

2023 AND 2024 GROUND FISH HARVEST SPECIFICATIONS
UNDER DEFAULT HARVEST CONTROL RULES

The following tables were downloaded from the Pacific Fisheries Information Network (PacFIN) on November 17, 2021. These tables are available on the PacFIN web site under the [APEX reporting system](#). These tables will be updated if corrections are made to be consistent with PFMC decisions on 2023 and 2024 groundfish harvest specifications.

List of Tables

Table 1. 2023 harvest specifications (mt) and stock category designations for west coast groundfish stocks and stock complexes under default harvest control rules (specifications not yet available for highlighted stocks)..... 2

Table 2. 2024 harvest specifications (mt) and stock category designations for west coast groundfish stocks and stock complexes under default harvest control rules. 11

Table 1. 2023 harvest specifications (mt) and stock category designations for west coast groundfish stocks and stock complexes under default harvest control rules (specifications not yet available for highlighted stocks).

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Yelloweye Rockfish	CW	1 (Year Based)	0.4	123	103	66	2017	OFL projected using a 50% SPR harvest rate in the 2017 stock assessment. ACL projected using a 65% SPR harvest rate in the 2017 stock assessment. Sector-specific ACTs projected using a 70% SPR harvest rate in the 2017 stock assessment.
Arrowtooth Flounder	CW	2 (Year Based)	0.4	26391	18632	18632	2017	OFL based on the 2021 catch-only update of the 2017 update assessment.
Big Skate	CW	2 (Year Based)	0.45	1541	1320	1320	2019	OFL projected using a 50% SPR harvest rate in the 2019 big skate assessment.
Black Rockfish	WA	1 (Year Based)	0.45	319	290	290	2015	OFL projected using a 50% SPR from the 2019 catch-only projection update.
Black Rockfish	CA	1 (Year Based)	0.45	368	334	334	2015	OFL projected using a 50% SPR from the 2019 catch-only projection update.
Bocaccio	S of 4010	1 (Year Based)	0.45	2009	1842	1842	2017	OFL projected using a 50% SPR from the 2019 updated harvest specification projections based on new sigmas with a 7.4% reduction to subtract the portion of the assessed stock north of 40°10' N lat.; ACL = ABC (P* = 0.45).
Cabazon	CA	1 (Year Based)	0.45	197	182	182	2019	OFL projected using a 45% SPR from the 2019 assessment.
Cabazon	3427 - 42	1 (Year Based)	0.45	175	162.05	162.05	2019	OFL projected using a 45% SPR from the 2019 assessment.
Cabazon	S of 3427	1 (Year Based)	0.45	21.7	20.0942	20.0942	2019	OFL projected using a 45% SPR from the 2019 assessment.
Cabazon/Kelp Greenling	WA		-	25	20	20	-	Sum of harvest specification contributions of component stocks in the complex.
Cabazon	WA	3 (Year Based)	0.45	18.3	14.2374	14.2374	2019	OFL based on a DB-SRA assessment in the 2019 assessment.
Kelp Greenling	WA	3 (Year Based)	0.45	7.1	5.5238	5.5238	2015	OFL based on a 2015 DB-SRA estimate using a low vulnerability prior.
Cabazon/Kelp Greenling	OR		-	202	185	185	-	Sum of harvest specification contributions of component stocks in the complex.
Cabazon	OR	1 (Year Based)	0.45	54.5	50.467	50.467	2019	OFL projected using a 45% SPR from the 2019 assessment.
Kelp Greenling	OR	1 (Year Based)	0.45	147.569	134.1402	134.1402	2015	OFL projected in the 2021 catch-only update of the 2015 assessment.
California Scorpionfish	CW	CA Scorpionfish (Year Based)	0.45	290	262	262	2017	OFL from the 2019 catch-only update of the 2017 assessment.
Canary Rockfish	CW	1 (Year Based)	0.45	1413	1284	1284	2015	OFL from the 2019 catch-only update of the 2015 assessment.
Chilipepper	S of 4010	1 (Year Based)	0.45	2401	2183	2183	2015	OFL from the 2019 catch-only update of the 2015 assessment. OFLs are apportioned to the north (7%) and south (93%) of 40°10' N lat. based on average historical landings.

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Cowcod	S of 4010		-	113	80	80	2019	Harvest specifications are the sum of assessed area projections (Conception area) and DBSRA estimates (Monterey area). Sector allocations are based on a precautionary ACT of 50 mt due to assessment uncertainty.
Cowcod	4010 - 3427	3 (Year Based)	0.4	18.9	11.3778	11.3778	2019	OFL is based on the 2019 DB-SRA estimate in Appendix B of the 2019 cowcod assessment.
Cowcod	S of 3427	2 (Year Based)	0.4	93.7818	68.7421	68.7421	2019	OFL is based on a 50% SPR harvest rate projected in the 2019 assessment. ABC based on time varying cat. 2 sigma, P* = 0.4.
Darkblotched Rockfish	CW	1 (Year Based)	0.45	856	785	785	2017	OFL projected using a 50% SPR in the 2021 catch-only projection update.
Dover Sole	CW	1 (Year Based)	0.45	63834	59685	50000	2021	OFL projected using a 30% SPR harvest rate in the 2021 full assessment. ACL = 50,000 mt.
English Sole	CW	2 (Year Based)	0.45	11133	9018	9018	2013	OFL projected using a 30% SPR harvest rate in the 2019 English Sole Updated Harvest Specification Projections. ACL = ABC (P* = 0.45).
Lingcod	N of 4010	2 (Year Based)	0.45	5010	4378	4378	2021	OFLs projected using a 45% SPR harvest rate in the 2021 full assessment of lingcod N of 40°10' N lat.
Lingcod	S of 4010	2 (Year Based)	0.45	846	739	726	2021	OFLs projected using a 45% SPR harvest rate in the 2021 full assessment of lingcod S of 40°10' N lat.
Longnose Skate	CW	2 (Year Based)	0.45	1993	1708	1708	2019	OFLs projected using a 45% SPR harvest rate in the 2019 assessment. ACL = ABC.
Longspine Thornyhead	CW	2 (Year Based)	0.4	-	-	-	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 catch-only projection update. The coastwide ABC (P* = 0.4) is apportioned N (76%) and S (24%) of 34°27' N lat. to determine ACLs based on the 2003-2012 average swept area biomass from the NMFS trawl survey.
Longspine Thornyhead	S of 3427	2 (Year Based)	0.4	-	-	725	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 catch-only projection update. The coastwide ABC (P* = 0.4) is apportioned N (76%) and S (24%) of 334°27' N lat. to determine ACLs based on the 2003-2012 average swept area biomass from the NMFS trawl survey.
Longspine Thornyhead	N of 3427	2 (Year Based)	0.4	-	-	2295	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 catch-only projection update. The coastwide ABC (P* = 0.4) is apportioned N (76%) and S (24%) of 34°27' N lat. to determine ACLs based on the 2003-2012 average swept area biomass from the NMFS trawl survey.
Pacific Ocean Perch	N of 4010	2 (Year Based)	0.45	4248	3573	3573	2017	OFL projected using a 50% SPR harvest rate in the 2019 Pacific Ocean Perch Updated Harvest Specification Projections. ACL = ABC (P* = 0.45).
Petrale Sole	CW	1 (Year Based)	0.45	3763	3485	3485	2019	OFL projected using a 30% SPR harvest rate in the 2021 catch-only projection update. ACL = ABC (P* = 0.45). 30 mt allocation to non-trawl and the remainder to trawl. The allocation percentages shown in the Allocation Type are an artifact of the database; they are not used to allocate petrale sole.

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Sablefish	CW	1 (Year Based)	0.45	11577	10825	-	2021	OFLs projected using a 45% SPR harvest rate in the 2021 update assessment. ACL = ABC (P* = 0.45). ACLs are based on an apportionment of the coastwide ABC with 78.4% to the N and 21.6% to the S of 36° N lat. determined using the average 2014-2018 annual swept area biomass estimates from the NMFS NWFSC trawl survey.
Sablefish	S of 36	1 (Year Based)	0.45	-	-	2338	2019	OFLs projected using a 45% SPR harvest rate in the 2021 update assessment. ACL = ABC (P* = 0.45). ACLs are based on an apportionment of the coastwide ABC with 78.4% to the N and 21.6% to the S of 36° N lat., determined using the average 2014-2018 annual swept area biomass estimates from the NMFS NWFSC trawl survey.
Sablefish	N of 36	1 (Year Based)	0.45	-	-	8486	2021	OFLs projected using a 45% SPR harvest rate in the 2021 update assessment. ACL = ABC (P* = 0.45). ACLs are based on an apportionment of the coastwide ABC with 78.4% to the N and 21.6% to the S of 36° N lat., determined using the average 2014-2018 annual swept area biomass estimates from the NMFS NWFSC trawl survey.
Shortspine Thornyhead	CW	2 (Year Based)	0.4	-	-	-	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 Catch-Only Projection Update. The coastwide ABC (P* = 0.4) is apportioned N (65.4%) and S (34.6%) of 34°27' N lat. based on 2003-2012 average swept area biomass in the NMFS NWFSC trawl survey to determine ACLs.
Shortspine Thornyhead	N of 3427	2 (Year Based)	0.4	-	-	1359	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 Catch-Only Projection Update. The coastwide ABC (P* = 0.4) is apportioned N (65.4%) and S (34.6%) of 34°27' N lat. based on 2003-2012 average swept area biomass in the NMFS NWFSC trawl survey to determine ACLs.
Shortspine Thornyhead	S of 3427	2 (Year Based)	0.4	-	-	719	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 Catch-Only Projection Update. The coastwide ABC (P* = 0.4) is apportioned N (65.4%) and S (34.6%) of 34°27' N lat. based on 2003-2012 average swept area biomass in the NMFS NWFSC trawl survey to determine ACLs.
Splitnose	S of 4010	1 (Year Based)	0.45	1803	1592	1592	2009	OFL projected using a 50% SPR harvest rate in the 2019 Updated Harvest Specification Projections. Coastwide OFL is apportioned N (35.8%) and S (64.2%) of 40°10' N lat. based on average historical (1916-2008) landings.
Widow Rockfish	CW	1 (Year Based)	0.45	13633	12624	12624	2019	OFL projected using a 50% SPR harvest rate in the 2019 update assessment. ACL = ABC (P* = 0.45). Non-trawls are allocated 400 mt and rest is allocated to trawl. The 91% and 9% allocations noted in the Allocation Type section is an artifact and is not used to allocate widow for the 2023-2024 biennial cycle.

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Olive	N of 4010	3 (Year Based)	0.45	0.315	0.2451	0.2451	2011	
Quillback	WA	3 (Year Based)	0.45	2.855	2.2212	2.2251	2021	OFL projected using a 50% SPR harvest rate MSY proxy from the 2021 assessment of quillback rockfish in WA.
Quillback	OR	2 (Year Based)	0.45	3.14	2.7444	2.7444	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of quillback rockfish in OR.
Quillback	42 - 4010	2 (Year Based)	0.45	1.0164	0.8883	0.0134	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of quillback rockfish in CA, with 49.6% of the OFL apportioned north of 40°10' N lat. based on the estimated average 2002-2020 total catch by area.
Treefish	N of 4010	3 (Year Based)	0.45	0.2165	0.1684	0.1684	2011	
Nearshore Rockfish South	S of 4010		-	1091	898	886	-	Sum of harvest specification contributions of component stocks in the complex.
Blue	4010 - 3427	2 (Year Based)	0.45	302.4	254.3184	254.3184	2017	OFL from the 2019 catch-only projection update. 90% of the CA OFL is apportioned south of 40°10' N lat. (see Appendix D of the 2017 Assessment).
Blue	S of 3427	3 (Year Based)	0.45	21.8	16.9604	16.9604	2017	
Brown	S of 4010	2 (Year Based)	0.45	178.2189	144.3573	144.3573	2013	The portion of the coastwide stock south of 40°10' N lat. based on the proportion of cumulative removals by area during 1916-2012 (98.8%).
Calico	S of 4010	3 (Year Based)	0.45	-	-	-	-	
China	S of 4010	2 (Year Based)	0.45	16.39	13.5381	13.5381	2015	OFLs projected from the South Model in the 2015 assessment updated with 2019 catch-only projections.
Copper	4010 - 3427	2 (Year Based)	0.45	87.9748	76.89	75.6875	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of copper rockfish in CA north of 34°27' N lat. with 96.1% of the OFL apportioned south of 40°10' N lat. based on the estimated average 2002-2020 total catch by area.
Copper	S of 3427	2 (Year Based)	0.45	21.8317	19.0809	8.7922	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of copper rockfish in CA south of 34°27' N lat.
Gopher	S of 4010	2 (Year Based)	0.45	136	118.864	118.864	2019	
Grass	S of 4010	3 (Year Based)	0.45	59.6267	46.3896	46.3896	2011	
Kelp	S of 4010	3 (Year Based)	0.45	27.6594	21.519	21.519	2011	
Olive	S of 4010	3 (Year Based)	0.45	224.6426	174.7719	174.7719	2011	
Quillback	S of 4010	2 (Year Based)	0.45	1.0328	0.9027	0.0136	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of quillback rockfish in CA, with 50.4% of the OFL apportioned south of 40°10' N lat. based on the estimated average 2002-2020 total catch by area.
Treefish	S of 4010	3 (Year Based)	0.45	13.2295	10.2926	10.2926	2011	
Other Fish	CW		-	286	223	223	-	Sum of harvest specification contributions of component stocks in the complex.
Kelp Greenling	CA	3 (Year Based)	0.45	118.9	92.5042	92.5042	2011	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Leopard Shark	CW	3 (Year Based)	0.45	167.1	130.0038	130	2011	
Other Flatfish	CW		-	7887	4862	4862	-	Sum of harvest specification contributions of component stocks in the complex.
Butter Sole	CW	3 (Year Based)	0.4	4.631	2.7879	2.7879	-	
Curlfin Sole	CW	3 (Year Based)	0.4	8.242	4.9617	4.9617	-	
Flathead Sole	CW	3 (Year Based)	0.4	35	21.07	21.07	-	
Pacific Sanddab	CW	3 (Year Based)	0.4	4801	2890.202	2890.202	2011	
Rex Sole	CW	2 (Year Based)	0.4	2197.89	1437.4201	1437.4201	2013	OFL projected using a 50% SPR harvest rate from the 2013 ExSSS assessment and updated with 2019 catch-only projections.
Rock Sole	CW	3 (Year Based)	0.4	66.7	40.1534	40.1534	2011	
Sand Sole	CW	3 (Year Based)	0.4	773.2	465.4664	465.4664	2011	
Pacific Whiting	CW		-	-	-	369400	2021	
Shelf Rockfish North	N of 4010		-	1614	1283	1283	-	Sum of harvest specification contributions of component stocks in the complex.
Bocaccio	N of 4010	3 (Year Based)	0.45	284	220.952	220.952	2011	
Bronzespotted	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Chameleon	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Chilipepper	N of 4010	1 (Year Based)	0.45	180.74	164.2927	164.2927	2015	OFLs are apportioned to the north (7%) and south (93%) of 40°10' N lat. based on average historical landings.
Cowcod	N of 4010	3 (Year Based)	0.45	0.567	0.4411	0.4411	2019	
Flag	N of 4010	3 (Year Based)	0.45	0.1	0.0778	0.0778	2011	
Freckled	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Greenblotched	N of 4010	3 (Year Based)	0.45	1.3	1.0114	1.0114	2011	
Greenspotted	42 - 4010	2 (Year Based)	0.45	9.3886	7.4639	7.4639	2011	OFLs are projected using a 50% SPR harvest rate from the northern California model and updated in 2021. The portion of the assessed area north of 40°10' N lat. (22.2% of OFL from northern California model) based on average historical catch.
Greenspotted	WA - OR	3 (Year Based)	0.45	6.1	4.7458	4.7458	2011	
Greenstriped	N of 4010	3 (Year Based)	0.45	623.61	485.1686	485.1686	2009	OFL based on the MSY associated with the F _{MSY} proxy in the 2009 assessment. The portion of the coastwide stock north of 40°10' N lat. (84.5%) is based on the mean of the 2003-2008 swept area biomass estimates from the NMFS trawl survey.
Halfbanded	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Harlequin	N of 4010	3 (Year Based)	0.45	-	-	-	-	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Honeycomb	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Mexican	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Pink	N of 4010	3 (Year Based)	0.45	0.004	0.0031	0.0031	2011	
Pinkrose	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Puget Sound	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Pygmy	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Redstripe	N of 4010	3 (Year Based)	0.45	269.9	209.9822	209.9822	2011	
Rosethorn	N of 4010	3 (Year Based)	0.45	12.9	10.0362	10.0362	2011	
Rosy	N of 4010	3 (Year Based)	0.45	3	2.334	2.334	2011	
Silvergray	N of 4010	3 (Year Based)	0.45	159.4	124.0132	124.0132	2011	
Speckled	N of 4010	3 (Year Based)	0.45	0.2	0.1556	0.1556	2011	
Squarespot	42 - 4010	2 (Year Based)	0.45	-	-	-	2021	OFL projected using a 50% SPR harvest rate from the 2021 squarespot rockfish assessment in CA.
Starry	N of 4010	3 (Year Based)	0.45	0.0037	0.0029	0.0029	2011	
Stripetail	N of 4010	3 (Year Based)	0.45	40.4	31.4312	31.4312	2011	
Swordspine	N of 4010	3 (Year Based)	0.45	0.0001	0.0001	0.0001	2011	
Tiger	N of 4010	3 (Year Based)	0.45	1	0.778	0.778	2011	
Vermilion	WA	2 (Year Based)	0.45	0.82	0.716	0.716	2021	OFL projected from the 2021 assessment of vermilion rockfish in WA.
Vermilion	OR	1 (Year Based)	0.45	13.48	12.60	12.60	2021	OFL projected from the 2021 assessment of vermilion rockfish in OR.
Vermilion	42 - 4010	1 (Year Based)	0.45	6.7865	6.3454	6.3454	2021	OFL projected from the 2021 assessment of vermilion rockfish in CA. The OFLs N (4.4%) and S (95.6%) of 40°10' N lat. are based on an apportionment of the estimated biomass in CA N of 34°27' N lat.
Shelf Rockfish South	S of 4010		-	1830	1465	1465	-	Sum of harvest specification contributions of component stocks in the complex.
Bronzespotted	S of 4010	3 (Year Based)	0.45	3.6	2.8008	2.8008	2011	
Chameleon	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Flag	S of 4010	3 (Year Based)	0.45	23.4	18.2052	18.2052	2011	
Freckled	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Greenblotched	S of 4010	3 (Year Based)	0.45	23.1	17.9718	17.9718	2011	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Greenspotted	4010 - 3427	2 (Year Based)	0.45	32.9024	26.1574	26.1574	2011	OFLs are projected using a 50% SPR harvest rate from the northern California model and updated in 2021. The portion of the assessed area north of 40°10' N lat. (22.2% of OFL from northern California model) based on average historical catch.
Greenspotted	S of 3427	2 (Year Based)	0.45	45.68	36.3156	36.3156	2011	OFLs are projected using a 50% SPR harvest rate from the southern California model and updated in 2021.
Greenstriped	S of 4010	3 (Year Based)	0.45	114.39	88.9954	88.9954	2009	OFL based on the MSY associated with the F_{MSY} proxy in the 2009 assessment. The portion of the coastwide stock south of 40°10' N lat. (15.5%) is based on the mean of the 2003-2008 swept area biomass estimates from the NMFS trawl survey.
Halfbanded	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Harlequin	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Honeycomb	S of 4010	3 (Year Based)	0.45	9.9	7.7022	7.7022	2011	
Mexican	S of 4010	3 (Year Based)	0.45	5.1	3.9678	3.9678	2011	
Pink	S of 4010	3 (Year Based)	0.45	2.5	1.945	1.945	2011	
Pinkrose	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Pygmy	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Redstripe	S of 4010	3 (Year Based)	0.45	0.5	0.389	0.389	2011	
Rosethorn	S of 4010	3 (Year Based)	0.45	2.1	1.6338	1.6338	2011	
Rosy	S of 4010	3 (Year Based)	0.45	44.5	34.621	34.621	2011	
Silvergray	S of 4010	3 (Year Based)	0.45	0.5	0.389	0.389	2011	
Speckled	S of 4010	3 (Year Based)	0.45	39.4	30.6532	30.6532	2011	
Squarespot	S of 4010	2 (Year Based)	0.45	11.1	9.7014	9.7014	2021	OFL projected using a 50% SPR harvest rate from the 2021 squarespot rockfish assessment in CA.
Starry	S of 4010	3 (Year Based)	0.45	62.6	48.7028	48.7028	2011	
Stripetail	S of 4010	3 (Year Based)	0.45	23.6	18.3608	18.3608	2011	
Swordspine	S of 4010	3 (Year Based)	0.45	14.2	11.0476	11.0476	2011	
Tiger	S of 4010	3 (Year Based)	0.45	0.04	0.0311	0.0311	2011	
Vermilion	4010 - 3427	1 (Year Based)	0.45	147.4515	137.8672	137.8672	2021	OFL projected from the 2021 assessment of vermilion and sunset rockfishes in CA N of 34°27' N lat. The OFLs N (4.4%) and S (95.6%) of 40°10' N lat. are based on an apportionment of the estimated biomass in CA N of 34°27' N lat.
Vermilion	S of 3427	2 (Year Based)	0.45	159.364	139.2841	139.2841	2021	OFL projected from the 2021 assessment of vermilion and sunset rockfishes in CA S of 34°27' N lat.
Yellowtail Rockfish	S of 4010	3 (Year Based)	0.45	1064.4	828.1032	828.1032	2011	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Slope Rockfish North	N of 4010		-	1819	1540	1540	-	Sum of harvest specification contributions of component stocks in the complex.
Aurora	N of 4010	1 (Year Based)	0.45	17.4078	15.6671	15.6671	2013	The portion of the coastwide stock north of 40°10' N lat. (19%) is based on average survey biomass.
Bank	N of 4010	3 (Year Based)	0.45	17.2	13.3816	13.3816	2011	
Blackgill Rockfish	N of 4010	3 (Year Based)	0.45	4.7	3.6566	3.6566	2011	
Redbanded	N of 4010	3 (Year Based)	0.45	45.3	35.2434	35.2434	2011	
Rougheye/Blackspotted	N of 4010	2 (Year Based)	0.45	233.24	188.9244	188.9244	2013	The coastwide OFLs are apportioned north (98%) and south (2%) based on average landings during 1985-2012.
Sharpchin	N of 4010	2 (Year Based)	0.45	285.288	231.0833	231.0833	2013	OFLs are apportioned north and south of 40°10' N lat. (80% N, 20% S) based on average swept area biomass estimates from the triennial survey.
Shortraker	N of 4010	3 (Year Based)	0.45	18.7	14.5486	14.5486	2011	
Splitnose	N of 4010	1 (Year Based)	0.45	1005.264	887.6481	887.6481	2009	OFL projected using a 50% SPR harvest rate in the 2019 Updated Harvest Specification Projections. Coastwide OFL is apportioned N (35.8%) and S (64.2%) of 40°10' N lat. based on average historical (1916-2008) landings.
Yellowmouth	N of 4010	3 (Year Based)	0.45	192.4	149.6872	149.6872	2011	
Slope Rockfish South	S of 4010		-	870	701	701	-	Sum of harvest specification contributions of component stocks in the complex.
Aurora	S of 4010	1 (Year Based)	0.45	74.2124	66.7911	66.7911	2013	The portion of the coastwide stock north of 40°10' N lat. (19%) is based on average survey biomass.
Bank	S of 4010	3 (Year Based)	0.45	503.2	391.4896	391.4896	2011	
Blackgill Rockfish	S of 4010	2 (Year Based)	0.45	205	172.405	172.405	2017	
Pacific Ocean Perch	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Redbanded	S of 4010	3 (Year Based)	0.45	10.4	8.0912	8.0912	2011	
Rougheye/Blackspotted	S of 4010	2 (Year Based)	0.45	4.76	3.8556	3.8556	2013	The coastwide OFLs are apportioned north (98%) and south (2%) of 40°10' N lat. based on average landings during 1985-2012.
Sharpchin	S of 4010	2 (Year Based)	0.45	71.322	57.7708	57.7708	2013	OFLs are apportioned north and south of 40°10' N lat. (80% N, 20% S) based on average swept area biomass estimates from the triennial survey.
Shortraker	S of 4010	3 (Year Based)	0.45	0.1	0.0778	0.0778	2011	
Yellowmouth	S of 4010	3 (Year Based)	0.45	0.8	0.6224	0.6224	2011	

Table 2. 2024 harvest specifications (mt) and stock category designations for west coast groundfish stocks and stock complexes under default harvest control rules.

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Yelloweye Rockfish	CW	1 (Year Based)	0.4	123	103	66	2017	OFL projected using a 50% SPR harvest rate in the 2017 stock assessment. ACL projected using a 65% SPR harvest rate in the 2017 stock assessment. Sector-specific ACTs projected using a 70% SPR harvest rate in the 2017 stock assessment.
Arrowtooth Flounder	CW	2 (Year Based)	0.4	20459	14178	14178	2017	OFL based on the 2021 catch-only update of the 2017 update assessment.
Big Skate	CW	2 (Year Based)	0.45	1492	1267	1267	2019	OFL projected using a 50% SPR harvest rate in the 2019 big skate assessment.
Black Rockfish	WA	1 (Year Based)	0.45	319	289	289	2015	OFL projected using a 50% SPR from the 2019 catch-only projection update.
Black Rockfish	CA	1 (Year Based)	0.45	364	329	329	2015	OFL projected using a 50% SPR from the 2019 catch-only projection update.
Bocaccio	S of 4010	1 (Year Based)	0.45	2002	1828	1828	2017	OFL projected using a 50% SPR from the 2019 updated harvest specification projections based on new sigmas with a 7.4% reduction to subtract the portion of the assessed stock north of 40°10' N lat.; ACL = ABC (P* = 0.45).
Cabazon	CA	1 (Year Based)	0.45	185	171	171	2019	OFL projected using a 45% SPR from the 2019 assessment.
Cabazon	3427 - 42	1 (Year Based)	0.45	164.3	151.4846	151.4846	2019	OFL projected using a 45% SPR from the 2019 assessment.
Cabazon	S of 3427	1 (Year Based)	0.45	21	19.362	19.362	2019	OFL projected using a 45% SPR from the 2019 assessment.
Cabazon/Kelp Greenling	WA		-	22	17	17	-	Sum of harvest specification contributions of component stocks in the complex.
Cabazon	WA	3 (Year Based)	0.45	14.9	11.5922	11.5922	2019	OFL based on a DB-SRA assessment in the 2019 assessment.
Kelp Greenling	WA	3 (Year Based)	0.45	7.1	5.5238	5.5238	2015	OFL based on a 2015 DB-SRA estimate using a low vulnerability prior.
Cabazon/Kelp Greenling	OR		-	198	180	180	-	Sum of harvest specification contributions of component stocks in the complex.
Cabazon	OR	1 (Year Based)	0.45	53.4	49.2348	49.2348	2019	OFL projected using a 45% SPR from the 2019 assessment.
Kelp Greenling	OR	1 (Year Based)	0.45	144.899	130.9887	130.9887	2015	OFL projected in the 2021 catch-only update of the 2015 assessment.
California Scorpionfish	CW	CA Scorpionfish (Year Based)	0.45	280	252	252	2017	OFL from the 2019 catch-only update of the 2017 assessment.
Canary Rockfish	CW	1 (Year Based)	0.45	1401	1267	1267	2015	OFL from the 2019 catch-only update of the 2015 assessment.
Chilipepper	S of 4010	1 (Year Based)	0.45	2346	2121	2121	2015	OFL from the 2019 catch-only update of the 2015 assessment. OFLs are apportioned to the north (7%) and south (93%) of 40°10' N lat. based on average historical landings.

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Cowcod	S of 4010		-	112	79	79	2019	Harvest specifications are the sum of assessed area projections (Conception area) and DBSRA estimates (Monterey area). Sector allocations are based on a precautionary ACT of 50 mt due to assessment uncertainty.
Cowcod	4010 - 3427	3 (Year Based)	0.4	19.2	11.5584	11.5584	2019	OFL is based on the 2019 DB-SRA estimate in Appendix B of the 2019 cowcod assessment.
Cowcod	S of 3427	2 (Year Based)	0.4	93.2651	67.0576	67.0576	2019	OFL is based on a 50% SPR harvest rate projected in the 2019 assessment. ABC based on time varying cat. 2 sigma, P* = 0.4.
Darkblotched Rockfish	CW	1 (Year Based)	0.45	822	750	750	2017	OFL projected using a 50% SPR in the 2021 catch-only projection update.
Dover Sole	CW	1 (Year Based)	0.45	55859	51949	50000	2021	OFL projected using a 30% SPR harvest rate in the 2021 full assessment. ACL = 50,000 mt.
English Sole	CW	2 (Year Based)	0.45	11158	8960	8960	2013	OFL projected using a 30% SPR harvest rate in the 2019 English Sole Updated Harvest Specification Projections. ACL = ABC (P* = 0.45).
Lingcod	N of 4010	2 (Year Based)	0.45	4455	3854	3854	2021	OFLs projected using a 45% SPR harvest rate in the 2021 full assessment of lingcod N of 40°10' N lat.
Lingcod	S of 4010	2 (Year Based)	0.45	855	740	722	2021	OFLs projected using a 45% SPR harvest rate in the 2021 full assessment of lingcod S of 40°10' N lat.
Longnose Skate	CW	2 (Year Based)	0.45	1955	1660	1660	2019	OFLs projected using a 45% SPR harvest rate in the 2019 assessment. ACL = ABC.
Longspine Thornyhead	CW	2 (Year Based)	0.4	-	-	-	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 catch-only projection update. The coastwide ABC (P* = 0.4) is apportioned N (76%) and S (24%) of 34°27' N lat. to determine ACLs based on the 2003-2012 average swept area biomass from the NMFS trawl survey.
Longspine Thornyhead	S of 3427	2 (Year Based)	0.4	-	-	683	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 catch-only projection update. The coastwide ABC (P* = 0.4) is apportioned N (76%) and S (24%) of 33°42' N lat. to determine ACLs based on the 2003-2012 average swept area biomass from the NMFS trawl survey.
Longspine Thornyhead	N of 3427	2 (Year Based)	0.4	-	-	2162	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 catch-only projection update. The coastwide ABC (P* = 0.4) is apportioned N (76%) and S (24%) of 34°27' N lat. to determine ACLs based on the 2003-2012 average swept area biomass from the NMFS trawl survey.
Pacific Ocean Perch	N of 4010	2 (Year Based)	0.45	4133	3443	3443	2017	OFL projected using a 50% SPR harvest rate in the 2019 Pacific Ocean Perch Updated Harvest Specification Projections. ACL = ABC (P* = 0.45).
Petrale Sole	CW	1 (Year Based)	0.45	3563	3285	3285	2019	OFL projected using a 30% SPR harvest rate in the 2021 catch-only projection update. ACL = ABC (P* = 0.45). 30 mt allocation to non-trawl and the remainder to trawl. The allocation percentages shown in the Allocation Type are an artifact of the database; they are not used to allocate petrale sole.

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Sablefish	CW	1 (Year Based)	0.45	10670	9923	-	2021	OFLs projected using a 45% SPR harvest rate in the 2021 update assessment. ACL = ABC (P* = 0.45). ACLs are based on an apportionment of the coastwide ABC with 78.4% to the N and 21.6% to the S of 36° N lat. determined using the average 2014-2018 annual swept area biomass estimates from the NMFS NWFS trawl survey.
Sablefish	S of 36	1 (Year Based)	0.45	-	-	2143	2019	OFLs projected using a 45% SPR harvest rate in the 2021 update assessment. ACL = ABC (P* = 0.45). ACLs are based on an apportionment of the coastwide ABC with 78.4% to the N and 21.6% to the S of 36° N lat., determined using the average 2014-2018 annual swept area biomass estimates from the NMFS NWFS trawl survey.
Sablefish	N of 36	1 (Year Based)	0.45	-	-	7780	2021	OFLs projected using a 45% SPR harvest rate in the 2021 update assessment. ACL = ABC (P* = 0.45). ACLs are based on an apportionment of the coastwide ABC with 78.4% to the N and 21.6% to the S of 36° N lat., determined using the average 2014-2018 annual swept area biomass estimates from the NMFS NWFS trawl survey.
Shortspine Thornyhead	CW	2 (Year Based)	0.4	-	-	-	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 Catch-Only Projection Update. The coastwide ABC (P* = 0.4) is apportioned N (65.4%) and S (34.6%) of 34°27' N lat. based on 2003-2012 average swept area biomass in the NMFS NWFS trawl survey to determine ACLs.
Shortspine Thornyhead	N of 3427	2 (Year Based)	0.4	-	-	1328	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 Catch-Only Projection Update. The coastwide ABC (P* = 0.4) is apportioned N (65.4%) and S (34.6%) of 34°27' N lat. based on 2003-2012 average swept area biomass in the NMFS NWFS trawl survey to determine ACLs.
Shortspine Thornyhead	S of 3427	2 (Year Based)	0.4	-	-	702	2013	Coastwide OFL projected using a 50% SPR harvest rate in the 2019 Catch-Only Projection Update. The coastwide ABC (P* = 0.4) is apportioned N (65.4%) and S (34.6%) of 34°27' N lat. based on 2003-2012 average swept area biomass in the NMFS NWFS trawl survey to determine ACLs.
Splitnose	S of 4010	1 (Year Based)	0.45	1766	1553	1553	2009	OFL projected using a 50% SPR harvest rate in the 2019 Updated Harvest Specification Projections. Coastwide OFL is apportioned N (35.8%) and S (64.2%) of 40°10' N lat. based on average historical (1916-2008) landings.
Widow Rockfish	CW	1 (Year Based)	0.45	12453	11482	11482	2019	OFL projected using a 50% SPR harvest rate in the 2019 update assessment. ACL = ABC (P* = 0.45). Non-trawls are allocated 400 mt and rest is allocated to trawl. The 91% and 9% allocations noted in the Allocation Type section is an artifact and is not used to allocate widow for the 2023-2024 biennial cycle.

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Olive	N of 4010	3 (Year Based)	0.45	0.3152	0.2452	0.2452	2011	
Quillback	WA	3 (Year Based)	0.45	2.86	2.2251	2.2251	2021	OFL projected using a 50% SPR harvest rate MSY proxy from the 2021 assessment of quillback rockfish in WA.
Quillback	OR	2 (Year Based)	0.45	3.15	2.7248	2.7248	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of quillback rockfish in OR.
Quillback	42 - 4010	2 (Year Based)	0.45	1.15	0.9947	0.1673	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of quillback rockfish in CA, with 49.6% of the OFL apportioned north of 40°10' N lat. based on the estimated average 2002-2020 total catch by area.
Treefish	N of 4010	3 (Year Based)	0.45	0.2165	0.1684	0.1684	2011	
Nearshore Rockfish South	S of 4010		-	1098	903	891	-	Sum of harvest specification contributions of component stocks in the complex.
Blue	4010 - 3427	2 (Year Based)	0.45	302.4	256.7376	256.7376	2017	OFL from the 2019 catch-only projection update. 90% of the CA OFL is apportioned south of 40°10' N lat. (see Appendix D of the 2017 Assessment).
Blue	S of 3427	3 (Year Based)	0.45	21.8	16.9604	16.9604	2017	
Brown	S of 4010	2 (Year Based)	0.45	179.1085	143.8241	143.8241	2013	The portion of the coastwide stock south of 40°10' N lat. based on the proportion of cumulative removals by area during 1916-2012 (98.8%).
Calico	S of 4010	3 (Year Based)	0.45	-	-	-	-	
China	S of 4010	2 (Year Based)	0.45	16.82	13.7588	13.7588	2015	OFLs projected from the South Model in the 2015 assessment updated with 2019 catch-only projections.
Copper	4010 - 3427	2 (Year Based)	0.45	89.5227	77.4372	76.4641	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of copper rockfish in CA north of 34°27' N lat. with 96.1% of the OFL apportioned south of 40°10' N lat. based on the estimated average 2002-2020 total catch by area.
Copper	S of 3427	2 (Year Based)	0.45	25.3074	21.8909	11.4362	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of copper rockfish in CA south of 34°27' N lat.
Gopher	S of 4010	2 (Year Based)	0.45	137	118.505	118.505	2019	
Grass	S of 4010	3 (Year Based)	0.45	59.6267	46.3896	46.3896	2011	
Kelp	S of 4010	3 (Year Based)	0.45	27.6594	21.519	21.519	2011	
Olive	S of 4010	3 (Year Based)	0.45	224.6426	174.7719	174.7719	2011	
Quillback	S of 4010	2 (Year Based)	0.45	1.1685	1.0108	0.17	2021	OFL projected using a 50% SPR harvest rate from the 2021 assessment of quillback rockfish in CA, with 50.4% of the OFL apportioned south of 40°10' N lat. based on the estimated average 2002-2020 total catch by area.
Treefish	S of 4010	3 (Year Based)	0.45	13.2295	10.2926	10.2926	2011	
Other Fish	CW		-	286	223	223	-	Sum of harvest specification contributions of component stocks in the complex.
Kelp Greenling	CA	3 (Year Based)	0.45	118.9	92.5042	92.5042	2011	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Leopard Shark	CW	3 (Year Based)	0.45	167.1	130.0038	130	2011	
Other Flatfish	CW		-	7946	4874	4874	-	Sum of harvest specification contributions of component stocks in the complex.
Butter Sole	CW	3 (Year Based)	0.4	4.6308	2.7877	2.7877	-	
Curlfin Sole	CW	3 (Year Based)	0.4	8.2423	4.9619	4.9619	-	
Flathead Sole	CW	3 (Year Based)	0.4	35	21.07	21.07	-	
Pacific Sanddab	CW	3 (Year Based)	0.4	4801	2890.202	2890.202	2011	
Rex Sole	CW	2 (Year Based)	0.4	2257.36	1449.2251	1449.2251	2013	OFL projected using a 50% SPR harvest rate from the 2013 ExSSS assessment and updated with 2019 catch-only projections.
Rock Sole	CW	3 (Year Based)	0.4	66.7	40.1534	40.1534	2011	
Sand Sole	CW	3 (Year Based)	0.4	773.2	465.4664	465.4664	2011	
Pacific Whiting	CW		-	-	-	-	2021	
Shelf Rockfish North	N of 4010		-	1610	1278	1278	-	Sum of harvest specification contributions of component stocks in the complex.
Bocaccio	N of 4010	3 (Year Based)	0.45	284.0136	220.9626	220.9626	2011	
Bronzespotted	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Chameleon	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Chilipepper	N of 4010	1 (Year Based)	0.45	176.61	159.6554	159.6554	2015	OFLs are apportioned to the north (7%) and south (93%) of 40°10' N lat. based on average historical landings.
Cowcod	N of 4010	3 (Year Based)	0.45	0.567	0.4411	0.4411	2019	
Flag	N of 4010	3 (Year Based)	0.45	0.0724	0.0563	0.0563	2011	
Freckled	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Greenblotched	N of 4010	3 (Year Based)	0.45	1.2774	0.9938	0.9938	2011	
Greenspotted	42 - 4010	2 (Year Based)	0.45	9.453	7.4489	7.4489	2011	OFLs are projected using a 50% SPR harvest rate from the northern California model and updated in 2021. The portion of the assessed area north of 40°10' N lat. (22.2% of OFL from northern California model) based on average historical catch.
Greenspotted	WA - OR	3 (Year Based)	0.45	6.078	4.7287	4.7287	2011	
Greenstriped	N of 4010	3 (Year Based)	0.45	623.61	485.1686	485.1686	2009	OFL based on the MSY associated with the F _{MSY} proxy in the 2009 assessment. The portion of the coastwide stock north of 40°10' N lat. (84.5%) is based on the mean of the 2003-2008 swept area biomass estimates from the NMFS trawl survey.
Halfbanded	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Harlequin	N of 4010	3 (Year Based)	0.45	-	-	-	-	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Honeycomb	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Mexican	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Pink	N of 4010	3 (Year Based)	0.45	0.0037	0.0029	0.0029	2011	
Pinkrose	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Puget Sound	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Pygmy	N of 4010	3 (Year Based)	0.45	-	-	-	-	
Redstripe	N of 4010	3 (Year Based)	0.45	269.9106	209.9904	209.9904	2011	
Rosethorn	N of 4010	3 (Year Based)	0.45	12.8971	10.0339	10.0339	2011	
Rosy	N of 4010	3 (Year Based)	0.45	3.034	2.3605	2.3605	2011	
Silvergray	N of 4010	3 (Year Based)	0.45	159.4204	124.0291	124.0291	2011	
Speckled	N of 4010	3 (Year Based)	0.45	0.1711	0.1331	0.1331	2011	
Squarespot	42 - 4010	2 (Year Based)	0.45	-	-	-	2021	OFL projected using a 50% SPR harvest rate from the 2021 squarespot rockfish assessment in CA.
Starry	N of 4010	3 (Year Based)	0.45	0.0037	0.0029	0.0029	2011	
Stripetail	N of 4010	3 (Year Based)	0.45	40.3954	31.4276	31.4276	2011	
Swordspine	N of 4010	3 (Year Based)	0.45	0.0001	0.0001	0.0001	2011	
Tiger	N of 4010	3 (Year Based)	0.45	0.9689	0.7538	0.7538	2011	
Vermilion	WA	2 (Year Based)	0.45	0.812	0.702	0.702	2021	OFL projected from the 2021 assessment of vermilion rockfish in WA.
Vermilion	OR	1 (Year Based)	0.45	13.38	12.45	12.45	2021	OFL projected from the 2021 assessment of vermilion rockfish in OR.
Vermilion	42 - 4010	1 (Year Based)	0.45	6.924	6.4393	6.4393	2021	OFL projected from the 2021 assessment of vermilion rockfish in CA. The OFLs N (4.4%) and S (95.6%) of 40°10' N lat. are based on an apportionment of the estimated biomass in CA N of 34°27' N lat.
Shelf Rockfish South	S of 4010		-	1833	1465	1465	-	Sum of harvest specification contributions of component stocks in the complex.
Bronzespotted	S of 4010	3 (Year Based)	0.45	3.6465	2.837	2.837	2011	
Chameleon	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Flag	S of 4010	3 (Year Based)	0.45	23.4239	18.2238	18.2238	2011	
Freckled	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Greenblotched	S of 4010	3 (Year Based)	0.45	23.1305	17.9955	17.9955	2011	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Greenspotted	4010 - 3427	2 (Year Based)	0.45	33.128	26.1049	26.1049	2011	OFLs are projected using a 50% SPR harvest rate from the northern California model and updated in 2021. The portion of the assessed area north of 40°10' N lat. (22.2% of OFL from northern California model) based on average historical catch.
Greenspotted	S of 3427	2 (Year Based)	0.45	45.86	36.1377	36.1377	2011	OFLs are projected using a 50% SPR harvest rate from the southern California model and updated in 2021.
Greenstriped	S of 4010	3 (Year Based)	0.45	114.39	88.9954	88.9954	2009	OFL based on the MSY associated with the F_{MSY} proxy in the 2009 assessment. The portion of the coastwide stock south of 40°10' N lat. (15.5%) is based on the mean of the 2003-2008 swept area biomass estimates from the NMFS trawl survey.
Halfbanded	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Harlequin	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Honeycomb	S of 4010	3 (Year Based)	0.45	9.8668	7.6764	7.6764	2011	
Mexican	S of 4010	3 (Year Based)	0.45	5.0532	3.9314	3.9314	2011	
Pink	S of 4010	3 (Year Based)	0.45	2.5	1.945	1.945	2011	
Pinkrose	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Pygmy	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Redstripe	S of 4010	3 (Year Based)	0.45	0.4926	0.3832	0.3832	2011	
Rosethorn	S of 4010	3 (Year Based)	0.45	2.1305	1.6575	1.6575	2011	
Rosy	S of 4010	3 (Year Based)	0.45	44.5082	34.6274	34.6274	2011	
Silvergray	S of 4010	3 (Year Based)	0.45	0.5376	0.4183	0.4183	2011	
Speckled	S of 4010	3 (Year Based)	0.45	39.3813	30.6387	30.6387	2011	
Squarespot	S of 4010	2 (Year Based)	0.45	11.1	9.6015	9.6015	2021	OFL projected using a 50% SPR harvest rate from the 2021 squarespot rockfish assessment in CA.
Starry	S of 4010	3 (Year Based)	0.45	62.5716	48.6807	48.6807	2011	
Stripetail	S of 4010	3 (Year Based)	0.45	23.6233	18.3789	18.3789	2011	
Swordspine	S of 4010	3 (Year Based)	0.45	14.2159	11.06	11.06	2011	
Tiger	S of 4010	3 (Year Based)	0.45	0.0399	0.031	0.031	2011	
Vermilion	4010 - 3427	1 (Year Based)	0.45	150.44	139.9092	139.9092	2021	OFL projected from the 2021 assessment of vermilion and sunset rockfishes in CA N of 34°27' N lat. The OFLs N (4.4%) and S (95.6%) of 40°10' N lat. are based on an apportionment of the estimated biomass in CA N of 34°27' N lat.
Vermilion	S of 3427	2 (Year Based)	0.45	158.813	137.3732	137.3732	2021	OFL projected from the 2021 assessment of vermilion and sunset rockfishes in CA S of 34°27' N lat.
Yellowtail Rockfish	S of 4010	3 (Year Based)	0.45	1064.4392	828.1337	828.1337	2011	

Stock or Complex	Area	Category	P*	OFL	ABC	ACL	Assess Year	Notes
Slope Rockfish North	N of 4010		-	1797	1516	1516	-	Sum of harvest specification contributions of component stocks in the complex.
Aurora	N of 4010	1 (Year Based)	0.45	17.3551	15.5502	15.5502	2013	The portion of the coastwide stock north of 40°10' N lat. (19%) is based on average survey biomass.
Bank	N of 4010	3 (Year Based)	0.45	17.2375	13.4108	13.4108	2011	
Blackgill Rockfish	N of 4010	3 (Year Based)	0.45	4.7	3.6566	3.6566	2011	
Redbanded	N of 4010	3 (Year Based)	0.45	45.2618	35.2137	35.2137	2011	
Rougheye/Blackspotted	N of 4010	2 (Year Based)	0.45	233.24	190.7903	190.7903	2013	The coastwide OFLs are apportioned north (98%) and south (2%) based on average landings during 1985-2012.
Sharpchin	N of 4010	2 (Year Based)	0.45	282.6912	227.001	227.001	2013	OFLs are apportioned north and south of 40°10' N lat. (80% N, 20% S) based on average swept area biomass estimates from the triennial survey.
Shortraker	N of 4010	3 (Year Based)	0.45	18.7038	14.5516	14.5516	2011	
Splitnose	N of 4010	1 (Year Based)	0.45	985.0442	865.8538	865.8538	2009	OFL projected using a 50% SPR harvest rate in the 2019 Updated Harvest Specification Projections. Coastwide OFL is apportioned N (35.8%) and S (64.2%) of 40°10' N lat. based on average historical (1916-2008) landings.
Yellowmouth	N of 4010	3 (Year Based)	0.45	192.4467	149.7235	149.7235	2011	
Slope Rockfish South	S of 4010		-	868	697	697	-	Sum of harvest specification contributions of component stocks in the complex.
Aurora	S of 4010	1 (Year Based)	0.45	73.9875	66.2928	66.2928	2013	The portion of the coastwide stock north of 40°10' N lat. (19%) is based on average survey biomass.
Bank	S of 4010	3 (Year Based)	0.45	503.215	391.5013	391.5013	2011	
Blackgill Rockfish	S of 4010	2 (Year Based)	0.45	204	169.932	169.932	2017	
Pacific Ocean Perch	S of 4010	3 (Year Based)	0.45	-	-	-	-	
Redbanded	S of 4010	3 (Year Based)	0.45	10.4057	8.0956	8.0956	2011	
Rougheye/Blackspotted	S of 4010	2 (Year Based)	0.45	4.76	3.8937	3.8937	2013	The coastwide OFLs are apportioned north (98%) and south (2%) of 40°10' N lat. based on average landings during 1985-2012.
Sharpchin	S of 4010	2 (Year Based)	0.45	70.6728	56.7503	56.7503	2013	OFLs are apportioned north and south of 40°10' N lat. (80% N, 20% S) based on average swept area biomass estimates from the triennial survey.
Shortraker	S of 4010	3 (Year Based)	0.45	0.1049	0.0816	0.0816	2011	
Yellowmouth	S of 4010	3 (Year Based)	0.45	0.8483	0.66	0.66	2011	