

2017 AND 2018 GROUND FISH HARVEST SPECIFICATIONS

The following tables are included in this attachment:

- Table 1. Proposed 2017 and 2018 OFLs (mt) for west coast groundfish stocks.
- Table 2. The range of alternative 2017 ABCs (mt) varied by the probability of overfishing (P*) for west coast groundfish stocks.
- Table 3. The range of alternative 2018 ABCs (mt) varied by the probability of overfishing (P*) for west coast groundfish stocks.
- Table 4. 2017 and 2018 harvest specifications (overfishing limits (OFLs in mt), acceptable biological catches (ABCs in mt), and annual catch limits (ACLs in mt)), for west coast groundfish stocks and stock complexes under default harvest control rules.

The following tables provide the 2017 and 2018 harvest specifications (overfishing limits (OFLs), acceptable biological catches (ABCs), and annual catch limits (ACLs) under proxy reference points for deciding OFLs and default harvest control rules decided by the Council for managing west coast groundfish stocks and stock complexes. Not all the information needed to decide 2017 and 2018 harvest specifications was available as of the briefing book deadline. Such affected stocks and stock complexes are highlighted in these tables. Missing harvest specifications will be made available in time for a November Council decision. These tables are revised from those provided in the advanced briefing book under Agenda Item H.5, Attachment 1.

Table 1. SSC-endorsed 2017 and 2018 OFLs (mt) for west coast groundfish stocks (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics; more information is needed for deciding harvest specifications for highlighted stocks and stock complexes).

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
OVERFISHED STOCKS				
BOCACIO S. of 40°10' N. lat.				
COWCOD S. of 40°10' N. lat.				
<i>COWCOD (Conception)</i>				
<i>COWCOD (Monterey)</i>	3	11.6	12.0	DB-SRA estimate calculated in 2014
DARKBLOTCHED ROCKFISH	1	671	693	Projected using a 50% SPR from the 2015 full assessment
PACIFIC OCEAN PERCH	1	948	972	Projected using a 50% SPR assuming ACL removals (SPR = 86.4%) from the 2011 rebuilding analysis
YELLOWWEYE ROCKFISH				
NON-OVERFISHED STOCKS				
Arrowtooth Flounder				
Black Rockfish (CA)				
Black Rockfish (OR)				
Black Rockfish (WA)				
Cabazon (CA)	1	157	156	Projected using a 45% SPR from the 2009 full assessment.
Cabazon (OR)	1	49	49	Projected using a 45% SPR from the 2009 full assessment.
California scorpionfish				
Canary Rockfish	1	1,793	1,661	Projected using a 50% SPR from the 2015 full assessment
Chilipepper S. of 40°10' N. lat.	1	2,727	2,623	Projected using a 50% SPR from the 2015 update assessment. The portion of the coastwide stock south of 40°10' N. lat. (93%) is based on average historical landings.
Dover Sole	1	89,702	90,282	Updated projection using a 30% SPR from the 2011 full assessment assuming actual catches since 2011.
English Sole				
Lingcod N. of 40°10' N. lat.				
Lingcod S. of 40°10' N. lat.				
Longnose skate	1	2,556	2,526	Projected using a 50% SPR from the 2007 full assessment.
Longspine Thornyhead (coastwide)	2	4,571	4,339	Projected using a 50% SPR from the 2013 full assessment.
Pacific Cod	3	3,200	3,200	Status quo OFL.
Petrals Sole	1	3,280	3,152	Projected using a 30% SPR from the 2015 update assessment
Sablefish (coastwide)	1	8,050	8,329	Projected using a 45% SPR from the 2015 update assessment.
Shortbelly	2	6,950	6,950	MSY estimated from 2007 assessment.
Shortspine Thornyhead (coastwide)	2	3,144	3,116	Projected using a 50% SPR from the 2013 full assessment.
Spiny dogfish	2	2,514	2,500	<i>Projected using a 50% SPR from the 2011 full assessment.</i>
Splitnose S. of 40°10' N. lat.	1	1,841	1,842	Projected using a 50% SPR from the 2009 full assessment. The portion of the coastwide stock south of 40°10' N. lat. (64.2%) is based on average historical (1916-2008) landings.
Starry Flounder				
Widow Rockfish	1	14,130	14,511	Projected using a 50% SPR from the 2015 full assessment.
Yellowtail N. of 40°10' N. lat.				

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
STOCK COMPLEXES				
Nearshore Rockfish North				
<i>Black and yellow</i>	3	0.01	0.01	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Blue (CA)</i>				
<i>Blue (OR & WA)</i>	3	32.3	32.3	<i>DCAC estimate.</i>
<i>Brown</i>				
<i>Calico</i>	3	-	-	<i>No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species</i>
China	2	30.2	29.3	Projected using a 50% SPR from the 2015 full assessment (sum of North and Central model estimates)
<i>Copper</i>				
<i>Gopher</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Grass</i>	3	0.7	0.7	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Kelp</i>	3	0.01	0.01	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Olive</i>	3	0.3	0.3	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Quillback</i>	3	7.4	7.4	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Treefish</i>	3	0.2	0.2	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
Shelf Rockfish North		2,303	2,301	Sum of OFL contributions of component stocks in the complex.
<i>Bronzespotted</i>	3	-	-	<i>No harvest contribution in the north (3a stock)</i>
<i>Bocaccio</i>	3	284.0	284.0	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Chameleon</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
Chilipepper	1	205.2	197.4	Projected using a 50% SPR from the 2015 update assessment. The portion of the coastwide stock north of 40°10' N. lat. (7%) is based on average historical landings.
<i>Cowcod</i>	3	0.4	0.4	<i>No harvest contribution (3a stock).</i>
<i>Flag</i>	3	0.1	0.1	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Freckled</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Greenblotched</i>	3	1.3	1.3	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Greenspotted 40°10' to 42° N. lat.</i>	2	9.2	9.1	<i>Projection using a 50% SPR from the full 2011 assessment. 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.</i>
<i>Greenspotted N. of 42 N. lat. (OR & WA)</i>	3	6.1	6.1	<i>DCAC estimate</i>
<i>Greenstriped</i>	2	1,299.6	1,306.4	<i>Projected using a 50% SPR from the full 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.</i>
<i>Halfbanded</i>	3	-	-	<i>No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species</i>
<i>Harlequin</i>	3	-	-	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Honeycomb</i>	3	-	-	<i>No harvest contribution in the north (3a stock)</i>
<i>Mexican</i>	3	-	-	<i>No harvest contribution in the north (3a stock)</i>
<i>Pink</i>	3	0.004	0.004	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Pinkrose</i>	3	-	-	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Puget Sound</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Pygmy</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Redstripe</i>	3	269.9	269.9	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Rosethorn</i>	3	12.9	12.9	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
<i>Rosy</i>	3	3.0	3.0	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Silvergray</i>	3	159.4	159.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Speckled</i>	3	0.2	0.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Squarespot</i>	3	0.2	0.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Starry</i>	3	0.004	0.004	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Stripetail</i>	3	40.4	40.4	DB-SRA estimate calculated in 2012 for 2013 and beyond. Only status determined from 2013 data-moderate assessment, so remains a cat. 3 stock.
<i>Swordspine</i>	3	0.0001	0.0001	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Tiger</i>	3	1.0	1.0	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Vermilion</i>	3	9.7	9.7	DB-SRA estimate calculated in 2012 for 2013 and beyond
Slope Rockfish North		1,533	1,538	Sum of OFL contributions of component stocks in the complex.
<i>Aurora</i>	1	17.5	17.5	Projected using a 50% SPR from the 2013 full assessment. The portion of the coastwide stock north of 40°10' N lat. (19%) is based on average survey biomass.
<i>Bank</i>	3	17.2	17.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Blackgill</i>	3	4.7	4.7	DCAC estimate.
<i>Redbanded</i>	3	45.3	45.3	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Rougheye/Blackspotted</i>	2	210.7	214.6	Projected using a 50% SPR from the 2013 full assessment. The coastwide OFLs are apportioned north (98%) and south (2%) based on average landings during 1985-2012.
<i>Sharpchin</i>				
<i>Shortraker</i>	3	18.7	18.7	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Splitnose</i>	1	1,026.7	1,027.1	Projected using a 50% SPR from the 2009 full assessment. The portion of the coastwide stock north of 40°10' N. lat. (35.8%) is based on average historical (1916-2008) landings.
<i>Yellowmouth</i>	3	192.4	192.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
Nearshore Rockfish South				
<i>Shallow Nearshore Species</i>		NA	NA	
<i>Black and yellow</i>	3	27.5	27.5	DB-SRA estimate calculated in 2012 for 2013 and beyond
China	2	13.3	13.8	Projected using a 50% SPR from the 2015 full assessment (South model estimate)
<i>Gopher (N of Pt. Conception)</i>				
<i>Gopher (S of Pt. Conception)</i>	3	25.6	25.6	DCAC estimate.
<i>Grass</i>	3	59.6	59.6	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Kelp</i>	3	27.7	27.7	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Deeper Nearshore Species</i>		NA	NA	
<i>Blue (assessed area)</i>				
<i>Blue (S of 34°27' N. lat.)</i>	3	72.9	72.9	DCAC estimate.
<i>Brown</i>				
<i>Calico</i>	3	-	-	No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species
<i>Copper</i>				
<i>Olive</i>	3	224.6	224.6	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Quillback</i>	3	5.4	5.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Treefish</i>	3	13.2	13.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
Shelf Rockfish South		1,916	1,917	Sum of OFL contributions of component stocks in the complex.

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
<i>Bronzespotted</i>	3	3.6	3.6	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Chameleon</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Flag</i>	3	23.4	23.4	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Freckled</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Greenblotched</i>	3	23.1	23.1	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Greenspotted</i>	2	77.8	77.4	<i>Projected using a 50% SPR from the full 2011 assessment. The portion of the assessed area south of 40°10' N lat. (77.8% of OFL from northern California model from average historical catch + the OFL from the southern California model)</i>
<i>Greenstriped</i>	2	238.4	239.6	<i>Projected using a 50% SPR from the full 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.</i>
<i>Halfbanded</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Harlequin</i>	3	-	-	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Honeycomb</i>	3	9.9	9.9	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Mexican</i>	3	5.1	5.1	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Pink</i>	3	2.5	2.5	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Pinkrose</i>	3	-	-	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Pygmy</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Redstripe</i>	3	0.5	0.5	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Rosethorn</i>	3	2.1	2.1	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Rosy</i>	3	44.5	44.5	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Silvergray</i>	3	0.5	0.5	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Speckled</i>	3	39.4	39.4	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Squarespot</i>	3	11.1	11.1	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Starry</i>	3	62.6	62.6	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Stripetail</i>	3	23.6	23.6	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond. Only status determined from 2013 data-moderate assessment, so presumed to remain a cat. 3 stock.</i>
<i>Swordspine</i>	3	14.2	14.2	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Tiger</i>	3	0.04	0.04	<i>DB-SRA estimate calculated in 2012 for 2013 and beyond</i>
<i>Vermilion</i>	3	269.3	269.3	<i>DB-SRA estimate calculated in 2011.</i>
<i>Yellowtail</i>	3	1,064.4	1,064.4	<i>DB-SRA estimate calculated in 2011.</i>
Slope Rockfish South		736	739	Sum of OFL contributions of component stocks in the complex.
<i>Aurora</i>	1	74.4	74.5	<i>Projected using a 50% SPR from the 2013 full assessment. The portion of the coastwide stock south of 40°10' N lat. (81%) is based on average survey biomass.</i>
<i>Bank</i>	3	503.2	503.2	<i>DB-SRA estimate calculated in 2011.</i>
<i>Blackgill</i>	2	143.0	146.0	<i>Projected using a 50% SPR from the 2011 full assessment.</i>
<i>Pacific ocean perch</i>	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Redbanded</i>	3	10.4	10.4	<i>DB-SRA estimate calculated in 2011.</i>
<i>Rougeye/Blackspotted</i>	2	4.3	4.4	<i>Projected using a 50% SPR from the 2013 full assessment. The coastwide OFLs are apportioned north (98%) and south (2%) based on average landings during 1985-2012.</i>
<i>Sharpchin</i>				
<i>Shortraker</i>	3	0.1	0.1	<i>DB-SRA estimate calculated in 2011.</i>
<i>Yellowmouth</i>	3	0.8	0.8	<i>DB-SRA estimate calculated in 2011.</i>
Other Flatfish				

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
<i>Butter sole</i>	3	4.6	4.6	<i>Based on the average catch during 1994-1998 + a 60% discard rate estimated from the EDCP study.</i>
<i>Curlfin sole</i>	3	8.2	8.2	<i>Based on the average catch during 1994-1998 + a 60% discard rate estimated from the EDCP study.</i>
<i>Flathead sole</i>	3	35.0	35.0	<i>Max. catch = 35 mt in 2005</i>
<i>Pacific sanddab</i>	3	4,801.0	4,801.0	<i>DB-SRA estimate calculated in 2011. Only status determined from 2013 full assessment, so presumed to remain a cat. 3 stock.</i>
<i>Rex sole</i>				
<i>Rock sole</i>	3	66.7	66.7	<i>DB-SRA estimate calculated in 2011.</i>
<i>Sand sole</i>	3	773.2	773.2	<i>DB-SRA estimate calculated in 2011.</i>
Other Fish a/				
<i>Cabezon (WA)</i>	3	4.5	4.8	<i>DB-SRA estimate calculated in 2014 for 2015 and beyond</i>
<i>Kelp greenling (CA)</i>	3	118.9	118.9	<i>DB-SRA estimate calculated in 2011.</i>
<i>Kelp greenling (OR)</i>				
<i>Kelp greenling (WA)</i>				
<i>Leopard shark</i>	3	167.1	167.1	<i>DB-SRA estimate calculated in 2014 for 2015 and beyond</i>

Table 2. The range of alternative 2017 ABCs (mt) varied by the probability of overfishing (P*) for west coast groundfish stocks (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics; more information is needed for deciding harvest specifications for highlighted stocks and stock complexes).

Stock	2017 OFL	Cat.	Range of Alternative 2017 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
OVERFISHED STOCKS							
BOCACCIO S. of 40°10' N. lat.							
COWCOD S. of 40°10' N. lat.							
<i>COWCOD (Conception)</i>							
<i>COWCOD (Monterey)</i>	12	3	10	8	7	5	4
DARKBLOTCHED ROCKFISH	671	1	641	613	584	556	526
PACIFIC OCEAN PERCH	948	1	906	866	825	785	743
YELLOW EYE ROCKFISH							
NON-OVERFISHED STOCKS							
Arrowtooth Flounder							
Black Rockfish (CA)							
Black Rockfish (OR)							
Black Rockfish (WA)							
Cabezon (CA)	157	1	150	143	137	130	123
Cabezon (OR)	49	1	47	45	43	41	38
California scorpionfish							
Canary Rockfish	1,793	1	1,714	1,637	1,560	1,485	1,406
Chilipepper S. of 40°10' N. lat.	2,727	1	2,607	2,490	2,372	2,258	2,138
Dover Sole	89,702	1	85,755	81,898	78,041	74,274	70,327
English Sole							
Lingcod N. of 40°10' N. lat.							
Lingcod S. of 40°10' N. lat.							
Longnose skate	2,556	1	2,444	2,334	2,224	2,116	2,004
Longspine Thornyhead (coastwide)	4,571	2	4,173	3,808	3,465	3,136	2,811
Pacific Cod	3,200	3	2,669	2,221	1,837	1,504	1,213
Petrale Sole	3,280	1	3,136	2,995	2,854	2,716	2,572
Sablefish (coastwide)	8,050	1	7,696	7,350	7,004	6,665	6,311
Shortbelly	6,950	2	6,345	5,789	5,268	4,768	4,274
Shortspine Thornyhead (coastwide)	3,144	2	2,870	2,619	2,383	2,157	1,934
Spiny dogfish	2,514	2	2,295	2,094	1,906	1,725	1,546
Splitnose S. of 40°10' N. lat.	1,841	1	1,760	1,681	1,602	1,525	1,444
Starry Flounder							
Widow Rockfish	14,130	1	13,508	12,901	12,293	11,700	11,078
Yellowtail N. of 40°10' N. lat.							
STOCK COMPLEXES							
Nearshore Rockfish North							
<i>Black and yellow</i>	0.014	3	0.011	0.009	0.008	0.006	0.005
<i>Blue (CA)</i>							
<i>Blue (OR & WA)</i>	32.3	3	26.9	22.4	18.5	15.2	12.2
<i>Brown</i>							
<i>Calico</i>	-	3	-	-	-	-	-
<i>China</i>	30.2	2	27.5	25.1	22.9	20.7	18.5
<i>Copper</i>							

Stock	2017 OFL	Cat.	Range of Alternative 2017 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
<i>Gopher</i>	-	3	-	-	-	-	-
<i>Grass</i>	0.7	3	0.5	0.5	0.4	0.3	0.2
<i>Kelp</i>	0.009	3	0.008	0.006	0.005	0.004	0.003
<i>Olive</i>	0.3	3	0.3	0.2	0.2	0.1	0.1
<i>Quillback</i>	7.4	3	6.2	5.1	4.2	3.5	2.8
<i>Treefish</i>	0.2	3	0.2	0.2	0.1	0.1	0.1
Shelf Rockfish North	2,303		2,049	1,825	1,623	1,439	1,265
<i>Bronzespotted</i>	-	3	-	-	-	-	-
<i>Bocaccio</i>	284.0	3	236.9	197.1	163.0	133.5	107.6
<i>Chameleon</i>	-	3	-	-	-	-	-
<i>Chilipepper</i>	205.2	1	196.2	187.4	178.6	169.9	160.9
<i>Cowcod</i>	0.4	3	0.3	0.3	0.3	0.3	0.3
<i>Flag</i>	0.07	3	0.06	0.05	0.04	0.03	0.03
<i>Freckled</i>	-	3	-	-	-	-	-
<i>Greenblotched</i>	1.3	3	1.1	0.9	0.7	0.6	0.5
<i>Greenspotted 40°10' to 42° N. lat.</i>	9.2	2	8.4	7.7	7.0	6.3	5.7
<i>Greenspotted N. of 42 N. lat. (OR & WA)</i>	6.1	3	5.1	4.2	3.5	2.9	2.3
<i>Greenstriped</i>	1,299.6	2	1,186.5	1,082.6	985.1	891.5	799.3
<i>Halfbanded</i>	-	3	-	-	-	-	-
<i>Harlequin</i>	-	3	-	-	-	-	-
<i>Honeycomb</i>	-	3	-	-	-	-	-
<i>Mexican</i>	-	3	-	-	-	-	-
<i>Pink</i>	0.004	3	0.003	0.003	0.002	0.002	0.001
<i>Pinkrose</i>	-	3	-	-	-	-	-
<i>Puget Sound</i>	-	3	-	-	-	-	-
<i>Pygmy</i>	-	3	-	-	-	-	-
<i>Redstripe</i>	269.9	3	225.1	187.3	154.9	126.9	102.3
<i>Rosethorn</i>	12.9	3	10.8	9.0	7.4	6.1	4.9
<i>Rosy</i>	3.0	3	2.5	2.1	1.7	1.4	1.1
<i>Silvergray</i>	159.4	3	133.0	110.6	91.5	74.9	60.4
<i>Speckled</i>	0.17	3	0.14	0.12	0.10	0.08	0.06
<i>Squarespot</i>	0.17	3	0.14	0.12	0.10	0.08	0.07
<i>Starry</i>	0.00	3	0.003	0.003	0.002	0.002	0.001
<i>Stripetail</i>	40.4	3	33.7	28.0	23.2	19.0	15.3
<i>Swordspine</i>	0.0001	3	0.00008	0.00007	0.00006	0.00005	0.00004
<i>Tiger</i>	1.0	3	0.8	0.7	0.6	0.5	0.4
<i>Vermilion</i>	9.7	3	8.1	6.7	5.6	4.6	3.7
Slope Rockfish North							
<i>Aurora</i>	17.5	1	16.6	15.8	15.0	14.2	13.4
<i>Bank</i>	17.2	3	14.4	12.0	9.9	8.1	6.5
<i>Blackgill</i>	4.7	3	3.9	3.3	2.7	2.2	1.8
<i>Redbanded</i>	45.3	3	37.7	31.4	26.0	21.3	17.2
<i>Rougheye/Blackspotted</i>	210.7	2	192	176	160	145	130
Sharpchin							
<i>Shortraker</i>	18.7	3	15.6	13.0	10.7	8.8	7.1
<i>Splinose</i>	1,026.7	1	981.6	937.4	893.3	850.1	805.0
<i>Yellowmouth</i>	192.4	3	160.5	133.6	110.5	90.4	72.9
Nearshore Rockfish South	470		393	328	272	224	181
<i>Shallow Nearshore Species</i>	NA		NA	NA	NA	NA	NA
<i>Black and yellow</i>	28	3	23.0	19.1	15.8	12.9	10.4

Stock	2017 OFL	Cat.	Range of Alternative 2017 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
China	13	2	12.2	11.1	10.1	9.1	8.2
Gopher (N of Pt. Conception)							
Gopher (S of Pt. Conception)	26	3	21.4	17.8	14.7	12.0	9.7
Grass	60	3	49.7	41.4	34.2	28.0	22.6
Kelp	28	3	23.1	19.2	15.9	13.0	10.5
Deeper Nearshore Species	NA		NA	NA	NA	NA	NA
Blue (assessed area)							
Blue (S of 34°27' N. lat.)	73	3	60.8	50.6	41.8	34.3	27.6
Brown							
Calico	-	3	-	-	-	-	-
Copper							
Olive	225	3	187.4	155.9	128.9	105.6	85.1
Quillback	5	3	4.5	3.7	3.1	2.5	2.0
Treefish	13	3	11.0	9.2	7.6	6.2	5.0
Shelf Rockfish South	1,916		1,623	1,374	1,158	969	801
Bronzespotted	3.6	3	3.0	2.5	2.1	1.7	1.4
Chameleon	-	3	-	-	-	-	-
Flag	23.4	3	19.5	16.3	13.4	11.0	8.9
Freckled	-	3	-	-	-	-	-
Greenblotched	23.1	3	19.3	16.1	13.3	10.9	8.8
Greenspotted	77.8	2	71.0	64.8	59.0	53.4	47.9
Greenstriped	238.4	2	217.7	198.6	180.7	163.5	146.6
Halfbanded	-	3	-	-	-	-	-
Harlequin	-	3	-	-	-	-	-
Honeycomb	9.9	3	8.2	6.8	5.7	4.6	3.7
Mexican	5.1	3	4.2	3.5	2.9	2.4	1.9
Pink	2.5	3	2.1	1.8	1.5	1.2	1.0
Pinkrose	-	3	-	-	-	-	-
Pygmy	-	3	-	-	-	-	-
Redstripe	0.5	3	0.4	0.3	0.3	0.2	0.2
Rosethorn	2.1	3	1.8	1.5	1.2	1.0	0.8
Rosy	44.5	3	37.1	30.9	25.5	20.9	16.9
Silvergray	0.5	3	0.4	0.4	0.3	0.3	0.2
Speckled	39.4	3	32.8	27.3	22.6	18.5	14.9
Squarespot	11.1	3	9.2	7.7	6.4	5.2	4.2
Starry	62.6	3	52.2	43.4	35.9	29.4	23.7
Stripetail	23.6	3	19.7	16.4	13.6	11.1	9.0
Swordspine	14.2	3	11.9	9.9	8.2	6.7	5.4
Tiger	0.04	3	0.03	0.03	0.02	0.02	0.02
Vermilion	269.3	3	224.6	186.9	154.6	126.6	102.1
Yellowtail	1,064.4	3	887.7	738.7	611.0	500.3	403.4
Slope Rockfish South							
Aurora	74.4	1	70.9	67.4	64.0	60.7	57.2
Bank	503.2	3	419.7	349.2	288.8	236.5	190.7
Blackgill	143.0	2	130.6	119.1	108.4	98.1	87.9
Pacific ocean perch	-	3	-	-	-	-	-
Redbanded	10.4	3	8.7	7.2	6.0	4.9	3.9
Rougheye/Blackspotted	4.3	2	3.9	3.6	3.3	2.9	2.6
Sharpchin							
Shortraker	0.10	3	0.09	0.07	0.06	0.05	0.04

Stock	2017 OFL	Cat.	Range of Alternative 2017 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
<i>Yellowmouth</i>	0.8	3	0.7	0.6	0.5	0.4	0.3
Other Flatfish							
<i>Butter sole</i>	4.6	3	3.9	3.2	2.7	2.2	1.8
<i>Curlfin sole</i>	8.2	3	6.9	5.7	4.7	3.9	3.1
<i>Flathead sole</i>	35.0	3	29.2	24.3	20.1	16.5	13.3
<i>Pacific sanddab</i>	4,801.0	3	4,004.0	3,331.9	2,755.8	2,256.5	1,819.6
Rex sole							
<i>Rock sole</i>	66.7	3	55.6	46.3	38.3	31.3	25.3
<i>Sand sole</i>	773.2	3	644.8	536.6	443.8	363.4	293.0
Other Fish							
<i>Cabezon (WA)</i>	4.5	3	3.8	3.1	2.6	2.1	1.7
<i>Kelp greenling (CA)</i>	118.9	3	99.2	82.5	68.2	55.9	45.1
Kelp greenling (OR)							
Kelp greenling (WA)							
<i>Leopard shark</i>	167.1	3	139.4	116.0	95.9	78.5	63.3

Table 3. The range of alternative 2018 ABCs (mt) varied by the probability of overfishing (P*) for west coast groundfish stocks (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics; more information is needed for deciding harvest specifications for highlighted stocks and stock complexes).

Stock	2018 OFL	Cat.	Range of Alternative 2018 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
OVERFISHED STOCKS							
BOCACCIO S. of 40°10' N. lat.							
COWCOD S. of 40°10' N. lat.							
<i>COWCOD (Conception)</i>							
<i>COWCOD (Monterey)</i>	12	3	10	8	7	6	5
DARKBLOTCHED ROCKFISH	693	1	663	633	603	574	543
PACIFIC OCEAN PERCH	972	1	929	887	846	805	762
YELLOW EYE ROCKFISH							
NON-OVERFISHED STOCKS							
Arrowtooth Flounder							
Black Rockfish (CA)							
Black Rockfish (OR)							
Black Rockfish (WA)							
Cabezon (CA)	156	1	149	142	136	129	122
Cabezon (OR)	49	1	47	45	43	41	38
California scorpionfish							
Canary Rockfish	1,661	1	1,588	1,516	1,445	1,375	1,302
Chilipepper S. of 40°10' N. lat.	2,623	1	2,507	2,394	2,282	2,172	2,056
Dover Sole	90,282	1	86,310	82,428	78,546	74,754	70,781
English Sole							
Lingcod N. of 40°10' N. lat.							
Lingcod S. of 40°10' N. lat.							
Longnose skate	2,526	1	2,415	2,306	2,198	2,092	1,980
Longspine Thornyhead (coastwide)	4,339	2	3,962	3,614	3,289	2,977	2,668
Pacific Cod	3,200	3	2,669	2,221	1,837	1,504	1,213
Petrale Sole	3,152	1	3,013	2,878	2,742	2,610	2,471
Sablefish (coastwide)	8,329	1	7,963	7,604	7,246	6,896	6,530
Shortbelly	6,950	2	6,345	5,789	5,268	4,768	4,274
Shortspine Thornyhead (coastwide)	3,116	2	2,845	2,596	2,362	2,138	1,916
Spiny dogfish	2,500	2	2,283	2,083	1,895	1,715	1,538
Splitnose S. of 40°10' N. lat.	1,842	1	1,761	1,682	1,602	1,525	1,444
Starry Flounder							
Widow Rockfish	14,511	1	13,873	13,249	12,625	12,015	11,377
Yellowtail N. of 40°10' N. lat.							
STOCK COMPLEXES							
Nearshore Rockfish North							
<i>Black and yellow</i>	<i>0.014</i>	3	<i>0.011</i>	<i>0.009</i>	<i>0.008</i>	<i>0.006</i>	<i>0.005</i>
<i>Blue (CA)</i>							
<i>Blue (OR & WA)</i>	32.3	3	26.9	22.4	18.5	15.2	12.2
<i>Brown</i>							
<i>Calico</i>	-	3	-	-	-	-	-
<i>China</i>	29.3	2	26.8	24.4	22.2	20.1	18.0
<i>Copper</i>							

Stock	2018 OFL	Cat.	Range of Alternative 2018 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
<i>Gopher</i>	-	3	-	-	-	-	-
<i>Grass</i>	0.7	3	0.5	0.5	0.4	0.3	0.2
<i>Kelp</i>	0.009	3	0.008	0.006	0.005	0.004	0.003
<i>Olive</i>	0.32	3	0.26	0.22	0.18	0.15	0.12
<i>Quillback</i>	7.4	3	6.2	5.1	4.2	3.5	2.8
<i>Treefish</i>	0.22	3	0.18	0.15	0.12	0.10	0.08
Shelf Rockfish North	2,301		2,047	1,823	1,622	1,437	1,263
<i>Bronzespotted</i>	-	3	-	-	-	-	-
<i>Bocaccio</i>	284.0	3	236.9	197.1	163.0	133.5	107.6
<i>Chameleon</i>	-	3	-	-	-	-	-
<i>Chilipepper</i>	197.4	1	188.7	180.2	171.7	163.4	154.8
<i>Cowcod</i>	0.4	3	0.3	0.3	0.3	0.3	0.3
<i>Flag</i>	0.07	3	0.06	0.05	0.04	0.03	0.03
<i>Freckled</i>	-	3	-	-	-	-	-
<i>Greenblotched</i>	1.3	3	1.1	0.9	0.7	0.6	0.5
<i>Greenspotted 40°10' to 42° N. lat.</i>	9.1	2	8.4	7.6	6.9	6.3	5.6
<i>Greenspotted N. of 42 N. lat. (OR & WA)</i>	6.1	3	5.1	4.2	3.5	2.9	2.3
<i>Greenstriped</i>	1,306.4	2	1,192.7	1,088.2	990.2	896.2	803.4
<i>Halfbanded</i>	-	3	-	-	-	-	-
<i>Harlequin</i>	-	3	-	-	-	-	-
<i>Honeycomb</i>	-	3	-	-	-	-	-
<i>Mexican</i>	-	3	-	-	-	-	-
<i>Pink</i>	0.004	3	0.003	0.003	0.002	0.002	0.001
<i>Pinkrose</i>	-	3	-	-	-	-	-
<i>Puget Sound</i>	-	3	-	-	-	-	-
<i>Pygmy</i>	-	3	-	-	-	-	-
<i>Redstripe</i>	269.9	3	225.1	187.3	154.9	126.9	102.3
<i>Rosethorn</i>	12.9	3	10.8	9.0	7.4	6.1	4.9
<i>Rosy</i>	3.0	3	2.5	2.1	1.7	1.4	1.1
<i>Silvergray</i>	159.4	3	133.0	110.6	91.5	74.9	60.4
<i>Speckled</i>	0.17	3	0.14	0.12	0.10	0.08	0.06
<i>Squarespot</i>	0.17	3	0.14	0.12	0.10	0.08	0.07
<i>Starry</i>	0.004	3	0.003	0.003	0.002	0.002	0.001
<i>Stripetail</i>	40.4	3	33.7	28.0	23.2	19.0	15.3
<i>Swordspine</i>	0.00008	3	0.00008	0.00007	0.00006	0.00005	0.00004
<i>Tiger</i>	1.0	3	0.8	0.7	0.6	0.5	0.4
<i>Vermilion</i>	9.7	3	8.1	6.7	5.6	4.6	3.7
Slope Rockfish North							
<i>Aurora</i>	17.5	1	16.6	15.8	15.0	14.2	13.4
<i>Bank</i>	17.2	3	14.4	12.0	9.9	8.1	6.5
<i>Blackgill</i>	4.7	3	3.9	3.3	2.7	2.2	1.8
<i>Redbanded</i>	45.3	3	37.7	31.4	26.0	21.3	17.2
<i>Rougheye/Blackspotted</i>	214.6	2	196	179	163	147	132
Sharpchin							
<i>Shortraker</i>	18.7	3	15.6	13.0	10.7	8.8	7.1
<i>Splinose</i>	1,027.1	1	981.9	937.7	893.6	850.4	805.2
<i>Yellowmouth</i>	192.4	3	160.5	133.6	110.5	90.4	72.9
Nearshore Rockfish South	470		393	328	272	224	181
<i>Shallow Nearshore Species</i>	NA		NA	NA	NA	NA	NA
<i>Black and yellow</i>	27.5	3	23.0	19.1	15.8	12.9	10.4

Stock	2018 OFL	Cat.	Range of Alternative 2018 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
China	13.3	2	12.2	11.1	10.1	9.1	8.2
Gopher (N of Pt. Conception)							
Gopher (S of Pt. Conception)	25.6	3	21.4	17.8	14.7	12.0	9.7
Grass	59.6	3	49.7	41.4	34.2	28.0	22.6
Kelp	27.7	3	23.1	19.2	15.9	13.0	10.5
Deeper Nearshore Species	NA		NA	NA	NA	NA	NA
Blue (assessed area)							
Blue (S of 34°27' N. lat.)	72.9	3	60.8	50.6	41.8	34.3	27.6
Brown							
Calico	-	3	-	-	-	-	-
Copper							
Olive	224.6	3	187.4	155.9	128.9	105.6	85.1
Quillback	5.4	3	4.5	3.7	3.1	2.5	2.0
Treefish	13.2	3	11.0	9.2	7.6	6.2	5.0
Shelf Rockfish South	1,917		1,624	1,374	1,159	969	801
Bronzespotted	3.6	3	3.0	2.5	2.1	1.7	1.4
Chameleon	-	3	-	-	-	-	-
Flag	23.4	3	19.5	16.3	13.4	11.0	8.9
Freckled	-	3	-	-	-	-	-
Greenblotched	23.1	3	19.3	16.1	13.3	10.9	8.8
Greenspotted	77.4	2	70.6	64.4	58.6	53.1	47.6
Greenstriped	239.6	2	218.8	199.6	181.6	164.4	147.4
Halfbanded	-	3	-	-	-	-	-
Harlequin	-	3	-	-	-	-	-
Honeycomb	9.9	3	8.2	6.8	5.7	4.6	3.7
Mexican	5.1	3	4.2	3.5	2.9	2.4	1.9
Pink	2.5	3	2.1	1.8	1.5	1.2	1.0
Pinkrose	-	3	-	-	-	-	-
Pygmy	-	3	-	-	-	-	-
Redstripe	0.5	3	0.4	0.3	0.3	0.2	0.2
Rosethorn	2.1	3	1.8	1.5	1.2	1.0	0.8
Rosy	44.5	3	37.1	30.9	25.5	20.9	16.9
Silvergray	0.5	3	0.4	0.4	0.3	0.3	0.2
Speckled	39.4	3	32.8	27.3	22.6	18.5	14.9
Squarespot	11.1	3	9.2	7.7	6.4	5.2	4.2
Starry	62.6	3	52.2	43.4	35.9	29.4	23.7
Stripetail	23.6	3	19.7	16.4	13.6	11.1	9.0
Swordspine	14.2	3	11.9	9.9	8.2	6.7	5.4
Tiger	0.04	3	0.03	0.03	0.02	0.02	0.02
Vermilion	269.3	3	224.6	186.9	154.6	126.6	102.1
Yellowtail	1,064.4	3	887.7	738.7	611.0	500.3	403.4
Slope Rockfish South							
Aurora	74.5	1	71.0	67.5	64.1	60.7	57.3
Bank	503.2	3	419.7	349.2	288.8	236.5	190.7
Blackgill	146.0	2	133.3	121.6	110.7	100.2	89.8
Pacific ocean perch	-	3	-	-	-	-	-
Redbanded	10.4	3	8.7	7.2	6.0	4.9	3.9
Rougheye/Blackspotted	4.4	2	4.0	3.6	3.3	3.0	2.7
Sharpchin							
Shortraker	0.10	3	0.09	0.07	0.06	0.05	0.04

Stock	2018 OFL	Cat.	Range of Alternative 2018 ABCs				
			Overfishing Probability (P*)				
			0.45	0.40	0.35	0.30	0.25
<i>Yellowmouth</i>	0.8	3	0.7	0.6	0.5	0.4	0.3
Other Flatfish							
<i>Butter sole</i>	4.6	3	3.9	3.2	2.7	2.2	1.8
<i>Curlfin sole</i>	8.2	3	6.9	5.7	4.7	3.9	3.1
<i>Flathead sole</i>	35.0	3	29.2	24.3	20.1	16.5	13.3
<i>Pacific sanddab</i>	4,801.0	3	4,004.0	3,331.9	2,755.8	2,256.5	1,819.6
Rex sole							
<i>Rock sole</i>	66.7	3	55.6	46.3	38.3	31.3	25.3
<i>Sand sole</i>	773.2	3	644.8	536.6	443.8	363.4	293.0
Other Fish							
<i>Cabezon (WA)</i>	4.8	3	4.0	3.3	2.8	2.3	1.8
<i>Kelp greenling (CA)</i>	118.9	3	99.2	82.5	68.2	55.9	45.1
Kelp greenling (OR)							
Kelp greenling (WA)							
<i>Leopard shark</i>	167.1	3	139.4	116.0	95.9	78.5	63.3

Table 4. 2017 and 2018 harvest specifications (overfishing limits (OFLs in mt), acceptable biological catches (ABCs in mt), and annual catch limits (ACLs in mt)), for west coast groundfish stocks and stock complexes under default harvest control rules (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics; more information is needed for deciding harvest specifications for highlighted stocks and stock complexes).

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
OVERFISHED STOCKS							
BOCACCI S. of 40°10'							
COWCOD S. of 40°10' N. lat.							
<i>COWCOD (Conception)</i>							
<i>COWCOD (Monterey)</i>	12	10	NA	12	10	NA	ACL = ABC (P* = 0.45)
DARKBLOTCHED ROCKFISH	671	641	406	693	663	419	ABC (P* = 0.45), ACL (SPR = 64.9%)
PACIFIC OCEAN PERCH	948	906	169	972	929	173	ABC (P* = 0.45), ACL (SPR = 86.4%)
YELLOW EYE ROCKFISH							
NON-OVERFISHED STOCKS							
Arrowtooth Flounder							
Black Rockfish (CA)							
Black Rockfish (OR)							
Black Rockfish (WA)							
Cabezon (CA)	157	150	150	156	149	149	ACL = ABC (P* = 0.45)
Cabezon (OR)	49	47	47	49	47	47	ACL = ABC (P* = 0.45)
California scorpionfish							
Canary Rockfish	1,793	1,714	1,714	1,661	1,588	1,588	ACL = ABC (P* = 0.45)
Chilipepper S. of 40°10'	2,727	2,607	2,607	2,623	2,507	2,507	ACL = ABC (P* = 0.45)
Dover Sole	89,702	85,755	50,000	90,282	86,310	50,000	ABC (P* 0.45), ACL = 50,000 mt annually
English Sole							
Lingcod N. of 40°10'							
Lingcod S. of 40°10'							
Longnose skate	2,556	2,444	2,000	2,526	2,415	2,000	ABC (P* = 0.45), ACL = 2,000 mt annually
Longspine Thornyhead N. of 34°27'	4,571	3,808	2,894	4,339	3,614	2,747	ACL = 76% of coastwide ABC (P* = 0.4)
Longspine Thornyhead S. of 34°27'			914			867	ACL = 24% of coastwide ABC (P* = 0.4)
Pacific Cod	3,200	2,221	1,600	3,200	2,221	1,600	ABC (P* = 0.4), ACL = 50% of OFL
Petrale Sole	3,280	3,136	3,136	3,152	3,013	3,013	ABC (P* = 0.45), ACL (25-5 rule)
Sablefish N. of 36°	8,050	7,350	6,240	8,329	7,604	6,456	ACL: 40-10 rule applied to 84.9% of coastwide ABC (P* = 0.4)
Sablefish S. of 36°			1,110			1,148	ACL: 40-10 rule applied to 15.1% of coastwide ABC (P* = 0.4)
Shortbelly	6,950	5,789	500	6,950	5,789	500	ABC (P* = 0.4), ACL = 500 mt annually
Shortspine Thornyhead N. of 34°27'	3,144	2,619	1,713	3,116	2,596	1,698	ACL = 65.4% of coastwide ABC (P* = 0.4)
Shortspine Thornyhead S. of 34°27'			906			898	ACL = 34.6% of coastwide ABC (P* = 0.4)
Spiny dogfish	2,514	2,094	2,094	2,500	2,083	2,083	ACL = ABC (P* = 0.4)
Splitnose S. of 40°10'	1,841	1,760	1,760	1,842	1,761	1,761	ACL = ABC (P* = 0.45)

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
Starry Flounder							
Widow Rockfish	14,130	13,508	2,000	14,511	13,873	2,000	ABC (P* = 0.45), ACL = 2,000 mt annually
Yellowtail N. of 40°10'							
STOCK COMPLEXES							
Nearshore Rockfish North							
<i>Black and yellow</i>	0.0	0.0	0.0	0.0	0.0	0.0	ACL = ABC (P* = 0.45)
<i>Blue (CA)</i>							
<i>Blue (OR & WA)</i>	32.3	26.9	26.9	32.3	26.9	26.9	ACL = ABC (P* = 0.45)
<i>Brown</i>							
<i>Calico</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
China	30.2	27.5	27.5	29.3	26.8	26.8	ACL = ABC (P* = 0.45)
<i>Copper</i>							
<i>Gopher</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Grass</i>	0.7	0.5	0.5	0.7	0.5	0.5	ACL = ABC (P* = 0.45)
<i>Kelp</i>	0.0	0.0	0.0	0.0	0.0	0.0	ACL = ABC (P* = 0.45)
<i>Olive</i>	0.3	0.3	0.3	0.3	0.3	0.3	ACL = ABC (P* = 0.45)
<i>Quillback</i>	7.4	6.2	6.2	7.4	6.2	6.2	ACL = ABC (P* = 0.45)
<i>Treefish</i>	0.2	0.2	0.2	0.2	0.2	0.2	ACL = ABC (P* = 0.45)
Shelf Rockfish North	2,303	2,049	2,049	2,301	2,047	2,047	Sum of component species specifications
<i>Bronzespotted</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Bocaccio</i>	284.0	236.9	236.9	284.0	236.9	236.9	ACL = ABC (P* = 0.45)
<i>Chameleon</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Chilipepper</i>	205.2	196.2	196.2	197.4	188.7	188.7	ACL = ABC (P* = 0.45)
<i>Cowcod</i>	0.4	0.3	0.3	0.4	0.3	0.3	ACL = ABC (P* = 0.45)
<i>Flag</i>	0.1	0.1	0.1	0.1	0.1	0.1	ACL = ABC (P* = 0.45)
<i>Freckled</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Greenblotched</i>	1.3	1.1	1.1	1.3	1.1	1.1	ACL = ABC (P* = 0.45)
<i>Greenspotted 40°10' to 42° N. lat.</i>	9.2	8.4		9.1	8.4		ACL = ABC (P* = 0.45)
<i>Greenspotted N. of 42 N. lat. (OR & WA)</i>	6.1	5.1	5.1	6.1	5.1	5.1	ACL = ABC (P* = 0.45)
<i>Greenstriped</i>	1,299.6	1,186.5	1,186.5	1,306.4	1,192.7	1,192.7	ACL = ABC (P* = 0.45)
<i>Halfbanded</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Harlequin</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Honeycomb</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Mexican</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Pink</i>	0.0	0.0	0.0	0.0	0.0	0.0	ACL = ABC (P* = 0.45)
<i>Pinkrose</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Puget Sound</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>Pygmy</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
<i>Redstripe</i>	269.9	225.1	225.1	269.9	225.1	225.1	ACL = ABC ($P^* = 0.45$)
<i>Rosethorn</i>	12.9	10.8	10.8	12.9	10.8	10.8	ACL = ABC ($P^* = 0.45$)
<i>Rosy</i>	3.0	2.5	2.5	3.0	2.5	2.5	ACL = ABC ($P^* = 0.45$)
<i>Silvergray</i>	159.4	133.0	133.0	159.4	133.0	133.0	ACL = ABC ($P^* = 0.45$)
<i>Speckled</i>	0.2	0.1	0.1	0.2	0.1	0.1	ACL = ABC ($P^* = 0.45$)
<i>Squarespot</i>	0.2	0.1	0.1	0.2	0.1	0.1	ACL = ABC ($P^* = 0.45$)
<i>Starry</i>	0.0	0.0	0.0	0.0	0.0	0.0	ACL = ABC ($P^* = 0.45$)
<i>Stripetail</i>	40.4	33.7	33.7	40.4	33.7	33.7	ACL = ABC ($P^* = 0.45$)
<i>Swordspine</i>	0.0	0.0	0.0	0.0	0.0	0.0	ACL = ABC ($P^* = 0.45$)
<i>Tiger</i>	1.0	0.8	0.8	1.0	0.8	0.8	ACL = ABC ($P^* = 0.45$)
<i>Vermilion</i>	9.7	8.1	8.1	9.7	8.1	8.1	ACL = ABC ($P^* = 0.45$)
Slope Rockfish North	1,533	1,423	1,423	1,538	1,427	1,427	Sum of component species specifications
<i>Aurora</i>	17.5	16.6	16.6	17.5	16.6	16.6	ACL = ABC ($P^* = 0.45$)
<i>Bank</i>	17.2	14.4	14.4	17.2	14.4	14.4	ACL = ABC ($P^* = 0.45$)
<i>Blackgill</i>	4.7	3.9	3.9	4.7	3.9	3.9	ACL = ABC ($P^* = 0.45$)
<i>Redbanded</i>	45.3	37.7	37.7	45.3	37.7	37.7	ACL = ABC ($P^* = 0.45$)
<i>Rougeye/Blackspotted</i>	210.7	192.4	192.4	214.6	195.9	195.9	ACL = ABC ($P^* = 0.45$)
<i>Sharpchin</i>							
<i>Shorthead</i>	18.7	15.6	15.6	18.7	15.6	15.6	ACL = ABC ($P^* = 0.45$)
<i>Splimose</i>	1,026.7	981.6	981.6	1,027.1	981.9	981.9	ACL = ABC ($P^* = 0.45$)
<i>Yellowmouth</i>	192.4	160.5	160.5	192.4	160.5	160.5	ACL = ABC ($P^* = 0.45$)
Nearshore Rockfish South							
<i>Shallow Nearshore Species</i>	NA	NA	NA	NA	NA	NA	NA
<i>Black and yellow</i>	27.5	23.0	23.0	27.5	23.0	23.0	ACL = ABC ($P^* = 0.45$)
China	13.3	12.2	10.8	13.8	12.2	11.5	ACL = ABC ($P^* = 0.45$)
<i>Gopher (N of Pt. Conception)</i>							
<i>Gopher (S of Pt. Conception)</i>	25.6	21.4	21.4	25.6	21.4	21.4	ACL = ABC ($P^* = 0.45$)
<i>Grass</i>	59.6	49.7	49.7	59.6	49.7	49.7	ACL = ABC ($P^* = 0.45$)
<i>Kelp</i>	27.7	23.1	23.1	27.7	23.1	23.1	ACL = ABC ($P^* = 0.45$)
<i>Deeper Nearshore Species</i>	NA	NA	NA	NA	NA	NA	NA
<i>Blue (assessed area)</i>							
<i>Blue (S of 34°27' N. lat.)</i>	72.9	60.8	60.8	72.9	60.8	60.8	ACL = ABC ($P^* = 0.45$)
<i>Brown</i>							
<i>Calico</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Copper</i>							
<i>Olive</i>	224.6	187.4	187.4	224.6	187.4	187.4	ACL = ABC ($P^* = 0.45$)
<i>Quillback</i>	5.4	4.5	4.5	5.4	4.5	4.5	ACL = ABC ($P^* = 0.45$)
<i>Treefish</i>	13.2	11.0	11.0	13.2	11.0	11.0	ACL = ABC ($P^* = 0.45$)
Shelf Rockfish South	1,916	1,623	1,623	1,917	1,624	1,624	Sum of component species specifications
<i>Bronzespotted</i>	3.6	3.0	3.0	3.6	3.0	3.0	ACL = ABC ($P^* = 0.45$)

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
<i>Chameleon</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Flag</i>	23.4	19.5	19.5	23.4	19.5	19.5	ACL = ABC ($P^* = 0.45$)
<i>Freckled</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Greenblotched</i>	23.1	19.3	19.3	23.1	19.3	19.3	ACL = ABC ($P^* = 0.45$)
<i>Greenspotted</i>	77.8	71.0		77.4	70.6		ACL = ABC ($P^* = 0.45$)
<i>Greenstriped</i>	238.4	217.7	217.7	239.6	218.8	218.8	ACL = ABC ($P^* = 0.45$)
<i>Halfbanded</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Harlequin</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Honeycomb</i>	9.9	8.2	8.2	9.9	8.2	8.2	ACL = ABC ($P^* = 0.45$)
<i>Mexican</i>	5.1	4.2	4.2	5.1	4.2	4.2	ACL = ABC ($P^* = 0.45$)
<i>Pink</i>	2.5	2.1	2.1	2.5	2.1	2.1	ACL = ABC ($P^* = 0.45$)
<i>Pinkrose</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Pygmy</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Redstripe</i>	0.5	0.4	0.4	0.5	0.4	0.4	ACL = ABC ($P^* = 0.45$)
<i>Rosethorn</i>	2.1	1.8	1.8	2.1	1.8	1.8	ACL = ABC ($P^* = 0.45$)
<i>Rosy</i>	44.5	37.1	37.1	44.5	37.1	37.1	ACL = ABC ($P^* = 0.45$)
<i>Silvergray</i>	0.5	0.4	0.4	0.5	0.4	0.4	ACL = ABC ($P^* = 0.45$)
<i>Speckled</i>	39.4	32.8	32.8	39.4	32.8	32.8	ACL = ABC ($P^* = 0.45$)
<i>Squarespot</i>	11.1	9.2	9.2	11.1	9.2	9.2	ACL = ABC ($P^* = 0.45$)
<i>Starry</i>	62.6	52.2	52.2	62.6	52.2	52.2	ACL = ABC ($P^* = 0.45$)
<i>Stripetail</i>	23.6	19.7	19.7	23.6	19.7	19.7	ACL = ABC ($P^* = 0.45$)
<i>Swordspine</i>	14.2	11.9	11.9	14.2	11.9	11.9	ACL = ABC ($P^* = 0.45$)
<i>Tiger</i>	0.0	0.0	0.0	0.0	0.0	0.0	ACL = ABC ($P^* = 0.45$)
<i>Vermilion</i>	269.3	224.6	224.6	269.3	224.6	224.6	ACL = ABC ($P^* = 0.45$)
<i>Yellowtail</i>							
Slope Rockfish South							
<i>Aurora</i>	74.4	70.9	70.9	74.5	71.0	71.0	ACL = ABC ($P^* = 0.45$)
<i>Bank</i>	503.2	419.7	419.7	503.2	419.7	419.7	ACL = ABC ($P^* = 0.45$)
<i>Blackgill</i>	143.0	130.6	120.2	146.0	133.3	123.0	ACL = ABC ($P^* = 0.45$)
<i>Pacific ocean perch</i>	-	-	-	-	-	-	ACL = ABC ($P^* = 0.45$)
<i>Redbanded</i>	10.4	8.7	8.7	10.4	8.7	8.7	ACL = ABC ($P^* = 0.45$)
<i>Rougheye/Blackspotted</i>	4.3	3.9	3.9	4.4	4.0	4.0	ACL = ABC ($P^* = 0.45$)
<i>Sharpchin</i>							
<i>Shortraker</i>	0.1	0.1	0.1	0.1	0.1	0.1	ACL = ABC ($P^* = 0.45$)
<i>Yellowmouth</i>	0.8	0.7	0.7	0.8	0.7	0.7	ACL = ABC ($P^* = 0.45$)
Other Flatfish							
<i>Butter sole</i>	4.6	3.2	3.2	4.6	3.2	3.2	ACL = ABC ($P^* = 0.4$)
<i>Curlfin sole</i>	8.2	5.7	5.7	8.2	5.7	5.7	ACL = ABC ($P^* = 0.4$)
<i>Flathead sole</i>	35.0	24.3	24.3	35.0	24.3	24.3	ACL = ABC ($P^* = 0.4$)
<i>Pacific sanddab</i>	4,801.0	3,331.9	3,331.9	4,801.0	3,331.9	3,331.9	ACL = ABC ($P^* = 0.4$)

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
<i>Rex sole</i>							
<i>Rock sole</i>	66.7	46.3	46.3	66.7	46.3	46.3	ACL = ABC (P* = 0.4)
<i>Sand sole</i>	773.2	536.6	536.6	773.2	536.6	536.6	ACL = ABC (P* = 0.4)
Other Fish							
<i>Cabezon (WA)</i>	4.5	3.8	3.8	4.8	4.0	4.0	ACL = ABC (P* = 0.45)
<i>Kelp greenling (CA)</i>	118.9	99.2	99.2	118.9	99.2	99.2	ACL = ABC (P* = 0.45)
<i>Kelp greenling (OR)</i>							
<i>Kelp greenling (WA)</i>							
<i>Leopard shark</i>	167.1	139.4	139.4	167.1	139.4	139.4	ACL = ABC (P* = 0.45)