

GROUNDFISH MANAGEMENT TEAM REPORT ON INSEASON ADJUSTMENTS

The Groundfish Management Team (GMT) reviewed the latest information on the status of the groundfish fisheries, and offers the following comments and recommendations. Information and recommendations on the release of the canary rockfish, darkblotched rockfish, and Pacific ocean perch buffers (as requested by the Council in April) may be found in Supplemental GMT Report 3, under this agenda item.

Action Items

Limited Entry and Open Access Fixed Gear Lingcod Trip Limits and Modification of the Non-trawl Rockfish Conservation Area

The GMT updated the nearshore model to include refreshed discard ratios from the West Coast Groundfish Observer Program (WCGOP), and revised discard mortality rates as described in [Agenda Item F.10.a, Supplemental GMT Report 1, June 2017](#). Both the Oregon and California nearshore fisheries are each projected to be 0.3 mt below their yelloweye rockfish shares (0.6 mt combined out of 2.1 mt share) based on this new information (see overfished species scorecard; Attachment 1).

Based upon the newly available scientific information used in the nearshore model which could provide for greater opportunity, the Groundfish Advisory Subpanel (GAP) has requested that the GMT investigate: (1) higher lingcod trip limits for both north and south of 40°10' N. lat. for the limited entry (LE) and open access (OA) fixed gear (FG) sectors and (2) modify the shoreward non-trawl rockfish conservation area (RCA) boundary from 30 fathoms to 40 fathoms between 40° 10' N. lat. and 34° 27' N. lat.

The GMT notes that all the proposed lingcod trip limit alternatives requested by the GAP are within the range of impacts previously analyzed in the [Final Environmental Impact Statement \(FEIS\) for Proposed Harvest Specifications and Management Measures for 2015-2016](#).

Limited Entry and Open Access Fixed Gear Trip Limits for Lingcod North of 40°10' N. Lat.

The GAP requested two lingcod trip limit alternatives (Table 1). Alternative 1 retains the same structure of the highest trip limits previously analyzed (i.e., in 2015-2016) after July 1, assuming implementation is possible by that date. Alternative 2 is similar, but with lower limits in the “summer” (July-Nov, Periods 4 through the start of Period 6) and a higher limit in December, as we were informed that many favor higher winter trip limits because that helps spread revenue better, and could better provide for harvest of incidental catch.

Table 1. Current and proposed trip limits for limited entry and open access fixed gear trip limits for lingcod north of 40° 10' N. lat. assuming a July 1 implementation date.

Alternative	Sector	July-Oct	Nov	Dec
Status Quo	LE	1,200 lbs. bimonthly	600 lbs.	200 lbs.
	OA	600 lbs. monthly	600 lbs.	100 lbs.
1	LE	1,600 lbs. bimonthly	800 lbs.	200 lbs.
	OA	800 lbs. monthly	800 lbs.	100 lbs.
2	LE	1,400 lbs. bimonthly	700 lbs.	400 lbs.
	OA	700 lbs. monthly	700 lbs.	200 lbs.

The GMT notes that previously, there were concerns with opening winter periods related to protecting lingcod spawning season. However, this was during a time when lingcod was overfished, and thus were subject to heightened conservation concerns. The impact analysis in 2015-2016 FEIS, when the winter closure was recommended to be removed, are summarized here. The 2009 lingcod assessment modeled two populations north and south of the California-Oregon border at 42° N. lat. ([Hamel, et al. 2009](#)). Both populations were healthy with stock depletion estimated at 62 and 74 percent for the north and south, respectively. Further, lingcod is one of few stocks that has a minimum size limit for commercial fisheries (24 inches in CA, 22 inches in WA and OR) which results in most fish reaching maturity before being harvested (i.e., the length of 50 percent maturity is approximately 23.5 inches for females and 15-22 inches for males; [Hamel, et al. 2009](#)). Allowing fish to reach spawning size before harvest is generally considered to boost and help ensure long-term stock productivity (thus avoiding recruitment overfishing).

Given that, some may now have less concern with winter harvests. However, the GMT acknowledges that there still may be some concerns with greater winter harvest of lingcod and notes that Washington still closes recreational lingcod during winter months to protect spawners.

Both alternative trip limits are expected to increase lingcod attainments while staying within the current yelloweye rockfish residuals from the applicable sectors (0.7 mt combined) in the scorecard (Table 2). Minimal impacts are expected for northern California, and are within the California share of 0.7 mt (discussed below). The GAP and the GMT concluded that taking a precautionary approach was wise given that there may be extra effort from displaced salmon trollers, and higher trip limits could entice more targeting. Modeling behavioral changes are difficult since they are hard to predict, and could lead to higher than projected impacts.

Table 2. Projected lingcod landings and associated yelloweye rockfish mortality (both in mt) relative to the current scorecard residual for the alternatives to increase lingcod north of 40° 10' N. lat. for the LE and OA FG sectors assuming a July 1 implementation date. Both alternatives are precautionary in regards to yelloweye rockfish impacts given concerns with additional effort from displaced salmon trollers and since higher limits could promote higher targeting.

Area	Alternative	Projected lingcod landings	Additional associated yelloweye rockfish mortality	Resulting residual yelloweye rockfish
Oregon nearshore	SQ	48.8	---	0.310
	A1	51.5	0.015	0.295
	A2	51.6	0.017	0.293
Northern California nearshore (42°N. lat. - 40° 10' N. lat.)	SQ	5.8	---	0.300
	A1	6.0	0.002	0.298
	A2	6.0	0.002	0.298
Total*	SQ	71.2	---	0.710
	A1	75.5	0.029	0.693
	A2	75.0	0.058	0.691

*Minimal amounts of additional lingcod are projected to be taken in the non-nearshore and are included in the total.

The GMT therefore recommends that the Council consider increasing trip limits of lingcod north of 40° 10' N. lat. for the limited entry and open access fixed gear sectors.

Non-Trawl Rockfish Conservation Area Modifications and Limited Entry and Open Access Fixed Gear Trip Limits for Lingcod South of 40° 10' N lat.

During the 2017-2018 Biennial Harvest Specifications process, modifications to the non-trawl RCA south of 40° 10' N lat. were analyzed, including modifying the shoreward boundary from 30 fathoms to 40 fathoms between 40° 10' N. lat. and 34° 27' N. lat. ([Agenda Item F.6.a, Supplemental CDFW Report 2, April 2016; Appendix A](#)). While, that action could not be accommodated at the time due to projected yelloweye rockfish impacts, projected impacts to target stocks were minimal. As a result of the previously discussed nearshore model updates which resulted in yelloweye rockfish savings, industry requested that the shoreward non-trawl RCA between 40° 10' N. lat. and 34° 27' N. lat. be modified from 30 fathoms to 40 fathoms.

To analyze the yelloweye rockfish impacts from moving the shoreward non-trawl RCA boundary, the GMT assumed that effort would remain unchanged in the shallowest depth bin (0 to 10 fathoms) and all remaining effort would shift to the deepest depth bin (30 to 40 fathoms). In other words, this method assumes that all the effort which would have occurred between 11 and 30 fathoms would now occur in the 30 to 40 fathom depth bin. While the GMT acknowledges this may overestimate impacts as the discard mortality is 100 percent in the greater than 30 fathom depth bin, it is a simple and conservative method to determine the upper bounds of potential impacts.

In addition, an increase to the LE and OA trip limits for lingcod south of 40° 10' N. lat. were also requested to reduce regulatory discarding. In past years, the non-trawl lingcod allocation south of 40° 10' N. lat. has been fully or near fully ascribed. In 2017, the southern lingcod non-trawl allocation is 683.1 mt of which the recreational fishery is projected to take 410.5 mt for, leaving a residual of 272.6 mt for the non-trawl sector. To ensure that the fishery stayed within the allocation, the recreational lingcod bag limit was reduced from three fish to two fish for 2017-2018, which significantly reduced projected impacts to lingcod (note the recreational sector accounted for more than 90 percent of take in recent years). The non-trawl commercial sector is projected to take 91.8 mt under status quo trip limits.

As a result the GMT analyzed two possible options, Alternative 1 which would double status quo trip limits and Alternative 2, an intermediate option that increases limits 0.5 times. Both of these options mimic the current trip limit structure as shown in Table 3.

Table 3. Proposed alternative trip limits for lingcod south of 40° 10' N. lat.

Alternative	Sector	July-Oct	Nov	Dec	Projected (mt)
Status Quo	LE	800 lbs. bimonthly	400 lbs.	200 lbs.	91.8
	OA	800 lbs. monthly	400 lbs.	100 lbs.	
1	LE	1,600 lbs. bimonthly	800 lbs.	400 lbs.	178.7
	OA	800 lbs. monthly	800 lbs.	200 lbs.	
2	LE	1,200 lbs. bimonthly	600 lbs.	300 lbs.	146.7
	OA	600 lbs. monthly	200 lbs.	150 lbs.	

Both actions will increase yelloweye rockfish impacts, however, it appears that they could be accommodated while remaining within California's nearshore yelloweye rockfish share of 0.7 mt. (Table 4). As shown in Table 2, there are projected to be minimal yelloweye rockfish impacts in northern California (40° 10' N. lat. - 42° N. lat.) under any Alternative for north of 40° 10' N lat.. Table 4 displays projected yelloweye rockfish impacts for the nearshore south of 40° 10' N. lat. under the proposed trip limit alternatives and two non-trawl RCA configurations.

Table 4. Projected impacts of yelloweye rockfish by trip limit alternative and non-trawl RCA configuration.

Trip Limit Alternative	RCA Configuration	YE Impacts (mt)
Status Quo	Status Quo (30 fm)	0.46
Status Quo	40 fm	0.61
Alternative 1/Alternative 2	Status Quo (30 fm)	0.52
Alternative 1	40 fm	0.68
Alternative 2	40 fm	0.67

While it may seem counterintuitive that the projected yelloweye rockfish impacts resulting from each trip limit alternative do not vary greatly, this is because only those lingcod which are landed with other nearshore species are included in the nearshore model projections. Further, a state issued permit is required to land nearshore species in California, which limits the amount of effort in the fishery. As a result, the difference between the trip limit alternatives is minimal, though in conjunction with the impacts resulting from modification of the non-trawl RCA, there is a slight difference in projected between the trip limit alternatives.

The GMT recommends that the Council consider increasing lingcod trip limits for limited entry and open access fixed gear sectors south of 40° 10' N lat. and modify the shoreward non-trawl RCA boundary between 40° 10' N lat. and 34° 27' N lat. from 30 fathoms to 40 fathoms.

Informational Items

Sablefish Daily Trip Limit (DTL)

As a reminder, the Council took action in April to increase the trip limits for the OA sector north of 36° N. lat. (OAN) from one landing per week up to 900 lbs., not to exceed 1,800 lbs. bimonthly, to one landing per week up to 1,000 lbs., not to exceed 2,000 lbs. bimonthly. This increase was effective as of May 12, 2017 ([NMFS-SEA-17-11](#)). Table 5 below shows the projected landings and attainment for each DTL sector with landings data complete through May 31, 2017.

Table 5. Projected landings and attainment for DTL sectors. LEN: Limited Entry North of 36° N. lat, LES: Limited Entry South of 36° N. lat, OAS: Open Access South of 36° N. lat.

Sector	Landings (mt)	Landing Target (mt)	Attainment
LEN	196.3 - 222.2	258	76.1 - 86.1%
OAN	380.4 - 436.3	425	89.5 - 103.7%
LES	317.7 - 371.8	728	43.6 - 51.1%
OAS	54.9	312	17.6%

Pacific Ocean Perch Bycatch in Pink Shrimp Fishery-2014

After the April 2015 Council meeting, the GMT reached out to WCGOP for more information about the high bycatch of Pacific ocean perch in the pink shrimp fishery in 2014. As a reminder, bycatch in 2014 was 20 times higher than in other recent years, including 2015. The GMT proposed several potential reasons for this high bycatch, including a possible recruitment event, small sampling coverage being expanded on high bycatch hauls, and a greater proportion of Washington pink shrimp occurring further north where POP are more abundant. WCGOP explained that it is most likely due to the doubling of shrimp landings from 2014 to 2015 off of Washington, where the bycatch occurred at 40 times the rate observed in previous years. In addition, bycatch rates in Oregon increased by about 20 percent from 2013 although total catch pink shrimp was similar. Based on this the GMT still believes 3 mt is still an appropriate projected impact from the Incidental Open Access.

Research

NMFS staff provided preliminary projected impacts for all research projects for 2017 (Table 6). The GMT notes that while the projected impacts for bocaccio exceed the set aside, there is a residual in the scorecard (476.2 mt; Attachment 1). The International Pacific Halibut Commission (IPHC) survey has just begun, so there are no updates to overfished species impacts. The GMT and IPHC will continue close communication concerning yelloweye rockfish impacts as the survey progresses.

Table 6. Preliminary projected impacts, in mt, for all research projects for 2017. Information from NMFS WCR.

Species	Set Aside	Projection
Bocaccio	4.6	8.2
Cowcod	2.0	0.9
POP	5.2	4.76
Yelloweye RF	2.7	2.4

Overfished Species Scorecard Update

Attachment 1 shows the latest overfished species scorecard. Updates include new projections from the nearshore projection model (as described above and in [Agenda Item F.10.a, Supplemental GMT Report 1, June 2017](#)) and the at-sea bootstrap methodology.

The GMT Recommends the Following:

- **the Council consider increasing lingcod trip limits north of 40°10' N. lat. for the limited entry and open access fixed gear sectors.**
- **the Council consider increasing lingcod trip limits for limited entry and open access fixed gear sectors south of 40° 10' N lat. and modify the shoreward non-trawl RCA boundary between 40° 10' N lat. and 34° 27' N lat. from 30 fathoms to 40 fathoms.**

Attachment 1. Allocations^a and projected mortality impacts (mt) of overfished groundfish species for 2017.

<i>Date</i> : 12 June 2017	Bocaccio b/		Cow cod b/		Dkbl		POP		Yelloweye	
	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts
Off the Top Deductions	15.4	19.0	2.0	2.0	77.3	27.3	49.4	24.4	5.4	5.8
Additional Buffer					50.0		25.0			
EFPC/	10.0	10.0	0.015	0.015	0.1	0.1	0.0	0.0	0.030	0.020
Research d/	4.6	8.2	2.0	2.0	2.5	2.5	5.2	5.2	2.7	3.1
Incidental OA e/	0.8	0.8	0.0	0.0	24.5	24.5	10.0	10.0	0.4	0.4
Tribal f/					0.2	0.2	9.2	9.2	2.3	2.3
Bottom Trawl					0.2	0.2	2.0	2.0		0.0
Troll					0.0					0.0
Fixed gear mid-water					0.0				2.3	2.3
whiting						0.3	7.2	7.2		
Trawl Allocations	302.4	92.7	1.4	0.2	535.6	150.8	220.0	61.5	1.1	0.1
-SB Trawl	302.4	92.7	1.4	0.2	507.6	136.9	198.3	43.0	1.1	0.1
-At-Sea Trawl					16.1	13.9	21.7	18.5	0.0	0.0
a) At-sea whiting MS					11.6	5.3	9.0	5.4		
b) At-sea whiting CP					16.4	8.6	12.7	13.1		
Non-Trawl Allocation	472.2	202.1	2.6	0.0	28.2	5.8	11.6	0.3	13.1	11.4
Non-Nearshore	144.3	16.6		0.0		5.6		0.3	0.8	0.7
LE FG		6.2				5.2		0.3		0.6
OA FG		10.4				0.5		0.0		0.0
Directed OA: Nearshore	1.8	0.6		0.0		0.2			2.1	1.6
Recreational Groundfish										
WA						--		--	3.3	3.1
OR						--		--	3.0	2.8
CA	326.1	184.9		2.2		--		--	3.9	3.2
TOTAL	790.0	313.8	6.0	2.2	641.1	183.9	281.0	86.2	19.6	17.3
2017 Harvest Specification	790	790	6.0	6.0	641	641	281	281	20	20
Difference	0.0	476.2	0.0	3.8	-0.1	457.1	0.0	194.8	0.4	2.7
Percent of ACL	100.0%	39.7%	100.3%	36.9%	100.0%	28.7%	100.0%	30.7%	100.0%	86.4%
Key			= not applicable							
			= trace, less than 0.1 mt							
			= Fixed Values							
			= off the top deductions							

a/ Formal allocations are represented in the black shaded cells and are specified in regulation in Tables 1b and 1e. The other values in the allocation columns are 1) off the top deductions, 2) set asides from the trawl allocation (at-sea petrale only) 3) ad-hoc allocations recommended in the 2013-14 EIS process, 4) HG for the recreational fisheries for canary and YE.

b/ South of 40°10' N. lat.

c/ EFPs are amounts set aside to accommodate anticipated applications. Values in this table represent the estimates from the 13-14 biennial cycle, which are currently specified in regulation.

d/ Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs.

e/ The GMT's best estimate of impacts as analyzed in the 2017-2018 Environmental Impact Statement (Appendix B), which are currently specified in regulation.

f/ Tribal values in the allocation column represent the the values in regulation. Projected impacts are the tribes best estimate of catch.