## CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON 2021 GROUNDFISH HARVEST IN CALIFORNIA

The California Department of Fish and Wildlife (CDFW) provides the following informational report on harvest of select groundfish species for 2021. This report represents the second update on the status of the 2021 fishing season 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. The 2021 combined recreational and commercial catches to date compared to federally designated harvest specifications (Table 1) are within allowable levels.

Monthly recreational catch (Table 2) data are from RecFIN through September 2021 and reflect activity across all recreational management areas for January through September. There are new regulatory changes for 2021 within the ten-fish aggregate Rockfish, Cabezon, and Greenling bag limit. These changes include removal of the sub-bag limits for cabezon, black rockfish, and canary rockfish and implementation of a five-fish sub-bag limit for vermilion rockfish. Several management areas also experienced an increase in allowable fishing depth in 2021. Due to the removal of the black rockfish sub-bag limit, recreational catch of the species has increased compared to prior years, which was expected. Despite this increased catch, the ACL is not expected to be exceeded. Catch of other species are in line with 2020 levels.

During the first half of 2021, California Recreational Fisheries Survey (CRFS) staff continued to maintain COVID-19 safety protocols, including keeping a safe distance from subject anglers and passers-by. Similar to 2020, there were some deficiencies in data collected by CRFS in the early months of 2021, including the absence of any party-charter onboard data, length data, and some species composition data. Starting on July 16, CRFS samplers resumed normal pre-COVID-19 sampling protocols.

Commercial landings data (Table 3) are from PacFIN, through November 8, 2021. Data are preliminary and subject to change. Year-to-date landings continue to show increases in commercial landings of shelf rockfish stocks (i.e., minor shelf complex, canary, bocaccio, widow, and chilipepper rockfishes), nearshore stocks (i.e., black rockfish, nearshore rockfish complex, CA scorpionfish, cabezon, and kelp greenling), and lingcod from previous years (2017-2020). Deepwater stocks (i.e., sablefish, thornyheads, and slope rockfish) are trending similar to 2020.

CDFW will provide a final 2021 catch update for the March 2022 briefing book.

**Table 1.** Estimated take (mt) of select groundfish species in California for 2021 compared to the harvest limits for 2021.

Stock/Stock Complex	Reference Point	Recreational Mortality (mt)	Commercial Landings (mt)	Total (mt)	Tracking Limits (mt)	Percent Attainment	
Yelloweye rockfish	ACT (CA rec)	2.6	See Table 3	2.6	8.9	29.2%	
Nearshore rockfish N. 42°-40°10' N. lat.	HG (CA Share) <sup>a</sup>	11.2	8.6	19.8	36.2	54.7%	
Nearshore rockfish S. 40°10' N. lat.	ACL	315.7	87.1	402.8	1016	39.6%	
Black rockfish	ACL	170.3	36.2	206.5	348	59.3%	
Cabezon	ACL	17.4	21.4	38.8	210	18.5%	
California scorpionfish	ACL	119.6	0.8	120.4	291	41.4%	
Kelp greenling	b	3.3	2.1	5.4	92.5	5.8%	
Lingcod N. 40°10' N. lat.	Non-Trawl Allocation	23.0	17.1	40.1	2799.8	1.4%	
Lingcod S. 40°10' N. lat.	Non-Trawl Allocation	166.0	29.3	195.3	599	32.6%	
Shelf rockfish N. 40°10' N. lat.	Non-Trawl Allocation	3.3	2.2	5.5	571.4	1.0%	
Yellowtail rockfish N. 40°10' N. lat.	ACL	1.0	5.1	6.1	6050	0.1%	
Shelf rockfish S. 40°10' N. lat.°	Non-Trawl Allocation	270.1	98.5	368.6	1163	31.7%	
Vermilion rockfish S. 40°10' N. lat.	ACL Contribution to Complex	169.7	58.9	228.6	209.5	109.1%	
Bocaccio S. 40°10' N. lat.	Non-Trawl Allocation	54.6	31.2	85.8	1036.4	8.3%	
Canary rockfish	HG (rec)	51.5	See Table 3	51.5	116.8	44.1%	
Chilipepper S. 40°10' N. lat.	Non-Trawl Allocation	1.1	26.1	27.2	565.1	4.8%	
Cowcod S. 40°10' N. lat.	ACT (rec)	7.2	See Table 3	7.2	16	45.0%	
Widow rockfish	Non-Trawl Allocation	2.1	4.2	6.3	1302.9	0.5%	
Slope rockfish N. 40°10' N. lat.	Non-Trawl Allocation	-	11.3	11.3	290.3	3.9%	
Slope rockfish S. 40°10' N. lat. <sup>d</sup>	Non-Trawl Allocation	0.0	3.9	3.9	47.9	8.1%	
Blackgill rockfish S. 40°10' N. lat.e	HG	-	24.1	24.1	176.6	13.6%	
Darkblotched rockfish	ACL	-	0.4	0.4	882	0.0%	
Shortbelly rockfish	f	-	0.0	0.0	NA	-	

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

a/ The nearshore complex north of 40°10' N lat. HG is 79 mt. The CA share of the HG is 36.2 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.

Table 2. Estimated catch (mt) of select groundfish species in California recreational sector by month in 2021.

Stock/Stock Complex <sup>1</sup>	January	February	March	April	May	June	July	August	September	Total
Yelloweye rockfish	-	-	-	0.1	0.2	0.2	0.4	0.8	0.9	2.6
Nearshore rockfish N. 42°-40°10' N. lat.	0.0	0.1	0.1	0.2	0.4	1.4	3.3	3.9	1.8	11.2
Nearshore rockfish S. 40°10' N. lat.	0.2	0.4	2.4	18.8	26.0	50.2	63.8	84.0	69.9	315.7
Black rockfish	0.3	0.2	0.9	1.3	12.7	30.4	62.8	38.2	23.5	170.3
Cabezon	0.0	3.3	0.4	0.7	2.0	3.3	2.9	2.4	2.4	17.4
California scorpionfish	4.9	5.7	5.0	8.8	15.3	29.7	24.7	17.2	8.3	119.6
Kelp greenling	0.1	0.1	0.2	0.2	0.4	0.2	1.1	0.6	0.4	3.3
Lingcod N. 40°10' N. lat.	0.0	-	0.6	0.6	2.5	3.9	6.0	5.4	4.0	23.0
Lingcod S. 40°10' N. lat.	0.0	0.2	2.9	13.2	16.8	19.4	23.5	56.6	33.4	166.0
Shelf rockfish N. 40°10' N. lat.	-	-	-	ı	0.2	0.5	1.0	1.1	0.5	3.3
Yellowtail rockfish N. 40°10' N. lat.	-	-	-	ı	0.0	0.1	0.3	0.4	0.2	1.0
Shelf rockfish S. 40°10' N. lat. <sup>a</sup>	0.0	0.0	7.3	30.4	32.3	30.0	45.8	68.1	56.2	270.1
Vermilion rockfish S. 40°10' N. lat.	0.0	0.0	5.7	20.1	24.2	21.3	33.3	33.9	31.2	169.7
Bocaccio S. 40°10' N. lat.	-	-	4.6	12.4	3.1	6.0	8.3	7.7	12.5	54.6
Canary rockfish	-	-	0.0	3.7	4.3	7.6	9.5	16.2	10.2	51.5
Chilipepper S. 40°10' N. lat.	0.0	-	0.3	0.2	0.0	0.2	0.1	0.1	0.2	1.1
Cowcod S. 40°10' N. lat.	-	-	0.3	0.6	2.0	0.1	0.3	0.1	3.8	7.2
Widow rockfish	-	-	-	0.0	0.2	0.2	0.2	0.9	0.6	2.1
Slope rockfish N. 40°10' N. lat.	-	-	-	-	-	-	-	-	-	-
Slope rockfish S. 40°10' N. lat. <sup>b</sup>	-	-	0.0	0.0	-	-	-	-	0.0	0.0
Blackgill rockfish S. 40°10' N. lat.	-	-	-	-	-	-	-	-	-	-
Darkblotched rockfish	-	-	-	-	-	-	-	-	-	-
Shortbelly rockfish	-	- 1'4	-	-	-	-	-	-	-	-

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

<sup>1/</sup> 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.** Estimated landings (mt) of select groundfish species in California commercial non-trawl fixed gear limited entry and open access sectors by month in 2021.

Stock/Stock Complex <sup>1</sup>	January	February	March	April	May	June	July	August	September	October	November	Total
Yelloweye Rockfish	-	-	-	-	0.0	-	-	-	=	-	-	-
Nearshore rockfish N. 42°-40°10' N. lat.	0.0	0.7	1.0	0.9	0.3	1.1	1.0	1.2	1.2	1.2	-	8.6
Nearshore rockfish S. 40°10' N. lat.	2.6	5.6	6.1	5.9	6.0	11.1	15.5	11.8	12.3	9.2	1.0	87.1
Black Rockfish	0.0	0.6	2.5	4.3	4.8	6.0	6.0	2.7	5.4	3.8	0.1	36.2
Cabezon	0.5	1.7	1.9	1.7	1.8	3.6	3.0	2.9	2.8	1.4	0.1	21.4
CA Scorpionfish	-	0.2	0.0	0.1	0.0	0.3	0.1	0.1	0.0	-	-	0.8
Kelp Greenlings (CA)	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.0	2.1
Lingcod N. 40°10' N. lat.	0.7	0.8	1.8	2.2	1.4	1.8	0.9	0.8	2.5	3.4	0.8	17.1
Lingcod S. 40°10' N. lat.	0.7	2.5	3.0	2.9	2.2	4.2	2.7	3.7	4.5	2.7	0.2	29.3
Shelf RF N 40°10' N lat.	-	0.3	0.2	0.3	0.2	0.4	0.3	0.2	0.2	0.1	0.0	2.2
Yellowtail rockfish N. 40°10' N. lat.	0.0	0.3	0.4	0.6	0.8	0.6	0.4	0.2	0.7	1.1	-	5.1
Shelf rockfish S. 40°10' N. lat. <sup>a</sup>	8.5	8.6	9.3	7.5	7.9	13.7	12.6	8.7	12.4	8.3	1.0	98.5
Vermilion rockfish S. 40°10' N. lat.	5.5	5.9	6.5	3.5	4.7	7.9	7.9	5.7	5.9	4.8	0.6	58.9
Bocaccio	1.7	2.5	5.1	2.5	3.1	3.7	4.0	1.4	4.2	2.6	0.4	31.2
Canary Rockfish	0.6	1.5	2.8	2.2	1.5	2.9	2.6	1.6	2.1	2.4	0.3	20.5
Chilipepper Rockfish S. 40°10' N. lat	1.4	2.5	3.5	2.3	3.4	3.5	4.5	0.8	2.5	1.5	0.2	26.1
Cowcod S. 40°10' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-
Widow Rockfish	0.2	0.3	0.1	0.2	0.0	0.3	0.8	0.8	0.8	0.7	0.0	4.2
Slope RF N 40°10' N lat.	-	0.1	0.2	0.2	0.5	2.0	1.9	1.6	3.7	1.1	-	11.3
Slope RF S 40°10' N lat.b	0.2	0.5	0.5	0.5	0.2	0.3	0.4	0.3	0.2	0.8	0.0	3.9
Blackgill rockfish S. 40°10' N. lat.°	0.8	2.0	2.1	3.1	2.4	2.3	1.9	2.0	3.0	3.2	1.3	24.1
Darkblotched rockfish	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	-	0.4
Shortbelly rockfish		-	0.0	-	-	-	-	-	0.0	-	-	0.0

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

<sup>1/</sup> 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.