

GROUND FISH MANAGEMENT TEAM REPORT ON BIENNIAL MANAGEMENT  
MEASURES FOR 2025-2026: ANNUAL CATCH TARGETS, ALLOCATIONS, HARVEST  
GUIDELINES, SHARES, AND AT-SEA SET-ASIDES

This report covers items #4-10 from the Action Item Checklist ([Agenda Item E.7, Attachment 1 November 2023](#)). Items #2-3 (GMT Report 2) and items #11-20 (GMT Report 4) will be in separate reports.

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## Executive Summary

The GMT has highlighted potential items for review during our overwinter analysis and seeks Council concurrence and/or additional guidance on these plans, with specific requests noted below.

As described under Action Item #4, we could revisit quillback and yelloweye rockfish annual catch targets (ACTs) and evaluate establishing ACTs for canary rockfish in the non-trawl sector, copper rockfish south of Point Conception, and sablefish N of 36° N. lat. The GMT sees a lesser need for reviewing the yelloweye ACT, but the team is bringing it to the Council's attention in case further analysis to remove or adjust the yelloweye ACT is requested, based on recent mortality trends and anticipated harvest limits. The GMT asks the Council to provide guidance regarding which of these species it would wish to have analyzed for ACTs. Additionally, if the Council requests that the GMT analyze removal or adjustments to the yelloweye rockfish non-trawl ACT, the team expects to also analyze the yelloweye rockfish HGs within the non-trawl allocation.

Given how potentially constraining canary rockfish will be for all sectors, the GMT sees a need to holistically analyze all allocation and management schemes for canary rockfish (including analysis of an ACT as just mentioned). The GMT expects to analyze adjustments to trawl/non-trawl allocations, at-sea set-asides, and commercial non-trawl (i.e., non-nearshore and nearshore) and recreational fishery allocations to stay within the 2025-26 canary rockfish ACLs, and the team seeks Council guidance for any specific requests.

In addition to canary rockfish, the GMT sees merit in reconsidering biennial trawl/non-trawl allocations for widow rockfish and petrale sole (Action Item #5). The current allocation structure of these stocks may cause constraints to fishery sectors. Specifically, the GMT is recommending including an option for analysis that would allocate 200 mt of widow rockfish to the non-trawl sector, in addition to the status quo of 400 mt, with the remainder of the fishery HG allocated to the trawl sector. At this time, the GMT has not identified a potential alternative option for petrale sole.

The GMT recommends delaying all A-21 adjustments (Action Item #7), including shortspine thornyhead, until the intersector allocation review so that the holistic trawl catch share program review may inform potential adjustments.

The GMT evaluated at-sea set-asides (Action Item #9) for all stocks with current set-asides and is recommending a range of 2025-26 at-sea set-aside options shown in Table 12 of this report; the only stocks with more than one option suggested for analysis are canary rockfish, darkblotched rockfish, sablefish north of 36° N. lat., and shortspine thornyhead north of 34° 27' N. lat.

The nearshore rockfish complex north of 40° 10' N. lat is currently managed using an informal sharing arrangement, and the GMT requests guidance from the Council as to whether the GMT should analyze any alternatives to the informal sharing arrangement that is currently in place for copper rockfish off of Washington and Oregon, given the new stock definitions in Amendment 31 (Action Item #10).

The GMT is recommending status quo trawl/non-trawl allocations for yelloweye rockfish because allocation proportions are not expected to constrain either the trawl or non-trawl sectors in 2025-26 (Action Item #6). Finally, the team recommends continuing to use the status quo blackgill rockfish HG and allocation proportions within the slope rockfish complex south of 40° 10' N. lat. (Action Item #8); as well as the status quo within non-trawl sharing arrangements for sablefish south of 36° N. lat., bocaccio south of 40° 10' N. lat., and cowcod south of 40° 10' N. lat. (Action Item #10); and has not identified a need for any analysis of species-specific HGs or state shares for stocks in a complex (Action Item #8).

## Action Item #4: Annual Catch Targets

Annual catch targets (ACTs) are a management target set below annual catch limits (ACLs). An ACT may be used along with accountability measures to ensure an ACL is not exceeded in cases where there is uncertainty in inseason catch monitoring and the ACL may be at greater risk of being exceeded, or any other reason to more closely monitor mortality. Table 1 shows the status quo methodology for setting the ACTs for stocks with current ACTs.

The GMT has been discussing which species could be analyzed for ACT options during overwinter analysis. The GMT has begun discussing the potential for a commercial non-trawl ACT for canary rockfish and the potential for an ACT for copper rockfish south of Point Conception to respond to localized depletion outlined in the [Status of copper rockfish \(\*Sebastes caurinus\*\) along the U.S. California coast south of Point Conception in 2023](#). The GMT and the GAP had a robust discussion about adding an ACT at or below the commercial harvest guideline for sablefish N of 36° N. lat., and the GMT could analyze options overwinter. The GMT could also revisit and analyze options for quillback rockfish ACT(s) once the GMT has an Overfishing Limit (OFL)/ACL from the rebuilding analysis. Finally, the GMT could analyze whether the yelloweye rockfish ACT is still necessary for management, noting that 2022 non-trawl mortality was 28.6 mt, which is close to the expected 2025-26 non-trawl ACTs (Table 1), but the trawl allocation is not likely to be fully attained and therefore the ACL is not likely to be at risk of being exceeded.

**Table 1. Status quo 2025 and 2026 ACTs for stocks with ACTs, and maximum mortality (2018-2022) within those ACTs for reference.**

Stock or Management Unit with ACT	Groundfish Sector(s) Managed to ACT	Status Quo ACT Method	Status Quo 2025 ACT (mt)	Status Quo 2026 ACT (mt)
Yelloweye rockfish	Non-Trawl	78.4% of the non-trawl allocation	30.0	30.7
Copper rockfish (California)	All	The 2023 stock assessment produced three sub-ACL contributions to the complex that will need to be analyzed for ACTs. Status quo approach is to set area-specific ACTs equal to the area-specific ACL contributions to the complex.		
Quillback rockfish (California)	All	Status quo approach is to set the statewide ACT equal to the statewide ACL, then apportion into area-specific ACTs.		

## Action Item #5: Two-Year Trawl/Non-Trawl Allocations

There are some stocks for which trawl and non-trawl allocations are specified every two years. For stocks with two-year trawl/non-trawl allocations, the GMT explored historical mortality, sector-specific attainment, and 2025-26 status quo allocations<sup>1</sup> to decide if there is merit in considering biennial allocation changes in 2025-26 based on potential constraints. The GMT determined that biennial allocations for the majority of stocks do not need to be adjusted. However, the GMT sees merit in reconsidering biennial allocations for canary rockfish, widow rockfish, and petrale sole. The current allocation structure of these stocks may cause constraints to fishery sectors. **Therefore, at this time, the GMT recommends the status quo biennial trawl/non-trawl allocations for all stocks except canary rockfish, widow rockfish, and petrale sole for which the GMT recommends further analysis overwinter.**

Canary rockfish is an important stock to many directed groundfish fisheries, and ACL reductions in 2025-26 are expected to result in trawl and non-trawl allocations that would be higher than recent mortality in those respective sectors (Table 2). Currently, 72.3 percent of the canary rockfish fishery HG is allocated to the trawl sector and 27.7 percent to the non-trawl sector. The non-trawl allocation is then distributed to the commercial non-trawl and state-specific recreational sectors using an informal sharing arrangement (see Action Item #10). Given the expected constraints to many sectors, the GMT plans to holistically analyze all allocation and management schemes for canary rockfish in our overwinter analysis. At that time, the GMT will develop any alternative options for Council consideration in March and April, as needed.

In addition to canary rockfish, the GMT identified the potential for the trawl sector to be constrained by widow rockfish in 2025-26 because of decreasing trawl allocations in those years compared to recent mortality (Table 3). Currently, 400 mt of the widow rockfish fishery HG is

<sup>1</sup> The data for their ACLs, Harvest Guidelines (HG), total groundfish mortality (through 2022), trawl/non-trawl allocations and mortality, and sector-specific mortality as a percentage of total groundfish mortality from 2011-2022 are provided in Appendix A for reference. For all tables in this section and in Appendix A, data were queried from the Fisheries Observation Science (FOS) program’s groundfish expanded multi-year mortality (GEMM) product for 2002-2022 (Somers et al., 2023).

allocated to the non-trawl sector and the remainder is allocated to the trawl sector. The GMT sees merit in increasing the trawl sector percentage, as that sector is more likely to be constrained than the non-trawl sector in 2025-26. **The GMT recommends including an option for analysis that would allocate 200 mt of widow rockfish to the non-trawl sector and the remainder to the trawl sector.**

The GMT also identified the potential for petrale sole to be a constraint to the trawl sector in 2025-26 given substantial reductions in the ACLs (Table 4). The status quo trawl/non-trawl allocations are such that 30 mt is allocated to the non-trawl sector and the remainder is allocated to the trawl sector. Recreational petrale sole mortality to date in 2023 is higher than it has been historically, and the GMT expects that 2025-26 non-trawl mortality could reach or exceed 30 mt. Therefore, the GMT concluded that further analysis of petrale sole allocations and management measures to stay within the allocations is justified.

**Table 2. Canary rockfish ACLs, HGs, set-asides, and sector allocations, 2017-2026. Trawl and non-trawl mortality and attainments are shown in gray for comparison against the trawl and non-trawl allocations also in gray.**

Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
ACL	1,714	1,526	1,450	1,368	1,338	1,307	1,284	1,296	571	573
Off-the-top Deduction	247	59	67	67	69	69	69	69	63	63
Fishery HG	1,467	1,467	1,383	1,301	1,269	1,238	1,215	1,227	508	510
(Trawl %)	72.3%	72.3%	72.3%	72.3%	72.3%	72.3%	72.3%	72.3%	72.3%	72.3%
Trawl Allocation	1,060	1,060	1,000	941	917	895	879	887	368	368
Trawl Mortality	249	449	427	339	374	498	-	-	-	-
Trawl Attainment	23%	42%	43%	36%	41%	56%	-	-	-	-
--At-sea Set-aside	16	16	16	16	36	36	36	36	36	36
	30	30	30	30						
--IFQ Allocation	1,014	1,014	954	895	881	859	843	851	332	332
(Non-Trawl %)	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%
Non-Trawl Allocation	406	406	383	360	351	343	337	340	141	141
Non-Trawl Mortality	130	122	139	141	178	186	-	-	-	-
Non-Trawl Attainment	32%	30%	36%	39%	51%	54%	-	-	-	-
--Non-nearshore + Nearshore HG (36%)	46	46	44	41	127	123	121	122	51	51
	100	100	94	89						
--WA Rec. HG (12.3%)	50	50	47	44	43	42	41	42	17	17
--OR Rec. HG (18.5%)	75	75	71	67	65	63	62	63	26	26
--CA Rec. HG (33.2%)	135	135	127	120	117	114	112	113	47	47

**Table 3. Trawl/non-trawl allocations, mortality, and attainments for widow rockfish from 2011-2026. Status quo allocations are 400 mt to non-trawl and the remainder to trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mort. (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort. (mt)	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort. (mt)
2011	600	539	176	491	175	36%	99%	49	1.9	4%	1%
2012	600	539	241	491	234	48%	97%	49	6.5	13%	3%
2013	1,500	1,411	462	1,284	443	34%	96%	127	19.5	15%	4%
2014	1,500	1,411	727	1,284	711	55%	98%	127	16.4	13%	2%
2015	2,000	1,880	858	1,711	850	50%	99%	169	7.7	5%	1%
2016	2,000	1,880	989	1,711	985	58%	100%	169	3.8	2%	0%
2017	13,508	13,290	6,352	12,094	6,343	52%	100%	1,196	9.5	1%	0%
2018	12,655	12,437	10,556	11,318	10,523	93%	100%	1,119	33.3	3%	0%
2019	11,831	11,583	9,552	10,540	9,523	90%	100%	1,042	29.2	3%	0%
2020	11,199	10,951	8,429	9,965	8,419	84%	100%	986	9.8	1%	0%
2021	14,725	14,477	10,881	14,077	10,869	77%	100%	400	11.7	3%	0%
2022	13,788	13,540	12,117	13,140	12,096	92%	100%	400	20.9	5%	0%
2023	12,624	12,386		11,986				400			
2024	11,482	11,244		10,844				400			
2025	11,237	11,019		10,619				400			
2026	10,392	10,174		9,774				400			

**Table 4. Trawl/non-trawl allocations, mortality, and attainments for petrale sole from 2011-2026. Status quo allocations are 30 mt to the non-trawl sector and the remainder to the trawl sector. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mort. (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2011	976	911	814	876	812	92.7%	99.8%	35	1.3	3.8%	0.2%
2012	1,160	1,095	1,058	1,060	1,057	99.7%	99.8%	35	1.7	5.0%	0.2%
2013	2,592	2,358	2,129	2,323	2,126	91.5%	99.8%	35	3.3	9.3%	0.2%
2014	2,652	2,418	2,320	2,383	2,319	97.3%	99.9%	35	1.3	3.8%	0.1%
2015	2,816	2,579	2,504	2,544	2,500	98.3%	99.8%	35	3.9	11.0%	0.2%
2016	2,910	2,673	2,481	2,638	2,475	93.8%	99.8%	35	5.5	15.7%	0.2%
2017	3,136	2,895	2,743	2,750	2,735	99.5%	99.7%	145	7.9	5.4%	0.3%
2018	3,013	2,772	2,654	2,633	2,645	100.5%	99.6%	139	9.4	6.7%	0.4%
2019	2,908	2,587	2,392	2,458	2,378	96.7%	99.4%	129	14.0	10.8%	0.6%
2020	2,845	2,524	2,124	2,398	2,116	88.2%	99.6%	126	8.8	7.0%	0.4%
2021	4,115	3,728	2,825	3,698	2,817	76.2%	99.7%	30	8.1	26.9%	0.3%
2022	3,660	3,273	3,009	3,243	2,997	92.4%	99.6%	30	11.7	38.9%	0.4%
2023	3,485	3,099		3,069				30			
2024	3,285	2,899		2,869				30			
2025	2,354	1,976		1,946				30			
2026	2,255	1,877		1,847				30			

## Action Item #6: Rebuilding/Overfished Species Allocations

### Rebuilding Species

#### *Yelloweye Rockfish*

In recent years, yelloweye rockfish has been allocated 8 percent to the trawl fisheries and 92 percent to the non-trawl fisheries. Table 5 shows the recent years' allocations, mortality, and sector-specific percentage of the total directed groundfish mortality. Historical mortality in the trawl sector is 0.03-0.80 mt, which is lower than the expected 2025-26 trawl allocations of 3.6-3.7 mt. The non-trawl mortality has ranged from 7.9-28.6 mt, which is lower than the expected 2025-26 non-trawl allocations of 41.5-42.2 mt. Therefore, the GMT does not expect status quo yelloweye rockfish allocation proportions to be a constraint to either the trawl or non-trawl fisheries in 2025-26. **The GMT recommends adopting status quo yelloweye rockfish proportions for trawl/non-trawl allocations (8 percent and 92 percent, respectively).**



**Table 5. Yelloweye rockfish allocations and mortality statistics (mt) from 2011-2026. Status quo allocations are 8 percent trawl and 92 percent non-trawl. The fishery HG (and resulting calculations) will be updated once draft off-the-top deductions are finalized.**

Year	ACL (mt)	Fishery HG (mt)	Total Directed Groundfish Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort. (mt)	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort. (mt)
2011	17.0	11.1	8.5	0.6	0.1	10%	1%	10.5	8.4	80%	99%
2012	17.0	11.1	10.4	0.6	0.0	5%	0%	10.5	10.3	98%	100%
2013	18.0	12.2	9.1	1.0	0.1	6%	1%	11.2	9.0	81%	99%
2014	18.0	12.2	8.0	1.0	0.1	10%	1%	11.2	7.9	70%	99%
2015	18.0	12.2	11.1	1.0	0.0	4%	0%	11.2	11.1	99%	100%
2016	19.0	13.2	8.8	1.1	0.1	5%	1%	12.1	8.8	73%	99%
2017	20.0	14.6	17.1	1.1	0.2	15%	1%	13.1	16.9	129%	99%
2018	20.0	14.0	16.2	1.1	0.1	11%	1%	12.9	16.1	124%	99%
2019	48.0	41.9	19.9	3.4	0.5	15%	3%	38.6	19.4	50%	97%
2020	49.0	42.9	15.0	3.4	0.4	12%	3%	39.5	14.6	37%	97%
2021	50.0	41.2	16.2	3.3	0.5	14%	3%	37.9	15.7	42%	97%
2022	51.0	42.2	29.4	3.4	0.8	24%	3%	38.8	28.6	74%	97%
2023	66.0	55.4		4.4				50.8			
2024	66.0	55.4		4.4				50.8			
2025	55.8	44.0		3.5				40.5			
2026	56.6	44.8		3.6				41.2			

\*note the trawl and non-trawl allocations do not always sum to the fishery HG in cases where the Council included a management buffer.

## Action Item #7: Amendment 21 Trawl/Non-Trawl Allocations

The Council has the ability to amend the Fishery Management Plan to remove or adjust the hard-wired Amendment 21 (A-21) formulas used to set trawl and non-trawl allocations for some stocks. A-21 allocations can also be adjusted during the Trawl Catch Share Program and Intersector Allocation Review, which is scheduled to begin scoping in June 2024 ([Agenda Item C.8, Attachment 1, November 2023](#)). Due to substantial changes to the ACLs for shortspine thornyhead north and south of 34° 27' N. lat. the Council may wish to reconsider the A-21 allocation adjustments for one or both of those stocks, as described further below.

### *Shortspine Thornyhead North of 34° 27' N. Lat.*

Table 6 below shows trends in trawl and non-trawl mortality, allocations, and sector-specific percent of total directed groundfish mortality 2011-2022 for shortspine thornyhead north of 34°

27' N. lat. ACLs, HGs, and sector allocations are shown for 2011-2026. The status quo A-21 allocations are 95 percent trawl and 5 percent non-trawl. Based on status quo allocation percentages, average trawl mortality 2011-2022 would be 1.8 times the expected 2025 trawl allocation, and average non-trawl mortality 2011-2022 would be 2.7 times the expected 2025 non-trawl allocation.

While these constraints may justify revisiting the shortspine thornyhead north A-21 allocations, adjusting A-21 allocations is expected to require substantially more analysis and workload than biennial trawl/non-trawl allocations. **Therefore, the GMT recommends delaying all A-21 adjustments, including shortspine thornyhead, until the intersector allocation review so that the holistic trawl catch share program review may inform potential adjustments.**

**Table 6. Trawl/non-trawl allocations, mortality, and attainments for shortspine thornyhead north of 34° 27' N. lat. from 2011-2026. Status quo allocations are 95 percent trawl and 5 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed Groundfish Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort. (mt)	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort. (mt)
2011	1,573	1,528	804	1,452	733	50%	91%	76	71	93%	9%
2012	1,556	1,511	788	1,435	724	50%	92%	76	65	86%	8%
2013	1,540	1,481	924	1,407	863	61%	93%	74	61	83%	7%
2014	1,525	1,466	762	1,392	708	51%	93%	73	53	73%	7%
2015	1,745	1,686	785	1,601	736	46%	94%	84	48	57%	6%
2016	1,726	1,667	806	1,583	757	48%	94%	83	49	59%	6%
2017	1,713	1,654	836	1,571	771	49%	92%	83	65	78%	8%
2018	1,698	1,639	765	1,557	698	45%	91%	82	67	82%	9%
2019	1,683	1,618	659	1,537	609	40%	92%	81	50	62%	8%
2020	1,669	1,604	408	1,524	374	25%	92%	80	34	42%	8%
2021	1,428	1,350	437	1,282	402	31%	92%	67	35	51%	8%
2022	1,393	1,315	641	1,249	613	49%	96%	66	27	41%	4%
2023	1,359	1,281		1,217				64			
2024	1,328	1,250		1,187				62			
2025	487	417		396				21			
2026	488	419		398				21			

## Action Item #8: Harvest Guidelines/State Shares for Stocks in a Complex

*Blackgill rockfish (within the slope rockfish complex south of 40°10' N. lat.)*

In the 2021-22 biennium, the Council chose to manage blackgill rockfish within the slope rockfish complex south of 40° 10' N. lat. by setting an HG for blackgill rockfish that was equal to the species-specific ACL contribution to the slope rockfish complex south of 40° 10' N. lat. The blackgill rockfish HG was then used to allocate 41 percent to the trawl sector and 59 percent to the non-trawl sector; these percentages were selected as part of the original Amendment-26 final preferred alternative. The other species in the slope rockfish complex south of 40°10' N. lat. are collectively allocated 91 percent to trawl and 9 percent to non-trawl. This allocation scheme, although complex, seems to meet the needs of trawl and non-trawl sectors, **and therefore the GMT recommends continuing to use this approach for the 2025-26 biennium.** Table 7 shows the proposed 2025-26 HGs for blackgill rockfish and the resulting trawl and non-trawl allocations. Table 8 shows the proposed 2025-26 HGs for the remaining species in the slope rockfish complex south of 40° 10' N. lat. and the resulting trawl and non-trawl allocations.

**Table 7. Proposed 2025-26 HG (mt) and trawl/non-trawl allocations (mt) for blackgill rockfish in the slope rockfish complex south of 40° 10' N. lat.**

Sector	2025	2026	Recent 5-year Avg. Mortality (mt)	Recent 5-year Max. Mortality (mt)
HG (ACL contribution)	167.68	165.05	42.4	63.1
Trawl share (41%)	68.75	67.67	20.0	37.8
Non-trawl (59%)	98.93	97.38	22.4	27.6

**Table 8. Proposed 2025-26 HG (in mt) and trawl/non-trawl allocations (in mt) for the remaining species in the Slope Rockfish south of 40° 10' N. lat. complex.**

Sector	2025	2026	Recent 5-year Avg. Mortality (mt)	Recent 5-year Max. Mortality (mt)
HG (ACL contribution)	693.14	690.80	43.0	46.8
Trawl share (91%)	630.76	628.63	36.6	41.6
Non-trawl (9%)	62.38	62.17	6.5	9.4

*Oregon black/blue/deacon rockfish complex*

The Oregon black/blue/deacon rockfish complex was created in 2019. At that time there were discussions about species-specific harvest guidelines within the complex. The goal was to prevent overfishing of the species-specific contribution to the complex. The Oregon Department of Fish and Wildlife (ODFW) informed the Council that they would be managing the complex to stay within the species-specific contributions to the complex (Table 9). In 2022, the species-specific ACL contribution was exceeded for black rockfish, but was within the complex total. ODFW took inseason action on Sep 6, 2022 to lower the recreational bag limit from five to four in an effort to stay within the black rockfish ACL contribution.

**Table 9. The black rockfish and blue/deacon rockfish 2021 and 2022 species-specific OFL, ABC, and ACL contributions to the Oregon black/blue/deacon rockfish complex, with annual mortality by species.**

Species	2021					2022				
	OFL cont. (mt)	ABC cont. (mt)	ACL cont. (mt)	Total Mort. (mt)	Over/Under OFL cont. (mt)	OFL cont. (mt)	ABC cont. (mt)	ACL cont. (mt)	Total Mort. (mt)	Over/Under OFL cont. (mt)
Black RF	570.0	512.0	512.0	440.1	-129.9	569.0	512.0	512.0	526.7	-42.3
Blue/deacon RF	105.7	90.6	90.6	26.2	-79.5	103.1	87.5	87.5	36.0	-67.1
<b>Complex Total</b>	<b>675.7</b>	<b>602.6</b>	<b>602.6</b>	<b>466.8</b>	<b>-208.9</b>	<b>672.1</b>	<b>599.5</b>	<b>599.5</b>	<b>562.7</b>	<b>-109.4</b>

Based on the above, the GMT does not see a need for harvest guidelines for either species within the Oregon black/blue/deacon rockfish complex.

*Cabezon/kelp greenling complexes in WA and OR*

The cabezon/kelp greenling complexes in Washington and Oregon were established in 2019. At that time there were discussions about species-specific harvest guidelines within the complex. As with the Oregon black/blue/deacon rockfish complex discussed above, the goal was to prevent overfishing of the species-specific contribution to the complex. The Washington Department of Fish and Wildlife (WDFW) and ODFW informed the Council that they would be managing the complex to stay within species-specific contributions. During the two years for which total mortality data is available, the mortality of both species in the Oregon complex and Washington complex remained below the species specific contributions to the OFL, ABC, and ACLs (Table 10 and Table 11, respectively).

**Table 10. The cabezon and kelp greenling 2021 and 2022 species-specific OFL, ABC, and ACL contributions to the Oregon cabezon/kelp greenling complex, with annual mortality by species.**

Species	2021					2022				
	OFL cont. (mt)	ABC cont. (mt)	ACL cont. (mt)	Total Mort. (mt)	Over/Under OFL cont. (mt)	OFL cont. (mt)	ABC cont. (mt)	ACL cont. (mt)	Total Mort. (mt)	Over/Under OFL cont. (mt)
Cabezon	58.3	54.5	54.5	39.8	-18.5	56.1	52.2	52.2	42.5	-13.6
Kelp Greenling	157.0	144.0	144.0	31.9	-125.1	151.4	138.2	138.2	41.0	-110.4
<b>Complex Total</b>	<b>215.3</b>	<b>198.5</b>	<b>198.5</b>	<b>71.7</b>	<b>-143.6</b>	<b>207.5</b>	<b>190.4</b>	<b>190.4</b>	<b>83.5</b>	<b>-124</b>

**Table 11. The cabezon and kelp greenling 2021 and 2022 species-specific OFL, ABC, and ACL contributions to the Washington cabezon/kelp greenling complex, with annual mortality by species.**

Species	2021					2022				
	OFL cont. (mt)	ABC cont. (mt)	ACL cont. (mt)	Total Mort. (mt)	Over/Under OFL cont. (mt)	OFL cont. (mt)	ABC cont. (mt)	ACL cont. (mt)	Total Mort. (mt)	Over/Under OFL cont. (mt)
Cabezon	18.3	14.2	14.2	5.8	-12.5	14.9	11.6	11.6	7.8	-7.1
Kelp Greenling	7.1	5.5	5.5	0.8	-6.3	7.1	5.5	5.5	1.7	-5.4
<b>Complex Total</b>	<b>25.4</b>	<b>19.7</b>	<b>19.7</b>	<b>6.6</b>	<b>-18.8</b>	<b>22.0</b>	<b>17.1</b>	<b>17.1</b>	<b>9.5</b>	<b>-12.5</b>

Similar to the Oregon black/blue/deacon rockfish complex, **the GMT does not see a need for harvest guidelines for either species within the Oregon cabezon/kelp greenling complex or the Washington cabezon/kelp greenling complex.**

## Action Item #9: At-Sea Set-Asides

At-sea set-asides are taken from the trawl allocation to accommodate bycatch in the at-sea whiting fishery; the remainder of the trawl allocations are allocated to the IFQ fishery. Similar to off-the-top deductions, at-sea set-asides are intended to account for anticipated mortality so as to minimize risk of exceeding the ACL. However, at-sea bycatch mortality is highly variable year-to-year, so it is difficult to predict with certainty. Species with at-sea set-asides will be managed on an annual basis unless there is a risk of a harvest specification being exceeded, unforeseen impact on another fishery, or conservation concerns, in which case inseason action may be taken (§660.150 and §660.160). For most stocks, attainment in the IFQ and non-trawl sectors is low enough to provide some level of buffer in the event the at-sea sectors exceed a set-aside. At-sea set-asides that are set too low may impact the whiting fishery’s ability to fully utilize their Pacific whiting allocation due to avoidance and move-along measures. For high attainment stocks in the IFQ fishery, setting at-sea set-asides such that a portion of the set-aside is continually unharvested economically impacts IFQ participants. On the other hand, if stocks are fully attained in all other sectors, setting the at-sea set-aside too low could put the ACL at risk of being exceeded.

At-sea bycatch rates for several stocks have been increasing in recent years. A variety of factors likely influence this increase, including fishing incentives and strategies, ocean conditions, and increasing abundance of co-occurring midwater species.

The GMT took a holistic look at all stocks with at-sea set-asides and asked the following list of questions for each individual stock when developing a range of options for analysis in the 2025-26 management measures package:

1. How does recent at-sea bycatch mortality compare to the status quo set-aside?
2. What has recent IFQ allocation attainment been?
3. Is the stock economically important to the IFQ fishery?
4. What has recent ACL attainment been?
5. Are the ACLs expected to change in the next biennium and by how much?

- a. If lower, is the IFQ sector expected to be more constrained in the next biennium?
  - b. If higher, is there a benefit to increasing the at-sea set-aside to create more of a buffer in the event of high bycatch?
6. Is there a conservation risk to the stock or a risk of exceeding the ACL if the at-sea set-aside were to be exceeded?
  7. How has fishing behavior impacted recent bycatch levels?
    - a. Can we expect similar fishing patterns in the 2025-26 biennium?

To answer some of those questions, Appendix B of this report shows recent four-year average and maximum at-sea mortality for stocks with at-sea set-asides, as well as 2022 ACL attainments, status quo set-asides, 2023 at-sea mortality through October 30, percent change in ACLs from 2024 to 2025, and average and maximum IFQ allocation attainments. **Based on our consideration of the questions listed above, the GMT recommends analyzing the range of options in Table 12 for 2025-26 at-sea set-asides.** The only stocks with more than one option for analysis are canary rockfish, darkblotched rockfish, sablefish north of 36° N. lat., and shortspine thornyhead north of 34° 27' N. lat.

**Table 12. GMT-proposed range of options for 2025-26 at-sea set-asides to be analyzed. For stocks with 2023-24 at-sea set-asides not listed in the table, the GMT recommends status quo set-asides in 2025-26.**

Stock/Management Unit	Option 1	Option 2	Option 3
Arrowtooth flounder	100	-	-
Canary rockfish	20	30	36
Darkblotched rockfish	100	150	-
Dover sole	10	-	-
Lingcod north of 40° 10' N. lat.	15	-	-
Longnose skate	5	-	-
Other flatfish	100	-	-
Pacific halibut	10	-	-
Pacific ocean perch	300	-	-
Petrable sole	5	-	-
Sablefish north of 36° N. lat.	300	429	-
Shortspine thornyhead north of 34° 27' N. lat.	50	70	100
Shelf rockfish complex north of 40° 10' N. lat.	35	-	-
Slope rockfish complex north of 40° 10' N. lat.	300	-	-
Widow rockfish	476	-	-
Yellowtail rockfish north of 40° 10' N. lat.	360	-	-

### *Canary Rockfish*

As noted above, the GMT plans to analyze canary rockfish management measures holistically, including at-sea set-asides. Average annual at-sea mortality of canary rockfish 2019-2022 is 4 mt, and the maximum during that time period is 6 mt. However, 20 mt have been caught this year as of November 5th, 2023. Therefore, the GMT considered 20 mt to be a sufficient minimum to

analyze, and 36 mt is the 2023-24 set-aside. Given the importance of canary rockfish, sees merit in including 30 mt as a moderate reduction with some buffer to account for unusually high bycatch.

### *Darkblotched rockfish*

The GMT received a request from the GAP to consider two alternatives for the darkblotched rockfish at-sea set-aside in 2025-26 that would increase the set-aside based on recent high mortality trends in the at-sea sector, and given that the set-aside was exceeded in 2022, the GMT sees merit in analyzing two options that are higher than the 2023-24 set-aside of 76.4 mt.

### *Sablefish North of 36° N. lat.*

Sablefish north ACLs are expected to increase roughly three-fold in 2025-26, and the GMT proposes analyzing two options for the at-sea set-aside. Option 1 roughly reflects the at-sea sectors' maximum mortality 2019-2022 (305 mt; 2022), and Option 2 was developed by multiplying the 2023 at-sea catch as of October 31 (158.3 mt) by the percent change in the sablefish north ACL (271 percent), with the expectation that recent high sablefish bycatch could be a result of the recent strong year classes.

### *Shortspine thornyhead north of 34° 27' N. lat.*

Bycatch of shortspine thornyhead was also exceptionally high in 2022 (244 mt), and 99 mt has been taken this year as of November 5, 2023. The 2023-24 set-aside is 70 mt (Option 2). A modest increase (100 mt; Option 1) to the at-sea set-aside could account for this increase in bycatch while recognizing that shortspine thornyhead north is likely to be a constraint in the IFQ sector in 2025-26 with substantial ACL reductions. However, some amount of the shortspine thornyhead ACL south of 34° 27' N. lat. is likely to go unharvested based on mortality trends, which means that the coastwide Acceptable Biological Catch (ABC) is not expected to be at risk. Thus, Option 1 would analyze re-distributing 20 mt to the IFQ sector in 2025-26 given potential constraints in that sector and the low conservation risk to the coastwide stock if the at-sea set-aside were exceeded.

## **Action Item #10: Within Non-Trawl HGs/Shares**

### **Rebuilding Species**

Under this action item, the Council will adopt the preliminary two-year within non-trawl allocations for yelloweye rockfish.

### *Yelloweye Rockfish*

Yelloweye rockfish is rebuilding ahead of schedule. Attainment of target stocks in the nearshore and non-nearshore sectors are high for most species, except lingcod, which has been limited by yelloweye rockfish bycatch (see Table 13). The GMT could analyze whether the yelloweye rockfish ACT is still necessary for management since the ACL is not expected to be at risk of being exceeded, and therefore additional analysis about the harvest guideline would be done overwinter.

**Table 13. 2021-22 non-trawl yelloweye rockfish mortality (mt) and percent of allocation attained, by sector.**

Sector	2021 Allocation		2021 Mortality			2022 Allocation		2022 Mortality		
	HG mt	ACT mt	mt	% of HG	% of ACT	HG mt	ACT mt	mt	% of HG	% of ACT
Non-Nearshore/ Nearshore	7.9	6.2	5.8	73.4%	93.5%	8.1	6.3	<b>16.1</b>	198.8%	255.6%
WA Rec.	9.7	7.5	2.6	26.8%	34.7%	9.9	7.8	3.2	32.3%	41%
OR Rec.	8.8	6.9	3.3	37.5%	47.8%	9.0	7.1	5.2	57.8%	73.2%
CA Rec	11.4	8.9	4.0	35.1%	44.9%	11.7	9.2	3.8	32.5%	41.3%
<b>Total</b>	<b>37.9</b>	<b>29.5</b>	<b>15.7</b>	<b>41.4%</b>	<b>53.2%</b>	<b>38.8</b>	<b>30.4</b>	<b>28.3</b>	<b>72.9%</b>	<b>93.1%</b>

**Table 14. Status quo yelloweye rockfish within non-trawl sector shares, based on the draft fishery HG, and non-trawl allocation for 2023-2024. Will be updated once off-the-top deductions are approved. Values in metric tons (mt), rounded to nearest tenth of a mt.**

Sector	SQ %	2025 HG (mt)	2026 HG (mt)	Reduction factor from HG to ACT a/	2025 ACT (mt)	2026 ACT (mt)
Non-Nearshore/Nearshore	21%	8.7	8.9	0.784	6.8	7.0
WA Rec.	26%	10.8	11.0		8.5	8.6
OR Rec.	23%	9.5	9.7		7.4	7.6
California Rec	30%	12.5	12.7		9.8	9.9
<b>Total (non-trawl allocation)</b>	<b>100%</b>	<b>41.5</b>	<b>42.3</b>		<b>32.5</b>	<b>33.1</b>

a/ based on the proportional difference between the 2019-2020 HGs and ACTs applied to the 2025-26 HG.

## Non-Overfished Species

Within the non-trawl allocation, several stocks are currently managed with an informal sharing arrangement between the commercial non-trawl sector and the three state-specific recreational sectors. Council action is not necessary if any non-trawl sector exceeds their respective harvest guideline, but the states generally coordinate to discuss management responses as needed. The exception to this is sablefish south of 36° N. lat., for which a formal allocation is established between the limited entry and open access sectors within the non-trawl sectors, and the Council manages those sectors to stay within the sector-specific shares. For the nearshore rockfish complex, state-specific sharing arrangements are established for each species within the complex.

### *Canary Rockfish*

Given the expected constraints to many sectors, the GMT plans to holistically analyze all allocation and management schemes for canary rockfish in our overwinter analysis. Given how potentially constraining canary rockfish will be for all sectors, there may be good justification to choose status quo non-trawl sharing arrangements. However, in light of discussions during the last biennial cycle, and the increase in recreational effort shown in Table 15 and Table 16, the GMT could analyze the following as a potential option:



1. Reallocate some of the commercial non-nearshore and nearshore share to the three state-specific recreational sectors equitably.

Specifically, commercial non-trawl mortality of canary rockfish was at a recent maximum of 31 mt in 2021 and 2022, but the expected 2025-26 commercial non-trawl share (i.e., non-nearshore + nearshore) is 51 mt. Yet, all of the state-specific recreational shares in 2025-26 are expected to be substantially lower than recent mortality in those sectors. Furthermore, the commercial non-trawl sector has been taking 17 percent of the total non-trawl mortality, while the commercial non-trawl sharing percentage is currently 36 percent. On the other hand, the WA and OR recreational sharing percentages are 3.7 percent and 12.5 percent lower than their respective contributions to total non-trawl mortality. California’s recreational share is roughly proportional at 1.8 percent higher than their recent average contribution.

**Table 15. Canary rockfish ACLs, HGs, set-asides, and sector allocations, 2017-2026. Trawl and non-trawl mortality and attainments are shown in gray for comparison against the trawl and non-trawl allocations also in gray.**

Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Non-Trawl Allocation	406	406	383	360	351	343	337	340	141	141
Non-Trawl Mortality	130	122	139	141	178	186	-	-	-	-
Non-Trawl Attainment	32%	30%	36%	39%	51%	54%	-	-	-	-
--Non-nearshore + Nearshore HG (36%)	46	46	44	41	127	123	121	122	51	51
	100	100	94	89						
--WA Rec. HG (12.3%)	50	50	47	44	43	42	41	42	17	17
--OR Rec. HG (18.5%)	75	75	71	67	65	63	62	63	26	26
--CA Rec. HG (33.2%)	135	135	127	120	117	114	112	113	47	47

**Table 16. Canary rockfish mortality in the commercial and recreational non-trawl sectors and sector-specific mortality as a percent of total non-trawl mortality, 2017-2022.**

Non-Trawl Sector		2017	2018	2019	2020	2021	2022	Average of 2020-2022
Non-nearshore + Nearshore	Mortality (mt)	13	12	15	26	31	31	29
	% of total non-trawl mortality	10%	10%	11%	19%	17%	17%	17%
WA Rec.	Mortality (mt)	5	5	14	8	39	37	28
	% of total non-trawl mortality	4%	4%	10%	6%	22%	20%	16%
OR Rec.	Mortality (mt)	28	44	39	60	38	56	52
	% of total non-trawl mortality	22%	36%	28%	43%	22%	30%	31%
CA Rec.	Mortality (mt)	83	62	71	46	70	63	59
	% of total non-trawl mortality	64%	51%	51%	33%	39%	34%	35%

*Nearshore Rockfish Complex North of 40° 10' N. lat.*

Currently, the nearshore rockfish complex is managed using an informal sharing arrangement. Amendment 31 defines copper rockfish off of Washington and Oregon as two separate stocks with individual stock assessments that inform the ACL contributions to the nearshore complex north. As a result of these new stock definitions, the GMT requests guidance from the Council as to whether the GMT should analyze any alternatives to the informal sharing arrangement that is currently in place.

**Table 17. Status quo informal sharing arrangement for the nearshore rockfish complex north of 40° 10' N. lat.. “Contr.” is the ACL contribution for each stock, which is divided amongst states by the SQ sharing arrangement percents (some values do not sum up due to rounding). Highlighted stocks mean they have been recently assessed.**

Stock	Sharing arrangement			2025				2026			
	WA%	OR%	CA%	ACL contr.	WA	OR	CA	ACL contr.	WA	OR	CA
Black and Yellow	12.9%	58.4%	28.7%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blue/deacon (CA)	0.0%	0.0%	100.0%	27.7	0.0	0.0	27.7	27.4	0.0	0.0	27.4
Blue/deacon (WA)	100.0%	0.0%	0.0%	5.6	5.6	0.0	0.0	5.5	5.5	0.0	0.0
Brown	0.0%	8.0%	92.0%	1.7	0.0	0.1	1.5	1.7	0.0	0.1	1.5
Calico	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
China (WA)	100.0%	0.0%	0.0%	7.7	7.7	0.0	0.0	7.4	7.4	0.0	0.0
China (OR + CA)	0.0%	80.9%	19.1%	16.1	0.0	13.0	3.1	15.7	0.0	12.7	3.0
Copper (WA) a/	100.0%	0.0%	0.0%	1.9	1.9	0.0	0.0	1.9	1.9	0.0	0.0
Copper (OR) a/	0.0%	100.0%	0.0%	14.4	0.0	14.4	0.0	13.9	0.0	13.9	0.0
Copper (4010-42)	0.0%	0.0%	100.0%	6.8	0.0	0.0	6.8	6.8	0.0	0.0	6.8
Gopher	12.9%	58.4%	28.7%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grass	12.9%	58.4%	28.7%	0.5	0.1	0.3	0.1	0.5	0.1	0.3	0.1
Kelp	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Olive	12.9%	58.4%	28.7%	0.3	0.0	0.1	0.1	0.3	0.0	0.1	0.1
Quillback (WA)	100.0%	0.0%	0.0%	2.2	2.2	0.0	0.0	2.2	2.2	0.0	0.0
Quillback (OR)	0.0%	100.0%	0.0%	2.7	0.0	2.7	0.0	2.7	0.0	2.7	0.0
Quillback (4010-42)	0.0%	0.0%	100.0%	tbd	0.0	0.0	tbd	tbd	0.0	0.0	tbd
Treefish	12.9%	58.4%	28.7%	0.2	0.0	0.1	0.0	0.2	0.0	0.1	0.0
<b>Total</b>				<b>87.8</b>	<b>17.5</b>	<b>30.8</b>	<b>39.4</b>	<b>86.1</b>	<b>17.1</b>	<b>30.0</b>	<b>39.0</b>
off-top				3.27				3.27			
off-top %					20%	35%	45%		20%	35%	45%
<b>HG</b>					<b>16.8</b>	<b>29.7</b>	<b>37.9</b>		<b>16.5</b>	<b>28.9</b>	<b>37.5</b>

a/ Per Amendment 31, copper rockfish is a combined Oregon and Washington stock. The 2025-26 amounts shown reflect the ACLs shown in the stock assessments.

*Sablefish South of 36° N. lat.*

Sablefish south of 36° N. lat. is currently managed using a 70-30 percent sharing of the non-trawl allocation between the limited entry fixed gear (LEFG) and open access (OA) sectors, respectively. Prior to 2017-2018, there was a 55-45 split. The GMT uses these shares to monitor the fishery inseason. The GMT did not see a need to adjust the current non-trawl sharing arrangement for sablefish south of 36° N. lat. given the expected increases in sablefish ACLs in 2025-26 and the low attainment of sablefish south allocations and shares. **Therefore, the GMT recommends continuing with the status quo 70-30 percent formal sharing arrangement between LEFG and OA for sablefish south of 36° N. lat. in 2025-26.**

*Bocaccio South of 40° 10' N. lat.*

Bocaccio south of 40° 10' N. lat. is managed with a non-trawl sharing arrangement between the non-nearshore/nearshore and state-specific recreational fisheries (Table 18).

**Table 18. Status quo 2025-26 non-trawl sector shares (%) for bocaccio south of 40° 10' N. lat.**

Sector	2025 Allocation	2026 Allocation	SQ %
Non-Trawl	995.3	987.7	100%
Fishery	2025 Shares	2025 Shares	SQ%
Non-Nearshore/Nearshore	307.5	305.2	30.9%
CA Rec.	687.8	682.5	69.1%

**Table 19. 2021-22 non-trawl bocaccio rockfish south of 40° 10' N. lat mortality (mt) and percent of allocation attained, by sector.**

Sector	2021 HG		2021 Mortality		2022 HG		2022 Mortality	
	mt	%	mt	%	mt	%	mt	%
Non-Nearshore/Nearshore	320	30%	35	32%	316	30%	46	31%
Recreational	716	69%	77	69%	706	69%	101	69%
<b>Total</b>	1,036	100%	111	100%	1,022	100%	146	100%

**At this time the GMT recommends the status quo harvest guideline sharing arrangement for bocaccio south of 40° 10' N. lat., because neither the commercial nor recreational non-trawl sectors seem to be fully attaining their allocation.**

*Cowcod South of 40° 10' N. lat.*

**At this time the GMT recommends the status quo harvest guidelines for cowcod south of 40° 10' N. lat., because neither the commercial nor recreational non-trawl sectors seem to be fully attaining their allocation.**

*Copper Rockfish South of 34° 27' N. lat.*

**At this time the GMT recommends investigating a copper rockfish ACT for the recreational fishery south of Pt. Conception.** The 2023 copper rockfish assessment indicated areas of local depletion south of Pt. Conception. To help address the concerns outlined in the assessment and to account for the 3-5 week lag in recreational fisheries data, an ACT for copper rockfish south of 34° 27' N. lat. should be explored in the GMTs over winter analysis.

# Appendix A.

**Table 20. Trawl/non-trawl allocations, mortality, and attainments for big skate from 2017-2026. Status quo allocations are 95 percent trawl and 5 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2017	494	437	237	415	231	56%	97%	22	6	30%	3%
2018	494	437	157	415	149	36%	94%	22	9	41%	6%
2019	494	452	158	429	147	34%	93%	23	10	46%	7%
2020	494	452	105	429	103	24%	98%	23	2	10%	2%
2021	1,477	1,420	194	1,349	189	14%	98%	71	4	6%	2%
2022	1,389	1,332	131	1,265	125	10%	96%	67	6	9%	4%
2023	1,320	1,263		1,200				63			
2024	1,267	1,210		1,149				60			
2025	1,224	1,165		1,106				58			
2026	1,188	1,128		1,147				60			

**Table 21. Trawl/non-trawl allocations, mortality, and attainments for bocaccio south of 40° 10' N. lat. from 2011-2026. Status quo allocations are 39 percent trawl and 61 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2011	263	250	111	60	5	9%	5%	190	106	56%	95%
2012	263	250	138	60	9	15%	6%	190	129	68%	94%
2013	320	312	148	75	13	17%	9%	237	135	57%	91%
2014	337	329	102	79	20	25%	19%	250	82	33%	81%
2015	349	341	137	82	40	48%	29%	259	98	38%	71%
2016	362	354	119	85	43	50%	36%	269	77	28%	64%
2017	790	775	218	302	87	29%	40%	472	131	28%	60%
2018	741	726	305	283	177	62%	58%	442	129	29%	42%
2019	2,097	2,051	466	801	302	38%	65%	1,250	164	13%	35%
2020	2,011	1,965	327	767	248	32%	76%	1,198	80	7%	24%
2021	1,748	1,702	366	664	254	38%	69%	1,038	112	11%	31%
2022	1,742	1,696	507	661	361	55%	71%	1,035	146	14%	29%
2023	1,842	1,794		700				1,094			
2024	1,828	1,780		694				1,086			
2025	1,681	1,673		653				1,020			
2026	1,668	1,660		648				1,012			

**Table 22. Trawl/non-trawl allocations, mortality, and attainments for cowcod south of 40° 10' N. lat. from 2011-2026. Status quo allocations are 36 percent trawl and 64 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2011	3	2.7	1.4	1.8	0.0	1%	1%	0.9	1.4	150%	99%
2012	3	2.7	0.8	1.8	0.1	5%	11%	0.9	0.7	81%	89%
2013	3	2.9	1.6	1.0	0.2	19%	12%	1.9	1.4	73%	88%
2014	3	2.9	0.7	1.0	0.2	19%	29%	1.9	0.5	24%	71%
2015	10	8	0.8	1.4	0.4	28%	47%	2.6	0.4	17%	53%
2016	10	8	0.9	1.4	0.3	20%	30%	2.6	0.7	25%	70%
2017	10	8	1.2	1.4	0.4	30%	35%	2.6	0.8	30%	65%
2018	10	8	2.4	1.4	0.4	30%	17%	2.6	2.0	77%	83%
2019	10	8	4.8	2.2	0.8	35%	16%	3.8	4.1	107%	84%
2020	10	8	5.8	2.2	0.8	36%	14%	3.8	5.0	132%	86%
2021	87.0	78.0	12.5	28.1	1.9	7%	15%	49.9	10.6	21%	85%
2022	85.0	75.6	1.7	27.2	0.8	3%	46%	48.4	0.9	2%	54%
2023	80.0	68.8		24.8				44.0			
2024	79.0	67.8		24.4				43.4			
2025	76.6	66.5		23.9				42.6			
2026	75.3	65.2		23.5				41.7			



**Table 23. Trawl/non-trawl allocations, mortality, and attainments for lingcod south of 40° 10' N. lat. from 2011-2026. Status quo allocations are 40 percent trawl and 60 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2011	2102	2095	216	943	7	1%	3%	1,152	207	18%	96%
2012	2164	2157	276	971	14	1%	5%	1,186	257	22%	93%
2013	1111	1102	432	496	14	3%	3%	606	407	67%	94%
2014	1063	1054	502	474	16	3%	3%	580	461	79%	92%
2015	1004	995	709	448	29	6%	4%	547	636	116%	90%
2016	946	937	674	422	21	5%	3%	515	622	121%	92%
2017	1251	1242	534	559	23	4%	4%	683	482	71%	90%
2018	1144	1135	449	511	49	10%	11%	624	374	60%	83%
2019	1039	1028	391	463	80	17%	21%	565	292	52%	75%
2020	869	857.7	288	386	57	15%	20%	472	217	46%	75%
2021	1,102	1,089	309	436	44	10%	14%	653	254	39%	82%
2022	1,172	1,159	319	464	51	11%	16%	695	256	37%	80%
2023	739	726		290				436			
2024	740	727		291				436			
2025	768	756		302				454			
2026	795	783		313				470			

**Table 24. Trawl/non-trawl allocations, mortality, and attainments for longnose skate from 2011-2026. Status quo allocations are 90 percent trawl and 10 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2011	1,349	1,220	907	1,159	819	71%	90%	61	88	144%	10%
2012	1,349	1,220	988	1,159	922	80%	93%	61	67	109%	7%
2013	2,000	1,928	981	1,735	924	53%	94%	193	57	30%	6%
2014	2,000	1,928	902	1,735	851	49%	94%	193	51	27%	6%
2015	2,000	1,927	836	1,734	779	45%	93%	193	57	30%	7%
2016	2,000	1,927	904	1,734	824	48%	91%	193	80	42%	9%
2017	2,000	1,853	881	1,668	773	46%	88%	185	108	58%	12%
2018	2,000	1,853	760	1,668	678	41%	89%	185	82	44%	11%
2019	2,000	1,852	667	1,667	603	36%	90%	185	64	35%	10%
2020	2,000	1,852	552	1,667	511	31%	93%	185	41	22%	7%
2021	1,823	1,792	612	1,613	573	36%	94%	179	39	22%	6%
2022	1,761	1,730	586	1,557	555	36%	95%	173	32	18%	5%
2023	1,708	1,457		1,311				146			
2024	1,660	1,409		1,268				141			
2025	1,616	1,585		1,427				159			
2026	1,579	1,548		1,394				155			

**Table 25. Trawl/non-trawl allocations, mortality, and attainments for minor shelf rockfish complex north of 40° 10' N. lat. from 2011-2026. Status quo allocations are 60 percent trawl and 40 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2011	968	925	38	557	17	3%	45%	368	21	6%	55%
2012	968	925	67	557	41	7%	61%	368	26	7%	39%
2013	968	903	51	543	31	6%	60%	359	20	6%	40%
2014	968	903	52	543	35	6%	67%	359	17	5%	33%
2015	1,944	1,872	51	1,127	34	3%	66%	745	17	2%	34%
2016	1,952	1,880	55	1,132	39	3%	70%	748	17	2%	30%
2017	2,049	1,965	286	1,183	257	22%	90%	782	29	4%	10%
2018	2,047	1,963	323	1,182	294	25%	91%	781	30	4%	9%
2019	2,054	1,977	648	1,190	611	51%	94%	786	37	5%	6%
2020	2,048	1,971	598	1,187	570	48%	95%	784	28	4%	5%
2021	1,511	1,436	456	866	422	49%	93%	573	34	6%	7%
2022	1,450	1,375	350	829	316	38%	90%	548	34	6%	10%
2023	1,276	1,204		730				482			
2024	1,271	1,199		727				480			
2025	1,392	1,326		798				528			
2026	1,378	1,312		790				522			

**Table 26. Trawl/non-trawl allocations, mortality, and attainments for minor shelf rockfish complex south of 40° 10' N. lat. from 2011-2026. Status quo allocations are 12 percent trawl and 88 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2011	714	701	349	86	3	3%	1%	615	346	56%	99%
2012	714	701	394	86	14	16%	3%	615	381	62%	97%
2013	714	668	419	81	21	26%	5%	587	398	68%	95%
2014	714	668	327	81	10	12%	3%	587	317	54%	97%
2015	1,624	1,575	543	192	9	5%	2%	1,383	533	39%	98%
2016	1,625	1,576	427	192	5	2%	1%	1,384	422	30%	99%
2017	1,623	1,576	542	192	2	1%	0%	1,384	540	39%	100%
2018	1,624	1,577	529	192	6	3%	1%	1,384	524	38%	99%
2019	1,625	1,546	756	189	17	9%	2%	1,357	739	54%	98%
2020	1,625	1,546	383	189	22	12%	6%	1,357	361	27%	94%
2021	1,438	1,305	544	159	29	18%	5%	1,146	515	45%	95%
2022	1,428	1,295	498	158	16	10%	3%	1,137	482	42%	97%
2023	1,469	1,336		163				1,173			
2024	1,469	1,336		163				1,173			
2025	1,465	1,438		175				1,263			
2026	1,462	1,436		175				1,261			

**Table 27. Trawl/non-trawl allocations, mortality, and attainments for minor slope rockfish complex south of 40° 10' N. lat. from 2011-2026. Status quo allocations are 63 percent trawl and 37 percent non-trawl. GF = groundfish**

Year	ACL (mt)	Fishery HG (mt)	Total Directed GF Mortality (mt)	Trawl				Non-Trawl			
				Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.	Sector Alloc. (mt)	Sector Mort. (mt)	Sector attain.	% of total directed GF mort.
2017	707	687	92	433	59	14%	64%	254	33	13%	36%
2018	709	689	98	434	73	17%	75%	255	25	10%	25%
2019	744	724	80	456	51	11%	64%	268	29	11%	36%
2020	743	723	67	455	44	10%	66%	267	23	9%	34%
2021	709	670	81	422	48	11%	59%	248	33	13%	41%
2022	705	666	101	420	66	16%	66%	246	35	14%	34%
2023	701	662		417				245			
2024	697	658		415				243			
2025	693	674		425				249			
2026	690	671		423				248			

## Appendix B.

**Table 28. Recent at-sea mortality, 2022 ACL attainment, status quo at-sea set-asides, percent change in 2025 ACLs, and recent IFQ attainment for stocks with at-sea set-asides.**

Species/Species Group	Area	2022 ACL Attainment (%)	4 Year Average Mortality (mt)	4 Year Max. Mortality (mt)	2023-2024 Set-Asides (mt)	2023 At-Sea Mortality (mt) Through 10/30	% change in ACL from 2024 to 2025 (default HCR)	4-year Avg. IFQ Allocation Attainment (%)	4-year Max. IFQ Allocation Attainment (%)
Arrowtooth flounder	Coastwide	9%	35	71	70	49	-21.05%	9%	12%
Canary rockfish	Coastwide	53%	4	6	36	20	-54.93%	45%	57%
Darkblotched rockfish	Coastwide	41%	56	76	76.4	100	0.53%	41%	50%
Dover sole	Coastwide	9%	3	6	10	1	-5.15%	10%	12%
Lingcod	N. of 40° 10' N. lat.	18%	1	2	15	2	-5.79%	17%	21%
Longnose skate	Coastwide	33%	1	3	5	3	-2.65%	36%	41%
Minor shelf rockfish	N. of 40° 10' N. lat.	25%	10	16	35	6	116.74%	47%	52%
Minor slope rockfish	N. of 40° 10' N. lat.	30%	161	209	300	91	113.48%	23%	30%
Other flatfish	Coastwide	10%	24	47	35	23	51.65%	9%	11%
Pacific halibut b/	Coastwide	n/a	1	2	10	0	n/a	n/a	n/a
Pacific ocean perch	N. of 40° 10' N. lat.	11%	56	142	300	84	-3.34%	13%	15%
Petrable sole	Coastwide	83%	0	0	5	0	-28.34%	89%	97%
Sablefish	N. of 36° N. lat.	95%	112	305	100	158	271.12%	85%	99%
Shortspine thornyhead	N. of 34° 27' N. lat.	46%	97	244	70	95	-62.21%	30%	37%
Widow rockfish	Coastwide	88%	147	199	476	206	-2.13%	89%	94%
Yellowtail RF	N. of 40° 10' N. lat.	53%	148	317	320	266	12.25%	75%	84%

b/ Pacific halibut are managed by the International Pacific Halibut Commission and through the Council's Halibut Catch Sharing Plan.