



# MARINE REGION

## BY THE NUMBERS

2023



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## Message from the Regional Manager

2023 was a year of extremes. The full closure of California's commercial and recreational salmon seasons weighed heavily on all our minds. This was further compounded by in-season action in August to significantly curtail nearshore groundfish fishing opportunities, another devastating blow to California Tribes, coastal fishing communities, commercial fishermen, and recreational anglers. While these catastrophic events rightfully seized most of our collective attention, there were several other positive events that are no less extraordinary. For the first time in more than 23 years, California anglers were able to enjoy an all-depth fishery for groundfish throughout the state. Closed to fishing since 2001 to protect vulnerable species that have since recovered, these new fishing opportunities provided amazing catches for new species such as chilipepper and chameleon rockfishes. Moving into 2024, these new opportunities will extend into the Cowcod Conservation Areas, which will be open for the first time after being closed in 2001. No less extraordinary was the continued run of amazing fishing for highly migratory species such as Pacific bluefin tuna and dolphinfish (dorado/mahi mahi). Once relegated to the very southern portion of our state and trips into Mexican waters, consistent catches of large Pacific bluefin tuna out of central and northern California continued. We even saw catches of bigeye tuna (which are rarely caught in the recreational fishery) off Humboldt and marlin off Fort Bragg. The 2022-23 commercial lobster fishery ended in March with its highest volume and non-adjusted value of all time, a testament to our hard-working commercial fishing fleet and the sustainable management of the lobster fishery under the Spiny Lobster Fishery Management Plan.

In our continued efforts to provide useful information to our stakeholders, the Marine Region launched a new Marine Fisheries Data Explorer (MFDE) this year. The MFDE allows users to visualize, search, sort, and download commercial fisheries data in a user-friendly online tool. The Marine Region also released the first Marine Protected Areas Decadal Management Review (DMR). The DMR represents the first ever comprehensive evaluation of the entire statewide MPA Network. From the stakeholder-driven, science-based planning process to the four pillars of the management program, California's MPA Network has set the global standard for ecologically connected, well-managed MPAs.

Looking ahead, we should expect continued challenges as we adapt and respond to our changing climate. I am confident Marine Region staff, California Tribes, partners, and stakeholders will once again rise to meet these challenges head on, but I also hope we will be able to create the space to enjoy our successes, big and small, as we work together to sustainably manage California's marine resources.

Dr. Craig Shuman



The Marine Region encompasses approximately **5,767** square statute miles of state waters, including San Francisco Bay and San Pablo Bay to the Carquinez Bridge.

For the 2022-2023 fiscal year, the Marine Region budget was **\$30,871,561**

As of December 31st, 2023, **155** permanent staff and **75** temporary positions worked within the Marine Region.



# CALIFORNIA COMMERCIAL FISHING NUMBERS

## Weight and Ex-Vessel Value<sup>1</sup> of Commercial Landings by Port Area<sup>2</sup>

Port Area	Pounds	Ex-Vessel Value
Eureka	21,485,167	\$44,004,979
Santa Barbara	23,359,142	\$35,131,162
Los Angeles	37,027,607	\$32,722,082
San Francisco	4,250,247	\$13,000,690
San Diego	4,757,370	\$14,131,925
Fort Bragg	5,960,578	\$7,696,037
Monterey	10,373,498	\$5,767,286
Bodega Bay	2,163,851	\$5,176,363
Morro Bay	1,361,409	\$3,198,890
<b>Total</b>	<b>110,738,872</b>	<b>\$160,829,414</b>

<sup>1</sup>Ex-Vessel Value is the amount paid to the fishermen at the dock.

<sup>2</sup>Port Area includes multiple ports in the same geographic region. A full list of the ports included in a given Port Area can be found on pages 23 and 24 of the 2021 Fish Business User Guide.

Data as of 2/9/2024, Date Source: Department's Marine Region, Marine Fisheries Statistical Unit

## Top Commercial Fishery Numbers

Total Commercial Landing Fees Collected: \$789,129

Top Ex-Vessel Value: \$54,078,572 Dungeness crab

Top Weight: 52,270,346 lbs Market squid



## Commercial Vessel Registration and Fishing License Revenue

Type	Numbers Sold	Revenue
Resident Vessel	2,659	\$1,159,324
Non-Resident Vessel	289	\$378,084
<b>Total Vessels</b>	<b>2,948</b>	<b>\$1,537,408</b>
Resident License	4,764	\$792,015
Non-Resident License	491	\$244,027
<b>Total Licenses</b>	<b>5,255</b>	<b>\$1,036,042</b>

Data as of 2/12/2024. Commercial Passenger Fishing Vessel (CPFV permit) is a subset of the Resident and Non-Resident Vessel total. There were 612 Registered Commercial Passenger Fishing Vessels with a total value of \$266,832. Data Source: Department's License and Revenue Branch

## Top 2023 Commercial Species Landed by Weight

Fishery	Pounds	Ex-Vessel Value
Market Squid	52,270,346	\$30,397,059
Dungeness Crab	21,019,733	\$54,078,572
Northern Anchovy	6,884,297	\$575,911
Pacific Sardine	3,772,996	\$1,062,005
Sablefish	3,340,506	\$5,724,189
Red Sea Urchin	2,417,777	\$8,454,398
Dover Sole	2,247,632	\$884,946
Chilipepper Rockfish	2,085,101	\$1,275,273
Petrale Sole	1,959,754	\$2,298,081
Pacific Hagfish	1,412,083	\$1,515,464

Data as of 2/12/2024. \*Note that landings and value are reported for the calendar year (January 1 – December 31). This may differ from seasonal landings for specific fisheries reported elsewhere. Data source: Department's Marine Region, Marine Fisheries Statistical Unit





## Top 2023 Commercial Fisheries by Ex-Vessel Value

Fishery	Pounds	Ex-Vessel Value
Dungeness Crab	21,019,733	\$54,078,572
Market Squid	52,270,346	\$30,397,059
California Spiny Lobster	1,095,802	\$21,506,406
Red Sea Urchin	2,417,778	\$8,454,398
Sablefish	3,340,506	\$5,724,189
California Halibut	982,099	\$5,343,100
Spot Prawn	216,125	\$4,570,767
Bigeye Tuna	788,264	\$3,422,285
Petrale Sole	1,959,754	\$2,298,081
Bluefin Tuna	409,482	\$2,261,460

Data as of 2/12/2024. \*Note that landings and value reported over the calendar year (January 1 – December 31) This may differ from seasonal landings for specific fisheries reported elsewhere. Data source: Department's Marine Region, Marine Fisheries Statistical Unit

## 2023 Commercial Groundfish Landings

Species	Pounds	Ex-Vessel Value
Nearshore <sup>1</sup>	407,422	\$2,274,304
Shelf and slope rockfish	5,203,303	\$4,099,834
Dover sole, thornyheads, sablefish (black cod)	5,804,335	\$7,832,294
Remaining flatfish <sup>2</sup>	2,254,307	\$2,436,475
Other <sup>3</sup>	552,095	\$557,751
<b>Totals</b>	<b>14,221,462</b>	<b>\$17,200,657</b>

<sup>1</sup> Includes nearshore rockfish, California scorpionfish, cabezon, greenlings and California sheephead.

<sup>2</sup> Includes arrowtooth flounder (turbot), butter sole, curlfin sole, English sole, Pacific sanddab, petrale sole, rex sole, sand sole and starry flounder.

<sup>3</sup> Includes all remaining species in the federal groundfish Fishery Management Plan.

Data Source: Department's Marine Landings Database System and includes landings reported through 12/31/23.



# CALIFORNIA RECREATIONAL FISHING NUMBERS

## California Recreational Fisheries Survey Sampling

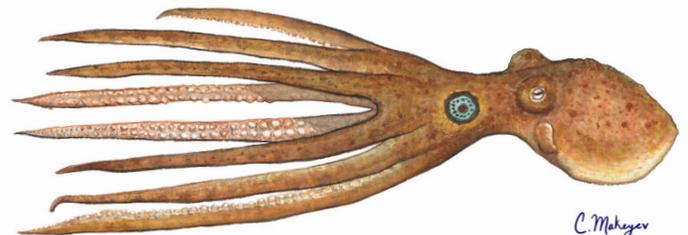
Data Collected from: 43,636 angler trips  
 Estimated Recreational Fishing Trips in Marine Waters: 1.8 million  
 Estimated Total Fish Caught: 7.1 million  
 Measurements Collected from: 84,119 fish

Data Source: Department's Marine Region, California Recreational Fisheries Survey.

## Total Recreational Licenses Sold and Fees Collected in 2023

License Type	Numbers Sold	Value
All Recreational Fishing Licenses <sup>1</sup>	1,624,016	\$71,614,378
Ocean Enhancement Validation	271,468	\$1,696,675
Spiny Lobster Report Card	31,196	\$335,357
Recreational Crab Trap Validation Stamps	41,332	\$103,330

<sup>1</sup>Note that recreational fishing licenses are valid for ocean and inland fishing in California.  
 Data Source: Department's License and Revenue Branch, as of 12/31/2023





## Top Types of Fish Targeted by Recreational Anglers Based on Fishing Trips

Rank	Trip-Type and Top Species Targeted <sup>1</sup>	Estimated Number of Angler Trips
1	<b>Bottomfish:</b> Rockfish, lingcod, California scorpionfish and ocean whitefish	598,000
2	<b>Inshore:</b> California halibut, barred surfperch, spotfin croaker, and redbtail surfperch	345,000
3	<b>Highly Migratory:</b> Bluefin tuna, yellowfin tuna, albacore and dolphinfish (dorado)	104,000
4	<b>Coastal Migratory:</b> Yellowtail, chub (Pacific) mackerel, Pacific barracuda and Pacific bonito	81,000
5	<b>Other Anadromous:</b> Striped bass, White Sturgeon	48,000

<sup>1</sup>For each trip target: the top species are listed based on the estimated total catch in pounds.  
Data source: CRFS estimates and data were extracted from RecFIN database at [www.recfin.org](http://www.recfin.org) and supplemented by CDFW Fisheries Analytics Project and Ocean Salmon Project. Highly Migratory effort and catch from Commercial Passenger Fishing Vessels were summed from the Marine Log System.

## Top Types of Fish Caught by Recreational Anglers Based on Pounds of Fish Caught<sup>1</sup>

Rank	Type of Fish	Estimated Pounds of Fish Caught <sup>1</sup>
1	<b>Tunas</b> (bluefin, yellowfin, and albacore)	5,834,000
2	<b>Rockfish, greenlings and cabezon</b>	3,805,000
3	<b>Flatfish</b> (California halibut, Pacific sanddab, Pacific halibut, soles and starry flounder)	1,105,000
4	<b>Lingcod</b>	447,000
5	<b>Sea Bass</b> (barred sandbass, kelp bass, and striped bass)	443,000

<sup>1</sup>Fish Caught = fish kept and fish released dead, estimates are preliminary and may differ from what is used for fisheries management.  
Data source: CRFS estimates and data were extracted from RecFIN database at [www.recfin.org](http://www.recfin.org) and supplemented by CDFW Fisheries Analytics Project and Ocean Salmon Project. Highly Migratory catch from Commercial Passenger Fishing Vessels were summed from the Marine Log System.



## New Marine Region Field Office

A Marine Region field office was opened in San Pedro on the AltaSea campus. AltaSea is a 34-acre facility in the Port of Los Angeles that focuses on the emerging blue energy economy and education. The move enables marine region science and staff to be directly accessible through educational outreach programs and supports the CDFW JEDI goals through engagement with students in underserved communities.

## Marine Protected Area Management Project Numbers

Public release of the first comprehensive 10-year management review of California's globally recognized network of marine protected areas: [The Decadal Management Review](#)

### Outreach and Education

- Published interactive MPA web map <https://wildlife.ca.gov/conservation/marine/MPAS>
- Published MPA blogs and news highlights: **7**
- Participated in partner events: **9**
- Participated in MPA collaborative meetings: **27**
- Distribution of English and Spanish outreach materials: **~15,000**

### Research and Monitoring

- Scientific Presentations: **17**

### Enforcement and Compliance

- Trainings on MPAs: **5**

### Policy and Permitting

- Regulatory Package: **1**

### Scientific Collecting Permits

- Total Permits Issued/Renewed: **179**



## Fisheries Samples Collected/Processed

### Ocean Salmon Project

- Staff read **22,064** coded wire tags and assigned ages to salmon collected across the Central Valley

### Groundfish and Pacific Halibut

- **2,180** otoliths have been collected by groundfish staff for use in future stock assessments

### Coastal Pelagic Fishery & Experimental Fishing Permit

- **3,745** sardine, anchovy, Pacific mackerel, and jack mackerel samples collected and processed
- **2,002** sardine, anchovy, and Pacific mackerel otolith pairs examined for age determination

### Market Squid

- **2,382** market squid samples collected and processed for biological data

### White Seabass

- **1,030+** white seabass measured and scanned for coded-wire tags

### Abalone

- **3,997** juvenile white abalone outplanted

## Experimental Fishing Permit (EFP) Program

- **6** Current EFPs
- **1** EFP Renewal
- **4** EFPs in process
- **11** Amendments Completed
- **19** Inquiries

## Permitting and Environmental Review

- Aquaculture Registrations issued in 2023: **48**
- Live Import, Restricted Species, Private Stocking and Broodstock Collection Permits issued in 2023: **151**
- Letters of Authorization in 2023: **1**

## State and Federal Regulation

- **12** State Regulatory Packages
- **21** Federal Regulatory Activities



## Marine Region Information Sharing

### New [Marine Fisheries Data Explorer \(MFDE\)](#)

The MFDE is a dynamic, web-based tool that summarizes non-confidential fisheries data on all marine finfish and invertebrate species in California’s commercial fisheries. The new data tool offers a variety of visuals, with multiple views and filtering options.

- **44** Years of Commercial Fishing Data
- **16,737,035,438** Total pounds of fish landed
- **7,581,270** Unique species/receipt combinations

### Marine Region Outreach Efforts

- **94,000+** Marine Management News Blogsite Visits
- **39** Marine Region Related CDFW Press Releases
- **61** Social Media Posts
- **1,500+** Responses to Public Inquiries Sent via “Ask Marine”
- **31** Blog Posts on the Marine Management News

### 2023 Data Sharing

- **24** Confidential Data Sharing Agreements
- **45** Non-Confidential Data Sharing Requests

### Marine Species Portal

- **1** New Enhanced Status Report: Spottin Croaker
- **12** New Species-at-a-Glance Summaries

California Marine Species Information available at: <https://marinespecies.wildlife.ca.gov/>

## CDFW Research Vessels

- The Marine Region’s flagship research vessel Garibaldi was re-powered with 1 lower emission engine. This will allow the 23-year-old vessel to continue supporting operations into the future.
- **178** days at sea

### Vessels and Hull Length

• Goby	12 ft	• Ronquil	19 ft	• Megathura	21 ft
• Sanddab	12 ft	• Roncador	19 ft	• Smoothhound	25 ft
• Chilipepper	14 ft	• Pinto	19 ft	• Irish Lord	26 ft
• Remora	18 ft	• Surf Scoter	19 ft	• Mystinus	29 ft
				• Garibaldi	45 ft

## Research Diving Program

**Total Dives: 773**      **Total Dive Hours: 488**

Scientific Illustrations of flag rockfish, sheep crab, Dungeness crab, sablefish, anchovy, sardine, and two spot octopus by CDFW Environmental Scientist Claudia Makeyev. CDFW photos: tuna jumping by CDFW Environmental Scientist Harrison Huang, Chameleon rockfish picture from CRFS staff, underwater rockfishes by MARE, all other photos are CDFW.