NOAA Technical Memorandum NMFS-F/SPO-254

Fisheries Economics of the United States 2023

Economic and Social Status and Trends Series

February 2026

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Office of Science and Technology
Economics and Social Analysis Division

Fisheries Economics of the United States 2023

February 2026

Suggested Citation

National Marine Fisheries Service. 2026. Fisheries Economics of the United States, 2023. NOAA Tech. Memo. NMFS-F/SPO-254, 30 p.

Table of Contents

Cover photo credits: Jeff Muir (top); iStock (bottom).

Executive Summary

The Fisheries Economics of the United States 2023 report demonstrates the integral role marine fisheries play in our economy and the success of our fishery management programs.

*In 2023, U.S. commercial fisheries, seafood industry, and recreational fisheries generated $319 billion in sales impacts—a 4 percent decrease from 2022—and supported 2.1 million jobs—a 6 percent decrease from 2022 (**Figure 1**).*

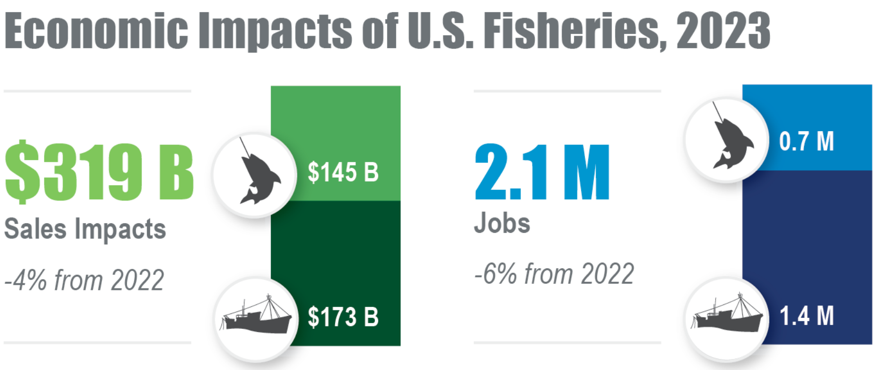


Figure 1. **Economic impacts of U.S. commercial and recreational U.S. fisheries, 2023 ([Data Tool]). Sums may not match total due to rounding.**

Commercial Fishing and Seafood

Commercial fisheries and the seafood industry generated $173 billion in sales impacts—a 9 percent decrease from 2022—and supported 1.4 million jobs in 2023 (**Table 1**). Sales impacts were largest in the import sector due to the significant value of seafood imports, which comprised 54 percent of total impacts (**Table 2**). Total commercial fishery landings revenues ($5.1 billion) decreased 16 percent from 2022. Landings volume increased 2 percent. Decreased revenues were primarily the result of a lower average price that has fallen for two consecutive years since peaking in 2021.

Recreational Fishing

Recreational fishing generated $145 billion in sales impacts—a 2 percent increase from 2022—and supported 694 thousand jobs in 2023 (**Table 5**). Expenditures for fishing trips and equipment totaled $73 billion. Impacts from equipment expenditures accounted for 80 percent of total job impacts and 81 percent of sales impacts. Anglers took 204 million saltwater fishing trips. Expenditures on shore-based fishing trips had the greatest trip-related economic impact (when compared to private boat or for-hire trips) accounting for 8 percent of total recreational fishing job impacts and 8 percent of sales impacts (**Table 6**).

Dollar values and annual changes are reported in inflation-adjusted (real) 2023 dollars unless otherwise noted.
Visit the [Abbreviated Glossary] for a better understanding of inflation-adjusted dollars, economic impacts, and other terms.

Photo credit: iStock.

Fishing is a vital part of our heritage. U.S. fisheries support millions of jobs and bring in billions of dollars to the broader economy every year. Whether fishing is your livelihood or a favorite pastime, or seafood is your meal of choice, U.S. fisheries are an economic engine that support fishing communities nationwide.

NOAA Fisheries Annual Reports

This report is one of three produced each year on the status of national marine fisheries. The other two reports are:

- Status of Stocks
- Fisheries of the United States

Report Overview

Fisheries Economics of the United States is an annual report that highlights the contributions of U.S. fisheries to our national economy and supports one of NOAA Fisheries' core missions: to support productive and sustainable fisheries. This is the 18th volume in this annual series and focuses on economic impacts in 2023. It provides information on:

- **Commercial Fisheries** economic impacts estimates based on the NOAA Commercial Fisheries and Seafood Industry Input-Output Model. Landings, revenue, and price trends based on data collection from the regional fisheries management bodies.
- **Recreational Fisheries** economic impacts estimates based on the NOAA Recreational Fisheries Input-Output Model. Marine angler expenditures based on the 2022 National Marine Recreational Fishing Expenditure Survey (NOAA Fisheries) and 2022 effort data from NOAA Fisheries and state partners. Recreational fishing catch and effort based on data from NOAA Fisheries and state partners.
- **Fishing Communities** indicators of coastal community engagement and reliance on fishing, and social and economic conditions in these communities.
- **Spotlight Topics** highlighted this year provide an overview of: 1) the economic, social, and cultural fishery benefits in U.S. Pacific Islands Territories; and 2) oyster aquaculture in the United States.

Report Resources

Some report information can be found on the web.

- *Data Tool*
- *Publications*
- *Methods*
- *Data Sources, Footnotes, and Reference Materials*
- *Resources*
- *Glossary*

Commercial Fisheries

Commercial fisheries consist of fishermen that sell their catch for profit. They are an integral part of the U.S. seafood industry that catches, imports, and sells food to U.S. consumers. This section reports on economic impacts, landings revenue, landings volume, and landings (ex-vessel) prices of key species and species groups.

Key Commercial Species

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

Commercial Fisheries Economic Impacts

In 2023, the U.S. commercial fisheries and seafood industry generated $173.4 billion in sales impacts, $43.9 billion in income impacts, and $69.2 billion in value-added impacts, and supported 1.4 million full- and part-time jobs (**Table 1**; **Figure 2**).

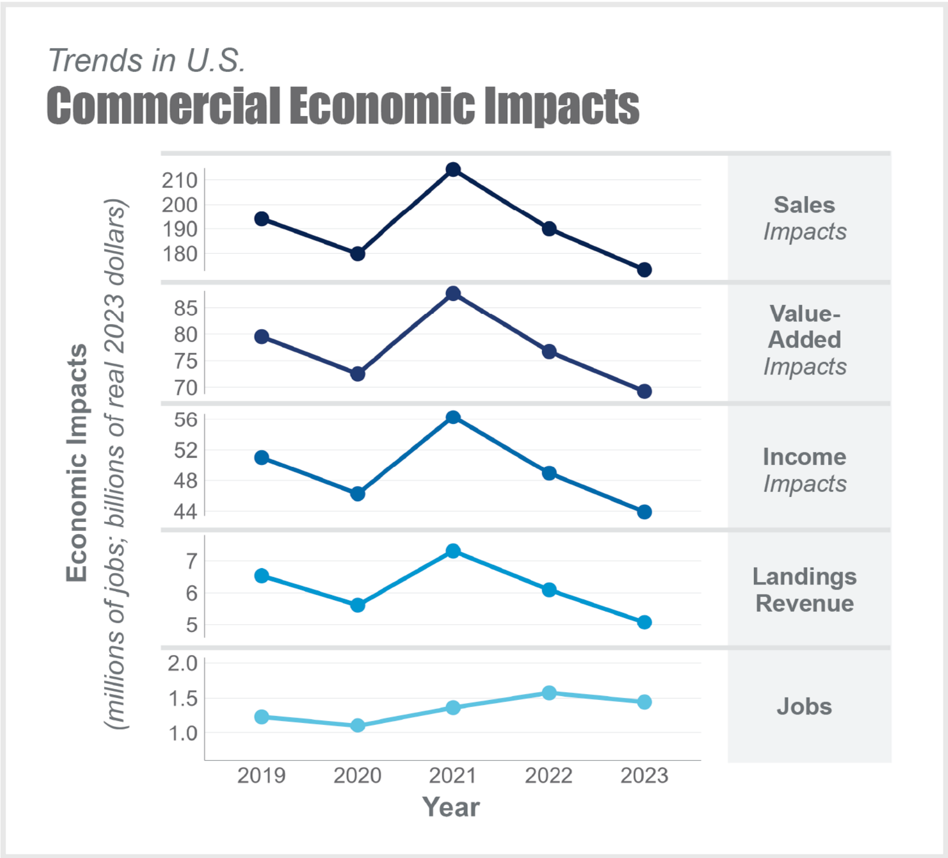


Figure 2. U.S. commercial economic impacts (with imports) trends for sales impacts, value-added impacts, income impacts, total revenue, and jobs from 2019 to 2023 (Data Tool). Dollars are in real 2023 dollars.

Importers generated the largest sales impacts ($94 billion) and value-added impacts ($28.6 billion), corresponding to the large volume of U.S. seafood imports. Imports share of total impacts remained steady from 2022 to 2023, reflecting the relative magnitude of imported seafood in the domestic consumer market (**Table 2**). Seafood imports totaled $25 billion—a 19 percent decrease from 2022—with a 9 percent decrease in import volume and an 11 percent decrease in import prices (average of $8.76 per kilogram). The largest share of the jobs impacts was generated by the retail sector (49 percent) and the largest share of the value-added impacts by the import sector (41 percent).

Table 1. **U.S. seafood industry economic impacts (with imports) trends (thousands of jobs; millions of real 2023 dollars) (Data Tool).**

Category	2019	2020	2021	2022	2023
Jobs	1,234	1,106	1,364	1,575	1,444
Sales Impacts	194,027	179,896	214,244	189,968	173,431
Income Impacts	51,007	46,258	56,291	48,950	43,914
Value-Added Impacts	79,508	72,513	87,719	76,707	69,226
Landings Revenue	6,523	5,602	7,232	6,050	5,076

Table 2. **2023 economic impacts by sector of the U.S. seafood industry (thousands of jobs; millions of dollars) (Data Tool).**

Sector	*With Imports*				*Without Imports*			
	Jobs	Sales Impacts	Income Impacts	Value-Added Impacts	Jobs	Sales Impacts	Income Impacts	Value-Added Impacts
Total Impacts	**1,444**	**173,431**	**43,914**	**69,226**	**716**	**47,557**	**17,423**	**24,719**
Commercial Harvesters	170	12,720	4,249	6,607	170	12,720	4,249	6,607
Seafood Processors and Dealers	118	16,092	5,078	7,060	54	7,450	2,351	3,269
Importers	342	93,980	15,062	28,649	NA	NA	NA	NA
Seafood Wholesalers and Distributors	101	13,715	4,507	6,449	26	3,567	1,172	1,677
Retail	714	36,925	15,017	20,462	466	23,820	9,651	13,167

National Commercial Highlights

Landings revenues totaled $5.1 billion—a 16 percent decrease from 2022. Decreased landings revenues were primarily the result of falling prices, which dropped 18 percent, though landings volume (8.4 billion pounds) increased 2 percent (**Figure 3**). In inflation-adjusted terms, this constitutes the lowest levels of landings value and average price over the last decade (2014 to 2023). Despite the increase in catch volumes from 2022, below average aggregate catch levels have persisted since 2020, which also contributed to the lower than average revenues in 2023 relative to the long-run average (**Figure 3**).

Economic and market forces were the largest drivers of declining revenues in 2023. Two key species highlight some of the recent challenges. Salmon revenues declined 45 percent in 2023 as high inventories and global supply put downward pressure on price as documented in the Alaska Seafood Snapshot report.[1,2] Shrimp revenues decreased 33 percent largely attributable to decreased landings price as domestic shrimp producers faced a supply and demand mismatch and unfair competition from imports, as determined by the U.S. International Trade Commission.[3,4] As a result of this unfair competition, the Department of Commerce levied countervailing and antidumping duties on imports of select countries. NOAA Fisheries' Shrimp Futures Initiative is working to understand the profound challenges facing the Southeast's shrimp fisheries.[5] Revenues increased for some species groups like American lobster and crab, while others like Alaska pollock saw more modest changes in revenues.

Costs to fishing industry inputs continue to be elevated. Trucking and ocean containerized freight rates peaked in 2022 and remained high through 2023, which affects seafood products since they are highly transported commodities.[6,7] High inventories and difficulty in acquiring cold storage persisted in some markets, which contributed to associated supply chain costs.[8] Increased costs throughout the supply chain can put downward pressure on landings prices. In addition, the producer price indices for seafood processors remained high through 2023 after peaking in 2022.[9,10] Retail seafood sales prices fell 4 percent, and sales were down 5 percent between 2022 and 2023. The seafood trade deficit decreased 20 percent in 2023, which was largely the result of a reduction of import value that fell 19 percent.

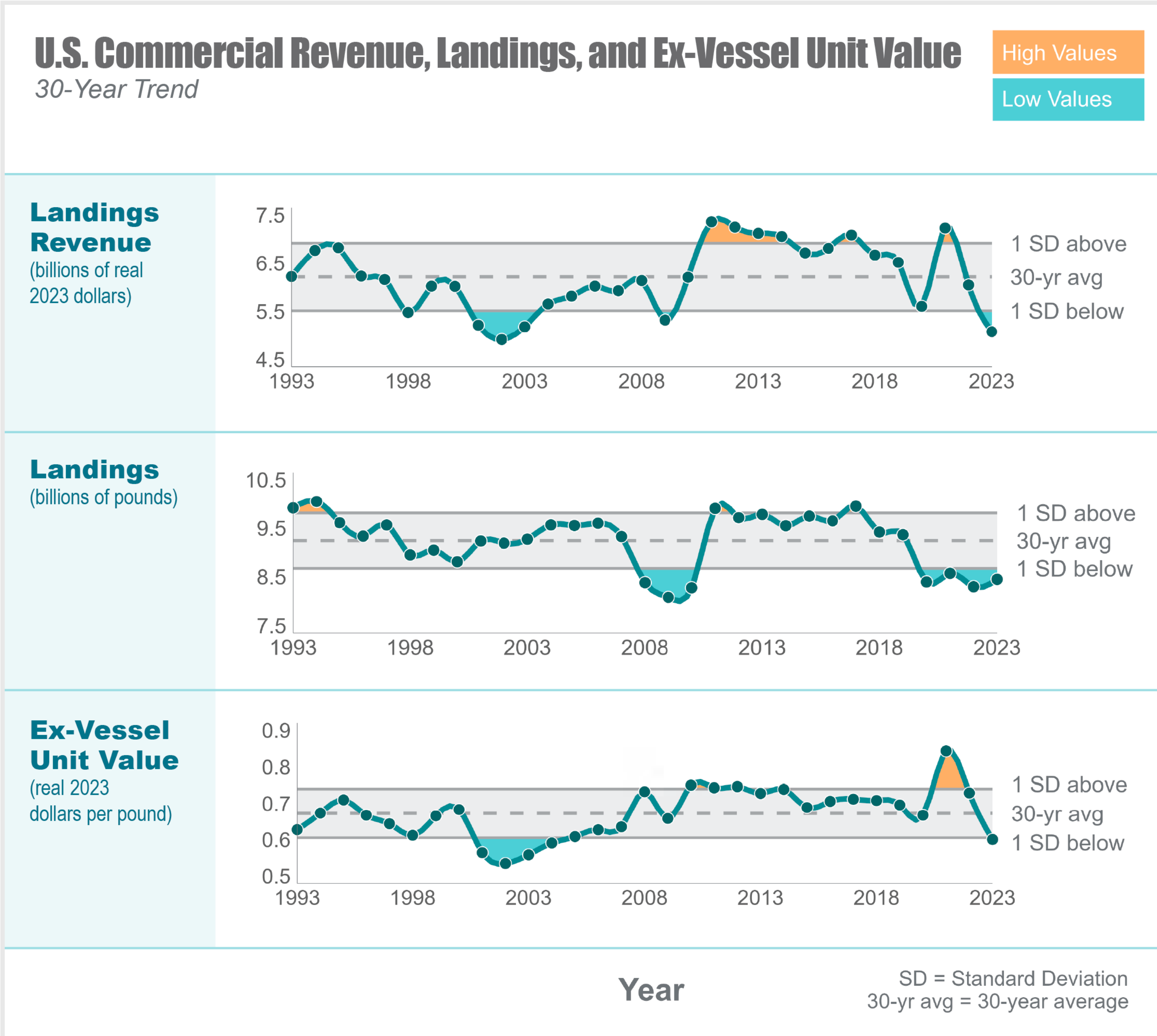


Figure 3. U.S. commercial landings revenue (top), landings (middle), and ex-vessel unit value (bottom) from 1993 to 2023. (Data Tool) Dollars are in real 2023 dollars. Shaded gray regions show plus or minus one standard deviation (solid gray lines) from the 30-year average (dashed gray line).

Catch Share Programs

Catch share programs are a market-based management tool where a secure share of fish is allotted to individual fishermen, cooperatives, fishing communities, and other entities for their exclusive use. Catch shares reduce overcapitalization, increase the economic viability of fisheries, and promote individual accountability for harvest. Currently, there are 17 U.S. federal catch share programs that include individual fishing quota programs (IFQs), individual transferable quota programs (ITQs), fishing community development quota programs (CDQs), fishing cooperatives, and fishing sectors.

Regional Commercial Highlights

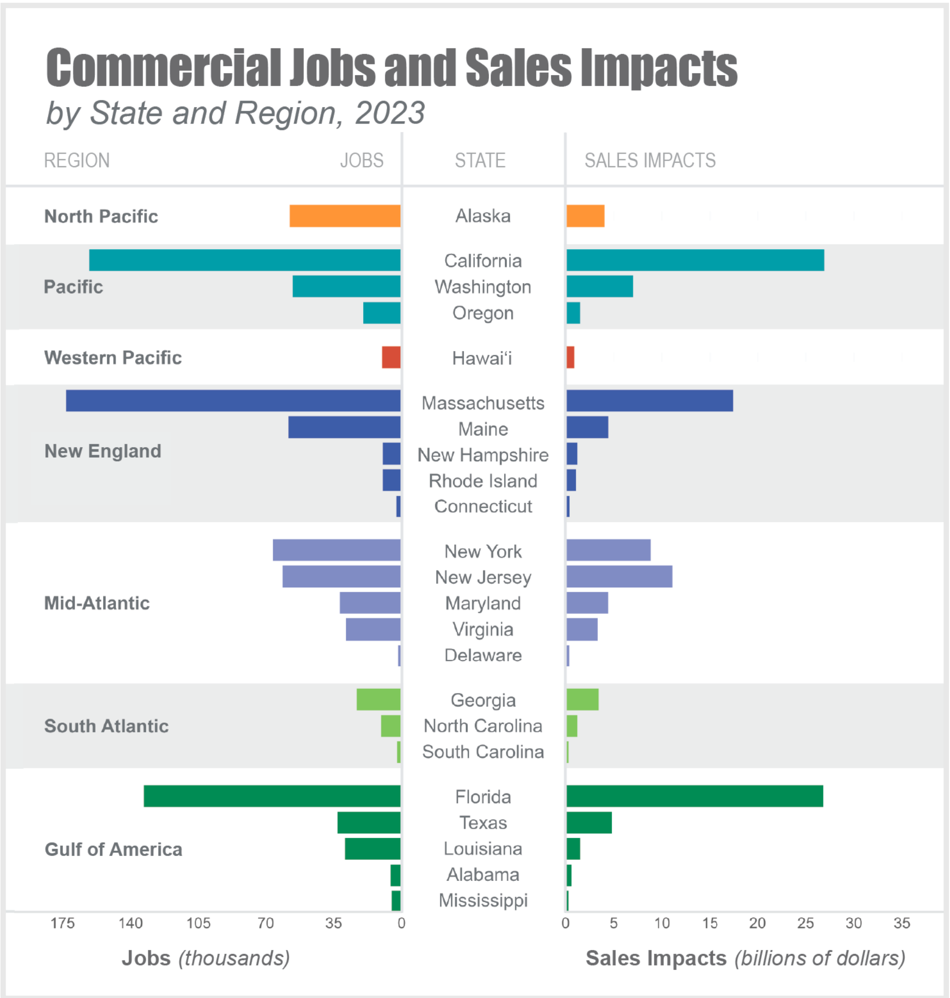
North Pacific: Alaska's commercial fishing and seafood industry supported 57,414 full- and part-time jobs and generated $4 billion in sales impacts (**Figure 4**), $1.8 billion in income impacts, and $2.2 billion in value-added impacts. Commercial harvesters generated the largest sales impacts ($2.8 billion), value-added impacts ($1.6 billion), income impacts ($1.3 billion), and employment impacts (41,499 jobs).

Pacific: California generated the largest employment impacts with 160,939 full- and part-time jobs (**Figure 4**). California also generated the largest sales impacts ($26.8 billion), value-added impacts ($9.5 billion), and income impacts impacts ($5.7 billion) (**Table 3**), largely due to the high volume of imports.

Western Pacific: Hawai'i's commercial fishing and seafood industry supported 9,870 full- and part-time jobs and generated $843.5 million in sales impacts (**Figure 4**), $247 million in income impacts, and $366.5 million in value-added impacts. Importers generated the largest sales impacts ($361.4 million), value-added impacts ($110.2 million), income impacts ($75.8 million), and employment impacts (4,182 jobs), while the harvest sector had the largest income impacts.

New England: Massachusetts generated the largest employment impacts with 172,826 full- and part-time jobs (**Figure 4**). Massachusetts also generated the largest sales impacts ($17.4 billion), value-added impacts ($6.6 billion), and income impacts ($4.2 billion) (**Table 3**).

Mid-Atlantic: New York generated the largest employment impacts with 66,132 full- and part-time jobs largely due to the high volume of imports (**Figure 4**). New Jersey generated the largest sales impacts ($11 billion), value-added impacts ($3.8 billion), and income impacts ($2.2 billion) (**Table 3**).



South Atlantic: Georgia generated the largest employment impacts with 22,802 full- and part-time jobs (**Figure 4**). Georgia also generated the largest sales impacts ($3.4 billion), value-added impacts ($1.2 billion), and income impacts ($726.9 million) (**Table 3**).

Gulf of America: Florida* generated the largest employment impacts with 132,776 full- and part-time jobs (**Figure 4**). Florida also generated the largest sales impacts ($26.8 billion), value-added impacts ($8.9 billion), and income impacts ($5 billion) (**Table 3**).

Figure 4. Commercial jobs (thousands) and sales impacts (billions of dollars) by state and region in 2023 (Data Tool).*

*While East and West Florida are managed separately—by the South Atlantic and Gulf Fishery Management Councils, respectively—information for Florida in this regional breakdown is generated for the entire state and included in the Gulf of America.

Table 3. **Jobs, sales impacts, income impacts, and value-added impacts generated by the U.S. seafood industry in 2023 (number of jobs; thousands of dollars) (Data Tool).**

Region	State	Jobs	Sales Impacts	Income Impacts	Value-Added Impacts
North Pacific	Alaska	57,414	3,971,932	1,769,775	2,193,273
Pacific	California	160,939	26,838,350	5,699,804	9,505,694
	Oregon	19,472	1,452,197	473,103	678,657
	Washington	55,773	6,929,556	1,825,598	2,795,269
Western Pacific	Hawai‘i	9,870	843,461	246,973	366,542
New England	Connecticut	2,358	366,421	77,620	128,902
	Maine	58,022	4,366,516	1,217,219	1,847,150
	Massachusetts	172,826	17,373,092	4,180,824	6,556,310
	New Hampshire	9,398	1,143,016	271,291	430,539
	Rhode Island	9,398	1,019,827	254,001	398,636
Mid-Atlantic	Delaware	1,644	315,076	58,084	101,829
	Maryland	31,525	4,343,733	981,540	1,578,923
	New Jersey	60,996	11,026,259	2,238,797	3,791,371
	New York	66,132	8,782,452	1,806,309	3,039,067
	Virginia	28,321	3,284,375	814,572	1,269,307
South Atlantic	Georgia	22,802	3,363,606	726,910	1,208,734
	North Carolina	10,384	1,144,631	277,730	437,245
	South Carolina	2,086	231,935	58,696	91,099
South Atlantic and Gulf of America	Florida*	132,776	26,752,126	4,985,247	8,930,928
Gulf of America	Alabama	5,457	535,430	141,496	210,650
	Louisiana	28,993	1,457,338	556,776	747,009
	Mississippi	4,884	228,909	89,168	115,506
	Texas	32,695	4,751,866	1,039,105	1,709,554

*While East and West Florida are managed separately—by the South Atlantic and Gulf Fishery Management Councils, respectively—information for Florida in this table is generated for the entire state.

Commercial Landings and Revenue

U.S. landings totaled 8.4 billion pounds with a revenue of $5.1 billion in 2023 (**Table 4**). This represented a 28 percent decrease from 2014 after adjusting for inflation and a 16 percent decrease from 2022 (**Figure 3**). The region with the highest volume and revenue was the North Pacific with 5.3 billion pounds landed and $1.6 billion in revenue (**Figure 5**). Finfish accounted for 88 percent of all landed weight and 45 percent of all landings revenue (**Figure 6**). Alaska pollock had the highest landings volume, and American lobster had the highest landings revenue in 2023.

Table 4. **U.S. commercial fisheries landings and revenue by region in 2023 (thousands of dollars; thousands of pounds) (Data Tool).**

Region	Revenue	Landings
U.S. Total	**5,075,649**	**8,449,482**
North Pacific	1,613,434	5,282,176
Pacific	617,316	864,711
Western Pacific	124,052	28,922
New England	1,350,534	415,967
Mid-Atlantic	404,779	494,772
South Atlantic	171,271	97,539
Gulf of America	794,263	1,265,395

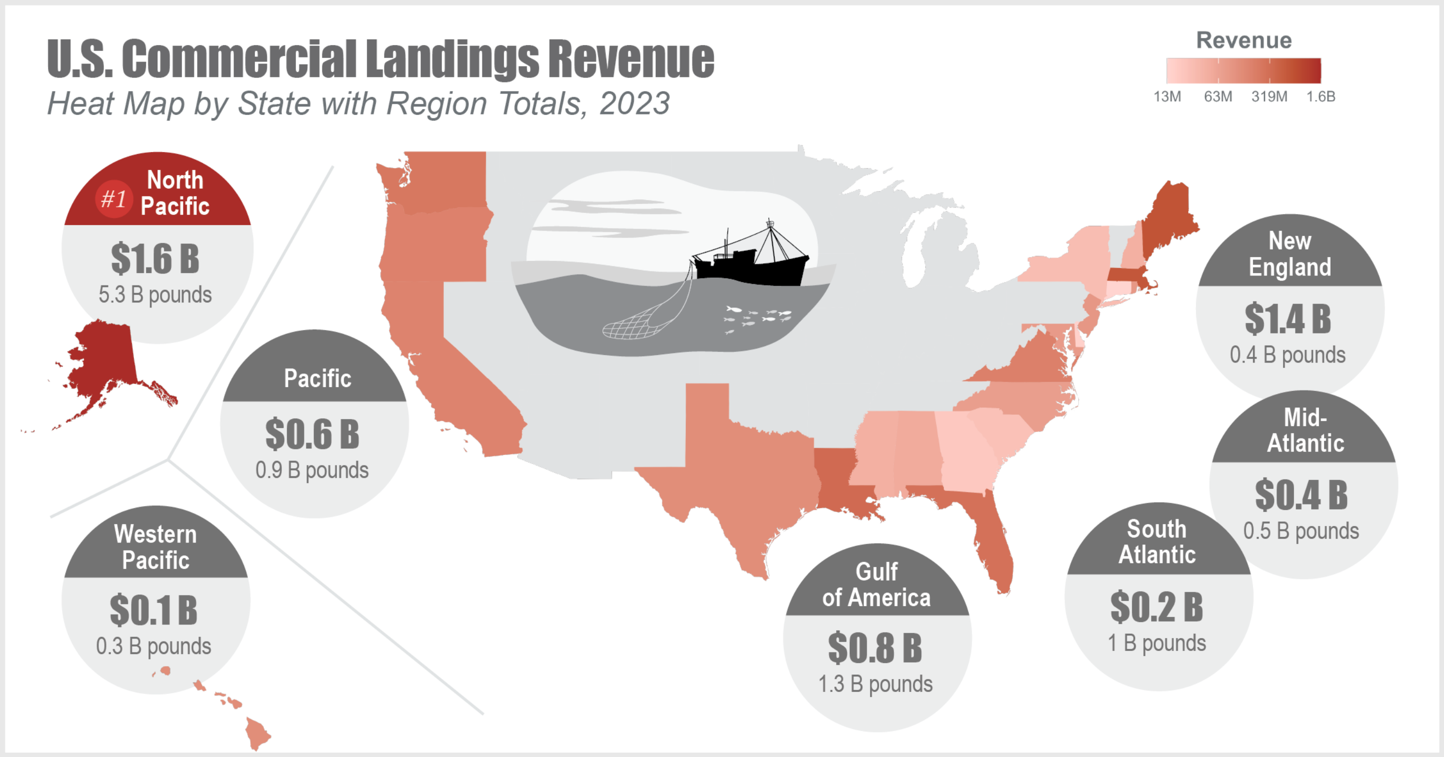


Figure 5. U.S. commercial landings revenue heat map by state with regional totals in 2023 (Data Tool).

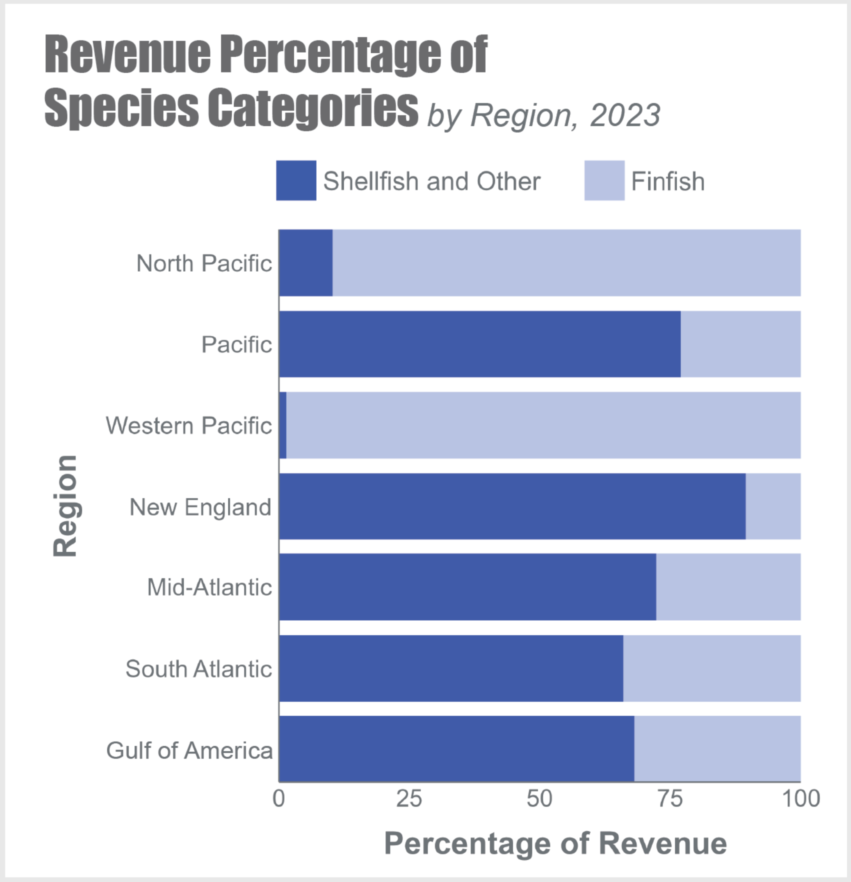


Figure 6. U.S. commercial revenue percentage breakdown of species categories by region in 2023 (Data Tool).

Recreational Fisheries

Saltwater recreational fishing is among the nation's favorite pastimes and remains a key contributor to the national economy. Recreational fishing refers to fishing for leisure rather than to sell fish (commercial fishing) or for subsistence.

Key Recreational Species[11]

- Atlantic croaker and spot
- Dolphinfish
- Pacific halibut
- Pacific salmon[12]
- Red snapper
- Rockfishes and scorpionfishes[13]
- Seatrout[14]
- Striped bass
- Summer flounder
- Tunas[15]

Recreational Economic Impacts

Economic impacts from recreational fishing expenditures supported 694,041 jobs across the United States in 2023, an increase of less than 1 percent from 2022 (**Table 5**; **Figure 7**). Recreational fishing also generated about $145.4 billion in sales impacts (2 percent increase from 2022), $47.1 billion in income impacts (1 percent increase from 2022), and $78.4 billion in value-added impacts (1 percent increase from 2022) (**Table 5**).

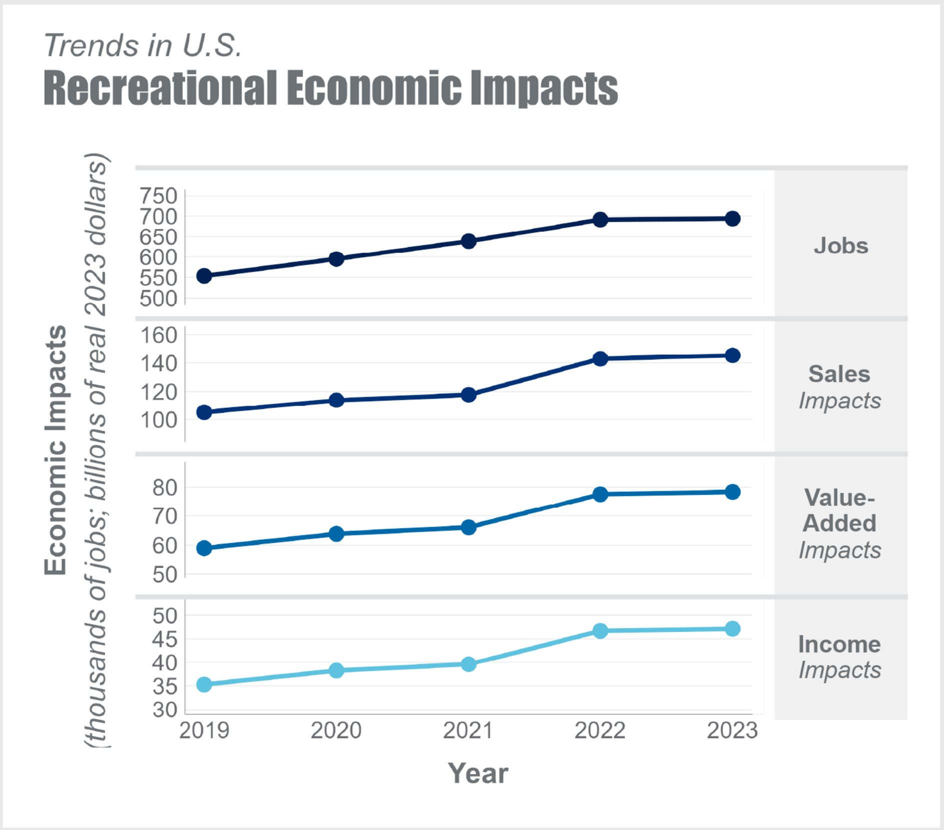


Figure 7. U.S. recreational economic impacts trends for jobs, sales impacts, value-added impacts, and income impacts from 2019 to 2023 (Data Tool). Dollars are in real 2023 dollars.

Table 5. Recreational economic impacts trends for the United States (number of jobs; millions of real 2023 dollars) (Data Tool).

Category	2019	2020	2021	2022	2023
Jobs	553,499	594,734	638,426	691,565	694,041
Sales Impacts	105,057	113,773	117,731	142,921	145,368
Income Impacts	35,284	38,225	39,589	46,686	47,130
Value-Added Impacts	58,940	63,790	66,001	77,550	78,366

Across the United States, impacts from durable equipment expenditures (e.g., rods and reels, fishing-related equipment, boats, and vehicles) accounted for 80 percent of total job impacts, 81 percent of sales impacts, 82 percent of income impacts, and 81 percent of value-added impacts (**Table 6**). Shore-based fishing trips had the second highest economic impact, accounting for 8 percent of employment and 8 percent of sales.

Table 6. Economic impacts of expenditures on recreational fishing trips (by mode) and durable equipment purchases (number of jobs; millions of dollars) in 2023 (Data Tool).

Category	Jobs	Sales Impacts	Income Impacts	Value-Added Impacts
For-Hire Expenditures	42,599	5,490	2,162	3,251
Private Boat Expenditures	38,244	10,805	2,670	5,417
Shore Expenditures	57,282	11,911	3,600	6,562
Durable Equipment Purchases	555,916	117,162	38,698	63,137

Expenditures for fishing trips and durable equipment totaled $73.4 billion. The region with the highest total trip expenditures was the Gulf of America with $5.8 billion (**Figure 8**; **Table 7**). Approximately $14.4 billion of U.S. expenditures were related to trip expenses. Total trip expenditures were composed of expenses on trips in the shore (43.6 percent), private boat (40.2 percent), and for-hire (16.2 percent) mode (**Figure 9**). Durable equipment expenditures totaled $59 billion, with the largest portion coming from boat expenses ($42.4 billion).

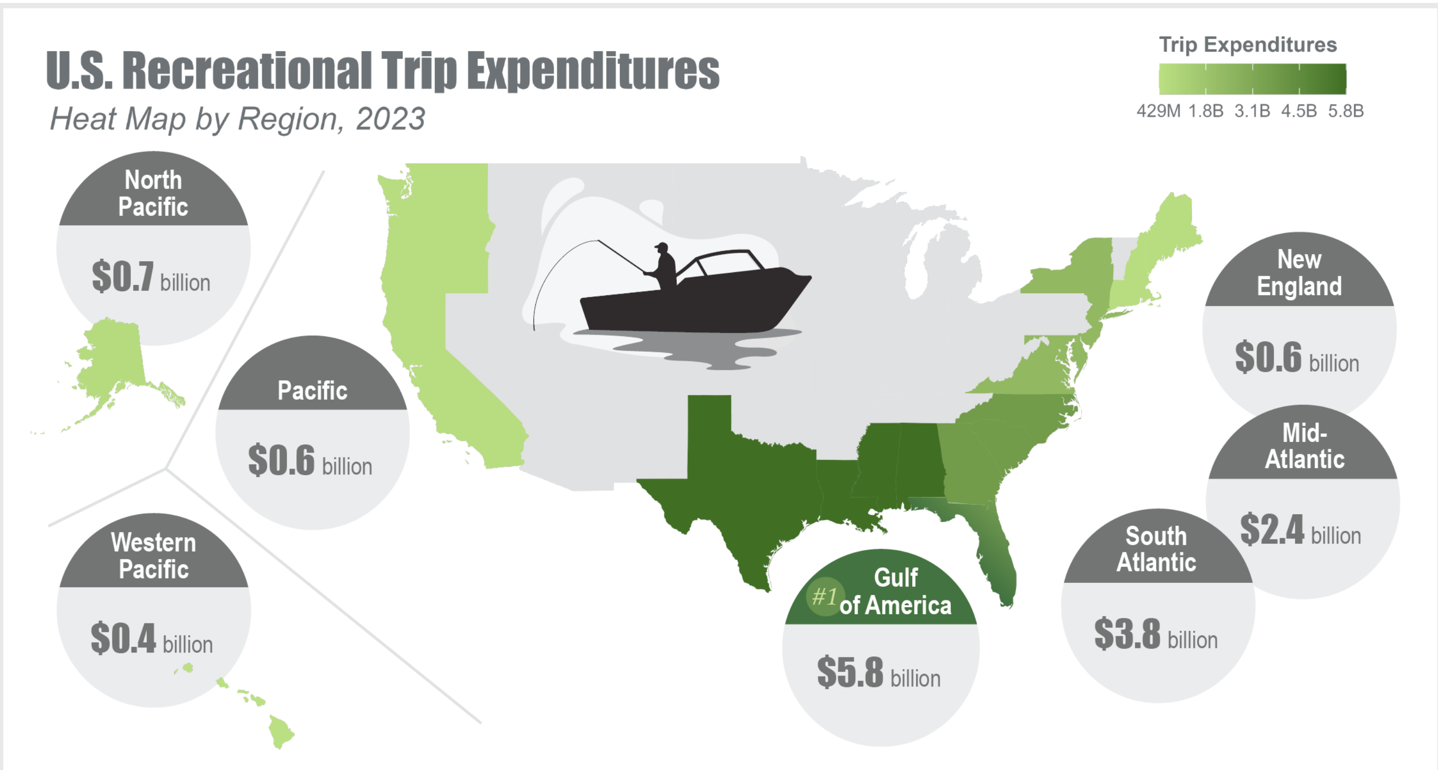


Figure 8. U.S. recreational trip expenditures heat map with regional totals. A logarithmic scale was used to scale expenditures to generate the heat map (Data Tool). East Florida is included in the South Atlantic; West Florida is included in the Gulf of America.

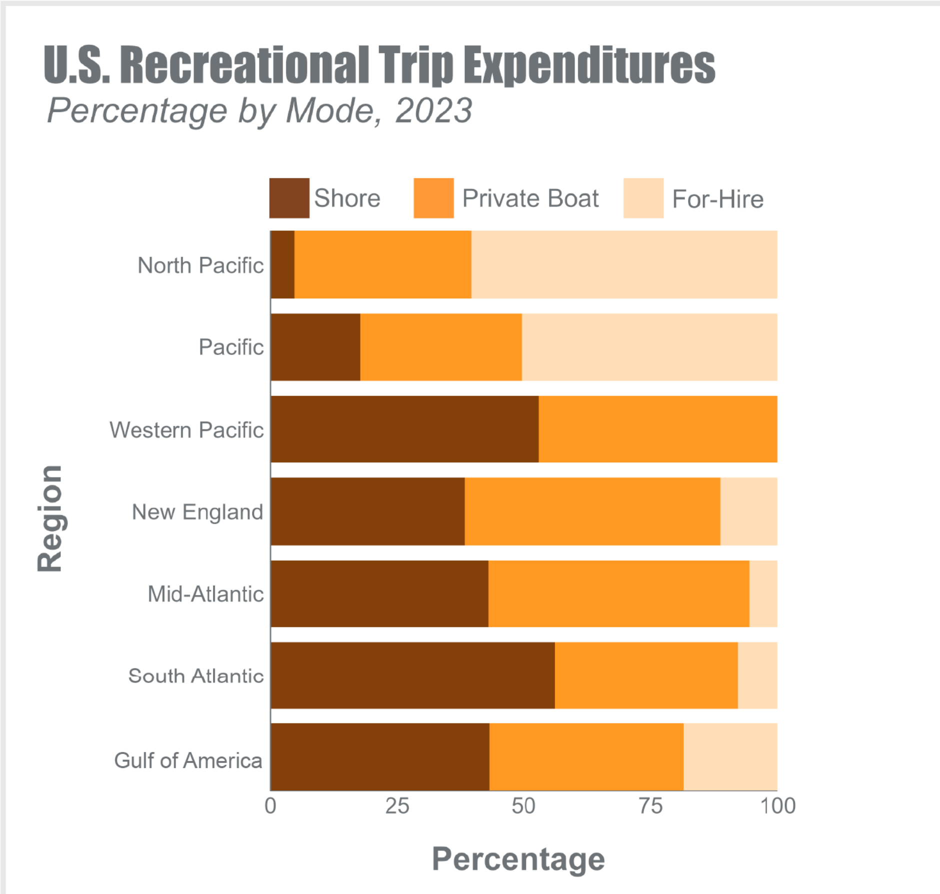


Figure 9. Percentage of trip expenditures by mode and region for U.S. recreational fisheries in 2023 ([Data Tool]).

National Recreational Highlights

Nationwide, recreational anglers took approximately 204.1 million saltwater fishing trips around the country (**Figure 10**). This number represents a 2 percent increase from 2022. Approximately 62 percent of fishing trips were taken via shore. West Florida anglers took the most fishing trips (45 million trips), followed by those in East Florida and North Carolina.

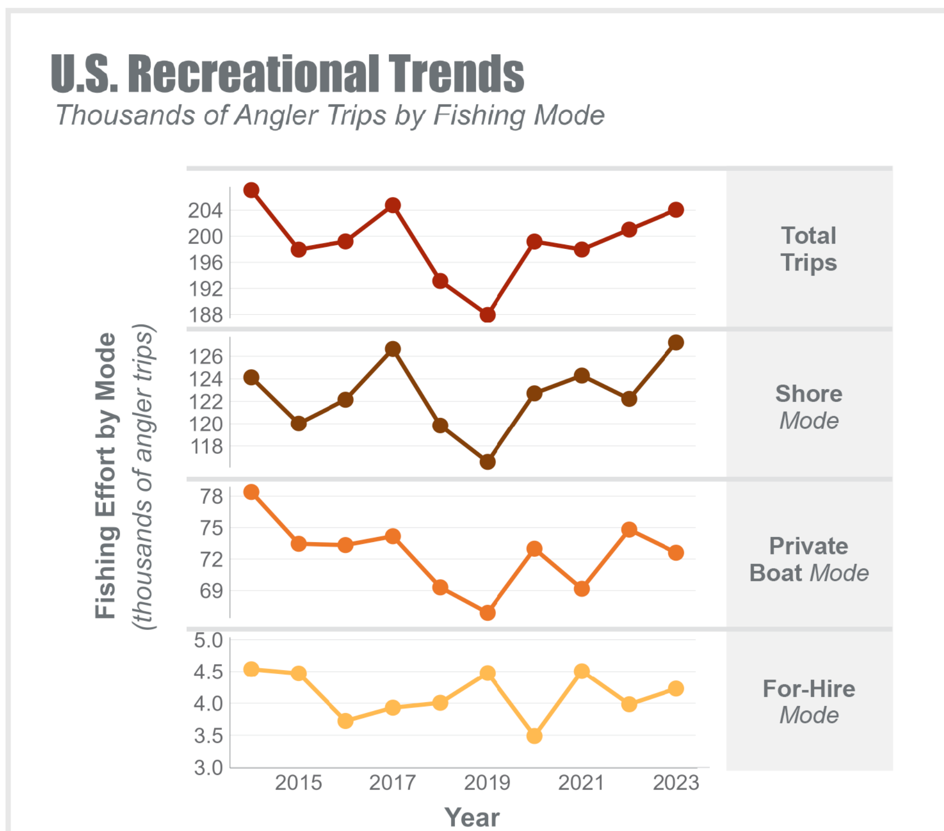


Figure 10. U.S. recreational trends in thousands of trips by fishing mode from 2014 to 2023 ([Data Tool]).

Regional Recreational Highlights—Pacific Region

Recreational anglers in the Pacific region had over $612 million in expenditures related to recreational fishing trips (**Figure 8**). Across three states, anglers along the Pacific Coast took over 1.9 million fishing trips. Of all trips, shore trips accounted for 40 percent, private boat trips accounted for 32 percent, and for-hire trips accounted for 28 percent.

California had the highest total expenditures on trips ($479 million) and took the most trips (1.6 million trips). Oregon anglers had the second highest expenditures on trips ($84 million) and took 218 thousand trips. The impacts from trip expenditures were highest in California with 5,028 jobs and $724 million in sales. Oregon had the second-most jobs supported by recreational fishing (794), followed by Washington (468). Oregon had the second-most in sales ($101 million), followed by Washington ($67 million) (**Figure 11**).

Of the Pacific region's key species and species groups, salmon (596 thousand fish), black rockfish (573 thousand fish), and mackerels (407 thousand fish) were caught most frequently by recreational anglers.

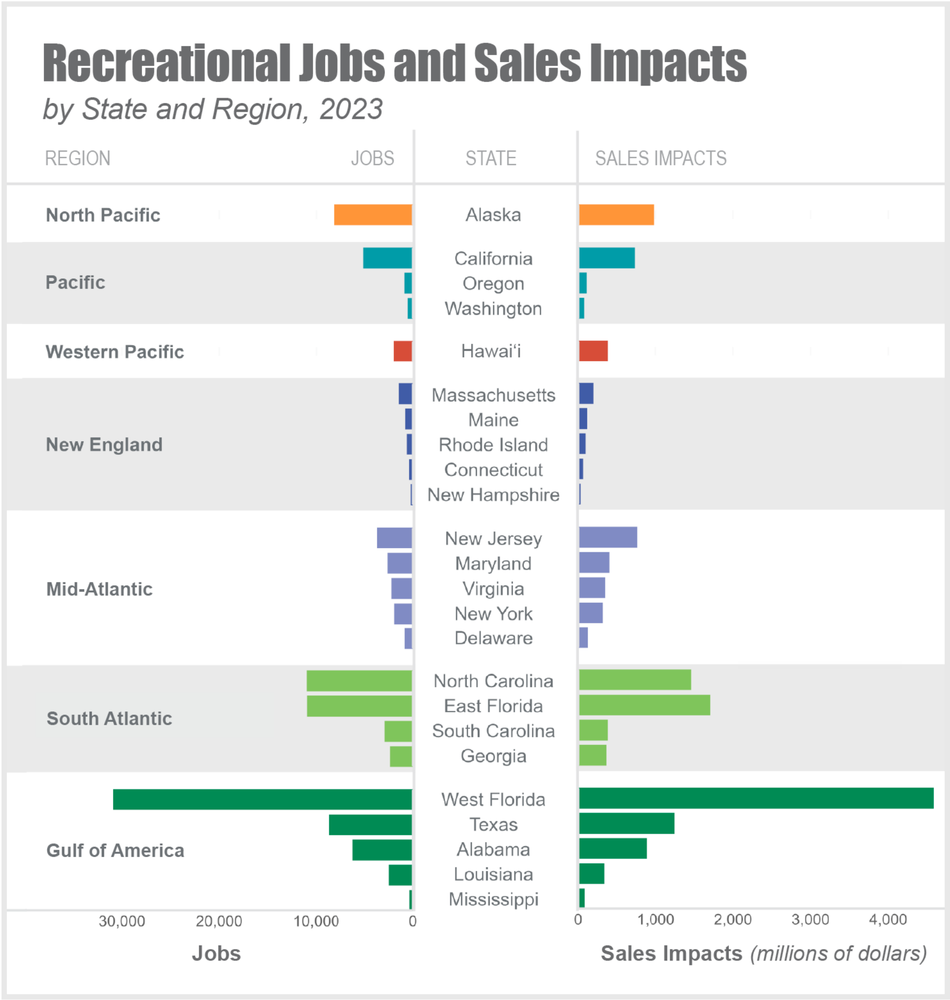


Figure 11. Recreational jobs and sales impacts (millions of dollars) of expenditures on recreational fishing trips by state and region in 2023 (Data Tool).

Table 7. **Jobs, sales impacts, income impacts, and value-added impacts of expenditures on recreational fishing trips in 2023 (number of jobs; millions of dollars) (Data Tool).**

Region	State	Jobs	Sales Impacts	Income Impacts	Value-Added Impacts
North Pacific	Alaska	8,122	976	388	569
Pacific	California	5,028	724	299	436
	Oregon	794	101	39	63
	Washington	468	67	24	40
Western Pacific	Hawaiʻi	1,913	373	104	196
New England	Connecticut	345	56	20	35
	Maine	731	106	35	64
	Massachusetts	1,380	190	86	124
	New Hampshire	157	23	11	15
	Rhode Island	569	89	34	58
Mid-Atlantic	Delaware	774	119	35	59
	Maryland	2,546	395	135	241
	New Jersey	3,644	750	243	443
	New York	1,879	311	114	205
	Virginia	2,164	336	113	212
South Atlantic	East Florida	10,906	1,702	554	1,032
	Georgia	2,281	356	119	211
	North Carolina	10,928	1,452	536	863
	South Carolina	2,851	372	121	220
Gulf of America	Alabama	6,155	878	258	472
	Louisiana	2,422	327	96	164
	Mississippi	306	73	13	30
	Texas	8,615	1,238	419	710
	West Florida	30,844	4,580	1,556	2,790

Photo credit: iStock.

Recreational Harvest and Release Trends

The species caught most frequently by recreational anglers in the United States were Atlantic croaker and spot (75.6 million fish), seatrout (61.6 million fish), and striped bass (28.8 million fish).

From 2014 to 2023, the species with the largest increases in catch were red snapper (41 percent), seatrout (19 percent), and tunas (3 percent), while the largest decreases were summer flounder (-37 percent), Atlantic croaker and spot (-33 percent), and dolphinfish (-27 percent). From 2022 to 2023, the species with the largest increases in catch were tunas (16 percent), dolphinfish (16 percent), and Pacific salmon (14 percent), while the species with the largest decreases were red snapper (-25 percent), striped bass (-14 percent), and seatrout (-12 percent).

Recreational anglers in Virginia caught the most Atlantic croaker and spot (18.4 million fish), West Florida anglers caught the most seatrout (31.2 million fish), and New Jersey anglers caught the most striped bass (9 million fish) and the most summer flounder (15.4 million fish). Alaska caught the most Pacific halibut (545 thousand fish) and Pacific salmon (1 million fish).

Spotlight Species—Lingcod

Lingcod

258 thousand caught in 2023

This year's species in the spotlight highlights a recreational gamefish species that is ubiquitous throughout the Pacific region. Lingcod (*Ophiodon elongatus*) range from Baja California, Mexico, to Kodiak Island in the Gulf of Alaska, and are an icon of the West Coast recreational groundfish fishery. Also known as dinosaurs of the deep, they are voracious predators coveted for their own food value. They mostly occur in rocky habitats on the continental shelf, and while primarily caught in boat-based modes, they can occasionally be caught from shore.

Recreational anglers in the Pacific Region caught (harvested and released) over 258 thousand lingcod in 2023. Of the total catch, approximately 67 percent, or 173 thousand fish, were harvested with the remainder being released. Anglers caught 88 thousand lingcod in California, 86 thousand in Oregon, and 84 thousand in Washington. From 2014 to 2023, anglers in the Pacific region caught a total of 3.8 million lingcod—58 percent of the total were caught in California, 22 percent in Oregon, and 20 percent in Washington (**Figure 12**).

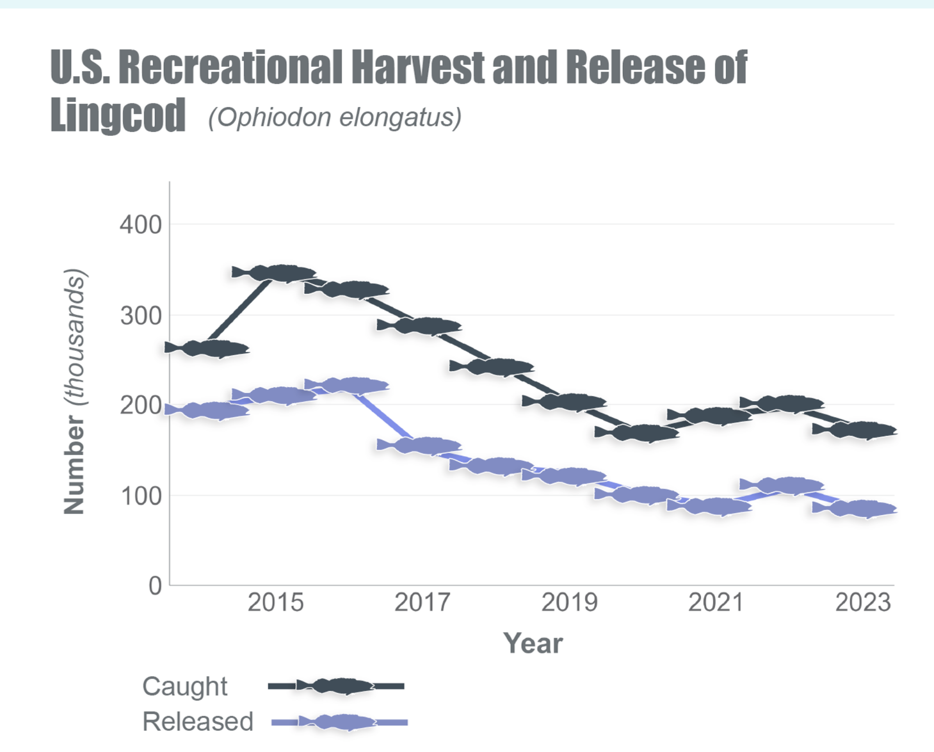


Figure 12. Recreational catch and release of lingcod in the Pacific region from 2014 to 2023 (Data Tool).

Fishing Communities

Fishing is a key driver of the history and development of U.S. coastal communities and remains central to their social, economic, and cultural cores. NOAA Fisheries has developed indicators to characterize fishing community engagement and reliance on commercial and recreational fisheries, as well as social and economic conditions in these communities. These indicators were assessed for 4,889 coastal communities in 2021.[16]

Fishing Engagement and Reliance

Fishing engagement and reliance indicators are used to identify coastal communities that are most closely associated with fishing. A community that is engaged or reliant on commercial or recreational fishing may be particularly susceptible to changes in the condition of the fisheries in which they participate.

Commercial Fishing Indicators

147 coastal communities (3 percent) were identified as significantly engaged and/or reliant on commercial fishing activity in 2021.

Engagement indicator

Measures commercial fishing activity using the number of permits and dealers, and pounds and value landed in a community.

Reliance Indicator

Adjusts these measures of fishing activity to account for each community's population size.

Recreational Fishing Indicators

322 coastal communities (7 percent) were identified as significantly engaged and/or reliant on recreational fishing activity in 2021.

Engagement Indicator

Measures the level of recreational fishing activity using shore, private vessel, and for-hire fishing effort.

Reliance Indicator

Adjusts these measures of fishing activity to account for each community's population size.

Social and Economic Indicators

There are a suite of social and economic indicators that can be used to describe conditions in fishing communities and their potential resilience to forces of change. These include demographic indicators (such as poverty, population composition, and personal disruption), civic transformation indicators that capture challenges to the ability of a working waterfront to support fishing employment and infrastructure (such as housing disruption, retiree migration, and population density), and economic indicators that characterize the strength and stability of the workforce and housing stock (such as labor force structure and housing characteristics).

Comparing Coastal Fishing Communities

Some commercial and recreational fishing communities may be more susceptible than others to shocks in the fishing industry (e.g., substantial changes to fishing revenues). The figure below presents a subset of social indicators selected for comparison between highly engaged and/or reliant commercial fishing communities and all other coastal communities (**Figure 13**).[17,18] Three percent of coastal communities were highly engaged and/or reliant on commercial fishing. The percentage of communities ranked as medium and high vulnerability for each index are displayed. When compared to all other communities in coastal counties, commercial fishing communities show similar results for the labor force and population composition indicators with at least 40 percent showing medium to high vulnerability. In contrast, there are greater differences between fishing communities and all other communities for the personal disruption, poverty, housing disruption, and housing characteristics indicators. The percent of fishing communities that fell into the medium to high range for these index measures was 5 percent to 14 percent higher than that for all other coastal communities (**Figure 13**).

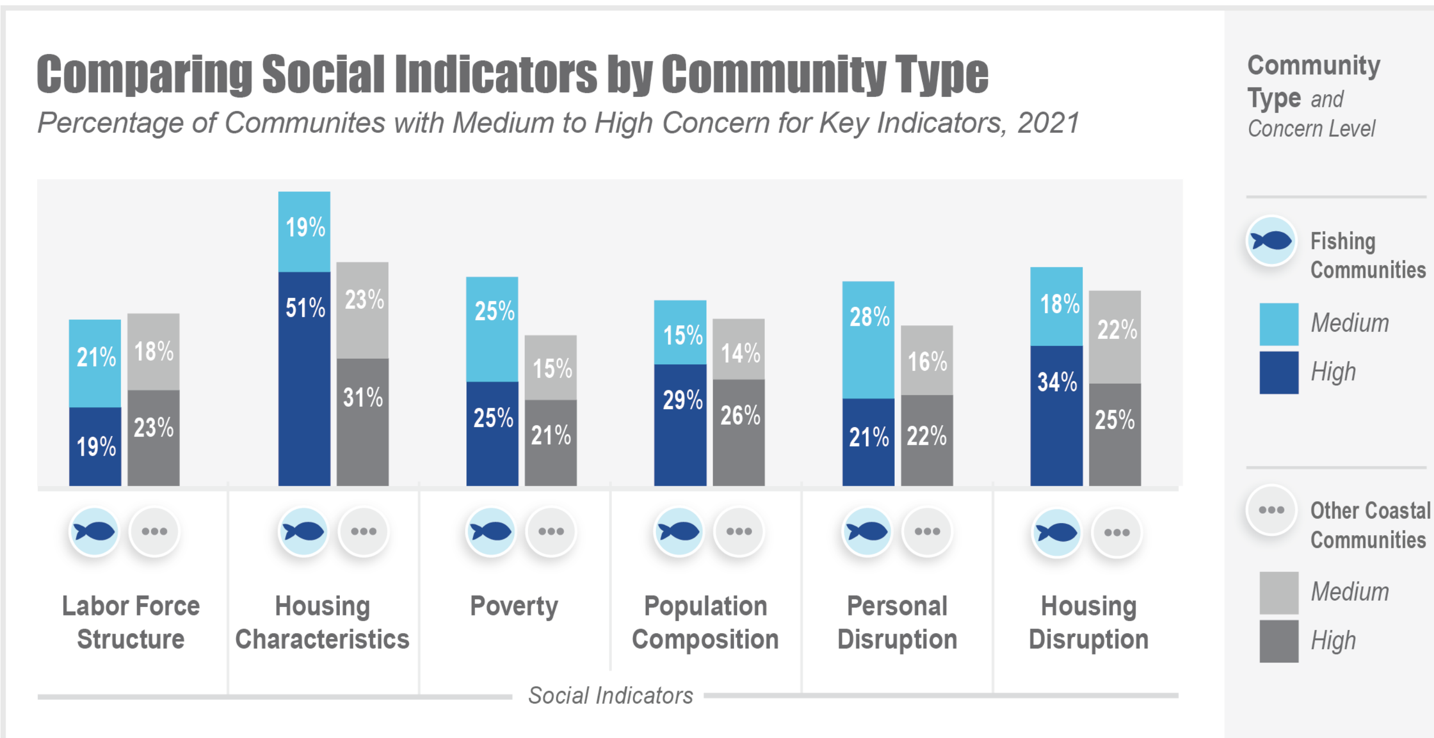


Figure 13. **Comparison of key social vulnerability indicators by community type in 2021.**

Spotlight Topics

This year's report spotlights two topics. The first provides an overview of the economic, social, and cultural fishery benefits in U.S. Pacific Islands Territories. The second provides an overview of oyster aquaculture in the United States.

U.S. Territories in the Pacific Islands Region
Economic, Social, and Cultural Fishery Benefits

The Pacific Islands Fisheries Science Center (PIFSC) recently established the first set of baseline estimates of economic contributions for U.S. territory fisheries in the Pacific Islands region, publishing reports for American Samoa,[19] the Commonwealth of the Northern Mariana Islands (CNMI), and Guam.[20] These reports describe fishery contributions in terms of jobs, income, value-added impacts, and total economic output to island economies (**Table 8**). This information is critical for fisheries managers to consider and reference when assessing policies or evaluating ecosystem factors that could potentially affect fishing activities and island economies across the Pacific Islands region.

Table 8. Economic impacts of commercial fisheries in the U.S. Pacific Islands Territories in 2019 (number of jobs; millions of dollars).

Category	American Samoa	CNMI	Guam
Jobs	3,500	14	44
Sales Impacts	381.07	1.55	3.75
Income Impacts	74.89	0.34	1.36
Value-Added Impacts	142.96	0.51	2.18

American Samoa is home to StarKist Samoa, the Pacific region's only remaining domestic tuna cannery, and Pago Pago harbor ranked in the top 7 of U.S. ports in terms of landings value ($97.2 million) in 2023. Commercial fisheries in American Samoa include purse seine, longline, and small boat fisheries. PIFSC research finds that commercial fishing supports approximately 20 percent of total employment in American Samoa. Small boat fisheries in Guam and the CNMI target pelagic fish, deepwater bottomfish, and nearshore species, and operate at a much smaller scale than purse seine and longline fisheries in American Samoa. Despite the smaller scale of fisheries in Guam and the CNMI, the number of jobs supported per $1 million in ex-vessel revenues are highest in Guam, followed by American Samoa, and slightly lower in the CNMI (**Figure 14**). The island of Guam has a larger and more developed economy, supporting more industries, thereby providing more opportunities for spending to circulate and stimulate further economic activity.

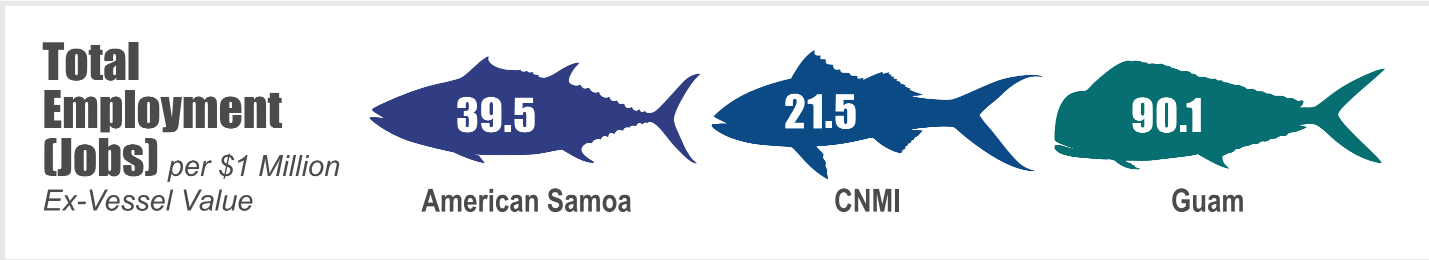


Figure 14. Total employment (jobs) supported per $1 million ex-vessel value in the U.S. Pacific Islands Territories in 2019.

It is important to note that small boat fisheries in the Pacific Islands region also provide valuable contributions to local food security, sustain culture and traditions, and support resilient island communities. Recent work from PIFSC describes and quantifies these vital non-market benefits for American Samoa,[21] Guam,[22] and the CNMI.[23] Fishers use their catch for home consumption, share fish widely within communities, and sell fish for supplemental income and to provide fresh local seafood for consumers (**Figure 15**). Across the Pacific Islands region, fishing is culture, can be at the core of an individual's identity, and fosters social cohesion throughout the island community (**Figure 16**). Further research to account for the full economic, social, and cultural benefits of fisheries continues to be a priority for PIFSC and NOAA Fisheries.[24] This research would allow us to more fully acknowledge the variety of ways that people fish and benefit from fishing, and to assess the distribution of these benefits.

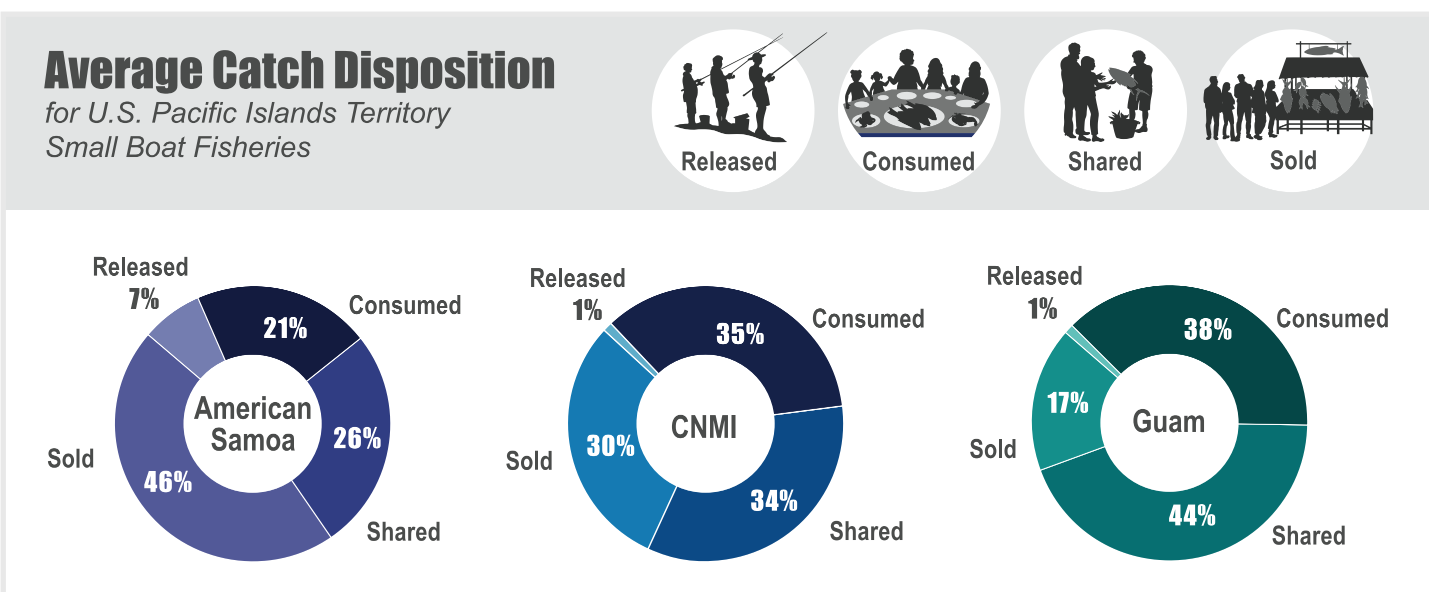


Figure 15. Average catch disposition for U.S. Pacific Islands Territory small boat fisheries.

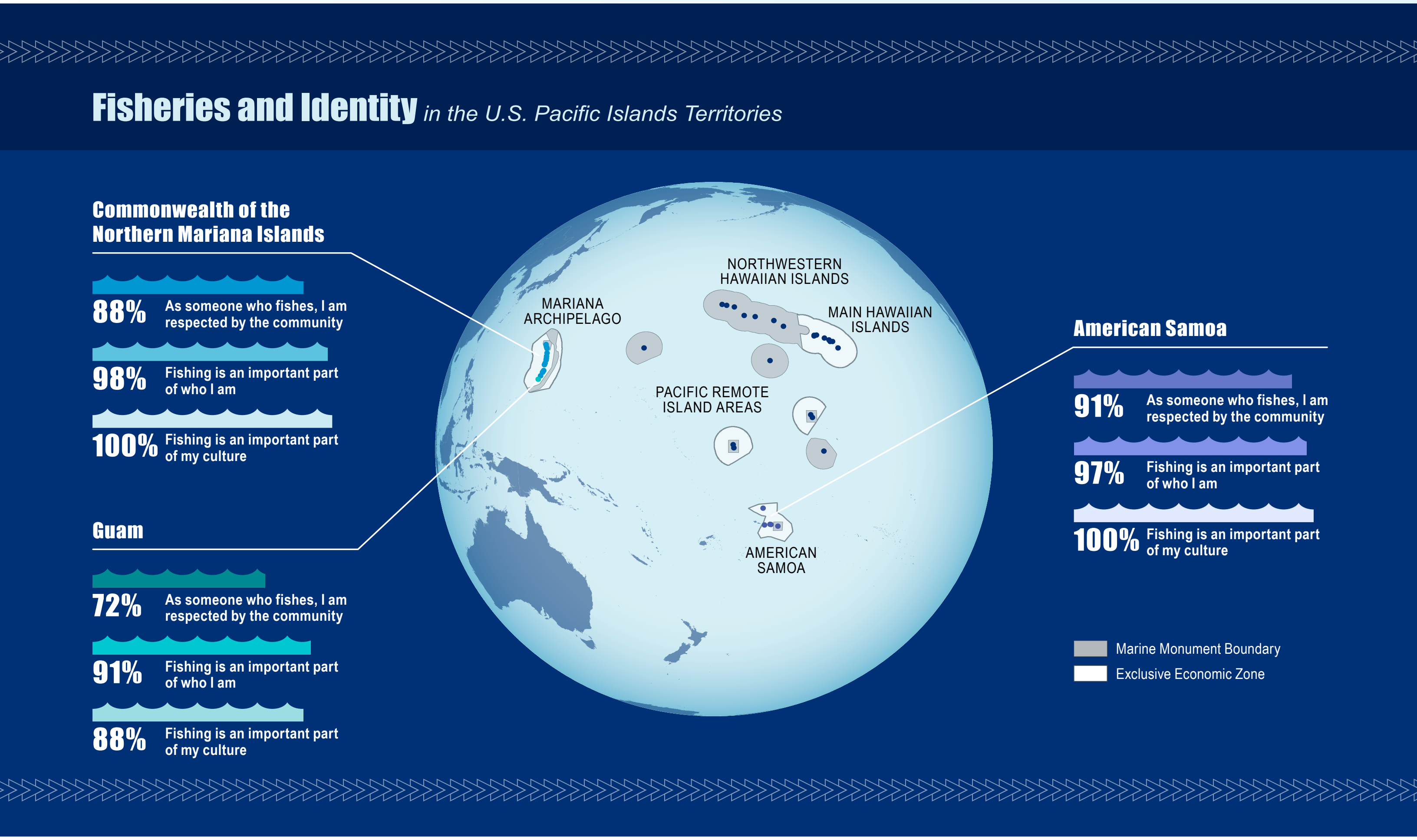


Figure 16. Fisheries and identity in the U.S. Pacific Islands Territories.

Oyster Aquaculture in the United States

Few shellfish invoke as much regional pride as the oyster, symbolizing the unique connection between local communities and their coastal waters. Revered for its distinct taste and its deep cultural significance, the oyster represents a timeless tradition of harvesting from the sea.

Oysters are farmed in every coastal region of the United States. The species, as well as the gear used to grow them, vary depending on the local conditions, regulations, costs, and market opportunities. On the East Coast, growers cultivate *Crassostrea virginica*, commonly called the Eastern oyster, while on the West coast, producers raise the Pacific oyster (*Magallana gigas*) most commonly as well as the European oyster (*Ostrea edulis*), Olympia oyster (*Ostrea lurida*), Kumamoto oyster (*Magallana sikamea*), and even the Eastern oyster (*C. virginica*). For all species of oysters, their taste and shape are influenced by their local environment and growing conditions, making each one a unique reflection of the coastal community and waters they come from.

Oyster cultivation can be separated into two distinct categories: bottom culture and off-bottom culture. Common bottom culture methods include "spat-on-shell," bottom cages, and rack and bag systems (**Figure 17**). Off-bottom culture equipment includes surface floats with cages, adjustable longlines, and bag systems (**Figure 18**). Use of off-bottom culture methods has increased in recent years due to specific biological and economic advantages. These include a higher growth rate, shell uniformity, deep-cup shape, ease of shucking, and their suitability for the premium half-shell market—fetching higher farm-gate prices. Oyster farming does not require the addition of external feed and can provide significant habitat and nutrient removal ecosystem services. Education regarding these environmental benefits, along with the potential human health advantages of consuming oysters, could drive consumer appreciation and increased consumption.

Figure 17. On-bottom oyster aquaculture with the tide receded.
Photo credit: Pixabay.

Figure 18. Off-bottom oyster aquaculture.
Photo credit: Sea Grant.

Oysters are the most valuable sector of U.S. marine aquaculture with a farm-gate value of $205 million in 2023 (**Figure 19**) (FOSS Tool).[25] While the Northeast region was the most valuable in 2023 ($85 million), the Gulf of America region produced the most oysters of any region in the United States (15 million pounds meat weight). Oysters are also a significantly traded commodity with an import value of $120 million and an export value of $20 million in 2023 (**Figure 20**). Canada is the largest oyster trade partner with the United States, and the oyster trade sector is dominated by farmed oysters. Oyster imports have increased, particularly since 2020. This, combined with strong domestic oyster production, signals a healthy demand for oysters in the United States. For the first time, oysters were included in the National Fisheries Institute's Top 10 List for Seafood Consumption (2022), which further suggests a growing demand for oysters by the American consumer.[26]

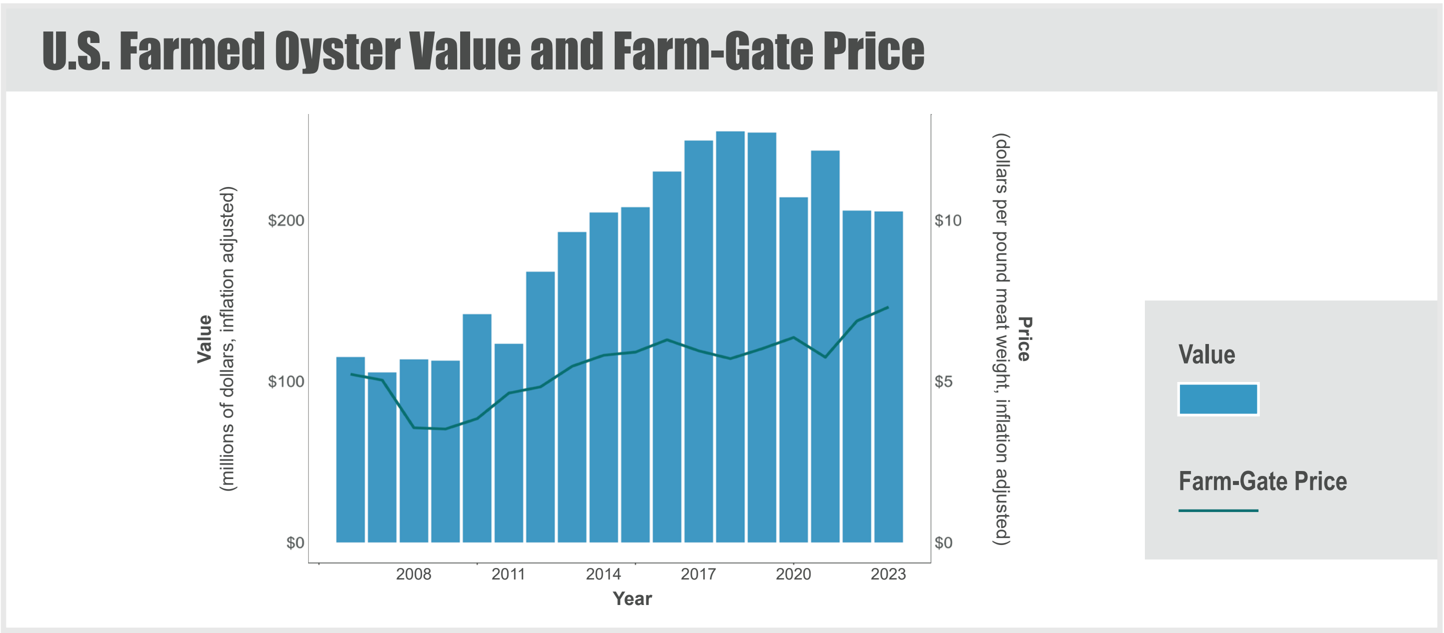


Figure 19. U.S. oyster aquaculture total annual value and price from 2006 to 2023. Values are in real 2023 dollars (FOSS Tool).

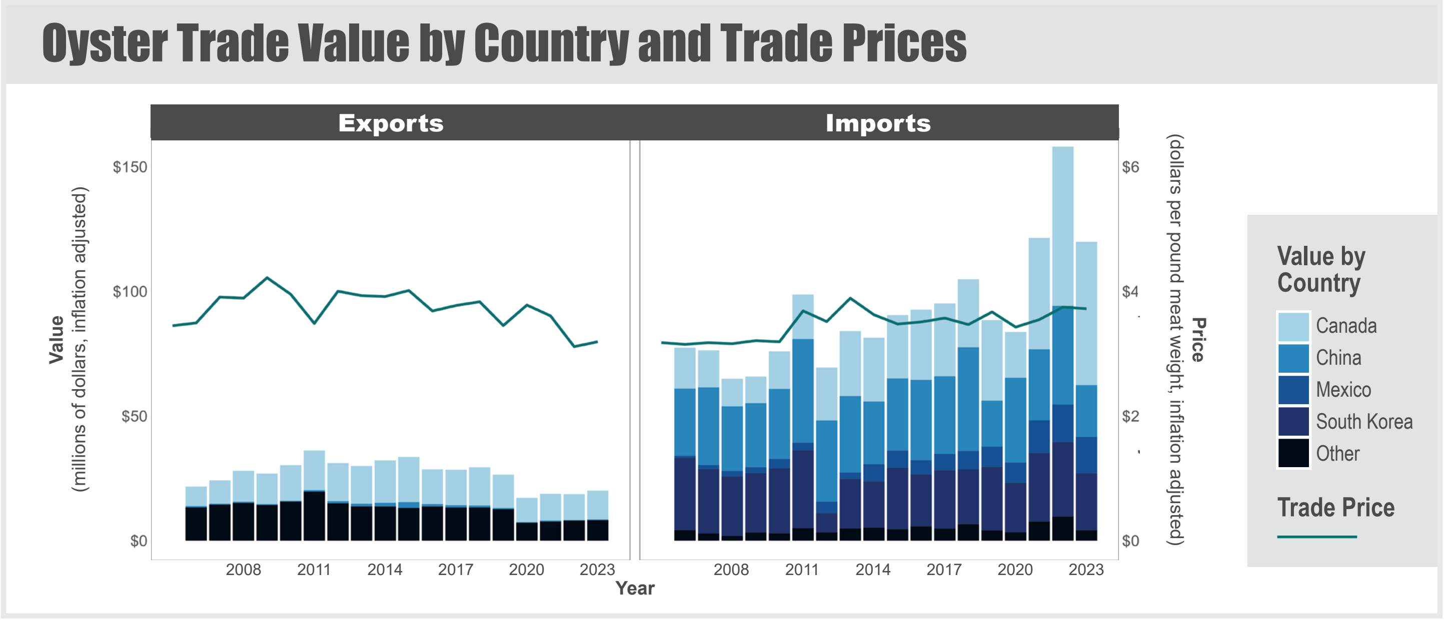


Figure 20. Trade of oysters from 2006 to 2023. Values are in real 2023 dollars (FOSS Tool).

Recent Trends and Events Impacting Oyster Markets

When considering recent trends in U.S. oyster aquaculture, the impacts of the supply disruptions and changes in consumption patterns associated with the onset of the COVID-19 pandemic in 2020 cannot be overlooked. Disruptions in supply chains and a sharp decline in demand impacted oyster growers significantly. With restaurants and other food establishments closing or operating at reduced capacity, the primary buyers of oysters diminished drastically.[27] Many oyster farmers faced challenges in selling their products, leading to overstocked farms and financial losses.[28] Labor shortages and restrictions on transportation also hindered harvesting and distribution.[29] Additionally, the decline in tourism, a key driver of oyster consumption in coastal areas, further hurt the industry. However, some farms adapted by shifting to direct-to-consumer sales and exploring online platforms to reach new markets.[26] In the years following the pandemic, the U.S. oyster industry has continued to adapt and grow.

According to the most recent Fisheries of the United States data, about 29 million pounds of farmed oysters (meat weight) was harvested in the United States in 2023. In 2019, Texas and Georgia became the final two U.S. coastal states to permit and support oyster farming. This development significantly expands the area available for oyster farming and will further contribute to this economically and environmentally valuable sector of U.S. marine aquaculture.

Pacific oysters on the half shell at Kodiak Ocean Bounty.
Photo credit: Erik OBrien

An Opportunity for Growth

The United States is one of the few countries globally with a substantial wild fishery for oysters.[26] However, as these stocks begin to decline and the demand for oysters continues to rise, there is a growth opportunity for U.S. oyster farmers.[26] At the same time, consumers are demanding a more premium half-shell oyster which commands a higher price over other products, such as shucked meat.[29] This preference may increase the likelihood of profitability.[29] Advancements in hatchery and grow-out technology have allowed growers to rear an oyster for the half-shell market that are visually appealing, the correct size, and cost-effective—dramatically changing the trajectory of the industry.

Abbreviated Glossary

See below for brief definitions of terms used in this report. This is a shortened version of the Glossary accessed on the web, which also includes the sources.

Anglers

People catching fish with no intent to sell, including people releasing the catch. Also known as recreational fishermen.

Catch

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; the total number of individual fish released (thrown back into the sea) and harvested (not thrown back into the sea) by anglers.

Coastal Community

Refers to communities located in a coastal county that has a marine shoreline. In the fishing communities section of this report, all communities within a shoreline county for which data were available (U.S. Census Bureau) were included for the purposes of comparison.

Commercial Fisheries

Fishing operations that sell their catch for profit. The term does not include subsistence fishermen or saltwater anglers who fish for sport or the for-hire sector. The commercial fisheries section reports on economic impacts, landings revenue, landings, and landings (ex-vessel) prices of key species and species groups.

Economic Impacts

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. These components include 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, labor income, and the contribution to gross domestic product (GDP) by state (also known as value-added impacts) from expenditures related to recreational fishing.

Expenditures

Spending related to recreational fishing activities that can be either: 1) related to a specific fishing trip or 2) on durable equipment.

Fishing Mode

The type of recreational fishing an angler engages in, such as fishing from shore, a private or rental boat, or a for-hire boat.

Fishing Trip

A fishing trip, also called an angler trip, is defined as any marine recreational fishing activity that occurs during a single 24-hour day. Trips are categorized by fishing mode, such as shore-based, from a private or rental boat, or from a for-hire boat.

Gross Domestic Product (GDP)

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. Value-added impacts refer to the contribution made to the gross domestic product in a region from commercial fishing landings and recreational fishing expenditures.

Harvest and Release

Recreational harvest is the total number of fish caught and kept from an area over a period of time. Release is the number of individual fish caught by an angler that are then returned to the sea (dead or alive). In Hawaiʻi and the Atlantic and Gulf states, harvest includes fish thrown back dead, and release does not include them.

Industry Sector

Fishing-related industries were combined into an industry sector: seafood sales and processing. Fishing-related industries were chosen from the County Business Patterns Data Series based on data availability and perceived relevance to fishing activities.

Inflation-Adjusted (Real) Dollars

Inflation-adjusted (real) dollars, also known as constant dollars, is a term describing income after adjustment for inflation. Inflation-adjusted value is a value expressed in dollars adjusted for purchasing power. Inflation-adjusted values represent an effort to remove the effects of price changes from statistical series reported in dollar terms.

Key Species or Species Groups

Up to 10 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 or cultural significance to a state or region.

Landings

The round (whole) weight volume (typically in pounds for this report) of fish unloaded by commercial fishermen. Landings are reported at the locations at which fish are brought to shore.

Landings Prices

Landings prices are calculated as unit values, the ratio of landings revenues divided by landings (volume). Landings prices may also be called ex-vessel prices. Prices in the aquaculture sector are called farm-gate prices.

Landings Revenues

The dollar value of commercial fisheries landings. Landings revenues may also be called landings value, ex-vessel revenues, or ex-vessel value. Revenues in the aquaculture sector are called farm-gate revenues or farm-gate value.

Recreational Fisheries

Fishing for leisure rather than to sell fish (commercial fishing) or for subsistence. The economic impacts of recreational fishing activities are based on spending by recreational anglers. The recreational fisheries section reports on sales impacts, the number of jobs supported, income impacts, and value-added impacts from expenditures.

Endnotes

*This section contains endnotes by section. Additionally, report information came from many sources. For more details, visit **Data Sources and Reference Materials** on the web.*

Commercial Fisheries

1 NOAA Fisheries. 2024. Alaska Seafood Snapshot. Available at https://www.fisheries.noaa.gov/s3//2024-10/ak-seafood-industry-snapshot-10-31-2024-afsc.pdf.

2 Joint Legislative Task Force. 2025. Evaluating Alaska's Seafood Industry. Available at https://www.akleg.gov/basis/get_documents.asp?session=34&docid=397 (accessed January 29, 2025).

3 U.S. International Trade Commission. 2024. Frozen Warmwater Shrimp from Ecuador, India, Indonesia, and Vietnam Injure U.S. Industry. Available at https://www.usitc.gov/press_room/news_release/2024/er1119_66150.htm (accessed November 19, 2024).

4 Blank, C. U.S. shrimp sales were down in 2023, and market difficulties expected to continue in 2024. Seafood Source. February 2, 2024. Available at https://www.seafoodsource.com/news/premium/foodservice-retail/shrimp-sales-down-in-2023-experts-forecast-continued-difficulties-in-2024 (accessed March 12, 2025).

5 NOAA Fisheries. 2025. Shrimp Futures Initiative. Available at https://www.fisheries.noaa.gov/southeast/socioeconomics/shrimp-futures-initiative (accessed March 12, 2025).

6 U.S. Bureau of Labor Statistics. 2025a. Producer Price Index by Commodity: Transportation Services: Deep Sea Water Transportation of Freight [WPU301301]. Available at https://fred.stlouisfed.org/series/WPU301301.

7 U.S. Bureau of Labor Statistics. 2025b. Producer Price Index by Industry: General Freight Trucking, Long-Distance Truckload: General Freight Trucking, Long-Distance, Truckload [PCU4841214841212]. Available at https://fred.stlouisfed.org/series/PCU4841214841212.

8 U.S. Bureau of Labor Statistics. 2025c. Producer Price Index by Industry: Refrigerated Warehousing and Storage: Warehousing and Storage of Refrigerated Goods [PCU4931204931202]. Available at https://fred.stlouisfed.org/series/PCU4931204931202.

9 U.S. Bureau of Labor Statistics. 2025d. Producer Price Index by Industry: Seafood Product Preparation and Packaging: Fresh and Frozen Seafood Processing: Prepared Fresh Fish/Seafood, Including Surimi/Surimi-Based Products [PCU31171031171021]. Available at https://fred.stlouisfed.org/series/PCU31171031171021.

10 U.S. Bureau of Labor Statistics. 2025e. Producer Price Index by Industry: Seafood Product Preparation and Packaging: Prepared Frozen Fish [PCU31171031171022)]. Available at https://fred.stlouisfed.org/series/PCU31171031171022.

Recreational Fisheries

11 Atlantic regions refer to those states within New England, Mid-Atlantic, South Atlantic, and the Gulf of America regions.

12 Chinook salmon, chum salmon, coho salmon, cutthroat trout, pink salmon, and sockeye salmon.

13 Bank rockfish, black and yellow rockfish, black rockfish, blue rockfish, bocaccio, bronzespotted rockfish, brown rockfish, calico rockfish, California scorpionfish, canary rockfish, chilipepper, china rockfish, copper rockfish, cowcod, darkblotched rockfish, deacon rockfish, deacon/blue rockfish unknown, flag rockfish, freckled rockfish, gopher rockfish, grass rockfish, greenblotched rockfish, greenspotted rockfish, greenstriped rockfish, halfbanded rockfish, honeycomb rockfish, kelp rockfish, mexican rockfish, olive rockfish, Pacific ocean perch, pinkrose rockfish, quillback rockfish, redbanded rockfish, redstripe rockfish, rockfish genus, rockfish species, rosethorn rockfish, rosy rockfish, scorpionfish family, shortspine thornyhead, silvergray rockfish, speckled rockfish, squarespot rockfish, starry rockfish, stripetail rockfish, swordspine rockfish, tiger rockfish, treefish, vermilion rockfish, widow rockfish, yelloweye rockfish, yellowmouth rockfish, and yellowtail rockfish.

14 Sand seatrout, seatrout genus, silver seatrout, spotted seatrout, and weakfish.

15 Albacore, bigeye tuna, blackfin tuna, bluefin tuna, tuna genus, and yellowfin tuna.

Fishing Communities

16 This assessment does not include the communities of the U.S. island territories of American Samoa, Guam, Commonwealth of The Northern Mariana Islands (CNMI), Puerto Rico, or U.S. Virgin Islands (USVI). For more information on the U.S. Pacific Island territories, see Spotlight Topics.

17 Jepson, M. and L.L. Colburn. 2013. Development of social indicators of fishing community vulnerability and resilience in the US Southeast and Northeast regions. NOAA Tech. Memo. NMFS-F/SPO-129, 64 p.

18 Colburn, L.L., M. Jepson, C. Weng, T. Seara, J. Weiss, and J.A. Hare. 2016. Indicators of climate change and social vulnerability in fishing dependent communities along the Eastern and Gulf Coasts of the United States. Mar. Policy 74:323–333. https://doi.org/10.1016/j.marpol.2016.04.030.

Spotlight—U.S. Territories of the Pacific Islands Region: Economic, Social, and Cultural Fishery Benefits

19 Chan, H.L. 2023. Economic Contributions of U.S. Commercial Fisheries in American Samoa. NOAA Tech. Memo. NMFS-PIFSC-151, 35 p. https://repository.library.noaa.gov/view/noaa/55943.

20 Chan, H.L. 2024. Economic Contributions of Small Boat Fisheries in Guam and the CNMI. NOAA Tech. Memo. NMFS-PIFSC-160, 29 p. https://repository.library.noaa.gov/view/noaa/61357.

21 Dombrow, C., and J. Hospital. 2023. Economic and social characteristics of the American Samoa small boat fishery 2021. NOAA Administrative Report, H-23-05, 92p. https://repository.library.noaa.gov/view/noaa/51021.

22 Dombrow, C., E. Rollins, A.L. Ayers, and J. Hospital. 2024. Economic and social characteristics of Guam's small boat fisheries, 2018. NOAA Administrative Report. NMFS-PIFSC-H-25-01. doi: 10.25923/0c8s-tc37.

23 Dombrow, C., E. Rollins, A.L. Ayers, and J. Hospital. 2025. Economic and social characteristics of small boat fishing in the Commonwealth of the Northern Mariana Islands, 2018. NOAA Administrative Report, H-25-03, 86 p. https://doi.org/10.25923/tbev-f042.

24 Leong, K.M., R.J. Ingram, D. Kleiber, S.H. Long, A. Mastitski, K. Norman, C. Weng, and S. Wise. 2024. Aligning fisheries terminology with diverse social benefits. Mar. Policy, 170:106377. https://doi.org/10.1016/j.marpol.2024.106377.

Spotlight—Oyster Aquaculture in the United States

25 NOAA Fisheries Office of Science and Technology, Commercial Landings Query. Available at https://www.fisheries.noaa.gov/foss (accessed December 3, 2024).

26 National Fisheries Institute. 2024. Top 10 Lists for Seafood Consumption. Available at https://aboutseafood.com/about/top-ten-list-for-seafood-consumption (accessed December 18, 2024).

27 NOAA Fisheries. 2021. U.S. Seafood Industry and For-Hire Sector Impacts from COVID-19: 2020 in Perspective. NOAA Tech. Memo NMFS-SPO-221, 88 p. Available at https://spo.nmfs.noaa.gov/sites/default/files/TM221.pdf.

28 van Senten, J., C.R. Engle, and M.A. Smith. 2021. Effects of COVID-19 on U.S. aquaculture farms. Applied Economic Perspectives and Policy 43:355-367. https://onlinelibrary.wiley.com/doi/abs/10.1002/aepp.13140.

29 Botta, R., F. Asche, J.S. Borsum, and E.V. Camp. 2020. A review of global aquaculture production and consumption. Mar. Policy 117:103952. https://www.sciencedirect.com/science/article/pii/S0308597X19305433.

Other Report Information

Acknowledgements

Office of Science and Technology Contributors

Economics and Social Analysis Division Director
Cameron Speir

Primary Authors and Analysts
Ben Fissel, Sabrina Lovell, and Amy Djukanovich

Section Authors and Analysts
Karma Norman and Changhua Weng (Fishing Communities section)

Justin Hospital and HingLing (Michel) Chan (U.S. Territories in the Pacific Islands Region section)

Ken Riley, Clete Otoshi, and Noah Boldt (Oyster Aquaculture in the United States section)

Report Development and Publication Support
Lauren Dolinger Few, Michael Lewis, Michael Liddel, Veronica Pereira, and Sofia Rearden (information and expertise)

Jacqui Fenner (communications, editing, and design)

John Thibodeau and Avi Litwack (communications)

Derrick Hill (Section 508 compliance)

Anudja Kunanayagam (editing)

Pacific States Marine Fisheries Commission Contributors

Rob Ames and Jason Edwards (information and expertise)

Data Sources

Report information came from many sources. Visit [Data Sources and Reference Materials] for details.

Photo Credits

All photos in this report are credited to NOAA Fisheries unless otherwise noted.

U.S. Secretary of Commerce
Howard Lutnick

Under Secretary of Commerce
for Oceans and Atmosphere
and NOAA Administrator
Neil Jacobs

Assistant Administrator for Fisheries
Eugenio Piñeiro Soler

February 2026

www.fisheries.noaa.gov

OFFICIAL BUSINESS

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