GROUNDFISH MANAGEMENT TEAM REPORT ON
INSEASON ADJUSTMENTS --FINAL ACTION

The Groundfish Management Team (GMT) discussed the current status of 2022 groundfish fisheries, requests from industry, and any needs for inseason adjustments during the September 2022 Pacific Fishery Management Council (Council) meeting.

Action Items

Sablefish North of 36° N. lat.

The model used to project sablefish landings under alternative trip limits was preliminarily selected for full methodology review under Agenda Item G.4 at this meeting, based on issues the GMT encountered earlier this year and the length of time since the last review. The GMT proposed changes to the input variables for the linear regressions used in the model, which resolved the issue of unrealistic and inaccurate predictions. The Scientific and Statistical Committee (SSC) recommended the use of those proposed changes for inseason in 2022, recognizing that a more thorough review will likely take place next year (Agenda Item G.4.a, Supplemental SSC Report 1, September 2022).

The GMT explored options to increase the weekly and bi-monthly sablefish trip limits north of 36° N. lat. for both the Limited Entry Fixed Gear (LEFG) and Open Access (OA) sectors for the remainder of 2022, given that much of the fleet for both sectors appear to be constrained by the current limits. Sablefish north attainment in most groundfish sectors is tracking high this year to date, compared to previous years, but given the high sablefish annual catch limit (ACL) this year (6,566 mt for north of 36° N. lat.) and that attainment of sablefish north of 36° N. lat. is at 55 percent as of September 10, 2022, the GMT does not expect that these increases will risk exceeding the ACL.

Limited Entry Fixed Gear North of 36° N. Lat. (LEN)

Table 1 below shows sablefish landings projections under status quo weekly and bi-monthly trip limits, as well as two alternative trip limit increases for the LEN sector. The LEN trip limits have historically only reached as high as 4,500 lbs. per week and 9,000 lbs. per two months once, which was during period 6 (i.e., November and December) of 2021. For this reason, trip limits higher than Option 2 were not explored. Table 2 provides the estimated ex-vessel revenue for each trip limit option. Under Option 1, the increase in ex-vessel revenue is approximately $76,667 and $146,112 under Option 2. **The GMT recommends the Council select Option 2 for the LEN sector, because it would increase opportunity and attainment while still providing a buffer between projected landings (224 mt under an average price scenario) and the LEN landed catch share of 320 mt.**

Table 1. Options for trip limit increases in the LEN sector (based on actual landings through August 31, 2022 plus projected landings after August 31, 2022). Bolded row represents the GMT recommendation.

Option	Trip Limit	Projected Landings (rd. wt. mt) under Three Price Scenarios			Landed Catch Share (mt)	Attainment under Three Price Scenarios		
		Low	Average	High		Low	Average	High
SQ	2,400 lbs./week not to exceed 4,800 lbs./2 months	155	166	178	320	48%	52%	56%
1	3,500 lbs./week not to exceed 7,000 lbs./2 months	180	197	214		56%	62%	67%
2	**4,500 lbs./week not to exceed 9,000 lbs./2 months**	**203**	**224**	**246**		**63%**	**70%**	**77%**

Table 2. Estimated period 6 (i.e., November and December) ex-vessel revenue ($USD) under the three sablefish trip limit options in the LEN sector. Only revenues from period 6 were included with the assumption that inseason action would be effective sometime during period 5.

Option	Trip Limit	Estimated Period 6 Ex-vessel Revenue	Increase in Est. Period 6 Ex-vessel Revenue Compared to Status Quo
SQ	2,400 lbs./week not to exceed 4,800 lbs./2 months	$194,446	-
1	3,500 lbs./week not to exceed 7,000 lbs./2 months	$271,113	$76,667
2	**4,500 lbs./week not to exceed 9,000 lbs./2 months**	**$340,558**	**$146,112**

Open Access North of 36° N. Lat. (OAN)

Table 3 below shows sablefish landings projections under status quo weekly and bi-monthly trip limits as well as two alternative trip limit increases for the OAN sector. The daily limit of 600 lbs. will remain in place through the end of 2022 and will be eliminated beginning in 2023 based on Council action in the 2023-24 harvest specifications and new management measures package. The OAN trip limits have historically never exceeded 3,000 lbs. per week and 6,000 lbs. per two months, but the GMT does not expect any risk under Option 2 given the 17 percent attainment buffer under an average price scenario, which appears to be the 2022 scenario. The model also overestimated 2022 landings by 20 mt as of August 31, 2022. **Table 4** provides the estimated ex-vessel revenue for each option in **Table 3**. The increase in ex-vessel revenue under Option 1 is approximately $68,333 and $137,223 under Option 2. **The GMT recommends the Council select Option 2 for the OAN sector, because it would increase opportunity and attainment while still providing a buffer between projected landings (440 mt under an average price scenario) and the OAN landed catch share of 527 mt.**

Table 3. Options for trip limit increases in the OAN sector (based on actual landings through August 31, 2022 plus projected landings after August 31, 2022). Bolded row represents the GMT recommendation.

Option	Trip Limit	Projected Landings (rd. wt. mt) under Three Price Scenarios			Landed Catch Share (mt)	Attainment under Three Price Scenarios		
		Low	Average	High		Low	Average	High
SQ	600 lbs./day, 2,000 lbs./week not to exceed 4,000 lbs./2 months	335	353	371	527	64%	67%	70%
1	600 lbs./day, 3,000 lbs./week not to exceed 6,000 lbs./2 months	371	397	422		70%	75%	80%
2	**600 lbs./day, 4,000 lbs./week not to exceed 8,000 lbs./2 months**	**408**	**440**	**472**		**77%**	**83%**	**89%**

Table 4. Estimated period 6 (i.e., November and December) ex-vessel revenue ($USD) under the three sablefish trip limit options in the OAN sector. Only revenues from period 6 were included with the assumption that inseason action would be effective sometime during period 5.

Option	Trip Limit	Estimated Period 6 Ex-vessel Revenue	Increase in Est. Period 6 Ex-vessel Revenue Compared to Status Quo
SQ	600 lbs./day, 2,000 lbs./week not to exceed 4,000 lbs./2 months	$221,113	-
1	600 lbs./day, 3,000 lbs./week not to exceed 6,000 lbs./2 months	$289,446	$68,333
2	**600 lbs./day, 4,000 lbs./week not to exceed 8,000 lbs./2 months**	**$358,336**	**$137,223**

Canary Rockfish

In June 2020, via inseason action, canary rockfish trip limits were increased from 300 lbs. / 2 months for both LE and OA coastwide to the current trip limits seen in Table 5. All other trip limits were increased in June 2020 as well, including yellowtail rockfish. Beginning in 2021, the shoreward non-trawl rockfish conservation area (NT-RCA) boundary lines north of 34° 27′ N. lat. were moved out to 40 fathoms[1] and 50 fathoms, allowing for more access to the mid-water shelf rockfish.

[1] Between 46° 16′ N. lat. and 40° 10′ N. lat. and the 30 fm and 40 fm lines, fishing is only allowed with hook-and-line gear except bottom longline and dinglebar gear as defined in 50 CFR § 660.11.

Prior to the September 2022 meeting, the GMT received a request from an OA fisherman from Northern California to increase the canary rockfish OA north of 40° 10′ N. lat. trip limit for the remainder of 2022. The request was to increase the OA trip limit from 1,000 lbs. / 2 months to 2,000 lbs. / 2 months to be more aligned with the yellowtail rockfish OA trip limit north of 40° 10′ N. lat. (1,000 lbs. / month) to maximize attainment of yellowtail rockfish while reducing regulatory discarding of canary rockfish.

In **Table 5**, the GMT provides estimated impacts from various adjustments to the canary trip limits, should the Council choose to increase trip limits for both LE and OA, coastwide. However, the options can be mixed and matched based on the preferred level of precaution.

The largest adjustment for periods 5 and 6 (i.e., LE = 4,000 lbs. / 2 months; OA = 2,000 lbs. / 2 months) increases the projected landings by 0.2 mt for LEN, 1.9 mt for OAN, 0.3 mt for LES, and 1.6 mt for OAS. The estimated total mortality from the largest adjustment would be approximately 28 percent of the non-trawl commercial share (123.5 mt). The average price per pound of canary rockfish caught in the non-trawl commercial fisheries in 2022 is approximately $2.80; therefore, under the largest adjustment, increases in ex-vessel revenue for LEN is approximately $1,381, for OAN it is $11,715, for LES it is $2,156, and for OAS it is $10,072.

Table 5. Options to increase canary trip limits by period in the LEN, OAN, LES, and OAS sectors, associated landings projections, estimated mortality, and non-trawl commercial share attainment.

Sector	Jan - Feb	Mar - Apr	May - Jun	Jul - Aug	Sep - Oct	Nov - Dec	Landings projection (mt)	Est. total mort. (mt)*	% of the 2022 Non-trawl commercial share (123.5 mt)
Option 1 (status quo)									
LEN	3,000 lbs. / 2 months						3.3	30.9	25%
OAN	1,000 lbs. / 2 months						9.2		
LES	3,500 lbs. / 2 months						6.2		
OAS	1,500 lbs. / 2 months						12.2		
						Total Option 1	30.8		
Option 2									
LEN	3,000 lbs. / 2 months				3,500 lbs. / 2 months		3.4	31.9	26%
OAN	1,000 lbs. / 2 months				1,500 lbs. / 2 months		10.1		
LES	3,500 lbs. / 2 months						6.2		
OAS	1,500 lbs. / 2 months						12.2		
						Total Option 2	31.8		
Option 3									
LEN	3,000 lbs. / 2 months				**4,000 lbs. / 2 months**		3.5	35	28%
OAN	1,000 lbs. / 2 months				**2,000 lbs. / 2 months**		11.1		
LES	3,500 lbs. / 2 months				**4,000 lbs. / 2 months**		6.5		
OAS	1,500 lbs. / 2 months				**2,000 lbs. / 2 months**		13.8		
						Total Option 3	34.9		

*An estimated discard mortality of 0.1 mt was applied to both LE and OA sectors, coastwide. Data source: GEMM

The GMT recommends Option 3 which increases the LE trip limit to 4,000 lbs. per two months and OA trip limit to 2,000 lbs. per two months, both north and south of 40° 10′ N. lat. for the remainder of 2022. The adjustment will help increase attainment of yellowtail rockfish while reducing regulatory discarding of canary rockfish north of 40° 10′ N. lat. Additionally, the adjustment would provide some additional opportunity to a healthy shelf species

south of 40° 10′ N. lat. While the request to increase canary trip limits applied only to trip limits north of 40° 10′ N. lat., Option 3 would promote equity within the coastwide fleet.

Lingcod LE/OA North of 42° N Lat.

A request for increased lingcod limits in the limited entry fixed gear fishery north of 42° N. lat. was made due to the entirety of the 5,000 lb. trip limit being landed within the first few trips of a two-month fishing period. Status quo is currently resulting in regulatory discard. We modeled raising the lingcod trip limit by 1,000 lbs. per two months for LEFG and 500 lbs. per month for OA and raising by 2,000 lbs. per two months for LEFG and 1,000 lbs. per month for OA (**Table 6**). The average price per pound of lingcod caught in the non-trawl LEFG commercial fisheries in 2022 is approximately $2.27 and in the OA commercial fisheries is $3.06; therefore, under the largest adjustment, increases in ex-vessel revenue for LEFG is approximately $4,540, for OA it is $6,120 at full trip limit attainment per period. There are small differences in projected landings (**Table 7**), but the projected attainments remain low relative to the non-trawl allocation. Projected impacts to yelloweye rockfish under the two options differ minimally from the status quo (~0.01 mt increase for the remainder of 2022). All options fall well within the non-trawl commercial yelloweye rockfish projected impacts of 3.9 mt, which assumes full attainment of the non-trawl allocations, and well within the 6.3 mt non-trawl commercial annual catch target. The GMT and Groundfish Advisory Subpanel (GAP) discussed whether these increases would entice more OA fishermen and therefore have more yelloweye rockfish impacts, but the GAP does not believe that this merits concern at this time. Therefore, **the GMT recommends Option 2, because the increase in lingcod is expected to reduce regulatory discard and provide additional opportunity for some industry members already in the fishery.**

Table 6. Status Quo and alternative trip limit options for lingcod north of 42° N lat.

Option	Sector	Area	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct a/	Nov-Dec
Status Quo	LE	N of 42°	5,000 lbs. / 2 months					
	OA	N of 42°	2,500 lbs. / month					
Option 1	LE	N of 42°	5,000 lbs. / 2 months				6,000 lbs. / 2 months	
	OA	N of 42°	2,500 lbs. / month				3,000 lbs. / month	
Option 2	**LE**	**N of 42°**	**5,000 lbs. / 2 months**				**7,000 lbs. / 2 months**	
	OA	**N of 42°**	**2,500 lbs. / month**				**3,500 lbs. / month**	

a/ Increases are recommended to be implemented as soon as possible; however, they will not be in effect until National Marine Fisheries Service (NMFS) publishes the inseason action in the *Federal Register*. If that happens before October 31, Period 5 bi-monthly limits would increase.

Table 7. Projected lingcod landings and yelloweye rockfish impacts for Status Quo and alternative trip limit options for lingcod north of 42° N lat.

Option	Projected Landings of OA & LE (mt)	Non-trawl Allocation (mt)	% Attainment	Projected Yelloweye Rockfish Impacts (mt)	Non-Trawl Commercial Projected Yelloweye Rockfish Impacts (mt)
Status Quo	182.76	2,573.791	7.1%	0.98	3.9
Option 1	184.23	2,573.791	7.2%	0.99	3.9
Option 2	188.76	2,573.791	7.3%	1.02	3.9

Oregon Recreational Fishery

The GMT received an overview of the Oregon Department of Fish and Wildlife (ODFW) report (Agenda Item G.10.a, ODFW Report 1, September 2022) outlining the progress of the 2022 season, inseason actions taken, and a request for 2023.

Nearshore rockfish complex north

The ODFW report indicated that total Oregon impacts (recreational and commercial) to the nearshore rockfish complex north of 40° 10′ N. lat. may exceed the Oregon share of that complex ACL. Staff from the Washington Department of Fish and Wildlife (WDFW) and the California Department of Fish and Wildlife (CDFW) have indicated their fisheries are tracking based on data through July at approximately 31 percent in Washington and through June approximately 24 percent in California (Agenda Item G.10.a, Supplemental CDFW Report 1, September 2022). Therefore, the GMT thinks the risk to the nearshore rockfish north of 40° 10′ N. lat. complex ACL is low.

Request for 2023

The ODFW report contains a request arising from public meetings to increase the daily bag limit in the longleader gear fishery from ten fish per person per day to either twelve or fifteen fish per person per day beginning in 2023. The ten fish daily bag limit is the highest bag limit that has been analyzed via biennial harvest specifications processes. The original exempted fishing permit (EFP) that informed this fishery did have a fifteen fish bag limit. Therefore, there is some data that could inform the higher bag limit. Given that, the GMT looks to the NMFS for guidance on if this request is eligible for the groundfish inseason process. If so, the GMT anticipates additional information from ODFW in November, at which time we will provide further input.

Washington Recreational Fishery

As noted in the Oregon recreational fishery section above, WDFW staff shared that Washington total impacts to the nearshore rockfish complex north of 40° 10′ N. lat. through July are tracking at around 31 percent. However, WDFW indicated that catches of quillback rockfish within that complex by June had exceeded the species-specific contribution (or harvest guideline, HG) to the Washington share of that complex ACL. The Washington HG of 0.7 mt was exceeded by 0.5 mt through July, and projected catch through the end of the season is expected to add an additional

roughly 0.4 mt. With only about five weeks remaining in the 2022 season, no action will be taken because a closure will not accrue any substantial benefit. WDFW notes that the Washington HG for quillback rockfish increases to 2.2 mt in 2023, and management measures will prohibit the retention of quillback rockfish during the months of May, June, and July. Thus, exceeding the HG in 2023 is unlikely.

Informational Items

Chinook Salmon Scorecard

Table 8 shows Chinook salmon catches from groundfish fisheries and EFPs as of September 6, 2022, in relation to the sector thresholds. The GMT will report the Chinook salmon numbers from the Year-Round Coastwide Midwater Rockfish EFP during the March, June, and September meetings. This EFP took 116 Chinook salmon as of September 6,2022. NMFS will provide a full report on the Chinook salmon numbers from the Year-Round Coastwide Midwater Rockfish EFP at the April and November meetings.

Table 8. Chinook salmon catch to date (numbers of fish) in 2022 as of September 6, 2022, in relation to the sector thresholds in numbers of fish (Source: PacFIN IFQ521 Combined Sector Salmon Bycatch ESA Report).

Sector[a/]	Sub-Sector	Catch To Date (numbers of fish)	% of Threshold	Total Threshold (numbers of fish)
Pacific Whiting	Catcher Processor	225	2%	**11,000**
	Mothership	61	1%	
	Shoreside	1,297	12%	
	Tribal	560 b/	5%	
	Total	***2,144***	***19%***	
Non-Whiting	Bottom Trawl	121	5%	**5,500**
	Midwater Trawl	94	2%	
	Tribal	21	0%	
	Fixed Gear	500 c/	9%	
	WA Rec			
	OR Rec, incl. longleader			
	CA Rec			
	Total	***736***	***16%***	
All groundfish fisheries & EFPs		2,996		

a/ Also, there is a reserve of 3,500 fish, in addition to the number of fish in the whiting and non-whiting thresholds.
b/ Current year tribal landings are estimated as the maximum of the historic landings for the last 5 years.
c/ GMT proposed assumption of annual mortality, which assumed maximum historical mortality (154) plus a 250 fish buffer from the 2017 BiOp and an additional 96 fish to account for some uncertainty in recreational salmon seasons; recreational estimates only apply to groundfish fisheries occurring outside of salmon seasons.
N/A = no catch to date

Shortbelly Rockfish Scorecard

Table 9 estimates that 295.1 mt of shortbelly rockfish (approx. 15 percent of the threshold) has been taken as of September 6, 2022. Up-to-date estimates of total mortality from all sectors can be found anytime at the public groundfish scorecard (Report GMT007) on the PacFIN Reports Dashboard.

Table 9. Estimated mortality of shortbelly rockfish by sector, as of September 6, 2022. (Source: PacFIN)

Sector	Estimated Mortality (mt)
At-Sea Pacific whiting Catcher Processor	2.9
At-Sea Pacific whiting Mothership	41.2
IFQ	101.5
Incidental/Miscellaneous	N/A
Shoreside Pacific whiting	149.5
Treaty	*
Nearshore	*
Total	**295.1**
Threshold	**2,000**

N/A = no catch to date
* = confidential

Rebuilding Species Scorecard

Table 10 shows projected yelloweye rockfish mortality impacts from groundfish fisheries as of September 6, 2022, in relation to the HGs and annual catch targets (ACT). The International Pacific Halibut Commission's annual stock assessment longline survey has concluded with 0.76 mt of yelloweye rockfish impacts, returning 0.34 mt to the scorecard. The Oregon recreational value has been updated based on inseason data through August 2022.

The GMT also notes that the estimated total mortality of yelloweye rockfish from the directed Pacific halibut fishery in 2021 was 1.1 mt (Table 2; Agenda Item G.1.b, NWFSC Report 1, September 2022). This is less than the 2.62 mt set-aside that is being used for 2022, 2023, and 2024.

Table 10. Projected mortality impact (metric tons) of yelloweye rockfish by sector, as of September 6, 2022.

Fishery	Yelloweye rockfish		
Date: September 6, 2022	**HG Allocations a/**	**ACT Allocations a/**	**Projected Impacts f/**
Off the Top Deductions	8.85	8.85	**10.22**
EFP b/	0.24	0.24	0.02
Research c/	2.92	2.92	**2.58**
Incidental OA d/	0.69	0.69	2.62
Tribal e/	5	5	5
Bottom Trawl			0
Troll			0
Fixed gear	5	5	5
mid-water			0
whiting			
Trawl Allocations	3.4	3.4	0.6
-SB Trawl	3.4	3.4	0.6
-At-Sea Trawl	0		0
a) At-sea Pacific whiting MS			
b) At-sea Pacific whiting CP			
Non-Trawl Allocation	38.8	30.4	22.6
Non-Nearshore	8.1	6.3	3.9
LE FG			
OA FG			
Directed OA: Nearshore			
Recreational Groundfish			
WA	9.9	7.8	5.7
OR	9	7.1	**4.5**
CA	11.7	9.2	8.5
TOTAL	51	42.6	33.4
Harvest Specification	51	42.2	**42.2**
Difference	0	-0.4	**8.8**
Percent of ACL	100.00%	101.00%	**79.2%**
Key	Blank cells = not applicable		
	Dashed (--) = trace, less than 0.1 mt		
	Gray shaded cells = Fixed values		
	Light blue shaded cells = off the top deductions		

a/ Formal allocations are represented in the black shaded cells and are specified in regulation in Tables 2b and 1e. The other values in the allocation columns are 1) off the top deductions, 2) set asides from the trawl allocation 3) ad-hoc allocations recommended in the 2021-2022 EIS process, 4) HG for the recreational fisheries for yelloweye rockfish.
b/ EFPs are amounts set aside to accommodate anticipated applications. Values in this table represent the estimates provided by the applicants and approved by the Council, which are currently specified in regulation
c/ Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs.
d/ The GMT's best estimate of impacts as analyzed in the 2021-2022 Environmental Impact Statement, which are currently specified in regulation.
e/ Tribal values in the allocation column represent the values in regulation. Projected impacts are the tribes best estimate of catch.
f/ updated based on GMT's best estimates

PFMC
09/11/22