

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT
 ON LINGCOD SOUTH OF 40°10' N. LAT.**

At the March 2019 meeting, the Pacific Fishery Management Council (Council) discussed the recreational lingcod bag limit south of 40°10' N lat., and the projected catches against established reference points. At that time, complete 2018 catch data was not available to evaluate catch projections against the 2019 and 2020 non-trawl allocation. The Council requested CDFW provide updated catch projections at the April Council meeting.

Background

The lingcod Harvest Guideline south of 40°10' N lat. is formally allocated between the trawl and non-trawl sectors, as determined by the Amendment 21 Intersector allocation scheme. While the trawl sector has harvested less than 10 percent of its allocation each year from 2013 through 2018, the non-trawl sector has had high attainment in these years and exceeded its allocation in 2015 and 2016 (Table 1). In 2017, a less optimistic outlook for the southern portion of the stock resulted in harvest limit reductions for 2019 and 2020 for both the trawl and non-trawl sectors, consistent with the Amendment 21 allocations.

Table 1. Harvest specifications, allocations, and catch for lingcod south of 40°10' N lat. for 2013-2020 (mt) for the trawl and non-trawl sectors. Data are from RecFIN, CA Marine Landings Database System (MLDS), and WCGOP.

Year	ACL	Harvest Guideline	Trawl Alloc.	Trawl catch	% of Trawl Alloc.	Non-Trawl Alloc.	Non-Trawl catch	% of Non-Trawl Alloc.
2013	1,111	1,102	495.9	13.7	2.8%	606.1	417.6	68.9%
2014	1,063	1,054	474.3	16.1	3.4%	579.7	550.3	94.9%
2015	1,004	995	447.7	29.1	6.5%	547.2	685.0	125.2%
2016	946	937	421.3	21.8	5.2%	515.3	639.2	124.0%
2017	1,251	1,242	558.9	22.6	4.0%	683.1	514.9	75.4%
2018	1,144	1,135	510.8	43.8	8.6%	624.3	522.4	83.7%
2019	1,039	1,028	462.5			565.2		
2020	869	858	386			471.7		

Analyses completed in January 2018 for the 2019-2020 specifications and management measures suggested that reducing both the recreational bag limit to one fish and the open access (OA) commercial trip limits would be needed to ensure impacts did not exceed the non-trawl allocation in 2020 (Table 2). Those analyses utilized fishery data from 2015-2016, the most recent fishery data available at the time.

Table 2. Non-trawl recreational lingcod bag limit, recreational and non-trawl commercial catch, and harvest limits south of 40°10' N lat. from 2005-2018, and projections for 2019-2020 made in 2017. Data are from RecFIN, CA MLDS, and WCGOP.

Year	Bag Limit	Rec. Catch	Com. Non-Trawl Catch ¹	Total Non-Trawl Catch ¹	Non-Trawl Alloc ¹	Non-Trawl Attainment ¹
2005	2	333.0				
2006	2	270.0				
2007	2	137.8				
2008	2	84.6				
2009	2	97.7				
2010	2	79.7				
2011	2	187.7				
2012	2	235.4				
2013	2	381.3	36.3	417.6	606	69%
2014	2	492.4	57.9	550.3	579	95%
2015	3	602.9	82.1	685.0	547.2	125%
2016	3	582.9	59.4	639.2	515.3	124%
2017	2	446.8	58.3	506.6	683.1	73.9 %
2018	2	331.2	52.6	383.8	624.3	61.5%
2019	1(2)	<i>315.3 (422.4)²</i>	<i>50.1²</i>	<i>365.4 (472.5)²</i>	565.2	<i>64.6% (83.6%)²</i>
2020	1(2)	<i>315.3 (422.4)²</i>	<i>50.1²</i>	<i>365.4 (472.5)²</i>	471.7	<i>77.5% (100.2%)²</i>

¹ Prior to 2013 the non-trawl lingcod allocation was allocated north and south of the Oregon/California border (42°N lat.) and sub-allocations north and south of 40°10' N lat. did not exist. During this time lingcod was tracked for the entire state of California.

² Projected amount of catch in *italics*; recreational projections are from the RecFISH model. For 2019 and 2020, recreational catch values outside parentheses indicate projected catch based on a one fish bag limit and catch values inside parentheses indicate projected catch based on a two fish bag limit.

Updated Catch Projections

CDFW offers the following updated catch projections for 2019 and 2020 (Table 3), which include the updated catch information through 2018 shown in Table 2. Under status-quo regulations, the total non-trawl attainment is projected to be well under the non-trawl allocation both in 2019 and 2020 (46.6 and 55.9 percent, respectively).

CDFW also modeled projected non-trawl impacts under a scenario that would offer commensurate increases to fishing opportunities for both the commercial and recreational sectors. These increases are within those previously analyzed and have already been put forward for inseason consideration, or are reasonably anticipated to be put forward for consideration at future meetings. When modeling this scenario, the following assumptions were made:

1. The increased opportunities modeled for 2019 were assumed to be effective by June 1, 2019
2. Established bag and trip limit tools were coupled with recent catch information
3. A recreational bag limit of two fish
4. OA gear monthly trip limits of 500 pounds throughout the year (see attached trip limit table for reference)
5. LE fixed gear bimonthly trip limit of 1,200 pounds throughout the year (see attached trip limit table for reference)

If inseason action to increase the recreational bag limit and commercial trip limits was taken as described above, the non-trawl sector catch is projected to remain within the non-trawl allocation in 2019, but in 2020 catches are expected to slightly exceed the allocation (Table 3).

Table 3. Updated non-trawl lingcod bag limit, recreational and commercial non-trawl catch projections, and harvest limits south of 40°10' N lat. for 2019 and 2020. Data are from CDFW.

Year	Bag Limit	Rec. Catch¹	Com. Non-Trawl Catch²	Total Non-Trawl Catch^{1, 2}	Non-Trawl Alloc.	Non-Trawl Attainment^{1, 2}
2019	1(2 ³)	223.0 (398.5 ³)	40.6 (57.5 ³)	263.6 (456.0 ³)	565.2	46.6% (80.7% ³)
2020	1(2)	223.0 (411.1)	40.6 (64.3)	263.6 (475.4)	471.7	55.9% (100.8%)

¹ California Recreational Fisheries Survey data were used to model recreational projections. For 2019 and 2020, recreational catch values outside parentheses indicate projected catch based on a one fish bag limit for the full year (status quo) and catch values inside parentheses indicate projected catch based on a two fish bag limit.

² MLDS data were used to model commercial catch projections. For 2019 and 2020 commercial catch values outside parentheses indicate projected catch based on current monthly and bimonthly trip limits in the OA and LE fixed gear sectors (status quo, see current trip limit tables below). Catch values inside parentheses indicate projected catch based on increases to both the OA and LE fixed gear sectors as follows: monthly trip limit increases in the OA gear sector, and an increased bimonthly trip limit for Period 1, Period 3, and the month of December in the LE fixed gear sector.

³ Projected catch for 2019 assumes an effective date by June 1 for increases to the recreational bag limit and commercial trip limits.

Attachment: Limited Entry Fixed Gear Trip Limit Table, South of 40°10' N lat

Table 2 (South) to Part 660, Subpart E -- Non-Trawl Rockfish Conservation Areas and Trip Limits for Limited Entry Fixed Gear South of 40°10' N. lat.

Other limits and requirements apply -- Read §§660.10 through 660.399 before using this table		01/01/2019					
		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
Rockfish Conservation Area (RCA)^{1/}:							
1	40°10' N. lat. - 34°27' N. lat.	40 fm line ^{1/} - 125 fm line ^{1/}					
2	South of 34°27' N. lat.	75 fm line ^{1/} - 150 fm line ^{1/} (also applies around islands)					
See §§660.60 and 660.230 for additional gear, trip limit and conservation area requirements and restrictions. See §§660.70-660.74 and §§660.76-660.79 for conservation area descriptions and coordinates (including RCAs, YRCAs, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).							
State trip limits and seasons may be more restrictive than Federal trip limits or seasons, particularly in waters off Oregon and California.							
3	Minor Slope rockfish ^{2/} & Darkblotched rockfish	40,000 lb/ 2 months, of which no more than 1,375 lb may be blackgill rockfish			40,000 lb/ 2 months, of which no more than 1,600 lb may be blackgill rockfish		
4	Splitnose rockfish	40,000 lb/ 2 months					
5	Sablefish						
6	40°10' N. lat. - 36°00' N. lat.	1,300 lb/week, not to exceed 3,900 lb/ 2 months					
7	South of 36°00' N. lat.	2,000 lb/ week					
8	Longspine thornyhead	10,000 lb/ 2 months					
9	Shortspine thornyhead						
10	40°10' N. lat. - 34°27' N. lat.	2,000 lb/ 2 months			2,500 lb/ 2 months		
11	South of 34°27' N. lat.	3,000 lb/ 2 months					
12		5,000 lb/ month					
13	Dover sole, arrowtooth flounder, petrale sole, English sole, starry flounder, Other Flatfish ^{3/}	South of 42° N. lat., when fishing for "other flatfish," vessels using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 0.44 in (11 mm) point to shank, and up to two 1 lb (0.45 kg) weights per line, are not subject to the RCAs.					
14							
15							
16							
17	Whiting	10,000 lb/ trip					
18							
19	Minor Shelf Rockfish ^{2/} , Shortbelly rockfish, Widow rockfish (including Chilipepper between 40°10' - 34°27' N. lat.)						
20	40°10' N. lat. - 34°27' N. lat.	Minor shelf rockfish, shortbelly, widow rockfish, & chilipepper: 2,500 lb/ 2 months, of which no more than 500 lb may be any species other than chilipepper.					
21	South of 34°27' N. lat.	4,000 lb/ 2 months	CLOSED	4,000 lb/ 2 months			
22	Chilipepper						
23	40°10' N. lat. - 34°27' N. lat.	Chilipepper included under minor shelf rockfish, shortbelly and widow rockfish limits - - See above					
24	South of 34°27' N. lat.	2,000 lb/ 2 months, this opportunity only available seaward of the non-trawl RCA					
25	Canary rockfish						
26	40°10' N. lat. - 34°27' N. lat.	300 lb/ 2 months					
27	South of 34°27' N. lat.	300 lb/ 2 months	CLOSED	300 lb/ 2 months			
28	Yelloweye rockfish	CLOSED					
29	Cowcod	CLOSED					
30	Bronzespotted rockfish	CLOSED					
31	Bocaccio						
32	40°10' N. lat. - 34°27' N. lat.	1,000 lb/ 2 months					
33	South of 34°27' N. lat.	1,500 lb/ 2 months	CLOSED	1,500 lb/ 2 months			
34	Minor Nearshore Rockfish, California Black rockfish, & Oregon Black/Blue/Deacon rockfish						
35	Shallow nearshore ^{4/}	1,200 lb/ 2 months	CLOSED	1,200 lb/ 2 months			
36	Deeper nearshore ^{5/}	1,000 lb/ 2 months	CLOSED	1,000 lb/ 2 months			
37	California Scorpionfish	1,500 lb/ 2 months	CLOSED	1,500 lb/ 2 months			
38	Lingcod ^{6/}	200 lb/ 2 months	CLOSED	800 lb/ 2 months	1,200 lb/ 2 months	600 lb/ month	300 lb/ month
39	Pacific cod	1,000 lb/ 2 months					
40	Spiny dogfish	200,000 lb/ 2 months		150,000 lb/ 2 months	100,000 lb/ 2 months		
41	Longnose skate	Unlimited					
42	Other Fish ^{7/} & Cabezon in California	Unlimited					
43	Big Skate	Unlimited					

TABLE 2 (South)

1/ The Rockfish Conservation Area is an area closed to fishing by particular gear types, bounded by lines specifically defined by latitude and longitude coordinates set out at §§ 660.71-660.74. This RCA is not defined by depth contours (with the exception of the 20-fm depth contour boundary south of 42° N. lat.), and the boundary lines that define the RCA may close areas that are deeper or shallower than the depth contour. Vessels that are subject to RCA restrictions may not fish in the RCA, or operate in the RCA for any purpose other than transiting.

2/ POP is included in the trip limits for Minor Slope Rockfish. Blackgill rockfish have a species specific trip sub-limit within the Minor Slope Rockfish cumulative limit. Yellowtail rockfish are included in the trip limits for Minor Shelf Rockfish. Bronzespotted rockfish have a species specific trip limit.

3/ "Other Flatfish" are defined at § 660.11 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.

4/ "Shallow Nearshore" are defined at § 660.11 under "Groundfish" (7)(i)(B)(1).

5/ "Deeper Nearshore" are defined at § 660.11 under "Groundfish" (7)(i)(B)(2).

6/ The commercial minimum size limit for lingcod is 24 inches (61 cm) total length South of 42° N. lat.

7/ "Other Fish" are defined at § 660.11 and include kelp greenling off California and leopard shark.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.

Attachment: Open Access Trip Limit Table, South of 40°10' N lat.

Table 3 (South) to Part 660, Subpart F -- Non-Trawl Rockfish Conservation Areas and Trip Limits for Open Access Gears South of 40°10' N. lat.

Other limits and requirements apply -- Read §§660.10 through 660.399 before using this table						01012019	
		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
Rockfish Conservation Area (RCA)^{1/}:							
1	40°10' N. lat. - 34°27' N. lat.	40 fm line ^{1/} - 125 fm line ^{1/}					
2	South of 34°27' N. lat.	75 fm line ^{1/} - 150 fm line ^{1/} (also applies around islands)					
See §§660.60 and 660.230 for additional gear, trip limit and conservation area requirements and restrictions. See §§660.70-660.74 and §§660.76-660.79 for conservation area descriptions and coordinates (including RCAs, YRCAs, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).							
State trip limits and seasons may be more restrictive than Federal trip limits or seasons, particularly in waters off Oregon and California.							
3	Minor Slope Rockfish^{2/} & Darkblotched rockfish	10,000 lb/ 2 months, of which no more than 475 lb may be blackgill rockfish			10,000 lb/ 2 months, of which no more than 550 lb may be blackgill rockfish		
4	Splitnose rockfish	200 lb/ month					
5	Sablefish						
6	40°10' N. lat. - 36°00' N. lat.	300 lb/ day or one landing per week up to 1,200 lb, not to exceed 2,400 lb/ 2 months					
7	South of 36°00' N. lat.	300 lb/ day, or one landing per week of up to 1,600 lb, not to exceed 3,200 lb/ 2 months					
8	Shortpine thornyheads and longspine thornyheads	CLOSED					
9	40°10' N. lat. - 34°27' N. lat.	50 lb/ day, no more than 1,000 lb/ 2 months					
10	South of 34°27' N. lat.						
11		3,000 lb/ month, no more than 300 lb of which may be species other than Pacific sanddabs.					
12	Dover sole, arrowtooth flounder, petrale sole, English sole, starry flounder, Other Flatfish^{3/}	South of 42° N. lat., when fishing for "other flatfish," vessels using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 0.44 in (11 mm) point to shank, and up to two 1 lb (0.45 kg) weights per line are not subject to the RCAs.					
13							
14							
15							
16							
17	Whiting	300 lb/ month					
18	Minor Shelf Rockfish^{2/}, Shortbelly, Widow rockfish and Chilipepper						
19	40°10' N. lat. - 34°27' N. lat.	400 lb/ 2 months				400 lb/ 2 months	
20	South of 34°27' N. lat.	1,500 lb/ 2 months	CLOSED			1,500 lb/ 2 months	
21	Canary rockfish	300 lb/ 2 months	CLOSED			300 lb/ 2 months	
22	Yelloweye rockfish	CLOSED					
23	Cowcod	CLOSED					
24	Bronzespotted rockfish	CLOSED					
25	Bocaccio	500 lb/ 2 months	CLOSED			500 lb/ 2 months	
26	Minor Nearshore Rockfish, California Black rockfish, & Oregon Black/Blue/Deacon rockfish						
27	Shallow nearshore ^{4/}	1,200 lb/ 2 months	CLOSED			1,200 lb/ 2 months	
28	Deeper nearshore ^{5/}	1,000 lb/ 2 months	CLOSED			1,000 lb/ 2 months	
29	California scorpionfish	1,500 lb/ 2 months	CLOSED			1,500 lb/ 2 months	
30	Lingcod^{6/}	300 lb/ month	CLOSED			300 lb/ month	
31	Pacific cod	1,000 lb/ 2 months					
32	Spiny dogfish	200,000 lb/ 2 months		150,000 lb/ 2 months		100,000 lb/ 2 months	
33	Longnose skate	Unlimited					
34	Big skate	Unlimited					
35	Other Fish^{7/} & Cabezon in California	Unlimited					

TABLE 3 (South)

Attachment: Open Access Trip Limit Table, South of 40°10' N lat. (Cont.')

Table 3 (South). Continued		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC	
36	RIDGEBACK PRAWN AND, SOUTH OF 38° 57.50' N. LAT., CA HALIBUT AND SEA CUCUMBER NON-GROUNDFISH TRAWL							TABLE 3 (South) cont'd
37	NON-GROUNDFISH TRAWL Rockfish Conservation Area (RCA) for CA Halibut, Sea Cucumber & Ridgeback Prawn:							
38	40° 10' N. lat. - 38° 00' N. lat.	100 fm line ^{1/} - 200 fm line ^{1/}	100 fm line ^{1/} - 150 fm line ^{1/}				100 fm line ^{1/} - 200 fm line ^{1/}	
39	38° 00' N. lat. - 34° 27' N. lat.	100 fm line ^{1/} - 150 fm line ^{1/}						
40	South of 34° 27' N. lat.	100 fm line ^{1/} - 150 fm line ^{1/} along the mainland coast; shoreline - 150 fm line ^{1/} around islands						
41		Groundfish: 300 lb/trip. Species-specific limits described in the table above also apply and are counted toward the 300 lb groundfish per trip limit. The amount of groundfish landed may not exceed the amount of the target species landed, except that the amount of spiny dogfish landed may exceed the amount of target species landed. Spiny dogfish are limited by the 300 lb/trip overall groundfish limit. The daily trip limits for sablefish coastwide and thornyheads south of Pt. Conception and the overall groundfish "per trip" limit may not be multiplied by the number of days of the trip. Vessels participating in the California halibut fishery south of 38°57.50' N. lat. are allowed to (1) land up to 100 lb/day of groundfish without the ratio requirement, provided that at least one California halibut is landed and (2) land up to 3,000 lb/month of flatfish, no more than 300 lb of which may be species other than Pacific sanddabs, sand sole, starry flounder, rock sole, curffin sole, or California scorpionfish (California scorpionfish is also subject to the trip limits and closures in line 29).						
42	PINK SHRIMP NON-GROUNDFISH TRAWL GEAR (not subject to RCAs)							
43	South	Effective April 1 - October 31: Groundfish: 500 lb/day, multiplied by the number of days of the trip, not to exceed 1,500 lb/trip. The following sublimits also apply and are counted toward the overall 500 lb/day and 1,500 lb/trip groundfish limits: lingcod 300 lb/ month (minimum 24 inch size limit); sablefish 2,000 lb/ month; canary rockfish, thornyheads and yelloweye rockfish are PROHIBITED. All other groundfish species taken are managed under the overall 500 lb/day and 1,500 lb/trip groundfish limits. Landings of all groundfish species count toward the per day, per trip or other species-specific sublimits described here and the species-specific limits described in the table above do not apply. The amount of groundfish landed may not exceed the amount of pink shrimp landed.						
<p>1/ The Rockfish Conservation Area is an area closed to fishing by particular gear types, bounded by lines specifically defined by latitude and longitude coordinates set out at §§ 660.71-660.74. This RCA is not defined by depth contours (with the exception of the 20-fm depth contour boundary south of 42° N. lat.), and the boundary lines that define the RCA may close areas that are deeper or shallower than the depth contour. Vessels that are subject to RCA restrictions may not fish in the RCA, or operate in the RCA for any purpose other than transiting.</p> <p>2/ POP is included in the trip limits for minor slope rockfish. Blackgill rockfish have a species specific trip sub-limit within the minor slope rockfish cumulative limits. Yellowtail rockfish is included in the trip limits for minor shelf rockfish. Bronzespotted rockfish have a species specific trip limit.</p> <p>3/ "Other flatfish" are defined at § 660.11 and include butter sole, curffin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.</p> <p>4/ "Shallow Nearshore" are defined at § 660.11 under "Groundfish" (7)(i)(B)(1).</p> <p>5/ "Deeper Nearshore" are defined at § 660.11 under "Groundfish" (7)(i)(B)(2).</p> <p>6/ The commercial minimum size limit for lingcod is 24 inches (61 cm) total length South of 42° N. lat.</p> <p>7/ "Other fish" are defined at § 660.11 and includes kelp greenling off California and leopard shark.</p> <p>To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.</p>								