Western Pacific Region

- Hawai‘i

Long-tail Red Snapper (Onaga) and Redfin Jobfish (Lehi)
(photo credit: Allen Shimada, NOAA Fisheries Office of Science and Technology)

MANAGEMENT CONTEXT

The U.S. Pacific Islands Region includes the state of Hawai'i; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands (CNMI); and the Pacific Remote Island Areas. Federal fisheries in this region are managed by the Western Pacific Fishery Management Council (WPFMC) and NOAA Fisheries under five fishery ecosystem plans (FEPs). These plans focus on place-based rather than species- or fishery-based management.

Western Pacific Fishery Ecosystem Plans

- American Samoa
- Hawai'i
- Mariana Archipelago (Guam and the CNMI)
- Pacific Remote Island Areas
- Western Pacific Pelagics

Because fishery data are limited in most of these areas, only information for the Hawai'i and Western Pacific Pelagics fisheries is reported here. No catch share programs operate in this region.

Hawai'i FEP: NOAA Fisheries, the WPFMC, and the State of Hawai'i collaborate to manage fisheries across the Hawai'i Archipelago. The major fisheries in Hawai'i include trolling for pelagic species such as tuna, marlin, wahoo and mahimahi; deepwater hook-and-line bottom fishing; and various forms of net fishing that target nearshore pelagic and reef fish species. Under this FEP, the Hancock Seamount groundfish complex is currently overfished. This fishery has been closed since 1986.

Western Pacific Pelagics FEP: The management species covered under this FEP include tunas, billfishes, sharks, squids, and an assortment of other species. These species include mahimahi, wahoo, moonfish, and pomfret caught by the Hawai'i longline fishery and smaller boats that use diverse gears including trolling, handline, and traditional fishing methods. Of these species, bigeye tuna, Pacific bluefin tuna, swordfish, and the Central Western Pacific striped marlin stock are considered subject to overfishing. The Central Western Pacific striped marlin stock and Pacific bluefin tuna stock are also listed as overfished.

In addition to management by the WPFMC and NOAA Fisheries, pelagic fish, such as bigeye and yellowfin tunas, are managed by two regional fishery management organizations (RFMOs). The Western and Central Pacific Fisheries Commission (WCPFC) have authority to manage pelagic fisheries in the Western and Central Pacific Ocean, while the Inter-American Tropical Tuna Commission (IATTC) manages pelagic fisheries in the Eastern Pacific Ocean. Fish species and fisheries under the purview of both RFMOs migrate across national boundaries and between RFMO areas, requiring coordinated management. Since 2009, the annual bigeye tuna catch limit has been recommended by the WCPFC and implemented by NOAA Fisheries for the U.S. longline fleet in the Western and Central Pacific. The IATTC establishes the harvest limit for bigeye tuna for U.S. longline vessels longer than 24 meters in the Eastern Tropical Pacific.

Policy Updates

The Hawai'i-based pelagic longline fleet accounts for most of the U.S. longline catch of bigeye tuna in the WCPO. The 2015 bigeye catch limit for U.S. longline vessels was set at 3,502 metric tons. NOAA Fisheries projected that the fishery would reach the limit on August 5, 2015, after which the fleet would no longer be able to retain and land bigeye tuna unless NOAA Fisheries authorized specified fishing agreements with U.S. Territories before the end of the year. On October 9, 2015, the U.S. longline vessels that signed onto a specified fishing agreement with CNMI could collectively fish up to 1,000 metric tons and attribute the catch to CNMI. The U.S. longline vessels that signed onto a specified fishing agreement with Guam could fish up to 1,000 metric tons and attribute that catch to Guam, effective November 6, 2015.

On February 3, 2016, NOAA Fisheries published a final rule allowing large federally permitted U.S. longline vessels to fish in certain areas of the American Samoa Large Vessel Prohibited Area (LVPA). The LVPA was established in 2002 to prevent the potential for gear conflicts and catch competition between large and small fishing vessels. However, the American Samoa pelagic fisheries had changed so that the conditions that led to the establishment of the LVPA appeared to no longer exist. This action had allowed fishing in an additional 16,817 nm2 of federal waters. On March 20, 2017, a U.S. federal judge in American Samoa v. National Marine Fisheries Service,

16-cv-00095 (D.Haw) issued an order that vacates and sets aside the regulations at 50 CFR 665.818(b), therefore, disallowing large federally permitted U.S. longline vessels to fish within the LVPA.

COMMERCIAL FISHERIES

In this report, commercial fisheries refer to fishing operations that sell their catch for profit. It does not include saltwater anglers that fish for sport or subsistence fishermen. It also excludes the for hire sector, which earns its revenue from selling recreational fishing trips to saltwater anglers. The commercial fisheries section reports on economic impacts, landings revenue, landings, and ex-vessel prices of key species/species groups.

Key Western Pacific Commercial Species

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

Economic Impacts

The premise behind economic impact modeling is that every dollar spent in a regional economy (direct impact) is either saved or respent on additional goods or services. If those dollars are respent on other goods and services in the regional economy, this spending generates additional economic activity in the region. This report provides estimates of total economic impacts for the Nation and for each of the 23 coastal states. Total economic impacts for each state and the Nation represent the sum of direct impacts; indirect impacts (in this case, the impact from suppliers to the seafood industry); and induced impacts (spending by employees on personal and household expenditures, where employees of both seafood businesses and its full supply chain are included). That is, impacts from the seafood industry as well as the economic activity generated throughout each region's broader economy from this industry.

Four different measures are commonly used to show commercial fisheries landings affect the economy in a region (state or nationwide): sales, income, value-added, and employment. Sales refer to the gross value of all sales by regional businesses affected by an activity, such as commercial fishing. It includes both the direct sales of fish landed and sales made between businesses and households resulting from the original sale. Income includes personal income (wages and salaries) and proprietors' income (income from self-employment). Value-added is the contribution made to the gross domestic product in a region. Employment is specified on the basis of full-time and part-time jobs supported directly or indirectly by the sales of seafood or purchases of inputs to commercial fishing. The first three types of measures are calculated in terms of dollars, whereas employment impacts are measured in terms of numbers of jobs. Note that these categories are not additive. The United States seafood industry is defined here as the commercial fishing sector, seafood processors and dealers, seafood wholesalers and distributors, importers, and seafood retailers.[1]

In 2015, the commercial fishing and seafood industry in the state of Hawai'i generated $814 million in sales impacts, $247 million in income impacts, $362 million in value-added impacts, and 9,000 full- and part-time jobs. The retail sector generated the largest employment impacts across sectors (3,700 jobs). The importers sector generated the largest sales impacts ($323 billion), the retail sector generated the largest income impacts ($91 million), and the retail sector generated the largest value-added impacts ($118 million).

Landings Trends

Landings and landings revenue trends for the 2006 to 2015 period can be understood only after considering the growth of the tuna fishery. Hawai'i accounted for 61 percent of all tuna landings revenue in the U.S. in 2015, earning $84 million for its catch. From 2006 to 2015, tuna revenue increased $39 million, increasing 88 percent. Bigeye tuna dominated Hawai'i's landings revenue in 2015 at $11 million, an increase of $25 million from 2006 and a $10 million increase from 2014. Bigeye tuna accounted for at least 50 percent of Hawai'i's landings revenue each year from 2006 to 2015.

Landings Revenue

In 2015, landings revenue totaled about $111 million, a

Landings Revenue: Largest Increases

From 2006:
- Pomfret (123%, 87% in real terms)
- Tunas (88%, 58% in real terms)
- Moonfish (opah) (65%, 43% in real terms)

From 2014:
- Pomfret (20%)
- Scad (18%)
- Tunas (14%)

Landings Revenue: Largest Decreases

From 2006:
- Lobster (-20%, -91% in real terms)
- Swordfish (-12%, -44% in real terms)

From 2014:
- Lobster (-54%)
- Swordfish (-14%)
- Snappers (-8%)

Landings: Largest Increases

From 2006:
- Pomfret (133%)
- Moonfish (opah) (89%)
- Tunas (60%)

From 2014:
- Tunas (16%)
- Marlin (15%)
- Scad (15%)

Landings: Largest Decreases

From 2006:
- Lobster (-33%)
- Swordfish (-21%)
- Snappers (-11%)

From 2014:
- Lobster (-60%)
- Swordfish (-18%)
- Mahi-mahi (dolphin) (-18%)

66% increase from 2006 (a 47% increase in real terms after adjusting for inflation) and a 10% increase from 2014. Finfish landings revenue accounted for more than 99% of all landings revenue. In 2015, tunas ($84 million), swordfish ($5 million), and mahi-mahi (dolphin, $5 million) dominated landings revenue. From 2006 to 2015, pomfret (123%, 87% in real terms); tunas (88%, 58% in real terms); and moonfish (opah, 65%, 43% in real terms) had the largest revenue increases, while lobster (-20%, -91% in real terms) and swordfish (-12%, -24% in real terms) had the largest decreases. From 2014 to 2015, pomfret (20%), scad (18%), and tunas (14%) had the largest revenue increases, while lobster (-54%), swordfish (-14%), and snappers (-8%) had the largest decreases.

Landings

In 2015, commercial fishermen in the Western Pacific Region landed more than 36 million pounds of finfish and shellfish in the state of Hawai'i. This represents a 41% increase from 2006 and a 9% increase from 2014. Tunas contributed the most to landings, accounting for 64% of total landings. From 2006 to 2015, pomfret (133%); moonfish (opah, 89%); and tunas (60%) had the largest landings increases, while lobster (-33%), swordfish (-21%), and snappers (-11%) had the largest decreases. From 2014 to 2015, tunas (16%), marlin (15%), and scad (15%) had the largest landings increases, while lobster (-60%), swordfish (-18%), and mahi-mahi (dolphin, -18%) had the largest decreases.

Price

In 2015, snappers ($6.31 per pound) received the highest ex-vessel price in Hawai'i. Landings of marlin ($1.16 per pound) had the lowest ex-vessel price. From 2006 to 2015, scad (41%, 18% in real terms); snappers (31%, 12% in real terms); and mahi-mahi (dolphin, 23%, 2% in real terms) had the largest price increases, while moonfish (opah, -13%, -24% in real terms); pomfret (-4%, -22% in real terms); and wahoo (-3%, -19% in real terms) had the largest decreases. From 2014 to 2015, mahi-mahi (dolphin, 27%); pomfret (10%); and lobster (7%) had the largest price increases, while marlin (-16%), wahoo (-5%), and tunas (-2%) had the largest decreases.

RECREATIONAL FISHERIES

In this report, recreational fisheries refer to fishing for fun rather than to resell fish (commercial fishing) or for subsistence. The recreational fisheries section reports on

Key Western Pacific Recreational Species

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

economic impacts and expenditures, angler participation, trips, and catch of key species/species groups.

Economic Impacts and Expenditures

The contribution of recreational fishing activities[2] in the United States are reported in terms of economic impacts from angler expenditures. Total annual trip expenditures are estimated by multiplying mean trip expenditures by the estimated number of adult trips in each trip mode (for-hire, private boat, and shore). Total annual durable expenditures are estimated by multiplying mean durable expenditures by the estimated annual number of adult participants in a given state.

Four different measures are commonly used to show how angler expenditures affect the economy in a region (state or nationwide): sales, income, value-added, and employment. Sales refer to the gross value of all sales by regional businesses affected by an activity, such as recreational fishing. It includes both the direct sales made by the angler and sales made between businesses and households resulting from that original sale by the angler. Income includes personal income (wages and salaries) and proprietors' income (income from self-employment). Value-added is the contribution made to the gross domestic product in a region. Employment is specified on the basis of full- and part-time jobs supported directly or indirectly by the purchases made by anglers. The first three measures are calculated in terms of dollars, whereas employment impacts are measured in terms of number of jobs. Note that these categories are not additive. NOAA Fisheries uses a regional impact modeling software, called IMPLAN, to estimate these four types of impacts.

Note that no information is available for durable goods expenditures related to recreational fishing in Hawai'i.

Economic impacts from recreational fishing activities in Hawai'i totaled 934 jobs in 2015 and generated $119 million in sales, $37 million in income, and $60 million in value-added impacts. Of the three fishing trip modes, trips in the shore fishing mode had the greatest economic impact, accounting for 49% of employment impacts.

Expenditures for fishing trips in Hawai'i in 2015 totaled more than $97 million. A large portion of these trip expenditures came from trips in the shore (48%) and private boat (28%) sectors.

Fishing Trips

In 2015, recreational fishermen took 1.4 million saltwater fishing trips in the state of Hawai'i. This number was a 46% decrease from 2006 and a 4% increase from 2015. Of this total, 81% of fishing trips were taken from the shore sector.

Participation

The state of Hawai'i has not kept track of participation in recreational fisheries since 2006.

Harvest and Release

Of Hawai'i's key species and species groups, scads (bigeye and mackerel, 1.2 million fish), goatfishes (829,000 fish), and jacks (trevallys and other jacks, 485,000 fish) were most frequently caught by recreational anglers. From 2006 to 2015, yellowfin tuna (136%); scads (bigeye and mackerel, 53%); and blue marlin (47%) had the largest increases in catch, while dolphinfish (mahi-mahi, -64%); snappers (-43%); and smallmouth bonefish (-34%) had the largest decreases. From 2014 to 2015, blue marlin (80%); goatfishes (73%); and scads (bigeye and mackerel, 39%) had the largest increases in catch, while snappers (-50%); dolphinfish (mahi-mahi, -15%); and smallmouth bonefish (-10%) had the largest decreases.

MARINE ECONOMY

For this report, the marine economy refers to the economic activity generated by fishing and marine-

[2] Trip expenditure estimates were generated from the 2011 National Marine Recreational Fishing Expenditure Survey. Durable good expenditure impacts were generated from the 2014 National Marine Recreational Fishing Expenditure Survey (see http://www.st.nmfs.noaa.gov/economics/fisheries/recreational/Marine-Angler-Durable-Expenditures/2014-durable-expenditures-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, 2011, available at http://www.st.nmfs.noaa.gov/economics/publications/marine-angler-expenditures/marine-angler-2011).

Recreational Catch: Largest Increases

From 2006:
- Yellowfin tuna (136%)
- Scads (bigeye and mackerel) (53%)
- Blue marlin (47%)

From 2014:
- Blue marlin (80%)
- Goatfishes (73%)
- Scads (bigeye and mackerel) (39%)

Recreational Catch: Largest Decreases

From 2006:
- Dolphinfish (mahi-mahi) (-64%)
- Snappers (-43%)
- Smallmouth bonefish (-34%)

From 2014:
- Snappers (-50%)
- Dolphinfish (mahi-mahi) (-15%)
- Smallmouth bonefish (-10%)

related industries in a coastal state. The state marine economy consists of two industry sectors: 1) seafood sales and processing (employer establishments and non-employer firms); and 2) transport, support, and marine operations (employer establishments). These sectors include several different marine-related industries.[3,4]

To measure the size of the commercial fishing sector in a state's economy relative to the size of the commercial fishing sector in the national economy[5], researchers use an index called the Commercial Fishing Location Quotient (CFLQ). The CFLQ is calculated as the ratio of the percentage of regional employment in the commercial fishing sector relative to the percentage of national employment in the commercial fishing sector. The U.S. CFLQ is 1. If a state's CFLQ is less than 1, then less commercial fishing occurs in this state than the national average. If a state's CFLQ is greater than 1, then more commercial fishing occurs in this state than the national average.

In 2014, the CFLQ for Hawai'i was 4.28. Hawai'i's CFLQ suggests that the level of employment in industries related to commercial fishing in this state is approximately 4.28 times higher than the level of employment in these industries nationwide.
In 2014, 32,000 establishments operated throughout Hawai'i (including marine and non-marine-related establishments). These establishments employed 519,000 workers and had a total annual payroll of almost $21 billion. The region's gross domestic product was approximately $76 billion in 2014.

Seafood Sales and Processing

Seafood Product Preparation and Packaging: In 2014, there were 14 non-employer firms (a 27% increase from 2006) and annual receipts totaled $1 million (a 10% decrease from 2006 in real terms).

There were 2 employer establishments (a 33% decrease from 2006) in 2014. The number of employees and payroll was suppressed for confidentiality purposes for this sector.

Seafood Sales, Retail: In 2014, there were 38 non-employer firms (a 23% increase from 2006) and annual receipts totaled $3.7 million (a 10% decrease from 2006 in real terms).

There were 26 employer establishments (a 4% decrease from 2006) in 2014. These establishments employed 305 workers (a 3% decrease from 2006) and had a total annual payroll of $7.1 million (a 12% increase from 2006 in real terms).

Seafood Sales, Wholesale: There were 30 establishments (a 9% decrease from 2006) in 2014. These establishments employed 567 workers (a 23% increase from 2006) and had a total annual payroll of $21 million (an 11% increase from 2006 in real terms).

Transport, Support, and Marine Operations

Data for the Transport, Support, and Marine Operations sector of Hawai'i's economy were largely suppressed for confidentiality reasons. It is clear, however, that these sectors play an important role in the regional economy. For example, Marine Cargo Handling contributed 700 jobs and more than $66 million in payroll to the regional economy in 2014.

[3] Unless otherwise stated, data is from the U.S. Census Bureau, http://censtats.census.gov/ (accessed May 31, 2016).
[4] U.S. Bureau of Economic Analysis, "Table 1.1.5 Gross Domestic Product" and "Table SA6N Compensation of Employees by NAICS Industry," http://www.bea.gov/iTable/index_nipa.cfm (accessed May 31, 2016).
[5] U.S. Bureau of Labor Statistics, "Location Quotient Calculator," http://data.bls.gov/location_quotient/ (accessed May 31, 2016).

Tables | Hawai‘i

2015 Economic Impacts of the Hawai'i Seafood Industry (thousands of dollars)

	With Imports				Without Imports			
	#Jobs	Sales	Income	Value Added	#Jobs	Sales	Income	Value Added
Total Impacts	8,957	814,120	247,107	362,087	6,802	411,129	162,717	221,055
Commercial Harvesters	3,218	180,060	65,574	94,329	3,218	180,060	65,574	94,329
Seafood Processors & Dealers	528	51,667	20,452	26,378	374	36,531	14,461	18,650
Importers	1,044	322,907	51,752	98,436	0	0	0	0
Seafood Wholesalers & Distributors	502	53,106	18,626	24,777	283	29,941	10,501	13,969
Retail	3,665	206,380	90,703	118,167	2,928	164,597	72,181	94,107

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Revenue	66,780	75,690	84,877	71,202	84,044	91,565	112,300	107,979	101,249	110,885
Finfish & Other	66,569	75,426	84,556	70,856	83,700	91,274	111,865	107,413	100,754	110,607
Shellfish	211	264	321	347	343	291	435	567	495	278
Key Species										
Lobsters	60	93	120	136	117	104	98	95	105	48
Mahimahi (dolphin)	3,630	3,483	3,174	2,853	3,303	4,314	5,309	4,130	4,412	4,596
Marlin	2,581	2,028	2,072	2,142	1,756	2,375	2,888	2,802	3,197	3,103
Moonfish (opah)	1,906	2,171	2,198	2,409	2,591	2,853	3,163	3,203	2,910	3,151
Pomfret	1,328	1,461	1,662	1,381	1,549	1,449	2,097	2,576	2,466	2,968
Scad	999	1,094	889	1,198	1,251	964	1,181	1,147	1,128	1333
Snappers	1,750	1,690	1,715	1,860	1,681	1,415	1,738	2,003	2,223	2,046
Swordfish	5,237	7,730	7,177	7,336	7,303	6,669	6,693	4,493	5,405	4,633
Tunas	44,630	51,171	60,863	47,710	59,775	66,628	83,298	81,819	73,657	83,742
Wahoo	2,330	2,085	2,225	1,673	1,746	1,806	2,330	2,375	2,800	2,795

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Landings	26,021	28,934	30,652	26,906	28,069	29,289	31,048	32,447	33,474	36,643
Finfish & Other	25,983	28,890	30,599	26,849	28,007	29,240	30,968	32,346	33,387	36,605
Shellfish	38	44	52	57	62	49	79	101	86	38
Key Species										
Lobsters	6	8	10	11	9	10	8	9	10	4
Mahimahi (dolphin)	1,337	1,388	1,250	1,287	1,518	1,423	1,746	1,515	1,689	1,385
Marlin	2,477	1,375	1,952	1,677	1,221	1,826	1,459	1,935	2,318	2,675
Moonfish (opah)	1,093	1,226	1,313	1,884	1,824	1,564	1,549	2,072	2,004	2,067
Pomfret	584	593	671	627	593	427	731	1,142	1,243	1,361
Scad	432	461	318	405	460	323	383	361	356	410
Snappers	378	381	378	391	342	269	308	357	369	338
Swordfish	2,602	3,643	3,835	3,881	3,153	2,592	2,381	1,674	2,480	2,046
Tunas	14,799	17,594	18,295	14,594	16,706	18,519	20,147	20,900	20,296	23,613
Wahoo	893	715	849	605	600	564	652	744	1,056	1,103

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Lobsters	9.63	11.84	12.14	12.37	12.36	10.39	11.84	10.71	10.21	10.97
Mahimahi (dolphin)	2.71	2.51	2.54	2.22	2.18	3.03	3.04	2.73	2.61	3.32
Marlin	1.04	1.47	1.06	1.28	1.44	1.30	1.98	1.45	1.38	1.16
Moonfish (opah)	1.74	1.77	1.67	1.28	1.42	1.82	2.04	1.55	1.45	1.52
Pomfret	2.27	2.46	2.48	2.20	2.61	3.39	2.87	2.25	1.98	2.18
Scad	2.31	2.37	2.80	2.95	2.72	2.98	3.08	3.18	3.17	3.25
Snappers	4.62	4.44	4.54	4.76	4.92	5.26	5.65	5.60	6.03	6.06
Swordfish	2.01	2.12	1.87	1.89	2.32	2.57	2.81	2.68	2.18	2.26
Tunas	3.02	2.91	3.33	3.27	3.58	3.60	4.13	3.91	3.63	3.55
Wahoo	2.61	2.92	2.62	2.77	2.91	3.20	3.57	3.19	2.65	2.53

2015 Economic Impacts of Hawai'i Recreational Fishing Expenditures (thousands of dollars)[1]

		#Jobs	Sales	Income	Value Added
Trip Impacts by Fishing Mode	For-Hire	291	36,020	13,088	21,149
	Private Boat	183	29,750	7,519	12,478
	Shore	460	53,494	15,897	26,794
Total Durable Expenditures		0	0	0	0
Total State Economic Impacts		934	119,264	36,504	60,421

2015 Angler Trip & Durable Goods Expenditures (thousands of dollars)[1]

Fishing Mode	Trip Expenditures
For-Hire	23,164
Private Boat	27,244
Shore	47,173
Total	97,581

Equipment	Durable Goods Expenditures
Fishing Tackle	NA
Other Equipment	NA
Boat Expenses	NA
Vehicle Expenses	NA
Second Home Expenses	NA
Total Durable Expenditures	NA

Total State Trip and Durable Goods Expenditures	97,581

Recreational Anglers by Residential Area (thousands of anglers)[2, 3]

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Coastal	173									
Non-Coastal	0									
Out-of-State	224									
Total Anglers	397									

Recreational Fishing Effort by Mode (thousands of angler trips)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Private	570	475	564	441	484	224	325	297	324	273
Shore	2,074	2,102	1,966	1,722	1,907	1,158	1,195	1,216	1,051	1,158
Total Trips	2,644	2,577	2,531	2,163	2,390	1,382	1,519	1,513	1,374	1,431

Harvest (H) & Release (R) of Key Species/Species Groups (thousands of fish)[4]

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Blue marlin	H	3	2	11	3	1	2	3	4	3	5
	R	0	< 1	0	< 1	0	0	0	0	< 1	0
Dolphinfish (mahimahi)	H	219	136	184	103	164	63	163	94	92	78
	R	< 1	< 1	0	0	0	0	0	0	< 1	0
Goatfishes[5]	H	783	265	457	686	236	141	148	826	458	815
	R	11	9	5	6	12	13	13	3	22	14
Jacks (trevallys and other jacks)[6]	H	208	169	199	123	138	97	107	140	150	168
	R	210	130	120	85	126	59	129	126	263	317
Scads (bigeye and mackerel)	H	812	1,089	402	1,102	840	662	608	889	899	1,245
	R	0	0	0	0	0	0	0	2	0	< 1
Skipjack tuna	H	201	228	568	230	289	125	197	380	199	268
	R	1	5	2	0	0	< 1	0	0	0	< 1
Smallmouth bonefish	H	63	20	50	37	55	13	27	23	29	26
	R	2	13	4	2	13	2	8	10	20	17
Snappers[7]	H	126	83	112	125	295	86	137	127	184	84
	R	36	38	7	19	25	3	14	8	3	8
Wahoo	H	62	57	78	61	41	15	32	37	43	55
	R	0	< 1	0	0	0	0	0	0	< 1	< 1
Yellowfin tuna	H	124	273	461	198	302	141	182	150	220	292
	R	< 1	2	0	1	1	0	0	0	< 1	1

[1] NA = not available.
[2] Participation (number of anglers) data are not available for 2007 through 2014.
[3] Data is not available because all Hawai'i residents are considered coastal county residents.
[4] In this table, '<1' = 0-999 fish and '1' = 1,000-1,499 fish.
[5] Goatfishes include yellowstripe, yellowfin, pfulgers, bandtail, doublebar, diespot, whitesaddle, manybar, blue and 'Goastfish famil/genus'.
[6] Trevallys & other jacks includes bluefin trevally, giant trevally, bigeye trevally, black trevally, African pompano, greater amberjack, island jack, and other species in the jack family.
[7] Snappers include bluestip, blacktail, ruby, longtailed, pink, VonSiebolds, Binghams, green jobfish, ironjaw and smalltooth jobfish.

2014 Hawai'i State Economy (% of national total)[1]

	#Establishments	#Employees	Annual Payroll ($ billions)	Employee Compensation ($ billions)	Gross State Product ($ billions)	Commercial Fishing Location Quotient[2]
Totals	31,801 (0.4%)	519,130 (0.4%)	20.85 (0.4%)	42.57 (0.5%)	76.17 (0.4%)	4.28

Seafood Sales & Processing - Non-Employer Firms (thousands of dollars)

		2006	2007	2008	2009	2010	2011	2012	2013	2014
Seafood product prep. & packaging	Firms	11	10	9	7	11	14	14	16	14
	Receipts	1,011	1,023	1,020	712	741	866	965	821	1,048
Seafood sales, retail	Firms	31	41	37	35	37	39	42	40	38
	Receipts	3,627	4,353	4,394	3,666	4,124	3,558	4,086	3,764	3,727

Seafood Sales & Processing - Employer Establishments (thousands of dollars)[3]

		2006	2007	2008	2009	2010	2011	2012	2013	2014
Seafood product prep. & packaging	Establishments	3	1	1	1	1	1	2	2	2
	Employees	ds	ds	ds	ds	ds	ds	ds	ds	ds
	Payroll	ds	ds	ds	ds	ds	ds	ds	ds	ds
Seafood sales, wholesale	Establishments	33	36	37	38	37	40	33	32	30
	Employees	462	550	695	538	531	538	483	542	567
	Payroll	16,786	18,932	20,665	19,347	19,290	19,416	19,413	20,039	21,369
Seafood sales, retail	Establishments	27	25	25	25	24	25	24	25	26
	Employees	315	393	173	158	177	187	303	318	305
	Payroll	5,564	7,209	3,674	3,559	3,533	3,521	6,493	7,366	7,142

Transport, Support, & Marine Operations - Employer Establishments (thousands of dollars)[3,4]

		2006	2007	2008	2009	2010	2011	2012	2013	2014
Coastal & Great Lakes freight transportation	Establishments	13	11	5	5	2	2	5	5	6
	Employees	543	557	478	475	ds	ds	431	ds	ds
	Payroll	36,941	36,635	34,544	34,367	ds	ds	34,538	ds	ds
Deep sea freight transportation	Establishments	0	0	1	0	1	1	2	1	1
	Employees	NA	NA	ds	NA	ds	ds	ds	ds	ds
	Payroll	NA	NA	ds	NA	ds	ds	ds	ds	ds
Deep sea passenger transportation	Establishments	2	1	1	1	1	1	1	1	1
	Employees	ds	ds	ds	ds	ds	ds	ds	ds	ds
	Payroll	ds	ds	ds	ds	ds	ds	ds	ds	ds
Marinas	Establishments	9	11	9	10	13	13	9	11	9
	Employees	152	167	156	164	189	208	162	166	153
	Payroll	3,719	4,151	4,317	4,368	5,362	5,237	3,779	4,003	3,304
Marine cargo handling	Establishments	7	8	11	11	14	14	11	10	10
	Employees	ds	1,048	1,098	1,075	1,236	1,278	664	709	700
	Payroll	ds	87,770	89,104	87,833	109,059	109,134	54,309	61,651	66,034
Navigational services to shipping	Establishments	6	8	11	11	11	8	8	9	9
	Employees	ds	ds	105	120	90	105	97	100	80
	Payroll	ds	3,340	5,846	5,258	5,113	5,310	5,567	6,518	5,416
Port & harbor operations	Establishments	2	2	4	3	2	2	2	1	1
	Employees	ds	ds	ds	ds	ds	ds	ds	ds	ds
	Payroll	ds	ds	3,218	2,031	ds	ds	ds	ds	ds
Ship & boat building	Establishments	14	13	14	13	15	15	18	18	14
	Employees	545	ds	ds	ds	ds	ds	ds	ds	ds
	Payroll	23,134	ds	ds	ds	ds	ds	ds	ds	ds

[1] Census Bureau data for the Marine Economy section of this report is available only through 2014.
[2] The US Commercial Fishing Location Quotient (CFLQ) is 1. A CFLQ less than (greater than) 1 implies that there is less (more) commercial fishing in this state than the national average.
[3] ds = these data are suppressed.
[4] NA = not applicable.