California Department of Fish and Wildlife

Agency Report

to the

Technical Subcommittee

of the

Canada-United States Groundfish Committee

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Prepared by

Caroline McKnight

Andre Klein

Melanie Parker



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# Agency Overview

Within the California Department of Fish and Wildlife (CDFW), the Marine Region is responsible for protecting and managing California's marine resources under the authority of laws and regulations created by the State Legislature, the California Fish and Game Commission (CFGC) and the Pacific Fishery Management Council (PFMC). The Marine Region is unique in the CDFW because of its dual responsibility for both policy and operational issues within the State's marine jurisdiction (0 – 3 miles). It was created to improve marine resources management by incorporating fisheries and habitat programs, environmental review and water quality monitoring into a single organizational unit. In addition, it was specifically designed to be more effective, inclusive, comprehensive and collaborative in marine management activities.

The Marine Region has adopted a management approach that takes a broad perspective relative to resource issues and problems. This ecosystem approach considers the values of entire biological communities and habitats, as well as the needs of the public, while ensuring a healthy marine environment. The Marine Region employs approximately 140 permanent and 100 seasonal staff that provide technical expertise and policy recommendations to the CDFW, CFGC, PFMC, and other agencies or entities involved with the management, protection, and utilization of finfish, shellfish, invertebrates, and plants in California’s ocean waters.

Groundfish project staff are tasked with managing groundfish and providing policy recommendations. Other staff work indirectly on groundfish, such as our California Recreational Fisheries Survey (CRFS) staff that sample our recreational fisheries and our Marine Protected Areas (MPA) Project and their remotely operated vehicle (ROV) work that benefits groundfish. Additionally, Pacific States Marine Fisheries Commission (PSMFC) staff sample the state’s commercial groundfish fishery. The Marine Region’s annual [Year in Review](https://wildlife.ca.gov/Fishing/Ocean/Year-In-Review) provides summary of all its programs, including groundfish. The Marine Region’s annual [By the Numbers Report](https://wildlife.ca.gov/Fishing/Ocean/Year-In-Review) provides another view of the breadth of work conducted by CDFW's Marine Region.

# Surveys

ROV Visual Survey and Analysis for MPA and Fishery Data Needs

Scientists from CDFW’s Groundfish and MPA Management Projects continued analysis of ROV survey data collected from 2014 to 2016 and more recent coverage from 2019-2021 for use in this year’s copper rockfish (*S. caurinus*) stock assessment.

# Reserves

Marine Protected Areas Research and Monitoring

In 2022, the MPA Monitoring project completed the first comprehensive [MPA Decadal Management Review](https://wildlife.ca.gov/Conservation/Marine/MPAs/Management/Decadal-Review) (Review). This Review evaluates the MPA management and network in meeting the goals of the Marine Life Protection Act and includes adaptive management recommendations for CFGC consideration. To ensure stakeholder input was incorporated into the Review, CDFW invited tribes, agencies, and organizational partners. Twenty-two reports, as well as a comprehensive summary provided by the tribes are available as appendices to the full Review.

For any inquiries or comments about the review or MPAs in general, please email the [MPA Decadal Management Review Team](https://wildlife.ca.gov/Conservation/Marine/MPAs/Contact/Decadal-Management-Review)

# Review of Agency Groundfish Research, Assessment and Management

## Groundfish, all species combined

1. Research off California

Scientific Collecting Permits are issued by CDFW to take, collect, capture, mark, or salvage, for scientific, educational, and non-commercial propagation purposes. Permits are generally issued for three years, except that student permits are for one year. While a complete report of groundfish-related research activities isn’t available for this report, the permits fall into four broad categories: 1) public display in aquariums and interpretive centers; 2) environmental monitoring; 3) life history studies that include age and growth, hormone assays and genetics for population structure; and, 4) studies related to changing environmental conditions such as ocean acidification and hypoxia.

### CDFW Research

Recreational Biological Sampling

Stock assessments completed in 2021 further highlighted the need for California specific biological data, particularly from nearshore rockfish stocks. In response, CDFW begun biological sampling of the recreational fishery late in 2021, initially on an ad-hoc basis. Beginning in 2022, CDFW collaborated with NMFS staff to develop a limited sampling design such that a more standardized random sampling approach could be achieved within staffing limitations.

CDFW currently has three part time sampling staff operating out of the Eureka, Monterey and San Diego port complexes, covering recreational sampling sites in northern, central and southern California, respectively. While samplers prioritize a suite of species that are due to be assessed or have significance to the fishery, they also collect biological data from any groundfish species they encounter. In 2022, 2,242 samples were collected across 25 species, representing a significant increase in the amount of fishery dependent biological data.

While this sampling effort can not be a comprehensive statewide approach by virtue of staffing constraints and California’s size, it does offer fishery dependent biological data, which would otherwise be unavailable, that have been randomly collected in a standardized manner.

Creel Survey Surrendered Fish

CDFW’s CRFS program conducts a creel survey to estimate catch and effort in California’s recreational fisheries. During those efforts, anglers are given an opportunity to voluntarily surrender certain rockfish species that were retained illegally (yelloweye rockfish [*S. ruberrimus*]) or in excess of the sub-bag limit (copper [*S. caurinus*] and quillback [*S. maliger*] rockfishes). Initially, this effort began in 2016, with the collection of yelloweye rockfish – an overfished species, however, less optimistic stock status indicated by stock assessments for copper and quillback rockfishes in 2021, caused the expansion to include these two species.

In 2022, 115 copper, 50 yelloweye and 43 quillback rockfishes were collected, totaling almost 120, 400 and 80 for each of these species, respectively, since these efforts were undertaken. Data from these fish will be used to inform future stock assessments, particularly age and growth parameters, which may reduce model uncertaintity.

Cowcod Exempting Fishing Permit

Cowcod were once an overfished species that have now been declared rebuilt. However, due to relatively low allowable harvest limits, in part stemming from the lack of biological and age data, retention of cowcod has remained prohibited in non-trawl commercial and recreational fisheries. To collect biological data, CDFW has obtained a federal Exempted Fishing Permit (EFP) which allows participating recreational charter vessels to retain cowcod incidentally encountered during normal fishing operations. Once landed, these cowcod are transferred to CDFW for the collection of biological data. Currently, there are nine participating vessels.

1. Assessment

CDFW staff contributed to the 2023 stock assessments as co-author (black [*S. melanops*], canary [*S. pinniger*]and copper [*S. caurinus*]rockfishes). CDFW staff provided additional length and age data for inclusion in the black, canary and copper rockfish stock assessments.

1. Management

After many years of work, CDFW staff, combined with work by our partner agencies (NMFS, PFMC, the states of Oregon and Washington Departments of Fish and Wildlife) as well as stakeholder groups, the PFMC recently adopted and recommended changes to non-trawl area management. This momentous achievement will restore access to historic fishing grounds and healthy groundfish stocks for the non-trawl commercial sector, and in southern California, repeal the Cowcod Conservation Areas – which had effectively closed over 4,300 square miles of productive groundfish grounds to the commercial and recreational sectors. This effort was the culmination of a successful Exempted Fishing Permit which proved the viability of a new gear configuration and consensus among a stakeholder workgroup comprised of conservation, industry and CDFW.

1. Commercial Fishery Monitoring

Statistical and biological data from landings are continually collected and routinely analyzed by CDFW staff to provide current information on groundfish fisheries and the status of the stocks. California’s primary commercial landings database is housed in CDFW’s Marine Landings Database System. Outside funding also enables California fishery data to be routinely incorporated into regional databases such as Pacific Coast Fisheries Information Network.

Commercial sampling is conducted by PSMFC staff and occurs at local fish markets where samplers determine species composition of the different market categories, measure and weigh fish, and take otoliths for future ageing.

Inseason monitoring of California commercial species landings is conducted by CDFW staff. This work is done in conjunction with inseason monitoring, management and regulatory tasks conducted by the PFMC’s Groundfish Management Team.

1. Recreational Fishery Monitoring

CRFS sampling, which estimates catch and effort in recreational fisheries, has resumed normal sampling operations, ending modified COVID sampling protocols. Estimates are typically available on a monthly basis with a 6-week time lag, however, information for some species are available weekly. Availability of near real time catch data, in conjunction with fishery tracking and monitoring, provides the ability to take inseason action more expeditiously, if needed. This approach is particularly useful for species with low allowable harvest limits or when substantive changes to fishing regulations create projection uncertainties.

For more information about CRFS, visit the Department website at <https://wildlife.ca.gov/Conservation/Marine/CRFS>.

1. Pacific Halibut & International Pacific Halibut Commission activities

The California coastline plays a unique part in Pacific halibut management as it is located at the southern extent of the population range and has historically been a minor contributor to harvest removals compared to other management areas. While relatively small in volume, this fishery is essential to the continued existence of the fishing community on California’s rugged north coast, especially taking into consideration increasingly limited fishing opportunities for salmon and groundfish. CDFW is optimistic that Pacific halibut can continue to be a viable and sustainable resource for the local and regional economies of the north coast.

1. Management

The CDFW collaboratively manages the Pacific Halibut resource off the coast of California with the IPHC, NMFS, PFMC, other west coast states, and the CFGC. Pacific Halibut management activities occur on an annual timeline, with most changes to management occurring through the PFMC’s Catch Sharing Plan and federal regulations published by NMFS. Changes to the Catch Sharing Plan for the following year are approved in November by the PFMC.

Once the federal regulations are adopted, the state can then take action to conform state regulations to federal regulations for the recreational fishery by notifying constituents within 10 days of publication of the regulations in the Federal Register. Notification is done via press release and the CFGC is notified of the action at their next scheduled meeting.

1. Commercial Fishery Monitoring

The directed commercial fishery for Pacific Halibut is managed under a coastwide (Washington, Oregon and California) quota and operates as a derby fishery. The fishery opened on June 26 and beginning in 2022, is structured based on 56-hour openers that are spaced two weeks apart. The fishery operates on this schedule until the coastwide quota has been met. California effort in this fishery continued in 2022 with six vessels participating in the fishery; landings totaled 2,028 dressed kilograms (4,472 dressed pounds).

1. Recreational Fishery Monitoring

The 2022 recreational Pacific halibut fishery in California was scheduled to be open seven days per week May 1- November 15, or until the 38,740 net pound quota was met, whichever came first. However, inseason catch tracking and monitoring through the end of July indicated the quota was expected to be reached or exceeded prior to the November 15 fishery end date. CDFW in consultation with the IPHC, NMFS and the PFMC closed the recreational fishery on August 7, 2022.

Beginning in 2020, extreme high catch events have occurred in the fishery generally starting the second half of June and extending into July or August. These extreme catch events are first observed in the raw CDFW California Recreational Fishery Survey (CRFS) sampler data, with tallies of fish reaching over 250 fish in a single week in 2020. Prior to 2020, on average 250 fish would be sampled over an entire season, and the highest single months tally was just over 100 fish. These extreme catch events continued in 2021, and 2022, and indicate an abundance of Pacific halibut off the California coast. Anecdotal information from anglers and charter/party boat operators indicates that during these times the success of anglers targeting Pacific halibut is almost 100 percent with anglers reaching their limits fairly early in the day, whereas prior to 2020 the success rate was about 50 percent and time spent on the water was significantly increased.

In response to these high catch events, and the resulting speed at which the quota can be reached or exceeded, CDFW implemented daily tracking in 2021 which continued in 2022. This adaptive catch tracking and monitoring has resulted in more timely management responses to fishery catch trends.