



Fisheries Economics of the United States, 2011

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

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Front cover photo: Shem Creek, South Carolina (photo credit: Amber Von Harten) Inside cover photo: Nanticoke River, Maryland (photo credit: Sean Howard)

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Preface

Fisheries Economics of the U.S., 2011

Fisheries Economics of the U.S., 2011 is the sixth volume in this annual 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. This year's report covers the years 2002 to 2011 and provides descriptive statistics 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. Cameron Speir is editor and lead author for this report. Primary analysts and collaborators include Erin Steiner, Sabrina Lovell, Lauren Dolinger Few, and Ben Fissel. Other analysts and contributors include Ayeisha Brinson, Rita Curtis, Ron Felthoven, Karen Greene, Jean Lee, Qian Li, Michael Liddel, Laura Johansen, and Avi Litwack.

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 Tom Newton (Texas Department of Parks and Wildlife). 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.

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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.

Dungeness crabs, Moss Landing, California (photo credit: Richael Young)		



National Overview U.S. Summary

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 45 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 177 stocks or stock complexes and the overfishing status of 194 stocks or stock complexes is known. Currently, 39 stocks or stock complexes are categorized as overfished and 32 are categorized as subject to overfishing².

Less is known about the 248 minor stocks or stock complexes. The overfished status of 42 of these stocks or stock complexes is known and four of these are currently considered overfished. The overfishing status of 2 of the 248 minor stocks or stock complexes is known and NA 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) - 2012 Quarter 3 Update through September 30, 2012. The NOAA Fisheries Office of Sustainable Fisheries. http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm

 $^{^3}$ http://www.nmfs.noaa.gov/ia/agreements/regional_agreements/intlagree.html

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 2011, there were 42 vessels flying the national flags of 22 nations participating in IUU fishing activities. 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 87 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 44 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	44
Marine Mammals: Whales	12
Marine Mammals: Dolphins	2
Marine Mammals: Porpoise	1
Marine Mammals: Seals	5
Marine Mammals: Sea Lions	2
Sea Turtles	16
Marine Invertebrates	4
Marine Plants	1
Total	87

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 102 candidate species for listing (82 are coral species) and 7 species proposed for listing.

In 1970, the Eastern North Pacific gray whale was listed under the ESA, but has since made a comeback and was considered 'recovered' in 1994. The Caribbean monk seal, listed in 1967, was delisted in 2008. This species is considered to be extinct. regional fishery associations, and fishing community

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 aguaria.

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),

¹An additional 33 vessels with unknown country affiliation also participate in IUU fishing activities.

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

 $^{^3{}m The~U.S.}$ 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

		Catch Shares		1		
Region	Program	First Year	Value 2010 \$ million	Pre-catch share price	Post-catch share price	Unit
New England	Northeast Scallop IFQ	2010	20	6.69	8.78	per lb
New England	Northeast Multispecies Sectors	2010	87.1	1.31	1.43	per lb
Mid-Atlantic	Atlantic Surf Clam ITQ	1990	26	13.32	11.72	per bushel
Mid-Atlantic	Atlantic Ocean Quahog ITQ	1990	20.8	6.1	6.84	per bushel
Mid-Atlantic	Golden Tilefish IFQ	2010	5.3	2.57	2.82	per lb
South Atlantic	Wreckfish IFQ	1992	ND	ND	ND	
Gulf of Mexico	Red Snapper IFQ	2007	10.3	3.32	3.36	per lb
Gulf of Mexico	Grouper-Tilefish IFQ	2010	14.3	3.16	3.23	per lb
Pacific	Pacific Coast Sablefish Permit Stacking	2002	14.9	1.84	4.83	per lb
Pacific	Pacific Groundfish Trawl Rationalization	2011	52	0.22	0.23	per lb
North Pacific	Western Alaska CDQ	1992	NA	NA	NA	
North Pacific	Alaska Halibut IFQ	1995	199	1.94	4.58	per lb
North Pacific	Alaska Sablefish IFQ	1995	99.8	2.8	4.38	per lb
North Pacific	AFA Pollock Co-ops	1998	226.2	314	321	per mt
North Pacific	Alaska Weatervane Scallop Co-ops	2001	ND	ND	ND	
North Pacific	BSAI Crab Rationalization	2005	130.5	1.9	2.04	per lb
North Pacific	Non-Pollock Trawl Catcher/Process Co-ops	2008 or	245.3	1082	939	per mt

U.S. Summary National Overview

quotas¹; community development quota programs (CDQs); fishing cooperatives; and sector allocation programs². Catch share programs are a fishery management tool that dedicates a secure share of quota that entitles individual fishermen, fishing cooperatives, fishing communities, or other entities to harvest a fixed amount of fish.

With clearly defined fishing privileges, fishermen no longer need to "race to fish", but instead can make harvest decisions based upon market conditions, improving economic performance, and weather conditions, which improves crew safety. These incentives can reduce the cost of taking conservation actions and can encourage individual fishing choices that are more consistent with sustainable fishing practices such as reducing bycatch of species not being targeted for harvest and reducing the wasteful practice of "discarding", i.e., throwing back low-value or undersized catch, which is often associated with high mortality rates. The ability to align fishermen's economic incentives with the long-term biological health of the fishery singularly distinguishes catch share programs from traditional fishery management strategies (i.e., trip limits, gear restrictions, etc.).

The NOAA catch shares policy³, released in 2010, encourages 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. Nationwide, there are 15 catch share programs currently in operation; some programs have been in operation for more than 20 years and others have been implemented more recently.

Recently, there has been an effort to characterize the federal catch share programs and develop standard performance indicators that measure the economic performance of catch share programs, regardless of their design. The standard performance measures include metrics for catch and landings, effort, revenue, accumulation limits and cost recovery. These indicators over the duration of the catch share program and compared to the Baseline Period, which is defined as the average of the three years prior to the Program's implementation. One of the indicators measuring economic efficiency, average price of catch share species reveals that with the exception of two catch share programs (Atlantic Surf Clam Individual Transferable Quota and Non-Pollock Trawl Catcher/Processor Groundfish Cooperatives Amendment 80), the average price for the most recent year is greater than average prices during the baseline period. Nationwide, there are 15 catch share programs currently in operation in six different regions. The total landings revenue of the fisheries for which information was available was about \$1.2 billion in 2010.

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 seven⁴ 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.

One example of an ecolabeling program is run by the Marine Stewardship Council (MSC), one of the largest and most recognizable ecolabeling programs in the world. Under this program, MSC sets standards for sustainable fishing practices and seafood traceability. Capture fisheries can voluntarily seek certification that it meets these standards from an accredited third-party certifier. If a fishery meets a set of performance standards then its products can bear the MSC logo and have access to wholesalers and retailers that have been approved through the MSCs chain-of-custody certification. There are currently 184 fisheries worldwide that meet MSC sustainability standards, ⁵ 19 of which are U.S. fisheries.

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.

³http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/index.htm

⁴This total excludes three buyback programs associated with Northwest Pacific salmon disasters in 1994, 1995, and 1998 because data were not available.

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

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U.S. Fisheries with MSC Certification

Region	Fishery	Certified
North Pacific	Alaskan	Sep 2000;
	salmon	Nov 2007
North Pacific	Bering	Feb 2005;
	Sea/Aleutian	Dec 2010
	Islands (BSAI)	
N .1 D .0	pollock	4 2005
North Pacific	Gulf of Alaska (GOA) pollock	Apr 2005; Sep 2010
North Pacific	US North	Apr 2006
NOTH FACILIC	Pacific halibut	Apr 2000
North Pacific	US North	May 2006
	Pacific	_
	sablefish	
Pacific	Pacific	Aug 2007
	albacore tuna -	
	(American Albacore	
	Fishing	
	Association)	
Pacific	Oregon pink	Dec 2007
	shrimp	
Mid-Atlantic	Atlantic deep	Sep 2009
	sea red crab	
Pacific	Pacific hake	Oct 2009
	mid-water	
	trawl	
North Pacific	BSAI Pacific	Jan 2010
North Pacific	GOA Pacific	Jan 2010
North Pacific	cod	Jan 2010
North Pacific	North Pacific	Mar 2010
	albacore tuna	
	(American	
	Western Fish	
	Boat Owners	
North Doolfie	Association)	lum 2010
North Pacific	Bering Sea and Aleutian	Jun 2010
	Islands flatfish	
North Pacific	Gulf of Alaska	Jun 2010
	flatfish	50 2010
Pacific	Oregon	Dec 2010
	dungeness crab	
Southeast	Southeast	Dec 2011
	Atlantic	
	swordfish	
Southeast	Lousiana blue	Mar 2012
N 0	crab	A 2015
Northeast & Mid-Atlantic	US Atlantic	Aug 2012
	spiny dogfish	

Commercial Fisheries

Commercial fishermen in the U.S. harvested 9.9 billion pounds of finfish and shellfish in 2011, earning \$5.3 billion for their catch. Pacific salmon (\$618 million) followed by sea scallop (\$585 million), shrimp (\$536 million), and American lobster (\$423 million) contributed most to total revenue in the U.S. In terms of pounds landed, walleye pollock (2.8 billion pounds), menhaden (1.9 billion), and Pacific salmon (780 million) comprised over half of total pounds landed in 2011.

Key U.S. Commercial Species

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

When looking at key species or species groups, commercial fishermen in Alaska caught the most salmon (738 million pounds) and earned \$565 million for their catch in 2011. Tuna was caught in large numbers in Hawai'i (19 million pounds) and generated \$67 million in landings revenue.

On the East Coast, Maine fishermen contributed most to the total landings of American lobster (105 million pounds) and earned \$334 million for their catch in 2011. In Massachusetts, sea scallop was a major contributor to total revenue, earning \$331 million for 33 million pounds landed. More blue crab was caught in Maryland (50 million pounds) than any other state, earning fishermen in this state over \$59 million. Louisiana landed over half of the menhaden in 2011 with fisherman landing 1.1 billion pounds and generating \$94 million in landings revenue.

In the Gulf of Mexico, shrimp is a highly valued species. Fishermen in Texas earned \$215 million for their catch (87 million pounds). Although, more shrimp was landed in Louisiana (92 million pounds) the total landings revenue was less (\$133 million). The ex-vessel price in Texas (\$2.47) was greater than that in Louisiana (\$1.44).

¹In 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

Economic Impacts¹

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 2011, this industry supported approximately 1.2 million full- and part-time jobs and generated \$129 billion in sales impacts, \$37 billion in income impacts, and \$55 billion in value added impacts.

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

	2008	2009	2010	2011
Jobs	1,144,353	1,029,542	1,196,683	1,233,204
Income	34,544,909	31,556,643	36,269,724	36,568,695
Sales	126,175,684	116,224,548	133,135,986	129,386,335
Value Added	52,726,594	48,282,319	55,434,189	55,321,482
Total Revenue	4,399,402	3,894,864	4,511,171	5,338,063

Seafood retailers, which generated the largest job and value added impacts, contributed 618,000 jobs, \$32 billion in sales impacts, and \$17.7 billion in value added impacts to the national economy in 2011. Imports, which generated the largest sales impacts, contributed 176,000 jobs, \$48.4 billion in sales impacts, and \$14.8 billion in value added impacts. The wholesalers and distributors sector was the smallest of the seafood industry sectors and contributed 54,000 jobs, \$7.5 billion in sales impacts, and \$3.5 billion in value added impacts to the national economy.

Employment impacts from the U.S. seafood industry were higher in 2011 than in 2010. Overall, employment impacts increased by 3.1%, with the gains concentrated in the commercial harvesting (up 17%) and retail (up 8.8%) sectors. Income impacts were 0.82% higher in 2011. Sales (down -2.8%) and value added (down -0.2%) impacts were somewhat smaller than the previous year. For all four types of impacts, the impacts increased substantially in the commercial harvesting and retail sectors.

The greatest employment impacts generated by the seafood industry were generated in California with 122,000 jobs, followed by Massachusetts (98,000 jobs), Florida (72,000 jobs), and Washington (67,000 jobs). The lowest number of jobs were supported in Delaware (339 jobs).

Jobs supported by the U.S. Seafood Industry (2011)

Jobs supported by the 0.5. Searood industry (2011)				
State	Jobs	State	Jobs	
United States	1,233,204	Oregon	18,562	
California	122,074	Maryland	15,274	
Massachusetts	98,358	Georgia	11,137	
Florida	72,341	Alabama	11,011	
Washington	67,007	Rhode Island	9,157	
Alaska	63,295	North Carolina	8,850	
New Jersey	43,638	Hawai'i	8,627	
New York	41,847	New Hampshire	5,968	
Louisiana	32,818	Mississippi	5,550	
Maine	31,127	Connecticut	4,514	
Texas	27,717	South Carolina	1,547	
Virginia	22,082	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 (\$8 billion), and Massachusetts (\$7.8 billion). The importers sector generated the highest level of sales impacts in all four states. The lowest sales were generated in Delaware (\$44 million).

Total sales generated by the U.S. Seafood Industry (2011) (thousands of dollars)

State	In-State	State	In-State
	Sales		Sales
United States	129,386,335	Maine	1,734,058
California	20,053,619	Georgia	1,489,958
Florida	14,250,006	Oregon	1,351,116
Washington	8,026,068	Rhode Island	1,024,748
Massachusetts	7,754,140	North Carolina	795,541
New Jersey	6,563,733	New Hampshire	766,257
New York	5,102,910	Connecticut	740,263
Alaska	4,684,638	Hawai'i	694,228
Texas	2,277,959	Alabama	499,805
Virginia	1,866,659	Mississippi	247,106
Louisiana	1,801,568	South Carolina	88,131
Maryland	1,743,095	Delaware	43,746

The greatest value added impacts were generated by the seafood industry in California with \$7.2 billion in sales, followed by Florida (\$4.8 billion), Washington (\$3.3 billion), and Massachusetts (\$3.1 billion). The smallest value added impacts were generated in Delaware (\$15 million).

Total value added impacts generated by the U.S. Seafood Industry (2011)

(thousands of dollars)

State	Value State Added		Value Added
United States	55,321,482	Maryland	665,883
California	7,168,389	Oregon	633,483
Florida	4,778,502	Georgia	548,826
Washington	3,297,368	Rhode Island	397,018
Massachusetts	3,090,449	North Carolina	329,451
Alaska	2,493,124	Hawai'i	311,097
New Jersey	2,407,754	New Hampshire	287,785
New York	1,801,303	Connecticut	257,905
Texas	1,002,928	Alabama	250,171
Louisiana	877,911	Mississippi	125,430
Maine	829,833	South Carolina	46,495
Virginia	800,243	Delaware	14,661

Landings Revenue

Landings revenue in the U.S. totaled \$5.3 billion in 2011. This was a 69% increase (17% increase in real terms) from 2002 levels (\$3.2 billion) and a 18% increase (9.1% increase in real terms) relative to 2010 (\$4.5 billion). Both the finfish and shellfish components contributed to the increasing landing revenues trend. Totaling \$2.6 billion in 2011, finfish revenue experienced a 88% increase (31% increase in real terms) from 2002 to 2011 and increased 19% (9.4% increase in real terms) from 2010 to 2011.

U.S. shellfish revenue totaled \$2.7 billion in 2011, increasing 53.5% (6.6% increase in real terms) from 2002 to 2011 and increased 18% (a 8.9% increase in real terms) from 2010 to 2011.

Total Landings Revenue by Region (2011) (thousands of dollars)

Region	Total	Region	Total
	Revenue		Revenue
United States	5,338,063	Pacific	710,495
North Pacific	1,911,540	Mid-Atlantic	527,493
New England	1,109,057	South Atlantic	171,302
Gulf of Mexico	818,017	Western Pacific	91,513

The ten U.S. key species and species groups comprised 63% of total revenue in 2011. Of these, Pacific salmon, sea scallop, shrimp, American lobster, and walleye pollock contributed most to total revenue in the U.S. in 2011. These species or groups totaled approximately \$2.5 billion in 2011 or 47% of total revenue. The largest increases in total revenue among the national key species or species groups from 2002 to 2011 were experienced by: Pacific salmon (296%, 175% in real terms), sea scallop (190%, 101% in real terms), and sablefish (142%, 68% in real terms).

All key species or species groups showed increases in nominal revenue from 2002 to 2011, though three species groups decreased in real revenue over that time period: blue crab (down less than 1%), menhaden (down 14%), and shrimp (down 29%). Relative to 2010 totals, key species or species groups with the largest increases in total revenue in 2011 were: sablefish (37%, 26% in real terms), menhaden (34%, 24% in real terms), and sea scallop (28%, 18% in real terms).

Total Landings Revenue by State (2011) (thousands of dollars)

State	Total	State	Total
	Revenue		Revenue
Alaska	1,911,540	Maryland	76,722
Massachusetts	565,238	Rhode Island	75,956
Maine	424,712	North Carolina	71,177
Louisiana	333,619	East Florida	60,570
Washington	331,404	Alabama	50,941
Texas	239,082	New York	37,625
New Jersey	214,191	Mississippi	30,300
California	201,269	New Hampshire	23,483
Virginia	191,665	South Carolina	23,268
West Florida	164,076	Connecticut	19,668
Oregon	148,337	Georgia	16,295
Hawai'i	91,513	Delaware	7,091

Overall, the greatest portion of the nation's landings revenue was generated in Alaska (\$1.9 billion), which contributed 36% to the U.S. total. Alaska also contributed more than any other state to total U.S. finfish revenue (\$2.6 billion), accounting for 64% of total finfish revenue. More than half of Alaska's finfish landings revenue came from walleye pollock and salmon. Massachusetts (\$433 million) and Maine (\$381 million) contributed most to total U.S. shellfish revenue, contributing 15.8% and 13.9%, respectively. Sea scallop accounted for most of the revenue generated in Massachusetts and American lobster contributed the most to revenue in Maine.

Commercial Fisheries Facts

Landings revenue

- The ten key U.S. key species or species groups accounted for 63% of total landings revenue in 2011.
- Finfish and other fishery products (\$2.6 billion) contributed slightly less than shellfish (\$2.7 billion) to total landings revenue in the U.S. in 2011.
- 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 2011, contributing 21.3% 19.5%, and 15.4%, 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 64% of total landings in 2011.
- Finfish and other fishery products accounted for 86% of total U.S. landings in 2011 or 8.5 billion pounds.
- Walleye pollock and menhaden contributed 33% and 22%, respectively, to U.S. finfish landings.
- Shrimp and blue crab contributed 23% and 15%, respectively, to shellfish landings.
- Walleye pollock had the largest one-year increase in landings over the 10 year time period, increasing 44% from 1.9 billion pounds in 2010 to 2.8 billion pounds in 2011.
- 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 (\$9.9), Pacific halibut (\$4.98), and sablefish (\$4.56) had the highest ex-vessel price per pound in 2011.
- Walleye pollock (\$0.13) and menhaden (\$0.08) had the lowest ex-vessel price per pound in 2011.
- 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 31% from \$1.79 per pound in 2008 to \$1.24 in 2009.

Landings

In 2011, U.S. commercial fishermen landed 9.9 billion pounds of finfish and shellfish. Relative to 2002 levels, this was an 4.6% increase and a 20% increase relative to 2010 (8.2 billion pounds). Finfish landings totaled 8.5 billion pounds in 2011, a 3.2% increase from 8.2 billion pounds in 2002 and a 22% increase from 2010 (6.9 billion pounds).

Total Landings by Region (2011)

(thousands of pounds)

Region	Total	Region	Total		
	Landings		Landings		
United States	9,867,148	Mid-Atlantic	779,829		
North Pacific	5,272,554	New England	622,355		
Gulf of Mexico	1,765,899	South Atlantic	123,460		
Pacific	1,175,506	Western Pacific	29,289		

Almost 60% of total catch in 2011 was made up of the ten U.S. key species and species groups. Walleye pollock and menhaden had the highest landings totals in 2011 with 2.8 billion pounds and 1.9 billion pounds landed, respectively. These two species accounted for 47% of total U.S. landings in 2011.

Total Landings by State (2011) (thousands of pounds)

State	Total	State	Total
	Landings		Landings
Alaska	5,272,554	West Florida	77,687
Louisiana	1,285,875	Rhode Island	77,236
Virginia	494,028	North Carolina	67,483
California	408,181	East Florida	31,215
Mississippi	278,080	Hawai'i	29,289
Oregon	274,525	New York	27,104
Maine	269,923	Alabama	26,145
Massachusetts	255,798	Georgia	12,646
Washington	210,672	New Hampshire	12,321
New Jersey	175,516	South Carolina	12,116
Texas	98,111	Connecticut	7,078
Maryland	78,197	Delaware	4,921

The greatest increases in landings between 2002 and 2011 occurred in American lobster (52%), Pacific salmon (39%), and blue crab (13%). During the same time period, decreases were seen in Pacific halibut (47%), walleye pollock (16%), and shrimp (10%). The largest increase in landings of key species or groups between 2010 and 2011 was experienced by walleye pollock (44%) and the largest decrease was experienced by Pacific halibut (24%).

Alaskan fishermen harvested the majority of the nation's total landings. Alaska contributed 56% to the U.S. total in 2011, landing 5.3 billion pounds of finfish and shellfish. Alaska also contributed most to the U.S. finfish total, landing 5.2 billion pounds or 61% of the U.S. finfish total. Walleye pollock comprised much of landings in Alaska (53%). More shellfish was landed in California (300 million pounds) and Louisiana (157 million pounds) than any other single state. The landings in these two states comprised 33% of all shellfish landed in the United States in 2011.

Prices

Of the ten U.S. key species and species groups, sea scallop, Pacific halibut, and sablefish received the highest ex-vessel prices in 2011 at \$9.9 per pound, \$4.98 per pound, and \$4.56 per pound respectively.

Significant increases in price were observed for Pacific halibut, which increased 195% (105% in real terms) from 2002 to 2011, and experienced an increase of 35.7% (25.2% in real terms) from 2010 to 2011. Pacific salmon ex-vessel price experienced the next largest change between 2002 and 2011, with an increase of 182% (96% in real terms). The greatest change in price between 2010 and 2011 was experienced by Pacific halibut (35.7% increase a 25.2% increase in real terms), followed by sablefish with a 33.7% increase (a 23.2% increase in real terms).

Menhaden and walleye pollock had the lowest ex-vessel prices in 2011 at \$0.08 and \$0.13 per pound, respectively. However, landings of menhaden and walleye pollock were the largest among the U.S. key species and groups: 1.87 billion pounds of menhaden and 2.81 billion pounds of walleye pollock.

Recreational Fisheries

In 2011, there were approximately 11 million recreational saltwater anglers across the U.S. who took 70 million saltwater fishing trips around the country. These anglers spent \$4.5 billion on fishing trips and \$22 billion on durable fishing-related equipment. These expenditures contributed \$70 billion in sales impacts to the U.S. economy, generated \$32 billion in value added impacts, and supported over 455,000 job impacts. Of the U.S. key recreational species or species groups, seatrout (51 million fish), and Atlantic croaker and spot (31 million fish) were the most often caught by recreational saltwater anglers in 2011.

Key United States Recreational Species

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

Expenditures and Economic Impacts

Economic impacts from recreational fishing activities (impacts from fishing trips and durable equipment combined) supported over 455,000 full- and part-time jobs across the U.S. in 2011. Sales impacts from recreational angling trips and durable expenditures totaled \$70 billion and value added impacts totaled \$32 billion. Durable equipment impacts contributed most to these totals, accounting for 81% of employment impacts, 85% of total sales impacts, and 83% of value added impacts. Of the three fishing trip modes, private boat-based fishing trips contributed most to the number of jobs supported by recreational angling with 7.4% of employment impacts. For-hire sales (\$2.5 billion) and value added impacts (\$1.4 billion) were approximately half the magnitude of impacts generated by either private boat (\$4.6 billion, \$2.3 billion) or shore-based trips (\$3.5 billion, \$1.8 billion).

National Overview U.S. Summary

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

	2008	2009	2010	2011
Jobs	384,707	327,124	326,188	454,542
Income	NA	14,574,464	14,570,210	20,518,517
Sales	58,877,647	49,811,961	49,832,341	70,315,216
Value Added	27,350,783	23,196,423	23,170,932	32,471,761
$Total\ Trips^1$	85,548	74,559	72,464	70,194

U.S. anglers spent a total of \$4.5 billion on expenditures related for fishing trips in 2011. Of this total, expenditures for private boat-based fishing trips contributed the most (\$2 billion), followed by shore-based fishing trips (\$1.5 billion), and for-hire-based fishing trips (\$1 billion). Expenditures on fishing-related equipment totaled over \$22 billion in 2011. Anglers spent more on boat expenses (\$11 billion) than any other durable good. Other major expenditures include vehicle expenses (\$4.1 billion), fishing tackle (\$3.8 billion) and second home expenses (\$2.1 billion).

Jobs supported by the U.S. Recreational Fishing Industry (2011)

(2011)								
State	Jobs	State	Jobs					
West Florida	47,047	Washington	4,939					
East Florida	28,701	South Carolina	3,254					
Louisiana	17,764	Oregon	3,147					
North Carolina	17,737	New York	2,972					
Texas	15,150	Hawai'i	2,948					
New Jersey	9,965	Georgia	2,880					
Alabama	8,177	Rhode Island	1,273					
California	7,703	Mississippi	1,181					
Virginia	7,237	Connecticut	909					
Alaska	6,291	Maine	843					
Maryland	5,745	Delaware	795					
Massachusetts	5,322	New Hampshire	376					

The greatest employment impacts from expenditures on recreational angling were generated in East Florida with 29,000 jobs, followed by Louisiana(18,000 jobs), North Carolina(18,000 jobs), and Texas(15,000 jobs). The lowest number of jobs were supported in New Hampshire (376 jobs). The highest sales impacts from expenditures on recreational angling were also generated in East Florida with \$3.3 billion in sales, followed by Louisiana(\$2 billion), Texas(\$1.9 billion, and New Jersey(\$1.9 billion). The lowest sales were generated in 41 million (\$41 million).

Total Sales generated by the U.S. Recreational Fishing Industry (2011)

(thousands of dollars)

State	Sales	State	Sales		
West Florida	4,881,831	Washington	514,088		
East Florida	3,255,774	Oregon	370,032		
North Carolina	1,961,144	New York	369,382		
Texas	1,853,361	Georgia	348,742		
New Jersey	1,697,115	Hawai'i	309,923		
Louisiana	1,602,913	South Carolina	282,049		
California	1,031,068	Rhode Island	157,111		
Virginia	833,508	Mississippi	145,769		
Alabama	797,280	Connecticut	128,921		
Maryland	783,833	Delaware	120,877		
Massachusetts	726,164	Maine	77,071		
Alaska	557,958	New Hampshire	41,005		

Participation²

Nationwide, there were 11 million recreational saltwater anglers who fished in their home states in 2011. Approximately 9.2 million of these anglers were residents of a U.S. coastal county and 1.4 million anglers were residents of a non-coastal county. Between 2002 and 2011, the total number of U.S. anglers fishing in their home states increased 6.3%. However, the number of anglers decreased 4.1% between 2010 and 2011. The number of coastal county anglers increased 6.7% from 2002 to 2011 and decreased 4% from 2010 to 2011. The number of non-coastal county anglers increased 4.1% between 2002 and 2011 and from 2010 to 2011, there was a 4.9% decrease.

Fishing Trips ³

The total number of fishing trips taken in the U.S. decreased 2.7% from 2002 to 2011. Relative to 2010, total fishing trips taken in the U.S. decreased 3% with largest increase occurring in the for-hire mode (22%)

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 2011. These species or groups were caught in large numbers relative to the other key species or groups: seatrout (51 million fish), Atlantic croaker and spot (31 million fish), summer flounder (22 million fish), and striped bass (8.4 million fish). Anglers fishing in the Mid-Atlantic and New England caught most of the Atlantic croaker, summer flounder, and striped bass in 2011, while most seatrout were caught in the Gulf of Mexico and the South Atlantic.

¹The number of trips is in thousands and excludes Alaska and Texas.

²Participation estimates do not include Alaska and Texas. Hawai'i is included for 2003-2011; Numbers include the Caribbean.

³Effort numbers do not include Alaska and Texas. They include Hawai'i only for 2003-2010. California numbers were estimated differently from 2004-2011.

U.S. Summary National Overview

Recreational Fishing Facts

Participation

- An average of 12 million anglers fished in United States annually from 2002 to 2011.
- In 2011, coastal county residents made up 87% 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 80 million fishing trips were taken annually from 2002 to 2011.
- Private or rental boat and shore-based fishing trips accounted for 35 million and 32 million fishing trips, respectively in 2011. Together, these made up 95.5% 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 17%, from 72 million trips to 84 million trips.
- The largest one-year decrease in total trips taken during this period in total trips taken occurred between 2008 and 2009, decreasing 13%, from 86 million trips to 75 million trips.

Harvest and release

- <u>Seatrout</u> was the most commonly caught key species or species group, <u>averaging 45 million fish</u> caught over the 10 year time <u>period</u>. Of these, <u>61%</u> were released rather than harvested.
- Of the eight commonly caught key species or species groups, six were released more often than harvested over this time period. The species or species group that was most commonly released was sharks (96% released).
- Large Atlantic tuna (88% harvested), followed by Pacific halibut (57% harvested), and Atlantic croaker and spot (50% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.

In the North Pacific Region, salmon (Chinook, chum, coho, pink, and sockeye) and Pacific halibut were the most commonly caught species or group in 2011 with 963,000 fish and 705,000 fish caught, respectively. Bigeye and mackerel (662,000 fish) comprised 44% of fish caught by anglers in the Western Pacific in 2011.

Recreational catch of striped bass experienced a 47% decrease between 2002 and 2011, the largest change during this 10 year time period. There were 2.7 million sharks caught in 2011. Other key species or groups with large changes in recreational catch include: seatrout (40% increase), summer flounder (29% increase), little tunny and Atlantic bonito (27% decrease), and Pacific halibut (21% increase).

From 2010 to 2011, decreases occurred in the recreational catch of sharks, summer flounder, and large Atlantic tuna. Of these, the largest decreases occurred in sharks (36%), large Atlantic tuna (24%), and summer flounder (9%). The largest increase observed for this time period was for seatrout, which experienced a 25% increase.

Marine Economy¹

In 2010, there were 7.4 billion establishments in the U.S, including marine and non-marine related establishments. These establishments employed almost 112 million full- and part-time employees and had a total annual payroll of \$4.9 trillion. From 2002 to 2010, the number of establishments increased 2.7%, employee numbers decreased 0.38%, and total annual payroll increased 25% (a 5.7% decrease in real terms) nationwide. More modest changes were seen from 2009 to 2010: 0.5% decrease, 2.2% decrease, and 1.8% increase (a 2.3% decrease in real terms), respectively.

The nation's gross domestic product was \$14.4 trillion in 2010, a 36% increase (a 2.6% increase in real terms) relative to 2002 levels (\$11 trillion) and a 4.2% increase (a 0% increase in real terms) relative to 2009 levels (\$13.8 trillion). Employee compensation in 2002 was \$6.1 trillion, a 30% increase (a 1.9% decrease in real terms).

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

Seafood Sales and Processing

In 2010, there were 1,617 nonemployer firms engaged in seafood product preparation and packaging, a 79% increase from 2002 levels. Annual receipts increased 88% (42% increase in real terms) from \$56 million (2002) to \$105 million (2010). More of these firms were located in Florida (202 firms) than any other state.

In contrast to nonemployer firms, the number of employer establishments in seafood product and packaging decreased 15% from 754 in 2002 to 638 in 2010. These firms employed approximately 32,000 full- and part-time employees in 2010 and had a total annual payroll of \$1.1 billion. Relative to 2002 levels, this was an 18% decrease in workers but a 2.2% increase (a 23% decrease in real terms) in annual payroll. More of these establishments were located in Alaska (119 establishments) and Washington (93 establishments) than any other states.

There were over 2,000 employer establishments involved in seafood wholesale activities in 2010. Most of these establishments

¹Information for 2010 is reported in this section; 2011 data were not available for this report.

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were in California (314 firms), New York (263 firms), and Florida (229 firms) Establishments in the seafood wholesaling sector employed 19,386 workers and had an annual payroll of \$799 million. From 2002 to 2010, the number of establishments in the seafood wholesale sector decreased 24%, the number of employees decreased 27%, and the annual payroll decreased 11% (a 33% decrease in real terms).

Nonemployer firms and employer establishments engaged in seafood retail activities saw varying trends from 2002 to 2010. There was a 14% increase in firms (2,513 in 2010) and a 11% decrease in establishments (1,982 in 2010). Annual receipts for nonemployer firms totaled \$200 million in 2010, a 0.1% decrease (25% decrease in real terms) relative to 2002 levels.

Annual payroll for employer establishments totaled over \$219 million, a 31% increase (1.7% decrease in real terms) relative to 2002 levels. Approximately 9,857 full- and part-time workers were employed by the 1,982 establishments in 2010, a 0.88% increase and a 11% decrease, respectively from 2002. The employer establishments for retail seafood sales were primarily

located in New York (394 firms), California (158 firms), and Florida (145 firms). Most non-employer firms in the retail sector were located in Florida (331), New York (247), and California (210).

Transport, Support, and Marine Operations

In the U.S. transport, support, and marine operations industry sector, industries involved in marina activities had the highest number of establishments. In 2010, there were over 3,900 marina industries that employed 27,000 full- and part-time workers. Compared to 2002 levels, this was a 2.1% decrease in establishment numbers and a 16% increase in number of employees.

Annual payroll for this industry was \$927 million in 2010, a 37% increase (3.3% increase in real terms) over 2002 levels. Most of these marina industries were located in California (236235 industries), Florida (159025), and New York (98499).

Commercial Fisheries United States

2011 Economic Impacts of the United States Seafood Industry (thousands of dollars)

		With Imports		Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added	
Total Impacts	1,233,204	129,386,335	55,321,482	786,505	52,870,191	27,489,114	
Commercial Harvesters	186,726	14,148,340	7,351,409	186,726	14,148,340	7,351,409	
Seafood Processors & Dealers	198,001	27,231,326	11,946,661	59,752	8,309,304	3,645,377	
Importers	176,037	48,424,097	14,761,785	0	0	0	
Seafood Wholesalers & Distributors	54,273	7,478,706	3,516,426	27,711	3,818,492	1,795,423	
Retail	618,166	32,103,866	17,745,201	512,317	26,594,055	14,696,905	

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	3,164,209	3,346,066	3,769,942	3,952,692	4,041,780	4,203,688	4,394,152	3,927,630	4,511,633	5,338,063
Finfish & other	1,374,489	1,518,330	1,777,802	1,860,060	1,950,757	2,068,233	2,254,846	1,887,456	2,183,578	2,590,197
Shellfish	1,789,720	1,827,736	1,992,140	2,092,632	2,091,023	2,135,455	2,139,306	2,040,174	2,328,055	2,747,866
American lobster	293,894	283,516	374,306	415,415	395,150	367,500	326,814	310,370	399,476	423,354
Blue crab	146,974	153,685	145,905	140,818	126,043	148,866	160,682	163,159	205,683	181,842
Menhaden	81,607	71,988	75,045	62,520	69,683	92,725	90,996	99,092	107,130	143,679
Pacific halibut	136,789	172,846	176,893	177,599	202,163	227,348	217,726	140,613	207,233	213,518
Pacific salmon	156,194	198,946	302,775	330,816	310,865	381,589	395,253	369,744	554,798	618,300
Sablefish	77,637	102,983	99,153	101,759	109,026	106,504	121,869	123,231	137,573	188,217
Sea scallop	202,092	229,097	320,039	432,514	384,758	386,044	370,057	376,331	455,694	585,090
Shrimp	523,882	441,622	446,043	412,718	454,610	429,993	444,522	379,152	416,976	535,509
Tunas	85,473	86,818	89,952	86,358	86,760	93,875	106,867	96,072	108,257	136,004
Walleye pollock	203,263	203,018	271,612	306,906	329,879	297,460	323,212	270,595	282,399	362,592

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	9,436,477	9,505,337	9,688,745	9,712,427	9,484,055	9,309,281	8,357,614	8,060,769	8,248,510	9,867,148
Finfish & other	8,232,370	8,367,711	8,516,634	8,630,877	8,303,972	8,227,911	7,290,705	6,792,319	6,948,622	8,499,132
Shellfish	1,204,107	1,137,626	1,172,111	1,081,550	1,180,083	1,081,370	1,066,909	1,268,450	1,299,888	1,368,016
American lobster	83,087	71,683	90,073	87,809	92,609	80,842	88,106	100,507	116,248	126,264
Blue crab	175,574	170,890	174,561	159,242	166,133	156,599	162,192	176,184	199,334	199,149
Menhaden	1,755,398	1,590,510	1,495,240	1,243,807	1,304,250	1,484,230	1,344,468	1,570,733	1,473,329	1,874,995
Pacific halibut	80,977	78,862	79,181	76,264	71,897	69,967	67,000	59,812	56,460	42,877
Pacific salmon	561,489	669,998	738,746	899,759	663,567	886,054	659,196	705,063	787,712	780,066
Sablefish	40,734	47,998	52,851	51,296	46,842	43,884	43,314	42,826	40,318	41,284
Sea scallop	52,672	55,968	64,108	56,626	59,013	58,450	53,385	58,003	57,529	59,112
Shrimp	345,249	324,170	316,566	264,163	337,012	273,636	248,609	305,701	262,295	310,570
Tunas	49,632	61,762	56,323	44,252	49,923	50,642	47,878	49,062	48,001	49,708
Walleye pollock	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	2,810,787

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

Average Annual Trice of Rey Species Groups (donars per pound)											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
American lobster	3.54	3.96	4.16	4.73	4.27	4.55	3.71	3.09	3.44	3.35	
Blue crab	0.84	0.90	0.84	0.88	0.76	0.95	0.99	0.93	1.03	0.91	
Menhaden	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.06	0.07	0.08	
Pacific halibut	1.69	2.19	2.23	2.33	2.81	3.25	3.25	2.35	3.67	4.98	
Pacific salmon	0.28	0.30	0.41	0.37	0.47	0.43	0.60	0.52	0.70	0.79	
Sablefish	1.91	2.15	1.88	1.98	2.33	2.43	2.81	2.88	3.41	4.56	
Sea scallop	3.84	4.09	4.99	7.64	6.52	6.60	6.93	6.49	7.92	9.90	
Shrimp	1.52	1.36	1.41	1.56	1.35	1.57	1.79	1.24	1.59	1.72	
Tunas	1.72	1.41	1.60	1.95	1.74	1.85	2.23	1.96	2.26	2.74	
Walleye pollock	0.06	0.06	0.08	0.09	0.10	0.10	0.14	0.15	0.15	0.13	

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	22,806	2,537,215	804,012	1,377,196
Private Boat	33,720	4,589,856	1,356,127	2,334,562
Shore	28,740	3,512,042	1,074,793	1,826,550
Total Durable Equipment Impacts	369,277	59,676,104	17,283,585	26,933,452
Total State Trip and Durable Equipment Economic Impacts	454,542	70,315,216	20,518,517	32,471,761

2011 Angler Trip & Durable Expenditures (thousands of dollars)¹

Fishing Mode	Trip Exper	nditures	Equipment	Durable Expenditures	
	Non-Residents	Residents	Fishing Tackle	3,829,739	
For-Hire	NA	1,011,001	Other Equipment	1,406,941	
Private Boat	NA	2,027,441	Boat Expenses	10,865,232	
Shore	NA	1,481,376	Vehicle Expenses	4,050,431	
Total Trip Expenditures	NA	4,519,818	Second Home Expenses	2,111,150	
			Total Durable Equipment Expenditures	22,263,493	
Total State Trip and Dural	ole Equipment Exp	enditures		26,783,311	

Recreational Anglers by Residential Area (thousands of anglers)²

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	8,608	10,434	10,199	11,330	11,644	12,389	10,725	9,408	9,557	9,183
Non-Coastal	1,372	1,562	1,579	1,492	1,685	1,616	1,591	1,747	1,502	1,428
Total Anglers	9,981	11,996	11,779	12,822	13,329	14,005	12,316	11,155	11,059	10,611

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	3,197	3,244	3,424	3,524	3,734	4,173	3,416	3,281	2,597	3,179
Private	38,525	45,013	44,007	43,249	42,719	46,465	44,912	37,647	37,760	35,321
Shore	30,437	36,199	38,015	37,345	38,694	37,021	37,220	33,631	32,107	31,694
Total Trips	72,159	84,456	85,446	84,118	85,147	87,659	85,548	74,559	72,464	70,194

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

riarvest (11) and it		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Drum (Atlantic	Н	17,836	20,879	19,793	20,352	22,936	26,567	24,020	15,762	13,355	13,319
croaker and spot)	R	16,436	18,203	17,821	23,760	19,371	21,365	24,974	20,374	15,981	18,092
Drum (seatrouts)	Н	13,943	15,228	16,947	16,095	18,903	17,559	21,081	20,187	16,743	22,234
Druin (Seatrouts)	R	22,458	25,552	27,214	30,632	30,351	28,970	32,349	25,807	23,936	28,649
Little tunny &	Н	321	254	405	179	313	293	204	231	190	281
Atlantic bonito ⁴	R	1,020	865	1,099	464	868	1,221	725	807	597	703
Pacific halibut	Н	351	403	483	500	463	585	516	440	398	394
r acinc nambut	R	233	290	369	380	353	438	359	321	304	311
Rockfishes &	Н	2,856	3,742	2,593	3,617	2,677	2,454	2,068	2,199	NA	NA
scorpionfishes	R	1,065	1,796	977	1,347	895	691	636	836	NA	NA
Salmon	Н	1,321	1,626	1,569	1,481	873	1,286	722	1,574	NA	NA
Saimon	R	692	881	1,010	844	513	710	375	659	NA	NA
Sharks ⁵	Н	156	168	148	203	131	144	108	126	157	104
Silaiks	R	2,076	2,796	3,052	3,983	3,507	3,954	4,134	3,980	4,012	2,574
Striped bass	Н	1,891	2,579	2,617	2,488	2,740	2,438	2,341	1,990	1,973	2,249
Striped bass	R	13,971	14,996	17,480	18,227	23,415	16,218	12,695	8,120	6,355	6,174
Summer flounder	Н	3,280	4,574	4,389	4,107	4,034	3,105	2,363	1,829	1,509	1,844
Julillier Hourider	R	13,417	15,974	16,055	21,869	17,511	17,627	20,547	22,297	22,230	19,723
Tunas (large	Н	428	889	772	667	566	729	799	530	594	421
Atlantic species) ⁶	R	28	112	132	109	135	95	87	53	51	69

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

 $^{^3\}mbox{This}$ table excludes all Texas data and Hawaii data for 2002.

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

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

⁶Includes all tunas in the thunnus family.

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	7,200,770	112,400,654	3,943,180	6,099,602	10,572,388	1
2010	7,396,628	111,970,095	4,940,983	7,952,204	14,416,601	1
% change	2.72%	-0.383%	25.3%	30.4%	36.4%	

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	903	1,038	1,110	1,080	1,142	1,303	1,308	1,383	1,617
prep. & packaging	Receipts	55,750	70,071	81,871	78,745	80,066	88,230	89,670	92,358	104,990
Seafood Sales,	Firms	2,210	2,346	2,260	2,098	2,089	2,610	2,522	2,407	2,513
retail	Receipts	199,937	210,231	210,450	203,951	211,186	231,776	233,002	198,495	199,810

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	754	764	734	717	670	685	663	645	638
prep. & packaging	Employees	38,663	39,580	38,102	37,684	35,894	33,169	33,323	30,894	31,789
prep. & packaging	Payroll	1,092,500	1,177,582	1,151,780	1,180,396	1,205,890	1,196,086	1,161,637	1,091,727	1,116,305
Seafood sales,	Establishments	2,883	2,456	2,330	2,314	2,222	2,438	2,063	2,099	2,183
wholesale	Employees	26,719	23,091	22,501	22,666	22,013	24,232	20,116	19,290	19,386
Wildiesale	Payroll	895,718	743,479	771,749	781,459	826,720	924,654	782,178	758,332	798,794
Seafood sales,	Establishments	2,238	2,125	2,151	2,155	2,115	2,094	2,044	1,967	1,982
retail	Employees	9,771	10,346	10,714	10,381	10,545	10,380	9,732	9,439	9,857
ICLAII	Payroll	167,634	186,087	192,187	194,602	200,971	209,404	205,423	211,264	219,045

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

Transport, Suppor		(thousands of dollars)								
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	520	606	579	610	579	573	513	513	547
Lakes freight	Employees	20,149	22,449	21,928	21,025	22,172	22,568	21,019	20,919	17,528
transportation	Payroll	1,096,771	1,183,071	1,179,549	1,232,342	1,376,033	1,552,467	1,694,613	1,470,159	1,288,001
Deep sea freight	Establishments	471	472	435	465	456	427	365	376	372
transportation	Employees	12,916	12,175	11,314	11,357	11,473	11,308	10,231	11,180	10,288
transportation	Payroll	784,149	734,781	735,804	801,863	825,752	855,683	852,063	863,363	867,797
	Establishments	4,021	4,150	4,092	4,143	4,025	4,085	3,972	3,891	3,937
Marinas	Employees	23,047	27,928	28,100	27,511	28,339	28,788	28,686	26,643	26,657
	Payroll	675,529	773,538	814,821	839,848	894,097	945,355	954,032	905,488	927,499
Marine cargo	Establishments	595	542	551	549	540	552	532	541	507
handling	Employees	50,428	50,644	58,618	59,670	61,905	62,941	63,736	56,386	57,275
nanding	Payroll	2,425,187	2,422,537	2,899,703	3,034,672	3,261,953	3,428,126	3,272,723	2,776,791	3,026,861
Navigational	Establishments	828	782	804	803	802	830	868	846	847
services to shipping	Employees	11,224	11,795	11,881	10,819	12,043	12,997	13,419	12,689	13,529
scrvices to simpling	Payroll	509,953	629,541	591,510	584,689	699,375	756,552	847,938	826,384	937,980
Port & harbor	Establishments	212	223	234	244	229	223	268	258	287
operations	Employees	6,304	6,413	6,888	7,453	7,002	6,573	5,608	5,100	4,844
operations	Payroll	245,979	279,970	300,692	319,338	323,554	318,608	282,671	250,358	290,467
Chin 0, hoot	Establishments	1,736	1,739	1,793	1,799	1,764	1,771	1,782	1,615	1,540
Ship & boat building	Employees	131,292	133,395	137,633	141,620	142,057	148,864	157,512	137,759	127,691
Dullullig	Payroll	5,111,708	5,119,596	5,499,783	5,654,818	5,877,830	6,405,570	7,269,306	6,674,187	6,529,523

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



Regional Summary North Pacific

Management Context

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

North Pacific Fishery Management Plans

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

Of the stocks or stock complexes covered in these fishery management plans, none are currently listed as overfished. No stocks in this region are currently subject to overfishing. The North Pacific Region has nine 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) American Fisherie Act (Bering Sea) pollock cooperatives: 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 cooperatives; 7) Non-Pollock Trawl Catcher/Processor Groundfish (Amendment 80); 8) Freezer Longline Cooperatives; and 9) Bering Sea Chinook Salmon Bycatch. The landings revenues for these nine programs totaled over \$907 million in 2010, which exceeds the total landings revenue of any other state.

A management measure that is unique to Alaska is the western Alaska Community Development Quota (CDQ) program. 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 2011, 180 million pounds of pollock were caught under the BSAI CDQ program, with a value of approximately \$49 million.

Commercial Fisheries

North Pacific fishermen earned over \$1.9 billion from their commercial harvest (5.3 billion pounds) in 2011. Landings revenue was dominated by salmon (\$565 million), walleye pollock (\$363 million), crab (\$249 million), and Pacific cod (\$210 million). Walleye pollock contributed the most to landings in 2011, accounting for 53% of total landings (2.8 billion pounds) and 19% of landings revenue, with an average annual price of \$0.13 per pound. In contrast, salmon accounted for 14% of total landings (738 million pounds) and generated 30% of landings revenue, with an average annual price of \$0.77 per pound in 2011.

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 \$4.7 billion in sales impacts, \$2 billion in income impacts, and over 63,000 jobs in 2011. Seafood processing and dealer operations contributed 26% to in-state sales for Alaskan businesses, with over \$1.2 billion generated in 2011. 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 2011.

Key North Pacific Commercial Species

- Atka mackerel
- Pacific herring
- Pacific cod
- Rockfish

• Crab

Sablefish

- - -
- Salmon
- FlatfishPacific halibut
- Walleye pollock

Landings Revenue

In 2011, landings revenue for finfish and shellfish totaled over \$1.9 billion, a 126% increase from total revenue generated in 2002. When adjusting for inflation, real landings revenue increased 57%. Landings revenue in 2011 was a 21% increase relative to 2010 (\$1.6 billion). Finfish and other catch contributed more than shellfish to the 2011 total, accounting for 86% or \$1.6 billion. This was a 136% increase (64% increase in real terms) from 2002 finfish revenue totals. Similarly, shellfish revenues increased 79%

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)

North Pacific Regional Summary

(24% increase in real terms) from \$146 million in 2002 to \$263 million in 2011. The largest changes in landings revenue between 2002 and 2011 were for Atka mackerel (831% increase), salmon (335% increase), and flatfish (178% increase).

Commercial Fisheries Facts

Landings revenue

- On average, the key species or species groups account for 99% of total revenue, (\$1.9 billion) generated in the North Pacific Region.
- <u>Salmon</u> contributed more than any other species or species group, averaging \$325 million in landings revenue from 2002 to 2011.
- 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 52% from \$273 million in 2008 to \$131 million in 2009.

Landings

- Key species or species groups contributed an average of 99% annually to total landings between 2002 and 2011.
- Walleye pollock, contributed the most to landings in the region, averaging 2.9 billion pounds from 2002 to 2011.
- Walleye pollock had the largest one-year increase in landings over the 10 year time period, increasing 44% from 1.9 billion pounds in 2010 to 2.8 billion pounds in 2011.
- Salmon had the largest one-year decrease in landings over the 10 year time period, decreasing 27% from 872 million pounds in 2005 to 634 million pounds in 2006.

Prices

- Sablefish had the highest average annual ex-vessel price per pound (\$2.96) over the time period, followed by Pacific halibut (\$2.85), and crab (\$2.47).
- Walleye pollock had the lowest average annual ex-vessel price per pound (\$0.10) over the time period, followed by Atka mackerel (\$0.12), 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 52% from \$0.55 per pound in 2008 to \$0.27 in 2009.

Landings

In 2011, North Pacific commercial fishermen landed 5.3 billion pounds of finfish and shellfish, a 5% increase from 2002 totals. Finfish and catch other than shellfish accounted for 98% of this total (5.2 billion) and increased 4.7% from 2002 (5 billion pounds) and increased 24% from 2010 (4.2 billion pounds). Shellfish landings in 2011 increased 35% from 63 million pounds in 2002

to 85 million pounds in 2011. Between 2010 and 2011, shellfish landings increased 0.2%. Overall, an average of 5 billion pounds were landed annually in the North Pacific from 2002 to 2011, 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 53% of total landings in 2011 (2.8 billion pounds). Landings of salmon (738 million pounds), Pacific cod (663 million pounds), and flatfish (650 million pounds) also significantly contributed to the total landings.

Relative to 2002, landings of flatfish, Pacific herring, and salmon in 2011 increased more than any other key species or group, increasing 128%, 41.1%, and 41.1% respectively. In contrast, the largest decreases between 2002 and 2011 were experienced by Pacific halibut (47%) and walleye pollock (16%).

Prices

In all, 2011 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 2011 ex-vessel prices to those in 2002 the largest changes occurred in Atka mackerel (588% increase, 378% increase in real terms), salmon (208% increase, 114% increase in real terms), Pacific halibut (200% increase, 109% increase in real terms), and sablefish (159% increase, 80% increase in real terms). Relative to ex-vessel prices in 2010 the largest changes in the ex-vessel values were for Pacific herring (41% decrease, 46% decrease in real terms), Pacific halibut (36% increase, 25% increase in real terms), sablefish (31% increase, 21% increase in real terms), and crab (30% increase, 20% increase in real terms),

Recreational Fisheries

Recreational fishermen spent approximately 811,000 days fishing in Alaska in 2011. These anglers numbered over 286,000, with 56% of them non-residents. Pacific halibut was the most caught species or species group, with approximately 705,000 harvested or released in 2011. Coho salmon and razor clam were also caught in large numbers, with 474,000 and 436,000 caught, respectively. Together, these three species accounted for 64% of total catch by anglers in the North Pacific Region.

Economic Impacts and Expenditures¹

In 2011, approximately 6,300 jobs in the North Pacific were generated by recreational fishing activities and over \$446 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 (2,600 jobs) or a private boat (2,400). These fishing trip modes also generated the most in trip-related expenditures: \$138 million for for-hire fishing trips (44% of total trip expenditures) and \$165 million for private boat trips (52% of total trip expenditures). Over 87% of total trip-related expenditures in Alaska came from non-resident anglers.

¹Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2006, available at:http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006)

Regional Summary North Pacific

Key North Pacific Recreational Species

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

In addition to jobs generated by recreational fishing activities, other economic impacts include sales impacts and the contribution of recreational fishing activities to gross domestic product (value added impacts). For-hire fishing trips generated \$209 million in sales (46% of total trip-related sales) and \$116 million in value added impacts (46% of total trip-related value added impacts) in 2011. Private boat trips contributed \$233 million in sales (51%) and \$125 million (50%) in value added impacts. Shore-based fishing trips contributed \$18 million in trip-related sales (3.9%) and \$9.8 million in trip-related value added impacts (3.9%).

Anglers spent over \$129 million on durable equipment in 2011, contributing 29% to total expenditures in the region (trip and durable equipment combined). Most of this was spent on boat expenses (\$81 million). Expenditures related to vehicles were \$1.9 million; second home expenses, \$2.15 million; other equipment, \$20.4 million; and fishing tackle, \$23 million.

Economic impacts from durable equipment expenditures in 2011 include over 1,000 jobs, \$98 million in sales impacts, and \$67 million in value added impacts. These impacts represented 16% of the employment impacts, 18% of the sales impacts, 24% of the income impacts, and 21% of the value added impacts generated by recreational fishing activities.

Participation

In 2011, there were 286,000 recreational saltwater anglers who fished in Alaska. This was an 4% increase from 2002 (275,000 anglers) and a 1.8% increase from 2010 (281,000 anglers). Recreational fishermen in Alaska are categorized as either a resident of Alaska or a non-resident. In 2011, non-resident anglers made up 56% of total anglers (161,000 anglers). There was no change in number of anglers from 2002 and a 1.5% increase from 2010 (159,000 anglers). In terms of resident anglers, there were 124,000 resident anglers who fished in the North Pacific Region in 2011, which was a 10% increase from 2002 and a 2.2% increase from 2010.

Days Fished¹

Anglers who fished in Alaska spent approximately 811,000 days fishing in 2011. This was a 5.1% decrease from the 855,000 days spent fishing in 2002. From 2010 to 2011, there was a 0.1% increase in the number of days fished (811,000 days) in 2010.

Harvest and Release

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

recreational fishermen. In 2011, 705,000 Pacific halibut, 474,000 coho salmon, and 436,000 razor clam were caught by anglers in Alaska. Razor clam (100% harvested), coho salmon (81%), and sockeye salmon (76%) were more often harvested than released, while pink salmon were more often released (65% released).

Recreational Fish Facts

Participation

- An average of 304,000 anglers fished in North Pacific annually between 2002 to 2011.
- In 2011, residents made up 44% of total anglers 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 925,000 days fishing annually in Alaska from 2002 to 2011.
- 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 11% decrease from 914,000 days in 2009 to 811,000 days in 2010.

Harvest and release

- <u>Pacific halibut</u> was the most commonly caught key species or species group, averaging 789,000 fish caught over the 10 year time period. Of these, 43% were 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).
- Chum salmon had the largest annual increase in catch, increasing 98% from 2010 to 2011. Pink salmon had the largest annual decrease in catch, decreasing 53% from 2005 to 2006.

Between 2002 and 2011, five of the North Pacific's key species or groups experienced increases in catch totals. Those with the largest increases include: chum salmon (32%), rockfish (30%), and Pacific halibut (21%). Over the same time period, decreases were experienced by chinook salmon (6%) and coho salmon (25%).

In the short term, the largest increases were experienced bychum salmon and chinook salmon from 2010 to 2011. Decreases over the same time period occurred in two species or species groups, the largest of which were experienced by rockfish (11%) and greenlings (lingcod) (4%). The dramatic changes in pink salmon catch between 2010 and 2011 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 255,000 full- and part-time employees were employed by 20,000 establishments in 2010. Annual payroll totaled \$12 billion, employee compensation totaled \$24 billion and gross state product totaled \$48 billion. The Bureau of Labor Statistics did not disclose CFLQ data for Alaska for 2010.

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 24% from

25 firms in 2002 to 31 firms in 2010. Despite this, annual receipts decreased 32% to \$1.5 million in 2010 (a 49% 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 55 establishments in 2010. This was a 139% increase relative to 2002 totals.

¹Information for 2010 is reported in this section; 2011 data were not available for this report.

Commercial Fisheries Alaska

2011 Economic Impacts of the Alaska Seafood Industry (thousands of dollars)

		With Imports		Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added	
Total Impacts	63,295	4,684,638	2,493,124	62,972	4,655,932	2,478,543	
Commercial Harvesters	44,713	3,276,246	1,732,120	44,713	3,276,246	1,732,120	
Seafood Processors & Dealers	14,689	1,198,307	648,337	14,387	1,174,056	635,207	
Importers	14	3,986	1,215	0	0	0	
Seafood Wholesalers & Distributors	431	45,647	20,409	428	45,370	20,285	
Retail	3,448	160,453	91,044	3,444	160,260	90,931	

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

0		•	_	,	. , .		• (,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Revenue	844,763	1,026,015	1,161,519	1,259,540	1,323,872	1,465,810	1,668,448	1,301,661	1,583,681	1,911,540
Finfish & other	698,310	851,572	996,113	1,100,155	1,199,905	1,284,964	1,416,810	1,108,427	1,381,821	1,648,941
Shellfish	146,453	174,443	165,406	159,385	123,967	180,846	251,638	193,234	201,860	262,599
Atka mackerel	2,525	3,022	10,795	14,893	15,703	14,253	19,523	26,732	27,523	23,499
Pacific cod	107,188	162,397	142,905	150,537	210,282	223,209	272,669	130,755	144,775	209,908
Crab	139,828	165,834	153,430	146,131	110,572	168,195	240,747	180,264	189,553	248,693
Flatfish	40,665	39,945	41,325	61,923	71,107	76,014	95,912	71,235	80,312	113,150
Pacific halibut	128,922	165,906	168,658	170,075	192,905	217,399	208,983	134,603	200,454	205,211
Pacific herring	9,139	8,930	14,029	13,429	7,455	14,817	22,912	29,294	23,026	12,305
Rockfish	6,461	7,968	6,582	5,663	7,237	7,082	7,854	7,599	9,099	6,927
Sablefish	65,314	84,166	81,923	81,393	86,035	85,520	94,590	88,750	101,596	143,309
Salmon	129,902	168,093	255,000	293,562	276,513	347,625	368,218	344,655	505,693	564,788
Walleye pollock	203,263	203,018	271,612	306,906	329,879	297,460	323,212	270,595	282,399	362,592

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Landings	5,019,820	5,276,714	5,306,169	5,610,287	5,373,085	5,253,164	4,471,034	4,005,498	4,275,477	5,272,554
Finfish & other	4,957,262	5,214,835	5,247,370	5,545,864	5,299,194	5,177,143	4,366,531	3,910,859	4,190,949	5,187,877
Shellfish	62,558	61,879	58,799	64,423	73,891	76,021	104,503	94,639	84,528	84,677
Atka mackerel	83,244	99,542	108,423	129,482	130,814	126,961	127,029	156,887	145,206	112,596
Pacific cod	509,574	568,660	583,747	547,849	520,955	488,496	494,429	490,568	538,201	662,976
Crab	57,879	56,956	52,434	57,310	69,002	70,700	99,445	89,532	79,875	80,463
Flatfish	284,767	290,926	270,675	341,699	383,194	423,338	599,882	506,393	564,170	649,689
Pacific halibut	77,939	76,616	76,558	73,922	69,154	67,242	64,639	57,749	54,857	41,291
Pacific herring	69,858	68,984	70,893	85,701	79,845	67,137	83,787	86,951	108,116	98,600
Rockfish	22,907	26,465	23,197	22,694	23,308	24,424	25,725	24,974	28,626	25,441
Sablefish	32,057	35,794	39,946	37,554	33,124	32,254	30,336	27,004	25,263	27,139
Salmon	523,057	630,527	697,897	872,318	634,227	861,254	640,070	671,181	756,826	738,122
Walleye pollock	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	2,810,787

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

Average Aimaa	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atka mackerel	0.03	0.03	0.10	0.12	0.12	0.11	0.15	0.17	0.19	0.21
Pacific cod	0.21	0.29	0.24	0.27	0.40	0.46	0.55	0.27	0.27	0.32
Crab	2.42	2.91	2.93	2.55	1.60	2.38	2.42	2.01	2.37	3.09
Flatfish	0.14	0.14	0.15	0.18	0.19	0.18	0.16	0.14	0.14	0.17
Pacific halibut	1.65	2.17	2.20	2.30	2.79	3.23	3.23	2.33	3.65	4.97
Pacific herring	0.13	0.13	0.20	0.16	0.09	0.22	0.27	0.34	0.21	0.12
Rockfish	0.28	0.30	0.28	0.25	0.31	0.29	0.31	0.30	0.32	0.27
Sablefish	2.04	2.35	2.05	2.17	2.60	2.65	3.12	3.29	4.02	5.28
Salmon	0.25	0.27	0.37	0.34	0.44	0.40	0.58	0.51	0.67	0.77
Walleye pollock	0.06	0.06	0.08	0.09	0.10	0.10	0.14	0.15	0.15	0.13

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)¹

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	2,620	209,409	67,137	116,039
Private Boat	2,439	232,717	73,798	125,417
Shore	201	18,027	5,887	9,821
Total Durable Equipment Impacts	1,030	97,805	45,694	66,574
Total State Trip and Durable Equipment Economic Impacts	6,291	557,958	192,517	317,852

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	23,279
For-Hire	118,820	19,267	Other Equipment	20,448
Private Boat	145,444	19,486	Boat Expenses	81,477
Shore	9,396	3,904	Vehicle Expenses	1,865
Total Trip Expenditures	273,660	42,658	Second Home Expenses	2,150
			Total Durable Equipment Expenditures	129,219
Total State Trip and Dura	445,537			

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Out of State	162	170	193	207	197	205	190	158	159	161
In State	113	129	130	127	120	127	119	127	122	124
Total Anglers	275	299	323	334	317	332	309	284	281	286

Recreational Fishing Effort by Mode (thousands of days)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Days Fished	855	868	1,007	1,054	941	1,052	935	914	811	811

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

Turvest (11) and 1		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Chinook salmon	Н	89	96	110	116	117	110	71	89	78	85
CHIHOOK Saimon	R	104	105	124	127	104	110	80	96	66	95
Chum salmon	Н	14	23	24	17	14	18	12	22	11	21
Cituin Saimon	R	31	51	61	42	34	34	28	34	19	38
Coho salmon	Н	497	537	560	695	395	506	403	418	350	386
Cono sannon	R	136	156	193	191	107	122	89	94	74	88
Greenlings	Н	20	22	31	38	35	42	37	32	32	33
(lingcod)	R	43	44	52	67	53	70	65	46	39	36
Pacific halibut	Н	351	403	483	500	463	585	516	440	398	394
r acine nanbut	R	233	290	369	380	353	438	359	321	304	311
Pink salmon	Н	114	111	132	149	65	133	88	117	82	72
T IIIK Saililoii	R	194	291	297	343	167	280	151	224	121	135
Razor clam	Н	789	590	551	451	483	389	593	556	357	436
Nazor Clain	R	0	0	0	0	0	0	0	0	0	0
Rockfish	Н	120	118	180	184	173	198	226	209	224	211
NOCKIISII	R	135	132	227	199	165	178	171	149	151	122
Sockeye salmon	Н	24	29	24	27	21	32	29	34	28	31
Jockeye Saimon	R	14	14	10	11	7	21	10	10	6	10

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

²Information 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

 $^{^{3}}$ In this table, '(1)' = 0-999 fish.

Alaska's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	18,856 (0.26%)	213,600 (0.19%)	8,439 (0.21%)	15,236 (0.27%)	28,894 (0.25%)	ND^{23}
2010	19,985 (0.27%)	254,734 (0.23%)	12,821 (0.26%)	23,569 (0.33%)	47,713 (0.3%)	2
% change	5.99%	19.3%	51.9%	54.7%	65.1%	

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	25	34	26	17	22	33	31	32	31
prep. & packaging	Receipts	2,140	1,864	1,731	1,315	1,055	1,837	1,455	1,699	1,455
Seafood Sales,	Firms	0	16	0	11	12	12	13	0	13
retail	Receipts	ND^2	625	ND^2	752	649	1,358	1,431	ND^2	1,431

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	105	109	113	124	113	114	122	121	119
prep. & packaging	Employees	ND^2	6,493	6,749	6,621	6,866	6,506	7,707	7,572	8,074
prep. & packaging	Payroll	ND^2	205,702	216,599	235,457	246,067	262,127	254,894	121	268,208
Seafood sales,	Establishments	99	90	93	88	77	68	57	54	52
wholesale	Employees	179	228	187	177	224	167	143	ND^2	ND^2
Wilolesale	Payroll	10,232	7,103	7,561	7,928	8,509	8,528	8,389	8,445	9,141
Seafood sales,	Establishments	12	8	6	11	7	7	9	10	10
retail	Employees	37	21	ND^2	22	ND^2	ND^2	37	44	ND^2
i Ctuli	Payroll	1,669	1,340	ND^2	1,175	ND^2	ND^2	1,839	1,824	1,986

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

, , , , , , , , , , , , , , , , , , , ,		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	23	30	30	43	46	46	49	50	55
Lakes freight	Employees	ND^2	ND^2							
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	27,357	33,888	33,132	ND^2
D	Establishments	10	5	4	5	5	3	3	3	3
Deep sea freight transportation	Employees	ND^2	ND^2							
transportation	Payroll	ND^2	ND^2							
Daan aaa maaaan mar	Establishments	NA^4	NA^3	1	1	1	6	1	1	NA^3
Deep sea passenger transportation	Employees	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3
transportation	Payroll	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3
	Establishments	22	22	22	22	21	13	14	13	14
Marinas	Employees	101	ND^2	62	71	ND^2	48	66	56	ND^2
	Payroll	3,625	ND^2	2,367	2,612	ND^2	1,763	2,303	2,181	1,932
Marine cargo	Establishments	16	15	13	13	11	17	12	13	13
handling	Employees	ND^2	621	488	703	503	677	ND^2	ND^2	ND^2
nanuing	Payroll	ND^2	20,443	21,078	20,827	22,876	35,345	ND^2	ND^2	ND^2
Nevimetianal	Establishments	25	28	29	32	31	31	25	23	25
Navigational services to shipping	Employees	271	273	280	318	ND^2	ND^2	296	312	303
services to shipping	Payroll	19,251	20,758	20,676	20,334	ND^2	25,058	23,233	25,630	27,543
Port & harbor	Establishments	4	2	3	2	2	2	7	50 ND ² 33,132 3 ND ² ND ² 1 ND ² 13 56 2,181 13 ND ² ND ² 23 312	9
operations	Employees	ND^2	ND^2							
operations	Payroll	ND^2	ND^2							
Ship & boat	Establishments	12	10	14	14	17	16	17	21	22
building	Employees	ND^2	ND^2	286	ND^2	ND^2	ND^2	ND^2		ND^2
Dunumg	Payroll	ND^2	ND^2	8,815	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.

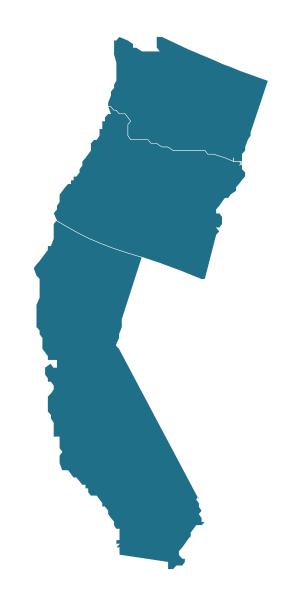
 $^{^2\}mathrm{ND} = \mathrm{these} \ \mathrm{data} \ \mathrm{are} \ \mathrm{confidential} \ \mathrm{thus} \ \mathrm{not} \ \mathrm{disclosable}$

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

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

Pacific

- California
- OregonWashington



Regional Summary Pacific Region

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, five are currently listed as overfished: canary rockfish, Chinook salmon, cowcod, pacific ocean perch, and yelloweye rockfish. No stocks in this region are currently subject to overfishing. 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 2011, commercial fishermen in the Pacific Region landed roughly 1.2 billion pounds of finfish and shellfish, earning \$710 million in landings revenue. Landings revenue was dominated by crab (\$182 million) and other shellfish (\$162 million). These species groups commanded ex-vessel prices of \$2.74 and \$5.78 per pound, respectively, and comprised 48% of total landings revenue, but only 8% of total landings in the Pacific Region.

Washington had the highest landings revenue in the region with \$331 million in 2011, followed by California (\$201 million) and Oregon (\$148 million). In terms of pounds landed, California contributed the most (408 million pounds), followed by Oregon (275 million pounds) and Washington (211 million pounds).

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

Pacific Region Regional Summary

Key Pacific Region Commercial Species

- Albacore tuna
- Crab
- Flatfish
- Hake
- Other shellfish
- Rockfish
- Sablefish
- Salmon
- Jaiiiioi
- Shrimp
- Squid

Economic Impacts¹

In 2011, the Pacific Region's seafood industry generated \$20 billion in sales impacts in California, \$1.4 billion in sales impacts in Oregon, and \$8 billion in sales impacts in Washington. California also generated the largest income, value added, and employment impacts (\$4.3 billion; \$7.2 billion; 122,000 jobs). The smallest income impacts were generated in Oregon (\$443 million) and the smallest employment impacts were also generated in Oregon (19,000 jobs).

The sector that generated the greatest employment impacts in California was the importers sector (55,000 jobs) followed by the retail sector with 48,000 jobs. In Washington, the retail sector generated the largest employment impacts and contributed 23,500 jobs to the state economy. In Oregon, the retail sector generated the larges employment impacts, 9,400 jobs, followed by the commercial harvest sector with 5,100 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 (26%) 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 \$710 million in 2011. This was a 81% increase (a 25% increase in real terms) from 2002 levels (\$394 million) and a 28% increase (a 18% increase in real terms) relative to 2010 (\$554 million). Totaling \$450 million in 2011, shellfish revenue experienced a 78% increase (a 24% increase in real terms) from 2002 to 2011 and experienced a 28% increase (18% increase in real terms) from 2010 to 2011.

Hake and squid had the highest annual landings in the Pacific Region in 2011, with 496 million pounds and 268 million pounds, respectively. Although they together accounted for 65% of the total landings in the Pacific Region, they only accounted for 17% of the total landings revenue generated in 2011.

Commercial Fisheries Facts

Landings revenue

- On average, between 2002 and 2011, the key species or species groups accounted for 92% of total revenue, generating \$446 million in the Pacific Region.
- <u>Crab</u> had higher landings revenues than any other species or species group, averaging \$123 million in landings revenue from 2002 to 2011.
- <u>Squid</u> had the largest one-year increase in landings revenue over the 10 year time period, increasing 114% from \$27 million in 2008 to \$57 million in 2009.
- 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 75% annually to total landings between 2002 and 2011.
- Hake (whiting), contributed the most to landings in the region, averaging 429 million pounds from 2002 to 2011.
- Squid had the largest one-year increase in landings over the 10 year time period, increasing 141% from 85 million in 2008 pounds to 206 million pounds in 2009.
- Shrimp 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 (\$4.04) over the time period, followed by crab (\$1.99), and sablefish (\$1.91).
- Hake (whiting) had the lowest average annual ex-vessel price per pound (\$0.07) over the time period, followed by squid (\$0.25), and flatfish (\$0.41).
- <u>Squid</u> had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 136% from \$0.11 per pound in 2002 to \$0.26 in 2003.
- Salmon 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 2002 and 2011, the greatest changes in landings were experienced by hake (increasing 74%), squid (increasing 67%), and sablefish (increasing 63%). In the short term, between 2010 and 2011 the largest changes were experienced by shrimp (increasing 44%), hake (increasing 40%), and salmon (increasing 36%). In terms of finfish, Washington contributed the most (\$99 million) followed by Oregon (\$77 million), and California (\$56 million). Shellfish landings revenue was also dominated by Washington, which contributed the most (\$233 million) followed by California (\$146 million), and Oregon (\$72 million).

Crab and other shellfish had the highest landings revenue in the Pacific Region in 2011, with \$182 million and \$162 million, respectively. Together they accounted for 48% of the total landings revenue generated in 2011. Between 2002 and 2011, the landings revenue for crab increased 149% and increased 84%

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)

Regional Summary Pacific Region

for other shellfish.

From 2002 to 2011, species or species groups with large changes in landings revenue include hake (increased 289%), squid (increased 265%), and sablefish (increased 264%). Species or species groups with large changes in landings revenue between 2010 and 2011 include hake (increasing 94%), shrimp (increasing 85%), and albacore tuna (increasing 50%).

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 1.2 billion pounds of finfish and shellfish in 2011. This was a 7.6% increase from the 1.1 billion pounds landed in 2002 and a 11% increase from the 1.1 billion landed in 2010. Finfish landings contributed 64% of total landings in the Pacific Region (757 million pounds) in 2011. From 2010 to 2011, finfish landings experienced a 16% increase. Over the same time period, shellfish landings experienced a 1.5% increase from 413 million pounds in 2010 to 419 million in 2011 and a 38% increase from 303 million pounds in 2002.

Prices

The ex-vessel prices for the Pacific Region's key species and species groups in 2011 were higher than their 10 year average for nine of the key species (five of the species in real terms). Ex-vessel prices for albacore tuna and squid experienced the biggest increases between 2002 and 2011, increasing 170% (90% in real terms) and 130% (58% in real terms), respectively. Relative to the ex-vessel prices in 2010, the Pacific Region's albacore tuna experienced the greatest increase (57.5%, 45.3% in real terms) from \$1.13 in 2010 to \$1.78 in 2011; salmon experienced the greatest decrease (20%, 26% in real terms) from \$1.6 to \$1.28.

In California, the species or species group with the largest change in ex-vessel price from 2002 to 2011 was salmon (236% increase, 133% increase in real terms) from \$1.34 to \$4.50. The largest change in ex-vessel price experienced in Oregon was for Albacore tuna (185% increase, 98% increase in real terms from \$0.68 to \$1.94 and in Washington the largest change in ex-vessel price was experienced by tuna, albacore (167% increase, 85% increase in real terms from \$0.63 to \$1.68).

Recreational Fishing

In 2011, over 1.5 million recreational anglers took 6.1 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, 27% of them were taken from a private or rental boat and another 62% were shore-based.

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 7,700 full- and part-time employment impacts generated by recreational fishing activities in the state. Washington (4,900 jobs), and Oregon (3,100 jobs) followed in terms of employment impacts generated by recreational fishing activities.

Key Pacific Region Recreational Species

- Albacore and other tunas
- Barracuda, bass and bonito
- Croakers
- Flatfishes
- Greenlings

- Mackerel
- Rockfishes and scorpionfishes
- Salmon
- Sculpins
- Surfperches

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 2011, sales impacts were also the highest in California (\$1 billion in sales impacts), followed by Washington (\$514 million), and Oregon (\$370 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 2011 were generated by expenditures on durable equipment: 73% in Oregon, 72% in Washington, and 35% in California. In the same year value added impacts were the highest in California (\$551 million in value added impacts), followed by Washington (\$275 million), and Oregon (\$201 million).

¹Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2006, available at:http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006)

Pacific Region Regional Summary

Recreational Fishing Facts

Participation

- An average of 1.6 million anglers fished in Pacific Region annually from 2002 to 2011.
- In 2011, 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 6.7 million fishing trips were taken annually from 2002 to 2011.
- Private or rental boat and shore-based fishing trips accounted for 1.7 million and 3.8 million fishing trips, respectively, in 2011. Together these made up 89% 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

- Albacore and other tunas was the most commonly caught key species or species group, averaging 99,000 fish over the 9 year time period. Of these, NA% were released rather than harvested.
- Of the ten commonly caught key species or species groups, six were released more often than harvested over this time period. The species or species group that was most commonly released was sculpins (76% released).
- Albacore and other tunas (84% harvested), followed by rockfishes and scorpionfishes (75% harvested), and salmon (73% 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 \$1.7 billion across the Pacific Region in 2011. Approximately 66% of these expenditures were related to durable equipment purchases. The greatest expenditures were for boat expenses (\$573 million), followed by fishing tackle (\$242 million), and vehicle expenses (\$174 million). Fishing trip related expenditures by Pacific Region's non-residents totaled over \$32 million of which the greatest portion can be attributed to for-hire-based fishing trips (\$22 million). Residents of the Pacific Region spent \$536 million on trip-related expenses with the majority of these expenses related to shore trips (\$242 million).

There were 1.5 million recreational anglers who fished in the Pacific Region in 2011. This was a 28% decrease from 2002 (2 million anglers). These anglers were Pacific Region residents from either a coastal (1.1 million anglers) or non-coastal county (390,000 anglers). Over 73% of total anglers in 2011 were residents of a coastal county. Coastal county angler participation in 2011 experienced a 27% decrease relative to 2002 (1.5 million anglers) and experienced a 2.1% increase between 2010 and 2011. Non-coastal county angler participation experienced a 30% decrease relative to 2002 (559,000 anglers) and experienced a 1.6% increase relative to 2010 (384,000 anglers).

Fishing Trips

Recreational fishermen took 6.1 million fishing trips in the Pacific Region in 2011. This was a 25% decrease from 2002 (8.2 million trips) and was 479,000 more trips than were taken in 2010. Of the total trips taken in the Pacific Region in 2011, approximately 62% of the trips were shore based (3.8 million trips). The other most popular mode of fishing was private or rental boat based with 1.7 million trips in 2011.

Harvest and Release

Harvest and release estimates were not available for the Pacific Region in 2010 and 2011.

Marine Economy¹

The sum of the gross domestic products by state for California, Oregon, and Washington was \$2.4 trillion in 2010. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$801 billion. These economic measures experienced increases of 38%, 30%, and 26% respectively, between 2002 and 2010, and experienced a 3% increase, a 1.9% increase, and a 2% increase, respectively between 2009 and 2010. Approximately 1.1 million establishments employed 16 million full- and part-time employees across the region in 2010. This was a 4.1% increase in establishment numbers and a 1% decrease in employee numbers from 2002 to 2010. In 2010, California had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the Pacific Region. California's approximately 850,000 establishments employed approximately 13 million employees in 2010. Gross state product in California was \$1.9 trillion, followed by Washington (\$340 billion) and Oregon (\$185 billion).

In 2010, the commercial fishing location quotient (CFLQ) for Washington was the highest in the region at 12.2. This was an 5.4% decrease from 2002 and a 6.4% decrease from 2009. Washington's CFLQ indicates that the level of employment in commercial fishing-related industries in this state is approximately 12 times higher than the level of employment in these industries nationwide. The 2010 CFLQ in Oregon was 3.39 (a 0.9% increase from 2002 and a 6.4% decrease from 2009), while the 2010 CFLQ in California was 0.66 (a 27% decrease from 2002 and a 5.7% decrease from 2009).

Seafood Sales and Processing

Participation

Information for 2010 is reported in this section; 2011 data were not available for this report.

Regional Summary Pacific Region

In 2010, there were 202 nonemployer firms engaged in seafood product preparation and packaging across the Pacific Region. In 2010, 69% of these firms were located in California. Region-wide, annual receipts totaled \$18 million in 2010. Annual receipt totals experienced a 87% 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 14% from 188 in 2002 to 162 in 2010. Approximately 57% of these establishments were located in Washington. The numbers of employees in these industries also decreased across the region, decreasing 27% to approximately 7,900 full- and part-time workers in 2010, despite an annual payroll increase of 5.9% to \$344 million.

There were 441 seafood wholesale establishments in 2010. The number of employees was not available at the region level. From 2002 to 2010, the number of seafood wholesale establishments decreased 19% across the Pacific Region.

Nonemployer firms engaged in seafood retail in the Pacific Region totaled 259 in 2010, a 25% increase relative to 2002. Of these firms, 81% were located in California. At the state level, these firms increased 10% in Washington and increased 27% in California between 2002 and 2010. Oregon experienced a 23% increase. Annual receipts from the nonemployer retail sector in the region totaled \$24 million in 2010 a 10% increase from 2002 (a 17% decrease in real terms) and a 17% increase from 2009 (a 12% increase in real terms).

Employer establishments engaged in seafood retail decreased 12% from 2002 to 2010, totaling 226 in 2010. These establishments employed 1,429 workers. Over 70% of these establishments were located in California. Region-wide, the numbers of employees in

the seafood retail sector increased 5.7% between 2002 and 2010. Across the states within the region, the largest change occurred in Oregon(26% increase). Annual payroll also increased across the Pacific Region, a 39% increase region-wide (4.8% increase in real terms), to \$35 million in 2010.

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 16,000 people in 2010. This industry also had the highest annual payroll in the region totaling \$775 million. Marinas had the highest number of establishments (417), followed by the ship and boat building industries with 303 establishments and the navigational services to shipping industries with 138 establishments. Of all of the industries, port and harbor operations had the fewest number of establishments (33).

In California, industries with large changes in establishment numbers, employees, or annual payroll from 2009 to 2010 were: deep sea passenger transportation (40% decrease in establishments), port and harbor operations (40% increase in payroll), deep sea freight transportation (32% increase in establishments) and port and harbor operations (26% increase in establishments). In Oregon, large changes were seen for port and harbor operations (200% increase in establishments), ship and boat building (54% decrease in payroll), ship and boat building (48% decrease in employees) and navigational services to shipping (24% decrease in establishments). In Washington, large changes were seen in the port and harbor operations (37% decrease in employees), deep sea freight transportation (31% decrease in employees), port and harbor operations (28% decrease in payroll) and coastal and Great Lakes freight transportation (25% increase in employees).

Pacific Commercial Fisheries

2011 Economic Impacts of the Pacific Region Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
California	122,074	20,053,619	7,168,389	15,330	1,141,093	590,691		
Oregon	18,562	1,351,116	633,483	15,183	798,937	442,848		
Washington	67,007	8,026,068	3,297,368	27,022	1,772,689	992,738		

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	393,571	423,244	440,474	414,584	471,788	459,772	500,447	491,183	553,909	710,495
Finfish & other	141,259	156,596	178,693	166,922	176,425	176,104	215,784	168,495	202,527	260,608
Shellfish	252,312	266,647	261,781	247,662	295,363	283,668	284,663	322,688	351,383	449,888
Albacore tuna	14,219	24,366	27,242	20,574	23,767	21,612	28,845	27,541	28,780	43,308
Crab	73,073	130,952	115,365	97,127	143,758	121,136	107,107	123,865	132,843	182,076
Flatfish	12,004	13,441	12,741	13,816	12,974	14,462	15,738	14,155	10,511	11,225
Hake (whiting)	13,576	17,150	21,819	29,139	34,425	32,603	58,492	14,104	27,316	52,869
Other shellfish	88,164	89,222	102,423	107,438	116,161	120,569	129,947	131,593	129,561	161,820
Rockfish	11,365	7,803	6,832	6,559	6,848	7,541	9,257	8,974	9,226	9,445
Sablefish	12,323	18,817	17,230	20,366	22,991	20,984	27,279	34,481	35,977	44,908
Salmon	26,170	30,773	47,676	37,188	34,306	33,865	26,992	24,986	48,986	53,424
Shrimp	82,634	28,175	30,586	15,706	12,433	17,298	25,132	16,594	21,941	40,662
Squid	18,260	25,340	19,748	31,516	26,998	29,169	26,585	56,928	71,173	66,578

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	1,092,377	993,985	1,138,763	1,301,649	1,169,906	1,109,222	1,091,673	897,222	1,063,491	1,175,506
Finfish & other	789,574	756,538	932,610	1,070,529	935,523	902,887	906,773	582,120	650,822	756,705
Shellfish	302,803	237,447	206,153	231,120	234,383	206,335	184,900	315,102	412,669	418,801
Albacore tuna	21,996	36,577	31,764	19,649	28,117	25,483	24,507	27,055	25,477	24,264
Crab	42,441	81,892	69,247	61,849	85,301	51,888	45,075	59,158	61,668	66,516
Flatfish	29,365	31,849	29,895	31,495	27,689	33,502	37,409	40,599	33,281	25,557
Hake (whiting)	285,547	309,300	474,460	569,273	558,078	454,533	531,277	253,053	355,216	496,363
Other shellfish	31,813	27,884	31,275	30,907	30,611	29,543	28,557	28,911	26,159	27,974
Rockfish	13,346	9,275	8,057	7,406	6,633	7,447	9,469	10,458	11,038	9,910
Sablefish	8,677	12,204	12,905	13,742	13,718	11,630	12,978	15,822	15,055	14,145
Salmon	38,077	39,234	40,609	27,249	29,172	24,600	19,040	33,742	30,693	41,792
Shrimp	81,909	38,997	29,422	26,069	20,290	26,497	35,799	33,456	46,191	66,687
Squid	160,669	99,115	88,215	123,090	108,561	109,464	85,200	205,643	288,678	268,078

riverage ruman rives or rest openies of outs (action per pound)											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Albacore tuna	0.65	0.67	0.86	1.05	0.85	0.85	1.18	1.02	1.13	1.78	
Crab	1.72	1.60	1.67	1.57	1.69	2.33	2.38	2.09	2.15	2.74	
Flatfish	0.41	0.42	0.43	0.44	0.47	0.43	0.42	0.35	0.32	0.44	
Hake (whiting)	0.05	0.06	0.05	0.05	0.06	0.07	0.11	0.06	0.08	0.11	
Other shellfish	2.77	3.20	3.27	3.48	3.79	4.08	4.55	4.55	4.95	5.78	
Rockfish	0.85	0.84	0.85	0.89	1.03	1.01	0.98	0.86	0.84	0.95	
Sablefish	1.42	1.54	1.34	1.48	1.68	1.80	2.10	2.18	2.39	3.17	
Salmon	0.69	0.78	1.17	1.36	1.18	1.38	1.42	0.74	1.60	1.28	
Shrimp	1.01	0.72	1.04	0.60	0.61	0.65	0.70	0.50	0.48	0.61	
Squid	0.11	0.26	0.22	0.26	0.25	0.27	0.31	0.28	0.25	0.25	

	Trips	Jobs	Sales	Income	Value Added
California	4,288,000	7,703	1,031,068	349,937	551,328
Oregon	655,000	3,147	370,032	136,881	200,835
Washington	1,162,000	4,939	514,088	175,209	275,425

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	241,763
For-Hire	22,458	116,120	Other Equipment	110,215
Private Boat	5,984	177,467	Boat Expenses	573,050
Shore	3,909	242,265	Vehicle Expenses	173,539
Total Trip Expenditures	32,351	535,850	Second Home Expenses	6,918
			Total Durable Equipment Expenditures	1,105,486
Total State Trip and Dura	ble Equipment Exp	enditures		1,673,687

Recreational Anglers by Residential Area (thousands of anglers)

	•		•		_ ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	1,463	1,437	1,168	1,028	1,257	1,184	1,065	1,136	1,047	1,069
Non-Coastal	559	538	429	409	481	379	385	638	384	390
Out-of-State	NA^1									
Total Anglers	2,022	1,975	1,597	1,437	1,738	1,563	1,450	1,774	1,431	1,459

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	695	619	649	624	635	605	514	492	455	654
Private Boat	3,990	4,247	1,752	1,849	1,761	1,828	1,421	1,471	1,432	1,659
Shore	3,507	3,445	4,255	3,962	4,548	3,818	3,846	4,345	3,739	3,792
Total Trips	8,192	8,311	6,656	6,435	6,944	6,251	5,781	6,308	5,626	6,105

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

· ,		. ,		•	•	•					
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Albacore & other	Н	116	168	80	23	45	106	51	80	NA	NA
tunas	R	6	83	10	2	4	7	0	13	NA	NA
Barracuda, bass &	Н	1,965	1,888	2,126	1,015	668	537	434	412	NA	NA
bonito	R	4,427	3,727	2,597	2,011	1,660	1,407	1,093	1,211	NA	NA
Croakers	Н	1,513	758	619	572	456	427	321	427	NA	NA
Cloakers	R	1,016	871	660	618	553	631	272	362	NA	NA
Flatfishes	Н	1,209	680	499	560	325	260	344	329	NA	NA
i latiisiles	R	2,061	948	343	513	520	338	361	297	NA	NA
Greenlings	Н	454	512	210	270	236	194	171	190	NA	NA
Greenings	R	958	858	342	281	207	151	139	192	NA	NA
Mackerel	Н	800	918	945	1,023	1,158	823	940	753	NA	NA
Mackerei	R	1,730	2,011	1,715	1,872	3,287	1,209	1,765	1,267	NA	NA
Rockfishes &	Н	2,736	3,624	2,413	3,433	2,504	2,256	1,842	1,990	NA	NA
scorpionfishes	R	930	1,664	750	1,148	730	513	465	687	NA	NA
Salmon	Н	598	853	744	494	275	505	131	916	NA	NA
Jaimon	R	244	314	386	171	127	177	45	235	NA	NA
Sculpins	Н	116	110	78	78	61	54	65	64	NA	NA
Sculpins	R	403	291	240	232	216	202	222	194	NA	NA
Surfperches	Н	829	1,143	1,301	949	1,168	865	836	756	NA	NA
Surrperches	R	728	1,175	1,556	1,237	1,670	856	812	701	NA	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

²Due 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.

California Commercial Fisheries

2011 Economic Impacts of the California Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	122,074	20,053,619	7,168,389	15,330	1,141,093	590,691		
Commercial Harvesters	4,253	405,059	204,131	4,253	405,059	204,131		
Seafood Processors & Dealers	4,597	472,985	232,721	1,749	181,719	89,410		
Importers	54,519	14,997,138	4,571,784	0	0	0		
Seafood Wholesalers & Distributors	10,793	1,545,962	700,537	601	86,121	39,025		
Retail	47,912	2,632,475	1,459,216	8,727	468,194	258,125		

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

The state of the s										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	111,923	136,152	140,615	116,084	129,907	127,580	120,861	150,752	176,252	201,269
Finfish & other	59,888	56,402	58,798	46,640	43,164	50,363	46,968	46,682	44,291	55,736
Shellfish	52,035	79,750	81,816	69,444	86,743	77,217	73,893	104,070	131,960	145,533
Crab	15,074	37,455	43,381	19,653	46,483	28,626	24,227	32,508	43,016	53,753
Pacific sardine	5,848	2,874	3,957	3,150	5,100	8,218	7,575	5,544	4,366	4,398
Rockfish	6,560	4,761	4,447	4,145	4,630	4,924	5,781	5,330	5,453	5,644
Sablefish	3,508	4,721	3,724	4,295	4,892	4,873	6,224	9,765	11,491	15,121
Salmon	7,611	12,153	17,770	12,804	5,261	7,835	6	ND^1	1,215	5,067
Sea urchins	10,411	7,906	7,300	6,156	5,145	5,400	6,550	7,806	7,413	8,101
Shrimp	5,901	3,520	3,783	4,338	4,213	4,064	5,696	5,462	4,951	8,626
Spiny lobster	4,784	5,278	6,160	6,039	8,111	6,916	8,008	7,934	11,386	12,971
Squid	18,259	25,333	19,740	31,467	26,959	29,131	26,477	56,877	71,165	66,567
Swordfish	6,401	7,850	4,834	1,896	2,695	3,127	2,365	1,932	2,203	3,348

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	499,676	382,146	379,591	442,353	341,661	384,826	323,884	374,795	437,847	408,181
Finfish & other	321,539	252,764	257,944	301,993	203,107	258,625	223,912	147,934	120,103	108,106
Shellfish	178,138	129,381	121,647	140,360	138,554	126,200	99,972	226,861	317,744	300,075
Crab	8,609	23,922	27,016	12,028	27,391	12,393	9,845	16,660	23,352	22,202
Pacific sardine	128,584	76,528	97,509	76,324	102,683	178,480	126,945	82,842	73,814	60,993
Rockfish	5,991	4,399	3,843	3,181	3,252	3,136	3,933	3,984	3,949	3,450
Sablefish	2,893	3,636	3,158	3,645	3,617	3,240	3,507	5,089	5,501	5,646
Salmon	5,661	7,328	7,113	4,962	1,184	1,743	1	ND^2	255	1,127
Sea urchins	14,176	11,107	12,219	11,304	10,664	11,131	10,283	12,205	11,230	11,464
Shrimp	5,867	3,498	3,520	2,944	1,197	2,015	3,011	3,596	4,522	8,217
Spiny lobster	702	736	860	761	886	663	741	706	716	751
Squid	160,665	99,088	88,167	122,887	108,410	109,150	84,071	205,278	288,497	267,985
Swordfish	3,803	4,706	2,613	653	1,187	1,210	1,168	898	815	1,364

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Crab	1.75	1.57	1.61	1.63	1.70	2.31	2.46	1.95	1.84	2.42
Pacific sardine	0.05	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.06	0.07
Rockfish	1.10	1.08	1.16	1.30	1.42	1.57	1.47	1.34	1.38	1.64
Sablefish	1.21	1.30	1.18	1.18	1.35	1.50	1.77	1.92	2.09	2.68
Salmon	1.34	1.66	2.50	2.58	4.44	4.50	4.16	ND^2	4.76	4.50
Sea urchins	0.73	0.71	0.60	0.54	0.48	0.49	0.64	0.64	0.66	0.71
Shrimp	1.01	1.01	1.07	1.47	3.52	2.02	1.89	1.52	1.09	1.05
Spiny lobster	6.81	7.18	7.16	7.93	9.15	10.44	10.80	11.24	15.91	17.27
Squid	0.11	0.26	0.22	0.26	0.25	0.27	0.31	0.28	0.25	0.25
Swordfish	1.68	1.67	1.85	2.90	2.27	2.58	2.03	2.15	2.70	2.45

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,672	181,394	60,457	103,522
Private Boat	783	104,944	32,639	55,982
Shore	2,527	291,961	96,312	159,266
Total Durable Equipment Impacts	2,721	452,768	160,528	232,558
Total State Trip and Durable Equipment Economic Impacts	7,703	1,031,068	349,937	551,328

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	137,287
For-Hire	19,794	93,189	Other Equipment	62,381
Private Boat	1,668	73,517	Boat Expenses	92,305
Shore	1,963	211,448	Vehicle Expenses	82,310
Total Trip Expenditures	23,425	378,153	Second Home Expenses	5,046
			Total Durable Equipment Expenditures	379,330
Total State Trip and Dura	ble Equipment Exp	enditures		780,908

Recreational Anglers by Residential Area (thousands of anglers)

	.				0 /					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	1110	1113	865	740	991	878	819	888	803	714
Non-Coastal	379	378	280	263	335	226	246	490	241	238
Out of State	111	115	98	79	109	65	83	71	69	93
Total Anglers	1600	1606	1243	1082	1435	1168	1148	1449	1113	1045

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

	_	•		_	. ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	569	483	521	504	522	489	424	385	357	560
Private	2,905	3,117	708	902	896	768	640	676	655	682
Shore	2,501	2,699	3,509	3,216	3,802	3,072	3,100	3,599	2,993	3,046
Total Trips	5,975	6,299	4,738	4,622	5,220	4,329	4,164	4,660	4,005	4,288

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

Trairest (T) and T		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Albacore & other	Н	107	146	49	6	9	22	5	13	NA	NA
tunas	R	6	83	10	2	3	7	(1)	13	NA	NA
Barracuda, bass &	Н	1,965	1,888	2,126	1,015	668	537	434	412	NA	NA
bonito ²	R	4,427	3,727	2,597	2,011	1,660	1,407	1,093	1,211	NA	NA
Croakers	Н	1,513	758	619	572	456	427	321	427	NA	NA
Cloakers	R	1,016	871	660	618	553	631	272	362	NA	NA
Flatfishes	Н	962	603	410	478	241	187	276	258	NA	NA
i latiisiles	R	1,844	850	295	465	471	292	313	241	NA	NA
Greenlings	Н	215	357	72	125	104	69	48	64	NA	NA
Greenings	R	641	717	239	179	113	67	53	83	NA	NA
Mackerel	Н	800	918	945	1,023	1,158	823	940	753	NA	NA
Mackerei	R	1,730	2,011	1,715	1,872	3,287	1,209	1,765	1,267	NA	NA
Rockfishes &	Н	2,116	3,035	1,778	2,725	1,891	1,674	1,318	1,383	NA	NA
scorpionfishes	R	844	1,621	701	1,058	668	456	402	605	NA	NA
Salmon	Н	201	109	256	167	119	59	(1)	1	NA	NA
Saimon	R	40	39	103	71	74	36	(1)	(1)	NA	NA
Sculpins	Н	60	70	41	39	25	19	29	27	NA	NA
Sculpins	R	184	140	98	87	74	58	78	50	NA	NA
Surfperches	Н	586	878	1,046	694	913	610	581	501	NA	NA
Jumperches	R	563	1,016	1,402	1,083	1,516	702	658	546	NA	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
2002	820,997 (11%)	12,856,426 (11%)	510,841 (13%)	786,803 (13%)	1,387,213 (13%)	0.9
2010	849,875 (11%)	12,536,402 (11%)	635,620 (13%)	1,010,410 (13%)	1,877,568 (13%)	0.66
% change	3.52%	-2.49%	24.4%	28.4%	35.3%	-18.9%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	70	77	98	88	91	121	139	156	139
prep. & packaging	Receipts	9,123	9,858	14,312	10,207	8,298	10,842	11,460	10,432	11,460
Seafood Sales,	Firms	165	192	193	166	163	222	210	200	210
retail	Receipts	18,225	19,771	19,092	16,892	19,875	19,703	19,892	17,047	19,892

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

	_			•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soafood product	Establishments	63	60	55	48	47	49	45	47	48
Seafood product prep. & packaging	Employees	3,357	2,896	2,931	2,963	2,592	2,229	2,024	2,167	1,820
prep. & packaging	Payroll	82,116	74,637	72,178	92,642	78,065	75,886	65,215	69,529	62,480
Seafood sales,	Establishments	334	269	263	258	252	300	278	289	314
wholesale	Employees	4,539	3,536	3,744	3,925	4,063	4,429	3,321	3,183	3,223
Wilolesale	Payroll	151,789	115,669	124,657	134,576	144,758	159,672	132,139	128,813	137,810
Soafood sales	Establishments	186	175	169	180	184	182	161	153	158
Seafood sales, – retail –	Employees	988	968	945	999	1,031	1,004	932	976	985
	Payroll	16,775	19,919	16,686	18,832	19,900	21,224	20,585	21,785	22,718

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

Transport, Suppor	-,	Employer Establishments			(thousands of dollars)					
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	31	22	20	26	22	29	28	30	25
Lakes freight	Employees	1,776	1,341	ND^2	1,346	ND^2	ND^2	ND^2	ND^2	554
transportation	Payroll	132,432	117,982	ND^2	129,262	ND^2	ND^2	ND^2	ND^2	30,431
Deep sea freight	Establishments	44	51	50	54	54	51	43	41	54
transportation	Employees	ND^2	902	901	ND^2	957	1,643	ND^2	ND^2	2,562
	Payroll	ND^2	62,417	69,815	ND^2	84,199	116,628	ND^2	ND^2	236,235
Doon soo nassangar	Establishments	11	14	15	15	16	13	5	5	3
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	1,552	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	72,119	ND^2	ND^2	ND^2	ND^2
	Establishments	248	263	271	263	268	276	277	276	270
Marinas	Employees	1,851	2,485	2,476	2,426	2,457	2,680	2,652	2,514	2,390
	Payroll	57,393	70,640	73,338	71,318	74,778	80,216	85,315	78,890	80,631
Marine cargo	Establishments	64	56	54	54	52	56	61	62	63
handling	Employees	15,274	15,557	20,456	19,303	20,975	22,395	22,086	17,428	18,449
Hallulling	Payroll	1,000,809	1,040,515	1,179,221	1,273,698	1,448,623	1,484,308	1,453,281	1,211,572	1,273,268
Navigational	Establishments	30	35	38	37	36	39	40	39	41
services to shipping	Employees	476	850	ND^2	ND^2	817	858	815	804	765
services to simpling	Payroll	28,197	53,162	ND^2	ND^2	63,893	63,610	65,225	61,720	58,899
Port & harbor	Establishments	23	19	20	20	20	18	17	19	21
operations	Employees	139	417	ND^2	ND^2	582	443	256	345	435
operations	Payroll	7,668	23,110	ND^2	ND^2	32,523	30,001	23,316	26,889	37,560
Shin & hoat	Establishments	145	141	143	141	132	136	136	123	117
Ship & boat building	Employees	7,782	8,574	8,865	10,132	9,801	9,250	11,630	10,483	9,720
building	Payroll	315,090	314,706	354,404	410,446	453,255	433,846	477,300	460,239	448,338

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

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

Commercial Fisheries Oregon

2011 Economic Impacts of the Oregon Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	18,562	1,351,116	633,483	15,183	798,937	442,848		
Commercial Harvesters	5,110	279,483	162,154	5,110	279,483	162,154		
Seafood Processors & Dealers	1,702	146,243	73,385	1,550	133,367	66,923		
Importers	1,636	450,066	137,200	0	0	0		
Seafood Wholesalers & Distributors	716	86,752	39,472	431	52,217	23,759		
Retail	9,399	388,572	221,272	8,093	333,870	190,011		

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

					, , ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	68,292	86,779	101,022	88,196	106,093	97,298	103,042	104,706	104,719	148,337
Finfish & other	32,073	40,889	49,634	53,192	46,326	47,589	56,912	52,749	58,730	76,698
Shellfish	36,218	45,890	51,388	35,005	59,767	49,709	46,130	51,957	45,990	71,639
Albacore tuna	2,952	6,169	9,145	8,815	8,067	9,468	10,666	10,191	12,425	18,748
Crab	20,767	37,122	42,960	26,603	53,810	38,208	29,168	42,413	32,757	44,702
Flatfish	5,156	6,632	6,460	7,281	7,547	7,930	9,163	8,468	6,861	6,780
Hake (whiting)	3,219	3,642	4,641	7,107	7,974	6,501	6,830	3,783	5,414	16,518
Oysters	3,143	3,292	3,292	1,232	1,163	1,847	2,748	2,253	1,658	1,869
Pacific sardine	2,819	2,941	4,870	6,199	3,743	4,551	5,665	5,291	5,252	3,192
Rockfish	3,511	2,327	1,633	1,387	1,564	2,002	2,610	2,500	2,520	2,473
Sablefish	4,405	7,381	6,935	8,657	9,787	9,494	13,737	15,919	15,069	17,351
Salmon	6,933	8,869	12,995	10,437	4,940	4,647	4,166	3,546	7,698	6,736
Shrimp	11,353	5,051	4,740	6,901	4,494	9,365	13,937	6,813	11,006	24,607

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

<u> </u>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	210,750	226,317	294,866	312,636	282,846	253,543	195,688	198,895	201,560	274,525
Finfish & other	155,609	180,788	254,330	278,646	236,998	216,134	155,837	154,147	153,588	208,436
Shellfish	55,140	45,529	40,536	33,990	45,848	37,410	39,851	44,747	47,972	66,089
Albacore tuna	4,362	9,165	10,754	8,087	8,534	10,468	8,876	10,082	10,703	9,673
Crab	12,452	23,934	27,276	17,734	33,291	17,007	13,875	21,848	15,817	17,242
Flatfish	11,489	14,372	14,846	16,910	16,385	19,697	23,842	26,047	22,226	15,958
Hake (whiting)	71,220	80,648	130,238	135,503	122,804	81,481	55,511	53,466	57,017	142,092
Oysters	786	823	823	308	255	197	162	563	415	467
Pacific sardine	50,069	55,683	79,610	99,450	74,669	90,037	49,298	45,902	44,743	23,479
Rockfish	4,653	3,434	2,574	2,007	1,967	2,905	3,820	4,207	4,533	3,819
Sablefish	3,185	4,798	5,627	5,834	5,838	5,349	6,514	7,219	6,269	5,074
Salmon	6,117	6,720	5,914	4,666	1,810	1,370	1,860	2,311	2,765	2,386
Shrimp	41,584	20,546	12,207	15,784	12,128	19,990	25,400	22,019	31,429	48,198

<u> </u>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Albacore tuna	0.68	0.67	0.85	1.09	0.95	0.90	1.20	1.01	1.16	1.94
Crab	1.67	1.55	1.58	1.50	1.62	2.25	2.10	1.94	2.07	2.59
Flatfish	0.45	0.46	0.44	0.43	0.46	0.40	0.38	0.33	0.31	0.42
Hake (whiting)	0.05	0.05	0.04	0.05	0.06	0.08	0.12	0.07	0.09	0.12
Oysters	4.00	4.00	4.00	4.00	4.56	9.40	16.96	4.00	4.00	4.00
Pacific sardine	0.06	0.05	0.06	0.06	0.05	0.05	0.11	0.12	0.12	0.14
Rockfish	0.75	0.68	0.63	0.69	0.80	0.69	0.68	0.59	0.56	0.65
Sablefish	1.38	1.54	1.23	1.48	1.68	1.78	2.11	2.21	2.40	3.42
Salmon	1.13	1.32	2.20	2.24	2.73	3.39	2.24	1.53	2.78	2.82
Shrimp	0.27	0.25	0.39	0.44	0.37	0.47	0.55	0.31	0.35	0.51

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	214	16,475	5,364	9,288
Private Boat	453	39,461	13,415	22,752
Shore	173	14,765	5,000	8,413
Total Durable Equipment Impacts	2,306	299,331	113,101	160,382
Total State Trip and Durable Equipment Economic Impacts	3,147	370,032	136,881	200,835

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	42,357
For-Hire	706	9,934	Other Equipment	19,559
Private Boat	2,344	29,948	Boat Expenses	168,129
Shore	1,173	11,073	Vehicle Expenses	49,639
Total Trip Expenditures	4,223	50,955	Second Home Expenses	761
			Total Durable Equipment Expenditures	280,445
Total State Trip and Dura	ble Equipment Exp	enditures		335,623

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	101	91	90	87	82	86	79	85	82	81
Non-Coastal	153	135	125	123	125	130	120	128	124	122
Out of State	21	15	16	14	15	15	14	15	14	14
Total Anglers	275	242	231	224	222	231	213	228	221	217

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	67	67	64	58	56	61	48	56	51	52
Private	448	426	426	382	373	399	353	396	378	370
Shore	295	233	233	233	233	233	233	233	233	233
Total Trips	810	726	723	673	662	693	634	685	662	655

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

riarvest (11) una 1		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Albacore tuna	Н	3	11	17	5	12	59	24	43	NA	NA
Albacore tulia	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	NA	NA
Baitfishes	Н	772	320	322	320	320	320	320	320	NA	NA
Daithshes	R	21	24	24	24	24	24	24	24	NA	NA
Flatfishes	Н	31	15	27	21	21	22	21	17	NA	NA
i latiisiies	R	8	6	7	7	7	6	8	9	NA	NA
Greenlings	Н	154	96	99	106	99	97	94	92	NA	NA
Greenings	R	176	77	78	77	72	65	67	70	NA	NA
Rockfishes	Н	383	405	379	401	331	322	308	362	NA	NA
ROCKIISIICS	R	36	23	24	57	39	38	47	49	NA	NA
Salmon	Н	118	235	186	61	37	92	28	157	NA	NA
Sallion	R	67	146	148	23	16	55	16	120	NA	NA
Sculpins	Н	21	23	20	22	20	20	21	21	NA	NA
Sculpins	R	77	50	51	54	51	53	53	53	NA	NA
Sturgeon	Н	12	12	12	12	12	12	12	12	NA	NA
Julgeon	R	27	24	24	24	24	24	24	24	NA	NA
Surfperches	Н	139	122	122	122	122	122	122	122	NA	NA
Jumperches	R	60	34	34	34	34	34	34	34	NA	NA

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

Oregon's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	101,933 (1.4%)	1,329,235 (1.2%)	43,522 (1.1%)	70,770 (1.1%)	119,571 (1.2%)	3.36
2010	107,397 (1.5%)	1,351,164 (1.2%)	54,368 (1.1%)	89,334 (1.3%)	185,211 (1.1%)	3.39
% change	5.36%	1.65%	24.9%	26.2%	54.9%	3.87%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	0	0	0	9	7	0	19	15	19
prep. & packaging	Receipts	ND^2	ND^2	ND^2	309	54	ND^2	957	469	957
Seafood Sales,	Firms	13	10	11	7	11	11	16	12	16
retail	Receipts	644	428	507	985	914	1,210	2,101	1,133	2,101

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

	_			•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coofeed made de	Establishments	19	19	18	20	21	22	23	20	21
Seafood product prep. & packaging	Employees	707	720	738	762	896	819	850	812	806
prep. & packaging	Payroll	20,867	21,980	20,593	19,022	25,881	27,394	27,616	26,202	27,007
Seafood sales,	Establishments	33	26	21	23	16	18	18	19	22
wholesale	Employees	ND^2	ND^2	126	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Wildiesale	Payroll	ND^2	ND^2	4,446	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Seafood sales,	Establishments	28	21	24	24	22	23	21	23	21
retail	Employees	129	ND^2	171	204	306	171	178	151	162
i Ctali	Payroll	2,311	ND^2	3,259	3,464	3,294	3,185	3,370	3,515	3,651

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	10	8	8	9	9	13	8	9	8
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	476	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	25,206	ND^2	ND^2	ND^2
Deep sea freight	Establishments	7	6	6	6	6	5	4	3	3
transportation	Employees	ND^2								
transportation	Payroll	ND^2								
Dann ann mannan	Establishments	NA^3	NA^3	NA^3	NA^3	NA^3	2	NA^3	NA^3	NA^3
Deep sea passenger transportation	Employees	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3
transportation	Payroll	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3
	Establishments	41	42	41	40	37	38	37	33	30
Marinas	Employees	ND^2	122	133	113	ND^2	138	106	109	102
	Payroll	ND^2	2,742	2,988	3,550	ND^2	3,754	2,178	2,602	2,290
Marine cargo	Establishments	7	8	8	8	9	9	13	13	12
handling	Employees	ND^2								
Hallullig	Payroll	ND^2								
Navigational	Establishments	18	21	21	21	20	17	20	17	18
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	183	200	189	144
services to simpping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	11,331	11,808	10,154	9,577
Port & harbor	Establishments	1	1	NA^3	NA^3	NA^3	2	1	1	3
operations	Employees	ND^2	ND^2	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2
Chin & host	Establishments	44	43	50	43	41	40	41	35	34
Ship & boat building	Employees	1,323	1,284	1,285	1,298	1,230	1,441	1,692	1,886	980
Dunung	Payroll	47,303	42,270	43,357	45,183	43,416	47,950	74,583	90,446	42,004

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

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

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

Washington Commercial Fisheries

2011 Economic Impacts of the Washington Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	67,007	8,026,068	3,297,368	27,022	1,772,689	992,738		
Commercial Harvesters	7,928	660,330	396,726	7,928	660,330	396,726		
Seafood Processors & Dealers	17,241	1,638,466	814,366	2,944	283,533	140,924		
Importers	15,535	4,273,279	1,302,683	0	0	0		
Seafood Wholesalers & Distributors	2,800	364,502	166,616	983	127,928	58,477		
Retail	23,503	1,089,491	616,977	15,167	700,898	396,612		

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	143,720	172,829	166,247	193,317	217,030	216,119	232,841	227,773	255,332	331,404
Finfish & other	39,854	47,415	55,906	50,145	68,201	59,386	68,213	61,115	81,902	98,697
Shellfish	103,867	125,414	110,342	143,172	148,829	156,733	164,628	166,658	173,430	232,706
Clams	34,339	36,060	42,297	48,503	55,786	56,428	64,141	72,646	73,625	90,587
Crab	37,232	56,374	29,024	50,872	43,464	54,302	53,712	48,944	57,070	83,621
Hake (Whiting)	1,022	1,601	2,341	4,937	7,296	7,121	7,249	2,334	4,105	7,183
Halibut	6,777	5,991	7,264	6,512	8,303	8,842	7,525	4,879	5,764	6,792
Mussels	1,613	2,513	3,096	3,729	6,564	3,820	5,293	4,851	4,318	4,652
Oysters	25,578	26,142	31,257	33,697	38,302	37,437	34,794	34,993	30,370	42,816
Sablefish	4,354	6,675	6,517	7,395	8,307	6,608	7,312	8,796	9,402	12,414
Salmon	11,780	9,941	17,316	14,319	24,586	22,026	23,376	22,003	40,622	42,433
Shrimp	4,473	3,723	3,648	4,335	3,602	3,746	5,380	4,139	5,677	7,139
Tuna, Albacore	7,375	15,621	15,657	10,643	15,176	10,439	17,225	16,390	14,575	22,241

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	172,277	189,479	192,181	213,502	241,606	194,449	173,176	163,937	189,486	210,672
Finfish & other	125,903	132,940	155,224	156,902	191,717	151,762	128,208	120,452	142,608	158,120
Shellfish	46,374	56,539	36,957	56,600	49,889	42,687	44,968	43,485	46,878	52,552
Clams	3,087	3,127	3,319	3,621	4,617	3,363	4,070	4,266	3,876	4,030
Crab	21,380	34,037	14,955	32,086	24,619	22,487	21,355	20,651	22,500	27,071
Hake (Whiting)	22,564	35,124	69,117	93,654	120,058	91,272	67,159	36,378	58,900	73,494
Halibut	2,487	1,868	2,254	1,948	2,451	2,428	2,055	1,731	1,371	1,315
Mussels	214	337	427	504	774	475	593	568	589	535
Oysters	9,935	9,649	11,058	12,190	12,306	11,189	10,258	9,386	8,650	9,776
Sablefish	2,559	3,736	4,064	4,240	4,259	3,035	2,954	3,514	3,277	3,416
Salmon	26,626	25,493	27,918	17,926	26,570	21,938	17,641	31,821	28,086	38,705
Shrimp	11,149	8,867	6,599	7,279	6,926	4,455	7,355	7,775	10,153	10,195
Tuna, Albacore	11,708	23,672	18,044	10,505	19,133	13,129	14,801	16,112	13,148	13,203

Average Aimaa	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Clams	11.12	11.53	12.74	13.40	12.08	16.78	15.76	17.03	19.00	22.48
Crab	1.74	1.66	1.94	1.59	1.77	2.41	2.52	2.37	2.54	3.09
Hake (Whiting)	0.05	0.05	0.03	0.05	0.06	0.08	0.11	0.06	0.07	0.10
Halibut	2.73	3.21	3.22	3.34	3.39	3.64	3.66	2.82	4.20	5.17
Mussels	7.53	7.46	7.26	7.40	8.48	8.05	8.93	8.54	7.33	8.69
Oysters	2.57	2.71	2.83	2.76	3.11	3.35	3.39	3.73	3.51	4.38
Sablefish	1.70	1.79	1.60	1.74	1.95	2.18	2.48	2.50	2.87	3.63
Salmon	0.44	0.39	0.62	0.80	0.93	1.00	1.33	0.69	1.45	1.10
Shrimp	0.40	0.42	0.55	0.60	0.52	0.84	0.73	0.53	0.56	0.70
Tuna, Albacore	0.63	0.66	0.87	1.01	0.79	0.80	1.16	1.02	1.11	1.68

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				_
For-Hire	247	22,956	7,380	12,818
Private Boat	902	103,234	31,909	53,946
Shore	249	25,871	8,439	13,878
Total Durable Equipment Impacts	3,542	362,027	127,481	194,783
Total State Trip and Durable Equipment Economic Impacts	4,939	514,088	175,209	275,425

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	62,119
For-Hire	1,958	12,997	Other Equipment	28,275
Private Boat	1,972	74,002	Boat Expenses	312,616
Shore	773	19,744	Vehicle Expenses	41,590
Total Trip Expenditures	4,703	106,742	Second Home Expenses	1,111
			Total Durable Equipment Expenditures	445,711
Total State Trip and Dura	ble Equipment Exp	enditures		557,156

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	252	233	213	201	184	220	167	163	162	274
Non-Coastal	27	25	24	23	21	23	19	20	19	30
Out of State	24	20	19	18	17	19	15	16	15	17
Total Anglers	303	278	255	242	222	262	201	198	196	321

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

				_						
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	59	69	64	62	57	55	42	51	47	42
Private	637	704	618	565	492	661	428	399	399	607
Shore	711	513	513	513	513	513	513	513	513	513
Total Trips	1,407	1,286	1,195	1,140	1,062	1,229	983	963	959	1,162

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

()		- () -	- 3 - 1			(· · · ,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Albacore tuna	Н	6	11	14	12	24	25	22	24	NA	NA
Albacore tulia	R	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	NA	NA
Flatfishes	Н	216	62	62	61	63	51	47	54	NA	NA
i latiisiles	R	209	92	41	41	42	40	40	47	NA	NA
Greenlings	Н	85	59	39	39	33	28	29	34	NA	NA
Greenings	R	141	64	25	25	22	19	19	39	NA	NA
Rockfishes ²	Н	237	184	256	307	282	260	216	245	NA	NA
Nockrisiles	R	50	20	25	33	23	19	16	33	NA	NA
Salmon	Н	279	509	302	266	119	354	103	758	NA	NA
Saimon	R	137	129	135	77	37	86	29	115	NA	NA
Sculpins	Н	35	17	17	17	16	15	15	16	NA	NA
Sculpins	R	142	101	91	91	91	91	91	91	NA	NA
Sharks & Skates	Н	27	15	1	1	1	(1)	1	1	NA	NA
Silaiks & Skales	R	331	203	14	12	14	9	12	10	NA	NA
Smelt & herring	Н	3,254	2,487	2,486	2,486	2,486	2,486	2,486	2,486	NA	NA
Silieit & lieitilig	R	196	136	126	126	126	126	126	126	NA	NA
Cturgoon	Н	11	8	8	8	7	8	8	9	NA	NA
Sturgeon	R	30	18	25	30	21	18	12	17	NA	NA
Surfperches	Н	104	143	133	133	133	133	133	133	NA	NA
Jumperches	R	105	125	120	120	120	120	120	121	NA	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
2002	165,933 (2.3%)	2,185,658 (1.9%)	83,127 (2.1%)	135,795 (2.2%)	237,117 (2.2%)	12.9
2010	175,914 (2.4%)	2,326,731 (2.1%)	111,399 (2.3%)	187,718 (2.4%)	339,829 (2.4%)	12.2
% change	6.02%	6.45%	34%	38.2%	43.3%	-8.84%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	48	59	53	54	53	63	44	44	44
prep. & packaging	Receipts	2,763	5,680	4,446	5,568	4,149	4,698	5,167	4,007	5,167
Seafood Sales,	Firms	30	32	30	31	29	32	33	40	33
retail	Receipts	2,681	1,623	2,202	1,836	1,727	1,458	1,807	2,132	1,807

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	106	110	101	98	96	98	96	86	93
prep. & packaging	Employees	6,728	5,968	5,851	5,743	5,705	5,249	5,893	4,860	5,296
prep. & packaging	Payroll	221,978	231,153	247,316	239,962	255,129	275,662	306,213	232,543	254,592
Seafood sales,	Establishments	175	121	116	126	115	127	107	108	105
wholesale	Employees	1,185	1,112	883	1,094	1,015	1,086	996	1,103	970
Wildicalc	Payroll	51,959	39,206	37,292	42,852	42,934	46,085	48,251	48,044	45,871
Seafood sales,	Establishments	44	37	40	47	49	50	44	43	47
retail	Employees	235	284	222	291	292	244	247	239	282
i ctuii	Payroll	6,379	6,363	6,578	9,322	8,998	8,001	7,947	8,324	9,098

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

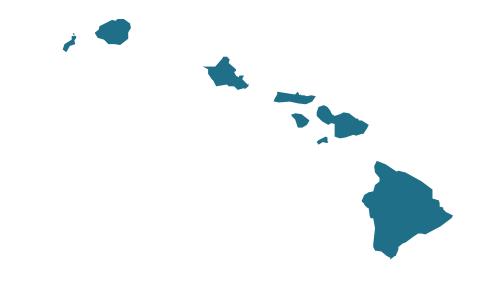
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	33	36	38	41	43	37	24	24	30
Lakes freight	Employees	2,173	1,607	2,039	1,672	2,353	1,903	2,222	2,245	1,731
transportation	Payroll	130,456	112,319	128,786	122,000	145,144	136,543	168,832	168,783	130,398
Deep sea freight	Establishments	23	27	23	24	23	30	21	25	20
transportation	Employees	ND^2	276	311	378	197	227	263	305	209
transportation	Payroll	ND^2	16,147	20,559	22,655	14,390	19,692	24,843	28,897	24,711
Deep sea passenger	Establishments	7	3	2	3	3	3	4	5	4
transportation	Employees	ND^2								
transportation	Payroll	ND^2								
	Establishments	111	102	96	96	103	114	116	110	117
Marinas	Employees	406	430	449	442	466	485	573	570	560
	Payroll	11,283	12,400	12,763	13,556	14,269	15,623	18,931	18,811	18,783
Marine cargo	Establishments	33	23	30	30	29	28	25	27	26
handling	Employees	2,538	ND^2	ND^2	4,459	3,764	4,913	4,821	2,953	ND^2
nananng	Payroll	194,398	ND^2	ND^2	318,873	303,375	334,601	334,193	239,490	ND^2
Navigational	Establishments	55	52	53	53	56	61	76	69	79
services to shipping	Employees	218	834	ND^2	841	942	950	1,213	1,168	1,225
services to simpling	Payroll	20,962	51,092	ND^2	60,034	72,120	72,912	100,542	102,934	102,766
Port & harbor	Establishments	4	3	4	6	5	6	11	11	9
operations	Employees	37	ND^2	ND^2	ND^2	53	129	111	118	74
орстатіонз	Payroll	1,565	ND^2	ND^2	ND^2	3,436	4,631	6,359	6,437	4,662
Ship & boat	Establishments	135	138	141	154	164	167	169	162	152
building	Employees	4,974	6,056	6,474	7,154	7,669	7,742	8,067	6,710	5,406
Danding	Payroll	219,980	244,124	272,336	307,735	313,230	354,084	402,253	312,240	284,759

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

Western Pacific

- Hawai'i



Management Context

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

Western Pacific Fishery Ecosystem Plans

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

Of the stocks covered in these fishery ecosystem plans, the Hancock Seamount groundfish complex is currently considered overfished. This fishery has been closed since 1986. 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 2011. 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 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 \$92 million from their commercial harvest in 2011, landing over 29 million pounds of finfish and shellfish. Tunas comprised 73% of landings revenue (\$67 million) as well as 63% of total landings (19 million pounds). Swordfish (\$6.7 million), mahimahi (\$4.3 million), moonfish (\$2.9 million), and marlin (\$2.4 million) also contributed to landings revenue. Lobsters commanded the highest ex-vessel price in 2011, with an average annual price of \$10.39 per pound.

Key Western Pacific Commercial Species

- Lobsters
- Scad
- Mahimahi
- Snappers
- Marlin
- Swordfish
- MoonfishPomfret
- TunasWahoo
- Economic Impacts³

In 2011, the Western Pacific's seafood industry generated \$694 million in sales impacts, \$213 million in income impacts, and approximately 8,600 full- and part-time jobs. Importers contributed the most to sales (38% of the total), while the retail sector contributed the most to employment impacts (41%), income impacts (37%), and valued added impacts (33%). The commercial harvest sector generated 3,200 jobs, \$159 million in sales, \$58 million in income, and \$84 million in value added impacts.

Landings Revenue

Landings revenue for finfish and shellfish totaled over \$91.5 million in 2011, a 75% increase from total revenue generated in 2002; when adjusted for inflation, real landings revenues increased 21%. Landings trends for this time period (2002-2011) can only be understood in light of the extensive closure of fishing grounds to the Hawai'i-based swordfish longline fishery in 2000 due to concern about the high frequency of interactions with loggerhead and leatherback sea turtles. From 2000 to 2001, swordfish landings revenue decreased 95% from \$12.8 million to \$1.3 million. A few years later when the fishery was re-opened, landings revenue increased 534% from \$1.2 million in 2004 to \$7.8 million in 2005. Swordfish landings revenue between 2001 and 2004 averaged \$1.2 million while between 2005 to 2011,

 $[\]overline{}$ The Western Pacific Region also includes the U.S. territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. However, due to data availability, only information from Hawai'i is reported here.

¹ 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.

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

swordfish landings revenue averaged \$7 million, an increase of more than 500%.

Landings revenue in 2011 increased 8.9% (0.5% increase in real terms) from the 2010 level (\$84 million). Finfish and other catch contributed nearly 100% of total revenue in 2011 (\$91 million), a 75% increase from 2002 (22% increase in real terms). Revenue earned from shellfish landings decreased 48% (a 64% decrease in real terms) from \$306,000 in 2002 to \$158,000 in 2011. Landings revenue in 2011 was dominated by tunas which contributed \$67 million or 73% 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 2002 to 2011 were for swordfish (386% or 238% in real terms) and moonfish (134% or 62% in real terms).

Landings

In 2011, Hawai'ian commercial fishermen landed 29 million pounds of finfish and shellfish, a 22% increase from 2002 landings totals. This was a 4.3% increase compared to landings in 2010 (28 million pounds). Finfish and other catch accounted for nearly 100% of total landings annually. Shellfish landings decreased 34% from 31,000 pounds landed in 2002 to 20,000 pounds in 2011 and also decreased 6.7% from 2010 to 2011.

Tunas contributed more to the Western Pacific's total landings than any other species or group with 18.5 million pounds landed in 2011. This was a 17% increase from 2002 total landings of tunas (15.9 million pounds). Swordfish followed with 2.6 million pounds landed in 2011. Swordfish landings experienced dramatic changes from 2002 to 2011 due to the aforementioned closure of the swordfish longline fishery in late 2000. 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. When the fishery re-opened a few years later, landings increased 561% from 520,000 pounds in 2004 to 3.4 million pounds in 2005. Swordfish landings between 2001 and 2004 averaged approximately a half million pounds, while in between 2005 and 2011 the average was 2.9 million pounds.

Prices

Overall, the 2011 ex-vessel price for nine of the key species or species groups were above their ten year average annual price. Only lobster had a lower price per pound (\$10.39) in 2011 relative to its annual average (\$11.54) over the time period. The ex-vessel price for swordfish in 2011 was \$2.57, \$0.41 more than the ten year average. Relative to ex-vessel prices in 2010, mahimahi (40%) experienced a double digit increase in 2011 while lobster experienced a double digit decrease (16%) from 2010 to 2011.

Commercial Fisheries Facts

Landings revenue

- On average, the key species or species groups account for <u>97% of total revenue</u>, (\$88 million) generated in the Western Pacific Region.
- <u>Tunas</u> contributed more than any other species or species group, averaging \$49 million in landings revenue from 2002 to 2011.
- Swordfish 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 due to the re-opening of the swordfish longline fishery.
- Swordfish 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 2002 and 2011
- <u>Tunas</u>, contributed the most to landings in the region, averaging 16 million pounds from 2002 to 2011.
- 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.
- Swordfish 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 due to the re-opening of the swordfish longline fishery.

Prices

- <u>Lobsters</u> had the highest average annual ex-vessel price per pound (\$11.54) over the time period, followed by snappers (\$4.61), and tunas (\$3.01).
- Marlin had the lowest average annual ex-vessel price per pound (\$1.23) over the time period, followed by moonfish (\$1.59), and swordfish (\$2.16).
- 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.

Recreational Fisheries

In 2011, there were 87,000 recreational anglers who fished in the state of Hawai'i. These anglers took 1.4 million fishing trips and of these, 84% were shore-based trips. Scads (bigeye and mackerel) was the most caught species group with 662,000 fish caught in 2011. Almost all of these fish were harvested by anglers rather than released. The most released species or species group was trevallys and other jacks (38%). All others were harvested at least 88% of the time in 2011.

Key Western Pacific Recreational Species

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

Economic Impacts and Expenditures⁴

In 2011, approximately 2,900 jobs in the Western Pacific were generated by recreational fishing activities and over \$285 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 (603 jobs) or from a for-hire fishing vessel (570 jobs). These fishing trip modes also generated the most in trip-related expenditures: \$45 million for shore-based fishing trips (43% of total trip expenditures) and \$40 million for for-hire trips (38% of total trip expenditures). Thirty five percent 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 \$55 million in sales impacts (42% of total trip-related sales) and \$30 million in value added impacts (43% of total trip-related value added impacts) in 2011. Private boat trips contributed \$25 million in sales (19%) and \$13 million (18%) in value added impacts. Shore-based fishing trips contributed \$52 million in trip-related sales (39%) and \$27 million in trip-related value added impacts (39%).

Anglers spent over \$179 million on durable equipment in 2011, contributing 63% to total expenditures in the region (trip and durable equipment combined). Fishermen spent more on fishing tackle (\$67 million) and boat expenses (also \$67 million) than

other durable goods. Expenditures related to vehicle expenses (\$35 million) and other equipment (\$10 million) followed in size of expenditures. Economic impacts from durable equipment expenditures in 2011 include about 1,500 jobs, \$179 million in sales impacts, and \$87 million in value added impacts.

Participation⁵

In 2011, there were 87,000 recreational anglers who fished in Hawai'i. This was an 80% decrease from 2003 (440,000 anglers) and a 82% decrease from 2010 (475,000 anglers). In 2011, non-resident anglers made up 4.2% of total anglers (3,700 anglers). There was a 98% decrease in non-resident anglers from 2003 (180,000 anglers) and a 99% decrease from 2010 (293,000 anglers). In terms of resident anglers, there were 84,000 resident anglers who fished in Hawai'i in 2011, which was a 68% decrease from 2003 and a 54% decrease from 2010. The large decline in participation is a result of the significant decrease in fishing effort (42% decrease, described below) coupled with a 23% increase in the number of trips taken by active anglers, which is commonly referred to as "angler avidity." An increase in angler avidity coupled with a decrease in trips necessarily results in a decrease in participation.

Fishing Trips⁵

Anglers who fished in Hawai'i took approximately 1.38 million fishing trips in 2011. This was a 42% decrease from the 2.4 million fishing trips taken in 2003. From 2010 to 2011, there was a 42% decrease in the number of trips taken (2.4 million trips) in 2010.

Harvest and Release⁵

Of Hawai'i's key species and species groups, bigeye and mackerel scad, goatfishes, and trevallys and other jacks were most frequently caught by recreational fishermen. In 2011, 662,000 bigeye and mackerel scad, 185,000 goatfishes, and 159,000 trevallys and other jacks 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 (38%) than any of the other key species or species groups.

Between 2004 (the first year for which recreational catch data for Hawai'i are available) and 2011 one of Hawai'i's key species or groups experienced increases in catch totals: bigeye and mackerel scad (268%). Over the same time period, the largest decreases were experienced by: wahoo (84%), smallmouth bonefish (77%), and goatfishes (75%).

⁴ Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2006, available at :http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006)

⁵ Due to data availability, the time period 2003 to 2011 is discussed in this section.

Between 2010 and 2011, the largest (and only) increase in catch occurred in the blue marlin (100%) fishery. Decreases over the same time period occurred in nine of the species or species groups, the largest of which were experienced by smallmouth bonefish (76%) and snappers (65%).

Recreational Fisheries Facts

Participation

- An average of <u>341,000 anglers</u> fished in the Western Pacific annually from 2003 to 2011.
- In 2011, in-state residents made up 96% of total anglers in this region. These anglers averaged 53% of total anglers annually over the nine year time period.

Fishing trips

- In the Western Pacific, an average of 2.4 million fishing trips was taken annually from 2003 to 2011.
- <u>Private or rental boat and shore-based</u> fishing trips accounted for 224,000 and 1.2 million fishing trips, respectively in 2011.

Harvest and release

- The <u>bigeye and mackerel scad</u> species group was the most commonly caught key species or species group, <u>averaging 728,000</u> fish caught over the 10 year time period. Of these, <u>0.22% were released</u> 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 <u>trevallys and other</u> <u>jacks (38% released)</u>.
- Species or species groups that were harvested 100% of the time included blue marlin, dolphinfish, and bigeye and mackerel scad.
- Between 2010 and 2011, blue marlin experienced the largest annual increase in catch (100%), and smallmouth bonefish had the largest decrease (76%).

Marine Economy⁶

In 2010, over 32,000 establishments employed approximately 479,000 full- and part-time employees in Hawai'i. Annual payroll totaled \$18 billion, employee compensation totaled \$38 billion, and gross product by state totaled \$66 billion. Gross state product, annual payroll, and employee compensation increased 47%, 31%, and 44%, respectively between 2002 and 2010. The commercial fishing location quotient (CFLQ) for Hawai'i was 4.71. Between 2002 and 2010 the CFLQ for Hawai'i decreased 35%. Hawai'i's level of commercial fishing-related employment continues to be well above the national baseline.

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 2010 (14 establishments). The marine cargo handling sector had the largest payroll (\$109 million) and the largest number of employees was also in the marine cargo handling sector (1,236). The largest increase in number of establishments between 2002 and 2010 was in the marine cargo handling sector (100%) and the greatest decrease occurred in the coastal and Great Lakes freight transportation sector (82%)

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

Commercial Fisheries Hawaii

2011 Economic Impacts of the Hawaii Seafood Industry (thousands of dollars)

		With Imports			Without Import	ts
	Jobs	Sales	Value Added	Jobs	Sales	Value Added
Total Impacts	8,627	694,228	311,097	6,667	364,073	195,754
Commercial Harvesters	3,154	159,444	83,529	3,154	159,444	83,529
Seafood Processors & Dealers	509	44,786	22,865	366	32,350	16,516
Importers	964	265,307	80,877	0	0	0
Seafood Wholesalers & Distributors	476	45,551	21,253	277	26,518	12,372
Retail	3,523	179,139	102,574	2,869	145,761	83,337

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

					, .	•	`		,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	52,384	52,755	57,679	71,040	66,120	75,705	85,120	71,168	84,023	91,513
Finfish & other	52,078	52,493	57,274	70,677	66,013	75,531	84,753	70,985	83,851	91,354
Shellfish	306	262	406	364	106	174	367	183	172	158
Lobsters	122	68	91	111	61	93	120	136	116	104
Mahimahi (dolphin)	2,630	2,940	4,909	3,597	3,640	3,482	3,182	2,850	3,300	4,310
Marlin	2,010	1,986	2,472	2,512	2,558	2,028	2,072	2,141	1,756	2,373
Moonfish (opah)	1,219	1,509	1,343	1,897	1,873	2,170	2,197	2,408	2,591	2,852
Pomfret	675	777	1,316	1,440	1,311	1,460	1,665	1,379	1,549	1,449
Scad	1,067	1,105	944	839	1,020	1,099	896	555	1,251	964
Snappers	2,009	2,035	2,201	2,005	1,756	1,680	1,710	1,844	1,637	1,372
Swordfish	1,371	691	1,225	7,768	5,125	7,726	7,176	7,334	7,302	6,669
Tunas	37,598	37,381	38,484	46,071	44,085	51,148	60,874	47,674	59,756	66,580
Wahoo	1,452	1,919	2,201	2,253	2,329	2,087	2,235	1,672	1,745	1,806

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	23,968	23,740	24,456	28,140	25,659	28,938	30,682	26,906	28,069	29,289
Finfish & other	23,937	23,711	24,426	28,113	25,644	28,916	30,653	26,884	28,047	29,269
Shellfish	31	28	31	26	15	22	29	22	22	20
Lobsters	10	6	8	10	6	8	10	11	9	10
Mahimahi (dolphin)	1,376	1,326	2,225	1,440	1,342	1,388	1,252	1,287	1,518	1,423
Marlin	1,497	2,337	1,844	2,190	2,389	1,376	1,951	1,678	1,220	1,826
Moonfish (opah)	912	1,095	786	1,086	1,071	1,226	1,313	1,884	1,824	1,564
Pomfret	490	459	766	646	576	593	672	627	593	427
Scad	571	630	478	398	442	463	320	205	460	323
Snappers	499	501	508	436	377	376	376	386	314	249
Swordfish	703	306	520	3,439	2,514	3,643	3,835	3,881	3,153	2,592
Tunas	15,871	14,421	14,965	16,118	14,631	17,589	18,303	14,589	16,704	18,518
Wahoo	660	990	852	818	891	715	853	605	600	564

Average Amilian 11	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Lobsters	12.66	11.88	11.08	10.99	9.66	11.84	12.14	12.37	12.36	10.39
Mahimahi (dolphin)	1.91	2.22	2.21	2.50	2.71	2.51	2.54	2.21	2.17	3.03
Marlin	1.34	0.85	1.34	1.15	1.07	1.47	1.06	1.28	1.44	1.30
Moonfish (opah)	1.34	1.38	1.71	1.75	1.75	1.77	1.67	1.28	1.42	1.82
Pomfret	1.38	1.69	1.72	2.23	2.28	2.46	2.48	2.20	2.61	3.39
Scad	1.87	1.75	1.97	2.11	2.30	2.37	2.80	2.71	2.72	2.98
Snappers	4.02	4.06	4.33	4.59	4.64	4.44	4.54	4.78	5.20	5.53
Swordfish	1.95	2.26	2.36	2.26	2.04	2.12	1.87	1.89	2.32	2.57
Tunas	2.37	2.59	2.57	2.86	3.01	2.91	3.33	3.27	3.58	3.60
Wahoo	2.20	1.94	2.58	2.75	2.61	2.92	2.62	2.76	2.91	3.20

Recreational Fisheries Hawaii

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	570	54,641	17,687	30,043
Private Boat	237	24,980	7,512	12,774
Shore	603	51,518	16,955	27,197
Total Durable Equipment Impacts	1,538	178,784	59,031	86,582
Total State Trip and Durable Equipment Economic Impacts	2,948	309,923	101,185	156,595

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	67,017
For-Hire	36,718	2,960	Other Equipment	10,316
Private Boat	102	21,171	Boat Expenses	66,574
Shore	69	44,801	Vehicle Expenses	35,182
Total Trip Expenditures	36,890	68,933	Second Home Expenses	0
			Total Durable Equipment Expenditures	179,089
Total State Trip and Dura	ble Equipment Exp	enditures		284,912

Recreational Anglers by Residential Area (thousands of anglers)¹

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal		261	223	204	173	170	192	140	182	84
Non-Coastal		NA^2	NA^1							
Out of State		180	183	166	224	146	137	106	293	4
Total Anglers		440	407	370	396	317	329	246	475	87

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

		•			• ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Private		510	709	578	570	475	565	441	484	224
Shore		1,893	2,162	1,893	2,075	2,102	1,966	1,722	1,907	1,158
Total Trips		2,403	2,871	2,471	2,645	2,577	2,531	2,163	2,391	1,382

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

		· (· ·) · ·				(,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Blue marlin	Н		4	5	19	3	2	11	3	1	2
Dide mariii	R		(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)
Dolphinfish	Н		109	225	178	219	137	184	103	164	63
(mahimahi)	R		1	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)
Goatfishes ⁵	Н		793	716	444	812	298	467	713	271	172
Goathshes	R		10	17	8	16	9	7	6	17	13
Jacks (trevallys	Н		124	330	254	207	169	276	121	142	99
and other jacks $)^6$	R		171	146	182	213	129	121	84	127	60
Scads (bigeye and	Н		1,950	180	726	812	1,089	402	1,103	841	662
mackerel)	R		2	(1)	13	(1)	(1)	(1)	(1)	(1)	(1)
Skipjack tuna	Н		439	419	301	201	228	568	230	288	125
Skipjack tulia	R		1	6	1	1	5	2	(1)	(1)	(1)
Smallmouth	Н		24	61	24	64	19	50	36	55	14
bonefish	R		4	9	11	2	13	4	2	13	2
Snappers ⁷	Н		232	234	221	178	105	140	145	340	114
Shappers	R		17	18	57	35	39	7	24	25	14
Wahoo	Н		106	97	54	62	57	78	61	40	16
vvalioo	R		(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)
Yellowfin tuna	Н		183	267	231	124	273	461	198	302	141
renownii tuna	R		5	(1)	10	1	2	(1)	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.

 $^{^2\}mathrm{NA}=\mathrm{not}$ 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 2002.

 $^{^4}$ In 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 Marine Economy

Hawaii's State Economy (% of national total)

		With Imports			Without Import	S
	Jobs	Sales	Value Added	Jobs.1	Sales.1	Value Added.1
Total Impacts	8,627	694,228	311,097	6,667	364,073	195,754
Commercial Harvesters	3,154	159,444	83,529	3,154	159,444	83,529
Seafood Processors & Dealers	509	44,786	22,865	366	32,350	16,516
Importers	964	265,307	80,877	0	0	0
Seafood Wholesalers & Distributors	476	45,551	21,253	277	26,518	12,372
Retail	3,523	179,139	102,574	2,869	145,761	83,337

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	7	9	11	5	11	10	9	7	9
prep. & packaging	Receipts	1,566	1,034	1,309	409	1,011	1,023	1,020	713	1,020
Seafood Sales,	Firms	0	36	33	29	31	41	37	34	37
retail	Receipts	ND^1	4,753	2,875	3,487	3,627	4,353	4,394	3,559	4,394

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

	_									
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soafood product	Establishments	4	4	4	3	3	1	1	1	1
Seafood product prep. & packaging	Employees	86	ND^2							
prep. & packaging	Payroll	2,584	ND^2							
Seafood sales,	Establishments	44	33	36	32	33	36	37	38	37
wholesale	Employees	525	654	404	485	462	550	695	538	531
Wholesale	Payroll	15,203	12,653	13,949	15,163	16,786	18,932	20,665	19,347	19,290
Seafood sales,	Establishments	29	31	31	29	27	25	25	25	24
retail	Employees	229	317	321	326	315	393	173	158	177
ICLAII	Payroll	3,737	5,187	5,038	5,007	5,564	7,209	3,674	3,559	3,533

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	11	10	11	13	13	11	5	5	2
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	543	557	478	475	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	36,941	36,635	34,544	34,367	ND^2
Doon oos fusialet	Establishments	2	1	NA^2	NA^3	NA^3	NA^3	1	NA^3	1
Deep sea freight transportation	Employees	ND^2	ND^2	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	ND^2
transportation	Payroll	ND^2	ND^2	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	ND^2
Daan aaa maaaan wax	Establishments	1	1	1	2	2	1	1	1	1
Deep sea passenger transportation	Employees	ND^2								
transportation	Payroll	ND^2								
	Establishments	8	11	11	10	9	11	9	10	13
Marinas	Employees	56	177	178	181	152	167	156	164	189
	Payroll	1,414	3,285	3,439	3,354	3,719	4,151	4,317	4,368	5,362
Marina aarma	Establishments	7	8	8	8	7	8	11	11	14
Marine cargo handling	Employees	756	ND^2	ND^2	694	ND^2	1,048	1,098	1,075	1,236
nanuing	Payroll	49,975	ND^2	ND^2	53,061	ND^2	87,770	89,104	87,833	109,059
Nevimetional	Establishments	7	7	6	6	6	8	11	11	11
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	105	120	90
services to shipping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	3,340	5,846	5,258	5,113
Port & harbor	Establishments	2	2	2	2	2	2	4	3	2
operations	Employees	ND^2								
орегаціона	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	3,218	2,031	ND^2
Chin & host	Establishments	16	14	17	16	14	13	14	13	15
Ship & boat building	Employees	ND^2	480	589	ND^2	545	ND^2	ND^2	ND^2	ND^2
Dunding	Payroll	ND^2	22,053	20,908	ND^2	23,134	ND^2	ND^2	ND^2	ND^2

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

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

New England

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



Regional Summary New England Region

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, thirteen are currently listed as overfished: Atlantic cod (two stocks), Atlantic halibut, Atlantic salmon, Atlantic wolffish, ocean pout, thorny skate, white hake, windowpane, winter flounder, witch flounder, and yellowtail flounder (two stocks). Seven stocks or stock complexes are currently subject to overfishing: Atlantic cod (two stocks), haddock, white hake, windowpane, witch flounder, and yellowtail flounder.

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 2011, commercial fishermen in the New England Region landed 622 million pounds of finfish and shellfish, earning \$1.1 billion in landings revenue. Landings revenue was dominated by American lobster (\$419 million) and sea scallop (\$353 million). These species groups commanded ex-vessel prices of \$3.35 and \$10.01 per pound, respectively and comprised 70% 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 \$565 million in 2011, followed by Maine (\$425 million) and Rhode Island (\$76 million). In terms of pounds landed, Maine contributed the most (270 million pounds), followed by Massachusetts (256 million pounds) and Rhode Island (77 million pounds).

Economic Impacts¹

In 2011, the New England Region's seafood industry generated \$740 million in sales impacts in Connecticut, \$1.7 billion in sales impacts in Maine, \$7.8 billion in sales impacts in Massachusetts, \$766 million in sales impacts in New Hampshire, and \$1 billion in sales impacts in Rhode Island. Massachusetts generated the largest impacts across the three other impact categories, generating 98,000 job, \$2 billion in income, and \$3.1 billion in value added impacts. The smallest income impacts were generated in Connecticut (\$154 million) and the smallest employment impacts were also generated in Connecticut (4,500 jobs).

Key New England Region Commercial Species

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

The sector that generated the greatest employment impacts by state was the retail sector with 60,000 employment impacts in Massachusetts and 13,000 employment impacts in Maine. The harvest sector in Maine generated 14,000 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 \$1.1 billion in 2011. This was a 59% increase (a 11% increase in real terms) from 2002 levels (\$696 million) and a 16% increase (a 6.8% increase in real terms) relative to 2010 (\$958 million). Totaling \$898 million in 2011, shellfish revenue experienced a 83% increase (a 27% increase in real terms) from 2002 to 2011 and experienced a 17% increase (8% increase in real terms) from 2010 to 2011.

In the New England Region, Massachusetts had the highest finfish landings revenue (\$132 million), followed by Maine (\$44 million), and Rhode Island (\$25 million). Shellfish landings revenue was also dominated by Massachusetts, which contributed the most (\$433 million) followed by Maine (\$381 million), and Rhode Island (\$51.4 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)

New England Region Regional Summary

Commercial Fisheries Facts

Landings revenue

- On average, between 2002 and 2011, the key species or species groups accounted for 85% of total revenue, generating \$738 million in the New England Region.
- American lobster had higher landings revenues than any other species or species group, averaging \$353 million in landings revenue from 2002 to 2011.
- Atlantic mackerel had the largest one-year increase in landings revenue over the 10 year time period, increasing 363% from \$2.9 million in 2005 to \$14 million in 2006.
- Atlantic mackerel had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 92% from \$3.5 million in 2010 to \$269,000 in 2011.

Landings

- Key species or species groups contributed an average of 72% annually to total landings between 2002 and 2011.
- Atlantic herring contributed the most to landings in the region, averaging 179 million pounds from 2002 to 2011
- Atlantic mackerel had the largest one-year increase in landings over the 10 year time period, increasing 1113% from 8.2 million in 2005 pounds to 100 million pounds in 2006.
- Atlantic mackerel had the largest one-year decrease in landings over the 10 year time period, decreasing 95% from 17 million pounds in 2010 to 888,000 pounds in 2011.

Prices

- <u>Sea scallop</u> had the highest average annual ex-vessel price per pound (\$6.62) over the time period, followed by <u>bluefin tuna</u> (\$6.26), and <u>quahog clam</u> (\$4.99).
- Atlantic herring had the lowest average annual ex-vessel price per pound (\$0.11) over the time period, followed by Atlantic mackerel (\$0.18), and squid (\$0.68).
- 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 2011, with \$419 million and \$353 million, respectively. Together they accounted for 70% of total landings revenue in 2011. Between 2002 and 2011, the landings revenue from these species experienced a 46% increase for American lobster and 222% increase for sea scallop.

From 2002 to 2011, species or species groups with large changes in landings revenue include Atlantic herring (increased 168%), Atlantic mackerel (decreased 93%), and quahog clam (decreased 52%). Species or species groups with large changes in landings revenue between 2010 and 2011 include Atlantic mackerel (92% decrease), squid (55% increase), and goosefish (41% increase).

Landings

Fishermen in the New England Region landed 622 million pounds of finfish and shellfish in 2011. This was a 5.7% increase from the 589 million pounds landed in 2002 and a 7.7% increase from the 578 million landed in 2010. Finfish landings contributed 57% of total landings in the New England Region (353 million pounds) in 2011. From 2010 to 2011, finfish landings experienced a 6.1% increase. Shellfish landings experienced a 10% increase from 245 million pounds in 2010 to 269 million in 2011 and a 33% increase from 202 million pounds in 2002. Atlantic herring and American lobster had the highest annual landings in the New England Region in 2011, with 171 million pounds and 125 million pounds, respectively. Together they accounted for 48% of the total landings in 2011. Atlantic herring landings increased 27% and American lobster landings increased 54% during this period.

From 2002 to 2011, species or species groups with large changes in landings include Atlantic mackerel (decreasing 97%), quahog clam (decreasing 74%), and goosefish (decreasing 65%). Species or species groups with large changes in landings between 2010 and 2011 include Atlantic mackerel (decreasing 95%), squid (increasing 28%), and cod and haddock (decreasing 23%).

Prices

The ex-vessel prices for the New England Region's key species and species groups in 2011 were higher than their 10 year average for nine of the key species (five of the species in real terms). Ex-vessel prices for sea scallop and atlantic mackerel experienced the biggest increases between 2002 and 2011, increasing 150% (74% in real terms) and 110% (49% in real terms), respectively. Relative to 2010 ex-vessel prices, New England's Atlantic mackerel experienced the greatest increase (50%, 38.3% in real terms) from \$0.20 in 2010 to \$0.30 in 2011. Flounders experienced the greatest price decrease between 2010 and 2011 decling from \$1.91 to \$1.72 (9.95%, 16.9% in real terms). Relative to ex-vessel prices in 2010, six species or species groups experienced increases, including Atlantic mackerel (50%), and cod & haddock (28%).

In Connecticut, the species or species group with the largest change in ex-vessel price from 2002 to 2011 was sea scallop (144% increase, 69% increase in real terms) from \$4.05 to \$9.87. The largest change in ex-vessel price experienced in Maine was for Atlantic herring (114% increase, 49% increase in real terms from \$0.07 to \$0.15 and in Massachusetts the largest change in ex-vessel price was experienced by clams, all other (192% increase, 102% increase in real terms) from \$0.48 to \$1.40.

Recreational Fishing

In 2011, almost 1.3 million recreational anglers took 6.1 million fishing trips in the New England Region. Over 90% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 52% were taken from a private or rental boat and another 42% were shore-based. Atlantic mackerel was the most frequently caught species or species group with 5.9 million fish caught in 2011 and represented 30% of total fish caught in

¹Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Economic impacts from recreational

Regional Summary New England Region

the region. Of the Atlantic mackerel caught, 9.1% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in the 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 5,320 full- and part-time jobs generated by recreational fishing activities in the state. Rhode Island (1,300 jobs), and Connecticut (909 jobs), followed in terms of employment impacts.

Key New England Region Recreational Species

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

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) or expenditures on durable equipment. Throughout the New England Region, expenditures on durable equipment in 2011 generated more employment impacts than any other expenditure: 69% in Rhode Island, 64% in Connecticut, and 62% in Maine.

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 2011, sales impacts were the highest in Massachusetts (\$726 million in sales impacts), followed by Rhode Island (\$157 million), Connecticut (\$129 million), Maine (\$77 million), and New Hampshire (\$41 million). In the same year, value added impacts were the highest in Massachusetts (\$391 million in value added impacts), followed by Connecticut (\$76 million), Rhode Island (\$74 million), Maine (\$39 million), and New Hampshire (\$23 million).

Overall, there were \$1.2 billion in expenditures on fishing trip and durable equipment expenditures across the New England Region in 2011. Approximately 74% of these expenditures were durable equipment purchases. The greatest expenditures were for boat expenses (\$461 million), followed by fishing tackle (\$236 million), vehicle expenses (\$111 million), other equipment (\$50 million), and second home expenses (\$2 million). Fishing trip expenditures by New England's non-residents totaled almost \$126 million, of which the greatest portion can be attributed to for-hire-based fishing trips (\$56 million). Residents of the New England Region spent \$178 million on saltwater fishing trips, with the most of these expenses related to private boat trips (\$107 million).

Recreational Fishing Facts

Participation

- An average of 1.4 million anglers fished in the New England Region annually from 2002 to 2011.
- In 2011, coastal county residents made up 90% 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 2010 and 2011, decreasing 12%, from 1.3 million anglers to 1.2 million anglers.

Fishing trips

- In the New England Region, an average of 8.3 million fishing trips were taken annually from 2002 to 2011.
- Private or rental boat and shore-based fishing trips accounted for 3.2 million and 2.5 million fishing trips, respectively, in 2011. Together these made up 94% of the fishing trips taken in that year.
- The largest annual increase in the number of total trips taken annually over the 10 year time period occurred between 2004 and 2005, increasing 6.5%, from 8.6 million trips to 9.2 million trips.
- The largest annual decrease during the same period in total trips taken occurred between 2008 and 2009, decreasing 22%, from 9.1 million trips to 7.2 million trips.

Harvest and release

- <u>Striped bass</u> was the most commonly caught key species or species group, <u>averaging 7.8 million fish</u> over the 10 year time period. Of these, <u>92% were released</u> rather than harvested.
- Of the ten commonly caught key species or species groups, seven were released more often than harvested over this time period.
- The species or species group that was most commonly released was little tunny (94% released).
- Atlantic mackerel (91% harvested), followed by winter flounder (60% harvested), and bluefin tuna (55% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.

Participation

There were 1.3 million recreational anglers who fished in the New England Region in 2011. This was a 7.9% increase from 2002 (1.2 million anglers). These anglers were New England Region residents from either a coastal (1.2 million anglers) or non-coastal county (131,000 anglers). Almost 90% of total anglers in 2011 were residents of a coastal county. Coastal county angler participation in 2011 increased 8.1% relative to 2002 (1.1 million anglers) and decreased 12% between 2010 and 2011. Non-coastal county angler participation increased 5.7% relative to 2002 (124,000 anglers) and decreased 22% relative to 2010 (169,000 anglers).

fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2006, available at:http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006)

Fishing Trips

Recreational fishermen took 6.1 million fishing trips in New England Region in 2011. This was a 30% decrease from the 2002 (8.6 million trips) and was 1.2 million fewer trips than those taken in 2010. Approximately 52% of the saltwater trips were private or rental boat based (3.2 million trips). The other most popular mode of fishing was shore-based with 2.5 million trips in 2011.

Harvest and Release

The New England Region's species and species groups caught most frequently in 2011 were Atlantic mackerel (5.9 million fish), scup (4.7 million fish), bluefish (2.6 million fish), and striped bass (2.5 million fish) in 2011. Little tunny (100% released), tautog (83% released), summer flounder (82% released), striped bass (82% released), bluefish (75% released), bluefin tuna (71% released), Atlantic cod (63% released), and scup (51% released) were more often released rather than harvested.

Anglers harvested more often than released Atlantic mackerel (91% harvested) and winter flounder (63% harvested). In 2011, most of the striped bass were caught in Massachusetts (1.2 million fish) and Connecticut (676,000), making up 76% of the total catch. Atlantic mackerel were caught in large numbers in Maine and New Hampshire which represented 71% of the total catch of Atlantic mackerel in the New England Region. Between 2002 and 2011, eight of the New England Region's key species or species groups showed decreases in catch totals. Key species or groups with the largest decreases were striped bass (73%), tautog (49%), and summer flounder (24%).

Marine Economy¹

The sum of the gross domestic products by state for Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island was \$760 billion in 2010. Employee compensation totaled \$442 billion and annual payroll totaled \$297 billion. These economic measures experienced increases of 31%, 27%, and 22% respectively, between 2002 and 2010, and experienced a 4% increase, a 2.3% increase, and a 2.5% increase, respectively, between 2009 and 2010. Approximately 366,000 establishments employed 5.8 million full- and part-time employees across the region in 2010. This was a 2.6% decrease in establishment numbers and a 3.7% decrease in employee numbers from 2002 to 2010.

In 2010, the commercial fishing location quotient (CFLQ) for Maine was the highest in the region at 14.24. This was an 60% increase from 2002 (the Bureau of Labor Statistics did not report a CFLQ value for Maine in 2009). Maine's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 14 times higher than the level of employment in these industries nationwide. The 2010 CFLQ in Rhode Island was 2.27 (a 0.4% increase from 2002).

Seafood Sales and Processing

In 2010, there were 115 nonemployer firms engaged in seafood product preparation and packaging across the New England

Region, a 24% increase from 2002 levels. Over the same time period, Massachusetts experienced a 4% increase. In 2010, 56% of these firms were located in Maine. Annual receipt totals experienced a 41% increase in Maine between 2002 and 2010. In contrast to the increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 15% from 98 in 2002 to 86 in 2010. Approximately 51% of these establishments were located in Massachusetts in 2010.

There were 376 seafood wholesale establishments in 2010 that employed 3,244 full- and part-time workers. From 2009 to 2010, the number of seafood wholesale establishments increased 0.3% and the number of employees increased 2.3% in the New England Region.

Nonemployer firms engaged in seafood retail in the New England Region totaled 171 in 2010, a 12% decrease relative to 2002. Of these firms, 37% were located in Massachusetts. At the state level, these firms showed a 3.8% decrease in Connecticut and a 5% decrease in Rhode Island between 2002 and 2010. Annual receipts in the region totaled \$20 million in 2010, a 13% decrease from 2002 (a 34% decrease in real terms) and a 18% increase from 2010 (a 13% increase in real terms). Employer establishments engaged in seafood retail decreased 2% from 2002 to 2010, totaling 240 in 2010. These establishments employed 1,179 workers. Almost 47% of 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 2010. This industry also had the highest annual payroll in the region totaling \$160 million. Marinas had the highest number of establishments (497), followed by the ship and boat building industries with 160 establishments and the navigational services to shipping industries with 38 establishments.

In Massachusetts, industries with large changes in establishment numbers, employees, or annual payroll from 2009 to 2010 were: navigational services to shipping (117% increase in payroll), navigational services to shipping (111% increase in employees), port and harbor operations (100% increase in payroll) and port and harbor operations (100% increase in establishments). In Maine, large changes were seen for marine cargo handling (33% decrease in establishments), coastal and Great Lakes freight transportation (27% increase in employees), navigational services to shipping (27% decrease in employees) and ship and boat building (9% decrease in establishments). In Connecticut, large changes were seen in the navigational services to shipping (65% decrease in payroll), port and harbor operations (63% decrease in payroll) and port and harbor operations (27% decrease in employees).

Information for 2010 is reported in this section: 2011 data were not available for this report.

Commercial Fisheries New England

2011 Economic Impacts of the New England Region Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Valued Added	Jobs	Sales	Valued Added		
Connecticut	4,514	740,263	257,905	1,165	69,507	33,212		
Massachusetts	98,358	7,754,140	3,090,449	63,078	2,376,805	1,196,219		
Maine	31,127	1,734,058	829,833	29,844	1,543,494	762,644		
New Hampshire	5,968	766,257	287,785	2,044	114,586	58,059		
Rhode Island	9,157	1,024,748	397,018	4,642	269,101	136,313		

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

		_	,	•	. , .		• \		,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	696,423	690,692	821,573	970,516	953,372	895,573	809,110	789,281	957,876	1,109,057
Finfish & other	207,082	200,351	194,911	200,751	184,219	178,831	190,251	177,947	190,723	211,139
Shellfish	489,341	490,341	626,662	769,765	769,153	716,742	618,859	611,334	767,153	897,918
American lobster	287,621	277,946	368,649	408,719	386,034	359,754	317,925	305,335	395,263	418,933
Atlantic herring	9,005	15,274	14,931	20,085	21,593	18,766	20,478	24,721	20,645	24,172
Atlantic mackerel	3,776	4,404	10,416	2,923	13,528	6,000	5,265	7,927	3,459	269
Bluefin tuna	14,349	8,267	4,297	3,864	1,715	2,077	2,993	4,450	8,470	9,258
Cod & haddock	49,679	44,386	40,089	39,824	31,885	39,317	47,166	38,733	49,707	48,779
Flounders	49,201	47,221	43,737	42,339	37,717	33,716	30,610	27,340	27,695	30,849
Goosefish	29,194	30,031	27,960	34,408	26,571	21,203	19,945	14,320	14,075	19,792
Quahog clam	17,193	16,857	16,721	6,707	26,811	30,027	8,902	9,004	9,632	8,315
Sea scallop	109,634	116,454	158,014	250,762	263,623	237,299	203,126	209,969	265,460	352,586
Squid	15,786	17,283	28,133	20,206	20,006	17,711	19,848	16,820	14,787	22,887

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	588,891	660,283	723,130	684,292	704,258	582,321	600,977	648,505	577,818	622,355
Finfish & other	387,327	468,511	487,785	461,038	466,873	368,813	388,225	421,926	333,201	353,371
Shellfish	201,564	191,772	235,345	223,254	237,385	213,508	212,752	226,579	244,617	268,984
American lobster	81,382	70,502	88,679	86,224	90,837	79,433	86,226	99,221	115,253	125,240
Atlantic herring	134,605	209,933	188,201	212,389	207,530	155,986	166,222	209,270	139,554	170,565
Atlantic mackerel	26,649	34,839	88,124	8,223	99,751	50,760	38,359	39,427	16,904	888
Bluefin tuna	2,386	1,787	704	837	274	300	447	772	1,201	1,085
Cod & haddock	45,469	38,482	34,158	30,500	19,810	24,848	33,109	32,463	39,261	30,108
Flounders	41,758	39,782	40,966	30,290	19,538	16,079	15,391	16,225	14,528	17,908
Goosefish	41,975	46,751	39,735	34,873	26,136	19,579	17,401	13,973	12,193	14,541
Quahog clam	6,116	5,173	6,231	1,088	4,216	4,630	1,468	1,628	1,786	1,602
Sea scallop	27,394	27,587	30,462	32,038	40,587	35,390	28,868	31,693	32,878	35,208
Squid	27,893	29,405	47,901	26,748	25,330	26,421	28,615	28,124	21,722	27,907

Average Annual Trice of Key Species Groups (dollars per pound)												
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
American lobster	3.53	3.94	4.16	4.74	4.25	4.53	3.69	3.08	3.43	3.35		
Atlantic herring	0.07	0.07	0.08	0.09	0.10	0.12	0.12	0.12	0.15	0.14		
Atlantic mackerel	0.14	0.13	0.12	0.36	0.14	0.12	0.14	0.20	0.20	0.30		
Bluefin tuna	6.01	4.63	6.10	4.62	6.26	6.93	6.69	5.76	7.05	8.54		
Cod & haddock	1.09	1.15	1.17	1.31	1.61	1.58	1.42	1.19	1.27	1.62		
Flounders	1.18	1.19	1.07	1.40	1.93	2.10	1.99	1.69	1.91	1.72		
Goosefish	0.70	0.64	0.70	0.99	1.02	1.08	1.15	1.02	1.15	1.36		
Quahog clam	2.81	3.26	2.68	6.16	6.36	6.49	6.07	5.53	5.39	5.19		
Sea scallop	4.00	4.22	5.19	7.83	6.50	6.71	7.04	6.63	8.07	10.01		
Squid	0.57	0.59	0.59	0.76	0.79	0.67	0.69	0.60	0.68	0.82		

	Trips	Jobs	Sales	Income	Value Added
Connecticut	1,307,000	909	128,921	48,613	75,685
Massachusetts	2,813,000	5,322	726,164	252,277	390,731
Maine	528,000	843	77,071	25,283	39,313
New Hampshire	294,000	376	41,005	14,177	22,614
Rhode Island	1,113,000	1,273	157,111	47,957	73,650

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	236,216
For-Hire	55,917	23,910	Other Equipment	50,376
Private Boat	27,532	106,582	Boat Expenses	461,383
Shore	42,059	47,905	Vehicle Expenses	110,989
Total Trip Expenditures	125,509	178,399	Second Home Expenses	1,954
			Total Durable Equipment Expenditures	860,918
Total State Trip and Dura	ble Equipment Exp	enditures		1,164,826

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	1,069	1,198	1,155	1,349	1,408	1,408	1,389	1,222	1,317	1,156
Non-Coastal	124	152	165	169	188	205	187	165	169	131
Out-of-State	NA^1									
Total Anglers	1,194	1,349	1,319	1,518	1,596	1,614	1,576	1,387	1,486	1,288

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	235	318	331	417	455	517	511	463	321	364
Private Boat	4,511	4,425	4,371	5,060	4,650	4,821	4,892	3,374	3,968	3,160
Shore	3,844	3,835	3,934	3,719	4,107	3,950	3,735	3,322	2,926	2,531
Total Trips	8,590	8,578	8,636	9,196	9,212	9,288	9,138	7,159	7,215	6,055

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

riarvest (ri) and r		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
A+1+:I	Н	644	704	421	486	203	305	385	391	508	531
Atlantic cod	R	1,144	1,175	775	1,108	722	965	954	834	1,070	912
Atlantic mackerel	Н	3,544	2,397	1,577	2,941	4,181	1,885	3,356	2,464	3,473	5,335
Atlantic mackerer	R	363	212	172	62	559	116	453	343	379	533
Bluefin tuna	Н	1	5	1	12	3	11	9	8	1	2
Diueilli tulla	R	(1)	4	4	8	7	10	1	5	(1)	5
Bluefish	Н	1,167	1,189	1,228	1,202	1,647	1,514	1,458	672	1,185	660
Didensii	R	2,146	2,535	3,126	3,013	3,637	2,906	2,995	1,437	1,845	1,929
Little tunny ²	Н	6	4	9	(1)	1	5	(1)	1	2	(1)
Little tulling	R	52	33	85	55	26	65	16	16	20	45
Porgies (scup)	Н	2,461	4,179	5,204	1,595	1,429	3,049	1,944	1,498	2,411	2,287
r orgics (scup)	R	2,382	2,831	2,543	2,193	2,638	2,801	4,048	3,280	3,586	2,376
Striped bass	Н	520	699	689	699	594	591	601	548	527	457
Striped bass	R	8,575	6,760	7,251	9,940	14,092	8,365	7,715	4,165	2,771	2,038
Summer flounder	Н	439	549	690	588	641	426	583	168	198	267
Summer mounder	R	1,558	1,068	895	1,418	2,851	1,044	2,112	907	819	1,252
Winter flounder	Н	105	86	57	43	51	52	179	113	106	100
vviiitei iloulidei	R	73	39	35	41	46	43	70	101	86	59
Wrasses (tautog)	Н	266	335	163	269	362	570	304	194	358	78
vviasses (tautog)	R	637	668	367	597	639	1,425	515	394	560	384

¹NA = 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 $$^2\mathrm{This}$$ species may not be equivalent to species with similar names listed in the commercial tables.

2011 Economic Impacts of the Connecticut Seafood Industry (thousands of dollars)

		With Imports		Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added	
Total Impacts	4,514	740,263	257,905	1,165	69,507	33,212	
Commercial Harvesters	582	34,877	14,739	582	34,877	14,739	
Seafood Processors & Dealers	185	19,152	9,455	72	7,549	3,727	
Importers	2,071	569,579	173,633	0	0	0	
Seafood Wholesalers & Distributors	296	47,773	21,010	23	3,669	1,613	
Retail	1,381	68,881	39,069	489	23,412	13,133	

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

		•	-		. , .		• (,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	27,779	29,825	33,399	37,570	36,892	42,053	17,207	16,476	18,099	19,668
Finfish & other	4,283	4,136	4,575	5,097	3,731	3,421	3,988	3,757	5,898	4,646
Shellfish	23,496	25,690	28,825	32,474	33,161	38,632	13,219	12,719	12,201	15,022
American lobster	4,226	3,170	3,166	3,821	4,031	3,222	2,102	1,799	1,757	798
Eastern oyster	2,012	2,274	1,356	ND^1	2,206	5,142	ND^2	ND^2	ND^2	ND^2
Flounders	909	896	1,075	1,170	1,026	881	802	756	892	1,036
Goosefish	790	683	580	658	346	512	551	591	572	976
Hake	1,307	1,602	2,028	2,432	1,628	1,232	1,619	1,354	1,417	1,705
Quahog clam	9,202	10,470	10,690	ND^2	18,135	20,531	ND^2	ND^2	ND^2	ND^2
Scups or Porgies	195	167	191	263	302	311	384	363	271	406
Sea scallop	6,400	8,125	11,203	9,761	7,229	8,605	10,032	9,737	9,458	13,007
Snails (conchs)	199	119	209	233	533	312	35	53	ND^2	ND^2
Squid, Ioligo	1,178	1,400	1,298	1,224	954	744	546	384	473	694

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	16,177	16,420	18,192	13,628	11,747	10,050	7,115	7,951	6,623	7,078
Finfish & other	7,799	7,825	6,832	6,548	5,807	3,931	4,537	5,390	4,458	4,997
Shellfish	8,378	8,595	11,359	7,080	5,940	6,119	2,578	2,561	2,165	2,080
American lobster	1,067	671	647	714	793	569	426	447	396	159
Eastern oyster	247	279	186	ND^2	77	193	ND^2	ND^2	ND^2	ND^2
Flounders	633	565	637	582	456	345	282	312	334	428
Goosefish	1,029	1,023	897	524	496	460	409	546	358	630
Hake	2,904	2,875	2,936	3,735	2,632	1,839	2,465	2,492	2,151	2,199
Quahog clam	3,435	4,038	5,137	ND^2	2,665	3,067	ND^2	ND^2	ND^2	ND^2
Scups or Porgies	314	292	256	328	298	256	282	346	324	643
Sea scallop	1,579	1,908	2,172	1,272	1,104	1,313	1,407	1,475	1,260	1,318
Snails (conchs)	128	70	31	50	101	117	47	34	ND^2	ND^2
Squid, Ioligo	1,778	1,572	1,699	1,537	1,157	811	523	366	366	498

71701460 7111144		ter epecie	-, - p	C. Cape (a	2005 2006 2007 2000 2000 2010								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011			
American lobster	3.96	4.72	4.89	5.35	5.08	5.67	4.93	4.03	4.43	5.00			
Eastern oyster	8.16	8.14	7.30	ND^2	28.61	26.64	ND^2	ND^2	ND^2	ND^2			
Flounders	1.44	1.59	1.69	2.01	2.25	2.55	2.84	2.42	2.67	2.42			
Goosefish	0.77	0.67	0.65	1.26	0.70	1.11	1.35	1.08	1.60	1.55			
Hake	0.45	0.56	0.69	0.65	0.62	0.67	0.66	0.54	0.66	0.78			
Quahog clam	2.68	2.59	2.08	ND^2	6.80	6.69	ND^2	ND^2	ND^2	ND^2			
Scups or Porgies	0.62	0.57	0.75	0.80	1.01	1.22	1.36	1.05	0.84	0.63			
Sea scallop	4.05	4.26	5.16	7.67	6.55	6.55	7.13	6.60	7.51	9.87			
Snails (conchs)	1.55	1.69	6.69	4.66	5.28	2.66	0.75	1.55	ND^2	ND^2			
Squid, Ioligo	0.66	0.89	0.76	0.80	0.82	0.92	1.04	1.05	1.29	1.39			

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	99	10,288	3,647	6,358
Private Boat	183	23,248	8,475	14,603
Shore	44	4,909	1,819	3,038
Total Durable Equipment Impacts	583	90,477	34,671	51,686
Total State Trip and Durable Equipment Economic Impacts	909	128,921	48,613	75,685

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	16,020
For-Hire	1,523	5,379	Other Equipment	3,105
Private Boat	2,556	21,195	Boat Expenses	71,546
Shore	158	4,874	Vehicle Expenses	0
Total Trip Expenditures	4,236	31,448	Second Home Expenses	0
			Total Durable Equipment Expenditures	90,671
Total State Trip and Dura	ble Equipment Exp	enditures		126,355

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	283	361	297	323	336	302	381	438	402	420
Non-Coastal	NA^1									
Out of State	87	112	63	77	44	61	123	93	112	98
Total Anglers	371	473	359	400	380	363	504	531	514	518

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

		•			- /					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	51	64	31	34	50	63	73	43	40	45
Private	954	875	956	1,174	868	1,097	1,292	711	871	863
Shore	645	625	573	485	571	559	608	665	614	399
Total Trips	1,650	1,564	1,560	1,693	1,489	1,719	1,973	1,419	1,525	1,307

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

iaitest (ii) ana i		- ()	tej opec.	co opecie		Cinoasana	,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic cod	Н	(1)	2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Atlantic Cou	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	Н	569	458	589	248	507	452	624	261	592	308
Diuensii	R	662	542	979	576	1,167	888	1,144	296	715	997
Hickory shad	Н	71	71	12	54	63	36	(1)	(1)	1	16
Thekory shau	R	377	79	21	32	144	4	5	(1)	(1)	(1)
Little tunny ³	Н	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)	1	(1)
Little tulliny	R	28	8	3	(1)	(1)	1	(1)	9	8	15
Porgies (scup)	Н	882	1,528	1,071	508	533	926	549	288	1,088	933
r orgies (scup)	R	569	804	539	753	740	1,005	974	1,204	1,192	538
Striped bass	Н	51	96	103	141	115	118	108	61	92	64
Striped bass	R	697	843	826	1,762	987	984	3,105	1,161	671	612
Summer flounder	Н	93	166	216	157	137	112	146	45	35	47
Julillier Houlider	R	453	474	269	779	1,111	297	991	428	373	345
White perch	Н	1	11	(1)	(1)	(1)	(1)	7	60	(1)	(1)
willte percii	R	27	28	11	(1)	15	18	52	72	(1)	(1)
Winter flounder	Н	16	24	4	3	(1)	(1)	(1)	12	15	19
willter Houlider	R	9	5	14	(1)	22	15	(1)	7	12	(1)
Wrasses (tautog)	Н	101	168	17	36	201	353	167	86	116	26
vviasses (tautog)	R	219	283	77	149	107	744	250	112	256	36

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

 $^{^2}$ In this table, $^\prime(1)^\prime=0$ -999 thousand fish and $^\prime1^\prime=1{,}000$ -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
2002	92,375 (1.3%)	1,555,595 (1.4%)	68,478 (1.7%)	97,062 (1.6%)	168,865 (1.6%)	0.49
2010	89,234 (1.2%)	1,436,992 (1.3%)	79,919 (1.6%)	120,921 (1.5%)	221,347 (1.5%)	ND^2
% change	-3.4%	-7.62%	16.7%	24.6%	31.1%	NA ³

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	0	7	7	7	11	0	18	16	18
prep. & packaging	Receipts	ND^2	1,022	1,404	551	3,206	ND^2	2,375	2,331	2,375
Seafood Sales,	Firms	26	26	25	24	15	26	25	23	25
retail	Receipts	3,225	2,966	3,115	3,313	2,915	4,436	3,247	2,139	3,247

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

	_			•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soafood product	Establishments	2	2	3	3	4	3	3	2	2
Seafood product prep. & packaging	Employees	ND^2	ND^2	ND^2	113	119	ND^2	59	ND^2	ND^2
prep. & packaging	Payroll	ND^2	ND^2	ND^2	3,656	4,242	ND^2	1,040	ND^2	ND^2
Seafood sales,	Establishments	28	19	19	17	19	20	24	25	23
wholesale	Employees	ND^2	169	181	ND^2	ND^2	183	185	212	216
Wilolesale	Payroll	ND^2	7,738	7,688	ND^2	ND^2	8,347	8,551	8,842	9,219
Seafood sales,	Establishments	36	34	38	39	35	36	35	36	39
retail	Employees	165	206	202	187	196	177	203	205	204
retuii	Payroll	3,859	5,110	5,060	5,028	4,937	5,252	5,248	5,551	5,563

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	5	6	5	5	4	4	5	5	6
Lakes freight	Employees	ND^2								
transportation	Payroll	ND^2	8,148							
Deep sea freight	Establishments	11	12	13	11	14	14	12	12	10
transportation	Employees	238	270	260	310	235	228	243	222	225
transportation	Payroll	18,271	29,086	37,013	36,766	47,845	48,110	46,595	45,045	29,407
Deep sea passenger	Establishments	2	2	2	2	1	2	1	1	1
transportation	Employees	ND^2								
transportation	Payroll	ND^2								
	Establishments	108	116	117	117	119	124	125	126	129
Marinas	Employees	722	1,006	1,016	994	1,024	1,224	1,352	1,261	1,284
	Payroll	29,690	39,691	41,952	42,754	44,829	50,809	60,016	58,065	58,877
Marine cargo	Establishments	1	NA^3	1	3	3	5	4	3	3
handling	Employees	ND^2	NA^3	ND^2						
nananng	Payroll	ND^2	NA^3	ND^2	ND^2	ND^2	5,925	ND^2	ND^2	ND^2
Navigational	Establishments	8	6	6	8	9	6	6	6	6
services to shipping	Employees	ND^2	ND^2	ND^2	45	69	ND^2	ND^2	5	ND^2
services to simpling	Payroll	ND^2	ND^2	ND^2	1,768	2,423	432	338	696	242
Port & harbor	Establishments	5	4	4	4	4	4	8	8	6
operations	Employees	185	ND^2	ND^2	ND^2	ND^2	ND^2	179	166	122
operations	Payroll	5,527	ND^2	ND^2	ND^2	ND^2	ND^2	6,136	5,787	2,162
Ship & boat	Establishments	12	14	17	17	17	22	15	13	12
building	Employees	ND^2								
Dunamb	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.

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

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

Maine Commercial Fisheries

2011 Economic Impacts of the Maine Seafood Industry (thousands of dollars)

. ,										
		With Imports			Without Import	ts				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added				
Total Impacts	31,127	1,734,058	829,833	29,844	1,543,494	762,644				
Commercial Harvesters	14,020	815,274	364,618	14,020	815,274	364,618				
Seafood Processors & Dealers	2,337	164,767	84,528	2,133	150,540	77,229				
Importers	541	148,725	45,338	0	0	0				
Seafood Wholesalers & Distributors	958	92,400	43,130	839	80,928	37,775				
Retail	13,271	512,892	292,219	12,852	496,752	283,022				

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

	2002	2002	2004	2005	2006	2007	2000	2000	2010	2011
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	290,315	287,049	367,459	392,122	361,920	344,018	308,211	292,465	377,821	424,712
Finfish & other	47,489	49,292	48,904	47,141	37,084	36,827	36,440	30,343	30,115	43,700
Shellfish	242,826	237,757	318,555	344,982	324,836	307,191	271,771	262,122	347,706	381,012
American lobster	210,950	205,715	289,079	317,948	297,143	280,634	245,146	237,673	315,875	334,183
Atlantic herring	4,618	7,296	76	56	29	9,170	8,374	7,868	8,632	14,261
Bloodworms	5,759	5,292	7,524	6,039	5,037	6,051	5,913	6,197	5,874	5,845
Blue mussel	4,117	4,487	3,319	2,625	2,618	1,934	1,627	2,203	2,071	1,940
Cod & haddock	5,944	4,673	5,392	5,177	3,982	3,728	5,257	1,751	1,528	1,671
Goosefish	6,248	7,852	6,828	6,232	3,238	2,402	1,478	525	393	579
Ocean quahog clam	4,748	4,480	3,842	3,607	3,919	3,194	2,195	1,821	1,721	7,524
Pollock	2,386	2,206	2,346	3,106	2,309	2,160	2,321	2,045	1,502	1,953
Sea Urchins	7,657	8,569	7,866	5,142	3,693	4,367	5,410	5,866	5,490	5,113
Softshell clam	14,370	15,859	16,628	14,081	13,163	12,574	12,826	11,686	12,959	15,692

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	202,483	223,533	228,502	214,514	217,659	184,233	185,242	186,858	199,063	269,923
Finfish & other	113,132	141,621	130,368	121,278	121,268	91,638	86,440	80,878	78,370	121,673
Shellfish	89,351	81,912	98,134	93,236	96,391	92,595	98,801	105,979	120,694	148,250
American lobster	63,626	54,971	71,574	68,730	72,662	63,959	69,863	81,176	95,506	104,693
Atlantic herring	67,169	96,681	911	558	258	72,726	66,277	63,084	56,522	95,806
Bloodworms	683	594	615	456	450	549	537	574	533	526
Blue mussel	4,793	4,287	4,102	3,357	2,897	2,643	2,289	2,760	2,582	2,804
Cod & haddock	5,172	3,860	4,588	4,045	2,448	2,345	2,455	1,401	876	845
Goosefish	11,127	13,291	10,552	7,130	3,666	2,376	1,178	601	404	533
Ocean quahog clam	1,287	1,194	1,013	1,001	1,214	1,011	669	556	549	10,636
Pollock	2,958	4,085	4,189	5,260	3,678	4,245	4,064	3,039	1,640	2,359
Sea Urchins	6,321	5,963	5,742	3,517	2,800	2,761	2,900	3,487	2,592	2,407
Softshell clam	2,423	2,364	2,380	1,857	1,868	1,948	1,998	1,902	2,076	2,341

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
American lobster	3.32	3.74	4.04	4.63	4.09	4.39	3.51	2.93	3.31	3.19
Atlantic herring	0.07	0.08	0.08	0.10	0.11	0.13	0.13	0.12	0.15	0.15
Bloodworms	8.43	8.91	12.24	13.24	11.20	11.02	11.01	10.79	11.03	11.12
Blue mussel	0.86	1.05	0.81	0.78	0.90	0.73	0.71	0.80	0.80	0.69
Cod & haddock	1.15	1.21	1.18	1.28	1.63	1.59	2.14	1.25	1.74	1.98
Goosefish	0.56	0.59	0.65	0.87	0.88	1.01	1.26	0.87	0.97	1.09
Ocean quahog clam	3.69	3.75	3.79	3.60	3.23	3.16	3.28	3.27	3.13	0.71
Pollock	0.81	0.54	0.56	0.59	0.63	0.51	0.57	0.67	0.92	0.83
Sea Urchins	1.21	1.44	1.37	1.46	1.32	1.58	1.87	1.68	2.12	2.12
Softshell clam	5.93	6.71	6.99	7.58	7.05	6.46	6.42	6.14	6.24	6.70

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	106	7,784	2,543	4,399
Private Boat	76	6,460	2,229	3,814
Shore	139	9,959	3,257	5,489
Total Durable Equipment Impacts	521	52,867	17,254	25,612
Total State Trip and Durable Equipment Economic Impacts	843	77,071	25,283	39,313

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	18,165
For-Hire	4,671	901	Other Equipment	4,452
Private Boat	2,177	4,271	Boat Expenses	52,608
Shore	5,697	1,606	Vehicle Expenses	0
Total Trip Expenditures	12,546	6,779	Second Home Expenses	40
			Total Durable Equipment Expenditures	75,264
Total State Trip and Dura	ble Equipment Exp	enditures		94,589

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	127	165	113	190	182	174	121	117	122	85
Non-Coastal	17	23	21	20	22	13	9	12	9	7
Out of State	172	170	148	173	285	260	180	324	159	107
Total Anglers	316	358	282	383	489	447	310	453	290	198

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	13	14	19	39	31	33	25	26	23	22
Private	421	410	338	520	547	460	408	333	327	265
Shore	471	496	420	523	497	530	421	544	367	241
Total Trips	905	920	777	1,082	1,075	1,023	854	903	717	528

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

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		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
American Shad	Н	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)	(1)
American Shad	R	(1)	1	2	(1)	7	4	5	19	9	5
Atlantic cod	Н	15	11	5	29	14	19	41	46	14	40
Atlantic cou	R	16	26	19	37	49	72	50	36	44	99
Atlantic mackerel	Н	1,207	615	1,022	607	450	806	836	1,111	1,094	1,544
Atlantic mackerer	R	234	105	87	29	103	80	265	194	177	304
Blue shark	Н	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Dide Shark	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1	(1)	10
Bluefin tuna	Н	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Didenni tuna	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Bluefish	Н	24	14	16	38	8	50	30	3	14	(1)
Didensii	R	42	23	42	49	49	74	55	26	9	7
Haddock	Н	3	1	4	6	9	13	19	11	3	12
Haddock	R	4	3	2	2	4	10	2	2	3	4
Pollock	Н	76	10	59	28	66	51	68	62	59	57
r ollock	R	47	18	56	32	23	24	135	34	105	134
Striped bass	Н	71	58	49	83	75	54	58	62	17	18
Juliped bass	R	1,391	847	694	2,985	4,001	1,115	465	264	193	143
Winter flounder	Н	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
vviiitei noundei	R	(1)	1	(1)	(1)	1	(1)	1	5	(1)	(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
2002	40,292 (0.56%)	486,766 (0.43%)	14,375 (0.36%)	23,508 (0.38%)	39,989 (0.39%)	8.88
2010	40,571 (0.55%)	480,932 (0.43%)	17,279 (0.35%)	29,610 (0.35%)	50,674 (0.37%)	14.2
% change	0.692%	-1.2%	20.2%	26%	26.7%	49.2%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	50	62	57	52	54	65	64	63	64
prep. & packaging	Receipts	3,023	4,699	5,642	5,082	6,463	7,177	4,261	6,642	4,261
Seafood Sales,	Firms	62	60	55	51	45	55	46	46	46
retail	Receipts	8,980	8,365	8,621	7,331	7,115	5,905	4,035	3,212	4,035

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	33	35	28	27	27	27	29	25	27
prep. & packaging	Employees	639	656	576	614	616	536	490	545	594
prep. & packaging	Payroll	11,301	13,999	19,767	12,349	12,304	9,351	9,288	10,427	12,851
Seafood sales,	Establishments	190	181	177	177	167	170	168	164	164
wholesale	Employees	1,256	985	1,048	1,152	996	1,015	1,210	1,126	1,153
Wildicsalc	Payroll	36,043	29,643	30,108	30,513	32,192	32,005	36,185	37,687	39,915
Seafood sales,	Establishments	47	51	50	49	55	50	45	49	51
retail	Employees	173	181	189	184	179	181	148	152	176
retaii	Payroll	3,971	4,663	5,112	4,678	4,753	4,635	4,148	4,481	5,126

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
		2002		2004					2009	2010
Coastal & Great Lakes freight transportation	Establishments	4	5	4	3	3	3	5	4	4
	Employees	30	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	22	28
	Payroll	939	ND^2	ND^2	ND^2	ND^2	ND^2	1,058	1,037	1,067
Deep sea freight transportation	Establishments	3	2	2	1	1	NA^3	1	1	1
	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	ND^2	ND^2
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	ND^2	ND^2
Deep sea passenger transportation	Establishments	4	1	1	1	1	2	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
Marinas	Establishments	85	79	84	84	84	86	87	89	86
	Employees	503	416	406	411	417	464	411	376	395
	Payroll	16,055	12,853	13,369	14,215	15,353	18,600	15,206	14,654	14,699
Marine cargo handling	Establishments	4	4	4	3	3	3	3	3	2
	Employees	91	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Payroll	3,183	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Navigational services to shipping	Establishments	18	17	16	16	12	15	15	14	13
	Employees	88	106	91	88	93	105	138	93	68
	Payroll	4,341	5,521	4,927	5,890	6,260	6,737	6,148	5,369	4,928
Port & harbor operations	Establishments	NA^3	1	1	1	1	2	2	1	1
	Employees	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
	Payroll	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & boat building	Establishments	87	91	86	92	89	94	90	82	75
	Employees	ND^2	7,630	7,753	ND^2	6,808	6,751	6,930	ND^2	ND^2
	Payroll	ND^2	332,332	328,179	ND^2	320,288	345,036	354,899	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.

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

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

2011 Economic Impacts of the Massachusetts Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	98,358	7,754,140	3,090,449	63,078	2,376,805	1,196,219		
Commercial Harvesters	13,269	1,032,684	484,877	13,269	1,032,684	484,877		
Seafood Processors & Dealers	7,587	977,819	484,709	1,799	234,730	116,357		
Importers	14,708	4,045,936	1,233,379	0	0	0		
Seafood Wholesalers & Distributors	3,097	495,150	219,547	1,138	181,928	80,666		
Retail	59,697	1,202,551	667,938	46,872	927,463	514,319		

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

				, ,	, .		•		,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	296,922	292,602	325,937	427,332	437,157	420,066	399,921	400,832	478,627	565,238
Finfish & other	122,845	116,767	109,163	117,003	110,426	109,434	122,004	114,709	126,578	132,097
Shellfish	174,077	175,835	216,774	310,330	326,731	310,632	277,917	286,122	352,048	433,141
American lobster	56,569	52,329	51,581	49,563	52,553	51,255	45,423	42,725	50,367	54,859
Atlantic herring	2,285	5,461	4	69	ND^1	8,265	11,336	15,322	10,253	8,719
Atlantic mackerel	713	1,888	6,542	ND^2	10,203	4,736	4,265	4,548	1,487	138
Clams, all other	8,169	823	4,721	19,010	14,064	15,682	15,257	16,746	17,885	15,894
Cod & haddock	40,550	36,668	31,452	31,954	25,451	32,033	38,696	33,684	45,210	43,393
Eastern oyster	ND^2	ND^2	24	2,738	4,618	4,559	5,496	6,432	8,171	9,070
Flounders	33,092	32,995	29,897	28,815	24,592	22,091	20,926	19,646	19,975	22,021
Goosefish	15,546	15,585	15,675	21,485	17,712	14,381	14,036	9,902	9,922	13,434
Ocean quahog clam	ND^2	7,325	6,919	ND^2	8,297	10,100	9,575	10,710	8,981	4,042
Sea scallop	100,551	106,938	144,748	226,949	234,668	218,292	189,893	197,296	252,290	330,921

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	243,501	295,439	337,603	337,304	351,426	304,436	326,234	355,872	282,835	255,798
Finfish & other	175,490	231,978	267,342	267,311	271,352	227,230	255,604	279,097	201,007	179,370
Shellfish	68,011	63,461	70,261	69,993	80,074	77,206	70,630	76,775	81,828	76,428
American lobster	12,853	11,385	11,295	9,880	10,966	10,143	10,598	11,781	12,768	13,717
Atlantic herring	40,508	79,873	40	700	ND^2	73,268	94,233	133,531	71,922	66,515
Atlantic mackerel	5,549	23,451	72,687	ND^2	89,535	46,240	35,406	30,199	12,156	521
Clams, all other	17,057	1,045	6,315	19,881	4,593	4,135	4,376	6,552	10,196	11,315
Cod & haddock	37,521	32,013	26,926	24,539	15,862	20,290	28,524	28,514	36,461	27,160
Eastern oyster	ND^2	ND^2	9	105	212	123	138	159	214	252
Flounders	28,987	29,418	30,704	22,115	13,182	10,966	11,589	12,399	11,158	13,690
Goosefish	22,794	23,979	22,357	21,849	17,495	13,308	12,446	9,829	8,740	10,022
Ocean quahog clam	ND^2	14,226	14,085	ND^2	16,798	20,158	18,126	18,691	15,646	5,797
Sea scallop	25,290	25,371	27,944	29,045	36,088	32,540	27,012	29,782	31,157	33,016

Werage Aminan Free of New Openies Groups (noming per pound)										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
American lobster	4.40	4.60	4.57	5.02	4.79	5.05	4.29	3.63	3.94	4.00
Atlantic herring	0.06	0.07	0.09	0.10	ND^2	0.11	0.12	0.11	0.14	0.13
Atlantic mackerel	0.13	0.08	0.09	ND^2	0.11	0.10	0.12	0.15	0.12	0.27
Clams, all other	0.48	0.79	0.75	0.96	3.06	3.79	3.49	2.56	1.75	1.40
Cod & haddock	1.08	1.15	1.17	1.30	1.60	1.58	1.36	1.18	1.24	1.60
Eastern oyster	ND^2	ND^2	2.74	26.09	21.75	37.00	39.77	40.36	38.25	35.94
Flounders	1.14	1.12	0.97	1.30	1.87	2.01	1.81	1.58	1.79	1.61
Goosefish	0.68	0.65	0.70	0.98	1.01	1.08	1.13	1.01	1.14	1.34
Ocean quahog clam	ND^2	0.51	0.49	ND^2	0.49	0.50	0.53	0.57	0.57	0.70
Sea scallop	3.98	4.21	5.18	7.81	6.50	6.71	7.03	6.62	8.10	10.02

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	815	78,396	27,484	46,772
Private Boat	742	86,783	31,780	53,208
Shore	958	98,753	35,342	58,470
Total Durable Equipment Impacts	2,808	462,231	157,671	232,281
Total State Trip and Durable Equipment Economic Impacts	5,322	726,164	252,277	390,731

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	133,323
For-Hire	38,515	13,394	Other Equipment	36,214
Private Boat	14,582	63,018	Boat Expenses	251,688
Shore	31,254	37,526	Vehicle Expenses	100,595
Total Trip Expenditures	84,351	113,938	Second Home Expenses	1,914
			Total Durable Equipment Expenditures	523,735
Total State Trip and Dura	ble Equipment Exp	enditures		722,024

Recreational Anglers by Residential Area (thousands of anglers)

	J				0 - ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	465	434	535	585	623	664	655	489	586	490
Non-Coastal	96	112	131	135	151	179	170	144	152	115
Out of State	344	306	335	391	484	465	469	421	433	293
Total Anglers	906	852	1000	1112	1258	1309	1293	1054	1171	897

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	106	145	210	236	230	233	255	240	156	190
Private	2,399	2,329	2,273	2,336	2,411	2,441	2,338	1,759	2,149	1,318
Shore	1,701	1,611	1,968	1,739	1,938	1,948	1,929	1,451	1,186	1,305
Total Trips	4,206	4,085	4,451	4,311	4,579	4,622	4,522	3,450	3,491	2,813

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

()	` '	<i>,</i> .	•	•	•	,					
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic bonito	Н	6	11	5	29	13	3	7	4	1	5
Atlantic bonnto	R	17	(1)	2	9	38	12	9	1	3	(1)
Atlantic cod	Н	585	582	348	388	120	232	261	213	412	360
Atlantic cou	R	1,050	937	658	932	424	658	671	582	884	542
Atlantic mackerel	Н	2,024	1,313	481	1,927	3,603	951	2,024	471	2,084	1,649
Atlantic mackerer	R	61	45	75	17	422	27	152	68	185	42
Bluefish	Н	229	374	354	551	653	681	519	344	476	226
Didensii	R	627	1,020	1,295	1,814	1,843	1,241	1,302	953	1,027	597
Haddock	Н	63	75	127	247	121	292	232	155	143	53
Haddock	R	125	130	56	62	62	56	158	36	33	13
Porgies (scup)	Н	975	1,624	3,315	657	425	1,771	762	1,070	925	785
i orgies (scup)	R	879	1,221	1,486	751	1,097	1,183	1,687	1,743	1,858	1,175
Striped bass	Н	308	405	445	340	315	314	378	344	341	256
Striped bass	R	5,719	4,362	4,980	3,987	7,811	5,331	3,650	2,283	1,672	972
Summer flounder	Н	156	177	225	267	238	138	233	51	45	59
Julillier Hourider	R	337	244	348	358	611	136	273	96	215	182
Winter flounder	Н	51	45	45	39	44	41	167	87	86	69
vviiitei iloulluel	R	34	30	14	40	20	19	62	83	68	58
Wrasses (tautog)	Н	103	47	21	73	80	92	34	24	45	33
vviasses (tautog)	R	284	189	68	127	332	413	78	96	117	210

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

Massachusetts's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	175,991 (2.4%)	3,023,126 (2.7%)	127,902 (3.2%)	179,522 (2.7%)	288,352 (2.9%)	8.42
2010	169,790 (2.3%)	2,928,545 (2.6%)	158,404 (3.2%)	229,031 (2.6%)	377,846 (2.9%)	ND^2
% change	-3.52%	-3.13%	23.8%	27.6%	31%	NA ³

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	26	23	25	28	36	24	26	22	26
prep. & packaging	Receipts	1,296	676	2,284	2,266	2,525	908	1,250	1,944	1,250
Seafood Sales,	Firms	78	59	64	59	62	57	64	62	64
retail	Receipts	7,314	5,409	5,933	5,528	4,905	4,421	7,982	6,889	7,982

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	45	55	53	50	47	52	44	44	44
prep. & packaging	Employees	2,231	2,717	2,743	2,671	2,607	2,684	2,355	2,396	2,159
	Payroll	92,776	110,917	112,642	115,704	120,912	113,580	109,747	119,282	107,635
Seafood sales,	Establishments	207	163	148	151	139	160	141	144	149
wholesale	Employees	2,393	1,880	1,890	1,836	1,706	1,803	1,442	1,542	1,591
Wildicalc	Payroll	107,871	74,431	75,689	76,070	77,106	81,863	68,898	70,864	83,467
Sanfood sales	Establishments	126	124	128	116	115	126	118	115	112
Seafood sales, retail	Employees	490	720	686	677	692	737	549	542	584
	Payroll	10,673	17,760	17,454	17,725	18,165	19,267	15,017	15,261	16,495

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	10	13	13	10	12	14	14	12	12
Lakes freight	Employees	ND^2	ND^2	688	ND^2	623	283	169	166	ND^2
transportation	Payroll	ND^2	ND^2	36,533	ND^2	38,421	18,620	11,701	10,011	ND^2
Door oos fusialet	Establishments	12	10	10	10	11	12	8	10	8
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	509	ND^2	361	ND^2	313
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	38,982	ND^2	38,908	35,473	36,069
D	Establishments	2	1	1	4	4	1	NA^3	1	NA^3
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	NA^3
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	NA^3
	Establishments	139	145	135	139	141	173	175	177	175
Marinas	Employees	988	969	989	973	1,064	1,154	1,138	1,188	1,150
	Payroll	35,169	40,700	41,474	43,103	45,894	51,705	53,694	56,663	57,002
M	Establishments	7	6	6	5	4	5	3	2	2
Marine cargo handling	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	69	ND^2	ND^2	ND^2
nanunng	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	2,867	2,271	ND^2	ND^2
Marrianal	Establishments	5	5	7	6	11	9	8	11	9
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	65	75	71	150
services to shipping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	4,540	4,355	4,342	9,413
D . 0	Establishments	NA^3	3	3	3	4	3	4	4	8
Port & harbor operations	Employees	NA^3	ND^2	ND^2	ND^2	ND^2	69	63	66	86
operations	Payroll	NA^3	ND^2	ND^2	ND^2	ND^2	647	1,289	1,323	2,662
Chin 0, hoot	Establishments	50	53	55	50	47	49	43	38	37
Ship & boat	Employees	617	ND^2	ND^2	588	ND^2	588	603	579	535
building	Payroll	21,710	ND^2	ND^2	20,050	ND^2	26,445	28,402	20,685	20,196

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

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

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

2011 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	5,968	766,257	287,785	2,044	114,586	58,059		
Commercial Harvesters	695	41,186	18,077	695	41,186	18,077		
Seafood Processors & Dealers	629	67,994	34,451	164	17,920	9,079		
Importers	1,845	507,565	154,728	0	0	0		
Seafood Wholesalers & Distributors	360	46,329	21,492	61	7,844	3,639		
Retail	2,439	103,183	59,038	1,124	47,637	27,264		

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

0				3 . , .								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Total revenue	16,689	15,127	17,214	22,084	18,915	16,996	17,471	17,757	20,653	23,483		
Finfish & other	7,350	5,748	6,449	6,840	4,855	4,151	4,824	5,571	5,122	6,153		
Shellfish	9,339	9,380	10,765	15,244	14,059	12,845	12,647	12,186	15,531	17,330		
American lobster	2	ND^1	10,199	14,377	13,915	12,492	12,267	11,919	14,890	16,337		
Atlantic cod	1,983	1,853	2,244	1,913	1,705	1,972	2,311	2,587	2,184	2,501		
Atlantic herring	783	1,170	3	ND^2	ND^2	147	134	271	375	208		
Goosefish	1,853	1,097	1,456	1,484	794	375	290	280	214	208		
Haddock	134	144	157	136	132	123	89	68	29	35		
Hake	321	303	200	279	219	244	167	215	237	445		
Pollock	847	589	569	1,138	1,221	902	1,093	1,284	843	1,359		
Sea scallop	726	375	276	527	24	30	16	4	3	26		
Shrimp	104	212	222	340	120	ND^2	ND^2	ND^2	567	ND^2		
Spiny dogfish	85	27	0	ND^2	183	ND^2	419	557	292	451		

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

0			• ,	•	• (•	,			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	23,200	27,435	23,796	21,281	10,820	8,422	10,463	13,887	11,820	12,321
Finfish & other	20,354	24,747	21,074	18,081	7,857	5,166	7,178	10,094	7,026	7,151
Shellfish	2,846	2,688	2,722	3,200	2,963	3,256	3,284	3,793	4,794	5,169
American lobster	0	ND^2	2,097	2,556	2,666	2,469	2,567	2,985	3,659	3,917
Atlantic cod	1,583	1,458	1,633	1,293	1,023	1,168	1,479	1,985	1,227	1,287
Atlantic herring	14,125	18,933	32	ND^2	ND^2	936	1,198	3,120	2,830	1,514
Goosefish	1,876	1,629	1,640	1,226	621	317	249	249	172	153
Haddock	95	108	123	99	73	61	53	45	18	19
Hake	557	729	405	372	241	313	222	423	322	587
Pollock	997	1,109	1,202	1,997	2,566	2,025	2,456	2,019	1,042	1,737
Sea scallop	177	100	44	76	3	4	2	1	0	3
Shrimp	90	223	432	567	294	ND^2	ND^2	ND^2	963	ND^2
Spiny dogfish	349	175	0	ND^2	620	ND^2	1,370	2,073	1,214	1,647

Average Annual	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
American lobster	3.86	ND^2	4.86	5.62	5.22	5.06	4.78	3.99	4.07	4.17
Atlantic cod	1.25	1.27	1.37	1.48	1.67	1.69	1.56	1.30	1.78	1.94
Atlantic herring	0.06	0.06	0.10	ND^2	ND^2	0.16	0.11	0.09	0.13	0.14
Goosefish	0.99	0.67	0.89	1.21	1.28	1.18	1.17	1.13	1.24	1.36
Haddock	1.41	1.33	1.27	1.38	1.82	2.01	1.70	1.52	1.55	1.91
Hake	0.58	0.41	0.49	0.75	0.91	0.78	0.75	0.51	0.74	0.76
Pollock	0.85	0.53	0.47	0.57	0.48	0.45	0.45	0.64	0.81	0.78
Sea scallop	4.10	3.76	6.22	6.89	7.44	8.26	7.68	7.22	8.84	10.42
Shrimp	1.16	0.95	0.51	0.60	0.41	ND^2	ND^2	ND^2	0.59	ND^2
Spiny dogfish	0.24	0.16	0.18	ND^2	0.30	ND^2	0.31	0.27	0.24	0.27

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	149	12,231	4,083	7,166
Private Boat	71	7,354	2,544	4,445
Shore	12	1,062	371	629
Total Durable Equipment Impacts	145	20,358	7,179	10,374
Total State Trip and Durable Equipment Economic Impacts	376	41,005	14,177	22,614

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	8,476
For-Hire	4,912	3,590	Other Equipment	2,294
Private Boat	554	6,876	Boat Expenses	9,135
Shore	618	379	Vehicle Expenses	6,218
Total Trip Expenditures	6,085	10,846	Second Home Expenses	0
			Total Durable Equipment Expenditures	26,123
Total State Trip and Dura	ble Equipment Exp	enditures		43,054

Recreational Anglers by Residential Area (thousands of anglers)

0	,		•		υ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	60	91	81	105	90	97	63	67	46	56
Non-Coastal	11	16	13	14	15	13	8	9	7	10
Out of State	65	75	69	84	82	63	46	58	33	30
Total Anglers	137	182	163	203	187	172	118	134	86	96

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	29	35	28	53	90	113	91	98	61	69
Private	142	230	154	238	182	233	138	148	90	178
Shore	146	151	161	214	227	155	103	155	92	47
Total Trips	317	416	343	505	499	501	332	401	243	294

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

Trail Vest (11) una 1		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Н	(1)	(1)	1	(1)	(1)	3	(1)	(1)	(1)	(1)
	R	4	(1)	2	2	9	1	3	(1)	1	(1)
Atlantic cod	Н	38	108	67	68	65	53	81	128	80	127
Atlantic Cou	R	70	207	96	137	247	235	232	209	130	258
Atlantic mackerel	Н	214	409	71	407	116	128	496	882	294	2,142
Atlantic mackerer	R	68	61	10	16	34	9	36	81	17	187
Bluefin tuna	Н	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Didellii tulla	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2
Bluefish	Н	19	7	13	21	9	35	5	(1)	1	2
Didensii	R	14	18	9	47	23	18	3	2	(1)	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)
Haddock	Н	19	44	68	103	167	97	90	100	48	76
Haddock	R	43	127	22	38	109	43	18	29	11	20
Pollock	Н	89	62	57	60	76	70	52	40	51	100
1 Ollock	R	64	43	33	34	46	17	20	49	77	104
Striped bass	Н	13	25	8	24	14	5	5	9	6	32
otriped bass	R	237	260	226	572	459	258	78	59	52	98
Winter flounder	Н	8	8	1	1	7	10	11	10	3	12
vviiitei noundei	R	10	2	2	1	3	7	6	5	5	1

 $^{^{1}}$ 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
2002	37,928 (0.53%)	550,725 (0.49%)	18,652 (0.47%)	27,285 (0.44%)	46,730 (0.45%)	0.29
2010	37,452 (0.51%)	562,505 (0.5%)	24,224 (0.49%)	35,224 (0.43%)	61,636 (0.44%)	0.16
% change	-1.26%	2.14%	29.9%	29.1%	31.9%	-31%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	0	7	4	4	4	5	0	0	0
prep. & packaging	Receipts	ND^2	1,205	1,147	842	1,087	927	ND^2	ND^2	ND^2
Seafood Sales,	Firms	9	14	15	11	10	11	17	14	17
retail	Receipts	862	960	1,438	1,330	1,496	1,540	1,894	1,858	1,894

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	9	11	10	10	10	7	7	8	8
prep. & packaging	Employees	368	322	448	418	ND^2	ND^2	ND^2	115	292
prep. & packaging	Payroll	13,452	13,676	18,886	16,275	ND^2	ND^2	ND^2	3,234	10,971
Seafood sales,	Establishments	14	11	12	10	9	8	8	8	8
wholesale	Employees	78	ND^2	82	ND^2	ND^2	92	101	88	80
Wildiesale	Payroll	2,093	ND^2	2,511	ND^2	ND^2	3,360	4,142	4,268	4,171
Seafood sales,	Establishments	9	12	12	12	15	15	14	14	12
retail	Employees	ND^2	ND^2	ND^2	79	78	93	83	95	102
Tetali -	Payroll	ND^2	ND^2	ND^2	2,053	2,201	2,077	2,011	2,299	2,296

		0000	0000	0004	000=	0006	200=	0000	0000	0010
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	1	NA^3	NA^3	1	1	1	NA^3	NA^3	NA^3
Lakes freight	Employees	ND^2	NA^3	NA^3	ND^2	ND^2	ND^2	NA^3	NA^3	NA^3
transportation	Payroll	ND^2	NA^3	NA^3	ND^2	ND^2	ND^2	NA^3	NA^3	NA^3
Door oos fusialet	Establishments	1	1	1	2	2	1	1	1	1
Deep sea freight transportation	Employees	ND^2								
transportation	Payroll	ND^2								
Daan aan massannan	Establishments	1	NA^3							
Deep sea passenger transportation	Employees	ND^2	NA^3							
transportation	Payroll	ND^2	NA^3							
	Establishments	36	40	40	38	35	35	37	37	35
Marinas	Employees	228	196	226	194	ND^2	171	173	146	135
	Payroll	10,872	9,043	9,315	8,871	ND^2	7,774	8,114	7,022	6,920
Marina aarma	Establishments	NA^3	NA^3	NA^3	NA^3	NA^3	1	NA^3	NA^3	NA^3
Marine cargo handling	Employees	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3
nanding	Payroll	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3
Nevimetianal	Establishments	2	3	3	4	4	2	2	2	2
Navigational services to shipping	Employees	ND^2								
scrvices to silipping	Payroll	ND^2								
Port & harbor	Establishments	1	NA^3							
operations	Employees	ND^2	NA^3							
operations	Payroll	ND^2	NA^3							
Chin I host	Establishments	8	10	8	6	6	8	9	8	7
Ship & boat building	Employees	ND^2								
bullullig	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.

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

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

2011 Economic Impacts of the Rhode Island Seafood Industry (thousands of dollars)

•			, ,	,			
		With Imports		Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added	
Total Impacts	9,157	1,024,748	397,018	4,642	269,101	136,313	
Commercial Harvesters	2,068	130,996	61,578	2,068	130,996	61,578	
Seafood Processors & Dealers	463	48,609	24,478	292	30,835	15,527	
Importers	2,249	618,743	188,620	0	0	0	
Seafood Wholesalers & Distributors	483	58,591	27,316	119	14,385	6,707	
Retail	3,894	167,808	95,026	2,164	92,884	52,501	

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

					, .		`		,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	64,718	66,088	77,565	91,408	98,488	72,441	66,300	61,751	62,677	75,956
Finfish & other	25,115	24,408	25,821	24,672	28,123	24,998	22,995	23,566	23,009	24,545
Shellfish	39,602	41,679	51,744	66,736	70,366	47,442	43,306	38,185	39,668	51,412
All other flounders	3,194	2,728	2,136	1,734	3,499	3,585	2,171	1,455	593	805
American lobster	15,875	16,731	14,624	23,009	18,391	12,151	12,987	11,218	12,374	12,756
Atlantic herring	1,312	1,195	1,187	1,075	2,667	982	631	1,260	1,385	981
Atlantic mackerel	3,031	2,385	3,815	2,888	3,293	1,182	882	3,301	1,886	73
Goosefish	4,757	4,813	3,421	4,549	4,481	3,533	3,590	3,022	2,974	4,594
Quahog clam	7,043	6,370	5,868	3,438	3,481	4,010	3,273	2,849	3,293	3,920
Scups or porgies	2,229	2,098	1,990	2,319	2,778	2,782	2,335	2,689	2,833	3,312
Sea scallop	ND^1	279	1,512	13,268	20,783	8,963	2,170	2,342	2,156	6,834
Squid	13,208	14,319	25,133	16,973	16,753	15,339	17,687	15,249	12,589	20,379
Summer flounder	3,992	4,060	5,309	5,866	5,042	4,416	4,592	4,541	5,547	6,415

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

- C	_		. , .		• \	•	,			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	103,530	97,456	115,037	97,565	112,606	75,179	71,923	83,937	77,477	77,236
Finfish & other	70,552	62,340	62,169	47,820	60,590	40,848	34,465	46,467	42,340	40,180
Shellfish	32,978	35,116	52,868	49,745	52,016	34,331	37,458	37,471	35,137	37,056
All other flounders	2,781	2,428	2,360	1,315	1,848	1,871	1,144	1,027	358	615
American lobster	3,835	3,475	3,064	4,344	3,749	2,293	2,772	2,832	2,923	2,753
Atlantic herring	12,774	13,440	13,491	11,605	23,150	7,537	4,504	9,528	8,279	6,717
Atlantic mackerel	20,930	10,768	15,269	8,075	10,143	4,242	2,385	9,057	4,356	132
Goosefish	5,148	6,830	4,288	4,143	3,858	3,117	3,120	2,748	2,519	3,202
Quahog clam	1,192	1,131	1,080	642	679	610	556	511	599	666
Scups or porgies	3,675	3,814	3,425	3,424	3,643	3,932	2,151	3,619	4,298	6,335
Sea scallop	ND^2	76	249	1,612	3,290	1,357	310	356	267	690
Squid	23,713	25,862	43,697	22,135	21,294	23,718	26,417	26,452	19,799	25,995
Summer flounder	2,286	2,178	3,085	2,925	2,123	1,516	1,473	1,794	2,289	2,824

Average Annual 1	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
All other flounders	1.15	1.12	0.90	1.32	1.89	1.92	1.90	1.42	1.66	1.31
American lobster	4.14	4.82	4.77	5.30	4.91	5.30	4.69	3.96	4.23	4.63
Atlantic herring	0.10	0.09	0.09	0.09	0.12	0.13	0.14	0.13	0.17	0.15
Atlantic mackerel	0.14	0.22	0.25	0.36	0.32	0.28	0.37	0.36	0.43	0.55
Goosefish	0.92	0.70	0.80	1.10	1.16	1.13	1.15	1.10	1.18	1.43
Quahog clam	5.91	5.63	5.43	5.35	5.13	6.57	5.88	5.58	5.50	5.89
Scups or porgies	0.61	0.55	0.58	0.68	0.76	0.71	1.09	0.74	0.66	0.52
Sea scallop	ND^2	3.67	6.07	8.23	6.32	6.61	7.00	6.58	8.07	9.90
Squid	0.56	0.55	0.58	0.77	0.79	0.65	0.67	0.58	0.64	0.78
Summer flounder	1.75	1.86	1.72	2.01	2.38	2.91	3.12	2.53	2.42	2.27

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	100	9,212	3,124	5,507
Private Boat	196	18,451	6,509	11,053
Shore	104	8,739	3,031	5,025
Total Durable Equipment Impacts	873	120,709	35,293	52,065
Total State Trip and Durable Equipment Economic Impacts	1,273	157,111	47,957	73,650

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures			
	Non-Residents	Residents	Fishing Tackle	60,232			
For-Hire	6,296	646	Other Equipment	4,311			
Private Boat	7,663	11,222	Boat Expenses	76,406			
Shore	4,332	3,520	Vehicle Expenses	4,176			
Total Trip Expenditures	18,291	15,388	Second Home Expenses	0			
			Total Durable Equipment Expenditures	145,125			
Total State Trip and Durable Equipment Expenditures							

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	134	147	129	145	177	171	169	111	161	105
Non-Coastal	NA^1									
Out of State	214	253	237	241	291	229	297	209	225	190
Total Anglers	348	400	366	386	468	401	465	320	387	296

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	36	60	43	55	54	75	67	56	41	38
Private	595	581	650	792	642	590	716	423	531	536
Shore	881	952	812	758	874	758	674	507	667	539
Total Trips	1,512	1,593	1,505	1,605	1,570	1,423	1,457	986	1,239	1,113

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

()		` '	, .	•	•	`	,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic bonito	Н	12	2	3	1	(1)	6	(1)	(1)	(1)	(1)
Atlantic bonito	R	1	4	8	(1)	(1)	4	1	(1)	(1)	(1)
Atlantic cod	Н	6	1	1	1	4	1	2	4	2	4
Atlantic cou	R	8	5	2	2	2	(1)	1	7	12	13
Black seabass	Н	77	70	26	86	42	42	53	36	160	51
DIACK SEADASS	R	242	206	24	64	160	119	128	133	211	221
Bluefish	Н	326	336	256	344	470	296	280	64	102	124
Didensii	R	801	932	801	527	555	685	491	160	94	327
Porgies (scup)	Н	604	1,027	818	430	471	352	633	140	398	569
r orgies (scup)	R	934	806	518	689	801	613	1,387	333	536	663
Striped bass	Н	77	115	84	111	75	100	52	72	71	87
Striped bass	R	531	448	525	634	834	677	417	398	183	213
Summer flounder	Н	190	206	249	164	265	176	203	72	118	161
Julillier Hourider	R	768	350	278	279	1,129	611	848	382	231	725
Winter flounder	Н	30	9	7	(1)	(1)	1	1	4	2	(1)
vviiitei iloulidei	R	20	1	5	(1)	(1)	2	1	1	1	(1)
Wrasses (tautog)	Н	62	120	125	160	81	125	103	84	197	19
vviasses (tautog)	R	134	196	222	321	200	268	187	186	187	138
Yellowfin tuna	Н	2	2	(1)	1	(1)	(1)	(1)	(1)	(1)	(1)
i chowini tuna	R	(1)	11	(1)	2	(1)	(1)	(1)	(1)	(1)	(1)

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

 $^{^2}$ In this table, $^\prime(1)^\prime=0$ -999 thousand fish and $^\prime1^\prime=1,000$ -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
2002	28,860 (0.4%)	415,970 (0.37%)	13,547 (0.34%)	21,530 (0.36%)	38,135 (0.35%)	2.26
2010	28,521 (0.39%)	399,000 (0.36%)	16,832 (0.34%)	27,127 (0.34%)	48,840 (0.34%)	2.27
% change	-1.17%	-4.08%	24.2%	26%	28.1%	-40.7%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	0	0	0	6	8	8	7	9	7
prep. & packaging	Receipts	ND^2	ND^2	ND^2	2,024	1,662	2,291	1,376	1,045	1,376
Seafood Sales,	Firms	20	16	14	16	24	23	19	16	19
retail	Receipts	2,433	2,227	2,186	2,215	3,266	3,536	2,748	2,821	2,748

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Saafaad product	Establishments	9	7	7	7	7	6	8	7	5
Seafood product prep. & packaging	Employees	184	355	355	270	231	196	270	275	193
prop. & packaging	Payroll	7,284	10,381	10,867	5,549	6,137	6,876	6,354	5,821	6,096
Seafood sales,	Establishments	39	38	35	32	36	35	29	34	32
wholesale	Employees	380	394	259	206	188	224	226	202	204
Wilolesale	Payroll	14,505	15,724	12,269	9,851	10,209	11,447	10,505	9,534	9,815
Seafood sales,	Establishments	27	29	34	31	28	27	23	24	26
retail	Employees	151	162	163	140	ND^2	109	94	127	113
recan	Payroll	3,015	2,870	2,707	2,447	ND^2	2,207	2,027	2,398	2,309

								,		
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	2	1	1	1	1	1	2	1	1
Lakes freight	Employees	ND^2								
transportation	Payroll	ND^2								
Dans and funishe	Establishments	1	1	2	2	2	2	2	2	2
Deep sea freight transportation	Employees	ND^2								
transportation	Payroll	ND^2								
Dans	Establishments	2	3	NA^3	NA^3	NA^3	1	1	1	1
Deep sea passenger transportation	Employees	ND^2	ND^2	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	NA^3	NA^3	NA^3	ND^2	ND^2	ND^2	ND^2
	Establishments	56	61	60	66	63	68	73	70	72
Marinas	Employees	522	405	475	408	457	463	476	459	428
	Payroll	17,609	14,456	15,111	15,843	18,748	22,029	23,204	21,372	22,227
Marina aarma	Establishments	3	1	1	1	2	2	5	5	5
Marine cargo handling	Employees	ND^2								
Handing	Payroll	ND^2								
Navimational	Establishments	10	8	8	8	7	7	8	8	8
Navigational services to shipping	Employees	36	46	ND^2						
services to silipping	Payroll	2,162	2,585	ND^2	ND^2	ND^2	ND^2	5,904	3,728	3,955
David () Isaailaan	Establishments	NA^3	2	2	2	2	2	2	1	1
Port & harbor operations	Employees	NA^3	ND^2							
operations	Payroll	NA^3	ND^2							
Chin O. book	Establishments	31	37	38	36	38	37	39	33	29
Ship & boat building	Employees	1,329	ND^2	ND^2	ND^2	1,325	1,374	1,342	1,085	954
bulluling	Payroll	47,328	ND^2	ND^2	ND^2	52,682	55,788	54,225	41,246	40,004

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

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

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

Mid-Atlantic

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



Regional Summary Mid-Atlantic Region

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, noneNo stocks in this region are currently subject to overfishing. Releases of winter flounder increased 331% 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 182% increase in catch overall in between 2008 and 2009.

Commercial Fisheries

In 2011, commercial fishermen in the Mid-Atlantic Region landed 780 million pounds of finfish and shellfish, earning \$527 million in landings revenue. Landings revenue was dominated by sea scallop (\$227 million) and blue crab (\$99 million). These species commanded ex-vessel prices of \$9.73 and \$0.98 per pound, respectively, and comprised 62% of total landings revenue, but only 16% of total landings in the Mid-Atlantic Region.

Key Mid-Atlantic Region Commercial Species

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

New Jersey and Virginia had the highest landings revenue in the region in 2011, \$214 million and \$192 million, respectively. The next greatest landings revenue came from Maryland with \$77 million in landings revenue. In terms of pounds landed, Virginia had the highest landings (494 million pounds), followed by New Jersey (176 million pounds) and Maryland (78 million pounds).

Economic Impacts¹

In 2011, the Mid-Atlantic Region's seafood industry generated 339 in employment impacts in Delaware, 15,000 in employment impacts in Maryland, 44,000 in employment impacts in New Jersey, 42,000 in employment impacts in New York, and 22,000 in employment impacts in Virginia. New Jersey generated the largest impacts across the three other impact categories, generating \$6.6 billion sales impacts, \$1.5 billion in income, and \$2.4 billion in value added impacts. The smallest income impacts were generated in Delaware (\$8.9 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 2,800 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 \$527 million in 2011. This was a 54% increase (a 6.9% increase in real terms) from 2002 levels (\$342 million) and a 3.7% increase (a 4.4% decrease in real terms) relative to 2010 (\$509 million). Totaling \$404 million in 2011, shellfish revenue experienced a 57% increase (a 8.7% increase in real terms) from 2002 to 2011 and experienced a 2.4% increase (5.6% decrease in real terms) from 2010 to 2011.

In terms of finfish, Virginia contributed the most (\$59 million), followed by New Jersey (\$27 million), and New York (\$22 million). Shellfish landings revenue was dominated by New Jersey (\$187 million), followed by Virginia (\$133 million), and Maryland (\$63 million).

Sea scallop and blue crab had the highest landings revenue in the Mid-Atlantic Region in 2011. Between 2002 and 2011, the landings revenue from sea scallop increased 149% (a 73% increase in real terms) and the landings revenue for blue crab 61% increase (a 12% increase in real terms).

From 2002 to 2011, species or species groups with large changes in landings revenue include squid (increased 122%), summer flounder (increased 82%), and Atlantic surf clam (decreased 68%). Species or species groups with large changes in landings revenue between 2010 and 2011 include squid (increasing 72%), Atlantic surf clam (decreasing 38%), and eastern oyster (decreasing 33%).

Landings

Fishermen in the Mid-Atlantic Region landed 780 million pounds of finfish and shellfish in 2011. This was a 11% increase from the 702 million pounds landed in 2002 but a 3.4% decrease from the 808 million pounds landed in 2010. Finfish landings contributed 74% of total landings in the Mid-Atlantic Region (578 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)

Mid-Atlantic Region Regional Summary

pounds) in 2011. From 2010 to 2011, finfish landings experienced a 0.3% decrease. Over the same time period, shellfish landings experienced a 11% decrease from 228 million pounds in 2010 to 202 million pounds in 2011 and a 1.8% decrease from 206 million pounds in 2002.

Commercial Fisheries Facts

Landings revenue

- On average, between 2002 and 2011, the key species or species groups accounted for 84% of total revenue, generating \$358 million in the Mid-Atlantic Region.
- <u>Sea scallop</u> had higher landings revenues than any other species or species group, averaging \$155 million in landings revenue from 2002 to 2011.
- <u>Squid</u> had the largest one-year increase in landings revenue over the 10 year time period, increasing 120% from \$6.5 million in 2003 to \$14 million in 2004.
- American lobster had the largest one-year decrease in landings revenue over the 10 year time period, decreasing 43% from \$8.9 million in 2008 to \$5 million in 2009.

Landings

- Key species or species groups contributed an average of 84% annually to total landings between 2002 and 2011.
- Menhaden, contributed the most to landings in the region, averaging 429 million pounds from 2002 to 2011.
- Squid had the largest one-year increase in landings over the 10 year time period, increasing 297% from 10 million in 2003 pounds to 42 million pounds in 2004.
- <u>Squid</u> had the largest one-year decrease in landings over the 10 year time period, decreasing 71% from 42 million pounds in 2004 to 12 million pounds in 2005.

Prices

- Eastern oyster had the highest average annual ex-vessel price per pound (\$7.23) over the time period, followed by quahog clam (\$6.70), and sea scallop (\$6.34).
- Menhaden had the lowest average annual ex-vessel price per pound (\$0.07) over the time period, followed by Atlantic surf clam (\$0.59), and squid (\$0.68).
- <u>Squid</u> had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 121% from \$0.34 per pound in 2004 to \$0.75 in 2005.
- Eastern oyster had the largest decrease in ex-vessel price over the 10 year time period, decreasing 49% from \$8.92 per pound in 2010 to \$4.55 in 2011.

Menhaden and blue crab had the highest annual landings in the Mid-Atlantic Region in 2011, with 497 million pounds and 101 million pounds, respectively. Together they accounted for 77% of the total landings in 2011. Menhaden landings increased 26% and blue crab landings increased 61% from 2002 to 2011.

From 2002 to 2011, species or species groups with large changes in landings include squid (increasing 119%), Atlantic surf clam

(decreasing 73%), and blue crab (increasing 61%). Species or species groups with large changes in landings between 2010 and 2011 include Atlantic surf clam (decreasing 39%), summer flounder (increasing 36%), and eastern oyster (increasing 31%).

Prices

The ex-vessel prices for the Mid-Atlantic Region's key species and species groups in 2011 were higher than their 10 year average for six of the key species (two of the species in real terms). Ex-vessel prices for sea scallop and summer flounder experienced the biggest increases between 2002 and 2011, increasing 165% (84% in real terms) and 36% (-5.9% in real terms), respectively. Relative to the ex-vessel prices in 2010, the Mid-Atlantic Region's squid experienced the greatest increase (37.8%, 27.1% in real terms) from \$0.45 in 2010 to \$0.62 in 2011. Of the changes in ex-vessel price experienced by species or species groups between 2010 and 2011, eastern oyster experienced the greatest decrease (49%, 53% in real terms) from \$8.92 to \$4.55. Relative to ex-vessel prices in 2010, five species or species groups experienced increases, including squid (38%), and sea scallop (27%).

In Delaware, the species or species group with the largest change in ex-vessel price from 2002 to 2011 was American eel (131% increase, 61% increase in real terms) from \$1.31 to \$3.03. The largest change in ex-vessel price experienced in Maryland was for Sea scallop (179% increase, 94% increase in real terms from \$3.52 to \$9.83 and in New Jersey the largest change in ex-vessel price was experienced by atlantic mackerel (456% increase, 286% increase in real terms from \$0.09 to \$0.50).

Recreational Fishing

In 2011, over 2.4 million recreational anglers took 16 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, 53% of them were taken from a private or rental boat and another 40% were shore-based. Summer flounder were the most frequently caught species or species group with 20 million fish caught in 2011, and represented 35% of total fish caught in the region. Of the summer flounder caught, 92% of them were released rather than harvested.

Economic Impacts and Expenditures¹

The contribution of recreational fishing activities in the 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 10,000 full- and part-time jobs generated by recreational fishing activities in the state. Virginia (7,200 jobs), and Maryland (5,700 jobs), followed in terms of employment impacts.

Overall, these employment impacts were generated by expenditures on recreational fishing trips taken by anglers (private or rental boat, for-hire boat, or shore-based trips) and expenditures on durable equipment. Throughout the Mid-Atlantic Region, most of the employment impacts in 2011 were generated

¹Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2006, available at:http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006)

Regional Summary Mid-Atlantic Region

by expenditures on durable equipment: 75% in Virginia, 74% in New Jersey, and 67% 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 2011, sales impacts were the highest in New Jersey (\$1.7 billion in sales impacts), followed by Virginia (\$834 million), Maryland (\$784 million), New York (\$369 million), and Delaware (\$121 million). In the same year, value added impacts were the highest in New Jersey (\$871 million in value added impacts), followed by Virginia (\$434 million), Maryland (\$397 million), New York (\$212 million), and Delaware (\$56 million).

Overall, total fishing trip and durable equipment expenditures across the Mid-Atlantic Region in 2011 were \$3.7 billion. Approximately 78% of these expenditures were generated by durable equipment purchases. The greatest expenditures were for boat expenses (\$1.4 billion), followed by fishing tackle (\$731 million), vehicle expenses (\$428 million), other equipment (\$193 million), and second home expenses (\$141 million). Fishing trip-related expenditures by the Mid-Atlantic Region's non-residents totaled over \$222 million of which the greatest portion can be attributed to shore-based fishing trips (\$89 million). Residents of the Mid-Atlantic Region spent \$580 million on saltwater fishing trips, with the most of these expenses generated by private boat trips (\$353 million).

Key Mid-Atlantic Region Recreational Species

- Black seabass
- Bluefish
- Atlantic croaker
- Spot
- Scup

- Striped bass
- Summer flounder
- Weakfish drum
- Winter flounder
- Tautog

Participation

There were 2.4 million recreational anglers who fished in the Mid-Atlantic Region in 2011. This was a 34% increase from 2002 (1.8 million anglers). These anglers were Mid-Atlantic Region residents from either a coastal county (2.2 million anglers) or non-coastal county (145,000 anglers). About 94% of total anglers in 2011 were residents of a coastal county. Coastal county angler participation in 2011 increased 37% relative to 2002 (1.6 million anglers) and decreased 14% between 2010 and 2011. Non-coastal county angler participation increased 4.4% relative to 2002 (139,000 anglers) and decreased 18% relative to 2010 (178,000 anglers).

Fishing Trips

Recreational fishermen took 16 million fishing trips in the Mid-Atlantic Region in 2011. This was a 4% decrease from 2002 (17 million trips) and was 607,000 fewer trips than taken in 2010. Of the total trips taken in the Mid-Atlantic Region in 2011, approximately 53% of the trips were private or rental boat-based (8.5 million trips). The other most popular mode of fishing was shore based with 6.4 million trips in 2011.

Recreational Fishing Facts

Participation

- An average of 2.7 million anglers fished in the Mid-Atlantic Region annually from 2002 to 2011.
- In 2011, 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 2008 and 2009, decreasing 14%, from 2.8 million anglers to 2.4 million anglers.

Fishing trips

- In the Mid-Atlantic Region, an average of 19 million fishing trips were taken annually from 2002 to 2011.
- Private or rental boat and shore-based fishing trips accounted for 8.5 million and 6.4 million fishing trips, respectively, in 2011. Together these made up 93% 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 2008 and 2009, decreasing 18%, from 21 million trips to 17 million trips.

Harvest and release

- Summer flounder was the most commonly caught key species or species group, averaging 20 million fish over the 10 year time period. Of these, 87% 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 (87% released).
- Spot (65% harvested), followed by winter flounder (59% harvested), and Atlantic croaker (48% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.

Harvest and Release

Of the Mid-Atlantic Region's key species and species groups, summer flounder (20 million fish), Atlantic croaker (9.4 million fish), bluefish (6.7 million fish) and spot (6.6 million fish) were the most often caught by anglers in 2011. Weakfish drum (99% released), summer flounder (92% released), black seabass (86% released), tautog (81% released), striped bass (70% released), bluefish (63% released), winter flounder (58% released), Atlantic croaker (57% released), and scup (57% released) were more often released rather than harvested. The only species harvested more often than released was spot (61% harvested).

At the state level, summer flounder was the most often caught key species or species group in the Mid-Atlantic Region with

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20 million fish caught, region-wide. Most of these fish were caught in New Jersey, New York, and Delaware with 8.8 million, 7.7 million, and 683,000 fish, respectively. The most frequently caught fish in Maryland was white perch with 3.9 million fish and Atlantic croaker was the most commonly caught fish in Virginia (8.2 million) in 2011.

Between 2002 and 2011, eight 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 (82%), black seabass (72%), and winter flounder (65%).

Marine Economy¹

The sum of the gross domestic products by state for Delaware, Maryland, New Jersey, New York, and Virginia was \$2.4 trillion in 2011. Employee compensation totaled \$1.4 trillion and annual payroll totaled \$851 billion. These economic measures increased 34% (a 0.6% increase in real terms) and 26% (a 4.9% decrease in real terms), respectively between 2002 and 2010; and experienced a 2.9% increase (a 1.3% decrease in real terms), and 2.7% increase (a 1.4% decrease in real terms), respectively between 2009 and 2010. Approximately 1.1 million establishments employed 16 million full- and part-time employees across the region in 2010. This was a 2.5% increase in establishment numbers and a 0.8% decrease in employee numbers from 2002 to 2010.

In 2010, the commercial fishing location quotient (CFLQ) for New Jersey was the highest in the region at 1.19. This was an 18% increase from 2002 and a remained unchanged from 2009. New Jersey's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 1.2 times higher than the level of employment in these industries nationwide. The 2010 CFLQ in Virginia was 0.59 (a 18% increase from 2002).

Seafood Sales and Processing

In 2010, there were 228 nonemployer firms engaged in seafood product preparation and packaging across the Mid-Atlantic Region. In 2010, 32% of these firms were located in New York. Region-wide, annual receipts totaled \$14 million in 2010 and 0 from 2005 to 2009. Annual receipt totals experienced a 3.5% increase in Maryland between 2002 and 2010 from \$3.2 million to \$3.3 million. In contrast to an increase in nonemployer firms region-wide, the number of employer establishments engaged in seafood product preparation and packaging decreased 29% from 97 in 2002 to 68 in 2010. 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 499 seafood wholesale establishments in 2010. The number of employees was not available at the region level. From 2002 to 2010, the number of seafood wholesale establishments decreased 15% across the Mid-Atlantic Region.

Nonemployer firms engaged in seafood retail in the Mid-Atlantic Region totaled 512 in 2010, a 0.4% decrease relative to 2002. Of these firms, 16% were located in Maryland. At the state level, these firms showed a remained unchanged in New Jersey and decreased 15% in Virginia between 2002 and 2010. Annual receipts in the region totaled \$53 million in 2010.

Employer establishments engaged in seafood retail decreased 4.1% from 2002 to 2010, totaling 663 in 2010. These establishments employed 2,647 workers in 2009. In the Mid-Atlantic Region, annual payroll for seafood retail0 from \$NA in 2003 to \$60 million in 2010.

Transport, Support, and Marine Operations

For industries where data were available, marinas employed more people than any other industry in this sector, employing approximately 5,000 people in 2010. In contrast, the marine cargo handling industry had the highest annual payroll in the region totaling \$483 million. Marinas had the highest number of establishments (950), followed by the ship and boat building industries with 158 establishments and the coastal and great lakes freight transportation industries with 99 establishments.

In Maryland, industries with large changes in establishment numbers, employees, or annual payroll from 2009 to 2010 were: marine cargo handling (104% increase in payroll), marine cargo handling (71% increase in employees), deep sea freight transportation (53% increase in employees) and deep sea passenger transportation (50% decrease in establishments). In New Jersey, large changes were seen for port and harbor operations (130% increase in employees), port and harbor operations (89% increase in payroll), port and harbor operations (83% increase in establishments) and navigational services to shipping (44% decrease in employees). In New York, large changes were seen in the navigational services to shipping (162% increase in payroll), port and harbor operations (100% increase in establishments), navigational services to shipping (92% increase in employees) and deep sea passenger transportation (50% decrease in establishments).

¹Information for 2010 is reported in this section; 2011 data were not available for this report.

Commercial Fisheries Mid-Atlantic

2011 Economic Impacts of the Mid-Atlantic Region Seafood Industry (thousands of dollars)

		With Imports		Without Imports					
	Jobs	Sales	Valued Added	Jobs	Sales	Valued Added			
Delaware	339	43,746	14,661	302	34,728	11,796			
Maryland	15,274	1,743,095	665,883	6,966	368,398	184,663			
New Jersey	43,638	6,563,733	2,407,754	10,115	818,397	390,460			
New York	41,847	5,102,910	1,801,303	2,963	138,229	67,182			
Virginia	22,082	1,866,659	800,243	16,634	906,586	473,802			

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

		_					' '		,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	342,397	357,210	407,276	440,084	362,198	422,272	454,508	434,969	508,808	527,493
Finfish & other	84,091	87,702	87,648	101,538	95,508	104,079	91,633	101,999	113,732	123,033
Shellfish	258,306	269,508	319,628	338,547	266,689	318,193	362,876	332,970	395,076	404,460
American lobster	6,273	5,569	5,656	6,696	9,116	7,746	8,889	5,036	4,214	4,421
Atlantic surf clam	34,692	35,366	26,760	27,084	29,580	32,479	30,019	26,426	17,719	10,981
Blue crab	61,660	60,799	69,364	71,073	55,638	69,201	80,883	79,894	128,244	99,340
Eastern oyster	9,814	8,903	5,663	6,703	6,485	8,972	11,146	9,309	9,897	6,601
Menhaden	24,123	24,352	25,570	28,188	24,466	29,918	24,458	28,581	40,339	39,674
Quahog clam	16,935	20,160	19,918	20,773	20,229	23,437	35,852	23,022	21,783	19,994
Sea scallop	91,237	111,969	160,665	181,327	120,142	147,053	165,919	161,775	184,282	227,438
Squid	9,287	6,497	14,278	9,163	7,729	7,446	7,724	7,158	12,032	20,646
Striped Bass	8,215	9,751	7,633	11,335	9,947	10,994	10,684	11,451	11,422	12,632
Summer flounder	8,700	10,678	13,244	13,615	12,364	10,857	9,694	9,984	12,886	15,872

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	702,234	710,738	757,107	708,741	667,307	748,267	687,708	694,170	807,543	779,829
Finfish & other	496,430	514,804	529,453	517,898	488,011	556,786	482,090	490,157	579,127	577,628
Shellfish	205,804	195,934	227,654	190,843	179,296	191,481	205,619	204,013	228,416	202,201
American lobster	1,705	1,181	1,394	1,585	1,772	1,409	1,880	1,286	995	1,024
Atlantic surf clam	62,134	64,601	50,984	50,921	50,556	53,952	48,099	41,692	27,662	16,930
Blue crab	63,076	56,047	68,979	70,983	61,873	64,589	67,935	75,893	119,280	101,485
Eastern oyster	1,713	1,493	859	1,202	984	794	1,391	1,024	1,110	1,451
Menhaden	394,606	398,744	421,309	412,672	400,784	472,086	397,537	395,464	499,859	496,823
Quahog clam	2,318	3,311	3,537	3,735	3,728	4,115	5,246	3,255	2,469	2,345
Sea scallop	24,887	28,213	33,381	24,526	18,279	22,793	24,355	25,639	23,998	23,383
Squid	15,187	10,462	41,586	12,260	9,746	8,608	8,241	8,310	26,822	33,332
Striped Bass	4,591	5,273	3,927	5,706	4,746	5,477	5,693	5,852	5,621	5,406
Summer flounder	6,433	7,315	8,400	8,360	6,609	4,723	4,258	5,134	6,384	8,653

Average Annual I	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	2002	2003	2004	2005	2000	2007		2009	2010	2011
American lobster	3.68	4.71	4.06	4.22	5.15	5.50	4.73	3.92	4.23	4.32
Atlantic surf clam	0.56	0.55	0.52	0.53	0.59	0.60	0.62	0.63	0.64	0.65
Blue crab	0.98	1.08	1.01	1.00	0.90	1.07	1.19	1.05	1.08	0.98
Eastern oyster	5.73	5.96	6.59	5.58	6.59	11.30	8.02	9.09	8.92	4.55
Menhaden	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.07	0.08	0.08
Quahog clam	7.31	6.09	5.63	5.56	5.43	5.70	6.83	7.07	8.82	8.53
Sea scallop	3.67	3.97	4.81	7.39	6.57	6.45	6.81	6.31	7.68	9.73
Squid	0.61	0.62	0.34	0.75	0.79	0.86	0.94	0.86	0.45	0.62
Striped Bass	1.79	1.85	1.94	1.99	2.10	2.01	1.88	1.96	2.03	2.34
Summer flounder	1.35	1.46	1.58	1.63	1.87	2.30	2.28	1.94	2.02	1.83

	Trips	Jobs	Sales	Income	Value Added
Delaware	926,000	795	120,877	36,133	55,535
Maryland	2,820,000	5,745	783,833	260,839	396,620
New Jersey	5,162,000	9,965	1,697,115	554,318	870,983
New York	4,168,000	2,972	369,382	128,738	212,169
Virginia	2,898,000	7,237	833,508	280,954	433,725

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	731,471
For-Hire	46,468	100,767	Other Equipment	192,747
Private Boat	86,361	353,011	Boat Expenses	1,390,841
Shore	89,457	126,512	Vehicle Expenses	428,052
Total Trip Expenditures	222,287	580,288	Second Home Expenses	140,956
			Total Durable Equipment Expenditures	2,884,068
Total State Trip and Dura	ble Equipment Exp	enditures		3,686,643

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	1,643	2,229	2,363	3,002	2,876	3,234	2,823	2,437	2,598	2,244
Non-Coastal	139	144	157	252	224	212	197	187	178	145
Out-of-State	NA^1									
Total Anglers	1,783	2,372	2,520	3,254	3,100	3,446	3,020	2,623	2,776	2,389

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	1,025	1,181	1,099	1,268	1,337	1,688	1,144	1,110	870	1,048
Private Boat	9,550	11,287	11,244	11,901	11,863	12,372	11,567	9,708	9,365	8,514
Shore	6,070	7,383	6,243	7,668	7,370	8,124	8,006	6,195	6,346	6,412
Total Trips	16,645	19,851	18,586	20,837	20,570	22,184	20,717	17,013	16,581	15,974

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

					-	`					
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black seabass	Н	3,059	3,034	1,317	995	1,116	1,303	923	1,335	1,316	533
Diack Scabass	R	10,332	8,383	5,528	5,414	5,739	6,401	8,473	6,270	6,458	3,203
Bluefish	Н	2,517	3,192	4,142	4,667	3,904	4,945	3,516	2,932	2,558	2,465
Diuciisii	R	4,582	4,196	6,305	6,640	5,696	8,012	7,211	4,456	3,933	4,246
Drum (Atlantic	Н	10,866	9,350	10,399	10,492	9,254	8,584	9,981	7,308	6,020	3,992
croaker)	R	10,364	9,426	8,966	12,244	7,416	11,023	12,912	9,405	6,233	5,390
Drum (spot)	Н	2,316	4,771	2,604	4,769	6,657	11,998	6,557	4,346	3,699	4,033
Druin (spot)	R	1,015	1,658	1,305	4,755	2,885	3,940	4,492	2,238	2,574	2,609
Porgies (scup)	Н	1,186	5,268	1,948	992	2,005	1,699	1,544	1,638	2,735	771
r orgies (scup)	R	1,551	2,379	3,730	2,254	3,543	2,500	3,170	2,293	2,414	1,041
Striped bass	Н	1,251	1,663	1,472	1,598	2,025	1,772	1,681	1,382	1,403	1,655
Striped bass	R	5,052	7,801	9,579	8,033	9,227	7,730	4,787	3,802	3,465	3,782
Summer flounder	Н	2,634	3,918	3,467	3,339	3,195	2,540	1,725	1,563	1,226	1,509
Summer nounder	R	11,851	14,901	15,122	20,359	14,547	16,578	18,431	21,372	21,402	18,466
Weakfish drum	Н	919	307	418	1,102	554	331	372	37	14	7
Weakiisii uruiii	R	1,688	1,363	1,421	1,972	2,054	1,037	1,983	179	458	468
Winter flounder	Н	361	540	267	132	325	106	44	76	55	92
vviiitei iloulidei	R	265	182	64	222	188	42	32	138	103	126
Wrasses (tautog)	Н	1,231	382	598	275	679	728	668	692	759	352
vviasses (tautog)	R	2,531	1,011	1,369	856	2,005	2,203	1,979	1,912	2,319	1,531

 $^{^{1}}$ 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

2011 Economic Impacts of the Delaware Seafood Industry (thousands of dollars)

		With Imports	Without Import	Vithout Imports		
	Jobs	Sales	Value Added	Jobs	Sales	Value Added
Total Impacts	339	43,746	14,661	302	34,728	11,796
Commercial Harvesters	148	12,993	4,186	148	12,993	4,186
Seafood Processors & Dealers	29	5,175	1,750	28	5,030	1,702
Importers	28	7,659	2,335	0	0	0
Seafood Wholesalers & Distributors	23	3,154	1,430	19	2,541	1,152
Retail	112	14,765	4,960	107	14,163	4,756

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

			-	•						
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	6,067	5,204	5,419	6,113	5,677	7,931	6,900	7,542	7,840	7,091
Finfish & other	986	1,465	1,258	1,273	1,315	1,300	1,100	1,067	1,069	1,328
Shellfish	5,081	3,739	4,161	4,840	4,361	6,631	5,801	6,475	6,772	5,763
American eel	118	230	169	100	275	292	190	134	206	274
Black sea bass	21	181	181	157	190	198	156	25	8	2
Blue crab	3,511	1,899	2,839	3,429	2,961	5,329	4,605	5,435	5,957	4,819
Eastern oyster	478	305	361	485	459	490	410	334	404	347
Quahog clam	392	435	175	220	193	ND^1	ND^2	ND^2	ND^2	ND^2
Sea scallop	ND^2	ND^2	12	102	121	ND^2	256	173	ND^2	ND^2
Spot	8	46	38	98	53	57	40	49	50	67
Striped bass	336	479	497	494	501	300	403	327	396	410
Weakfish	176	83	61	82	55	31	18	5	4	2
Whelks	694	1,079	690	562	601	ND^2	ND^2	ND^2	ND^2	ND^2

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	5,857	5,018	4,288	4,851	4,369	5,346	4,706	5,011	5,214	4,921
Finfish & other	1,933	2,264	1,349	1,470	1,144	1,102	817	1,154	851	1,157
Shellfish	3,925	2,754	2,938	3,381	3,224	4,244	3,890	3,857	4,363	3,764
American eel	90	156	142	110	120	131	80	60	69	91
Black sea bass	12	98	84	73	87	73	61	6	3	4
Blue crab	3,062	1,792	2,276	2,924	2,856	3,799	3,508	3,414	4,110	3,502
Eastern oyster	133	76	79	84	75	80	67	67	71	62
Quahog clam	134	141	54	69	60	ND^2	ND^2	ND^2	ND^2	ND^2
Sea scallop	ND^2	ND^2	2	13	20	ND^2	38	25	ND^2	ND^2
Spot	14	77	59	155	57	62	32	61	60	82
Striped bass	146	191	176	174	182	143	189	184	185	185
Weakfish	173	91	51	71	33	25	11	3	2	1
Whelks	590	729	491	276	203	ND^2	ND^2	ND^2	ND^2	ND^2

Average Annual Trice of New Species Species Groups (dollars per pound)										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
American eel	1.31	1.48	1.19	0.91	2.28	2.22	2.38	2.24	3.00	3.03
Black sea bass	1.69	1.86	2.17	2.15	2.18	2.73	2.57	4.25	2.65	0.50
Blue crab	1.15	1.06	1.25	1.17	1.04	1.40	1.31	1.59	1.45	1.38
Eastern oyster	3.60	4.00	4.57	5.76	6.10	6.14	6.09	4.97	5.67	5.56
Quahog clam	2.92	3.09	3.26	3.18	3.22	ND^2	ND^2	ND^2	ND^2	ND^2
Sea scallop	ND^2	ND^2	5.18	8.08	6.19	ND^2	6.81	6.80	ND^2	ND^2
Spot	0.59	0.60	0.65	0.63	0.92	0.92	1.24	0.81	0.84	0.82
Striped bass	2.30	2.50	2.82	2.84	2.75	2.09	2.13	1.77	2.13	2.21
Weakfish	1.02	0.91	1.18	1.16	1.64	1.27	1.75	1.92	1.56	2.01
Whelks	1.18	1.48	1.41	2.04	2.96	ND^2	ND^2	ND^2	ND^2	ND^2

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	34	3,269	1,064	1,869
Private Boat	179	21,101	6,093	10,519
Shore	188	18,081	5,697	9,603
Total Durable Equipment Impacts	394	78,426	23,279	33,545
Total State Trip and Durable Equipment Economic Impacts	795	120,877	36,133	55,535

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	29,440
For-Hire	1,906	461	Other Equipment	11,564
Private Boat	6,650	12,047	Boat Expenses	26,932
Shore	9,142	6,856	Vehicle Expenses	21,844
Total Trip Expenditures	17,698	19,363	Second Home Expenses	5,347
			Total Durable Equipment Expenditures	95,127
Total State Trip and Dura	ble Equipment Exp	enditures		132,188

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	89	127	116	120	137	150	134	114	128	129
Non-Coastal	NA^1									
Out of State	177	199	243	191	205	224	182	173	165	190
Total Anglers	266	326	359	311	342	374	315	287	293	318

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	64	38	32	42	62	70	56	44	20	17
Private	536	553	654	553	595	722	529	487	408	512
Shore	429	514	389	431	427	459	444	379	391	397
Total Trips	1,029	1,105	1,075	1,026	1,084	1,251	1,029	910	819	926

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

narrest (11) and 1		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic mackerel	Н	6	(1)	13	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Atlantic mackerer	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	(1)	(1)
Black seabass	Н	608	308	43	67	113	94	21	37	22	44
Diack Scabass	R	1,233	832	276	275	329	583	464	292	232	210
Bluefish	Н	116	89	128	126	98	152	68	98	31	45
Diuensii	R	435	120	408	190	288	539	166	166	57	128
Drum (Atlantic	Н	261	342	389	825	764	359	370	452	75	92
croaker)	R	362	656	599	675	938	672	603	539	230	88
Drum (weakfish) ³	Н	121	20	5	19	10	3	4	6	(1)	(1)
Dium (weaknism)	R	101	39	72	104	96	22	61	4	12	6
Striped bass	Н	29	29	25	20	20	8	26	20	15	18
Striped bass	R	114	169	155	250	248	247	260	146	65	110
Summer flounder	Н	107	105	110	73	88	108	36	87	52	66
Julillier Hourider	R	497	415	737	795	446	1,072	605	964	619	617
White perch	Н	40	30	63	37	69	34	40	64	187	113
willte percii	R	72	134	303	105	194	190	243	121	397	272
Wrasses (tautog)	Н	185	62	70	60	111	100	103	121	56	46
vviasses (tautog)	R	411	167	198	232	194	266	165	224	196	88
Yellowfin tuna	Н	10	2	1	5	6	(1)	1	(1)	(1)	(1)
i chowilli tulla	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

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

 $^{^2\}mbox{In this table, '(1)'}=0\mbox{-}999$ thousand fish and '1' $=1\mbox{,}000\mbox{-}1\mbox{,}499$ 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
2002	24,377 (0.34%)	389,304 (0.35%)	14,716 (0.37%)	20,439 (0.41%)	43,672 (0.34%)	ND^{23}
2010	24,290 (0.33%)	359,007 (0.32%)	17,167 (0.35%)	25,358 (0.44%)	64,010 (0.32%)	2
% change	-0.357%	-7.78%	16.7%	24.1%	46.6%	

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	0	0	0	3	3	0	3	NA^4	3
prep. & packaging	Receipts	ND^2	ND^2	ND^2	64	214	ND^2	27	NA^3	27
Seafood Sales,	Firms	5	7	9	12	9	12	9	9	9
retail	Receipts	435	959	803	1,523	835	1,025	418	664	418

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

				•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soofood product	Establishments	1	1	1	1	1	1	1	1	1
Seafood product prep. & packaging	Employees	ND^2								
	Payroll	ND^2								
Seafood sales,	Establishments	7	5	2	3	3	3	6	7	7
wholesale	Employees	65	ND^2	ND^2	ND^2	9	ND^2	ND^2	ND^2	ND^2
Wilolesale	Payroll	2,279	ND^2	ND^2	ND^2	337	ND^2	ND^2	ND^2	ND^2
Soafood sales	Establishments	15	18	16	14	17	19	18	16	15
Seafood sales, retail	Employees	94	ND^2	144	138	135	105	ND^2	50	47
	Payroll	1,779	ND^2	3,363	3,264	3,133	2,997	1,498	1,348	1,414

, , , , , , , , , , , , , , , , , , , ,		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	8	5	3	3	3	3	2	2	1
Lakes freight	Employees	ND^2								
transportation	Payroll	ND^2								
Dans and funishe	Establishments	2	2	1	1	NA^5	NA^3	4	4	5
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	NA^3	NA^3	ND^2	ND^2	120
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	NA^3	NA^3	ND^2	ND^2	10,768
Daan aaa maaaan	Establishments	1	NA^3	NA^3	1	NA^3	NA^3	NA^3	NA^3	1
Deep sea passenger transportation	Employees	ND^2	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3	NA^3	ND^2
transportation	Payroll	ND^2	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3	NA^3	ND^2
	Establishments	13	17	17	16	18	17	19	16	19
Marinas	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	88	65	ND^2	65
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	2,540	1,738	1,877	2,342
Marine cargo	Establishments	6	5	5	4	4	3	3	3	3
handling	Employees	199	513	ND^2	ND^2	597	527	629	ND^2	434
nanumg	Payroll	14,718	14,879	ND^2	ND^2	18,812	19,027	19,204	16,952	16,835
Navigational	Establishments	10	10	9	9	8	8	9	8	8
Navigational services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	75	76	79	85	76
scrvices to silipping	Payroll	ND^2	ND^2	ND^2	ND^2	4,783	4,961	5,360	5,672	5,176
Port & harbor	Establishments	NA^3	1	2	2	3	2	2	2	3
operations	Employees	NA^3	ND^2	29						
operations	Payroll	NA^3	ND^2	1,182						
Ship & boat	Establishments	1	1	1	1	1	1	2	2	2
building	Employees	ND^2								
Danishing .	Payroll	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.

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

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

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

 $^{{}^5{\}rm NA}={
m these}$ data are not available

2011 Economic Impacts of the Maryland Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	15,274	1,743,095	665,883	6,966	368,398	184,663		
Commercial Harvesters	2,779	135,387	60,155	2,779	135,387	60,155		
Seafood Processors & Dealers	1,822	161,514	80,372	632	56,620	28,175		
Importers	3,894	1,071,272	326,571	0	0	0		
Seafood Wholesalers & Distributors	822	109,633	49,484	200	26,618	12,014		
Retail	5,956	265,289	149,301	3,355	149,773	84,319		

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

		_	•	•	. , .		• (,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	49,013	49,038	49,200	63,754	53,579	65,329	73,196	75,892	104,877	76,722
Finfish & other	8,135	8,095	4,670	10,766	9,896	12,170	11,090	11,614	13,157	13,608
Shellfish	40,878	40,943	44,530	52,988	43,684	53,158	62,106	64,278	91,720	63,114
Atlantic croaker	512	576	751	543	440	335	442	415	509	469
Black sea bass	436	555	573	724	811	454	445	450	592	508
Blue crab	30,338	34,532	39,104	39,962	31,141	41,690	50,115	52,049	79,805	59,193
Clams or bivalves	8,002	5,170	4,654	4,784	4,889	5,074	5,436	4,403	5,400	2,637
Eastern oyster	2,172	706	181	3,435	1,238	3,146	2,277	3,849	4,361	ND^1
Menhaden	423	337	232	1,514	609	1,379	915	884	755	714
Sea scallop	96	ND^2	417	4,549	6,200	2,809	3,758	3,160	1,187	568
Striped bass	3,759	3,916	1,549	4,259	4,591	5,333	5,232	5,180	5,531	5,610
Summer flounder	ND^2	527	444	677	549	546	578	551	546	463
White perch	559	556	347	848	568	619	776	942	1,158	1,482

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

9	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	53,185	49,350	49,509	67,489	51,226	61,585	63,533	66,819	102,911	78,197
Finfish & other	15,275	13,468	8,055	25,000	12,719	21,618	18,626	19,968	27,881	21,292
Shellfish	37,909	35,882	41,454	42,489	38,507	39,967	44,908	46,850	75,031	56,905
Atlantic croaker	1,513	1,532	1,801	1,389	877	576	778	550	622	784
Black sea bass	280	313	284	337	350	171	159	126	203	183
Blue crab	26,481	27,816	33,826	34,914	29,446	30,778	34,872	38,801	66,661	50,027
Clams or bivalves	10,663	7,527	7,270	6,112	7,756	7,947	8,600	6,292	6,971	3,795
Eastern oyster	567	159	43	738	274	317	249	498	430	ND^2
Menhaden	4,850	4,232	3,336	15,806	5,263	13,751	9,615	9,419	15,756	8,366
Sea scallop	27	ND^2	94	591	931	450	569	521	153	58
Striped bass	2,085	2,193	885	2,349	2,485	2,640	2,655	2,812	2,549	2,344
Summer flounder	ND^2	329	262	338	248	229	208	214	263	259
White perch	1,583	1,477	453	1,524	688	973	858	1,301	1,704	2,041

Average Aliman Thee of Ney Openies/ Species Groups (domais per pound)											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Atlantic croaker	0.34	0.38	0.42	0.39	0.50	0.58	0.57	0.75	0.82	0.60	
Black sea bass	1.56	1.77	2.02	2.15	2.31	2.66	2.79	3.58	2.91	2.78	
Blue crab	1.15	1.24	1.16	1.14	1.06	1.35	1.44	1.34	1.20	1.18	
Clams or bivalves	0.75	0.69	0.64	0.78	0.63	0.64	0.63	0.70	0.77	0.69	
Eastern oyster	3.83	4.45	4.23	4.66	4.52	9.92	9.13	7.73	10.14	ND^2	
Menhaden	0.09	0.08	0.07	0.10	0.12	0.10	0.10	0.09	0.05	0.09	
Sea scallop	3.52	ND^2	4.44	7.70	6.66	6.25	6.60	6.06	7.77	9.83	
Striped bass	1.80	1.79	1.75	1.81	1.85	2.02	1.97	1.84	2.17	2.39	
Summer flounder	ND^2	1.60	1.69	2.01	2.22	2.39	2.78	2.58	2.07	1.79	
White perch	0.35	0.38	0.77	0.56	0.83	0.64	0.90	0.72	0.68	0.73	

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	582	50,524	17,155	29,700
Private Boat	557	60,042	20,972	36,610
Shore	740	68,529	23,903	40,421
Total Durable Equipment Impacts	3,866	604,738	198,808	289,890
Total State Trip and Durable Equipment Economic Impacts	5,745	783,833	260,839	396,620

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	102,037
For-Hire	21,517	12,565	Other Equipment	25,715
Private Boat	11,504 46,261		Boat Expenses	424,367
Shore	26,772	30,318	Vehicle Expenses	107,135
Total Trip Expenditures	59,793	89,143	Second Home Expenses	916
			Total Durable Equipment Expenditures	660,170
Total State Trip and Dura	ble Equipment Exp	enditures		809,106

Recreational Anglers by Residential Area (thousands of anglers)

	,		`		υ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	430	526	442	620	733	850	643	514	552	415
Non-Coastal	41	53	39	49	84	78	50	43	54	49
Out of State	330	418	333	425	447	528	507	327	462	372
Total Anglers	801	997	815	1095	1264	1456	1200	884	1068	836

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	183	187	176	212	238	269	195	202	138	161
Private	1,596	2,033	1,535	1,924	1,836	2,352	1,891	1,608	1,643	1,453
Shore	1,059	1,109	874	1,020	1,145	1,082	1,273	1,081	1,150	1,206
Total Trips	2,838	3,329	2,585	3,156	3,219	3,703	3,359	2,891	2,931	2,820

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

` '											
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black seabass	Н	337	241	15	91	121	39	27	33	36	47
DIACK SEADASS	R	925	773	259	563	645	577	674	453	670	352
Bluefish	Н	197	213	367	167	421	676	550	591	273	259
Diuelisii	R	577	519	593	236	778	1,172	1,631	670	162	408
Drum (Atlantic	Н	1,223	1,620	896	784	755	873	621	1,335	1,137	554
croaker)	R	2,524	1,393	854	1,138	1,783	1,258	2,128	1,138	1,011	366
Drum (spot)	Н	692	3,300	868	1,789	2,895	3,616	1,892	2,064	1,164	913
Druin (spot)	R	501	671	383	2,136	1,355	1,619	1,739	632	1,155	298
Drum (weakfish) ²	Н	101	42	15	32	1	7	2	4	5	(1)
Diulii (Weakiisii)	R	286	182	231	61	47	63	38	8	162	18
Striped bass	Н	283	525	369	534	668	765	415	501	457	445
Striped bass	R	2,928	4,653	3,479	3,855	3,711	3,066	1,338	1,423	1,509	1,127
Summer flounder	Н	69	40	42	117	36	103	58	64	26	14
Summer mountee	R	383	373	805	361	252	1,018	922	817	1,227	472
White perch	Н	1,156	2,020	1,623	2,411	2,560	2,889	1,509	550	2,613	1,571
vviiite percii	R	1,755	3,699	3,459	5,837	3,953	5,425	3,853	1,137	2,891	2,347
Wrasses (tautog)	Н	43	13	8	28	15	43	19	39	57	12
vviasses (tautog)	R	294	97	24	148	186	178	151	133	362	75
Yellowfin tuna	Н	18	26	2	5	8	4	(1)	5	1	(1)
Yellowfin tuna	R	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2	(1)	(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
2002	131,815 (1.8%)	2,062,515 (1.8%)	75,032 (1.9%)	127,286 (2%)	206,624 (2.1%)	0.7
2010	134,579 (1.8%)	2,075,507 (1.9%)	97,807 (2%)	175,443 (2%)	293,349 (2.2%)	0.47
% change	2.1%	0.63%	30.4%	37.8%	42%	-42.9%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	50	47	51	57	55	56	56	41	56
prep. & packaging	Receipts	3,199	2,487	2,301	2,727	2,751	3,940	3,310	2,106	3,310
Seafood Sales,	Firms	79	78	70	78	73	99	84	91	84
retail	Receipts	8,629	6,771	10,100	6,976	7,755	10,493	9,010	8,593	9,010

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	24	23	23	23	19	22	22	19	18
prep. & packaging	Employees	807	762	895	1,141	1,053	1,296	1,003	245	273
prep. & packaging	Payroll	20,618	20,399	23,039	24,986	28,852	32,386	39,328	13,049	12,652
Seafood sales,	Establishments	77	63	58	59	59	62	60	61	63
wholesale	Employees	870	686	733	709	694	978	851	777	795
Wilolesale	Payroll	33,072	27,934	29,813	30,148	32,943	50,353	42,296	39,055	39,067
Seafood sales,	Establishments	88	97	96	95	97	102	94	87	87
retail	Employees	488	459	579	576	617	613	590	485	526
recan	Payroll	10,033	10,634	12,328	13,019	14,190	14,777	11,510	11,499	11,810

	, & ividinie Operations Employer Establishments					(chousands or denais)					
		2002	2003	2004	2005	2006	2007	2008	2009	2010	
Coastal & Great	Establishments	8	9	11	10	10	8	6	7	8	
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	14	16	15	16	14	14	13	15	15	
transportation	Employees	123	ND^2	281	316	ND^2	244	250	255	390	
transportation	Payroll	9,216	ND^2	18,983	14,131	ND^2	14,905	19,765	20,722	24,185	
Dana and massanasa	Establishments	4	3	2	1	1	1	3	2	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	188	180	183	185	179	183	179	176	175	
Marinas	Employees	1,232	1,296	1,321	1,228	1,260	1,326	1,383	1,289	1,275	
	Payroll	33,621	34,024	36,598	36,590	40,866	48,752	45,965	45,483	43,508	
Marine cargo	Establishments	16	14	11	12	13	15	15	16	17	
handling	Employees	1,487	1,862	1,725	1,639	1,659	1,791	1,572	1,599	2,742	
nanding	Payroll	66,525	69,084	75,911	81,219	73,367	85,328	48,382	46,727	95,182	
Navigational	Establishments	13	11	8	9	9	8	9	11	10	
services to shipping	Employees	ND^2	195	ND^2	ND^2	ND^2	157	92	77	84	
scrvices to silipping	Payroll	ND^2	38,619	ND^2	ND^2	ND^2	4,882	3,968	3,807	4,015	
Port & harbor	Establishments	7	8	10	11	11	8	3	4	5	
operations	Employees	259	376	479	ND^2	ND^2	323	ND^2	ND^2	ND^2	
орстатіонз	Payroll	11,655	16,099	19,218	ND^2	ND^2	13,427	ND^2	ND^2	ND^2	
Ship & boot	Establishments	44	55	58	57	55	48	46	38	35	
Ship & boat building	Employees	1,223	1,426	1,022	ND^2	1,119	874	677	416	ND^2	
bullullig	Payroll	40,743	36,444	35,364	ND^2	33,463	29,500	22,363	16,238	ND^2	

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

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

2011 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	43,638	6,563,733	2,407,754	10,115	818,397	390,460		
Commercial Harvesters	3,602	426,864	181,894	3,602	426,864	181,894		
Seafood Processors & Dealers	6,049	560,815	277,214	924	86,813	42,912		
Importers	16,022	4,407,196	1,343,506	0	0	0		
Seafood Wholesalers & Distributors	2,535	409,652	179,034	266	42,948	18,770		
Retail	15,430	759,207	426,105	5,324	261,773	146,885		

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

<u> </u>	<u> </u>		3 • , .		· \					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	112,708	120,670	145,217	158,746	136,039	151,513	168,518	150,030	178,080	214,191
Finfish & other	20,062	22,017	21,369	22,585	24,476	24,238	19,945	24,032	22,929	26,783
Shellfish	92,646	98,653	123,847	136,161	111,563	127,275	148,573	125,998	155,152	187,407
American lobster	1,139	1,028	1,800	2,001	2,533	4,056	3,214	850	2,679	2,774
Atlantic herring	60	145	1	1	ND^1	562	548	1,564	422	415
Atlantic mackerel	1,780	2,855	3,398	3,957	3,709	668	1,568	1,539	848	53
Blue crab	6,725	4,736	5,330	6,773	6,359	5,471	7,284	184	11,858	9,423
Eastern oyster	1,853	3,366	1,558	823	2,288	ND^2	2,547	ND^2	ND^2	ND^2
Goosefish	5,896	6,200	3,446	4,451	4,415	4,484	4,005	3,017	2,752	3,641
Ocean quahog & surf clams	39,804	38,054	31,379	25,567	31,038	26,547	30,838	27,496	23,889	19,428
Quahog clam	ND^2	5,228	7,409	7,556	7,615	968	6,254	ND^2	ND^2	ND^2
Sea scallop	33,336	43,507	67,309	88,486	57,465	77,359	91,320	90,111	109,116	142,482
Summer flounder	3,504	3,683	4,134	4,478	4,926	3,989	3,461	3,377	4,553	5,462

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

<u> </u>	_	•	, .	• '		•	,			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	162,139	170,133	187,377	156,695	152,781	153,846	162,304	161,611	161,844	175,516
Finfish & other	65,737	75,471	71,450	74,193	66,316	65,164	62,816	73,617	74,803	94,657
Shellfish	96,401	94,662	115,926	82,502	86,465	88,683	99,487	87,994	87,041	80,859
American lobster	264	210	370	369	471	680	633	180	642	627
Atlantic herring	1,138	1,805	5	1	ND^2	6,038	6,539	13,692	4,140	2,385
Atlantic mackerel	20,486	33,056	36,091	32,414	24,977	5,384	9,426	10,255	4,692	107
Blue crab	6,229	4,012	4,350	6,333	5,981	4,636	5,816	257	9,268	9,600
Eastern oyster	379	714	323	162	350	ND^2	550	ND^2	ND^2	ND^2
Goosefish	5,697	7,185	4,177	3,881	3,841	4,229	3,694	2,686	1,988	2,265
Ocean quahog & surf clams	73,949	71,683	61,155	49,849	55,286	44,791	51,597	45,306	38,538	29,342
Quahog clam	ND^2	1,260	1,796	1,852	1,844	240	1,516	ND^2	ND^2	ND^2
Sea scallop	8,644	10,638	13,705	11,831	8,439	11,808	13,282	14,038	14,170	14,543
Summer flounder	2,407	2,385	2,630	2,349	2,380	1,697	1,541	1,799	2,166	2,830

Average Amina i free of	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
American lobster	4.31	4.90	4.86	5.42	5.38	5.96	5.08	4.73	4.18	4.42
Atlantic herring	0.05	0.08	0.23	0.78	ND^2	0.09	0.08	0.11	0.10	0.17
Atlantic mackerel	0.09	0.09	0.09	0.12	0.15	0.12	0.17	0.15	0.18	0.50
Blue crab	1.08	1.18	1.23	1.07	1.06	1.18	1.25	0.72	1.28	0.98
Eastern oyster	4.88	4.72	4.82	5.09	6.53	ND^2	4.63	ND^2	ND^2	ND^2
Goosefish	1.03	0.86	0.83	1.15	1.15	1.06	1.08	1.12	1.38	1.61
Ocean quahog & surf clams	0.54	0.53	0.51	0.51	0.56	0.59	0.60	0.61	0.62	0.66
Quahog clam	ND^2	4.15	4.13	4.08	4.13	4.04	4.12	ND^2	ND^2	ND^2
Sea scallop	3.86	4.09	4.91	7.48	6.81	6.55	6.88	6.42	7.70	9.80
Summer flounder	1.46	1.54	1.57	1.91	2.07	2.35	2.25	1.88	2.10	1.93

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	580	62,526	21,058	36,350
Private Boat	1,270	179,913	54,191	93,076
Shore	783	93,766	30,440	50,978
Total Durable Equipment Impacts	7,333	1,360,911	448,628	690,578
Total State Trip and Durable Equipment Economic Impacts	9,965	1,697,115	554,318	870,983

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	307,411
For-Hire	17,405	23,220	Other Equipment	58,800
Private Boat	37,561	104,637	Boat Expenses	499,473
Shore	29,105	47,508	Vehicle Expenses	232,339
Total Trip Expenditures	84,072	175,365	Second Home Expenses	134,169
			Total Durable Equipment Expenditures	1,232,192
Total State Trip and Dura	1,491,629			

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	400	592	708	818	693	890	765	656	776	687
Non-Coastal	17	20	31	39	25	19	26	35	36	23
Out of State	239	462	379	471	481	518	456	454	449	357
Total Anglers	656	1074	1117	1328	1199	1427	1246	1145	1261	1067

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	367	466	432	452	633	606	450	434	319	382
Private	2,992	3,603	3,895	3,753	3,721	3,614	3,595	2,671	3,264	2,446
Shore	2,049	2,712	2,121	2,357	2,682	2,978	2,858	2,235	2,279	2,334
Total Trips	5,408	6,781	6,448	6,562	7,036	7,198	6,903	5,340	5,862	5,162

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

()		` '	- 3	•	•	`	,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black seabass	Н	1,759	1,903	1,079	660	530	725	579	584	685	149
Diack Scabass	R	4,320	4,296	3,121	2,387	2,082	2,423	4,431	3,139	3,868	1,302
Bluefin tuna	Н	7	9	7	10	4	7	4	14	6	2
Diueilli tulla	R	(1)	(1)	60	24	97	1	1	2	7	6
Bluefish	Н	1,322	1,572	1,530	2,367	1,184	1,654	1,029	813	910	1,150
Diuensii	R	2,169	1,913	2,226	2,291	1,803	2,735	1,478	1,476	1,885	1,911
Drum (weakfish) 2	Н	494	149	228	1,008	489	229	298	12	2	3
Diulii (Weakiisii)	R	351	630	534	1,374	1,335	613	1,433	79	103	101
Red hake	Н	12	16	4	6	141	1	152	240	124	206
Neu liake	R	(1)	14	3	2	12	(1)	19	23	24	13
Striped bass	Н	415	392	423	411	509	288	310	281	318	394
Striped bass	R	715	926	1,503	1,219	1,890	1,789	1,309	801	689	884
Summer flounder	Н	988	1,784	1,617	1,302	1,556	1,067	763	825	552	737
Summer mountain	R	4,206	5,806	6,700	8,940	6,739	6,192	8,959	10,413	10,565	8,096
Winter flounder	Н	208	307	40	32	64	96	3	7	24	28
vviiitei iloulidei	R	124	110	32	21	112	27	15	28	39	25
Wrasses (tautog)	Н	347	102	90	43	202	300	172	127	374	137
vviasses (tautog)	R	836	394	385	222	603	1,290	901	856	1,064	844
Yellowfin tuna	Н	14	22	9	21	36	58	7	7	26	17
i enowini tuna	R	4	(1)	8	1	(1)	(1)	1	16	(1)	(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 Marine Economy

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

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	237,505 (3.3%)	3,596,919 (3.2%)	152,370 (3.9%)	216,721 (3.6%)	376,922 (3.6%)	ND^{23}
2010	228,937 (3.1%)	3,367,169 (3%)	178,657 (3.6%)	267,771 (3.3%)	480,446 (3.4%)	2
% change	-3.61%	-6.39%	17.3%	23.6%	27.5%	

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	21	23	23	26	27	25	22	33	22
prep. & packaging	Receipts	2,673	2,279	2,694	3,086	3,027	2,399	1,851	3,667	1,851
Seafood Sales,	Firms	92	100	89	93	72	90	92	81	92
retail	Receipts	8,348	8,822	9,219	9,194	8,916	11,320	11,196	9,901	11,196

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soafood product	Establishments	17	16	15	17	16	16	14	13	11
Seafood product prep. & packaging	Employees	928	846	749	969	667	628	566	661	482
prep. & packaging	Payroll	23,045	20,794	21,029	28,235	22,097	18,403	18,703	22,025	17,427
Seafood sales,	Establishments	102	84	85	85	89	101	81	83	90
wholesale	Employees	969	920	948	914	941	978	856	858	848
Wilolcsalc	Payroll	37,394	35,991	38,066	37,828	41,506	41,994	37,462	37,348	38,065
Seafood sales,	Establishments	149	133	134	128	127	124	118	106	108
retail	Employees	559	454	547	524	493	472	368	332	332
i Ctuli	Payroll	10,225	10,513	11,952	11,787	11,373	10,352	9,372	9,126	9,094

Transport, Suppor	-,	p 0. a. c. c			,					
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	13	15	17	18	18	23	18	19	18
Lakes freight	Employees	ND^2	768	ND^2	914	1,040	778	645	594	600
transportation	Payroll	ND^2	45,024	ND^2	54,097	68,096	56,017	48,911	41,925	44,246
Deep sea freight	Establishments	35	37	33	38	39	31	27	26	26
transportation	Employees	1,397	1,287	1,028	948	648	566	1,115	1,045	ND^2
transportation	Payroll	78,258	70,996	65,691	68,633	45,940	44,133	75,848	66,547	78,898
Doon soo nassangar	Establishments	4	5	4	5	4	2	2	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	199	203	201	206	204	216	211	214	212
Marinas	Employees	927	951	945	978	940	1,045	916	784	781
	Payroll	32,480	34,777	36,862	38,323	39,154	41,624	39,596	35,811	35,475
Marine cargo	Establishments	29	27	26	26	25	23	21	22	21
handling	Employees	3,408	4,108	4,685	4,972	4,599	4,781	4,244	3,479	3,292
Hallullig	Payroll	247,217	318,325	340,085	363,714	345,784	350,690	278,189	230,886	260,894
Navigational	Establishments	22	16	17	16	19	26	20	19	16
services to shipping	Employees	ND^2	210	ND^2	169	ND^2	227	191	133	75
services to simpling	Payroll	ND^2	8,028	ND^2	9,673	ND^2	11,403	7,776	6,638	6,125
Port & harbor	Establishments	5	5	6	7	6	8	6	6	11
operations	Employees	ND^2	240	ND^2	194	ND^2	271	143	54	124
operations	Payroll	ND^2	10,644	ND^2	11,599	ND^2	12,197	12,446	5,548	10,463
Shin & hoat	Establishments	41	37	35	37	34	31	30	25	24
Ship & boat building	Employees	2,223	2,005	2,040	2,320	2,307	2,305	2,019	1,188	1,056
building	Payroll	76,607	75,149	80,301	89,421	88,367	91,460	79,309	42,909	37,920

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

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

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

2011 Economic Impacts of the New York Seafood Industry (thousands of dollars)

		With Imports			Without Imports					
	Jobs	Sales	Value Added	Jobs	Sales	Value Added				
Total Impacts	41,847	5,102,910	1,801,303	2,963	138,229	67,182				
Commercial Harvesters	1,386	67,485	29,835	1,386	67,485	29,835				
Seafood Processors & Dealers	883	126,868	62,743	104	15,157	7,496				
Importers	14,284	3,929,115	1,197,766	0	0	0				
Seafood Wholesalers & Distributors	4,155	303,956	138,550	102	7,471	3,405				
Retail	21,139	675,486	372,410	1,370	48,116	26,446				

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

					, .		•		,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	51,264	51,601	46,878	56,367	57,725	59,379	59,143	49,347	33,924	37,625
Finfish & other	15,924	16,426	16,765	18,317	19,143	20,496	18,841	17,569	20,445	22,285
Shellfish	35,341	35,175	30,113	38,051	38,582	38,884	40,302	31,778	13,479	15,340
American lobster	5,131	4,426	3,722	4,396	6,289	3,624	5,498	3,943	1,329	1,398
Atlantic surf clam	5,520	7,934	4,475	7,055	4,473	5,932	5,670	5,858	1,708	ND^1
Eastern oyster	4,995	4,263	3,367	1,961	2,390	2,627	2,870	1,428	ND^2	ND^2
Flounder, Summer	2,042	2,240	3,275	3,797	3,418	3,133	2,933	3,088	3,569	3,715
Loligo squid	6,247	4,353	5,426	6,054	5,846	5,159	5,290	4,167	4,516	7,249
Quahog clam	12,245	12,399	10,673	12,696	12,237	14,224	13,185	8,397	ND^2	ND^2
Scups or porgies	1,185	1,330	1,637	2,027	2,457	2,349	1,710	1,887	2,112	2,549
Sea scallop	90	164	720	3,617	3,518	3,872	5,050	5,018	3,777	4,961
Softshell clam	679	888	1,227	1,468	2,055	1,628	1,076	700	ND^2	ND^2
Tilefishes	3,195	2,736	2,082	2,765	3,323	3,843	3,343	3,262	4,077	4,525

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	38,548	39,388	34,514	38,150	32,659	35,594	34,521	34,398	27,665	27,104
Finfish & other	16,540	17,223	16,531	14,631	14,036	16,495	15,069	16,172	18,191	18,596
Shellfish	22,008	22,165	17,983	23,519	18,623	19,099	19,451	18,225	9,473	8,507
American lobster	1,440	946	996	1,154	1,243	716	1,210	1,047	307	344
Atlantic surf clam	8,544	13,264	7,462	11,953	6,913	9,161	8,753	8,799	2,573	ND^2
Eastern oyster	537	466	370	219	269	124	135	64	ND^2	ND^2
Flounder, Summer	1,053	1,073	1,594	1,799	1,220	942	856	1,140	1,363	1,511
Loligo squid	9,613	4,603	6,363	6,693	6,462	5,438	5,469	4,098	3,900	5,629
Quahog clam	1,502	1,553	1,346	1,617	1,650	1,592	1,476	1,410	ND^2	ND^2
Scups or porgies	1,558	1,850	1,907	2,186	2,423	2,325	1,214	1,848	2,690	3,726
Sea scallop	26	39	170	647	577	619	782	918	507	522
Softshell clam	132	163	234	270	393	198	131	114	ND^2	ND^2
Tilefishes	1,593	1,755	1,335	1,142	1,297	1,393	1,199	1,435	1,586	1,521

Average Ammaar I		- J - C P - C - C - C - C - C - C - C - C -	- Сросиос ч		р р	2007 2008 2009 2010 5.06 4.54 3.76 4.32 0.65 0.65 0.67 0.66 21.21 21.21 22.23 ND² 3.33 3.43 2.71 2.62 0.95 0.97 1.02 1.16					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
American lobster	3.56	4.68	3.74	3.81	5.06	5.06	4.54	3.76	4.32	4.06	
Atlantic surf clam	0.65	0.60	0.60	0.59	0.65	0.65	0.65	0.67	0.66	ND^2	
Eastern oyster	9.30	9.15	9.10	8.97	8.87	21.21	21.21	22.23	ND^2	ND^2	
Flounder, Summer	1.94	2.09	2.05	2.11	2.80	3.33	3.43	2.71	2.62	2.46	
Loligo squid	0.65	0.95	0.85	0.90	0.90	0.95	0.97	1.02	1.16	1.29	
Quahog clam	8.15	7.98	7.93	7.85	7.42	8.94	8.93	5.96	ND^2	ND^2	
Scups or porgies	0.76	0.72	0.86	0.93	1.01	1.01	1.41	1.02	0.79	0.68	
Sea scallop	3.43	4.19	4.24	5.59	6.10	6.25	6.46	5.47	7.44	9.50	
Softshell clam	5.15	5.45	5.24	5.43	5.23	8.23	8.24	6.13	ND^2	ND^2	
Tilefishes	2.01	1.56	1.56	2.42	2.56	2.76	2.79	2.27	2.57	2.97	

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

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,043	102,927	36,048	62,326
Private Boat	936	113,282	40,674	70,922
Shore	222	23,992	8,692	14,646
Total Durable Equipment Impacts	770	129,181	43,324	64,274
Total State Trip and Durable Equipment Economic Impacts	2,972	369,382	128,738	212,169

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	45,733
For-Hire	3,640	62,687	Other Equipment	20,598
Private Boat	2,156	113,537	Boat Expenses	47,804
Shore	775	23,108	Vehicle Expenses	10,276
Total Trip Expenditures	6,571	199,332	Second Home Expenses	0
			Total Durable Equipment Expenditures	124,412
Total State Trip and Dura	ble Equipment Exp	enditures		330,315

Recreational Anglers by Residential Area (thousands of anglers)

	,		`		υ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	387	599	587	885	735	881	817	638	646	497
Non-Coastal	8	19	18	27	25	39	32	21	24	18
Out of State	41	82	76	110	114	147	118	58	69	46
Total Anglers	436	700	681	1022	874	1067	967	717	740	561

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

		•								
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	339	405	388	526	361	684	387	383	347	458
Private	2,171	3,030	2,670	3,108	3,121	3,315	3,200	2,819	2,351	2,321
Shore	1,606	2,089	1,755	2,495	1,961	2,522	2,341	1,624	1,675	1,389
Total Trips	4,116	5,524	4,813	6,129	5,443	6,521	5,928	4,826	4,373	4,168

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

\ /											
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic herring ²	Н	26	30	124	60	23	214	70	3	79	75
Atlantic herring	R	14	(1)	2	2	2	230	50	(1)	17	(1)
Black seabass	Н	221	318	133	143	269	410	259	567	543	274
Diack Scabass	R	1,412	739	625	1,072	1,328	1,548	1,654	1,236	1,164	894
Bluefish	Н	752	1,146	1,896	1,684	1,834	2,150	1,484	1,293	1,026	926
Diuensii	R	1,018	1,305	2,530	3,381	2,378	2,650	3,225	1,794	1,471	1,600
Drum (weakfish) ³	Н	25	9	11	(1)	11	4	40	(1)	3	(1)
Druin (weakiisii)	R	62	8	39	77	18	109	25	3	3	55
Porgies (scup)	Н	1,090	5,110	1,877	859	1,678	1,596	1,451	1,461	1,990	715
rorgies (scup)	R	1,246	1,806	3,515	1,738	2,623	1,963	2,838	2,124	1,865	998
Shortfin mako	Н	1	3	(1)	(1)	(1)	(1)	(1)	(1)	1	(1)
shark	R	4	3	2	5	(1)	(1)	(1)	(1)	(1)	3
Striped bass	Н	202	315	263	376	368	474	684	355	539	676
Striped bass	R	588	1,083	2,709	1,413	1,722	1,679	1,347	1,073	1,068	1,507
Summer flounder	Н	698	1,538	1,024	1,164	752	866	608	299	335	375
Julillier Hourider	R	4,099	5,722	3,182	7,754	4,946	5,272	5,521	5,565	6,571	7,295
Winter flounder	Н	153	233	227	100	261	10	41	69	31	64
vviiitei iloulidei	R	141	72	32	201	76	15	17	110	63	101
Wrasses (tautog)	Н	630	129	278	84	246	224	318	345	145	111
vviasses (tautog)	R	953	298	640	178	823	388	728	666	567	488

 $^{^{1}}$ 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.

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
2002	498,921 (6.9%)	7,234,915 (6.4%)	329,811 (8.4%)	476,767 (7.8%)	822,408 (7.8%)	1.01
2010	519,504 (7%)	7,266,189 (6.5%)	418,438 (8.5%)	638,150 (7.8%)	1,128,823 (8%)	1.19
% change	4.13%	0.432%	26.9%	33.8%	37.3%	17.8%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	40	62	49	57	61	68	73	101	73
prep. & packaging	Receipts	1,730	2,580	3,517	2,652	3,044	3,516	3,383	4,883	3,383
Seafood Sales,	Firms	244	272	241	219	206	266	247	192	247
retail	Receipts	29,832	29,321	28,640	24,987	24,790	23,157	23,983	19,278	23,983

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

	_			•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soafood product	Establishments	16	18	17	18	15	15	17	15	15
Seafood product prep. & packaging	Employees	352	271	323	324	298	294	379	ND^2	272
prep. & packaging	Payroll	20,430	15,676	14,782	14,810	16,491	18,723	18,570	15,227	16,976
Seafood sales,	Establishments	315	291	274	269	254	291	231	246	263
wholesale	Employees	2,269	2,183	2,091	2,003	2,066	2,058	1,627	1,741	1,798
Wildicsalc	Payroll	84,367	75,063	75,411	76,177	78,198	84,361	72,233	68,345	72,442
Soafood sales	Establishments	381	376	386	392	388	372	368	386	394
Seafood sales, retail	Employees	1,421	1,518	1,602	1,513	1,495	1,575	1,470	1,509	1,586
	Payroll	22,867	25,422	26,489	25,665	26,701	28,497	30,741	31,640	32,001

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	69	60	60	57	55	50	50	48	65
Lakes freight	Employees	2,284	1,751	1,452	1,448	1,464	1,746	1,759	2,299	1,654
transportation	Payroll	141,213	115,452	94,074	91,347	109,315	125,570	160,735	198,352	136,577
Deep sea freight	Establishments	38	35	36	39	38	34	29	32	30
transportation	Employees	1,084	927	600	602	ND^2	ND^2	732	782	704
transportation	Payroll	52,516	58,350	38,246	39,309	ND^2	65,632	108,744	89,313	98,499
Deep sea passenger	Establishments	4	8	7	6	4	4	3	4	2
transportation	Employees	ND^2	212	ND^2	ND^2	ND^2	7	ND^2	8	ND^2
transportation	Payroll	ND^2	6,673	ND^2	ND^2	ND^2	240	316	126	ND^2
	Establishments	386	417	413	416	404	411	419	418	429
Marinas	Employees	1,680	2,167	2,185	2,093	2,112	2,070	2,263	2,099	2,052
	Payroll	69,242	77,398	81,737	84,832	83,807	88,862	100,910	96,640	94,654
Marine cargo	Establishments	11	14	14	12	12	12	10	9	13
handling	Employees	ND^2	951	1,099	ND^2	ND^2	ND^2	ND^2	ND^2	1,086
nananng	Payroll	ND^2	50,015	48,529	ND^2	ND^2	ND^2	ND^2	ND^2	68,555
Navigational	Establishments	32	34	34	35	36	36	32	37	37
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	578	386	312	598
services to simpling	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	40,976	23,294	19,126	50,119
Port & harbor	Establishments	4	3	3	3	3	5	3	4	8
operations	Employees	ND^2	ND^2	ND^2	ND^2	6	ND^2	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	ND^2	ND^2	119	ND^2	ND^2	ND^2	568
Ship & boat	Establishments	41	44	45	47	48	53	49	47	41
building	Employees	ND^2	ND^2	ND^2	590	ND^2	643	688	585	575
Dunama	Payroll	ND^2	ND^2	ND^2	21,514	ND^2	26,653	30,462	28,880	26,771

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

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

Commercial Fisheries Virginia

2011 Economic Impacts of the Virginia Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	22,082	1,866,659	800,243	16,634	906,586	473,802		
Commercial Harvesters	5,273	325,136	159,654	5,273	325,136	159,654		
Seafood Processors & Dealers	1,713	152,230	76,441	1,593	141,717	71,162		
Importers	2,922	803,712	245,007	0	0	0		
Seafood Wholesalers & Distributors	1,096	134,744	62,081	542	66,646	30,706		
Retail	11,078	450,837	257,062	9,226	373,086	212,280		

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

_										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	123,308	130,657	160,496	155,066	109,082	137,993	146,611	152,022	183,894	191,665
Finfish & other	38,947	39,661	43,522	48,559	40,593	45,748	40,518	47,580	55,940	58,829
Shellfish	84,361	90,996	116,973	106,507	68,489	92,245	106,093	104,442	127,954	132,835
Atlantic croaker	3,815	2,822	3,013	3,691	4,345	4,445	5,270	6,939	6,027	4,778
Black sea bass	1,589	1,306	1,167	1,242	1,070	663	763	581	939	1,006
Blue crab	21,083	19,130	21,822	20,578	14,067	15,496	17,984	21,044	29,062	25,116
Catfishes & bullhea	1,005	372	649	900	1,570	956	1,192	1,567	670	904
Goosefish	704	879	599	1,142	688	781	954	631	594	795
Menhaden	22,113	22,511	24,144	25,259	22,269	25,317	21,271	23,578	34,476	32,978
Sea Scallop	57,715	68,298	92,207	84,574	52,828	63,013	65,534	63,312	70,203	79,426
Spot	1,256	1,688	2,236	2,227	1,762	3,232	1,171	3,410	975	3,157
Striped bass	2,823	3,389	3,648	4,457	2,816	3,831	3,379	4,220	3,635	4,476
Summer flounder	3,150	4,220	5,376	4,652	3,460	3,184	2,719	2,961	4,214	6,229

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

O O	_	•	. , .		• \	•	,			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	442,490	446,828	481,374	441,538	426,235	491,849	422,595	426,282	509,841	494,028
Finfish & other	396,929	406,359	432,023	402,586	393,760	452,360	384,712	379,196	457,334	441,863
Shellfish	45,560	40,469	49,351	38,952	32,475	39,489	37,883	47,087	52,507	52,166
Atlantic croaker	12,448	10,936	9,488	9,272	7,830	10,588	11,214	8,572	7,830	5,533
Black sea bass	771	507	498	475	327	189	215	164	264	275
Blue crab	27,301	21,464	27,642	26,064	22,719	24,660	23,203	32,552	38,277	37,862
Catfishes & bullhea	1,886	1,799	1,922	1,622	1,360	1,555	1,772	1,876	871	905
Goosefish	970	1,270	1,002	1,157	676	841	964	742	584	603
Menhaden	364,941	373,868	399,798	372,578	370,989	420,481	353,895	351,388	433,241	413,835
Sea Scallop	16,189	17,536	19,410	11,444	8,310	9,916	9,685	10,137	9,167	8,260
Spot	3,062	3,471	4,338	3,103	1,696	4,328	1,977	3,902	1,024	3,522
Striped bass	1,841	2,104	2,120	2,472	1,391	1,962	2,196	2,109	2,139	2,077
Summer flounder	2,970	3,522	3,906	3,869	2,757	1,854	1,652	1,979	2,590	4,051

Average Amidai 1	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic croaker	0.31	0.26	0.32	0.40	0.55	0.42	0.47	0.81	0.77	0.86
Black sea bass	2.06	2.58	2.34	2.61	3.27	3.50	3.54	3.53	3.56	3.66
Blue crab	0.77	0.89	0.79	0.79	0.62	0.63	0.78	0.65	0.76	0.66
Catfishes & bullhea	0.53	0.21	0.34	0.55	1.15	0.61	0.67	0.84	0.77	1.00
Goosefish	0.73	0.69	0.60	0.99	1.02	0.93	0.99	0.85	1.02	1.32
Menhaden	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.07	0.08	0.08
Sea Scallop	3.56	3.89	4.75	7.39	6.36	6.35	6.77	6.25	7.66	9.62
Spot	0.41	0.49	0.52	0.72	1.04	0.75	0.59	0.87	0.95	0.90
Striped bass	1.53	1.61	1.72	1.80	2.02	1.95	1.54	2.00	1.70	2.16
Summer flounder	1.06	1.20	1.38	1.20	1.26	1.72	1.65	1.50	1.63	1.54

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	72	5,717	1,864	3,262
Private Boat	1,211	119,065	39,532	69,116
Shore	530	48,845	16,249	28,007
Total Durable Equipment Impacts	5,424	659,880	223,308	333,341
Total State Trip and Durable Equipment Economic Impacts	7,237	833,508	280,954	433,725

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	246,850
For-Hire	2,000	1,834	Other Equipment	76,070
Private Boat	28,490	76,529	Boat Expenses	392,265
Shore	23,663	18,722	Vehicle Expenses	56,458
Total Trip Expenditures	54,153	97,085	Second Home Expenses	524
			Total Durable Equipment Expenditures	772,167
Total State Trip and Dura	ble Equipment Exp	enditures		923,405

Recreational Anglers by Residential Area (thousands of anglers)

0	,		•		υ,					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	337	384	510	559	578	463	464	515	496	516
Non-Coastal	73	52	69	137	90	76	89	87	63	56
Out of State	407	288	428	511	364	297	338	305	279	320
Total Anglers	817	724	1007	1206	1033	836	891	907	838	892

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

	0000	2002	2004	0005	2006	2007	2000	2000	0010	0011
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	72	85	71	36	43	59	56	47	46	30
Private	2,255	2,068	2,490	2,563	2,590	2,369	2,352	2,123	1,699	1,782
Shore	927	959	1,104	1,365	1,155	1,083	1,090	876	851	1,086
Total Trips	3,254	3,112	3,665	3,964	3,788	3,511	3,498	3,046	2,596	2,898

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

(11) una 1		2002	2002	2004	2005	2006	2007	2000	2009	2010	2011
		1	2003	2004	2005	2006	2007	2008		2010	
Black seabass	H	134	264	47	34	83	35	37	114	30	19
Diack Scabass	R	2,442	1,743	1,247	1,117	1,355	1,270	1,250	1,150	524	445
Cobia	Н	3	2	1	17	22	10	5	17	7	4
Cobia	R	11	15	6	16	23	3	3	13	9	9
Drum (Atlantic	Н	9,129	6,695	8,259	7,656	7,222	6,946	8,388	5,328	4,745	3,305
croaker)	R	7,108	6,544	6,276	8,738	4,193	8,503	7,807	7,620	4,824	4,874
Drum (snot)	Н	1,602	1,441	1,718	2,782	3,584	8,203	4,398	2,146	1,670	2,968
Drum (spot)	R	482	934	882	2,457	1,371	2,156	1,487	1,458	1,156	2,244
Drum (spotted	Н	17	102	68	22	43	158	104	22	17	248
seatrout)	R	137	207	258	191	83	362	367	172	550	1,215
Drum (weakfish) ¹	Н	178	87	159	43	43	88	28	15	4	4
Druin (weakiisii)	R	888	504	545	356	558	230	426	85	178	288
Red drum	Н	50	14	5	3	13	46	20	39	11	(1)
Neu urum	R	802	43	34	28	186	111	236	179	28	61
Stringd hass	Н	322	402	392	257	460	237	246	225	74	122
Striped bass	R	707	970	1,733	1,296	1,656	949	533	359	134	154
Summer flounder	Н	772	451	674	683	763	396	260	288	261	317
	R	2,666	2,585	3,698	2,509	2,164	3,024	2,424	3,613	2,420	1,986
\\/vaccas (tautas)	Н	26	76	152	60	105	61	56	60	127	46
Wrasses (tautog)	R	37	55	122	76	199	81	34	33	130	36

 $^{^{1}\}mathrm{This}$ species may not be equivalent to species with similar names listed in the commercial tables.

Virginia's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	180,501 (2.5%)	2,914,804 (2.6%)	101,693 (2.6%)	173,455 (2.8%)	290,904 (2.8%)	0.5
2010	193,042 (2.6%)	2,998,278 (2.7%)	139,059 (2.8%)	249,258 (2.9%)	419,365 (3.1%)	0.59
% change	6.95%	2.86%	36.7%	43.7%	44.2%	18%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	35	53	68	65	74	62	74	69	74
prep. & packaging	Receipts	1,406	2,370	3,456	3,665	4,916	4,845	5,020	4,039	5,020
Seafood Sales,	Firms	94	88	89	80	86	84	80	80	80
retail	Receipts	8,266	7,193	8,346	8,762	8,027	7,265	8,273	6,603	8,273

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Conford munduat	Establishments	39	38	42	39	33	30	26	25	23
Seafood product prep. & packaging	Employees	1,035	1,256	1,231	1,336	871	955	490	941	961
prep. & packaging	Payroll	35,828	37,386	38,731	39,980	28,530	34,520	11,366	30,600	30,460
Seafood sales,	Establishments	89	84	86	86	80	83	69	72	76
wholesale	Employees	790	742	756	675	605	734	621	519	518
Wildlesale	Payroll	21,591	20,133	22,235	21,864	21,388	25,365	17,667	15,620	17,901
Seafood sales, retail	Establishments	74	61	68	69	75	73	68	62	59
	Employees	259	165	297	286	334	282	251	271	265
	Payroll	3,662	3,146	4,479	4,865	5,348	5,227	5,170	5,401	5,480

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	13	16	13	15	13	15	10	9	7
Lakes freight	Employees	ND^2	591	ND^2	ND^2	ND^2	565	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	26,881	ND^2	ND^2	ND^2	30,704	ND^2	ND^2	ND^2
Deep sea freight	Establishments	23	22	21	24	22	20	18	16	17
transportation	Employees	1,254	1,087	1,124	1,090	1,564	1,611	409	ND^2	421
transportation	Payroll	92,591	87,099	91,978	95,871	141,085	148,502	32,473	19,241	35,917
Daan saa massan saa	Establishments	2	2	2	1	1	1	2	2	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	122	136	137	141	131	126	119	118	115
Marinas	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	992	964	829	868
	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	26,186	24,326	24,631	24,182
Maxima aaxaa	Establishments	18	19	19	18	17	15	12	12	7
_	Employees	ND^2	ND^2	ND^2	1,516	1,110	1,085	ND^2	ND^2	ND^2
Marine cargo handling	Payroll	ND^2	ND^2	ND^2	52,254	51,654	56,696	ND^2	ND^2	41,280
Navigational	Establishments	17	15	20	21	17	18	23	25	26
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	216	375	384	411
services to silipping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	11,700	21,014	22,177	22,910
Port & harbor	Establishments	8	8	9	9	10	10	8	6	7
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
Shin & host	Establishments	62	50	52	50	51	52	59	53	56
Ship & boat building	Employees	21,240	20,720	21,022	21,230	21,741	ND^2	ND^2	ND^2	ND^2
Dunung	Payroll	963,644	901,156	920,372	938,375	993,066	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

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

- Coastal migratory pelagic resources (with GMFMC)
- 2. Coral coral reef and live/hardbottom habitat plan
- 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, five are currently listed as overfished: pink shrimp, red grouper, red porgy, red snapper, and snowy grouper. Eight stocks or stock complexes are currently subject to overfishing: black sea bass, gag, red grouper, red snapper, snowy grouper, speckled hind, vermilion snapper, and warsaw grouper.

Commercial Fisheries

In 2011, commercial fishermen in the South Atlantic Region landed 123 million pounds of finfish and shellfish, earning \$171 million in landings revenue. Landings revenue was dominated by shrimp (\$54 million) and blue crab (\$34 million). These species groups commanded ex-vessel prices of \$2.36 and \$0.80 per pound, respectively, and together comprised 51% of total landings revenue, and 53% of total landings in the South Atlantic Region.

Key South Atlantic Region Commercial Species

- Blue crab
- Oysters
- Clams
- Shrimp
- Flounders
- Snappers
- Groupers
- Swordfish
- King mackerels
- Tunas

in real terms) and the landings revenue for

North Carolina and East Florida had the highest landings revenue in the region in 2011 with \$71.2 million and \$60.6 million, respectively. The next greatest landings revenue came from South Carolina with \$23 million in landings revenue. In terms of pounds landed, North Carolina also had the highest landings (67 million pounds), followed by East Florida (31 million pounds) and Georgia (13 million pounds).

Shrimp experienced a 21% increase in ex-vessel price (a 16% decrease in real terms) from \$1.95 per pound in 2002 to \$2.36 per pound in 2011. Over the same time period, the ex-vessel price per pound for blue crab decreased 12% (a 39% decrease in real terms), from \$0.91 to \$0.8 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 2011, the South Atlantic Region's seafood industry generated \$14 billion in sales impacts in Florida, \$1.5 billion in sales impacts in Georgia, \$796 million in sales impacts in North Carolina, and \$88 million in sales impacts in South Carolina. Florida generated the largest employment, income, and value added impacts, generating 72,000 jobs, \$2.7 billion, and \$4.8 billion, respectively. The smallest income impacts were generated in South Carolina (\$35 million) and the smallest employment impacts were also generated in South Carolina (1,500 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 2,200 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 \$171 million in 2011. This was a 0.2% increase (a 30% decrease in real terms) from 2002 levels (\$171 million) and a 3.2% increase (a 4.8% decrease in real terms) relative to 2010 (\$166 million).

Totaling \$105 million in 2011, shellfish revenue experienced a 1.8% decrease (a 32% decrease in real terms) from 2002 to 2011 and experienced a 5.4% increase (2.8% decrease in real terms) from 2010 to 2011.

Shrimp and blue crab had the highest landings revenue in the South Atlantic Region in 2011, with \$54 million and \$34 million, respectively. Together they accounted for 51% of the total landings revenue earned in 2011. Between 2002 and 2011, the landings revenue from shrimp increased 4.3% (a 28% decrease in real terms) and the landings revenue for blue crab decreased

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)

³Commercial economic impacts data were not available for East Florida, data for Florida are reported here.

South Atlantic Region Regional Summary

20% (a 45% decrease in real terms).

In terms of finfish, North Carolina contributed the most (\$31 million) followed by East Florida (\$26 million), and South Carolina (\$8.4 million). Shellfish landings revenue was dominated by North Carolina, which also contributed the most (\$40 million) followed by East Florida (\$34 million), and Georgia (\$16 million).

Commercial Fisheries Facts

Landings revenue

- On average, between 2002 and 2011, the key species or species groups accounted for 78% 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 \$44 million in landings revenue from 2002 to 2011.
- Swordfish 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 57% annually to total landings between 2002 and 2011.
- Blue crab contributed the most to landings in the region, averaging 42 million pounds from 2002 to 2011.
- 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.
- Shrimp 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 (\$6.17) over the time period, followed by oysters (\$4.64), and groupers (\$3.03).
- Blue crab had the lowest average annual ex-vessel price per pound (\$0.87) over the time period, followed by king mackerels (\$1.74), and shrimp (\$1.94).
- Blue crab 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.
- Shrimp had the largest decrease in ex-vessel price over the 10 year time period, decreasing 25% from \$2.19 per pound in 2008 to \$1.64 in 2009.

From 2002 to 2011, species or species groups with large changes in landings revenue include oysters (increased 219%), swordfish (increased 189%), and tunas (increased 81%). Species or species groups with large changes in landings revenue between 2010 and 2011 include tunas (increasing 28%), swordfish (increasing 25%), and flounders (decreasing 18%).

Landings

Fishermen in the South Atlantic Region landed 123 million pounds of finfish and shellfish in 2011. This was a 43% decrease

from the 216 million pounds landed in 2002 and a 3.3% increase from the 119 million landed in 2010. Finfish landings contributed 40% of total landings in the South Atlantic Region (49 million pounds) in 2011. From 2010 to 2011, finfish landings experienced a 6.6% decrease.

Over the same time period, shellfish landings experienced a 11% increase from 67 million pounds in 2010 to 74 million in 2011 and a 4.6% decrease from 78 million pounds in 2002. Blue crab and shrimp had the highest annual landings in the South Atlantic Region in 2011, with 42 million pounds and 23 million pounds, respectively. Together they accounted for 53% of the total landings in 2011. Blue crab landings decreased 9.4% and shrimp landings decreased 14% during this period.

From 2002 to 2011, species or species groups with large changes in landings include oysters (increasing 123%), swordfish (increasing 83%), and tunas (increasing 56%). Species or species groups with large changes in landings between 2010 and 2011 include king mackerels (decreasing 28%), tunas (increasing 22%), and flounders (decreasing 18%).

Prices

The ex-vessel prices for the South Atlantic Region's key species and species groups in 2011 were higher than their 10 year average for eight of the key species (three of the species in real terms). Ex-vessel prices for groupers and swordfish experienced the biggest increases between 2002 and 2011, increasing 61% (12% in real terms) and 59% (10% in real terms), respectively. Relative to the ex-vessel prices in 2010, the South Atlantic Region's king mackerels experienced the greatest increase (21.3%, 11.9% in real terms) from \$1.78 in 2010 to \$2.16 in 2011. Blue crab experienced the greatest decrease in ex-vessel price during this period (14%, 20.7% in real terms) from \$0.93 to \$0.80. Relative to ex-vessel prices in 2010, seven species or species groups experienced increases, including shrimp (19%), and groupers (15%).

In East Florida, the species or species group with the largest change in ex-vessel price from 2002 to 2011 was swordfish (62% increase, 12% increase in real terms) from \$2.32 to \$3.75. The largest change in ex-vessel price experienced in Georgia was for snails (conchs) (67% increase, 16% increase in real terms from \$0.78 to \$1.30 and in North Carolina the largest change in ex-vessel price was experienced by Atlantic croaker (97% increase, 37% increase in real terms from \$0.32 to \$0.63).

Recreational Fishing

In 2011, over 2.3 million recreational anglers took 18 million fishing trips in the South Atlantic Region. Over 81% of these anglers were residents of a regional coastal county. Of the total fishing trips taken, 49% of them were taken from a private or rental boat and another 49% were shore-based. Atlantic croaker and spot were the most frequently caught species or species group with 7.3 million fish caught in 2011, and represented 24% of total fish caught in the region. Of the Atlantic croaker and spot caught, 58% of them were released rather than harvested.

Economic Impacts and Expenditures¹

¹Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Economic impacts from recreational

Regional Summary South Atlantic Region

The contribution of recreational fishing activities in the 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 29,000 full- and part-time jobs generated by recreational fishing activities in the state. North Carolina (18,000 jobs), and South Carolina (3,300 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 2011 were generated by expenditures on durable equipment: 87% in Georgia, 84% in East Florida, and 63% in North Carolina.

Key South Atlantic Region Recreational Species

- Black sea bass
- Bluefish
- Dolphinfish
- Atlantic croaker and spot
- Spotted seatrout
- King mackerel
- Sheepshead porgy
- Red drum
- Sharks
- Spanish mackerel

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 2011, sales impacts were the highest in East Florida (\$3.3 billion in sales impacts), followed by North Carolina (\$2 billion), Georgia (\$349 million), and South Carolina (\$282 million). In the same year, value added impacts were the highest in East Florida (\$1.7 billion in value added impacts), followed by North Carolina (\$948 million), Georgia (\$183 million), and South Carolina (\$155 million).

Overall, total fishing trip and durable equipment expenditures across the South Atlantic Region in 2011 were \$6.1 billion. Approximately 84% of these expenditures were related to durable equipment purchases. The greatest expenditures were for vehicle expenses (\$2.3 billion), followed by boat expenses (\$1.4 billion), fishing tackle (\$1.1 billion), and other equipment (\$278 million). Fishing trip-related expenditures by the South Atlantic Region's non-residents totaled over \$385 million of which the greatest portion can be attributed to shore-based fishing trips (\$219 million). Residents of the South Atlantic Region spent \$563 million on saltwater fishing trips, with the largest part of these expenses related to private boat trips (\$329 million).

Recreational Fishing Facts

Participation

- An average of <u>2.8</u> million anglers fished in the South Atlantic Region annually from 2002 to 2011.
- In 2011, coastal county residents made up 81% 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 <u>20 million</u> fishing trips were taken annually from 2002 to <u>2011</u>.
- Private or rental boat and shore-based fishing trips accounted for 8.7 million and 8.6 million fishing trips, respectively, in 2011. 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 2008 and 2009, decreasing 14%, from 22 million trips to 19 million trips.

Harvest and release

- Atlantic croaker and spot was the most commonly caught key species or species group, averaging 8.4 million fish over the 10 year time period. Of these, 50% 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 (84% harvested), followed by king mackerel (73% harvested), and Spanish mackerel (63% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.

Participation

There were 2.3 million recreational anglers who fished in the South Atlantic Region in 2011. This was a 2.7% increase from 2002 (2.3 million anglers). These anglers were South Atlantic Region residents from either a coastal county (1.9 million anglers) or non-coastal county (450,000 anglers). Almost 81% of total anglers in 2011 were residents of a coastal county. Coastal county angler participation in 2011 decreased 2.8% relative to 2002 (1.9 million anglers) and decreased 2% between 2010 and 2011. Non-coastal county angler participation increased 35% relative to 2002 (334,000 anglers) and decreased 16% relative to 2010 (536,000 anglers).

fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2006, available at:http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006)

Fishing Trips

Recreational fishermen took 18 million fishing trips in the South Atlantic Region in 2011. This was a 0.5% decrease from 2002 (18 million trips) and was 1.4 million fewer trips than taken in 2010. Of the total trips taken in the South Atlantic Region in 2011, approximately 49% of the trips were private or rental boat based (8.7 million trips). The other most popular mode of fishing was shore-based with 8.6 million trips in 2011.

Harvest and Release

Of the South Atlantic Region's key species and species groups, Atlantic croaker and spot (7.3 million fish), spotted seatrout (5.7 million fish), bluefish (5.4 million fish) and black sea bass (3.4 million fish) were the most often caught by anglers in 2011. Sharks (99% released), black sea bass (90% released), spotted seatrout (85% released), red drum (81% released), bluefish (64% released), and drum (atlantic croaker and spot) (58% released) were most often released rather than harvested. Anglers harvested more often than released king mackerel (76% harvested) and dolphinfish (70% harvested).

Between 2002 and 2011, three 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 king mackerel (57%), Spanish mackerel (41%), and dolphinfish (14%).

Marine Economy¹

The sum of the gross domestic products by state for Florida, Georgia, North Carolina, and South Carolina was \$1.7 trillion in 2010. Employee compensation totaled \$940 billion and annual payroll totaled \$568 billion. These economic measures increased 31% (a 1.3% decrease in real terms) and 26% (a 5.5% decrease in real terms), respectively, between 2002 and 2010; and experienced a 1.6% increase (a 2.5% decrease in real terms), and 0.4% increase (a 3.6% decrease in real terms), respectively between 2009 and 2010. Approximately 1 million establishments employed 15 million full- and part-time employees across the region in 2010. This was a 6.9% increase in establishment numbers and a 0.5% increase in employee numbers from 2002 to 2010.

In 2010, the commercial fishing location quotient (CFLQ) for East Florida was the highest in the region at 1. This was an 22% decrease from 2002 and a 5.3% increase from 2009. East Florida's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 1 times lower than the level of employment in these industries nationwide. The 2010 CFLQ in North Carolina was 0.16 (a 45% decrease from 2002).

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 79% from 2002 to 2007. Annual receipts totals experienced a 111% increase in South Carolina between 2002 and 2010. There were 347 seafood wholesale establishments across the South Atlantic Region in 2010 that employed 2,971 full- and part-time workers. From 2002 to 2010, the number of seafood wholesale establishments decreased 28% and the number of employees0.

Nonemployer firms engaged in seafood retail in the South Atlantic Region totaled 610 in 2010, a 22% increase relative to 2002. Of these firms, 17% were located in Georgia. At the state level, these firms showed a 36% increase in Florida and a 2.6% decrease in North Carolina between 2002 and 2010. Annual receipts in the region totaled \$49 million in 2010, a 19% increase from 2002 (a 11% decrease in real terms) and a 2.8% increase from 2009 (a 1.3% decrease in real terms).

Employer establishments engaged in seafood retail decreased 13% from 2002 to 2010, totaling 331 in 2010. These establishments employed 1,548 workers. Region-wide, the numbers of employees in the seafood retail sector increased 0.2% between 2002 and 2010. Across the states within the region, the largest change occurred in South Carolina (24% increase).

Transport, Support, and Marine Operations

The marine cargo handling employed more people than any other industry in this sector, employing approximately 13,000 people in 2010. This industry also had the highest annual payroll in the region totaling \$337 million. Marinas had the highest number of establishments (667), followed by the ship and boat building industries with 359 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 2009 to 2010 were: coastal and Great Lakes freight transportation (33% increase in payroll), coastal and Great Lakes freight transportation (27% decrease in employees), navigational services to shipping (27% increase in payroll) and coastal and Great Lakes freight transportation (19% increase in employees). In Georgia, large changes were seen for coastal and Great Lakes freight transportation (20% decrease in establishments), port and harbor operations (20% decrease in establishments), marine cargo handling (20% decrease in employees) and marinas (17% increase in establishments). In South Carolina, large changes were seen in the deep sea passenger transportation (67% decrease in establishments), marine cargo handling (14% decrease in establishments), deep sea freight transportation (12% decrease in establishments) and navigational services to shipping (12% decrease in establishments).

¹Information for 2010 is reported in this section; 2011 data were not available for this report.

Commercial Fisheries South Atlantic

2011 Economic Impacts of the South Atlantic Region Seafood Industry (thousands of dollars)

		With Imports		Without Imports					
	Jobs	Sales	Valued Added	Jobs.1	Sales.1	Valued Added.1			
East Florida	72,341	14,250,006	4,778,502	10,550	928,929	376,208			
Georgia	11,137	1,489,958	548,826	2,222	104,308	55,698			
North Carolina	8,850	795,541	329,451	5,086	248,229	136,504			
South Carolina	1,547	88,131	46,495	1,495	79,999	43,701			

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	171,034	156,703	159,444	131,410	140,674	152,390	165,627	147,144	165,913	171,302
Finfish & other	63,906	54,820	66,858	56,907	60,707	61,339	60,811	62,937	66,138	66,146
Shellfish	107,140	101,882	92,592	74,507	79,976	91,061	104,817	84,219	99,784	105,164
Blue crab	42,397	46,643	34,249	31,784	27,050	33,634	39,985	37,783	36,199	33,733
Clams	6,132	6,248	5,561	4,779	4,223	4,039	3,861	3,571	4,091	3,364
Flounders	11,308	9,718	11,530	10,974	13,317	11,375	10,928	10,171	10,948	8,941
Groupers	2,831	2,851	2,728	2,814	3,416	4,565	4,084	3,214	3,016	3,018
King mackerels	4,067	4,102	5,260	5,551	6,495	6,872	7,695	8,088	7,571	6,575
Oysters	2,138	2,353	2,912	3,305	3,853	3,806	4,028	4,603	7,175	6,818
Shrimp	51,699	42,707	44,797	31,035	39,653	43,807	51,064	33,076	46,022	53,944
Snappers	3,618	2,331	3,208	3,314	2,748	3,922	4,554	4,024	3,489	3,752
Swordfish	3,248	4,113	3,555	3,134	2,753	4,298	3,661	4,821	7,519	9,400
Tunas	2,808	2,423	3,671	3,904	4,692	4,894	4,672	4,869	3,976	5,096

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

rotar Landings a	and Landin	igs of Key	Species/S	pecies Gro	oups (triou	sanus or p	ounasj			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	216,204	197,486	199,033	123,421	114,661	105,285	116,554	113,280	119,474	123,460
Finfish & other	138,277	116,081	121,214	64,925	52,056	46,631	44,023	51,012	52,585	49,133
Shellfish	77,926	81,405	77,820	58,497	62,604	58,654	72,531	62,268	66,888	74,327
Blue crab	46,479	50,881	45,001	38,218	36,779	34,045	44,997	39,015	38,840	42,093
Clams	1,004	983	886	747	685	663	628	619	641	554
Flounders	7,586	5,799	7,325	5,944	6,282	4,778	5,034	5,278	5,020	4,130
Groupers	1,166	1,134	1,057	1,007	1,152	1,416	1,266	992	884	772
King mackerels	2,474	2,848	3,269	3,106	3,792	3,736	4,352	4,858	4,247	3,046
Oysters	551	595	689	730	808	776	857	938	1,439	1,226
Shrimp	26,503	24,343	26,472	16,048	22,080	21,235	23,341	20,108	23,198	22,831
Snappers	1,529	958	1,285	1,286	967	1,354	1,515	1,373	1,196	1,244
Swordfish	1,429	1,575	1,314	1,152	1,036	1,417	1,307	1,800	2,288	2,611
Tunas	1,418	1,235	1,739	1,569	2,360	2,310	1,658	1,945	1,805	2,209

Therage Times of the Species Species Croups (demand per pound)										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Blue crab	0.91	0.92	0.76	0.83	0.74	0.99	0.89	0.97	0.93	0.80
Clams	6.11	6.35	6.27	6.40	6.16	6.09	6.15	5.77	6.38	6.07
Flounders	1.49	1.68	1.57	1.85	2.12	2.38	2.17	1.93	2.18	2.17
Groupers	2.43	2.51	2.58	2.79	2.97	3.22	3.23	3.24	3.41	3.91
King mackerels	1.64	1.44	1.61	1.79	1.71	1.84	1.77	1.66	1.78	2.16
Oysters	3.88	3.96	4.22	4.53	4.77	4.91	4.70	4.91	4.99	5.56
Shrimp	1.95	1.75	1.69	1.93	1.80	2.06	2.19	1.64	1.98	2.36
Snappers	2.37	2.43	2.50	2.58	2.84	2.90	3.01	2.93	2.92	3.02
Swordfish	2.27	2.61	2.71	2.72	2.66	3.03	2.80	2.68	3.29	3.60
Tunas	1.98	1.96	2.11	2.49	1.99	2.12	2.82	2.50	2.20	2.31

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Trips	Jobs	Sales	Income	Value Added
East Florida	10,157,000	28,701	3,255,774	1,093,766	1,708,369
Georgia	970,000	2,880	348,742	119,021	182,586
North Carolina	4,740,000	17,737	1,961,144	606,074	948,461
South Carolina	1,807,000	3,254	282,049	93,789	154,999

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	1,059,539
For-Hire	125,489	29,914	Other Equipment	277,813
Private Boat	41,190	329,059	Boat Expenses	1,405,929
Shore	218,760	204,365	Vehicle Expenses	2,308,671
Total Trip Expenditures	385,437	563,338	Second Home Expenses	63,454
			Total Durable Equipment Expenditures	5,115,405
Total State Trip and Dural	ble Equipment Exp	enditures		6,064,180

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	1,948	2,271	2,105	2,615	2,603	3,157	2,330	1,922	1,933	1,893
Non-Coastal	334	473	511	472	477	493	560	462	536	450
Out-of-State	NA^1									
Total Anglers	2,282	2,744	2,616	3,087	3,080	3,650	2,890	2,384	2,470	2,343

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	442	412	490	505	456	503	415	391	368	374
Private Boat	8,265	9,962	9,899	9,896	9,824	11,535	10,910	8,923	9,514	8,663
Shore	9,057	10,871	10,829	10,621	11,251	9,955	10,468	9,370	9,186	8,637
Total Trips	17,764	21,245	21,218	21,022	21,531	21,993	21,793	18,684	19,068	17,674

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

· /		. ,		-	•	•					
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black sea bass	Н	340	424	918	624	582	435	348	271	509	335
Diack sea bass	R	1,456	1,407	2,758	2,386	2,513	2,861	2,566	1,909	2,594	3,031
Bluefish	Н	1,617	1,664	1,879	2,078	1,487	1,915	1,690	1,585	2,348	1,939
Diuciisii	R	3,190	2,277	2,664	2,752	3,200	4,089	3,085	2,557	4,267	3,458
Dolphinfish	Н	1,297	1,137	840	1,018	1,017	1,080	1,026	726	826	825
Богриннзи	R	81	146	119	202	186	394	188	99	128	354
Drum (Atlantic	Н	3,701	5,521	5,701	4,211	4,980	4,574	5,516	2,813	1,945	3,074
croaker and spot)	R	2,272	4,653	3,876	3,882	6,754	3,775	4,179	4,869	3,336	4,182
Drum (spotted	Н	758	826	1,050	1,477	1,507	1,546	1,635	1,413	932	858
seatrout)	R	3,218	2,891	3,561	6,409	5,264	5,555	5,167	4,169	5,771	4,890
King mackerel	Н	364	600	461	392	491	821	485	422	231	152
Killig Illackerei	R	97	255	227	193	198	301	168	96	76	47
Porgies	Н	409	728	428	541	392	638	692	624	703	660
(sheepshead)	R	453	558	316	421	420	546	691	511	496	516
Red drum	Н	293	468	414	481	319	414	463	277	608	493
ited druiii	R	1,615	1,527	1,766	2,612	2,033	1,840	2,414	1,870	3,321	2,139
Sharks ³	Н	9	25	23	76	6	15	16	19	3	11
Silaiks	R	1,016	1,367	1,819	2,568	1,852	1,954	2,525	2,063	1,969	1,541
Spanish mackerel	Н	1,353	1,169	760	932	651	1,060	1,315	1,126	1,070	865
Spanish mackerer	R	769	841	444	617	274	603	886	519	604	395

 $^{^{1}}NA = data$ 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

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

Commercial Fisheries East Florida

2011 Economic Impacts of the Florida¹ Seafood Industry (thousands of dollars)

		With Imports	Without Imports						
	Jobs	Sales	Value Added	Jobs	Sales	Value Added			
Total Impacts	72,341	14,250,006	4,778,502	10,550	928,929	376,208			
Commercial Harvesters	6,817	446,577	186,630	6,817	446,577	186,630			
Seafood Processors & Dealers	4,219	679,112	258,376	548	95,706	36,412			
Importers	37,278	10,254,318	3,125,965	0	0	0			
Seafood Wholesalers & Distributors	8,983	1,039,625	507,796	464	53,716	26,237			
Retail	15,043	1,830,373	699,735	2,721	332,930	126,929			

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

					<u>. , .</u>		•			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	34,420	33,111	39,978	35,489	42,002	42,767	47,855	40,992	51,138	60,570
Finfish & other	14,599	14,246	15,324	16,496	17,422	19,768	21,131	23,164	25,748	26,288
Shellfish	19,821	18,865	24,654	18,993	24,580	23,000	26,724	17,828	25,389	34,282
Blue crab	2,723	2,507	3,685	4,648	3,701	4,924	4,333	2,376	3,415	4,155
Clams	879	791	506	390	435	391	508	415	331	220
Groupers	719	658	584	587	521	923	724	583	561	547
King mackerel	2,816	2,853	3,650	3,456	4,318	4,833	6,036	6,563	6,903	5,495
Lobsters	1,939	1,779	2,148	1,624	2,462	2,488	3,312	1,089	2,825	3,205
Sharks	1,496	1,362	1,149	1,201	1,364	726	636	949	757	677
Shrimp	13,224	12,721	17,360	11,118	16,390	13,821	17,225	12,455	17,071	24,361
Snappers	1,113	919	1,098	1,009	972	1,279	1,905	2,383	1,454	1,668
Spanish mackerel	1,131	1,437	1,827	2,198	2,094	2,332	1,827	2,004	2,414	2,686
Swordfish	1,642	1,698	1,491	1,625	1,219	2,529	2,339	2,385	3,677	4,005

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

			• ,	•	• (•	,			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	21,693	23,432	28,707	22,964	27,021	25,196	26,306	27,501	29,710	31,215
Finfish & other	12,144	12,874	12,497	12,815	13,848	13,893	14,111	16,105	17,137	16,029
Shellfish	9,549	10,558	16,209	10,149	13,173	11,303	12,196	11,396	12,573	15,186
Blue crab	2,233	1,988	3,536	4,045	3,130	4,063	3,342	1,640	2,553	3,226
Clams	109	99	54	42	47	41	55	54	42	22
Groupers	281	250	216	207	166	274	204	165	150	137
King mackerel	1,645	2,061	2,291	1,833	2,572	2,631	3,299	4,064	3,905	2,630
Lobsters	414	395	456	313	407	361	506	298	481	514
Sharks	1,795	1,509	1,273	1,292	1,472	818	776	1,109	781	716
Shrimp	6,217	6,451	11,728	5,203	8,843	6,174	7,619	8,662	8,743	10,528
Snappers	494	398	453	407	355	461	635	805	510	562
Spanish mackerel	1,995	2,741	3,066	3,134	3,143	3,264	2,263	2,629	3,553	3,433
Swordfish	708	725	511	543	407	772	791	838	1,028	1,067

riterage ramaan			· -				2000	0000	2002 2002 2004 2005 2005 2007 2000 2000 2010 2010												
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011											
Blue crab	1.22	1.26	1.04	1.15	1.18	1.21	1.30	1.45	1.34	1.29											
Clams	8.09	8.00	9.30	9.27	9.20	9.52	9.30	7.73	7.90	9.84											
Groupers	2.56	2.63	2.70	2.84	3.14	3.37	3.55	3.53	3.73	3.99											
King mackerel	1.71	1.38	1.59	1.89	1.68	1.84	1.83	1.61	1.77	2.09											
Lobsters	4.68	4.50	4.71	5.18	6.06	6.90	6.55	3.65	5.87	6.23											
Sharks	0.83	0.90	0.90	0.93	0.93	0.89	0.82	0.86	0.97	0.95											
Shrimp	2.13	1.97	1.48	2.14	1.85	2.24	2.26	1.44	1.95	2.31											
Snappers	2.25	2.31	2.42	2.48	2.74	2.78	3.00	2.96	2.85	2.97											
Spanish mackerel	0.57	0.52	0.60	0.70	0.67	0.71	0.81	0.76	0.68	0.78											
Swordfish	2.32	2.34	2.92	2.99	3.00	3.28	2.96	2.85	3.58	3.75											

 $^{^{1}}$ Information reported in this table if for the state of Florida, not East Florida

Recreational Fisheries East Florida

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	855	83,108	28,367	48,928
Private Boat	2,089	198,718	69,902	118,745
Shore	1,520	143,352	49,428	83,224
Total Durable Equipment Impacts	24,238	2,830,596	946,069	1,457,473
Total State Trip and Durable Equipment Economic Impacts	28,701	3,255,774	1,093,766	1,708,369

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	680,782
For-Hire	45,395	5,328	Other Equipment	165,033
Private Boat	13,600	174,533	Boat Expenses	730,965
Shore	50,920	65,662	Vehicle Expenses	1,905,734
Total Trip Expenditures	109,915	245,524	Second Home Expenses	5,487
			Total Durable Equipment Expenditures	3,488,001
Total State Trip and Dura	ble Equipment Exp	enditures		3,843,440

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	1304	1413	1161	1565	1660	2168	1317	1099	1033	1109
Non-Coastal	NA^1									
Out of State	784	793	685	945	935	1008	703	643	629	553
Total Anglers	2089	2206	1847	2510	2595	3176	2021	1741	1662	1662

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	216	187	203	194	172	169	137	149	118	124
Private	5,429	6,211	5,544	6,064	5,913	7,157	6,452	5,394	5,706	5,298
Shore	4,657	5,045	5,144	5,092	5,543	5,277	4,651	4,577	4,393	4,735
Total Trips	10,302	11,443	10,891	11,350	11,628	12,603	11,240	10,120	10,217	10,157

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

		- (,				(,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Bluefish	Н	758	644	513	446	433	471	377	623	787	557
Diuensii	R	1,392	622	499	369	719	932	499	680	1,620	912
Dolphinfish	Н	659	787	545	353	492	514	662	328	248	347
Богринизи	R	72	130	114	200	162	373	185	78	118	346
Drum (kingfish)	Н	930	590	1,094	997	839	853	949	408	720	935
Druin (kingnsii)	R	587	368	755	906	707	1,099	551	608	935	807
Drum (spotted	Н	206	170	235	379	332	277	181	172	252	286
seatrout)	R	2,327	1,708	2,413	4,245	3,316	3,095	2,831	1,641	2,937	2,141
Cray channer	Н	402	447	322	397	445	689	352	225	161	187
Gray snapper	R	1,437	1,654	1,770	1,047	1,327	2,072	1,552	1,707	498	677
Jack (Florida	Н	141	373	447	281	165	126	271	91	264	106
pompano)	R	175	307	417	188	129	163	359	80	161	297
King mackerel	Н	282	463	287	242	340	515	349	292	182	133
Itting mackerer	R	82	233	145	118	157	227	124	52	59	45
Porgies	Н	290	354	202	390	243	255	236	227	351	286
(sheepshead)	R	352	351	252	289	314	306	465	355	336	357
Red drum	Н	119	159	137	195	146	162	160	80	176	179
itea aruin	R	663	749	1,006	1,406	847	759	890	522	1,415	1,051
Spanish mackerel	Н	926	783	369	513	322	455	503	369	513	405
Spanish macketel	R	555	446	209	248	141	196	364	150	282	147

 $^{^1\}mathrm{NA}=\mathrm{not}$ 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
2002	450,188 (6.3%)	6,366,964 (5.7%)	192,932 (4.9%)	304,181 (5.1%)	536,061 (5%)	1.29
2010	491,150 (6.6%)	6,626,558 (5.9%)	252,973 (5.1%)	400,635 (5.1%)	736,065 (5%)	1
% change	9.1%	4.08%	31.1%	31.7%	37.3%	-10.9%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	116	142	177	164	174	173	202	216	202
prep. & packaging	Receipts	5,064	8,047	8,652	8,756	10,184	10,497	11,065	12,399	11,065
Seafood Sales,	Firms	243	240	247	247	251	319	331	308	331
retail	Receipts	20,837	18,064	18,004	22,787	20,708	27,557	26,087	24,726	26,087

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	33	27	24	25	22	20	23	25	27
prep. & packaging	Employees	2,359	2,084	2,193	1,616	1,704	1,748	1,637	1,143	1,269
prep. & packaging	Payroll	65,914	61,452	65,881	47,529	62,801	58,233	53,455	46,235	45,772
Seafood sales,	Establishments	314	293	261	258	259	267	229	215	229
wholesale	Employees	2,395	1,835	1,948	1,883	2,091	2,308	1,913	1,762	1,747
Wilolesale	Payroll	78,160	55,874	63,276	65,339	73,897	85,019	75,203	72,159	70,889
Seafood sales,	Establishments	190	174	190	176	173	169	168	158	145
retail	Employees	908	952	977	970	936	989	991	885	865
iciali	Payroll	17,186	15,673	17,575	19,192	19,513	20,595	21,604	21,182	20,783

	, 		2000	2004	2005	0006	000=	,	0000	0010
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	51	66	59	59	54	47	42	42	50
Lakes freight	Employees	2,856	ND^2	1,132	1,150	1,217	1,242	1,106	972	709
transportation	Payroll	143,185	ND^2	80,422	71,420	91,638	94,429	50,115	37,774	50,217
Doon soo froight	Establishments	62	61	63	69	73	69	57	58	61
Deep sea freight transportation	Employees	1,858	2,535	2,567	2,622	3,729	3,190	2,486	2,801	2,279
transportation	Payroll	107,564	131,904	150,701	207,300	226,810	208,144	169,055	180,139	159,025
Doon soo nassangar	Establishments	31	36	32	31	37	34	31	33	29
Deep sea passenger transportation	Employees	7,863	8,879	8,849	8,492	9,077	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	315,551	428,941	536,753	504,625	571,590	ND^2	ND^2	ND^2	ND^2
	Establishments	481	528	532	551	513	493	442	428	430
Marinas	Employees	3,449	5,079	5,067	5,069	5,494	4,935	5,024	4,665	4,439
	Payroll	90,662	111,324	125,763	133,384	146,390	148,592	151,677	132,955	133,017
Marine cargo	Establishments	74	68	66	63	66	53	56	59	55
handling	Employees	4,405	5,651	5,671	6,409	7,266	6,585	8,052	7,288	7,547
Handing	Payroll	109,555	171,481	175,257	177,983	189,020	173,788	192,473	185,309	191,560
Navigational	Establishments	141	140	149	148	142	145	147	145	145
Navigational services to shipping	Employees	714	817	686	660	781	1,484	894	829	980
services to silipping	Payroll	34,040	39,524	39,309	42,200	48,370	61,470	56,917	60,641	76,853
Port & harbor	Establishments	29	26	29	31	27	29	40	32	34
operations	Employees	1,180	592	1,045	973	584	459	712	527	470
operations	Payroll	26,928	19,071	24,327	22,606	19,417	12,872	24,668	19,006	20,525
Ship & boat	Establishments	291	290	306	312	301	296	297	261	248
building	Employees	11,407	11,830	12,503	12,729	12,385	12,332	12,419	8,221	7,363
Dunumg	Payroll	379,828	393,985	443,379	454,209	427,888	469,382	442,096	296,537	302,909

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

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

Georgia Commercial Fisheries

2011 Economic Impacts of the Georgia Seafood Industry (thousands of dollars)

•	•	5 (,					
		With Imports			Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added			
Total Impacts	11,137	1,489,958	548,826	2,222	104,308	55,698			
Commercial Harvesters	726	28,252	13,717	726	28,252	13,717			
Seafood Processors & Dealers	983	77,107	39,226	245	19,406	9,872			
Importers	3,925	1,079,622	329,116	0	0	0			
Seafood Wholesalers & Distributors	831	103,036	49,936	40	5,009	2,428			
Retail	4,672	201,942	116,832	1,212	51,641	29,682			

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

8	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	14,703	13,685	14,374	13,465	11,534	11,331	13,079	11,750	13,715	16,295
Finfish & other	960	649	747	729	574	625	622	626	274	125
Shellfish	13,743	13,036	13,627	12,736	10,960	10,706	12,457	11,124	13,441	16,170
Blue crab	2,166	1,970	2,508	3,096	2,959	3,767	3,910	3,839	2,648	3,212
Clams	319	521	426	658	298	290	383	473	430	605
Groupers	ND^1	ND^2	ND^2	ND^2	ND^2	123	ND^2	ND^2	ND^2	ND^2
Shrimp	11,048	10,320	10,589	8,936	7,640	6,446	7,877	6,602	10,092	11,690
Snails (conchs)	50	69	4	3	6	1	6	11	27	39
Snappers	ND^2	ND^2	ND^2	ND^2	ND^2	269	ND^2	ND^2	ND^2	ND^2

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

Total Landings and Landings of recy Species/ Species Groups (incusands of pounds)												
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Total landings	9,177	9,437	9,659	9,638	8,294	7,908	8,957	7,357	7,203	12,646		
Finfish & other	596	409	420	401	285	304	267	306	155	83		
Shellfish	8,582	9,028	9,239	9,237	8,009	7,603	8,691	7,051	7,048	12,564		
Blue crab	1,989	1,713	2,963	4,302	4,091	4,421	4,255	3,597	2,329	3,393		
Clams	49	75	70	112	46	49	54	76	81	107		
Groupers	ND^2	ND^2	ND^2	ND^2	ND^2	37	ND^2	ND^2	ND^2	ND^2		
Shrimp	5,079	5,591	5,090	4,531	3,851	2,797	3,132	3,321	4,548	4,246		
Snails (conchs)	64	90	4	3	5	1	5	11	18	30		
Snappers	ND^2	ND^2	ND^2	ND^2	ND^2	93	ND^2	ND^2	ND^2	ND^2		

		- 3 - 1	, .	. ,	•	. ,				
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Blue crab	1.09	1.15	0.85	0.72	0.72	0.85	0.92	1.07	1.14	0.95
Clams	6.57	6.94	6.10	5.85	6.49	5.89	7.03	6.24	5.30	5.68
Groupers	ND	ND	ND	ND	ND	3.33	ND	ND	ND	ND
Shrimp	2.18	1.85	2.08	1.97	1.98	2.30	2.51	1.99	2.22	2.75
Snails (conchs)	0.78	0.77	1.10	1.03	1.22	1.25	1.31	1.00	1.50	1.30
Snappers	ND^2	ND^2	ND^2	ND^2	ND^2	2.89	ND^2	ND^2	ND^2	ND^2

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

Georgia **Recreational Fisheries**

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	62	5,245	1,714	3,061
Private Boat	200	22,809	7,741	13,835
Shore	111	12,161	4,096	7,292
Total Durable Equipment Impacts	2,507	308,527	105,470	158,398
Total State Trip and Durable Equipment Economic Impacts	2,880	348,742	119,021	182,586

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	75,493
For-Hire	1,699	1,771	Other Equipment	19,692
Private Boat	2,521	21,010	Boat Expenses	173,848
Shore	2,378	9,277	Vehicle Expenses	19,465
Total Trip Expenditures	6,597	32,058	Second Home Expenses	0
			Total Durable Equipment Expenditures	288,497
Total State Trip and Dura	ble Equipment Exp	enditures		327,152

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	58	112	104	135	121	149	190	146	145	146
Non-Coastal	54	113	120	67	66	115	154	91	136	131
Out of State	37	42	53	43	33	45	98	45	61	78
Total Anglers	148	268	278	245	219	308	441	282	342	355

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	9	12	26	26	29	30	17	16	7	16
Private	338	549	485	538	481	577	732	516	530	620
Shore	273	410	457	370	289	421	455	311	336	334
Total Trips	620	971	968	934	799	1,028	1,204	843	873	970

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

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		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black drum	Н	23	44	19	20	20	51	91	15	70	10
DIACK UTUITI	R	19	27	42	11	29	35	66	22	40	5
Black sea bass	Н	24	103	70	86	68	35	100	18	13	43
DIACK SEA DASS	R	82	239	143	218	184	291	580	114	163	227
Bluefish	Н	2	1	(1)	4	3	11	8	1	13	3
Diuensii	R	26	23	17	21	23	102	116	73	107	70
Drum (Atlantic	Н	36	249	39	39	35	44	39	82	35	44
croaker)	R	194	964	154	281	283	229	294	434	264	262
Drum (southern	Н	427	504	662	511	448	576	697	587	586	873
kingfish)	R	378	847	818	562	669	625	873	559	465	667
Drum (spotted	Н	271	426	340	241	380	578	642	507	384	289
seatrout)	R	358	738	610	643	809	1,039	720	916	742	551
Porgies	Н	26	128	81	66	36	59	65	51	104	138
(sheepshead)	R	39	123	26	58	52	85	97	33	38	44
Red drum	Н	91	122	139	105	69	113	133	69	195	107
Neu urum	R	169	272	142	334	137	226	314	167	483	213
Sharks ²	Н	(1)	4	1	2	(1)	2	3	1	(1)	3
Jilaiks	R	194	210	293	362	355	583	518	332	268	296
Southern flounder	Н	30	82	53	38	23	94	49	34	35	28
Journal Hounder	R	11	16	33	8	17	(1)	2	9	3	12

 $^{^{1}}$ In this table, '(1)' = 0-999 thousand fish and '1' = 1,000-1,499 thousand fish. 2 Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

Georgia's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	206,323 (2.9%)	3,381,244 (3%)	113,752 (2.9%)	178,394 (3%)	313,952 (2.9%)	0.12
2010	217,099 (2.9%)	3,315,274 (3%)	137,539 (2.8%)	227,218 (2.8%)	403,230 (2.9%)	0.06
% change	5.22%	-1.95%	20.9%	27.4%	28.4%	-50%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	20	24	29	24	21	34	45	50	45
prep. & packaging	Receipts	1,560	2,249	2,030	2,642	1,957	2,187	3,489	3,741	3,489
Seafood Sales,	Firms	77	72	69	64	78	87	101	99	101
retail	Receipts	5,027	4,668	4,855	6,625	7,180	8,671	6,922	5,917	6,922

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

				•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coofood made at	Establishments	11	11	11	11	8	6	7	6	6
Seafood product prep. & packaging	Employees	1,014	994	ND^2	1,155	1,164	ND^2	ND^2	ND^2	1,056
prep. & packaging	Payroll	29,867	28,432	ND^2	39,839	43,637	ND^2	ND^2	ND^2	37,343
Seafood sales,	Establishments	53	39	36	29	30	42	30	33	36
wholesale	Employees	572	580	619	640	659	688	565	532	514
Wilolesale	Payroll	19,616	32,047	31,012	32,781	31,654	31,033	20,122	18,628	20,075
Seafood sales,	Establishments	52	46	50	59	55	44	48	42	48
retail	Employees	161	152	159	185	184	179	160	162	176
ICLAII	Payroll	2,002	2,243	2,437	2,753	2,724	2,633	2,433	2,447	2,502

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	5	6	6	7	6	6	6	5	4
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	33	28	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	1,883	2,040	1,700	ND^2
Doon soo froight	Establishments	19	23	18	19	15	13	14	13	14
Deep sea freight transportation	Employees	ND^2	256	185	193	ND^2	132	156	29	ND^2
transportation	Payroll	ND^2	12,201	10,306	10,658	ND^2	10,090	11,275	2,192	2,465
Deep sea passenger	Establishments	NA^3	NA^3	NA^3	NA^3	NA^3	1	NA^3	NA^3	NA^3
transportation	Employees	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3
transportation	Payroll	NA^3	NA^3	NA^3	NA^3	NA^3	ND^2	NA^3	NA^3	NA^3
	Establishments	63	69	57	60	66	68	60	58	62
Marinas	Employees	ND^2	642	ND^2	ND^2	ND^2	569	527	541	631
	Payroll	ND^2	12,870	ND^2	ND^2	ND^2	12,701	15,571	15,736	17,428
Marine cargo	Establishments	15	14	18	17	17	17	17	18	17
handling	Employees	3,197	ND^2	2,018	2,350	3,003	2,501	2,660	3,707	2,971
nananng	Payroll	75,368	ND^2	68,696	80,706	104,596	110,857	97,869	87,410	84,675
Navigational	Establishments	9	9	8	8	10	11	11	9	8
services to shipping	Employees	107	ND^2	ND^2	136	ND^2	217	182	ND^2	ND^2
services to simpling	Payroll	5,109	ND^2	ND^2	7,784	ND^2	11,141	10,193	12,185	11,237
Port & harbor	Establishments	4	4	7	6	5	4	5	5	4
operations	Employees	ND^2	ND^2	ND^2	ND^2	196	98	ND^2	ND^2	ND^2
operations	Payroll	ND^2	ND^2	ND^2	ND^2	3,303	3,108	ND^2	ND^2	ND^2
Ship & boat	Establishments	20	18	20	17	16	21	20	14	12
building	Employees	ND^2	1,580	ND^2	ND^2	1,967	2,225	2,159	ND^2	ND^2
Sanama	Payroll	ND^2	40,768	ND^2	ND^2	64,667	68,646	69,096	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.

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

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

Commercial Fisheries North Carolina

2011 Economic Impacts of the North Carolina Seafood Industry (thousands of dollars)

•			J (,				
		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	8,850	795,541	329,451	5,086	248,229	136,504		
Commercial Harvesters	2,162	120,395	66,840	2,162	120,395	66,840		
Seafood Processors & Dealers	1,050	70,274	35,307	403	27,210	13,671		
Importers	1,543	424,459	129,394	0	0	0		
Seafood Wholesalers & Distributors	431	46,974	21,745	121	13,232	6,125		
Retail	3,663	133,439	76,165	2,399	87,392	49,869		

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

<u>g</u>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	94,747	84,926	79,703	64,890	70,121	82,285	86,822	77,248	79,865	71,177
Finfish & other	37,274	31,560	38,910	34,901	37,716	36,203	34,445	34,002	33,376	31,303
Shellfish	57,473	53,366	40,793	29,989	32,405	46,082	52,377	43,246	46,489	39,874
Atlantic croaker	3,234	2,924	3,528	3,409	3,563	2,714	3,142	3,004	3,410	3,164
Black sea bass	878	1,417	1,486	1,332	1,715	1,195	1,156	1,401	948	628
Blue crab	33,149	37,108	24,465	20,274	17,087	21,432	27,555	27,429	26,544	21,282
Clams	3,534	3,399	3,390	2,798	2,656	2,660	2,435	2,141	2,640	1,933
Flounders	11,270	9,671	11,503	10,963	13,301	11,335	10,886	10,124	10,908	8,889
Groupers	1,302	1,200	1,124	1,214	1,559	1,995	1,939	1,609	1,506	1,302
King mackerel	1,177	1,214	1,573	2,054	2,120	1,967	1,632	1,500	644	1,062
Shrimp	18,365	10,931	9,463	4,409	9,141	17,905	19,251	8,528	10,691	10,886
Snappers	1,186	686	873	1,116	953	1,601	1,784	1,073	955	1,004
Tunas	2,158	1,989	3,317	3,321	4,060	4,046	3,393	2,922	1,489	2,437

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	160,142	139,401	134,078	79,607	68,744	62,871	71,209	68,962	71,994	67,483
Finfish & other	110,944	88,721	91,383	49,435	35,675	30,440	27,706	32,419	32,519	29,802
Shellfish	49,198	50,681	42,696	30,172	33,069	32,432	43,503	36,543	39,474	37,681
Atlantic croaker	10,189	14,429	11,993	11,903	10,397	7,271	5,792	6,135	7,312	5,054
Black sea bass	592	851	881	690	778	473	485	615	401	272
Blue crab	37,737	42,770	34,129	25,430	25,343	21,425	32,917	29,707	30,683	30,035
Clams	627	547	551	418	427	438	400	367	366	302
Flounders	7,568	5,772	7,302	5,937	6,272	4,754	5,009	5,256	5,001	4,101
Groupers	581	518	478	481	587	701	683	553	493	366
King mackerel	778	765	955	1,246	1,186	1,059	1,037	778	329	408
Shrimp	9,969	6,167	4,881	2,358	5,737	9,537	9,427	5,408	5,955	5,140
Snappers	490	269	339	433	345	550	603	374	320	326
Tunas	1,000	914	1,424	1,271	1,982	1,836	1,041	1,028	703	1,056

7 tronage 7 timaa	verage ramaar race of recy species Groups (donars per pound)									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic croaker	0.32	0.20	0.29	0.29	0.34	0.37	0.54	0.49	0.47	0.63
Black sea bass	1.48	1.67	1.69	1.93	2.21	2.53	2.39	2.28	2.36	2.31
Blue crab	0.88	0.87	0.72	0.80	0.67	1.00	0.84	0.92	0.87	0.71
Clams	5.64	6.22	6.15	6.69	6.21	6.08	6.09	5.83	7.21	6.39
Flounders	1.49	1.68	1.58	1.85	2.12	2.38	2.17	1.93	2.18	2.17
Groupers	2.24	2.32	2.35	2.52	2.65	2.84	2.84	2.91	3.06	3.56
King mackerel	1.51	1.59	1.65	1.65	1.79	1.86	1.57	1.93	1.96	2.60
Shrimp	1.84	1.77	1.94	1.87	1.59	1.88	2.04	1.58	1.80	2.12
Snappers	2.42	2.55	2.57	2.58	2.76	2.91	2.96	2.87	2.98	3.08
Tunas	2.16	2.18	2.33	2.61	2.05	2.20	3.26	2.84	2.12	2.31

Recreational Fisheries North Carolina

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,355	106,477	33,906	59,755
Private Boat	1,498	139,335	44,719	78,567
Shore	3,663	303,553	96,913	169,035
Total Durable Equipment Impacts	11,221	1,411,779	430,536	641,104
Total State Trip and Durable Equipment Economic Impacts	17,737	1,961,144	606,074	948,461

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	250,075
For-Hire	53,606	17,838	Other Equipment	81,722
Private Boat	20,479	102,454	Boat Expenses	419,575
Shore	112,816	110,878	Vehicle Expenses	379,028
Total Trip Expenditures	186,901	231,169	Second Home Expenses	57,967
			Total Durable Equipment Expenditures	1,188,366
Total State Trip and Dura	ble Equipment Exp	enditures		1,606,436

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	409	524	613	685	588	564	587	446	544	490
Non-Coastal	226	281	290	285	265	265	303	259	296	254
Out of State	1130	1298	1156	1280	1374	1079	1079	976	1073	755
Total Anglers	1765	2103	2058	2250	2227	1908	1970	1681	1914	1499

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	184	174	183	260	234	218	192	146	166	152
Private	1,941	2,181	2,640	2,345	2,452	2,670	2,461	2,005	2,199	1,899
Shore	3,462	4,379	4,090	3,939	4,179	3,444	4,246	3,158	3,314	2,689
Total Trips	5,587	6,734	6,913	6,544	6,865	6,332	6,899	5,309	5,679	4,740

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

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		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black sea bass	Н	85	167	398	231	126	110	58	107	139	94
Diack sea bass	R	529	419	1,300	1,194	1,177	950	559	668	1,103	1,062
Bluefish	Н	778	953	1,233	1,382	917	1,257	1,177	827	1,105	1,153
Didensii	R	1,610	1,417	1,761	2,044	1,836	2,378	2,138	1,551	2,221	1,924
Dolphinfish	Н	621	334	268	662	522	533	357	367	499	473
Боринизи	R	3	14	5	2	24	5	2	3	5	8
Drum (Atlantic	Н	2,996	4,286	4,337	3,341	3,534	3,538	2,163	1,424	1,314	1,453
croaker and spot)	R	1,598	2,686	2,915	2,735	5,167	2,805	2,741	3,135	2,470	2,799
Drum (spotted	Н	197	107	285	585	564	531	656	609	195	216
seatrout)	R	384	132	261	1,059	596	849	883	1,214	1,685	1,917
Flounder (lefteye	Н	216	110	189	156	152	189	70	100	143	93
and summer)	R	1,286	830	1,341	878	925	1,090	1,691	1,212	1,584	988
King mackerel	Н	67	114	149	139	143	270	106	92	35	13
Tillig Hackerel	R	7	22	78	73	32	44	24	12	7	(1)
Spanish mackerel	Н	403	350	327	335	305	495	745	678	482	366
Spanish mackerer	R	197	165	149	181	96	257	448	312	295	171
Striped bass	Н	59	139	431	136	98	48	35	12	34	106
Juliped bass	R	154	285	586	123	62	81	175	122	107	295
Yellowfin tuna	Н	135	328	169	180	166	102	26	29	23	26
i chowini tuna	R	8	56	10	8	13	1	(1)	(1)	1	(1)

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

North Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	207,562 (2.9%)	3,322,004 (3%)	101,827 (2.6%)	163,313 (2.9%)	302,201 (2.7%)	0.21
2010	218,104 (2.9%)	3,234,595 (2.9%)	125,174 (2.5%)	219,158 (2.9%)	424,562 (2.8%)	0.09
% change	5.08%	-2.63%	22.9%	34.2%	40.5%	-42.9%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	25	33	27	26	27	30	0	0	0
prep. & packaging	Receipts	1,385	1,646	1,515	1,106	1,084	1,813	ND^2	ND^2	ND^2
Seafood Sales,	Firms	117	133	144	130	115	150	114	139	114
retail	Receipts	11,560	11,565	12,294	10,913	11,342	14,999	10,918	12,073	10,918

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

	_			•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	21	18	18	17	18	22	18	16	16
prep. & packaging	Employees	280	ND^2	ND^2	ND^2	475	ND^2	232	170	171
prep. & packaging	Payroll	8,547	ND^2	ND^2	ND^2	11,563	12,659	5,373	4,461	4,749
Seafood sales,	Establishments	84	68	72	77	70	71	65	66	66
wholesale	Employees	961	628	627	703	582	597	559	584	590
Wildiesale	Payroll	21,716	16,170	17,411	17,577	16,543	15,655	16,843	17,383	18,348
Seafood sales,	Establishments	81	87	88	90	89	86	90	77	82
retail	Employees	301	304	340	316	250	241	219	243	247
T C C C C C C C C C C C C C C C C C C C	Payroll	3,890	3,982	4,234	4,185	4,129	4,170	4,143	4,494	5,017

•	-			2000	0010					
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	6	5	5	5	4	6	4	6	4
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	54	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	2,061	ND^2	2,366	ND^2
Doon soo froight	Establishments	15	7	7	7	8	6	5	6	10
Deep sea freight transportation	Employees	168	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	9	ND^2
transportation	Payroll	52,665	ND^2	ND^2	ND^2	ND^2	510	533	617	ND^2
Doon soo nassangar	Establishments	3	3	2	2	1	1	NA^3	1	NA^3
Deep sea passenger transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	NA^3
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	NA^3
	Establishments	103	104	97	103	103	96	107	105	102
Marinas	Employees	557	ND^2	644	654	681	522	656	501	536
	Payroll	13,186	ND^2	16,529	16,530	16,616	14,922	17,164	15,858	16,238
Marine cargo	Establishments	6	7	10	12	9	13	13	12	11
handling	Employees	ND^2	433	668	641	757	652	760	914	600
nanumg	Payroll	ND^2	16,001	28,676	25,988	19,736	25,164	23,328	20,707	20,755
Navigational	Establishments	4	6	6	8	7	14	10	11	13
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	102	87	96	94
services to silipping	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	3,773	3,668	4,313	3,968
Port & harbor	Establishments	7	6	5	5	5	3	3	2	4
operations	Employees	ND^2	271	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	ND^2	12,650	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Ship & boat	Establishments	62	55	62	65	74	78	77	64	60
building	Employees	3,566	3,290	3,622	3,957	4,232	ND^2	4,281	1,983	1,501
Dunumg	Payroll	103,506	106,656	127,472	133,665	153,672	ND^2	138,243	68,004	64,807

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

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

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

South Carolina Commercial Fisheries

2011 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	1,547	88,131	46,495	1,495	79,999	43,701		
Commercial Harvesters	549	38,536	20,967	549	38,536	20,967		
Seafood Processors & Dealers	113	8,671	4,362	111	8,497	4,274		
Importers	24	6,728	2,051	0	0	0		
Seafood Wholesalers & Distributors	44	4,480	2,067	39	4,015	1,853		
Retail	817	29,717	17,048	796	28,951	16,607		

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

					р/ - Р					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	21,340	21,242	18,542	17,570	17,025	16,017	17,872	17,032	21,205	23,268
Finfish & other	5,375	4,650	5,042	4,781	4,995	4,744	4,614	5,114	6,740	8,429
Shellfish	15,965	16,592	13,499	12,789	12,031	11,274	13,259	11,918	14,465	14,839
Black sea bass	95	168	302	191	168	236	257	362	213	182
Blue crab	4,239	5,057	3,591	3,766	3,304	3,511	4,187	4,059	3,593	5,084
Clams	1,399	1,537	1,238	934	834	697	535	542	688	606
Groupers	811	993	1,020	1,013	1,335	1,524	1,421	1,021	949	1,169
Oysters	1,025	1,199	1,229	1,471	1,369	1,375	1,739	1,738	1,858	1,975
Sharks	78	66	128	136	144	78	78	56	123	166
Shrimp	9,062	8,736	7,385	6,572	6,481	5,634	6,712	5,487	8,168	7,008
Snappers	1,319	725	1,237	1,190	823	773	864	568	1,079	1,080
Swordfish	670	616	555	ND^1	ND^2	ND^2	187	1,116	1,944	2,777
Tilefish	423	287	221	143	271	5	66	9	25	8

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	13,559	13,728	12,439	11,212	10,602	9,310	10,081	9,375	10,567	12,116
Finfish & other	3,052	2,598	2,768	2,274	2,249	1,994	1,940	2,161	2,774	3,220
Shellfish	10,507	11,130	9,670	8,938	8,353	7,316	8,141	7,215	7,793	8,896
Black sea bass	60	104	212	115	86	114	132	168	98	100
Blue crab	4,435	4,411	4,374	4,440	4,215	4,137	4,484	4,014	3,275	5,439
Clams	219	263	211	175	165	135	119	123	152	123
Groupers	304	366	363	319	399	404	379	274	241	269
Oysters	262	283	275	308	291	285	324	309	332	337
Sharks	109	124	206	174	147	105	110	63	87	108
Shrimp	5,238	6,133	4,773	3,957	3,650	2,727	3,162	2,716	3,951	2,918
Snappers	544	290	492	447	267	250	277	194	365	356
Swordfish	240	219	200	ND^2	ND^2	ND^2	71	459	630	741
Tilefish	195	145	124	80	139	4	28	5	15	4

Average Amma	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black sea bass	1.56	1.61	1.42	1.66	1.97	2.07	1.94	2.15	2.16	1.82
Blue crab	0.96	1.15	0.82	0.85	0.78	0.85	0.93	1.01	1.10	0.93
Clams	6.38	5.85	5.86	5.34	5.06	5.17	4.51	4.42	4.54	4.95
Groupers	2.67	2.71	2.81	3.17	3.35	3.77	3.75	3.73	3.94	4.35
Oysters	3.91	4.24	4.46	4.78	4.71	4.82	5.36	5.63	5.60	5.85
Sharks	0.71	0.53	0.62	0.78	0.98	0.74	0.71	0.89	1.42	1.53
Shrimp	1.73	1.42	1.55	1.66	1.78	2.07	2.12	2.02	2.07	2.40
Snappers	2.42	2.50	2.51	2.66	3.08	3.09	3.12	2.92	2.95	3.03
Swordfish	2.79	2.81	2.78	ND^2	ND^2	ND^2	2.64	2.43	3.09	3.75
Tilefish	2.17	1.98	1.78	1.78	1.95	1.36	2.30	2.00	1.71	1.84

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

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	528	41,360	13,304	23,367
Private Boat	415	36,462	12,027	21,275
Shore	1,054	86,166	27,629	47,979
Total Durable Equipment Impacts	1,256	118,060	40,829	62,377
Total State Trip and Durable Equipment Economic Impacts	3,254	282,049	93,789	154,999

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	53,189
For-Hire	24,789	4,977	Other Equipment	11,366
Private Boat	4,590	31,062	Boat Expenses	81,541
Shore	52,646	18,548	Vehicle Expenses	4,444
Total Trip Expenditures	82,024	54,587	Second Home Expenses	0
			Total Durable Equipment Expenditures	150,541
Total State Trip and Dura	ble Equipment Exp	enditures		287,152

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	177	222	227	230	234	277	236	231	210	148
Non-Coastal	55	79	101	120	146	113	103	112	104	66
Out of State	161	270	334	448	617	551	604	554	494	264
Total Anglers	392	571	662	798	997	941	942	898	809	478

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	33	39	78	25	21	86	69	80	77	82
Private	557	1,021	1,230	949	978	1,131	1,265	1,008	1,079	846
Shore	665	1,037	1,138	1,220	1,240	813	1,116	1,324	1,143	879
Total Trips	1,255	2,097	2,446	2,194	2,239	2,030	2,450	2,412	2,299	1,807

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

Trairest (Tr) and Tr		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black sea bass	Н	113	45	238	75	183	125	89	37	216	56
DIACK SEA DASS	R	336	289	769	513	583	921	865	470	641	660
Bluefish	Н	79	66	133	246	134	176	128	134	443	226
Diuensii	R	162	215	387	318	622	677	332	253	319	552
Drum (Atlantic	Н	460	724	901	502	1,229	644	2,798	827	369	947
croaker and spot)	R	197	672	531	505	1,092	376	393	840	353	462
Drum (southern	Н	226	982	1,150	998	926	698	823	1,057	389	611
kingfish)	R	135	1,048	749	391	1,164	539	614	689	(1)	68
Drum (spotted	Н	84	123	190	272	231	160	156	125	101	67
seatrout)	R	149	313	277	462	543	572	733	398	407	281
Porgies	Н	30	129	95	45	60	108	216	222	103	170
(sheepshead)	R	21	50	22	47	27	21	60	24	58	93
Red drum	Н	41	162	108	130	49	72	120	70	173	162
rtea arum	R	143	430	438	493	540	438	551	752	787	666
$Sharks^2$	Н	(1)	(1)	16	38	(1)	3	5	13	(1)	3
Silaiks	R	276	382	402	604	512	170	259	397	467	348
Southern flounder	Н	112	111	215	84	111	76	102	88	108	102
Journal Hounder	R	73	52	89	73	199	106	102	74	(1)	16
Spanish mackerel	Н	23	25	56	71	23	95	52	74	70	87
Spanish macketel	R	9	224	84	184	28	97	68	56	27	67

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.

Marine Economy South Carolina

South Carolina's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	98,357 (1.4%)	1,538,750 (1.4%)	43,999 (1.1%)	71,133 (1.2%)	124,391 (1.2%)	0.15
2010	102,045 (1.4%)	1,502,853 (1.3%)	52,548 (1.1%)	93,371 (1.1%)	160,374 (1.2%)	0.1
% change	3.75%	-2.33%	19.4%	31.3%	28.9%	-40%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	20	19	22	14	12	12	15	21	15
prep. & packaging	Receipts	547	1,115	1,797	2,234	1,303	857	1,155	1,794	1,155
Seafood Sales,	Firms	64	74	74	61	76	75	64	76	64
retail	Receipts	3,484	4,599	4,612	3,588	3,427	3,876	4,650	4,534	4,650

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

		• •		•						
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soofood product	Establishments	4	3	4	3	3	5	2	2	2
Seafood product prep. & packaging	Employees	ND^2	ND^2	28	7	ND^2	ND^2	ND^2	ND^2	ND^2
prep. & packaging	Payroll	ND^2	ND^2	805	145	ND^2	ND^2	ND^2	ND^2	ND^2
Seafood sales,	Establishments	28	22	18	22	19	26	20	15	16
wholesale	Employees	ND^2	ND^2	ND^2	211	191	220	108	111	120
Wilolesale	Payroll	ND^2	ND^2	ND^2	5,818	5,542	6,186	3,770	3,676	3,868
Seafood sales,	Establishments	58	55	58	64	62	60	64	57	56
retail	Employees	175	244	ND^2	206	190	210	292	261	260
retaii	Payroll	2,391	2,911	ND^2	2,773	2,905	3,155	4,871	4,901	4,580

Transport, Suppor	-,		,			ts (thousands of donars)				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	1	3	4	4	4	5	4	4	4
Lakes freight	Employees	ND^2	ND^2	ND^2	45	ND^2	60	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	1,882	ND^2	2,352	ND^2	ND^2	ND^2
Deep sea freight	Establishments	10	8	7	10	9	6	4	8	7
transportation	Employees	ND^2	ND^2	ND^2	113	ND^2	67	ND^2	ND^2	20
transportation	Payroll	ND^2	ND^2	ND^2	4,600	ND^2	3,419	659	ND^2	758
Daan saa massammar	Establishments	1	3	1	1	1	1	7	6	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	62	63	69	70	71	72	68	69	73
Marinas	Employees	357	365	378	398	452	469	588	533	537
	Payroll	6,395	6,696	7,645	8,050	10,105	11,498	13,753	12,642	13,786
Marine cargo	Establishments	16	15	17	18	17	15	17	14	12
handling	Employees	1,793	2,415	2,253	1,994	2,707	1,419	1,282	1,953	1,731
Hallullig	Payroll	54,609	78,941	81,691	66,767	83,142	75,967	56,812	43,170	39,625
Navigational	Establishments	11	6	5	7	8	6	8	8	7
services to shipping	Employees	83	144	ND^2	ND^2	155	152	227	208	222
services to simpping	Payroll	3,422	5,716	ND^2	ND^2	7,588	7,369	11,916	12,522	12,591
Dawt O. hawbay	Establishments	NA^3	1	1	1	1	3	3	2	2
Port & harbor operations	Employees	NA^3	ND^2	ND^2	ND^2	ND^2	113	ND^2	ND^2	ND^2
operations	Payroll	NA^3	ND^2	ND^2	ND^2	ND^2	7,058	ND^2	ND^2	ND^2
Shin & hoat	Establishments	43	41	46	48	45	41	46	41	39
Ship & boat building	Employees	1,570	2,253	2,380	2,672	2,425	2,962	3,001	1,929	1,922
bullullig	Payroll	61,045	78,963	90,974	97,087	92,098	102,531	97,743	73,988	74,945

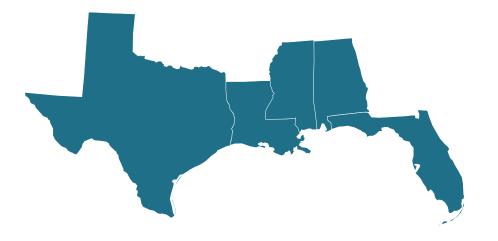
 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.

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

 $^{^3{\}sf NA}={\sf these}$ 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
- 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. Three stocks or stock complexes are currently subject to overfishing: gag, gray triggerfish, and greater amberjack.

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 2011, commercial fishermen in the Gulf of Mexico Region landed 1.8 billion pounds of finfish and shellfish, earning \$818 million in landings revenue. Landings revenue was dominated by shrimp (\$438 million) and menhaden (\$104 million). These species commanded ex-vessel prices of \$1.99 and \$0.08 per pound, respectively, and comprised 66% of total landings revenue, and 90% of total landings in the Gulf of Mexico Region.

Key Gulf of Mexico Region Commercial Species

- Blue crab
- Oysters
- Crawfish
- Red snapper
- Groupers
- Shrimp
- Menhaden
- Stone crab
- Mullets
- Tunas

Louisiana and Texas had the highest landings revenue in the region in 2011, \$334 million and \$239 million, respectively. The next greatest landings revenue came from West Florida with \$164 million in landings revenue. In terms of pounds landed, Louisiana had the highest landings (1.3 billion pounds), followed by Mississippi (278 million pounds) and Texas (98 million pounds).

Economic Impacts^{1,2}

In 2011, the Gulf of Mexico Region's seafood industry generated \$500 million in sales impacts in Alabama, \$1.8 billion in sales impacts in Louisiana, \$247 million in sales impacts in Mississippi, \$2.3 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 72,000 jobs, \$2.7 billion, and \$4.8 billion, respectively. The smallest income impacts were generated in Mississippi (\$96 million) and the smallest employment impacts were also generated in Mississippi (5,500 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 5,800 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 \$818 million in 2011. This was a 20% increase (a 17% decrease in real terms) from 2002 levels (\$682 million) and a 28% increase

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.

Gulf of Mexico Region Regional Summary

(a 18% increase in real terms) relative to 2010 (\$639 million). Totaling \$623 million in 2011, shellfish revenue experienced a 17% increase (a 19% decrease in real terms) from 2002 to 2011 and experienced a 23% increase (13% increase in real terms) from 2010 to 2011.

Commercial Fisheries Facts

Landings revenue

- On average, between 2002 and 2011, the key species or species groups accounted for 91% of total revenue, generating \$615 million in the Gulf of Mexico Region.
- <u>Shrimp</u> had higher landings revenues than any other species or species group, averaging \$371 million in landings revenue from 2002 to 2011.
- <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.
- <u>Crawfish</u> 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 2002 and 2011.
- Menhaden contributed the most to landings in the region, averaging 1.1 billion pounds from 2002 to 2011.
- <u>Crawfish</u> 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.
- Crawfish 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

- Stone crab had the highest average annual ex-vessel price per pound (\$4.20) over the time period, followed by tunas (\$2.92), and oysters (\$2.90).
- Menhaden had the lowest average annual ex-vessel price per pound (\$0.06) over the time period, followed by mullets (\$0.65), and crawfish (\$0.71).
- Tunas had the largest one-year increase in ex-vessel price over the 10 year time period, increasing 71% from \$2.03 per pound in 2010 to \$3.47 in 2011.
- <u>Crawfish</u> had the largest decrease in ex-vessel price over the 10 year time period, decreasing 35% from \$0.88 per pound in 2006 to \$0.57 in 2007.

Between 2002 and 2011, the landings revenue from shrimp increased 14% (a 21% decrease in real terms) and the landings revenue for menhaden increased 99% (a 38% increase in real terms). Although in 2011, menhaden landings (1.4 billion pounds) were six times higher than shrimp landings (220 million), the landings revenue for shrimp (\$438 million) was four times higher than the landings revenue for menhaden (\$104 million). In terms of finfish, Louisiana contributed the most (\$112 million) followed by West Florida (\$59 million), and Mississippi (\$11 million). Shellfish landings revenue was dominated by Texas, which contributed the most (\$231 million) followed by Louisiana (\$221 million), and West Florida (\$105 million).

From 2002 to 2011, species or species groups with large changes

in landings revenue include menhaden (increased 99%), tunas (decreased 58%), and oysters (increased 27%). Species or species groups with large changes in landings revenue between 2010 and 2011 include tunas (increasing 105%), mullets (increasing 99%), and menhaden (increasing 57%).

Landings

Fishermen in the Gulf of Mexico Region landed 1.8 billion pounds of finfish and shellfish in 2011. This was a 2.1% increase from the 1.73 billion pounds landed in 2002 and a 37% increase from the 1.29 billion pounds landed in 2010. Finfish landings contributed 82% of total landings in the Gulf of Mexico Region (1.4 billion pounds) in 2011. From 2010 to 2011, finfish landings experienced a 41% increase.

Over the same time period, shellfish landings experienced a 22% increase from 261 million pounds in 2010 to 318 million in 2011 and a 10% decrease from 351 million pounds in 2002. Menhaden and shrimp had the highest annual landings in the Gulf of Mexico Region in 2011, with 1.4 billion pounds and 220 million pounds, respectively. Together they accounted for 90% of the total landings in 2011. Menhaden landings increased 6.5% and shrimp landings decreased 5.9% during this period.

From 2002 to 2011, species or species groups with large changes in landings include tunas (decreasing 67%), groupers (decreasing 42%), and crawfish (decreasing 38%). Species or species groups with large changes in landings between 2010 and 2011 include mullets (increasing 59%), groupers (increasing 43%), and menhaden (increasing 42%).

Prices

The ex-vessel prices for the Gulf of Mexico Region's key species and species groups in 2011 were higher than their 10 year average for ten of the key species (two of the species in real terms). Ex-vessel prices for menhaden and crawfish increased the most between 2002 and 2011, increasing 100% (39% in real terms) and 98% (37% in real terms), respectively. Relative to ex-vessel prices in 2010, the Gulf of Mexico Region's tunas experienced the greatest increase (71%, 58% in real terms) from \$2.03 per pound in 2010 to \$3.47 in 2011. There were no decreases in ex-vessel price experienced by any species or groups in Gulf of Mexico Region between 2010 and 2011. Relative to ex-vessel prices in 2010, eight species or species groups experienced increases, including mullets (26%).

In Alabama, the species or species group with the largest change in ex-vessel price from 2002 to 2011 was oysters (100% increase, 39% increase in real terms) from \$2.11 to \$4.22. The largest change in ex-vessel price experienced in Louisiana was for menhaden (100% increase, 39% increase in real terms) from \$0.04 to \$0.08 and in Mississippi the largest change in ex-vessel price was experienced by oysters (130% increase, 60% increase in real terms) from \$1.63 per pound to \$3.75.

Recreational Fishing

In 2011, over 3 million recreational anglers took 23 million fishing trips in the Gulf of Mexico Region. Almost 90% of these anglers were residents of a regional coastal county. Of the total fishing

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trips taken, 57% were taken from a private or rental boat and another 40% were shore-based. Spotted seatrout were the most frequently caught species or species group with 33 million fish caught in 2011, and represented 45% of total fish caught in the region. Of the spotted seatrout caught, 58% 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 47,000 full- and part-time jobs generated by recreational fishing activities in the state. Louisiana (18,000 jobs), and Texas (15,000 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 2011 were generated by expenditures on durable equipment: 82% in West Florida, 81% in Louisiana, and 74% in Alabama.

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 2011, sales impacts were the highest in West Florida (\$2.7 billion in value added impacts), followed by Texas (\$952 million), Louisiana (\$806 million), Alabama (\$410 million), and Mississippi (\$61 million). In the same year, value added impacts were the highest in West Florida (\$2.7 billion in value added impacts), followed by Texas (\$952 million), Louisiana (\$806 million), Alabama (\$410 million), and Mississippi (\$61 million).

Key Gulf of Mexico Region Recreational Species

- Atlantic croaker
- Gulf and southern kingfish
- Sand and silver seatrout
- Spotted seatrout
- Sheepshead porgy
- Red drum
- Red snapper
- Southern flounder
- Spanish mackerel
- Striped mullet

Overall, total fishing trip and durable equipment expenditures across the Gulf of Mexico Region in 2011 were \$9.8 billion. Approximately 85% of these expenditures were related to durable equipment purchases. The greatest expenditures were for boat

expenses (\$4.5 billion), followed by fishing tackle (\$1.3 billion), vehicle expenses (\$1.2 billion), second home expenses (\$812 million), and other equipment (\$523 million).

Recreational Fishing Facts

Participation

- An average of 3.2 million anglers fished in the Gulf of Mexico Region annually from 2002 to 2011.
- In 2011, coastal county residents made up 90% of total anglers in this region. These anglers averaged 91% 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 2008 and 2009, decreasing 13%, from 2.9 million anglers to 2.6 million anglers.

Fishing trips

- In the Gulf of Mexico Region, an average of <u>23 million</u> fishing trips were taken annually from 2002 to <u>2011</u>.
- Private or rental boat and shore-based fishing trips accounted for 13 million and 8.9 million fishing trips, respectively, in 2011. 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 2004 and 2005, decreasing 12%, from 26 million trips to 23 million trips.

Harvest and release

- Spotted seatrout was the most commonly caught key species or species group, averaging 30 million fish over the 10 year time period. Of these, 62% were released rather than harvested.
- Of the ten commonly caught key species or species groups, six were released more often than harvested over this time period.
- The species or species group that was most commonly released was Atlantic croaker (72% released).
- Striped mullet (88% harvested), followed by southern flounder (76% harvested), and sand and silver seatrout (68% harvested) were key species or groups that experienced the greatest proportion of harvests rather than releases.

¹Expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Economic impacts from recreational fishing activities were generated using the NMFS Recreational Economic Impact Model (see The Economic Contribution of Marine Angler Expenditures in the United States, 2006, available at:http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2006)

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Fishing trip-related expenditures by the Gulf of Mexico Region's non-residents totaled over \$474 million of which the greatest portion can be attributed to for-hire-based fishing trips (\$207 million). Residents of the Gulf of Mexico Region spent \$1 billion on saltwater fishing trips, with most of these expenses related to private boat trips (\$597 million).

Participation

There were 3 million recreational anglers who fished in the Gulf of Mexico Region in 2011. This was a 13% increase from 2002 (2.7 million anglers). These anglers were Gulf of Mexico Region residents from either a coastal county (2.7 million anglers) or non-coastal county (311,000 anglers).

Almost 90% of total anglers in 2011 were residents of a coastal county. Coastal county angler participation in 2011 increased 10% relative to 2002 (2.5 million anglers) and increased 10% between 2010 and 2011. Non-coastal county angler participation increased 44% relative to 2002 (216,000 anglers) and increased 32% relative to 2010 (235,000 anglers).

Fishing Trips

Recreational fishermen took 23 million fishing trips in the Gulf of Mexico Region in 2011. This was a 15% increase from the 2002 (20 million trips) and was 1.5 million more trips than taken in 2010. Of the total trips taken in Gulf of Mexico Region in 2011, approximately 57% of the trips were private or rental boat based (13 million) trips. The other most popular mode of fishing was shore based with 8.9 million trips in 2011.

Harvest and Release

Of the Gulf of Mexico Region's key species and species groups, spotted seatrout (33 million fish), red drum (10 million fish), sand and silver seatrout (8.3 million fish) and Atlantic croaker (8 million fish) were the most often caught by anglers in 2011.

Red snapper (75% released), Atlantic croaker (74% released), red drum (65% released), spotted seatrout (58% released), and Spanish mackerel (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 (86% 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 30 million fish caught across the three states. In Alabama, the most commonly caught fish was Atlantic croaker (3.5 million fish) in 2011.

Between 2002 and 2011, three 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 red snapper (36%), gulf and southern kingfish (12%), and Spanish mackerel (10%).

Marine Economy²

The sum of the gross domestic products by state for Alabama, Louisiana, Mississippi, Texas, and Florida 3 was \$2.5 trillion in 2011. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$788 billion. These economic measures increased 39% (a 4.3% increase in real terms) and 35% (a 1.4% increase in real terms), respectively, between 2002 and 2010; and experienced a 2.2% increase (a 2% decrease in real terms), and 1.4% increase (a 2.6% decrease in real terms), respectively, between 2009 and 2010.

In 2010, the commercial fishing location quotient (CFLQ) for Louisiana was the highest in the region at 1.58. This was an 16% decrease from 2002 and a 22% decrease from 2009. Louisiana's CFLQ suggests that the level of employment in commercial fishing-related industries in this state is approximately 1.6 times higher than the level of employment in these industries nationwide. The 2010 CFLQ in West Florida was 1 (a 22% decrease from 2002).

Seafood Sales and Processing

In 2010, there were 414 nonemployer firms engaged in seafood product preparation and packaging across the Gulf of Mexico Region. This was a 20% increase from 2002 levels. Over the same time period, Louisiana experienced a 17% increase. In 2010, 8% of these firms were located in Alabama. Region-wide, annual receipts totaled \$25 million in 2010 and increased 51% from 2002 to 2010.

Annual receipt totals experienced a 15% increase in Mississippi between 2002 and 2010 (13% 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 25% from 166 in 2002 to 124 in 2010. Approximately 27% of these establishments were located in Louisiana. The number of employees in the seafood product preparation and packaging sector decreased 28% from 10,623 employees in 2002 to 7,639 employees in 2011.

There were 444 seafood wholesale establishments in 2010. The number of employees was not available at the region level. From 2002 to 2010, the number of seafood wholesale establishments decreased 31% across the Gulf of Mexico Region.

Nonemployer firms engaged in seafood retail in the Gulf of Mexico Region totaled 806 in 2010, a 17% increase relative to 2002. Of these firms, 7.1% were located in Alabama. At the state level, these firms decreased 1.6% in Louisiana and decreased 5.9% in Mississippi between 2002 and 2010. Annual receipts in the region totaled \$79 million in 2010 a 24% increase from 2003 (a 4.5% decrease in real terms) and a 24% increase from 2010 (a 19% increase in real terms).

Employer establishments engaged in seafood retail decreased 23% from 2002 to 2010, totaling 347 in 2010. The number of

 $^{^1\}mathrm{The}\ \mathrm{Texas}\ \mathrm{Department}$ of Wildlife only collects information about harvest and not total catch.

²Information for 2010 is reported in this section; 2011 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.

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employees was not available for the retail sector in the Gulf of Mexico Region in 2010.

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 6,700 people in 2010. In contrast, the navigational services to shipping industry had the highest annual payroll in the region totaling \$455 million. Marinas had the highest number of establishments (693), followed by the ship and boat building industries with 506 establishments and the navigational services to shipping industries with 394 establishments.

In Alabama, industries with large changes in establishment numbers, employees, or annual payroll from 2009 to 2010 were: marinas (119% increase in employees), marinas (44% increase in payroll) and ship and boat building (34% decrease in establishments). In Texas, large changes were seen for deep sea passenger transportation (50% decrease in establishments), port and harbor operations (35% increase in payroll) and coastal and Great Lakes freight transportation (30% decrease in employees). In Louisiana, large changes were seen in the deep sea freight transportation (93% decrease in payroll), deep sea freight transportation (92% decrease in employees) and marinas (64% increase in payroll).

Gulf of Mexico Commercial Fisheries

2011 Economic Impacts of the Gulf of Mexico Region Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Valued Added	Jobs	Sales	Valued Added		
Alabama	11,011	499,805	250,171	10,348	421,295	220,521		
Louisiana	32,818	1,801,568	877,911	30,676	1,467,854	762,430		
Mississippi	5,550	247,106	125,430	5,439	231,104	119,876		
Texas	27,717	2,277,959	1,002,928	22,516	1,357,574	687,876		
West Florida	72,341	14,250,006	4,778,502	10,550	928,929	376,208		

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

0			-		. , .					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	681,646	662,902	669,002	625,038	691,220	690,211	662,153	643,880	639,271	818,017
Finfish & other	147,338	139,373	143,479	122,642	135,982	145,584	146,109	150,833	131,582	194,714
Shellfish	534,308	523,530	525,523	502,396	555,238	544,626	516,044	493,047	507,690	623,304
Blue crab	42,913	46,243	42,292	37,961	43,355	46,028	39,814	45,476	41,237	48,769
Crawfish	8,070	4,845	4,810	8,360	1,290	9,034	9,435	15,547	13,969	9,911
Groupers	24,631	24,257	25,807	24,692	22,795	20,242	22,891	17,291	13,580	19,667
Menhaden	52,116	45,863	44,921	32,938	44,946	62,110	64,376	69,456	66,019	103,521
Mullets	8,877	8,265	8,956	6,593	9,429	5,543	6,085	6,105	5,220	10,368
Oysters	50,756	61,634	60,845	56,510	62,316	69,542	60,272	73,473	55,060	64,207
Red snapper	10,714	10,447	11,676	11,336	13,167	9,570	7,966	7,984	10,202	11,413
Shrimp	385,679	365,434	366,426	360,513	397,706	367,060	366,576	327,263	339,706	438,459
Stone crab	23,091	23,043	26,704	21,223	24,115	26,242	18,898	17,690	23,384	24,496
Tunas	13,227	12,000	12,335	9,431	8,461	10,535	6,168	8,180	2,688	5,516

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	1,728,899	1,595,895	1,475,139	1,198,203	1,362,326	1,404,307	1,278,274	1,599,505	1,285,544	1,765,899
Finfish & other	1,377,421	1,228,816	1,110,240	887,920	974,969	1,071,322	994,159	1,235,041	1,024,166	1,448,055
Shellfish	351,478	367,080	364,899	310,283	387,357	332,985	284,115	364,464	261,378	317,844
Blue crab	66,019	63,961	60,581	50,041	67,481	57,964	49,260	61,272	41,212	55,571
Crawfish	15,602	8,337	8,537	15,177	1,469	15,848	15,612	19,312	14,556	9,597
Groupers	12,003	10,933	11,912	10,776	9,092	7,308	8,547	6,633	4,870	6,983
Menhaden	1,290,407	1,142,747	1,023,260	815,495	901,398	1,005,325	927,517	1,165,948	967,025	1,374,299
Mullets	12,661	12,957	13,750	9,023	12,727	8,933	10,580	11,303	8,960	14,233
Oysters	24,110	27,033	25,052	20,174	19,674	22,518	20,655	22,833	15,870	18,386
Red snapper	4,803	4,435	4,677	4,109	4,637	2,998	2,368	2,503	3,259	3,567
Shrimp	233,759	256,357	255,782	216,291	288,973	225,163	188,789	251,294	178,845	219,963
Stone crab	6,433	5,292	5,971	4,534	4,806	5,893	6,123	5,335	5,112	5,477
Tunas	4,877	5,063	3,882	3,050	2,851	3,426	1,782	2,836	1,322	1,588

Therage Timular Free of Ney Species/ Species Groups (demans per pound)											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Blue crab	0.65	0.72	0.70	0.76	0.64	0.79	0.81	0.74	1.00	0.88	
Crawfish	0.52	0.58	0.56	0.55	0.88	0.57	0.60	0.81	0.96	1.03	
Groupers	2.05	2.22	2.17	2.29	2.51	2.77	2.68	2.61	2.79	2.82	
Menhaden	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.06	0.07	0.08	
Mullets	0.70	0.64	0.65	0.73	0.74	0.62	0.58	0.54	0.58	0.73	
Oysters	2.11	2.28	2.43	2.80	3.17	3.09	2.92	3.22	3.47	3.49	
Red snapper	2.23	2.36	2.50	2.76	2.84	3.19	3.36	3.19	3.13	3.20	
Shrimp	1.65	1.43	1.43	1.67	1.38	1.63	1.94	1.30	1.90	1.99	
Stone crab	3.59	4.35	4.47	4.68	5.02	4.45	3.09	3.32	4.57	4.47	
Tunas	2.71	2.37	3.18	3.09	2.97	3.07	3.46	2.88	2.03	3.47	

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Trips	Jobs	Sales	Income	Value Added
Alabama	2,485,000	8,177	797,280	262,715	410,222
Louisiana	4,577,000	17,764	1,602,913	521,949	806,349
Mississippi	1,616,000	1,181	145,769	37,783	60,735
Texas	NA^1	15,150	1,853,361	586,068	952,284
West Florida	13,901,000	47,047	4,881,831	1,715,843	2,653,677

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	1,317,095
For-Hire	207,051	105,140	Other Equipment	523,466
Private Boat	116,943	597,111	Boat Expenses	4,463,924
Shore	150,261	297,713	Vehicle Expenses	1,191,348
Total Trip Expenditures	474,255	999,964	Second Home Expenses	812,091
			Total Durable Equipment Expenditures	8,307,925
Total State Trip and Dura	ble Equipment Exp	enditures		9,782,144

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	2,485	3,039	3,185	3,133	3,328	3,235	2,926	2,550	2,480	2,737
Non-Coastal	216	256	318	190	315	326	262	296	235	311
Out-of-State	NA^2	NA^1								
Total Anglers	2,701	3,294	3,503	3,323	3,643	3,562	3,188	2,846	2,715	3,048

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	765	692	833	692	835	849	819	823	579	735
Private Boat	11,636	14,110	15,643	13,586	13,621	14,980	15,195	13,443	12,684	12,913
Shore	7,265	8,155	9,954	9,013	8,836	8,457	8,776	8,332	7,783	8,931
Total Trips	19,666	22,957	26,430	23,291	23,292	24,286	24,790	22,598	21,046	22,579

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Drum (Atlantic	Н	833	1,057	976	769	1,441	1,312	1,872	1,175	1,509	2,052
croaker)	R	2,757	2,432	3,639	2,844	2,312	2,614	3,148	3,858	3,827	5,899
Drum (Gulf and	Н	1,203	1,803	1,682	1,426	1,249	1,135	1,302	1,063	1,423	939
southern kingfish)	R	477	538	810	781	924	844	726	576	625	538
Drum (sand and	Н	3,257	3,114	2,262	2,035	2,109	3,088	3,405	4,203	4,575	5,733
silver seatrouts)	R	1,067	1,005	1,000	726	1,538	1,909	1,988	2,443	1,808	2,540
Drum (spotted	Н	7,367	9,566	11,559	10,028	13,286	11,187	14,126	13,335	10,139	13,581
seatrout)	R	15,298	19,216	19,764	20,212	20,056	18,849	21,017	17,366	14,563	19,122
Porgies	Н	1,553	1,944	2,495	2,001	1,109	1,198	1,566	1,572	1,147	2,218
(sheepshead)	R	1,701	2,005	2,171	2,393	1,506	1,224	1,487	1,338	1,740	1,631
Red drum	Н	2,477	2,672	2,942	2,318	2,361	2,843	3,292	2,608	3,248	3,543
Neu urum	R	4,873	5,914	5,808	6,235	6,391	6,222	7,017	5,522	6,468	6,447
Red snapper	Н	1,106	992	1,279	835	967	1,223	677	795	333	520
ixed shapper	R	2,091	1,943	2,685	2,193	2,832	3,259	2,110	2,146	1,436	1,521
Southern flounder	Н	504	660	742	541	475	650	473	644	771	764
Journal Hounder	R	117	253	271	194	170	239	120	194	220	222
Spanish mackerel	Н	1,963	1,503	2,124	1,193	1,757	1,333	1,897	1,503	1,563	1,535
Spanish macketer	R	1,920	2,211	2,314	1,373	2,856	2,105	2,039	1,635	2,476	1,942
Striped mullet	Н	1,264	1,586	1,163	1,081	1,102	1,149	1,257	743	1,666	1,901
Juliped mullet	R	75	280	167	165	141	158	145	226	126	313

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

Alabama Commercial Fisheries

2011 Economic Impacts of the Alabama Seafood Industry (thousands of dollars)

		With Imports		Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added	
Total Impacts	11,011	499,805	250,171	10,348	421,295	220,521	
Commercial Harvesters	1,726	84,014	37,129	1,726	84,014	37,129	
Seafood Processors & Dealers	2,125	135,348	67,372	1,685	107,700	53,610	
Importers	179	49,281	15,023	0	0	0	
Seafood Wholesalers & Distributors	168	8,016	3,620	161	7,692	3,474	
Retail	6,813	223,146	127,026	6,775	221,888	126,308	

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

0					, .		`		,	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	35,925	36,844	37,036	39,726	48,558	48,845	44,356	38,869	27,660	50,941
Finfish & other	3,175	3,185	3,905	3,982	4,572	3,686	4,210	3,662	2,724	4,052
Shellfish	32,751	33,658	33,131	35,744	43,986	45,160	40,145	35,207	24,936	46,889
Blue crab	1,490	1,715	1,774	663	1,319	1,711	1,533	961	732	1,127
Flounders	291	210	230	247	223	261	214	197	97	222
Menhaden	102	104	89	63	48	71	59	42	15	58
Mullets	985	772	1,187	1,117	1,171	984	1,016	765	593	687
Oysters	1,602	1,623	2,120	3,020	3,639	2,698	243	77	389	1,322
Red snapper	368	359	382	638	536	213	239	263	329	314
Sharks	275	337	431	478	463	250	359	275	111	381
Shrimp	29,603	30,284	29,197	32,002	39,022	40,742	38,355	34,140	23,815	44,413
Spanish mackerel	371	443	554	401	573	453	616	301	492	582
Vermillion snapper	54	83	152	149	318	323	504	841	381	620

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	23,658	25,535	26,559	23,985	34,033	29,434	24,450	28,825	14,637	26,145
Finfish & other	5,451	5,982	6,248	5,552	6,498	4,857	5,414	4,478	3,414	4,956
Shellfish	18,207	19,553	20,311	18,432	27,535	24,578	19,036	24,347	11,222	21,190
Blue crab	2,575	2,958	3,329	1,024	2,384	2,557	1,799	1,458	926	1,614
Flounders	176	118	138	130	118	133	107	97	47	111
Menhaden	982	1,022	828	521	350	470	268	190	81	364
Mullets	1,949	1,700	2,133	1,976	1,913	1,798	1,988	1,814	1,198	1,262
Oysters	759	816	908	1,041	940	769	73	23	120	313
Red snapper	152	132	138	214	177	59	61	65	83	78
Sharks	329	803	716	800	1,227	315	423	328	140	450
Shrimp	14,857	15,770	16,064	16,260	24,201	21,247	17,154	22,841	10,175	19,247
Spanish mackerel	762	858	914	568	873	580	856	418	725	838
Vermillion snapper	28	36	66	66	122	129	197	346	147	223

Average Aliman Trice of Key Species/Species Groups (donars per pound)												
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Blue crab	0.58	0.58	0.53	0.65	0.55	0.67	0.85	0.66	0.79	0.70		
Flounders	1.65	1.78	1.67	1.91	1.89	1.97	2.01	2.04	2.05	2.00		
Menhaden	0.10	0.10	0.11	0.12	0.14	0.15	0.22	0.22	0.18	0.16		
Mullets	0.51	0.45	0.56	0.57	0.61	0.55	0.51	0.42	0.49	0.54		
Oysters	2.11	1.99	2.33	2.90	3.87	3.51	3.34	3.33	3.25	4.22		
Red snapper	2.41	2.72	2.78	2.98	3.03	3.62	3.93	4.04	3.97	4.04		
Sharks	0.83	0.42	0.60	0.60	0.38	0.79	0.85	0.84	0.79	0.85		
Shrimp	1.99	1.92	1.82	1.97	1.61	1.92	2.24	1.49	2.34	2.31		
Spanish mackerel	0.49	0.52	0.61	0.71	0.66	0.78	0.72	0.72	0.68	0.69		
Vermillion snapper	1.92	2.31	2.32	2.26	2.61	2.50	2.55	2.43	2.59	2.78		

Alabama Recreational Fisheries

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	539	40,337	12,500	22,204
Private Boat	627	59,726	18,528	32,698
Shore	924	75,250	23,240	40,480
Total Durable Equipment Impacts	6,086	621,967	208,446	314,840
Total State Trip and Durable Equipment Economic Impacts	8,177	797,280	262,715	410,222

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	245,964
For-Hire	21,439	5,480	Other Equipment	65,634
Private Boat	17,116	41,439	Boat Expenses	176,088
Shore	32,423	28,291	Vehicle Expenses	222,460
Total Trip Expenditures	70,978	75,210	Second Home Expenses	0
			Total Durable Equipment Expenditures	710,146
Total State Trip and Dura	ble Equipment Exp	enditures		856,334

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	123	187	223	231	233	253	192	205	195	295
Non-Coastal	97	123	159	93	184	169	116	151	140	177
Out of State	193	214	345	161	320	291	237	209	220	435
Total Anglers	413	524	728	485	736	712	545	566	554	907

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	68	66	77	56	77	75	56	56	33	75
Private	607	846	994	828	811	985	946	885	840	1,207
Shore	515	587	1,181	720	1,050	901	702	771	812	1,203
Total Trips	1,190	1,499	2,252	1,604	1,938	1,961	1,704	1,712	1,685	2,485

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

()		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Bluefish	Н	51	44	132	15	13	26	17	15	30	74
Diuensii	R	65	126	216	77	151	174	54	45	80	167
Drum (Atlantic	Н	188	244	178	233	453	463	1,163	250	918	886
croaker)	R	468	512	1,070	1,593	823	923	1,370	1,822	1,861	2,593
$Drum\;(kingfishes)^1$	Н	411	487	619	263	443	476	667	592	633	626
	R	162	185	410	265	460	291	256	283	309	341
Drum (sand	Н	428	709	502	349	593	705	1,216	1,428	2,070	2,346
seatrout)	R	130	225	266	290	502	481	410	752	836	743
Drum (spotted	Н	193	345	208	294	326	359	269	318	609	825
seatrout)	R	166	430	168	322	598	488	844	758	453	1,302
Porgies	Н	192	299	461	280	123	320	288	165	218	481
(sheepshead)	R	81	89	172	86	80	30	159	48	52	146
Red drum	Н	84	114	118	155	101	84	87	62	122	143
Neu urum	R	105	245	262	185	145	137	228	110	153	149
Red snapper	Н	473	380	305	232	181	217	108	137	41	217
iteu siiappei	R	984	666	589	493	640	852	340	394	287	488
Southern flounder	Н	82	113	139	150	123	96	93	139	242	163
Southern Hounder	R	15	68	73	83	64	38	37	22	65	60
Spanish mackerel	Н	106	122	468	45	58	93	111	76	253	334
эранізн шаскегеі	R	16	99	276	52	49	21	31	60	102	129

 $^{^1\}mbox{Kingfishes}$ include southern kingfish and Gulf kingfish

Alabama's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	99,931 (1.4%)	1,581,117 (1.4%)	45,466 (1.2%)	74,346 (1.2%)	125,168 (1.2%)	0.38
2010	99,251 (1.3%)	1,568,111 (1.4%)	57,448 (1.2%)	98,478 (1.2%)	170,219 (1.2%)	0.87
% change	-0.68%	-0.823%	26.4%	32.5%	36%	168%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	44	36	43	40	34	47	33	41	33
prep. & packaging	Receipts	3,603	1,168	3,413	3,414	1,558	1,547	1,894	1,805	1,894
Seafood Sales,	Firms	58	55	61	44	57	61	57	63	57
retail	Receipts	3,456	3,812	3,645	3,855	4,802	4,279	5,632	4,844	5,632

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

	_			•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	22	24	23	26	24	23	23	22	21
prep. & packaging	Employees	1,951	2,057	2,037	1,925	1,629	1,510	1,450	1,086	1,128
prep. & packaging	Payroll	36,198	36,766	36,130	38,229	34,703	32,774	29,277	24,900	22,824
Seafood sales,	Establishments	36	33	31	26	26	31	29	28	23
wholesale	Employees	547	611	588	607	395	395	494	339	332
Wilolesale	Payroll	7,062	6,148	6,752	6,345	6,195	6,202	8,751	5,893	5,119
Seafood sales,	Establishments	35	37	35	34	28	33	33	31	34
retail	Employees	110	ND^2	96	95	ND^2	ND^2	ND^2	130	132
i ctuii	Payroll	1,589	ND^2	1,401	1,399	ND^2	1,809	1,710	2,044	2,016

	2002 2003 2004 2005 2007 2007									
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	6	13	10	10	6	8	4	4	5
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	15	48	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	754	3,266	ND^2	ND^2	ND^2
Dans and funishe	Establishments	2	5	3	3	3	5	7	7	5
Deep sea freight transportation	Employees	ND^2	53	ND^2	ND^2	ND^2	46	ND^2	ND^2	ND^2
transportation	Payroll	ND^2	3,661	ND^2	ND^2	ND^2	3,553	ND^2	ND^2	ND^2
Dans	Establishments	NA^3	1	1	1	1	1	2	3	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	48	53	52	58	52	52	56	55	54
Marinas	Employees	242	287	341	347	312	364	316	278	609
	Payroll	4,966	6,218	7,631	8,047	8,388	9,382	9,170	8,418	12,149
Marine cargo	Establishments	19	17	18	17	14	19	20	19	19
handling	Employees	635	445	577	672	ND^2	491	756	658	548
Handing	Payroll	20,592	19,642	26,201	28,458	ND^2	21,076	33,244	27,272	32,143
Navimational	Establishments	15	12	16	17	18	16	17	16	16
Navigational services to shipping	Employees	220	410	ND^2	ND^2	ND^2	338	287	294	276
services to silipping	Payroll	9,317	19,602	ND^2	ND^2	ND^2	17,554	16,712	15,383	14,737
David 0 Isaailaan	Establishments	6	3	1	3	3	2	4	5	5
Port & harbor operations	Employees	162	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
operations	Payroll	6,321	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2
Chin I host	Establishments	45	41	42	45	47	42	42	40	32
Ship & boat building	Employees	2,901	2,781	2,195	2,591	3,027	3,570	4,435	3,913	2,598
Dunumg	Payroll	92,916	81,092	83,756	86,453	121,185	172,380	188,543	159,065	151,813

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

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

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

2011 Economic Impacts of the Florida¹ Seafood Industry (thousands of dollars)

•		5 (,				
		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	72,341	14,250,006	4,778,502	10,550	928,929	376,208		
Commercial Harvesters	6,817	446,577	186,630	6,817	446,577	186,630		
Seafood Processors & Dealers	4,219	679,112	258,376	548	95,706	36,412		
Importers	37,278	10,254,318	3,125,965	0	0	0		
Seafood Wholesalers & Distributors	8,983	1,039,625	507,796	464	53,716	26,237		
Retail	15,043	1,830,373	699,735	2,721	332,930	126,929		

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

					<u> </u>		•			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	144,185	141,185	148,058	137,912	145,494	132,162	122,764	115,127	137,457	164,076
Finfish & other	51,609	51,451	52,331	50,600	50,358	45,890	50,842	49,537	40,853	59,398
Shellfish	92,576	89,734	95,727	87,312	95,136	86,272	71,922	65,589	96,604	104,678
Blue crab	5,644	7,061	7,316	7,035	7,043	5,769	3,290	4,183	6,706	7,718
Gag	7,380	6,855	7,615	7,084	4,151	4,348	4,898	2,759	2,079	1,433
Lobsters	18,932	17,138	20,724	15,077	24,885	24,546	19,175	12,179	32,752	35,595
Mullets	6,059	4,755	4,891	4,355	6,021	3,663	4,172	5,069	4,188	8,630
Oyster	3,125	2,932	2,884	2,854	5,415	6,631	5,473	6,968	6,298	7,600
Quahog clam	3,606	3,870	2,074	1,736	807	914	1,009	915	1,001	921
Red grouper	12,859	11,695	13,281	13,376	14,384	11,024	13,569	10,488	8,992	15,082
Red snapper	2,188	2,284	2,168	1,671	1,991	3,066	2,945	2,980	4,552	5,417
Shrimp	37,252	34,893	34,737	38,625	32,225	20,976	23,265	23,314	25,978	27,559
Stone crab	22,874	22,913	26,507	21,074	24,029	26,213	18,877	17,586	23,335	24,405

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

0			• ,	•	• (•	,			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	82,075	79,163	83,894	73,038	70,766	59,784	60,127	65,351	62,595	77,687
Finfish & other	43,586	41,697	41,134	36,543	35,887	30,645	35,250	38,754	32,018	42,292
Shellfish	38,489	37,466	42,760	36,496	34,879	29,139	24,877	26,596	30,577	35,395
Blue crab	5,567	7,225	8,083	7,370	8,610	6,110	2,663	3,364	5,759	6,833
Gag	3,136	2,691	3,054	2,688	1,436	1,339	1,474	825	572	368
Lobsters	4,080	3,886	4,565	3,059	4,372	3,405	2,981	3,951	5,287	5,300
Mullets	8,020	6,577	6,660	5,635	7,308	5,619	6,979	9,167	7,262	11,409
Oyster	1,944	1,753	1,644	1,417	2,394	2,959	2,501	2,877	2,165	2,746
Quahog clam	480	558	266	212	96	116	146	150	156	137
Red grouper	6,987	5,841	6,789	6,386	6,062	4,352	5,619	4,387	3,488	5,634
Red snapper	948	928	811	584	649	919	848	863	1,317	1,538
Shrimp	19,128	18,131	18,258	19,297	14,176	8,628	9,942	10,673	11,814	11,562
Stone crab	6,385	5,253	5,933	4,502	4,784	5,884	6,117	5,310	5,100	5,454

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Blue crab	1.01	0.98	0.91	0.95	0.82	0.94	1.24	1.24	1.16	1.13
Gag	2.35	2.55	2.49	2.64	2.89	3.25	3.32	3.34	3.63	3.90
Lobsters	4.64	4.41	4.54	4.93	5.69	7.21	6.43	3.08	6.19	6.72
Mullets	0.76	0.72	0.73	0.77	0.82	0.65	0.60	0.55	0.58	0.76
Oyster	1.61	1.67	1.75	2.02	2.26	2.24	2.19	2.42	2.91	2.77
Quahog clam	7.51	6.93	7.79	8.17	8.44	7.90	6.90	6.12	6.43	6.74
Red grouper	1.84	2.00	1.96	2.09	2.37	2.53	2.41	2.39	2.58	2.68
Red snapper	2.31	2.46	2.67	2.86	3.07	3.34	3.47	3.45	3.46	3.52
Shrimp	1.95	1.92	1.90	2.00	2.27	2.43	2.34	2.18	2.20	2.38
Stone crab	3.58	4.36	4.47	4.68	5.02	4.45	3.09	3.31	4.58	4.47

¹Information reported in this table if for the state of Florida, not West Florida

Recreational Fisheries West Florida

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	3,113	302,927	103,418	179,604
Private Boat	3,177	318,260	109,436	189,249
Shore	2,235	210,696	71,575	122,407
Total Durable Equipment Impacts	38,522	4,049,949	1,431,414	2,162,416
Total State Trip and Durable Equipment Economic Impacts	47,047	4,881,831	1,715,843	2,653,677

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	647,956
For-Hire	158,309	29,181	Other Equipment	279,586
Private Boat	72,024	211,465	Boat Expenses	2,858,367
Shore	96,703	55,686	Vehicle Expenses	448,791
Total Trip Expenditures	327,037	296,332	Second Home Expenses	636,626
			Total Durable Equipment Expenditures	4,871,325
Total State Trip and Dura	ble Equipment Exp	enditures		5,494,694

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	1703	1965	2023	2088	2084	1934	1820	1551	1538	1592
Non-Coastal	NA^1									
Out of State	1990	2318	2141	2008	1988	2151	2029	1671	1470	1624
Total Anglers	3693	4283	4165	4096	4072	4085	3849	3222	3008	3216

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	582	497	600	505	564	611	571	573	460	536
Private	8,236	9,221	10,171	9,491	9,382	10,005	10,145	8,623	8,160	7,520
Shore	5,601	6,291	7,025	6,699	6,720	6,318	6,782	6,482	5,645	5,845
Total Trips	14,419	16,009	17,796	16,695	16,666	16,934	17,498	15,678	14,265	13,901

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

` '											
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Common snook	Н	50	44	70	62	24	36	26	13	(1)	1
Common shook	R	1,292	1,358	2,198	2,281	1,391	1,592	1,595	1,925	600	746
Drum (sand and	Н	1,355	751	434	487	434	1,119	746	893	410	864
silver seatrouts)	R	320	147	193	64	408	597	583	460	211	294
Drum (spotted	Н	1,532	1,628	2,066	1,980	1,617	1,513	1,544	1,370	1,117	1,476
seatrout)	R	10,711	10,469	9,893	11,749	9,458	10,059	9,585	7,673	8,469	11,382
Gag	Н	491	471	690	491	357	284	434	202	232	98
Gag	R	2,449	3,359	3,865	2,314	1,876	2,677	4,078	2,726	2,019	1,158
Cray spapper	Н	655	981	1,145	932	664	1,046	1,393	1,176	560	419
Gray snapper	R	2,997	4,809	3,637	4,700	2,847	4,290	5,689	3,015	1,858	2,241
King mackerel	Н	261	196	196	177	343	271	183	451	173	128
King mackerer	R	138	97	107	131	392	84	155	139	81	47
$Mullets^2$	Н	1,009	840	1,077	987	1,297	612	1,236	656	967	855
ividilets	R	93	188	281	209	100	182	143	191	71	106
Porgies	Н	686	761	709	1,050	624	590	556	682	455	608
(sheepshead)	R	1,126	1,369	1,399	1,857	942	895	855	808	1,245	1,274
Red drum	Н	291	364	322	501	375	411	457	226	240	288
neu urum	R	1,374	1,937	2,100	3,255	2,828	2,558	2,561	1,440	1,992	2,894
Spanish mackerel	Н	1,811	1,316	1,626	1,101	1,671	1,206	1,753	1,391	1,284	1,156
Spanish mackerer	R	1,866	2,085	2,010	1,278	2,768	2,065	1,988	1,545	2,359	1,780

¹NA = not applicable because all West Florida residents are considered coastal county residents

 $^{^2}$ Mullets 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
2002	450,188 (6.3%)	6,366,964 (5.7%)	192,932 (4.9%)	304,181 (5.1%)	536,061 (5%)	1.29
2010	491,150 (6.6%)	6,626,558 (5.9%)	252,973 (5.1%)	400,635 (5.1%)	736,065 (5%)	1
% change	9.1%	4.08%	31.1%	31.7%	37.3%	-10.9%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	116	142	177	164	174	173	202	216	202
prep. & packaging	Receipts	5,064	8,047	8,652	8,756	10,184	10,497	11,065	12,399	11,065
Seafood Sales,	Firms	243	240	247	247	251	319	331	308	331
retail	Receipts	20,837	18,064	18,004	22,787	20,708	27,557	26,087	24,726	26,087

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Establishments	33	27	24	25	22	20	23	25	27
prep. & packaging	Employees	2,359	2,084	2,193	1,616	1,704	1,748	1,637	1,143	1,269
	Payroll	65,914	61,452	65,881	47,529	62,801	58,233	53,455	46,235	45,772
Seafood sales,	Establishments	314	293	261	258	259	267	229	215	229
wholesale	Employees	2,395	1,835	1,948	1,883	2,091	2,308	1,913	1,762	1,747
Wildicsalc	Payroll	78,160	55,874	63,276	65,339	73,897	85,019	75,203	72,159	70,889
Soafood sales	Establishments	190	174	190	176	173	169	168	158	145
Seafood sales, retail	Employees	908	952	977	970	936	989	991	885	865
	Payroll	17,186	15,673	17,575	19,192	19,513	20,595	21,604	21,182	20,783

Transport, Suppor	-,	Employer Establishments			(5115 4154116		,			
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	51	66	59	59	54	47	42	42	50
Lakes freight	Employees	2,856	ND^2	1,132	1,150	1,217	1,242	1,106	972	709
transportation	Payroll	143,185	ND^2	80,422	71,420	91,638	94,429	50,115	37,774	50,217
Deep sea freight	Establishments	62	61	63	69	73	69	57	58	61
transportation	Employees	1,858	2,535	2,567	2,622	3,729	3,190	2,486	2,801	2,279
transportation	Payroll	107,564	131,904	150,701	207,300	226,810	208,144	169,055	180,139	159,025
Doon soo nossonger	Establishments	31	36	32	31	37	34	31	33	29
Deep sea passenger transportation	Employees	7,863	8,879	8,849	8,492	9,077	ND^2	ND^2	ND^2	ND^2
transportation	Payroll	315,551	428,941	536,753	504,625	571,590	ND^2	ND^2	ND^2	ND^2
	Establishments	481	528	532	551	513	493	442	428	430
Marinas	Employees	3,449	5,079	5,067	5,069	5,494	4,935	5,024	4,665	4,439
	Payroll	90,662	111,324	125,763	133,384	146,390	148,592	151,677	132,955	133,017
Marine cargo	Establishments	74	68	66	63	66	53	56	59	55
handling	Employees	4,405	5,651	5,671	6,409	7,266	6,585	8,052	7,288	7,547
Handing	Payroll	109,555	171,481	175,257	177,983	189,020	173,788	192,473	185,309	191,560
Navigational	Establishments	141	140	149	148	142	145	147	145	145
services to shipping	Employees	714	817	686	660	781	1,484	894	829	980
services to silipping	Payroll	34,040	39,524	39,309	42,200	48,370	61,470	56,917	60,641	76,853
Port & harbor	Establishments	29	26	29	31	27	29	40	32	34
operations	Employees	1,180	592	1,045	973	584	459	712	527	470
operations	Payroll	26,928	19,071	24,327	22,606	19,417	12,872	24,668	19,006	20,525
Chin l. host	Establishments	291	290	306	312	301	296	297	261	248
Ship & boat building	Employees	11,407	11,830	12,503	12,729	12,385	12,332	12,419	8,221	7,363
building	Payroll	379,828	393,985	443,379	454,209	427,888	469,382	442,096	296,537	302,909

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

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

Louisiana Commercial Fisheries

2011 Economic Impacts of the Louisiana Seafood Industry (thousands of dollars)

		With Imports		Without Imports							
	Jobs	Sales	Value Added	Jobs	Sales	Value Added					
Total Impacts	32,818	1,801,568	877,911	30,676	1,467,854	762,430					
Commercial Harvesters	12,407	626,308	308,175	12,407	626,308	308,175					
Seafood Processors & Dealers	1,991	169,492	83,857	1,833	156,282	77,322					
Importers	978	269,047	82,017	0	0	0					
Seafood Wholesalers & Distributors	1,015	111,792	49,298	841	92,654	40,859					
Retail	16,427	624,929	354,564	15,595	592,610	336,076					

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

				<i>y</i> 1 / 1 1				<u> </u>		
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	280,630	270,408	274,082	251,678	278,292	289,288	275,239	296,778	247,772	333,619
Finfish & other	70,327	63,299	66,074	49,443	60,735	65,198	64,116	71,479	71,155	112,292
Shellfish	210,303	207,109	208,008	202,235	217,557	224,090	211,124	225,300	176,617	221,327
Blue crab	30,685	33,623	29,881	27,419	32,605	35,044	32,202	37,306	30,299	36,761
Crawfish	8,070	4,845	4,810	8,360	1,290	9,034	9,435	15,547	13,969	9,911
King mackerel	1,046	990	1,198	1,273	1,112	1,298	1,307	1,184	1,149	1,593
Menhaden	40,378	34,464	35,249	25,776	36,441	41,368	45,768	51,405	57,600	93,547
Mullets	1,688	2,592	2,681	946	2,061	690	749	73	185	775
Oysters	30,296	33,358	34,814	33,305	35,999	40,148	38,852	50,959	24,963	41,568
Red snapper	4,696	3,960	3,861	3,568	4,472	2,529	2,038	2,185	2,311	2,261
Shrimp	141,213	135,153	138,466	133,143	147,652	139,842	130,623	121,477	107,372	133,067
Tunas	10,845	9,471	10,739	7,687	7,040	8,334	4,409	6,338	1,649	3,369
Vermillion snapper	1,308	1,896	1,663	1,137	762	991	819	806	399	517

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	1,312,139	1,181,607	1,095,571	849,280	918,675	999,343	918,827	1,172,327	1,007,016	1,285,875
Finfish & other	1,124,627	985,164	895,336	681,322	714,545	814,645	759,438	970,214	879,213	1,129,176
Shellfish	187,511	196,443	200,235	167,959	204,130	184,698	159,389	202,114	127,803	156,699
Blue crab	50,123	48,089	44,397	38,100	53,394	45,107	41,713	53,060	30,726	43,862
Crawfish	15,602	8,337	8,537	15,177	1,469	15,848	15,612	19,312	14,556	9,597
King mackerel	866	911	984	867	971	879	789	927	691	1,002
Menhaden	1,093,997	953,714	862,947	657,702	689,853	789,621	738,092	948,944	862,144	1,106,931
Mullets	2,555	4,524	4,754	1,238	3,361	1,375	1,503	189	362	1,385
Oysters	13,962	13,609	13,902	12,099	11,417	12,858	12,791	15,010	6,867	11,135
Red snapper	2,178	1,725	1,560	1,316	1,653	807	589	667	828	918
Shrimp	107,795	125,730	133,370	102,576	137,839	110,860	89,268	114,727	75,641	92,093
Tunas	3,587	3,184	3,230	2,296	2,143	2,476	1,248	2,009	490	932
Vermillion snapper	755	1,053	921	588	365	517	409	412	186	234

Average Annual Trice of Ney Species/Species Groups (donars per pound)											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Blue crab	0.61	0.70	0.67	0.72	0.61	0.78	0.77	0.70	0.99	0.84	
Crawfish	0.52	0.58	0.56	0.55	0.88	0.57	0.60	0.81	0.96	1.03	
King mackerel	1.21	1.09	1.22	1.47	1.15	1.48	1.66	1.28	1.66	1.59	
Menhaden	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.05	0.07	0.08	
Mullets	0.66	0.57	0.56	0.76	0.61	0.50	0.50	0.39	0.51	0.56	
Oysters	2.17	2.45	2.50	2.75	3.15	3.12	3.04	3.39	3.63	3.73	
Red snapper	2.16	2.30	2.47	2.71	2.71	3.13	3.46	3.28	2.79	2.46	
Shrimp	1.31	1.07	1.04	1.30	1.07	1.26	1.46	1.06	1.42	1.44	
Tunas	3.02	2.97	3.33	3.35	3.29	3.37	3.53	3.16	3.37	3.62	
Vermillion snapper	1.73	1.80	1.81	1.93	2.09	1.92	2.00	1.95	2.15	2.21	

Louisiana Recreational Fisheries

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	541	51,475	16,613	29,227
Private Boat	2,237	237,846	66,894	116,981
Shore	597	57,288	16,907	28,919
Total Durable Equipment Impacts	14,388	1,256,304	421,535	631,222
Total State Trip and Durable Equipment Economic Impacts	17,764	1,602,913	521,949	806,349

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	245,701
For-Hire	20,975	12,330	Other Equipment	86,045
Private Boat	17,434	163,788	Boat Expenses	974,417
Shore	4,535	42,032	Vehicle Expenses	220,904
Total Trip Expenditures	42,944	218,150	Second Home Expenses	91,310
			Total Durable Equipment Expenditures	1,618,377
Total State Trip and Dura	ble Equipment Exp	enditures		1,879,471

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	484	727	747	706	868	853	795	669	609	690
Non-Coastal	68	79	133	68	108	124	120	108	67	86
Out of State	117	204	179	138	198	157	170	139	120	183
Total Anglers	669	1011	1059	911	1174	1134	1084	916	796	959

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	94	105	143	123	187	143	179	183	79	113
Private	2,251	3,295	3,821	2,784	2,802	3,156	3,508	3,176	3,055	3,342
Shore	674	872	1,238	1,159	775	889	933	769	729	1,122
Total Trips	3,019	4,272	5,202	4,066	3,764	4,188	4,620	4,128	3,863	4,577

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

		` '	<i>,</i> .	•	•	`	,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Black drum	Н	512	485	504	309	369	385	544	518	398	469
Diack druin	R	886	835	1,026	651	717	728	1,117	974	1,032	1,085
Drum (Atlantic croaker)	Н	282	380	476	442	805	684	358	471	228	607
	R	1,054	1,012	1,995	963	1,142	1,006	1,186	1,099	1,268	2,319
Drum (sand	Н	599	985	903	975	775	888	1,085	879	1,065	1,187
seatrout)	R	506	302	453	254	454	541	822	853	514	1,032
Drum (spotted	Н	5,270	7,317	8,524	7,436	10,873	8,929	11,705	10,557	7,857	10,440
seatrout)	R	3,862	7,485	8,658	7,303	9,025	7,393	9,579	7,975	5,055	5,804
Drum(southern	Н	104	159	201	239	89	67	74	103	42	16
kingfish)	R	22	63	85	187	151	28	118	59	47	25
Porgies	Н	607	807	1,288	644	326	270	705	704	431	869
(sheepshead)	R	433	520	567	428	462	288	448	473	440	187
Red drum	Н	2,042	2,144	2,419	1,627	1,827	2,307	2,672	2,236	2,810	3,022
rtea arum	R	3,278	3,545	3,293	2,652	3,320	3,454	4,075	3,732	4,111	3,196
Red snapper	Н	47	70	88	111	172	159	84	98	7	31
rted snapper	R	40	166	273	339	429	285	261	195	7	108
Southern flounder	Н	271	407	471	280	290	348	235	286	328	398
Journal Hounder	R	49	116	129	76	54	67	36	51	72	61
Yellowfin tuna	Н	8	13	8	10	14	8	17	3	1	12
i chowini tuna	R	(1)	(1)	(1)	1	1	1	6	(1)	(1)	4

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

Louisiana's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million \$)	Commercial Location Quotient
2002	101,885 (1.4%)	1,583,308 (1.4%)	45,628 (1.2%)	74,803 (1.3%)	139,202 (1.2%)	1.87
2010	103,365 (1.4%)	1,599,551 (1.4%)	62,266 (1.3%)	105,352 (1.6%)	232,394 (1.3%)	1.58
% change	1.45%	1.03%	36.5%	40.8%	66.9%	-17.6%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	66	73	75	76	99	85	77	68	77
prep. & packaging	Receipts	3,006	4,678	10,097	8,513	8,179	6,523	7,365	5,306	7,365
Seafood Sales,	Firms	185	208	204	156	181	196	182	169	182
retail	Receipts	15,201	22,637	18,148	14,585	20,046	20,932	25,900	17,177	25,900

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Saafaad product	Establishments	50	54	54	50	40	41	36	38	34
Seafood product prep. & packaging	Employees	1,185	1,693	1,519	1,556	1,506	1,253	991	1,301	1,209
prep. & packaging	Payroll	52,861	56,562	47,016	43,801	45,439	41,391	32,382	37,657	35,770
Seafood sales,	Establishments	152	134	133	128	112	119	98	98	97
wholesale	Employees	1,270	1,001	975	1,037	807	954	739	702	683
Wilolesale	Payroll	22,363	19,539	19,639	17,649	21,243	21,604	15,858	17,261	15,554
Seafood sales,	Establishments	123	109	111	106	101	101	107	106	101
retail	Employees	640	796	745	723	759	781	681	703	527
retair	Payroll	7,033	9,406	9,567	8,277	10,560	11,827	11,141	11,564	11,214

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	109	160	148	136	137	138	123	117	125
Lakes freight	Employees	5,494	6,779	6,656	5,771	6,397	7,680	6,506	6,077	5,610
transportation	Payroll	236,730	287,415	300,547	294,941	386,136	527,290	549,388	391,914	405,796
Deep sea freight	Establishments	28	25	22	25	24	22	18	21	16
transportation	Employees	647	831	705	ND^2	595	685	1,095	1,192	93
transportation	Payroll	29,432	43,634	38,949	ND^2	35,269	39,843	87,479	91,760	6,147
Deep sea passenger	Establishments	6	4	3	3	2	3	2	2	1
transportation	Employees	66	ND^2							
transportation	Payroll	2,748	ND^2							
	Establishments	57	53	52	53	41	50	43	43	43
Marinas	Employees	345	409	ND^2	352	ND^2	378	274	244	314
	Payroll	8,724	11,019	ND^2	10,213	ND^2	17,794	9,581	8,989	14,716
Marine cargo	Establishments	47	47	47	46	51	49	39	44	41
handling	Employees	3,089	3,784	3,278	3,263	3,100	2,978	2,010	2,193	2,511
nanding	Payroll	114,659	131,274	127,896	110,129	118,748	128,207	85,484	92,883	105,063
Navigational	Establishments	148	118	127	120	129	128	145	137	138
services to shipping	Employees	3,371	2,738	2,472	2,136	2,204	2,508	2,884	2,893	3,176
scrvices to silipping	Payroll	135,223	112,412	109,008	96,202	115,222	141,757	183,381	175,271	224,533
Port & harbor	Establishments	15	13	18	18	18	14	22	17	21
operations	Employees	1,136	363	ND^2	418	436	467	517	440	431
operations	Payroll	47,191	18,331	ND^2	19,510	29,676	31,734	37,181	33,907	38,776
Ship & boat	Establishments	113	113	113	111	108	112	117	109	109
building	Employees	12,786	12,910	13,206	11,016	11,521	12,808	12,815	12,521	11,737
Dunung	Payroll	448,749	452,315	460,606	376,407	437,028	503,199	619,606	613,188	600,259

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

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

2011 Economic Impacts of the Mississippi Seafood Industry (thousands of dollars)

		With Imports		Without Imports			
	Jobs	Sales	Value Added	Jobs	Sales	Value Added	
Total Impacts	5,550	247,106	125,430	5,439	231,104	119,876	
Commercial Harvesters	968	49,305	21,796	968	49,305	21,796	
Seafood Processors & Dealers	833	63,085	31,273	818	61,936	30,703	
Importers	46	12,710	3,875	0	0	0	
Seafood Wholesalers & Distributors	73	6,821	3,032	63	5,936	2,639	
Retail	3,629	115,185	65,454	3,590	113,926	64,738	

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	47,565	46,149	43,618	23,386	21,586	39,340	43,696	38,033	21,913	30,300
Finfish & other	12,627	12,396	10,485	7,804	8,959	21,359	19,233	18,667	8,963	10,527
Shellfish	34,938	33,753	33,133	15,582	12,628	17,981	24,464	19,366	12,950	19,772
Blue crab	572	687	658	433	928	741	447	573	366	318
Flounders	63	49	32	20	36	58	40	58	64	118
Menhaden	11,625	11,277	9,564	7,074	8,447	20,658	18,534	17,987	8,378	9,871
Mullets	22	34	54	38	23	35	32	30	31	56
Oysters	4,456	7,228	6,073	1,447	ND^1	819	6,869	6,094	4,268	928
Red snapper	100	88	71	115	ND^2	ND^2	ND^2	158	ND^2	168
Shrimp	29,910	25,619	26,353	13,698	11,699	16,418	17,146	12,689	8,311	18,523

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

Total Editalings and Editalings of Ney Species/Species Groups (thousands of pounds)												
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Total landings	217,968	213,469	183,558	167,610	221,720	227,834	201,822	230,307	111,242	278,080		
Finfish & other	197,691	190,733	161,669	158,721	212,213	216,375	190,191	217,461	105,274	267,407		
Shellfish	20,277	22,736	21,889	8,889	9,507	11,459	11,631	12,846	5,968	10,673		
Blue crab	717	877	811	429	1,127	737	450	545	366	370		
Flounders	46	31	18	10	16	25	17	25	28	55		
Menhaden	195,371	187,956	159,392	157,194	211,163	215,182	189,118	216,709	104,729	266,774		
Mullets	64	94	128	99	66	70	57	62	59	93		
Oysters	2,738	4,042	3,029	610	ND^2	299	2,610	2,189	1,453	247		
Red snapper	46	43	35	54	ND^2	ND^2	ND^2	57	ND^2	86		
Shrimp	16,822	17,560	17,992	7,848	8,380	10,421	8,570	10,107	4,148	10,053		

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Blue crab	0.80	0.78	0.81	1.01	0.82	1.01	0.99	1.05	1.00	0.86
Flounders	1.35	1.57	1.73	1.88	2.22	2.38	2.36	2.34	2.33	2.14
Menhaden	0.06	0.06	0.06	0.05	0.04	0.10	0.10	0.08	0.08	0.04
Mullets	0.34	0.36	0.42	0.38	0.35	0.50	0.57	0.48	0.52	0.61
Oysters	1.63	1.79	2.00	2.37	ND^2	2.74	2.63	2.78	2.94	3.75
Red snapper	2.17	2.06	2.05	2.13	ND^2	ND^2	ND^2	2.75	ND^2	1.96
Shrimp	1.78	1.46	1.46	1.75	1.40	1.58	2.00	1.26	2.00	1.84

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

Recreational Fisheries Mississippi

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	49	4,362	1,375	2,458
Private Boat	283	32,645	8,682	15,646
Shore	106	10,118	2,944	5,044
Total Durable Equipment Impacts	742	98,643	24,782	37,587
Total State Trip and Durable Equipment Economic Impacts	1,181	145,769	37,783	60,735

2011 Angler Trip & Durable Expenditures (thousands of dollars)

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	28,207
For-Hire	1,712	1,148	Other Equipment	9,789
Private Boat	1,386	27,357	Boat Expenses	40,733
Shore	1,519	8,932	Vehicle Expenses	28,330
Total Trip Expenditures	4,616	37,438	Second Home Expenses	15
			Total Durable Equipment Expenditures	107,075
Total State Trip and Dura	ble Equipment Exp	enditures		149,129

Recreational Anglers by Residential Area (thousands of anglers)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Coastal	175	159	191	108	143	196	119	125	137	160
Non-Coastal	52	53	26	29	23	34	26	36	29	48
Out of State	49	48	46	39	27	55	48	50	50	60
Total Anglers	276	261	262	176	193	284	194	212	216	268

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
For-Hire	21	24	13	8	7	20	13	11	7	11
Private	542	748	657	483	626	834	596	759	629	844
Shore	475	405	510	435	291	349	359	310	597	761
Total Trips	1,038	1,177	1,180	926	924	1,203	968	1,080	1,233	1,616

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

		` '	, -,	•	•	•	,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Drum (Atlantic	Н	206	198	135	40	59	71	182	340	209	453
croaker)	R	936	701	371	208	190	264	388	717	422	606
Drum $(kingfishes)^2$	Н	278	327	355	225	163	161	180	126	174	177
	R	119	60	111	63	29	48	57	61	48	36
Drum (sand and	Н	866	667	423	222	304	295	351	1,003	986	1,336
silver seatrouts)	R	111	331	88	118	173	230	166	378	246	471
Drum (spotted	Н	372	276	761	318	470	386	608	1,090	556	840
seatrout)	R	559	832	1,045	838	975	909	1,009	960	586	634
Porgies	Н	68	77	37	27	36	18	17	21	43	260
(sheepshead)	R	61	27	33	22	22	11	25	9	3	24
Red drum	Н	60	50	83	35	58	41	76	84	76	90
ixed druiii	R	116	187	153	143	98	73	153	240	212	208
Red snapper	Н	43	39	13	1	7	2	9	15	1	6
Neu Shapper	R	166	90	61	51	52	9	104	55	25	(1)
Sharks ³	Н	12	8	8	9	2	4	3	21	71	35
Silaiks	R	118	59	38	37	39	41	12	36	87	37
Southern flounder	Н	141	120	103	72	47	121	110	209	195	182
Journal Hounder	R	48	67	55	30	35	31	45	120	79	99
Striped mullet	Н	212	550	192	34	2	66	78	119	188	491
oriped mullet	R	12	65	2	(1)	3	14	4	4	13	83

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

 $^{^2\}mbox{Kingfishes}$ include southern kingfish and Gulf kingfish

³Sharks include species within the requiem shark family, blacktip sharks, Atlantic sharpnose sharks, and unidentified sharks.

Mississippi Marine Economy

Mississippi's State Economy (% of national total)

	Establishments	Employees	Annual Payroll (million \$)	Employee Compensation (million \$)	Gross State Product (million	Commercial Location Quotient
2002	59,902 (0.83%)	904,252 (0.8%)	22,773 (0.58%)	40,415 (0.66%)	69,527 (0.66%)	1.64
2010	59,300 (0.8%)	882,181 (0.79%)	28,607 (0.58%)	52,766 (0.66%)	95,480 (0.66%)	ND^2
% change	-1%	-2.44%	25.6%	30.6%	37.3%	NA ³

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	15	23	18	12	22	0	17	16	17
prep. & packaging	Receipts	915	1,561	1,056	1,045	1,537	ND^2	1,055	756	1,055
Seafood Sales,	Firms	51	51	47	41	53	57	48	55	48
retail	Receipts	2,486	2,984	3,595	2,934	4,021	4,126	3,437	4,042	3,437

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

				•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Cfllt	Establishments	34	37	33	28	24	22	20	20	20
Seafood product prep. & packaging	Employees	3,675	4,438	3,728	3,637	3,353	3,022	3,062	2,796	2,849
prep. & packaging	Payroll	70,792	80,229	66,047	63,957	60,510	60,633	61,723	61,926	61,731
Seafood sales,	Establishments	29	26	29	30	23	25	18	16	18
wholesale	Employees	226	176	166	145	58	106	61	113	ND^2
Wildicsalc	Payroll	3,791	3,067	3,631	1,822	2,063	3,285	3,088	2,836	2,542
Seafood sales,	Establishments	28	19	17	21	12	15	18	14	15
retail	Employees	ND^2	47	55	57	41	ND^2	50	46	50
	Payroll	ND^2	468	532	521	395	ND^2	699	841	810

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	5	5	6	5	5	4	5	5	4
Lakes freight	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	119	114	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	7,585	8,351	7,730	8,058
Doon soo froight	Establishments	1	2	2	3	3	1	NA^3	1	1
Deep sea freight transportation	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	ND^2
transportation	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	ND^2	ND^2
Deep sea passenger	Establishments	NA^3	1	1	1	1	1	NA^3	NA^3	NA^3
transportation	Employees	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	NA^3	NA^3
transportation	Payroll	NA^3	ND^2	ND^2	ND^2	ND^2	ND^2	NA^3	NA^3	NA^3
	Establishments	18	22	22	25	16	19	17	13	18
Marinas	Employees	86	141	220	158	ND^2	ND^2	111	172	183
	Payroll	1,388	2,532	2,603	2,358	ND^2	2,145	2,794	3,479	4,163
Marine cargo	Establishments	7	4	5	6	5	5	7	8	7
handling	Employees	251	ND^2	ND^2	ND^2	238	ND^2	ND^2	ND^2	ND^2
nananng	Payroll	9,284	ND^2	ND^2	ND^2	8,621	ND^2	ND^2	ND^2	ND^2
Navigational	Establishments	8	10	9	8	8	9	8	7	8
services to shipping	Employees	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	ND^2	141
services to simpling	Payroll	ND^2	ND^2	ND^2	ND^2	ND^2	1,754	ND^2	ND^2	6,982
Port & harbor	Establishments	1	1	2	2	1	1	1	1	1
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
Ship & boat	Establishments	26	21	19	17	20	23	24	20	20
building	Employees	11,663	ND^2	ND^2	11,845	11,909	14,578	ND^2	ND^2	ND^2
Dunamb	Payroll	473,191	ND^2	ND^2	471,243	498,660	615,837	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.

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

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

Texas Commercial Fisheries

2011 Economic Impacts of the Texas Seafood Industry (thousands of dollars)

		With Imports		Without Imports				
	Jobs	Sales	Value Added	Jobs	Sales	Value Added		
Total Impacts	27,717	2,277,959	1,002,928	22,516	1,357,574	687,876		
Commercial Harvesters	5,754	508,663	232,633	5,754	508,663	232,633		
Seafood Processors & Dealers	2,019	167,700	83,088	1,885	156,733	77,654		
Importers	2,749	756,118	230,498	0	0	0		
Seafood Wholesalers & Distributors	1,220	163,689	75,633	670	89,848	41,515		
Retail	15,975	681,788	381,075	14,207	602,329	336,074		

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue	173,340	168,317	166,208	172,337	197,291	180,575	176,098	155,074	204,469	239,082
Finfish & other	9,600	9,041	10,684	10,813	11,359	9,452	7,709	7,488	7,888	8,445
Shellfish	163,741	159,276	155,524	161,523	185,932	171,123	168,389	147,586	196,581	230,637
Atlantic croaker	451	489	382	415	500	450	446	484	531	622
Black drum	1,820	1,365	1,444	1,917	2,013	1,660	1,363	1,377	1,573	1,448
Blue crab	4,523	3,157	2,663	2,410	1,459	2,763	2,342	2,454	3,134	2,845
Flounders	371	336	325	276	164	62	144	91	62	205
Groupers	664	1,028	785	795	628	417	553	641	356	549
Oysters	11,276	16,493	14,954	15,883	17,263	19,246	8,835	9,376	19,144	12,789
Red snapper	3,363	3,757	5,193	5,345	6,168	3,762	2,744	2,398	3,009	3,254
Shrimp	147,701	139,485	137,674	143,045	167,108	149,084	157,187	135,643	174,231	214,898
Tunas	1,190	720	0	340	0	ND^1	94	139	4	2
Vermilion snapper	386	349	611	571	642	1,554	1,430	1,233	1,337	1,274

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

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total landings	93,059	96,122	85,557	84,289	117,131	87,912	73,048	102,695	90,054	98,111
Finfish & other	6,066	5,240	5,852	5,782	5,825	4,800	3,866	4,134	4,247	4,224
Shellfish	86,993	90,883	79,705	78,507	111,306	83,111	69,182	98,561	85,807	93,887
Atlantic croaker	70	75	60	58	67	62	59	63	67	79
Black drum	2,331	1,677	1,717	2,077	2,212	1,687	1,468	1,610	1,729	1,795
Blue crab	7,037	4,811	3,961	3,119	1,966	3,454	2,635	2,844	3,436	2,893
Flounders	173	159	151	144	68	24	58	32	26	75
Groupers	274	416	329	303	220	141	170	208	144	190
Oysters	4,708	6,813	5,569	5,007	4,923	5,633	2,679	2,733	5,265	3,943
Red snapper	1,478	1,607	2,133	1,940	2,158	1,213	870	851	1,031	948
Shrimp	75,158	79,166	70,098	70,310	104,378	74,007	63,855	92,946	77,067	87,007
Tunas	430	275	0	112	0	ND^2	22	45	1	1
Vermilion snapper	217	192	322	279	273	672	592	561	539	465

tverage / illination / rice of rice of pecies/opecies distants for pound)												
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Atlantic croaker	6.46	6.49	6.35	7.14	7.43	7.29	7.58	7.64	7.98	7.84		
Black drum	0.78	0.81	0.84	0.92	0.91	0.98	0.93	0.86	0.91	0.81		
Blue crab	0.64	0.66	0.67	0.77	0.74	0.80	0.89	0.86	0.91	0.98		
Flounders	2.14	2.12	2.15	1.92	2.42	2.55	2.48	2.84	2.37	2.75		
Groupers	2.43	2.47	2.39	2.62	2.85	2.96	3.25	3.07	2.47	2.88		
Oysters	2.40	2.42	2.69	3.17	3.51	3.42	3.30	3.43	3.64	3.24		
Red snapper	2.27	2.34	2.43	2.76	2.86	3.10	3.15	2.82	2.92	3.43		
Shrimp	1.97	1.76	1.96	2.03	1.60	2.01	2.46	1.46	2.26	2.47		
Tunas	2.76	2.62	0.80	3.04	0.69	ND^2	4.26	3.08	3.19	1.82		
Vermilion snapper	1.78	1.82	1.90	2.05	2.35	2.31	2.42	2.20	2.48	2.74		

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

Texas Recreational Fisheries

2011 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

	Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode:				
For-Hire	1,130	103,768	32,782	57,841
Private Boat	2,095	240,615	72,554	128,583
Shore	2,350	257,028	78,973	138,775
Total Durable Equipment Impacts	9,576	1,251,949	401,758	627,085
Total State Trip and Durable Equipment Economic Impacts	15,150	1,853,361	586,068	952,284

2011 Angler Trip & Durable Expenditures (thousands of dollars)¹

Fishing Mode	Trip Expen	ditures	Equipment	Durable Expenditures
	Non-Residents	Residents	Fishing Tackle	149,267
For-Hire	4,616	57,001	Other Equipment	82,412
Private Boat	8,983	153,062	Boat Expenses	414,319
Shore	15,081	162,772	Vehicle Expenses	270,863
Total Trip Expenditures	28,680	372,834	Second Home Expenses	84,140
			Total Durable Equipment Expenditures	1,001,002
Total State Trip and Dura	ble Equipment Exp	enditures		1,402,516

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Atlantic croaker	Н	111	96	109	95	101	95	64	117	125	157
Black drum	Н	72	85	68	53	73	66	82	98	165	129
King mackerel	Н	16	19	15	14	29	11	8	16	6	9
Red drum	Н	233	270	273	231	318	289	266	285	264	347
Red snapper	Н	53	40	40	49	69	45	41	31	33	36
Sand seatrout	Н	173	119	176	125	129	95	152	111	127	227
Sheepshead	Н	84	76	67	81	78	46	46	34	49	57
Southern flounder	Н	91	111	100	81	64	49	64	47	30	92
Spotted seatrout	Н	965	939	934	855	987	916	917	810	732	1,137

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 2011 data provided by the Texas Parks and Wildlife Department (TPWD). These effort estimates were reviewed by the TPWD. To calculate angler expenditure estimates (durable equipment expenditures), participation estimates were based on the sum of saltwater licenses sold in Texas plus a proportion of combination licenses sold in Texas. A change in the method of reporting landings occurred in 2007 so data from 2007 is not comparable to earlier years.

²Data collected by the 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
2002	482,169 (6.7%)	7,993,559 (7.1%)	277,847 (7%)	427,957 (7.4%)	782,780 (7%)	0.53
2010	522,146 (7.1%)	8,785,238 (7.8%)	386,654 (7.8%)	619,854 (8.5%)	1,222,904 (7.8%)	0.2
% change	8.29%	9.9%	39.2%	44.8%	56.2%	-41.5%

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Seafood product	Firms	104	99	100	108	109	94	85	82	85
prep. & packaging	Receipts	3,901	5,234	1,989	2,228	2,974	5,386	3,466	3,896	3,466
Seafood Sales,	Firms	152	170	159	159	141	182	188	195	188
retail	Receipts	13,516	16,636	19,131	19,534	18,355	17,442	18,204	12,947	18,204

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

	_			•		,				
		2002	2003	2004	2005	2006	2007	2008	2009	2010
Soofood product	Establishments	27	23	24	23	21	26	27	24	22
Seafood product prep. & packaging	Employees	1,453	1,274	1,177	1,288	1,155	1,207	1,169	1,026	1,184
prop. & packaging	Payroll	25,772	25,426	24,394	23,842	24,302	27,813	27,045	29,006	24,961
Seafood sales,	Establishments	115	99	103	97	92	104	69	75	77
wholesale	Employees	999	1,057	1,009	1,001	897	970	734	683	715
Wilolesale	Payroll	29,430	27,016	27,730	26,408	28,586	51,597	24,498	23,650	23,879
Seafood sales,	Establishments	73	67	60	59	58	62	60	51	52
retail	Employees	287	227	219	176	207	189	206	189	199
i ctuii	Payroll	3,748	2,985	2,993	3,162	3,229	3,703	3,403	3,393	3,742

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

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Coastal & Great	Establishments	39	43	43	61	45	43	42	43	48
Lakes freight	Employees	866	2,705	2,565	ND^2	2,270	2,513	2,815	2,729	1,909
transportation	Payroll	42,377	88,033	91,995	ND^2	107,328	131,946	251,997	200,219	161,080
Deep sea freight	Establishments	45	48	41	43	40	41	35	36	30
transportation	Employees	1,287	ND^2	891	ND^2	751	920	514	802	764
transportation	Payroll	70,194	ND^2	38,553	ND^2	41,969	49,761	40,764	61,309	63,408
Deep sea passenger	Establishments	5	5	3	4	3	4	3	2	1
transportation	Employees	ND^2								
transportation	Payroll	ND^2								
	Establishments	179	170	165	166	150	141	143	131	148
Marinas	Employees	1,255	1,410	ND^2	ND^2	ND^2	1,200	1,486	1,423	1,198
	Payroll	28,471	31,197	ND^2	ND^2	ND^2	28,359	34,039	33,803	33,968
Marine cargo	Establishments	56	59	60	60	64	62	55	57	54
handling	Employees	4,549	5,091	4,539	5,200	5,349	6,237	6,313	6,276	5,262
nananng	Payroll	113,894	108,142	138,630	151,522	161,386	186,416	196,006	167,562	166,877
Navigational	Establishments	95	92	92	87	84	90	99	95	87
services to shipping	Employees	1,082	1,099	1,213	1,064	1,373	1,709	1,884	1,849	1,606
services to simpling	Payroll	49,825	60,714	68,741	75,914	98,244	125,061	137,962	137,289	132,283
Port & harbor	Establishments	13	16	15	15	16	15	24	30	29
operations	Employees	ND^2	ND^2	215	ND^2	112	98	ND^2	421	ND^2
орстатіонз	Payroll	ND^2	ND^2	7,128	ND^2	4,992	5,163	10,538	13,778	18,627
Ship & boat	Establishments	110	107	103	99	90	96	102	99	97
building	Employees	3,360	4,062	4,204	3,564	3,515	4,810	5,368	3,891	3,386
bunding	Payroll	137,129	156,565	163,800	156,259	170,308	210,275	235,190	158,261	147,492

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

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



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Fulton Fish Market, New York City (photo credit: Min-Yang Lee)

Selected publications by NOAA Fisheries Economics and Social Sciences Program staff are grouped by geographic region of focus and then organized under the following categories:

Climate Change Research
Coastal & Marine Recreation Research
Commercial Fisheries Economics Research
Marine Protected Areas Research
Ocean Policy & Management Research
Other Marine Environmental Research

Recreational Fisheries Economics Research Habitat Economics Research Seafood Marketing & Trade Research Sociocultural Research U.S. Territories & International Fisheries Research Protected Resources Economics Research

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Charter boats, Cape Hatteras, North Carolina (photo credit: Amber Von Harten)

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

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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 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/southwest

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/southwest

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.dmr.state.ms.us

Louisiana Department of Wildlife & Fisheries 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

Oyster tonging, Chesapeake Bay, Maryland (photo credit: Harley Speir)



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.

Bycatch¹

Species other than the primary target species that are caught incidental to the harvest of the primary species. Bycatch may be retained or discarded; discards may occur for regulatory or economic reasons.

Catch1

1. To undertake any activity that results in taking fish out of its environment dead or alive, or to bring fish on board a vessel dead or alive; 2. The total number (or weight) of fish caught by fishing operations. Catch should include all fish killed by the act of fishing, not just those landed; 3. The component of fish encountering fishing gear, which is retained by the gear.

Catch is usually expressed in terms of wet weight. It refers sometimes to the total amount caught and sometimes only to the amount landed. The fish which are not landed, but returned to the sea, are called discards or bycatch.

For recreational fishing activities, catch refers to the total number of individual fish released (thrown back into the sea) and harvested (not thrown back into the sea) by recreational fishermen (angler).

Catch Share 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.

Discards¹

To release or return a fish or other species to the sea, dead or alive, whether or not such fish or other species are brought fully on board a fishing vessel.

Estimates of discards can be made in a variety of ways, including samples from observers and logbook records. Fish (or parts of fish) can be discarded for a variety of reasons such as having physical damage, being a non-target species for the trip, and compliance with management regulations like minimum size limits or quotas.

Durable Equipment Expenditures or Durable Goods Expenditures⁸

For this report, this term refers to expenses related to equipment used for recreational fishing activities. These expenses include the purchase of: semi-durable goods (tackle, rods, reels, line, etc.), durable goods (motor boats and accessories, non-motorized boats, boating electronics, mooring, boat storage, boat insurance, and vehicles or homes), and angling accessories and multi-purpose items (magazines, club dues, saltwater angling specific clothing and camping gear).

Ecolabel or Ecolabelling 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 Model¹⁰ 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.

$\mathsf{Ex\text{-}vessel}^1$

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.

Landings¹

1. The number or poundage of fish unloaded by commercial fishermen or brought to shore by recreational fishermen for personal use. Landings are reported at the locations at which fish are brought to shore; 2. The part of the catch that is selected and kept during the sorting procedures on board vessels and successively discharged at dockside.

Limited Access Privilege Program (LAPP) or Limited Access Privilege 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".

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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