CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON 2024 GROUNDFISH HARVEST IN CALIFORNIA

The California Department of Fish and Wildlife (CDFW) provides the following report on harvest of select groundfish species of interest in 2024. A comprehensive reporting of groundfish mortality in California is found at the end of this report in Appendix I. All values were rounded using standard rounding rules in each table for presentation purposes; for that reason, a sum of the values over rows or columns within tables may not equal the total value.

Substantial changes to California recreational season structures and non-trawl commercial fishery regulations were implemented for 2024, in response to extremely low allowable mortality of quillback rockfish. Management in 2024 is consistent with Council and CDFW actions taken since September 2023 (Agenda Item G.8.a Supplemental GMT Report 5 September 2023, Agenda Item E.9.a Supplemental GMT Report 1 November 2023, Agenda Item F.8.a Supplemental GMT Report 1 March 2024 and Option 2 from, Agenda Item F.8.a Supplemental REVISED CDFW Report 2, March 2024). These changes have altered the dynamics of the non-trawl fisheries in California as demonstrated by the data below.

Recreational Yelloweye Rockfish Catch Update

The California recreational yelloweye rockfish harvest guideline (HG) is set at 11.8 mt, with an Annual Catch Target (ACT) of 9.3 mt in 2024. The best estimate of total mortality for yelloweye rockfish in the California recreational fishery through September 8 incorporates California Recreational Fisheries Survey (CRFS) estimates from January through July, and weekly Anticipated Catch Value (ACV) data through September 8. The best estimate of total mortality is 1.94 mt, which is well within the California recreational yelloweye rockfish ACT and is not currently projected to exceed the limit.

Quillback Rockfish

For 2024, quillback rockfish remain in the minor nearshore rockfish complex, north and south of 40°10' N. lat., with a shared commercial and recreational species-specific ACT of 0.96 mt for the area between 42° - 40°10' N. lat. and 0.97 mt for the area south of 40°10' N. lat. Catch updates to-date are within the area-specific ACT values for quillback rockfish and are not currently projected to exceed the limits.

Recreational Quillback Catch Update

The best estimate of total mortality for quillback rockfish in the California recreational fishery through September 8 incorporates CRFS estimates from January through July, and weekly ACV data through September 8. The best estimate of total mortality for the area between 42° - 40°10' N. lat. is 0.58 mt, and 0.94 mt for the area south of 40°10' N. lat. Although the current catch update for the area south of 40°10' N. lat. is 97 percent of the ACT, the ACVs for quillback rockfish have been considerably over-projecting CRFS estimates this year. The fishery appears to be adapting effectively to quillback rockfish being a prohibited species. Field survey reports indicate excellent angler compliance with non-retention; statewide 96 percent of encountered quillback rockfish are reported as released, and with the relatively shallow depth restrictions and new requirement that anglers possess a descending device, discard mortality estimates should be lower than in prior years for the same number of encountered fish. Management appears to be

working as intended, and CDFW expects 2024 mortality of quillback rockfish for the recreational sector to remain within the area-specific ACTs.

Non-Trawl Commercial Quillback Landings

There have been no reported landings of quillback rockfish in the California non-trawl commercial fishery since retention of quillback rockfish was prohibited in August 2023. Additionally, 2023 Groundfish Expanded Mortality Multiyear (GEMM) indicated discard mortality in the open access sector was reduced from 6.9 mt in 2022 to 1.3 mt in 2023.

Copper Rockfish

For 2024, 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 ACT of 6.99 mt for the area between 42° - 40°10' N. lat. and 87.73 mt for the area south of 40°10' N. lat. Catch updates to-date (discussed below) are within the area-specific ACT values for copper rockfish and are not currently projected to exceed the limits.

Recreational Copper Rockfish Catch Update

The best estimate of total mortality for copper rockfish in the California recreational fishery through September 8 incorporates CRFS estimates from January through July, and weekly ACV data through September 8. The best estimate of total mortality for the area between 42° - 40°10' N. lat. is 2.74 mt, and 25.31 mt for the area south of 40°10' N. lat.

Non-Trawl Commercial Copper Rockfish Landings

Landing totals are 0.1 mt (Table 2) for the area between 42° - 40° 10' N. lat. and 0.9 mt (Table 2) for the area south of 40° 10' N. lat. Landings across California remain similar to what we have seen each year since the sub-trip limits were implemented in 2022, suggesting they are effectively minimizing harvest in the commercial fishery. 2023 Groundfish Expanded Mortality Multiyear (GEMM) indicated mortality in the non-trawl commercial sectors south of 40° 10' N. lat. was reduced from 6.0 mt in 2022 to 3.3 mt in 2023. Reported landings are preliminary and subject to change as more data becomes available.

Vermilion Rockfish

Vermilion rockfish remain in the minor shelf rockfish complex, north and south of 40°10' N. lat. In 2023 vermilion rockfish mortality north of 40°10' N. lat. was under the shelf ACL contribution to the complex. However, south of 40°10' N. lat. vermilion rockfish mortality in 2023 was 393.6 mt (recreational= 295.2 mt, non-trawl commercial= 97.5 mt, trawl= 0.9 mt) considerably exceeding both the ACL contribution to the complex (281.3 mt) and OFL contribution to the complex (311.24 mt) contribution to the complex. Vermilion rockfish harvest has exceeded the species specific OFL contribution to the complex south of 40°10' N. lat. every year since 2015. Additional recreational management measure restrictions (reduced bag limit for areas south of 40°10' N. lat.) and different season and depth restrictions in 2024 were implemented to further reduce mortality of this species.

Vermilion Rockfish Catch Update

Recreational CRFS estimates through July indicate 76.1 mt of vermilion rockfish mortality have occurred, which is substantially less than through the same month in recent years. Commercial landings south of 40°10' N. lat. (60.6 mt) are 9.1 mt lower than this time last year, suggesting trip limit reductions (<u>Agenda Item E.3.a Supplemental GMT Report 1 November 2023</u>) implemented on January 1, 2024 have been effectively reduced harvest. Projected vermilion

rockfish mortality (combined non-trawl commercial and recreational) through the remainder of 2024 is expected to be just at or slightly under the ACL contribution to the complex.

Non-Trawl Commercial Fishery Comparison to 2023

The actions noted above to protect quillback rockfish have changed the dynamics of the non-trawl commercial fishery in Central and Northern California. Specifically, landings north of 40°10' N. lat. are lower for nearshore rockfish (-1.4 mt), shelf rockfish (-4.4 mt), yellowtail rockfish (-0.1 mt). and lingcod (-5.4 mt). Near-zero landings for lingcod in 2024 to date suggest actions taken by the state of California for state waters have likely precluded access to this stock. Landings south of 40°10' N. lat. are lower for vermilion rockfish (-9.1 mt), and lingcod (-6.5 mt); and higher for shelf rockfish (+5.3 mt) bocaccio rockfish (+27.9 mt), chilipepper rockfish (+7.3 mt), and slope rockfish (+16.7 mt). Additionally, sablefish both north of 36° N. lat. (-104.6), and south of 36° N. lat. (-66.6) are lower, whereas shortspine thornyhead south of 34°27' N. lat. are higher (+3.5mt) than this time in 2023. Reported landings are preliminary and subject to change as more data becomes available.

Appendix 1.

This appendix provides the most current California harvest information for the 2024 fishing season relative to Annual Catch Limits (ACLs), Harvest Guidelines (HGs), sector allocations, and Annual Catch Targets (ACTs) for 2024. 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 data are from RecFIN through July 2024 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 September 1, 2024 (Table 2). Reported mortality is preliminary and subject to change as more data becomes available. The 2024 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 2024. 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 ^a				0.3	0.2	0.1	0.6						1.2
CA Black rockfish ^a	0.0	0.0	0.0	0.1	15.7	19.7	48.3						83.9
Canary rockfish			0.0	4.0	2.7	1.9	3.9						12.5
Darkblotched rockfish													0.0
Shortbelly rockfish	0.0												0.0
Splitnose rockfish													0.0
Widow rockfish				0.6	0.1	0.0	0.2						0.9
Spiny dogfish	0.1		0.0		0.0	0.1	0.5						0.8
Dover sole							0.0						0.0
English sole													0.0
Petrale sole	0.0		0.2	1.4	0.3	0.8	2.0						4.6
Starry flounder			0.0	0.0	0.0	0.0	0.1						0.3
Other flatfish	0.3	0.7	0.9	2.0	1.6	1.4	4.6						11.5
CA Cabezon	0.1	0.1	0.1	0.1	2.8	2.1	5.0						10.3
CA Kelp greenling	0.0	0.1	0.0	0.1	0.2	0.1	0.3						0.7
Nearshore rockfish N. 42°-40°10' N. lat. ^b		0.0			0.8	1.5	3.8						6.1
Copper rockfish 42°-40°10' N. lat. ^a		0.0			0.2	0.5	1.1						1.9

Stock/Stock Complex	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Quillback rockfish 42°-40°10' N. lat.a					0.0	0.0	0.2						0.2
Shelf rockfish N. 40°10' N. lat.°				0.0	0.4	0.6	0.8						1.8
Squarespot rockfish N. 40°10' N. lat.													0.0
Vermilion rockfish N. 40°10' N. lat.					0.4	0.6	0.7						1.8
Yellowtail rockfish N. 40°10' N. lat.				0.3	0.0	0.2	0.2						0.6
Slope rockfish N. 40°10' N. lat.													0.0
Lingcod N. 40°10' N. lat.			0.0	0.1	3.0	6.4	8.3						17.8
Nearshore rockfish S. 40°10' N. lat. ^b	0.1	0.1	0.3	5.9	29.9	29.4	66.9						132.6
Copper rockfish S. 40°10' N. lat. ^a	0.0	0.0	0.0	3.1	3.0	4.3	7.1						17.7
Quillback rockfish S. 40°10' N. lat. ^a					0.0	0.0	0.2						0.2
CA scorpionfish	3.4	6.5	8.3	4.4	18.2	38.0	15.7						94.4
Shelf rockfish S. 40°10' N. lat.c	0.1	0.2	0.4	40.0	37.9	26.4	30.7						135.7
Mexican Rockfish S. 40°10' N. lat	-			2.5	3.8	6.8	0.4						13.5
Squarespot Rockfish S. 40°10' N. lat.		0.0	0.0	0.8	0.5	0.1	0.2						1.7
Vermilion rockfish S. 40°10' N. lat.	0.1	0.2	0.3	20.6	23.0	12.2	19.8						76.1
Bocaccio S. 40°10' N. lat.		0.0	0.0	17.5	25.3	11.9	11.8						66.5
Chilipepper S. 40°10' N. lat.	0.0		0.0	8.6	5.4	2.8	3.2						20.0
Cowcod S. 40°10' N. lat.				0.7	0.2	0.2	0.3						1.3
Slope rockfish S. 40°10' N. lat.d				3.8	5.3	0.4							9.5
Blackgill rockfish S. 40°10' N. lat.					0.0	0.0							0.0
Lingcod S. 40°10' N. lat.	0.0	0.1	0.0	6.5	15.8	16.8	33.4						72.6
Sablefish N. 36° N. lat.				0.1	0.0	0.0	1.0						1.1
Sablefish S. 36° N. lat.			0.0	0.1	0.0	0.1							0.1
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						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, 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 in both areas and Mexican rockfish for the area South of 40°10' N. lat..

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 2024. Data are from PacFIN (9/01/2024), 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
CA Black rockfish	0.0	0.1	0.3	1.1	1.4	4.5	6.3	6.9					20.6
Canary rockfish	1.1	1.1	1.2	1.3	0.7	2.5	2.0	1.8					11.7
Darkblotched rockfish	1		0.0	0.0	0.1	0.1	0.1	0.0					0.3
Shortbelly rockfish													
Splitnose rockfish	0.0	0.0	0.0	0.0		0.0		0.0					0.0
Widow rockfish	0.4	0.9	0.6	0.8	1.6	1.1	1.4	1.5					8.3
Spiny dogfish	0.0	0.0				0.0	0.1	0.1					0.2
Dover sole	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0					0.3
English sole													
Petrale sole	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0					0.6
Starry flounder		0.0				0.0	0.0						0.1
Other flatfish	0.2	0.0	0.0	0.0	0.1	0.1	0.2	0.0					0.7
CA Cabezon	1.8	1.4	1.9	2.8	2.3	2.3	3.2	1.7					17.4
CA Kelp greenling	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2					1.0
Nearshore rockfish N. 42°-40°10' N. lat. ^a			0.2	0.1	0.0	0.4	0.5	0.8					2.0
Copper rockfish 42°-40°10' N. lat.				0.0	0.0	0.0	0.1	0.0					0.1
Quillback rockfish 42°-40°10' N. lat.													
Shelf rockfish N. 40°10' N. lat. ^b		0.0	0.0			0.3	0.3	0.8					1.4
Squarespot Rockfish N. 40°10' N. lat.													
Vermilion rockfish N. 40°10' N. lat.		0.0				0.1	0.0	0.1					0.3
Yellowtail rockfish N. 40°10' N. lat.	0.2	0.4	0.1	0.0	0.1	0.1	0.5	1.4					2.9
Slope rockfish N. 40°10' N. lat.			0.0	0.0	0.0	0.5	0.4	1.5					2.4
Lingcod N. 40°10' N. lat.				0.0		0.3	0.0	0.3					0.6
Nearshore rockfish S. 40°10' N. lat. ^a	2.9	3.9	4.0	6.5	6.9	7.4	11.3	9.5					52.4
Copper rockfish S. 40°10' N. lat.	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1					0.9
Quillback rockfish S. 40°10' N. lat.]		

Stock/Stock Complex	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total
CA scorpionfish					0.3	0.2	0.2	0.2					0.9
Shelf rockfish S. 40°10' N. lat. ^b	12.8	10.9	10.2	10.6	11.7	12.2	9.7	11.4					89.5
Mexican Rockfish S. 40°10' N. lat.	0.3	0.4	0.9	0.6	0.9	0.7	0.6	0.9					5.3
Squarespot Rockfish S. 40°10' N. lat.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.1
Vermilion rockfish S. 40°10' N. lat.	9.6	7.0	6.8	7.5	7.2	8.5	6.4	7.6					60.6
Bocaccio S. 40°10' N. lat.	10.7	8.8	8.1	5.2	8.2	5.9	14.8	12.6					74.3
Chilipepper S. 40°10' N. lat.	3.9	4.3	7.7	4.2	5.2	4.7	8.8	4.8					43.6
Cowcod S. 40°10' N. lat.		1	1	1		1							
Slope rockfish S. 40°10' N. lat.°	3.9	3.8	3.8	4.3	6.0	4.6	4.5	5.3					36.1
Blackgill rockfish S. 40°10' N. lat.d	3.1	2.4	3.2	4.0	5.6	3.2	2.8	4.9					29.4
Lingcod S. 40°10' N. lat.	0.9	1.1	1.0	1.9	1.5	1.5	1.3	1.3					10.5
Sablefish N. 36° N. lat.	27.3	25.9	35.0	46.2	40.6	54.2	70.5	94.2					393.9
Sablefish S. 36° N. lat.	11.9	12.9	16.9	17.8	14.4	14.6	13.0	10.9					112.4
Longspine thornyhead N 34°27' N. lat.	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.4					1.5
Longspine thornyhead S 34°27' N. lat.	0.4	0.1	0.2	0.4	0.4	0.4	0.3	0.4					2.7
Shortspine thornyhead N 34°27' N. lat.	1.9	1.4	1.9	1.8	2.2	1.8	1.5	3.2					15.8
Shortspine thornyhead S 34°27' N. lat.	2.5	2.2	1.5	3.1	3.5	3.5	2.2	2.3					20.7

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 Mexican rockfish, vermilion rockfish, and squarespot rockfish

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

Table 3. Estimated mortality (mt) of select groundfish species in California for 2024 compared to the harvest limits for 2024.

Stock/Stock Complex	Reference Point	Recreational Mortality (mt)	Commercial non-trawl Landings (mt)	Total (mt)	Tracking Limits	Percent Attainment
Yelloweye rockfish ^a	ACT (CA rec) ^b	1.2		1.2	9.3 b	13.3%
CA Black rockfish ^a	ACL	83.9	20.6	104.4	229.0	45.6%
Canary rockfish	HG (rec) ^b	12.5	11.7	12.5	112.9 b	11.1%
Darkblotched rockfish	Non-Trawl Allocation	0.0	0.3	0.3	37.9	0.8%
Shortbelly rockfish	EC Species Threshold ^c	0.0		0.0	2,000.0	0.0%
Splitnose rockfish	Non-Trawl Allocation	0.0	0.0	0.0	76.7	0.0%
Widow rockfish	Non-Trawl Allocation	0.9	8.3	9.2	400.0	2.3%
Spiny dogfish	Fishery Harvest Guideline	0.8	0.2	1.0	1,055.5	0.1%
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	435.0	0.0%
Petrale sole	Non-Trawl Allocation	4.6	0.6	5.2	30.0	17.3%
Starry flounder	Non-Trawl Allocation	0.3	0.1	0.4	171.9	0.2%
Other flatfish	Non-Trawl Allocation	11.5	0.7	12.2	465.3	2.6%
CA Cabezon	ACL	10.3	17.4	27.7	171.0	16.2%
CA Kelp greenling	d	0.7	1.0	1.7	92.5	1.9%
Nearshore rockfish N. 42°-40°10' N. lat. e	HG (CA Share) ^f	6.1	2.0	8.1	39.9	20.2%
Copper rockfish 42°-40°10' N. lat. ^a	ACL Contribution to Complex ACL Contribution to	1.9	0.1	2.0	7.0	28.0%
Quillback rockfish 42°-40°10' N. lat.ª	Complex	0.2		0.2	1.0	21.5%
Shelf rockfish N. 40°10' N. lat. ^g	Non-Trawl Allocation	1.8	1.4	3.2	480.4	0.7%
Squarespot Rockfish N. 40°10' N. lat.	h	0.0		0.0	4.7	0.0%
Vermilion rockfish N. 40°10' N. lat.	ACL Contribution to Complex	1.8	0.3	2.1	6.6	31.4%
Yellowtail rockfish N. 40°10' N. lat.	Non-Trawl Allocation	0.6	2.9	3.5	543.9	0.7%
Slope rockfish N. 40°10' N. lat.	Non-Trawl Allocation	0.0	2.4	2.4	275.6	0.9%
Lingcod N. 40°10' N. lat.	Non-Trawl Allocation	17.8	0.6	18.4	1,965.9	0.9%
Nearshore rockfish S. 40°10' N. lat. ^e	ACL	132.6	52.4	185.0	891.0	20.8%

Stock/Stock Complex	Reference Point	Recreational Mortality (mt)	Commercial non-trawl Landings (mt)	Total (mt)	Tracking Limits	Percent Attainment
0 1010 40010131 1 10	ACL Contribution to	17.7	0.0	10.6	07.7	21 10/
Copper rockfish S. 40°10' N. lat. ^a	Complex	17.7	0.9	18.6	87.7	21.1%
Quillback rockfish S. 40°10' N. lat. ^a	ACL Contribution to Complex	0.2		0.2	1.0	21.6%
CA scorpionfish	ACL	94.4	0.9	95.3	252.0	37.8%
Shelf rockfish S. 40°10' N. lat.g	Non-Trawl Allocation	135.7	89.5	225.2	1,169.0	19.3%
Mexican Rockfish S. 40°10' N. lat.	ACL Contribution to Complex	13.5	5.3	18.8	3.9	481.0%
Squarespot Rockfish S. 40°10' N. lat.	ACL Contribution to Complex	1.7	0.1	1.8	9.6	18.8%
Vermilion rockfish S. 40°10' N. lat.	ACL Contribution to Complex	76.1	60.6	136.7	281.3	48.6%
Bocaccio S. 40°10' N. lat.	Non-Trawl Allocation	66.5	74.3	140.8	749.7	18.8%
Chilipepper S. 40°10' N. lat.	Non-Trawl Allocation	20.0	43.6	63.6	505.9	12.6%
Cowcod S. 40°10' N. lat.	Non-Trawl Allocation	1.3		1.3	43.4	3.0%
Slope rockfish S. 40°10' N. lat. i	Non-Trawl Allocation	9.5	36.1	45.6	243.5	18.7%
Blackgill rockfish S. 40°10' N. lat. j	HG	0.0	29.4	29.4	170.0	17.3%
Lingcod S. 40°10' N. lat.	Non-Trawl Allocation	72.6	10.5	83.1	423.9	19.6%
Sablefish N. 36° N. lat.	Non-Trawl Allocation	1.1	393.9	395.0	6,309.0	6.3%
Sablefish S. 36° N. lat.	Non-Trawl Allocation	0.1	112.4	112.5	1,256.0	9.0%
Longspine thornyhead N 34° 27' N. lat.	Non-Trawl Allocation	0.0	1.5	1.5	105.4	1.4%
Longspine thornyhead S 34° 27' N. lat.	ACL	0.0	2.7	2.7	683.0	0.4%
Shortspine thornyhead N 34° 27' N. lat.	Non-Trawl Allocation	0.0	15.8	15.8	62.5	25.3%
Shortspine thornyhead S 34° 27' N. lat.	Non-Trawl Allocation	0.0	20.7	20.7	645.3	3.2%

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

b/The tracking limit for yelloweye rockfish and canary rockfish only includes the recreational limits as there are no state specific HG's or ACT for the non-trawl commercial sector.

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

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

e/ Includes catch of copper rockfish and quillback rockfish

f/ The nearshore complex north of 40°10' N lat. HG is 87.7 mt. The CA share of the HG is 39.9 mt.

g/Includes catch of squarespot rockfish and vermilion rockfish in all areas and Mexican rockfish for the area south of 40°10′ N. lat.

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

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.