

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON 2022 GROUND FISH HARVEST IN CALIFORNIA

The California Department of Fish and Wildlife (CDFW) provides the following informational report on harvest of select groundfish species. This report provides an update on fishery performance in 2022 relative to Annual Catch Limits (ACLs), Harvest Guidelines (HGs), sector allocations, and Annual Catch Targets (ACTs) in effect for the 2021-22 biennium.

In this report, catch includes estimates of total mortality from the recreational sector, and landings from the commercial non-trawl sector without discard mortality available from commercial landing receipts. Additional species have been included in the report (e.g., quillback rockfish, copper rockfish, thornyheads, and sablefish) compared to CDFW inseason reports in prior years to provide a more comprehensive update on non-trawl groundfish catch in California. Except for blackgill rockfish, where reported commercial landings are from both the trawl and non-trawl sectors, all commercial landings reported herein are from only the non-trawl sector. The 2022 combined recreational and commercial catches compared to federally designated harvest specifications as shown in Table 1 are all within allowable levels.

Recreational Monitoring and Catch Estimation

Monthly recreational catch data are from RecFIN through January 2022 and reflect activity across all recreational management areas (Table 2). The boat-based recreational groundfish fishery opened March 1 in the Southern Management Area (south of 34° 27' N. lat. to the US/Mex border), April 1 in the San Francisco and Central Management Areas (between 38° 57.5' N. lat. and 34° 27' N. lat.) and will open May 1 in the Northern and Mendocino Management Areas (between the OR/CA border and 38° 57.5' N. lat.). Recreational catch information for 2022 will reflect the reductions to bag limits for vermilion rockfish, quillback rockfish, and copper rockfish, which became effective January 1, 2022.

In addition to tracking catch of groundfish species utilizing the monthly catch estimates that become available during the season, several rockfish species of concern (yelloweye rockfish, copper rockfish, quillback rockfish, and black rockfish) are tracked on a weekly basis using preliminary California Recreational Fisheries Survey (CRFS) information tallies from samplers' weekly field reports. In 2022, quillback and copper rockfish were added to the list of species that are tracked weekly as a result of new stock assessment information from 2021. Preliminary CRFS reports of fish observed or reported are converted into an Anticipated Catch Value (ACV) in metric tons using catch and effort data from previous years. Weekly ACV data are used as "proxy" values to approximate catch during the five-to-eight-week lag time between when data are collected and CRFS catch estimates become available, at which time the ACV value is replaced with the CRFS catch estimate for that month. The methods used to generate these near-real time estimates are familiar to the Council, as they are the same as those used by CDFW to track and estimate California's recreational Pacific halibut landings during the season.

For the year to date, ACVs through March 27 are available and indicate 2.4 mt of copper rockfish S 40°10' N. lat. have been taken (Table 3). Additionally, no quillback rockfish have been taken

statewide (Table 4), and also no copper rockfish between the OR/CA border and 40°10' N. lat. have been reported yet. However, it is still too early in the year to determine the impact the bag limit reductions will have on overall mortality in 2022.

To date, ACVs have been an effective and reliable tool to closely monitor recreational inseason mortality on a weekly basis, and CDFW has used this tool since 2008. The ACVs are more accurate predictors of CRFS catch estimates when the relationship between current year catch and sample data remains the same or similar to the relationship between prior year catch and estimate data. Because significant changes to recreational bag limits for quillback and copper rockfish were made for 2022, it is expected the ACVs produced for these species this year may over-project impacts compared to the resulting monthly CRFS catch estimates. However, CDFW believes the ACV process for these species will remain a valuable inseason catch tracking tool in 2022 and beyond.

Commercial Landings To Date

Commercial landings data are from PacFIN and reflect activity across all management areas from January through March (Table 5). Landings in the first three months of 2022 are higher for shelf rockfish (i.e., minor shelf complex, canary, bocaccio, widow, and chilipepper rockfishes), slope rockfish, and lingcod than in 2021. Landings of most nearshore species (i.e., black rockfish, nearshore rockfish complex, CA scorpionfish, cabezon, and kelp greenling), sablefish, thornyheads, and flatfish are similar to the first three months of 2021. However, as anticipated, quillback and copper rockfish landings declined precipitously compared to 2021 in response to the new 2022 sub-trip limits for these species.

Figure 1 shows the year-to-date cumulative landings of copper rockfish compared to the 2021 cumulative landings. Also shown is CDFW's projected 2022 commercial catch of copper rockfish in each region by the year's end, as reported in [Agenda Item E.7.a Supplemental CDFW Report 2, November 2021](#). Figure 2 shows the year-to-date cumulative landings of quillback rockfish compared to the 2021 cumulative landings. Also shown is CDFW's projected 2022 commercial catch of quillback rockfish in each region by the year's end, as reported in the [November 2021 Supplemental CDFW Report 2](#).

CDFW will provide additional catch updates throughout 2022 as seasons progress. Reported catches are subject to change as more data becomes available.

Table 1. Estimated take (mt) of select groundfish species in California for 2022 compared to the harvest limits for 2022. Note, recreational mortality values are based on monthly catch estimates and do not include weekly ACVs.

Stock/Stock Complex	Reference Point	Recreational Mortality (mt)	Commercial Landings (mt)	Total (mt)	Tracking Limits	Percent Attainment
YELLOWEYE ROCKFISH	ACT (CA rec)	0.0	See Table 5	0.0	9.2	0.0%
CA Black rockfish	ACL	0.3	8.3	8.6	338.7	2.5%
Canary rockfish	HG (rec)	0.0	See Table 5	0.0	113.9	0.0%
Darkblotched rockfish	Non-Trawl Allocation	0.0	0.2	0.2	40.6	0.5%
Shortbelly rockfish	f	0.0	0.0	0.0	NA	-
Splitnose rockfish	Non-Trawl Allocation	0.0	0.0	0.0	80.6	0.0%
Widow rockfish	Non-Trawl Allocation	0.0	1.7	1.7	400	0.4%
Spiny dogfish	Non-Trawl Allocation	0.0	0.1	0.1	1,585.20	0.0%
Dover sole	Non-Trawl Allocation	0.0	0.0	0.0	2,420.10	0.0%
English sole	Non-Trawl Allocation	0.0	0.0	0.0	442.5	0.0%
Petrale sole	Non-Trawl Allocation	0.1	0.2	0.3	30	0.9%
Starry flounder	Non-Trawl Allocation	0.0	0.0	0.0	171.8	0.0%
Other flatfish	Non-Trawl Allocation	0.6	0.1	0.7	461.7	0.2%
CA Cabezon	ACL	0.0	5.8	5.8	195	3.0%
CA Kelp greenling	b	0.1	0.9	1.0	92.5	1.1%
Nearshore rockfish N. 42°-40°10' N. lat.	HG (CA State-Specific) ^a	0.0	1.0	1.0	37.4	2.7%
Copper rockfish 42°-40°10' N. lat.	Contribution to CA Nearshore Rockfish HG N. 42°-40°10' N. lat.	0.0	0.0	0.0	2 ^g	0.0%
Quillback rockfish 42°-40°10' N. lat.	Contribution to CA Nearshore Rockfish HG N. 42°-40°10' N. lat.	0.0	0.0	0.0	1.6 ^g	0.0%
Shelf rockfish N. 40°10' N. lat.	Non-Trawl Allocation	0.0	0.4	0.4	548.3	0.1%
Yellowtail rockfish N. 40°10' N. lat.	ACL	0.0	0.7	0.7	575.2	0.1%
Slope rockfish N. 40°10' N. lat.	Non-Trawl Allocation	0.0	0.4	0.4	285.4	0.1%
Lingcod N. 40°10' N. lat.	Non-Trawl Allocation	0.0	3.8	3.8	2,573.80	0.1%
Nearshore rockfish S. 40°10' N. lat.	ACL	0.2	17.3	17.5	1,010	1.7%
Copper rockfish S. 40°10' N. lat.	ACL Contribution to Complex	0.1	0.6	0.7	202	16.7%
Quillback rockfish S. 40°10' N. lat.	ACL Contribution to Complex	0.0	0.2	0.2	4.2	0.1%

Stock/Stock Complex	Reference Point	Recreational Mortality (mt)	Commercial Landings (mt)	Total (mt)	Tracking Limits	Percent Attainment
CA scorpionfish	ACL	4.9	0.0	4.9	275	1.8%
Shelf rockfish S. 40°10' N. lat. ^c	Non-Trawl Allocation	0.0	23.9	23.9	1137.2	2.1%
Vermilion rockfish S. 40°10' N. lat.	ACL Contribution to Complex	0.0	16.6	16.6	209.5	7.9%
Bocaccio S. 40°10' N. lat.	Non-Trawl Allocation	0.0	11.3	11.3	1,021.80	1.1%
Chilipepper S. 40°10' N. lat.	Non-Trawl Allocation	0.0	11.0	11.0	540.3	2.0%
Cowcod S. 40°10' N. lat.	Non-Trawl Allocation	0.0	See Table 5	0.0	16	0.0%
Slope rockfish S. 40°10' N. lat. ^d	Non-Trawl Allocation	0.0	1.2	1.2	142.2	0.8%
Blackgill rockfish S. 40°10' N. lat. ^e	HG	0.0	13.8	13.8	174	7.9%
Lingcod S. 40°10' N. lat.	Non-Trawl Allocation	0.2	8.2	8.4	695.4	1.2%
Sablefish N. 36° N. lat.	Non-Trawl Allocation	0.0	94.7	94.7	6,566	1.4%
Sablefish S. 36° N. lat.	Non-Trawl Allocation	0.0	31.0	31.0	1,809	1.7%
Longspine thornyhead N 34° 27' N. lat.	Non-Trawl Allocation	0.0	0.5	0.5	119.9	0.4%
Longspine thornyhead S 34° 27' N. lat.	ACL	0.0	1.5	1.5	774	0.2%
Shortspine thornyhead N 34° 27' N. lat.	Non-Trawl Allocation	0.0	5.1	5.1	65.73	7.8%
Shortspine thornyhead S 34° 27' N. lat.	Non-Trawl Allocation	0.0	11.9	11.9	680.3	1.7%

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

a/ The nearshore complex north of 40°10' N lat. HG is 77 mt. The CA share of the HG is 37.4 mt.

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

c/ Includes catch of vermilion rockfish south of 40°10' N. lat.

d/ 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.

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

f/ Shortbelly rockfish is an ecosystem component species and does not have a harvest limit.

g/ These numbers are the CA State-Specific Contribution to CA Nearshore Rockfish HG N. 42°-40°10' N. lat. that is identified in [Agenda Item H.8.a Supplemental GMT Report 2, November 2019](#). These numbers are presented for reference, but as a reminder CDFW managers to the CA state HG share to nearshore complex north of 40°10' N lat.

Table 2. Estimated catch (mt) of select groundfish species in California recreational sector by month in 2022. Data are from RecFIN, are preliminary and subject to change. Note, recreational mortality values are based on monthly catch estimates and do not include weekly ACVs.

Stock/Stock Complex ¹	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total
YELLOWEYE ROCKFISH	-												-
CA Black rockfish	0.3												0.3
Canary rockfish	-												-
Darkblotched rockfish	-												-
Shortbelly rockfish	-												-
Splitnose rockfish	-												-
Widow rockfish	-												-
Spiny dogfish	0.0												0.0
Dover sole	-												-
English sole	-												-
Petrале sole	0.1												0.1
Starry flounder	-												-
Other flatfish	0.6												0.6
CA Cabezon	0.0												0.0
CA Kelp greenling	0.1												0.1
Nearshore rockfish N. 42°-40°10' N. lat.	0.0												0.0
Copper rockfish 42°-40°10' N. lat.	-												-
Quillback rockfish 42°-40°10' N. lat.	-												-
Shelf rockfish N. 40°10' N. lat.	-												-
Yellowtail rockfish N. 40°10' N. lat.	-												-
Slope rockfish N. 40°10' N. lat.	-												-
Lingcod N. 40°10' N. lat.	-												-
Nearshore rockfish S. 40°10' N. lat.	0.2												0.2
Copper rockfish S. 40°10' N. lat.	0.1												0.1
Quillback rockfish S. 40°10' N. lat.	-												-
CA scorpionfish	4.9												4.9

Stock/Stock Complex ¹	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total
Shelf rockfish S. 40°10' N. lat. ^a	0.0												0.0
Vermilion rockfish S. 40°10' N. lat.	0.0												0.0
Bocaccio S. 40°10' N. lat.	-												-
Chilipepper S. 40°10' N. lat.	0.0												0.0
Cowcod S. 40°10' N. lat.	-												-
Slope rockfish S. 40°10' N. lat. ^b	-												-
Lingcod S. 40°10' N. lat.	-												-
Sablefish N. 36° N. lat.	0.2												0.2
Sablefish S. 36° N. lat.	0.0												0.0
Longspine thornyhead N 34° 27' N. lat.	-												-
Longspine thornyhead S 34° 27' N. lat.	-												-
Shortspine thornyhead N 34° 27' N. lat.	-												-
Shortspine thornyhead S 34° 27' N. lat.	-												-

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

1/ See rockfish stock complex definitions under Table 1.

a/ Includes catch of vermilion rockfish south of 40°10' N. lat.

b/ 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 3. Recreational quillback rockfish ACVs (mt) north and south of 40°10' N. lat. through March 27, 2022, compared to monthly catch estimates. When monthly estimates become available, the ACV is reported with a strike-through and is no longer used in calculating the total projected catch for the year. Data are from RecFIN and CDFW, are preliminary and subject to change. Dash indicates no mortality, and 0.0 indicates trace mortality.

	N. 40°10' N. lat.		S. 40°10' N. lat.	
	ACV	Estimate	ACV	Estimate
January	-	-	-	-
February	-	TBD	-	TBD
March (data through March 27)	-	TBD	-	TBD
Total	-		-	

Table 4. Recreational copper rockfish ACVs (mt) north and south of 40°10' N. lat. through March 27, 2022, compared to monthly catch estimates. When monthly estimates become available, the ACV is reported with a strike-through and is no longer used in calculating the total projected catch for the year. Data are from RecFIN and CDFW, are preliminary and subject to change. Dash indicates no mortality, and 0.0 indicates trace mortality.

	N. 40°10' N. lat.		S. 40°10' N. lat.	
	ACV	Estimate	ACV	Estimate
January	-	-	-	0.1
February	-	TBD	0.1	TBD
March (data through March 27)	-	TBD	2.2	TBD
Total	-		2.4	

Table 5. Estimated landings (mt) of select groundfish species in California commercial non-trawl fixed gear limited entry and open access sectors by month in 2022. Data are from PacFIN, are preliminary and subject to change.

Stock/Stock Complex ¹	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total
YELLOWEYE ROCKFISH	-	-	-										-
CA Black rockfish	2.0	1.2	5.1										8.3
Canary rockfish	1.5	2.3	1.7										5.5
Darkblotched rockfish	0.0	0.0	0.2										0.2
Shortbelly rockfish	-	-	-										-
Splitnose rockfish	-	0.0	0.0										0.0
Widow rockfish	0.8	0.5	0.4										1.7
Spiny dogfish	0.1	0.0	-										0.1
Dover sole	0.0	0.0	0.0										0.0
English sole	-	-	-										-
Petrale sole	0.1	0.0	0.1										0.2
Starry flounder	-	0.0	-										0.0
Other flatfish	0.0	0.0	0.1										0.1
CA Cabezon	3.2	1.7	0.9										5.8
CA Kelp greenling	0.4	0.3	0.2										0.9
Nearshore rockfish N. 42°-40°10' N. lat.	0.4	0.2	0.4										1.0
Copper rockfish 42°-40°10' N. lat.	0.0	0.0	0.0										0.0
Quillback rockfish 42°-40°10' N. lat.	0.0	0.0	0.0										0.0
Shelf rockfish N. 40°10' N. lat.	0.2	0.1	0.1										0.4
Yellowtail rockfish N. 40°10' N. lat.	0.4	0.3	0.0										0.7
Slope rockfish N. 40°10' N. lat.	-	0.1	0.3										0.4
Lingcod N. 40°10' N. lat.	1.6	1.0	1.2										3.8
Nearshore rockfish S. 40°10' N. lat.	7.4	6.5	3.4										17.3
Copper rockfish S. 40°10' N. lat.	0.2	0.2	0.2										0.6
Quillback rockfish S. 40°10' N. lat.	0.0	0.1	0.1										0.2
CA scorpionfish	0.0	0.0	0.0										0.0

Stock/Stock Complex ¹	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total
Shelf rockfish S. 40°10' N. lat. ^a	8.9	8.1	6.9										23.9
Vermilion rockfish S. 40°10' N. lat.	6.3	5.8	4.5										16.6
Bocaccio S. 40°10' N. lat.	5.4	4.4	1.5										11.3
Chilipepper S. 40°10' N. lat.	6.0	2.3	2.7										11.0
Cowcod S. 40°10' N. lat.	-	-	-										-
Slope rockfish S. 40°10' N. lat. ^b	0.6	0.5	0.1										1.2
Blackgill rockfish S. 40°10' N. lat. ^c	7.6	3.3	2.9										13.8
Lingcod S. 40°10' N. lat.	4.1	2.6	1.5										8.2
Sablefish N. 36° N. lat.	34.2	25.6	34.9										94.7
Sablefish S. 36° N. lat.	21.0	18.8	10.0										31.0
Longspine thornyhead N 34° 27' N. lat.	0.2	0.1	0.2										0.5
Longspine thornyhead S 34° 27' N. lat.	0.7	0.3	0.5										1.5
Shortspine thornyhead N 34° 27' N. lat.	2.1	1.5	1.5										5.1
Shortspine thornyhead S 34° 27' N. lat.	4.4	3.9	3.6										11.9

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

1/ See rockfish stock complex definitions under Table 1.

a/ Includes landings of vermilion rockfish south of 40°10' N. lat.

b/ 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.

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

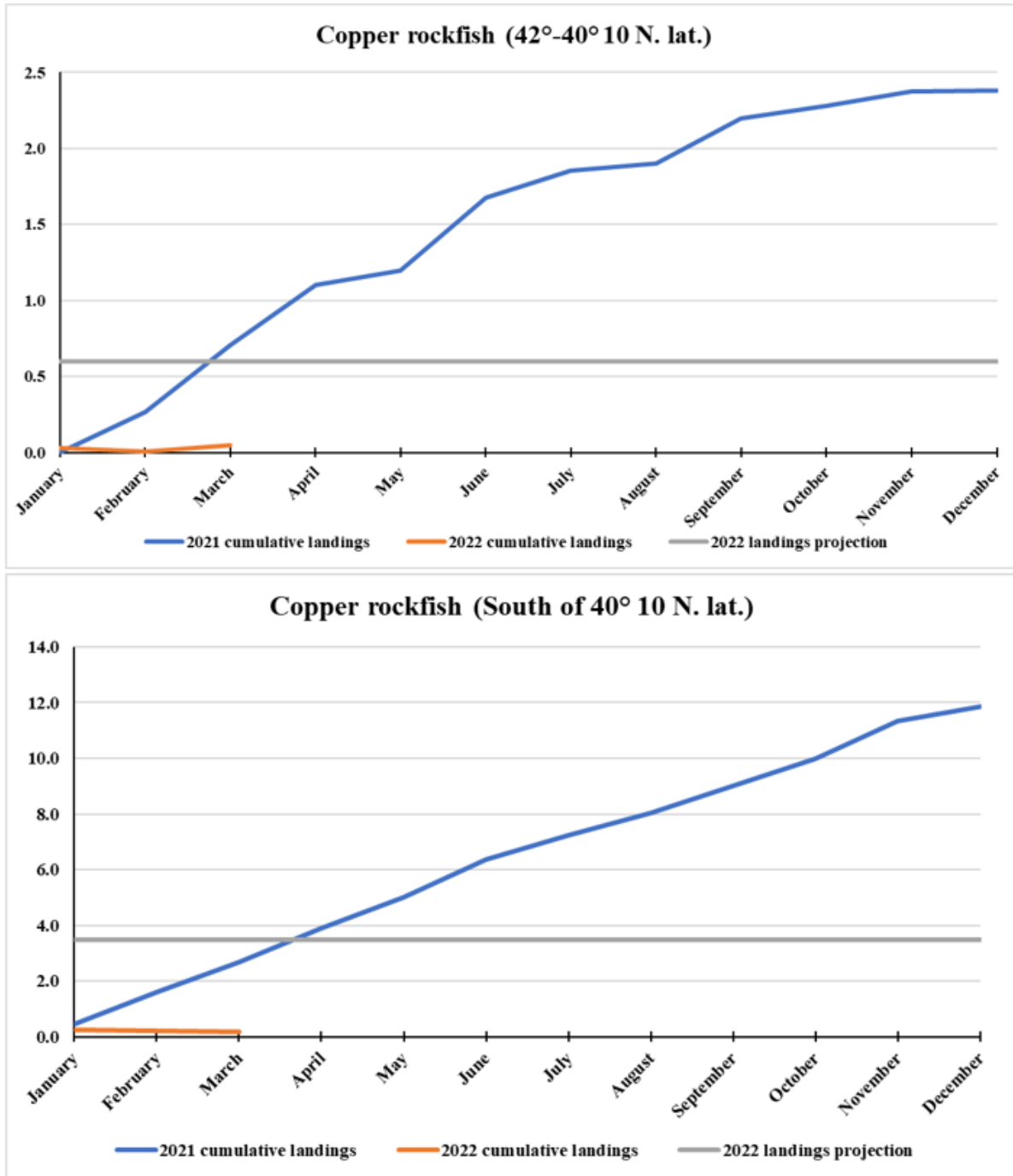


Figure 1. Cumulative commercial landings of copper rockfish in 2021 (blue) and 2022 (orange) by month compared to 2022 total catch projections (grey) for the area between 42 – 4010' N. lat. and for south of 40 10' N. lat. to the US/Mexico border. Data are from PacFIN, are preliminary and subject to change.

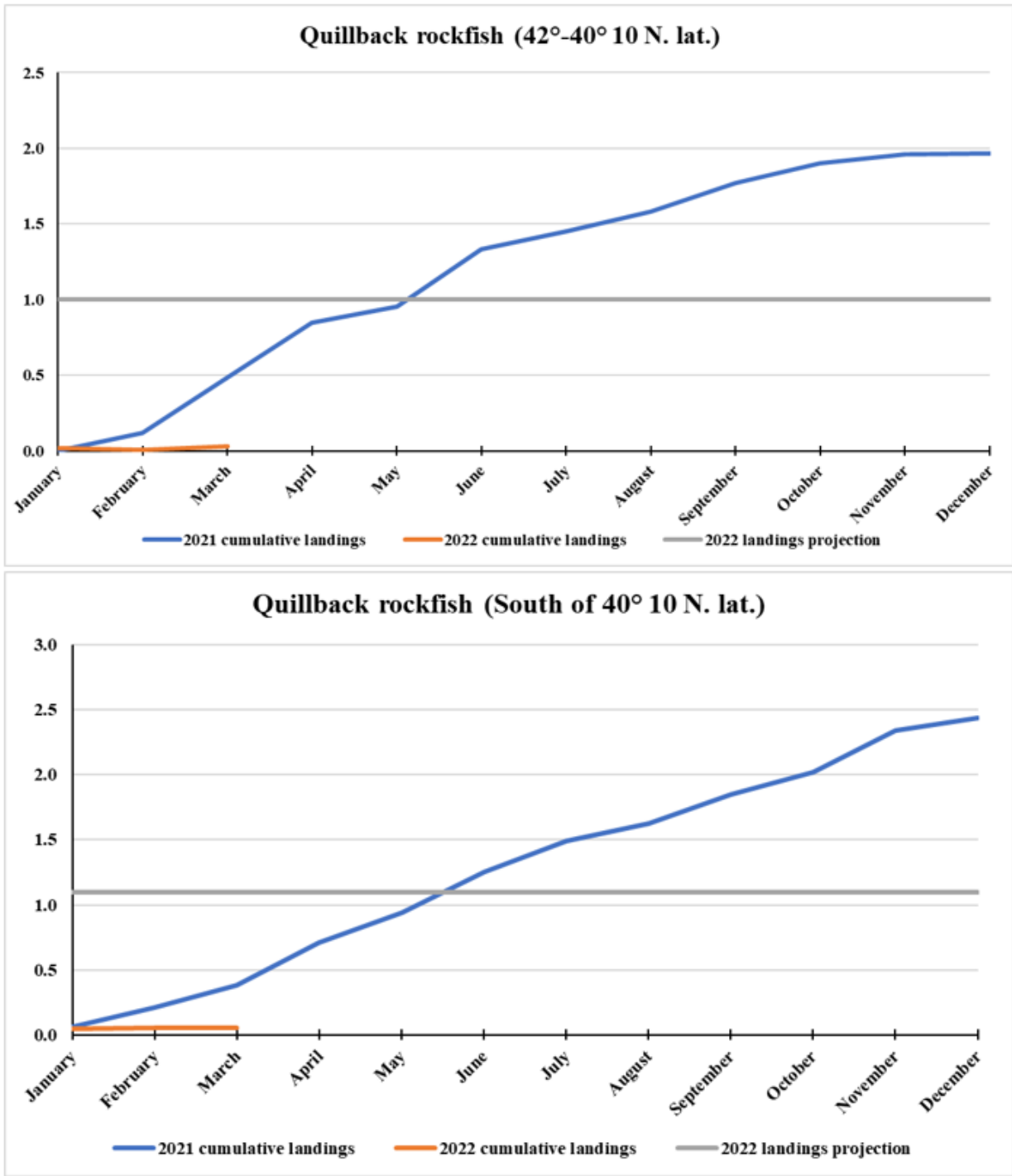


Figure 2. Cumulative commercial landings of quillback rockfish in 2021 (blue) and 2022 (orange) by month compared to 2022 total catch projections (grey) for the area between 42 – 4010' N. lat. and for south of 40 10' N lat. to the US/Mexico border. Data are from PacFIN, are preliminary and subject to change.