GROUNDFISH MANAGEMENT TEAM REPORT ON INSEASON ADJUSTMENTS INCLUDING PACIFIC WHITING SET-ASIDES FOR 2022 FINAL ACTION

The Groundfish Management Team (GMT) discussed the current status of groundfish fisheries, requests from industry, and any needs for inseason adjustments during the November 2021 Pacific Fishery Management Council (Council) meeting. The GMT may provide an additional supplemental report to discuss and provide recommendations on any remaining proposed adjustments.

Action Items

Pacific Whiting Set-Aside in Research Activities and the Pink Shrimp Fishery

At each November Council meeting, the Council adopts a set-aside amount of Pacific whiting to account for incidental catch in research activities and the pink shrimp fishery based on previous years' mortalities (<u>Agenda Item E.7, REVISED Supplemental Attachment 1, November 2021</u>). This amount is needed to establish the 2021 whiting fishery allocations and will be deducted from the total allowable catch.

Prior to 2021, 1,500 mt of Pacific whiting were set aside to accommodate mortality in research activities and the pink shrimp fishery. However, in 2020, the GMT and Groundfish Advisory Subpanel (GAP) recommended lowering the 2021 set-aside to 750 mt to more accurately reflect a declining trend in mortality (<u>Agenda Item G.3.a, Supplemental GMT Report 1, November 2020</u>). The GMT recommends continuing to set the Pacific whiting set-aside for research activities and the pink shrimp fishery at 750 mt for 2022.

Sablefish Daily Trip Limit (DTL)

Each biennium, the Council sets pre-season trip limits to reach, but not exceed, the landings targets for the limited entry fixed gear (LEN) and open access (OAN) DTL sectors north of 36° N. lat. These trip limits are frequently adjusted inseason, because price and participation can cause attainments to vary considerably from projections. The typical approach, as requested by the GAP, is to set conservative trip limits at the beginning of the year and increase them inseason if catch amounts are tracking low compared to annual limits.

In September 2021, the Council chose to increase the trip limits inseason for the LEN and OAN sectors (Agenda Item C.7.a, Supplemental GMT Report 1, September 2021), which are reflected in the final 2021 trip limits in regulation and represented in Table 1 as No Action for 2022. The 2021 inseason increases were possible because unanticipated low sablefish prices and less than projected fishery participation led to landing amounts lower than those projected pre-season.

Under even a low price scenario for 2022, the LEN sector is projected to land approximately twice the amount of their landed catch share under the No Action trip limits of 4,500 lbs./week and 9,000 lbs./2 months (Table 2). The GMT has also received requests in past inseason actions from DTL participants that vessels be able to attain their bimonthly limit within two weeks instead of three.

Thus, the GMT modeled alternative trip limits (Option 1) of 2,400 lbs./week and 4,800 lbs./2 months and provides the projections under those trip limits in Table 2, as well as those for a more conservative Option 2. Additionally, the GMT modeled alternative trip limits for the OAN sector of 2,000 lbs./week and 4,000 lbs./2 weeks, with a 600 lbs./day limit under both alternatives, to maintain OAN trip limits that are lower than the LEN limits (Table 2).

Table 1. No Action and Option 1 trip limits for the LEN and OAN sablefish DTL sectors.

Sector	Option	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	
LEN	No Action	1,700 lbs./wee	k, not to excee	4,500 lbs./week, not to exceed 9,000 lbs./2 months				
	Option 1	2,400 lbs./wee	2,400 lbs./week, not to exceed 4,800 lbs./2 months					
	No Action	600 lbs./day, o	_	600 lbs./day, landing/week lbs., not to ex lbs./2 months	up to 3,000 ceed 6,000			
Option 1 600 lbs./day, or 1 landing/week up to 2,000 lbs., not to exceed						xceed 4,000 ll	bs./2 months	

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

Given that the status quo trip limits would not be sustainable throughout the entire 2022 year, the GMT recommends selecting the Option 1 2022 trip limits of 2,400 lbs./week, not to exceed 4,800 lbs./2 months for the LEN sector of the DTL fishery. Under Option 1, the LEN sector is projected to attain 99 percent of their 2022 landed catch share under an average price scenario and 80 percent of their landed catch share under a low price scenario (Table 2, Figure 1). The GMT provides Option 2 as a more conservative alternative but notes that selecting Option 2 would result in LEN and OAN trip limits of the same value, which is generally avoided. Additionally, prices in 2021 tracked similarly to those in 2020, which were low as a result of market constraints and the COVID-19 pandemic, and prices could continue to fall within the low to average range in 2022.

Table 2. Options for trip limit adjustments in the LEN sector.

Option	Trip Limit	,	Landings under Two cenarios	Catch	Attainment (percent)	
		Low	Average	Share (mt)	Low	Average
	4,500 lbs./week not to exceed 9,000 lbs./2 months	673	792		200	236
1	2,400 lbs./week not to exceed 4,800 lbs./2 months	268	334	336	80	99
2	2,000 lbs./week not to exceed 4,000 lbs./2 months	212	268		63	80

LE North 2022 Projected Cumulative Landings

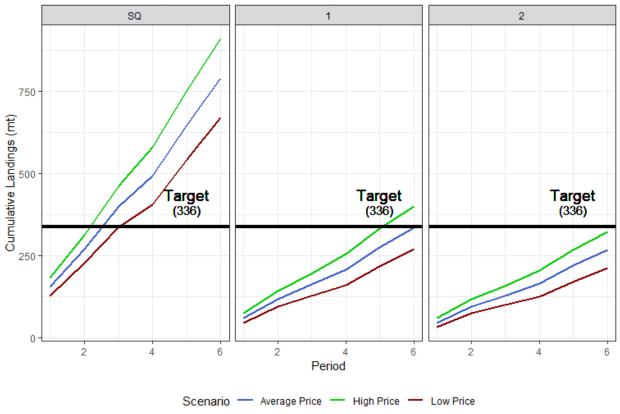


Figure 1. 2022 cumulative projected landings for the LEN sector of the sablefish DTL fishery under three price scenarios for each of the three trip limit options represented as separate panels (SQ, 1, & 2).

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

To keep the OAN trip limits lower than the LEN trip limits, while still providing enough opportunity for OAN vessels, the GMT recommends selecting the Option 1 2022 trip limits of 600 lbs./day, 2,000 lbs./week, and 4,000 lbs./2 months for the OAN sector of the DTL fishery. Under Option 1, the OAN sector is projected to attain 70 percent of their landed catch share under an average price scenario and 52 percent under a low price scenario (Table 3, Figure 2).

Table 3. Options for trip limit adjustments in the OAN sector.

Option	Trip Limit		Landings nt) under Scenarios	Landed Catch	Attainment (percent)	
		Low	Average	Share (mt)	Low	Average
SQ	600 lbs./day, 3,000 lbs./week not to exceed 6,000 lbs./2 months	307	409		56	74
	600 lbs./day, 2,000 lbs./week not to exceed 4,000 lbs./2 months	290	387	553	52	70

OA North 2022 Projected Cumulative Landings

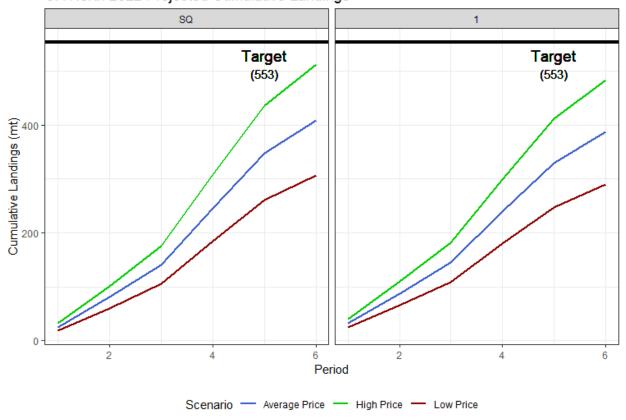


Figure 2. 2022 cumulative projected landings for the OAN sector of the sablefish DTL fishery under three price scenarios for each of the two trip limit options represented as separate panels (SQ & 1).

Lingcod LE/OA North of 42° N. Lat.

A request for increased lingcod take in the limited entry fixed gear fishery north of 42° N. lat. was made before the September 2021 meeting due to the entirety of the 4,000 lbs. trip limit being landed within the first two weeks of a trip limit period (Table 4). As of November 19, 2021, lingcod attainment is 17 percent for all fisheries so increasing this trip limit could allow for increased attainment. This request was made because in May of 2020, participants in the tier fishery started

encountering more lingcod than the limit allowed, increasing the number of lingcod discarded at sea. Therefore, the status quo could potentially result in a continued regulatory discard of lingcod north of 42° N. lat. We modeled raising the lingcod trip limit by 1,000 lbs. per 2 months for limited entry and 500 lbs. per month for open access (Table 5). We project that raising the limit for all of 2022 will only slightly increase yelloweye rockfish bycatch (< 0.03 mt) for both limited entry and open access under Option 1. Therefore, the GMT recommends Option 1 (implementation in 2022), because higher lingcod trip limits are expected to reduce regulatory discard and provide additional opportunity for some industry members already in the fishery. The GMT still believes that 1,000 extra lbs. per 2 months is less likely to entice new effort than a higher limit, which will help minimize increased targeting of lingcod and associated yelloweye rockfish bycatch.

Table 4. 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	Nov-Dec
50	LE	N of 42°	4,000 lbs. / 2 months				5,000 lbs.	/ 2 months
SQ	OA	N of 42°	2,000 lbs. / month				2,500 lbs	s. / month
1	LE	N of 42°	5,000 lbs. / 2 months					
1	OA	N of 42°	2,500 lbs. / month				1	

Table 5. Projected impacts compared to the non-trawl allocation for Lingcod north of 42° N. lat.

Option	Sector	Area	Mortality Estimate (mt)	LE + OA (mt)	Non-Trawl Allocation (mt)	% of Non-Trawl Allocation	
50	LE		25.8	106.1	2,799.8	3.8 %	
SQ O	OA	North of 40° 10′ N	80.3	100.1	2,799.8	3.8 70	
1	LE	lat.	27.5	109.9	2 700 9	3.9 %	
1	OA	1	82.4	109.9	2,799.8	3.9 70	

Shortspine Thornyhead Open Access north of 34° 27′ N. Lat.

The GMT considered increasing the shortspine thornyhead north of 34° 27′ N. lat. limit from 50 lbs./month to 100 lbs./month for the OA sector. However, given the lack of information, the GMT is not recommending making an adjustment to the shortspine thornyhead north of 34° 37′ N. lat. trip limit at this time.

Informational Items

At-Sea Set-Asides

Except for shortspine thornyhead north of 34° 27′ N. lat., all stocks with an at-sea set aside are under 60 percent of their 2021 set-aside as of November 15, 2021. Shortspine thornyhead exceeded its set-aside by 8 percent as of that date, but attainment of the stock has been generally low in recent years and the GMT does not consider this minor exceedance to pose any risk to the ACL. Industry noted that this exceedance is largely due to changes in vessel operations to avoid other

non-groundfish species such as jack mackerel as the sector experiences larger than anticipated bycatch.

Sablefish DTL

Limited Entry Fixed Gear South of 36° N. lat. (LES)

Sablefish prices per pound in the limited entry fixed gear sector of the DTL fishery south of 36° N. lat. (LES) have been tracking slightly lower in 2021 than 2020. However, 2020 prices in the LES sector do not appear to be as heavily impacted by the COVID-19 pandemic as those of the LEN sector.

The Council increased the LES trip limits from 2,000 lbs./week to 2,500 lbs./week in the 2021-22 harvest specifications cycle, and there have been no adjustments to the status quo 2,500 lbs./week limit in 2021. There is no daily or bimonthly limit for this sector. The GMT did not receive any requests to adjust the trip limit for 2022, and the sector is projected to attain 28 percent (162 mt) of their 572 mt landed catch share in 2022.

Open Access South of 36° N. lat. (OAS)

Sablefish prices per pound in the open access fixed gear sector of the DTL fishery south of 36° N. lat. (OAS) have generally been tracking lower than previous years. However, landings in 2021 as of November 19, while still far below the 435 mt landed catch share, are tracking higher in 2021 than in 2019 or 2020, which were the lowest years since at least 2011 (Figure 3). Infrastructure limitations south of 36° N. lat. continue to be a constraint. The GMT did not receive any requests to adjust the existing 2,000 lbs./week and 6,000 lbs./2 months trip limits.

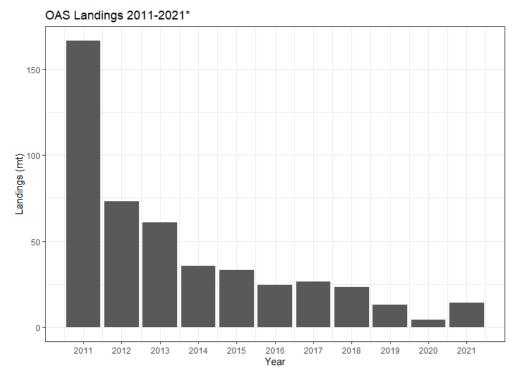


Figure 3. Annual landings (mt) in the OAS sector from 2011 to 2021. *2021 landings are through November 19, 2021.

Chinook Salmon Scorecard

Table 6 shows Chinook salmon catch from groundfish fisheries and exempted fishing permits (EFPs) as of November 19, 2021, in relation to the sector thresholds. Table 7 shows the breakdown of catch from the trawl gear modification EFP.

Table 6. Chinook salmon catch (individuals) in 2021 as of Nov 19, 2021 in relation to the sector thresholds (Source = PacFIN IFQ521 Combined Sector Salmon Bycatch ESA Report).

Sector a/	Sub-Sector	Catch To Date	% of Threshold	Total Threshold	
	СР	1,503	14%		
	MS	133	1%		
Whiting	Shoreside	538	5%	11,000	
	Tribal	560 b/	5%		
	Total	2,734	25%		
	Bottom Trawl	352	6%		
	Midwater Trawl	32	1%		
	Tribal	25	1%		
Nan Whiting	Fixed Gear			5 500	
Non-Whiting	WA Rec	500 -/	00/	5,500	
	OR Rec + longleader	500 c/	9%		
	CA Rec				
	Total	909	17%		
All groundf	ish fisheries & EFPs	3,643			

a/ 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.

Table 7. Chinook and coho salmon catch in 2021 Trawl Gear Modification EFP (Source: NMFS WCR on October 31, 2021). Chinook salmon catch from these EFPs are included in the sector totals in Table 5 above.

Gear	Region	Vessels	Trips	Chinook Count	Unid Salmon Count	Coho Count	Groundfish Weight (lbs.)	Groundfish Revenue
Midwater Trawl	N & S of 42°N. lat. combined a/	15	179	30	0	3	21,020,893	\$3,638,937

a/ Due to the limited number of participants in one area, both north and south of 42° N. lat. are combined to maintain confidentiality.

Shortbelly Rockfish Scorecard

As of November 19, 2021, a total of 416.1 mt of shortbelly rockfish is estimated to have been taken in 2021. Table 8 provides the estimated mortality by sector.

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.

Table 8. Estimated mortality of shortbelly rockfish by sector, as of Nov. 19, 2021. (Source = PacFIN Report GMT007)

Sector	Estimated Mortality (mt)
At-Sea Hake Catcher Processor	131.4
At-Sea Hake Mothership	54.6
IFQ	33.3
Incidental/Miscellaneous	*
Shoreside Hake	195.2
Treaty	*
Total	416.1
Threshold	2,000

^{*} Indicates confidential

Rebuilding Species Scorecard

Appendix 1 shows the updated 2021 and draft 2022 rebuilding species scorecards for yelloweye rockfish.

Summary of Recommendations

The GMT recommends the Council adopt:

- 750 mt Pacific whiting set-aside for research activities and the pink shrimp fishery for 2022:
- for the sablefish DTL fishery:
 - o LEN: Option 1 2022 trip limits of 2,400 lbs./week, not to exceed 4,800 lbs./2
 - OAN: Option 1 2022 trip limits of 600 lbs./day, 2,000 lbs./week, and 4,000 lbs./2 months; and
- for lingcod north of 42° N. lat.:
 - o LEN: Option 1 2022 trip limit of 5,000 lbs. / 2 months
 - o OAN: Option 1 2022 trip limit of 2,500 lbs. / 2 months,

PFMC 11/21/21

Appendix 1. Rebuilding Species Scorecards

Table A-1. Allocations^a and projected mortality impacts (mt) of yelloweye rockfish as adopted for 2022.

Fishery		Yelloweye					
<u>Date</u> : Nov 1, 2021	HG Allocations a/	ACT Allocations a/	Projected Impacts f/				
Off the Top Deductions	8.85	8.85	6.5				
EFP b/	0.24	0.24	0.02				
Research c/	2.92	2.92	2.5				
Incidental OA d/	0.69	0.69	2.66				
Tribal e/	5.0	5.0	1.3				
Bottom Trawl			0.0				
Troll			0.0				
Fixed gear	5.0	5.0	5.0				
mid-water			0.0				
whiting							
Trawl Allocations	3.3	3.3	0.6				
-SB Trawl	3.3	3.3	0.6				
-At-Sea Trawl	0.0		0.0				
a) At-sea whiting MS							
b) At-sea whiting CP							
Non-Trawl Allocation	37.9	29.5	23.6				
Non-Nearshore							
LE FG	7.8	6.2	3.9				
OA FG	7.0	0.2	3.9				
Directed OA: Nearshore							
Recreational Groundfish							
WA	9.7	7.5	5.7				
OR	8.8	6.9	5.5				
CA	11.4	8.9	8.5				
TOTAL	50.1	41.7	30.7				
Harvest Specification	50	41.7	41.7				
Difference	0.0	0.1	11.0				
Percent of ACL	100.1%	99.9%	73.7%				
	= not applicable						
Key	= trace, less than 0.1 mt						
1.0,	= Fixed Values						
-/F1 -114:	= off the top deductions	. 1					

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 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.

f/ taken from Agenda Item F.1.Attachment 8, June 2020, draft analytical document

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.