,980	20,593	19,022	25,881	27,394	27,616	26,202
Seafood sales,	Establishments	29	33	26	21	23	16	18	18	19
wholesale	Employees	295	ND^2	ND^2	126	ND^2	ND^2	ND^2	ND^2	ND^2
Wholesale	Payroll	8,698	ND^2	ND^2	4,446	ND^2	ND^2	ND^2	ND^2	ND^2
Seafood sales,	Establishments	16	28	21	24	24	22	23	21	23
retail	Employees	116	129	ND^2	171	204	306	171	178	151
	Payroll	1,945	2,311	ND^2	3,259	3,464	3,294	3,185	3,370	3,515

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	7	10	8	8	9	9	13	8	9
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	476	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	25,206	ND^2	ND^2
Deen ees fusielet	Establishments	4	7	6	6	6	6	5	4	3
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	NA ³	2	NA^3	NA^3					
Deep sea passenger transportation	Employees	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3
transportation	Payroll	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3
	Establishments	33	41	42	41	40	37	38	37	33
Marinas	Employees	ND^2	ND^2	122	133	113	ND^2	138	106	109
	Payroll	ND^2	ND^2	2,742	2,988	3,550	ND^2	3,754	2,178	2,602
Marine cargo	Establishments	9	7	8	8	8	9	9	13	13
handling	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
nanunng	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Neviretienel	Establishments	21	18	21	21	21	20	17	20	17
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	183	200	189
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	11,331	11,808	10,154
Port & harbor	Establishments	1	1	1	NA^3	NA ³	NA ³	2	1	1
operations	Employees	ND^2	ND^2	ND^2	NA ³	NA ³	NA ³	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	ND^2	NA ³	NA ³	NA^3	ND^2	ND^2	ND^2
Ship & boat	Establishments	51	44	43	50	43	41	40	41	35
building	Employees	1,969	1,323	1,284	1,285	1,298	1,230	1,441	1,692	1,886
Sanding	Payroll	69,200	47,303	42,270	43,357	45,183	43,416	47,950	74,583	90,446

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable

Washington

2010 Economic Impacts of the Washington Seafood Industry (thousands of dollars)

	5	With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	61,510	7,612,936	3,070,834	21,194	1,365,089	766,042		
Commercial Harvesters	6,242	507,860	306,730	6,242	507,860	306,730		
Seafood Processors & Dealers	16,562	1,569,672	780,174	2,306	218,549	108,626		
Importers	15,491	4,261,262	1,299,019	0	0	0		
Seafood Wholesalers & Distributors	2,610	334,446	152,877	769	98,537	45,042		
Retail	20,605	939,695	532,034	11,877	540,143	305,645		

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

•										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	140,382	143,720	172,829	166,247	193,317	217,030	216,119	232,841	227,773	255,332
Finfish & other	38,342	39,854	47,415	55,906	50,145	68,201	59,386	68,213	61,115	81,902
Shellfish	102,040	103,867	125,414	110,342	143,172	148,829	156,733	164,628	166,658	173,430
Clams	32,677	34,339	36,060	42,297	48,503	55,786	56,428	64,141	72,646	73,625
Crab	37,681	37,232	56,374	29,024	50,872	43,464	54,302	53,712	48,944	57,070
Hake (Whiting)	1,299	1,022	1,601	2,341	4,937	7,296	7,121	7,249	2,334	4,105
Halibut	5,759	6,777	5,991	7,264	6,512	8,303	8,842	7,525	4,879	5,764
Mussels	2,426	1,613	2,513	3,096	3,729	6,564	3,820	5,293	4,851	4,318
Oysters	24,642	25,578	26,142	31,257	33,697	38,302	37,437	34,794	34,993	30,370
Sablefish	5,984	4,354	6,675	6,517	7,395	8,307	6,608	7,312	8,796	9,402
Salmon	10,332	11,780	9,941	17,316	14,319	24,586	22,026	23,376	22,003	40,622
Shrimp	3,697	4,473	3,723	3,648	4,335	3,602	3,746	5,380	4,139	5,677
Tuna, Albacore	7,917	7,375	15,621	15,657	10,643	15,176	10,439	17,225	16,390	14,575

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	154,701	172,277	189,479	192,181	213,502	241,606	194,449	173,176	163,937	189,486
Finfish & other	114,764	125,903	132,940	155,224	156,902	191,717	151,762	128,208	120,452	142,608
Shellfish	39,937	46,374	56,539	36,957	56,600	49,889	42,687	44,968	43,485	46,878
Clams	2,632	3,087	3,127	3,319	3,621	4,617	3,363	4,070	4,266	3,876
Crab	19,024	21,380	34,037	14,955	32,086	24,619	22,487	21,355	20,651	22,500
Hake (Whiting)	35,593	22,564	35,124	69,117	93,654	120,058	91,272	67,159	36,378	58,900
Halibut	2,490	2,487	1,868	2,254	1,948	2,451	2,428	2,055	1,731	1,371
Mussels	332	214	337	427	504	774	475	593	568	589
Oysters	9,497	9,935	9,649	11,058	12,190	12,306	11,189	10,258	9,386	8,650
Sablefish	3,589	2,559	3,736	4,064	4,240	4,259	3,035	2,954	3,514	3,277
Salmon	23,291	26,626	25,493	27,918	17,926	26,570	21,938	17,641	31,821	28,086
Shrimp	7,764	11,149	8,867	6,599	7,279	6,926	4,455	7,355	7,775	10,153
Tuna, Albacore	9,110	11,708	23,672	18,044	10,505	19,133	13,129	14,801	16,112	13,148

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

0				• •	•	• •				
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Clams	12.42	11.12	11.53	12.74	13.40	12.08	16.78	15.76	17.03	19.00
Crab	1.98	1.74	1.66	1.94	1.59	1.77	2.41	2.52	2.37	2.54
Hake (Whiting)	0.04	0.05	0.05	0.03	0.05	0.06	0.08	0.11	0.06	0.07
Halibut	2.31	2.73	3.21	3.22	3.34	3.39	3.64	3.66	2.82	4.20
Mussels	7.30	7.53	7.46	7.26	7.40	8.48	8.05	8.93	8.54	7.33
Oysters	2.59	2.57	2.71	2.83	2.76	3.11	3.35	3.39	3.73	3.51
Sablefish	1.67	1.70	1.79	1.60	1.74	1.95	2.18	2.48	2.50	2.87
Salmon	0.44	0.44	0.39	0.62	0.80	0.93	1.00	1.33	0.69	1.45
Shrimp	0.48	0.40	0.42	0.55	0.60	0.52	0.84	0.73	0.53	0.56
Tuna, Albacore	0.87	0.63	0.66	0.87	1.01	0.79	0.80	1.16	1.02	1.11

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditure	2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)												
	Jobs	Sales	Income	Value Added									
Trip Impacts by Fishing Mode:													
For-Hire	175	16,256	5,226	9,077									
Private Boat	472	54,090	16,719	28,266									
Shore	291	30,223	9,858	16,213									
Total Durable Equipment Impacts	2,219	226,870	79,888	122,064									
Total State Trip and Durable Equipment Economic Impacts	3,157	327,439	111,691	175,619									

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	34,965
For-Hire	1,106	9,484	Other Equipment	24,185
Private Boat	1,019	38,788	Boat Expenses	197,854
Shore	1,011	22,957	Vehicle Expenses	14,555
Total Trip Expenditures	3,136	71,229	Second Home Expenses	7,753
			Total Durable Equipment Expenditures	279,312
Total State Trip and Dura	ble Equipment Exp	enditures	·	353,677

Recreational Anglers by Residential Area (thousands of anglers)

0			•		υ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	427	252	233	213	201	184	220	167	163	162
Non-Coastal	33	27	25	24	23	21	23	19	20	19
Out of State	22	24	20	19	18	17	19	15	16	15
Total Anglers	481	303	278	255	242	222	262	201	198	196

Recreational Fishing Effort by Mode (thousands of angler-trips)¹

	8	J			· · · · /					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	33	59	69	64	62	57	55	42	51	47
Private	1,454	637	704	618	565	492	661	428	399	399
Shore	670	711	513	513	513	513	513	513	513	513
Total Trips	2,157	1,407	1,286	1,195	1,140	1,062	1,229	983	963	959

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albacore tuna	Н	4	6	11	14	12	24	25	22	24	NA
Albacore tulla	R	(1)	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	NA
Flatfishes	Н	119	216	62	62	61	63	51	47	54	NA
Flathshes	R	66	209	92	41	41	42	40	40	47	NA
Greenlings	Н	73	85	59	39	39	33	28	29	34	NA
Greenings	R	33	141	64	25	25	22	19	19	39	NA
Rockfishes ²	Н	199	237	184	256	307	282	260	216	245	NA
NOCKIISIIES	R	14	50	20	25	33	23	19	16	33	NA
Salmon	Н	663	279	509	302	266	119	354	103	758	NA
Jaimon	R	131	137	129	135	77	37	86	29	115	NA
Sculpins	Н	10	35	17	17	17	16	15	15	16	NA
Sculpins	R	85	142	101	91	91	91	91	91	91	NA
Sharks & Skates	Н	36	27	15	1	1	1	(1)	1	1	NA
Sharks & Skales	R	445	331	203	14	12	14	9	12	10	NA
Smelt & herring	Η	3,649	3,254	2,487	2,486	2,486	2,486	2,486	2,486	2,486	NA
Smelt & herring	R	161	196	136	126	126	126	126	126	126	NA
Sturgeon	Н	10	11	8	8	8	7	8	8	9	NA
Juigeon	R	20	30	18	25	30	21	18	12	17	NA
Surfperches	Н	89	104	143	133	133	133	133	133	133	NA
Jumperches	R	101	105	125	120	120	120	120	120	121	NA

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

Washington's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	164,072 (2.3%)	2,294,285 (2%)	86,533 (2.2%)	134,243 (2.3%)	230,338 (2.2%)	12.5
2009	177,276 (2.4%)	2,385,282 (2.1%)	110,390 (2.3%)	184,023 (2.4%)	331,639 (2.4%)	13
% change	8.05%	3.97%	27.6%	37.1%	44%	8.67%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	41	48	59	53	54	53	63	44	44
prep. & packaging	Receipts	3,432	2,763	5,680	4,446	5,568	4,149	4,698	5,167	4,007
Seafood Sales,	Firms	29	30	32	30	31	29	32	33	40
retail	Receipts	2,465	2,681	1,623	2,202	1,836	1,727	1,458	1,807	2,132

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	112	106	110	101	98	96	98	96	86
prep. & packaging	Employees	6,498	6,728	5,968	5,851	5,743	5,705	5,249	5,893	4,860
prep. & packaging	Payroll	216,660	221,978	231,153	247,316	239,962	255,129	275,662	306,213	232,543
Seafood sales,	Establishments	176	175	121	116	126	115	127	107	108
wholesale	Employees	1,444	1,185	1,112	883	1,094	1,015	1,086	996	1,103
WIDESale	Payroll	56,122	51,959	39,206	37,292	42,852	42,934	46,085	48,251	48,044
Seafood sales,	Establishments	32	44	37	40	47	49	50	44	43
retail	Employees	198	235	284	222	291	292	244	247	239
retair	Payroll	4,503	6,379	6,363	6,578	9,322	8,998	8,001	7,947	8,324

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

			=pio,			(incusure)		
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	30	33	36	38	41	43	37	24	24
Lakes freight	Employees	2,330	2,173	1,607	2,039	1,672	2,353	1,903	2,222	2,245
transportation	Payroll	129,997	130,456	112,319	128,786	122,000	145,144	136,543	168,832	168,783
Deen see fueight	Establishments	22	23	27	23	24	23	30	21	25
Deep sea freight transportation	Employees	584	ND^2	276	311	378	197	227	263	305
transportation	Payroll	29,209	ND^2	16,147	20,559	22,655	14,390	19,692	24,843	28,897
	Establishments	8	7	3	2	3	3	3	4	5
Deep sea passenger transportation	Employees	494	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	20,543	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	119	111	102	96	96	103	114	116	110
Marinas	Employees	573	406	430	449	442	466	485	573	570
	Payroll	14,516	11,283	12,400	12,763	13,556	14,269	15,623	18,931	18,811
Maulius saure	Establishments	36	33	23	30	30	29	28	25	27
Marine cargo handling	Employees	2,847	2,538	ND^2	ND^2	4,459	3,764	4,913	4,821	2,953
nanunng	Payroll	213,946	194,398	ND^2	ND^2	318,873	303,375	334,601	334,193	239,490
Neutrational	Establishments	57	55	52	53	53	56	61	76	69
Navigational services to shipping	Employees	239	218	834	ND^2	841	942	950	1,213	1,168
services to shipping	Payroll	20,235	20,962	51,092	ND^2	60,034	72,120	72,912	100,542	102,934
	Establishments	5	4	3	4	6	5	6	11	11
Port & harbor operations	Employees	ND^2	37	ND^2	ND^2	ND^2	53	129	111	118
operations	Payroll	ND^2	1,565	ND^2	ND^2	ND^2	3,436	4,631	6,359	6,437
Ship & heat	Establishments	134	135	138	141	154	164	167	169	162
Ship & boat building	Employees	5,532	4,974	6,056	6,474	7,154	7,669	7,742	8,067	6,710
building	Payroll	194,050	219,980	244,124	272,336	307,735	313,230	354,084	402,253	312,240

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

Western Pacific

- Hawai'i



Management Context

The Western Pacific Region includes the state of Hawai'i¹. Federal fisheries in this region are managed by the Western Pacific Fishery Management Council (WPFMC) and NOAA Fisheries (NMFS) under five fishery ecosystem plans (FEPs). Fishery ecosystem plans manage marine resources from a place-based perspective rather than managing fishing activities in terms of targeted species. These FEPs replaced the Council's existing fishery management plans (FMPs) for Bottomfish and Seamount Groundfish, Coral Reef Ecosystems, Crustaceans, and Precious Corals.

Western Pacific Fishery Ecosystem Plans

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

Of the stocks covered in these fishery ecosystem plans, the Hancock Seamount Groundfish Complex is currently considered overfished. This fishery has been closed since 1986. Bigeye tuna is currently subject to overfishing and this status is considered to be primarily due to international fishing pressure. The U.S. harvested 6% (14 million pounds) of the Pacific-wide (western-central and eastern Pacific Ocean) total of Pacific bigeye tuna landings reported in 2010. Currently, there are no catch share programs in place in this region.

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

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

bigeye tuna is 1.1 million pounds. However, this quota is only applied to U.S. longline vessels greater than 78.7 feet in length, all other vessels are not bound by any catch limit in the Eastern tropical Pacific.²

Commercial Fisheries

Fishermen in Hawai'i earned \$84 million from their commercial harvest in 2010, landing over 28 million pounds of finfish and shellfish. Tunas comprised 71% of this landings revenue (\$60 million) as well as 60% of total landings (17 million pounds). Swordfish (\$7.3 million), mahimahi (\$3.3 million), moonfish (\$2.6 million), and marlin (\$1.8 million) also contributed to landings revenue. Lobsters commanded the highest ex-vessel price in 2010, with an average annual price of \$12.36 per pound.

Key Western Pacific Commercial Species

- Lobsters
- Mahimahi
- Marlin
- Moonfish
- Pomfret
- ScadSnappers
- Swordfish
- Tunas
- Wahoo

Economic Impacts³

In 2010, the Western Pacific's seafood industry generated \$664 million in sales impacts, \$201 million in income impacts, and approximately 8,200 full- and part-time jobs. Importers contributed the most to sales (40% of the total), while the retail sector contributed the most to employment impacts (41%), income impacts (37%), and valued added impacts (33%). In contrast, the retail sector contributed most to income (37%) and employment impacts (41% of total jobs) with \$74 million in income and 3,400 jobs. The commercial harvest sector generated 2,900 jobs, \$146 million in sales, \$53 million in income, and \$77 million in value added impacts.

Landings Revenue

Landings revenue for finfish and shellfish totaled over \$84 million in 2010, a 75% increase from total revenue generated in 2001. When adjusted for inflation, real landings revenues increased 35%. Landings revenue in 2010 increased 18% (13% increase in real terms) from the 2009 level (\$71 million). Finfish and other catch contributed nearly 100% of total revenue in 2010 (\$84 million), a 75% increase from 2001 (36% increase in real terms). Revenue earned from shellfish landings decreased 29% (a 45% decrease in real terms) from \$241,000 in 2001 to \$172,000 in 2010. Landings revenue in 2010 was dominated by tunas which contributed \$60 million or 71% of total landings revenue. On average, tunas contributed 69% to total revenue over the 10 year time period. The largest increases in landings revenue from 2001 to 2010 were for swordfish (439% or 317% in real terms) and pomfret (301% or 211% in real terms).

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.

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

³The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

Landings

In 2010, Hawai'ian commercial fishermen landed 28 million pounds of finfish and shellfish, a 20% increase from 2001 landings totals. This was a 4.3% increase compared to landings in 2009 (27 million pounds). Finfish and other catch accounted for nearly 100% of total landings annually. Shellfish landings decreased 8.6% from 24,000 pounds landed in 2001 to 22,000 pounds in 2010 and also decreased 0% from 2009 to 2010.

Commercial Fisheries Facts

Landings revenue

- On average, the key species or species groups account for <u>96% of total revenue</u>, (\$81 million) generated in the Western Pacific Region.
- Tunas contributed more than any other species or species group, averaging \$46 million in landings revenue from 2001 to 2010.
- <u>Swordfish</u> had the largest one-year increase in landings revenue over the 10 year time period, increasing 534% from \$1.2 million in 2004 to \$7.8 million in 2005.
- <u>Swordfish</u> had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 50% from \$1.4 million in 2002 to \$691,000 in 2003.

Landings

- Key species or species groups contributed an average of 94% annually to total landings between 2001 and 2010.
- Tunas, contributed the most to landings in the region, averaging 16 million pounds from 2001 to 2010.
- Swordfish had the largest one-year increase in landings over the 10 year time period, increasing 561% from 520,000 in 2004 pounds to 3.4 million pounds in 2005.
- <u>Swordfish</u> had the largest one-year decrease in landings over the 10 year time period, decreasing 56% from 703,000 pounds in 2002 to 306,000 pounds in 2003.

Prices

- Lobsters had the highest average annual ex-vessel price per pound (\$11.76) over the time period, followed by snappers (\$4.43), and tunas (\$2.88).
- Marlin had the lowest average annual ex-vessel price per pound (\$1.20) over the time period, followed by moonfish (\$1.54), and pomfret (\$2.05).
- Marlin had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 58% from \$0.85 per pound in 2003 to \$1.34 in 2004.
- Marlin had the largest decrease in ex-vessel price over the 10 year time period, decreasing 37% from \$1.34 per pound in 2002 to \$0.85 in 2003.

Tunas contributed more to the Western Pacific's total landings than any other species or group with 16.7 million pounds landed in 2010. This was a 9.3% increase from 2001 total landings of tunas (15.3 million pounds). Swordfish followed with 3.2 million pounds landed in 2010. Swordfish landings experienced dramatic changes from 2001 to 2010. From 2000 to 2001, landings

decreased 91% from 6.4 million pounds to 559,000 pounds when the Hawai'i longline fishery was largely closed to protect sea turtles. A few years later (2004-2005), landings increased 561% from 520,000 pounds to 3.4 million pounds. Swordfish landings between 2001 and 2004 averaged approximately a half million pounds, while in between 2005 and 2010 the average was 3 million pounds.

Prices

Overall, the 2010 ex-vessel price for eight of the key species or species groups were above their ten year average annual price. Mahimahi (dolphin) had a lower price per pound (\$2.17) in 2010 relative to its annual average (\$2.28) over the time period, the price per pound for moonfish was \$1.42, which was \$0.12 less than the ten year average, and the ex-vessel price for swordfish in 2010 was \$0.171 more than the ten year average. Relative to ex-vessel prices in 2009, swordfish (23%) experienced a double digit increase in 2010. Double digit decreases between 2009 and 2010 occurred in , and declining %, and % respectively. In real terms, lobsters, mahimahi, scad, and NA experienced declines in ex-vessel prices between 2009 and 2010.

Recreational Fisheries

In 2010, there were 475,000 recreational anglers who fished in the state of Hawai'i. These anglers took 2.4 million fishing trips and of these, 80% were shore-based trips. Scads (bigeye and mackerel) was the most caught species group with 840,000 fish caught in 2010. Almost all of these fish were harvested by anglers rather than released. The most released species or species group was trevallys and other jacks (47%). All others were harvested at least 81% of the time in 2010.

Economic Impacts and Expenditures¹

In 2010, approximately 7,200 jobs in the Western Pacific were generated by recreational fishing activities and over \$780 million was spent by anglers who fished in the region. Most of these employment impacts were generated by industries that provided services to anglers who fished from shore (1,149) or a private boat (388). These fishing trip modes also generated the most in trip-related expenditures: \$85 million for shore-based fishing trips (67% of total trip expenditures) and \$35 million for private boat trips (27% of total trip expenditures). Only 7.3% of total trip-related expenditures in the Western Pacific came from non-resident anglers.

In addition to employment impacts generated by recreational fishing activities, other economic impacts include sales impacts and the contribution of recreational fishing activities to gross domestic product (value added impacts). For-hire fishing trips generated \$9.4 million in sales impacts (6.4% of total trip-related sales) and \$5.2 million in value added impacts (6.7% of total trip-related value added impacts) in 2010. Private boat trips contributed \$41 million in sales (28%) and \$21 million (27%) in value added impacts. Shore-based fishing trips contributed \$98 million in trip-related sales (66%) and \$52 million in trip-related value added impacts (66%).

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

Western Pacific

Anglers spent almost \$653 million on durable equipment in 2010, contributing 84% to total expenditures in the region (trip and durable equipment combined). Fishermen spent more on fishing tackle (\$253 million) than any other durable good. Expenditures related to other equipment (\$148 million), vehicle expenses (\$145 million), and boat expenses (\$79 million) followed in size of expenditures.

Economic impacts from durable equipment expenditures in 2010 include almost 5,600 jobs, \$652 million in sales impacts, and \$316 million in value added impacts.



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

Participation¹

In 2010, there were 475,000 recreational anglers who fished in Hawai'i. This was an 7.8% increase from 2003 (440,000 anglers) and a 93% increase from 2009 (246,000 anglers). In 2010, non-resident anglers made up 62% of total anglers (293,000 anglers). There was a 63% increase in non-resident anglers from 2003 (180,000 anglers) and a 177% increase from 2009 (106,000 anglers). In terms of resident anglers, there were 182,000 resident anglers who fished in Hawai'i in 2010, which was a 30% decrease from 2003 and a 30% increase from 2009.

Fishing Trips¹

Anglers who fished in Hawai'i took approximately 2.39 million fishing trips in 2010. This was a 0.5% decrease from the 2.4 million fishing trips taken in 2003. From 2009 to 2010, there was a 11% increase in the number of trips taken (2.2 million trips) in 2009.

Harvest and Release¹

Of Hawai'i's key species and species groups, bigeye and mackerel scad, snappers, and yellowfin tuna were most frequently caught by recreational fishermen. In 2010, 840,000 bigeye and mackerel scad, 365,000 snappers, and 303,000 yellowfin tuna were caught by anglers in Hawai'i. Blue marlin (100% harvested), dolphinfish (100%), and yellowfin tuna (100%) were more often harvested than released, while trevallys and other jacks were released more often (47%) than any of the other key species or species groups.

Recreational Fishing Facts *Participation*

- An average of <u>372,000 anglers</u> fished in the Western Pacific annually from 2003 to 2010.
- In 2010, <u>in-state residents</u> made up <u>38% of total anglers</u> in this region. These anglers averaged 52% of total anglers annually over the eight year time period.

Fishing trips

- In the Western Pacific, an average of 2.5 million fishing trips were taken annually from 2003 to 2010.
- Private or rental boat and shore-based fishing trips accounted for $\frac{484,000}{2010}$ and $\underline{1.9}$ million fishing trips, respectively in 2010.

Harvest and release

- The bigeye and mackerel scad species group was the most commonly caught key species or species group, averaging 890,000 fish caught over the 10 year time period. Of these, 0.23% were released rather than harvested.
- Of the ten commonly caught key species or species groups none were released more often than harvested over this time period. The species or species group that was most commonly released was trevallys and other jacks (42% released).
- Species or species groups that were harvested 100% of the time included wahoo, dolphinfish, and bigeye and mackerel scad
- Between 2009 and 2010, snappers experienced the largest annual increase in catch (113%), and goatfishes had the largest decrease (60%).

Between 2003 and 2010 four of Hawai'i's key species or groups experienced increases in catch totals: smallmouth bonefish (133%), yellowfin tuna (61%), dolphinfish (49%), and snappers (47%). Over the same time period, the largest decreases were experienced by: blue marlin (67%), goatfishes (64%), and wahoo (61%).

In the short term, the largest increases in catch were experienced by snappers (113%) and smallmouth bonefish (74%) from 2009 to 2010. Decreases over the same time period occurred in four of the species or species groups, the largest of which were experienced by goatfishes (60%) and blue marlin (60%).

${\rm Marine} ~ {\rm Economy}^2$

In 2009, over 32,000 establishments employed approximately 488,000 full- and part-time employees in Hawai'i. Annual payroll totaled \$18 billion, employee compensation totaled \$37 billion, and gross product by state totaled \$65 billion. Gross state product, annual payroll, and employee compensation increased 54%, 40%, and 51%, respectively between 2001 and 2009. The commercial fishing location quotient (CFLQ) for Hawai'i was 5.26. Between 2002 and 2009 the CFLQ for Hawai'i decreased 28% from 7.26 to 5.26. Despite these declines, Hawai'i's level of commercial fishing-related employment was still greater than the national

 $^{^1\}text{Due}$ to data availability, the time period 2003 to max(years) is discussed in this section

 $^{^{2}}$ Information for 2009 is reported in this section; 2010 data were not available for this report.

 $^{^{1}}$ The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

baseline. 1

Seafood Sales and Processing

There were seven nonemployer firms engaged in seafood product preparation and packaging in 2009. Annual receipts for this industry increased 209% from \$231,000 in 2001 to \$713,000 in 2009 (a 149% increase in real terms). The number of employer establishments engaged in this industry decreased to one establishment in 2009. Employee and annual payroll totals were not available. In 2009, there were 38 seafood wholesale establishments that employed 538 full- and part-time workers with an annual payroll of \$19 million. The number of employees decreased 34% and the annual payroll increased 10% (a 12% decrease in real terms) from 2001 to 2009. Similarly to employment, the number of establishments decreased 25%.

Nonemployer firms involved in seafood retailremained unchanged between 2001 and 2009 with34 firms. Annual receipt totals

increased 43% (a 15% increase in real terms) to \$3.6 million in 2009. Similarly, employer establishments involved in this industry decreased 7.4% to 25 in 2009. These establishments employed 158 workers with an annual payroll of \$3.6 million. Employee and annual payroll numbers also decreased

Transport, Support, and Marine Operations

Data were largely unavailable for the transport, support, and marine operations sector. According to the available information, the marine cargo handling had the highest numbers of establishments in 2009 (11 establishments). The marine cargo handling sector had the largest payroll (\$88 million) and the largest number of employees was also in the marine cargo handling sector (1,075). The largest increase in number of establishments between 2001 and 2009 was in the navigational services to shipping sector (120%) and the greatest decrease occurred in the coastal and Great Lakes freight transportation sector (55%).

2010 Economic Impacts of the Hawaii Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	8,206	664,361	295,289	6,221	334,187	179,740		
Commercial Harvesters	2,945	146,365	76,733	2,945	146,365	76,733		
Seafood Processors & Dealers	484	42,094	21,490	342	29,693	15,159		
Importers	962	264,561	80,650	0	0	0		
Seafood Wholesalers & Distributors	460	43,320	20,212	259	24,340	11,357		
Retail	3,355	168,021	96,204	2,676	133,788	76,492		

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

0									/	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	48,080	52,384	52,755	57,679	71,040	66,120	75,705	85,120	71,168	84,023
Finfish & other	47,839	52,078	52,493	57,274	70,677	66,013	75,531	84,753	70,985	83,851
Shellfish	241	306	262	406	364	106	174	367	183	172
Lobsters	98	122	68	91	111	61	93	120	136	116
Mahimahi (dolphin)	2,262	2,630	2,940	4,909	3,597	3,640	3,482	3,182	2,850	3,300
Marlin	2,139	2,010	1,986	2,472	2,512	2,558	2,028	2,072	2,141	1,756
Moonfish (opah)	999	1,219	1,509	1,343	1,897	1,873	2,170	2,197	2,408	2,591
Pomfret	386	675	777	1,316	1,440	1,311	1,460	1,665	1,379	1,549
Scad	882	1,067	1,105	944	839	1,020	1,099	896	555	1,251
Snappers	1,965	2,009	2,035	2,201	2,005	1,756	1,680	1,710	1,844	1,637
Swordfish	1,354	1,371	691	1,225	7,768	5,125	7,726	7,176	7,334	7,302
Tunas	34,491	37,598	37,381	38,484	46,071	44,085	51,148	60,874	47,674	59,756
Wahoo	1,657	1,452	1,919	2,201	2,253	2,329	2,087	2,235	1,672	1,745

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

0	0		• / •		• •		,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	23,484	23,968	23,740	24,456	28,140	25,659	28,938	30,682	26,906	28,069
Finfish & other	23,460	23,937	23,711	24,426	28,113	25,644	28,916	30,653	26,884	28,047
Shellfish	24	31	28	31	26	15	22	29	22	22
Lobsters	8	10	6	8	10	6	8	10	11	9
Mahimahi (dolphin)	1,245	1,376	1,326	2,225	1,440	1,342	1,388	1,252	1,287	1,518
Marlin	2,220	1,497	2,337	1,844	2,190	2,389	1,376	1,951	1,678	1,220
Moonfish (opah)	765	912	1,095	786	1,086	1,071	1,226	1,313	1,884	1,824
Pomfret	272	490	459	766	646	576	593	672	627	593
Scad	505	571	630	478	398	442	463	320	205	460
Snappers	526	499	501	508	436	377	376	376	386	314
Swordfish	559	703	306	520	3,439	2,514	3,643	3,835	3,881	3,153
Tunas	15,288	15,871	14,421	14,965	16,118	14,631	17,589	18,303	14,589	16,704
Wahoo	906	660	990	852	818	891	715	853	605	600

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Lobsters	12.61	12.66	11.88	11.08	10.99	9.66	11.84	12.14	12.37	12.36
Mahimahi (dolphin)	1.82	1.91	2.22	2.21	2.50	2.71	2.51	2.54	2.21	2.17
Marlin	0.96	1.34	0.85	1.34	1.15	1.07	1.47	1.06	1.28	1.44
Moonfish (opah)	1.31	1.34	1.38	1.71	1.75	1.75	1.77	1.67	1.28	1.42
Pomfret	1.42	1.38	1.69	1.72	2.23	2.28	2.46	2.48	2.20	2.61
Scad	1.75	1.87	1.75	1.97	2.11	2.30	2.37	2.80	2.71	2.72
Snappers	3.73	4.02	4.06	4.33	4.59	4.64	4.44	4.54	4.78	5.20
Swordfish	2.42	1.95	2.26	2.36	2.26	2.04	2.12	1.87	1.89	2.32
Tunas	2.26	2.37	2.59	2.57	2.86	3.01	2.91	3.33	3.27	3.58
Wahoo	1.83	2.20	1.94	2.58	2.75	2.61	2.92	2.62	2.76	2.91

Hawaii

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditure	es (thousands	of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	98	9,432	3,053	5,186
Private Boat	388	40,917	12,304	20,923
Shore	1,149	98,158	32,305	51,819
Total Durable Equipment Impacts	5,609	651,859	215,231	315,686
Total State Trip and Durable Equipment Economic Impacts	7,244	800,366	262,893	393,613

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	253,372
For-Hire	6,820	29	Other Equipment	148,474
Private Boat	838	34,006	Boat Expenses	78,731
Shore	1,626	83,868	Vehicle Expenses	145,194
Total Trip Expenditures	9,284	117,903	Second Home Expenses	27,202
			Total Durable Equipment Expenditures	652,972
Total State Trip and Dura	able Equipment Exp	enditures	·	780,159

Recreational Anglers by Residential Area (thousands of anglers)¹

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal			261	223	204	173	170	192	140	182
Non-Coastal			NA^2	NA^1						
Out of State			180	183	166	224	146	137	106	293
Total Anglers			440	407	370	396	317	329	246	475

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Private			509	709	578	570	475	564	441	484
Shore			1,893	2,162	1,892	2,074	2,102	1,966	1,722	1,907
Total Trips			2,402	2,871	2,470	2,644	2,577	2,531	2,163	2,390

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue marlin	Н	1		4	5	19	3	2	11	3	1
Diue marini	R	(1)		(1)	(1)	(1)	(1)	1	(1)	(1)	(1)
Dolphinfish	Н	4		109	225	178	219	136	184	103	164
(mahimahi)	R	(1)		1	(1)	1	(1)	(1)	(1)	(1)	(1)
$Goatfishes^5$	Н	25		794	715	447	813	298	468	713	270
Goathsnes	R	7		10	17	8	16	9	6	7	18
Jacks (trevallys	Н	15		125	331	257	210	169	277	123	140
and other jacks) 6	R	(1)		171	146	182	210	130	120	85	126
Scads (bigeye and	Н	21		1,951	179	726	812	1,089	402	1,102	840
mackerel)	R	(1)		2	(1)	14	(1)	(1)	(1)	(1)	(1)
Skipjack tuna	Н	24		440	420	302	201	228	568	230	289
	R	(1)		1	6	1	1	5	2	(1)	(1)
Smallmouth	Н	1		25	61	25	63	20	50	37	55
bonefish	R	(1)		4	9	12	2	13	4	2	13
Snappers ⁷	Н	13		233	236	223	177	104	138	147	340
Shappers	R	14		16	19	57	36	40	7	24	25
Wahoo	Н	1		105	97	54	62	57	78	61	41
vvanoo	R	(1)		(1)	(1)	(1)	(1)	1	(1)	(1)	(1)
Yellowfin tuna	Н	2		184	268	231	124	273	461	198	302
renowini tulla	R	(1)		5	(1)	9	1	2	(1)	1	1

¹Participation (number of anglers), effort (number of trips), and catch (number of fish harvested or released) data were not available for 2001 and 2002. $^{2}NA =$ not applicable because all Hawaii residents are considered coastal county residents

³Effort data (number of trips) for for-hire boat trips were not available and effort data were not available for 2001 or 2002.

⁴In this table, '(1)' = 0.999 thousand fish and '1' = 1,000-1,499 thousand fish.

⁵Goatfishes include yellowstripe, yellowfin, pfulgers, bandtail, doublebar, diespot, whitesaddle, manybar, blue, and 'Goastfish famil/genus'

⁶Trevallys & other jacks includes bluefin trevally, giant trevally, bigeye trevally, black trevally, African pompano, greater amberjack, island jack, and other species in the jack family.

⁷Snappers include bluestip, blacktail, ruby, longtailed, pink, VonSiebolds, Binghams, green jobfish, ironjaw, and smalltooth jobfish.

Hawaii's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	30,175 (0.43%)	441,856 (0.38%)	12,684 (0.32%)	24,655 (0.41%)	42,401 (0.41%)	ND ²³
2009	32,372 (0.44%)	488,403 (0.43%)	17,743 (0.37%)	37,217 (0.47%)	65,428 (0.48%)	5.26
% change	7.28%	10.5%	39.9%	51%	54.3%	

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	7	7	9	11	5	11	10	9	7
prep. & packaging	Receipts	231	1,566	1,034	1,309	409	1,011	1,023	1,020	713
Seafood Sales,	Firms	34	0	36	33	29	31	41	37	34
retail	Receipts	2,497	ND^2	4,753	2,875	3,487	3,627	4,353	4,394	3,559

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	3	4	4	4	3	3	1	1	1
prep. & packaging	Employees	ND^2	86	ND^2						
prep. & packaging	Payroll	ND^2	2,584	ND^2						
Seafood sales,	Establishments	51	44	33	36	32	33	36	37	38
wholesale	Employees	812	525	654	404	485	462	550	695	538
Wholesale	Payroll	17,656	15,203	12,653	13,949	15,163	16,786	18,932	20,665	19,347
Seafood sales,	Establishments	27	29	31	31	29	27	25	25	25
retail	Employees	235	229	317	321	326	315	393	173	158
retail -	Payroll	3,773	3,737	5,187	5,038	5,007	5,564	7,209	3,674	3,559

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

1 / 11					`					
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	11	11	10	11	13	13	11	5	5
Lakes freight	Employees	463	ND^2	ND^2	ND^2	ND^2	543	557	478	475
transportation	Payroll	25,782	ND^2	ND^2	ND^2	ND^2	36,941	36,635	34,544	34,367
Deen ees fusielet	Establishments	2	2	1	NA^4	NA ³	NA^3	NA ³	1	NA ³
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	NA ³	NA ³	NA^3	NA ³	ND^2	NA^3
transportation	Payroll	ND^2	ND^2	ND^2	NA ³	NA ³	NA ³	NA ³	ND^2	NA ³
D	Establishments	1	1	1	1	2	2	1	1	1
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	7	8	11	11	10	9	11	9	10
Marinas	Employees	ND^2	56	177	178	181	152	167	156	164
	Payroll	ND^2	1,414	3,285	3,439	3,354	3,719	4,151	4,317	4,368
Maulua anna	Establishments	6	7	8	8	8	7	8	11	11
Marine cargo handling	Employees	426	756	ND^2	ND^2	694	ND^2	1,048	1,098	1,075
nanunng	Payroll	24,920	49,975	ND^2	ND^2	53,061	ND^2	87,770	89,104	87,833
New Section of	Establishments	5	7	7	6	6	6	8	11	11
Navigational services to shipping	Employees	103	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	105	120
services to simpping	Payroll	5,926	ND^2	ND^2	ND^2	ND^2	ND^2	3,340	5,846	5,258
	Establishments	2	2	2	2	2	2	2	4	3
Port & harbor operations	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	3,218	2,031
Chin & heat	Establishments	17	16	14	17	16	14	13	14	13
Ship & boat building	Employees	ND^2	ND^2	480	589	ND^2	545	ND^2	ND^2	ND^2
building	Payroll	ND^2	ND^2	22,053	20,908	ND^2	23,134	ND^2	ND^2	ND^2

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

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

 $^{^{2}}ND =$ these data are confidential thus not disclosable

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

New England

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



Management Context

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

New England Region FMPs

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

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

Between 1990 and 1994, there was a 68% drop in total landings of sea scallop in the New England Region from 24 million pounds to 7.6 million pounds. Additionally, an Emergency Action was enacted in December 1994, which closed three large fishing grounds on the Northeast Continental Shelf to rebuild certain groundfish stocks, but which also affected a large percentage of the scallop biomass. Portions of these closed areas were reopened to scallop fishing in 1999, resulting in a total catch of 13.7 million pounds. Building on the success from the previous closure management system, Amendment 10 to the Atlantic Sea Scallop FMP was implemented in 2004, which uses rotational area management. Since that time, total landings have continued to increase, reaching a peak of 41 million pounds in 2006.

Commercial Fisheries

In 2010, commercial fishermen in the New England Region landed 576 million pounds of finfish and shellfish, earning \$954 million in landings revenue. Landings revenue was dominated by American lobster (\$393 million) and sea scallop (\$265 million). These species groups commanded ex-vessel prices of \$3.43 and \$8.07 per pound, respectively and comprised 69% of total landings

revenue, but only 26% of total landings in the New England Region.

Massachusetts had the highest landings revenue in the region with \$478 million in 2010, followed by Maine (\$375 million) and Rhode Island (\$63 million). In terms of pounds landed, Massachusetts also contributed the most (283 million pounds), followed by Maine (198 million pounds) and Rhode Island (77 million pounds).

Economic Impacts¹

In 2010, the New England Region's seafood industry generated \$730 million in sales impacts in Connecticut, \$1.6 billion in sales impacts in Maine, \$7.4 billion in sales impacts in Massachusetts, \$752 million in sales impacts in New Hampshire, and \$978 million in sales impacts in Rhode Island. Massachusetts generated the largest impacts across the three other impact categories, generating 90,000 job, \$1.9 billion in income, and \$2.9 billion in value added impacts. The smallest income impacts were generated in Connecticut (\$151 million) and the smallest employment impacts were also generated in Connecticut (4,400 jobs).

Key New England Region Commercial Species

- American lobster
- FloundersGoosefish
- Atlantic herringAtlantic mackerel
- Quahog clam
- Bluefin tunaCod and haddock
- Sea scallop
- Squid

The sector that generated the greatest employment impacts by state was the retail sector with 54,000 employment impacts in Massachusetts and 12,000 employment impacts in Maine. The harvest sector in Maine generated 13,000 employment impacts. More sales impacts were generated by importers in Massachusetts than any other sector in any another state in the region at \$4 billion and the greatest value added impacts were also generated by importers in Massachusetts (\$1.2 billion).

Landings Revenue

Landings revenue in the New England Region totaled \$954 million in 2010. This was a 50% increase (a 16% increase in real terms) from 2001 levels (\$638 million) and a 22% increase (a 17% increase in real terms) relative to 2009 (\$782 million). Totaling \$764 million in 2010, shellfish revenue experienced a 83% increase (a 41% increase in real terms) from 2001 to 2010 and experienced a 26% increase (21% increase in real terms) from 2009 to 2010.

In the New England Region, Massachusetts had the highest finfish landings revenue (\$127 million), followed by Maine (\$30 million), and Rhode Island (\$23 million). Shellfish landings revenue was also dominated by Massachusetts, which contributed the most (\$352 million) followed by Maine (\$345 million), and Rhode Island (\$39.6 million).

¹The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

Commercial Fisheries Facts

Landings revenue

- On average, between 2001 and 2010, the key species or species groups accounted for 84% of total revenue, generating \$692 million in the New England Region.
- American lobster had higher landings revenues than any other species or species group, averaging \$332 million in landings revenue from 2001 to 2010.
- Atlantic mackerel had the largest one-year increase in landings revenue over the 10 year time period, increasing 764% from \$437,000 in 2001 to \$3.8 million in 2002.
- <u>Squid</u> had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 88% from \$20 million in 2006 to \$2.4 million in 2007.

Landings

- Key species or species groups contributed an average of 72% annually to total landings between 2001 and 2010.
- Atlantic herring contributed the most to landings in the region, averaging 183 million pounds from 2001 to 2010.
- Atlantic mackerel had the largest one-year increase in landings over the 10 year time period, increasing 1575% from 1.6 million in 2001 pounds to 27 million pounds in 2002.
- Atlantic mackerel had the largest one-year decrease in landings over the 10 year time period, decreasing 91% from 88 million pounds in 2004 to 8.2 million pounds in 2005.

Prices

- Bluefin tuna had the highest average annual ex-vessel price per pound (\$6.09) over the time period, followed by sea scallop (\$6.00), and quahog clam (\$5.05).
- Atlantic herring had the lowest average annual ex-vessel price per pound (\$0.10) over the time period, followed by Atlantic mackerel (\$0.18), and squid (\$0.64).
- Atlantic mackerel had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 200% from \$0.12 per pound in 2004 to \$0.36 in 2005.
- Atlantic mackerel had the largest decrease in ex-vessel price over the 10 year time period, decreasing 61% from \$0.36 per pound in 2005 to \$0.14 in 2006.

American lobster and sea scallop had the highest landings revenue in the New England Region in 2010, with \$393 million and \$265 million, respectively. Together they accounted for 69% of total landings revenue in 2010. Between 2001 and 2010, the landings revenue from these species experienced a 64% increase for American lobster and 177% increase for sea scallop.

From 2001 to 2010, species or species groups with large changes in landings revenue include Atlantic mackerel (increased 691%), American lobster (increased 64%), and Atlantic herring (increased 63%). Species or species groups with large changes in landings revenue between 2009 and 2010 include bluefin tuna (90% increase), Atlantic mackerel (56% decrease), and cod and haddock (35% increase).

Landings

Fishermen in the New England Region landed 576 million pounds of finfish and shellfish in 2010. This was a 8.7% decrease from the 631 million pounds landed in 2001 and a 11% decrease from the 647 million landed in 2009. Finfish landings contributed 58% of total landings in the New England Region (333 million pounds) in 2010. From 2009 to 2010, finfish landings experienced a 22% decrease. Shellfish landings experienced a 11% increase from 219 million pounds in 2009 to 243 million in 2010 and a 41% increase from 173 million pounds in 2001. Atlantic herring and American lobster had the highest annual landings in the New England Region in 2010, with 139 million pounds and 114 million pounds, respectively. Together they accounted for 44% of the total landings in 2010. Atlantic herring landings decreased 33% and American lobster landings increased 67% during this period.

From 2001 to 2010, species or species groups with large changes in landings include Atlantic mackerel (increasing 962%), goosefish (decreasing 72%), and flounders (decreasing 70%). Species or species groups with large changes in landings between 2009 and 2010 include Atlantic mackerel (decreasing 57%), bluefin tuna (increasing 56%), and Atlantic herring (decreasing 33%).

Prices

The ex-vessel prices for the New England Region's key species and species groups in 2010 were higher than their 10 year average for eight of the key species (four of the species in real terms). Ex-vessel prices for Atlantic herring and sea scallop experienced the biggest increases between 2001 and 2010, increasing 150% (94% in real terms) and 110% (62% in real terms), respectively. Relative to 2009 ex-vessel prices, New England's Atlantic herring experienced the greatest increase (25%, 20% in real terms) from \$0.12 in 2009 to \$0.15 in 2010. Quahog clam experienced the greatest price decrease between 2009 and 2010 decling from \$5.53 to \$5.39 (2.53%, 6.45% in real terms). Relative to ex-vessel prices in 2009, eight species or species groups experienced increases, including Atlantic herring (25%), and bluefin tuna (22%).

In Connecticut, the species or species group with the largest change in ex-vessel price from 2001 to 2010 was flounders (129% increase, 77% increase in real terms) from \$1.17 to \$2.68. The largest change in ex-vessel price experienced in Maine was for Atlantic herring (150% increase, 94% increase in real terms from \$0.06 to \$0.15 and in Massachusetts the largest change in ex-vessel price was experienced by clams, all other (220% increase, 148% increase in real terms) from \$0.55 to \$1.76.

Recreational Fishing

In 2010, over 1.5 million recreational anglers took 7.5 million fishing trips in the New England Region. Over 89% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 54% were taken from a private or rental boat and another 42% were shore-based. Porgies (scup) was the most frequently caught species or species group with 5.5 million fish caught in 2010 and represented 26% of total fish caught in the

¹Expenditures and economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see

region. Of the porgies (scup) caught, 59% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in New England Region are reported in terms of economic impacts at the state level (employment, sales, income, and value added impacts) and expenditures on fishing trips and durable equipment at the regional level. Employment impacts in Massachusetts were the highest in the region with over 4,700 full- and part-time jobs generated by recreational fishing activities in the state. Connecticut (4,600 jobs), and Rhode Island (1,200 jobs), followed in terms of employment impacts.

Key New England Region Recreational Species

- Atlantic cod
- Scup
- Atlantic mackerelBluefin tuna
- Striped bassSummer flounder
- Sur
- Bluefish
- Winter flounder
- Little tunny
- Tautog

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) or expenditures on durable equipment. Throughout the New England Region, expenditures on durable equipment in 2010 generated more employment impacts than any other expenditure: 93% in Connecticut, 51% in Rhode Island, and 50% in Massachusetts.

In addition to jobs, the contribution of recreational fishing activities to the New England Region's economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value added impacts). In 2010, sales impacts were the highest in Connecticut (\$703 million in sales impacts), followed by Massachusetts (\$636 million), Rhode Island (\$135 million), Maine (\$94 million), and New Hampshire (\$28 million). In the same year, value added impacts were the highest in Connecticut (\$404 million in value added impacts), followed by Massachusetts (\$666 million), Maine (\$50 million), and New Hampshire (\$16 million).

Overall, there were \$1.6 billion in expenditures on fishing trip and durable equipment expenditures across the New England Region in 2010. Approximately 80% of these expenditures were durable equipment purchases. The greatest expenditures were for vehicle expenses (\$513 million), followed by fishing tackle (\$410 million), boat expenses (\$247 million), other equipment (\$101 million), and second home expenses (\$13 million). Fishing trip expenditures by New England's non-residents totaled almost \$171 million, of which the greatest portion can be attributed to shore-based fishing trips (\$111 million). Residents of the New England Region spent \$155 million on saltwater fishing trips, with the most of these expenses related to private boat trips (\$94 million).

Recreational Fishing Facts

Participation

- An average of <u>1.4 million anglers</u> fished in the New England Region annually from 2001 to 2010.
- In 2010, coastal county residents made up 89% of total anglers in this region. These anglers averaged 88% of total anglers annually over the 10 year time period.
- The largest annual increase in the number of coastal anglers during the 10 year time period occurred between 2004 and 2005, increasing 17%, from 1.2 million anglers to 1.3 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2008 and 2009, decreasing 12%, from 1.4 million anglers to 1.2 million anglers.

Fishing trips

- In the New England Region, an average of 8.8 million fishing trips were taken annually from 2001 to 2010.
- Private or rental boat and shore-based fishing trips accounted for <u>4.1 million</u> and <u>3.1 million</u> fishing trips, respectively, in 2010. Together these made up 96% of the fishing trips taken in that year.
- The largest annual increase in the number of total trips taken annually over the 10 year time period occurred between 2004 and 2005, increasing 6.9%, from 8.7 million trips to 9.3 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2008 and 2009, decreasing 18%, from 9.2 million trips to 7.5 million trips.

Harvest and release

- <u>Striped bass</u> was the most commonly caught key species or species group, <u>averaging 8.9 million fish</u> over the 10 year time period. Of these, <u>93% were released</u> rather than harvested.
- Of the ten commonly caught key species or species groups, eight were released more often than harvested over this time period.
- The species or species group that was most commonly released was striped bass (93% released).
- Atlantic mackerel (90% harvested), followed by winter flounder (58% harvested), and bluefin tuna (49% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.
- The largest one-year change in the number of fish released was for releases of <u>bluefin tuna</u>, which increased 4616% between 2002 and 2003
- the largest one-year change in number of fish harvested occurred in <u>little tunny</u>, which increased 6985% from 2005 to 2006.

Participation

There were 1.5 million recreational anglers who fished in the New England Region in 2010. This was a 38% increase from 2001 (1.1 million anglers). These anglers were New England Region residents from either a coastal (1.3 million anglers) or non-coastal county (169,000 anglers). Almost 89% of total

Marine Angler Expenditures in the United States, 2006, available at: http://www.st.nmfs.noaa.gov/st5/publication/AnglerExpenditureReport/AnglerExpendituresReport_ALL.pdf)

Fishing Trips

Recreational fishermen took 7.5 million fishing trips in New England Region in 2010. This was a 17% decrease from the 2001 (9 million trips) and was 31,000 fewer trips than those taken in 2009. Approximately 54% of the saltwater trips were private or rental boat based (4.1 million trips). The other most popular mode of fishing was shore-based with 3.1 million trips in 2010.

Harvest and Release

The New England Region's species and species groups caught most frequently in 2010 were scup (5.5 million fish), Atlantic mackerel (4.5 million fish), striped bass (3.7 million fish), and Atlantic cod (3.1 million fish) in 2010. Little tunny (89% released), striped bass (85% released), summer flounder (83% released), tautog (66% released), Atlantic cod (66% released), bluefish (63% released), and scup (59% released) were more often released rather than harvested.

Anglers harvested more often than released Atlantic mackerel (87% harvested) and bluefin tuna (79% harvested). In 2010, most of the striped bass were caught in Massachusetts (2.3 million fish) and Connecticut (865,000), making up 85% of the total catch. Atlantic mackerel were caught in large numbers in Maine and New Hampshire which represented 43% of the total catch of Atlantic mackerel in the New England Region. Between 2001 and 2010, seven of the New England Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were striped bass (56%), bluefish (41%), and little tunny (41%).

Marine Economy¹

The sum of the gross domestic products by state for Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island was \$745 billion in 2009. Employee compensation totaled \$434 billion and annual payroll totaled \$289 billion. These economic measures experienced increases of 31%, 25%, and 16% respectively, between 2001 and 2009, and experienced a 0.4% decrease, a 2.9% decrease, and a 5% decrease, respectively, between 2008 and 2009. Approximately 368,000 establishments employed 5.9 million full- and part-time employees across the region in 2009. This was a 2% decrease in establishment numbers and a 4.1% decrease in employee numbers from 2001 to 2009.

In 2009, the commercial fishing location quotient (CFLQ) for Rhode Island was the highest in the region at 2.62. This was a 68% decrease from 2001 and a 81% decrease from 2008. Rhode Island's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 3 times higher than the level of employment in these industries nationwide.

Seafood Sales and Processing

In 2009, there were 110 nonemployer firms engaged in seafood product preparation and packaging across the New England Region, a 11% increase from 2002 levels. Over the same time period, Massachusetts experienced a 4.3% decrease. In 2009, 57% of these firms were located in Maine. Annual receipt totals experienced a 5.4% increase in Maine between 2001 and 2009. In contrast to the increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 22% from 93 in 2002 to 86 in 2009. Approximately 51% of these establishments were located in Massachusetts in 2009.

There were 375 seafood wholesale establishments in 2009 that employed 3,170 full- and part-time workers. From 2008 to 2009, the number of seafood wholesale establishments increased 1.4% and the number of employees increased 0.2% in the New England Region.

Nonemployer firms engaged in seafood retail in the New England Region totaled 161 in 2009, a 1.9% increase relative to 2001. Of these firms, 39% were located in Massachusetts. At the state level, these firms showed a 15% increase in Connecticut and a 5.9% decrease in Rhode Island between 2001 and 2009. Annual receipts in the region totaled \$17 million in 2009, a 18% decrease from 2001 (a 34% decrease in real terms) and a 15% decrease from 2009 (a 15% decrease in real terms). Employer establishments engaged in seafood retail increased 5.8% from 2001 to 2009, totaling 238 in 2009. These establishments were located in Massachusetts.

Transport, Support, and Marine Operations

For the sectors where information was available, marinas employed more people than any other industry in this sector, employing approximately 3,400 people in 2009. This industry also had the highest annual payroll in the region totaling \$158 million. Marinas had the highest number of establishments (499), followed by the ship and boat building industries with 174 establishments and the navigational services to shipping industries with 41 establishments.

In Massachusetts, industries with large changes in establishment numbers, employees, or annual payroll from 2008 to 2009 were: navigational services to shipping (38% increase in establishments), marine cargo handling (33% decrease in establishments), ship and boat building (27% decrease in payroll) and deep sea freight transportation (25% increase in employees). In Maine, large changes were seen for port and harbor operations (50% decrease in establishments), navigational services to shipping (33% decrease in employees), coastal and Great Lakes freight transportation (20% decrease in establishments) and navigational services to shipping (13% decrease in payroll). In Connecticut, large changes were seen in the navigational services to shipping (106% increase in payroll), marine cargo handling (25% decrease in establishments), ship and boat building (13% decrease in establishments) and deep sea freight transportation (9% decrease in employees).

 $^1 {\sf Information}$ for 2009 is reported in this section; 2010 data were not available for this report.

Commercial Fisheries

New England

2010 Economic Impacts of the New England Region Seafood Industry (thousands of dollars)

		0 0	V (/	
	Landings Revenue	Jobs	Sales	Income	Valued Added
Connecticut	17,116	4,407	730,401	151,200	253,536
Massachusetts	478,468	90,018	7,383,443	1,893,689	2,902,863
Maine	375,148	28,059	1,553,055	511,590	740,429
New Hampshire	20,609	5,795	751,841	176,621	280,837
Rhode Island	62,639	8,454	977,581	235,082	373,235

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	638,028	696,423	690,692	821,573	970,516	953,372	896,597	811,351	782,170	953,979
Finfish & other	220,052	207,082	200,351	194,911	200,751	184,219	178,935	190,397	178,042	190,132
Shellfish	417,975	489,341	490,341	626,662	769,765	769,153	717,662	620,955	604,128	763,847
American lobster	239,681	287,621	277,946	368,649	408,719	386,034	347,298	317,877	298,293	392,536
Atlantic herring	12,634	9,005	15,274	14,931	20,085	21,593	18,766	20,352	24,720	20,613
Atlantic mackerel	437	3,776	4,404	10,416	2,923	13,528	6,001	4,303	7,926	3,455
Bluefin tuna	17,043	14,349	8,267	4,297	3,864	1,715	2,077	2,887	4,450	8,470
Cod & haddock	46,416	49,679	44,386	40,089	39,824	31,885	39,317	43,006	36,661	49,657
Flounders	49,845	49,201	47,221	43,737	42,339	37,717	33,716	30,460	27,336	27,677
Goosefish	35,721	29,194	30,031	27,960	34,408	26,571	21,203	18,467	13,138	13,870
Quahog clam	17,716	17,193	16,857	16,721	6,707	26,811	31,102	11,531	9,019	9,629
Sea scallop	95,616	109,634	116,454	158,014	250,762	263,623	237,280	202,964	209,989	265,032
Squid	12,915	15,786	17,283	28,133	20,206	20,006	2,371	6,311	16,820	14,697

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

•										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	631,043	588,891	660,283	723,130	684,292	704,258	582,249	600,987	646,876	576,081
Finfish & other	458,053	387,327	468,511	487,785	461,038	466,873	373,715	395,323	428,369	332,790
Shellfish	172,990	201,564	191,772	235,345	223,254	237,385	208,534	205,664	218,507	243,291
American lobster	68,560	81,382	70,502	88,679	86,224	90,837	76,971	86,210	96,930	114,434
Atlantic herring	208,232	134,605	209,933	188,201	212,389	207,530	155,986	165,067	209,263	139,343
Atlantic mackerel	1,591	26,649	34,839	88,124	8,223	99,751	50,761	35,524	39,427	16,898
Bluefin tuna	2,534	2,386	1,787	704	837	274	300	426	772	1,201
Cod & haddock	45,931	45,469	38,482	34,158	30,500	19,810	24,848	31,461	30,819	39,231
Flounders	48,435	41,758	39,782	40,966	30,290	19,538	16,078	15,286	16,218	14,518
Goosefish	43,008	41,975	46,751	39,735	34,873	26,136	19,579	16,224	12,783	12,123
Quahog clam	4,684	6,116	5,173	6,231	1,088	4,216	4,622	1,476	1,631	1,786
Sea scallop	24,741	27,394	27,587	30,462	32,038	40,587	35,387	28,872	31,691	32,826
Squid	24,959	27,893	29,405	47,901	26,748	25,330	2,701	13,957	28,124	21,659

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	3.50	3.53	3.94	4.16	4.74	4.25	4.51	3.69	3.08	3.43
Atlantic herring	0.06	0.07	0.07	0.08	0.09	0.10	0.12	0.12	0.12	0.15
Atlantic mackerel	0.28	0.14	0.13	0.12	0.36	0.14	0.12	0.12	0.20	0.20
Bluefin tuna	6.73	6.01	4.63	6.10	4.62	6.26	6.93	6.78	5.76	7.05
Cod & haddock	1.01	1.09	1.15	1.17	1.31	1.61	1.58	1.37	1.19	1.27
Flounders	1.03	1.18	1.19	1.07	1.40	1.93	2.10	1.99	1.69	1.91
Goosefish	0.83	0.70	0.64	0.70	0.99	1.02	1.08	1.14	1.03	1.14
Quahog clam	3.78	2.81	3.26	2.68	6.16	6.36	6.73	7.81	5.53	5.39
Sea scallop	3.86	4.00	4.22	5.19	7.83	6.50	6.71	7.03	6.63	8.07
Squid	0.52	0.57	0.59	0.59	0.76	0.79	0.88	0.45	0.60	0.68

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Trips	Jobs	Sales	Income	Value Added
Connecticut	1,504,749	4,608	703,309	268,804	403,846
Massachusetts	3,691,824	4,697	636,157	221,606	343,897
Maine	750,115	1,130	94,483	31,000	49,646
New Hampshire	251,969	261	28,396	9,836	15,610
Rhode Island	1,282,507	1,190	135,262	42,407	66,287

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	410,497
For-Hire	26,893	14,076	Other Equipment	100,637
Private Boat	32,696	94,102	Boat Expenses	246,933
Shore	111,177	47,088	Vehicle Expenses	512,899
Total Trip Expenditures	170,765	155,267	Second Home Expenses	12,578
			Total Durable Equipment Expenditures	1,283,544
Total State Trip and Dura	ble Equipment Exp	enditures		1,609,576

Recreational Anglers by Residential Area (thousands of anglers)

0	•		•		o ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	969	1,069	1,198	1,155	1,349	1,408	1,408	1,389	1,222	1,317
Non-Coastal	108	124	152	165	169	188	205	187	165	169
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	1,077	1,194	1,349	1,319	1,518	1,596	1,614	1,576	1,387	1,486

Recreational Fishing Effort by Mode (thousands of angler-trips)

	•			•						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	303	235	319	300	418	458	480	471	449	317
Private Boat	4,857	4,513	4,426	4,450	5,017	4,681	4,863	4,921	3,489	4,051
Shore	3,874	3,844	3,833	3,910	3,819	4,510	4,355	3,793	3,574	3,112
Total Trips	9,035	8,592	8,578	8,660	9,254	9,650	9,699	9,185	7,512	7,481

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic cod	Н	1,104	644	706	NA	653	264	313	481	483	1,047
Atlantic cod	R	1,378	1,143	1,175	945	1,525	802	1,184	1,287	1,139	2,020
Atlantic mackerel	Н	3,851	3,543	2,399	1,588	3,062	4,849	3,079	3,459	3,151	3,914
	R	772	363	212	162	78	328	188	546	400	561
Bluefin tuna	Н	1	1	5	2	12	4	14	14	10	1
Diuenin tuna	R	(1)	(1)	4	15	12	13	9	2	12	(1)
Bluefish	Н	1,462	1,166	1,188	1,284	1,359	1,541	1,359	1,209	776	1,043
Diuensii	R	3,324	2,148	2,532	3,281	3,451	3,016	3,141	2,899	1,449	1,757
Little tunny 2	Н	3	7	3	13	(1)	2	5	3	1	3
	R	38	54	33	109	52	38	77	76	22	22
Porgies (scup)	Н	3,031	2,460	4,181	2,983	1,567	1,261	1,871	1,901	1,173	2,287
l'orgies (scup)	R	2,837	2,382	2,829	1,759	1,902	2,548	2,543	3,595	2,563	3,259
Striped bass	Н	498	523	701	608	691	585	638	568	548	545
Striped bass	R	7,931	8,577	6,760	8,586	10,831	16,327	9,739	7,003	4,443	3,147
Summer flounder	Н	573	439	549	786	604	592	417	473	161	168
Summer nounder	R	1,008	1,559	1,071	1,048	1,491	2,503	1,290	1,941	1,023	799
Winter flounder	Н	169	107	83	54	50	61	54	169	121	130
winter nounder	R	155	74	41	32	43	65	44	76	103	101
Wrasses (tautog)	Н	172	265	335	294	228	321	452	299	180	297
wrasses (laulog)	R	338	638	669	545	504	595	981	420	378	580

 $^{^{1}}NA = data$ are not available because out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified

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

Commercial Fisheries

2010 Economic impacts of the Connecticut Searood industry (thousands of donars)										
		With Imports		Without Imports						
	Jobs	Sales	Value Added	Jobs	Sales	Value Added				
Total Impacts	4,407	730,401	253,536	1,031	60,504	28,911				
Commercial Harvesters	514	30,352	12,827	514	30,352	12,827				
Seafood Processors & Dealers	176	18,140	8,955	64	6,570	3,243				
Importers	2,065	567,977	173,144	0	0	0				
Seafood Wholesalers & Distributors	297	47,174	20,746	20	3,194	1,405				
Retail	1,355	66,757	37,864	432	20,388	11,437				

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	31,176	27,779	29,825	33,399	37,570	36,892	42,053	16,927	16,626	17,116
Finfish & other	5,712	4,283	4,136	4,575	5,097	3,731	3,421	3,904	3,778	5,420
Shellfish	25,464	23,496	25,690	28,825	32,474	33,161	38,632	13,022	12,848	11,696
American lobster	5,450	4,226	3,170	3,166	3,821	4,031	3,222	2,101	1,914	1,747
Eastern oyster	3,245	2,012	2,274	1,356	ND^1	2,206	5,142	ND^1	ND^1	ND^1
Flounders	1,188	909	896	1,075	1,170	1,026	881	851	760	886
Goosefish	1,201	790	683	580	658	346	512	551	ND^1	367
Hake	2,341	1,307	1,602	2,028	2,432	1,628	1,226	1,545	1,354	1,193
Quahog clam	9,930	9,202	10,470	10,690	ND^1	18,135	20,531	ND^1	ND^1	ND^1
Scups or Porgies	171	195	167	191	263	302	311	386	364	252
Sea scallop	5,727	6,400	8,125	11,203	9,761	7,229	8,605	9,840	9,762	9,107
Snails (conchs)	95	199	119	209	233	533	312	481	ND^1	ND^1
Squid, Ioligo	687	1,178	1,400	1,298	1,224	954	744	ND^1	384	384

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

		• •								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	18,748	16,177	16,420	18,192	13,628	11,747	10,050	7,115	7,972	6,015
Finfish & other	10,609	7,799	7,825	6,832	6,548	5,807	3,931	4,535	5,388	3,969
Shellfish	8,139	8,378	8,595	11,359	7,080	5,940	6,119	2,580	2,584	2,046
American lobster	1,330	1,067	671	647	714	793	569	426	479	410
Eastern oyster	434	247	279	186	ND^1	77	193	ND^1	ND^1	ND^1
Flounders	1,011	633	565	637	582	456	345	307	314	331
Goosefish	1,360	1,029	1,023	897	524	496	460	409	ND^1	288
Hake	5,644	2,904	2,875	2,936	3,735	2,632	1,831	2,480	2,492	1,821
Quahog clam	3,382	3,435	4,038	5,137	ND^1	2,665	3,067	ND^1	ND^1	ND^1
Scups or Porgies	220	314	292	256	328	298	256	283	347	305
Sea scallop	1,538	1,579	1,908	2,172	1,272	1,104	1,313	1,407	1,475	1,219
Snails (conchs)	36	128	70	31	50	101	117	184	ND^1	ND^1
Squid, loligo	1,026	1,778	1,572	1,699	1,537	1,157	811	ND^1	366	303

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	4.10	3.96	4.72	4.89	5.35	5.08	5.67	4.93	3.99	4.26
Eastern oyster	7.48	8.16	8.14	7.30	ND^1	28.61	26.64	ND^1	ND^1	ND^1
Flounders	1.17	1.44	1.59	1.69	2.01	2.25	2.55	2.77	2.42	2.68
Goosefish	0.88	0.77	0.67	0.65	1.26	0.70	1.11	1.35	ND^1	1.28
Hake	0.41	0.45	0.56	0.69	0.65	0.62	0.67	0.62	0.54	0.65
Quahog clam	2.94	2.68	2.59	2.08	ND^1	6.80	6.69	ND^1	ND^1	ND^1
Scups or Porgies	0.77	0.62	0.57	0.75	0.80	1.01	1.22	1.36	1.05	0.83
Sea scallop	3.72	4.05	4.26	5.16	7.67	6.55	6.55	6.99	6.62	7.47
Snails (conchs)	2.65	1.55	1.69	6.69	4.66	5.28	2.66	2.62	ND^1	ND^1
Squid, Ioligo	0.67	0.66	0.89	0.76	0.80	0.82	0.92	ND^1	1.05	1.27

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

Recreational Fisheries

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2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)										
	Jobs	Sales	Income	Value Added						
Trip Impacts by Fishing Mode:										
For-Hire	44	4,619	1,638	2,855						
Private Boat	188	23,853	8,696	14,983						
Shore	93	10,427	3,864	6,454						
Total Durable Equipment Impacts	4,283	664,409	254,607	379,554						
Total State Trip and Durable Equipment Economic Impacts	4,608	703,309	268,804	403,846						

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	188,581
For-Hire	836	2,263	Other Equipment	34,857
Private Boat	2,552	21,818	Boat Expenses	152,216
Shore	2,201	8,488	Vehicle Expenses	290,182
Total Trip Expenditures	5,588	32,569	Second Home Expenses	0
			Total Durable Equipment Expenditures	665,836
Total State Trip and Dura	ble Equipment Exp	enditures		703,993

Recreational Anglers by Residential Area (thousands of anglers)

0			· ·		υ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	246	283	361	297	323	336	302	381	438	402
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	78	87	112	63	77	44	61	123	93	112
Total Anglers	324	371	473	359	400	380	363	504	531	514

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J (0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	46	51	64	39	38	45	50	62	43	41
Private	981	953	875	924	1,073	863	1,089	1,286	725	856
Shore	695	645	625	574	483	569	544	562	668	609
Total Trips	1,723	1,650	1,564	1,537	1,594	1,477	1,683	1,911	1,436	1,505

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

Harvest (H) and Release (R) of Rey Species Species Groups (thousands of fish)											
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic cod	Н	(1)	(1)	2	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Atlantic cou	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	Н	716	569	458	534	418	476	375	428	332	526
Diuensii	R	1,429	662	542	947	989	786	847	1,132	415	743
Hickory shad	Н	16	71	71	28	52	80	57	5	(1)	1
HICKOTY SHAU	R	88	377	79	103	35	110	8	24	2	(1)
Little tunny ³	Н	1	(1)	1	2	(1)	(1)	(1)	(1)	(1)	1
Little tunity	R	27	28	8	9	(1)	(1)	5	(1)	7	12
Porgies (scup)	Н	1,016	882	1,529	564	724	519	690	672	229	1,006
roigies (scup)	R	931	570	804	387	719	733	871	1,131	949	1,148
Striped bass	Н	54	51	96	75	115	83	110	113	73	88
Striped bass	R	1,108	697	843	1,079	1,714	1,682	1,832	2,372	1,281	777
Summer flounder	Н	153	93	166	217	213	107	109	116	62	40
Summer nounder	R	406	452	475	363	839	902	325	792	552	442
White perch	Н	(1)	1	11	1	(1)	(1)	(1)	74	114	(1)
white perch	R	7	27	28	30	3	3	88	138	101	(1)
Winter flounder	Н	15	16	24	4	4	8	4	(1)	4	14
winter nounder	R	32	9	6	9	1	24	14	(1)	2	10
Wrasses (tautog)	Н	17	100	168	98	75	176	211	177	66	112
vviasses (laulog)	R	59	219	283	329	144	141	445	200	67	262

 $^{^1\}mathsf{NA} = \mathsf{not}$ applicable because all Connecticut residents are considered coastal county residents

²In this table, (1)' = 0.999 thousand fish and (1)' = 1,000-1,499 thousand fish.

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 (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	92,105 (1.3%)	1,555,214 (1.4%)	68,920 (1.7%)	96,410 (1.6%)	168,407 (1.6%)	0.6
2009	90,048 (1.2%)	1,468,291 (1.3%)	78,027 (1.6%)	121,233 (1.6%)	227,550 (1.6%)	ND^2
% change	-2.23%	-5.59%	13.2%	25.7%	35.1%	NA ³

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	0	0	7	7	7	11	0	18	16
prep. & packaging	Receipts	ND^2	ND^2	1,022	1,404	551	3,206	ND^2	2,375	2,331
Seafood Sales,	Firms	20	26	26	25	24	15	26	25	23
retail	Receipts	2,378	3,225	2,966	3,115	3,313	2,915	4,436	3,247	2,139

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

						,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafeed meeduat	Establishments	2	2	2	3	3	4	3	3	2
Seafood product prep. & packaging	Employees	ND^2	ND^2	ND^2	ND^2	113	119	ND^2	59	ND^2
prep. & packaging	Payroll	ND^2	ND^2	ND^2	ND^2	3,656	4,242	ND^2	1,040	ND^2
Seafood sales,	Establishments	25	28	19	19	17	19	20	24	25
wholesale	Employees	ND^2	ND^2	169	181	ND^2	ND^2	183	185	212
wholesale	Payroll	ND^2	ND^2	7,738	7,688	ND^2	ND^2	8,347	8,551	8,842
Saafaad calas	Establishments	34	36	34	38	39	35	36	35	36
Seafood sales, retail	Employees	131	165	206	202	187	196	177	203	205
letan	Payroll	3,403	3,859	5,110	5,060	5,028	4,937	5,252	5,248	5,551

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Canadal & Cuant	Establishments	8	5	6	5	5		4	5	5
Coastal & Great		•	-	-	-	-	4	-	-	5 ND2
Lakes freight	Employees	506	ND^2							
transportation	Payroll	31,940	ND^2							
Deep sea freight	Establishments	12	11	12	13	11	14	14	12	12
transportation	Employees	ND^2	238	270	260	310	235	228	243	222
	Payroll	ND^2	18,271	29,086	37,013	36,766	47,845	48,110	46,595	45,045
	Establishments	2	2	2	2	2	1	2	1	1
Deep sea passenger transportation	Employees	ND^2								
transportation	Payroll	ND^2								
	Establishments	101	108	116	117	117	119	124	125	126
Marinas	Employees	ND^2	722	1,006	1,016	994	1,024	1,224	1,352	1,261
	Payroll	ND^2	29,690	39,691	41,952	42,754	44,829	50,809	60,016	58,065
Marine cargo	Establishments	2	1	NA^3	1	3	3	5	4	3
handling	Employees	ND^2	ND^2	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
nanuning	Payroll	ND^2	ND^2	NA^3	ND^2	ND^2	ND^2	5,925	ND^2	ND^2
Neutrational	Establishments	4	8	6	6	8	9	6	6	6
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	45	69	ND^2	ND^2	5
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	1,768	2,423	432	338	696
Deut & beukeu	Establishments	3	5	4	4	4	4	4	8	8
Port & harbor operations	Employees	ND^2	185	ND^2	ND^2	ND^2	ND^2	ND^2	179	166
operations	Payroll	ND^2	5,527	ND^2	ND^2	ND^2	ND^2	ND^2	6,136	5,787
Ship & heat	Establishments	14	12	14	17	17	17	22	15	13
Ship & boat building	Employees	ND^2								
bunding	Payroll	ND^2								

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

 $^{^{2}}ND$ = these data are confidential thus not disclosable

 $^{^{3}\}mathrm{NA}=\mathrm{these}$ data are not available

2010 Economic Impacts of the Maine Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	28,059	1,553,055	740,429	26,757	1,362,500	673,136		
Commercial Harvesters	12,582	720,137	322,059	12,582	720,137	322,059		
Seafood Processors & Dealers	2,113	146,790	75,305	1,909	132,603	68,027		
Importers	539	148,307	45,210	0	0	0		
Seafood Wholesalers & Distributors	877	83,245	38,857	757	71,805	33,517		
Retail	11,948	454,576	258,997	11,510	437,954	249,533		

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	241,383	290,315	287,049	367,459	392,122	361,920	343,872	308,146	285,925	375,148
Finfish & other	56,662	47,489	49,292	48,904	47,141	37,084	36,930	36,679	30,488	30,061
Shellfish	184,721	242,826	237,757	318,555	344,982	324,836	306,942	271,467	255,437	345,087
American lobster	153,982	210,950	205,715	289,079	317,948	297,143	280,667	245,098	231,170	313,274
Atlantic herring	7,165	4,618	7,296	76	56	29	9,170	8,379	7,868	8,627
Bloodworms	4,851	5,759	5,292	7,524	6,039	5,037	6,051	5,913	6,197	5,874
Blue mussel	2,650	4,117	4,487	3,319	2,625	2,618	1,934	1,627	2,203	2,071
Cod & haddock	6,469	5,944	4,673	5,392	5,177	3,982	3,728	1,482	216	1,521
Goosefish	7,991	6,248	7,852	6,828	6,232	3,238	2,402	ND^1	ND^1	393
Ocean quahog clam	3,499	4,748	4,480	3,842	3,607	3,919	3,194	2,195	1,821	1,721
Pollock	2,448	2,386	2,206	2,346	3,106	2,309	2,160	ND^1	2,045	1,491
Sea Urchins	12,694	7,657	8,569	7,866	5,142	3,693	4,368	5,410	5,866	5,490
Softshell clam	16,609	14,370	15,859	16,628	14,081	13,163	12,476	12,826	ND^1	12,958

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	236,240	202,483	223,533	228,502	214,514	217,659	184,191	185,212	184,558	198,184
Finfish & other	167,022	113,132	141,621	130,368	121,278	121,268	96,541	93,510	87,248	78,189
Shellfish	69,218	89,351	81,912	98,134	93,236	96,391	87,650	91,703	97,310	119,995
American lobster	48,618	63,626	54,971	71,574	68,730	72,662	63,965	69,847	78,994	94,702
Atlantic herring	115,825	67,169	96,681	911	558	258	72,726	66,313	63,084	56,488
Bloodworms	644	683	594	615	456	450	549	537	574	533
Blue mussel	2,749	4,793	4,287	4,102	3,357	2,897	2,643	2,289	2,760	2,582
Cod & haddock	5,741	5,172	3,860	4,588	4,045	2,448	2,345	1,131	162	872
Goosefish	10,983	11,127	13,291	10,552	7,130	3,666	2,376	ND^1	ND^1	403
Ocean quahog clam	1,083	1,287	1,194	1,013	1,001	1,214	1,011	669	556	549
Pollock	3,447	2,958	4,085	4,189	5,260	3,678	4,245	ND^1	3,039	1,625
Sea Urchins	9,901	6,321	5,963	5,742	3,517	2,800	2,762	2,900	3,487	2,592
Softshell clam	2,660	2,423	2,364	2,380	1,857	1,868	1,931	1,998	ND^1	2,076

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	3.17	3.32	3.74	4.04	4.63	4.09	4.39	3.51	2.93	3.31
Atlantic herring	0.06	0.07	0.08	0.08	0.10	0.11	0.13	0.13	0.12	0.15
Bloodworms	7.53	8.43	8.91	12.24	13.24	11.20	11.02	11.01	10.79	11.03
Blue mussel	0.96	0.86	1.05	0.81	0.78	0.90	0.73	0.71	0.80	0.80
Cod & haddock	1.13	1.15	1.21	1.18	1.28	1.63	1.59	1.31	1.33	1.74
Goosefish	0.73	0.56	0.59	0.65	0.87	0.88	1.01	ND^1	ND^1	0.97
Ocean quahog clam	3.23	3.69	3.75	3.79	3.60	3.23	3.16	3.28	3.27	3.13
Pollock	0.71	0.81	0.54	0.56	0.59	0.63	0.51	ND^1	0.67	0.92
Sea Urchins	1.28	1.21	1.44	1.37	1.46	1.32	1.58	1.87	1.68	2.12
Softshell clam	6.25	5.93	6.71	6.99	7.58	7.05	6.46	6.42	ND^1	6.24

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

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditure	es (thousands	of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	84	6,185	2,021	3,495
Private Boat	87	7,353	2,537	4,340
Shore	544	38,908	12,722	21,445
Total Durable Equipment Impacts	414	42,038	13,720	20,365
Total State Trip and Durable Equipment Economic Impacts	1,130	94,483	31,000	49,646

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	20,254
For-Hire	4,084	344	Other Equipment	8,987
Private Boat	1,564	5,777	Boat Expenses	15,882
Shore	25,996	2,533	Vehicle Expenses	14,244
Total Trip Expenditures	31,644	8,654	Second Home Expenses	480
			Total Durable Equipment Expenditures	59,847
Total State Trip and Dura	ble Equipment Exp	enditures	·	100,145

Recreational Anglers by Residential Area (thousands of anglers)

0			•		U ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	126	127	165	113	190	182	174	121	117	122
Non-Coastal	16	17	23	21	20	22	13	9	12	9
Out of State	166	172	170	148	173	285	260	180	324	159
Total Anglers	308	316	358	282	383	489	447	310	453	290

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J (0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	20	13	14	38	38	31	33	31	26	23
Private	444	422	410	315	552	517	486	382	330	339
Shore	469	471	495	406	499	649	703	426	658	388
Total Trips	932	906	919	758	1,089	1,197	1,222	840	1,014	750

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American Shad	Н	(1)	(1)	(1)	(1)	1	4	(1)	(1)	2	(1)
American Shau	R	2	(1)	1	2	(1)	20	3	4	20	9
Atlantic cod	Н	92	15	11	42	26	12	22	35	45	20
	R	73	16	25	43	43	41	79	59	54	61
Atlantic mackerel	Н	1,175	1,207	616	778	761	387	1,139	839	1,290	1,343
	R	319	234	106	79	32	95	95	227	162	280
Blue shark	H	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Dide shark	R	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)	1	(1)
Bluefin tuna	Н	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)	(1)
Didenii tuna	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	Н	15	24	14	17	19	6	37	24	5	14
Didensii	R	40	42	23	38	51	42	72	65	30	11
Haddock	Н	12	3	1	12	7	8	13	15	11	6
Haddock	R	17	4	4	3	3	4	13	3	2	3
Pollock	H	58	76	10	57	45	78	43	90	55	53
TOHOCK	R	130	48	17	39	53	27	19	162	36	143
Striped bass	Н	60	72	58	37	69	73	71	49	53	19
Juliped bass	R	871	1,392	847	748	3,024	4,063	1,105	470	247	191
Winter flounder	Н	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
winter nounder	R	3	(1)	1	(1)	(1)	1	(1)	1	4	(1)

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

Maine's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	39,650 (0.56%)	500,030 (0.43%)	14,205 (0.36%)	22,567 (0.37%)	38,134 (0.38%)	8.09
2009	40,616 (0.55%)	488,932 (0.43%)	17,168 (0.35%)	29,113 (0.36%)	50,039 (0.37%)	ND^2
% change	2.44%	-2.22%	20.9%	29%	31.2%	NA ³

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	55	50	62	57	52	54	65	64	63
prep. & packaging	Receipts	6,301	3,023	4,699	5,642	5,082	6,463	7,177	4,261	6,642
Seafood Sales,	Firms	51	62	60	55	51	45	55	46	46
retail	Receipts	8,486	8,980	8,365	8,621	7,331	7,115	5,905	4,035	3,212

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	36	33	35	28	27	27	27	29	25
prep. & packaging	Employees	1,007	639	656	576	614	616	536	490	545
prep. & packaging	Payroll	13,125	11,301	13,999	19,767	12,349	12,304	9,351	9,288	10,427
Seafood sales,	Establishments	182	190	181	177	177	167	170	168	164
wholesale	Employees	1,235	1,256	985	1,048	1,152	996	1,015	1,210	1,126
Wholesale	Payroll	32,599	36,043	29,643	30,108	30,513	32,192	32,005	36,185	37,687
Seafood sales,	Establishments	41	47	51	50	49	55	50	45	49
retail	Employees	ND^2	173	181	189	184	179	181	148	152
retail	Payroll	ND^2	3,971	4,663	5,112	4,678	4,753	4,635	4,148	4,481

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

· · · ·		2001	2002	2003	2004	2005	2006	2007	2008	2009
	Establishments									2005
Coastal & Great Lakes freight transportation		6	4	5	4	3	3	3	5	4
	Employees	ND^2	30	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	22
	Payroll	ND^2	939	ND^2	ND^2	ND^2	ND^2	ND^2	1,058	1,037
Deep sea freight transportation	Establishments	4	3	2	2	1	1	NA^3	1	1
	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	ND^2
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA ³	ND^2	ND^2
Deep sea passenger transportation	Establishments	2	4	1	1	1	1	2	1	1
	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Marinas	Establishments	89	85	79	84	84	84	86	87	89
	Employees	600	503	416	406	411	417	464	411	376
	Payroll	18,121	16,055	12,853	13,369	14,215	15,353	18,600	15,206	14,654
Marine cargo handling	Establishments	4	4	4	4	3	3	3	3	3
	Employees	ND^2	91	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Payroll	ND^2	3,183	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Navigational services to shipping	Establishments	16	18	17	16	16	12	15	15	14
	Employees	45	88	106	91	88	93	105	138	93
	Payroll	3,371	4,341	5,521	4,927	5,890	6,260	6,737	6,148	5,369
Port & harbor operations	Establishments	1	NA^3	1	1	1	1	2	2	1
	Employees	ND^2	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Payroll	ND^2	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & boat building	Establishments	79	87	91	86	92	89	94	90	82
	Employees	8,242	ND^2	7,630	7,753	ND^2	6,808	6,751	6,930	ND^2
	Payroll	300,378	ND^2	332,332	328,179	ND^2	320,288	345,036	354,899	ND^2

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable

 $^{{}^{3}}NA = these data are not available$
Commercial Fisheries

2010 Economic Impacts of the Massachusetts Seafood Industry (thousands of dollars)

•			J (/				
		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	90,018	7,383,443	2,902,863	54,105	2,013,392	1,009,726		
Commercial Harvesters	11,264	875,421	407,482	11,264	875,421	407,482		
Seafood Processors & Dealers	7,319	939,695	465,811	1,548	198,696	98,495		
Importers	14,667	4,034,559	1,229,910	0	0	0		
Seafood Wholesalers & Distributors	2,964	466,358	206,781	979	154,017	68,290		
Retail	53,805	1,067,411	592,880	40,315	785,258	435,460		

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

		0			<i>,</i> .	•	•		,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	278,946	296,922	292,602	325,937	427,332	437,157	420,079	399,922	400,248	478,468
Finfish & other	122,944	122,845	116,767	109,163	117,003	110,426	109,434	122,000	114,784	126,502
Shellfish	156,002	174,077	175,835	216,774	310,330	326,731	310,645	277,923	285,464	351,966
American lobster	53,430	56,569	52,329	51,581	49,563	52,553	51,258	45,423	42,074	50,305
Atlantic herring	2,769	2,285	5,461	4	69	ND^1	8,265	11,336	15,322	10,226
Atlantic mackerel	141	713	1,888	6,542	ND^1	10,203	4,736	4,258	4,548	1,486
Clams, all other	5,927	8,169	823	4,721	19,010	14,064	15,707	24,860	16,742	17,847
Cod & haddock	36,905	40,550	36,668	31,452	31,954	25,451	32,033	38,694	33,668	45,165
Eastern oyster	ND^1	ND^1	ND^1	24	2,738	4,618	4,559	5,477	6,432	8,171
Flounders	33,086	33,092	32,995	29,897	28,815	24,592	22,091	20,926	19,635	19,963
Goosefish	18,263	15,546	15,585	15,675	21,485	17,712	14,381	14,036	9,902	9,920
Ocean quahog clam	ND^1	ND^1	7,325	6,919	ND^1	8,297	10,100	ND^1	10,710	8,981
Sea scallop	87,357	100,551	106,938	144,748	226,949	234,668	218,292	189,923	197,296	252,270

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	240,759	243,501	295,439	337,603	337,304	351,426	304,401	326,261	355,965	282,601
Finfish & other	182,473	175,490	231,978	267,342	267,311	271,352	227,229	255,635	279,324	200,789
Shellfish	58,286	68,011	63,461	70,261	69,993	80,074	77,171	70,626	76,641	81,812
American lobster	12,133	12,853	11,385	11,295	9,880	10,966	10,143	10,598	11,641	12,752
Atlantic herring	48,960	40,508	79,873	40	700	ND^1	73,268	94,233	133,531	71,746
Atlantic mackerel	387	5,549	23,451	72,687	ND^1	89,535	46,240	35,438	30,199	12,156
Clams, all other	10,836	17,057	1,045	6,315	19,881	4,593	4,215	22,492	6,553	10,162
Cod & haddock	37,162	37,521	32,013	26,926	24,539	15,862	20,290	28,523	28,498	36,434
Eastern oyster	ND^1	ND^1	ND^1	9	105	212	127	149	159	214
Flounders	33,989	28,987	29,418	30,704	22,115	13,182	10,965	11,589	12,390	11,152
Goosefish	22,120	22,794	23,979	22,357	21,849	17,495	13,308	12,446	9,829	8,739
Ocean quahog clam	ND^1	ND^1	14,226	14,085	ND^1	16,798	20,158	ND^1	18,691	15,646
Sea scallop	22,640	25,290	25,371	27,944	29,045	36,088	32,540	27,016	29,782	31,155

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	4.40	4.40	4.60	4.57	5.02	4.79	5.05	4.29	3.61	3.95
Atlantic herring	0.06	0.06	0.07	0.09	0.10	ND^1	0.11	0.12	0.11	0.14
Atlantic mackerel	0.36	0.13	0.08	0.09	ND^1	0.11	0.10	0.12	0.15	0.12
Clams, all other	0.55	0.48	0.79	0.75	0.96	3.06	3.73	1.11	2.56	1.76
Cod & haddock	0.99	1.08	1.15	1.17	1.30	1.60	1.58	1.36	1.18	1.24
Eastern oyster	ND^1	ND^1	ND^1	2.74	26.09	21.75	36.02	36.67	40.37	38.25
Flounders	0.97	1.14	1.12	0.97	1.30	1.87	2.01	1.81	1.58	1.79
Goosefish	0.83	0.68	0.65	0.70	0.98	1.01	1.08	1.13	1.01	1.14
Ocean quahog clam	ND^1	ND^1	0.51	0.49	ND^1	0.49	0.50	ND^1	0.57	0.57
Sea scallop	3.86	3.98	4.21	5.18	7.81	6.50	6.71	7.03	6.62	8.10

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

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditure	es (thousands	of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	369	35,531	12,456	21,198
Private Boat	705	82,535	30,224	50,603
Shore	1,271	131,120	46,926	77,634
Total Durable Equipment Impacts	2,351	386,972	131,999	194,461
Total State Trip and Durable Equipment Economic Impacts	4,697	636,157	221,606	343,897

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	143,846
For-Hire	15,383	8,144	Other Equipment	38,978
Private Boat	19,780	54,021	Boat Expenses	62,215
Shore	62,283	29,040	Vehicle Expenses	182,923
Total Trip Expenditures	97,446	91,205	Second Home Expenses	10,500
			Total Durable Equipment Expenditures	438,462
Total State Trip and Dura	ble Equipment Exp	enditures	•	627,113

Recreational Anglers by Residential Area (thousands of anglers)

0			•		U ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	392	465	434	535	585	623	664	655	489	586
Non-Coastal	79	96	112	131	135	151	179	170	144	152
Out of State	279	344	306	335	391	484	465	469	421	433
Total Anglers	750	906	852	1000	1112	1258	1309	1293	1054	1171

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	134	106	145	133	246	242	242	235	227	153
Private	2,569	2,399	2,329	2,456	2,383	2,438	2,419	2,322	1,872	2,258
Shore	1,821	1,701	1,611	1,913	1,809	2,044	2,049	1,907	1,507	1,281
Total Trips	4,524	4,206	4,085	4,502	4,439	4,724	4,710	4,465	3,606	3,692

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantia hanita	Н	13	6	11	4	15	5	4	3	4	2
Atlantic bonito	R	8	17	(1)	3	12	18	12	5	1	2
Atlantic cod	Н	842	585	583	519	558	188	239	372	286	943
	R	1,119	1,049	937	843	1,337	534	883	1,029	834	1,801
Atlantic mackerel	Н	1,811	2,024	1,313	722	1,967	4,296	1,789	2,047	726	2,311
	R	157	61	45	73	21	203	83	261	152	257
Bluefish	Н	357	229	374	406	589	686	587	414	377	334
Diuensii	R	948	628	1,019	1,468	1,812	1,507	1,344	1,242	814	896
Haddock	Н	73	61	75	215	334	151	291	263	196	373
TIAUUOCK	R	45	125	130	104	87	89	55	108	43	60
Porgies (scup)	Н	881	975	1,624	1,511	397	314	729	660	772	842
Forgies (scup)	R	832	879	1,221	855	516	931	936	1,177	1,282	1,537
Striped bass	Н	288	309	407	400	368	340	347	343	336	354
Striped bass	R	5,411	5,719	4,362	5,892	4,840	8,657	5,772	3,641	2,490	1,922
Summer flounder	Н	152	155	177	281	203	219	76	150	48	44
Summer nounder	R	210	336	244	388	308	556	99	181	122	141
Winter flounder	Н	61	53	45	40	42	43	37	155	105	110
winter nounder	R	97	34	30	17	39	35	17	65	91	84
Wrasses (tautog)	Н	116	103	47	23	48	63	76	24	27	53
wrasses (laulog)	R	205	284	190	63	148	266	331	86	122	130

¹In this table, '(1)' = 0.999 thousand fish and '1' = 1,000-1,499 thousand fish.

Massachusetts's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	177,434 (2.5%)	3,129,980 (2.7%)	134,667 (3.4%)	181,012 (2.8%)	282,294 (3%)	7.54
2009	170,473 (2.3%)	2,967,877 (2.6%)	153,775 (3.2%)	222,378 (2.6%)	360,538 (2.9%)	ND^2
% change	-3.92%	-5.18%	14.2%	22.9%	27.7%	NA ³

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	29	26	23	25	28	36	24	26	22
prep. & packaging	Receipts	1,762	1,296	676	2,284	2,266	2,525	908	1,250	1,944
Seafood Sales,	Firms	62	78	59	64	59	62	57	64	62
retail	Receipts	6,171	7,314	5,409	5,933	5,528	4,905	4,421	7,982	6,889

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Saafaad product	Establishments	41	45	55	53	50	47	52	44	44
Seafood product prep. & packaging	Employees	2,164	2,231	2,717	2,743	2,671	2,607	2,684	2,355	2,396
prep. & packaging	Payroll	83,249	92,776	110,917	112,642	115,704	120,912	113,580	109,747	119,282
Seafood sales,	Establishments	212	207	163	148	151	139	160	141	144
wholesale	Employees	2,508	2,393	1,880	1,890	1,836	1,706	1,803	1,442	1,542
Wholesale	Payroll	105,904	107,871	74,431	75,689	76,070	77,106	81,863	68,898	70,864
Seafood sales,	Establishments	115	126	124	128	116	115	126	118	115
retail	Employees	451	490	720	686	677	692	737	549	542
	Payroll	8,224	10,673	17,760	17,454	17,725	18,165	19,267	15,017	15,261

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	12	10	13	13	10	12	14	14	12
Lakes freight	Employees	ND^2	ND^2	ND^2	688	ND^2	623	283	169	166
transportation	Payroll	ND^2	ND^2	ND^2	36,533	ND^2	38,421	18,620	11,701	10,011
Deen oog freight	Establishments	14	12	10	10	10	11	12	8	10
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	509	ND^2	361	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	38,982	ND^2	38,908	35,473
	Establishments	2	2	1	1	4	4	1	NA ³	1
Deep sea passenger transportation	Employees	ND^2	NA^3	ND^2						
transportation	Payroll	ND^2	NA^3	ND^2						
	Establishments	136	139	145	135	139	141	173	175	177
Marinas	Employees	996	988	969	989	973	1,064	1,154	1,138	1,188
	Payroll	34,865	35,169	40,700	41,474	43,103	45,894	51,705	53,694	56,663
Marine cargo	Establishments	7	7	6	6	5	4	5	3	2
handling	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	69	ND^2	ND^2
nanuning	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	2,867	2,271	ND^2
Navigational	Establishments	5	5	5	7	6	11	9	8	11
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	65	75	71
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	4,540	4,355	4,342
Port & harbor	Establishments	NA^3	NA^3	3	3	3	4	3	4	4
operations	Employees	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	69	63	66
operations	Payroll	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	647	1,289	1,323
Ship & boat	Establishments	56	50	53	55	50	47	49	43	38
building	Employees	577	617	ND^2	ND^2	588	ND^2	588	603	579
Sunding	Payroll	18,813	21,710	ND^2	ND^2	20,050	ND^2	26,445	28,402	20,685

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

 $^{^2\}mathrm{ND} =$ these data are confidential thus not disclosable

 $^{^{3}\}mathrm{NA}=\mathrm{these}$ data are not available

2010 Economic Impacts of the New Hampshire Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	5,795	751,841	280,837	1,814	100,182	50,742		
Commercial Harvesters	620	36,145	15,865	620	36,145	15,865		
Seafood Processors & Dealers	608	65,539	33,206	145	15,605	7,907		
Importers	1,840	506,138	154,293	0	0	0		
Seafood Wholesalers & Distributors	357	45,295	21,012	55	6,918	3,209		
Retail	2,369	98,725	56,461	995	41,514	23,761		

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

0					• • •		• •		,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	17,865	16,689	15,127	17,214	22,084	18,915	17,045	17,466	17,708	20,609
Finfish & other	8,231	7,350	5,748	6,449	6,840	4,855	4,151	4,819	5,528	5,131
Shellfish	9,634	9,339	9,380	10,765	15,244	14,059	12,895	12,647	12,181	15,478
American lobster	8,072	2	ND^1	10,199	14,377	13,915	ND^1	12,267	11,914	14,837
Atlantic cod	2,017	1,983	1,853	2,244	1,913	1,705	1,972	2,311	2,587	2,187
Atlantic herring	399	783	1,170	3	ND^1	ND^1	147	ND^1	271	375
Goosefish	2,812	1,853	1,097	1,456	1,484	794	375	290	280	216
Haddock	181	134	144	157	136	132	123	89	68	29
Hake	367	321	303	200	279	219	244	ND^1	215	237
Pollock	891	847	589	569	1,138	1,221	902	ND^1	1,284	845
Sea scallop	689	726	375	276	527	24	30	16	4	3
Shrimp	369	104	212	222	340	120	322	291	188	567
Spiny dogfish	148	85	27	0	ND^1	183	ND^1	414	514	292

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

•		• •	• •	•	• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	18,584	23,200	27,435	23,796	21,281	10,820	8,422	10,463	13,886	11,814
Finfish & other	15,078	20,354	24,747	21,074	18,081	7,857	5,166	7,178	10,094	7,031
Shellfish	3,505	2,846	2,688	2,722	3,200	2,963	3,256	3,284	3,792	4,783
American lobster	2,028	0	ND^1	2,097	2,556	2,666	ND^1	2,567	2,984	3,648
Atlantic cod	1,976	1,583	1,458	1,633	1,293	1,023	1,168	1,479	1,985	1,228
Atlantic herring	7,015	14,125	18,933	32	ND^1	ND^1	936	ND^1	3,120	2,830
Goosefish	2,463	1,876	1,629	1,640	1,226	621	317	249	249	174
Haddock	135	95	108	123	99	73	61	53	45	18
Hake	820	557	729	405	372	241	313	ND^1	424	322
Pollock	1,183	997	1,109	1,202	1,997	2,566	2,025	ND^1	2,019	1,043
Sea scallop	171	177	100	44	76	3	4	2	1	0
Shrimp	506	90	223	432	567	294	783	572	359	963
Spiny dogfish	536	349	175	0	ND^1	620	ND^1	1,370	1,885	1,214

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	3.98	3.86	ND^1	4.86	5.62	5.22	ND^1	4.78	3.99	4.07
Atlantic cod	1.02	1.25	1.27	1.37	1.48	1.67	1.69	1.56	1.30	1.78
Atlantic herring	0.06	0.06	0.06	0.10	ND^1	ND^1	0.16	ND^1	0.09	0.13
Goosefish	1.14	0.99	0.67	0.89	1.21	1.28	1.18	1.17	1.13	1.24
Haddock	1.35	1.41	1.33	1.27	1.38	1.82	2.01	1.70	1.52	1.55
Hake	0.45	0.58	0.41	0.49	0.75	0.91	0.78	ND^1	0.51	0.74
Pollock	0.75	0.85	0.53	0.47	0.57	0.48	0.45	ND^1	0.64	0.81
Sea scallop	4.04	4.10	3.76	6.22	6.89	7.44	8.26	7.68	7.22	8.84
Shrimp	0.73	1.16	0.95	0.51	0.60	0.41	0.41	0.51	0.52	0.59
Spiny dogfish	0.28	0.24	0.16	0.18	ND^1	0.30	ND^1	0.30	0.27	0.24

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

New Hampshire

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditure	es (thousands	of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	95	7,829	2,614	4,587
Private Boat	30	3,134	1,084	1,894
Shore	33	2,961	1,035	1,754
Total Durable Equipment Impacts	103	14,472	5,103	7,375
Total State Trip and Durable Equipment Economic Impacts	261	28,396	9,836	15,610

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	7,995
For-Hire	2,852	2,591	Other Equipment	2,226
Private Boat	356	2,810	Boat Expenses	2,618
Shore	1,605	1,175	Vehicle Expenses	5,732
Total Trip Expenditures	4,813	6,576	Second Home Expenses	0
			Total Durable Equipment Expenditures	18,570
Total State Trip and Dura	ble Equipment Exp	enditures		29,959

Recreational Anglers by Residential Area (thousands of anglers)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	68	60	91	81	105	90	97	63	67	46
Non-Coastal	13	11	16	13	14	15	13	8	9	7
Out of State	74	65	75	69	84	82	63	46	58	33
Total Anglers	154	137	182	163	203	187	172	118	134	86

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	•		0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	83	29	35	39	47	88	94	82	98	60
Private	177	143	230	141	236	192	248	147	149	94
Shore	100	147	150	181	237	267	196	119	167	98
Total Trips	360	318	416	360	520	547	538	349	414	252

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

narvest (n) and k		2001	2002	-	2004	2005	,	2007	2008	2009	2010
			1	2003			2006	2007	1		
Atlantic cod	H	164	39	108	44	69	61	51	73	148	81
Atlantic cou	R	184	70	208	56	143	225	221	198	244	147
Atlantic mackerel	Н	828	212	409	86	333	153	151	573	1,135	259
	R	297	69	61	10	25	31	11	58	86	24
Bluefin tuna	Н	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Diuenin tuna	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	Н	8	19	8	21	23	10	32	6	1	2
Diuensii	R	14	14	17	10	42	26	18	2	2	(1)
Bottomfish,	Н	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
unidentified	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Flounder or sole,	Н	(1)	(1)	(1)	2	1	(1)	5	(1)	(1)	(1)
unidentified	R	2	5	1	2	4	6	2	2	(1)	2
Haddock	Н	36	19	44	51	107	120	95	81	105	53
Haddock	R	50	43	128	17	36	86	41	18	29	12
Pollock	Н	167	89	63	53	49	80	56	53	41	60
FUIIOCK	R	265	63	42	28	29	39	15	18	46	62
Stringd bass	Н	15	13	25	10	26	15	7	7	11	5
Striped bass	R	164	238	260	197	513	568	289	84	66	44
Winter flounder	Н	9	8	7	2	3	10	13	14	9	3
winter nounder	R	6	10	3	2	3	5	10	8	5	6

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

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	37,312 (0.53%)	556,877 (0.48%)	18,494 (0.46%)	26,690 (0.44%)	44,604 (0.45%)	0.23
2009	37,873 (0.51%)	568,043 (0.5%)	23,628 (0.49%)	34,577 (0.42%)	59,086 (0.44%)	0.09
% change	1.5%	2.01%	27.8%	29.6%	32.5%	-65.2%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	NA^2	0	7	4	4	4	5	0	0
prep. & packaging	Receipts	NA^3	ND^3	1,205	1,147	842	1,087	927	ND^2	ND^2
Seafood Sales,	Firms	8	9	14	15	11	10	11	17	14
retail	Receipts	1,055	862	960	1,438	1,330	1,496	1,540	1,894	1,858

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

	0			•		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	8	9	11	10	10	10	7	7	8
prep. & packaging	Employees	ND^2	368	322	448	418	ND^2	ND^2	ND^2	115
prep. & packaging	Payroll	ND^2	13,452	13,676	18,886	16,275	ND^2	ND^2	ND^2	3,234
Seafood sales,	Establishments	14	14	11	12	10	9	8	8	8
wholesale	Employees	75	78	ND^2	82	ND^2	ND^2	92	101	88
Wholesale	Payroll	2,222	2,093	ND^2	2,511	ND^2	ND^2	3,360	4,142	4,268
Seafood sales,	Establishments	9	9	12	12	12	15	15	14	14
retail	Employees	ND^2	ND^2	ND^2	ND^2	79	78	93	83	95
ICLAII	Payroll	ND^2	ND^2	ND^2	ND^2	2,053	2,201	2,077	2,011	2,299

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	1	1	NA^4	NA ³	1	1	1	NA ³	NA ³
Lakes freight	Employees	ND^2	ND^2	NA^3	NA ³	ND^2	ND^2	ND^2	NA^3	NA^3
transportation	Payroll	ND^2	ND^2	NA^3	NA ³	ND^2	ND^2	ND^2	NA^3	NA^3
Deen ees fusielet	Establishments	1	1	1	1	2	2	1	1	1
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	1	1	NA ³	NA ³	NA ³	NA ³	NA^3	NA^3	NA^3
Deep sea passenger transportation	Employees	ND^2	ND^2	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3
transportation	Payroll	ND^2	ND^2	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3
	Establishments	42	36	40	40	38	35	35	37	37
Marinas	Employees	209	228	196	226	194	ND^2	171	173	146
	Payroll	8,135	10,872	9,043	9,315	8,871	ND^2	7,774	8,114	7,022
Marine cargo	Establishments	NA^3	NA^3	NA^3	NA^3	NA ³	NA^3	1	NA^3	NA^3
handling	Employees	NA^3	NA^3	NA^3	NA^3	NA ³	NA^3	ND^2	NA^3	NA^3
nanuning	Payroll	NA^3	NA^3	NA^3	NA^3	NA ³	NA^3	ND^2	NA^3	NA^3
Navigational	Establishments	2	2	3	3	4	4	2	2	2
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Port & harbor	Establishments	1	1	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3
operations	Employees	ND^2	ND^2	NA^3	NA^3	NA ³	NA^3	NA^3	NA^3	NA^3
operations	Payroll	ND^2	ND^2	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3
Ship & boat	Establishments	6	8	10	8	6	6	8	9	8
building	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Sananig	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2

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

 $^{^{2}}NA =$ these data are not available

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

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

Commercial Fisheries

2010 Economic impacts of the knode Island Searood industry (thousands of donars)												
		With Imports			Without Imports							
	Jobs	Sales	Value Added	Jobs	Sales	Value Added						
Total Impacts	8,454	977,581	373,235	3,866	221,771	112,001						
Commercial Harvesters	1,709	107,879	50,367	1,709	107,879	50,367						
Seafood Processors & Dealers	415	43,153	21,730	244	25,429	12,805						
Importers	2,243	617,003	188,090	0	0	0						
Seafood Wholesalers & Distributors	469	55,944	26,082	99	11,863	5,531						
Retail	3,619	153,601	86,966	1,813	76,601	43,298						

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

		0			/ ·				,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	68,657	64,718	66,088	77,565	91,408	98,488	73,548	68,890	61,663	62,639
Finfish & other	26,503	25,115	24,408	25,821	24,672	28,123	24,999	22,994	23,465	23,018
Shellfish	42,154	39,602	41,679	51,744	66,736	70,366	48,548	45,896	38,198	39,620
All other flounders	3,085	3,194	2,728	2,136	1,734	3,499	3,585	2,138	1,455	593
American lobster	18,747	15,875	16,731	14,624	23,009	18,391	12,152	12,988	11,221	12,373
Atlantic herring	2,295	1,312	1,195	1,187	1,075	2,667	982	634	1,260	1,385
Atlantic mackerel	280	3,031	2,385	3,815	2,888	3,293	1,182	ND^1	3,301	1,886
Goosefish	5,455	4,757	4,813	3,421	4,549	4,481	3,533	3,590	2,956	2,974
Quahog clam	7,208	7,043	6,370	5,868	3,438	3,481	5,081	5,856	2,862	3,290
Scups or porgies	1,282	2,229	2,098	1,990	2,319	2,778	2,783	2,335	2,689	2,833
Sea scallop	684	ND^1	279	1,512	13,268	20,783	8,963	2,170	2,342	2,154
Squid	11,596	13,208	14,319	25,133	16,973	16,753	ND^1	4,147	15,249	12,589
Summer flounder	3,787	3,992	4,060	5,309	5,866	5,042	4,416	4,592	4,543	5,548

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

			• • •			•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	116,713	103,530	97,456	115,037	97,565	112,606	75,186	71,935	84,495	77,469
Finfish & other	82,871	70,552	62,340	62,169	47,820	60,590	40,849	34,465	46,314	42,813
Shellfish	33,842	32,978	35,116	52,868	49,745	52,016	34,338	37,471	38,180	34,656
All other flounders	3,148	2,781	2,428	2,360	1,315	1,848	1,871	1,115	1,027	358
American lobster	4,452	3,835	3,475	3,064	4,344	3,749	2,294	2,772	2,832	2,923
Atlantic herring	36,400	12,774	13,440	13,491	11,605	23,150	7,537	4,511	9,528	8,279
Atlantic mackerel	1,131	20,930	10,768	15,269	8,075	10,143	4,242	ND^1	9,057	4,356
Goosefish	6,081	5,148	6,830	4,288	4,143	3,858	3,117	3,120	2,705	2,519
Quahog clam	1,220	1,192	1,131	1,080	642	679	614	567	511	598
Scups or porgies	1,617	3,675	3,814	3,425	3,424	3,643	3,933	2,152	3,619	4,298
Sea scallop	181	ND^1	76	249	1,612	3,290	1,357	310	356	267
Squid	22,769	23,713	25,862	43,697	22,135	21,294	ND^1	11,757	26,452	19,799
Summer flounder	1,799	2,286	2,178	3,085	2,925	2,123	1,516	1,473	1,794	2,289

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
All other flounders	0.98	1.15	1.12	0.90	1.32	1.89	1.92	1.92	1.42	1.66
American lobster	4.21	4.14	4.82	4.77	5.30	4.91	5.30	4.69	3.96	4.23
Atlantic herring	0.06	0.10	0.09	0.09	0.09	0.12	0.13	0.14	0.13	0.17
Atlantic mackerel	0.25	0.14	0.22	0.25	0.36	0.32	0.28	ND^1	0.36	0.43
Goosefish	0.90	0.92	0.70	0.80	1.10	1.16	1.13	1.15	1.09	1.18
Quahog clam	5.91	5.91	5.63	5.43	5.35	5.13	8.27	10.33	5.60	5.50
Scups or porgies	0.79	0.61	0.55	0.58	0.68	0.76	0.71	1.09	0.74	0.66
Sea scallop	3.78	ND^1	3.67	6.07	8.23	6.32	6.61	7.00	6.58	8.07
Squid	0.51	0.56	0.55	0.58	0.77	0.79	ND^1	0.35	0.58	0.64
Summer flounder	2.11	1.75	1.86	1.72	2.01	2.38	2.91	3.12	2.53	2.42

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

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added						
Trip Impacts by Fishing Mode:										
For-Hire	65	5,933	2,012	3,547						
Private Boat	188	17,705	6,246	10,606						
Shore	330	27,759	9,629	15,961						
Total Durable Equipment Impacts	606	83,865	24,520	36,173						
Total State Trip and Durable Equipment Economic Impacts	1,190	135,262	42,407	66,287						

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures			
	Non-Residents	Residents	Fishing Tackle	49,821			
For-Hire	3,738	734	Other Equipment	15,589			
Private Boat	8,444	9,676	Boat Expenses	14,002			
Shore	19,092	5,852	Vehicle Expenses	19,818			
Total Trip Expenditures	31,274	16,263	Second Home Expenses	1,598			
			Total Durable Equipment Expenditures	100,829			
Total State Trip and Durable Equipment Expenditures							

Recreational Anglers by Residential Area (thousands of anglers)

0	,		•							
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	137	134	147	129	145	177	171	169	111	161
Non-Coastal	NA^1									
Out of State	260	214	253	237	241	291	229	297	209	225
Total Anglers	397	348	400	366	386	468	401	465	320	387

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	, (·								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	20	37	60	51	48	52	61	60	55	41
Private	687	595	582	615	772	671	621	783	414	505
Shore	789	880	952	836	790	982	863	778	572	736
Total Trips	1,496	1,512	1,595	1,503	1,611	1,704	1,545	1,621	1,042	1,283

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

narvest (11) and N		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantia hanita	Н	2	11	2	6	1	(1)	4	(1)	(1)	(1)
Atlantic bonito	R	1	1	4	5	1	(1)	5	1	(1)	(1)
Atlantic cod	Н	6	6	1	3	1	2	1	2	4	2
Atlantic cou	R	2	8	5	3	2	2	1	1	7	11
Black seabass	Н	123	78	70	53	56	53	54	51	32	146
DIACK SEADASS	R	151	241	205	39	52	259	162	168	119	188
Bluefish	Н	365	325	334	307	310	362	327	337	62	167
Didensii	R	893	801	932	818	558	655	860	459	188	107
Porgies (scup)	Н	1,134	603	1,027	908	446	428	452	569	171	438
r orgies (scup)	R	1,074	933	805	517	666	884	736	1,286	332	574
Striped bass	H	80	78	115	85	113	74	102	56	75	79
Striped bass	R	377	530	449	670	741	1,356	741	436	358	212
Summer flounder	H	268	191	205	288	188	264	232	207	51	85
Summer nounder	R	392	770	351	297	341	1,044	867	968	348	216
Winter flounder	H	82	30	8	8	1	1	1	1	2	3
Willer Houlider	R	17	20	1	3	(1)	(1)	3	1	1	1
Wrasses (tautog)	Н	40	62	120	173	106	81	164	99	87	132
vviasses (laulog)	R	74	135	197	153	212	188	205	134	190	189
Yellowfin tuna	Н	1	1	2	(1)	1	(1)	(1)	(1)	(1)	(1)
	R	(1)	(1)	11	(1)	1	(1)	(1)	(1)	(1)	(1)

 $^{^{1}}NA = not$ applicable because all Rhode Island residents are considered coastal county residents

 $^{^2 {\}rm In}$ this table, '(1)'= 0-999 thousand fish and '1' = 1,000-1,499 thousand fish.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	28,539 (0.4%)	414,638 (0.36%)	13,158 (0.33%)	20,506 (0.35%)	35,645 (0.34%)	2.88
2009	28,682 (0.39%)	413,584 (0.36%)	16,776 (0.35%)	26,479 (0.34%)	47,470 (0.34%)	2.62
% change	0.501%	-0.254%	27.5%	29.1%	33.2%	-10.1%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	0	0	0	0	6	8	8	7	9
prep. & packaging	Receipts	ND^2	ND^2	ND^2	ND^2	2,024	1,662	2,291	1,376	1,045
Seafood Sales,	Firms	17	20	16	14	16	24	23	19	16
retail	Receipts	2,577	2,433	2,227	2,186	2,215	3,266	3,536	2,748	2,821

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	6	9	7	7	7	7	6	8	7
prep. & packaging	Employees	240	184	355	355	270	231	196	270	275
prep. & packaging	Payroll	7,581	7,284	10,381	10,867	5,549	6,137	6,876	6,354	5,821
Seafood sales,	Establishments	41	39	38	35	32	36	35	29	34
wholesale	Employees	382	380	394	259	206	188	224	226	202
wholesale	Payroll	14,250	14,505	15,724	12,269	9,851	10,209	11,447	10,505	9,534
Seafood sales,	Establishments	26	27	29	34	31	28	27	23	24
retail	Employees	ND^2	151	162	163	140	ND^2	109	94	127
	Payroll	ND^2	3,015	2,870	2,707	2,447	ND^2	2,207	2,027	2,398

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	1	2	1	1	1	1	1	2	1
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Deen oog freight	Establishments	2	1	1	2	2	2	2	2	2
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	3	2	3	NA ³	NA ³	NA ³	1	1	1
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2
	Establishments	54	56	61	60	66	63	68	73	70
Marinas	Employees	555	522	405	475	408	457	463	476	459
	Payroll	18,967	17,609	14,456	15,111	15,843	18,748	22,029	23,204	21,372
Marine cargo	Establishments	3	3	1	1	1	2	2	5	5
handling	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
nanuning	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Neurotional	Establishments	9	10	8	8	8	7	7	8	8
Navigational services to shipping	Employees	ND^2	36	46	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
services to simpping	Payroll	ND^2	2,162	2,585	ND^2	ND^2	ND^2	ND^2	5,904	3,728
Port & harbor	Establishments	NA^3	NA^3	2	2	2	2	2	2	1
operations	Employees	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & boat	Establishments	33	31	37	38	36	38	37	39	33
building	Employees	ND^2	1,329	ND^2	ND^2	ND^2	1,325	1,374	1,342	1,085
building	Payroll	ND^2	47,328	ND^2	ND^2	ND^2	52,682	55,788	54,225	41,246

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

 $^{^{2}}ND$ = these data are confidential thus not disclosable

 $^{^{3}\}mathrm{NA}=\mathrm{these}$ data are not available

Mid-Atlantic

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



Management Context

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

Mid-Atlantic Region FMPs

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

Of the stocks or stock complexes covered in these fishery management plans, one is currently listed as overfished: butterfish. No stocks in this region are currently subject to overfishing. Releases of winter flounder increased 240% between 2008 and 2009. This increase was partially driven by an addendum to Amendment 1 to the Interstate Fishery Management Plan for Inshore Stocks of Winter Flounder in 2009, which reduced the harvest limit from ten fish to two fish per day. The effect of the management action was compounded by a 111% increase in catch overall in between 2008 and 2009.

Commercial Fisheries

In 2010, commercial fishermen in the Mid-Atlantic Region landed 787 million pounds of finfish and shellfish, earning \$514 million in landings revenue. Landings revenue was dominated by sea scallop (\$184 million) and blue crab (\$138 million). These species commanded ex-vessel prices of \$7.68 and \$1.32 per pound, respectively, and comprised 63% of total landings revenue, but only 16% of total landings in the Mid-Atlantic Region.

Key Mid-Atlantic Regio	on Commercial Species
American lobster	 Quahog clam
 Atlantic surf clam 	 Sea scallop

Virginia and New Jersey had the highest landings revenue in the

region in 2010, \$199 million and \$178 million, respectively. The

next greatest landings revenue came from Maryland with \$96

million in landings revenue. In terms of pounds landed, Virginia

had the highest landings (495 million pounds), followed by New

Jersey (162 million pounds) and Maryland (98 million pounds).

- Blue crab
- Squid
- Eastern oyster
- Menhaden
- Striped Bass Summer flounder

Economic Impacts¹

In 2010, the Mid-Atlantic Region's seafood industry generated 339 in employment impacts in Delaware, 17,000 in employment impacts in Maryland, 43,000 in employment impacts in New Jersey, 42,000 in employment impacts in New York, and 23,000 in employment impacts in Virginia. New Jersey generated the largest impacts across the three other impact categories, generating \$6.4 billion sales impacts, \$1.4 billion in income, and \$2.3 billion in value added impacts. The smallest income impacts were generated in Delaware (\$8.8 million) and the smallest employment impacts were also generated in Delaware (339 jobs).

The sector that generated the greatest employment impacts by state was the retail sector with 21,000 jobs in New York and 15,000 jobs in New Jersey. The harvest sector in Maryland generated 3,500 jobs. More sales impacts were generated by importers in New Jersey than any other sector in any another state in the region at \$4.4 billion and the greatest value added impacts were also generated by importers in New Jersey (\$1.3 billion).

Landings Revenue

Landings revenue in the Mid-Atlantic Region totaled \$514 million in 2010. This was a 48% increase (a 14% increase in real terms) from 2001 levels (\$348 million) and a 18% increase (a 13% increase in real terms) relative to 2009 (\$435 million). Totaling \$404 million in 2010, shellfish revenue experienced a 57% increase (a 21% increase in real terms) from 2001 to 2010 and experienced a 19% increase (14% increase in real terms) from 2009 to 2010.

In terms of finfish, Virginia contributed the most (\$53 million), followed by New Jersey (\$23 million), and New York (\$21 million). Shellfish landings revenue was dominated by New Jersey (\$155 million), followed by Virginia (\$146 million), and Maryland (\$83 million).

Sea scallop and blue crab had the highest landings revenue in the Mid-Atlantic Region in 2010. Between 2001 and 2010, the landings revenue from sea scallop increased 145% (a 89%increase in real terms) and the landings revenue for blue crab 95% increase (a 51% increase in real terms).

From 2001 to 2010, species or species groups with large changes in landings revenue include blue crab (increased 95%), eastern oyster (decreased 80%), and summer flounder (increased 78%). Species or species groups with large changes in landings revenue between 2009 and 2010 include eastern oyster (decreasing 81%), squid (increasing 68%), and blue crab (increasing 63%).

Landings

Fishermen in the Mid-Atlantic Region landed 787 million pounds of finfish and shellfish in 2010. This was a 5.8% decrease from the 835 million pounds landed in 2001 but a 13% increase from the 696 million pounds landed in 2009. Finfish landings contributed 73% of total landings in the Mid-Atlantic Region (575 million pounds) in 2010. From 2009 to 2010, finfish landings experienced

¹The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

Commercial Fisheries Facts

Landings revenue

- On average, between 2001 and 2010, the key species or species groups accounted for 83% of total revenue, generating \$339 million in the Mid-Atlantic Region.
- <u>Sea scallop</u> had higher landings revenues than any other species or species group, averaging \$140 million in landings revenue from 2001 to 2010.
- Atlantic surf clam had the largest one-year increase in landings revenue over the 10 year time period, increasing 366% from \$5.7 million in 2008 to \$26 million in 2009.
- Atlantic surf clam had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 83% from \$32 million in 2007 to \$5.7 million in 2008.

Landings

- Key species or species groups contributed an average of 83% annually to total landings between 2001 and 2010.
- Menhaden, contributed the most to landings in the region, averaging 428 million pounds from 2001 to 2010.
- Atlantic surf clam had the largest one-year increase in landings over the 10 year time period, increasing 376% from 8.8 million in 2008 pounds to 42 million pounds in 2009.
- Atlantic surf clam had the largest one-year decrease in landings over the 10 year time period, decreasing 84% from 54 million pounds in 2007 to 8.8 million pounds in 2008.

Prices

- Quahog clam had the highest average annual ex-vessel price per pound (\$7.24) over the time period, followed by Eastern oyster (\$6.69), and sea scallop (\$5.71).
- Menhaden had the lowest average annual ex-vessel price per pound (\$0.06) over the time period, followed by Atlantic surf clam (\$0.58), and squid (\$0.63).
- <u>Squid</u> had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 126% from \$0.38 per pound in 2008 to \$0.86 in 2009.
- <u>Squid</u> had the largest decrease in ex-vessel price over the 10 year time period, decreasing 56% from \$0.86 per pound in 2007 to \$0.38 in 2008.

Menhaden and blue crab had the highest annual landings in the Mid-Atlantic Region in 2010, with 498 million pounds and 105 million pounds, respectively. Together they accounted for 77% of the total landings in 2010. Menhaden landings decreased 3.9% and blue crab landings increased 72% from 2001 to 2010.

From 2001 to 2010, species or species groups with large changes

in landings include eastern oyster (decreasing 89%), squid (increasing 73%), and blue crab (increasing 72%). Species or species groups with large changes in landings between 2009 and 2010 include squid (increasing 223%), eastern oyster (decreasing 77%), and quahog clam (decreasing 51%).

Prices

The ex-vessel prices for the Mid-Atlantic Region's key species and species groups in 2010 were higher than their 10 year average for eight of the key species (four of the species in real terms). Ex-vessel prices for quahog clam and sea scallop experienced the biggest increases between 2001 and 2010, increasing 178% (116% in real terms) and 120% (67% in real terms), respectively. Relative to the ex-vessel prices in 2009, the Mid-Atlantic Region's quahog clam experienced the greatest increase (116%, 107% in real terms) from \$7.62 in 2009 to \$16.43 in 2010. Of the changes in ex-vessel price experienced by species or species groups between 2009 and 2010, squid experienced the greatest decrease (47.7%, 49.8% in real terms) from \$0.86 to \$0.45. Relative to ex-vessel prices in 2009, eight species or species groups experienced increases, including quahog clam (116%), and sea scallop (22%).

In Delaware, the species or species group with the largest change in ex-vessel price from 2001 to 2010 was american eel (188% increase, 123% increase in real terms) from \$1.04 to \$3.00. The largest change in ex-vessel price experienced in Maryland was for Atlantic croaker (170% increase, 109% increase in real terms from \$0.3 to \$0.81 and in New Jersey the largest change in ex-vessel price was experienced by atlantic mackerel (157% increase, 99% increase in real terms from \$0.07 to \$0.18).

Recreational Fishing

In 2010, over 2.8 million recreational anglers took 17 million fishing trips in the Mid-Atlantic Region. Over 94% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 56% of them were taken from a private or rental boat and another 39% were shore-based. Summer flounder were the most frequently caught species or species group with 23 million fish caught in 2010, and represented 34% of total fish caught in the region. Of the summer flounder caught, 95% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in Mid-Atlantic Region are reported in terms of economic impacts at the state level (employment, sales, income, and value added impacts) and expenditures on fishing trips and durable equipment at the regional level. Employment impacts in New Jersey were the highest in the region with over 9,100 full- and part-time jobs generated by recreational fishing activities in the state. Maryland (6,800 jobs), and Virginia (4,600 jobs), followed in terms of employment impacts.

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) and

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

Mid-Atlantic Region

expenditures on durable equipment. Throughout the Mid-Atlantic Region, most of the employment impacts in 2010 were generated by expenditures on durable equipment: 69% in New York, 67% in New Jersey, and 64% in Maryland.

In addition to employment impacts, the contribution of recreational fishing activities to Mid-Atlantic Region's economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value added impacts). In 2010, sales impacts were the highest in New Jersey (\$1.5 billion in sales impacts), followed by Maryland (\$915 million), New York (\$668 million), Virginia (\$517 million), and Delaware (\$200 million). In the same year, value added impacts were the highest in New Jersey (\$781 million in value added impacts), followed by Maryland (\$466 million), New York (\$350 million), Virginia (\$273 million), and Delaware (\$91 million).

Overall, total fishing trip and durable equipment expenditures across the Mid-Atlantic Region in 2010 were \$3.7 billion. Approximately 77% of these expenditures were generated by durable equipment purchases. The greatest expenditures were for vehicle expenses (\$1 billion), followed by fishing tackle (\$836 million), boat expenses (\$534 million), other equipment (\$230 million), and second home expenses (\$211 million). Fishing trip-related expenditures by the Mid-Atlantic Region's non-residents totaled over \$325 million of which the greatest portion can be attributed to shore-based fishing trips (\$158 million). Residents of the Mid-Atlantic Region spent \$504 million on saltwater fishing trips, with the most of these expenses generated by private boat trips (\$313 million).

Key Mid-Atlantic Region Recreational Species

- Black seabass
- Striped bass
- Bluefish

- Summer flounder
- Atlantic croaker
- Weakfish drum
- Spot Scup
- Winter flounder
- Tautog

Participation

There were 2.8 million recreational anglers who fished in the Mid-Atlantic Region in 2010. This was a 12% increase from 2001 (2.5 million anglers). These anglers were Mid-Atlantic Region residents from either a coastal county (2.6 million anglers) or non-coastal county (178,000 anglers). over 94% of total anglers in 2010 were residents of a coastal county. Coastal county angler participation in 2010 increased 13% relative to 2001 (2.3 million anglers) and increased 6.6% between 2009 and 2010. Non-coastal county angler participation decreased 6.6% relative to 2001 (190,000 anglers) and decreased 5% relative to 2009 (187,000 anglers).

Fishing Trips

Recreational fishermen took 17 million fishing trips in the Mid-Atlantic Region in 2010. This was a 20% decrease from the 2001 (21 million trips) and was 110,000 fewer trips than taken in 2009. Of the total trips taken in the Mid-Atlantic Region in 2010, fish), black seabass (7.5 million fish) and spot (6.4 million

approximately 56% of the trips were private or rental boat-based (9.5 million trips). The other most popular mode of fishing was shore based with 6.6 million trips in 2010.

Recreational Fishing Facts

Participation

- An average of 2.7 million anglers fished in the Mid-Atlantic Region annually from 2001 to 2010.
- In 2010, coastal county residents made up 94% of total anglers in this region. These anglers averaged 93% of total anglers annually over the 10 year time period.
- The largest annual increase in the number of coastal anglers during the 10 year time period occurred between 2002 and 2003, increasing 36%, from 1.6 million anglers to 2.2 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2001 and 2002, decreasing 28%, from 2.3 million anglers to 1.6 million anglers.

Fishing trips

- In the Mid-Atlantic Region, an average of 20 million fishing trips were taken annually from 2001 $\overline{\text{to 2010.}}$
- Private or rental boat and shore-based fishing trips accounted for 9.5 million and 6.6 million fishing trips, respectively, in 2010. Together these made up 95% of the fishing trips taken in that year.
- The largest annual increase in the number of total trips taken annually over the 10 year time period occurred between 2002 and 2003, increasing 19%, from 17 million trips to 20 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2001 and 2002, decreasing 22%, from 21 million trips to 17 million trips.

Harvest and release

- Summer flounder was the most commonly caught key species or species group, averaging 21 million fish over the 10 year time period. Of these, 86% were released rather than harvested.
- Of the ten commonly caught key species or species groups, eight were released more often than harvested over this time period.
- The species or species group that was most commonly released was summer flounder (86% released).
- Spot (67% harvested), followed by winter flounder (61% harvested), and Atlantic croaker (49% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.
- The largest one-year change in the number of fish released was for releases of winter flounder, which increased 240% between 2008 and 2009
- the largest one-year change in number of fish harvested occurred in scup, which increased 344% from 2002 to 2003.

Harvest and Release

Of the Mid-Atlantic Region's key species and species groups, summer flounder (23 million fish), Atlantic croaker (12 million

Regional Summary

fish) were the most often caught by anglers in 2010. Weakfish drum (96% released), summer flounder (95% released), black seabass (84% released), tautog (78% released), striped bass (70% released), winter flounder (66% released), bluefish (60% released), scup (51% released), and Atlantic croaker (50% released) were more often released rather than harvested. The only species harvested more often than released was spot (59% harvested).

At the state level, summer flounder was the most often caught key species or species group in the Mid-Atlantic Region with 23 million fish caught, region-wide. Most of these fish were caught in New Jersey, New York, and Delaware with 11 million, 6.3 million, and 845,000 fish, respectively. The most frequently caught fish in Maryland was white perch with 4.4 million fish and Atlantic croaker was the most commonly caught fish in Virginia (9.4 million) in 2010.

Between 2001 and 2010, seven of the Mid-Atlantic Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were weakfish drum (91%), winter flounder (90%), and Atlantic croaker (47%).

Marine Economy¹

The sum of the gross domestic products by state for Delaware, Maryland, New Jersey, New York, and Virginia was \$2.3 trillion in 2010. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$828 billion. These economic measures increased 32% (a 6.1% increase in real terms) and 20% (a 3.1% decrease in real terms), respectively between 2001 and 2009; and experienced a 3.1% decrease (a 2.7% decrease in real terms), and 6.1% decrease (a 5.8% decrease in real terms), respectively between 2008 and 2009. Approximately 1.1 million establishments employed 16 million full- and part-time employees across the region in 2009. This was a 4% increase in establishment numbers and a 0.9% decrease in employee numbers from 2001 to 2009.

In 2009, the commercial fishing location quotient (CFLQ) for New Jersey was the highest in the region at 1.11. This was an 5.1% decrease from 2001 and a 23% increase from 2008. New Jersey's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 1.1 times higher than the level of employment in these industries nationwide. The CFLQ 2009 in Virginia was 0.54 (a 42% increase from 2001).

Seafood Sales and Processing

In 2009, information about the number of firms engaged in seafood product preparation and their annual receipts was not available. The number of employer establishments engaged

in seafood product preparation and packaging decreased 25% from 108 in 2001 to 73 in 2009. Approximately 26% of these establishments were located in Maryland. The number of employees was not available for the seafood product preparation and packaging sector in the Mid-Atlantic Region.

There were 469 seafood wholesale establishments in 2009. The number of employees was not available at the region level. From 2001 to 2009, the number of seafood wholesale establishments decreased 23% across the Mid-Atlantic Region.

Nonemployer firms engaged in seafood retail in the Mid-Atlantic Region totaled 453 in 2009, a 10% decrease relative to 2001. Of these firms, 20% were located in Maryland. At the state level, these firms showed a 6.9% decrease in New Jersey and decreased 10% in Virginia between 2001 and 2009. Annual receipts in the region totaled \$45 million in 2009.

Employer establishments engaged in seafood retail decreased 5.8% from 2001 to 2009, totaling 657 in 2009. These establishments employed NA workers in 2008. In the Mid-Atlantic Region, annual payroll for seafood retail increased 22% from \$49 million in 2002 to \$59 million in 2009.

Transport, Support, and Marine Operations

For industries where data were available, navigational services to shipping employed more people than any other industry in this sector, employing approximately 991 people in 2009. In contrast, the marinas industry had the highest annual payroll in the region totaling \$204 million. Marinas had the highest number of establishments (942), followed by the ship and boat building industries with 165 establishments and the navigational services to shipping industries with 100 establishments.

In Maryland, industries with large changes in establishment numbers, employees, or annual payroll from 2008 to 2009 were: ship and boat building (39% decrease in employees), deep sea passenger transportation (33% decrease in establishments), port and harbor operations (33% increase in establishments) and ship and boat building (27% decrease in establishments). In New Jersey, large changes were seen for port and harbor operations (62% decrease in employees), port and harbor operations (55% decrease in payroll), deep sea passenger transportation (50% increase in establishments) and ship and boat building (46% decrease in payroll). In New York, large changes were seen in the deep sea passenger transportation (60% decrease in payroll), deep sea passenger transportation (33% increase in establishments), port and harbor operations (33% increase in establishments) and coastal and Great Lakes freight transportation (31% increase in employees).

¹Information for 2009 is reported in this section; 2010 data were not available for this report.

2010 Economic Impacts of the Mid-Atlantic Region Seafood Industry (thousands of dollars)

		U	J (/	
	Landings Revenue	Jobs	Sales	Income	Valued Added
Delaware	6,966	339	43,122	8,812	14,450
Maryland	95,962	17,283	1,835,366	462,008	712,947
New Jersey	177,936	42,506	6,425,332	1,448,018	2,344,918
New York	33,824	41,794	5,090,068	1,085,227	1,797,704
Virginia	198,840	22,987	1,900,724	555,845	817,273

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

		0		<u> </u>					,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	348,231	342,397	357,210	407,276	440,084	362,198	416,866	457,517	434,763	513,720
Finfish & other	90,643	84,091	87,702	87,648	101,538	95,508	103,724	91,340	95,408	110,011
Shellfish	257,589	258,306	269,508	319,628	338,547	266,689	313,141	366,176	339,355	403,709
American lobster	9,828	6,273	5,569	5,656	6,696	9,116	7,695	8,876	5,028	4,210
Atlantic surf clam	34,211	34,692	35,366	26,760	27,084	29,580	32,479	5,670	26,426	17,719
Blue crab	70,871	61,660	60,799	69,364	71,073	55,638	69,122	82,861	84,826	138,233
Eastern oyster	8,587	9,814	8,903	5,663	6,703	6,485	10,301	11,064	8,974	1,680
Menhaden	27,783	24,123	24,352	25,570	28,188	24,466	29,918	22,229	27,590	40,398
Quahog clam	22,744	16,935	20,160	19,918	20,773	20,229	21,176	37,443	24,685	26,196
Sea scallop	75,275	91,237	111,969	160,665	181,327	120,142	147,052	165,919	161,775	184,105
Squid	9,904	9,287	6,497	14,278	9,163	7,729	7,446	11,865	7,161	12,033
Striped Bass	8,616	8,215	9,751	7,633	11,335	9,947	10,851	10,305	10,499	11,499
Summer flounder	7,078	8,700	10,678	13,244	13,615	12,364	10,319	9,825	10,281	12,572

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	835,425	702,234	710,738	757,107	708,741	667,307	741,428	682,448	695,636	786,951
Finfish & other	631,288	496,430	514,804	529,453	517,898	488,011	556,640	481,817	490,952	574,689
Shellfish	204,137	205,804	195,934	227,654	190,843	179,296	184,788	200,631	204,684	212,262
American lobster	2,633	1,705	1,181	1,394	1,585	1,772	1,397	1,877	1,286	994
Atlantic surf clam	60,421	62,134	64,601	50,984	50,921	50,556	53,952	8,753	41,692	27,662
Blue crab	61,045	63,076	56,047	68,979	70,983	61,873	59,164	63,133	77,404	104,779
Eastern oyster	2,217	1,713	1,493	859	1,202	984	1,194	1,384	1,023	234
Menhaden	518,487	394,606	398,744	421,309	412,672	400,784	471,641	363,233	395,643	498,252
Quahog clam	3,857	2,318	3,311	3,537	3,735	3,728	4,085	5,185	3,239	1,594
Sea scallop	21,160	24,887	28,213	33,381	24,526	18,279	22,918	24,507	25,639	23,975
Squid	15,465	15,187	10,462	41,586	12,260	9,746	8,608	31,263	8,314	26,826
Striped Bass	4,930	4,591	5,273	3,927	5,706	4,746	5,396	5,512	5,860	5,334
Summer flounder	5,164	6,433	7,315	8,400	8,360	6,609	4,502	4,336	5,258	6,236

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	3.73	3.68	4.71	4.06	4.22	5.15	5.51	4.73	3.91	4.23
Atlantic surf clam	0.57	0.56	0.55	0.52	0.53	0.59	0.60	0.65	0.63	0.64
Blue crab	1.16	0.98	1.08	1.01	1.00	0.90	1.17	1.31	1.10	1.32
Eastern oyster	3.87	5.73	5.96	6.59	5.58	6.59	8.63	7.99	8.78	7.17
Menhaden	0.05	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.07	0.08
Quahog clam	5.90	7.31	6.09	5.63	5.56	5.43	5.18	7.22	7.62	16.43
Sea scallop	3.56	3.67	3.97	4.81	7.39	6.57	6.42	6.77	6.31	7.68
Squid	0.64	0.61	0.62	0.34	0.75	0.79	0.86	0.38	0.86	0.45
Striped Bass	1.75	1.79	1.85	1.94	1.99	2.10	2.01	1.87	1.79	2.16
Summer flounder	1.37	1.35	1.46	1.58	1.63	1.87	2.29	2.27	1.96	2.02

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	·····		(
	Trips	Jobs	Sales	Income	Value Added
Delaware	846,107	1,286	199,775	59,794	91,109
Maryland	3,035,646	6,793	914,851	305,213	465,504
New Jersey	5,988,115	9,089	1,518,517	493,840	780,671
New York	4,469,890	4,459	667,852	227,223	350,163
Virginia	2,625,755	4,602	516,718	173,813	272,745

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	836,028
For-Hire	38,616	55,636	Other Equipment	229,791
Private Boat	128,726	312,713	Boat Expenses	534,312
Shore	158,069	135,303	Vehicle Expenses	1,037,793
Total Trip Expenditures	325,409	503,652	Second Home Expenses	210,760
			Total Durable Equipment Expenditures	2,848,684
Total State Trip and Dura	ble Equipment Exp	enditures	·	3,677,745

Recreational Anglers by Residential Area (thousands of anglers)

	-		``							
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	2,290	1,643	2,229	2,363	3,002	2,876	3,234	2,823	2,437	2,598
Non-Coastal	190	139	144	157	252	224	212	197	187	178
Out-of-State	NA^1									
Total Anglers	2,480	1,783	2,372	2,520	3,254	3,100	3,446	3,020	2,623	2,776

Recreational Fishing Effort by Mode (thousands of angler-trips)

	•			•						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	1,323	1,024	1,182	1,323	1,152	1,339	1,399	940	1,100	870
Private Boat	11,982	9,551	11,286	11,084	11,730	12,123	12,551	11,710	9,759	9,477
Shore	7,901	6,071	7,383	6,327	7,935	7,895	8,768	7,949	6,217	6,619
Total Trips	21,206	16,646	19,852	18,734	20,817	21,357	22,718	20,599	17,076	16,966

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black seabass	Н	2,636	3,057	3,033	1,590	1,060	1,317	1,515	817	1,246	1,239
DIACK SEADASS	R	10,519	10,328	8,381	5,668	5,405	5,966	7,534	8,981	6,570	6,307
Bluefish	Н	3,227	2,518	3,193	4,274	5,176	4,037	4,556	3,837	2,449	2,414
Diuensii	R	6,519	4,579	4,196	5,793	7,121	5,513	7,736	7,187	4,252	3,693
Drum (Atlantic	Н	12,145	10,868	9,349	9,830	10,790	9,464	9,602	8,039	6,752	5,842
croaker)	R	9,811	10,361	9,425	7,928	11,136	8,059	12,331	11,522	8,302	5,850
Drum (spot)	Н	2,196	2,314	4,772	3,725	5,245	6,347	10,694	7,724	5,468	3,785
Drum (spot)	R	1,562	1,016	1,657	1,591	4,163	2,587	3,933	4,879	2,258	2,656
Porgies (scup)	Н	2,058	1,187	5,271	1,713	821	1,528	1,715	1,753	1,595	2,417
Forgies (scup)	R	1,983	1,551	2,379	2,857	1,839	3,145	2,296	3,861	2,480	2,487
Striped bass	Н	1,475	1,252	1,662	1,574	1,503	1,994	1,512	1,432	1,364	1,372
Striped bass	R	5,464	5,053	7,802	8,474	8,009	9,511	7,114	4,838	3,367	3,251
Summer flounder	Н	4,393	2,633	3,922	3,598	3,303	3,393	2,792	1,768	1,691	1,223
Summer nounder	R	21,881	11,852	14,902	15,235	21,311	15,419	18,489	20,260	22,294	21,614
Weakfish drum	Н	1,315	918	308	331	1,125	497	276	336	37	14
	R	2,732	1,689	1,363	1,387	1,906	1,877	1,079	1,687	170	345
Winter flounder	Н	795	362	541	331	196	248	209	75	107	41
white nounder	R	475	266	183	85	264	288	57	40	137	81
Wrasses (tautog)	Н	617	1,231	384	832	376	721	808	630	698	754
wrasses (lautog)	R	1,694	2,534	1,010	1,648	1,221	2,239	2,472	2,057	2,015	2,643

 $^{^{1}}NA = data$ are not available because out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified

2010 Economic Impacts of the Delaware Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	339	43,122	14,450	301	34,115	11,587		
Commercial Harvesters	148	12,764	4,113	148	12,764	4,113		
Seafood Processors & Dealers	29	5,085	1,720	28	4,942	1,672		
Importers	28	7,638	2,328	0	0	0		
Seafood Wholesalers & Distributors	23	3,108	1,409	19	2,496	1,132		
Retail	112	14,527	4,880	107	13,913	4,672		

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

0					• • •		• •		,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	7,660	6,067	5,204	5,419	6,113	5,677	7,266	6,390	7,536	6,966
Finfish & other	1,080	986	1,465	1,258	1,273	1,315	642	635	1,061	1,077
Shellfish	6,580	5,081	3,739	4,161	4,840	4,361	6,624	5,755	6,475	5,890
American eel	126	118	230	169	100	275	133	190	134	206
Black sea bass	42	21	181	181	157	190	185	141	144	189
Blue crab	5,140	3,511	1,899	2,839	3,429	2,961	5,329	4,605	5,435	5,147
Eastern oyster	172	478	305	361	485	459	490	410	334	357
Quahog clam	233	392	435	175	220	193	ND^1	ND^1	ND^1	ND^1
Sea scallop	ND^1	ND^1	ND^1	12	102	121	ND^1	256	173	ND^1
Spot	51	8	46	38	98	53	43	0	54	ND^1
Striped bass	365	336	479	497	494	501	137	52	356	398
Weakfish	133	176	83	61	82	55	22	11	6	ND^1
Whelks	1,015	694	1,079	690	562	601	ND^1	312	ND^1	ND^1

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

0			• /	•	• 、	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	7,140	5,857	5,018	4,288	4,851	4,369	4,881	4,371	5,010	4,718
Finfish & other	2,078	1,933	2,264	1,349	1,470	1,144	640	527	1,154	892
Shellfish	5,062	3,925	2,754	2,938	3,381	3,224	4,240	3,844	3,856	3,826
American eel	121	90	156	142	110	120	59	80	60	69
Black sea bass	25	12	98	84	73	87	63	51	50	80
Blue crab	4,085	3,062	1,792	2,276	2,924	2,856	3,799	3,508	3,414	3,596
Eastern oyster	78	133	76	79	84	75	80	67	67	62
Quahog clam	64	134	141	54	69	60	ND^1	ND^1	ND^1	ND^1
Sea scallop	ND^1	ND^1	ND^1	2	13	20	ND^1	38	25	ND^1
Spot	78	14	77	59	155	57	67	0	71	ND^1
Striped bass	199	146	191	176	174	182	49	22	193	185
Weakfish	188	173	91	51	71	33	13	5	3	ND^1
Whelks	828	590	729	491	276	203	ND^1	203	ND^1	ND^1

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

0			, .	• •	•	• /				
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American eel	1.04	1.31	1.48	1.19	0.91	2.28	2.24	2.38	2.24	3.00
Black sea bass	1.66	1.69	1.86	2.17	2.15	2.18	2.92	2.76	2.87	2.37
Blue crab	1.26	1.15	1.06	1.25	1.17	1.04	1.40	1.31	1.59	1.43
Eastern oyster	2.21	3.60	4.00	4.57	5.76	6.10	6.14	6.09	4.97	5.75
Quahog clam	3.67	2.92	3.09	3.26	3.18	3.22	ND^1	ND^1	ND^1	ND^1
Sea scallop	ND^1	ND^1	ND^1	5.18	8.08	6.19	ND^1	6.81	6.80	ND^1
Spot	0.66	0.59	0.60	0.65	0.63	0.92	0.65	0.70	0.76	ND^1
Striped bass	1.84	2.30	2.50	2.82	2.84	2.75	2.82	2.39	1.84	2.15
Weakfish	0.71	1.02	0.91	1.18	1.16	1.64	1.68	1.96	1.88	ND^1
Whelks	1.23	1.18	1.48	1.41	2.04	2.96	ND^1	1.54	ND^1	ND^1

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

Delaware

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)										
	Jobs	Sales	Income	Value Added						
Trip Impacts by Fishing Mode:										
For-Hire	33	3,109	1,012	1,777						
Private Boat	212	24,950	7,205	12,438						
Shore	347	33,349	10,506	17,711						
Total Durable Equipment Impacts	695	138,367	41,071	59,183						
Total State Trip and Durable Equipment Economic Impacts	1,286	199,775	59,794	91,109						

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	36,515
For-Hire	1,599	651	Other Equipment	11,161
Private Boat	12,230	9,878	Boat Expenses	10,281
Shore	22,696	6,809	Vehicle Expenses	103,252
Total Trip Expenditures	36,525	17,338	Second Home Expenses	6,625
			Total Durable Equipment Expenditures	167,833
Total State Trip and Dura	221,696			

Recreational Anglers by Residential Area (thousands of anglers)

0	5		•		υ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	107	89	127	116	120	137	150	134	114	128
Non-Coastal	NA^1									
Out of State	226	177	199	243	191	205	224	182	173	165
Total Anglers	333	266	326	359	311	342	374	315	287	293

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J (0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	71	63	38	65	48	42	53	46	43	20
Private	672	535	552	679	568	671	731	553	498	415
Shore	436	429	514	434	459	465	512	468	379	411
Total Trips	1,180	1,028	1,104	1,177	1,074	1,179	1,296	1,067	920	846

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

Harvest (H) and R	leieac	()		•		`	,	0007	0000	0000	0010
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic mackerel	H	23	6	(1)	7	(1)	(1)	(1)	(1)	(1)	(1)
	R	1	1	(1)	(1)	(1)	(1)	(1)	(1)	2	(1)
Black seabass	Н	203	607	307	106	62	128	76	25	50	22
DIACK SEADASS	R	1,003	1,233	832	448	250	460	544	477	330	252
Bluefish	Н	102	117	89	136	152	96	172	82	122	55
Diuensii	R	221	435	120	322	217	322	479	246	207	100
Drum (Atlantic	Н	312	262	341	494	934	863	401	349	427	118
croaker)	R	285	361	655	483	761	1,034	618	609	516	182
Drum (weakfish) ³	Н	72	122	20	7	19	11	4	4	5	(1)
Druin (weakiish)	R	227	101	39	79	111	121	19	61	5	17
Striped bass	Н	41	29	30	25	20	19	10	17	22	15
Striped bass	R	163	115	169	151	225	246	251	261	153	79
Summer flounder	Н	146	107	106	124	91	110	118	33	92	72
Summer nounder	R	1,051	498	415	850	841	534	1,096	722	978	773
White perch	Н	44	40	30	63	43	65	27	55	52	94
white perch	R	117	72	134	187	116	147	143	162	81	244
Wrasses (tautog)	Н	51	186	63	143	72	117	89	122	117	63
vviasses (laulog)	R	209	412	167	263	251	216	267	206	180	223
Yellowfin tuna	Н	16	10	2	1	3	2	(1)	1	(1)	(1)
	R	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

 $^{^1\}mathsf{NA} = \mathsf{not}$ applicable because all Delaware residents are considered coastal county residents

²In this table, (1)' = 0.999 thousand fish and (1)' = 1,000-1,499 thousand fish.

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

Delaware's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	24,074 (0.34%)	389,376 (0.34%)	15,022 (0.38%)	19,762 (0.43%)	43,903 (0.33%)	ND^2
2009	24,523 (0.33%)	370,846 (0.32%)	16,777 (0.35%)	25,079 (0.43%)	60,660 (0.32%)	2
% change	1.87%	-4.76%	11.7%	26.9%	38.2%	

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	0	0	0	0	3	3	0	3	NA^3
prep. & packaging	Receipts	ND^2	ND^2	ND^2	ND^2	64	214	ND^2	27	NA^3
Seafood Sales,	Firms	5	5	7	9	12	9	12	9	9
retail	Receipts	214	435	959	803	1,523	835	1,025	418	664

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

	U	1 2		· ·		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Saafaad product	Establishments	1	1	1	1	1	1	1	1	1
Seafood product prep. & packaging	Employees	ND^2								
prep. & packaging	Payroll	ND^2								
Seafood sales,	Establishments	5	7	5	2	3	3	3	6	7
wholesale	Employees	ND^2	65	ND^2	ND^2	ND^2	9	ND^2	ND^2	ND^2
WIDESale	Payroll	ND^2	2,279	ND^2	ND^2	ND^2	337	ND^2	ND^2	ND^2
Seafood sales,	Establishments	12	15	18	16	14	17	19	18	16
retail	Employees	65	94	ND^2	144	138	135	105	ND^2	50
retail	Payroll	1,243	1,779	ND^2	3,363	3,264	3,133	2,997	1,498	1,348

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	4	8	5	3	3	3	3	2	2
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Deep sea freight	Establishments	3	2	2	1	1	NA ³	NA^3	4	4
transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	NA ³	NA^3	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	NA ³	NA^3	ND^2	ND^2
	Establishments	1	1	NA ³	NA ³	1	NA ³	NA^3	NA^3	NA^3
Deep sea passenger transportation	Employees	ND^2	ND^2	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3	NA^3
transportation	Payroll	ND^2	ND^2	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3	NA^3
	Establishments	12	13	17	17	16	18	17	19	16
Marinas	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	88	65	ND^2
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	2,540	1,738	1,877
Marine cargo	Establishments	5	6	5	5	4	4	3	3	3
handling	Employees	257	199	513	ND^2	ND^2	597	527	629	ND^2
nanuning	Payroll	4,482	14,718	14,879	ND^2	ND^2	18,812	19,027	19,204	16,952
Navigational	Establishments	10	10	10	9	9	8	8	9	8
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	75	76	79	85
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	4,783	4,961	5,360	5,672
Port & harbor	Establishments	NA^3	NA^3	1	2	2	3	2	2	2
operations	Employees	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & boat	Establishments	3	1	1	1	1	1	1	2	2
building	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Sunding	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2

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

 $^{^{2}}ND$ = these data are confidential thus not disclosable

 $^{^{3}}$ NA = these data are not available

Commercial Fisheries

		With Imports			Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	17,283	1,835,366	712,947	8,857	460,760	231,013		
Commercial Harvesters	3,537	169,318	75,283	3,537	169,318	75,283		
Seafood Processors & Dealers	1,990	175,419	87,291	803	70,819	35,241		
Importers	3,883	1,068,259	325,652	0	0	0		
Seafood Wholesalers & Distributors	885	116,075	52,391	254	33,293	15,027		
Retail	6,988	306,295	172,330	4,264	187,330	105,463		

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

0					• • •		• •		,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	55,591	49,013	49,038	49,200	63,754	53,579	65,609	73,434	76,057	95,962
Finfish & other	8,574	8,135	8,095	4,670	10,766	9,896	12,410	11,300	11,957	12,685
Shellfish	47,017	40,878	40,943	44,530	52,988	43,684	53,199	62,134	64,100	83,277
Atlantic croaker	676	512	576	751	543	440	389	498	444	492
Black sea bass	244	436	555	573	724	811	ND^1	ND^1	421	586
Blue crab	34,681	30,338	34,532	39,104	39,962	31,141	41,700	50,115	52,020	74,708
Clams or bivalves	8,073	8,002	5,170	4,654	4,784	4,889	5,074	5,436	4,403	ND^1
Eastern oyster	3,789	2,172	706	181	3,435	1,238	3,146	2,277	3,849	1,322
Menhaden	382	423	337	232	1,514	609	1,379	921	909	727
Sea scallop	108	96	ND^1	417	4,549	6,200	2,809	3,758	3,160	1,187
Striped bass	3,418	3,759	3,916	1,549	4,259	4,591	5,333	5,232	5,181	5,423
Summer flounder	ND^1	ND^1	527	444	677	549	ND^1	703	876	540
White perch	801	559	556	347	848	568	619	776	943	1,128

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

0			• •	•	• 、	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	55,539	53,185	49,350	49,509	67,489	51,226	61,813	63,692	68,313	97,724
Finfish & other	16,089	15,275	13,468	8,055	25,000	12,719	21,785	18,773	20,420	26,808
Shellfish	39,450	37,909	35,882	41,454	42,489	38,507	40,028	44,919	47,893	70,916
Atlantic croaker	2,233	1,513	1,532	1,801	1,389	877	655	872	597	610
Black sea bass	150	280	313	284	337	350	ND^1	ND^1	119	203
Blue crab	25,933	26,481	27,816	33,826	34,914	29,446	30,784	34,872	40,284	62,905
Clams or bivalves	11,911	10,663	7,527	7,270	6,112	7,756	7,947	8,600	6,292	ND^1
Eastern oyster	1,274	567	159	43	738	274	317	249	498	172
Menhaden	4,619	4,850	4,232	3,336	15,806	5,263	13,752	9,660	9,562	15,433
Sea scallop	28	27	ND^1	94	591	931	450	569	521	153
Striped bass	2,049	2,085	2,193	885	2,349	2,485	2,640	2,655	2,813	2,507
Summer flounder	ND^1	ND^1	329	262	338	248	ND^1	282	329	261
White perch	1,947	1,583	1,477	453	1,524	688	973	858	1,301	1,676

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic croaker	0.30	0.34	0.38	0.42	0.39	0.50	0.59	0.57	0.74	0.81
Black sea bass	1.62	1.56	1.77	2.02	2.15	2.31	ND^1	ND^1	3.54	2.89
Blue crab	1.34	1.15	1.24	1.16	1.14	1.06	1.35	1.44	1.29	1.19
Clams or bivalves	0.68	0.75	0.69	0.64	0.78	0.63	0.64	0.63	0.70	ND^1
Eastern oyster	2.97	3.83	4.45	4.23	4.66	4.52	9.92	9.13	7.73	7.69
Menhaden	0.08	0.09	0.08	0.07	0.10	0.12	0.10	0.10	0.10	0.05
Sea scallop	3.81	3.52	ND^1	4.44	7.70	6.66	6.25	6.60	6.06	7.76
Striped bass	1.67	1.80	1.79	1.75	1.81	1.85	2.02	1.97	1.84	2.16
Summer flounder	ND^1	ND^1	1.60	1.69	2.01	2.22	ND^1	2.49	2.66	2.07
White perch	0.41	0.35	0.38	0.77	0.56	0.83	0.64	0.90	0.72	0.67

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

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)											
	Jobs	Sales	Income	Value Added							
Trip Impacts by Fishing Mode:											
For-Hire	303	26,294	8,928	15,457							
Private Boat	609	65,651	22,931	40,029							
Shore	1,520	140,725	49,086	83,005							
Total Durable Equipment Impacts	4,361	682,182	224,268	327,014							
Total State Trip and Durable Equipment Economic Impacts	6,793	914,851	305,213	465,504							

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	177,782
For-Hire	7,804	9,933	Other Equipment	43,381
Private Boat	21,418	41,743	Boat Expenses	82,650
Shore	93,213	24,023	Vehicle Expenses	355,791
Total Trip Expenditures	122,434	75,699	Second Home Expenses	85,108
			Total Durable Equipment Expenditures	744,713
Total State Trip and Dura	942,846			

Recreational Anglers by Residential Area (thousands of anglers)

0			· ·		υ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	565	430	526	442	620	733	850	643	514	552
Non-Coastal	50	41	53	39	49	84	78	50	43	54
Out of State	426	330	418	333	425	447	528	507	327	462
Total Anglers	1041	801	997	815	1095	1264	1456	1200	884	1068

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	,								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	174	182	187	264	181	235	219	142	205	142
Private	2,340	1,596	2,033	1,499	1,933	1,980	2,440	1,965	1,598	1,667
Shore	1,275	1,059	1,110	881	1,066	1,374	1,387	1,286	1,008	1,227
Total Trips	3,790	2,837	3,330	2,645	3,180	3,589	4,045	3,393	2,811	3,036

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

narvest (11) and N		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
	Н	119	337	241	158	81	104	53	34	30	42
Black seabass						-			-		
	R	2,324	925	773	618	784	799	1,331	1,128	462	915
Bluefish	H	429	199	214	373	240	509	705	660	335	301
Brachish	R	1,074	577	518	683	344	850	1,381	1,855	494	158
Drum (Atlantic	Н	1,320	1,223	1,620	871	810	833	1,093	689	1,038	814
croaker)	R	1,586	2,523	1,393	819	951	1,792	1,631	2,069	780	925
Drum (spot)	Н	1,089	691	3,301	1,375	2,007	2,645	3,843	2,297	2,171	995
Druin (spor)	R	577	501	670	577	2,186	1,467	1,422	2,040	784	1,023
Drum (weakfish) 2	Н	303	100	41	30	22	(1)	10	3	2	3
Dium (weakiish)	R	737	286	181	132	55	57	106	30	7	104
Striped bass	Н	383	282	525	380	490	649	679	442	530	469
Striped bass	R	2,890	2,929	4,653	3,739	3,753	3,896	2,998	1,406	1,218	1,446
Summer flounder	Н	139	69	41	66	85	58	157	90	90	39
Summer nounder	R	1,245	383	373	952	433	511	1,626	1,306	1,029	1,630
White perch	Н	565	1,156	2,020	1,441	2,436	2,558	2,990	1,418	727	2,147
white perch	R	1,583	1,754	3,698	3,035	5,394	4,331	5,101	3,557	1,141	2,239
Wrasses (tautog)	Н	24	42	14	14	40	14	107	24	45	85
vvrasses (Laulog)	R	138	295	96	36	255	211	390	335	168	532
Yellowfin tuna	Н	26	18	26	4	11	21	7	(1)	7	2
	R	2	(1)	(1)	(1)	2	(1)	1	(1)	2	(1)

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

Maryland's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	129,301 (1.8%)	2,091,198 (1.8%)	74,187 (1.9%)	121,916 (1.9%)	195,641 (2%)	0.74
2009	135,633 (1.8%)	2,122,388 (1.9%)	96,621 (2%)	171,299 (2%)	285,116 (2.2%)	0.44
% change	4.9%	1.49%	30.2%	40.5%	45.7%	-37.8%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	25	50	47	51	57	55	56	56	41
prep. & packaging	Receipts	1,997	3,199	2,487	2,301	2,727	2,751	3,940	3,310	2,106
Seafood Sales,	Firms	62	79	78	70	78	73	99	84	91
retail	Receipts	5,904	8,629	6,771	10,100	6,976	7,755	10,493	9,010	8,593

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	26	24	23	23	23	19	22	22	19
prep. & packaging	Employees	889	807	762	895	1,141	1,053	1,296	1,003	245
prep. & packaging	Payroll	23,686	20,618	20,399	23,039	24,986	28,852	32,386	39,328	13,049
Seafood sales,	Establishments	94	77	63	58	59	59	62	60	61
wholesale	Employees	913	870	686	733	709	694	978	851	777
Wholesale	Payroll	28,847	33,072	27,934	29,813	30,148	32,943	50,353	42,296	39,055
Seafood sales,	Establishments	78	88	97	96	95	97	102	94	87
retail	Employees	475	488	459	579	576	617	613	590	485
retain	Payroll	8,853	10,033	10,634	12,328	13,019	14,190	14,777	11,510	11,499

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	10	8	9	11	10	10	8	6	7
Lakes freight	Employees	178	ND^2							
transportation	Payroll	7,969	ND^2							
Deen ees fusionte	Establishments	12	14	16	15	16	14	14	13	15
Deep sea freight transportation	Employees	ND^2	123	ND^2	281	316	ND^2	244	250	255
transportation	Payroll	ND^2	9,216	ND^2	18,983	14,131	ND^2	14,905	19,765	20,722
D	Establishments	1	4	3	2	1	1	1	3	2
Deep sea passenger transportation	Employees	ND^2								
transportation	Payroll	ND^2								
	Establishments	185	188	180	183	185	179	183	179	176
Marinas	Employees	1,240	1,232	1,296	1,321	1,228	1,260	1,326	1,383	1,289
	Payroll	32,088	33,621	34,024	36,598	36,590	40,866	48,752	45,965	45,483
	Establishments	15	16	14	11	12	13	15	15	16
Marine cargo handling	Employees	1,505	1,487	1,862	1,725	1,639	1,659	1,791	1,572	1,599
nanunng	Payroll	63,172	66,525	69,084	75,911	81,219	73,367	85,328	48,382	46,727
Neutrational	Establishments	13	13	11	8	9	9	8	9	11
Navigational services to shipping	Employees	275	ND^2	195	ND^2	ND^2	ND^2	157	92	77
services to simpling	Payroll	18,710	ND^2	38,619	ND^2	ND^2	ND^2	4,882	3,968	3,807
	Establishments	4	7	8	10	11	11	8	3	4
Port & harbor operations	Employees	319	259	376	479	ND^2	ND^2	323	ND^2	ND^2
operations	Payroll	9,545	11,655	16,099	19,218	ND^2	ND^2	13,427	ND^2	ND^2
Chin & heat	Establishments	40	44	55	58	57	55	48	46	38
Ship & boat building	Employees	1,421	1,223	1,426	1,022	ND^2	1,119	874	677	416
building	Payroll	48,561	40,743	36,444	35,364	ND^2	33,463	29,500	22,363	16,238

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

2010 Economic Impacts of the New Jersey Seafood Industry (thousands of dollars)

		With Imports	•	Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	42,506	6,425,332	2,344,918	8,538	679,880	324,374		
Commercial Harvesters	3,040	354,611	151,105	3,040	354,611	151,105		
Seafood Processors & Dealers	5,891	544,788	269,292	780	72,118	35,648		
Importers	15,977	4,394,802	1,339,728	0	0	0		
Seafood Wholesalers & Distributors	2,524	401,351	175,407	224	35,678	15,593		
Retail	15,075	729,780	409,385	4,494	217,473	122,027		

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

0						• •			,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	110,246	112,708	120,670	145,217	158,746	136,039	151,445	168,519	149,032	177,936
Finfish & other	19,858	20,062	22,017	21,369	22,585	24,476	24,171	19,946	23,033	22,749
Shellfish	90,389	92,646	98,653	123,847	136,161	111,563	127,274	148,573	125,999	155,187
American lobster	2,471	1,139	1,028	1,800	2,001	2,533	4,056	3,214	850	2,679
Atlantic herring	32	60	145	1	1	ND^1	563	ND^1	1,564	422
Atlantic mackerel	1,695	1,780	2,855	3,398	3,957	3,709	668	ND^1	1,539	843
Blue crab	4,802	6,725	4,736	5,330	6,773	6,359	6,004	7,284	185	12,020
Eastern oyster	1,918	1,853	3,366	1,558	823	2,288	2,231	2,547	ND^1	ND^1
Goosefish	6,135	5,896	6,200	3,446	4,451	4,415	4,484	4,005	3,018	2,751
Ocean quahog & surf clams	41,193	39,804	38,054	31,379	25,567	31,038	32,362	ND^1	27,496	23,889
Quahog clam	5,636	ND^1	5,228	7,409	7,556	7,615	968	6,306	ND^1	ND^1
Sea scallop	29,983	33,336	43,507	67,309	88,486	57,465	77,359	91,320	90,111	108,990
Summer flounder	2,313	3,504	3,683	4,134	4,478	4,926	3,989	3,461	3,377	4,552

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	168,541	162,139	170,133	187,377	156,695	152,781	153,838	162,301	161,599	161,832
Finfish & other	71,867	65,737	75,471	71,450	74,193	66,316	65,155	62,816	73,605	74,806
Shellfish	96,674	96,401	94,662	115,926	82,502	86,465	88,683	99,484	87,994	87,026
American lobster	580	264	210	370	369	471	680	633	180	642
Atlantic herring	708	1,138	1,805	5	1	ND^1	6,039	ND^1	13,693	4,140
Atlantic mackerel	25,224	20,486	33,056	36,091	32,414	24,977	5,384	ND^1	10,255	4,692
Blue crab	4,724	6,229	4,012	4,350	6,333	5,981	4,821	5,816	257	9,268
Eastern oyster	412	379	714	323	162	350	444	550	ND^1	ND^1
Goosefish	5,855	5,697	7,185	4,177	3,881	3,841	4,229	3,694	2,687	1,986
Ocean quahog & surf clams	73,900	73,949	71,683	61,155	49,849	55,286	55,746	ND^1	45,306	38,538
Quahog clam	1,357	ND^1	1,260	1,796	1,852	1,844	240	1,529	ND^1	ND^1
Sea scallop	8,219	8,644	10,638	13,705	11,831	8,439	11,808	13,279	14,038	14,155
Summer flounder	1,745	2,407	2,385	2,630	2,349	2,380	1,697	1,541	1,799	2,166

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	4.26	4.31	4.90	4.86	5.42	5.38	5.96	5.08	4.73	4.18
Atlantic herring	0.05	0.05	0.08	0.23	0.78	ND^1	0.09	ND^1	0.11	0.10
Atlantic mackerel	0.07	0.09	0.09	0.09	0.12	0.15	0.12	ND^1	0.15	0.18
Blue crab	1.02	1.08	1.18	1.23	1.07	1.06	1.25	1.25	0.72	1.30
Eastern oyster	4.65	4.88	4.72	4.82	5.09	6.53	5.02	4.63	ND^1	ND^1
Goosefish	1.05	1.03	0.86	0.83	1.15	1.15	1.06	1.08	1.12	1.38
Ocean quahog & surf clams	0.56	0.54	0.53	0.51	0.51	0.56	0.58	ND^1	0.61	0.62
Quahog clam	4.15	ND^1	4.15	4.13	4.08	4.13	4.04	4.12	ND^1	ND^1
Sea scallop	3.65	3.86	4.09	4.91	7.48	6.81	6.55	6.88	6.42	7.70
Summer flounder	1.32	1.46	1.54	1.57	1.91	2.07	2.35	2.25	1.88	2.10

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

New Jersey

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditure	010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)												
	Jobs	Sales	Income	Value Added									
Trip Impacts by Fishing Mode:													
For-Hire	515	55,509	18,695	32,271									
Private Boat	1,644	232,965	70,171	120,522									
Shore	854	102,286	33,206	55,611									
Total Durable Equipment Impacts	6,077	1,127,756	371,768	572,267									
Total State Trip and Durable Equipment Economic Impacts	9,089	1,518,517	493,840	780,671									

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	353,494
For-Hire	19,648	16,419	Other Equipment	72,899
Private Boat	52,436	131,694	Boat Expenses	201,251
Shore	29,903	53,672	Vehicle Expenses	353,263
Total Trip Expenditures	101,986	201,785	Second Home Expenses	40,183
			Total Durable Equipment Expenditures	1,021,090
Total State Trip and Dura	able Equipment Exp	enditures		1,324,861

Recreational Anglers by Residential Area (thousands of anglers)

0			•		σ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	721	400	592	708	818	693	890	765	656	776
Non-Coastal	42	17	20	31	39	25	19	26	35	36
Out of State	543	239	462	379	471	481	518	456	454	449
Total Anglers	1306	656	1074	1117	1328	1199	1427	1246	1145	1261

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	,								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	643	368	466	501	408	630	545	388	434	319
Private	4,025	2,992	3,602	3,892	3,765	3,859	3,634	3,567	2,753	3,323
Shore	2,817	2,049	2,711	2,152	2,476	2,803	3,256	2,804	2,257	2,346
Total Trips	7,484	5,409	6,779	6,544	6,649	7,292	7,436	6,760	5,444	5,988

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black seabass	Н	1,919	1,760	1,903	1,173	667	692	1,006	456	608	548
DIACK SEADASS	R	4,371	4,318	4,295	2,833	2,463	2,090	2,882	4,221	3,003	3,102
Bluefin tuna	Н	11	7	9	9	8	4	5	3	9	6
Diuenni tuna	R	4	(1)	(1)	31	26	35	1	(1)	2	7
Bluefish	Н	1,431	1,321	1,571	2,012	2,035	1,457	1,645	1,296	762	697
Diuensii	R	2,056	2,168	1,913	2,403	2,644	1,930	3,146	1,752	1,386	1,522
Drum (weakfish) 2	Н	736	493	151	184	1,053	418	209	270	11	3
Dium (weakiish)	R	1,065	351	631	607	1,280	1,231	581	1,255	82	78
Red hake	Н	51	12	16	12	6	111	1	175	218	142
Neu llake	R	5	(1)	15	6	6	15	(1)	24	24	36
Striped bass	Н	560	416	392	449	327	489	206	318	269	315
Stripeu bass	R	966	715	926	1,324	1,197	2,102	1,495	1,452	719	507
Summer flounder	Н	2,070	989	1,784	1,887	1,396	1,561	1,328	851	1,013	577
Summer nounder	R	10,343	4,205	5,807	7,212	9,931	6,823	7,125	9,349	11,294	10,672
Winter flounder	Н	562	208	307	95	46	43	194	14	5	17
willer nounder	R	188	124	110	29	42	192	42	10	35	31
Wrasses (tautog)	Н	468	348	103	131	37	195	342	183	153	313
vviasses (Laulog)	R	1,006	836	394	426	335	563	1,353	709	1,007	1,061
Yellowfin tuna	Н	9	14	22	25	22	41	25	6	5	15
	R	(1)	4	(1)	1	(1)	1	(1)	1	7	1

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

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	234,558 (3.3%)	3,622,788 (3.1%)	154,239 (3.9%)	210,839 (3.6%)	364,453 (3.5%)	0.08
2009	231,186 (3.1%)	3,443,211 (3%)	177,071 (3.6%)	265,028 (3.4%)	471,946 (3.4%)	ND^2
% change	-1.44%	-4.96%	14.8%	25.7%	29.5%	NA ³

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	14	21	23	23	26	27	25	22	33
prep. & packaging	Receipts	2,878	2,673	2,279	2,694	3,086	3,027	2,399	1,851	3,667
Seafood Sales,	Firms	87	92	100	89	93	72	90	92	81
retail	Receipts	8,368	8,348	8,822	9,219	9,194	8,916	11,320	11,196	9,901

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

	0			•		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product prep. & packaging	Establishments	18	17	16	15	17	16	16	14	13
	Employees	1,100	928	846	749	969	667	628	566	661
prep. & packaging	Payroll	27,302	23,045	20,794	21,029	28,235	22,097	18,403	18,703	22,025
Seafood sales,	Establishments	112	102	84	85	85	89	101	81	83
wholesale	Employees	1,023	969	920	948	914	941	978	856	858
Wholesale	Payroll	39,677	37,394	35,991	38,066	37,828	41,506	41,994	37,462	37,348
Saafaad calac	Establishments	125	149	133	134	128	127	124	118	106
Seafood sales, retail	Employees	549	559	454	547	524	493	472	368	332
	Payroll	10,183	10,225	10,513	11,952	11,787	11,373	10,352	9,372	9,126

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	21	13	15	17	18	18	23	18	19
Lakes freight	Employees	532	ND^2	768	ND^2	914	1,040	778	645	594
transportation	Payroll	36,912	ND^2	45,024	ND^2	54,097	68,096	56,017	48,911	41,925
Deen een fusiokt	Establishments	33	35	37	33	38	39	31	27	26
Deep sea freight transportation	Employees	1,451	1,397	1,287	1,028	948	648	566	1,115	1,045
	Payroll	86,618	78,258	70,996	65,691	68,633	45,940	44,133	75,848	66,547
	Establishments	4	4	5	4	5	4	2	2	3
Deep sea passenger transportation	Employees	ND^2								
transportation	Payroll	ND^2								
	Establishments	211	199	203	201	206	204	216	211	214
Marinas	Employees	ND^2	927	951	945	978	940	1,045	916	784
	Payroll	ND^2	32,480	34,777	36,862	38,323	39,154	41,624	39,596	35,811
Marine cargo	Establishments	26	29	27	26	26	25	23	21	22
handling	Employees	3,418	3,408	4,108	4,685	4,972	4,599	4,781	4,244	3,479
nanunng	Payroll	187,150	247,217	318,325	340,085	363,714	345,784	350,690	278,189	230,886
Neurational	Establishments	21	22	16	17	16	19	26	20	19
Navigational services to shipping	Employees	183	ND^2	210	ND^2	169	ND^2	227	191	133
services to simpping	Payroll	10,359	ND^2	8,028	ND^2	9,673	ND^2	11,403	7,776	6,638
Port & harbor	Establishments	5	5	5	6	7	6	8	6	6
operations	Employees	376	ND^2	240	ND^2	194	ND^2	271	143	54
operations	Payroll	21,855	ND^2	10,644	ND^2	11,599	ND^2	12,197	12,446	5,548
Ship & heat	Establishments	45	41	37	35	37	34	31	30	25
Ship & boat building	Employees	2,185	2,223	2,005	2,040	2,320	2,307	2,305	2,019	1,188
building	Payroll	70,980	76,607	75,149	80,301	89,421	88,367	91,460	79,309	42,909

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable

Commercial Fisheries

2010 Economic Impacts of the New York Seafood Industry (thousands of dollars)

2010 Economic impacts of the New Tork Searbou multisty (thousands of donars)										
		With Imports		Without Imports						
	Jobs	Sales	Value Added	Jobs	Sales	Value Added				
Total Impacts	41,794	5,090,068	1,797,704	2,705	124,196	60,361				
Commercial Harvesters	1,266	60,636	26,807	1,266	60,636	26,807				
Seafood Processors & Dealers	871	125,015	61,827	95	13,618	6,735				
Importers	14,243	3,918,066	1,194,398	0	0	0				
Seafood Wholesalers & Distributors	4,200	302,364	137,824	93	6,712	3,060				
Retail	21,214	683,987	376,848	1,251	43,229	23,760				

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	55,072	51,264	51,601	46,878	56,367	57,725	58,964	58,943	49,271	33,824
Finfish & other	18,864	15,924	16,426	16,765	18,317	19,143	20,480	18,839	17,495	20,504
Shellfish	36,208	35,341	35,175	30,113	38,051	38,582	38,484	40,103	31,777	13,320
American lobster	7,357	5,131	4,426	3,722	4,396	6,289	3,639	5,498	3,936	1,329
Atlantic surf clam	4,885	5,520	7,934	4,475	7,055	4,473	5,932	5,670	5,858	1,708
Eastern oyster	2,137	4,995	4,263	3,367	1,961	2,390	2,627	2,870	1,428	ND^1
Flounder, Summer	1,778	2,042	2,240	3,275	3,797	3,418	3,133	2,933	3,088	3,568
Loligo squid	6,035	6,247	4,353	5,426	6,054	5,846	5,159	5,290	4,169	4,516
Quahog clam	13,502	12,245	12,399	10,673	12,696	12,237	14,224	13,185	8,397	ND^1
Scups or porgies	703	1,185	1,330	1,637	2,027	2,457	2,349	1,710	1,887	2,112
Sea scallop	718	90	164	720	3,617	3,518	3,872	5,050	5,018	3,725
Softshell clam	561	679	888	1,227	1,468	2,055	1,628	1,076	ND^1	ND^1
Tilefishes	3,191	3,195	2,736	2,082	2,765	3,323	3,845	3,343	3,240	4,077

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

U	0		• • •		• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	42,388	38,548	39,388	34,514	38,150	32,659	35,594	34,521	34,413	27,535
Finfish & other	21,018	16,540	17,223	16,531	14,631	14,036	16,495	15,069	16,186	18,158
Shellfish	21,370	22,008	22,165	17,983	23,519	18,623	19,099	19,451	18,227	9,377
American lobster	2,053	1,440	946	996	1,154	1,243	716	1,210	1,047	307
Atlantic surf clam	7,549	8,544	13,264	7,462	11,953	6,913	9,161	8,753	8,799	2,573
Eastern oyster	244	537	466	370	219	269	124	135	64	ND^1
Flounder, Summer	752	1,053	1,073	1,594	1,799	1,220	942	856	1,140	1,363
Loligo squid	7,625	9,613	4,603	6,363	6,693	6,462	5,438	5,469	4,100	3,900
Quahog clam	1,828	1,502	1,553	1,346	1,617	1,650	1,592	1,476	1,410	ND^1
Scups or porgies	655	1,558	1,850	1,907	2,186	2,423	2,325	1,214	1,848	2,690
Sea scallop	259	26	39	170	647	577	619	782	918	500
Softshell clam	106	132	163	234	270	393	198	131	ND^1	ND^1
Tilefishes	1,835	1,593	1,755	1,335	1,142	1,297	1,394	1,199	1,427	1,586

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

0				• •	• •	,				
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
American lobster	3.58	3.56	4.68	3.74	3.81	5.06	5.08	4.54	3.76	4.32
Atlantic surf clam	0.65	0.65	0.60	0.60	0.59	0.65	0.65	0.65	0.67	0.66
Eastern oyster	8.77	9.30	9.15	9.10	8.97	8.87	21.21	21.21	22.23	ND^1
Flounder, Summer	2.36	1.94	2.09	2.05	2.11	2.80	3.33	3.43	2.71	2.62
Loligo squid	0.79	0.65	0.95	0.85	0.90	0.90	0.95	0.97	1.02	1.16
Quahog clam	7.39	8.15	7.98	7.93	7.85	7.42	8.94	8.93	5.96	ND^1
Scups or porgies	1.07	0.76	0.72	0.86	0.93	1.01	1.01	1.41	1.02	0.79
Sea scallop	2.77	3.43	4.19	4.24	5.59	6.10	6.25	6.46	5.47	7.45
Softshell clam	5.30	5.15	5.45	5.24	5.43	5.23	8.23	8.24	ND^1	ND^1
Tilefishes	1.74	2.01	1.56	1.56	2.42	2.56	2.76	2.79	2.27	2.57

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

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditure	es (thousands	of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	515	50,816	17,797	30,771
Private Boat	552	66,841	23,999	41,847
Shore	311	33,596	12,171	20,509
Total Durable Equipment Impacts	3,081	516,600	173,255	257,036
Total State Trip and Durable Equipment Economic Impacts	4,459	667,852	227,223	350,163

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	159,934
For-Hire	5,858	26,888	Other Equipment	64,092
Private Boat	2,108	66,156	Boat Expenses	132,413
Shore	2,561	30,882	Vehicle Expenses	90,369
Total Trip Expenditures	10,527	123,926	Second Home Expenses	50,720
			Total Durable Equipment Expenditures	497,528
Total State Trip and Dura	able Equipment Exp	enditures	·	631,981

Recreational Anglers by Residential Area (thousands of anglers)

0			•		U ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	474	387	599	587	885	735	881	817	638	646
Non-Coastal	11	8	19	18	27	25	39	32	21	24
Out of State	29	41	82	76	110	114	147	118	58	69
Total Anglers	513	436	700	681	1022	874	1067	967	717	740

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	344	339	406	397	475	398	522	312	372	344
Private	2,365	2,172	3,030	2,600	3,032	3,058	3,237	3,276	2,889	2,390
Shore	1,915	1,607	2,090	1,777	2,566	1,943	2,459	2,365	1,656	1,736
Total Trips	4,624	4,118	5,525	4,774	6,073	5,399	6,218	5,954	4,917	4,470

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

narvest (11) and N		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
							1	1			
Atlantic herring 2	H	39	26	30	73	140	39	315	111	6	133
	R	48	14	(1)	4	2	3	176	41	(1)	23
Black seabass	Н	164	221	318	105	176	277	312	245	454	606
DIACK SCADASS	R	641	1,411	739	490	963	1,634	1,513	1,829	1,500	1,570
Bluefish	Н	1,005	751	1,147	1,499	2,376	1,534	1,660	1,320	1,119	984
Diuensii	R	2,543	1,017	1,305	1,883	3,314	1,839	1,919	2,514	1,822	1,389
Drum (weakfish) ³	Н	28	25	9	8	(1)	9	7	31	(1)	3
Druin (weakiish)	R	69	63	7	40	194	12	201	27	6	3
Porgies (scup)	Н	1,734	1,091	5,112	1,581	686	1,277	1,601	1,617	1,312	1,860
roigies (scup)	R	1,666	1,246	1,805	2,508	1,263	2,498	1,590	3,282	2,191	1,996
Shortfin mako	Н	(1)	1	3	(1)	(1)	1	1	(1)	(1)	1
shark	R	2	4	3	2	5	2	(1)	(1)	(1)	(1)
Striped bass	Н	190	202	314	243	298	313	371	448	329	502
Striped bass	R	824	588	1,084	1,493	1,348	1,578	1,456	1,277	922	1,097
Summer flounder	Н	700	696	1,539	937	1,147	802	711	565	265	260
Summer nounder	R	5,228	4,100	5,722	2,682	7,767	5,277	5,255	6,124	5,793	6,080
Winter flounder	Н	233	154	234	236	150	204	15	61	102	24
vvinter nounder	R	286	141	73	56	222	95	14	30	101	49
Wrassos (tautor)	Н	46	630	129	381	119	253	202	256	330	156
Wrasses (tautog)	R	314	953	297	783	272	1,020	368	775	621	695

¹In this table, '(1)' = 0.999 thousand fish and '1' = 1,000-1,499 thousand fish.

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

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

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	493,863 (7%)	7,428,349 (6.5%)	343,498 (8.6%)	480,181 (7.9%)	810,332 (8%)	1.17
2009	515,819 (6.9%)	7,332,392 (6.4%)	400,790 (8.3%)	615,407 (7.8%)	1,094,104 (7.9%)	1.19
% change	4.45%	-1.29%	16.7%	28.2%	35%	-5.13%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	45	40	62	49	57	61	68	73	101
prep. & packaging	Receipts	2,607	1,730	2,580	3,517	2,652	3,044	3,516	3,383	4,883
Seafood Sales,	Firms	262	244	272	241	219	206	266	247	192
retail	Receipts	31,218	29,832	29,321	28,640	24,987	24,790	23,157	23,983	19,278

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product prep. & packaging	Establishments	21	16	18	17	18	15	15	17	15
	Employees	370	352	271	323	324	298	294	379	ND^2
	Payroll	18,258	20,430	15,676	14,782	14,810	16,491	18,723	18,570	15,227
Seafood sales,	Establishments	296	315	291	274	269	254	291	231	246
wholesale	Employees	2,158	2,269	2,183	2,091	2,003	2,066	2,058	1,627	1,741
Wholesale	Payroll	76,881	84,367	75,063	75,411	76,177	78,198	84,361	72,233	68,345
Seafood sales,	Establishments	323	381	376	386	392	388	372	368	386
retail	Employees	1,154	1,421	1,518	1,602	1,513	1,495	1,575	1,470	1,509
	Payroll	18,609	22,867	25,422	26,489	25,665	26,701	28,497	30,741	31,640

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	67	69	60	60	57	55	50	50	48
Lakes freight	Employees	2,182	2,284	1,751	1,452	1,448	1,464	1,746	1,759	2,299
transportation	Payroll	129,403	141,213	115,452	94,074	91,347	109,315	125,570	160,735	198,352
Doop coo froight	Establishments	40	38	35	36	39	38	34	29	32
Deep sea freight transportation	Employees	621	1,084	927	600	602	ND^2	ND^2	732	782
transportation	Payroll	42,874	52,516	58,350	38,246	39,309	ND^2	65,632	108,744	89,313
	Establishments	5	4	8	7	6	4	4	3	4
Deep sea passenger transportation	Employees	160	ND^2	212	ND^2	ND^2	ND^2	7	ND^2	8
transportation	Payroll	5,646	ND^2	6,673	ND^2	ND^2	ND^2	240	316	126
	Establishments	386	386	417	413	416	404	411	419	418
Marinas	Employees	1,805	1,680	2,167	2,185	2,093	2,112	2,070	2,263	2,099
	Payroll	66,508	69,242	77,398	81,737	84,832	83,807	88,862	100,910	96,640
Marina carro	Establishments	19	11	14	14	12	12	12	10	9
Marine cargo handling	Employees	ND^2	ND^2	951	1,099	ND^2	ND^2	ND^2	ND^2	ND^2
nanuning	Payroll	ND^2	ND^2	50,015	48,529	ND^2	ND^2	ND^2	ND^2	ND^2
Neurotional	Establishments	41	32	34	34	35	36	36	32	37
Navigational services to shipping	Employees	554	ND^2	ND^2	ND^2	ND^2	ND^2	578	386	312
services to simpping	Payroll	29,646	ND^2	ND^2	ND^2	ND^2	ND^2	40,976	23,294	19,126
Daut R. Iaaulaau	Establishments	3	4	3	3	3	3	5	3	4
Port & harbor operations	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	6	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	119	ND^2	ND^2	ND^2
Ship & heat	Establishments	44	41	44	45	47	48	53	49	47
Ship & boat building	Employees	759	ND^2	ND^2	ND^2	590	ND^2	643	688	585
bunung	Payroll	26,072	ND^2	ND^2	ND^2	21,514	ND^2	26,653	30,462	28,880

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

2010 Economic Impacts of the Virginia Seafood Industry (thousands of dollars)

	0	2 (/				
		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	22,987	1,900,724	817,273	17,471	941,369	490,653		
Commercial Harvesters	5,495	338,048	164,683	5,495	338,048	164,683		
Seafood Processors & Dealers	1,799	157,506	79,090	1,679	147,022	73,825		
Importers	2,914	801,452	244,318	0	0	0		
Seafood Wholesalers & Distributors	1,132	137,047	63,142	571	69,141	31,855		
Retail	11,647	466,671	266,041	9,726	387,158	220,288		

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

9						•	•		,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	119,618	123,308	130,657	160,496	155,066	109,082	133,454	150,091	152,730	198,840
Finfish & other	42,222	38,947	39,661	43,522	48,559	40,593	45,895	40,480	41,725	52,805
Shellfish	77,395	84,361	90,996	116,973	106,507	68,489	87,560	109,611	111,005	146,034
Atlantic croaker	3,126	3,815	2,822	3,013	3,691	4,345	4,641	5,291	4,308	4,012
Black sea bass	1,317	1,589	1,306	1,167	1,242	1,070	663	763	581	939
Blue crab	25,600	21,083	19,130	21,822	20,578	14,067	15,288	20,155	26,005	44,915
Catfishes & bullhea	987	1,005	372	649	900	1,570	978	1,188	1,254	292
Goosefish	700	704	879	599	1,142	688	750	ND^1	639	562
Menhaden	25,860	22,113	22,511	24,144	25,259	22,269	25,317	21,272	23,550	34,573
Sea Scallop	44,466	57,715	68,298	92,207	84,574	52,828	63,013	65,534	63,312	70,203
Spot	1,326	1,256	1,688	2,236	2,227	1,762	3,221	1,184	2,127	2,024
Striped bass	3,250	2,823	3,389	3,648	4,457	2,816	3,852	3,351	3,282	3,751
Summer flounder	2,973	3,150	4,220	5,376	4,652	3,460	3,189	2,725	2,934	3,906

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	561,792	442,490	446,828	481,374	441,538	426,235	485,256	417,514	426,252	495,075
Finfish & other	520,211	396,929	406,359	432,023	402,586	393,760	452,518	384,581	379,538	453,958
Shellfish	41,581	45,560	40,469	49,351	38,952	32,475	32,739	32,933	46,714	41,117
Atlantic croaker	12,929	12,448	10,936	9,488	9,272	7,830	10,973	11,261	8,609	5,927
Black sea bass	661	771	507	498	475	327	189	215	164	264
Blue crab	25,057	27,301	21,464	27,642	26,064	22,719	19,045	18,401	32,581	28,119
Catfishes & bullhea	1,964	1,886	1,799	1,922	1,622	1,360	1,597	1,769	1,870	554
Goosefish	887	970	1,270	1,002	1,157	676	827	ND^1	742	564
Menhaden	487,144	364,941	373,868	399,798	372,578	370,989	420,032	353,384	351,397	432,037
Sea Scallop	12,654	16,189	17,536	19,410	11,444	8,310	10,041	9,840	10,137	9,167
Spot	3,248	3,062	3,471	4,338	3,103	1,696	4,305	1,997	3,908	2,482
Striped bass	2,050	1,841	2,104	2,120	2,472	1,391	1,976	2,182	2,106	1,894
Summer flounder	2,660	2,970	3,522	3,906	3,869	2,757	1,859	1,657	1,987	2,445

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

U	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic croaker	0.24	0.31	0.26	0.32	0.40	0.55	0.42	0.47	0.50	0.68
Black sea bass	1.99	2.06	2.58	2.34	2.61	3.27	3.50	3.54	3.53	3.56
Blue crab	1.02	0.77	0.89	0.79	0.79	0.62	0.80	1.10	0.80	1.60
Catfishes & bullhea	0.50	0.53	0.21	0.34	0.55	1.15	0.61	0.67	0.67	0.53
Goosefish	0.79	0.73	0.69	0.60	0.99	1.02	0.91	ND^1	0.86	1.00
Menhaden	0.05	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.07	0.08
Sea Scallop	3.51	3.56	3.89	4.75	7.39	6.36	6.28	6.66	6.25	7.66
Spot	0.41	0.41	0.49	0.52	0.72	1.04	0.75	0.59	0.54	0.82
Striped bass	1.59	1.53	1.61	1.72	1.80	2.02	1.95	1.54	1.56	1.98
Summer flounder	1.12	1.06	1.20	1.38	1.20	1.26	1.72	1.65	1.48	1.60

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

Virginia ~ ~ ~ -

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)										
	Jobs	Sales	Income	Value Added						
Trip Impacts by Fishing Mode:										
For-Hire	102	8,130	2,651	4,638						
Private Boat	1,197	117,655	39,064	68,297						
Shore	370	34,128	11,353	19,568						
Total Durable Equipment Impacts	2,933	356,805	120,746	180,241						
Total State Trip and Durable Equipment Economic Impacts	4,602	516,718	173,813	272,745						

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	108,303
For-Hire	3,707	1,745	Other Equipment	38,258
Private Boat	40,534	63,242	Boat Expenses	107,717
Shore	9,696	19,917	Vehicle Expenses	135,118
Total Trip Expenditures	53,937	84,904	Second Home Expenses	28,124
			Total Durable Equipment Expenditures	417,520
Total State Trip and Dura	able Equipment Exp	enditures	·	556,361

Recreational Anglers by Residential Area (thousands of anglers)

0			· ·		υ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	423	337	384	510	559	578	463	464	515	496
Non-Coastal	88	73	52	69	137	90	76	89	87	63
Out of State	520	407	288	428	511	364	297	338	305	279
Total Anglers	1031	817	724	1007	1206	1033	836	891	907	838

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	91	72	86	96	41	34	59	53	47	45
Private	2,579	2,255	2,068	2,415	2,432	2,555	2,510	2,348	2,021	1,682
Shore	1,458	927	958	1,083	1,368	1,310	1,154	1,025	917	899
Total Trips	4,128	3,254	3,113	3,594	3,841	3,900	3,723	3,425	2,984	2,626

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Dia ale ana ha an	Н	231	132	265	48	75	115	67	58	102	20
Black seabass	R	2,180	2,441	1,742	1,280	945	983	1,265	1,327	1,275	468
Cobia	Н	9	3	2	3	14	8	10	7	12	10
Cobia	R	10	10	15	7	23	29	8	7	11	14
Drum (Atlantic	Н	9,335	9,129	6,695	7,293	7,791	7,069	7,753	6,525	5,128	4,815
croaker)	R	7,087	7,108	6,544	5,791	8,144	4,599	9,511	7,035	6,860	4,553
Drum (spot)	Н	1,056	1,602	1,441	2,323	2,994	3,510	6,609	5,061	3,146	1,968
Drum (spot)	R	969	482	934	975	1,799	921	2,311	1,721	1,381	1,321
Drum (spotted	Н	13	16	102	75	31	56	146	80	40	32
seatrout)	R	110	136	207	296	277	125	415	373	333	729
$Drum (weakfish)^1$	Н	176	178	86	103	30	59	45	29	18	5
Druin (weakiish)	R	633	888	504	528	267	456	172	314	69	143
Red drum	Н	7	50	14	5	3	15	71	27	64	16
	R	30	801	43	34	31	159	166	238	224	43
Striped bass	Н	301	321	402	477	368	523	246	207	213	71
Striped bass	R	621	707	971	1,768	1,485	1,690	914	442	355	123
Summer flounder	Н	1,338	772	451	584	584	862	479	229	232	275
Jummer nounder	R	4,014	2,666	2,585	3,539	2,340	2,274	3,388	2,758	3,199	2,460
Wrasses (tautog)	Н	29	26	76	163	108	142	67	45	53	138
wrasses (lautog)	R	27	38	55	141	107	229	94	32	40	133

 $^{^1\}mbox{This}$ species may not be equivalent to species with similar names listed in the commercial tables.

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	176,532 (2.5%)	2,943,854 (2.6%)	102,538 (2.6%)	169,823 (2.7%)	280,046 (2.8%)	0.38
2009	194,018 (2.6%)	3,061,186 (2.7%)	137,138 (2.8%)	242,641 (2.9%)	409,732 (3.1%)	0.6
% change	9.91%	3.99%	33.7%	42.9%	46.3%	42.1%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	20	35	53	68	65	74	62	74	69
prep. & packaging	Receipts	1,185	1,406	2,370	3,456	3,665	4,916	4,845	5,020	4,039
Seafood Sales,	Firms	89	94	88	89	80	86	84	80	80
retail	Receipts	10,148	8,266	7,193	8,346	8,762	8,027	7,265	8,273	6,603

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product prep. & packaging	Establishments	42	39	38	42	39	33	30	26	25
	Employees	1,259	1,035	1,256	1,231	1,336	871	955	490	941
picp. & packaging	Payroll	35,228	35,828	37,386	38,731	39,980	28,530	34,520	11,366	30,600
Seafood sales,	Establishments	100	89	84	86	86	80	83	69	72
wholesale	Employees	875	790	742	756	675	605	734	621	519
Wholesale	Payroll	21,138	21,591	20,133	22,235	21,864	21,388	25,365	17,667	15,620
Seafood sales, retail	Establishments	59	74	61	68	69	75	73	68	62
	Employees	203	259	165	297	286	334	282	251	271
	Payroll	3,104	3,662	3,146	4,479	4,865	5,348	5,227	5,170	5,401

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	14	13	16	13	15	13	15	10	9
Lakes freight	Employees	ND^2	ND^2	591	ND^2	ND^2	ND^2	565	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	26,881	ND^2	ND^2	ND^2	30,704	ND^2	ND^2
	Establishments	22	23	22	21	24	22	20	18	16
Deep sea freight transportation	Employees	ND^2	1,254	1,087	1,124	1,090	1,564	1,611	409	ND^2
transportation	Payroll	ND^2	92,591	87,099	91,978	95,871	141,085	148,502	32,473	19,241
Doop can passangar	Establishments	NA^3	2	2	2	1	1	1	2	2
Deep sea passenger transportation	Employees	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	129	122	136	137	141	131	126	119	118
Marinas	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	992	964	829
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	26,186	24,326	24,631
Marina aarra	Establishments	16	18	19	19	18	17	15	12	12
Marine cargo handling	Employees	1,284	ND^2	ND^2	ND^2	1,516	1,110	1,085	ND^2	ND^2
nanuning	Payroll	50,553	ND^2	ND^2	ND^2	52,254	51,654	56,696	ND^2	ND^2
Navigational	Establishments	13	17	15	20	21	17	18	23	25
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	216	375	384
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	11,700	21,014	22,177
Port & harbor	Establishments	9	8	8	9	9	10	10	8	6
operations	Employees	ND^2	ND^2	ND^2						
operations	Payroll	ND^2	ND^2	ND^2						
Ship & boat	Establishments	63	62	50	52	50	51	52	59	53
building	Employees	20,198	21,240	20,720	21,022	21,230	21,741	ND^2	ND^2	ND^2
54114115	Payroll	989,524	963,644	901,156	920,372	938,375	993,066	ND^2	ND^2	ND^2

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable

South Atlantic

- East Florida
- Georgia
- North Carolina
- South Carolina



Management Context

The South Atlantic Region includes East Florida, Georgia, North Carolina, and South Carolina. Federal fisheries in this region are managed by the South Atlantic Fishery Management Council (SAFMC) and NOAA Fisheries (NMFS) under four fishery management plans (FMPs). The spiny lobster and coastal migratory pelagic resources fisheries are managed with the Gulf of Mexico Fishery Management Council (GMFMC). The Dolphin Wahoo FMP is managed with the Mid-Atlantic Fishery Management Council (MAFMC) and the New England Fishery management Council (NEFMC)¹

South Atlantic Region FMPs

- 1. Coastal migratory pelagic resources (with GMFMC)
- 2. Coral coral reef and live/hardbottom habitat plan
- 3. Dolphin wahoo (with MAFMC and NEFMC))
- 4. Golden crab
- 5. Pelagic Sargassum habitat
- 6. Shrimp
- 7. Snapper grouper
- 8. Spiny lobster (with GMFMC)

Of the stocks or stock complexes covered in these fishery management plans, six are currently listed as overfished: black sea bass, pink shrimp, red grouper, red porgy, red snapper, and snowy grouper. Nine stocks or stock complexes are currently subject to overfishing: black sea bass, gag, red grouper, red snapper, snowy grouper, speckled hind, tilefish, vermilion snapper, and warsaw grouper.

Commercial Fisheries

In 2010, commercial fishermen in the South Atlantic Region landed 119 million pounds of finfish and shellfish, earning \$165 million in landings revenue. Landings revenue was dominated by shrimp (\$45 million) and blue crab (\$36 million). These species groups commanded ex-vessel prices of \$1.98 and \$0.93 per pound, respectively, and together comprised 49% of total landings revenue, and 52% of total landings in the South Atlantic Region.

Key South Atlantic Region Commercial Species

Blue crabClams

Flounders

OystersShrimp

- Snappers
- Groupers
- King mackerels
- SwordfishTunas

North Carolina and East Florida had the highest landings revenue in the region in 2010 with \$79.8 million and \$50.4 million, respectively. The next greatest landings revenue came from South Carolina with \$21 million in landings revenue. In terms of pounds landed, North Carolina also had the highest landings (72 million pounds), followed by East Florida (29 million pounds) and South Carolina (10 million pounds).

Shrimp experienced a 6.2% decrease in ex-vessel price (a 27% decrease in real terms) from \$2.11 per pound in 2001 to \$1.98 per pound in 2010. Over the same time period, the ex-vessel price per pound for blue crab decreased 8.8% (a 29% decrease in real terms), from \$1.02 to \$0.93 per pound. The decline in value of shrimp is mostly attributable to increases in competition from imports of farmed shrimp. Blue crab in the South Atlantic Region has not experienced an increase in competition, but rather has maintained its ex-vessel price due to declining harvest in the Mid-Atlantic, South Atlantic and Gulf of Mexico.

Economic Impacts^{2,3}

In 2010, the South Atlantic Region's seafood industry generated \$14 billion in sales impacts in Florida, \$1.5 billion in sales impacts in Georgia, \$825 million in sales impacts in North Carolina, and \$81 million in sales impacts in South Carolina. Florida generated the largest employment, income, and value added impacts, generating 71,000 jobs, \$2.6 billion, and \$4.7 billion, respectively. The smallest income impacts were generated in South Carolina (\$31 million) and the smallest employment impacts were also generated in South Carolina (1,400 jobs).

The sector that generated the greatest employment impacts by state was the importers sector with 37,000 jobs in Florida and 3,900 jobs in Georgia. The harvest sector in North Carolina generated 2,500 jobs. More sales impacts were generated by importers in Florida than any other sector in any another state in the region at \$10 billion and the greatest value added impacts were also generated by importers in Florida (\$3.1 billion).

Landings Revenue

Landings revenue in the South Atlantic Region totaled \$165 million in 2010. This was a 7.4% decrease (a 28% decrease in real terms) from 2001 levels (\$178 million) and a 12% increase (a 7.5% increase in real terms) relative to 2009 (\$147 million).

Totaling \$99 million in 2010, shellfish revenue experienced a 12% decrease (a 32% decrease in real terms) from 2001 to 2010 and experienced a 17% increase (13% increase in real terms) from 2009 to 2010.

Shrimp and blue crab had the highest landings revenue in the South Atlantic Region in 2010, with \$45 million and \$36 million, respectively. Together they accounted for 49% of the total landings revenue earned in 2010. Between 2001 and 2010, the landings revenue from shrimp decreased 13% (a 33% decrease in real terms) and the landings revenue for blue crab decreased 19% (a 37% decrease in real terms).

³Commercial economic impacts data were not available for East Florida, data for Florida are reported here.

¹The authority to manage red drum was transferred to the Atlantic States Marine Fisheries Commission (ASMFC) in 2008.

²The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

In terms of finfish, North Carolina contributed the most (\$33 million) followed by East Florida (\$26 million), and South Carolina (\$6.5 million). Shellfish landings revenue was dominated by North Carolina, which also contributed the most (\$46 million) followed by East Florida (\$25 million), and South Carolina (\$14 million).

Commercial Fisheries Facts

Landings revenue

- On average, between 2001 and 2010, the key species or species groups accounted for <u>78%</u> of total revenue, generating \$121 million in the South Atlantic Region.
- <u>Shrimp</u> had higher landings revenues than any other species or species group, averaging \$43 million in landings revenue from 2001 to 2010.
- <u>Swordfish</u> had the largest one-year increase in landings revenue over the 10 year time period, increasing 56% from \$2.8 million in 2006 to \$4.3 million in 2007.
- <u>Snappers</u> had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 36% from \$3.6 million in 2002 to \$2.3 million in 2003.

Landings

- Key species or species groups contributed an average of 54% annually to total landings between 2001 and 2010.
- <u>Blue crab</u> contributed the most to landings in the region, averaging 42 million pounds from 2001 to 2010.
- Oysters had the largest one-year increase in landings over the 10 year time period, increasing 53% from 938,000 in 2009 pounds to 1.4 million pounds in 2010.
- <u>Shrimp</u> had the largest one-year decrease in landings over the 10 year time period, decreasing 39% from 26 million pounds in 2004 to 16 million pounds in 2005.

Prices

- <u>Clams</u> had the highest average annual ex-vessel price per pound (\$6.24) over the time period, followed by <u>oysters</u> (\$4.48), and groupers (\$2.88).
- <u>Blue crab</u> had the lowest average annual ex-vessel price per pound (\$0.90) over the time period, followed by <u>king mackerels</u> (\$1.70), and <u>flounders</u> (\$1.90).
- <u>Blue crab</u> had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 34% from \$0.74 per pound in 2006 to \$0.99 in 2007.
- <u>Shrimp</u> had the largest decrease in ex-vessel price over the 10 year time period, decreasing 25% from \$2.19 per pound in 2008 to \$1.64 in 2009.

From 2001 to 2010, species or species groups with large changes in landings revenue include oysters (increased 217%), swordfish (increased 108%), and king mackerels (increased 65%). Species or species groups with large changes in landings revenue between 2009 and 2010 include oysters (increasing 56%), swordfish (increasing 54%), and shrimp (increasing 36%).

Landings

Fishermen in the South Atlantic Region landed 119 million pounds of finfish and shellfish in 2010. This was a 40% decrease from the 199 million pounds landed in 2001 and a 5.2% increase from the 113 million landed in 2009. Finfish landings contributed 44% of total landings in the South Atlantic Region (52 million pounds) in 2010. From 2009 to 2010, finfish landings experienced a 2.8% increase.

Over the same time period, shellfish landings experienced a 7.1% increase from 62 million pounds in 2009 to 67 million in 2010 and a 10% decrease from 74 million pounds in 2001. Blue crab and shrimp had the highest annual landings in the South Atlantic Region in 2010, with 39 million pounds and 23 million pounds, respectively. Together they accounted for 52% of the total landings in 2010. Blue crab landings decreased 10% and shrimp landings decreased 7.4% during this period.

From 2001 to 2010, species or species groups with large changes in landings include oysters (increasing 150%), swordfish (increasing 65%), and king mackerels (increasing 59%). Species or species groups with large changes in landings between 2009 and 2010 include oysters (increasing 53%), swordfish (increasing 26%), and snappers (decreasing 13%).

Prices

The ex-vessel prices for the South Atlantic Region's key species and species groups in 2010 were higher than their 10 year average for ten of the key species (two of the species in real terms). Ex-vessel prices for tunas and groupers experienced the biggest increases between 2001 and 2010, increasing 41% (9.2% in real terms) and 39% (7.9% in real terms), respectively. Relative to the ex-vessel prices in 2009, the South Atlantic Region's swordfish experienced the greatest increase (22.8%, 17.8% in real terms) from \$2.68 in 2009 to \$3.29 in 2010. Tunas experienced the greatest decrease in ex-vessel price during this period (12%, 15.5% in real terms) from \$2.50 to \$2.20. Relative to ex-vessel prices in 2009, seven species or species groups experienced increases, including shrimp (21%), and flounders (13%).

In East Florida, the species or species group with the largest change in ex-vessel price from 2001 to 2010 was groupers (46% increase, 13% increase in real terms) from \$2.56 to \$3.73. The largest change in ex-vessel price experienced in Georgia was for snails (conchs) (100% increase, 55% increase in real terms from \$0.75 to \$1.50 and in North Carolina the largest change in ex-vessel price was experienced by Atlantic croaker (81% increase, 40% increase in real terms from \$0.26 to \$0.47).

Recreational Fishing

In 2010, almost 2.5 million recreational anglers took 20 million fishing trips in the South Atlantic Region. Over 78% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 49% of them were taken from a private or rental boat and another 49% were shore-based. Bluefish were the most frequently caught species or species group with 6.9 million fish caught in 2010, and represented 21% of total fish caught in

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

the region. Of the bluefish caught, 61% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in South Atlantic Region are reported in terms of economic impacts at the state level (employment, sales, income, and value added impacts) and expenditures on fishing trips and durable equipment at the regional level. Employment impacts in East Florida were the highest in the region with over 25,000 full- and part-time jobs generated by recreational fishing activities in the state. North Carolina (19,000 jobs), and South Carolina (4,300 jobs), followed in terms of employment impacts.

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) and expenditures on durable equipment. Throughout the South Atlantic Region, most of the employment impacts in 2010 were generated by expenditures on durable equipment: 92% in Georgia, 84% in East Florida, and 49% in North Carolina.

Key South Atlantic Region Recreational Species

- Black sea bass
- Bluefish
- King mackerel
- Sheepshead porgy
- Dolphinfish
- Red drum • Sharks
- Atlantic croaker and spot
 - Spanish mackerel
- Spotted seatrout

In addition to jobs, the contribution of recreational fishing activities to South Atlantic Region's economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value added impacts).

In 2010, sales impacts were the highest in East Florida (\$2.9 billion in sales impacts), followed by North Carolina (\$2 billion), South Carolina (\$379 million), and Georgia (\$229 million). In the same year, value added impacts were the highest in East Florida (\$1.5 billion in value added impacts), followed by North Carolina (\$980 million), South Carolina (\$207 million), and Georgia (\$119 million).

Overall, total fishing trip and durable equipment expenditures across the South Atlantic Region in 2010 were \$5.6 billion. Approximately 80% of these expenditures were related to durable equipment purchases. The greatest expenditures were for boat expenses (\$1.5 billion), followed by vehicle expenses (\$1.3 billion), fishing tackle (\$1.1 billion), and other equipment (\$300 million). Fishing trip-related expenditures by the South Atlantic Region's non-residents totaled over \$588 million of which the greatest portion can be attributed to shore-based fishing trips (\$434 million). Residents of the South Atlantic Region spent \$529 million on saltwater fishing trips, with the largest part of these expenses related to private boat trips (\$296 million).

Recreational Fishing Facts

Participation

- An average of 2.8 million anglers fished in the South Atlantic Region annually from 2001 to 2010.
- In 2010, coastal county residents made up 78% of total anglers in this region. These anglers averaged 83% of total anglers annually over the 10 year time period.
- The largest annual increase in the number of coastal anglers during the 10 year time period occurred between 2004 and 2005, increasing 24%, from 2.1 million anglers to 2.6 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2007 and 2008, decreasing 26%, from 3.2 million anglers to 2.3 million anglers.

Fishing trips

- In the South Atlantic Region, an average of 21 million fishing trips were taken annually from 2001 to 2010.
- Private or rental boat and shore-based fishing trips accounted for 9.6 million and 9.5 million fishing trips, respectively, in 2010. Together these made up 98% of the fishing trips taken in that year.
- The largest annual increase in the number of total trips taken annually over the 10 year time period occurred between 2002 and 2003, increasing 20%, from 18 million trips to 21 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2001 and 2002, decreasing 18%, from 22 million trips to 18 million trips.

Harvest and release

- Atlantic croaker and spot was the most commonly caught key species or species group, averaging 9.1 million fish over the 10 year time period. Of these, 46% were released rather than harvested.
- Of the ten commonly caught key species or species groups, five were released more often than harvested over this time period.
- The species or species group that was most commonly released was sharks (99% released).
- Dolphinfish (87% harvested), followed by king mackerel (73% harvested), and Spanish mackerel (65% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.
- The largest one-year change in the number of fish released was for releases of king mackerel, which increased 159% between 2002 and 2003
- the largest one-year change in number of fish harvested occurred in sharks, which increased 357% from 2006 to 2007.

Participation

There were 2.5 million recreational anglers who fished in the South Atlantic Region in 2010. This was a 8.5% decrease from 2001 (2.7 million anglers). These anglers were South Atlantic Region residents from either a coastal county (1.9 million anglers) or non-coastal county (536,000 anglers). Over 78% of total anglers in 2010 were residents of a coastal county. Coastal county angler participation in 2010 decreased 15% relative to 2001 (2.3 million anglers) and increased 0.6% between 2009 and
2010. Non-coastal county angler participation increased 28% relative to 2001 (419,000 anglers) and increased 16% relative to 2009 (462,000 anglers).

Fishing Trips

Recreational fishermen took 20 million fishing trips in the South Atlantic Region in 2010. This was a 10% decrease from 2001 (22 million trips) and was 428,000 more trips than taken in 2009. Of the total trips taken in the South Atlantic Region in 2010, approximately 49% of the trips were private or rental boat based (9.6 million trips). The other most popular mode of fishing was shore-based with 9.5 million trips in 2010.

Harvest and Release

Of the South Atlantic Region's key species and species groups, bluefish (6.9 million fish), spotted seatrout (6.1 million fish), Atlantic croaker and spot (5.9 million fish) and black sea bass (3.8 million fish) were the most often caught by anglers in 2010. Sharks (100% released), black sea bass (86% released), spotted seatrout (85% released), red drum (82% released), Atlantic croaker and spot (63% released), and bluefish (61% released) were most often released rather than harvested. Anglers harvested more often than released dolphinfish (89% harvested) and king mackerel (75% harvested).

At the state level spotted seatrout was the most commonly caught species in East Florida and Georgia with a total of 4 million fish caught across the two states in 2010. In North Carolina, the most commonly caught fish was Atlantic croaker and spot (4.2 million fish) and black sea bass was the most commonly caught fish in South Carolina (1 million fish) in the same year. Between 2001 and 2010, four of the South Atlantic Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were dolphinfish (50%), Atlantic croaker and spot (37%), and king mackerel (34%).

Marine Economy¹

The sum of the gross domestic products by state for Florida, Georgia, North Carolina, and South Carolina was \$1.7 trillion in 2009. Employee compensation totaled \$927 billion and annual payroll totaled \$566 billion. These economic measures increased 33% (a 7.5% increase in real terms) and 25% (a 0.9% increase in real terms), respectively, between 2001 and 2009; and experienced a 3.6% decrease (a 3.3% decrease in real terms), and 5.3% decrease (a 5% decrease in real terms), respectively between 2008 and 2009. Approximately 1 million establishments employed 15 million full- and part-time employees across the region in 2009. This was a 10% increase in establishment numbers and a 1.4% increase in employee numbers from 2001 to 2009.

In 2009, the commercial fishing location quotient (CFLQ) for Florida was the highest in the region at 0.97. This was an 29% decrease from 2001 and a 2% decrease from 2008. Florida's CFLQ suggests that the level of employment in commercial

fishing-related industries in this state is approximately equal to the level of employment in these industries nationwide. The CFLQ in South Carolina in 2009 was 0.17 (a 61% decrease from 2001).

Seafood Sales and Processing

Annual receipts for nonemployer firms engaged in seafood product preparation and packaging across the South Atlantic Region totaled \$15 million in 2007 and increased 69% from 2001 to 2007. Annual receipts totals experienced a 490% increase in South Carolina between 2001 and 2009. There were 329 seafood wholesale establishments across the South Atlantic Region in 2009 that employed 2,989 full- and part-time workers. From 2001 to 2009, the number of seafood wholesale establishments decreased 33% and the number of employees decreased 33%.

Nonemployer firms engaged in seafood retail in the South Atlantic Region totaled 622 in 2009, a 37% increase relative to 2001. Of these firms, 16% were located in Georgia. At the state level, these firms showed a 45% increase in Florida and a 20% increase in North Carolina between 2001 and 2009. Annual receipts in the region totaled \$47 million in 2009, a 36% increase from 2001 (a 10% increase in real terms) and a 2.7% decrease from 2008 (a 2.4% decrease in real terms).

Employer establishments engaged in seafood retail increased 2.1% from 2001 to 2009, totaling 334 in 2009. These establishments employed 1,551 workers. Region-wide, the numbers of employees in the seafood retail sector increased 20% between 2001 and 2009. Across the states within the region, the largest change occurred in South Carolina (37% increase).

Transport, Support, and Marine Operations

The marine cargo handling employed more people than any other industry in this sector, employing approximately 14,000 people in 2009. This industry also had the highest annual payroll in the region totaling \$337 million. Marinas had the highest number of establishments (660), followed by the ship and boat building industries with 380 establishments and the navigational services to shipping industries with 173 establishments.

In Florida, industries with large changes in establishment numbers, employees, or annual payroll from 2008 to 2009 were: ship and boat building (34% decrease in employees), ship and boat building (33% decrease in payroll), port and harbor operations (26% decrease in employees) and coastal and Great Lakes freight transportation (25% decrease in establishments). In Georgia, large changes were seen for deep sea freight transportation (81% decrease in employees), deep sea freight transportation (81% decrease in payroll), marine cargo handling (39% increase in employees) and ship and boat building (30% decrease in employees). In South Carolina, large changes were seen in the deep sea freight transportation (100% increase in establishments), marine cargo handling (52% increase in employees), ship and boat building (36% decrease in employees) and port and harbor operations (33% decrease in establishments).

¹Information for 2009 is reported in this section; 2010 data were not available for this report.

South Atlantic

2010 Economic Impacts of the South Atlantic Region Seafood Industry (thousands of dollars)

	p				
	Landings Revenue	Jobs	Sales	Income	Valued Added
Florida	50,442	71,229	14,103,674	2,641,205	4,721,012
Georgia	13,410	10,920	1,472,345	329,465	540,246
North Carolina	79,825	9,613	825,122	232,997	346,290
South Carolina	20,994	1,429	80,904	31,242	42,228

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	177,880	171,034	156,703	159,444	131,410	140,674	152,390	165,627	147,010	164,665
Finfish & other	65,350	63,906	54,820	66,858	56,907	60,707	61,339	60,811	62,906	65,882
Shellfish	112,534	107,140	101,882	92,592	74,507	79,976	91,061	104,817	84,116	98,790
Blue crab	44,487	42,397	46,643	34,249	31,784	27,050	33,634	39,985	37,703	36,165
Clams	7,926	6,132	6,248	5,561	4,779	4,223	4,039	3,861	3,571	4,033
Flounders	10,164	11,308	9,718	11,530	10,974	13,317	11,375	10,928	10,171	10,948
Groupers	2,802	2,831	2,851	2,728	2,814	3,416	4,565	4,084	3,214	2,978
King mackerels	4,592	4,067	4,102	5,260	5,551	6,495	6,872	7,695	8,088	7,562
Oysters	2,261	2,138	2,353	2,912	3,305	3,853	3,806	4,028	4,603	7,168
Shrimp	51,918	51,699	42,707	44,797	31,035	39,653	43,807	51,064	33,072	45,138
Snappers	4,668	3,618	2,331	3,208	3,314	2,748	3,922	4,554	4,024	3,475
Swordfish	3,582	3,248	4,113	3,555	3,134	2,753	4,298	3,661	4,821	7,443
Tunas	3,402	2,808	2,423	3,671	3,904	4,692	4,894	4,672	4,869	3,966

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

		0				· · · · •				
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	199,256	216,204	197,486	199,033	123,421	114,661	105,285	116,554	113,195	119,036
Finfish & other	125,525	138,277	116,081	121,214	64,925	52,056	46,631	44,023	50,990	52,414
Shellfish	73,730	77,926	81,405	77,820	58,497	62,604	58,654	72,531	62,205	66,622
Blue crab	43,459	46,479	50,881	45,001	38,218	36,779	34,045	44,997	38,958	39,037
Clams	1,169	1,004	983	886	747	685	663	628	619	639
Flounders	6,319	7,586	5,799	7,325	5,944	6,282	4,778	5,034	5,278	5,020
Groupers	1,148	1,166	1,134	1,057	1,007	1,152	1,416	1,266	992	875
King mackerels	2,675	2,474	2,848	3,269	3,106	3,792	3,736	4,352	4,858	4,241
Oysters	575	551	595	689	730	808	776	857	938	1,437
Shrimp	24,559	26,503	24,343	26,472	16,048	22,080	21,235	23,341	20,106	22,741
Snappers	2,068	1,529	958	1,285	1,286	967	1,354	1,515	1,373	1,191
Swordfish	1,371	1,429	1,575	1,314	1,152	1,036	1,417	1,307	1,800	2,260
Tunas	2,181	1,418	1,235	1,739	1,569	2,360	2,310	1,658	1,945	1,799

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue crab	1.02	0.91	0.92	0.76	0.83	0.74	0.99	0.89	0.97	0.93
Clams	6.78	6.11	6.35	6.27	6.40	6.16	6.09	6.15	5.77	6.32
Flounders	1.61	1.49	1.68	1.57	1.85	2.12	2.38	2.17	1.93	2.18
Groupers	2.44	2.43	2.51	2.58	2.79	2.97	3.22	3.23	3.24	3.40
King mackerels	1.72	1.64	1.44	1.61	1.79	1.71	1.84	1.77	1.66	1.78
Oysters	3.93	3.88	3.96	4.22	4.53	4.77	4.91	4.70	4.91	4.99
Shrimp	2.11	1.95	1.75	1.69	1.93	1.80	2.06	2.19	1.64	1.98
Snappers	2.26	2.37	2.43	2.50	2.58	2.84	2.90	3.01	2.93	2.92
Swordfish	2.61	2.27	2.61	2.71	2.72	2.66	3.03	2.80	2.68	3.29
Tunas	1.56	1.98	1.96	2.11	2.49	1.99	2.12	2.82	2.50	2.20

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	p		(
	Trips	Jobs	Sales	Income	Value Added
East Florida	10,185,419	25,403	2,876,867	967,029	1,511,290
Georgia	965,217	1,875	229,062	78,245	119,009
North Carolina	6,153,067	18,893	1,974,716	613,811	980,339
South Carolina	2,206,755	4,312	378,974	126,762	207,039

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	1,088,439
For-Hire	85,937	25,769	Other Equipment	300,271
Private Boat	67,809	296,230	Boat Expenses	1,486,495
Shore	434,347	206,559	Vehicle Expenses	1,314,596
Total Trip Expenditures	588,093	528,557	Second Home Expenses	298,947
			Total Durable Equipment Expenditures	4,488,751
Total State Trip and Dura	ble Equipment Exp	enditures		5,605,401

Recreational Anglers by Residential Area (thousands of anglers)

0			•		o ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	2,279	1,948	2,271	2,105	2,615	2,603	3,157	2,330	1,922	1,933
Non-Coastal	419	334	473	511	472	477	493	560	462	536
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	2,698	2,282	2,744	2,616	3,087	3,080	3,650	2,890	2,384	2,470

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	• •		0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	497	440	412	434	601	552	623	580	563	447
Private Boat	9,565	8,266	9,963	9,369	10,073	10,749	13,137	11,009	8,988	9,563
Shore	11,534	9,057	10,872	11,060	11,138	12,511	11,893	10,665	9,531	9,500
Total Trips	21,596	17,763	21,246	20,862	21,813	23,813	25,652	22,254	19,082	19,510

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

						`	,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black sea bass	H	550	340	423	892	811	783	612	379	311	545
DIACK SEA DASS	R	2,000	1,457	1,406	2,677	2,484	2,967	3,764	2,941	2,716	3,270
Bluefish	H	1,974	1,617	1,664	1,657	2,210	1,969	2,453	1,881	1,524	2,671
Diuensii	R	3,906	3,190	2,276	2,723	3,005	3,707	4,540	3,441	2,337	4,226
Dolphinfish	H	1,526	1,297	1,138	891	1,134	1,127	1,217	1,058	745	777
Dolphinnsh	R	234	81	146	107	219	232	255	201	75	96
Drum (Atlantic	H	6,146	3,702	5,520	5,881	4,440	5,509	6,272	5,917	3,071	2,176
croaker and spot)	R	3,231	2,270	4,653	3,719	3,881	7,291	4,273	4,086	4,912	3,689
Drum (spotted	H	806	760	825	1,100	1,350	1,624	1,450	1,544	1,318	942
seatrout)	R	2,594	3,217	2,892	3,212	5,337	4,989	6,115	4,716	3,783	5,194
King mackaral	H	394	363	600	398	428	511	807	490	441	244
King mackerel	R	99	99	256	156	208	196	303	167	127	83
Porgies	Н	787	409	728	492	614	489	749	850	599	795
(sheepshead)	R	604	454	558	382	436	438	604	774	521	536
Red drum	H	353	294	470	469	498	356	456	473	337	632
	R	1,560	1,617	1,527	1,899	2,412	2,111	2,071	2,333	1,980	2,933
Sharks ³	Н	27	8	24	29	58	6	27	8	26	5
JIIdIKS	R	1,451	1,020	1,366	1,653	2,049	1,792	2,057	2,392	1,988	2,058
Spanish maskaral	Н	1,229	1,355	1,170	994	1,091	790	1,211	1,326	1,146	1,138
Spanish mackerel	R	459	770	840	453	705	322	587	995	467	660

 $^{^{1}}NA = data$ are not available because out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified

²In this table, '(1)' = 0.999 thousand fish and '1' = 1,000-1,499 thousand fish.

Commercial Fisheries

2010 Economic impacts of the fit	onida Ocuroot	i maasery (en	busanas or aon	ur <i>3)</i>		
		With Imports			Without Import	ts
	Jobs	Sales	Value Added	Jobs	Sales	Value Added
Total Impacts	71,229	14,103,674	4,721,012	8,969	776,219	314,538
Commercial Harvesters	5,800	373,224	156,135	5,800	373,224	156,135
Seafood Processors & Dealers	4,126	661,709	251,755	465	79,944	30,416
Importers	37,173	10,225,483	3,117,175	0	0	0
Seafood Wholesalers & Distributors	9,027	1,028,149	502,191	395	45,013	21,986
Retail	15,103	1,815,109	693,757	2,309	278,038	106,002

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

0				,	• • •		• (,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	42,639	34,420	33,111	39,978	35,489	42,002	42,767	47,855	40,992	50,442
Finfish & other	15,111	14,599	14,246	15,324	16,496	17,422	19,768	21,131	23,164	25,703
Shellfish	27,528	19,821	18,865	24,654	18,993	24,580	23,000	26,724	17,828	24,740
Blue crab	2,916	2,723	2,507	3,685	4,648	3,701	4,924	4,333	2,376	3,415
Clams	960	879	791	506	390	435	391	508	415	309
Groupers	906	719	658	584	587	521	923	724	583	561
King mackerel	3,163	2,816	2,853	3,650	3,456	4,318	4,833	6,036	6,563	6,895
Lobsters	2,190	1,939	1,779	2,148	1,624	2,462	2,488	3,312	1,089	2,818
Sharks	1,483	1,496	1,362	1,149	1,201	1,364	726	636	949	757
Shrimp	20,103	13,224	12,721	17,360	11,118	16,390	13,821	17,225	12,455	16,459
Snappers	1,178	1,113	919	1,098	1,009	972	1,279	1,905	2,383	1,454
Spanish mackerel	1,152	1,131	1,437	1,827	2,198	2,094	2,332	1,827	2,004	2,414
Swordfish	1,609	1,642	1,698	1,491	1,625	1,219	2,529	2,339	2,385	3,677

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

		• •	• •	•	• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	27,134	21,693	23,432	28,707	22,964	27,021	25,196	26,306	27,501	29,218
Finfish & other	12,663	12,144	12,874	12,497	12,815	13,848	13,893	14,111	16,105	17,056
Shellfish	14,471	9,549	10,558	16,209	10,149	13,173	11,303	12,196	11,396	12,162
Blue crab	2,672	2,233	1,988	3,536	4,045	3,130	4,063	3,342	1,640	2,553
Clams	105	109	99	54	42	47	41	55	54	39
Groupers	354	281	250	216	207	166	274	204	165	150
King mackerel	1,789	1,645	2,061	2,291	1,833	2,572	2,631	3,299	4,064	3,900
Lobsters	450	414	395	456	313	407	361	506	298	480
Sharks	1,912	1,795	1,509	1,273	1,292	1,472	818	776	1,109	781
Shrimp	10,329	6,217	6,451	11,728	5,203	8,843	6,174	7,619	8,662	8,339
Snappers	525	494	398	453	407	355	461	635	805	510
Spanish mackerel	2,116	1,995	2,741	3,066	3,134	3,143	3,264	2,263	2,629	3,553
Swordfish	545	708	725	511	543	407	772	791	838	1,028

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue crab	1.09	1.22	1.26	1.04	1.15	1.18	1.21	1.30	1.45	1.34
Clams	9.12	8.09	8.00	9.30	9.27	9.20	9.52	9.30	7.73	7.89
Groupers	2.56	2.56	2.63	2.70	2.84	3.14	3.37	3.55	3.53	3.73
King mackerel	1.77	1.71	1.38	1.59	1.89	1.68	1.84	1.83	1.61	1.77
Lobsters	4.87	4.68	4.50	4.71	5.18	6.06	6.90	6.55	3.65	5.87
Sharks	0.78	0.83	0.90	0.90	0.93	0.93	0.89	0.82	0.86	0.97
Shrimp	1.95	2.13	1.97	1.48	2.14	1.85	2.24	2.26	1.44	1.97
Snappers	2.24	2.25	2.31	2.42	2.48	2.74	2.78	3.00	2.96	2.85
Spanish mackerel	0.54	0.57	0.52	0.60	0.70	0.67	0.71	0.81	0.76	0.68
Swordfish	2.95	2.32	2.34	2.92	2.99	3.00	3.28	2.96	2.85	3.58

¹Information reported in this table if for the state of Florida, not East Florida

East Florida

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)											
	Jobs	Sales	Income	Value Added							
Trip Impacts by Fishing Mode:											
For-Hire	527	51,228	17,486	30,159							
Private Boat	2,267	215,579	75,833	128,820							
Shore	1,355	127,828	44,075	74,211							
Total Durable Equipment Impacts	21,255	2,482,231	829,635	1,278,100							
Total State Trip and Durable Equipment Economic Impacts	25,403	2,876,867	967,029	1,511,290							

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	623,253
For-Hire	22,248	9,018	Other Equipment	161,169
Private Boat	30,570	173,526	Boat Expenses	1,149,132
Shore	39,921	64,036	Vehicle Expenses	1,120,320
Total Trip Expenditures	92,739	246,580	Second Home Expenses	4,853
			Total Durable Equipment Expenditures	3,058,728
Total State Trip and Dura	able Equipment Exp		3,398,047	

Recreational Anglers by Residential Area (thousands of anglers)

0			•		0 ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	1561	1304	1413	1161	1565	1660	2168	1317	1099	1033
Non-Coastal	NA^1									
Out of State	1088	784	793	685	945	935	1008	703	643	629
Total Anglers	2649	2089	2206	1847	2510	2595	3176	2021	1741	1662

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	251	216	187	198	201	173	178	161	180	127
Private	5,994	5,430	6,212	5,313	6,230	6,503	8,317	6,451	5,401	5,685
Shore	6,219	4,657	5,045	5,149	5,618	6,439	6,674	4,603	4,561	4,374
Total Trips	12,464	10,303	11,444	10,660	12,049	13,115	15,169	11,215	10,142	10,185

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bluefish	Н	581	759	644	494	549	640	807	425	546	841
Diuensii	R	1,376	1,392	622	451	416	892	932	609	672	1,610
Dolphinfish	Н	993	659	788	482	435	533	573	666	316	250
Dolphinnsh	R	220	72	129	105	216	209	231	194	57	86
Drum (kingfish)	H	1,366	930	590	970	1,103	1,004	1,078	627	467	686
	R	799	588	368	628	758	811	1,136	475	603	717
Drum (spotted	Н	251	206	170	200	338	299	303	160	183	239
seatrout)	R	1,996	2,326	1,708	1,970	3,446	2,889	3,623	2,141	1,558	2,390
Gray spappor	Н	302	400	446	340	454	554	882	433	293	203
Gray snapper	R	1,302	1,438	1,654	1,396	1,228	1,457	2,929	1,827	1,716	586
Jack (Florida	Н	141	141	374	275	226	176	178	170	116	235
pompano)	R	234	175	306	341	222	125	199	287	84	119
King mackerel	Н	256	282	463	271	261	379	537	353	321	189
	R	70	83	233	106	128	163	220	119	76	63
Porgies	Н	465	290	353	231	461	291	330	331	246	365
(sheepshead)	R	511	352	351	308	337	299	371	547	336	359
Red drum	H	178	119	159	164	196	150	199	164	98	154
	R	850	664	749	1,138	1,271	894	897	822	648	1,204
Spanish mackerel	Н	774	927	784	533	677	439	601	566	376	565
	R	286	555	446	214	368	192	198	353	175	332

 $^{^{1}}NA =$ not applicable because all East Florida residents are considered coastal county residents

Florida's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	434,583 (6.1%)	6,431,696 (5.6%)	189,628 (4.8%)	292,012 (5%)	506,413 (4.9%)	1.36
2009	491,249 (6.6%)	6,861,612 (6%)	253,360 (5.2%)	397,743 (5.2%)	732,782 (5.1%)	0.95
% change	13%	6.68%	33.6%	36.2%	44.7%	-28.7%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	104	116	142	177	164	174	173	202	216
prep. & packaging	Receipts	6,350	5,064	8,047	8,652	8,756	10,184	10,497	11,065	12,399
Seafood Sales,	Firms	212	243	240	247	247	251	319	331	308
retail	Receipts	17,935	20,837	18,064	18,004	22,787	20,708	27,557	26,087	24,726

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

	0			•		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	43	33	27	24	25	22	20	23	25
prep. & packaging	Employees	2,033	2,359	2,084	2,193	1,616	1,704	1,748	1,637	1,143
prep. & packaging	Payroll	58,977	65,914	61,452	65,881	47,529	62,801	58,233	53,455	46,235
Seafood sales,	Establishments	323	314	293	261	258	259	267	229	215
wholesale	Employees	2,670	2,395	1,835	1,948	1,883	2,091	2,308	1,913	1,762
Wholesale	Payroll	76,717	78,160	55,874	63,276	65,339	73,897	85,019	75,203	72,159
Seafood sales,	Establishments	159	190	174	190	176	173	169	168	158
retail	Employees	697	908	952	977	970	936	989	991	885
	Payroll	13,403	17,186	15,673	17,575	19,192	19,513	20,595	21,604	21,182

· · · ·		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	58	51	66	59	59	54	47	42	42
Lakes freight	Employees	3,208	2,856	ND^2	1,132	1,150	1,217	1,242	1,106	972
transportation	Payroll	150,964	143,185	ND^2	80,422	71,420	91,638	94,429	50,115	37,774
Deen ees fusielet	Establishments	51	62	61	63	69	73	69	57	58
Deep sea freight transportation	Employees	2,123	1,858	2,535	2,567	2,622	3,729	3,190	2,486	2,801
transportation	Payroll	106,848	107,564	131,904	150,701	207,300	226,810	208,144	169,055	180,139
	Establishments	30	31	36	32	31	37	34	31	33
Deep sea passenger transportation	Employees	8,719	7,863	8,879	8,849	8,492	9,077	ND^2	ND^2	ND^2
transportation	Payroll	394,932	315,551	428,941	536,753	504,625	571,590	ND^2	ND^2	ND^2
	Establishments	509	481	528	532	551	513	493	442	428
Marinas	Employees	3,876	3,449	5,079	5,067	5,069	5,494	4,935	5,024	4,665
	Payroll	88,274	90,662	111,324	125,763	133,384	146,390	148,592	151,677	132,955
Marine cargo	Establishments	71	74	68	66	63	66	53	56	59
handling	Employees	4,863	4,405	5,651	5,671	6,409	7,266	6,585	8,052	7,288
nanunng	Payroll	124,760	109,555	171,481	175,257	177,983	189,020	173,788	192,473	185,309
Novinational	Establishments	133	141	140	149	148	142	145	147	145
Navigational services to shipping	Employees	755	714	817	686	660	781	1,484	894	829
services to simpping	Payroll	35,854	34,040	39,524	39,309	42,200	48,370	61,470	56,917	60,641
Port & harbor	Establishments	25	29	26	29	31	27	29	40	32
operations	Employees	1,355	1,180	592	1,045	973	584	459	712	527
operations	Payroll	25,246	26,928	19,071	24,327	22,606	19,417	12,872	24,668	19,006
Ship & boat	Establishments	313	291	290	306	312	301	296	297	261
building	Employees	13,182	11,407	11,830	12,503	12,729	12,385	12,332	12,419	8,221
bullang	Payroll	405,856	379,828	393,985	443,379	454,209	427,888	469,382	442,096	296,537

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

2010 Economic Impacts of the Georgia Seafood Industry (thousands of dollars)

•	0	2 (,					
		With Imports			Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added			
Total Impacts	10,920	1,472,345	540,246	1,865	86,200	46,031			
Commercial Harvesters	606	23,268	11,291	606	23,268	11,291			
Seafood Processors & Dealers	943	73,616	37,450	206	16,077	8,179			
Importers	3,914	1,076,586	328,190	0	0	0			
Seafood Wholesalers & Distributors	835	101,838	49,355	34	4,087	1,981			
Retail	4,623	197,036	113,959	1,020	42,768	24,581			

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	15,440	14,703	13,685	14,374	13,465	11,534	11,331	13,079	11,750	13,410
Finfish & other	953	960	649	747	729	574	625	622	626	274
Shellfish	14,486	13,743	13,036	13,627	12,736	10,960	10,706	12,457	11,124	13,136
Blue crab	2,902	2,166	1,970	2,508	3,096	2,959	3,767	3,910	3,839	2,617
Clams	187	319	521	426	658	298	290	383	473	430
Groupers	ND^1	ND^1	ND^1	ND^1	ND^1	ND^1	123	ND^1	ND^1	ND^1
Shrimp	11,037	11,048	10,320	10,589	8,936	7,640	6,446	7,877	6,602	9,819
Snails (conchs)	245	50	69	4	3	6	1	6	11	27
Snappers	533	ND^1	ND^1	ND^1	ND^1	ND^1	269	ND^1	ND^1	ND^1

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

0		U U	• •			•				
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	9,308	9,177	9,437	9,659	9,638	8,294	7,908	8,957	7,357	7,351
Finfish & other	546	596	409	420	401	285	304	267	306	155
Shellfish	8,762	8,582	9,028	9,239	9,237	8,009	7,603	8,691	7,051	7,195
Blue crab	2,771	1,989	1,713	2,963	4,302	4,091	4,421	4,255	3,597	2,529
Clams	25	49	75	70	112	46	49	54	76	81
Groupers	ND^1	ND^1	ND^1	ND^1	ND^1	ND^1	37	ND^1	ND^1	ND^1
Shrimp	4,476	5,079	5,591	5,090	4,531	3,851	2,797	3,132	3,321	4,496
Snails (conchs)	326	64	90	4	3	5	1	5	11	18
Snappers	255	ND^1	ND^1	ND^1	ND^1	ND^1	93	ND^1	ND^1	ND^1

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue crab	1.05	1.09	1.15	0.85	0.72	0.72	0.85	0.92	1.07	1.03
Clams	7.50	6.57	6.94	6.10	5.85	6.49	5.89	7.03	6.24	5.30
Groupers	ND	ND	ND	ND	ND	ND	3.33	ND	ND	ND
Shrimp	2.47	2.18	1.85	2.08	1.97	1.98	2.30	2.51	1.99	2.18
Snails (conchs)	0.75	0.78	0.77	1.10	1.03	1.22	1.25	1.31	1.00	1.50
Snappers	2.09 ¹	ND^1	ND^1	ND^1	ND^1	ND^1	2.89	ND^1	ND^1	ND^1

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)										
	Jobs	Sales	Income	Value Added						
Trip Impacts by Fishing Mode:										
For-Hire	5	458	150	267						
Private Boat	78	8,911	3,024	5,405						
Shore	58	6,326	2,131	3,793						
Total Durable Equipment Impacts	1,734	213,367	72,940	109,543						
Total State Trip and Durable Equipment Economic Impacts	1,875	229,062	78,245	119,009						

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	58,798
For-Hire	94	209	Other Equipment	20,933
Private Boat	327	8,867	Boat Expenses	82,866
Shore	1,109	4,954	Vehicle Expenses	23,510
Total Trip Expenditures	1,530	14,029	Second Home Expenses	13,407
			Total Durable Equipment Expenditures	199,515
Total State Trip and Dura	ble Equipment Exp	·	215,074	

Recreational Anglers by Residential Area (thousands of anglers)

0			•		U ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	83	58	112	104	135	121	149	190	146	145
Non-Coastal	91	54	113	120	67	66	115	154	91	136
Out of State	38	37	42	53	43	33	45	98	45	61
Total Anglers	212	148	268	278	245	219	308	441	282	342

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J		0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	6	9	12	19	25	28	26	17	16	7
Private	449	338	549	442	501	472	553	747	503	561
Shore	352	272	410	475	326	291	348	517	332	396
Total Trips	807	619	971	936	851	790	926	1,282	851	965

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black drum	Н	13	23	44	26	22	23	51	104	21	77
DIACK UTUITI	R	14	19	28	30	12	29	31	69	28	41
Black sea bass	Н	102	23	104	66	91	77	36	107	27	15
DIACK SEA DASS	R	177	83	238	134	222	235	231	566	121	199
Bluefish	Н	10	2	1	1	3	3	11	7	2	15
Diuensii	R	48	26	23	16	22	33	92	128	66	138
Drum (Atlantic	Н	22	36	249	45	40	40	47	46	77	58
croaker)	R	192	194	965	165	266	311	222	337	474	258
Drum (southern	Н	741	427	504	679	556	511	663	875	522	797
kingfish)	R	598	379	847	624	547	630	670	922	533	547
Drum (spotted	Н	309	271	426	336	231	453	500	624	479	447
seatrout)	R	365	358	738	608	678	872	958	720	831	921
Porgies	Н	138	25	129	101	80	51	65	78	46	97
(sheepshead)	R	37	39	122	38	42	61	67	93	38	37
Red drum	H	90	91	122	140	108	82	103	143	82	253
	R	250	169	273	166	331	148	192	365	238	533
Sharks ²	Н	3	1	3	1	2	(1)	3	2	1	1
JIIdIKS	R	168	195	212	254	340	329	512	581	350	311
Southern flounder	Н	48	29	84	58	45	31	81	57	38	38
Southern nounder	R	15	11	16	29	13	25	(1)	1	9	4

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

²Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

Georgia's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	202,505 (2.9%)	3,498,583 (3%)	115,913 (2.9%)	175,210 (3%)	304,960 (2.9%)	0.12
2009	219,348 (3%)	3,410,505 (3%)	136,632 (2.8%)	224,272 (2.8%)	394,117 (2.9%)	0.07
% change	8.32%	-2.52%	17.9%	28%	29.2%	-50%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	14	20	24	29	24	21	34	45	50
prep. & packaging	Receipts	1,104	1,560	2,249	2,030	2,642	1,957	2,187	3,489	3,741
Seafood Sales,	Firms	67	77	72	69	64	78	87	101	99
retail	Receipts	4,516	5,027	4,668	4,855	6,625	7,180	8,671	6,922	5,917

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	10	11	11	11	11	8	6	7	6
prep. & packaging	Employees	1,131	1,014	994	ND^2	1,155	1,164	ND^2	ND^2	ND^2
prep. & packaging	Payroll	30,187	29,867	28,432	ND^2	39,839	43,637	ND^2	ND^2	ND^2
Seafood sales,	Establishments	50	53	39	36	29	30	42	30	33
wholesale	Employees	609	572	580	619	640	659	688	565	532
Wholesale	Payroll	19,178	19,616	32,047	31,012	32,781	31,654	31,033	20,122	18,628
Seafood sales,	Establishments	46	52	46	50	59	55	44	48	42
retail	Employees	181	161	152	159	185	184	179	160	162
	Payroll	1,874	2,002	2,243	2,437	2,753	2,724	2,633	2,433	2,447

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	5	5	6	6	7	6	6	6	5
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	33	28	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	1,883	2,040	1,700
Deen ees fusionte	Establishments	15	19	23	18	19	15	13	14	13
Deep sea freight transportation	Employees	ND^2	ND^2	256	185	193	ND^2	132	156	29
transportation	Payroll	ND^2	ND^2	12,201	10,306	10,658	ND^2	10,090	11,275	2,192
	Establishments	NA^3	NA ³	NA ³	NA ³	NA^3	NA ³	1	NA^3	NA ³
Deep sea passenger transportation	Employees	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3
transportation	Payroll	NA^3	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3
	Establishments	64	63	69	57	60	66	68	60	58
Marinas	Employees	ND^2	ND^2	642	ND^2	ND^2	ND^2	569	527	541
	Payroll	ND^2	ND^2	12,870	ND^2	ND^2	ND^2	12,701	15,571	15,736
Marina aarra	Establishments	17	15	14	18	17	17	17	17	18
Marine cargo handling	Employees	1,747	3,197	ND^2	2,018	2,350	3,003	2,501	2,660	3,707
nanunng	Payroll	48,346	75,368	ND^2	68,696	80,706	104,596	110,857	97,869	87,410
Neutrational	Establishments	7	9	9	8	8	10	11	11	9
Navigational services to shipping	Employees	ND^2	107	ND^2	ND^2	136	ND^2	217	182	ND^2
services to simpping	Payroll	ND^2	5,109	ND^2	ND^2	7,784	ND^2	11,141	10,193	12,185
Daut & Laubau	Establishments	4	4	4	7	6	5	4	5	5
Port & harbor operations	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	196	98	ND^2	ND^2
operations	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	3,303	3,108	ND^2	ND^2
Ship & heat	Establishments	28	20	18	20	17	16	21	20	14
Ship & boat building	Employees	ND^2	ND^2	1,580	ND^2	ND^2	1,967	2,225	2,159	ND^2
building	Payroll	ND^2	ND^2	40,768	ND^2	ND^2	64,667	68,646	69,096	ND^2

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable

Commercial Fisheries

2010 Economic Impacts of the North Carolina Seafood Industry (thousands of dollars)

•			V (
		With Imports			Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added			
Total Impacts	9,613	825,122	346,290	5,792	277,838	153,046			
Commercial Harvesters	2,474	134,917	75,174	2,474	134,917	75,174			
Seafood Processors & Dealers	1,105	73,458	36,907	459	30,514	15,331			
Importers	1,539	423,266	129,030	0	0	0			
Seafood Wholesalers & Distributors	452	48,542	22,471	139	14,895	6,895			
Retail	4,043	144,939	82,708	2,720	97,511	55,646			

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Total revenue	88,141	94,747	84,926	79,703	64,890	70,121	82,285	86,822	77,248	79,825	
Finfish & other	36,090	37,274	31,560	38,910	34,901	37,716	36,203	34,445	34,002	33,373	
Shellfish	52,051	57,473	53,366	40,793	29,989	32,405	46,082	52,377	43,246	46,452	
Atlantic croaker	3,080	3,234	2,924	3,528	3,409	3,563	2,714	3,142	3,004	3,410	
Black sea bass	1,062	878	1,417	1,486	1,332	1,715	1,195	1,156	1,401	948	
Blue crab	32,231	33,149	37,108	24,465	20,274	17,087	21,432	27,555	27,429	26,541	
Clams	5,036	3,534	3,399	3,390	2,798	2,656	2,660	2,435	2,141	2,605	
Flounders	10,142	11,270	9,671	11,503	10,963	13,301	11,335	10,886	10,124	10,908	
Groupers	1,050	1,302	1,200	1,124	1,214	1,559	1,995	1,939	1,609	1,506	
King mackerel	1,351	1,177	1,214	1,573	2,054	2,120	1,967	1,632	1,500	644	
Shrimp	11,911	18,365	10,931	9,463	4,409	9,141	17,905	19,251	8,528	10,691	
Snappers	1,219	1,186	686	873	1,116	953	1,601	1,784	1,073	955	
Tunas	2,589	2,158	1,989	3,317	3,321	4,060	4,046	3,393	2,922	1,489	

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

		• •	• •	•						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	137,147	160,142	139,401	134,078	79,607	68,744	62,871	71,209	68,962	71,989
Finfish & other	98,055	110,944	88,721	91,383	49,435	35,675	30,440	27,706	32,419	32,517
Shellfish	39,092	49,198	50,681	42,696	30,172	33,069	32,432	43,503	36,543	39,472
Atlantic croaker	12,017	10,189	14,429	11,993	11,903	10,397	7,271	5,792	6,135	7,312
Black sea bass	644	592	851	881	690	778	473	485	615	401
Blue crab	32,180	37,737	42,770	34,129	25,430	25,343	21,425	32,917	29,707	30,681
Clams	772	627	547	551	418	427	438	400	367	366
Flounders	6,307	7,568	5,772	7,302	5,937	6,272	4,754	5,009	5,256	5,001
Groupers	471	581	518	478	481	587	701	683	553	493
King mackerel	837	778	765	955	1,246	1,186	1,059	1,037	778	329
Shrimp	5,254	9,969	6,167	4,881	2,358	5,737	9,537	9,427	5,408	5,955
Snappers	524	490	269	339	433	345	550	603	374	320
Tunas	1,713	1,000	914	1,424	1,271	1,982	1,836	1,041	1,028	703

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic croaker	0.26	0.32	0.20	0.29	0.29	0.34	0.37	0.54	0.49	0.47
Black sea bass	1.65	1.48	1.67	1.69	1.93	2.21	2.53	2.39	2.28	2.36
Blue crab	1.00	0.88	0.87	0.72	0.80	0.67	1.00	0.84	0.92	0.87
Clams	6.52	5.64	6.22	6.15	6.69	6.21	6.08	6.09	5.83	7.11
Flounders	1.61	1.49	1.68	1.58	1.85	2.12	2.38	2.17	1.93	2.18
Groupers	2.23	2.24	2.32	2.35	2.52	2.65	2.84	2.84	2.91	3.06
King mackerel	1.61	1.51	1.59	1.65	1.65	1.79	1.86	1.57	1.93	1.96
Shrimp	2.27	1.84	1.77	1.94	1.87	1.59	1.88	2.04	1.58	1.80
Snappers	2.33	2.42	2.55	2.57	2.58	2.76	2.91	2.96	2.87	2.98
Tunas	1.51	2.16	2.18	2.33	2.61	2.05	2.20	3.26	2.84	2.12

North Carolina

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditur	es (thousands	s of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,080	84,921	27,042	47,658
Private Boat	1,307	121,578	39,020	68,554
Shore	7,183	595,275	190,049	331,481
Total Durable Equipment Impacts	9,323	1,172,943	357,700	532,646
Total State Trip and Durable Equipment Economic Impacts	18,893	1,974,716	613,811	980,339

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	341,082
For-Hire	44,336	12,644	Other Equipment	98,147
Private Boat	24,811	82,455	Boat Expenses	142,557
Shore	321,447	117,222	Vehicle Expenses	129,568
Total Trip Expenditures	390,594	212,321	Second Home Expenses	275,970
			Total Durable Equipment Expenditures	987,325
Total State Trip and Dura	ble Equipment Exp	enditures	·	1,590,240

Recreational Anglers by Residential Area (thousands of anglers)

					• ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	454	409	524	613	685	588	564	587	446	544
Non-Coastal	251	226	281	290	285	265	265	303	259	296
Out of State	1301	1130	1298	1156	1280	1374	1079	1079	976	1073
Total Anglers	2007	1765	2103	2058	2250	2227	1908	1970	1681	1914

Recreational Fishing Effort by Mode (thousands of angler-trips)

	U .	, ,		0	• /					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	202	183	174	178	304	290	286	283	219	216
Private	2,169	1,941	2,181	2,543	2,354	2,656	2,784	2,550	2,032	2,254
Shore	4,279	3,462	4,379	4,306	4,129	4,300	3,910	4,348	3,446	3,683
Total Trips	6,650	5,586	6,733	7,027	6,786	7,247	6,979	7,181	5,698	6,153

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

Harvest (H) and R		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black sea bass	H	175	84	166	264	241	156	122	69	116	151
Diack Sca Dass	R	790	530	418	1,020	1,056	1,204	1,208	854	953	1,315
Bluefish	H	1,266	777	953	1,044	1,374	1,128	1,338	1,299	856	1,371
Didensii	R	2,329	1,610	1,416	1,907	2,206	1,875	2,496	2,285	1,388	2,141
Dolphinfish	H	492	621	335	387	686	590	608	382	376	464
Dolphinnsh	R	4	4	14	2	2	23	8	5	3	8
Drum (Atlantic	Н	4,286	2,995	4,287	4,533	3,419	3,205	4,667	2,718	1,519	1,410
croaker and spot)	R	2,401	1,597	2,685	2,584	2,829	5,436	2,959	2,696	2,924	2,812
Drum (spotted	Н	182	197	106	317	512	578	525	584	509	165
seatrout)	R	195	385	132	300	817	560	974	1,005	933	1,502
Flounder (lefteye	Н	363	216	110	200	164	186	222	83	78	149
and summer)	R	1,566	1,285	829	1,669	1,043	1,051	1,293	1,627	1,239	1,645
King mackerel	Н	114	67	114	105	153	119	229	109	80	36
	R	9	7	22	45	71	22	39	21	13	7
Spanish mackerel	H	401	402	349	309	332	305	491	687	703	472
Spanish mackerer	R	161	197	165	122	174	90	278	542	242	272
Striped bass	H	66	60	138	352	145	107	51	53	11	46
Sulfed bass	R	119	155	285	398	130	83	44	86	86	69
Yellowfin tuna	Н	237	135	328	204	216	244	115	27	30	34
	R	1	8	56	12	10	15	1	(1)	2	1

¹In this table, '(1)' = 0.999 thousand fish and '1' = 1,000-1,499 thousand fish.

North Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	204,075 (2.9%)	3,431,554 (3%)	103,027 (2.6%)	159,468 (2.9%)	292,171 (2.7%)	0.22
2009	218,987 (2.9%)	3,353,931 (2.9%)	124,323 (2.6%)	213,935 (2.9%)	407,032 (2.7%)	0.1
% change	7.31%	-2.26%	20.7%	34.2%	39.3%	-50%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	17	25	33	27	26	27	30	0	0
prep. & packaging	Receipts	1,335	1,385	1,646	1,515	1,106	1,084	1,813	ND^2	ND^2
Seafood Sales,	Firms	116	117	133	144	130	115	150	114	139
retail	Receipts	9,395	11,560	11,565	12,294	10,913	11,342	14,999	10,918	12,073

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

				· ·		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	27	21	18	18	17	18	22	18	16
prep. & packaging	Employees	381	280	ND^2	ND^2	ND^2	475	ND^2	232	170
prep. & packaging	Payroll	8,510	8,547	ND^2	ND^2	ND^2	11,563	12,659	5,373	4,461
Seafood sales,	Establishments	84	84	68	72	77	70	71	65	66
wholesale	Employees	983	961	628	627	703	582	597	559	584
Wholesale	Payroll	22,597	21,716	16,170	17,411	17,577	16,543	15,655	16,843	17,383
Seafood sales,	Establishments	70	81	87	88	90	89	86	90	77
retail	Employees	245	301	304	340	316	250	241	219	243
retain	Payroll	3,512	3,890	3,982	4,234	4,185	4,129	4,170	4,143	4,494

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	3	6	5	5	5	4	6	4	6
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	54	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	2,061	ND^2	2,366
Deen ees fusionte	Establishments	13	15	7	7	7	8	6	5	6
Deep sea freight transportation	Employees	104	168	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	9
transportation	Payroll	8,154	52,665	ND^2	ND^2	ND^2	ND^2	510	533	617
D	Establishments	5	3	3	2	2	1	1	NA ³	1
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2
	Establishments	111	103	104	97	103	103	96	107	105
Marinas	Employees	616	557	ND^2	644	654	681	522	656	501
	Payroll	14,720	13,186	ND^2	16,529	16,530	16,616	14,922	17,164	15,858
Marina aarra	Establishments	8	6	7	10	12	9	13	13	12
Marine cargo handling	Employees	ND^2	ND^2	433	668	641	757	652	760	914
nanunng	Payroll	ND^2	ND^2	16,001	28,676	25,988	19,736	25,164	23,328	20,707
Neutrational	Establishments	6	4	6	6	8	7	14	10	11
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	102	87	96
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	3,773	3,668	4,313
Daut & Laubau	Establishments	5	7	6	5	5	5	3	3	2
Port & harbor operations	Employees	ND^2	ND^2	271	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	12,650	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & heat	Establishments	59	62	55	62	65	74	78	77	64
Ship & boat building	Employees	3,383	3,566	3,290	3,622	3,957	4,232	ND^2	4,281	1,983
building	Payroll	100,341	103,506	106,656	127,472	133,665	153,672	ND^2	138,243	68,004

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable

2010 Economic Impacts of the South Carolina Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	1,429	80,904	42,228	1,377	72,772	39,429		
Commercial Harvesters	493	34,846	18,617	493	34,846	18,617		
Seafood Processors & Dealers	104	7,840	3,944	101	7,667	3,857		
Importers	24	6,709	2,045	0	0	0		
Seafood Wholesalers & Distributors	40	4,021	1,855	35	3,557	1,641		
Retail	769	27,489	15,767	747	26,702	15,314		

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

	· · · · · · · · · · · · · · · · · · ·									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	23,908	21,340	21,242	18,542	17,570	17,025	16,017	17,872	17,032	20,994
Finfish & other	5,741	5,375	4,650	5,042	4,781	4,995	4,744	4,614	5,114	6,532
Shellfish	18,166	15,965	16,592	13,499	12,789	12,031	11,274	13,259	11,918	14,462
Black sea bass	132	95	168	302	191	168	236	257	362	210
Blue crab	6,141	4,239	5,057	3,591	3,766	3,304	3,511	4,187	4,059	3,593
Clams	1,744	1,399	1,537	1,238	934	834	697	535	542	688
Groupers	846	811	993	1,020	1,013	1,335	1,524	1,421	1,021	911
Oysters	1,074	1,025	1,199	1,229	1,471	1,369	1,375	1,739	1,738	1,858
Sharks	129	78	66	128	136	144	78	78	56	116
Shrimp	8,865	9,062	8,736	7,385	6,572	6,481	5,634	6,712	5,487	8,168
Snappers	1,738	1,319	725	1,237	1,190	823	773	864	568	1,065
Swordfish	660	670	616	555	ND^1	ND^1	ND^1	187	1,116	1,868
Tilefish	292	423	287	221	143	271	5	66	9	25

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

0			• /	•	• 、	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	14,273	13,559	13,728	12,439	11,212	10,602	9,310	10,081	9,375	10,478
Finfish & other	3,152	3,052	2,598	2,768	2,274	2,249	1,994	1,940	2,160	2,686
Shellfish	11,120	10,507	11,130	9,670	8,938	8,353	7,316	8,141	7,215	7,793
Black sea bass	97	60	104	212	115	86	114	132	168	97
Blue crab	5,566	4,435	4,411	4,374	4,440	4,215	4,137	4,484	4,014	3,275
Clams	266	219	263	211	175	165	135	119	123	152
Groupers	323	304	366	363	319	399	404	379	274	232
Oysters	272	262	283	275	308	291	285	324	309	332
Sharks	150	109	124	206	174	147	105	110	63	75
Shrimp	4,498	5,238	6,133	4,773	3,957	3,650	2,727	3,162	2,716	3,951
Snappers	765	544	290	492	447	267	250	277	194	361
Swordfish	229	240	219	200	ND^1	ND^1	ND^1	71	459	602
Tilefish	149	195	145	124	80	139	4	28	5	15

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black sea bass	1.37	1.56	1.61	1.42	1.66	1.97	2.07	1.94	2.15	2.16
Blue crab	1.10	0.96	1.15	0.82	0.85	0.78	0.85	0.93	1.01	1.10
Clams	6.55	6.38	5.85	5.86	5.34	5.06	5.17	4.51	4.42	4.54
Groupers	2.62	2.67	2.71	2.81	3.17	3.35	3.77	3.75	3.73	3.93
Oysters	3.95	3.91	4.24	4.46	4.78	4.71	4.82	5.36	5.63	5.60
Sharks	0.86	0.71	0.53	0.62	0.78	0.98	0.74	0.71	0.89	1.55
Shrimp	1.97	1.73	1.42	1.55	1.66	1.78	2.07	2.12	2.02	2.07
Snappers	2.27	2.42	2.50	2.51	2.66	3.08	3.09	3.12	2.92	2.95
Swordfish	2.88	2.79	2.81	2.78	ND^1	ND^1	ND^1	2.64	2.43	3.10
Tilefish	1.96	2.17	1.98	1.78	1.78	1.95	1.36	2.30	2.00	1.71

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

Recreational Fisheries

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2010 Economic Impacts of Recreational Fishing Expenditure	es (thousands	of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	411	32,177	10,350	18,179
Private Boat	506	44,471	14,669	25,948
Shore	1,366	111,611	35,788	62,148
Total Durable Equipment Impacts	2,029	190,714	65,955	100,764
Total State Trip and Durable Equipment Economic Impacts	4,312	378,974	126,762	207,039

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2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	65,306
For-Hire	19,259	3,898	Other Equipment	20,022
Private Boat	12,101	31,382	Boat Expenses	111,940
Shore	71,870	20,347	Vehicle Expenses	41,198
Total Trip Expenditures	103,230	55,627	Second Home Expenses	4,717
			Total Durable Equipment Expenditures	243,183
Total State Trip and Dura	able Equipment Exp	enditures	·	402,040

Recreational Anglers by Residential Area (thousands of anglers)

0	•		•		U ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	180	177	222	227	230	234	277	236	231	210
Non-Coastal	77	55	79	101	120	146	113	103	112	104
Out of State	224	161	270	334	448	617	551	604	554	494
Total Anglers	481	392	571	662	798	997	941	942	898	809

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J (0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	38	32	39	39	72	61	132	120	148	97
Private	954	557	1,021	1,070	989	1,118	1,483	1,260	1,051	1,063
Shore	684	665	1,038	1,130	1,066	1,481	961	1,196	1,192	1,046
Total Trips	1,676	1,254	2,098	2,239	2,126	2,661	2,577	2,576	2,391	2,207

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

That vest (11) and the		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black sea bass	Н	103	113	44	276	173	307	189	110	67	182
DIACK SEA DASS	R	421	335	289	952	680	812	1,356	1,011	918	844
Bluefish	Н	118	79	66	118	284	197	297	150	118	443
Diuensii	R	152	163	215	349	362	907	1,020	418	211	338
Drum (Atlantic	Н	755	460	723	793	593	1,996	1,044	2,445	996	454
croaker and spot)	R	269	196	672	699	455	1,289	592	395	962	276
Drum (southern	Н	359	226	982	1,026	1,058	1,113	1,281	819	759	339
kingfish)	R	125	136	1,049	497	439	1,350	849	688	661	(1)
Drum (spotted	H	63	85	123	247	268	294	122	176	147	92
seatrout)	R	39	148	315	334	395	667	560	850	460	381
Porgies	H	113	31	129	107	28	88	133	252	159	156
(sheepshead)	R	24	21	51	20	26	49	47	56	40	59
Red drum	H	61	41	162	134	141	72	88	109	83	154
Red druin	R	221	143	430	401	492	607	537	524	684	642
$Sharks^2$	H	14	(1)	(1)	20	27	(1)	10	1	17	(1)
Sharks	R	520	276	380	368	339	493	252	293	332	317
Southern flounder	Н	82	112	111	237	104	148	136	91	85	93
Southern nounder	R	28	73	52	133	86	217	184	124	92	1
Spanish mackerel	Н	44	24	25	144	70	43	105	58	61	96
	R	10	9	223	114	154	33	84	93	49	56

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

²Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

South Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	97,030 (1.4%)	1,596,385 (1.4%)	43,840 (1.1%)	68,919 (1.2%)	119,976 (1.2%)	0.44
2009	103,254 (1.4%)	1,542,825 (1.3%)	51,721 (1.1%)	91,520 (1.1%)	158,786 (1.2%)	0.12
% change	6.41%	-3.36%	18%	32.8%	32.3%	-61.4%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	13	20	19	22	14	12	12	15	21
prep. & packaging	Receipts	304	547	1,115	1,797	2,234	1,303	857	1,155	1,794
Seafood Sales,	Firms	59	64	74	74	61	76	75	64	76
retail	Receipts	2,848	3,484	4,599	4,612	3,588	3,427	3,876	4,650	4,534

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

	0			•		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Saafaad product	Establishments	5	4	3	4	3	3	5	2	2
Seafood product prep. & packaging	Employees	ND^2	ND^2	ND^2	28	7	ND^2	ND^2	ND^2	ND^2
hich. & hackaging	Payroll	ND^2	ND^2	ND^2	805	145	ND^2	ND^2	ND^2	ND^2
Seafood sales,	Establishments	31	28	22	18	22	19	26	20	15
wholesale	Employees	177	ND^2	ND^2	ND^2	211	191	220	108	111
Wholesale	Payroll	3,330	ND^2	ND^2	ND^2	5,818	5,542	6,186	3,770	3,676
Seafood sales,	Establishments	52	58	55	58	64	62	60	64	57
retail	Employees	166	175	244	ND^2	206	190	210	292	261
	Payroll	2,250	2,391	2,911	ND^2	2,773	2,905	3,155	4,871	4,901

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	2	1	3	4	4	4	5	4	4
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	45	ND^2	60	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	1,882	ND^2	2,352	ND^2	ND^2
Deen ees fusielet	Establishments	8	10	8	7	10	9	6	4	8
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	113	ND^2	67	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	4,600	ND^2	3,419	659	ND^2
	Establishments	1	1	3	1	1	1	1	7	6
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	64	62	63	69	70	71	72	68	69
Marinas	Employees	343	357	365	378	398	452	469	588	533
	Payroll	6,807	6,395	6,696	7,645	8,050	10,105	11,498	13,753	12,642
Marine cargo	Establishments	14	16	15	17	18	17	15	17	14
handling	Employees	2,330	1,793	2,415	2,253	1,994	2,707	1,419	1,282	1,953
nanuning	Payroll	60,755	54,609	78,941	81,691	66,767	83,142	75,967	56,812	43,170
Neurational	Establishments	12	11	6	5	7	8	6	8	8
Navigational services to shipping	Employees	89	83	144	ND^2	ND^2	155	152	227	208
services to simpping	Payroll	3,051	3,422	5,716	ND^2	ND^2	7,588	7,369	11,916	12,522
Port & harbor	Establishments	NA^3	NA^3	1	1	1	1	3	3	2
operations	Employees	NA^3	NA ³	ND^2	ND^2	ND^2	ND^2	113	ND^2	ND^2
operations	Payroll	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	7,058	ND^2	ND^2
Ship & heat	Establishments	40	43	41	46	48	45	41	46	41
Ship & boat building	Employees	1,801	1,570	2,253	2,380	2,672	2,425	2,962	3,001	1,929
bullding	Payroll	54,654	61,045	78,963	90,974	97,087	92,098	102,531	97,743	73,988

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

 $^{^{3}}NA =$ these data are confidential thus not di $^{3}NA =$ these data are not available

Gulf of Mexico

- Alabama
- West Florida
- Louisiana
- Mississippi
- Texas



Management Context

The Gulf of Mexico Region includes Alabama, Louisiana, Mississippi, Texas, and West Florida. Federal fisheries in this region are managed by the Gulf of Mexico Fishery Management Council (GMFMC) and NOAA Fisheries (NMFS) under seven fishery management plans (FMPs). The spiny lobster and coastal migratory pelagic resources fisheries are managed in conjunction with the South Atlantic Fishery Management Council (SAFMC).

Gulf of Mexico Region FMPs

- 1. Red Drum
- 2. Shrimp
- 3. Reef Fish
- 4. Coastal Migratory Pelagic Resources (with SAFMC)
- 5. Spiny Lobster (with SAFMC)
- 6. Corals
- 7. Aquaculture

Of the stocks or stock complexes covered in these fishery management plans, four are currently listed as overfished: gag, gray triggerfish, greater amberjack, and red snapper. Four stocks or stock complexes are currently subject to overfishing: gag, gray triggerfish, greater amberjack, and red snapper.

There have been two recent changes to the Gulf of Mexico FMPs over the last several years. The Aquaculture FMP was approved in 2009 and is the only federal FMP to solely address aquaculture. The purpose of the plan is to develop a regional permitting process to ensure that the aquaculture industry is environmentally sound and economically sustainable. As of October 2011, the FMP had not yet been implemented. The other recent change to the Gulf of Mexico FMPs, was the repeal of the Stone Crab FMP. Stone crab was historically managed as a federal fishery, however, as of October 2011, the Gulf of Mexico states will now be responsible for management of the stone crab.

In recent years, fishing operations in the Gulf of Mexico were significantly disrupted by hurricanes, especially with major storms making landfall in Louisiana and Texas in 2005 (Hurricanes Katrina and Rita) and 2008 (Hurricanes Gustav and Ike). Locally, storm surge has severely disrupted or destroyed the infrastructure necessary to support fishing, such as vessels, fuel and ice suppliers, and fish houses. For the affected areas and individuals, recovery is a long and slow process, often involving rebuilding homes and settling insurance claims before the repair and restart of fishing operations.

In 2010, the Deep Water Horizon accident and resulting oil spill severely affected Gulf fisheries. Large parts of the Gulf of Mexico, including state and federal waters, were closed to fishing during May through October, 2010. Both Alabama and Mississippi reported less than half and Louisiana about three

quarters of their annual shrimp landings compared to the average of the previous three years. While the Gulf Coast Claims Facility has paid out over \$700 million to the Gulf fishing industry, the long term consequences of the oil spill on the fishing industry have yet to be assessed.

Commercial Fisheries

In 2010, commercial fishermen in the Gulf of Mexico Region landed 1.3 billion pounds of finfish and shellfish, earning \$639 million in landings revenue. Landings revenue was dominated by shrimp (\$340 million) and menhaden (\$66 million). These species commanded ex-vessel prices of \$1.92 and \$0.07 per pound, respectively, and comprised 64% of total landings revenue, and 89% of total landings in the Gulf of Mexico Region.

Key Gulf of Mexico Region Commercial Species

- Blue crab
- Crawfish
- Groupers
- Menhaden
- Oysters Red snapper
- Shrimp
- Mullets
- Stone crab
- Tunas

Louisiana and Texas had the highest landings revenue in the region in 2010, \$248 million and \$204 million, respectively. The next greatest landings revenue came from West Florida with \$137 million in landings revenue. In terms of pounds landed, Louisiana had the highest landings (1 billion pounds), followed by Mississippi (111 million pounds) and Texas (90 million pounds).

Economic Impacts^{1,2}

In 2010, the Gulf of Mexico Region's seafood industry generated \$303 million in sales impacts in Alabama, \$1.4 billion in sales impacts in Louisiana, \$175 million in sales impacts in Mississippi, \$2.1 billion in sales impacts in Texas, and \$14 billion in sales impacts in Florida. Florida generated the largest employment, income, and value added impacts, generating 71,000 jobs, \$2.6 billion, and \$4.7 billion, respectively. The smallest income impacts were generated in Mississippi (\$67 million) and the smallest employment impacts were also generated in Mississippi (3,800 jobs).

The sector that generated the greatest employment impacts by state was the importers sector with 37,000 jobs in Florida and 2,700 jobs in Texas. The harvest sector in Texas generated 5,100 jobs. More sales impacts were generated by importers in Florida than any other sector in any another state in the region at \$10 billion and the greatest value added impacts were also generated by importers in Florida (\$3.1 billion).

Landings Revenue

Landings revenue in the Gulf of Mexico Region totaled 639 million in 2010. This was a 21% decrease (a 39% decrease in real terms) from 2001 levels (807 million) and a 3.3% increase (a 0.9% decrease in real terms) relative to 2009 (619 million).

¹The NMFS Commercial Fishing Industry Input/Output Model was used to generate the impact estimates (see NMFS Commercial Fishing & Seafood Industry Input/Output Model, available at: www.st.nmfs.noaa.gov/documents/commercial_seafood_impacts_2007-2009.pdf)

²Commercial economic impacts data were not available for West Florida, data for Florida are reported here.

Totaling \$507 million in 2010, shellfish revenue experienced a 21% decrease (a 39% decrease in real terms) from 2001 to 2010 and experienced a 8.2% increase (3.9% increase in real terms) from 2009 to 2010.

Commercial Fisheries Facts

Landings revenue

- On average, between 2001 and 2010, the key species or species groups accounted for <u>91%</u> of total revenue, generating \$614 million in the Gulf of Mexico Region.
- <u>Shrimp</u> had higher landings revenues than any other species or species group, averaging \$375 million in landings revenue from 2001 to 2010.
- <u>Crawfish</u> had the largest one-year increase in landings revenue over the 10 year time period, increasing 600% from \$1.3 million in 2006 to \$9 million in 2007.
- Crawfish had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 85% from \$8.4 million in 2005 to \$1.3 million in 2006.

Landings

- Key species or species groups contributed an average of 96% annually to total landings between 2001 and 2010.
- <u>Menhaden</u> contributed the most to landings in the region, <u>averaging 1 billion pounds</u> from 2001 to 2010.
- Crawfish had the largest one-year increase in landings over the 10 year time period, increasing 979% from 1.5 million in 2006 pounds to 16 million pounds in 2007.
- <u>Crawfish</u> had the largest one-year decrease in landings over the 10 year time period, decreasing 90% from 15 million pounds in 2005 to 1.5 million pounds in 2006.

Prices

- <u>Stone crab</u> had the highest average annual ex-vessel price per pound (\$4.06) over the time period, followed by tunas (\$2.84), and red snapper (\$2.78).
- Menhaden had the lowest average annual ex-vessel price per pound (\$0.05) over the time period, followed by mullets (\$0.64), and crawfish (\$0.68).
- Crawfish had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 60% from \$0.55 per pound in 2005 to \$0.88 in 2006.
- Crawfish had the largest decrease in ex-vessel price over the 10 year time period, decreasing 37% from \$0.82 per pound in 2001 to \$0.52 in 2002.

Between 2001 and 2010, the landings revenue from shrimp decreased 32% (a 47% decrease in real terms) and the landings revenue for menhaden decreased 8.8% (a 29% decrease in real terms). Although in 2010, menhaden landings (967 million pounds) were five times higher than shrimp landings (177 million), the landings revenue for shrimp (\$340 million) was five times higher than the landings revenue for menhaden (\$66 million). In terms of finfish, Louisiana contributed the most (\$71 million) followed by West Florida (\$42 million), and Mississippi (\$9 million). Shellfish landings revenue was dominated by Texas, which contributed the most (\$196 million) followed by Louisiana (\$177 million), and West Florida (\$96 million).

From 2001 to 2010, species or species groups with large changes in landings revenue include tunas (decreased 71%), crawfish

(increased 62%), and groupers (decreased 48%). Species or species groups with large changes in landings revenue between 2009 and 2010 include tunas (decreasing 67%), stone crab (increasing 32%), and red snapper (increasing 28%).

Landings

Fishermen in the Gulf of Mexico Region landed 1.3 billion pounds of finfish and shellfish in 2010. This was a 20% decrease from the 1.61 billion pounds landed in 2001 and a 18% decrease from the 1.57 billion pounds landed in 2009. Finfish landings contributed 80% of total landings in the Gulf of Mexico Region (1 billion pounds) in 2010. From 2009 to 2010, finfish landings experienced a 17% decrease.

Over the same time period, shellfish landings experienced a 24% decrease from 340 million pounds in 2009 to 259 million in 2010 and a 28% decrease from 359 million pounds in 2001. Menhaden and shrimp had the highest annual landings in the Gulf of Mexico Region in 2010, with 967 million pounds and 177 million pounds, respectively. Together they accounted for 89% of the total landings in 2010. Menhaden landings decreased 17% and shrimp landings decreased 31% during this period.

From 2001 to 2010, species or species groups with large changes in landings include tunas (decreasing 62%), groupers (decreasing 60%), and oysters (decreasing 39%). Species or species groups with large changes in landings between 2009 and 2010 include tunas (decreasing 53%), oysters (decreasing 31%), and red snapper (increasing 30%).

Prices

The ex-vessel prices for the Gulf of Mexico Region's key species and species groups in 2010 were higher than their 10 year average for eight of the key species (four of the species in real terms). Ex-vessel prices for oysters and stone crab increased the most between 2001 and 2010, increasing 71% (32% in real terms) and 49% (16% in real terms), respectively. Relative to ex-vessel prices in 2009, the Gulf of Mexico Region's shrimp experienced the greatest increase (44%, 39% in real terms) from \$1.33 per pound in 2009 to \$1.92 in 2010. Of the changes in ex-vessel price experienced by species or species groups between 2009 and 2010, tunas experienced the greatest decrease (30%, 32% in real terms) from \$2.88 to \$2.03. Relative to ex-vessel prices in 2009, eight species or species groups experienced increases, including stone crab (38%).

In Alabama, the species or species group with the largest change in ex-vessel price from 2001 to 2010 was oysters (165% increase, 105% increase in real terms) from \$2.15 to \$5.70. The largest change in ex-vessel price experienced in Louisiana was for oysters (73% increase, 34% increase in real terms) from \$2.10 to \$3.63 and in Mississippi the largest change in ex-vessel price was experienced by oysters (86% increase, 44% increase in real terms) from \$1.58 per pound to \$2.94.

Recreational Fishing

In 2010, over 2.7 million recreational anglers took 21 million fishing trips in the Gulf of Mexico Region. Over 91% of these anglers were residents of a regional coastal county. Of the total

fishing trips taken, 60% were taken from a private or rental boat and another 38% were shore-based. Spotted seatrout were the most frequently caught species or species group with 24 million fish caught in 2010, and represented 42% of total fish caught in the region. Of the spotted seatrout caught, 61% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in the Gulf of Mexico Region are reported in terms of economic impacts at the state level (employment, sales, income, and value added impacts) and expenditures on fishing trips and durable equipment at the regional level. Employment impacts in West Florida were the highest in the region with over 39,000 full- and part-time jobs generated by recreational fishing activities in the state. Texas (19,000 jobs), and Louisiana (16,000 jobs) followed in terms of employment impacts.

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) and expenditures on durable equipment. Throughout the Gulf of Mexico Region, most of the employment impacts in 2010 were generated by expenditures on durable equipment: 92% in Mississippi, 90% in Texas, and 80% in Louisiana.

In addition to employment impacts, the contribution of recreational fishing activities to the Gulf of Mexico Region's economy can be measured in terms of sales impacts and the contribution of these activities to gross domestic product (value added impacts). In 2010, sales impacts were the highest in West Florida (\$2.2 billion in sales impacts), followed by Texas

(\$1.3 billion), Louisiana (\$736 million), Alabama (\$221 million), and Mississippi (\$167 million). In the same year, value added impacts were the highest in West Florida (\$2.2 billion in value added impacts), followed by Texas (\$1.3 billion), Louisiana (\$736 million), Alabama (\$221 million), and Mississippi (\$167 million).

Key Gulf of Mexico Region Recreational Species

- Atlantic croaker
- Red drum
- Gulf and southern kingfish
 Sand and silver
- Red snapper
- Southern flounder
- Spanish mackerelStriped mullet
- seatrout
- Spotted seatrout
- Sheepshead porgy

Overall, total fishing trip and durable equipment expenditures across the Gulf of Mexico Region in 2010 were \$9.1 billion. Approximately 87% of these expenditures were related to durable equipment purchases. The greatest expenditures were for boat expenses (\$3.5 billion), followed by fishing tackle (\$1.4 billion),

vehicle expenses (\$1.3 billion), second home expenses (\$1.1 billion), and other equipment (\$535 million).

Recreational Fishing Facts

Participation

- An average of <u>3.2 million anglers</u> fished in the Gulf of Mexico Region annually from 2001 to 2010.
- In 2010, coastal county residents made up 91% of total anglers in this region. These anglers averaged 92% of total anglers annually over the 10 year time period.
- The largest annual increase in the number of coastal anglers during the 10 year time period occurred between 2002 and 2003, increasing 22%, from 2.5 million anglers to 3 million anglers.
- The largest annual decrease during the same period for coastal anglers occurred between 2001 and 2002, decreasing 14%, from 2.9 million anglers to 2.5 million anglers.

Fishing trips

- In the Gulf of Mexico Region, an average of 23 million fishing trips were taken annually from 2001 to 2010.
- Private or rental boat and shore-based fishing trips accounted for <u>12 million</u> and <u>7.8 million</u> fishing trips, respectively, in <u>2010</u>. Together these made up 97% of the fishing trips taken in that year.
- The largest annual increase in the number of total trips taken annually over the 10 year time period occurred between 2002 and 2003, increasing 17%, from 20 million trips to 23 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2001 and 2002, decreasing 14%, from 23 million trips to 20 million trips.

Harvest and release

- <u>Spotted seatrout</u> was the most commonly caught key species or species group, <u>averaging 28 million fish</u> over the 10 year time period. Of these, <u>62% were released</u> rather than harvested.
- Of the ten commonly caught key species or species groups, five were released more often than harvested over this time period.
- The species or species group that was most commonly released was Atlantic croaker (71% released).
- Striped mullet (84% harvested), followed by southern flounder (77% harvested), and sand and silver seatrout (68% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.
- The largest one-year change in the number of fish released was for releases of <u>striped mullet</u>, which increased 269% between 2002 and 2003
- the largest one-year change in number of fish harvested occurred in <u>Atlantic croaker</u>, which increased 91% from 2005 to 2006.

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

Participation

There were 2.7 million recreational anglers who fished in the Gulf of Mexico Region in 2010. This was a 13% decrease from 2001 (3.1 million anglers). These anglers were Gulf of Mexico Region residents from either a coastal county (2.5 million anglers) or non-coastal county (235,000 anglers).

Over 91% of total anglers in 2010 were residents of a coastal county. Coastal county angler participation in 2010 decreased 14% relative to 2001 (2.9 million anglers) and decreased 3% between 2009 and 2010. Non-coastal county angler participation increased 3.7% relative to 2001 (227,000 anglers) and decreased 20% relative to 2009 (296,000 anglers).

Fishing Trips

Recreational fishermen took 21 million fishing trips in the Gulf of Mexico Region in 2010. This was a 9.3% decrease from the 2001 (23 million trips) and was 1.5 million fewer trips than taken in 2009. Of the total trips taken in Gulf of Mexico Region in 2010, approximately 60% of the trips were private or rental boat based (12 million) trips. The other most popular mode of fishing was shore based with 7.8 million trips in 2010.

Harvest and Release

Of the Gulf of Mexico Region's key species and species groups, spotted seatrout (24 million fish), red drum (8.8 million fish), sand and silver seatrout (6.3 million fish) and Atlantic croaker (5 million fish) were the most often caught by anglers in 2010.

Red snapper (82% released), Atlantic croaker (73% released), red drum (64% released), spotted seatrout (61% released), Spanish mackerel (57% released), and sheepshead porgy (56% released) were most often released rather than harvested. Species or species groups that were harvested more often than released by anglers include striped mullet (92% harvested) and southern flounder (77% harvested).

At the state level, spotted seatrout was the most commonly caught species in West Florida, Texas¹ and Louisiana with a total of 23 million fish caught across the three states. In Alabama, the most commonly caught fish was sand seatrout (2.6 million fish) in 2010.

Between 2001 and 2010, five of the Gulf of Mexico Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were gulf and southern kingfish (43%), striped mullet (40%), and red snapper (37%).

Marine Economy²

The sum of the gross domestic products by state for Alabama, Louisiana, Mississippi, Texas, and Florida³ was \$2.3 trillion in 2010. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$777 billion. These economic measures increased 40% (a 13% increase in real terms) and 33% (a 7.1% increase in real terms), respectively, between 2001 and 2009; and experienced a 2.6% decrease (a 2.2% decrease in real terms), and 4.5% decrease (a 4.2% decrease in real terms), respectively, between 2008 and 2009.

In 2009, the commercial fishing location quotient (CFLQ) for Louisiana was the highest in the region at 2.19. This was an 19% increase from 2001 and a 12% decrease from 2008. Louisiana's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 2 times higher than the level of employment in these industries nationwide. The CFLQ 2009 in West Florida was 0.97 (a 29% decrease from 2001.

Seafood Sales and Processing

In 2009, there were 423 nonemployer firms engaged in seafood product preparation and packaging across the Gulf of Mexico Region. This was a 31% increase from 2001 levels. Over the same time period, Louisiana experienced a 17% increase. In 2009, 9.7% of these firms were located in Alabama. Region-wide, annual receipts totaled \$24 million in 2009 and increased 29% from 2001 to 2009.

Annual receipt totals experienced a 36% decrease in Mississippi between 2001 and 2009 (49% decrease in real terms). In contrast to an increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 27% from 176 in 2001 to 129 in 2009. Approximately 29% of these establishments were located in Louisiana. The number of employees in the seafood product preparation and packaging sector decreased 31% from 10,613 employees in 2001 to 7,352 employees in 2010.

There were 432 seafood wholesale establishments in 2009 that employed 3,599 full- and part-time workers. From 2001 to 2009, the number of seafood wholesale establishments decreased 37% and the number of employees decreased 39% across the Gulf of Mexico Region.

Nonemployer firms engaged in seafood retail in the Gulf of Mexico Region totaled 790 in 2009, a 34% increase relative to 2001. Of these firms, 8% were located in Alabama. At the state level, these firms decreased 0.6% in Louisiana and increased Inf% in Mississippi between 2001 and 2009. Annual receipts in the region totaled \$64 million in 2009 a 15% increase from 2002 (a 10% decrease in real terms) and a 20% decrease from 2009 (a 19% decrease in real terms).

Employer establishments engaged in seafood retail increased

¹The Texas Department of Wildlife only collects information about harvest and not total catch.

 $^{^{2}}$ Information for 2009 is reported in this section; 2010 data were not available for this report.

³Marine Economy information was not available for West Florida, information for the entire state of Florida is provided here.

0.8% from 2001 to 2009, totaling 360 in 2009. The number of employees was not available for the retail sector in the Gulf of Mexico Region in 2009.

Transport, Support, and Marine Operations

For the sectors in which information was available at the region level, marinas employed more people than any other industry in this sector, employing approximately 6,800 people in 2009. This industry also had the highest annual payroll in the region totaling \$188 million. Marinas had the highest number of establishments (670), followed by the ship and boat building industries with 529 establishments and the navigational services to shipping industries with 400 establishments.

In Alabama, industries with large changes in establishment numbers, employees, or annual payroll from 2008 to 2009 were: deep sea passenger transportation (50% increase in establishments), port and harbor operations (25% increase in establishments) and marine cargo handling (18% decrease in employees). In Texas, large changes were seen for deep sea freight transportation (56% increase in employees), deep sea freight transportation (50% increase in payroll) and deep sea passenger transportation (33% decrease in establishments). In Louisiana, large changes were seen in the coastal and Great Lakes freight transportation (29% decrease in payroll), port and harbor operations (23% decrease in establishments) and deep sea freight transportation (17% increase in establishments).

Commercial Fisheries

Gulf of Mexico

2010 Economic Impacts of the Gulf of Mexico Region Seafood Industry (thousands of dollars)

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	Landings Revenue	Jobs	Sales	Income	Valued Added
Alabama	27,240	6,268	303,012	109,450	147,178
Louisiana	248,616	25,546	1,438,640	493,653	688,241
Mississippi	21,913	3,828	174,584	66,953	87,554
Texas	204,076	24,634	2,064,282	599,583	897,412
Florida	137,350	71,229	14,103,674	2,641,205	4,721,012

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Total revenue	807,403	681,646	662,902	669,002	625,038	691,220	690,211	662,153	618,920	639,196	
Finfish & other	164,959	147,338	139,373	143,479	122,642	135,982	145,584	146,109	150,403	132,223	
Shellfish	642,444	534,308	523,530	525,523	502,396	555,238	544,626	516,044	468,517	506,973	
Blue crab	42,862	42,913	46,243	42,292	37,961	43,355	46,028	39,814	44,051	41,352	
Crawfish	8,511	8,070	4,845	4,810	8,360	1,290	9,034	9,435	15,386	13,775	
Groupers	25,986	24,631	24,257	25,807	24,692	22,795	20,242	22,891	17,290	13,550	
Menhaden	72,366	52,116	45,863	44,921	32,938	44,946	62,110	64,376	69,456	66,019	
Mullets	10,206	8,877	8,265	8,956	6,593	9,429	5,543	6,085	6,101	6,088	
Oysters	52,285	50,756	61,634	60,845	56,510	62,316	69,542	60,272	72,987	54,507	
Red snapper	10,251	10,714	10,447	11,676	11,336	13,167	9,570	7,966	7,891	10,083	
Shrimp	497,202	385,679	365,434	366,426	360,513	397,706	367,060	366,576	304,809	340,342	
Stone crab	20,477	23,091	23,043	26,704	21,223	24,115	26,242	18,898	17,693	23,335	
Tunas	9,187	13,227	12,000	12,335	9,431	8,461	10,535	6,168	8,180	2,688	

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

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	1,613,163	1,728,899	1,595,895	1,475,139	1,198,203	1,362,326	1,404,307	1,278,274	1,574,613	1,284,416
Finfish & other	1,254,170	1,377,421	1,228,816	1,110,240	887,920	974,969	1,071,322	994,159	1,234,630	1,025,219
Shellfish	358,993	351,478	367,080	364,899	310,283	387,357	332,985	284,115	339,983	259,197
Blue crab	54,500	66,019	63,961	60,581	50,041	67,481	57,964	49,260	58,984	41,170
Crawfish	10,410	15,602	8,337	8,537	15,177	1,469	15,848	15,612	19,103	14,350
Groupers	12,167	12,003	10,933	11,912	10,776	9,092	7,308	8,547	6,633	4,860
Menhaden	1,165,244	1,290,407	1,142,747	1,023,260	815,495	901,398	1,005,325	927,517	1,165,948	967,025
Mullets	16,084	12,661	12,957	13,750	9,023	12,727	8,933	10,580	11,292	10,114
Oysters	25,621	24,110	27,033	25,052	20,174	19,674	22,518	20,655	22,696	15,680
Red snapper	4,642	4,803	4,435	4,677	4,109	4,637	2,998	2,368	2,476	3,229
Shrimp	257,088	233,759	256,357	255,782	216,291	288,973	225,163	188,789	229,449	177,207
Stone crab	6,682	6,433	5,292	5,971	4,534	4,806	5,893	6,123	5,336	5,103
Tunas	3,463	4,877	5,063	3,882	3,050	2,851	3,426	1,782	2,836	1,322

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue crab	0.79	0.65	0.72	0.70	0.76	0.64	0.79	0.81	0.75	1.00
Crawfish	0.82	0.52	0.58	0.56	0.55	0.88	0.57	0.60	0.81	0.96
Groupers	2.14	2.05	2.22	2.17	2.29	2.51	2.77	2.68	2.61	2.79
Menhaden	0.06	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.06	0.07
Mullets	0.63	0.70	0.64	0.65	0.73	0.74	0.62	0.58	0.54	0.60
Oysters	2.04	2.11	2.28	2.43	2.80	3.17	3.09	2.92	3.22	3.48
Red snapper	2.21	2.23	2.36	2.50	2.76	2.84	3.19	3.36	3.19	3.12
Shrimp	1.93	1.65	1.43	1.43	1.67	1.38	1.63	1.94	1.33	1.92
Stone crab	3.06	3.59	4.35	4.47	4.68	5.02	4.45	3.09	3.32	4.57
Tunas	2.65	2.71	2.37	3.18	3.09	2.97	3.07	3.46	2.88	2.03

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

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	Trips	Jobs	Sales	Income	Value Added
Alabama	1,806,629	4,440	425,866	139,247	220,556
Louisiana	3,767,620	16,177	1,463,823	475,365	735,542
Mississippi	1,225,867	3,280	429,206	108,498	166,522
Texas	NA^1	19,457	2,498,115	798,201	1,259,923
West Florida	13,966,573	39,319	4,062,480	1,425,649	2,216,730

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	1,430,584
For-Hire	95,027	56,302	Other Equipment	535,481
Private Boat	136,245 539,550		Boat Expenses	3,490,959
Shore	233,501	154,877	Vehicle Expenses	1,331,175
Total Trip Expenditures	464,774	750,728	Second Home Expenses	1,094,730
			Total Durable Equipment Expenditures	7,882,931
Total State Trip and Dura	ble Equipment Exp	enditures		9,098,433

Recreational Anglers by Residential Area (thousands of anglers)

0	•		•		o ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	2,898	2,485	3,039	3,185	3,133	3,328	3,235	2,926	2,550	2,480
Non-Coastal	227	216	256	318	190	315	326	262	296	235
Out-of-State	NA^2	NA^1	NA^1	NA^1	NA^1	NA^1	NA^1	NA^1	NA^1	NA^1
Total Anglers	3,125	2,701	3,294	3,503	3,323	3,643	3,562	3,188	2,846	2,715

Recreational Fishing Effort by Mode (thousands of angler-trips)

				•						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	742	764	691	818	712	820	876	839	792	554
Private Boat	12,371	11,635	14,110	14,107	12,629	13,837	14,435	14,574	13,211	12,411
Shore	9,776	7,266	8,155	9,430	8,530	9,206	8,957	8,695	8,294	7,802
Total Trips	22,890	19,666	22,957	24,355	21,871	23,863	24,267	24,109	22,297	20,767

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

harvest (ii) and helease (ii) of hely openes openes choups (thousands of hely)											
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Drum (Atlantic	Н	1,432	832	1,057	938	747	1,430	1,332	1,409	1,464	1,370
croaker)	R	2,755	2,757	2,431	3,404	1,913	2,476	2,648	2,836	3,867	3,636
Drum (Gulf and	Н	2,552	1,205	1,802	1,886	1,636	1,494	1,260	1,548	1,208	1,344
southern kingfish)	R	1,044	477	538	911	884	1,063	671	700	661	714
Drum (sand and	Н	3,360	3,256	3,111	2,292	1,825	2,726	2,998	3,565	4,287	4,564
silver seatrouts)	R	1,063	1,069	1,003	1,064	790	1,677	1,739	2,401	2,232	1,734
Drum (spotted	Н	9,381	7,366	9,568	10,569	9,977	15,564	11,575	13,150	12,567	9,385
seatrout)	R	11,202	15,298	19,217	18,282	19,702	20,872	19,036	19,415	16,786	14,563
Porgies	Н	1,478	1,552	1,941	2,475	1,979	1,452	1,324	1,787	1,756	1,330
(sheepshead)	R	1,649	1,701	2,004	2,194	1,982	1,541	1,073	1,442	1,433	1,662
Red drum	Н	3,115	2,478	2,673	2,850	2,173	2,814	2,973	3,189	2,620	3,166
	R	5,146	4,874	5,915	5,538	5,319	7,024	6,057	6,512	5,444	5,679
Red snapper	Н	848	1,106	993	1,077	829	969	1,117	709	722	304
Neu shapper	R	1,807	2,091	1,942	2,140	1,904	2,558	2,755	1,916	2,189	1,356
Southern flounder	Н	732	506	659	706	507	560	609	540	585	772
Southern nounder	R	171	117	252	212	185	178	194	151	172	234
Spanish mackerel	Н	2,477	1,962	1,504	2,120	1,134	1,936	1,708	1,873	1,416	1,709
	R	1,845	1,920	2,211	2,183	1,385	3,011	2,110	2,259	1,572	2,274
Striped mullet	Н	1,561	1,264	1,587	1,141	1,112	1,146	986	1,006	751	1,265
Striped mullet	R	733	76	280	116	211	157	176	225	218	113

¹The Marine Recreational Program (MRIP) does not collect effort data for Texas.

 $^{^{2}}NA = data$ are not available because out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified

Commercial Fisheries

2010 Economic Impacts of the Alabama Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	6,268	303,012	147,178	5,604	224,681	117,589		
Commercial Harvesters	938	44,892	19,851	938	44,892	19,851		
Seafood Processors & Dealers	1,354	85,162	42,391	916	57,592	28,667		
Importers	179	49,143	14,981	0	0	0		
Seafood Wholesalers & Distributors	96	4,507	2,035	89	4,184	1,889		
Retail	3,701	119,308	67,920	3,661	118,013	67,181		

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	44,941	35,925	36,844	37,036	39,726	48,558	48,845	44,356	38,869	27,240
Finfish & other	3,361	3,175	3,185	3,905	3,982	4,572	3,686	4,210	3,662	2,745
Shellfish	41,580	32,751	33,658	33,131	35,744	43,986	45,160	40,145	35,207	24,496
Blue crab	1,744	1,490	1,715	1,774	663	1,319	1,711	1,533	961	725
Flounders	238	291	210	230	247	223	261	214	197	97
Menhaden	130	102	104	89	63	48	71	59	42	15
Mullets	1,448	985	772	1,187	1,117	1,171	984	1,016	765	594
Oysters	1,235	1,602	1,623	2,120	3,020	3,639	2,698	243	77	368
Red snapper	280	368	359	382	638	536	213	239	263	329
Sharks	14	275	337	431	478	463	250	359	275	111
Shrimp	38,592	29,603	30,284	29,197	32,002	39,022	40,742	38,355	34,140	23,402
Spanish mackerel	310	371	443	554	401	573	453	616	301	497
Vermillion snapper	55	54	83	152	149	318	323	504	841	383

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

0			• • •		• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	25,858	23,658	25,535	26,559	23,985	34,033	29,434	24,450	28,825	14,454
Finfish & other	6,253	5,451	5,982	6,248	5,552	6,498	4,857	5,414	4,478	3,437
Shellfish	19,605	18,207	19,553	20,311	18,432	27,535	24,578	19,036	24,347	11,017
Blue crab	2,458	2,575	2,958	3,329	1,024	2,384	2,557	1,799	1,458	915
Flounders	137	176	118	138	130	118	133	107	97	48
Menhaden	1,589	982	1,022	828	521	350	470	268	190	81
Mullets	2,539	1,949	1,700	2,133	1,976	1,913	1,798	1,988	1,814	1,202
Oysters	575	759	816	908	1,041	940	769	73	23	64
Red snapper	118	152	132	138	214	177	59	61	65	83
Sharks	24	329	803	716	800	1,227	315	423	328	140
Shrimp	16,566	14,857	15,770	16,064	16,260	24,201	21,247	17,154	22,841	10,036
Spanish mackerel	506	762	858	914	568	873	580	856	418	731
Vermillion snapper	27	28	36	66	66	122	129	197	346	148

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue crab	0.71	0.58	0.58	0.53	0.65	0.55	0.67	0.85	0.66	0.79
Flounders	1.74	1.65	1.78	1.67	1.91	1.89	1.97	2.01	2.04	2.05
Menhaden	0.08	0.10	0.10	0.11	0.12	0.14	0.15	0.22	0.22	0.18
Mullets	0.57	0.51	0.45	0.56	0.57	0.61	0.55	0.51	0.42	0.49
Oysters	2.15	2.11	1.99	2.33	2.90	3.87	3.51	3.34	3.33	5.70
Red snapper	2.37	2.41	2.72	2.78	2.98	3.03	3.62	3.93	4.04	3.97
Sharks	0.58	0.83	0.42	0.60	0.60	0.38	0.79	0.85	0.84	0.79
Shrimp	2.33	1.99	1.92	1.82	1.97	1.61	1.92	2.24	1.49	2.33
Spanish mackerel	0.61	0.49	0.52	0.61	0.71	0.66	0.78	0.72	0.72	0.68
Vermillion snapper	2.04	1.92	2.31	2.32	2.26	2.61	2.50	2.55	2.43	2.59

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)										
	Jobs	Sales	Income	Value Added						
Trip Impacts by Fishing Mode:										
For-Hire	242	18,131	5,619	9,981						
Private Boat	502	47,800	14,828	26,169						
Shore	854	69,514	21,469	37,395						
Total Durable Equipment Impacts	2,842	290,421	97,332	147,011						
Total State Trip and Durable Equipment Economic Impacts	4,440	425,866	139,247	220,556						

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures						
	Non-Residents	Residents	Fishing Tackle	67,150						
For-Hire	8,547	3,552	Other Equipment	28,696						
Private Boat	7,334	39,529	Boat Expenses	171,295						
Shore	32,094	23,992	Vehicle Expenses	39,934						
Total Trip Expenditures	47,975	67,074	Second Home Expenses	24,520						
	331,595									
Total State Trip and Dura	Total State Trip and Durable Equipment Expenditures446,644									

Recreational Anglers by Residential Area (thousands of anglers)

0	,		•		υ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	213	123	187	223	231	233	253	192	205	195
Non-Coastal	113	97	123	159	93	184	169	116	151	140
Out of State	227	193	214	345	161	320	291	237	209	220
Total Anglers	553	413	524	728	485	736	712	545	566	554

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J (0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	63	68	67	77	55	77	74	56	57	34
Private	825	606	846	907	806	857	1,007	949	898	852
Shore	748	516	588	1,056	705	1,209	1,038	666	762	920
Total Trips	1,636	1,190	1,500	2,040	1,566	2,143	2,120	1,671	1,717	1,807

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Bluefish	Н	89	51	45	167	24	26	33	24	21	63
Diuensii	R	113	64	126	187	93	264	208	80	69	115
Drum (Atlantic	Н	360	187	244	132	159	330	289	730	343	753
croaker)	R	546	467	512	786	748	683	930	1,287	1,506	1,730
Drum $(kingfishes)^1$	Н	1,202	412	486	813	483	572	514	821	735	770
	R	368	162	185	382	300	589	247	240	355	436
Drum (sand	Н	712	428	709	716	410	725	688	1,257	1,448	1,907
seatrout)	R	180	130	225	345	333	506	428	493	599	722
Drum (spotted	Н	295	193	345	199	344	308	308	269	411	514
seatrout)	R	356	167	431	142	367	449	418	684	607	410
Porgies	Н	313	191	299	383	284	216	282	314	174	171
(sheepshead)	R	109	81	88	98	89	75	33	126	72	58
Red drum	Н	136	84	114	119	127	112	99	94	58	124
	R	172	104	245	145	160	176	128	221	110	213
Red snapper	Н	349	473	380	411	277	197	232	132	196	60
Red Shapper	R	910	983	665	654	560	688	659	435	487	440
Southern flounder	Н	182	82	113	114	114	113	98	84	90	191
Southern nounder	R	45	16	68	58	74	51	38	36	20	46
Spanish mackerel	Н	328	106	122	398	94	143	99	136	95	365
Spanish macketer	R	115	16	100	253	58	89	30	36	74	188

 $^{^1\}mathrm{King}\mathrm{fishes}$ include southern kingfish and Gulf kingfish

Alabama's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	99,261 (1.4%)	1,620,952 (1.4%)	45,162 (1.1%)	71,733 (1.2%)	120,112 (1.2%)	0.4
2009	100,805 (1.4%)	1,612,258 (1.4%)	56,972 (1.2%)	96,704 (1.2%)	166,819 (1.2%)	0.6
% change	1.56%	-0.536%	26.2%	34.8%	38.9%	10%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	39	44	36	43	40	34	47	33	41
prep. & packaging	Receipts	2,711	3,603	1,168	3,413	3,414	1,558	1,547	1,894	1,805
Seafood Sales,	Firms	50	58	55	61	44	57	61	57	63
retail	Receipts	3,633	3,456	3,812	3,645	3,855	4,802	4,279	5,632	4,844

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

	0			•		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Conford menduat	Establishments	21	22	24	23	26	24	23	23	22
Seafood product prep. & packaging	Employees	1,880	1,951	2,057	2,037	1,925	1,629	1,510	1,450	1,086
prep. & packaging	Payroll	32,692	36,198	36,766	36,130	38,229	34,703	32,774	29,277	24,900
Seafood sales,	Establishments	45	36	33	31	26	26	31	29	28
wholesale	Employees	692	547	611	588	607	395	395	494	339
WIDESale	Payroll	9,597	7,062	6,148	6,752	6,345	6,195	6,202	8,751	5,893
Seafood sales,	Establishments	30	35	37	35	34	28	33	33	31
retail	Employees	95	110	ND^2	96	95	ND^2	ND^2	ND^2	130
Tetali	Payroll	1,244	1,589	ND^2	1,401	1,399	ND^2	1,809	1,710	2,044

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	9	6	13	10	10	6	8	4	4
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	15	48	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	754	3,266	ND^2	ND^2
	Establishments	2	2	5	3	3	3	5	7	7
Deep sea freight transportation	Employees	ND^2	ND^2	53	ND^2	ND^2	ND^2	46	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	3,661	ND^2	ND^2	ND^2	3,553	ND^2	ND^2
D	Establishments	2	NA^3	1	1	1	1	1	2	3
Deep sea passenger transportation	Employees	ND^2	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	61	48	53	52	58	52	52	56	55
Marinas	Employees	ND^2	242	287	341	347	312	364	316	278
	Payroll	ND^2	4,966	6,218	7,631	8,047	8,388	9,382	9,170	8,418
Marina cargo	Establishments	19	19	17	18	17	14	19	20	19
Marine cargo handling	Employees	617	635	445	577	672	ND^2	491	756	658
nanuning	Payroll	20,809	20,592	19,642	26,201	28,458	ND^2	21,076	33,244	27,272
Novigational	Establishments	11	15	12	16	17	18	16	17	16
Navigational services to shipping	Employees	ND^2	220	410	ND^2	ND^2	ND^2	338	287	294
services to simpping	Payroll	ND^2	9,317	19,602	ND^2	ND^2	ND^2	17,554	16,712	15,383
Deut & Leukeu	Establishments	7	6	3	1	3	3	2	4	5
Port & harbor operations	Employees	ND^2	162	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	ND^2	6,321	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & boat	Establishments	41	45	41	42	45	47	42	42	40
building	Employees	2,575	2,901	2,781	2,195	2,591	3,027	3,570	4,435	3,913
Bullang	Payroll	105,756	92,916	81,092	83,756	86,453	121,185	172,380	188,543	159,065

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 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

 $^{^{3}}NA =$ these data are not available

2010 Economic Impacts of the Florida¹ Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	71,229	14,103,674	4,721,012	8,969	776,219	314,538		
Commercial Harvesters	5,800	373,224	156,135	5,800	373,224	156,135		
Seafood Processors & Dealers	4,126	661,709	251,755	465	79,944	30,416		
Importers	37,173	10,225,483	3,117,175	0	0	0		
Seafood Wholesalers & Distributors	9,027	1,028,149	502,191	395	45,013	21,986		
Retail	15,103	1,815,109	693,757	2,309	278,038	106,002		

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

			,	3	. , .		• •		/	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	146,558	144,185	141,185	148,058	137,912	145,494	132,162	122,764	114,988	137,350
Finfish & other	52,707	51,609	51,451	52,331	50,600	50,358	45,890	50,842	49,538	41,596
Shellfish	93,851	92,576	89,734	95,727	87,312	95,136	86,272	71,922	65,450	95,754
Blue crab	4,855	5,644	7,061	7,316	7,035	7,043	5,769	3,290	4,182	6,666
Gag	8,050	7,380	6,855	7,615	7,084	4,151	4,348	4,898	2,759	2,069
Lobsters	14,847	18,932	17,138	20,724	15,077	24,885	24,546	19,175	12,179	32,060
Mullets	6,126	6,059	4,755	4,891	4,355	6,021	3,663	4,172	5,069	5,056
Oyster	3,855	3,125	2,932	2,884	2,854	5,415	6,631	5,473	6,968	6,261
Quahog clam	4,740	3,606	3,870	2,074	1,736	807	914	1,009	915	1,021
Red grouper	13,519	12,859	11,695	13,281	13,376	14,384	11,024	13,569	10,488	8,973
Red snapper	1,509	2,188	2,284	2,168	1,671	1,991	3,066	2,945	2,980	4,507
Shrimp	44,021	37,252	34,893	34,737	38,625	32,225	20,976	23,265	23,173	25,924
Stone crab	20,136	22,874	22,913	26,507	21,074	24,029	26,213	18,877	17,589	23,285

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

		• •	• •	•	• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	80,336	82,075	79,163	83,894	73,038	70,766	59,784	60,127	65,337	63,529
Finfish & other	44,498	43,586	41,697	41,134	36,543	35,887	30,645	35,250	38,754	33,124
Shellfish	35,838	38,489	37,466	42,760	36,496	34,879	29,139	24,877	26,582	30,404
Blue crab	4,647	5,567	7,225	8,083	7,370	8,610	6,110	2,663	3,364	5,714
Gag	3,281	3,136	2,691	3,054	2,688	1,436	1,339	1,474	825	569
Lobsters	2,966	4,080	3,886	4,565	3,059	4,372	3,405	2,981	3,951	5,189
Mullets	8,989	8,020	6,577	6,660	5,635	7,308	5,619	6,979	9,166	8,414
Oyster	2,559	1,944	1,753	1,644	1,417	2,394	2,959	2,501	2,877	2,154
Quahog clam	509	480	558	266	212	96	116	146	150	158
Red grouper	7,031	6,987	5,841	6,789	6,386	6,062	4,352	5,619	4,387	3,481
Red snapper	652	948	928	811	584	649	919	848	863	1,306
Shrimp	17,471	19,128	18,131	18,258	19,297	14,176	8,628	9,942	10,660	11,800
Stone crab	6,594	6,385	5,253	5,933	4,502	4,784	5,884	6,117	5,311	5,091

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue crab	1.04	1.01	0.98	0.91	0.95	0.82	0.94	1.24	1.24	1.17
Gag	2.45	2.35	2.55	2.49	2.64	2.89	3.25	3.32	3.34	3.63
Lobsters	5.01	4.64	4.41	4.54	4.93	5.69	7.21	6.43	3.08	6.18
Mullets	0.68	0.76	0.72	0.73	0.77	0.82	0.65	0.60	0.55	0.60
Oyster	1.51	1.61	1.67	1.75	2.02	2.26	2.24	2.19	2.42	2.91
Quahog clam	9.31	7.51	6.93	7.79	8.17	8.44	7.90	6.90	6.12	6.48
Red grouper	1.92	1.84	2.00	1.96	2.09	2.37	2.53	2.41	2.39	2.58
Red snapper	2.31	2.31	2.46	2.67	2.86	3.07	3.34	3.47	3.45	3.45
Shrimp	2.52	1.95	1.92	1.90	2.00	2.27	2.43	2.34	2.17	2.20
Stone crab	3.05	3.58	4.36	4.47	4.68	5.02	4.45	3.09	3.31	4.57

 $^{^{1}}$ Information reported in this table if for the state of Florida, not West Florida

West Florida

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditur	es (thousands	s of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,419	138,115	47,152	81,888
Private Boat	3,676	368,171	126,598	218,928
Shore	3,864	364,280	123,749	211,635
Total Durable Equipment Impacts	30,361	3,191,913	1,128,150	1,704,279
Total State Trip and Durable Equipment Economic Impacts	39,319	4,062,480	1,425,649	2,216,730

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures		
	Non-Residents	Residents	Fishing Tackle	907,245		
For-Hire	67,719	17,765	Other Equipment	293,870		
Private Boat	102,307	225,640	Boat Expenses	1,851,987		
Shore	197,454	66,020	Vehicle Expenses	646,555		
Total Trip Expenditures	367,480	309,424	Second Home Expenses	139,613		
			Total Durable Equipment Expenditures	3,839,270		
Total State Trip and Dura	able Equipment Exp	enditures		4,516,174		

Recreational Anglers by Residential Area (thousands of anglers)

0			•		o ,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	1894	1703	1965	2023	2088	2084	1934	1820	1551	1538
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	2552	1990	2318	2141	2008	1988	2151	2029	1671	1470
Total Anglers	4447	3693	4283	4165	4096	4072	4085	3849	3222	3008

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	J (0	• •					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	543	581	496	590	522	560	641	595	567	437
Private	8,225	8,235	9,222	9,161	8,720	8,932	9,415	9,617	8,495	7,958
Shore	7,621	5,602	6,291	6,680	6,246	6,738	6,343	6,716	6,455	5,571
Total Trips	16,389	14,418	16,009	16,431	15,489	16,230	16,399	16,928	15,517	13,967

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

. ,		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Common snook	Н	36	50	45	69	65	38	30	22	15	3
Common shook	R	1,290	1,292	1,359	2,039	2,283	1,575	1,574	1,665	1,569	554
Drum (sand and	Н	1,047	1,354	751	571	372	412	867	739	828	366
silver seatrouts)	R	389	321	146	190	105	297	450	597	283	259
Drum (spotted	Н	1,080	1,532	1,629	1,841	1,964	1,506	1,569	1,532	1,438	1,216
seatrout)	R	6,201	10,710	10,470	9,601	11,507	8,733	10,432	9,046	7,699	8,725
Corr	Н	453	490	470	614	458	262	299	419	222	231
Gag	R	1,905	2,449	3,359	3,530	2,377	1,793	2,923	4,270	2,657	2,047
Cray channer	Н	805	655	980	881	838	654	890	1,397	1,124	481
Gray snapper	R	2,562	2,998	4,808	3,429	4,751	2,646	4,360	6,017	3,036	1,744
King mackaral	Н	212	262	196	189	175	368	252	195	368	168
King mackerel	R	249	139	96	108	134	463	79	141	139	77
$Mullets^2$	Н	1,436	1,010	840	1,112	1,017	1,241	729	1,002	564	879
wunets	R	342	93	187	282	260	139	214	240	194	88
Porgies	Н	745	686	761	871	798	732	709	743	764	550
(sheepshead)	R	961	1,125	1,370	1,547	1,390	938	740	813	907	1,226
Red drum	Н	266	292	365	323	459	378	430	472	256	260
	R	1,462	1,376	1,938	2,160	2,637	2,898	2,493	2,330	1,381	1,934
Spanish mackerel	Н	2,122	1,810	1,317	1,687	985	1,754	1,582	1,705	1,286	1,331
	R	1,705	1,865	2,084	1,913	1,275	2,879	2,058	2,204	1,461	2,070

 $^{^1\}mathsf{NA}=\mathsf{not}$ applicable because all West Florida residents are considered coastal county residents

²Mullets include species within the mullet genus including striped mullets.

Florida's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	434,583 (6.1%)	6,431,696 (5.6%)	189,628 (4.8%)	292,012 (5%)	506,413 (4.9%)	1.36
2009	491,249 (6.6%)	6,861,612 (6%)	253,360 (5.2%)	397,743 (5.2%)	732,782 (5.1%)	0.95
% change	13%	6.68%	33.6%	36.2%	44.7%	-28.7%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	104	116	142	177	164	174	173	202	216
prep. & packaging	Receipts	6,350	5,064	8,047	8,652	8,756	10,184	10,497	11,065	12,399
Seafood Sales,	Firms	212	243	240	247	247	251	319	331	308
retail	Receipts	17,935	20,837	18,064	18,004	22,787	20,708	27,557	26,087	24,726

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

	U			•						
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Saafaad product	Establishments	43	33	27	24	25	22	20	23	25
Seafood product prep. & packaging	Employees	2,033	2,359	2,084	2,193	1,616	1,704	1,748	1,637	1,143
prep. & packaging	Payroll	58,977	65,914	61,452	65,881	47,529	62,801	58,233	53,455	46,235
Seafood sales,	Establishments	323	314	293	261	258	259	267	229	215
wholesale	Employees	2,670	2,395	1,835	1,948	1,883	2,091	2,308	1,913	1,762
WIDESale	Payroll	76,717	78,160	55,874	63,276	65,339	73,897	85,019	75,203	72,159
Seafood sales,	Establishments	159	190	174	190	176	173	169	168	158
retail	Employees	697	908	952	977	970	936	989	991	885
retair	Payroll	13,403	17,186	15,673	17,575	19,192	19,513	20,595	21,604	21,182

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	58	51	66	59	59	54	47	42	42
Lakes freight	Employees	3,208	2,856	ND^2	1,132	1,150	1,217	1,242	1,106	972
transportation	Payroll	150,964	143,185	ND^2	80,422	71,420	91,638	94,429	50,115	37,774
Deen ees freight	Establishments	51	62	61	63	69	73	69	57	58
Deep sea freight transportation	Employees	2,123	1,858	2,535	2,567	2,622	3,729	3,190	2,486	2,801
transportation	Payroll	106,848	107,564	131,904	150,701	207,300	226,810	208,144	169,055	180,139
	Establishments	30	31	36	32	31	37	34	31	33
Deep sea passenger transportation	Employees	8,719	7,863	8,879	8,849	8,492	9,077	ND^2	ND^2	ND^2
transportation	Payroll	394,932	315,551	428,941	536,753	504,625	571,590	ND^2	ND^2	ND^2
	Establishments	509	481	528	532	551	513	493	442	428
Marinas	Employees	3,876	3,449	5,079	5,067	5,069	5,494	4,935	5,024	4,665
	Payroll	88,274	90,662	111,324	125,763	133,384	146,390	148,592	151,677	132,955
Marine cargo	Establishments	71	74	68	66	63	66	53	56	59
handling	Employees	4,863	4,405	5,651	5,671	6,409	7,266	6,585	8,052	7,288
nanunng	Payroll	124,760	109,555	171,481	175,257	177,983	189,020	173,788	192,473	185,309
Neurotional	Establishments	133	141	140	149	148	142	145	147	145
Navigational services to shipping	Employees	755	714	817	686	660	781	1,484	894	829
services to simpping	Payroll	35,854	34,040	39,524	39,309	42,200	48,370	61,470	56,917	60,641
Daut & Laubau	Establishments	25	29	26	29	31	27	29	40	32
Port & harbor operations	Employees	1,355	1,180	592	1,045	973	584	459	712	527
operations	Payroll	25,246	26,928	19,071	24,327	22,606	19,417	12,872	24,668	19,006
Ship & heat	Establishments	313	291	290	306	312	301	296	297	261
Ship & boat building	Employees	13,182	11,407	11,830	12,503	12,729	12,385	12,332	12,419	8,221
Sunding	Payroll	405,856	379,828	393,985	443,379	454,209	427,888	469,382	442,096	296,537

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

Commercial Fisheries

		With Imports		-	Without Import	ts
	Jobs	Sales	Value Added	Jobs	Sales	Value Added
Total Impacts	25,546	1,438,640	688,241	23,371	1,104,947	572,578
Commercial Harvesters	9,306	468,171	228,754	9,306	468,171	228,754
Seafood Processors & Dealers	1,572	131,937	65,277	1,415	118,765	58,760
Importers	975	268,290	81,787	0	0	0
Seafood Wholesalers & Distributors	811	87,910	38,766	635	68,826	30,351
Retail	12,882	482,332	273,657	12,015	449,185	254,714

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

					, .	•	•		,	
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	347,253	280,630	270,408	274,082	251,678	278,292	289,288	275,239	271,957	248,616
Finfish & other	86,823	70,327	63,299	66,074	49,443	60,735	65,198	64,116	71,047	71,120
Shellfish	260,430	210,303	207,109	208,008	202,235	217,557	224,090	211,124	200,909	177,496
Blue crab	31,967	30,685	33,623	29,881	27,419	32,605	35,044	32,202	35,881	30,519
Crawfish	8,511	8,070	4,845	4,810	8,360	1,290	9,034	9,435	15,386	13,775
King mackerel	996	1,046	990	1,198	1,273	1,112	1,298	1,307	1,184	1,148
Menhaden	58,961	40,378	34,464	35,249	25,776	36,441	41,368	45,768	51,405	57,600
Mullets	2,417	1,688	2,592	2,681	946	2,061	690	749	69	184
Oysters	31,853	30,296	33,358	34,814	33,305	35,999	40,148	38,852	50,467	24,694
Red snapper	5,411	4,696	3,960	3,861	3,568	4,472	2,529	2,038	2,093	2,309
Shrimp	187,969	141,213	135,153	138,466	133,143	147,652	139,842	130,623	99,165	108,493
Tunas	7,895	10,845	9,471	10,739	7,687	7,040	8,334	4,409	6,338	1,649
Vermillion snapper	1,114	1,308	1,896	1,663	1,137	762	991	819	745	399

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

0			• •		• •	•	,			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	1,195,654	1,312,139	1,181,607	1,095,571	849,280	918,675	999,343	918,827	1,147,448	1,005,289
Finfish & other	1,003,402	1,124,627	985,164	895,336	681,322	714,545	814,645	759,438	969,802	879,164
Shellfish	192,252	187,511	196,443	200,235	167,959	204,130	184,698	159,389	177,647	126,125
Blue crab	41,799	50,123	48,089	44,397	38,100	53,394	45,107	41,713	50,773	30,802
Crawfish	10,410	15,602	8,337	8,537	15,177	1,469	15,848	15,612	19,103	14,350
King mackerel	818	866	911	984	867	971	879	789	927	690
Menhaden	971,102	1,093,997	953,714	862,947	657,702	689,853	789,621	738,092	948,944	862,144
Mullets	4,260	2,555	4,524	4,754	1,238	3,361	1,375	1,503	178	360
Oysters	15,133	13,962	13,609	13,902	12,099	11,417	12,858	12,791	14,871	6,800
Red snapper	2,436	2,178	1,725	1,560	1,316	1,653	807	589	640	827
Shrimp	124,813	107,795	125,730	133,370	102,576	137,839	110,860	89,268	92,895	74,160
Tunas	2,706	3,587	3,184	3,230	2,296	2,143	2,476	1,248	2,009	490
Vermillion snapper	601	755	1,053	921	588	365	517	409	383	186

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Blue crab	0.76	0.61	0.70	0.67	0.72	0.61	0.78	0.77	0.71	0.99
Crawfish	0.82	0.52	0.58	0.56	0.55	0.88	0.57	0.60	0.81	0.96
King mackerel	1.22	1.21	1.09	1.22	1.47	1.15	1.48	1.66	1.28	1.66
Menhaden	0.06	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.05	0.07
Mullets	0.57	0.66	0.57	0.56	0.76	0.61	0.50	0.50	0.39	0.51
Oysters	2.10	2.17	2.45	2.50	2.75	3.15	3.12	3.04	3.39	3.63
Red snapper	2.22	2.16	2.30	2.47	2.71	2.71	3.13	3.46	3.27	2.79
Shrimp	1.51	1.31	1.07	1.04	1.30	1.07	1.26	1.46	1.07	1.46
Tunas	2.92	3.02	2.97	3.33	3.35	3.29	3.37	3.53	3.16	3.37
Vermillion snapper	1.86	1.73	1.80	1.81	1.93	2.09	1.92	2.00	1.95	2.15

Recreational Fisheries

_ L	ouisiana

2010 Economic Impacts of Recreational Fishing Expenditur	es (thousands	of dollars)		
	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	404	38,427	12,402	21,819
Private Boat	2,287	243,209	68,402	119,619
Shore	543	52,106	15,378	26,303
Total Durable Equipment Impacts	12,942	1,130,080	379,182	567,802
Total State Trip and Durable Equipment Economic Impacts	16,177	1,463,823	475,365	735,542

2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	251,652
For-Hire	15,737	9,126	Other Equipment	121,276
Private Boat	20,046	165,261	Boat Expenses	875,103
Shore	1,563	40,792	Vehicle Expenses	90,956
Total Trip Expenditures	37,346	215,179	Second Home Expenses	116,787
			Total Durable Equipment Expenditures	1,455,775
Total State Trip and Dura	ble Equipment Exp	enditures	·	1,708,300

Recreational Anglers by Residential Area (thousands of anglers)

0			•		0,					
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	593	484	727	747	706	868	853	795	669	609
Non-Coastal	67	68	79	133	68	108	124	120	108	67
Out of State	137	117	204	179	138	198	157	170	139	120
Total Anglers	797	669	1011	1059	911	1174	1134	1084	916	796

Recreational Fishing Effort by Mode (thousands of angler-trips)

	0	,								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	118	94	104	139	128	176	141	175	157	78
Private	2,646	2,251	3,295	3,446	2,639	3,381	3,165	3,416	3,074	2,963
Shore	851	674	872	1,209	1,159	934	1,210	950	769	726
Total Trips	3,615	3,019	4,271	4,795	3,926	4,491	4,516	4,541	4,000	3,768

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

narvest (n) and k		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black drum	H	446	511	485	509	314	389	351	501	503	399
	R	828	885	834	904	525	657	682	967	857	856
Drum (Atlantic	Н	532	281	379	405	528	914	856	373	624	323
croaker)	R	1,157	1,055	1,011	2,011	919	1,411	1,173	1,013	1,314	1,173
Drum (sand	Н	449	599	983	601	773	1,161	1,122	1,177	1,003	1,022
seatrout)	R	205	506	302	419	204	651	578	1,130	949	482
Drum (spotted	Н	7,698	5,270	7,318	8,082	7,317	13,230	9,337	10,811	9,913	7,014
seatrout)	R	4,007	3,862	7,484	7,794	7,046	10,644	7,401	8,993	7,732	4,851
Drum(southern	Н	145	105	159	309	335	153	118	103	133	46
kingfish)	R	180	23	63	112	286	166	34	141	67	49
Porgies	Н	326	607	805	1,174	867	474	309	714	775	543
(sheepshead)	R	453	433	520	525	482	507	290	485	447	374
Red drum	Н	2,652	2,042	2,143	2,349	1,554	2,254	2,390	2,559	2,240	2,703
	R	3,380	3,277	3,545	3,103	2,445	3,848	3,360	3,819	3,717	3,321
Red snapper	Н	55	47	71	83	104	201	148	90	104	18
Neu shapper	R	48	40	166	240	308	438	277	254	188	50
Southern flounder	Н	258	272	407	475	290	387	356	309	308	364
Southern nounder	R	65	48	115	102	64	80	83	45	56	67
Yellowfin tuna	Н	14	8	14	8	14	11	8	19	6	2
	R	1	(1)	(1)	(1)	2	(1)	1	8	(1)	(1)

¹In this table, '(1)' = 0.999 thousand fish and '1' = 1,000-1,499 thousand fish.

Louisiana's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	100,780 (1.4%)	1,599,482 (1.4%)	45,161 (1.1%)	71,436 (1.3%)	137,929 (1.2%)	1.84
2009	103,384 (1.4%)	1,639,104 (1.4%)	61,388 (1.3%)	103,048 (1.5%)	205,117 (1.3%)	2.02
% change	2.58%	2.48%	35.9%	44.3%	48.7%	19%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	58	66	73	75	76	99	85	77	68
prep. & packaging	Receipts	2,918	3,006	4,678	10,097	8,513	8,179	6,523	7,365	5,306
Seafood Sales,	Firms	170	185	208	204	156	181	196	182	169
retail	Receipts	12,586	15,201	22,637	18,148	14,585	20,046	20,932	25,900	17,177

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

	0			•		,				
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Saafaad product	Establishments	50	50	54	54	50	40	41	36	38
Seafood product prep. & packaging	Employees	1,141	1,185	1,693	1,519	1,556	1,506	1,253	991	1,301
prep. & packaging	Payroll	48,331	52,861	56,562	47,016	43,801	45,439	41,391	32,382	37,657
Seafood sales,	Establishments	164	152	134	133	128	112	119	98	98
wholesale	Employees	1,245	1,270	1,001	975	1,037	807	954	739	702
Wholesale	Payroll	23,053	22,363	19,539	19,639	17,649	21,243	21,604	15,858	17,261
Seafood sales,	Establishments	88	123	109	111	106	101	101	107	106
retail	Employees	518	640	796	745	723	759	781	681	703
retail	Payroll	5,636	7,033	9,406	9,567	8,277	10,560	11,827	11,141	11,564

· · ·		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	118	109	160	148	136	137	138	123	117
Lakes freight	Employees	5,689	5,494	6,779	6,656	5,771	6,397	7,680	6,506	6,077
transportation	Payroll	267,470	236,730	287,415	300,547	294,941	386,136	527,290	549,388	391,914
Deen ees fusielet	Establishments	31	28	25	22	25	24	22	18	21
Deep sea freight transportation	Employees	860	647	831	705	ND^2	595	685	1,095	1,192
transportation	Payroll	37,269	29,432	43,634	38,949	ND^2	35,269	39,843	87,479	91,760
	Establishments	8	6	4	3	3	2	3	2	2
Deep sea passenger transportation	Employees	ND^2	66	ND^2						
transportation	Payroll	ND^2	2,748	ND^2						
	Establishments	74	57	53	52	53	41	50	43	43
Marinas	Employees	ND^2	345	409	ND^2	352	ND^2	378	274	244
	Payroll	ND^2	8,724	11,019	ND^2	10,213	ND^2	17,794	9,581	8,989
Marine cargo	Establishments	58	47	47	47	46	51	49	39	44
handling	Employees	3,313	3,089	3,784	3,278	3,263	3,100	2,978	2,010	2,193
nanunng	Payroll	102,484	114,659	131,274	127,896	110,129	118,748	128,207	85,484	92,883
Navigational	Establishments	142	148	118	127	120	129	128	145	137
services to shipping	Employees	3,614	3,371	2,738	2,472	2,136	2,204	2,508	2,884	2,893
services to simpping	Payroll	133,061	135,223	112,412	109,008	96,202	115,222	141,757	183,381	175,271
Port & harbor	Establishments	19	15	13	18	18	18	14	22	17
operations	Employees	1,292	1,136	363	ND^2	418	436	467	517	440
operations	Payroll	51,443	47,191	18,331	ND^2	19,510	29,676	31,734	37,181	33,907
Ship & boat	Establishments	116	113	113	113	111	108	112	117	109
building	Employees	13,643	12,786	12,910	13,206	11,016	11,521	12,808	12,815	12,521
Salang	Payroll	477,137	448,749	452,315	460,606	376,407	437,028	503,199	619,606	613,188

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

2010 Economic Impacts of the Mississippi Seafood Industry (thousands of dollars)

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		With Imports			Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	3,828	174,584	87,554	3,716	158,586	81,993		
Commercial Harvesters	721	35,188	15,732	721	35,188	15,732		
Seafood Processors & Dealers	616	45,938	22,773	601	44,792	22,205		
Importers	46	12,675	3,864	0	0	0		
Seafood Wholesalers & Distributors	67	6,163	2,740	57	5,281	2,348		
Retail	2,379	74,619	42,445	2,337	73,323	41,708		

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	50,633	47,565	46,149	43,618	23,386	21,586	39,340	43,696	38,033	21,913
Finfish & other	14,432	12,627	12,396	10,485	7,804	8,959	21,359	19,233	18,667	8,963
Shellfish	36,201	34,938	33,753	33,133	15,582	12,628	17,981	24,464	19,366	12,950
Blue crab	391	572	687	658	433	928	741	447	573	366
Flounders	131	63	49	32	20	36	58	40	58	64
Menhaden	13,252	11,625	11,277	9,564	7,074	8,447	20,658	18,534	17,987	8,378
Mullets	114	22	34	54	38	23	35	32	30	31
Oysters	4,195	4,456	7,228	6,073	1,447	ND^1	819	6,869	6,100	4,268
Red snapper	106	100	88	71	115	ND^1	ND^1	ND^1	158	ND^1
Shrimp	31,614	29,910	25,619	26,353	13,698	11,699	16,418	17,146	12,689	8,311

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

-	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	213,922	217,968	213,469	183,558	167,610	221,720	227,834	201,822	230,307	111,242
Finfish & other	194,885	197,691	190,733	161,669	158,721	212,213	216,375	190,191	217,461	105,274
Shellfish	19,037	20,277	22,736	21,889	8,889	9,507	11,459	11,631	12,846	5,968
Blue crab	434	717	877	811	429	1,127	737	450	545	366
Flounders	84	46	31	18	10	16	25	17	25	28
Menhaden	192,467	195,371	187,956	159,392	157,194	211,163	215,182	189,118	216,709	104,729
Mullets	233	64	94	128	99	66	70	57	62	59
Oysters	2,653	2,738	4,042	3,029	610	ND^1	299	2,610	2,192	1,453
Red snapper	52	46	43	35	54	ND^1	ND^1	ND^1	57	ND^1
Shrimp	15,949	16,822	17,560	17,992	7,848	8,380	10,421	8,570	10,107	4,148

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
Blue crab	0.90	0.80	0.78	0.81	1.01	0.82	1.01	0.99	1.05	1.00		
Flounders	1.56	1.35	1.57	1.73	1.88	2.22	2.38	2.36	2.34	2.33		
Menhaden	0.07	0.06	0.06	0.06	0.05	0.04	0.10	0.10	0.08	0.08		
Mullets	0.49	0.34	0.36	0.42	0.38	0.35	0.50	0.57	0.48	0.52		
Oysters	1.58	1.63	1.79	2.00	2.37	ND^1	2.74	2.63	2.78	2.94		
Red snapper	2.04	2.17	2.06	2.05	2.13	ND^1	ND^1	ND^1	2.75	ND^1		
Shrimp	1.98	1.78	1.46	1.46	1.75	1.40	1.58	2.00	1.26	2.00		

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Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)											
	Jobs	Sales	Income	Value Added							
Trip Impacts by Fishing Mode:											
For-Hire	16	1,397	440	787							
Private Boat	159	18,379	4,888	8,808							
Shore	82	7,822	2,276	3,900							
Total Durable Equipment Impacts	3,023	401,608	100,894	153,027							
Total State Trip and Durable Equipment Economic Impacts	3,280	429,206	108,498	166,522							

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2010 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Exper	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	56,640
For-Hire	750	166	Other Equipment	13,946
Private Boat	885	15,297	Boat Expenses	14,647
Shore	1,061	7,019	Vehicle Expenses	350,702
Total Trip Expenditures	2,696	22,481	Second Home Expenses	0
			Total Durable Equipment Expenditures	435,936
Total State Trip and Dura	461.113			

Recreational Anglers by Residential Area (thousands of anglers)

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal	198	175	159	191	108	143	196	119	125	137
Non-Coastal	48	52	53	26	29	23	34	26	36	29
Out of State	82	49	48	46	39	27	55	48	50	50
Total Anglers	327	276	261	263	176	193	284	194	212	216

Recreational Fishing Effort by Mode (thousands of angler-trips)

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
For-Hire	18	21	24	12	8	7	20	13	11	4
Private	676	542	748	592	463	666	848	593	743	637
Shore	556	475	405	485	419	325	366	363	308	585
Total Trips	1,250	1,038	1,177	1,089	891	998	1,233	969	1,062	1,226

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Drum (Atlantic	Н	238	206	197	215	30	53	80	167	323	150
croaker)	R	818	937	701	351	158	233	274	395	814	437
Drum (kingfishes) 2	Н	490	278	327	316	198	178	169	179	159	198
	R	154	118	61	87	83	47	61	58	61	51
Drum (sand and	Н	1,150	866	666	404	267	422	280	370	1,009	1,232
silver seatrouts)	R	288	111	330	109	149	221	254	173	401	270
Drum (spotted	Н	308	372	276	447	352	520	361	539	805	641
seatrout)	R	638	559	832	745	783	1,046	786	692	747	577
Porgies	Н	95	69	77	47	30	30	25	16	44	66
(sheepshead)	R	127	62	27	24	22	21	11	18	6	3
Red drum	Н	60	60	50	59	33	70	54	63	66	79
	R	132	117	186	130	77	102	77	142	235	211
Red snapper	Н	21	43	39	16	1	5	7	5	18	1
Red Shapper	R	61	166	90	79	47	32	24	45	116	25
$Sharks^3$	Н	24	13	10	7	7	4	5	3	12	49
Sharks	R	65	118	59	46	39	44	41	27	27	64
Southern flounder	Н	275	142	119	103	69	44	118	116	178	212
Journenn nounder	R	51	48	67	46	40	26	35	68	94	111
Striped mullet	Н	383	212	550	241	31	5	71	111	194	156
Striped mullet	R	516	12	65	1	(1)	4	22	4	8	6

¹In this table, '(1)' = 0.999 thousand fish and '1' = 1,000-1,499 thousand fish.

 $^2 {\rm Kingfishes}$ include southern kingfish and Gulf kingfish

³Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

Mississippi's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	59,056 (0.83%)	926,868 (0.81%)	22,718 (0.57%)	38,829 (0.66%)	67,529 (0.65%)	1.69
2009	59,607 (0.8%)	904,037 (0.79%)	28,452 (0.59%)	52,219 (0.67%)	94,406 (0.67%)	ND^2
% change	0.933%	-2.46%	25.2%	34.5%	39.8%	NA ³

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	13	15	23	18	12	22	0	17	16
prep. & packaging	Receipts	1,186	915	1,561	1,056	1,045	1,537	ND^2	1,055	756
Seafood Sales,	Firms	0	51	51	47	41	53	57	48	55
retail	Receipts	ND^2	2,486	2,984	3,595	2,934	4,021	4,126	3,437	4,042

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product prep. & packaging	Establishments	33	34	37	33	28	24	22	20	20
	Employees	4,053	3,675	4,438	3,728	3,637	3,353	3,022	3,062	2,796
	Payroll	65,237	70,792	80,229	66,047	63,957	60,510	60,633	61,723	61,926
Seafood sales, wholesale	Establishments	28	29	26	29	30	23	25	18	16
	Employees	226	226	176	166	145	58	106	61	113
	Payroll	4,056	3,791	3,067	3,631	1,822	2,063	3,285	3,088	2,836
Seafood sales, retail	Establishments	17	28	19	17	21	12	15	18	14
	Employees	45	ND^2	47	55	57	41	ND^2	50	46
	Payroll	356	ND^2	468	532	521	395	ND^2	699	841

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great Lakes freight	Establishments	5	5	5	6	5	5	4	5	5
	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	119	114
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	7,585	8,351	7,730
Deep sea freight transportation	Establishments	1	1	2	2	3	3	1	NA ³	1
	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2
	Establishments	NA^3	NA ³	1	1	1	1	1	NA ³	NA^3
Deep sea passenger transportation	Employees	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	NA^3
transportation	Payroll	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	NA^3
	Establishments	17	18	22	22	25	16	19	17	13
Marinas	Employees	ND^2	86	141	220	158	ND^2	ND^2	111	172
	Payroll	ND^2	1,388	2,532	2,603	2,358	ND^2	2,145	2,794	3,479
Marina aarra	Establishments	9	7	4	5	6	5	5	7	8
Marine cargo handling	Employees	315	251	ND^2	ND^2	ND^2	238	ND^2	ND^2	ND^2
nanunng	Payroll	10,478	9,284	ND^2	ND^2	ND^2	8,621	ND^2	ND^2	ND^2
Neviretienel	Establishments	8	8	10	9	8	8	9	8	7
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
services to simpling	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	1,754	ND^2	ND^2
Port & harbor operations	Establishments	1	1	1	2	2	1	1	1	1
	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & boat building	Establishments	24	26	21	19	17	20	23	24	20
	Employees	11,531	11,663	ND^2	ND^2	11,845	11,909	14,578	ND^2	ND^2
	Payroll	465,845	473,191	ND^2	ND^2	471,243	498,660	615,837	ND^2	ND^2

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

 $^{^{2}}$ ND = these data are confidential thus not disclosable
Commercial Fisheries

2010 Economic Impacts of the Texas Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	24,634	2,064,282	897,412	19,366	1,144,453	582,137		
Commercial Harvesters	5,087	431,835	200,020	5,087	431,835	200,020		
Seafood Processors & Dealers	1,738	142,194	70,451	1,604	131,257	65,032		
Importers	2,741	753,992	229,850	0	0	0		
Seafood Wholesalers & Distributors	1,135	149,947	69,284	578	76,314	35,261		
Retail	13,933	586,315	327,807	12,097	505,047	281,824		

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

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	218,019	173,340	168,317	166,208	172,337	197,291	180,575	176,098	155,074	204,076
Finfish & other	7,637	9,600	9,041	10,684	10,813	11,359	9,452	7,709	7,488	7,800
Shellfish	210,382	163,741	159,276	155,524	161,523	185,932	171,123	168,389	147,586	196,276
Atlantic croaker	385	451	489	382	415	500	450	446	484	529
Black drum	1,703	1,820	1,365	1,444	1,917	2,013	1,660	1,363	1,377	1,569
Blue crab	3,905	4,523	3,157	2,663	2,410	1,459	2,763	2,342	2,454	3,075
Flounders	249	371	336	325	276	164	62	144	91	62
Groupers	405	664	1,028	785	795	628	417	553	641	355
Oysters	11,146	11,276	16,493	14,954	15,883	17,263	19,246	8,835	9,376	18,917
Red snapper	2,945	3,363	3,757	5,193	5,345	6,168	3,762	2,744	2,398	2,939
Shrimp	195,006	147,701	139,485	137,674	143,045	167,108	149,084	157,187	135,643	174,212
Tunas	617	1,190	720	0	340	0	ND^1	94	139	4
Vermilion snapper	456	386	349	611	571	642	1,554	1,430	1,233	1,331

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

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total landings	97,393	93,059	96,122	85,557	84,289	117,131	87,912	73,048	102,695	89,902
Finfish & other	5,132	6,066	5,240	5,852	5,782	5,825	4,800	3,866	4,134	4,219
Shellfish	92,261	86,993	90,883	79,705	78,507	111,306	83,111	69,182	98,561	85,683
Atlantic croaker	62	70	75	60	58	67	62	59	63	66
Black drum	2,320	2,331	1,677	1,717	2,077	2,212	1,687	1,468	1,610	1,724
Blue crab	5,163	7,037	4,811	3,961	3,119	1,966	3,454	2,635	2,844	3,372
Flounders	121	173	159	151	144	68	24	58	32	26
Groupers	187	274	416	329	303	220	141	170	208	144
Oysters	4,700	4,708	6,813	5,569	5,007	4,923	5,633	2,679	2,733	5,209
Red snapper	1,384	1,478	1,607	2,133	1,940	2,158	1,213	870	851	1,014
Shrimp	82,290	75,158	79,166	70,098	70,310	104,378	74,007	63,855	92,946	77,063
Tunas	209	430	275	0	112	0	ND^1	22	45	1
Vermilion snapper	242	217	192	322	279	273	672	592	561	537

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic croaker	6.21	6.46	6.49	6.35	7.14	7.43	7.29	7.58	7.64	7.98
Black drum	0.73	0.78	0.81	0.84	0.92	0.91	0.98	0.93	0.86	0.91
Blue crab	0.76	0.64	0.66	0.67	0.77	0.74	0.80	0.89	0.86	0.91
Flounders	2.06	2.14	2.12	2.15	1.92	2.42	2.55	2.48	2.84	2.37
Groupers	2.17	2.43	2.47	2.39	2.62	2.85	2.96	3.25	3.07	2.47
Oysters	2.37	2.40	2.42	2.69	3.17	3.51	3.42	3.30	3.43	3.63
Red snapper	2.13	2.27	2.34	2.43	2.76	2.86	3.10	3.15	2.82	2.90
Shrimp	2.37	1.97	1.76	1.96	2.03	1.60	2.01	2.46	1.46	2.26
Tunas	2.95	2.76	2.62	0.80	3.04	0.69	ND^1	4.26	3.08	3.19
Vermilion snapper	1.89	1.78	1.82	1.90	2.05	2.35	2.31	2.42	2.20	2.48

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

Recreational Fisheries

2010 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)											
	Jobs	Sales	Income	Value Added							
Trip Impacts by Fishing Mode:											
For-Hire	513	47,101	14,880	26,254							
Private Boat	1,286	147,738	44,548	78,950							
Shore	243	26,567	8,163	14,344							
Total Durable Equipment Impacts	17,415	2,276,710	730,610	1,140,375							
Total State Trip and Durable Equipment Economic Impacts	19,457	2,498,115	798,201	1,259,923							

2010 Angler Trip & Durable Expenditures (thousands of dollars)¹

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	147,897
For-Hire	2,274	25,693	Other Equipment	77,693
Private Boat	5,673	93,823	Boat Expenses	577,927
Shore	1,329	17,054	Vehicle Expenses	203,028
Total Trip Expenditures	9,277	136,570	Second Home Expenses	813,810
			Total Durable Equipment Expenditures	1,820,355
Total State Trip and Dura	ible Equipment Exp	enditures		1,966,202

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Atlantic croaker	Н	230	111	96	109	95	101	95	64	117	125
Black drum	Н	130	72	85	68	53	73	66	82	98	164
King mackerel	Н	15	16	19	15	14	29	11	8	16	6
Red drum	Н	244	233	270	273	231	318	289	266	285	264
Red snapper	Н	47	53	40	40	49	69	45	41	31	33
Sand seatrout	Н	79	173	119	176	125	129	95	152	111	127
Sheepshead	Н	80	84	76	67	81	78	46	46	34	49
Southern flounder	H	125	91	111	100	81	64	49	64	47	30
Spotted seatrout	H	966	965	939	934	855	987	916	917	810	732

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 2010 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.

 $^{^{2}}$ Data collected by the TPWG is reported in this table. The data collected by the TPWD differs from the data collected and reported in the MRIP. Please see the TPWD for more information: www.tpwd.state.tx.us/fishboat/.

Texas's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2001	473,868 (6.7%)	8,161,321 (7.1%)	282,315 (7.1%)	422,013 (7.5%)	765,740 (7.1%)	0.6
2009	519,028 (7%)	8,925,096 (7.8%)	376,647 (7.8%)	600,316 (8.2%)	1,146,647 (7.7%)	0.23
% change	9.53%	9.36%	33.4%	42.3%	49.7%	-55%

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

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Firms	108	104	99	100	108	109	94	85	82
prep. & packaging	Receipts	5,575	3,901	5,234	1,989	2,228	2,974	5,386	3,466	3,896
Seafood Sales,	Firms	159	152	170	159	159	141	182	188	195
retail	Receipts	13,079	13,516	16,636	19,131	19,534	18,355	17,442	18,204	12,947

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

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		2001	2002	2003	2004	2005	2006	2007	2008	2009
Seafood product	Establishments	29	27	23	24	23	21	26	27	24
prep. & packaging	Employees	1,506	1,453	1,274	1,177	1,288	1,155	1,207	1,169	1,026
prep. & packaging	Payroll	24,507	25,772	25,426	24,394	23,842	24,302	27,813	27,045	29,006
Seafood sales,	Establishments	129	115	99	103	97	92	104	69	75
wholesale	Employees	1,102	999	1,057	1,009	1,001	897	970	734	683
Wholesale	Payroll	33,552	29,430	27,016	27,730	26,408	28,586	51,597	24,498	23,650
Seafood sales,	Establishments	63	73	67	60	59	58	62	60	51
retail	Employees	295	287	227	219	176	207	189	206	189
	Payroll	3,908	3,748	2,985	2,993	3,162	3,229	3,703	3,403	3,393

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

Transport, Cappo.	-,		Employ			(thousane)		
		2001	2002	2003	2004	2005	2006	2007	2008	2009
Coastal & Great	Establishments	37	39	43	43	61	45	43	42	43
Lakes freight	Employees	1,071	866	2,705	2,565	ND^2	2,270	2,513	2,815	2,729
transportation	Payroll	49,992	42,377	88,033	91,995	ND^2	107,328	131,946	251,997	200,219
Deen see fusiont	Establishments	43	45	48	41	43	40	41	35	36
Deep sea freight transportation	Employees	1,130	1,287	ND^2	891	ND^2	751	920	514	802
transportation	Payroll	61,830	70,194	ND^2	38,553	ND^2	41,969	49,761	40,764	61,309
D	Establishments	1	5	5	3	4	3	4	3	2
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Establishments	185	179	170	165	166	150	141	143	131
Marinas	Employees	1,107	1,255	1,410	ND^2	ND^2	ND^2	1,200	1,486	1,423
	Payroll	29,083	28,471	31,197	ND^2	ND^2	ND^2	28,359	34,039	33,803
Marina carro	Establishments	54	56	59	60	60	64	62	55	57
Marine cargo handling	Employees	4,725	4,549	5,091	4,539	5,200	5,349	6,237	6,313	6,276
nanunng	Payroll	100,101	113,894	108,142	138,630	151,522	161,386	186,416	196,006	167,562
Neurational	Establishments	96	95	92	92	87	84	90	99	95
Navigational services to shipping	Employees	1,129	1,082	1,099	1,213	1,064	1,373	1,709	1,884	1,849
services to simpping	Payroll	55,549	49,825	60,714	68,741	75,914	98,244	125,061	137,962	137,289
Dout & houtou	Establishments	11	13	16	15	15	16	15	24	30
Port & harbor operations	Employees	ND^2	ND^2	ND^2	215	ND^2	112	98	ND^2	421
operations	Payroll	ND^2	ND^2	ND^2	7,128	ND^2	4,992	5,163	10,538	13,778
Ship & boat	Establishments	122	110	107	103	99	90	96	102	99
building	Employees	3,599	3,360	4,062	4,204	3,564	3,515	4,810	5,368	3,891
bunding	Payroll	135,405	137,129	156,565	163,800	156,259	170,308	210,275	235,190	158,261

 $^{{}^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 ND = these data are confidential thus not disclosable

Data Sources

Dana Point, Orange County, CA (photo credit: S. Lovell)

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Climate Change Research Coastal & Marine Recreation Research Commercial Fisheries Economics Research Marine Protected Areas Research Ocean Policy & Management Research Other Marine Environmental Research Recreational Fisheries Economics Research Habitat Economics Research Seafood Marketing & Trade Research Sociocultural Research U.S. Territories & International Fisheries Research Protected Resources Economics Research

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Resources



Resources

U.S.

Federal Agencies

Economics & Social Analysis Division Office of Science & Technology, NOAA Fisheries www.st.nmfs.gov/st5/index.html Office of Science & Technology, NOAA Fisheries www.st.nmfs.gov/index.html Marine Recreational Information Program www.st.nmfs.noaa.gov/mrip/index.html Office of International Affairs, NOAA Fisheries www.nmfs.noaa.gov/ia/index.htm Office of Marine Conservation U.S. Department of State www.state.gov/g/oes/ocns/

North Pacific

Federal Agencies Economic & Social Sciences Research Alaska Fisheries Science Center, NOAA Fisheries www.afsc.noaa.gov/ REFM/Socioeconomics/Default.php

Alaska Fisheries Science Center, NOAA Fisheries www.afsc.noaa.gov

Alaska Regional Office, NOAA Fisheries www.fakr.noaa.gov

Alaska Region, U.S. Fish & Wildlife Service alaska.fws.gov

District 17, U.S. Coast Guard www.uscg.mil/D17

State Agencies

Alaska Department of Fish & Game www.adfg.state.ak.us

Councils & Commissions

North Pacific Fishery Management Council www.fakr.noaa.gov/npfmc

Pacific States Marine Fisheries Commission www.psmfc.org/index.php

Fisheries Economics Data Program Pacific States Marine Fisheries Commission www.psmfc.org/efin

International Pacific Halibut Commission www.iphc.washington.edu/halcom/default.htm

Pacific

Federal Agencies

Human Dimensions Program Northwest Fisheries Science Center, NOAA Fisheries www.nwfsc.noaa.gov/research/divisions/ cbd/humandim.cfm Economics, Groundfish Analysis Program Northwest Fisheries Science Center, NOAA Fisheries www.nwfsc.noaa.gov/research/ divisions/fram/economics.cfm Northwest Fisheries Science Center, NOAA Fisheries www.nwfsc.noaa.gov Northwest Regional Office, NOAA Fisheries www.nwr.noaa.gov Socioeconomics Research Southwest Fisheries Science Center, NOAA Fisheries swfsc.noaa.gov Southwest Fisheries Science Center swfsc.noaa.gov Southwest Regional Office swr.nmfs.noaa.gov Pacific Region, U.S. Fish & Wildlife Service www.fws.gov/pacific California & Nevada, U.S. Fish & Wildlife Service www.fws.gov/cno District 13, U.S. Coast Guard http://www.uscg.mil/D13/ State Agencies California Department of Fish & Game www.dfg.ca.gov Oregon Department of Fish & Wildlife www.dfw.state.or.us Washington Department of Fish & Wildlife wdfw.wa.gov Councils & Commissions Pacific Fishery Management Council www.pcouncil.org Pacific States Marine Fisheries Commission www.psmfc.org/index.php Fisheries Economics Data Program - Pacific States Marine Fisheries Commission www.psmfc.org/efin International Pacific Halibut Commission www.iphc.washington.edu/halcom/default.htm

Western Pacific

Federal Agencies

Fisheries Monitoring & Socioeconomics Division Pacific Islands Fisheries Science Center, NOAA Fisheries www.pifsc.noaa.gov/fmsd

Pacific Islands Fisheries Science Center, NOAA Fisheries www.pifsc.noaa.gov/index.php Pacific Islands Regional Office, NOAA Fisheries www.fpir.noaa.gov Pacific Region, U.S. Fish & Wildlife Service www.fws.gov/pacific District 14, U.S. Coast Guard www.uscg.mil/d14 State Agencies Hawaii Department of Land & Natural Resources www.hawaii.gov/dlnr Guam Office of the Governor www.guamgovernor.net Department of Marine & Wildlife Resources, American Samoa Office of the Governor americansamoa.gov/departments/depts/ mwr.htm Division of Fish & Wildlife Commonwealth of the Northern Mariana Islands www.dfw.gov.mp Councils & Commissions Western Pacific Fishery Management Council www.wpcouncil.org New England Federal Agencies Social Sciences Branch, Northeast Fisheries Science Center, NOAA Fisheries www.nefsc.noaa.gov/read/socialsci Northeast Fisheries Science Center, NOAA Fisheries www.nefsc.noaa.gov

Northeast Fisheries Science Center, NOAA Fisheries www.nefsc.noaa.gov Northeast Regional Office, NOAA Fisheries www.nero.noaa.gov/nero Northeast Region, U.S. Fish & Wildlife Service www.fws.gov/northeast District 1, U.S. Coast Guard www.uscg.mil/D1 *State Agencies* Maine Department of Marine Resources www.maine.gov/dmr/index.htm Rhode Island Department of Environmental Management www.dem.ri.gov Massachusetts Division of Marine Fisheries www.mass.gov/dfwele/dmf Connecticut Department of Environmental Protection www.ct.gov/dep/site/default.asp New Hampshire Fish & Game Department www.wildlife.state.nh.us *Councils & Commissions* New England Fishery Management Council www.nefmc.org Atlantic States Marine Fisheries Commission www.asmfc.org

Mid-Atlantic

Federal Agencies Social Sciences Branch Northeast Fisheries Science Center, NOAA Fisheries www.nefsc.noaa.gov/read/socialsci Northeast Fisheries Science Center, NOAA Fisheries www.nefsc.noaa.gov Northeast Regional Office, NOAA Fisheries www.nero.noaa.gov/nero Northeast Region, U.S. Fish & Wildlife Service www.fws.gov/northeast District 5, U.S. Coast Guard www.uscg.mil/D5 State Agencies Bureau of Marine Resources, New York Department of Environmental Conservation www.dec.ny.gov/about/796.html New Jersey Division of Fish & Wildlife www.state.nj.us/dep/fgw Pennsylvania Fish & Boat Commission fishandboat.com/mpag1.htm Delaware Division of Fish & Wildlife www.fw.delaware.gov Fisheries Service, Maryland Department of Natural Resources www.dnr.state.md.us/fisheries Virginia Marine Resources Commission www.mrc.state.va.us Division of Marine Fisheries, North Carolina Department of Environment & Natural Resources www.ncfisheries.net Councils & Commissions Mid-Atlantic Fishery Management Council www.mafmc.org Atlantic States Marine Fisheries Commission www.asmfc.org

South Atlantic

Federal Agencies

Social Science Research Group, Southeast Fisheries Science Center, NOAA Fisheries www.sefsc.noaa.gov/socialscience.jsp Southeast Fisheries Science Center, NOAA Fisheries www.sefsc.noaa.gov Southeast Regional Office, NOAA Fisheries sero.nmfs.noaa.gov Southeast Region, U.S. Fish & Wildlife Service www.fws.gov/southeast Southwest Region, U.S. Fish & Wildlife Service www.fws.gov/southeast District 7, U.S. Coast Guard www.uscg.mil/D7 State Agencies North Carolina Division of Marine Fisheries www.ncfisheries.net

Resources

Marine Resources Division, South Carolina Department of Natural Resources www.dnr.sc.gov Coastal Resources Division Georgia Department of Natural Resources crd.dnr.state.ga.us Florida Fish & Wildlife Conservation Commission myfwc.com *Councils & Commissions* South Atlantic Fishery Management Council www.safmc.net

Atlantic States Marine Fisheries Commission 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 www.sefsc.noaa.gov Southeast Regional Office, NOAA Fisheries sero.nmfs.noaa.gov Southeast Region, U.S. Fish & Wildlife Service www.fws.gov/southeast Southwest Region, U.S. Fish & Wildlife Service www.fws.gov/southeast District 8, U.S. Coast Guard www.uscg.mil/D8 *State Agencies* Division of Marine Fisheries, Florida Fish & Wildlife Conservation Commission myfwc.com/RECREATION/Saltwater_index.htm Marine Resources Division, Alabama Department of Conservation & Natural Resources www.outdooralabama.com Mississippi Department of Marine Resources www.wlf.state.la.us Texas Parks & Wildlife Department www.tpwd.state.tx.us *Councils & Commissions* Gulf of Mexico Fishery Management Council www.gulfcouncil.org Gulf States Marine Fisheries Commission www.gsmfc.org

International Organizations

Pacific Salmon Commission www.psc.org North Atlantic Salmon Conservation Organization www.nasco.int International Pacific Halibut Commission www.iphc.washington.edu/halcom/default.htm InterAmerican Tropical Tuna Commission www.iattc.org/HomeENG.htm Western & Central Pacific Fisheries Commission www.wcpfc.int International Commission for the Conservation of Atlantic Tunas www.iccat.int/en Commission for the Conservation of Antarctic Marine Living Resources www.ccamlr.org International Maritime Organization www.imo.org Red List of Threatened Species www.iucnredlist.org

Professional Organizations

North American Association of Fisheries Economists oregonstate.edu/Dept/IIFET/NAAFE/Home.html International Institute of Fisheries Economics & Trade oregonstate.edu/dept/iifet

Other Organizations & Information

The Center for Independent Experts www.ciereviews.org Organisation for Economic Co-operation & Development www.oecd.org/home FishWatch - U.S. Seafood Facts www.nmfs.noaa.gov/fishwatch Marine Stewardship Council www.msc.org

Dutch Harbor, AK (photo credit: E.Steiner)

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 Program⁴

A management tool available to fishery managers intended to ease fishing-related pressure on marine resources. Fishing vessels are purchased by the government or by the fishing industry itself then removed from a specific fishery where fish stocks or stock complexes are considered overfished or subject to overfishing.

$Bycatch^1$

Species other than the primary target species that are caught incidental to the harvest of the primary species. Bycatch may be retained or discarded; discards may occur for regulatory or economic reasons.

$Catch^1$

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 Program⁵

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 County⁶

A coastal county meets one of the following criteria: 1) at least 15 percent of a county's total land area is located within the Nation's coastal watershed; or 2) a portion of or an entire county accounts for at least 15 percent of a coastal cataloging unit. Any U.S. county that meets these criteria is classified as coastal.

Coastal County Angler

For this report, a coastal county angler refers to a recreational fishermen who lives within a given state and within a coastal county of that state.

Commercial Fishing Location Quotient (CFLQ)

For this report, the CFLQ is calculated as the ratio of a state's distribution of employment in commercial fishing industries compared to the distribution of commercial fishing industries in the U.S. The CFLQ is calculated using the "Location Quotient Calculator" provided by the Bureau of Labor Statistics, U.S. Department of Labor.

Community Development Quota Program (CDQ)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)⁷

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.

$\mathbf{Discards}^1$

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 Scheme⁹

In fisheries, ecolabelling schemes entitle a fishery product to bear a distinctive logo or statement which certifies that the fish has been harvested in compliance with specified conservation and sustainability standards. The logo or statement is intended to make provision for informed decisions by purchasers whose choice may promote and stimulate the sustainable use of fishery resources.

Economic Impact Model^{10 11}

Economic impact models capture how sales in a sector generate economic impacts directly in the sector in which the sale was made and then ripple throughout the state and national economy as each dollar spent generates additional sales by other firms and consumers. The NMFS Commercial Fishing & Seafood Industry Input / Output Model uses an IMPLAN platform to estimate the economic impacts associated with the harvesting of fish by U.S. commercial fishermen and the other major components of the U.S. seafood industry. As used here, the term fish refers to the entire range of finfish, shellfish, and other life (that is, sea urchins, seaweed, kelp, and worms) from marine and freshwaters that are included in the landings data maintained by the National Marine Fisheries Service.

The NMFS Recreational Economic Impact Model, which also uses an IMPLAN platform, estimates the economic impacts generated by expenditures made by saltwater anglers.

Economic Impacts

For this report, the economic impacts of the commercial fishing sector and seafood industry refer to the employment (full-time and part-time jobs), personal income, and output (sales by U.S. businesses) generated by the commercial harvest sector and other major components of the U.S. seafood industry including: processors and dealers; wholesalers and distributors; grocers; and restaurants.

Economic impacts of recreational fishing activities refer to the amount of sales generated the number of jobs supported, and the contribution to gross domestic product by state (also known as value-added impacts) from expenditures related to recreational fishing.

Effort

For this report, effort refers to the number of fishing trips taken by recreational fishermen (anglers). The term can also refer to the amount of time and fishing power used to harvest fish in commercial fisheries, including gear size, boat size, and horsepower.

Employee Compensation¹²

This is related to Gross Domestic Product (GDP) by State and is an estimate of the sum of employee wages and salaries and supplements to wages and salaries. Wages and salaries are measured on an accrual, or "when earned" basis, which may be different from the measure of wages and salaries measured on a disbursement, or "when paid" basis. Wages and salaries and supplements of Federal military and civilian government employees stationed abroad are excluded from the measure of GDP by state.

Employer Establishments

An establishment is a single physical location at which business is conducted or services or industrial operations are performed. It is not necessarily identical with a company or enterprise, which may consist of one or more establishments. When two or more activities are carried on at a single location under a single ownership, all activities generally are grouped together as a single establishment. The entire establishment is classified on the basis of its major activity and all data are included in that classification.

Endangered Species^{13,1}

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)^{1,13}

The ESA is a statute which was enacted in 1973 to conserve species and ecosystems. Under its auspices, species facing possible extinction are listed as threatened or endangered, or as candidate species for such listings. When such a listing is made, recovery and conservation plans are drawn up to ensure the protection of the species and its habitat.

Expenditures

For this report, expenditures are related to recreational fishing activities and described as being one of two types: 1) expenditures related to a specific fishing trip; or 2) durable equipment expenditures.

$Ex-vessel^1$

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.

Fish Stock Complex¹⁴

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^{4,1}

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)^{1,4}

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 Cooperatives⁴

A market-based fisheries management tool where access to fisheries resources is limited to a specific group of fishermen. See also "Catch Share Progam."

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 Effort⁹

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)¹²

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), but includes fish thrown back dead in Hawaii and the Atlantic and Gulf states. 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."

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.

Glossary

$Landings^1$

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 System⁴

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 Quotient¹⁵

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.

Market-based Management^{16,4}

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 categories into one of two industry sectors: 1) seafood sales & processing, and 2) transport, support, & marine operations. See also "Industry Sector."

Non-coastal County Angler

For this report, a non-coastal county angler refers to a recreational fisherman who lives within a given state but not in a coastal county of that state.

Nonemployer Firms

A nonemployer business is one that has no paid employees, has annual business receipts of \$1,000 or more (\$1 or more in the construction industries), and is subject to federal income taxes. Most nonemployers are self-employed individuals operating very small unincorporated businesses which may or may not be the owner's principal source of income.

Non-resident

For this report, a non-resident in the U.S. table refers to a recreational fisherman (angler) who resides outside of the U.S; a non-resident in the regional and state tables refers to an angler who did not reside in the state where they fished.

Out-of-state Angler

For this report, an out-of-state angler is a recreational fisherman (angler) who does not reside within a given coastal state.

Overcapacity

Overcapacity refers to a situation where the harvesting capability within a given fishery exceeds the level of harvest allowed for that fishery.

Overcapitalization⁹

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.

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 walruses.

Regional Fishery Management Council or Fishery Management Council (FMC)⁴

The Magnuson-Stevens Act established eight Regional Fishery Management Councils around the United States. Each Council consists of voting and non-voting members who represent various federal, state, and tribal government, fishing industry groups (commercial and/or recreational), and non-fishing groups (such as environmental organizations and academic institutions). Each Council is tasked with creating fishery management plans for important fisheries within their regions.

Release

For this report, release refers to the number of individual fish caught by a recreational fisherman (angler) that are then returned to the sea (dead or alive). In Hawaii and the Atlantic and Gulf states, release does not include fish returned to the sea that are dead. See also "Catch" and "Harvest".

Glossary

Resident

For this report, a resident in the U.S. table refers to a recreational fisherman (angler) who resides inside of the U.S; a resident in the regional and state tables refers to an angler who resides in the state where they fished.

Sector Allocation Program¹⁷

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 Species¹³

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.

Notes

¹NOAA Fisheries Glossary. October 2005. K. Blackhart, D.G. Stanton, and A.M. Shimada, eds. Revised edition, June 2006. National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Department of Commerce. NOAA Technical Memorandum NMFS-F/SPO-69. Available at: http://www.st.nmfs.gov/st4/documents/F_Glossary.pdf[accessed 14 July 2009].

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³Nonemployer Definitions." Nonemployer Statistics, U.S. Census Bureau, U.S. Department of Commerce. Available at: http://www.census.gov/epcd/nonemployer/view/define.html/[accessed 14 July 2009].

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⁸Page 4 in: The Economic Contribution of Marine Angler Expenditures in the United States, 2006. 2008. B. Gentner and S. Steinback. National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Department of Commerce. NOAA Tech. Memo. NMFS-F/SPO-94. Available at: http://www.st.nmfs.noaa.gov/st5/publication/marine_angler.html[accessed 14 July 2009].

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¹⁰The NMFS Commercial Fishing and Seafood Industry Input/Output Model (CFSI I/O Model). August 2009. J. Kirkley. Virginia Institute of Marine Science. Available at: http://www.st.nmfs.noaa.gov/st5/publication/marine_angler.html [accessed 14 July 2009].

¹¹Pages 11-12 in: The Economic Contribution of Marine Angler Expenditures in the United States, 2006. November 2008. B. Gentner and S. Steinback. National Marine Fisheries Service (NOAA Fisheries), National Oceanic & Atmospheric Administration, U.S. Dept. of Commerce. NOAA Technical Memorandum NMFS-F/SPO-94, 301p. Available at: https://www.st.nmfs.noaa.gov/documents/Commercial\%20Fishing\%20I0\%20Model. pdf[accessed 15 September 2010].

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¹³Endangered Species Act of 1973 (P.L. 93-205, as amended through P.L. 100-707). Available at: http://www.nmfs.noaa.gov/pr/laws/esa/[accessed 14 July 2009].

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14 July 2009]. ¹⁷Sector Allocation as a Management Tool. Northeast Sea Grant. Available at: http://seagrant.gso.uri.edu/fisheries/sector_allocation/ index.html[accessed 14 July 2009].