

**GROUND FISH MANAGEMENT TEAM REPORT ON INSEASON ADJUSTMENTS-  
 INCLUDING WHITING YIELD SET-ASIDES FOR 2019**

The Groundfish Management Team (GMT) reviewed the latest information on the groundfish fisheries to-date and industry requests for 2018 and 2019 and offers the following comments and recommendations.

## 2018 Groundfish Fisheries

After reviewing the latest information, the GMT does not recommend any inseason actions for the remainder of 2018.

### Informational Items

#### Sablefish Daily Trip Limit (DTL) Fisheries

Table 1 below shows the projected landings through the end of the year with data through October 31, 2018.

**Table 1. Projected landings, landing target, and projected percent attainment by DTL sector (LEN= Limited Entry Fixed Gear North of 36° N. lat., OAN= Open Access North of 36° N. lat., LES= Limited Entry South of 36° N. lat., OAS= Open Access South of 36° N. lat.)**

Sector	Projected Landings (rd. wt. mt)	Landing Target (mt)	Attainment (%)
LEN	164-179	269	61-66.8
OAN	360.1-365.5	444	81.1-82.3
LES	232.3-356.5	759	42.6-47
OAS	33.8-35.5	325	11

#### At-Sea

Table 2 and Table 3 below show the to-date bycatch of selected species for the catcher/processor (CP) and mothership (MS) sectors. The whiting allocations reflect increases from the tribal reapportionment that became effective September 24, 2018 (NMFS-SEA-18-14).

**Table 2. At-sea bycatch through October 31, 2018.**

Species	CP			MS		
	Catch (mt)	Allocation/Set-Aside (mt)	Attainment (%)	Catch (mt)	Allocation/Set-Aside (mt)	Attainment (%)
Canary	0.78	16	4.88	4.62	30	15.4
Darkblotched	37.82	16.7	226.47	17.46	11.8	147.97
Pacific ocean perch (POP)	27.49	12.7	216.46	5.94	9.0	66
Widow	61.9	384.8	16.09	132.31	271.6	48.72
Whiting	103,794	136,912	75.81	61,576	96,644	63.71
Chinook a/	2,054			2,329		

a/ Numbers of fish, not mt

b/ As a reminder, the buffer for unforeseen catch events consists of 67.7 mt for darkblotched and 34.7 mt for POP and is available to any sector throughout the year.

**Table 3. Select species bycatch (mt) through October 31, 2018.**

Species	CP	MS	Total Catch	Total Set Aside
Sablefish	89.95	18.21	108.2	50
Rougheye a/	93.01	4.15	97.16	-
Minor slope (incl. rougheye)	145.44	64.86	210.3	100
Shortbelly	85.7	138.25	223.95	-

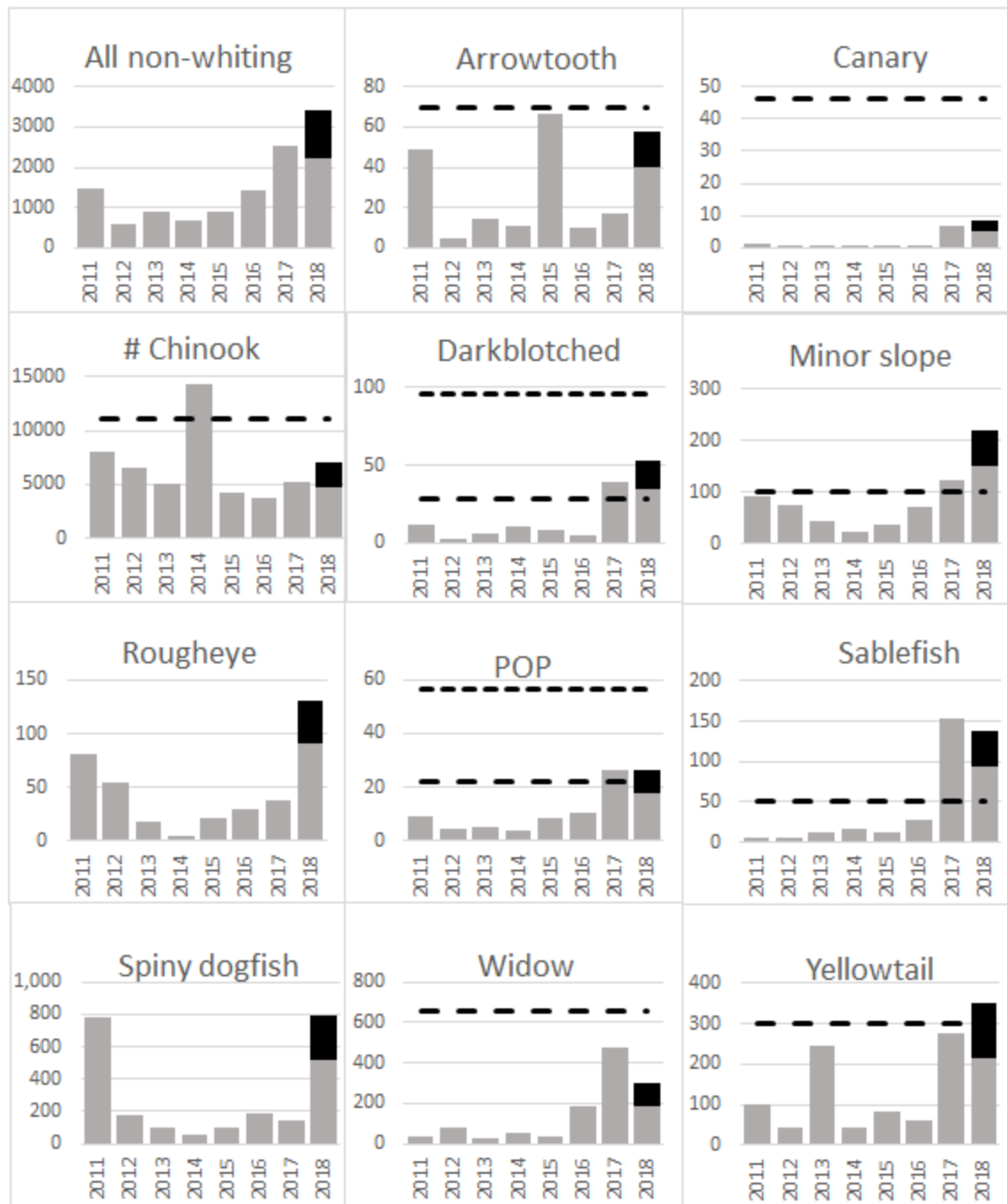
a/ Managed with a component annual catch limit (ACL) of 192.4 mt that the GMT does not project will be exceeded since other removals are 54 mt though November 3rd, and total projected impacts are 150 mt for the remainder of the year.

Bycatch in the at-sea sector has been relatively high for most species in 2018 (Figure 1). Bycatch rates of all non-whiting species, which provide a more standard comparison across years with variable whiting Total Allowable Catch (TACs), have also been relatively high. For instance, the bycatch rate (mt of non-whiting species/mt of whiting) for both sectors combined in 2018 is 1.6 percent compared to 1.3 percent in 2017 (which had the same TAC as 2018), 1.1 percent in 2011, and 0.4-0.9 percent from 2012 to 2016.

While both sectors have exceeded their darkblotched rockfish set asides, the combined total of 55.28 mt is less than 96.2 mt (the combined set-aside amounts plus the buffer for unforeseen catch events). Additionally, while the CP sector has exceeded their POP set aside, the combined total across both sectors of 33.43 mt is less than 56.4 mt (the combined set-aside amounts plus the

buffer). The bootstrap model showed a less than one percent chance that total combined set aside and buffer will be exceeded for either species.

For those species with combined set asides, Table 3 shows that the at-sea fleet has already exceeded their set asides of northern sablefish and northern slope rockfishes. The bycatch of roughey rockfish alone is projected to exceed the 100 mt set-aside for the entire northern slope complex. The at-sea fleets are also on pace to approach or exceed their set-asides of arrowtooth flounder and yellowtail rockfish. These projections assume that 2018 bycatch rates remain constant and the fleet takes the full whiting allocation.



**Figure 1. Actual (grey) and projected (black) bycatch (mt, except number of fish for Chinook) in the at-sea whiting fisheries compared, where applicable, to their 2018 set-asides, thresholds, and allocations (large dash) and to their set-asides plus inseason adjusted buffers for POP and darkblotched (small dash). Note that the “allocation” for Chinook is representing the whiting threshold, which includes shorebased whiting and all tribal bycatch.**

Note that the 2018 at-sea whiting fisheries combined have caught 107.7 mt of sablefish to date, which is more than double the 50 mt set aside. The at-sea sector is projected to catch 112.5 mt (median of the bootstrap) to 145 mt (based on current bycatch rates) of sablefish assuming full

attainment of the whiting allocation in 2018. This would result in a nearly 100 mt overage in 2018, similar to 2017, when the sector caught 153.1 mt of sablefish.

Since the at-sea overage of sablefish in 2017 contributed to the northern ACL being exceeded, the GMT analyzed if there would be a risk of exceeding the 2018 ACL. The most recent GMT projections found little risk to the 2018 northern sablefish ACL, despite the at-sea overage, due to low attainments in the other commercial fisheries, which we attribute to poor markets based on input from industry. As shown in Table 4, the projected impacts through the end of 2018 estimate an attainment of 86.7 percent of the sablefish N ACL. This includes assumptions of full attainment of the off-the-top deductions.

**Table 4. Sablefish N of 36° N. lat. scorecard (mt)**

<b>Year</b>	<b>Allocations</b>	<b>Projections</b>
Sablefish ACL N of 36° N. lat.	5,475	4746.2
Tribal Share	548	548
Research	26	26
Recreational	6.1	6.1
Exempted Fishing Permit (EFP)	1	1
Non-Tribal Comm. Share	4,894	4165.1
LE Share	4,434	3788
LE Trawl Share	2,572	2149.3
At-Sea Whiting	50	145
Shorebased IFQ	2,522	2004.3
LE FG	1,862	1638.7
Assumed Discard	67	67
Primary Season Share	1526	1407.7
DTL Landed Share	269	164
OA Share	460	377.1
Assumed Discard	17	17
OA Landed Share	444	360.1

### Shortbelly Rockfish

Based on the most recent estimates in the GMT scorecard, shortbelly rockfish total mortality is estimated to be at approximately 92 percent of the 500 mt ACL. All three whiting sectors have had much higher than normal bycatch of shortbelly rockfish this year (Table 5). For perspective, the three sectors combined caught 250 mt in 2017, with the CP sector taking 140 mt.

**Table 5. Whiting sector bycatch of shortbelly rockfish (mt).**

<b>Whiting Sector</b>	<b>Retained Weight (mt)</b>	<b>Discard Weight (mt)</b>	<b>Total Mortality (mt)</b>
At-Sea Hake CP	35.512	50.188	85.7
At-Sea Hake MS	61.704	76.542	138.246
Shoreside Hake	196.845	0.236	197.081

At the stock level, there is no conservation concern: while the ACL is 500 mt, the Acceptable Biological Catch (ABC) is 5,789 mt and the OFL is 6,950 mt. For context, in 2015-16, less than 10 percent of the ACL was taken in either year. In 2017, the groundfish fisheries took ~64 percent of the ACL ([Somers et al. 2018](#)).

Shortbelly rockfish is a small forage fish (13.7 inches max) that is not targeted for sale; therefore, it had previously been discussed as becoming an ecosystem component (EC) species in 2013-14. However, instead of classifying it as an EC species during Amendment 23, the Council chose instead to put in a restrictive ACL in 2013-14 at 50 mt. The increase to 500 mt for the ACL in 2015 was to prevent unavoidable bycatch from prematurely shutting down the re-emerging midwater rockfish fishery. This ACL was also meant to accommodate this incidental bycatch of shortbelly while allowing most of the harvestable surplus of the stock to be available as forage fish in the California Current. The Council may want to reconsider the ACL for shortbelly rockfish or make it an EC species in 2021-22 harvest specifications.

### Rebuilding Species Scorecard

Attachment 1 shows the rebuilding species scorecard, which includes updates to projected impacts for darkblotched rockfish and POP in the Individual Fishing Quota (IFQ) and at-sea sectors and yelloweye rockfish in the Incidental Open Access fisheries.

### Chinook Salmon Scorecard

Table 6 Salmon shows the inseason estimates of Chinook salmon bycatch through November 3, 2018. The 2018 groundfish fisheries are now held to Chinook salmon thresholds from the 2017 Salmon Biological Opinion. Relatively low bycatch rates and bycatch to date have led to the GMT to conclude that these whiting or non-whiting thresholds are unlikely to be reached (Table 6).

**Table 6. Inseason estimates of Chinook salmon bycatch (number of fish) through November 3, 2018.**

Sector	Sub-Sector	Catch To Date	Threshold	% of Threshold
Whiting	CP	2,056	11,000	53%
	MS	2,346		
	Shoreside	1,330		
	Tribal	125		
	<i>Total</i>	5,857		
Non-Whiting	Bottom Trawl	348 a/	5,500	16%
	Midwater Trawl	47 b/		
	Fixed Gear	500 c/		
	WA Rec			
	OR Rec + longleader			
	CA Rec			
	<i>Total</i>	895		
All groundfish fisheries		6,752	20,000	34%

a/ Includes 173 from the EFP caught with large roller footrope trawl seaward of the trawl RCA as a non-EFP gear

b/ Includes EFP minus the 173 from footnote a

c/ GMT proposed assumption of 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 applies to groundfish fisheries occurring outside of salmon seasons

## 2019 Groundfish Fisheries

### Action Items

Correction to Yellowtail Rockfish North of 40° 10' N. lat. Harvest Specifications

Recently, it was discovered that the ABC and ACL for yellowtail rockfish north of 40° 10' N. lat. for 2019-20 was mistakenly based on a Category 2 designation instead of Category 1. Revised estimates resulted in an addition of ~300 mt per year. The GMT does not have any issues with any management measures adopted in the 2019-20 specifications and **recommends the Council adopt the corrected values as shown in [Agenda Item G.6., Supplemental Attachment 3, November 2018.](#)**

**Table 7. Yellowtail Rockfish N of 40° 10' N. lat. Revised Allocations (mt)**

Year	Proposed Rule (Wrong Values)					Corrected Values				
	ACL	Fishery HG	Trawl All.	IFQ All.	Non-Trawl All.	ACL	Fishery HG	Trawl All.	IFQ All.	Non-Trawl All.
2019	5,997	4,951.9	4,357.7	4,057.7	594.2	6,279	5,233.9	4,605.8	4,305.8	628.1
2020	5,716	4,670.9	4,110.4	3,810.4	560.5	5,986	4,940.9	4,348.0	4,048.0	592.9

## Whiting Set-Asides for Pink Shrimp and Research

The GMT reviewed [Agenda Item G.6., Attachment 1, November 2018](#) and recommends a **1,500 mt set aside for 2019**. This amount should cover expected mortality and minimizes stranded yield as 1,500 mt is less than 0.5 percent of the 441,433 mt 2018 TAC.

## Sablefish DTL Fisheries

Table 8 below shows the DTL limits that the Council adopted in June 2018 as the final preferred trip limits for each DTL sector for 2019-20.

**Table 8. Trip Limits by DTL Sector.**

Sector	Trip Limit
LEN	1,200 lb/week, not to exceed 3,600 lbs bi-monthly
OAN	300 lb daily, or one landing per week up to 1,000 lb, not to exceed 2,000 lbs bi-monthly
LES	2,000 lb/week
OAS	300 lb daily, or one landing per week up to 1,600 lb, not to exceed 3,200 lbs bi-monthly

Table 9 below shows the projected attainment by sector under those trip limits. Based on input from the Groundfish Advisory Subpanel (GAP), the projections include 2018 prices and a correction factor to the model similar to 2018 effort.

**Table 9. Projected landings, landing target, and projected percent attainment for 2019.**

Sector	Projected Landings (rd. wt. mt)	Landing Target (mt)	Attainment (%)
LEN	182.5-248.8	273	66.9-91.1
OAN	278.2-397.4	449	61.9-88.4
LES	301.6-426.2	788	38.3-54.1
OAS	32.9	338	9.7

The GAP asked the GMT to look at trip limit alternatives for both LEN and OAN only, no alternative limits for LES or OAS, as shown in Table 10 below.



**Table 10. Trip limit alternatives for 2019 for LEN and OAN.**

Sector	Alternative	Trip Limit
LEN	Status Quo	1,200 lb/week, not to exceed 3,600 bi-monthly
	Alt 1	1,300 lb/week, not to exceed 3,900 bi-monthly
OAN	Status Quo	300 lb daily, or one landing per week up to 1,000 lb, not to exceed 2,000 lbs bi-monthly
	Alt 1	300 lb daily, or one landing per week up to 1,200 lb, not to exceed 2,400 lbs bi-monthly

Table 11 below shows the projected mortality by Alternative.

**Table 11. Projections for trip limit alternatives for 2019 for LEN and OAN.**

Sector	Alternative	Projected Landings (rd. wt. mt)	Landing Target (mt)	Attainment (%)
LEN	Status Quo	182.5-248.8	273	66.9-91.1
	Alt 1	207-277.5		75.8-101.7
OAN	Status Quo	278.2-397.4	449	61.9-88.4
	Alt 1	386.9-552.7		86.2-123

**Based on discussions with the GAP, the GMT recommends the Council adopt Alternative 1 for LEN (1,300 lbs weekly, not to exceed 3,900 bi-monthly) and OAN (300 lb daily, or one landing per week up to 1,200 lbs, not to exceed 2,400 lbs bi-monthly).**

#### OA trip limits for canary rockfish

Two proposals were made in April 2017 to increase OA canary rockfish trip limits for 2019-20 biennium as part of the biennial harvest specifications and management measures process. The Council elected to delay the proposals, so that the effects of first allowing retention in 2017 could be better evaluated with more data, particularly the discard estimates and observer records from the West Coast Groundfish Observer Program (WCGOP). Table 12 below shows the trip limit alternatives for consideration by the Council. As previously proposed, Alternative 1 would increase the OA canary rockfish limits coastwide from 150 lbs bi-monthly to 200 lbs bi-monthly. Alternative 2 would raise the bi-monthly limit to 300 lbs, which would be consistent with limited entry fisheries. Both alternatives include a closure south of 40° 10' N. lat. in period two that the Council adopted for 2019-2020 to better align with other fixed gear closures.

**Table 12: Canary rockfish trip limit alternatives in 2019.**

Sector	Alternative	Trip limit
LE N 40° 10'	No Action	300 lb/2 mo
LE S 40° 10'	No Action	300 lb/2 mo except closed period 2
OA N 40° 10'	No Action	150 lb 2/mo
	Alt 1	200 lb 2/mo
	Alt 2	300 lb 2/mo
OA S 40° 10'	No Action	150 lb 2/mo except closed period 2
	Alt 1	200 lb 2/mo except closed period 2
	Alt 2	300 lb 2/mo except closed period 2

Total mortality of canary rockfish is projected to remain low relative to the harvest guidelines (HGs) for the non-nearshore, Oregon nearshore, and California nearshore fisheries (Table 13). Only modest increases of less than 3 mt of additional canary rockfish landings are expected with the higher trip limits, mainly because the non-trawl RCA has closed the primary habitats and few vessels approach the current trip limits. The projections also include discard mortality based on the most recent 2017 discard ratios from observed trips. Bycatch of yelloweye rockfish for Alternative 2 is projected to increase by only 0.05 mt for all sectors combined and by less than that for Alternative 1. Under all three alternatives, each fixed gear fishery is expected to take less than half of their yelloweye rockfish HGs in 2019.

**The GMT recommends the Council consider Alternative 2 for canary rockfish trip limits to encourage increased yields with minimal risk to allocations.**

**Table 13: Canary rockfish projections by trip limit alternative.**

Sector	Projected total mortality (mt)			2019 HG (mt)	% taken w/ highest Alt 2
	No Action	Alt 1	Alt 2		
Non-nearshore	3.5	3.7	4.5	43.8	10.2%
OR nearshore	3.4	3.7	4.3	25.2	17.2%
CA nearshore	3.8	4.3	4.8	43.8	11.1%

## Informational Items

### Rebuilding Species Scorecard

Attachment 2 shows the rebuilding species scorecard for 2019 for cowcod and yelloweye rockfish.

### Recommendations

1. **The Council adopt the corrected yellowtail values as shown in [Agenda Item G.6., Supplemental Attachment 3, November 2018.](#)**
2. **The Council adopt a 1,500 mt whiting set aside for pink shrimp and research in 2019.**
3. **The Council adopt Alternative 1 for LEN (1,300 lbs weekly, not to exceed 3,900 bi-monthly) and OAN (300 lb daily, or one landing per week up to 1,200 lbs, not to exceed 2,400 lbs bi-monthly) for sablefish north of 36° N. lat.**
4. **The Council consider Alternative 2 for canary rockfish trip limits to encourage increased yields with minimal risk to allocations.**

**Attachment 1. Allocations<sup>a</sup> and projected mortality impacts (mt) of rebuilding groundfish species for 2018.**

	Bocaccio b/		Cowcod b/		Dkbl		POP		Yelloweye	
<i>Date : 11/6/2018</i>	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts	Allocation a/	Projected Impacts
<b>Off the Top Deductions</b>	15.4	16.8	2.0	2.0	77.3	9.6	49.4	14.7	6.0	4.1
Additional Buffer					50.0		25.0			
EFPc/	10.0	10.0	0.015	0.015	0.1	0.1	0.0	0.0	0.03	0.02
Research d/	4.6	4.6	2.0	2.0	2.5	2.5	5.2	5.2	3.3	2.2
Incidental OA e/	0.8	2.2	0.03	0.16	24.5	6.8	10.0	0.3	0.4	1.2
Tribal f/					0.2	0.2	9.2	9.2	2.3	0.6
Bottom Trawl					0.2	0.0	2.0	2.0		0.0
Troll					0.0					0.0
Fixed gear					0.0				2.3	0.6
mid-water					0.0					0.0
whiting						0.2	7.2	7.2		
<b>Trawl Allocations</b>	283.3	86.9	1.4	0.2	546.9	294.1	220.0	125.6	1.1	0.1
<b>-SB Trawl</b>	283.3	86.9	1.4	0.2	518.4	235.0	198.3	89.6	1.1	0.1
<b>-At-Sea Trawl</b>					28.5	59.1	21.7	36.0	0.0	0.0
<b>a) At-sea whiting MS</b>					11.8	19.6	9.0	7.2		
<b>b) At-sea whiting CP</b>					16.7	39.5	12.7	28.8		
<b>Non-Trawl Allocation</b>	442.3	202.1	2.6	2.2	28.8	6.1	11.6	0.7	12.9	13.8
Non-Nearshore	135.1	16.6		0.0		5.9		0.7	0.7	0.8
LE FG		6.2				5.0		0.6		
OA FG		10.4				0.9		0.1		
Directed OA: Nearshore	1.7	0.6		0.0		0.2		0.0	2.0	1.4
Recreational Groundfish										
WA						--		--	3.3	3.3
OR						--		--	3.0	3.4
CA	305.5	184.9		2.2		--		--	3.9	4.9
<b>TOTAL</b>	741.0	305.8	6.0	4.4	653.0	309.9	281.0	141.0	20.0	17.9
<b>2018 Harvest Specification</b>	<b>741</b>	<b>741</b>	<b>10.0</b>	<b>10.0</b>	<b>653</b>	<b>653</b>	<b>281</b>	<b>281</b>	<b>20</b>	<b>20</b>
<b>Difference</b>	0.0	435.2	4.0	5.6	0.0	343.2	0.0	140.0	0.0	2.1
<b>Percent of ACL</b>	100.0%	41.3%	60.2%	43.9%	100.0%	47.5%	100.0%	50.2%	100.0%	89.6%
Key			= not applicable							
		--	= trace, less than 0.1 mt							
			= Fixed Values							
			= off the top deductions							

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

b/ South of 40°10' N. lat.

c/ EFPs are amounts set aside to accommodate anticipated applications. Values in this table represent the estimates from the 17-18 biennial cycle, which are currently specified in regulation.

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

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

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

**Attachment 2. Allocations<sup>a</sup> and projected mortality impacts (mt) of rebuilding groundfish species for 2019.**

Fishery	Cowcod b/		Yelloweye		
	Allocations a/	Projected Impacts	HG Allocations a/	ACT Allocations a/	Projected Impacts
<b>Date: 18 July 2018</b>					
<b>Off the Top Deductions</b>	2.0	2.0	6.08	6.08	6.3
EFP b/	0.000	0.000	0.24	0.24	0.020
Research c/	2.0	2.0	2.9	2.9	2.7
Incidental OA d/	0.0	0.0	0.62	0.62	1.30
Tribal e/			2.3	2.3	2.3
Bottom Trawl					0.0
Troll					0.0
Fixed gear			2.3	2.3	2.3
mid-water					0.0
whiting					
<b>Trawl Allocations</b>	2.2	0.2	3.4		0.1
<b>-SB Trawl</b>	2.2	0.2	3.4		0.1
<b>-At-Sea Trawl</b>			0.0		0.0
<b>a) At-sea whiting MS</b>					
<b>b) At-sea whiting CP</b>					
<b>Non-Trawl Allocation</b>	3.8	1.6	38.6	30.3	15.0
Non-Nearshore		0.0	2.0	1.6	0.8
LE FG					0.7
OA FG					0.1
Directed OA: Nearshore		0.0	6.0	4.7	1.5
Recreational Groundfish					
WA			10.0	7.8	5.2
OR			8.9	7.0	4.2
CA		1.6	11.6	9.1	3.3
<b>TOTAL</b>	6.0	3.8	48.1	36.4	21.4
<b>Harvest Specification</b>	6.0	6.0	48	39	39
<b>Difference</b>	0.0	2.2	-0.1	2.6	17.6
<b>Percent of ACL</b>	100.0%	63.3%	100.2%	93.3%	55.0%
Key			= not applicable		
		--	= trace, less than 0.1 mt		
			= Fixed Values		
			= off the top deductions		

a/ Formal allocations are represented in the black shaded cells and are specified in regulation in Tables 1b and 1e. The other values in the allocation columns are 1) off the top deductions, 2) set asides from the trawl allocation 3) ad-hoc allocations recommended in the 2019-2020 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 2019-2020 Environmental Impact Statement (Appendix B), which are currently specified in regulation.

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

PFMC

11/07/18 Revised 11:20 am