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 final 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 compared to federally designated harvest specifications (Table 1) are within established allowable levels.

Monthly recreational catch data (Table 2) are from RecFIN and reflect activity across all recreational management areas for the entire calendar year. Commercial landings data (Table 3) are from PacFIN and also reflect activity across all management areas for the entire calendar year. Attainment of shelf rockfish stocks (i.e., minor shelf complex, canary, bocaccio, widow, and chilipepper rockfishes) and nearshore stocks (i.e., black rockfish, nearshore rockfish complex, CA scorpionfish, cabezon, and kelp greenling) was higher in 2021 compared to 2020 by both recreational and commercial sectors. Attainment of lingcod and deep-water stocks (i.e., sablefish, thornyheads, and slope rockfish) in 2021 was similar to 2020 in the non-trawl sector.

While all California catches in 2021 were within established specifications and guidelines, the ACL *contribution* of vermilion rockfish to the total shelf rockfish complex ACL south of 40°10' N. lat. was exceeded (Table 1). Consequently, in November 2021 the Council recommended, and NMFS and CDFW have implemented, inseason action for 2022 to further reduce the recreational sub-bag limit for this species.

CDFW will begin providing catch updates for 2022 at the April Council meeting. In response to the results of the 2021 stock assessments, future CDFW inseason reports will include estimated take of quillback and copper rockfishes, in addition to the select groundfish species and complexes reported in 2021.

Stock/Stock Complex ¹	Reference Point	Recreational Mortality (mt)	Commercial Landings (mt)	Total (mt)	Tracking Limits	Percent Attainment	
Yelloweye rockfish	ACT (CA rec)	4.0	See Table 3	4.0	8.9	44.9%	
Nearshore rockfish N. 42°-40°10' N. lat.	HG (CA Share) ^a	15.2	10.3	25.5	36.2	70.4%	
Nearshore rockfish S. 40°10' N. lat.	ACL	428.7	99.9	528.6	1016	52.0%	
Black rockfish	ACL (CA)	194.6	38.3	232.9	348	66.9%	
Cabezon	ACL (CA)	23.8	25.4	49.2	210	23.4%	
California scorpionfish	ACL (CA)	128.5	0.8	129.3	291	44.4%	
Kelp greenling	b	4.4	2.4	6.8	92.5	7.4%	
Lingcod N. 40°10' N. lat.	Non-Trawl Allocation	29.5	18.2	47.7	2799.8	1.7%	
Lingcod S. 40°10' N. lat.	Non-Trawl Allocation	231.3	35.9	267.2	599	44.6%	
Shelf rockfish N. 40°10' N. lat.	Non-Trawl Allocation	3.8	2.3	6.1	571.4	1.1%	
Yellowtail rockfish N. 40°10' N. lat.	ACL	1.8	4.5	6.3	6050	0.1%	
Shelf rockfish S. 40°10' N. lat.°	Non-Trawl Allocation	411.3	110.3	521.6	1163	44.8%	
Vermilion rockfish S. 40°10' N. lat.	ACL Contribution to Complex	230.5	58.9	289.4	209.5	138.1%	
Bocaccio S. 40°10' N. lat.	Non-Trawl Allocation	77.0	35.0	112.0	1036.4	10.8%	
Canary rockfish	HG (CA rec)	70.7	See Table 3	70.7	116.8	60.5%	
Chilipepper S. 40°10' N. lat.	Non-Trawl Allocation	3.2	28.1	31.3	565.1	5.5%	
Cowcod S. 40°10' N. lat.	Non-Trawl Allocation	8.4	See Table 3	8.4	16	52.4%	
Widow rockfish	Non-Trawl Allocation (Coastwide)	3.5	4.6	8.1	1302.9	0.6%	
Slope rockfish N. 40°10' N. lat.	Non-Trawl Allocation	-	3.4	3.4	290.3	1.2%	
Slope rockfish S. 40°10' N. lat. ^d	Non-Trawl Allocation	0.1	3.6	3.7	47.9	7.7%	
Blackgill rockfish S. 40°10' N. lat. ^e	HG	-	30.0	30.0	176.6	17.0%	
Darkblotched rockfish	ACL (Coastwide)	-	0.4	0.4	882	0.0%	
Shortbelly rockfish	f	-	0.0	0.0	NA	-	

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

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.

Stock/Stock Complex ¹	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Yelloweye rockfish	-	-	-	0.1	0.2	0.2	0.4	0.8	0.9	0.4	0.7	0.3	4.0
Nearshore rockfish N. 42°-40°10' N. lat.	0.0	0.1	0.1	0.2	0.4	1.7	3.3	3.9	1.8	1.7	1.9	0.1	15.2
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	32.4	54.8	25.8	428.7
Black rockfish	0.3	0.2	0.9	1.3	12.7	30.4	62.8	38.2	23.5	9.3	12.6	2.4	194.6
Cabezon	0.0	3.3	0.4	0.7	2.0	3.3	2.9	2.4	2.4	1.6	3.6	1.2	23.8
California scorpionfish	4.9	5.7	5.0	8.8	15.3	29.7	24.7	17.2	8.3	4.3	2.8	1.8	128.5
Kelp greenling	0.1	0.1	0.2	0.2	0.4	0.2	1.1	0.6	0.4	0.5	0.4	0.2	4.4
Lingcod N. 40°10' N. lat.	0.0	-	0.6	0.6	2.5	3.9	6.0	5.4	4.0	2.1	4.3	0.1	29.5
Lingcod S. 40°10' N. lat.	0.0	0.2	2.9	13.2	16.8	19.4	23.5	56.6	33.4	20.2	34.9	10.2	231.3
Shelf rockfish N. 40°10' N. lat.	-	-	-	-	0.2	0.5	1.0	1.1	0.5	0.2	0.3	0.0	3.8
Yellowtail rockfish N. 40°10' N. lat.	-	-	-	-	0.0	0.1	0.3	0.4	0.2	0.7	0.1	-	1.8
Shelf rockfish S. 40°10' N. lat. ^a	0.0	0.0	7.3	30.4	32.3	30.0	45.8	68.1	56.2	53.4	54.6	33.2	411.3
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	23.0	24.9	12.9	230.5
Bocaccio S. 40°10' N. lat.	-	-	4.6	12.4	6.1	6.0	8.3	7.7	12.5	10.7	6.4	2.3	77.0
Canary rockfish	-	-	0.0	3.7	4.3	7.6	9.5	16.2	10.2	6.3	8.2	4.7	70.7
Chilipepper S. 40°10' N. lat.	0.0	-	0.3	0.2	0.0	0.2	0.1	0.1	0.2	0.6	1.3	0.2	3.2
Cowcod S. 40°10' N. lat.	-	-	0.3	0.6	2.0	0.1	0.3	0.1	3.8	0.9	0.2	0.1	8.4
Widow rockfish	-	-	-	0.0	0.2	0.2	0.2	0.9	0.6	0.7	0.4	0.3	3.5
Slope rockfish N. 40°10' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Slope rockfish S. 40°10' N. lat. ^b	-	-	0.0	0.0	-	-	-	-	0.0	0.0	0.1	0.0	0.1
Blackgill rockfish S. 40°10' N. lat.	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Darkblotched rockfish	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Shortbelly rockfish	-	-	-	-	-	-	-	-	-	-	-	-	0.0

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

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.

Stock/Stock Complex¹ Jan Feb Mar Apr May Jun July Aug Sep Oct Nov Dec Total Yelloweye Rockfish 0.0 0.0 ----------Nearshore rockfish N. 42°-40°10' N. lat. 0.7 1.0 0.9 0.3 1.2 1.8 0.4 10.3 0.0 1.1 1.01.5 0.4 Nearshore rockfish S. 40°10' N. lat. 5.6 5.9 2.6 6.1 6.0 11.2 15.4 11.8 12.4 9.3 8.6 5.0 99.9 0.6 2.5 4.3 2.7 5.4 3.8 0.5 38.4 Black Rockfish 0.0 4.8 6.0 6.0 1.8 0.5 1.7 1.9 1.7 1.8 3.6 3.0 2.9 2.8 1.4 2.8 25.4 Cabezon 1.3 CA Scorpionfish 0.2 0.0 0.1 0.3 0.0 0.8 0.0 0.1 0.1 -_ --0.2 2.4 Kelp Greenlings (CA) 0.2 0.3 0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.1 0.1 Lingcod N. 40°10' N. lat. 0.0 0.8 1.8 2.2 1.4 1.8 0.9 0.8 2.5 3.3 2.2 0.5 18.2 Lingcod S. 40°10' N. lat. 2.5 3.0 2.9 2.2 4.2 2.7 3.7 4.5 2.7 3.9 2.9 35.9 0.7 Shelf RF N 40°10' N lat. 0.3 0.2 0.2 2.3 -0.3 0.2 0.4 0.3 0.2 0.1 0.1 0.0 Yellowtail rockfish N. 40°10' N. lat. 0.3 0.4 0.8 0.2 0.5 0.1 4.5 0.0 0.6 0.6 0.4 0.5 0.1 Shelf rockfish S. 40°10' N. lat.^a 7.5 8.3 8.5 9.2 7.1 13.6 12.4 8.7 12.4 8.3 10.5 3.8 110.3 58.9 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 -1.7 2.5 5.1 2.5 3.1 3.7 4.0 1.4 4.2 2.5 2.7 1.6 35.0 Bocaccio Canary Rockfish 1.5 2.8 2.2 1.5 2.9 2.6 1.6 2.2 2.4 2.0 23.7 0.6 1.4 Chilipepper Rockfish S. 40°10' N. lat 2.5 28.1 1.4 3.6 2.3 3.4 3.5 4.5 0.8 2.5 1.4 1.6 0.6 Cowcod S. 40°10' N. lat. _ _ _ ---_ _ --_ -Widow Rockfish 0.2 0.3 0.1 0.2 0.0 0.3 0.8 0.8 0.6 0.7 0.5 0.1 4.6 Slope RF N 40°10' N lat. 0.2 0.2 0.7 1.0 0.5 0.5 0.0 3.4 0.2 0.1 -_ -3.6 Slope RF S 40°10' N lat.^b 0.5 0.5 0.5 0.2 0.3 0.4 0.3 0.2 0.2 0.1 0.2 0.2 30.0 Blackgill rockfish S. 40°10' N. lat.^c 2.0 2.1 3.1 2.4 2.3 1.9 2.0 3.0 3.2 3.4 0.8 3.8 Darkblotched rockfish 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.1 0.1 0.1 0.1 --Shortbelly rockfish 0.0 -0.0 0.0 0.0 0.0 0.0 ---

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.

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.