

PROPOSED 2015 AND 2016 HARVEST SPECIFICATIONS
AND SELECT MANAGEMENT MEASURES
FOR GROUND FISH STOCKS AND STOCK COMPLEXES

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Table 1. 2014 OFLs (mt) and preferred 2015 and 2016 OFLs (mt) for west coast groundfish stocks, excluding kelp greenling, cabezon in Washington, and leopard shark (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in *italics*).

Stock	2014 OFL	Cat.	2015 OFL	2016 OFL	Comments
OVERFISHED STOCKS					
BOCACCI S. of 40°10' N. lat.	881	1	1,444	1,351	Projected using a 50% SPR from the 2013 update stock assessment with a 6% reduction to subtract the portion of the assessed stock north of 40°10' N. lat.
CANARY	741	1	733	729	Based on projections in the 2011 rebuilding analysis
COWCOD S. of 40°10' N. lat.	12		66.6	66.1	Sum of Conception and Monterey OFLs.
<i>COWCOD (Conception)</i>	7	2	55.0	54.1	Projected using a 50% SPR from the 2013 stock assessment.
<i>COWCOD (Monterey)</i>	5	3	<i>11.6</i>	<i>12.0</i>	Revised DB-SRA estimate calculated in 2011.
DARKBLOTCHED	553	1	574	580	Projected using a 50% SPR from the 2013 stock assessment
PACIFIC OCEAN PERCH	838	1	842	850	Projected using a 50% SPR from the 2011 rebuilding analysis
PETRALE SOLE	2,774	1	2,946	3,044	Projected using a 30% SPR from the 2013 stock assessment
YELLOWEYE	51	2	52	52	Projected using a 50% SPR from the 2011 rebuilding analysis
NON-DEPLETED STOCKS					
Arrowtooth Flounder	6,912	2	6,599	6,396	Projected using a 30% SPR from the 2007 full assessment.
Black Rockfish (OR-CA)	1,166	1	1,176	1,183	Projected using a 50% SPR from the 2007 full assessment with the addition of 3% of the northern OFL to account for the portion of the stock estimated between Cape Falcon and the Columbia River.
Black Rockfish (WA)	428	1	421	423	Projected using a 50% SPR from the 2007 full assessment with a 3% reduction to account for the portion of the stock estimated between Cape Falcon and the Columbia River.
Cabezon (CA)	165	1	161	158	Projected using a 45% SPR from the 2009 full assessment.
Cabezon (OR)	49	1	49	49	Projected using a 45% SPR from the 2009 full assessment.
California scorpionfish	122	1	119	117	Projected using a 45% SPR from the 2005 full assessment.
Chilipepper S. of 40°10' N. lat.	1,722	1	1,703	1,694	Projected using a 50% SPR from the 2007 full assessment. The portion of the coastwide stock south of 40°10' N. lat. (93%) is based on average historical landings.
Dover Sole	77,774	1	66,871	59,221	Projected using a 30% SPR from the 2011 full assessment.
English Sole	5,906	2	12,092	8,493	Projected using a 30% SPR from the 2013 data-moderate assessment.
Lingcod N. of 42° N. lat. (OR & WA)	1,984	1	1,898	1,842	Projected using a 45% SPR from the 2009 full assessment.
Lingcod S. of 42° N. lat. (CA)	2,454	2	2,317	2,185	Projected using a 45% SPR from the 2009 full assessment.
Lingcod N. of 40°10' N. lat.	3,162	1	3,010	2,891	Projected 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.	1,276	2	1,205	1,136	Projected using a 45% SPR from the 2009 full assessment with 48% of the OFL S. of 42° N. lat.

Stock	2014 OFL	Cat.	2015 OFL	2016 OFL	Comments
lat.					subtracted to account for line shift.
Longnose skate	2,816	1	2,449	2,405	Projected using a 50% SPR from the 2007 full assessment. 2015 and 2016 OFLs projected using the status quo 45% SPR rate are 2,745 and 2,686 mt, respectively.
Longspine Thornyhead (coastwide)	3,304	2	5,007	4,763	Projected using a 50% SPR from the 2013 full assessment.
Pacific Cod	3,200	3	3,200	3,200	Status quo OFL.
Sablefish (coastwide)	7,158	1	7,857	8,526	Projected using a 45% SPR from the 2011 full assessment.
Shortbelly	6,950	2	6,950	6,950	MSY estimated from 2007 assessment.
Shortspine Thornyhead (coastwide)	2,310	2	3,203	3,169	Projected using a 50% SPR from the 2013 full assessment.
Spiny dogfish	2,950	2	2,523	2,503	<i>Projected using a 50% SPR from the 2011 full assessment. 2015 and 2016 OFLs projected using the status quo 45% SPR rate are 2,921 and 2,893 mt, respectively.</i>
Splitnose S. of 40°10' N. lat.	1,747	1	1,794	1,826	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	1,834	2	1,841	1,847	Projected using a 30% SPR from the 2005 full assessment.
Widow	4,435	1	4,137	3,990	Projected using a 50% SPR from the 2011 full assessment.
Yellowtail N. of 40°10' N. lat.	4,584	2	12,281	11,647	Projected using a 50% SPR from the 2013 data-moderate assessment.
STOCK COMPLEXES					
Nearshore Rockfish North	110		88	88	Sum of OFL contributions of component stocks in the complex.
<i>Black and yellow</i>	<i>0.01</i>	3	<i>0.01</i>	<i>0.01</i>	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Blue (CA)</i>	<i>27.4</i>	2	<i>27.4</i>	<i>27.7</i>	<i>Projected 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>
<i>Blue (OR & WA)</i>	<i>32.3</i>	3	<i>32.3</i>	<i>32.3</i>	<i>DCAC estimate.</i>
<i>Brown</i>	<i>5.5</i>	2	<i>1.9</i>	<i>1.9</i>	Projected using a 50% SPR from the 2013 data-moderate assessment.
<i>Calico</i>	-	3	-	-	<i>No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species</i>
<i>China</i>	<i>9.8</i>	2	<i>7.2</i>	<i>7.4</i>	Projected using a 50% SPR from the 2013 data-moderate assessment. Assumes P* = 0.45
<i>Copper</i>	<i>26.0</i>	2	<i>10.6</i>	<i>10.3</i>	Projected using a 50% SPR from the 2013 data-moderate assessment.
<i>Gopher</i>	-	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Grass</i>	<i>0.7</i>	3	<i>0.7</i>	<i>0.7</i>	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Kelp</i>	<i>0.01</i>	3	<i>0.01</i>	<i>0.01</i>	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Olive</i>	<i>0.3</i>	3	<i>0.3</i>	<i>0.3</i>	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Quillback</i>	<i>7.4</i>	3	<i>7.4</i>	<i>7.4</i>	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>

Stock	2014 OFL	Cat.	2015 OFL	2016 OFL	Comments
<i>Treefish</i>	0.2	3	0.2	0.2	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
Shelf Rockfish North	2,195		2,209	2,218	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>	284.0	3	284.0	284.0	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Chameleon</i>	-	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Chilipepper</i>	129.6	3	128.2	127.5	<i>Projected using a 50% SPR from the 2007 full assessment. The portion of the coastwide stock north of 40°10' N. lat. (7%) is based on average historical landings.</i>
<i>Cowcod</i>	-	3	0.4	0.4	<i>No harvest contribution (3a stock).</i>
<i>Flag</i>	0.1	3	0.1	0.1	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Freckled</i>	-	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Greenblotched</i>	1.3	3	1.3	1.3	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Greenspotted 40°10' to 42° N. lat.</i>	9.4	2	10.0	9.9	<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>	6.1	3	6.1	6.1	<i>DCAC estimate</i>
<i>Greenstriped</i>	1,268.3	2	1,281.9	1,292.0	<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 2011 calculated in 2011</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>	0.004	3	0.004	0.004	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Pinkrose</i>	-	3	-	-	<i>DB-SRA estimate calculated in 2011 calculated in 2011</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>	269.9	3	269.9	269.9	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Rosethorn</i>	12.9	3	12.9	12.9	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Rosy</i>	3.0	3	3.0	3.0	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Silvergray</i>	159.4	3	159.4	159.4	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Speckled</i>	0.2	3	0.2	0.2	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Squarespot</i>	0.2	3	0.2	0.2	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Starry</i>	0.004	3	0.004	0.004	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Stripetail</i>	40.4	3	40.4	40.4	<i>DB-SRA estimate calculated in 2011 calculated in 2011. Only status determined from 2013 data-moderate assessment, so remains a cat. 3 stock</i>
<i>Swordspine</i>	0.0001	3	0.0001	0.0001	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>

Stock	2014 OFL	Cat.	2015 OFL	2016 OFL	Comments
<i>Tiger</i>	1.0	3	1.0	1.0	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Vermilion</i>	9.7	3	9.7	9.7	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
Slope Rockfish North	1,553		1,804	1,818	Sum of OFL contributions of component stocks in the complex.
<i>Aurora</i>	15.4	1	17.4	17.5	<i>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>
<i>Bank</i>	17.2	3	17.2	17.2	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Blackgill</i>	4.7	3	4.7	4.7	<i>DCAC estimate.</i>
<i>Redbanded</i>	45.3	3	45.3	45.3	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Rougheye/Blackspotted</i>	71.1	2	201.9	206.8	<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>	214.5	2	305.6	297.6	<i>Coastwide OFLs projected using a 50% SPR from the 2013 data-moderate assessment. 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>
<i>Shortraker</i>	18.7	3	18.7	18.7	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Splitnose</i>	974.1	1	1,000.6	1,018.2	<i>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>
<i>Yellowmouth</i>	192.4	3	192.4	192.4	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
Nearshore Rockfish South	1,160		1,313	1,288	Sum of OFL contributions of component stocks in the complex.
<i>Shallow Nearshore Species</i>	NA	NA	NA	NA	
<i>Black and yellow</i>	27.5	3	27.5	27.5	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>China</i>	16.6	2	55.2	52.7	<i>Projected using a 50% SPR from the 2013 data-moderate assessment</i>
<i>Gopher (N of Pt. Conception)</i>	153.0	1	148.0	144.0	<i>Projected using a 50% SPR from the 2005 full assessment.</i>
<i>Gopher (S of Pt. Conception)</i>	25.6	3	25.6	25.6	<i>DCAC estimate.</i>
<i>Grass</i>	59.6	3	59.6	59.6	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Kelp</i>	27.7	3	27.7	27.7	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Deeper Nearshore Species</i>	NA	NA	NA	NA	
<i>Blue (assessed area)</i>	187.8	2	188.6	190.3	<i>Projected 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.</i>
<i>Blue (S of 34°27' N. lat.)</i>	72.9	3	72.9	72.9	<i>DCAC estimate.</i>
<i>Brown</i>	204.6	2	163.8	160.2	<i>Projected using a 50% SPR from the 2013 data-moderate assessment</i>

Stock	2014 OFL	Cat.	2015 OFL	2016 OFL	Comments
<i>Calico</i>	-	3	-	-	<i>No harvest contribution (3a stock). Max. landings <2 mt, 1928-2008; mainly a discard species</i>
Copper	141.5	2	301.1	284.3	Projected using a 50% SPR from the 2013 data-moderate assessment
<i>Olive</i>	224.6	3	224.6	224.6	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Quillback</i>	5.4	3	5.4	5.4	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Treefish</i>	13.2	3	13.2	13.2	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
Shelf Rockfish South	1,912.9		1,917.9	1,918.9	Sum of OFL contributions of component stocks in the complex.
<i>Bronzespotted</i>	3.6	3	3.6	3.6	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Chameleon</i>	-	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Flag</i>	23.4	3	23.4	23.4	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Freckled</i>	-	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Greenblotched</i>	23.1	3	23.1	23.1	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Greenspotted</i>	80.3	2	82.8	82.0	<i>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>
<i>Greenstriped</i>	232.7	2	235.1	237.0	<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 2011 calculated in 2011</i>
<i>Honeycomb</i>	9.9	3	9.9	9.9	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Mexican</i>	5.1	3	5.1	5.1	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Pink</i>	2.5	3	2.5	2.5	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Pinkrose</i>	-	3	-	-	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Pygmy</i>	-	3	-	-	<i>No harvest contribution (3a stock).</i>
<i>Redstripe</i>	0.5	3	0.5	0.5	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Rosethorn</i>	2.1	3	2.1	2.1	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Rosy</i>	44.5	3	44.5	44.5	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Silvergray</i>	0.5	3	0.5	0.5	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Speckled</i>	39.4	3	39.4	39.4	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Squarespot</i>	11.1	3	11.1	11.1	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Starry</i>	62.6	3	62.6	62.6	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
Stripetail	23.6	3	23.6	23.6	<i>DB-SRA estimate calculated in 2011 calculated in 2011. Only status determined from 2013 data-moderate assessment, so presumed to remain a cat. 3 stock.</i>
<i>Swordspine</i>	14.2	3	14.2	14.2	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Tiger</i>	0.04	3	0.04	0.04	<i>DB-SRA estimate calculated in 2011 calculated in 2011</i>
<i>Vermilion</i>	269.3	3	269.3	269.3	<i>DB-SRA estimate calculated in 2011.</i>

Stock	2014 OFL	Cat.	2015 OFL	2016 OFL	Comments
<i>Yellowtail</i>	1,064.4	3	1,064.4	1,064.4	<i>DB-SRA estimate calculated in 2011.</i>
Slope Rockfish South	685		806	807	Sum of OFL contributions of component stocks in the complex.
<i>Aurora</i>	26.1	1	74.3	74.3	<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>	503.2	3	503.2	503.2	<i>DB-SRA estimate calculated in 2011.</i>
<i>Blackgill</i>	134.0	2	137.0	140.0	<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>	10.4	3	10.4	10.4	<i>DB-SRA estimate calculated in 2011.</i>
<i>Rougheye/Blackspotted</i>	0.4	2	4.1	4.2	<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>	9.8	2	76.4	74.4	<i>Coastwide OFLs projected using a 50% SPR from the 2013 data-moderate assessment. 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>
<i>Shortraker</i>	0.1	3	0.1	0.1	<i>DB-SRA estimate calculated in 2011.</i>
<i>Yellowmouth</i>	0.8	3	0.8	0.8	<i>DB-SRA estimate calculated in 2011.</i>
Other Flatfish	10,060		11,298	9,948	Sum of OFL contributions of component stocks in the complex.
<i>Butter sole</i>	4.6	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>	8.2	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>	35.0	3	35.0	35.0	<i>Max. catch = 35 mt in 2005</i>
<i>Pacific sanddab</i>	4,801.0	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>	4,371.5	2	5,609.0	4,259.0	<i>Projected using a 50% SPR from the 2013 data-moderate assessment.</i>
<i>Rock sole</i>	66.7	3	66.7	66.7	<i>DB-SRA estimate calculated in 2011.</i>
<i>Sand sole</i>	773.2	3	773.2	773.2	<i>DB-SRA estimate calculated in 2011.</i>

Table 2. Preferred 2015 and 2016 OFLs (in mt) and ABCs (in mt) for kelp greenling in California, kelp greenling in Oregon, kelp greenling in Washington, and leopard shark.

Stock	P*	2015 OFL	2015 ABC	2016 OFL	2016 ABC
Kelp greenling in CA	0.45	118.9	99.2	118.9	99.2
Kelp greenling in OR	0.45	14.0	11.7	16.6	12.9
Kelp greenling in WA	0.4	31.4	21.8	28.4	19.7
Leopard shark	0.45	167.1	139.4	167.1	139.4

Table 3. Alternative 2015 and 2016 OFLs (in mt) and ABCs (in mt) for cabezon in Washington varied by the choice of an overfishing probability (P*) and according to the methodology recommended by the SSC in March 2014 for calculating the OFLs.

Stock	P*	2015 OFL	2015 ABC	2016 OFL	2016 ABC
Cabezon in WA	0.45	4.5	3.7	4.8	4.0
	0.4	4.5	3.1	4.9	3.4
	0.35	4.5	2.6	5.0	2.9
	0.3	4.5	2.1	5.1	2.4
	0.25	4.5	1.7	5.1	1.9

Table 4. Preliminary preferred 2015 and 2016 annual catch limits (ACLs in mt) for west coast groundfish stocks and stock complexes (stocks with new assessments in bold).

Stock	Status Quo ACL	Preliminary Preferred ACLs (Alt. 3)				ACLs Varied by the Overfishing Probability (P*)			
	2014	2015	2016	ACL Harvest Control Rule	2015		2016		
					P* = 0.45 (Alt. 1)	P* = 0.25 (Alt. 2)	P* = 0.45 (Alt. 1)	P* = 0.25 (Alt. 2)	
OVERFISHED STOCKS									
BOCACCIO S. of 40°10'	337	349	362	SPR = 77.7%	349	349	362	362	
CANARY	119	122	125	SPR = 88.7%	122	122	125	125	
COWCOD S. of 40°10'	3	10	10	SPR = 82.7% (F = 0.007); ACT = 4 mt	10	10	10	10	
DARKBLOTCHED	330	338	346	SPR = 64.9%	338	338	346	346	
PACIFIC OCEAN PERCH	153	158	164	SPR = 86.4%	158	158	164	164	
PETRALE SOLE	2,652	2,816	2,910	25-5 rule	2,816	2,310	2,910	2,386	
YELLOWEYE	18	18	19	SPR = 76.0%	18	18	19	19	
NON-DEPLETED STOCKS									
Arrowtooth Flounder	5,758	5,497	5,328	ACL = ABC (P* = 0.4)	6,025	4,058	5,840	3,934	
Black Rockfish (OR-CA)	1,000	1,000	1,000	Constant catch strategy	1,000	922	1,000	927	
Black Rockfish (WA)	409	402	404	ACL = ABC (P* = 0.45)	402	330	404	332	
Cabazon (CA)	158	154	151	ACL = ABC (P* = 0.45)	154	126	151	124	
Cabazon (OR)	47	47	47	ACL = ABC (P* = 0.45)	47	38	47	38	
California scorpionfish	117	114	111	ACL = ABC (P* = 0.45)	114	93	111	91	
Chilipepper S. of 40°10'	1,647	1,628	1,619	ACL = ABC (P* = 0.45)	1,628	1,335	1,619	1,328	
Dover Sole	25,000	25,000	25,000	Constant catch strategy; alt. ACL = 50,000 mt	25,000	25,000	25,000	25,000	
English Sole	5,646	11,040	7,754	ACL = ABC (P* = 0.45)	11,040	7,437	7,754	5,223	
Lingcod N. of 40°10'	2,635	2,830	2,719	ACL = ABC (P* = 0.45)	2,830	2,172	2,719	2,089	
Lingcod S. of 40°10'	1,063	1,004	946	ACL = ABC (P* = 0.4)	1,100	741	1,037	699	
Longnose skate	2,000	2,000	2,000	Constant catch strategy	2,000	1,920	2,000	1,885	
Longspine Thornyhead N. of 34°27'	1,958	3,170	3,015	ACL = 76% of coastwide ABC (P* = 0.4)	3,474	2,340	3,305	2,226	
Longspine Thornyhead S. of 34°27'	347	1,001	952	ACL = 24% of coastwide ABC (P* = 0.4)	1,097	739	1,044	703	
Pacific Cod	1,600	1,600	1,600	ACL = 50% of OFL	1,600	1,213	1,600	1,213	
Sablefish N. of 36°	4,349	4,793	5,241	40-10 rule applied to 73.6% of coastwide ABC (P* = 0.4)	5,012	4,114	5,467	4,540	

Stock	Status Quo ACL	Preliminary Preferred ACLs (Alt. 3)			ACLs Varied by the Overfishing Probability (P*)			
	2014	2015	2016	ACL Harvest Control Rule	2015		2016	
					P* = 0.45 (Alt. 1)	P* = 0.25 (Alt. 2)	P* = 0.45 (Alt. 1)	P* = 0.25 (Alt. 2)
Sablefish S. of 36°	1,560	1,719	1,880	40-10 rule applied to 26.4% of coastwide ABC (P* = 0.4)	1,798	1,475	1,961	1,629
Shortbelly	50	50	50	De minimis ACL to accommodate incidental bycatch and allow harvestable surplus to be available as forage	50	50	50	50
Shortspine Thornyhead N. of 34°27'	1,525	1,745	1,726	ACL = 65.4% of coastwide ABC (P* = 0.4)	1,913	1,288	1,892	1,275
Shortspine Thornyhead S. of 34°27'	393	923	913	ACL = 34.6% of coastwide ABC (P* = 0.4)	1,012	682	1,001	674
Spiny dogfish		1,912	1,897	ACL = ABC (P* = 0.35)	2,303	1,551	2,285	1,540
Splitnose S. of 40°10'	1,670	1,715	1,746	ACL = ABC (P* = 0.45)	1,715	1,406	1,746	1,432
Starry Flounder	1,528	1,534	1,539	ACL = ABC (P* = 0.4)	1,681	1,132	1,686	1,136
Widow	1,500	1,500	1,500	Constant catch strategy; alt. ACL = 3,000 mt	1,500	1,500	1,500	1,500
Yellowtail N. of 40°10'	4,382	11,213	10,634	ACL = ABC (P* = 0.45)	11,213	7,553	10,634	7,163
STOCK COMPLEXES								
Nearshore Rockfish North	94	69	69	ACL = ABC (P* = 0.45); 40-10 adj. ACL contrib. for blue RF in CA and China RF	69	40	69	41
Shelf Rockfish North	968	1,944	1,952	ACL = ABC (P* = 0.45); 40-10 adj. ACL contrib. for greenspotted RF in CA	1,944	1,142	1,952	1,148
Slope Rockfish North	1,160	1,669	1,683	ACL = ABC (P* = 0.45)	1,669	1,215	1,683	1,227
Nearshore Rockfish South	990	1,114	1,006	ACL = ABC (P* = 0.45); 40-10 adj. ACL contrib. for blue RF N of 34°27' N lat.	1,114	696	1,006	684
Shelf Rockfish South	714	1,624	1,625	ACL = ABC (P* = 0.45); 40-10 adj. ACL contrib. for greenspotted RF in CA	1,624	802	1,625	803
Slope Rockfish South	622	687	689	ACL = ABC (P* = 0.45); 40-10 adj. ACL contrib. for blackgill RF	687	384	689	386
Other Flatfish	4,884	8,620	7,496	ACL = ABC (P* = 0.4)	9,865	5,606	8,633	4,775
Other Fish	4,697	This complex no longer exists			NA	NA	NA	NA
<i>Cabezon (WA) a/</i>	NA	3.7	4.0	ACL = ABC (P* = 0.45)	3.7	1.7	4.0	1.8
<i>Kelp greenling (CA) a/</i>	NA	99.2	99.2	ACL = ABC (P* = 0.45)	99.2	45.1	99.2	45.1
<i>Kelp greenling (OR) a/</i>	NA	11.7	12.9	ACL = ABC (P* = 0.45)	11.7	5.3	12.9	6.3
<i>Kelp greenling (WA) a/</i>	NA	21.8	19.7	ACL = ABC (P* = 0.4)	26.2	11.9	23.7	10.8
<i>Leopard shark a/</i>	NA	139.4	139.4	ACL = ABC (P* = 0.45)	139.4	63.3	139.4	63.3

Stock	Status Quo ACL	Preliminary Preferred ACLs (Alt. 3)			ACLs Varied by the Overfishing Probability (P*)			
	2014	2015	2016	ACL Harvest Control Rule	2015		2016	
					P* = 0.45 (Alt. 1)	P* = 0.25 (Alt. 2)	P* = 0.45 (Alt. 1)	P* = 0.25 (Alt. 2)
ECOSYSTEM COMPONENT SPECIES								
Big skate	No harvest specifications for an EC species							
California skate								
Aleutian skate								
Roughtail/black skate								
Bering/sandpaper skate								
All other skates (other than longnose)								
Pacific grenadier								
Giant grenadier								
All other grenadiers								
Ratfish								
Soupfin shark								
Finescale codling								

a/ These stocks have been managed in the Other Fish complex and are contemplated for individual stock management or in a new shallow roundfish stock complex in 2015-2016.

Table 5. Estimated time to rebuild and exploitation rate relative to alternative 2015-2016 ACLs for cowcod south of 40°10' N lat.

Stock	Current T _{TARGET}	Current SPR or Harvest Control Rule	PPA T _{TARGET}	ACL Alt.	ACLs (mt)		SPR or Harvest Control Rule	Median Time to Rebuild	Rebuilding Duration Beyond T@F=0 (yrs.)	Prob. of Rebuilding by T _{target}	Prob. of Rebuilding by T _{max}
					2015	2016					
Cowcod	2068	82.7%	X		0	0	E = 0	2019	0	95.9%	93.8%
					1.8	1.9	E = 0.0013	2019	0	95.2%	93.0%
					2.4	2.5	E = 0.0018	2019	0	95.0%	92.7%
					3.0	3.1	E = 0.0022	2019	0	94.7%	92.4%
					3.7	3.8	E = 0.0027	2019	0	94.4%	91.9%
				PPA ACT	4.3	4.4	E = 0.0031	2019	0	94.0%	91.5%
					4.9	5.0	E = 0.0036	2019	0	93.4%	91.3%
					5.5	5.6	E = 0.0040	2019	0	93.4%	91.0%
					6.1	6.3	E = 0.0045	2019	0	93.1%	90.6%
					6.7	6.9	E = 0.0049	2019	0	92.7%	90.2%
					7.3	7.5	E = 0.0054	2019	0	92.4%	89.8%
					7.9	8.1	E = 0.0058	2019	0	92.0%	89.6%
					8.5	8.8	E = 0.0063	2019	0	91.5%	89.2%
					9.1	9.4	E = 0.0067	2019	0	91.2%	88.8%
				PPA ACL	9.5	9.8	E = 0.007	2020	1	90.9%	88.4%
					9.7	10.0	E = 0.0072	2020	1	90.9%	88.5%
	55.8	55.8	E = 0.0409	2039	20	55.0%	53.4%				
	62.5	62.2	E = 0.0458	2057	38	51.4%	50.0%				

Table 6. Proposed annual catch limits and alternative state harvest guidelines for the Nearshore Rockfish complex north of 40°10' N lat. in 2015 and 2016 (as adopted for analysis in November 2013^{a/}).

Year	ACL (mt)	Basis for HG	N CA		OR		WA		OR + WA	
			HG (mt)	%	HG (mt)	%	HG (mt)	%	HG (mt)	%
2015	69	Prop. of cum. catch	36.1	52.6%	28.1	40.9%	4.5	6.5%	32.6	47.4%
2016	69	Prop. of cum. catch	36.4	52.6%	28.3	40.9%	4.5	6.5%	32.8	47.4%

a/ See Agenda Item C.4.b, WDFW Report for additional alternative HGs for the northern Nearshore Rockfish complex.

Table 7. Proposed annual catch limits and alternative state harvest guidelines for China rockfish north of 40°10' N lat. in 2015 and 2016 as adopted for analysis in November 2013 (P* = 0.45; 40-10 adj.).

Year	ACL (mt) a/	Basis for HG	N CA		OR		WA		OR + WA	
			HG (mt)	%	HG (mt)	%	HG (mt)	%	HG (mt)	%
2015	6.2	Prop. of cum. catch	0.9	15.3%	4.2	66.9%	1.1	17.9%	5.3	84.7%
		Prop of highest rec. catch	0.7	10.5%	3.5	55.5%	2.1	34.0%	5.6	89.5%
		Prop. of highest comm. catch	1.0	16.6%	5.2	83.4%	0.0	0.0%	5.2	83.4%
2016	6.5	Prop. of cum. catch	1.0	15.3%	4.3	66.9%	1.2	17.9%	5.5	84.7%
		Prop of highest rec. catch	0.7	10.5%	3.6	55.5%	2.2	34.0%	5.8	89.5%
		Prop. of highest comm. catch	1.1	16.6%	5.4	83.4%	0.0	0.0%	5.4	83.4%

a/ Annual catch limits adjusted from the ABCs (cat. 2/P* = 0.45) using the 40-10 harvest control rule.

Table 8. Proposed blue rockfish harvest guidelines for California fisheries in 2015 and 2016.

Area	OFL contribution by area		ABC contribution by area		40-10 adjusted HG contribution by area	
			P* = 0.45 a/		P* = 0.45 a/	
	2015	2016	2015	2016	2015	2016
40°10' - 42° N lat.	27.4	27.7	25.0	25.3	17.0	17.5
34°27' - 40°10' N lat.	188.6	190.3	172.2	173.8	116.6	120.0
South of 34°27' N lat. (unassessed area)	72.9	72.9	60.8	60.8	60.8	60.8
Total for CA	288.9	290.9	258.0	259.8	194.4	198.3

a/ Harvest specifications based on the ABCs determined using a P* = 0.45 are preferred.

Table 9. Proposed 2015 and 2016 OFL and ABC contributions (in mt), and proposed harvest guidelines (in mt) for blackgill rockfish south of 40°10' N lat.

Stock	2015 OFL contribution	2015 ABC contribution	2015 HG a/	2016 OFL contribution	2016 ABC contribution	2016 HG a/
Blackgill Rockfish S of 40°10'	137	125	114	140	128	117

a/ Harvest guideline is based on the 40-10 adjustment from the preferred ABC.

Table 10. Alternative 3 – Preliminary Preferred Alternative (PPA). 2015 ACLs and estimates of tribal (Trib), EFP, research (Res.), and incidental open access (OA) groundfish mortality in metric tons, used to calculate the fishery harvest guideline (HG), under Alternative 3.

Species	Area	ACL	Tribal	EFP	Research	OA	Fishery HG
BOCACCIO	S of 40°10' N. lat.	349		3	4.6	0.7	340.7
CANARY	Coastwide	122	7.7	1	4.5	2	106.8
COWCOD	S of 40°10' N. lat.	10		0.015	2		7.98
DARKBLOTCHED	Coastwide	338	0.2	0.1	2.1	18.4	317.2
PETRALE SOLE	Coastwide	2,816	220		14.2	2.4	2,579.4
POP	N of 40°10' N. lat.	158	9.2		5.2	0.6	143.0
YELLOWEYE	Coastwide	18	2.3	0.03	3.3	0.2	12.2
Arrowtooth flounder	Coastwide	5,497	2,041		16.39	30	3,409.6
Black	N of 46°16' N. lat.	402	14				388.0
Black	S of 46°16' N. lat.	1,000		1			999.0
Cabezon	OR	47					47.0
Cabezon	CA	154					154.0
Cabezon	WA	XXX					XXX
California	S of 34°27' N. lat.	114				2	112.0
Chilipepper	S of 40°10' N. lat.	1,628		10	9	5	1,604.0
Dover sole	Coastwide	25,000	1,497		41.9	55	23,406.1
English sole	Coastwide	11,040	91		5.8	7	10,936.2
Kelp Greenling	CA	99					99.2
Kelp Greenling	OR	12					11.7
Kelp Greenling	WA	21.8					21.8
Leopard Shark	Coastwide	139					139.4
Lingcod	N of 40°10' N. lat.	2,830	250	0.5	11.67	16	2,551.8
Lingcod	S of 40°10' N. lat.	1,004		1.0	1.1	7	994.9
Longnose skate	Coastwide	2,000	56		13.18	3.8	1,927.0
Longspine	N of 34°27' N. lat.	3,170	30		13.5	3	3,123.5
Longspine	S of 34°27' N. lat.	1,001			1	2	998.0
Pacific cod	Coastwide	1,600	400		7.04	2	1,191.0
Sablefish	N of 36° N. lat.	4,793			See Table 14		
Sablefish	S of 36° N. lat.	1,719			3	2	1,714.0
Shortbelly	Coastwide	50			2		48.0
Shortspine	N of 34°27' N. lat.	1,745	50		7.22	2	1,685.8
Shortspine	S of 34°27' N. lat.	923			1	41	881.0
Spiny Dogfish	Coastwide	1,912	111.8	1	12.5	49.53	1,737.2
Splitnose	S of 40°10' N. lat.	1,715		1.5	9		1,704.5
Starry flounder	Coastwide	1,534	2			8.3	1,523.7
Widow	Coastwide	1,500	60	9	7.9	3.3	1,419.8
Yellowtail	N of 40°10' N. lat.	11,213	677	10	16.6	3	10,506.4
Nearshore rockfish N.	N of 40°10' N. lat.	69					69.0
Nearshore rockfish S.	S of 40°10' N. lat.	1,114			2.6	1.4	1,110.0
Shelf rockfish N.	N of 40°10' N. lat.	1,944	30	3	13.4	26	1,871.6
Shelf rockfish S.	S of 40°10' N. lat.	1,624		30	9.6	9	1,575.4
Slope rockfish N.	N of 40°10' N. lat.	1,669	36	1	8.1	19	1,604.9
Slope rockfish S.	S of 40°10' N. lat.	687		1	2	17	667.0
Other flatfish	Coastwide	8,620	60		19	125	8,416.0

Table 11. Alternative 3 – PPA. Stock specific fishery harvest guidelines (HG) or annual catch targets (ACT) and allocations for 2015 (in mt).

Species	Area	Fishery HG or ACT	Allocation Type	Trawl		Non-trawl	
				%	Mt	%	Mt
BOCACCIO	S of 40°10' N. lat.	340.7	Biennial	N/A	81.9	N/A	258.8
CANARY	Coastwide	106.8	Biennial	N/A	56.9	N/A	49.9
COWCOD a/	S of 40°10' N. lat.	4.0	Biennial	N/A	1.4	N/A	2.6
DARKBLOTCHED	Coastwide	317.2	Amendment 21	95%	301.3	5%	15.9
PETRALE SOLE	Coastwide	2,579.4	Biennial	N/A	2,544.4	N/A	35.0
POP	N of 40°10' N. lat.	143.0	Amendment 21	95%	135.9	5%	7.2
YELLOWEYE	Coastwide	12.2	Biennial	N/A	1.0	N/A	11.2
Arrowtooth flounder	Coastwide	3,409.6	Amendment 21	95%	3,239.1	5%	170.5
Black	N of 46°16' N. lat.	388.0	None				
Black	S of 46°16' N. lat.	999.0	None				
Cabezon	OR	47.0	None				
Cabezon	CA	154.0	None				
Cabezon	WA	XXX	None				
California	S of 34°27' N. lat.	112.0	None				
Chilipepper	S of 40°10' N. lat.	1,604.0	Amendment 21	75%	1,203.0	25%	401.0
Dover sole	Coastwide	23,406.1	Amendment 21	95%	22,235.8	5%	1,170.3
English sole	Coastwide	10,936.2	Amendment 21	95%	10,389.4	5%	546.8
Kelp Greenling	CA	99.2	None				
Kelp Greenling	OR	11.7	None				
Kelp Greenling	WA	21.8	None				
Leopard Shark	Coastwide	139.4	None				
Lingcod	N of 40°10' N. lat.	2,551.8	Amendment 21	45%	1,148.3	55%	1,403.5
Lingcod	S of 40°10' N. lat.	994.9	Amendment 21	45%	447.7	55%	547.2
Longnose skate	Coastwide	1,927.0	Biennial	90%	1,734.3	10%	192.7
Longspine	N of 34°27' N. lat.	3,123.5	Amendment 21	95%	2,967.3	5%	156.2
Longspine	S of 34°27' N. lat.	998.0	None				
Pacific cod	Coastwide	1,191.0	Amendment 21	95%	1,131.4	5%	59.5
Sablefish	N of 36° N. lat.		See Table 1 c				
Sablefish	S of 36° N. lat.	1,714.0	Amendment 21	42%	719.9	58%	994.1
Shortbelly	Coastwide	48.0	None				0.0
Shortspine	N of 34°27' N. lat.	1,685.8	Amendment 21	95%	1,601.5	5%	84.3
Shortspine	S of 34°27' N. lat.	881.0	Amendment 21	NA	50.0	NA	831.0
Spiny Dogfish	Coastwide	1,737.2	None				
Splitnose	S of 40°10' N. lat.	1,704.5	Amendment 21	95%	1,619.3	5%	85.2
Starry flounder	Coastwide	1,523.7	Amendment 21	50%	761.9	50%	761.9
Widow	Coastwide	1,419.8	Amendment 21	91%	1,292.0	9%	127.8
Yellowtail	N of 40°10' N. lat.	10,506.4	Amendment 21	88%	9,245.6	12%	1,260.8
Nearshore rockfish N.	N of 40°10' N. lat.	69.0	None				
Nearshore rockfish S.	S of 40°10' N. lat.	1,110.0	None				
Other flatfish	Coastwide	8,416.0	Amendment 21	90%	7,574.4	10%	841.6
Shelf rockfish N.	N of 40°10' N. lat.	1,871.6	Biennial	60.2%	1,126.7	39.8%	744.9
Shelf rockfish S.	S of 40°10' N. lat.	1,575.4	Biennial	12.2%	192.2	87.8%	1,383.2
Slope rockfish N.	N of 40°10' N. lat.	1,604.9	Amendment 21	81%	1,300.0	19%	304.9
Slope rockfish S.	S of 40°10' N. lat.	667.0	Amendment 21	63%	420.2	37%	246.8

a/ The cowcod fishery harvest guideline is further reduced to an ACT of 4 mt.

Table 12. Alternative 3 - PPA. 2016 ACLs and estimates of tribal (Trib), EFP, research (Res.), and incidental open access (OA) groundfish mortality in metric tons, used to calculate the fishery harvest guideline (HG), under Alternative 3.

Species	Area	ACL	Tribal	EFP	Research	OA	Fishery HG
BOCACCIO	S of 40°10' N. lat.	362		3	4.6	0.7	353.7
CANARY	Coastwide	125	7.7	1	4.5	2	109.8
COWCOD	S of 40°10' N. lat.	10		0.015	2		7.98
DARKBLOTCHED	Coastwide	346	0.2	0.1	2.1	18.4	325.2
PETRALE SOLE	Coastwide	2,910	220		14.2	2.4	2,673.4
POP	N of 40°10' N. lat.	164	9.2		5.2	0.6	149.0
YELLOWEYE	Coastwide	19	2.3	0.03	3.3	0.2	13.2
Arrowtooth flounder	Coastwide	5,328	2,041		16.39	30	3,240.6
Black	N of 46°16' N. lat.	404	14				390.0
Black	S of 46°16' N. lat.	1,000		1			999.0
Cabazon	OR	47					47.0
Cabazon	CA	151					151.0
Cabazon	WA	XXX					XXX
CA scorpionfish	S of 34°27' N. lat.	111				2	109.0
Chilipepper	S of 40°10' N. lat.	1,619		10	9	5	1,595.0
Dover sole	Coastwide	25,000	1,497		41.9	55	23,406.1
English sole	Coastwide	7,754	91		5.8	7	7,650.2
Kelp Greenling	CA	99					99.2
Kelp Greenling	OR	13					12.9
Kelp Greenling	WA	19.7					19.7
Leopard Shark	Coastwide	139					139.4
Lingcod	N of 40°10' N. lat.	2,719	250	0.5	11.67	16	2,440.8
Lingcod	S of 40°10' N. lat.	946		1.0	1.1	7	936.9
Longnose skate	Coastwide	2,000	56		13.18	3.8	1,927.0
Longspine	N of 34°27' N. lat.	3,015	30		13.5	3	2,968.5
Longspine	S of 34°27' N. lat.	952			1	2	949.0
Pacific cod	Coastwide	1,600	400		7.04	2	1,191.0
Sablefish	N of 36° N. lat.	5,241			See Table 14		
Sablefish	S of 36° N. lat.	1,880			3	2	1,875.0
Shortbelly	Coastwide	50			2		48.0
Shortspine	N of 34°27' N. lat.	1,726	50		7.22	2	1,666.8
Shortspine	S of 34°27' N. lat.	913			1	41	871.0
Spiny Dogfish	Coastwide	1,897	111.8	1	12.5	49.53	1,722.2
Splitnose	S of 40°10' N. lat.	1,746		1.5	9		1,735.5
Starry flounder	Coastwide	1,539	2			8.3	1,528.7
Widow	Coastwide	1,500	60	9	7.9	3.3	1,419.8
Yellowtail	N of 40°10' N. lat.	10,634	677	10	16.6	3	9,927.4
Nearshore rockfish N.	N of 40°10' N. lat.	69					69.0
Nearshore rockfish S.	S of 40°10' N. lat.	1,006			2.6	1.4	1,002.0
Shelf rockfish N.	N of 40°10' N. lat.	1,952	30	3	13.4	26	1,879.6
Shelf rockfish S.	S of 40°10' N. lat.	1,625		30	9.6	9	1,576.4
Slope rockfish N.	N of 40°10' N. lat.	1,683	36	1	8.1	19	1,618.9
Slope rockfish S.	S of 40°10' N. lat.	689		1	2	17	669.0
Other flatfish	Coastwide	7,496	60		19	125	7,292.0

Table 13. Alternative 3 – Preliminary Preferred Alternative. Stock specific fishery harvest guidelines (HG) or annual catch targets (ACT) and allocations for 2016 (in mt).

Species	Area	Fishery HG	Allocation	Trawl		Non-trawl	
				%	Mt	%	Mt
BOCACCIO	S of 40°10' N. lat.	353.7	Biennial	N/A	85.0	N/A	268.7
CANARY	Coastwide	109.8	Biennial	N/A	56.9	N/A	49.9
COWCOD a/	S of 40°10' N. lat.	4.0	Biennial	N/A	1.4	N/A	2.6
DARKBLOTCHED	Coastwide	325.2	Amendment	95%	308.9	5%	16.3
PETRALE SOLE	Coastwide	2,673.4	Biennial	N/A	2,638.4	N/A	35.0
POP	N of 40°10' N.	149.0	Amendment	95%	141.6	5%	7.5
YELLOWEYE	Coastwide	13.2	Biennial	N/A	1.0	N/A	11.2
Arrowtooth flounder	Coastwide	3,240.6	Amendment	95%	3,078.6	5%	162.0
Black	N of 46°16' N.	390.0	None				
Black	S of 46°16' N. lat.	999.0	None				
Cabazon	OR	47.0	None				
Cabazon	CA	151.0	None				
Cabazon	WA	XXX	None				
California	S of 34°27' N. lat.	109.0	None				
Chilipepper	S of 40°10' N. lat.	1,595.0	Amendment	75%	1,196.3	25%	398.8
Dover sole	Coastwide	23,406.	Amendment	95%	22,235.	5%	1,170.
English sole	Coastwide	7,650.2	Amendment	95%	7,267.7	5%	382.5
Kelp Greenling	CA	99.2	None				
Kelp Greenling	OR	12.9	None				
Kelp Greenling	WA	19.7	None				
Leopard Shark	Coastwide	139.4	None				
Lingcod	N of 40°10' N.	2,440.8	Amendment	45%	1,098.4	55%	1,342.
Lingcod	S of 40°10' N. lat.	936.9	Amendment	45%	421.6	55%	515.3
Longnose skate	Coastwide	1,927.0	Biennial	90%	1,734.3	10%	192.7
Longspine	N of 34°27' N.	2,968.5	Amendment	95%	2,820.1	5%	148.4
Longspine	S of 34°27' N. lat.	949.0	None				
Pacific cod	Coastwide	1,191.0	Amendment	95%	1,131.4	5%	59.5
Sablefish	N of 36° N. lat.	0.0	See Table 1 c				
Sablefish	S of 36° N. lat.	1,875.0	Amendment	42%	787.5	58%	1,087.
Shortbelly	Coastwide	48.0	None				0.0
Shortspine	N of 34°27' N.	1,666.8	Amendment	95%	1,583.4	5%	83.3
Shortspine	S of 34°27' N. lat.	871.0	Amendment	NA	50.0	NA	821.0
Spiny Dogfish	Coastwide	1,722.2	None				
Splitnose	S of 40°10' N. lat.	1,735.5	Amendment	95%	1,648.7	5%	86.8
Starry flounder	Coastwide	1,528.7	Amendment	50%	764.4	50%	764.4
Widow	Coastwide	1,419.8	Amendment	91%	1,292.0	9%	127.8
Yellowtail	N of 40°10' N.	9,927.4	Amendment	88%	8,736.1	12%	1,191.
Nearshore rockfish	N of 40°10' N.	69.0	None				
Nearshore rockfish	S of 40°10' N. lat.	1,002.0	None				
Other flatfish	Coastwide	7,292.0	Amendment	90%	6,562.8	10%	729.2
Shelf rockfish N.	N of 40°10' N.	1,879.6	Biennial	60.2	1,131.5	39.8	748.1
Shelf rockfish S.	S of 40°10' N. lat.	1,576.4	Biennial	12.2	192.3	87.8	1,384.
Slope rockfish N.	N of 40°10' N.	1,618.9	Amendment	81%	1,311.3	19%	307.6
Slope rockfish S.	S of 40°10' N. lat.	669.0	Amendment	63%	421.5	37%	247.5

a/ The cowcod fishery harvest guideline is further reduced to an ACT of 4 mt.

Table 14. Alternative 3 – Preliminary Preferred Alternative. Sablefish north of 36° N. latitude ACLs, set-asides used to calculate the commercial harvest guideline (mt) for 2015-2016 under Alternative 3.

Year	ACL	Tribal Share a/	Res.	Rec	EFP	Non-Tribal Comm. Share
2015	4,793	479	26	6.1	1	4,281
2016	5,241	524	26	6.1	1	4,684

a/ The sablefish allocation to Pacific coast treaty Indian Tribes is 10 percent of the sablefish ACL for the area north of 36° N. lat. This allocation represents the total amount available to the treaty Indian fisheries before deductions for discard mortality.

Table 15. Alternative 3 – Preliminary Preferred. At-sea whiting set-asides under the Preferred Alternative. The No Action set-aside values are provided for reference.

Alternative			No Action Set-Asides
Species	Area	Total Set-Asides (mt)	Total Set-Asides (mt)
PETRALE SOLE	Coastwide	5	5
YELLOWEYE	Coastwide	0	0
Arrowtooth flounder	Coastwide	45	20
Dover sole	Coastwide	5	5
English sole	Coastwide	5	5
Lingcod	N of 40°10' N. lat.	15	15
Longnose skate	Coastwide	5	5
Longspine thornyhead	N of 34°27' N. lat.	5	5
Pacific cod	Coastwide	5	5
Pacific halibut a/	Coastwide	10	10
Sablefish	N of 36° N. lat.	50	50
Shortspine thornyhead	N of 34°27' N. lat.	20	20
Starry flounder	Coastwide	5	5
Yellowtail	N of 40°10' N. lat.	300	300
Shelf rockfish north	N of 40°10' N. lat.	35	35
Slope rockfish north	N of 40°10' N. lat.	100	100
Other Fish b/	Coastwide	TBD	520
Spiny Dogfish	Coastwide	TBD	N/A
Other flatfish	Coastwide	20	20

a/As stated in §660.55 (m), the Pacific halibut set-aside is 10 mt, to accommodate bycatch in the at-sea Pacific whiting fisheries and in the shorebased trawl sector south of 40°10' N. latitude (estimated to 5 mt each).

b/ In 2014, spiny dogfish was managed as part of the Other Fish complex. Under the Preferred Alternative, starting in 2015-2016, spiny dogfish will be managed separately.

Table 16. Preliminary preferred set-asides and allocations for overfished species.

	Bocaccio		Canary		Cowcod		Darkblotched		POP		Petrale		Yelloweye	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
ACL	349	362	122	125	10	10	338	346	158	164	2,816	2,910	18	19
Set-Asides Total	8.3	8.3	15.2	15.2	2.0	2.0	20.8	20.8	15.0	15.0	236.6	236.6	5.83	5.83
Tribal			7.7	7.7	0	0	0.2	0.2	9.2	9.2	220	220	2.3	2.3
EFP	3	3	1	1	0.015	0.015	0.1	0.1					0.03	0.03
Research	4.6	4.6	4.5	4.5	2	2	2.1	2.1	5.2	5.2	14.2	14.2	3.3	3.3
Open Access	0.7	0.7	2	2	0	0	18.4	18.4	0.6	0.6	2.4	2.4	0.2	0.2
Fishery HG	340.7	353.7	106.8	109.8	4.0	4.0	317.2	325.2	143.0	149.0	2,579.4	2,673.4	12.2	13.2
Trawl Total	81.9	85.0	56.9	58.5	1.4	1.4	301.3	308.9	135.9	141.6	2,544.4	2,638.4	1.0	1.1
Shorebased IFQ	81.9	85.0	43.3	44.5	1.4	1.4	285.6	293.0	118.5	124.0	2,539.4	2,633.4	1.0	1.1
At-Sea Whiting	0.0		13.7	14.0			15.7	16.1	17.4	17.4	5	5		
C-P	0.0		8.0	8.2			9.2	9.5	10.2	10.2				
Mothership	0.0		5.6	5.8			6.5	6.7	7.2	7.2				
Non-Trawl Total	258.8	268.7	49.9	51.3	2.6	2.6	15.9	16.3	7.2	7.5	35.0	35.0	11.2	12.1
Non-Nearshore	79.1	82.1	3.8	3.9									1.1	1.2
Nearshore FG	1.0	1.0	6.7	6.9									1.2	1.3
WA Rec a/	0.0	0.0	3.4	3.5									2.9	3.1
OR Rec a/	0.0	0.0	11.7	12.0									2.6	2.8
CA Rec	178.8	185.6	24.3	25.0									3.4	3.7

a/ Values represent HGs which may be adjusted within the non-trawl allocation.

Table 17. Alternative 3 – Shorebased IFQ. IFQ species and Pacific halibut allocations or set-asides under Alternative 3 for 2015 and 2016. No action allocations are provided in the right panel.

IFQ Species	Area	Alt 3-2015 SB IFQ Allocation (mt) a/ b/	Alt 3-2016 SB IFQ Allocation (mt) a/ b/	No Action – 2014 SB IFQ Allocation (mt)
BOCACCIO	South of 40°10' N. lat.	81.9	85.0	79.0
CANARY	Coastwide	43.3	44.5	41.1
COWCOD	South of 40°10' N. lat.	1.4	1.4	1.0
DARKBLOTCHED	Coastwide	285.6	292.8	278.4
PETRALE	Coastwide	2,539.4	2,633.4	2,378.0
POP	North of 40°10' N. lat.	118.5	124.2	112.3
YELLOWEYE	Coastwide	1.0	1.1	1.0
Arrowtooth flounder	Coastwide	3,194	3,033	3,467
Chilipepper rockfish	South of 40°10' N. lat.	1,203	1,196	1,067
Dover sole	Coastwide	22,231	22,231	22,235
English sole	Coastwide	10,384	7,263	5,261
Lingcod	North of 40°10' N. lat.	1,133	1,083	1,152
Lingcod	South of 40°10' N. lat.	448	422	473
Longspine thornyheads	North of 34°27' N. lat	2,962	2,815	1,811
Pacific cod	Coastwide	1,126	1,126	1,126
Pacific halibut a/	North of 40°10' N. lat.	45 max	45 max	60 max
Pacific halibut b/	South of 40°10' N. lat.	10	10	10
Sablefish	North of 36° N. lat.	2,199	2,411	1,988
Sablefish	South of 36° N. lat.	720	788	653
Shortspine thornyheads	North of 34°27' N.	1,581	1,563	1,372
Shortspine thornyheads	South of 34°27' N	50	50	50
Splitnose rockfish	South of 40°10' N. lat.	1,619	1,649	1,575
Starry flounder	Coastwide	757	759	756
Widow rockfish	Coastwide	1,002	1,002	994
Yellowtail rockfish	North of 40°10' N. lat.	8,946	8,436	2,939
Shelf rockfish	North of 40°10' N. lat.	1,091	1,097	508
Shelf rockfish	South of 40°10' N. lat.	192	192	81
Slope rockfish	North of 40°10' N. lat.	1,200	1,211	789
Slope rockfish	South of 40°10' N. lat.	427	428	379
Other flatfish	Coastwide	7,554	6,543	4,190

a/ Pacific halibut is managed using IBQ, see regulations at §660.140. Starting in 2015, the maximum IBQ allocation of legal sized fish is 45 mt, see (§660.55 (m)).

b/ As stated in regulations (§660.55 (m)), a Pacific halibut set-aside of 10 mt, to accommodate bycatch in the at-sea Pacific whiting fisheries and in the shorebased trawl sector south of 40°10 N. latitude. (estimated to be 5 mt each).