

2017 AND 2018 GROUNDFISH HARVEST SPECIFICATIONS

The following tables are included in this attachment:

- Table 1. SSC-endorsed 2017 and 2018 OFLs (mt) and stock category designations for west coast groundfish stocks and stock complexes.
- 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 or presumptive harvest control rules.
- Table 5. Alternative 2017 and 2018 harvest specifications (overfishing limits (OFLs in mt), acceptable biological catches (ABCs in mt), and annual catch limits (ACLs in mt)), for select west coast groundfish stocks.

The following tables provide the 2017 and 2018 harvest specifications (SSC-endorsed 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. Those stocks and stock complexes with harvest specifications not decided in September (or subject to changes since September) are highlighted in these tables.

Table 1. SSC-endorsed 2017 and 2018 OFLs (mt) and stock category designations for west coast groundfish stocks and stock complexes (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics; stocks scheduled for harvest specification decisions (i.e., those with specifications not already decided) are highlighted).

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
OVERFISHED STOCKS				
BOCACCIO S. of 40°10' N. lat.	1	2,139	2,013	Projected using a 50% SPR from the 2015 full stock assessment with a 7.4% reduction to subtract the portion of the assessed stock north of 40°10' N. lat.
COWCOD S. of 40°10' N. lat.		69.5	71.4	Sum of Conception and Monterey OFLs
<i>COWCOD (Conception)</i>	2	57.9	59.4	Projected using a 50% SPR from the 2013 XDB-SRA stock assessment
<i>COWCOD (Monterey)</i>	3	11.6	12.0	DB-SRA estimate calculated in 2014
DARKBLOTTCHED ROCKFISH	1	671	693	Projected using a 50% SPR from the 2015 full assessment
PACIFIC OCEAN PERCH	1	961	985	Projected using a 50% SPR assuming ACL removals (SPR = 86.4%) from the 2011 rebuilding analysis
YELLOWEYE ROCKFISH	2	57	58	Catch-only updated projections using a 50% SPR from the 2011 stock assessment
NON-OVERFISHED STOCKS				
Arrowtooth Flounder	2	16,571	16,498	Catch-only projection using a 30% SPR of the 2007 full assessment revised by inputting the actual catches since 2007 and projected assuming an expected total catch of 2,500 mt.
Black Rockfish (CA)	1	349	347	Projected using a 50% SPR from the 2015 full assessment.
Black Rockfish (OR)	2	577	570	Projected using a 50% SPR from the 2015 full assessment.
Black Rockfish (WA)	1	319	315	Projected using a 50% SPR from the 2015 full assessment.
Cabezon (CA)	1	157	156	Projected using a 45% SPR from the 2009 full assessment.
Cabezon (OR)	1	49	49	Projected using a 45% SPR from the 2009 full assessment.
California scorpionfish	2	289	286	Updated OFL projections assuming the Expected Catch scenario for future removals from the 2005 full assessment. Stock category is presumed to equal 2 based on the age of the assessment.
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	2	10,914	8,255	Projected using a 30% SPR from the 2013 data-moderate (exSSS) assessment assuming future ACL removals.
Lingcod N. of 40°10' N. lat.	1&2	3,549	3,310	Updated projection using a 45% SPR from the 2009 full assessment with 48% of the OFL S. of 42° N. lat. added to account for line shift.
Lingcod S. of 40°10' N. lat.	2	1,502	1,373	Updated projection using a 45% SPR from the 2009 full assessment with 48% of the OFL S. of 42° N. lat. subtracted to account for line shift.
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.
Petrale 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	Projected using a 50% SPR from the 2011 full assessment.

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
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	3	1,847	1,847	Re-specified 2016 OFL
Widow Rockfish	1	14,130	14,511	Projected using a 50% SPR from the 2015 full assessment.
Yellowtail N. of 40°10' N. lat.	2	6,786	6,574	Projected using a 50% SPR from the 2013 data-moderate (exSSS) assessment assuming future ACL removals.
STOCK COMPLEXES				
Nearshore Rockfish North		118	119	Sum of OFL contributions of component stocks in the complex.
<i>Black and yellow</i>	3	0.01	0.01	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Blue (CA)</i>	2	34.1	34.8	Updated projection using the Expected Catch scenario using a 50% SPR from the 2007 full assessment. The portion of the assessed stock in CA north of 40°10' N. lat. (12.7%) is based on average historical landings.
<i>Blue (OR & WA)</i>	3	32.3	32.3	DCAC estimate.
<i>Brown</i>	2	2.0	2.0	Projected using a 50% SPR from the 2013 data-moderate assessment. The portion of the coastwide stock north of 40°10' N lat. based on the proportion of cumulative removals by area during 1916-2012.
<i>Calico</i>	3	-	-	No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species
<i>China</i>	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>	2	11.2	11.6	Projected using a 50% SPR from the 2013 data-moderate assessment. The portion of the coastwide stock north of 40°10' N lat. based on the proportion of cumulative removals by area during 1916-2012.
<i>Gopher</i>	3	-	-	No harvest contribution (3a stock).
<i>Grass</i>	3	0.7	0.7	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Kelp</i>	3	0.01	0.01	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Olive</i>	3	0.3	0.3	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Quillback</i>	3	7.4	7.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Treefish</i>	3	0.2	0.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
Shelf Rockfish North		2,303	2,302	Sum of OFL contributions of component stocks in the complex.
<i>Bronzespotted</i>	3	-	-	No harvest contribution in the north (3a stock)
<i>Bocaccio</i>	3	284.0	284.0	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Chameleon</i>	3	-	-	No harvest contribution (3a stock).
<i>Chilipepper</i>	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	No harvest contribution (3a stock).
<i>Flag</i>	3	0.1	0.1	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Freckled</i>	3	-	-	No harvest contribution (3a stock).
<i>Greenblotched</i>	3	1.3	1.3	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Greenspotted 40°10' to 42° N. lat.</i>	2	9.4	9.3	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>Greenspotted N. of 42 N. lat. (OR & WA)</i>	3	6.1	6.1	DCAC estimate
<i>Greenstriped</i>	2	1,299.6	1,306.4	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>Halfbanded</i>	3	-	-	No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species
<i>Harlequin</i>	3	-	-	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Honeycomb</i>	3	-	-	No harvest contribution in the north (3a stock)
<i>Mexican</i>	3	-	-	No harvest contribution in the north (3a stock)

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
Pink	3	0.004	0.004	DB-SRA estimate calculated in 2012 for 2013 and beyond
Pinkrose	3	-	-	DB-SRA estimate calculated in 2012 for 2013 and beyond
Puget Sound	3	-	-	No harvest contribution (3a stock).
Pygmy	3	-	-	No harvest contribution (3a stock).
Redstripe	3	269.9	269.9	DB-SRA estimate calculated in 2012 for 2013 and beyond
Rosethorn	3	12.9	12.9	DB-SRA estimate calculated in 2012 for 2013 and beyond
Rosy	3	3.0	3.0	DB-SRA estimate calculated in 2012 for 2013 and beyond
Silvergray	3	159.4	159.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
Speckled	3	0.2	0.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
Squarespot	3	0.2	0.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
Starry	3	0.004	0.004	DB-SRA estimate calculated in 2012 for 2013 and beyond
Stripetail	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.
Swordspine	3	0.0001	0.0001	DB-SRA estimate calculated in 2012 for 2013 and beyond
Tiger	3	1.0	1.0	DB-SRA estimate calculated in 2012 for 2013 and beyond
Vermilion	3	9.7	9.7	DB-SRA estimate calculated in 2012 for 2013 and beyond
Slope Rockfish North		1,897	1,896	Sum of OFL contributions of component stocks in the complex.
Aurora	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.
Bank	3	17.2	17.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
Blackgill	3	4.7	4.7	DCAC estimate.
Redbanded	3	45.3	45.3	DB-SRA estimate calculated in 2012 for 2013 and beyond
Rougheye/Blackspotted	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.
Sharpchin	2	364.0	358.4	Projected using a 50% SPR from the 2013 data-moderate (exSSS) assessment assuming future ACL removals. 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	3	18.7	18.7	DB-SRA estimate calculated in 2012 for 2013 and beyond
Splitnose	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.
Yellowmouth	3	192.4	192.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
Nearshore Rockfish South		1,329	1,344	Sum of OFL contributions of component stocks in the complex.
Shallow Nearshore Species		NA	NA	
Black and yellow	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)
Gopher (N of Pt. Conception)	3	144.0	144.0	Re-specified 2016 OFL
Gopher (S of Pt. Conception)	3	25.6	25.6	DCAC estimate.
Grass	3	59.6	59.6	DB-SRA estimate calculated in 2012 for 2013 and beyond
Kelp	3	27.7	27.7	DB-SRA estimate calculated in 2012 for 2013 and beyond
Deeper Nearshore Species		NA	NA	
Blue (assessed area)	2	234.5	239.4	Updated projected using the Expected Catch scenario using a 50% SPR from the 2007 full assessment. The portion of the assessed stock in CA south of 40°10' N. lat. (87.3%) is based on average historical landings.

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
<i>Blue (S of 34°27' N. lat.)</i>	3	72.9	72.9	DCAC estimate.
<i>Brown</i>	2	170.0	174.0	Projected using a 50% SPR from the 2013 data-moderate assessment. The portion of the coastwide stock north of 40°10' N lat. based on the proportion of cumulative removals by area during 1916-2012.
<i>Calico</i>	3	-	-	No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species
<i>Copper</i>	2	310.9	316.7	Projected using a 50% SPR from the 2013 data-moderate assessment. The portion of the coastwide stock north of 40°10' N lat. based on the proportion of cumulative removals by area during 1916-2012.
<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		1,917	1,918	Sum of OFL contributions of component stocks in the complex.
<i>Bronzespotted</i>	3	3.6	3.6	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Chameleon</i>	3	-	-	No harvest contribution (3a stock).
<i>Flag</i>	3	23.4	23.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Freckled</i>	3	-	-	No harvest contribution (3a stock).
<i>Greenblotched</i>	3	23.1	23.1	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Greenspotted</i>	2	78.9	78.5	Updated projection 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>Greenstriped</i>	2	238.4	239.6	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>Halfbanded</i>	3	-	-	No harvest contribution (3a stock).
<i>Harlequin</i>	3	-	-	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Honeycomb</i>	3	9.9	9.9	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Mexican</i>	3	5.1	5.1	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Pink</i>	3	2.5	2.5	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Pinkrose</i>	3	-	-	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Pygmy</i>	3	-	-	No harvest contribution (3a stock).
<i>Redstripe</i>	3	0.5	0.5	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Rosethorn</i>	3	2.1	2.1	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Rosy</i>	3	44.5	44.5	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Silvergray</i>	3	0.5	0.5	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Speckled</i>	3	39.4	39.4	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Squarespot</i>	3	11.1	11.1	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Starry</i>	3	62.6	62.6	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Stripetail</i>	3	23.6	23.6	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>Swordspine</i>	3	14.2	14.2	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Tiger</i>	3	0.04	0.04	DB-SRA estimate calculated in 2012 for 2013 and beyond
<i>Vermilion</i>	3	269.3	269.3	DB-SRA estimate calculated in 2011.
<i>Yellowtail</i>	3	1,064.4	1,064.4	DB-SRA estimate calculated in 2011.
Slope Rockfish South		827	829	Sum of OFL contributions of component stocks in the complex.
<i>Aurora</i>	1	74.4	74.5	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.

Stock	Cat.	2017 OFL	2018 OFL	Basis/Harvest Control Rule
<i>Bank</i>	3	503.2	503.2	DB-SRA estimate calculated in 2011.
<i>Blackgill</i>	2	143.0	146.0	Projected using a 50% SPR from the 2011 full assessment.
<i>Pacific ocean perch</i>	3	-	-	No harvest contribution (3a stock).
<i>Redbanded</i>	3	10.4	10.4	DB-SRA estimate calculated in 2011.
<i>Rougheye/Blackspotted</i>	2	4.3	4.4	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>	2	91.0	89.6	Projected using a 50% SPR from the 2013 data-moderate (exSSS) assessment assuming future ACL removals. 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.
<i>Shortraker</i>	3	0.1	0.1	DB-SRA estimate calculated in 2011.
<i>Yellowmouth</i>	3	0.8	0.8	DB-SRA estimate calculated in 2011.
Other Flatfish		11,165	9,690	Sum of OFL contributions of component stocks in the complex.
<i>Butter sole</i>	3	4.6	4.6	Based on the average catch during 1994-1998 + a 60% discard rate estimated from the EDCP study.
<i>Curlfin sole</i>	3	8.2	8.2	Based on the average catch during 1994-1998 + a 60% discard rate estimated from the EDCP study.
<i>Flathead sole</i>	3	35.0	35.0	Max. catch = 35 mt in 2005
<i>Pacific sanddab</i>	3	4,801.0	4,801.0	DB-SRA estimate calculated in 2011. Only status determined from 2013 full assessment, so presumed to remain a cat. 3 stock.
<i>Rex sole</i>	2	5,476.0	4,001.0	Projected using a 30% SPR from the 2013 data-moderate (exSSS) assessment assuming future ACL removals.
<i>Rock sole</i>	3	66.7	66.7	DB-SRA estimate calculated in 2011.
<i>Sand sole</i>	3	773.2	773.2	DB-SRA estimate calculated in 2011.
Other Fish		537	501	Sum of OFL contributions of component stocks in the complex.
<i>Cabezon (WA)</i>	3	4.5	4.8	DB-SRA estimate calculated in 2014 for 2015 and beyond
<i>Kelp greenling (CA)</i>	3	118.9	118.9	DB-SRA estimate calculated in 2011.
<i>Kelp greenling (OR) assuming sigma = 0.44</i>	1	239.1	203.2	Projected using a 45% SPR from the 2015 full assessment
<i>Kelp greenling (WA)</i>	3	7.1	7.1	DB-SRA estimate calculated in 2015 using a low vulnerability prior.
<i>Leopard shark</i>	3	167.1	167.1	DB-SRA estimate calculated in 2014 for 2015 and beyond
Considered for Active Management				
<i>Big skate</i>	2	541	541	DB-SRA estimate calculated in 2014 for 2015 and beyond

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; stocks scheduled for harvest specification decisions (i.e., those with specifications not already decided) are highlighted).

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.	2,139	1	2,044	1,953	1,861	1,771	1,677
COWCOD S. of 40°10' N. lat.	70	NA	63	56	51	45	40
<i>COWCOD (Conception)</i>	58	2	53	48	44	40	36
<i>COWCOD (Monterey)</i>	12	3	10	8	7	5	4
DARKBLOTCHED ROCKFISH	671	1	641	613	584	556	526
PACIFIC OCEAN PERCH	961	1	919	877	836	796	753
YELLOWEYE ROCKFISH	57	2	52	47	43	39	35
NON-OVERFISHED STOCKS							
Arrowtooth Flounder	16,571	2	15,130	13,804	12,561	11,368	10,191
Black Rockfish (CA)	349	1	334	319	304	289	274
Black Rockfish (OR)	577	2	527	481	437	396	355
Black Rockfish (WA)	319	1	305	291	278	264	250
Cabezon (CA)	157	1	150	143	137	130	123
Cabezon (OR)	49	1	47	45	43	41	38
California scorpionfish	289	2	264	240	219	198	178
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	10,914	2	9,964	9,091	8,273	7,487	6,712
Lingcod N. of 40°10' N. lat.	3,549	1&2	3,333	3,129	2,932	2,741	2,548
Lingcod S. of 40°10' N. lat.	1,502	2	1,372	1,251	1,139	1,031	924
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	1,847	3	1,540	1,282	1,060	868	700
Widow Rockfish	14,130	1	13,508	12,901	12,293	11,700	11,078
Yellowtail N. of 40°10' N. lat.	6,786	2	6,196	5,653	5,144	4,655	4,173
STOCK COMPLEXES							
Nearshore Rockfish North	118		105	93	82	72	63
<i>Black and yellow</i>	<i>0.014</i>	<i>3</i>	<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>34.1</i>	<i>2</i>	<i>31.1</i>	<i>28.4</i>	<i>25.9</i>	<i>23.4</i>	<i>21.0</i>
<i>Blue (OR & WA)</i>	<i>32.3</i>	<i>3</i>	<i>26.9</i>	<i>22.4</i>	<i>18.5</i>	<i>15.2</i>	<i>12.2</i>
<i>Brown</i>	<i>2.0</i>	<i>2</i>	<i>1.8</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>1.2</i>
<i>Calico</i>	-	3	-	-	-	-	-
<i>China</i>	<i>30.2</i>	<i>2</i>	<i>27.5</i>	<i>25.1</i>	<i>22.9</i>	<i>20.7</i>	<i>18.5</i>
<i>Copper</i>	<i>11.2</i>	<i>2</i>	<i>10.3</i>	<i>9.4</i>	<i>8.5</i>	<i>7.7</i>	<i>6.9</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>	9.4	2	8.5	7.8	7.1	6.4	5.8	
<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	1,897		1,755	1,625	1,504	1,389	1,277	
<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	
<i>Sharpchin</i>	364.0	2	332.3	303.2	275.9	249.7	223.9	
<i>Shortraker</i>	18.7	3	15.6	13.0	10.7	8.8	7.1	
<i>Splitnose</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	1,329		1,166	1,024	897	782	676	
<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	2017 OFL	Cat.	Range of Alternative 2017 ABCs					
			Overfishing Probability (P*)					
			0.45	0.40	0.35	0.30	0.25	
<i>China</i>	13.3	2	12.2	11.1	10.1	9.1	8.2	
<i>Gopher (N of Pt. Conception)</i>	144.0	3	120.1	99.9	82.7	67.7	54.6	
<i>Gopher (S of Pt. Conception)</i>	25.6	3	21.4	17.8	14.7	12.0	9.7	
<i>Grass</i>	59.6	3	49.7	41.4	34.2	28.0	22.6	
<i>Kelp</i>	27.7	3	23.1	19.2	15.9	13.0	10.5	
<i>Deeper Nearshore Species</i>	NA		NA	NA	NA	NA	NA	
<i>Blue (assessed area)</i>	234.5	2	214.1	195.3	177.7	160.9	144.2	
<i>Blue (S of 34°27' N. lat.)</i>	72.9	3	60.8	50.6	41.8	34.3	27.6	
<i>Brown</i>	170.0	2	155.2	141.6	128.9	116.6	104.6	
<i>Calico</i>	-	3	-	-	-	-	-	
<i>Copper</i>	310.9	2	283.8	258.9	235.6	213.3	191.2	
<i>Olive</i>	224.6	3	187.4	155.9	128.9	105.6	85.1	
<i>Quillback</i>	5.4	3	4.5	3.7	3.1	2.5	2.0	
<i>Treafish</i>	13.2	3	11.0	9.2	7.6	6.2	5.0	
<i>Shelf Rockfish South</i>	1,917		1,624	1,375	1,159	970	801	
<i>Bronzespotted</i>	3.6	3	3.0	2.5	2.1	1.7	1.4	
<i>Chameleon</i>	-	3	-	-	-	-	-	
<i>Flag</i>	23.4	3	19.5	16.3	13.4	11.0	8.9	
<i>Freckled</i>	-	3	-	-	-	-	-	
<i>Greenblotched</i>	23.1	3	19.3	16.1	13.3	10.9	8.8	
<i>Greenspotted</i>	78.9	2	72.0	65.7	59.8	54.1	48.5	
<i>Greenstriped</i>	238.4	2	217.7	198.6	180.7	163.5	146.6	
<i>Halfbanded</i>	-	3	-	-	-	-	-	
<i>Harlequin</i>	-	3	-	-	-	-	-	
<i>Honeycomb</i>	9.9	3	8.2	6.8	5.7	4.6	3.7	
<i>Mexican</i>	5.1	3	4.2	3.5	2.9	2.4	1.9	
<i>Pink</i>	2.5	3	2.1	1.8	1.5	1.2	1.0	
<i>Pinkrose</i>	-	3	-	-	-	-	-	
<i>Pygmy</i>	-	3	-	-	-	-	-	
<i>Redstripe</i>	0.5	3	0.4	0.3	0.3	0.2	0.2	
<i>Rosethorn</i>	2.1	3	1.8	1.5	1.2	1.0	0.8	
<i>Rosy</i>	44.5	3	37.1	30.9	25.5	20.9	16.9	
<i>Silvergray</i>	0.5	3	0.4	0.4	0.3	0.3	0.2	
<i>Speckled</i>	39.4	3	32.8	27.3	22.6	18.5	14.9	
<i>Squarespot</i>	11.1	3	9.2	7.7	6.4	5.2	4.2	
<i>Starry</i>	62.6	3	52.2	43.4	35.9	29.4	23.7	
<i>Stripetail</i>	23.6	3	19.7	16.4	13.6	11.1	9.0	
<i>Swordspine</i>	14.2	3	11.9	9.9	8.2	6.7	5.4	
<i>Tiger</i>	0.04	3	0.03	0.03	0.02	0.02	0.02	
<i>Vermilion</i>	269.3	3	224.6	186.9	154.6	126.6	102.1	
<i>Yellowtail</i>	1,064.4	3	887.7	738.7	611.0	500.3	403.4	
<i>Slope Rockfish South</i>	827		718	623	540	466	399	
<i>Aurora</i>	74.4	1	70.9	67.4	64.0	60.7	57.2	
<i>Bank</i>	503.2	3	419.7	349.2	288.8	236.5	190.7	
<i>Blackgill</i>	143.0	2	130.6	119.1	108.4	98.1	87.9	
<i>Pacific ocean perch</i>	-	3	-	-	-	-	-	
<i>Redbanded</i>	10.4	3	8.7	7.2	6.0	4.9	3.9	
<i>Rougheye/Blackspotted</i>	4.3	2	3.9	3.6	3.3	2.9	2.6	
<i>Sharpchin</i>	91.0	2	83.1	75.8	69.0	62.4	56.0	
<i>Shortraker</i>	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	11,165		9,744	8,510	7,416	6,430	5,524
<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
<i>Rex sole</i>	5,476.0	2	4,999.6	4,561.5	4,150.8	3,756.5	3,367.7
<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	536.7		474.4	420.3	372.6	329.7	290.4
<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
<i>Kelp greenling (OR) assuming sigma = 0.44</i>	239.1	1	226.2	213.8	201.8	189.8	177.7
<i>Kelp greenling (WA)</i>	7.1	3	5.9	4.9	4.1	3.3	2.7
<i>Leopard shark</i>	167.1	3	139.4	116.0	95.9	78.5	63.3
STOCK CONSIDERED FOR ACTIVE MANAGEMENT							
<i>Big skate</i>	541.0	2	493.9	450.7	410.1	371.1	332.7

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; stocks scheduled for harvest specification decisions (i.e., those with specifications not already decided) are highlighted).

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.	2,013	1	1,924	1,838	1,751	1,667	1,578
COWCOD S. of 40°10' N. lat.	71	NA	64	58	52	46	41
<i>COWCOD (Conception)</i>	59	2	54	49	45	41	37
<i>COWCOD (Monterey)</i>	12	3	10	8	7	6	5
DARKBLOTCHED ROCKFISH	693	1	663	633	603	574	543
PACIFIC OCEAN PERCH	985	1	942	899	857	816	772
YELLOWEYE ROCKFISH	58	2	52	48	44	39	35
NON-OVERFISHED STOCKS							
Arrowtooth Flounder	16,498	2	15,063	13,743	12,506	11,318	10,147
Black Rockfish (CA)	347	1	332	317	302	287	272
Black Rockfish (OR)	570	2	520	475	432	391	351
Black Rockfish (WA)	315	1	301	288	274	261	247
Cabezon (CA)	156	1	149	142	136	129	122
Cabezon (OR)	49	1	47	45	43	41	38
California scorpionfish	286	2	261	238	217	196	176
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	8,255	2	7,537	6,876	6,257	5,663	5,077
Lingcod N. of 40°10' N. lat.	3,310	1&2	3,110	2,921	2,738	2,561	2,381
Lingcod S. of 40°10' N. lat.	1,373	2	1,253	1,144	1,041	942	844
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	1,847	3	1,540	1,282	1,060	868	700
Widow Rockfish	14,511	1	13,873	13,249	12,625	12,015	11,377
Yellowtail N. of 40°10' N. lat.	6,574	2	6,002	5,476	4,983	4,510	4,043
STOCK COMPLEXES							
Nearshore Rockfish North	119		105	93	82	73	63
<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>34.8</i>	2	<i>31.8</i>	<i>29.0</i>	<i>26.4</i>	<i>23.9</i>	<i>21.4</i>
<i>Blue (OR & WA)</i>	<i>32.3</i>	3	<i>26.9</i>	<i>22.4</i>	<i>18.5</i>	<i>15.2</i>	<i>12.2</i>
<i>Brown</i>	<i>2.0</i>	2	<i>1.9</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>1.2</i>
<i>Calico</i>	-	3	-	-	-	-	-
<i>China</i>	<i>29.3</i>	2	<i>26.8</i>	<i>24.4</i>	<i>22.2</i>	<i>20.1</i>	<i>18.0</i>
<i>Copper</i>	<i>11.6</i>	2	<i>10.6</i>	<i>9.7</i>	<i>8.8</i>	<i>8.0</i>	<i>7.1</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	2,302		2,048	1,824	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>	9.3	2	8.5	7.8	7.1	6.4	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>	1,306.4	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>	0.0001	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	1,896		1,754	1,624	1,503	1,389	1,277	
<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	
<i>Sharpchin</i>	358.4	2	327.2	298.5	271.7	245.9	220.4	
<i>Shortraker</i>	18.7	3	15.6	13.0	10.7	8.8	7.1	
<i>Splitnose</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	1,344		1,180	1,036	909	793	685	
Shallow Nearshore Species	NA		NA	NA	NA	NA	NA	
Black and yellow	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	
<i>China</i>	13.8	2	12.6	11.5	10.5	9.5	8.5	
<i>Gopher (N of Pt. Conception)</i>	144.0	3	120.1	99.9	82.7	67.7	54.6	
<i>Gopher (S of Pt. Conception)</i>	25.6	3	21.4	17.8	14.7	12.0	9.7	
<i>Grass</i>	59.6	3	49.7	41.4	34.2	28.0	22.6	
<i>Kelp</i>	27.7	3	23.1	19.2	15.9	13.0	10.5	
<i>Deeper Nearshore Species</i>	NA		NA	NA	NA	NA	NA	
<i>Blue (assessed area)</i>	239.4	2	218.6	199.4	181.4	164.2	147.2	
<i>Blue (S of 34°27' N. lat.)</i>	72.9	3	60.8	50.6	41.8	34.3	27.6	
<i>Brown</i>	174.0	2	158.8	144.9	131.9	119.3	107.0	
<i>Calico</i>	-	3	-	-	-	-	-	
<i>Copper</i>	316.7	2	289.2	263.8	240.1	217.3	194.8	
<i>Olive</i>	224.6	3	187.4	155.9	128.9	105.6	85.1	
<i>Quillback</i>	5.4	3	4.5	3.7	3.1	2.5	2.0	
<i>Treafish</i>	13.2	3	11.0	9.2	7.6	6.2	5.0	
<i>Shelf Rockfish South</i>	1,918		1,625	1,375	1,160	970	802	
<i>Bronzespotted</i>	3.6	3	3.0	2.5	2.1	1.7	1.4	
<i>Chameleon</i>	-	3	-	-	-	-	-	
<i>Flag</i>	23.4	3	19.5	16.3	13.4	11.0	8.9	
<i>Freckled</i>	-	3	-	-	-	-	-	
<i>Greenblotched</i>	23.1	3	19.3	16.1	13.3	10.9	8.8	
<i>Greenspotted</i>	78.5	2	71.7	65.4	59.5	53.9	48.3	
<i>Greenstriped</i>	239.6	2	218.8	199.6	181.6	164.4	147.4	
<i>Halfbanded</i>	-	3	-	-	-	-	-	
<i>Harlequin</i>	-	3	-	-	-	-	-	
<i>Honeycomb</i>	9.9	3	8.2	6.8	5.7	4.6	3.7	
<i>Mexican</i>	5.1	3	4.2	3.5	2.9	2.4	1.9	
<i>Pink</i>	2.5	3	2.1	1.8	1.5	1.2	1.0	
<i>Pinkrose</i>	-	3	-	-	-	-	-	
<i>Pygmy</i>	-	3	-	-	-	-	-	
<i>Redstripe</i>	0.5	3	0.4	0.3	0.3	0.2	0.2	
<i>Rosethorn</i>	2.1	3	1.8	1.5	1.2	1.0	0.8	
<i>Rosy</i>	44.5	3	37.1	30.9	25.5	20.9	16.9	
<i>Silvergray</i>	0.5	3	0.4	0.4	0.3	0.3	0.2	
<i>Speckled</i>	39.4	3	32.8	27.3	22.6	18.5	14.9	
<i>Squarespot</i>	11.1	3	9.2	7.7	6.4	5.2	4.2	
<i>Starry</i>	62.6	3	52.2	43.4	35.9	29.4	23.7	
<i>Stripetail</i>	23.6	3	19.7	16.4	13.6	11.1	9.0	
<i>Swordspine</i>	14.2	3	11.9	9.9	8.2	6.7	5.4	
<i>Tiger</i>	0.04	3	0.03	0.03	0.02	0.02	0.02	
<i>Vermilion</i>	269.3	3	224.6	186.9	154.6	126.6	102.1	
<i>Yellowtail</i>	1,064.4	3	887.7	738.7	611.0	500.3	403.4	
<i>Slope Rockfish South</i>	829		719	625	541	467	400	
<i>Aurora</i>	74.5	1	71.0	67.5	64.1	60.7	57.3	
<i>Bank</i>	503.2	3	419.7	349.2	288.8	236.5	190.7	
<i>Blackgill</i>	146.0	2	133.3	121.6	110.7	100.2	89.8	
<i>Pacific ocean perch</i>	-	3	-	-	-	-	-	
<i>Redbanded</i>	10.4	3	8.7	7.2	6.0	4.9	3.9	
<i>Rougheye/Blackspotted</i>	4.4	2	4.0	3.6	3.3	3.0	2.7	
<i>Sharpchin</i>	89.6	2	81.8	74.6	67.9	61.5	55.1	
<i>Shortraker</i>	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	9,690		8,397	7,281	6,298	5,418	4,617	
<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	
<i>Rex sole</i>	4,001.0	2	3,652.9	3,332.8	3,032.8	2,744.7	2,460.6	
<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	501.1		440.7	388.4	342.5	301.4	263.9	
<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	
<i>Kelp greenling (OR) assuming sigma = 0.44</i>	203.2	1	192.2	181.7	171.5	161.3	151.0	
<i>Kelp greenling (WA)</i>	7.1	3	5.9	4.9	4.1	3.3	2.7	
<i>Leopard shark</i>	167.1	3	139.4	116.0	95.9	78.5	63.3	
STOCK CONSIDERED FOR ACTIVE MANAGEMENT								
<i>Big skate</i>	541.0	2	493.9	450.7	410.1	371.1	332.7	

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 or presumptive harvest control rules (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics; stocks scheduled for harvest specification decisions (i.e., those with specifications not already decided) are highlighted).

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
OVERFISHED STOCKS							
BOCACCIO S. of 40°10'	2,139	2,044	790	2,013	1,924	741	ABC (P* = 0.45), ACL (SPR = 77.7%)
COWCOD S. of 40°10'	70	63	10	71	64	10	ABCs sum of Con. and Mont. area ABCs, ACLs projected from 2013 rebuilding analysis (SPR = 82.7% (F = 0.007)) + Mont. area ABC contrib., ACT = 4 mt
<i>COWCOD (Conception)</i>	58	53	NA	59	54	NA	ABC (P* = 0.45)
<i>COWCOD (Monterey)</i>	12	10	NA	12	10	NA	ACL = ABC (P* = 0.45)
DARKBLOTTCHED ROCKFISH	671	641	406	693	663	419	ABC (P* = 0.45), ACL (SPR = 64.9%)
PACIFIC OCEAN PERCH	961	919	171	985	942	176	Updated projections from 2011 rebuilding analysis using actual catches from 2011-2014 and assumed ACL removals thereafter. ABC (P* = 0.45), ACL (SPR = 86.4%)
YELLOWEYE ROCKFISH	57	47	20	58	48	20	Catch-only update from the 2011 stock assessment assuming ACL removals; ABC (P* = 0.4), ACL (SPR = 76.0%)
NON-OVERFISHED STOCKS							
Arrowtooth Flounder	16,571	13,804	13,804	16,498	13,743	13,743	ACL = ABC (P* = 0.4)
Black Rockfish (CA)	349	334	334	347	332	332	Presumptive ACL = ABC (P* = 0.45); default ACL = 1,000 mt annually (shared with OR)
Black Rockfish (OR)	577	527	527	570	520	520	Presumptive ACL = ABC (P* = 0.45), default ACL = 1,000 mt annually (shared with CA)
Black Rockfish (WA)	319	305	305	315	301	301	ACL = ABC (P* = 0.45)
Cabezon (CA)	157	150	150	156	149	149	ACL = ABC (P* = 0.45) w/ 40-10 adjustment (ACL rounds to ABC)
Cabezon (OR)	49	47	47	49	47	47	ACL = ABC (P* = 0.45)
California scorpionfish	289	264	264	286	261	261	ACL = ABC (P* = 0.45)
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	10,914	9,964	9,964	8,255	7,537	7,537	ACL = ABC (P* = 0.45)
Lingcod N. of 40°10'	3,549	3,333	3,333	3,310	3,110	3,110	ACL = ABC (P* = 0.45)
Lingcod S. of 40°10'	1,502	1,251	1,251	1,373	1,144	1,144	ACL = ABC (P* = 0.4)
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)

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
Splitnose S. of 40°10'	1,841	1,760	1,760	1,842	1,761	1,761	ACL = ABC (P* = 0.45)
Starry Flounder	1,847	1,282	1,282	1,847	1,282	1,282	ACL = ABC (P* = 0.4)
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'	6,786	6,196	6,196	6,574	6,002	6,002	ACL = ABC (P* = 0.45)
STOCK COMPLEXES							
Nearshore Rockfish North	118	105	105	119	105	105	Sum of component species specifications
<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>	34.1	31.1	30.9	34.8	31.8	31.8	ACL = ABC (P* = 0.45) w/40-10 adjustment. The stock is projected to be above target in 2018 under the Expected Catch scenario.
<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>	2.0	1.8	1.8	2.0	1.9	1.9	ACL = ABC (P* = 0.45)
<i>Calico</i>	-	-	-	-	-	-	ACL = ABC (P* = 0.45)
<i>China</i>	30.2	27.5	27.5	29.3	26.8	26.8	ACL = ABC (P* = 0.45)
<i>Copper</i>	11.2	10.3	10.3	11.6	10.6	10.6	ACL = ABC (P* = 0.45)
<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>Treelish</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	2,302	2,048	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>	9.4	8.5	8.2	9.3	8.5	8.2	ACL: 40-10 rule applied to 22.2% of northern model (CA N of 34°27' N latitude) 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)

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
<i>Puget Sound</i>	-	-	-	-	-	-	<i>ACL = ABC (P* = 0.45)</i>
<i>Pygmy</i>	-	-	-	-	-	-	<i>ACL = ABC (P* = 0.45)</i>
<i>Redstripe</i>	269.9	225.1	225.1	269.9	225.1	225.1	<i>ACL = ABC (P* = 0.45)</i>
<i>Rosethorn</i>	12.9	10.8	10.8	12.9	10.8	10.8	<i>ACL = ABC (P* = 0.45)</i>
<i>Rosy</i>	3.0	2.5	2.5	3.0	2.5	2.5	<i>ACL = ABC (P* = 0.45)</i>
<i>Silvergray</i>	159.4	133.0	133.0	159.4	133.0	133.0	<i>ACL = ABC (P* = 0.45)</i>
<i>Speckled</i>	0.2	0.1	0.1	0.2	0.1	0.1	<i>ACL = ABC (P* = 0.45)</i>
<i>Squarespot</i>	0.2	0.1	0.1	0.2	0.1	0.1	<i>ACL = ABC (P* = 0.45)</i>
<i>Starry</i>	0.0	0.0	0.0	0.0	0.0	0.0	<i>ACL = ABC (P* = 0.45)</i>
<i>Stripetail</i>	40.4	33.7	33.7	40.4	33.7	33.7	<i>ACL = ABC (P* = 0.45)</i>
<i>Swordspine</i>	0.0	0.0	0.0	0.0	0.0	0.0	<i>ACL = ABC (P* = 0.45)</i>
<i>Tiger</i>	1.0	0.8	0.8	1.0	0.8	0.8	<i>ACL = ABC (P* = 0.45)</i>
<i>Vermilion</i>	9.7	8.1	8.1	9.7	8.1	8.1	<i>ACL = ABC (P* = 0.45)</i>
Slope Rockfish North	1,897	1,755	1,755	1,896	1,754	1,754	Sum of component species specifications
<i>Aurora</i>	17.5	16.6	16.6	17.5	16.6	16.6	<i>ACL = ABC (P* = 0.45)</i>
<i>Bank</i>	17.2	14.4	14.4	17.2	14.4	14.4	<i>ACL = ABC (P* = 0.45)</i>
<i>Blackgill</i>	4.7	3.9	3.9	4.7	3.9	3.9	<i>ACL = ABC (P* = 0.45)</i>
<i>Redbanded</i>	45.3	37.7	37.7	45.3	37.7	37.7	<i>ACL = ABC (P* = 0.45)</i>
<i>Rougheye/Blackspotted</i>	210.7	192.4	192.4	214.6	195.9	195.9	<i>ACL = ABC (P* = 0.45)</i>
<i>Sharpchin</i>	364.0	332.3	332.3	358.4	327.2	327.2	<i>ACL = ABC (P* = 0.45)</i>
<i>Shortraker</i>	18.7	15.6	15.6	18.7	15.6	15.6	<i>ACL = ABC (P* = 0.45)</i>
<i>Splitnose</i>	1,026.7	981.6	981.6	1,027.1	981.9	981.9	<i>ACL = ABC (P* = 0.45)</i>
<i>Yellowmouth</i>	192.4	160.5	160.5	192.4	160.5	160.5	<i>ACL = ABC (P* = 0.45)</i>
Nearshore Rockfish South	1,329	1,166	1,163	1,344	1,180	1,179	Sum of component species specifications
<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	<i>ACL = ABC (P* = 0.45)</i>
<i>China</i>	13.3	12.2	10.8	13.8	12.6	11.5	<i>ACL = ABC (P* = 0.45) w/ 40-10 adjustment</i>
<i>Gopher (N of Pt. Conception)</i>	144.0	120.1	120.1	144.0	120.1	120.1	<i>ACL = ABC (P* = 0.45)</i>
<i>Gopher (S of Pt. Conception)</i>	25.6	21.4	21.4	25.6	21.4	21.4	<i>ACL = ABC (P* = 0.45)</i>
<i>Grass</i>	59.6	49.7	49.7	59.6	49.7	49.7	<i>ACL = ABC (P* = 0.45)</i>
<i>Kelp</i>	27.7	23.1	23.1	27.7	23.1	23.1	<i>ACL = ABC (P* = 0.45)</i>
<i>Deeper Nearshore Species</i>	NA	NA	NA	NA	NA	NA	NA
<i>Blue (assessed area)</i>	234.5	214.1	212.8	239.4	218.6	218.6	<i>ACL = ABC (P* = 0.45) w/40-10 adjustment. The stock is projected to be above target in 2018 under the Expected Catch scenario.</i>
<i>Blue (S of 34°27' N. lat.)</i>	72.9	60.8	60.8	72.9	60.8	60.8	<i>ACL = ABC (P* = 0.45)</i>
<i>Brown</i>	170.0	155.2	155.2	174.0	158.8	158.8	<i>ACL = ABC (P* = 0.45)</i>
<i>Calico</i>	-	-	-	-	-	-	<i>ACL = ABC (P* = 0.45)</i>
<i>Copper</i>	310.9	283.8	283.8	316.7	289.2	289.2	<i>ACL = ABC (P* = 0.45)</i>
<i>Olive</i>	224.6	187.4	187.4	224.6	187.4	187.4	<i>ACL = ABC (P* = 0.45)</i>
<i>Quillback</i>	5.4	4.5	4.5	5.4	4.5	4.5	<i>ACL = ABC (P* = 0.45)</i>

Stock or Stock Complex	2017			2018			Default Harvest Control Rules
	OFL	ABC	ACL	OFL	ABC	ACL	
<i>Treefish</i>	13.2	11.0	11.0	13.2	11.0	11.0	$ACL = ABC (P^* = 0.45)$
Shelf Rockfish South	1,917	1,624	1,623	1,918	1,625	1,624	Sum of component species specifications
<i>Bronzespotted</i>	3.6	3.0	3.0	3.6	3.0	3.0	$ACL = ABC (P^* = 0.45)$
<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>	78.9	72.0	70.9	78.5	71.7	70.7	<i>ACL: 40-10 rule applied to 77.8% of northern model (CA N of 34°27' N latitude) ABC plus the southern model ABC (P^* = 0.45)</i>
<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>	1,064.4	887.7	887.7	1,064.4	887.7	887.7	$ACL = ABC (P^* = 0.45)$
Slope Rockfish South	827	718	707	829	719	709	Sum of component species specifications
<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	<i>ACL = ABC (P^* = 0.45) w/ 40-10 adjustment</i>
<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>	91.0	83.1	83.1	89.6	81.8	81.8	$ACL = ABC (P^* = 0.45)$
<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	$ACL = ABC (P^* = 0.45)$

Stock or Stock Complex	2017			2018			Default Harvest Control Rules		
	OFL	ABC	ACL	OFL	ABC	ACL			
Other Flatfish	11,165	8,510	8,510	9,690	7,281	7,281			Sum of component species specifications
<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			$ACL = ABC (P^* = 0.4)$
<i>Rex sole</i>	5,476	4,562	4,562	4,001	3,333	3,333			$ACL = ABC (P^* = 0.4)$
<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	537	474	474	501	441	441			Sum of component species specifications
<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) assuming sigma = 0.44</i>	239.1	226.2	226.2	203.2	192.2	192.2			<i>Presumptive ACL = ABC (P^* = 0.45)</i>
<i>Kelp greenling (WA)</i>	7.1	5.9	5.9	7.1	5.9	5.9			<i>Presumptive ACL = ABC (P^* = 0.45)</i>
<i>Leopard shark</i>	167.1	139.4	139.4	167.1	139.4	139.4			$ACL = ABC (P^* = 0.45)$
CONSIDERED FOR ACTIVE MANAGEMENT									
<i>Big skate</i>	541.0	493.9	493.9	541.0	493.9	493.9			<i>Presumptive ACL = ABC (P^* = 0.45)</i>

Table 5. Alternative 2017 and 2018 harvest specifications (overfishing limits (OFLs in mt), acceptable biological catches (ABCs in mt), and annual catch limits (ACLs in mt)), for select west coast groundfish stocks (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics).

Stock	No Action						ACL Basis	
	2017			2018				
	OFL	ABC	ACL	OFL	ABC	ACL		
DARKBLOTTED ROCKFISH	671	641	406	693	663	419	SPR = 64.9%	
Canary Rockfish	1,793	1,714	1,714	1,661	1,588	1,588	ACL = ABC ($P^* = 0.45$)	
Widow Rockfish	14,130	13,508	2,000	14,511	13,873	2,000	2,000 mt constant catch	
<i>China Rockfish N of 40°10' N latitude</i>	30.2	27.5	27.5	29.3	26.8	26.8	ACL = ABC ($P^* = 0.45$)	
<i>China Rockfish S of 40°10' N latitude</i>	13.3	12.2	10.8	13.8	12.6	11.5	ACL = ABC ($P^* = 0.45$) w/ 40-10 redux	
Stock	Alternative 1						ACL Basis	
	2017			2018				
	OFL	ABC	ACL	OFL	ABC	ACL		
DARKBLOTTED ROCKFISH	671	641	641	683	653	653	ACL = ABC ($P^* = 0.45$)	
Canary Rockfish	1,793	1,714	857	1,735	1,659	763	50% of No Action ACL	
Widow Rockfish	14,130	13,508	13,508	13,237	12,655	12,655	ACL = ABC ($P^* = 0.45$)	
<i>China Rockfish N of 40°10' N latitude</i>	30.2	25.1	25.1	29.5	24.7	24.7	ACL = ABC ($P^* = 0.4$)	
<i>China Rockfish S of 40°10' N latitude</i>	13.3	11.1	9.9	13.9	11.6	10.5	ACL = ABC ($P^* = 0.4$) w/ 40-10 redux	
Stock	Alternative 2						ACL Basis	
	2017			2018				
	OFL	ABC	ACL	OFL	ABC	ACL		
DARKBLOTTED ROCKFISH	671	526	526	688	541	541	ACL = ABC ($P^* = 0.25$)	
Canary Rockfish							NA	
Widow Rockfish	14,130	11,078	11,078	13,506	10,589	10,589	ACL = ABC ($P^* = 0.25$)	
<i>China Rockfish N of 40°10' N latitude</i>							NA	
<i>China Rockfish S of 40°10' N latitude</i>							NA	