

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT  
 ON 2023 GROUND FISH HARVEST IN CALIFORNIA

Recreational Fishery .....	1
Quillback Rockfish .....	1
Copper Rockfish .....	2
Yelloweye Rockfish .....	2
Non-Trawl Commercial Fishery .....	2
Quillback Rockfish .....	2
Copper Rockfish .....	2
Commercial/Recreational Overages .....	2
Quillback Rockfish .....	2
Vermilion Rockfish .....	3
Species within Complexes South of 40°10' N. lat. that Exceeded Species-Specific OFL Contributions .....	3
Appendix 1 .....	5

The California Department of Fish and Wildlife (CDFW) provides the following report on harvest of select groundfish species of interest in 2023; a comprehensive reporting of groundfish mortality in California is found at the end of this report in Appendix I. Recreational harvest estimates are preliminary and subject to change, as 2023 data is finalized in June. Values were rounded using standard rounding rules in each table for presentation purposes; for that reason, a sum of the rounded values over rows and columns within tables may not equal the totals shown.

**Recreational Fishery**

***Quillback Rockfish***

A series of state and federal inseason actions were necessary in response to projected harvests exceeding limits in August and September 2023 (September 2023 briefing book, [Agenda Item G.8.a Supplemental CDFW Inseason Report 1](#) and [CDFW Inseason Report 2](#)). Recreational mortality in 2023 for the area between 42° - 40° 10' N. lat. is estimated at 1.49 mt, while the area south of 40° 10' N. lat. estimate is 0.79 mt (Table 1). Combined with commercial fishery estimates described below, California quillback mortality values to date exceed the area-specific ACT and OFL values for quillback rockfish (Table 3).

Inseason actions taken in August and September 2023 to move fisheries offshore served to minimize additional mortality in the fishery for the remainder of the year. An offshore fishery, which only allows fishing seaward of the 50 fm RCA boundary line, has proven to be an effective tool to minimize impacts to quillback rockfish while providing opportunity to harvest healthy shelf and slope species. Table 1 illustrates the substantial drop in quillback mortality from September onward when the majority of the recreational fleet was restricted to fishing seaward of the 50 fm RCA boundary line.

### ***Copper Rockfish***

Copper rockfish remain in the minor nearshore rockfish complex, north and south of 40°10' N. lat., with a shared commercial and recreational species-specific Annual Catch Target (ACT) of 6.9 mt for the area between 42° - 40° 10' N. lat. and 84.6 mt south of 40° 10' N. lat. The final 2023 total recreational mortality for copper rockfish is 3.68 mt for the area between 42° - 40° 10' N. lat. and 37.52 mt for the area south of 40° 10' N. lat. Combined with commercial fishery estimates described below, mortality values to date are within area-specific ACT values for copper rockfish (Table 3).

### ***Yelloweye Rockfish***

Yelloweye rockfish is a rebuilding rockfish species off the coast of California. In 2023, the initial California recreational harvest guideline for yelloweye rockfish was set at 15.3 mt, with an ACT of 12.0 mt. However, after a technical correction to the yelloweye allocation was applied in September ([Agenda Item G.8 Supplemental REVISED Attachment 1 September 2023](#)) the California recreational harvest guideline for yelloweye rockfish was reduced to 11.6 mt, with an ACT of 9.1 mt for 2023. The final 2023 total recreational mortality for yelloweye rockfish in the California recreational fishery is 9.62 mt. As anticipated, the shift to offshore only fisheries at the end of the summer months increased yelloweye rockfish encounters and mortality. Despite the increase, recreational total mortality stayed within the initial 2023 ACT however was slightly over the revised 2023 ACT, but under the revised fishery HG.

### **Non-Trawl Commercial Fishery**

#### ***Quillback Rockfish***

Commercial landings data are from PacFIN and reflect activity across all management areas from January through December 31, 2023. Landing totals are 0.25 mt (Table 2) for the area between 42° - 40° 10' N. lat. and 0.24 mt (Table 2) for the area south of 40° 10' N. lat. As discussed in [Agenda Item G.8.a. CDFW Inseason Report 1, September 2023](#) and [Agenda Item G.8.a. Supplemental CDFW Inseason Report 2, September 2023](#), mortality of quillback rockfish exceeded harvest limits in the areas north and south of 40° 10' N. lat. and retention of quillback rockfish was prohibited in the commercial fishery. Since the prohibition was announced in August, there have been no reported commercial landings of quillback rockfish.

#### ***Copper Rockfish***

Commercial landings data are from PacFIN and reflect activity across all management areas from January through December 31, 2023. Landing totals are 0.58 mt (Table 2) for the area between 42° - 40° 10' N. lat. and 1.83 mt (Table 2) for the area south of 40° 10' N. lat. The combined commercial and recreational values are within the area-specific ACT values for copper rockfish (Table 3). Landings across California remain similar in 2022 and 2023, suggesting the sub-trip limits are effectively minimizing harvest in the commercial fishery. Reported catches are preliminary and subject to change as more data becomes available.

### **Commercial/Recreational Overages**

#### ***Quillback Rockfish***

Combined California quillback rockfish take to date for the area north and south of 40°10' N. lat. have exceeded their respective OFL contributions (Table 3). CDFW took inseason action to reduce quillback mortality as discussed in September 2023 Council reports ([Agenda Item G.8.a Supplemental CDFW Report 2](#) and [Agenda Item G.8.a Supplemental GMT Report 5](#)).

### ***Vermilion Rockfish***

Vermilion rockfish remain in the minor shelf rockfish complex, north and south of 40°10' N. lat. In 2023 vermilion rockfish north of 40°10' N. lat. was under the ACL (Table 3). However, south of 40°10' N. lat. vermilion rockfish mortality was 393.6 mt (recreational= 295.2 mt, non-trawl commercial= 97.5 mt, trawl= 0.9 mt) exceeding both the ACL (281.3 mt) and OFL (311.24 mt) contributions to the complex. Including trawl mortality is new this year, noting that vermilion rockfish is aggregated as part of the minor shelf individual quota pounds issued annually. Vermilion rockfish harvest has exceeded the species specific OFL south of 40°10' N. lat. every year since 2015. The exceedance of the ACL and OFL in 2023 occurred even after multiple efforts have been taken to reduce vermilion rockfish mortality in both sport and commercial fisheries.

In 2021, emergency regulations were adopted by the Council ([Agenda Item E.7.a Supplemental CDFW Report 2 November 2021](#)) and the California Fish & Game Commission (CDFW [press release](#)) to decrease the vermilion rockfish statewide recreational sub-bag limit from 5 fish to 4 fish starting in 2022. In 2020, commercial sub- trip limits for vermilion rockfish were created. However, commercial fixed gear fishing effort and mortality of vermilion rockfish has continued to increase in recent years. To that effect, the Council took the GMT's recommendation in [Agenda Item E.3.a Supplemental GMT Report 1, November 2023](#) to reduce the risk of exceeding the vermilion rockfish ACL contribution south of 40° 10' N lat., which reduced Open Access North (OAN) and Open Access South (OAS) trip limits for 2024. The sub-trip limit reductions were recommended after considering the commercial sector's historic proportion of mortality, which has approximated 25% of the harvest limit.

Vermilion rockfish remain in the minor shelf rockfish complex north and south of 40°10' N. lat. While vermilion rockfish south of 40°10' N. lat. exceeded ACL/OFL contributions, the minor shelf rockfish complex stayed well within its ACL/OFL contributions (Table 3). Additionally, the recent 2021 vermilion rockfish stock assessment north of 40°10' N. lat. and stock assessment south of 40°10' N. lat. indicate vermilion rockfish are healthy. However, additional steps will need to occur in 2024 to ensure harvest of vermilion rockfish south of 40°10' N. lat. remains within limits.

CDFW will closely monitor commercial landings of vermilion rockfish inseason and recommend adjustments, if needed. Given Council actions in November on commercial fisheries, recreational season structures for 2024 should be developed to remain within 75% of the 2024 ACL or roughly 211 mt. Recreational mortality of vermilion rockfish in 2024 could be reduced by additional sub-bag limit reductions beyond the current 4 fish sub-bag limit, modifications of season depths and/or season length reductions or some combination of those management measures.

### ***Species within Complexes South of 40°10' N. lat. that Exceeded Species-Specific OFL Contributions***

Each year, CDFW evaluates year-end catch of rockfish species within the minor nearshore, shelf, and slope rockfish complexes to examine changes in individual species contributions to the complex, and changes in total mortality compared to previous years. The 2023 ACLs and OFLs have not been exceeded for any rockfish complex south of 40°10' N. lat. However, multiple

rockfish species in the minor shelf complex south of 40°10' N. lat., have exceeded their species-specific OFL contributions to the complex in 2023. These include:

- Greenblotched Rockfish South of 40°10' N. lat.: 2023 recreational total mortality was estimated at 45.31 mt. 2023 commercial fixed gear landings and trawl total mortality is 1.4 mt, resulting in a total 2023 mortality of 46.71 mt south of 40°10' N. lat. which exceeds the species-specific OFL contribution of 23.10 mt (202.2% OFL attainment). The OFL contribution is from the 2011 Depletion-Based Stock Reduction Analysis (DBSRA). Between 2008 and 2022, recreational catch did not exceed 2 mt in any year. CDFW expects this increase in recreational catch resulted from new all-depth recreational fishing opportunities available in 2023.
- Greenspotted Rockfish South of 40°10' N. lat.: 2023 recreational total mortality was 97.01 mt. 2023 commercial fixed gear landings and trawl total mortality was 15.2 mt, resulting in a total 2023 mortality of 112.21 mt south of 40°10' N. lat. which exceeds the species-specific OFL contribution of 78.58 mt (142.8% OFL attainment). The OFL contribution is from a full assessment that was done in 2011. OFLs between 40°10' N. lat. and 34°27' N. lat. were projected using a 50% SPR harvest rate from the northern California model and updated in 2021. OFLs south of 34°27' N. lat. were projected using a 50% SPR harvest rate from the southern California model and updated in 2021. Recreational catches between 2008 and 2022 did not exceed 20 mt in any year, and CDFW again expects the 2023 increase is explained by the all-depth recreational fishing opportunities.
- Mexican Rockfish South of 40°10' N. lat.: 2023 recreational total mortality is 45.36 mt. 2023 commercial fixed gear landings and trawl total mortality is 1.6 mt, resulting in a total 2023 mortality of 46.96 mt south of 40°10' N. lat. which exceeds the species-specific OFL contribution of 5.10 mt (920.8% OFL attainment). The OFL contribution is from the 2011 DBSRA. Recreational catch in 2022 was approximately 2 mt, and annual recreational catch between 2008 and 2021 was under 1 mt. Similar to greenblotched and greenspotted rockfish, CDFW again expects the 2023 increase in recreational Mexican rockfish harvest is explained by the all-depth recreational fishing opportunities.

Other than vermilion and greenspotted rockfish, most of the species who have exceeded their species specific OFL contributions have OFLs derived from the DBSRA method. Many of the contributing values to the complex OFLs, ABCs and ACLs from DBSRA are extremely small, and DBSRA analyses may not be fully or accurately indicative of biomass for each of these species. Importantly, while these species have surpassed their species-specific OFL contribution, CDFW emphasizes that the minor shelf rockfish complex south of 40°10' N. lat. has not exceeded the complex ACL/OFL for 2023 (Table 3).

**Appendix 1.**

This appendix provides an update of the 2023 fishing season relative to Annual Catch Limits (ACLs), Harvest Guidelines (HGs), sector allocations, and Annual Catch Targets (ACTs) for the 2023-24 biennium. Catch includes estimates of total mortality (does not include ACVs) from the recreational sector, and landings from the commercial sector without discard mortality. Commercial landings are from the non-trawl fixed gear limited entry and open access sectors, except for blackgill rockfish landings which include both trawl and non-trawl landings.

Monthly recreational catch estimates are from RecFIN through December 2023 and reflect activity across all recreational management areas (Table 1). Commercial landings data are from PacFIN and reflect activity across all management areas from January through December (Table 2). The 2023 combined recreational and commercial catches are compared to federally designated harvest specifications in Table 3.

Table 1. Estimated catch (mt) of select groundfish species in the California recreational sector by month in 2023. Data are from RecFIN, are preliminary and subject to change.

Stock/Stock Complex	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
YELLOWEYE ROCKFISH <sup>a</sup>	-	-	-	-	0.6	1.8	1.4	1.3	1.1	1.3	1.7	0.3	9.6
CA Black rockfish <sup>a</sup>	-	0.0	0.1	0.2	10.4	24.9	45.5	32.2	0.1	0.1	0.1	0.0	113.7
Canary rockfish	-	-	0.0	0.2	3.8	8.5	13.5	15.1	12.6	8.4	4.9	6.7	73.7
Darkblotched rockfish	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Shortbelly rockfish	-	-	-	-	-	-	-	-	0.0	-	-	-	0.0
Splitnose rockfish	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Widow rockfish	-	-	-	0.4	0.4	1.5	1.6	1.3	2.4	0.9	1.8	1.1	11.3
Spiny dogfish	-	-	0.0	0.0	0.0	0.4	1.1	0.4	0.3	0.0	0.1	0.0	2.5
Dover sole	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0
English sole	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Petrале sole	-	0.1	0.3	0.3	1.6	4.0	5.7	2.5	5.2	0.9	0.4	0.3	21.4
Starry flounder	-	-	0.0	-	0.0	0.0	-	0.1	-	-	0.0	-	0.2
Other flatfish	2.9	1.3	1.0	1.5	1.5	4.6	4.6	11.4	8.4	3.1	1.2	0.8	42.2
CA Cabezon	0.1	0.1	0.0	0.1	0.7	1.2	3.2	3.6	0.3	0.2	0.1	0.0	9.5
CA Kelp greenling	0.0	0.0	0.2	0.3	0.1	0.1	0.5	0.7	0.1	0.0	0.1	0.0	2.1
Nearshore rockfish N. 42°-40°10' N. lat. <sup>b</sup>	-	-	0.0	0.0	1.0	2.5	6.0	3.2	0.0	0.0	0.0	-	12.7
Copper rockfish 42°-40°10' N. lat. <sup>a</sup>	-	-	0.0	0.0	0.3	0.9	1.8	0.7	0.0	0.0	-	-	3.7
Quillback rockfish 42°-40°10' N. lat. <sup>a</sup>	-	-	-	-	0.1	0.3	0.9	0.2	-	-	-	-	1.5
Shelf rockfish N. 40°10' N. lat. <sup>c</sup>	-	-	-	-	0.2	1.1	1.1	1.1	0.1	0.1	-	-	3.5
Squarespot rockfish N. 40°10' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Vermilion rockfish N. 40°10' N. lat.	-	-	-	-	0.2	0.9	1.0	1.0	0.2	0.2	-	-	3.4
Yellowtail rockfish N. 40°10' N. lat.	-	-	-	-	0.4	0.5	0.6	1.0	0.2	0.0	0.1	-	2.8
Slope rockfish N. 40°10' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Lingcod N. 40°10' N. lat.	-	-	0.1	0.4	3.2	5.8	14.6	8.5	0.5	0.0	-	-	33.1
Nearshore rockfish S. 40°10' N. lat. <sup>b</sup>	0.2	0.1	0.0	8.3	20.1	21.9	52.1	83.0	6.6	1.8	1.6	1.1	196.7
Copper rockfish S. 40°10' N. lat. <sup>a</sup>	0.0	0.0	0.0	4.1	3.6	4.9	7.3	12.1	3.0	1.1	0.7	0.7	37.5
Quillback rockfish S. 40°10' N. lat. <sup>a</sup>	-	-	0.0	-	0.1	0.1	0.2	0.4	0.1	0.0	0.0	0.0	0.8
CA scorpionfish	5.3	3.5	4.7	9.1	7.9	17.7	29.3	11.4	9.2	8.2	3.4	7.5	117.2

Shelf rockfish S. 40°10' N. lat. <sup>c</sup>	0.0	0.1	0.1	51.6	85.1	113.9	81.9	79.9	101.0	68.2	82.3	62.5	726.6
Squarespot Rockfish S. 40°10' N. lat.	0.0	-	0.0	0.6	0.3	0.6	0.8	0.7	3.9	0.5	0.6	0.4	8.4
Vermilion rockfish S. 40°10' N. lat.	0.0	0.1	0.0	30.8	37.7	49.8	38.4	49.4	35.1	18.9	17.7	17.4	295.2
Bocaccio S. 40°10' N. lat.	-	0.0	0.0	17.9	36.0	40.5	40.6	39.5	40.2	19.0	14.3	8.6	256.6
Chilipepper S. 40°10' N. lat.	0.0	0.0	0.0	2.0	16.8	35.1	52.8	12.1	23.5	12.2	11.3	14.6	180.4
Cowcod S. 40°10' N. lat.	-	-	-	0.7	0.8	0.8	1.6	0.9	1.0	0.5	1.7	0.5	8.6
Slope rockfish S. 40°10' N. lat. <sup>d</sup>	-	-	-	2.2	4.1	2.6	0.2	2.4	1.9	0.8	2.9	1.6	18.8
Blackgill rockfish S. 40°10' N. lat.	-	-	-	-	-	0.0	-	0.0	-	-	-	0.0	0.0
Lingcod S. 40°10' N. lat.	0.0	0.0	0.0	3.1	15.5	18.1	25.8	52.7	28.5	14.5	5.6	4.7	168.5
Sablefish N. 36° N. lat.	-	0.0	0.3	-	1.0	5.5	1.3	3.3	5.7	0.7	0.1	0.0	18.0
Sablefish S. 36° N. lat.	-	-	0.0	0.0	0.1	0.3	0.4	0.2	0.1	0.0	0.2	0.0	1.4
Longspine thornyhead N 34° 27' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Longspine thornyhead S 34° 27' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Shortspine thornyhead N 34° 27' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Shortspine thornyhead S 34° 27' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0

Note: 0.0 indicates trace mortality; a dash (-) indicates no mortality.

a/ Totals for yelloweye rockfish, black rockfish, copper rockfish, and quillback rockfish are CRFS estimates only and do not include ACV projections.

b/ Includes catch of copper rockfish and quillback rockfish.

c/ Includes catch of squarespot rockfish and vermilion rockfish.

d/ Does not include catch of blackgill rockfish south of 40°10' N. lat. due to a separate harvest limit from the slope rockfish complex south of 40°10' N. lat.

Table 2. Landings (mt) of select groundfish species in California commercial non-trawl fixed gear limited entry and open access sectors, except for blackgill rockfish landings which include trawl and non-trawl, by month in 2023. Data are from PacFIN, are preliminary and subject to change.

Stock/Stock Complex	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total
YELLOWEYE ROCKFISH	--	--	--	--	0.0	--	--	--	--	--	--	0.0	0.0
CA Black rockfish	0.1	0.1	0.2	0.5	2.8	5.6	6.3	7.9	5.6	4.9	--	--	34.0
Canary rockfish	0.7	1.2	1.2	1.5	1.9	1.2	1.7	3.1	1.5	1.9	0.5	0.4	16.8
Darkblotched rockfish					0.0	0.0	0.0	0.1	0.1	0.0	0.1	--	0.3
Shortbelly rockfish	--	--	--	--	--	--	--	--	--	--	--	--	--
Splitnose rockfish	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	--	--	--	0.0
Widow rockfish	0.2	0.5	0.5	0.7	0.5	0.6	0.8	0.8	0.2	0.4	0.4	0.3	5.9
Spiny dogfish	0.1	0.0	--	0.0	0.0	0.1	0.2	0.3	0.1	0.0	0.0	--	0.9
Dover sole	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
English sole	--	--	--	--	--	--	--	--	--	--	--	--	--
Petrable sole	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.9
Starry flounder	--	--	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	0.1
Other flatfish	0.0	0.1	0.2	0.4	0.3	0.3	0.1	0.0	0.3	0.2	0.3	0.0	2.4
CA Cabezon	0.5	1.0	0.9	3.1	3.8	2.5	2.6	2.9	2.4	3.4	0.0	--	23.0
CA Kelp greenling	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.0	--	1.5
Nearshore rockfish N. 42°-40°10' N. lat. <sup>a</sup>	--	--	--	0.2	0.6	0.5	1.1	1.1	1.6	1.9	0.0	--	6.9
Copper rockfish 42°-40°10' N. lat.	--	--	--	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	--	0.6
Quillback rockfish 42°-40°10' N. lat.	--	--	--	0.0	0.1	0.0	0.1	0.0	--	--	--	--	0.3
Shelf rockfish N. 40°10' N. lat. <sup>b</sup>	--	--	0.2	0.1	0.2	0.3	0.5	0.3	0.2	0.2	0.0	--	1.9
Squarespot Rockfish N. 40°10' N. lat.	--	--	--	--	--	--	--	--	--	--	--	--	--
Yellowtail rockfish N. 40°10' N. lat.	--	--	0.1	0.4	0.5	0.5	1.0	0.4	0.1	0.3	0.0	0.0	3.3
Slope rockfish N. 40°10' N. lat.	--	--	--	0.0	0.3	0.2	0.3	1.2	0.5	0.0	0.1	0.4	3.0
Lingcod N. 40°10' N. lat.	--	--	0.0	0.5	0.8	1.1	1.4	2.3	1.3	3.6	0.6	--	11.7
Nearshore rockfish S. 40°10' N. lat. <sup>a</sup>	1.5	3.0	2.5	6.3	8.9	10.8	9.3	13.9	13.4	10.5	0.1	0.0	80.1
Copper rockfish S. 40°10' N. lat.	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.0	0.0	1.8
Quillback rockfish S. 40°10' N. lat.	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	--	--	--	--	0.2
CA scorpionfish	0.1	--	--	0.1	0.6	1.0	0.6	0.2	--	0.0	--	--	2.5



<b>Stock/Stock Complex</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>July</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total</b>
Shelf rockfish S. 40°10' N. lat. <sup>c</sup>	3.9	12.5	12.6	12.8	16.7	12.3	12.1	15.8	12.6	10.9	9.2	7.7	139.2
Squarespot Rockfish S. 40°10' N. lat.	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Vermilion rockfish S. 40°10' N. lat.	2.6	11.0	9.7	9.1	11.6	7.3	8.5	9.9	8.5	7.4	7.0	5.2	97.5
Bocaccio S. 40°10' N. lat.	3.0	3.2	3.9	6.7	7.7	7.5	7.1	7.6	4.8	6.0	4.5	4.1	66.0
Chilipepper S. 40°10' N. lat.	3.3	3.9	3.4	4.0	7.5	5.3	4.4	4.5	2.2	2.5	2.2	2.0	45.2
Cowcod S. 40°10' N. lat.	--	--	--	--	--	--	--	--	--	--	--	--	--
Slope rockfish S. 40°10' N. lat. <sup>d</sup>	0.5	1.2	0.2	0.6	0.5	0.9	0.7	0.3	0.2	0.9	0.5	1.9	8.4
Blackgill rockfish S. 40°10' N. lat. <sup>e</sup>	2.7	5.7	2.9	2.7	2.3	2.1	5.2	3.2	2.9	5.0	4.9	2.4	42.0
Lingcod S. 40°10' N. lat.	0.4	0.9	1.7	2.3	2.8	2.6	2.2	3.7	2.9	5.6	0.7	0.6	26.6
Sablefish N. 36° N. lat.	10.9	29.0	39.3	66.7	65.1	56.3	60.2	98.5	81.5	135.0	123.2	41.6	807.4
Sablefish S. 36° N. lat.	10.1	13.7	11.9	9.9	21.5	14.0	11.9	17.9	20.1	20.8	24.4	12.2	188.3
Longspine thornyhead N 34°27' N. lat.	0.1	0.2	0.1	0.1	0.3	0.2	0.2	0.3	0.3	0.5	0.2	0.1	2.6
Longspine thornyhead S 34°27' N. lat.	0.5	0.3	0.5	0.5	0.7	0.4	0.6	0.4	0.4	0.4	0.3	0.2	5.2
Shortspine thornyhead N 34°27' N. lat.	1.3	1.9	1.8	1.8	2.1	1.3	1.5	2.9	2.5	1.9	2.9	2.3	24.3
Shortspine thornyhead S 34°27' N. lat.	2.4	1.8	2.3	2.2	3.6	2.0	2.2	1.5	2.5	2.7	2.7	2.9	29.0

Note: 0.0 indicates trace mortality. Landing estimates do not include discard mortality. 0.0 indicates trace landings; a dash (--) indicates no landings.

a/ Includes landings of copper rockfish and quillback rockfish.

b/Includes landings of squarespot rockfish

c/ Includes landings of vermilion rockfish and squarespot.

d/ Does not include landings of blackgill rockfish south of 40°10' N. lat. due to a separate harvest limit from the slope rockfish complex south of 40°10' N. lat.

e/ Blackgill rockfish south of 40°10' N. lat. landings include both trawl and non-trawl sectors.

Table 3. Estimated take (mt) of select groundfish species in California for 2023 compared to the harvest limits for 2023.

Stock/Stock Complex	Reference Point	Recreational Mortality (mt)	Commercial non-trawl Landings (mt)	Total (mt)	Tracking Limits	Percent Attainment
YELLOWEYE ROCKFISH <sup>a</sup>	ACT (CA rec)	9.6	0.0	9.6	12.0	80.2%
CA Black rockfish <sup>a</sup>	ACL	113.7	34.0	147.7	334.0	44.2%
Canary rockfish	HG (rec)	73.7	16.8	90.6	111.7	81.1%
Darkblotched rockfish	Non-Trawl Allocation	0.0	0.3	0.3	38.1	0.9%
Shortbelly rockfish	EC Species Threshold <sup>b</sup>	0.0	--	0.0	2,000.0	0.0%
Splitnose rockfish	Non-Trawl Allocation	0.0	0.0	0.0	78.7	0.0%
Widow rockfish	Non-Trawl Allocation	11.3	5.9	17.2	400.0	4.3%
Spiny dogfish	Fishery Harvest Guideline	2.5	0.9	3.4	1,241.0	0.3%
Dover sole	Non-Trawl Allocation	0.0	0.3	0.3	2,420.1	0.0%
English sole	Non-Trawl Allocation	0.0	--	0.0	437.9	0.0%
Petrale sole	Non-Trawl Allocation	21.4	0.9	22.2	30.0	74.1%
Starry flounder	Non-Trawl Allocation	0.2	0.1	0.2	171.9	0.1%
Other flatfish	Non-Trawl Allocation	42.2	2.4	44.6	464.1	9.6%
CA Cabezon	ACL	9.5	23.0	32.5	182.0	17.9%
CA Kelp greenling	<sup>c</sup>	2.1	1.5	3.6	92.5	3.9%
Nearshore rockfish N. 42°-40°10' N. lat. <sup>d</sup>	HG (CA Share) <sup>e</sup>	12.7	6.9	19.6	39.6	49.5%
Copper rockfish 42°-40°10' N. lat. <sup>a</sup>	ACL Contribution to Complex	3.7	0.6	4.26	6.9	61.5%
Quillback rockfish 42°-40°10' N. lat. <sup>a</sup>	ACL Contribution to Complex	1.5	0.3	1.7	0.9	200.1%
Shelf rockfish N. 40°10' N. lat. <sup>f</sup>	Non-Trawl Allocation	3.5	1.9	5.4	482.4	1.1%
Squarespot Rockfish N. 40°10' N. lat.	<sup>g</sup>	0.0	--	0.0	-	0.0%
Vermilion rockfish N. 40°10' N. lat.	ACL Contribution to Complex	3.4	-	3.4	6.5	52.7%
Yellowtail rockfish N. 40°10' N. lat.	Non-Trawl Allocation	2.8	3.3	6.1	556.6	1.1%
Slope rockfish N. 40°10' N. lat.	Non-Trawl Allocation	0.0	3.0	3.0	280.2	1.1%
Lingcod N. 40°10' N. lat.	Non-Trawl Allocation	33.1	11.7	44.8	2,254.1	2.0%
Nearshore rockfish S. 40°10' N. lat. <sup>d</sup>	ACL	196.7	80.1	276.8	886.0	31.2%
Copper rockfish S. 40°10' N. lat. <sup>a</sup>	ACL Contribution to Complex	37.5	1.8	39.4	84.6	46.5%
Quillback rockfish S. 40°10' N. lat. <sup>a</sup>	ACL Contribution to Complex	0.8	0.2	1.0	0.9	115.3%

Stock/Stock Complex	Reference Point	Recreational Mortality (mt)	Commercial non-trawl Landings (mt)	Total (mt)	Tracking Limits	Percent Attainment
CA scorpionfish	ACL	117.2	2.5	119.7	262.0	45.7%
Shelf rockfish S. 40°10' N. lat. <sup>b</sup>	Non-Trawl Allocation	726.6	139.2	865.8	1,173.2	73.8%
Squarespot Rockfish S. 40°10' N. lat.	ACL Contribution to Complex	8.4	0.3	8.7	9.7	90.0%
Vermilion rockfish S. 40°10' N. lat.	ACL Contribution to Complex	295.2	97.5	392.8	281.3	139.6%
Bocaccio S. 40°10' N. lat.	Non-Trawl Allocation	256.6	66.0	322.6	1,093.5	29.5%
Chilipepper S. 40°10' N. lat.	Non-Trawl Allocation	180.4	45.2	225.7	521.3	43.3%
Cowcod S. 40°10' N. lat.	Non-Trawl Allocation	8.6	--	8.6	44.1	19.4%
Slope rockfish S. 40°10' N. lat. <sup>i</sup>	Non-Trawl Allocation	18.8	8.4	27.1	245.0	11.1%
Blackgill rockfish S. 40°10' N. lat. <sup>j</sup>	HG	0.0	42.0	42.0	172.4	24.4%
Lingcod S. 40°10' N. lat.	Non-Trawl Allocation	168.5	26.6	195.1	426.3	45.8%
Sablefish N. 36° N. lat.	Non-Trawl Allocation	18.0	807.4	825.3	6,885.0	12.0%
Sablefish S. 36° N. lat.	Non-Trawl Allocation	1.4	188.3	189.6	1,340.0	14.2%
Longspine thornyhead N 34° 27' N. lat.	Non-Trawl Allocation	0.0	2.6	2.6	112.1	2.3%
Longspine thornyhead S 34° 27' N. lat.	ACL	0.0	5.2	5.2	725.0	0.7%
Shortspine thornyhead N 34° 27' N. lat.	Non-Trawl Allocation	0.0	24.3	24.3	64.0	37.9%
Shortspine thornyhead S 34° 27' N. lat.	Non-Trawl Allocation	0.0	29.0	29.0	662.3	4.4%

a/ Recreational totals for yelloweye rockfish, black rockfish, copper rockfish, and quillback rockfish are CRFS

estimates only and do not include ACV projections.

b/ Shortbelly rockfish is an ecosystem component species and has a threshold of 2,000 lb as per FMP Amendment 30

c/ Reference point denotes the CA kelp greenling contribution to the Other Fish complex ACL.

d/ Includes catch of copper rockfish and quillback rockfish

e/ The nearshore complex north of 40°10' N lat. HG is 89.7 mt. The CA share of the HG is 39.6 mt.

f/ Includes catch of squarespot rockfish and vermilion rockfish

g/ Squarespot rockfish north of 40°10' N. lat. has no species-specific contribution within the Shelf Rockfish Complex north of 40°10' N. lat.

h/ Includes catch of vermilion rockfish and squarespot rockfish

i/ Does not include blackgill rockfish landings south of 40°10' N. lat. due to a separate harvest limit from the slope rockfish complex south of 40°10' N. lat.

j/ Blackgill rockfish south of 40°10' N. lat. commercial landings include both trawl and non-trawl sector.