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**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**50 CFR Part 679**

**[Docket No. 180831813-9170-02]**

**RIN 0648-XG471**

**Fisheries of the Exclusive Economic Zone Off Alaska; Gulf of Alaska; Final 2019 and 2020 Harvest Specifications for Groundfish**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Final rule; harvest specifications and closures.

**SUMMARY:** NMFS announces final 2019 and 2020 harvest specifications, apportionments, and Pacific halibut prohibited species catch limits for the groundfish fishery of the Gulf of Alaska (GOA). This action is necessary to establish harvest limits for groundfish during the remainder of the 2019 and the start of the 2020 fishing years and to accomplish the goals and objectives of the Fishery Management Plan for Groundfish of the Gulf of Alaska. The 2019 harvest specifications supersede those previously set in the 2018 and 2019 harvest specifications, and the 2020 harvest specifications will be superseded in early 2020 when the final 2020 and 2021 harvest specifications are published. The intended effect of this action is to conserve and manage the groundfish resources in the GOA in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

**DATES:** Harvest specifications and closures are effective at 1200 hours, Alaska local time (A.l.t.), [*Insert date of publication in the FEDERAL REGISTER*], through 2400 hours, A.l.t., December 31, 2020.

**ADDRESSES:** Electronic copies of the Final Alaska Groundfish Harvest Specifications Environmental Impact Statement (EIS), Record of Decision (ROD), the annual Supplementary Information Reports (SIRs) to the EIS, and the Initial Regulatory Flexibility Analysis (IRFA) prepared for this action are available from <https://alaskafisheries.noaa.gov>. The 2018 Stock Assessment and Fishery Evaluation (SAFE) report for the groundfish resources of the GOA, dated November 2018, and SAFE reports for previous years are available from the North Pacific Fishery Management Council (Council) at 605 West 4th Avenue, Suite 306, Anchorage, AK 99510-2252, phone 907-271-2809, or from the Council's website at <https://www.npfmc.org>.

**FOR FURTHER INFORMATION CONTACT:** Obren Davis, 907-586-7228.

**SUPPLEMENTARY INFORMATION:** NMFS manages the GOA groundfish fisheries in the exclusive economic zone of the GOA under the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP). The Council prepared the FMP under the authority of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801 *et seq.* Regulations governing U.S. fisheries and implementing the FMP appear at 50 CFR parts 600, 679, and 680.

The FMP and its implementing regulations require that NMFS, after consultation with the Council, specify the total allowable catch (TAC) for each target species, the sum of which must be within the optimum yield (OY) range of 116,000 to 800,000 metric tons (mt) (50 CFR 679.20(a)(1)(i)(B)). Section 679.20(c)(1) further requires that NMFS publish and solicit public comment on proposed annual TACs and apportionments thereof, Pacific halibut prohibited species catch (PSC) limits, and seasonal allowances of pollock and Pacific cod. Upon

consideration of public comment received under § 679.20(c)(1), NMFS must publish notice of final harvest specifications for up to two fishing years as annual TACs and apportionments, Pacific halibut PSC limits, and seasonal allowances of pollock and Pacific cod, per § 679.20(c)(3)(ii). The final harvest specifications set forth in Tables 1 through 30 of this rule reflect the outcome of this process, as required at § 679.20(c).

The proposed 2019 and 2020 harvest specifications for groundfish of the GOA and Pacific halibut PSC limits were published in the **Federal Register** on December 6, 2018 (83 FR 62794). Comments were invited and accepted through January 7, 2019. NMFS received five letters of comment on the proposed harvest specifications; the comments are summarized and responded to in the “Comments and Responses” section of this rule. In December 2018, NMFS consulted with the Council regarding the 2019 and 2020 harvest specifications. After considering public comment, as well as biological and socioeconomic data that were available at the Council’s December 2018 meeting, NMFS is implementing the final 2019 and 2020 harvest specifications, as recommended by the Council. For 2019, the sum of the TAC amounts is 430,569 mt. For 2020, the sum of the TAC amounts is 408,534 mt.

### **Other Actions Affecting the 2019 and 2020 Harvest Specifications**

#### *Amendment 106: Reclassify Squid as an Ecosystem Species*

On July 6, 2018, NMFS published the final rule to implement Amendment 106 to the FMP (83 FR 31460). This rule reclassified squid in the FMP as an “Ecosystem Component” species, which is a category of non-target species that are not in need of conservation and management. Accordingly, NMFS will no longer set an Overfishing Level (OFL), acceptable biological catch (ABC), and TAC for squid in the GOA groundfish harvest specifications, beginning with the proposed 2019 and 2020 harvest specifications. Amendment 106 prohibits

directed fishing for squid, while maintaining recordkeeping and reporting requirements for squid. Amendment 106 also establishes a squid maximum retainable amount when directed fishing for groundfish species at 20 percent to discourage targeting squid species.

*Rulemaking to Prohibit Directed Fishing for American Fisheries Act (AFA) and Crab Rationalization (CR) Program Sideboard Limits*

On February 8, 2019, NMFS published a final rule (84 FR 2723) that modifies regulations for the AFA Program and CR Program participants subject to limits on the catch of specific species (sideboard limits) in the GOA. Sideboard limits are intended to prevent participants who benefit from receiving exclusive harvesting privileges in a particular fishery from shifting effort to other fisheries.

Specifically, the final rule primarily establishes regulations to prohibit directed fishing for sideboard limits for specific groundfish species or species groups, rather than prohibiting directed fishing for AFA Program and CR Program sideboard limits through the GOA annual harvest specifications. The final rule streamlines and simplifies NMFS's management of applicable groundfish sideboard limits. Currently, NMFS calculates numerous AFA Program and CR Program sideboard limits as part of the annual GOA groundfish harvest specifications process and publishes these limits in the **Federal Register**. Concurrently, NMFS prohibits directed fishing for the majority of the groundfish sideboard limits because most limits are too small to support directed fishing. Rather than continue this annual process, the final rule revises regulations to prohibit directed fishing in regulation for most AFA Program and CR Program groundfish sideboard limits. Once the final rule is effective (effective March 11, 2019), NMFS will no longer publish in the annual GOA harvest specifications the AFA Program and CR Program sideboard limit amounts for groundfish species subject to the final rule (contained in

Tables 18, 19, 21, and 22 of this action), and those groundfish species subject to the final rule will be prohibited to directed fishing in regulation (84 FR 2723).

### **ABC and TAC Specifications**

In December 2018, the Scientific and Statistical Committee (SSC), Advisory Panel (AP), and Council reviewed the most recent biological and harvest information about the condition of groundfish stocks in the GOA. The GOA Groundfish Plan Team compiled and presented this information in the 2018 SAFE report for the GOA groundfish fisheries, dated November 2018 (see **ADDRESSES**). The SAFE report contains a review of the latest scientific analyses and estimates of each species' biomass and other biological parameters, as well as summaries of the available information on the GOA ecosystem and the economic condition of the groundfish fisheries off Alaska. From these data and analyses, the Plan Team recommends an OFL and ABC for each species or species group. The 2018 SAFE report was made available for public review during the public comment period for the proposed harvest specifications.

In previous years, the greatest changes from the proposed to the final harvest specifications have been based on recent NMFS stock surveys, which provide updated estimates of stock biomass and spatial distribution, and changes to the models used for producing stock assessments. At the November 2018 Plan Team meeting, NMFS scientists presented updated and new survey results, changes to stock assessment models, and accompanying stock assessment estimates for groundfish species and species groups that are included in the 2018 SAFE report per the stock assessment schedule found in the 2018 SAFE report introduction. The SSC reviewed this information at the December 2018 Council meeting. Changes from the proposed to the final 2019 and 2020 harvest specifications are discussed below.

The final 2019 and 2020 OFLs, ABCs, and TACs are based on the best available biological and socioeconomic information, including projected biomass trends, information on assumed distribution of stock biomass, and revised methods used to calculate stock biomass. The FMP specifies the formulas, or tiers, to be used to compute OFLs and ABCs. The formulas applicable to a particular stock or stock complex are determined by the level of reliable information available to fisheries scientists. This information is categorized into a successive series of six tiers to define OFL and ABC amounts, with Tier 1 representing the highest level of information quality available and Tier 6 representing the lowest level of information quality available. The Plan Team used the FMP tier structure to calculate OFL and ABC amounts for each groundfish species. The SSC adopted the final 2019 and 2020 OFLs and ABCs recommended by the Plan Team for all groundfish species. The Council adopted the SSC's OFL and ABC recommendations and the AP's TAC recommendations. The final TAC recommendations are based on the ABCs as adjusted for other biological and socioeconomic considerations, including maintaining the sum of all TACs within the required OY range of 116,000 to 800,000 mt.

The Council recommended 2019 and 2020 TACs that are equal to ABCs for pollock in the Southeast Outside (SEO) District, sablefish, shallow-water flatfish in the Central GOA and the West Yakutat and SEO Districts, deep-water flatfish, rex sole, arrowtooth flounder in the Central GOA, flathead sole in the West Yakutat and SEO Districts, Pacific ocean perch, northern rockfish, shortraker rockfish, dusky rockfish, rougheye and blackspotted rockfish, demersal shelf rockfish, thornyhead rockfish, "other rockfish," big skate, longnose skate, other skates, sculpins, sharks, and octopuses in the GOA. The Council recommended TACs for 2019 and 2020 that are less than the ABCs for pollock in the Western and Central GOA and the West Yakutat District,

Pacific cod, shallow-water flatfish in the Western GOA, arrowtooth flounder in the Western GOA and the West Yakutat and SEO Districts, flathead sole in the Western and Central GOA, and Atka mackerel. The combined Western, Central, and West Yakutat pollock TACs and the GOA Pacific cod TACs are set to accommodate the State of Alaska's (State's) guideline harvest levels (GHLs) so that the ABCs for pollock and Pacific cod are not exceeded. The Western GOA shallow-water flatfish, Western GOA arrowtooth flounder, and Western GOA flathead sole TACs are set to allow for increased harvest opportunities for these target species while conserving the halibut PSC limit for use in other, more fully utilized fisheries. The Atka mackerel TAC is set to accommodate incidental catch amounts in other fisheries.

The final 2019 and 2020 harvest specifications approved by the Secretary of Commerce are unchanged from those recommended by the Council, with the exception of the 2019 pollock ABCs and TACs for the Central GOA, and are consistent with the preferred harvest strategy alternative in the EIS (see **ADDRESSES**).

Following the December Council meeting, NMFS identified an error in the calculation of the 2019 seasonal apportionment of pollock among the combined Western, Central, and West Yakutat Regulatory Areas (W/C/WYK) management areas. This error does not affect the determination of the OFL or ABC (annual catch limit) for the combined W/C/WYK management areas. This error affects the 2019 seasonal TAC apportionments for the A season for Statistical Areas 620 and 630 (*i.e.*, the Central GOA management area), and the total ABC and TAC for the Central GOA management area. NMFS brought these errors to the Council's attention at the February 2019 Council meeting, along with NMFS's intent to make these corrections to the 2019 seasonal TAC apportionments for pollock. The Council did not object to the corrections for 2019. During the next annual harvest specifications process, NMFS will revise the 2020 seasonal

TAC apportionments for pollock, which will be based on the Council's recommendations at the December 2019 meeting for the 2020 and 2021 harvest specifications. Annually, NMFS makes an inseason adjustment to the next year's pollock specifications (*i.e.*, 2020) if necessary to ensure that the GOA pollock TAC for the upcoming year is the appropriate amount based on the best scientific information for pollock in the GOA.

NMFS finds that the Council's recommended OFLs, ABCs, and TACs are consistent with the biological condition of the groundfish stocks as described in the final 2018 SAFE report. This finding incorporates the corrections to the Council's recommendations for the pollock ABCs and TACs for the Central GOA management area. NMFS also finds that the Council's recommendations for OFLs, ABCs, and TACs are consistent with the biological condition of groundfish stocks as adjusted for other biological and socioeconomic considerations, including maintaining the total TAC within the OY range. NMFS reviewed the Council's recommended TACs and apportionments, and NMFS approves these harvest specifications under 50 CFR 679.20(c)(3)(ii). The apportionment of TAC amounts among gear types and sectors, processing sectors, and seasons is discussed below.

Tables 1 and 2 list the final 2019 and 2020 OFLs, ABCs, TACs, and area apportionments of groundfish in the GOA. The 2019 harvest specifications set in this final action will supersede the 2019 harvest specifications previously set in the final 2018 and 2019 harvest specifications (83 FR 8768, March 1, 2018). The 2020 harvest specifications will be superseded in early 2020 when the final 2020 and 2021 harvest specifications are published. Pursuant to this final action, the 2019 harvest specifications therefore will apply for the remainder of the current year (2019), while the 2020 harvest specifications are projected only for the following year (2020) and will be superseded in early 2020 by the final 2020 and 2021 harvest specifications. Because this final

action (published in early 2019) will be superseded in early 2020 by the publication of the final 2020 and 2021 harvest specifications, it is projected that this final action will implement the harvest specifications for the Gulf of Alaska for approximately one year.

#### *Specification and Apportionment of TAC Amounts*

NMFS's apportionment of groundfish species is based on the distribution of biomass among the regulatory areas over which NMFS manages the species. Additional regulations govern the apportionment of pollock, Pacific cod, and sablefish. Additional detail on the apportionment of pollock, Pacific cod, and sablefish are described below.

The ABC for the pollock stock in the combined W/C/WYK Regulatory Areas includes the amount for the GHL established by the State for the Prince William Sound (PWS) pollock fishery. The Plan Team, SSC, AP, and Council have recommended that the sum of all State water and Federal water pollock removals from the GOA not exceed ABC recommendations. For 2019 and 2020, the SSC recommended and the Council approved the W/C/WYK pollock ABC, including the amount to account for the State's PWS GHL. At the November 2018 Plan Team meeting, State fisheries managers recommended setting the PWS GHL at 2.5 percent of the annual W/C/WYK pollock ABC. For 2019, this yields a PWS pollock GHL of 3,396 mt, a decrease of 641 mt from the 2018 PWS GHL of 4,037 mt. For 2020, the PWS pollock GHL is 2,722 mt, a decrease of 1,315 mt from the 2018 PWS pollock GHL of 4,037 mt. After the GHL reductions, the 2019 and 2020 pollock ABCs for the combined W/C/WYK areas are then apportioned between four statistical areas (Areas 610, 620, 630, and 640) as both ABCs and TACs, as described below and detailed in Tables 1 and 2. The total ABCs and TACs for the four statistical areas, plus the State GHL, do not exceed the combined W/C/WYK ABC.

Apportionments of pollock to the W/C/WYK management areas are considered to be “apportionments of annual catch limits (ACLs)” rather than “ABCs.” This more accurately reflects that such apportionments address management, rather than biological or conservation, concerns. In addition, apportionments of the ACL in this manner allow NMFS to balance any transfer of TAC among Areas 610, 620, and 630 pursuant to § 679.20(a)(5)(iv)(B) to ensure that the combined W/C/WYK ACL, ABC, and TAC are not exceeded.

NMFS establishes pollock TACs in the Western (Area 610) and Central (Areas 620 and 630) Regulatory Areas and the West Yakutat (Area 640) and the SEO (Area 650) Districts of the GOA (see Tables 1 and 2). NMFS also establishes seasonal apportionments of the annual pollock TAC in the Western and Central Regulatory Areas of the GOA among Statistical Areas 610, 620, and 630. These apportionments are divided equally among each of the following four seasons: the A season (January 20 through March 10), the B season (March 10 through May 31), the C season (August 25 through October 1), and the D season (October 1 through November 1) (§§ 679.23(d)(2)(i) through (iv), and 679.20(a)(5)(iv)(A) and (B)). Additional detail is provided in this rule; Tables 3 and 4 list these amounts.

The 2019 and 2020 Pacific cod TACs are set to accommodate the State’s GHL for Pacific cod in State waters in the Western and Central Regulatory Areas, as well as in PWS. The Plan Team, SSC, AP, and Council recommended that the sum of all State water and Federal water Pacific cod removals from the GOA not exceed ABC recommendations. Accordingly, the Council set the 2019 and 2020 Pacific cod TACs in the Western, Central, and Eastern Regulatory Areas to account for State GHLS. Therefore, the 2019 Pacific cod TACs are less than the ABCs by the following amounts: 1) Western GOA, 2,290 mt; 2) Central GOA, 1,917 mt; and 3) Eastern GOA, 425 mt. The 2020 Pacific cod TACs are less than the ABCs by the following amounts: 1)

Western GOA, 2,909 mt; 2) Central GOA, 2,435 mt; and 3) Eastern GOA, 540 mt. These amounts reflect the State's 2019 and 2020 GHGs in these areas, which are 30 percent of the Western GOA ABC and 25 percent of the Eastern and Central GOA ABCs.

NMFS establishes seasonal apportionments of the annual Pacific cod TAC in the Western and Central Regulatory Areas. Sixty percent of the annual TAC is apportioned to the A season for hook-and-line, pot, and jig gear from January 1 through June 10, and for trawl gear from January 20 through June 10. Forty percent of the annual TAC is apportioned to the B season for jig gear from June 10 through December 31, for hook-and-line and pot gear from September 1 through December 31, and for trawl gear from September 1 through November 1 (§§ 679.23(d)(3) and 679.20(a)(12)). The Western and Central GOA Pacific cod TACs are allocated among various gear and operational sectors. The Pacific cod sector apportionments are discussed in detail in a subsequent section and in Tables 5 and 6 of this rule.

The Council's recommendation for sablefish area apportionments takes into account the prohibition on the use of trawl gear in the SEO District of the Eastern Regulatory Area (§ 679.7(b)(1)) and makes available five percent of the combined Eastern Regulatory Area TACs to vessels using trawl gear for use as incidental catch in other trawl groundfish fisheries in the WYK District (§ 679.20(a)(4)(i)). Tables 7 and 8 list the final 2019 and 2020 allocations of sablefish TAC to fixed gear and trawl gear in the GOA.

#### *Changes from the Proposed 2019 and 2020 Harvest Specifications in the GOA*

In October 2018, the Council's recommendations for the proposed 2019 and 2020 harvest specifications (83 FR 62794, December 6, 2018) were based largely on information contained in the final 2017 SAFE report for the GOA groundfish fisheries, dated November 2017. The final 2017 SAFE report for the GOA is available from the Council (see **ADDRESSES**). The Council

proposed that the final OFLs, ABCs, and TACs established for the 2019 groundfish fisheries (83 FR 8768, March 1, 2018) be used for the proposed 2019 and 2020 harvest specifications (83 FR 62794, December 6, 2018), pending completion and review of the 2018 SAFE report at the Council's December 2018 meeting.

As described previously, the SSC recommended the final 2019 and 2020 OFLs and ABCs as recommended by the Plan Team. The Council adopted as its recommendations the SSC's OFL and ABC recommendations and the AP's TAC recommendations for 2019 and 2020.

The final 2019 ABCs are higher than the proposed 2019 ABCs published in the proposed 2019 and 2020 harvest specifications (83 FR 62794, December 6, 2018) for pollock, shallow-water flatfish, deep-water flatfish, rex sole, arrowtooth flounder, flathead sole, northern rockfish, dusky rockfish, rougheye/blackspotted rockfish, demersal shelf rockfish, other rockfish, and sharks. The final 2019 ABCs are lower than the proposed 2019 ABCs for sablefish, Pacific ocean perch, and thornyhead rockfish.

The final 2020 ABCs are higher than the proposed ABCs for pollock, Pacific cod, shallow-water flatfish, deep-water flatfish, rex sole, arrowtooth flounder, flathead sole, northern rockfish, dusky rockfish, demersal shelf rockfish, other rockfish, and sharks. The final 2020 ABCs are lower than the proposed 2020 ABCs for sablefish, Pacific ocean perch, rougheye/blackspotted rockfish, and thornyhead rockfish. For the remaining target species, the Council recommended the final 2019 and 2020 ABCs that are the same as the proposed 2019 and 2020 ABCs.

Additional information explaining the changes between the proposed and final ABCs is included in the final 2018 SAFE report, which was not available when the Council made its proposed ABC and TAC recommendations in October 2018. At that time, the most recent stock

assessment information was contained in the final 2017 SAFE report. The final 2018 SAFE report contains the best and most recent scientific information on the condition of the groundfish stocks, as previously discussed in this preamble, and is available for review (see **ADDRESSES**). The Council considered the 2018 SAFE report in December 2018 when it made recommendations for the final 2019 and 2020 harvest specifications. In the GOA, the total final 2019 TAC amount is 430,569 mt, an increase of 15 percent from the total proposed 2019 TAC amount of 375,280 mt. The total final 2020 TAC amount is 408,534 mt, an increase of 9 percent from the total proposed 2020 TAC amount of 375,280 mt. Table 1a summarizes the difference between the proposed and final TACs.

Annual stock assessments incorporate a variety of new or revised inputs, such as survey data or catch information, as well as changes to the statistical models used to estimate a species' biomass and population trend. Changes to biomass and ABC estimates are primarily based on fishery catch updates to species' assessment models. Some species, such as pollock and sablefish, have additional surveys conducted on an annual basis, which resulted in additional data being available for the 2018 assessments for these stocks.

The changes from the proposed 2019 TACs to the final 2019 TACs are within a range of plus 143 percent or minus 29 percent, and the changes from the proposed 2020 TACs to the final 2020 TACs are within a range of plus 143 percent or minus 5 percent. Based on changes in the estimates of overall biomass in the stock assessment for 2019 and 2020, as compared to the estimates previously made for 2018 and 2019, the species or species group with the greatest TAC percentage increases are pollock, Pacific cod, arrowtooth flounder, northern rockfish, other rockfish, and sharks. Based on changes in the estimates of biomass, the species or species group with the greatest decreases in TACs is sablefish. For all other species and species groups,

changes from the proposed 2019 TACs to the final 2019 TACs and changes from the proposed 2020 TACs to the final 2020 TACs are less than a 10 percent change (either increase or decrease). These TAC changes correspond to associated changes in the ABCs and TACs, as recommended by the SSC, AP, and Council.

Detailed information providing the basis for the changes described above is contained in the final 2018 SAFE report. The final TACs are based on the best scientific information available. These TACs are specified in compliance with the harvest strategy described in the proposed and final rules for the 2019 and 2020 harvest specifications.

**Table 1a. Comparison of Proposed and Final 2019 and 2020 GOA Total Allowable Catch Limits (Values are rounded to the nearest metric ton and percentage).**

Species	2019 and 2020 Proposed TAC	2019 Final TAC	2019 Final minus 2019 Proposed TAC	Percentage difference	2020 Final TAC	2020 Final minus 2020 Proposed TAC	Percentage difference
Pollock	112,678	141,227	28,549	25%	114,943	2,265	2%
Pacific cod	12,368	12,368	0	0%	15,709	3,341	27%
Sablefish	16,194	11,571	-4,623	-29%	15,462	-732	-5%
Shallow-water flatfish	43,128	43,217	89	0%	43,606	478	1%
Deep-water flatfish	9,499	9,501	2	0%	9,624	125	1%
Rex sole	14,529	14,692	163	1%	14,725	196	1%
Arrowtooth flounder	76,300	99,295	22,995	30%	96,875	20,575	27%
Flathead sole	26,487	26,489	2	0%	26,587	100	0%
Pacific ocean perch	28,605	28,555	-50	0%	27,652	-953	-3%
Northern rockfish	3,347	4,528	1,181	35%	4,269	922	28%
Shortraker rockfish	863	863	0	0%	863	0	0%
Dusky rockfish	3,668	3,700	32	1%	3,670	2	0%
Rougheye/black spotted rockfish	1,427	1,428	1	0%	1,414	-13	-1%
Demersal shelf rockfish	250	261	11	4%	261	11	4%
Thornyhead rockfish	2,038	2,016	-22	-1%	2,016	-22	-1%
Other rockfish	2,305	5,594	3,289	143%	5,594	3,289	143%
Atka mackerel	3,000	3,000	0	0%	3,000	0	0%
Big skate	2,848	2,848	0	0%	2,848	0	0%
Longnose skate	3,572	3,572	0	0%	3,572	0	0%
Other skates	1,384	1,384	0	0%	1,384	0	0%
Sculpins	5,301	5,301	0	0%	5,301	0	0%
Sharks	4,514	8,184	3,670	81%	8,184	3,670	81%
Squids	0	0	0		0	0	
Octopuses	975	975	0	0%	975	0	0%
Total	375,280	430,569	55,289	15%	408,534	33,254	9%

The final 2019 and 2020 TAC recommendations for the GOA are within the OY range established for the GOA and do not exceed the ABC for any species or species group. Tables 1 and 2 list the final OFL, ABC, and TAC amounts for GOA groundfish for 2019 and 2020, respectively.

**Table 1 - Final 2019 OFLs, ABCs, and TACs of Groundfish for the Western/Central/West Yakutat, Western, Central, Eastern Regulatory Areas, the West Yakutat and Southeast Outside Districts of the Eastern Regulatory Area, and Gulfwide Districts of the Gulf of Alaska (Values are rounded to the nearest metric ton).**

Species	Area <sup>1</sup>	OFL	ABC	TAC
Pollock <sup>2</sup>	Shumagin (610)	n/a	24,875	24,875
	Chirikof (620)	n/a	67,388	67,388
	Kodiak (630)	n/a	34,443	34,443
	WYK (640)	n/a	5,748	5,748
	W/C/WYK (subtotal) <sup>2</sup>	194,230	135,850	132,454
	SEO (650)	11,697	8,773	8,773
	Total	205,927	144,623	141,227
Pacific cod <sup>3</sup>	W	n/a	7,633	5,343
	C	n/a	7,667	5,750
	E	n/a	1,700	1,275
	Total	23,669	17,000	12,368
Sablefish <sup>4</sup>	W	n/a	1,581	1,581
	C	n/a	5,178	5,178
	WYK	n/a	1,828	1,828
	SEO	n/a	2,984	2,984
	E (WYK and SEO) (subtotal)	n/a	4,812	4,812
	Total	25,227	11,571	11,571
Shallow-water flatfish <sup>5</sup>	W	n/a	25,620	13,250
	C	n/a	25,731	25,731
	WYK	n/a	2,279	2,279
	SEO	n/a	1,957	1,957
	Total	68,309	55,587	43,217
Deep-water flatfish <sup>6</sup>	W	n/a	416	416
	C	n/a	3,443	3,443
	WYK	n/a	3,280	3,280
	SEO	n/a	2,362	2,362
	Total	11,434	9,501	9,501
Rex sole	W	n/a	2,951	2,951
	C	n/a	8,357	8,357
	WYK	n/a	1,657	1,657
	SEO	n/a	1,727	1,727
	Total	17,889	14,692	14,692
Arrowtooth flounder	W	n/a	35,994	14,500
	C	n/a	70,995	70,995
	WYK	n/a	15,911	6,900
	SEO		22,941	6,900
	Total	174,598	145,841	99,295
Flathead sole	W	n/a	13,234	8,650

	C	n/a	20,238	15,400
	WYK	n/a	1,932	1,932
	SEO	n/a	406	406
	Total	44,865	21,109	15,400
Pacific ocean perch <sup>7</sup>	W	n/a	3,227	3,227
	C	n/a	19,646	19,646
	WYK	n/a	3,296	3,296
	W/C/WYK subtotal	31,113	26,169	26,169
	SEO	2,838	2,386	2,386
	Total	33,951	28,555	28,555
Northern rockfish <sup>8</sup>	W	n/a	1,190	1,190
	C	n/a	3,338	3,338
	E	n/a	1	-
	Total	5,402	4,529	4,528
Shortraker rockfish <sup>9</sup>	W	n/a	44	44
	C	n/a	305	305
	E	n/a	514	514
	Total	1,151	863	863
Dusky rockfish <sup>10</sup>	W	n/a	781	781
	C	n/a	2,764	2,764
	WYK	n/a	95	95
	SEO	n/a	60	60
	Total	4,521	3,700	3,700
Rougheye and Blackspotted rockfish <sup>11</sup>	W	n/a	174	174
	C	n/a	550	550
	E	n/a	704	704
	Total	1,715	1,428	1,428
Demersal shelf rockfish <sup>12</sup>	SEO	411	261	261
Thornyhead rockfish	W	n/a	326	326
	C	n/a	911	911
	E	n/a	779	779
	Total	2,688	2,016	2,016
Other rockfish <sup>13, 14</sup>	W and C	n/a	1,737	1,737
	WYK	n/a	368	368
	SEO	n/a	3,489	3,489
	Total	7,356	5,594	5,594
Atka mackerel	GW	6,200	4,700	3,000
Big skate <sup>15</sup>	W	n/a	504	504
	C	n/a	1,774	1,774
	E	n/a	570	570
	Total	3,797	2,848	2,848
Longnose skate <sup>16</sup>	W	n/a	149	149

	C	n/a	2,804	2,804
	E	n/a	619	619
	Total	4,763	3,572	3,572
Other skates <sup>17</sup>	GW	1,845	1,384	1,384
Sculpins	GW	6,958	5,301	5,301
Sharks	GW	10,913	8,184	8,184
Octopus	GW	1,300	975	975
Total		664,889	509,507	430,569

<sup>1</sup> Regulatory areas and districts are defined at § 679.2. (W=Western Gulf of Alaska; C=Central Gulf of Alaska; E=Eastern Gulf of Alaska; WYK=West Yakutat District; SEO=Southeast Outside District; GW=Gulf-wide).

<sup>2</sup> The total for the W/C/WYK Regulatory Areas pollock ABC is 135,850 mt. After deducting 2.5 percent (3,396 mt) of that ABC for the State's pollock GHL fishery, the remaining pollock ABC of 132,454 mt (for the W/C/WYK Regulatory Areas) is apportioned among four statistical areas (Areas 610, 620, 630, and 640). These apportionments are considered subarea ACLs, rather than ABCs, for specification and reapportionment purposes. The ACLs in Areas 610, 620, and 630 are further divided by season, as detailed in Table 3 (final 2019 seasonal biomass distribution of pollock in the Western and Central Regulatory Areas, area apportionments, and seasonal allowances). In the West Yakutat (Area 640) and Southeast Outside (Area 650) Districts of the Eastern Regulatory Area, pollock is not divided into seasonal allowances.

<sup>3</sup> The annual Pacific cod TAC is apportioned 60 percent to the A season and 40 percent to the B season in the Western and Central Regulatory Areas of the GOA. Pacific cod TAC in the Eastern Regulatory Area of the GOA is allocated 90 percent to vessels harvesting Pacific cod for processing by the inshore component and 10 percent to vessels harvesting Pacific cod for processing by the offshore component. Table 5 lists the final 2019 Pacific cod seasonal apportionments.

<sup>4</sup> Sablefish is allocated to trawl and fixed gear in 2019 and trawl gear in 2020. Table 7 lists the final 2019 allocations of sablefish TACs.

<sup>5</sup> "Shallow-water flatfish" means flatfish not including "deep-water flatfish," flathead sole, rex sole, or arrowtooth flounder.

<sup>6</sup> "Deep-water flatfish" means Dover sole, Greenland turbot, Kamchatka flounder, and deepsea sole.

<sup>7</sup> "Pacific ocean perch" means *Sebastes alutus*.

<sup>8</sup> "Northern rockfish" means *Sebastes polyspinis*. For management purposes, the 1 mt apportionment of ABC to the WYK District of the Eastern Gulf of Alaska has been included in the "other rockfish" species group.

<sup>9</sup> "Shortraker rockfish" means *Sebastes borealis*.

<sup>10</sup> "Dusky rockfish" means *Sebastes variabilis*.

<sup>11</sup> "Rougheye and blackspotted rockfish" means *Sebastes aleutianus* (rougheye) and *Sebastes melanostictus* (blackspotted).

<sup>12</sup> "Demersal shelf rockfish" means *Sebastes pinniger* (canary), *S. nebulosus* (china), *S. caurinus* (copper), *S. maliger* (quillback), *S. helvomaculatus* (rosethorn), *S. nigrocinctus* (tiger), and *S. ruberrimus* (yelloweye).

<sup>13</sup> "Other rockfish" means *Sebastes aurora* (aurora), *S. melanostomus* (blackgill), *S. paucispinis* (bocaccio), *S. goodei* (chilipepper), *S. crameri* (darkblotch), *S. elongatus* (greenstriped), *S. variegatus* (harlequin), *S. wilsoni* (pygmy), *S. babcocki* (redbanded), *S. proriger* (redstripe), *S. zacentrus* (sharpchin), *S. jordani* (shortbelly), *S. brevispinis* (silvergry), *S. diploproa* (splitnose), *S. saxicola* (stripetail), *S. miniatus* (vermilion), *S. reedi* (yellowmouth), *S. entomelas* (widow), and *S. flavidus* (yellowtail). In the Eastern GOA only, other rockfish also includes northern rockfish, *S. polyspinis*.

<sup>14</sup> "Other rockfish" in the Western and Central Regulatory Areas and in the West Yakutat District means other rockfish and demersal shelf rockfish. The "other rockfish" species group in the SEO District only includes other rockfish.

<sup>15</sup> "Big skate" means *Raja binoculata*.

<sup>16</sup> "Longnose skate" means *Raja rhina*.

<sup>17</sup> "Other skates" means *Bathyraja* and *Raja* spp.

**Table 2 - Final 2020 OFLs, ABCs, and TACs of Groundfish for the Western/Central/West Yakutat, Western, Central, Eastern Regulatory Areas, the West Yakutat and Southeast Outside Districts of the Eastern Regulatory Area, and Gulfwide Districts of the Gulf of Alaska (Values are rounded to the nearest metric ton).**

Species	Area <sup>1</sup>	OFL	ABC	TAC
Pollock <sup>2</sup>	Shumagin (610)	n/a	19,939	19,939
	Chirikof (620)	n/a	57,279	57,279
	Kodiak (630)	n/a	24,345	24,345
	WYK (640)	n/a	4,607	4,607
	W/C/WYK (subtotal) <sup>2</sup>	148,968	108,892	106,170
	SEO (650)	11,697	8,773	8,773
	Total	160,665	117,665	114,943
Pacific cod <sup>3</sup>	W	n/a	9,695	6,787
	C	n/a	9,738	7,304
	E	n/a	2,159	1,619
	Total	26,078	21,592	15,709
Sablefish <sup>4</sup>	W	n/a	2,105	2,105
	C	n/a	6,931	6,931
	WYK	n/a	2,433	2,433
	SEO	n/a	3,993	3,993
	E (WYK and SEO) (subtotal)	n/a	6,426	6,426
	Total	34,872	15,462	15,462
Shallow-water flatfish <sup>5</sup>	W	n/a	25,952	13,250
	C	n/a	26,065	26,065
	WYK	n/a	2,308	2,308
	SEO	n/a	1,983	1,983
	Total	69,167	56,308	43,606
Deep-water flatfish <sup>6</sup>	W	n/a	420	420
	C	n/a	3,488	3,488
	WYK	n/a	3,323	3,323
	SEO	n/a	2,393	2,393
	Total	11,581	9,624	9,624
Rex sole	W	n/a	2,956	2,956
	C	n/a	8,371	8,371
	WYK	n/a	1,664	1,664
	SEO	n/a	1,734	1,734
	Total	17,942	14,725	14,725
Arrowtooth flounder	W	n/a	34,765	14,500
	C	n/a	68,575	68,575
	WYK	n/a	15,368	6,900
	SEO	n/a	22,157	6,900
	Total	168,634	140,865	96,875
Flathead sole	W	n/a	13,771	8,650
	C	n/a	21,965	15,400

	WYK	n/a	2,097	2,097
	SEO	n/a	440	440
	Total	46,666	38,273	26,587
Pacific ocean perch <sup>7</sup>	W	n/a	3,125	3,125
	C	n/a	19,024	19,024
	WYK	n/a	3,192	3,192
	W/C/WYK	30,128	25,341	25,341
	SEO	2,748	2,311	2,311
	Total	32,876	27,652	27,652
	Northern rockfish <sup>8</sup>	W	n/a	1,122
C		n/a	3,147	3,147
E		n/a	1	0
Total		5,093	4,270	4,269
Shortraker rockfish <sup>9</sup>	W	n/a	44	44
	C	n/a	305	305
	E	n/a	514	514
	Total	1,151	863	863
Dusky rockfish <sup>10</sup>	W	n/a	774	774
	C	n/a	2,742	2,742
	WYK	n/a	94	94
	SEO	n/a	60	60
	Total	4,484	3,670	3,670
Rougheye and Blackspotted rockfish <sup>11</sup>	W	n/a	172	172
	C	n/a	545	545
	E	n/a	697	697
	Total	1,699	1,414	1,414
Demersal shelf rockfish <sup>12</sup>	SEO	411	261	261
Thornyhead rockfish	W	n/a	326	326
	C	n/a	911	911
	E	n/a	779	779
	Total	2,688	2,016	2,016
Other rockfish <sup>13,14</sup>	W and C	n/a	1,737	1,737
	WYK	n/a	368	368
	SEO	n/a	3,489	3,489
	Total	7,356	5,594	5,594
Atka mackerel	GW	6,200	4,700	3,000
Big skate <sup>15</sup>	W	n/a	504	504
	C	n/a	1,774	1,774
	E	n/a	570	570
	Total	3,797	2,848	2,848
Longnose skate <sup>16</sup>	W	n/a	149	149
	C	n/a	2,804	2,804

	E	n/a	619	619
	Total	4,763	3,572	3,572
Other skates <sup>17</sup>	GW	1,845	1,384	1,384
Sculpins	GW	6,958	5,301	5,301
Sharks	GW	10,913	8,184	8,184
Octopus	GW	1,300	975	975
Total		627,049	487,218	408,534

<sup>1</sup> Regulatory areas and districts are defined at § 679.2. (W=Western Gulf of Alaska; C=Central Gulf of Alaska; E=Eastern Gulf of Alaska; WYK=West Yakutat District; SEO=Southeast Outside District; GW=Gulf-wide).

<sup>2</sup> The total for the W/C/WYK Regulatory Areas pollock ABC is 108,892 mt. After deducting 2.5 percent (2,722 mt) of that ABC for the State's pollock GHF fishery, the remaining pollock ABC of 106,170 mt (for the W/C/WYK Regulatory Areas) is apportioned among four statistical areas (Areas 610, 620, 630, and 640). These apportionments are considered subarea ACLs, rather than ABCs, for specification and reapportionment purposes. The ACLs in Areas 610, 620, and 630 are further divided by season, as detailed in Table 4 (final 2020 seasonal biomass distribution of pollock in the Western and Central Regulatory Areas, area apportionments, and seasonal allowances). In the West Yakutat (Area 640) and Southeast Outside (Area 650) Districts of the Eastern Regulatory Area, pollock is not divided into seasonal allowances.

<sup>3</sup> The annual Pacific cod TAC is apportioned 60 percent to the A season and 40 percent to the B season in the Western and Central Regulatory Areas of the GOA. Pacific cod in the Eastern Regulatory Area of the GOA is allocated 90 percent to vessels harvesting Pacific cod for processing by the inshore component and 10 percent to vessels harvesting Pacific cod for processing by the offshore component. Table 6 lists the final 2020 Pacific cod seasonal apportionments.

<sup>4</sup> Sablefish is only allocated to trawl gear for 2020. Table 8 lists the final 2020 allocation of sablefish TACs to trawl gear.

<sup>5</sup> "Shallow-water flatfish" means flatfish not including "deep-water flatfish," flathead sole, rex sole, or arrowtooth flounder.

<sup>6</sup> "Deep-water flatfish" means Dover sole, Greenland turbot, Kamchatka flounder, and deepsea sole.

<sup>7</sup> "Pacific ocean perch" means *Sebastes alutus*.

<sup>8</sup> "Northern rockfish" means *Sebastes polyspinis*. For management purposes, the 1 mt apportionment of ABC to the WYK District of the Eastern Gulf of Alaska has been included in the "other rockfish" species group.

<sup>9</sup> "Shortraker rockfish" means *Sebastes borealis*.

<sup>10</sup> "Dusky rockfish" means *Sebastes variabilis*.

<sup>11</sup> "Rougheye and blackspotted rockfish" means *Sebastes aleutianus* (rougheye) and *Sebastes melanostictus* (blackspotted).

<sup>12</sup> "Demersal shelf rockfish" means *Sebastes pinniger* (canary), *S. nebulosus* (china), *S. caurinus* (copper), *S. maliger* (quillback), *S. helvomaculatus* (rosethorn), *S. nigrocinctus* (tiger), and *S. ruberrimus* (yelloweye).

<sup>13</sup> "Other rockfish" means *Sebastes aurora* (aurora), *S. melanostomus* (blackgill), *S. paucispinis* (bocaccio), *S. goodei* (chilipepper), *S. crameri* (darkblotch), *S. elongatus* (greenstriped), *S. variegatus* (harlequin), *S. wilsoni* (pygmy), *S. babcocki* (redbanded), *S. proriger* (redstripe), *S. zacentrus* (sharpchin), *S. jordani* (shortbelly), *S. brevispinis* (silverygrey), *S. diploproa* (splitnose), *S. saxicola* (stripetail), *S. miniatus* (vermilion), *S. reedi* (yellowmouth), *S. entomelas* (widow), and *S. flavidus* (yellowtail). In the Eastern GOA only, other rockfish also includes northern rockfish, *S. polyspinis*.

<sup>14</sup> "Other rockfish" in the Western and Central Regulatory Areas and in the West Yakutat District means other rockfish and demersal shelf rockfish. The "other rockfish" species group in the SEO District only includes other rockfish.

<sup>15</sup> "Big skate" means *Raja binoculata*.

<sup>16</sup> "Longnose skate" means *Raja rhina*.

<sup>17</sup> "Other skates" means *Bathyraja* and *Raja* spp.

### *Apportionment of Reserves*

Section 679.20(b)(2) requires that NMFS set aside 20 percent of each TAC for pollock, Pacific cod, flatfish, sculpins, sharks, and octopuses in reserve for possible apportionment at a later date during the fishing year. For 2019 and 2020, NMFS proposed reapportionment of all the reserves in the proposed 2019 and 2020 harvest specifications published in the **Federal Register** on December 6, 2018 (83 FR 62794). NMFS did not receive any public comments on the proposed reapportionments. For the final 2019 and 2020 harvest specifications, NMFS reapportioned, as proposed, all the reserves for pollock, Pacific cod, flatfish, sculpins, sharks, and octopuses back into the original TAC limit from which the reserve was derived. This was done because NMFS expects, based on recent harvest patterns, that such reserves are not necessary and that the entire TAC for each of these species will be caught. The TACs listed in Tables 1 and 2 reflect reapportionments of reserve amounts to the original TAC limit for these species and species groups; *i.e.*, each final TAC for the above mentioned species or species groups contains the full TAC recommended by the Council.

### *Apportionments of Pollock TAC Among Seasons and Regulatory Areas, and Allocations for Processing by Inshore and Offshore Components*

In the GOA, pollock is apportioned by season and area, and is further allocated for processing by inshore and offshore components. Pursuant to § 679.20(a)(5)(iv)(B), the annual pollock TAC specified for the Western and Central Regulatory Areas of the GOA is apportioned into four equal seasonal allowances of 25 percent. As established by § 679.23(d)(2)(i) through (iv), the A, B, C, and D season allowances are available from January 20 to March 10, March 10 to May 31, August 25 to October 1, and October 1 to November 1, respectively.

Pollock TACs in the Western and Central Regulatory Areas of the GOA are apportioned among Statistical Areas 610, 620, and 630 in proportion to the distribution of the pollock biomass, pursuant to § 679.20(a)(5)(iv)(A). In the A and B seasons, the apportionments previously were in proportion to the distribution of pollock biomass based on the four most recent NMFS winter surveys. In the C and D seasons, the apportionments were in proportion to the distribution of pollock biomass based on the four most recent NMFS summer surveys. For 2019 and 2020, the Council recommended, and NMFS approved, following the apportionment methodology that was used previously for the 2018 and 2019 harvest specifications. This methodology averages the winter and summer distribution of pollock in the Central Regulatory Area for the A season instead of using the distribution based on only the winter surveys. The average is intended to reflect the best available information about migration patterns, distribution of pollock, and the performance of the fishery in the area during the A season for the 2019 and 2020 fishing years. For the A season, the apportionment is based on an adjusted estimate of the relative distribution of pollock biomass of approximately 3 percent, 73 percent, and 24 percent in Statistical Areas 610, 620, and 630, respectively. For the B season, the apportionment is based on the relative distribution of pollock biomass of approximately 3 percent, 86 percent, and 11 percent in Statistical Areas 610, 620, and 630, respectively. For the C and D seasons, the apportionment is based on the relative distribution of pollock biomass of approximately 37 percent, 27 percent, and 37 percent in Statistical Areas 610, 620, and 630, respectively. The pollock chapter of the 2018 SAFE report (see **ADDRESSES**) contains a comprehensive description of the apportionment process and reasons for the minor changes from past apportionments.

Within any fishing year, the amount by which a seasonal allowance is underharvested or overharvested may be added to, or subtracted from, subsequent seasonal allowances for the Western and Central Regulatory Areas in a manner to be determined by the Regional Administrator (§ 679.20(a)(5)(iv)(B)). The rollover amount is limited to 20 percent of the subsequent seasonal TAC apportionment for the statistical area. Any unharvested pollock above the 20-percent limit could be further distributed to the other statistical areas, in proportion to the estimated biomass in the subsequent season in those statistical areas and in an amount no more than 20 percent of the seasonal TAC apportionment in those statistical areas (§ 679.20(a)(5)(iv)(B)). The pollock TACs in the WYK and the SEO Districts of 5,748 mt and 8,773 mt, respectively, in 2019, and 4,607 mt and 8,773 mt, respectively, in 2020, are not allocated by season.

Tables 3 and 4 list the final 2019 and 2020 seasonal biomass distribution of pollock in the Western and Central Regulatory Areas, area apportionments, and seasonal allowances. The amounts of pollock for processing by the inshore and offshore components are not shown. Section 679.20(a)(6)(i) requires the allocation of 100 percent of the pollock TAC in all regulatory areas and all seasonal allowances to vessels catching pollock for processing by the inshore component after subtraction of pollock amounts projected by the Regional Administrator to be caught by, or delivered to, the offshore component incidental to directed fishing for other groundfish species. Thus, the amount of pollock available for harvest by vessels harvesting pollock for processing by the offshore component is that amount that will be taken as incidental catch during directed fishing for groundfish species other than pollock, up to the maximum retainable amounts allowed by § 679.20(e) and (f). At this time, these incidental catch amounts

of pollock are unknown and will be determined during the fishing year during the course of fishing activities by the offshore component.

**Table 3 - Final 2019 Distribution of Pollock in the Western and Central Regulatory Areas of the Gulf of Alaska; Seasonal Biomass Distribution; Area Apportionments; and Seasonal Allowances of Annual TAC (Values are rounded to the nearest metric ton and percentages are rounded to the nearest 0.01.).**

Season <sup>1</sup>	Shumagin (Area 610)		Chirikof (Area 620)		Kodiak (Area 630)		Total <sup>2</sup>
	848	2.68%	23,236	73.35%	7,593	23.97%	
A (Jan 20-Mar 10)	848	2.68%	23,236	73.35%	7,593	23.97%	31,677
B (Mar 10-May 31)	848	2.68%	27,306	86.20%	3,522	11.12%	31,677
C (Aug 25-Oct 1)	11,590	36.59%	8,423	26.59%	11,664	36.82%	31,677
D (Oct 1-Nov 1)	11,590	36.59%	8,423	26.59%	11,664	36.82%	31,677
Annual Total	24,875		67,388		34,443		126,706

<sup>1</sup> As established by § 679.23(d)(2)(i) through (iv), the A, B, C, and D season allowances are available from January 20 to March 10, March 10 to May 31, August 25 to October 1, and October 1 to November 1, respectively. The amounts of pollock for processing by the inshore and offshore components are not shown in this table.

<sup>2</sup> The WYK District and SEO District pollock TACs are not allocated by season and are not included in the total pollock TACs shown in this table.

**Table 4 - Final 2020 Distribution of Pollock in the Western and Central Regulatory Areas of the Gulf of Alaska; Seasonal Biomass Distribution; Area Apportionments; and Seasonal Allowances of Annual TAC (Values are rounded to the nearest metric ton and percentages are rounded to the nearest 0.01.).**

Season <sup>1</sup>	Shumagin (Area 610)		Chirikof (Area 620)		Kodiak (Area 630)		Total <sup>2</sup>
	680	2.68%	21,888	86.20%	2,823	11.12%	
A (Jan 20-Mar 10)	680	2.68%	21,888	86.20%	2,823	11.12%	25,391
B (Mar 10-May 31)	680	2.68%	21,888	86.20%	2,823	11.12%	25,391
C (Aug 25-Oct 1)	9,290	36.59%	6,752	26.59%	9,349	36.82%	25,391
D (Oct 1-Nov 1)	9,290	36.59%	6,752	26.59%	9,349	36.82%	25,391
Annual Total	19,939		57,279		24,345		101,564

<sup>1</sup> As established by § 679.23(d)(2)(i) through (iv), the A, B, C, and D season allowances are available from January 20 to March 10, March 10 to May 31, August 25 to October 1, and October 1 to November 1, respectively. The amounts of pollock for processing by the inshore and offshore components are not shown in this table.

<sup>2</sup> The WYK District and SEO District pollock TACs are not allocated by season and are not included in the total pollock TACs shown in this table.

<sup>3</sup> Following the December 2018 Council meeting, NMFS identified an error in the calculation of the seasonal apportionment of pollock. This error affects the A season TAC apportionments for Statistical Areas 620 and 630 (*i.e.*, the Central GOA management area), and the annual total ABC and TAC for the Central GOA management area. NMFS corrects the 2019 seasonal TAC apportionments for pollock in the final 2019 and 2020 harvest specifications. During the next annual harvest specifications process, NMFS will revise the 2020 seasonal TAC apportionments for pollock, which will be based on the Council's recommendations at the December 2019 meeting for the 2020 and 2021 harvest specifications. Annually, NMFS makes an inseason adjustment to the next year's

pollock specifications (*i.e.*, 2020) if necessary to ensure that the GOA pollock TAC for the upcoming year is the appropriate amount based on the best scientific information for pollock in the GOA.

### *Annual and Seasonal Apportionments of Pacific Cod TAC*

Pursuant to § 679.20(a)(12)(i), NMFS seasonally allocates the 2019 and 2020 Pacific cod TACs in the Western and Central Regulatory Areas of the GOA among gear and operational sectors. NMFS also allocates the Pacific cod TACs annually between the inshore (90 percent) and offshore (10 percent) components in the Eastern Regulatory Area of the GOA (§ 679.20(a)(6)(ii)). In the Central GOA, the Pacific cod TAC is apportioned seasonally first to vessels using jig gear, and then among catcher vessels (CVs) less than 50 feet in length overall using hook-and-line gear, CVs equal to or greater than 50 feet in length overall using hook-and-line gear, catcher/processors (C/Ps) using hook-and-line gear, CVs using trawl gear, C/Ps using trawl gear, and vessels using pot gear (§ 679.20(a)(12)(i)(B)). In the Western GOA, the Pacific cod TAC is apportioned seasonally first to vessels using jig gear, and then among CVs using hook-and-line gear, C/Ps using hook-and-line gear, CVs using trawl gear, C/Ps using trawl gear, and vessels using pot gear (§ 679.20(a)(12)(i)(A)). The overall seasonal apportionments in the Western and Central GOA are 60 percent of the annual TAC to the A season and 40 percent of the annual TAC to the B season.

Under § 679.20(a)(12)(ii), any overage or underage of the Pacific cod allowance from the A season may be subtracted from, or added to, the subsequent B season allowance. In addition, any portion of the hook-and-line, trawl, pot, or jig sector allocations that is determined by NMFS as likely to go unharvested by a sector may be reallocated to other sectors for harvest during the remainder of the fishery year.

Pursuant to § 679.20(a)(12)(i)(A) and (B), a portion of the annual Pacific cod TACs in the Western and Central GOA will be allocated to vessels with a Federal fisheries permit that use

jig gear before the TACs are apportioned among other non-jig sectors. In accordance with the FMP, the annual jig sector allocations may increase to up to 6 percent of the annual Western and Central GOA Pacific cod TACs, depending on the annual performance of the jig sector (see Table 1 of Amendment 83 to the FMP for a detailed discussion of the jig sector allocation process (76 FR 74670, December 1, 2011)). Jig sector allocation increases are established for a minimum of two years.

NMFS has evaluated the 2018 harvest performance of the jig sector in the Western and Central GOA, and is establishing the 2019 and 2020 Pacific cod apportionments to this sector as follows. For 2019 and 2020, NMFS allocates the jig sector 2.5 percent of the annual Pacific cod TAC in the Western GOA. This is an increase from the 2018 jig sector allocation of 1.5 percent. The 2019 and 2020 allocations consist of a base allocation of 1.5 percent of the Western GOA Pacific cod TAC, and a 1.0 percent performance increase because in 2018 the jig sector harvested greater than 90 percent of its 2018 Pacific cod allocation.

For 2019 and 2020, NMFS allocates the jig sector 1.0 percent of the annual Pacific cod TAC in the Central GOA. This is the same percent as the 2018 jig sector allocation because in 2018 this sector harvested less than 90 percent of its 2018 Pacific cod allocation. The 2019 and 2020 allocations consist of a base allocation of 1.0 percent of the Central GOA Pacific cod TAC, and no additional performance increase in the Central GOA.

Tables 5 and 6 list the seasonal apportionments and allocations of the 2019 and 2020 Pacific cod TACs.

**Table 5 - Final 2019 Seasonal Apportionments and Allocation of Pacific Cod Total Allowable Catch (TAC) Amounts in the GOA; Allocations in the Western GOA and Central GOA Sectors, and the Eastern GOA Inshore and Offshore Processing Components (Values are rounded to the nearest metric ton).**

Regulatory area and sector	Annual allocation (mt)	A Season		B Season	
		Sector percentage of annual non-jig TAC	Seasonal allowances (mt)	Sector percentage of annual non-jig TAC	Seasonal allowances (mt)
Western GOA					
Jig (2.5 % of TAC)	134	N/A	80	N/A	53
Hook-and-line CV	73	0.70	36	0.70	36
Hook-and-line C/P	1,031	10.90	568	8.90	464
Trawl CV	2,000	27.70	1,443	10.70	557
Trawl C/P	125	0.90	47	1.50	78
All Pot CV and Pot C/P	1,980	19.80	1,031	18.20	948
Total	5,343	60.00	3,206	40.00	2,137
Central GOA					
Jig (1.0% of TAC)	58	N/A	35	N/A	23
Hook-and-line < 50 CV	831	9.32	530	5.29	301
Hook-and-line ≥ 50 CV	382	5.61	319	1.10	62
Hook-and-line C/P	291	4.11	234	1.00	57
Trawl CV <sup>1</sup>	2,367	21.14	1,203	20.45	1,164
Trawl C/P	239	2.00	114	2.19	125
All Pot CV and Pot C/P	1,583	17.83	1,015	9.97	568
Total	5,750	60.00	3,450	40.00	2,300
Eastern GOA		Inshore (90% of Annual TAC)		Offshore (10% of Annual TAC)	
		1,275		127	

<sup>1</sup> Trawl catcher vessels participating in Rockfish Program cooperatives receive 3.81 percent, or 219 mt, of the annual Central GOA TAC (see Table 28c to 50 CFR part 679), which is deducted from the Trawl CV B season allowance (see Table 12. Final 2019 Apportionments of Rockfish Secondary Species in the Central GOA and Table 28c to 50 CFR part 679).

**Table 6 - Final 2020 Seasonal Apportionments and Allocation of Pacific Cod Total Allowable Catch (TAC) Amounts in the GOA; Allocations in the Western GOA and Central GOA Sectors, and the Eastern GOA Inshore and Offshore Processing Components (Values are rounded to the nearest metric ton).**

Regulatory area and sector	Annual allocation (mt)	A Season		B Season	
		Sector percentage of annual non-jig TAC	Seasonal allowances (mt)	Sector percentage of annual non-jig TAC	Seasonal allowances (mt)
Western GOA					
Jig (2.5 % of TAC)	170	N/A	102	N/A	68
Hook-and-line CV	93	0.70	46	0.70	46
Hook-and-line C/P	1,310	10.90	721	8.90	589
Trawl CV	2,541	27.70	1,833	10.70	708
Trawl C/P	159	0.90	60	1.50	99
All Pot CV and Pot C/P	2,514	19.80	1,310	18.20	1,204
Total	6,787	60.00	4,072	40.00	2,715
Central GOA					
Jig (1.0% of TAC)	73	N/A	44	N/A	29
Hook-and-line < 50 CV	1,056	9.32	674	5.29	382
Hook-and-line ≥ 50 CV	485	5.61	406	1.10	79
Hook-and-line C/P	369	4.11	297	1.00	72
Trawl CV <sup>1</sup>	3,007	21.14	1,528	20.45	1,479
Trawl C/P	304	2.00	145	2.19	159
All Pot CV and Pot C/P	2,010	17.83	1,289	9.97	721
Total	7,304	60.00	4,382	40.00	2,921
Eastern GOA		Inshore (90% of Annual TAC)		Offshore (10% of Annual TAC)	
		1,619		162	

<sup>1</sup> Trawl catcher vessels participating in Rockfish Program cooperatives receive 3.81 percent, or 278 mt, of the annual Central GOA TAC (see Table 28c to 50 CFR part 679), which is deducted from the Trawl CV B season allowance (see Table 13. Final 2020 Apportionments of Rockfish Secondary Species in the Central GOA and Table 28c to 50 CFR part 679).

### *Allocations of the Sablefish TACs to Vessels Using Fixed and Trawl Gear*

Section 679.20(a)(4)(i) and (ii) require allocations of sablefish TACs for each of the regulatory areas and districts to fixed and trawl gear. In the Western and Central Regulatory Areas, 80 percent of each TAC is allocated to fixed gear, and 20 percent of each TAC is allocated to trawl gear. In the Eastern Regulatory Area, 95 percent of the TAC is allocated to fixed gear, and 5 percent is allocated to trawl gear. The trawl gear allocation in the Eastern Regulatory Area may only be used to support incidental catch of sablefish using trawl gear while directed fishing for other target species (§ 679.20(a)(4)(i)).

In recognition of the prohibition against trawl gear in the SEO District of the Eastern Regulatory Area, the Council recommended and NMFS approves specifying for incidental catch the allocation of 5 percent of the combined Eastern Regulatory Area sablefish TAC to trawl gear in the WYK District. The remainder of the WYK sablefish TAC is allocated to vessels using fixed gear. NMFS allocates 100 percent of the sablefish TAC in the SEO District to vessels using fixed gear. This action results in a 2019 allocation of 241 mt to trawl gear and 1,587 mt to fixed gear in the WYK District, a 2019 allocation of 2,984 mt to fixed gear in the SEO District, and a 2020 allocation of 321 mt to trawl gear in the WYK District. Table 7 lists the allocations of the 2019 sablefish TACs to fixed and trawl gear. Table 8 lists the allocations of the 2020 sablefish TACs to trawl gear.

The Council recommended that a trawl sablefish TAC be established for two years so that retention of incidental catch of sablefish by trawl gear could commence in January in the second year of the groundfish harvest specifications. Both the 2019 and 2020 trawl allocations are specified in these final harvest specifications, in Tables 7 and 8, respectively.

The Council also recommended that the fixed gear sablefish TAC be established annually to ensure that this IFQ fishery is conducted concurrently with the halibut IFQ fishery and is based on the most recent survey information. Since there is an annual assessment for sablefish and since the final harvest specifications are expected to be published before the IFQ season begins on March 15, 2019, the Council recommended that the fixed gear sablefish TAC be set annually, rather than for two years, so that the best scientific information available could be considered in establishing the sablefish ABCs and TACs. Accordingly, Table 7 lists the 2019 fixed gear allocations, and the 2020 fixed gear allocations will be specified in the 2020 and 2021 harvest specifications.

With the exception of the trawl allocations that are provided to the Rockfish Program (see Table 28c to 50 CFR part 679), directed fishing for sablefish with trawl gear in the GOA is closed during the fishing year. Also, fishing for groundfish with trawl gear is prohibited prior to January 20 (§ 679.23(c)). Therefore, it is not likely that the sablefish allocation to trawl gear would be reached before the effective date of the final 2019 and 2020 harvest specifications.

**Table 7 - Final 2019 Sablefish TAC Specifications in the Gulf of Alaska and Allocations to Fixed and Trawl Gear (Values are rounded to the nearest metric ton).**

Area/District	TAC	Fixed gear allocation	Trawl gear allocation
Western	1,581	1,265	316
Central <sup>1</sup>	5,178	4,142	1,036
West Yakutat <sup>2</sup>	1,828	1,587	241
Southeast Outside	2,984	2,984	0
Total	11,571	9,978	1,593

<sup>1</sup> The trawl allocation of sablefish in the Central Regulatory Area is further apportioned to the Rockfish Program cooperatives (533 mt). See Table 12: Final 2019 Apportionments of Rockfish Secondary Species in the Central GOA. This results in 503 mt being available for the non-Rockfish Program trawl fisheries.

<sup>2</sup> The trawl allocation is based on allocating 5 percent of the combined Eastern Regulatory Area (West Yakutat and Southeast Outside Districts) sablefish TAC as incidental catch to trawl gear in the West Yakutat District.

**Table 8 - Final 2020 Sablefish TAC Specifications in the Gulf of Alaska and Allocation to Trawl Gear<sup>1</sup> (Values are rounded to the nearest metric ton).**

Area/District	TAC	Fixed gear allocation	Trawl gear allocation
Western	2,105	n/a	421
Central <sup>2</sup>	6,931	n/a	1,386
West Yakutat <sup>3</sup>	2,433	n/a	321
Southeast Outside	3,993	n/a	0
Total	15,462	n/a	2,129

<sup>1</sup> The Council recommended that the final 2020 harvest specifications for the fixed gear sablefish Individual Fishing Quota fisheries not be specified in the final 2019 and 2020 harvest specifications.

<sup>2</sup> The trawl allocation of sablefish in the Central Regulatory Area is further apportioned to the Rockfish Program cooperatives (713 mt). See Table 13: Final 2020 Apportionments of Rockfish Secondary Species in the Central GOA. This results in 673 mt being available for the non-Rockfish Program trawl fisheries.

<sup>3</sup> The trawl allocation is based on allocating 5 percent of the combined Eastern Regulatory Area (West Yakutat and Southeast Outside Districts) sablefish TAC as incidental catch to trawl gear in the West Yakutat District.

### *Allocations, Apportionments, and Sideboard Limits for the Rockfish Program*

These final 2019 and 2020 harvest specifications for the GOA include the fishery cooperative allocations and sideboard limitations established by the Rockfish Program. Program participants are primarily trawl CVs and trawl C/Ps, with limited participation by vessels using longline gear. The Rockfish Program assigns quota share and cooperative quota to participants for primary species (Pacific ocean perch, northern rockfish, and dusky rockfish) and secondary species (Pacific cod, rougheye and blackspotted rockfish, sablefish, shortraker rockfish, and thornyhead rockfish), allows a participant holding a license limitation program (LLP) license with rockfish quota share to form a rockfish cooperative with other persons, and allows holders of C/P LLP licenses to opt out of the fishery. The Rockfish Program also has an entry level fishery for rockfish primary species for vessels using longline gear. Longline gear includes hook-and-line, jig, troll, and handline gear.

Under the Rockfish Program, rockfish primary species in the Central GOA are allocated to participants after deducting for incidental catch needs in other directed groundfish fisheries (§ 679.81(a)(2)). Participants in the Rockfish Program also receive a portion of the Central GOA TAC of specific secondary species. In addition to groundfish species, the Rockfish Program allocates a portion of the halibut PSC limit (191 mt) from the third season deep-water species fishery allowance for the GOA trawl fisheries to Rockfish Program participants (§ 679.81(d) and Table 28d to 50 CFR part 679). The Rockfish Program also establishes sideboard limits to restrict the ability of harvesters operating under the Rockfish Program to increase their participation in other, non-Rockfish Program fisheries. These restrictions and halibut PSC limits are discussed in a subsequent section in this rule titled “Rockfish Program Groundfish Sideboard and Halibut PSC Limitations.”

Section 679.81(a)(2)(ii) and Table 28e to 50 CFR part 679 require allocations of 5 mt of Pacific ocean perch, 5 mt of northern rockfish, and 50 mt of dusky rockfish to the entry level longline fishery in 2019 and 2020. The allocation for the entry level longline fishery may increase incrementally each year if the catch exceeds 90 percent of the allocation of a species. The incremental increase in the allocation would continue each year until it reaches the maximum percent of the TAC for that species. In 2018, the catch of Pacific ocean perch, northern rockfish, and dusky rockfish did not attain the 90 percent threshold, and those allocations for 2019 remain the same as the 2018 allocations. The remainder of the TACs for the rockfish primary species would be allocated to the CV and C/P cooperatives (§ 679.81(a)(2)(iii)). Table 9 lists the allocations of the 2019 and 2020 TACs for each rockfish primary species to the entry level longline fishery, the potential incremental increases for future years, and the maximum percentages of the TACs assigned to the Rockfish Program that may be allocated to the rockfish entry level longline fishery.

**Table 9 - Final 2019 and Initial 2020 Allocations of Rockfish Primary Species to the Entry Level Longline Fishery in the Central Gulf of Alaska.**

Rockfish primary species	2019 and 2020 allocations	Incremental increase in 2020 if > 90% of 2019 allocation is harvested	Up to maximum % of TAC
Pacific ocean perch	5 metric tons	5 metric tons	1%
Northern rockfish	5 metric tons	5 metric tons	2%
Dusky rockfish	50 metric tons	20 metric tons	5%

Section 679.81 requires allocations of rockfish primary species among various sectors of the Rockfish Program. Tables 10 and 11 list the final 2019 and 2020 allocations of rockfish primary species in the Central GOA to the entry level longline fishery, and rockfish CV and C/P cooperatives in the Rockfish Program. NMFS also is setting aside incidental catch amounts (ICAs) for other directed fisheries in the Central GOA of 3,000 mt of Pacific ocean perch, 300 mt of northern rockfish, and 250 mt of dusky rockfish. These amounts are based on recent average incidental catches in the Central GOA by other groundfish fisheries.

Allocations among vessels belonging to CV or C/P cooperatives are not included in these final harvest specifications. Rockfish Program applications for CV cooperatives and C/P cooperatives are not due to NMFS until March 1 of each calendar year; therefore, NMFS cannot calculate 2019 and 2020 allocations in conjunction with these final harvest specifications. NMFS will post the 2019 allocations on the Alaska Region website at <https://alaskafisheries.noaa.gov/fisheries/central-goa-rockfish-program> when they become available after March 1.

**Table 10 - Final 2019 Allocations of Rockfish Primary Species in the Central Gulf of Alaska to the Entry Level Longline Fishery and Rockfish Cooperatives in the Rockfish Program (Values are rounded to the nearest metric ton).**

Rockfish Primary Species	Central GOA annual TAC	Incidental catch allowance	TAC minus ICA	Allocation to the entry level longline <sup>1</sup> fishery	Allocation to the Rockfish cooperatives <sup>2</sup>
Pacific ocean perch	19,646	3,000	16,646	5	16,641
Northern rockfish	3,338	300	3,038	5	3,033
Dusky rockfish	2,764	250	2,514	50	2,464
Total	25,748	3,550	22,198	60	22,138

<sup>1</sup> Longline gear includes hook-and-line, jig, troll, and handline gear (50 CFR 679.2).

<sup>2</sup> Rockfish cooperatives include vessels in CV and C/P cooperatives (50 CFR 679.81).

**Table 11 - Final 2020 Allocations of Rockfish Primary Species in the Central Gulf of Alaska to the Entry Level Longline Fishery and Rockfish Cooperatives in the Rockfish Program (Values are rounded to the nearest metric ton).**

Rockfish Primary Species	Central GOA annual TAC	Incidental catch allowance	TAC minus ICA	Allocation to the entry level longline <sup>1</sup> fishery	Allocation to the Rockfish cooperatives <sup>2</sup>
Pacific ocean perch	19,024	3,000	16,024	5	16,019
Northern rockfish	3,147	300	2,847	5	2,842
Dusky rockfish	2,742	250	2,492	50	2,442
Total	24,913	3,550	21,363	60	21,303

<sup>1</sup> Longline gear includes hook-and-line, jig, troll, and handline gear (50 CFR 679.2).

<sup>2</sup> Rockfish cooperatives include vessels in CV and C/P cooperatives (50 CFR 679.81).

Section 679.81(c) and Table 28c to 50 CFR part 679 requires allocations of rockfish secondary species to CV and C/P cooperatives in the Central GOA. CV cooperatives receive allocations of Pacific cod, sablefish from the trawl gear allocation, and thornyhead rockfish. C/P cooperatives receive allocations of sablefish from the trawl gear allocation, rougheye and blackspotted rockfish, shortraker rockfish, and thornyhead rockfish. Tables 12 and 13 list the apportionments of the 2019 and 2020 TACs of rockfish secondary species in the Central GOA to CV and C/P cooperatives.

**Table 12 - Final 2019 Apportionments of Rockfish Secondary Species in the Central GOA to Catcher Vessel and Catcher/Processor Cooperatives (Values are rounded to the nearest metric ton).**

Rockfish Secondary Species	Central GOA Annual TAC	Catcher vessel cooperatives		Catcher/Processor cooperatives	
		Percentage of TAC	Apportionment (mt)	Percentage of TAC	Apportionment (mt)
Pacific cod	5,750	3.81%	219	0.00%	0
Sablefish	5,178	6.78%	351	3.51%	182
Shorthead rockfish	305	0.00%	0	40.00%	122
Rougheye /blackspotted rockfish	550	0.00%	0	58.87%	324
Thornyhead rockfish	911	7.84%	71	26.50%	241

**Table 13 - Final 2020 Apportionments of Rockfish Secondary Species in the Central GOA to Catcher Vessel and Catcher/Processor Cooperatives (Values are rounded to the nearest metric ton).**

Rockfish Secondary Species	Central GOA Annual TAC	Catcher Vessel cooperatives		Catcher/Processor cooperatives	
		Percentage of TAC	Apportionment (mt)	Percentage of TAC	Apportionment (mt)
Pacific cod	7,304	3.81%	278	0.00%	0
Sablefish	6,931	6.78%	470	3.51%	243
Shorthead rockfish	305	0.00%	0	40.00%	122
Rougheye/blackspotted rockfish	545	0.00%	0	58.87%	321
Thornyhead rockfish	911	7.84%	71	26.50%	241

### *Halibut PSC Limits*

Section 679.21(d) establishes annual halibut PSC limit apportionments to trawl gear and hook-and-line gear, and authorizes the establishment of apportionments for pot gear. In December 2018, the Council recommended halibut PSC limits of 1,706 mt for trawl gear, 257 mt for hook-and-line gear, and 9 mt for the DSR fishery in the SEO District for both 2019 and 2020.

The DSR fishery in the SEO District is defined at § 679.21(d)(2)(ii)(A). This fishery is apportioned 9 mt of the halibut PSC limit in recognition of its small-scale harvests of groundfish (§ 679.21(d)(2)(i)(A)). The separate halibut PSC limit for the DSR fishery is intended to prevent that fishery from being impacted from the halibut PSC incurred by other GOA fisheries. NMFS estimates low halibut bycatch in the DSR fishery because 1) the duration of the DSR fisheries and the gear soak times are short, 2) the DSR fishery occurs in the winter when there is less overlap in the distribution of DSR and halibut, and 3) the directed commercial DSR fishery has a low DSR TAC. The Alaska Department of Fish and Game sets the commercial GHL for the DSR fishery after deducting (1) estimates of DSR incidental catch in all fisheries (including halibut and subsistence); and (2) the allocation to the DSR sport fishery. Of the 250 mt TAC for DSR in 2018, 58 mt were available for directed fishing by the DSR commercial fishery, of which 26 mt were harvested (through December 17, 2018).

The FMP authorizes the Council to exempt specific gear from the halibut PSC limits. NMFS, after consultation with the Council, exempts pot gear, jig gear, and the sablefish IFQ hook-and-line gear fishery categories from the non-trawl halibut PSC limit for 2019 and 2020. The Council recommended, and NMFS approves, these exemptions because: 1) the pot gear fisheries have low annual halibut bycatch mortality, 2) IFQ program regulations prohibit discard of halibut if any halibut IFQ permit holder on board a catcher vessel holds unused halibut IFQ

for that vessel category and the IFQ regulatory area in which the vessel is operating (§ 679.7(f)(11)), 3) some sablefish IFQ fishermen hold halibut IFQ permits and are therefore required to retain the halibut they catch while fishing sablefish IFQ, and 4) NMFS estimates negligible halibut mortality for the jig gear fisheries given the small amount of groundfish harvested by jig gear, the selective nature of jig gear, and the high survival rates of halibut caught and released with jig gear.

The best available information on estimated halibut bycatch consists of data collected by fisheries observers during 2018. The calculated halibut bycatch mortality through December 31, 2018, is 1,103 mt for trawl gear and 51 mt for hook-and-line gear for a total halibut mortality of 1,154 mt. This halibut mortality was calculated using groundfish and halibut catch data from the NMFS Alaska Region's catch accounting system. This accounting system contains historical and recent catch information compiled from each Alaska groundfish fishery.

Section 679.21(d)(4)(i) and (ii) authorizes NMFS to seasonally apportion the halibut PSC limits after consultation with the Council. The FMP and regulations require that the Council and NMFS consider the following information in seasonally apportioning halibut PSC limits: 1) seasonal distribution of halibut; 2) seasonal distribution of target groundfish species relative to halibut distribution; 3) expected halibut bycatch needs on a seasonal basis relative to changes in halibut biomass and expected catch of target groundfish species; 4) expected bycatch rates on a seasonal basis; 5) expected changes in directed groundfish fishing seasons; 6) expected actual start of fishing effort; and 7) economic effects of establishing seasonal halibut allocations on segments of the target groundfish industry. The Council considered information from the 2018 SAFE report, NMFS catch data, State of Alaska catch data, IPHC stock assessment and mortality data, and public testimony when apportioning the halibut PSC limits.

For 2019 and 2020, the Council increased the trawl halibut PSC apportionment in the first season to 519 mt, an increase of 50 mt. The trawl halibut PSC apportionment for the third season was reduced by 50 mt to 462 mt. The 50 mt of halibut PSC that was moved from the third season to the first season was apportioned to the deep-water species fishery, which increased to 135 mt. The trawl halibut PSC apportionment in the fourth season was apportioned between the shallow-water (53 mt) and deep-water (75 mt) species fisheries. The overall trawl halibut PSC limit (of 1,706 mt) is unchanged. In addition, the Council changed the end date of the third season halibut PSC apportionment to August 1 from September 1. The Council also changed the beginning date of the fourth season halibut PSC apportionment to August 1 from September 1. The changes to the apportionment amounts and seasons are intended to better align halibut PSC use in the groundfish fisheries relative to expected halibut PSC needs on a seasonal basis and relative to changes in halibut biomass distribution and the expected catches of target groundfish species and corresponding halibut PSC rates. Also, the changes are intended to ensure that there is more consistent trawl fishing effort throughout the year, with fewer fishery closures due to the attainment of seasonal halibut PSC limits. These changes could result in increased efficiency for the trawl fleet and the GOA seafood processors dependent on groundfish caught by vessels using trawl gear. These changes are reflected in both Tables 14 and 15.

NMFS concurs with and implements the Council's recommendations listed in Table 14, which show the final 2019 and 2020 Pacific halibut PSC limits, allowances, and apportionments. These halibut PSC limits and seasons differ from those contained in the proposed 2019 and 2020 harvest specifications (83 FR 62794, December 6, 2018), for the reasons discussed above.

Section 679.21(d)(4)(iii) and (iv) specifies that any underages or overages of a seasonal apportionment of a halibut PSC limit will be added to or deducted from the next respective seasonal apportionment within the fishing year.

**Table 14 - Final 2019 and 2020 Pacific Halibut Prohibited Species Catch (PSC) Limits, Allowances, and Apportionments (Values are in metric tons).**

Trawl gear			Hook-and-line gear <sup>1</sup>				
			Other than DSR			DSR	
Season	Percent	Amount	Season	Percent	Amount	Season	Amount
January 20 - April 1	30.4%	519	January 1 - June 10	86%	221	January 1 - December 31	9
April 1 - July 1	20.0%	341	June 10 - September 1	2%	5		
July 1 - August 1	27.0%	462	September 1 - December 31	12%	31		
August 1 - October 1	7.5%	128					
October 1 - December 31	15.0%	256					
Total		1,706			257		9

<sup>1</sup> The Pacific halibut prohibited species catch (PSC) limit for hook-and-line gear is allocated to the demersal shelf rockfish (DSR) fishery in the SEO District and to the hook-and-line fisheries other than the DSR fishery. The hook-and-line sablefish IFQ fishery is exempt from halibut PSC limits, as are pot and jig gear for all groundfish fisheries. Note: Seasonal or sector apportionments may not total precisely due to rounding.

Section 679.21(d)(3)(ii) authorizes further apportionment of the trawl halibut PSC limit to trawl fishery categories listed in § 679.21(d)(3)(iii). The annual apportionments are based on each category's proportional share of the anticipated halibut bycatch mortality during the fishing year and optimization of the total amount of groundfish harvest under the halibut PSC limit. The fishery categories for the trawl halibut PSC limits are: 1) a deep-water species fishery, composed of sablefish, rockfish, deep-water flatfish, rex sole, and arrowtooth flounder; and 2) a shallow-water species fishery, composed of pollock, Pacific cod, shallow-water flatfish, flathead sole, Atka mackerel, and "other species" (sculpins, sharks, and octopuses) (§ 679.21(d)(3)(iii)). Halibut mortality incurred while directed fishing for skates with trawl gear accrues towards the shallow-water species fishery halibut PSC limit (69 FR 26320, May 12, 2004).

NMFS will combine available trawl halibut PSC limit apportionments on May 15 during the second season deep-water and shallow-water species fisheries for use in either fishery from May 15 through June 30 (§ 679.21(d)(4)(iii)(D)). This is intended to maintain groundfish harvest while minimizing halibut bycatch by these sectors to the extent practicable. This provides the deep-water and shallow-water species trawl fisheries additional flexibility and the incentive to participate in fisheries at times of the year that may have lower halibut PSC rates relative to other times of the year.

Table 15 lists the final 2019 and 2020 apportionments of trawl halibut PSC limits between the trawl gear deep-water and shallow-water species fishery categories. As described above, the Council recommended, and NMFS implements, the changes to the amount of the halibut PSC apportionments between the deep-water and shallow-water species fisheries, along with changes to the season dates for the third and fourth seasons.

Table 28d to 50 CFR part 679 specifies the amount of the trawl halibut PSC limit that is assigned to the CV and C/P sectors that are participating in the Rockfish Program. This includes 117 mt of halibut PSC limit to the CV sector and 74 mt of halibut PSC limit to the C/P sector. These amounts are allocated from the trawl deep-water species fishery's halibut PSC third seasonal apportionment. After the combined CV and C/P halibut PSC limit allocation of 191 mt to the Rockfish Program, 150 mt remains for the trawl deep-water species fishery's halibut PSC third seasonal apportionment.

Section 679.21(d)(4)(iii)(B) limits the amount of the halibut PSC limit allocated to Rockfish Program participants that could be re-apportioned to the general GOA trawl fisheries during the current fishing year to no more than 55 percent of the unused annual halibut PSC limit apportioned to Rockfish Program participants. The remainder of the unused Rockfish Program halibut PSC limit is unavailable for use by any person for the remainder of the fishing year (§ 679.21(d)(4)(iii)(C)).

**Table 15 - Final 2019 and 2020 Apportionment of Trawl Pacific Halibut Prohibited Species Catch Limits Between the Trawl Gear Deep-Water Species Fishery and the Shallow-Water Species Fishery Categories (Values are in metric tons).**

Season	Shallow-water	Deep-water <sup>1</sup>	Total
January 20 - April 1	384	135	519
April 1 - July 1	85	256	341
July 1 - August 1	121	341	462
August 1 - October 1	53	75	128
Subtotal January 20 - October 1	643	807	1,450
October 1 - December 31 <sup>2</sup>			256
Total			1,706

<sup>1</sup> Vessels participating in cooperatives in the Central GOA Rockfish Program will receive 191 mt of the third season (July 1 through August 1) deep-water species fishery halibut PSC apportionment.

<sup>2</sup> There is no apportionment between trawl shallow-water and deep-water species fishery categories during the fifth season (October 1 through December 31).

Section 679.21(d)(2)(i)(B) requires that the “other hook-and-line fishery” halibut PSC limit apportionment to vessels using hook-and-line gear must be apportioned between CVs and C/Ps in accordance with § 679.21(d)(2)(iii) in conjunction with these harvest specifications. A comprehensive description and example of the calculations necessary to apportion the “other hook-and-line fishery” halibut PSC limit between the hook-and-line CV and C/P sectors were included in the proposed rule to implement Amendment 83 to the FMP (76 FR 44700, July 26, 2011) and are not repeated here.

Pursuant to § 679.21(d)(2)(iii), the hook-and-line halibut PSC limit for the “other hook-and-line fishery” is apportioned between the CV and C/P sectors in proportion to the total Western and Central GOA Pacific cod allocations, which vary annually based on the proportion of the Pacific cod biomass between the Western, Central, and Eastern GOA. Pacific cod is apportioned among these two management areas based on the percentage of overall biomass per area, as calculated in the 2018 Pacific cod stock assessment. Updated information in the final 2018 SAFE report describes this distributional calculation, which allocates ABC among regulatory areas on the basis of the three most recent stock surveys. For 2019 and 2020, the distribution of the total GOA Pacific cod ABC is 45 percent to the Western GOA, 45 percent to the Central GOA, and 10 percent to the Eastern GOA. Therefore, the calculations made in accordance with § 679.21(d)(2)(iii) incorporate the most recent information on GOA Pacific cod distribution with respect to establishing the annual halibut PSC limits for the CV and C/P hook-and-line sectors. The annual halibut PSC limits for both the CV and C/P sectors of the “other hook-and-line fishery” are divided into three seasonal apportionments, using seasonal percentages of 86 percent, 2 percent, and 12 percent.

For 2019 and 2020, NMFS apportions halibut PSC limits of 120 mt and 137 mt to the hook-and-line CV and hook-and-line C/P sectors, respectively. Table 16 lists the final 2019 and 2020 apportionments of halibut PSC limits between the hook-and-line CV and the hook-and-line C/P sectors of the “other hook-and-line fishery.”

No later than November 1 of each year, NMFS will calculate the projected unused amount of halibut PSC limit by either of the CV or C/P hook-and-line sectors of the “other hook-and-line fishery” for the remainder of the year. The projected unused amount of halibut PSC limit is made available to the other hook-and-line sector for the remainder of that fishing year (§ 679.21(d)(2)(iii)(C)), if NMFS determines that an additional amount of halibut PSC is necessary for that sector to continue its directed fishing operations.

**Table 16 - Final 2019 and 2020 Apportionments of the “Other Hook-and-line Fishery” Annual Halibut Prohibited Species Catch Allowance between the Hook-and-Line Gear Catcher Vessel and Catcher/Processor Sectors (Values are in metric tons).**

“Other than DSR” allowance	Hook-and-line sector	Sector annual amount	Season	Seasonal percentage	Sector seasonal amount
257	Catcher Vessel	120	January 1 - June 10	86	103
			June 10 - September 1	2	2
			September 1 - December 31	12	14
	Catcher/Processor	137	January 1 - June 10	86	118
			June 10 - September 1	2	3
			September 1 - December 31	12	16

### *Estimates of Halibut Biomass and Stock Condition*

The IPHC annually assesses the abundance and potential yield of the Pacific halibut stock using all available data from the commercial and sport fisheries, other removals, and scientific surveys. Additional information on the Pacific halibut stock assessment may be found in the IPHC's 2018 Pacific halibut stock assessment (December 2018), available on the IPHC website at [www.iphc.int](http://www.iphc.int). The IPHC considered the 2018 Pacific halibut stock assessment at its January 2019 annual meeting when it set the 2019 commercial halibut fishery catch limits.

### *Halibut Discard Mortality Rates*

To monitor halibut bycatch mortality allowances and apportionments, the Regional Administrator uses observed halibut incidental catch rates, halibut discard mortality rates (DMRs), and estimates of groundfish catch to project when a fishery's halibut bycatch mortality allowance or seasonal apportionment is reached. Halibut incidental catch rates are based on observers' estimates of halibut incidental catch in the groundfish fishery. DMRs are estimates of the proportion of incidentally caught halibut that do not survive after being returned to the sea. The cumulative halibut mortality that accrues to a particular halibut PSC limit is the product of a DMR multiplied by the estimated halibut PSC. DMRs are estimated using the best scientific information available in conjunction with the annual GOA stock assessment process. The DMR methodology and findings are included as an appendix to the annual GOA groundfish SAFE report.

In 2016, the DMR estimation methodology underwent revisions per the Council's directive. An interagency halibut working group (IPHC, Council, and NMFS staff) developed improved estimation methods that have undergone review by the GOA Plan Team, SSC, and the Council. A summary of the revised methodology is contained in the GOA proposed 2017 and

2018 harvest specifications (81 FR 87881, December 6, 2016), and the comprehensive discussion of the working group's statistical methodology is available from the Council (see **ADDRESSES**). The DMR working group's revised methodology is intended to improve estimation accuracy, transparency, and transferability in the methodology used for calculating DMRs. The working group will continue to consider improvements to the methodology used to calculate halibut mortality, including potential changes to the reference period (the period of data used for calculating the DMRs). Future DMRs, including the 2020 DMRs, may change based on additional years of observer sampling, which could provide more recent and accurate data and which could improve the accuracy of estimation and progress on methodology. The new methodology will continue to ensure that NMFS is using DMRs that more accurately reflect halibut mortality, which will inform the different sectors of their estimated halibut mortality and allow specific sectors to respond with methods that could reduce mortality and, eventually, the DMR for that sector.

At the December 2018 meeting, the SSC, AP, and the Council concurred with the revised DMR estimation methodology, and NMFS adopted for 2019 and 2020 the DMRs calculated under the revised methodology, which uses an updated 2-year reference period. The final 2019 and 2020 DMRs in this rule are unchanged from the DMRs in the proposed 2019 and 2020 harvest specifications (83 FR 62794, December 6, 2018). Table 17 lists these final 2019 and 2020 DMRs.

**Table 17 - Final 2019 and 2020 Halibut Discard Mortality Rates for Vessels Fishing in the Gulf of Alaska (Values are percent of halibut assumed to be dead).**

Gear	Sector	Groundfish fishery	Halibut discard mortality rate (percent)
Pelagic trawl	Catcher vessel	All	100
	Catcher/processor	All	100
Non-pelagic trawl	Catcher vessel	Rockfish Program	49
	Catcher vessel	All others	67
	Mothership and catcher/processor	All	79
Hook-and-line	Catcher/processor	All	11
	Catcher vessel	All	21
Pot	Catcher vessel and catcher/processor	All	4

### *Chinook Salmon Prohibited Species Catch Limits*

Amendment 93 to the FMP (77 FR 42629, July 20, 2012) established separate Chinook salmon PSC limits in the Western and Central GOA in the directed pollock trawl fishery. These limits require that NMFS close the pollock directed fishery in the Western and Central Regulatory Areas of the GOA if the applicable Chinook salmon PSC limit in that regulatory area is reached (§ 679.21(h)(8)). The annual Chinook salmon PSC limits in the pollock directed fishery of 6,684 salmon in the Western GOA and 18,316 salmon in the Central GOA are set at § 679.21(h)(2)(i) and (ii).

Amendment 97 to the FMP (79 FR 71350, December 2, 2014) established an initial annual PSC limit of 7,500 Chinook salmon for the trawl non-pollock groundfish fisheries in the Western and Central GOA. This limit is apportioned among three sectors directed fishing for groundfish species other than pollock: 3,600 Chinook salmon to trawl C/Ps; 1,200 Chinook salmon to trawl CVs participating in the Rockfish Program; and 2,700 Chinook salmon to trawl CVs not participating in the Rockfish Program (§ 679.21(h)(4)). NMFS will monitor the Chinook salmon PSC in the trawl non-pollock groundfish fisheries and close an applicable sector if it reaches its Chinook salmon PSC limit.

The Chinook salmon PSC limit for two sectors, trawl C/Ps and trawl CVs not participating in the Rockfish Program, may be increased in subsequent years based on the performance of these two sectors and their ability to minimize their use of their respective Chinook salmon PSC limits. If either or both of these two sectors limits its use of Chinook salmon PSC to a specified threshold amount in 2018 (3,120 for trawl C/Ps and 2,340 for Non-Rockfish Program trawl CVs), that sector will receive an incremental increase to its 2019 Chinook salmon PSC limit (§ 679.21(h)(4)). In 2018, the trawl C/P sector did not exceed 3,120

Chinook salmon PSC; therefore, the 2019 trawl C/P sector Chinook salmon PSC limit will be 4,080 Chinook salmon. In 2018, the Non-Rockfish Program trawl CV sector did not exceed 2,340 Chinook salmon PSC; therefore, the 2019 Non-Rockfish Program trawl CV sector Chinook salmon PSC limit will be 3,060 Chinook salmon.

*American Fisheries Act (AFA) Catcher/Processor and Catcher Vessel Groundfish Harvest and PSC Limits*

Section 679.64 establishes groundfish harvesting and processing sideboard limitations on AFA C/Ps and CVs in the GOA. These sideboard limits are necessary to protect the interests of fishermen and processors who do not directly benefit from the AFA from those fishermen and processors who receive exclusive harvesting and processing privileges under the AFA. Section 679.7(k)(1)(ii) prohibits listed AFA C/Ps and C/Ps designated on a listed AFA C/P permit from harvesting any species of groundfish in the GOA. Additionally, § 679.7(k)(1)(iv) prohibits listed AFA C/Ps and C/Ps designated on a listed AFA C/P permit from processing any pollock harvested in a directed pollock fishery in the GOA and any groundfish harvested in Statistical Area 630 of the GOA.

AFA CVs that are less than 125 feet (38.1 meters) length overall, have annual landings of pollock in the Bering Sea and Aleutian Islands less than 5,100 mt, and have made at least 40 GOA groundfish landings from 1995 through 1997 are exempt from GOA CV groundfish sideboard limits under § 679.64(b)(2)(ii). Sideboard limits for non-exempt AFA CVs in the GOA are based on their traditional harvest levels of TAC in groundfish fisheries covered by the FMP. Section 679.64(b)(3)(iv) establishes the CV groundfish sideboard limitations in the GOA based on the aggregate retained catch of non-exempt AFA CVs of each sideboard species or species

group from 1995 through 1997 divided by the sum of the TACs for that species or species group available to CVs over the same period.

As discussed earlier in this preamble, NMFS published a final rule (84 FR 2723, February 8, 2019) that establishes regulations to prohibit directed fishing for sideboard limits for specific groundfish species or species groups, rather than prohibiting directed fishing for non-exempt AFA CV sideboards through the GOA annual harvest specifications. This applies to most, but not all, of the species and area apportionments listed in Table 18 and 19. Beginning with the 2020 and 2021 harvest specifications, NMFS will incorporate such changes into the specification and management of non-exempt AFA CV sideboard limits.

Tables 18 and 19 list the final 2019 and 2020 groundfish sideboard limits for non-exempt AFA CVs. NMFS will deduct all targeted or incidental catch of sideboard species made by non-exempt AFA CVs from the sideboard limits listed in Tables 18 and 19.

**Table 18 - Final 2019 GOA Non-Exempt American Fisheries Act Catcher Vessel (CV) Groundfish Sideboard Limits (Values are rounded to the nearest metric ton).**

Species	Apportionments by season/gear	Area/component	Ratio of 1995-1997 non-exempt AFA CV catch to 1995-1997 TAC	Final 2019 TACs	Final 2019 non-exempt AFA CV sideboard limit <sup>3</sup>
Pollock	A Season January 20 – March 10	Shumagin (610)	0.6047	848	513
		Chirikof (620)	0.1167	23,236	2,712
		Kodiak (630)	0.2028	7,593	1,540
	B Season March 10 - May 31	Shumagin (610)	0.6047	848	513
		Chirikof (620)	0.1167	27,306	3,187
		Kodiak (630)	0.2028	3,522	714
	C Season August 25 - October 1	Shumagin (610)	0.6047	11,590	7,008
		Chirikof (620)	0.1167	8,423	983
		Kodiak (630)	0.2028	11,664	2,365
	D Season October 1 - November 1	Shumagin (610)	0.6047	11,590	7,008
		Chirikof (620)	0.1167	8,423	983
		Kodiak (630)	0.2028	11,664	2,365
	Annual	WYK (640)	0.3495	5,748	2,009
SEO (650)		0.3495	8,773	3,066	
Pacific cod	A Season <sup>1</sup> January 1 - June 10	W	0.1331	3,206	427
		C	0.0692	3,450	239
	B Season <sup>2</sup> September 1 - December 31	W	0.1331	2,137	284
		C	0.0692	2,300	159
	Annual	E inshore	0.0079	1,148	9
		E offshore	0.0078	128	1
Sablefish	Annual, trawl gear	W	0.0000	316	0
		C	0.0642	1,036	67
		E	0.0433	241	10
Shallow-water flatfish	Annual	W	0.0156	13,250	207
		C	0.0587	25,731	1,510
		E	0.0126	4,236	53
Deep-water flatfish	Annual	W	0.0000	416	0
		C	0.0647	3,443	223
		E	0.0128	5,642	72
Rex sole	Annual	W	0.0007	2,951	2
		C	0.0384	8,357	321
		E	0.0029	3,384	10
Arrowtooth flounder	Annual	W	0.0021	14,500	30
		C	0.0280	70,995	1,988

		E	0.0002	13,800	3
Flathead sole	Annual	W	0.0036	8,650	31
		C	0.0213	15,400	328
		E	0.0009	2,439	2
Pacific ocean perch	Annual	W	0.0023	3,227	7
		C	0.0748	19,646	1,470
		E	0.0466	5,682	265
Northern rockfish	Annual	W	0.0003	1,190	0
		C	0.0277	3,338	92
Shortraker rockfish	Annual	W	0.0000	44	0
		C	0.0218	305	7
		E	0.0110	514	6
Dusky rockfish	Annual	W	0.0001	781	0
		C	0.0000	2,764	0
		E	0.0067	155	1
Rougeye and blackspotted rockfish	Annual	W	0.0000	174	0
		C	0.0237	550	13
		E	0.0124	704	9
Demersal shelf rockfish	Annual	SEO	0.0020	261	1
Thornyhead rockfish	Annual	W	0.0280	326	9
		C	0.0280	911	26
		E	0.0280	779	22
Other rockfish	Annual	C	0.1699	1,737	295
		E	0.0000	3,857	0
Atka mackerel	Annual	Gulfwide	0.0309	3,000	93
Big skates	Annual	W	0.0063	504	3
		C	0.0063	1,774	11
		E	0.0063	570	4
Longnose skates	Annual	W	0.0063	149	1
		C	0.0063	2,804	18
		E	0.0063	619	4
Other skates	Annual	Gulfwide	0.0063	1,384	9
Sculpins	Annual	Gulfwide	0.0063	5,301	33
Sharks	Annual	Gulfwide	0.0063	8,184	52
Octopuses	Annual	Gulfwide	0.0063	975	6

<sup>1</sup> The Pacific cod A season for trawl gear does not open until January 20.

<sup>2</sup> The Pacific cod B season for trawl gear closes November 1.

<sup>3</sup> On February 8, 2019, NMFS published a final rule (84 FR 2723) that modifies regulations for AFA Program and CR Program participants subject to sideboard limits in the GOA. The final rule establishes regulations to prohibit directed fishing for sideboard limits for specific groundfish species or species groups, rather than prohibiting directed fishing for AFA Program and CR Program sideboard limits through the GOA annual harvest specifications. Once the final rule is effective (effective March 11, 2019), NMFS will no longer publish in the annual GOA harvest

specifications the AFA Program and CR Program sideboard limit amounts for groundfish species subject to the final rule, and the groundfish species subject to the final rule will be prohibited to directed fishing in regulation (84 FR 2723).

**Table 19 - Final 2020 GOA Non-Exempt American Fisheries Act Catcher Vessel (CV) Groundfish Sideboard Limits (Values are rounded to the nearest metric ton).**

Species	Apportionments by season/gear	Area/component	Ratio of 1995-1997 non-exempt AFA CV catch to 1995-1997 TAC	Final 2020 TACs	Final 2020 non-exempt AFA CV sideboard limit <sup>3</sup>
Pollock	A Season January 20 - March 10	Shumagin (610)	0.6047	680	411
		Chirikof (620)	0.1167	21,888	2,554
		Kodiak (630)	0.2028	2,823	573
	B Season March 10 - May 31	Shumagin (610)	0.6047	680	411
		Chirikof (620)	0.1167	21,888	2,554
		Kodiak (630)	0.2028	2,823	573
	C Season August 25 - October 1	Shumagin (610)	0.6047	9,290	5,617
		Chirikof (620)	0.1167	6,752	788
		Kodiak (630)	0.2028	9,349	1,896
	D Season October 1 - November 1	Shumagin (610)	0.6047	9,290	5,617
		Chirikof (620)	0.1167	6,752	788
		Kodiak (630)	0.2028	9,349	1,896
Annual	WYK (640)	0.3495	4,607	1,610	
	SEO (650)	0.3495	8,773	3,066	
Pacific cod	A Season <sup>1</sup> January 1 - June 10	W	0.1331	4,072	542
		C	0.0692	4,382	303
	B Season <sup>2</sup> September 1 - December 31	W	0.1331	2,715	361
		C	0.0692	2,921	202
	Annual	E inshore	0.0079	1,457	12
		E offshore	0.0078	162	1
Sablefish	Annual, trawl gear	W	0.0000	421	0
		C	0.0642	1,386	89
		E	0.0433	321	14
Shallow-water flatfish	Annual	W	0.0156	13,250	207
		C	0.0587	26,065	1,530
		E	0.0126	4,291	54
Deep-water flatfish	Annual	W	0.0000	420	0
		C	0.0647	3,488	226
		E	0.0128	5,716	73
Rex sole	Annual	W	0.0007	2,956	2
		C	0.0384	8,371	321
		E	0.0029	3,398	10
Arrowtooth flounder	Annual	W	0.0021	14,500	30
		C	0.0280	68,575	1,920
		E	0.0002	13,800	3
Flathead sole	Annual	W	0.0036	8,650	31

		C	0.0213	15,400	328
		E	0.0009	2,537	2
Pacific ocean perch	Annual	W	0.0023	3,125	7
		C	0.0748	19,024	1,423
		E	0.0466	5,503	256
Northern rockfish	Annual	W	0.0003	1,122	0
		C	0.0277	3,147	87
Shortraker rockfish	Annual	W	0.0000	44	0
		C	0.0218	305	7
		E	0.0110	514	6
Dusky rockfish	Annual	W	0.0001	774	0
		C	0.0000	2,742	0
		E	0.0067	154	1
Rougeye and blackspotted rockfish	Annual	W	0.0000	172	0
		C	0.0237	545	13
		E	0.0124	697	9
Demersal shelf rockfish	Annual	SEO	0.0020	261	1
Thornyhead rockfish	Annual	W	0.0280	326	9
		C	0.0280	911	26
		E	0.0280	779	22
Other rockfish	Annual	W/C	0.1699	1,737	295
		E	0.0000	3,857	0
Atka mackerel	Annual	Gulfwide	0.0309	3,000	93
Big skates	Annual	W	0.0063	504	3
		C	0.0063	1,774	11
		E	0.0063	570	4
Longnose skates	Annual	W	0.0063	149	1
		C	0.0063	2,804	18
		E	0.0063	619	4
Other skates	Annual	Gulfwide	0.0063	1,384	9
Sculpins	Annual	Gulfwide	0.0063	5,301	33
Sharks	Annual	Gulfwide	0.0063	8,184	52
Octopuses	Annual	Gulfwide	0.0063	975	6

<sup>1</sup> The Pacific cod A season for trawl gear does not open until January 20.

<sup>2</sup> The Pacific cod B season for trawl gear closes November 1.

<sup>3</sup> On February 8, 2019, NMFS published a final rule (84 FR 2723) that modifies regulations for AFA Program and CR Program participants subject to sideboard limits in the GOA. The final rule establishes regulations to prohibit directed fishing for sideboard limits for specific groundfish species or species groups, rather than prohibiting directed fishing for AFA Program and CR Program sideboard limits through the GOA annual harvest specifications. Once the final rule is effective (effective March 11, 2019), NMFS will no longer publish in the annual GOA harvest specifications the AFA Program and CR Program sideboard limit amounts for groundfish species subject to the final rule, and the groundfish species subject to the final rule will be prohibited to directed fishing in regulation (84 FR 2723).

*Non-Exempt AFA Catcher Vessel Halibut PSC Limits*

The halibut PSC sideboard limits for non-exempt AFA CVs in the GOA are based on the aggregate retained groundfish catch by non-exempt AFA CVs in each PSC target category from 1995 through 1997 divided by the retained catch of all vessels in that fishery from 1995 through 1997 (§ 679.64(b)(4)(ii)). Table 20 lists the final 2019 and 2020 non-exempt AFA CV halibut PSC limits for vessels using trawl gear in the GOA, respectively.

**Table 20 - Final 2019 and 2020 Non-Exempt AFA CV Halibut Prohibited Species Catch (PSC) Sideboard Limits for Vessels Using Trawl Gear in the GOA (Values are rounded to nearest metric ton).**

Season	Season dates	Target fishery	Ratio of 1995-1997 non-exempt AFA CV retained catch to total retained catch	2019 and 2020 PSC limit	2019 and 2020 non-exempt AFA CV PSC limit
1	January 20 - April 1	shallow-water	0.340	384	131
		deep-water	0.070	135	9
2	April 1 - July 1	shallow-water	0.340	85	29
		deep-water	0.070	256	18
3	July 1 - August 1	shallow-water	0.340	121	41
		deep-water	0.070	341	24
4	August 1 - October 1	shallow-water	0.340	53	18
		deep-water	0.070	75	5
5	October 1 - December 31	all targets	0.205	256	52
Annual		Total shallow-water			219
		Total deep-water			56
		Total, all season and categories			1,706

### *Non-AFA Crab Vessel Groundfish Harvest Limitations*

Section 680.22 establishes groundfish catch limits for vessels with a history of participation in the Bering Sea snow crab fishery to prevent these vessels from using the increased flexibility provided by the Crab Rationalization Program to expand their level of participation in the GOA groundfish fisheries. Sideboard limits restrict these vessels' catch to their collective historical landings in each GOA groundfish fishery (except the fixed-gear sablefish fishery). Sideboard limits also apply to catch made using an LLP license derived from the history of a restricted vessel, even if that LLP license is used on another vessel.

The basis for these sideboard limits is described in detail in the final rules implementing the major provisions of the CR Program, including Amendments 18 and 19 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (Crab FMP) (70 FR 10174, March 2, 2005), Amendment 34 to the Crab FMP (76 FR 35772, June 20, 2011), Amendment 83 to the GOA FMP (76 FR 74670, December 1, 2011), and Amendment 45 to the Crab FMP (80 FR 28539, May 19, 2015).

As discussed earlier in this preamble, NMFS published a final rule (84 FR 2723, February 8, 2019) that establishes regulations to prohibit directed fishing for sideboard limits for specific groundfish species or species groups, rather than prohibiting directed fishing for non-AFA crab vessel sideboards through the GOA annual harvest specifications. This will apply to most, but not all, of the species and area apportionments listed in Tables 21 and 22. Beginning with the 2020 and 2021 harvest specifications, NMFS will incorporate such changes into the specification and the management of non-AFA crab vessel sideboard limits.

Tables 21 and 22 list the final 2019 and 2020 groundfish sideboard limitations for non-AFA crab vessels. All targeted or incidental catch of sideboard species made by non-AFA crab vessels or associated LLP licenses will be deducted from these sideboard limits.

**Table 21 - Final 2019 GOA Non-American Fisheries Act Crab Vessel Groundfish Sideboard Limits (Values are rounded to the nearest metric ton).**

Species	Season/gear	Area/component/ gear	Ratio of 1996- 2000 non-AFA crab vessel catch to 1996-2000 total harvest	Final 2019 TACs	Final 2019 non- AFA crab vessel sideboard limit <sup>3</sup>
Pollock	A Season January 20 - March 10	Shumagin (610)	0.0098	848	8
		Chirikof (620)	0.0031	23,236	72
		Kodiak (630)	0.0002	7,593	2
	B Season March 10 - May 31	Shumagin (610)	0.0098	848	8
		Chirikof (620)	0.0031	27,306	85
		Kodiak (630)	0.0002	3,522	1
	C Season August 25 - October 1	Shumagin (610)	0.0098	11,590	114
		Chirikof (620)	0.0031	8,423	26
		Kodiak (630)	0.0002	11,664	2
	D Season October 1 - November 1	Shumagin (610)	0.0098	11,590	114
		Chirikof (620)	0.0031	8,423	26
		Kodiak (630)	0.0002	11,664	2
	Annual	WYK (640)	0.0000	5,748	0
		SEO (650)	0.0000	8,773	0
Pacific cod	A Season <sup>1</sup> January 1 - June 10	WG Jig	0.0000	3,206	0
		WG Hook-and-line CV	0.0004	3,206	1
		WG Pot CV	0.0997	3,206	320
		WG Pot C/P	0.0078	3,206	25
		WG Trawl CV	0.0007	3,206	2
		CG Jig	0.0000	3,450	0
		CG Hook-and-line CV	0.0001	3,450	0
		CG Pot CV	0.0474	3,450	164
		CG Pot C/P	0.0136	3,450	47
	B Season <sup>2</sup> September 1 - December 31	WG Jig	0.0000	2,137	0
		WG Hook-and-line CV	0.0004	2,137	1
		WG Pot CV	0.0997	2,137	213
		WG Pot C/P	0.0078	2,137	17
		WG Trawl CV	0.0007	2,137	1
		CG Jig	0.0000	2,300	0
		CG Hook-and-line CV	0.0001	2,300	0
		CG Pot CV	0.0474	2,300	109
		CG Pot C/P	0.0136	2,300	31

		CG Trawl CV	0.0012	2,300	3
	Annual	EG inshore	0.0110	1,148	13
		EG offshore	0.0000	128	0
Sablefish	Annual, trawl gear	W	0.0000	316	0
		C	0.0000	1,036	0
		E	0.0000	241	0
Shallow-water flatfish	Annual	W	0.0059	13,250	78
		C	0.0001	25,731	3
		E	0.0000	4,236	0
Deep-water flatfish	Annual	W	0.0035	416	1
		C	0.0000	3,443	0
		E	0.0000	5,642	0
Rex sole	Annual	W	0.0000	2,951	0
		C	0.0000	8,357	0
		E	0.0000	3,384	0
Arrowtooth flounder	Annual	W	0.0004	14,500	6
		C	0.0001	70,995	7
		E	0.0000	13,800	0
Flathead sole	Annual	W	0.0002	8,650	2
		C	0.0004	15,400	6
		E	0.0000	2,439	0
Pacific ocean perch	Annual	W	0.0000	3,227	0
		C	0.0000	19,646	0
		E	0.0000	5,682	0
Northern rockfish	Annual	W	0.0005	1,190	1
		C	0.0000	3,338	0
Shortraker rockfish	Annual	W	0.0013	44	0
		C	0.0012	305	0
		E	0.0009	514	0
Dusky rockfish	Annual	W	0.0017	781	1
		C	0.0000	2,764	0
		E	0.0000	155	0
Rougheye/blacks potted rockfish	Annual	W	0.0067	174	1
		C	0.0047	550	3
		E	0.0008	704	1
Demersal shelf rockfish	Annual	SEO	0.0000	261	0
Thorny head rockfish	Annual	W	0.0047	326	2
		C	0.0066	911	6
		E	0.0045	779	4
Other rockfish	Annual	W/C	0.0033	1,737	6
		E	0.0000	3,857	0

Atka mackerel	Annual	Gulfwide	0.0000	3,000	0
Big skate	Annual	W	0.0392	504	20
		C	0.0159	1,774	28
		E	0.0000	570	0
Longnose skate	Annual	W	0.0392	149	6
		C	0.0159	2,804	45
		E	0.0000	619	0
Other skates	Annual	Gulfwide	0.0176	1,384	24
Sculpins	Annual	Gulfwide	0.0176	5,301	93
Sharks	Annual	Gulfwide	0.0176	8,184	144
Octopuses	Annual	Gulfwide	0.0176	975	17

<sup>1</sup> The Pacific cod A season for trawl gear does not open until January 20.

<sup>2</sup> The Pacific cod B season for jig gear opens June 10. The Pacific cod B season for trawl gear closes November 1.

<sup>3</sup> On February 8, 2019, NMFS published a final rule (84 FR 2723) that modifies regulations for AFA Program and CR Program participants subject to sideboard limits in the GOA. The final rule establishes regulations to prohibit directed fishing for sideboard limits for specific groundfish species or species groups, rather than prohibiting directed fishing for AFA Program and CR Program sideboard limits through the GOA annual harvest specifications. Once the final rule is effective (effective March 11, 2019), NMFS will no longer publish in the annual GOA harvest specifications the AFA Program and CR Program sideboard limit amounts for groundfish species subject to the final rule, and the groundfish species subject to the final rule will be prohibited to directed fishing in regulation (84 FR 2723).

**Table 22 - Final 2020 GOA Non-American Fisheries Act Crab Vessel Groundfish Sideboard Limits (Values are rounded to the nearest metric ton).**

Species	Season/gear	Area/component/ gear	Ratio of 1996- 2000 non-AFA crab vessel catch to 1996-2000 total harvest	Final 2020 TACs	Final 2020 non- AFA crab vessel sideboard limit <sup>3</sup>
Pollock	A Season January 20 - March 10	Shumagin (610)	0.0098	680	7
		Chirikof (620)	0.0031	21,888	68
		Kodiak (630)	0.0002	2,823	1
	B Season March 10 - May 31	Shumagin (610)	0.0098	680	7
		Chirikof (620)	0.0031	21,888	68
		Kodiak (630)	0.0002	2,823	1
	C Season August 25 - October 1	Shumagin (610)	0.0098	9,290	91
		Chirikof (620)	0.0031	6,752	21
		Kodiak (630)	0.0002	9,349	2
	D Season October 1 - November 1	Shumagin (610)	0.0098	9,290	91
		Chirikof (620)	0.0031	6,752	21
		Kodiak (630)	0.0002	9,349	2
	Annual	WYK (640)	0.0000	4,607	0
		SEO (650)	0.0000	8,773	0
Pacific cod	A Season <sup>1</sup> January 1 - June 10	WG Jig	0.0000	4,072	0
		WG Hook-and-line CV	0.0004	4,072	2
		WG Pot CV	0.0997	4,072	406
		WG Pot C/P	0.0078	4,072	32
		WG Trawl CV	0.0007	4,072	3
		CG Jig	0.0000	4,382	0
		CG Hook-and-line CV	0.0001	4,382	0
		CG Pot CV	0.0474	4,382	208
		CG Pot C/P	0.0136	4,382	60
	B Season <sup>2</sup> September 1 - December 31	WG Jig	0.0000	2,715	0
		WG Hook-and-line CV	0.0004	2,715	1
		WG Pot CV	0.0997	2,715	271
		WG Pot C/P	0.0078	2,715	21
		WG Trawl CV	0.0007	2,715	2
		CG Jig	0.0000	2,921	0
		CG Hook-and-line CV	0.0001	2,921	0
		CG Pot CV	0.0474	2,921	138
		CG Pot C/P	0.0136	2,921	40

		CG Trawl CV	0.0012	2,921	4
	Annual	E inshore	0.0110	1,457	16
		E offshore	0.0000	162	0
Sablefish	Annual, trawl gear	W	0.0000	421	0
		C	0.0000	1,386	0
		E	0.0000	321	0
Shallow-water flatfish	Annual	W	0.0059	13,250	78
		C	0.0001	26,065	3
		E	0.0000	4,291	0
Deep-water flatfish	Annual	W	0.0035	420	1
		C	0.0000	3,488	0
		E	0.0000	5,716	0
Rex sole	Annual	W	0.0000	2,956	0
		C	0.0000	8,371	0
		E	0.0000	3,398	0
Arrowtooth flounder	Annual	W	0.0004	14,500	6
		C	0.0001	68,575	7
		E	0.0000	13,800	0
Flathead sole	Annual	W	0.0002	8,650	2
		C	0.0004	15,400	6
		E	0.0000	2,537	0
Pacific ocean perch	Annual	W	0.0000	3,125	0
		C	0.0000	19,024	0
		E	0.0000	5,503	0
Northern rockfish	Annual	W	0.0005	1,122	1
		C	0.0000	3,147	0
Shortraker rockfish	Annual	W	0.0013	44	0
		C	0.0012	305	0
		E	0.0009	514	0
Dusky rockfish	Annual	W	0.0017	774	1
		C	0.0000	2,742	0
		E	0.0000	154	0
Rougheye/blackspotted rockfish	Annual	W	0.0067	172	1
		C	0.0047	545	3
		E	0.0008	697	1
Demersal shelf rockfish	Annual	SEO	0.0000	261	0
Thornyhead rockfish	Annual	W	0.0047	326	2
		C	0.0066	911	6
		E	0.0045	779	4
Other rockfish	Annual	W/C	0.0033	1,737	6
		E	0.0000	3,857	0

Atka mackerel	Annual	Gulfwide	0.0000	3,000	0
Big skate	Annual	W	0.0392	504	20
		C	0.0159	1,774	28
		E	0.0000	570	0
Longnose skate	Annual	W	0.0392	149	6
		C	0.0159	2,804	45
		E	0.0000	619	0
Other skates	Annual	Gulfwide	0.0176	1,384	24
Sculpins	Annual	Gulfwide	0.0176	5,301	93
Sharks	Annual	Gulfwide	0.0176	8,184	144
Octopuses	Annual	Gulfwide	0.0176	975	17

<sup>1</sup> The Pacific cod A season for trawl gear does not open until January 20.

<sup>2</sup> The Pacific cod B season for jig gear opens June 10. The Pacific cod B season for trawl gear closes November 1.

<sup>3</sup> On February 8, 2019, NMFS published a final rule (84 FR 2723) that modifies regulations for AFA Program and CR Program participants subject to sideboard limits in the GOA. The final rule establishes regulations to prohibit directed fishing for sideboard limits for specific groundfish species or species groups, rather than prohibiting directed fishing for AFA Program and CR Program sideboard limits through the GOA annual harvest specifications. Once the final rule is effective (effective March 11, 2019), NMFS will no longer publish in the annual GOA harvest specifications the AFA Program and CR Program sideboard limit amounts for groundfish species subject to the final rule, and the groundfish species subject to the final rule will be prohibited to directed fishing in regulation (84 FR 2723).

### *Rockfish Program Groundfish Sideboard and Halibut PSC Limitations*

The Rockfish Program establishes three classes of sideboard provisions: CV groundfish sideboard restrictions, C/P rockfish sideboard restrictions, and C/P opt-out vessel sideboard restrictions (§ 679.82(c)(1)). These sideboards are intended to limit the ability of rockfish harvesters to expand into other fisheries.

CVs participating in the Rockfish Program may not participate in directed fishing for dusky rockfish, Pacific ocean perch, and northern rockfish in the West Yakutat District and Western GOA from July 1 through July 31. Also, CVs may not participate in directed fishing for arrowtooth flounder, deep-water flatfish, and rex sole in the GOA from July 1 through July 31 (§ 679.82(d)).

C/Ps participating in Rockfish Program cooperatives are restricted by rockfish and halibut PSC sideboard limits. These C/Ps are prohibited from directed fishing for dusky rockfish, Pacific ocean perch, and northern rockfish in the West Yakutat District and Western GOA from July 1 through July 31 (§ 679.82(e)(2)). Holders of C/P-designated LLP licenses that opt out of participating in a Rockfish Program cooperative will be able to access that portion of each rockfish sideboard limit that is not assigned to rockfish cooperatives (§ 679.82(e)(7)). The sideboard ratio for each fishery in the West Yakutat District and the Western GOA is set forth in § 679.82(e)(4). Tables 23 and 24 list the final 2019 and 2020 Rockfish Program C/P sideboard limits in the West Yakutat District and the Western GOA. Due to confidentiality requirements associated with fisheries data, the sideboard limits for the West Yakutat District are not displayed.

**Table 23 - Final 2019 Rockfish Program Sideboard Limits for the Western GOA and West Yakutat District by Fishery for the Catcher/Processor Sector (Values are rounded to the nearest metric ton).**

Area	Fishery	C/P sector (% of TAC)	Final 2019 TACs	Final 2019 C/P limit
Western GOA	Dusky rockfish	72.3	781	565
	Pacific ocean perch	50.6	3,227	1,633
	Northern rockfish	74.3	1,190	884
West Yakutat District	Dusky rockfish	Confidential <sup>1</sup>	95	Confidential <sup>1</sup>
	Pacific ocean perch	Confidential <sup>1</sup>	3,296	Confidential <sup>1</sup>

<sup>1</sup> Not released due to confidentiality requirements associated with fish ticket data, as established by NMFS and the State of Alaska.

**Table 24 - Final 2020 Rockfish Program Sideboard Limits for the Western GOA and West Yakutat District by Fishery for the Catcher/Processor Sector (Values are rounded to the nearest metric ton).**

Area	Fishery	C/P sector (% of TAC)	Final 2020 TACs	Final 2020 C/P limit
Western GOA	Dusky rockfish	72.3	774	560
	Pacific ocean perch	50.6	3,125	1,581
	Northern rockfish	74.3	1,122	834
West Yakutat District	Dusky rockfish	Confidential <sup>1</sup>	94	Confidential <sup>1</sup>
	Pacific ocean perch	Confidential <sup>1</sup>	3,192	Confidential <sup>1</sup>

<sup>1</sup> Not released due to confidentiality requirements associated with fish ticket data, as established by NMFS and the State of Alaska.

Under the Rockfish Program, the C/P sector is subject to halibut PSC sideboard limits for the trawl deep-water and shallow-water species fisheries from July 1 through July 31 (§ 679.82(e)(3) and (e)(5)). Halibut PSC sideboard ratios by fishery are set forth in § 679.82(e)(5). No halibut PSC sideboard limits apply to the CV sector, as CVs participating in cooperatives receive a portion of the annual halibut PSC limit. C/Ps that opt out of the Rockfish Program are able to access that portion of the deep-water and shallow-water halibut PSC sideboard limit not assigned to C/P rockfish cooperatives. The sideboard provisions for C/Ps that elect to opt out of participating in a rockfish cooperative are described in § 679.82(c), (e), and (f). Sideboard limits are linked to the catch history of specific vessels that may choose to opt out. After March 1, NMFS will determine which C/Ps have opted-out of the Rockfish Program in 2019, and NMFS will know the ratios and amounts used to calculate opt-out sideboard ratios. NMFS will then calculate any applicable opt-out sideboards for 2019 and post these limits on the Alaska Region website at <https://alaskafisheries.noaa.gov/sustainablefisheries/rockfish/>. Table 25 lists the final 2019 and 2020 Rockfish Program halibut PSC sideboard limits for the C/P sector.

**Table 25 - Final 2019 and 2020 Rockfish Program Halibut PSC Sideboard Limits for the Catcher/Processor Sector (Values are rounded to the nearest metric ton).**

Sector	Shallow-water species fishery halibut PSC sideboard ratio (percent)	Deep-water species fishery halibut PSC sideboard ratio (percent)	2019 and 2020 halibut mortality limit (mt)	Annual shallow-water species fishery halibut PSC sideboard limit (mt)	Annual deep-water species fishery halibut PSC sideboard limit (mt)
Catcher/processor	0.10	2.50	1,706	2	43

### *Amendment 80 Program Groundfish and PSC Sideboard Limits*

Amendment 80 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (Amendment 80 Program) established a limited access privilege program for the non-AFA trawl C/P sector. The Amendment 80 Program established groundfish and halibut PSC catch limits for Amendment 80 Program participants to limit the ability of participants eligible for the Amendment 80 Program to expand their harvest efforts in the GOA.

Section 679.92 establishes groundfish harvesting sideboard limits on all Amendment 80 program vessels, other than the F/V *Golden Fleece*, to amounts no greater than the limits listed in Table 37 to 50 CFR part 679. Under § 679.92(d), the F/V *Golden Fleece* is prohibited from directed fishing for pollock, Pacific cod, Pacific ocean perch, dusky rockfish, and northern rockfish in the GOA.

Groundfish sideboard limits for Amendment 80 Program vessels operating in the GOA are based on their average aggregate harvests from 1998 through 2004 (72 FR 52668, September 14, 2007). Tables 26 and 27 list the final 2019 and 2020 groundfish sideboard limits for Amendment 80 Program vessels. NMFS will deduct all targeted or incidental catch of sideboard species made by Amendment 80 Program vessels from the sideboard limits in Tables 26 and 27.

**Table 26 - Final 2019 GOA Groundfish Sideboard Limits for Amendment 80 Program Vessels (Values are rounded to nearest metric ton).**

Species	Apportionments and allocations by season	Area	Ratio of Amendment 80 sector vessels 1998 - 2004 catch to TAC	2019 TAC (mt)	2019 Amendment 80 vessel sideboards (mt)
Pollock	A Season January 20 - March 10	Shumagin (610)	0.003	848	3
		Chirikof (620)	0.002	23,236	46
		Kodiak (630)	0.002	7,593	15
	B Season March 10 - May 31	Shumagin (610)	0.003	848	3
		Chirikof (620)	0.002	27,306	55
		Kodiak (630)	0.002	3,522	7
	C Season August 25 - October 1	Shumagin (610)	0.003	11,590	35
		Chirikof (620)	0.002	8,423	17
		Kodiak (630)	0.002	11,664	23
	D Season October 1 - November 1	Shumagin (610)	0.003	11,590	35
		Chirikof (620)	0.002	8,423	17
		Kodiak (630)	0.002	11,664	23
Annual	WYK (640)	0.002	5,748	11	
Pacific cod	A Season <sup>1</sup> January 1 - June 10	W	0.020	3,206	64
		C	0.044	3,450	152
	B Season <sup>2</sup> September 1 - December 31	W	0.020	2,137	43
		C	0.044	2,300	101
	Annual	WYK	0.034	1,275	43
Pacific ocean perch	Annual	W	0.994	3,227	3,208
		WYK	0.961	3,296	3,167
Northern rockfish	Annual	W	1.000	1,190	1,190
Dusky rockfish	Annual	W	0.764	781	597
		WYK	0.896	95	85

<sup>1</sup> The Pacific cod A season for trawl gear does not open until January 20.

<sup>2</sup> The Pacific cod B season for trawl gear closes November 1.

**Table 27 - Final 2020 GOA Groundfish Sideboard Limits for Amendment 80 Program Vessels (Values are rounded to nearest metric ton).**

Species	Apportionments and allocations by season	Area	Ratio of Amendment 80 sector vessels 1998 - 2004 catch to TAC	2020 TAC (mt)	2020 Amendment 80 vessel sideboards (mt)
Pollock	A Season January 20 - March 10	Shumagin (610)	0.003	680	2
		Chirikof (620)	0.002	21,888	44
		Kodiak (630)	0.002	2,823	6
	B Season March 10 - May 31	Shumagin (610)	0.003	680	2
		Chirikof (620)	0.002	21,888	44
		Kodiak (630)	0.002	2,823	6
	C Season August 25 - October 1	Shumagin (610)	0.003	9,290	28
		Chirikof (620)	0.002	6,752	14
		Kodiak (630)	0.002	9,349	19
	D Season October 1 - November 1	Shumagin (610)	0.003	9,290	28
		Chirikof (620)	0.002	6,752	14
		Kodiak (630)	0.002	9,349	19
Annual	WYK (640)	0.002	4,607	9	
Pacific cod	A Season <sup>1</sup> January 1 - June 10	W	0.020	4,072	81
		C	0.044	4,382	193
	B Season <sup>2</sup> September 1 - December 31	W	0.020	2,715	54
		C	0.044	2,921	129
	Annual	WYK	0.034	1,619	55
Pacific ocean perch	Annual	W	0.994	3,125	3,106
		WYK	0.961	3,192	3,068
Northern rockfish	Annual	W	1.000	1,122	1,122
Dusky rockfish	Annual	W	0.764	774	591
		WYK	0.896	94	84

<sup>1</sup> The Pacific cod A season for trawl gear does not open until January 20.

<sup>2</sup> The Pacific cod B season for trawl gear closes November 1.

The halibut PSC sideboard limits for Amendment 80 Program vessels in the GOA are based on the historic use of halibut PSC by Amendment 80 Program vessels in each PSC target category from 1998 through 2004. These values are slightly lower than the average historic use to accommodate two factors: allocation of halibut PSC cooperative quota under the Rockfish Program and the exemption of the F/V *Golden Fleece* from this restriction (§ 679.92(b)(2)).

Table 28 lists the final 2019 and 2020 halibut PSC sideboard limits for Amendment 80 Program vessels. These tables incorporate the maximum percentages of the halibut PSC sideboard limits that may be used by Amendment 80 Program vessels as contained in Table 38 to 50 CFR part 679. Any residual amount of a seasonal Amendment 80 halibut PSC sideboard limit may carry forward to the next season limit (§ 679.92(b)(2)).

**Table 28 - Final 2019 and 2020 Halibut PSC Sideboard Limits for Amendment 80 Program Vessels in the GOA (Values are rounded to nearest metric ton).**

Season	Season dates	Target fishery	Historic Amendment 80 use of the annual halibut PSC limit catch (ratio)	2019 and 2020 annual PSC limit (mt)	2019 and 2020 Amendment 80 vessel PSC limit
1	January 20 - April 1	shallow-water	0.0048	1,706	8
		deep-water	0.0115	1,706	20
2	April 1 - July 1	shallow-water	0.0189	1,706	32
		deep-water	0.1072	1,706	183
3	July 1 - August 1	shallow-water	0.0146	1,706	25
		deep-water	0.0521	1,706	89
4	August 1 - October 1	shallow-water	0.0074	1,706	13
		deep-water	0.0014	1,706	2
5	October 1 - December 31	shallow-water	0.0227	1,706	39
		deep-water	0.0371	1,706	63
				Total:	474

### *Directed Fishing Closures*

Pursuant to § 679.20(d)(1)(i), if the Regional Administrator determines 1) that any allocation or apportionment of a target species or species group allocated or apportioned to a fishery will be reached; or 2) with respect to pollock and Pacific cod, that an allocation or apportionment to an inshore or offshore component or sector allocation will be reached, then the Regional Administrator may establish a directed fishing allowance (DFA) for that species or species group. If the Regional Administrator establishes a DFA and that allowance is or will be reached before the end of the fishing year, NMFS will prohibit directed fishing for that species or species group in the specified GOA subarea, regulatory area, or district (§ 679.20(d)(1)(iii)).

The Regional Administrator has determined that the TACs for the species listed in Table 29 are necessary to account for the incidental catch of these species in other anticipated groundfish fisheries for the 2019 and 2020 fishing years.

**Table 29 - 2019 and 2020 Directed Fishing Closures in the GOA (Amounts for incidental catch in other directed fisheries are in metric tons).**

Target	Area/component/gear	Incidental catch amount and year (if amounts differ by year)
Pollock	all/offshore	not applicable <sup>1</sup>
Sablefish <sup>2</sup>	all/rawl	1,583 (2019) 2,129 (2020)
Pacific cod	Western, catcher/processor, trawl	125 (2019), 159 (2020)
	Central, catcher/processor, trawl	239 (2019), 304 (2020)
Shortraker rockfish <sup>2</sup>	all	863
Rougheye/blackspotted rockfish <sup>2</sup>	all	1,428 (2019)
		1,414 (2020)
Thornyhead rockfish <sup>2</sup>	all	5,594
Other rockfish	all	1,384
Atka mackerel	all	3,000
Big skate	All	2,848
Longnose skate	All	3,572
Other skates	All	1,384
Sharks	All	8,184
Octopuses	All	975

<sup>1</sup> Pollock is closed to directed fishing in the GOA by the offshore component under § 679.20(a)(6)(i).

<sup>2</sup> Closures not applicable to participants in cooperatives conducted under the Central GOA Rockfish Program, as cooperatives are prohibited from exceeding their allocations (§ 679.7(n)(6)(viii)).

Consequently, in accordance with § 679.20(d)(1)(i), the Regional Administrator establishes the DFA for the species or species groups listed in Table 29 as zero mt. Therefore, in accordance with § 679.20(d)(1)(iii), NMFS is prohibiting directed fishing for those species, areas, gear types, and components in the GOA listed in Table 29 effective at 1200 hours, A.l.t., [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], through 2400 hours, A.l.t., December 31, 2020.

Section 679.64(b)(5) provides for management of AFA CV groundfish harvest limits and PSC bycatch limits using directed fishing closures and PSC closures according to procedures set

out at §§ 679.20(d)(1)(iv) and 679.21(d)(6) and (e)(3)(v). The Regional Administrator has determined that, in addition to the closures listed above, many of the non-exempt AFA CV sideboard limits listed in Tables 18 and 19 are necessary as incidental catch to support other anticipated groundfish fisheries for the 2019 and 2020 fishing years. In accordance with § 679.20(d)(1)(iv), the Regional Administrator sets the DFAs for the species and species groups in Table 30 at zero mt. Therefore, in accordance with § 679.20(d)(1)(iii), NMFS is prohibiting directed fishing by non-exempt AFA CVs in the GOA for the species and specified areas listed in Table 30 effective at 1200 hours, A.l.t., [*INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER*], through 2400 hours, A.l.t., December 31, 2020.

**Table 30 - 2019 and 2020 Non-Exempt AFA CV Sideboard Directed Fishing Closures for All Gear Types in the GOA (Amounts for incidental catch in other directed fisheries are in metric tons).**

Species	Regulatory area/district	Incidental catch amount
Pacific cod	Eastern	10 (inshore) and 9 (offshore) [2019] 1 (inshore) and 1 (offshore) [2020]
Shallow-water flatfish	Eastern	53
Deep-water flatfish	Western	0
Rex sole	Western and Eastern	2 and 10
Arrowtooth flounder	Western and Eastern	30 and 3
Flathead sole	Western and Eastern	31 and 2
Pacific ocean perch	Western	7
Northern rockfish	Western	0
Dusky rockfish	Entire GOA	0
Demersal shelf rockfish	SEO District	0
Sculpins	Entire GOA	33

Section 680.22 provides for the management of non-AFA crab vessel sideboards using directed fishing closures in accordance with § 680.22(e)(2) and (3). The Regional Administrator has determined that the non-AFA crab vessel sideboards listed in Tables 21 and 22 are insufficient to support a directed fishery and has set the sideboard DFA at zero mt, with the exception of Pacific cod pot CV sector apportionments in the Western and Central Regulatory Areas. Therefore, NMFS is prohibiting directed fishing by non-AFA crab vessels in the GOA for all species and species groups listed in Tables 21 and 22, with the exception of the Pacific cod pot CV sector apportionments in the Western and Central Regulatory Areas.

Closures implemented under the 2018 and 2019 GOA harvest specifications for groundfish (83 FR 8768, March 1, 2018) remain effective under authority of these final 2019 and 2020 harvest specifications and until the date specified in those notices. Closures are posted at the following website:

<https://alaskafisheries.noaa.gov/infobulletins/search>. While these closures are in effect, the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a fishing trip. These closures to directed fishing are in addition to closures and prohibitions found at 50 CFR part 679. NMFS may implement other closures during the 2019 and 2020 fishing years as necessary for effective conservation and management.

## **Comments and Responses**

NMFS received five letters containing six substantive comments during the public comment period for the proposed GOA groundfish harvest specifications. No changes were made to the final rule in response to the comment letters received. NMFS's response to public comments on the proposed GOA groundfish harvest specifications is provided below.

*Comment 1:* NMFS should prohibit harvesting for a year to make sure that the population does not decrease to an amount that would prohibit harvesting for another 2 to 3 years.

*Response 1:* The SAFE reports (see **ADDRESSES**) are intended to summarize the best available scientific information concerning the past, present, and possible future condition of the stocks and fisheries under federal management. The SSC reviews the stock assessments and sets ABC levels for each species and species group managed under the FMP. The ABC recommendations, together with social and economic factors, are considered by the Council in determining TACs and other management strategies for the fisheries. Based on the information provided in the SAFE report, the Council recommended and NMFS implements TACs that do not exceed the ABC and OFL for each groundfish species and species group. The OFL, ABC, and TAC amounts recommended by the Council and approved by NMFS in this final rule are set according to the harvest strategy adopted in the EIS, the management objectives outlined in the

FMP, and the statutory requirements of the Magnuson-Stevens Act to ensure the long-term health of each species and species group and the optimization of yield on a continuing basis.

*Comment 2:* Amendment 106 reclassified squid as an “Ecosystem Component Species” that do not require conservation and management. What warrants the regulation for directed fishing?

*Response 2:* Amendment 106 prohibits directed fishing for squid while allowing limited retention of some squid incidentally caught in other fisheries. Reclassifying squid as an ecosystem component species does not require NMFS to set annual catch limits of an OFL, ABC, or TAC for squid in the GOA groundfish harvest specifications. To monitor the incidental catch of squid in the groundfish fisheries, Amendment 106 maintains recordkeeping and reporting requirements for squid. Additionally, squid may be retained up to a maximum retainable amount in other groundfish fisheries. This allows some squid to be retained for bait or sale, but at a level that discourages fishermen from targeting squid species. More information on Amendment 106 can be found in the final rule to implement Amendment 106 to the FMP (83 FR 31460, July 6, 2018).

*Comment 3:* Would reducing rockfish TAC amounts have substantial economic implications for individuals reliant on the selling of rockfish for food industries?

*Response 3:* Pacific ocean perch is the largest rockfish fishery in the GOA, and the TAC amounts are reached each year. Reduced TAC amounts for Pacific ocean perch and other species of rockfish may result in price increases, but the amount of any potential price increase is unknown. Also, a price increase may not offset revenue declines from lower TACs. Most rockfish fisheries in the GOA are closed because the TAC limits are not larger enough to support directed fishing. However, some retention of rockfish as incidental catch in other fisheries is

allowed. Decreased rockfish TAC amounts may require managers to prohibit all retention of rockfish, which would result in no revenue from the incidental catch of rockfish. Each year the SAFE report on the Economic Status of the Groundfish Fisheries off Alaska is updated with the most recent information about groundfish prices and value, including rockfish (see **ADDRESSES**).

*Comment 4:* NMFS administers the federal fisheries off Alaska for the benefit of a few Alaska fishermen, not for the benefit of all U.S. citizens or the Nation as a whole. There should never be a stock increase, and all quotas should be cut by 50 percent immediately to try to save all stocks, which are being unsustainably fished.

*Response 4:* NMFS manages the GOA groundfish fisheries on behalf of all U.S. citizens, as well as on behalf of the commercial fishing industry, in accordance with the National Standards of the Magnuson-Stevens Act (16 U.S.C. 1851(a)). Participants in this industry reside in other states besides Alaska, and more information about the industry can be found in the SAFE report on the Economic Status of the Groundfish Fisheries off Alaska (see **ADDRESSES**). NMFS's primary objective in the harvest specifications process is the conservation and management of fish resources for the Nation as a whole. The annual harvest specifications process is a key element to ensuring that Alaska fisheries are sustainably managed in a controlled and orderly manner. This process incorporates the best available scientific information from the most recent SAFE reports prepared by multi-disciplinary teams of scientists. Such reports contain the most recent scientific information on the condition of various groundfish stocks, as well as the condition of other ecosystem components. Based on the SAFE reports, the Council and NMFS annually respond to new developments in the natural environment as part of the harvest specifications process. The Council and NMFS set for each

groundfish species or species group the annual TAC and ABC amounts, and these amounts increase or decrease each year based on the biological condition of the groundfish stock. The Council and NMFS have reduced catch amounts if necessary based on the SAFE reports (such as the recent reductions in Pacific cod). More information on the biological condition of each groundfish species or species groups, including changes in annual TAC and ABC amounts, can be found in the annual SAFE reports. Currently, none of the NMFS-managed groundfish species off Alaska is overfished or subject to overfishing.

*Comment 5:* Pollock is overfished. There is no justification for allowing commercial fishing to catch all the pollock in the ocean, particularly to the detriment of marine mammals that also eat pollock.

*Response 5:* As mentioned in the response to Comment 4, none of the NMFS-managed groundfish species off Alaska, including pollock, is overfished or subject to overfishing, and the Council and NMFS continue to set annual harvest levels for groundfish species, including pollock, based on the best available scientific information on the biological condition of the groundfish species, the status of ecosystem, and other socio-economic factors. In addition, there are a broad suite of conservation and management measures in place to protect Steller sea lions that were subject to consultation under Section 7 of the Endangered Species Act, including those described at <https://www.fisheries.noaa.gov/species/steller-sea-lion#management>.

*Comment 6:* The information contained in the 2018 Pacific cod stock assessment indicates that the GOA Pacific cod spawning biomass will be at or below 20 percent of its unfished biomass at the beginning of 2019. Per applicable federal regulations, directed fishing for the key prey (pollock, Pacific cod, and Atka mackerel) of Steller sea lions should be prohibited in the event that the spawning biomass of such a species is projected in the stock

assessment to fall below 20 percent of the projected unfished spawning biomass during a given year. Since 2015, counts of Steller sea lion pups in 2017 were down 33 percent in the Eastern GOA and down 17 percent in the Central GOA. This suggests that the lower birth rates and/or pup survival for Steller sea lions correlate with the decline of Pacific cod.

*Response 6:* The Pacific cod stock in the GOA experienced a decline in biomass and abundance since 2015, as first reported following the 2017 bottom trawl survey. As detailed in the 2018 Ecosystem Status Report (see **ADDRESSES**), the GOA experienced anomalous warm conditions throughout the water column starting in 2014 and extending through 2016 (an event now characterized in the Ecosystem Status Report as “marine heat waves”). This unusual warm event apparently affected the entire ecosystem and, in particular, affected prey availability for upper trophic level predators as was evident in a number of ecosystem indicators including the poor condition of Pacific cod in recent years. These factors led to the current suite of Pacific cod assessment models, which include environmental factors in the assessment including a brief period of high natural mortality (M) and the relationship of longline survey catchability to a temperature index.

The 2019 ABC recommended in the stock assessment for Pacific cod (17,000 mt) resulted in a 13.6 percent reduction from the maximum permissible ABC. This reduction was determined based on catch projections that resulted in the spawning biomass estimate (“B”) being above 20 percent of unfished levels through 2020. The stock assessment’s recommendation for a reduction from the maximum permissible ABC for Pacific cod was explicitly made based on the need to maintain a projected spawning stock biomass above 20 percent of  $B_{100\%}$  in 2019. This is discussed in the 2018 Pacific cod stock assessment, particularly in the Executive Summary (p. 2) and Harvest Recommendations section (pp. 32-35). Based on the preferred assessment model and the ABC recommendation for 2019 of 17,000 mt, spawning

biomass is estimated in 2019 at 34,701 (see the Summary Table at p. 3, the discussion under “Specification of OFL and Maximum Permissible ABC” on p. 33, and Table 2.28), and will remain above  $B_{20\%}$  in 2019 (see the discussion under “ABC Recommendation” on p. 34). The stock assessment discussion provides the scientific and statistical rationale for the recommended specification of OFL, ABC, and selection of a preferred assessment model to calculate such parameters. The 2018 Pacific cod stock assessment is available from the Council (see **ADDRESSES**).

The SSC concurred with the preferred assessment model and with the reduction in ABC. The SSC noted that the ABC reduction of 13.6 percent is in addition to the buffer incorporated by the sloping harvest control rule that is triggered when a stock, like Pacific cod, falls below  $B_{40\%}$ , which results in a total buffer of 59 percent from  $F_{40\%}$ . The SSC supported the 13.6 percent reduction in ABC to provide stability in future levels of spawning biomass, and the SSC noted that the 13.6 percent reduction in ABC to 17,000 mt was determined based on catch projections that resulted in the spawning biomass estimate being above 20% of unfished levels through 2020. The SSC set the Pacific cod ABC at 17,000 mt for 2019, and NMFS adopts the Pacific cod ABC of 17,000 mt for 2019 in these final 2019 and 2020 harvest specifications.

Regarding the decline in pup counts from 2015 to 2017 in the Eastern and Central GOA by 33 percent and 18 percent, respectively, the SSC noted this information but reiterated that two years do not make a trend and that more years of data are necessary to distinguish these changes from other potential declines. These preliminary data provides important information in light of the recent marine heat-wave impacts on the GOA ecosystem. More detailed information on current population trends of the western Distinct Population Segment (DPS) Steller sea lion can be found in the 2017 Marine Mammal Stock Assessment Report, which reports that there is

strong evidence that across Alaska pup and non-pup counts of western DPS Steller sea lions have increased at 2.19 percent and 2.24 percent, respectively, between 2003 and 2016, although there are strong differences across Alaska but generally positive trends in the Gulf of Alaska.

In addition, beginning in 2018, NMFS began managing the GOA Pacific cod fisheries with additional scrutiny and caution because of the reductions in the GOA Pacific cod ABCs and corresponding TACs. Beginning in 2018, NMFS closed various sectors to directed fishing for Pacific cod due to small sector allocations, as well as the need to conserve adequate amounts of Pacific cod for incidental catch in other groundfish fisheries. In 2018, approximately 15,132 mt (84 percent) of the 18,000 mt Pacific cod ABC was caught in the GOA. This precautionary management is continuing in 2019. NMFS closed several regulatory areas and sectors to directed fishing for the year, including trawl C/Ps in the Central GOA and Western GOA and trawl CVs in the Western GOA, and some sectors that were open have already closed to directed fishing. More detailed information on these inseason actions can be found in information bulletins posted at <https://alaskafisheries.noaa.gov/infobulletins/search>.

### **Classification**

NMFS has determined that these final harvest specifications are consistent with the FMP and with the Magnuson-Stevens Fishery Conservation and Management Act and other applicable laws.

This action is authorized under 50 CFR 679.20 and is exempt from review under Executive Order 12866.

NMFS prepared an EIS for this action (see **ADDRESSES**) and made it available to the public on January 12, 2007 (72 FR 1512). On February 13, 2007, NMFS issued the ROD for the EIS. In February 2019, NMFS prepared a SIR for this action. Copies of the EIS, ROD, and

annual SIRs for this action are available from NMFS (see **ADDRESSES**). The Final EIS analyzes the environmental, social, and economic consequences of the groundfish harvest specifications and alternative harvest strategies on resources in the action area. Based on the analysis in the Final EIS, NMFS concluded that the preferred Alternative (Alternative 2) provides the best balance among relevant environmental, social, and economic considerations and allows for continued management of the groundfish fisheries based on the most recent, best scientific information. The preferred alternative is a harvest strategy in which TACs are set at a level within the range of ABCs recommended by the Council's SSC; the sum of the TACs must achieve the OY specified in the FMP.

The annual SIR evaluates the need to prepare a Supplemental EIS (SEIS) for the 2019 and 2020 groundfish harvest specifications. An SEIS should be prepared if 1) the agency makes substantial changes in the proposed action that are relevant to environmental concerns, or 2) significant new circumstances or information exist relevant to environmental concerns and bearing on the proposed action or its impacts (40 CFR 1502.9(c)(1)). After reviewing the information contained in the SIR and SAFE reports, the Regional Administrator has determined that 1) approval of the 2019 and 2020-harvest specifications, which were set according to the preferred harvest strategy in the EIS, does not constitute a substantial change in the action; and 2) there are no significant new circumstances or information relevant to environmental concerns and bearing on the action or its impacts. Additionally, the 2019 and 2020 harvest specifications will result in environmental, social, and economic impacts within the scope of those analyzed and disclosed in the EIS. Therefore, supplemental National Environmental Policy Act documentation is not necessary to implement the 2019 and 2020 harvest specifications.

Section 604 of the Regulatory Flexibility Act (RFA) (5 U.S.C. 604) requires that, when an agency promulgates a final rule under 5 U.S.C. 553, after being required by that section, or any other law, to publish a general notice of proposed rulemaking, the agency shall prepare a final regulatory flexibility analysis (FRFA). The following constitutes the FRFA prepared in the final action.

Section 604 describes the required contents of a FRFA: 1) a statement of the need for, and objectives of, the rule; 2) a statement of the significant issues raised by the public comments in response to the initial regulatory flexibility analysis, a statement of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments; 3) the response of the agency to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration in response to the proposed rule, and a detailed statement of any change made to the proposed rule in the final rule as a result of the comments; 4) a description of and an estimate of the number of small entities to which the rule will apply or an explanation of why no such estimate is available; 5) a description of the projected reporting, recordkeeping, and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record; and 6) a description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency that affect the impact on small entities was rejected.

A description of this action, its purpose, and its legal basis are contained at the beginning of the preamble to this final rule and are not repeated here.

NMFS published the proposed rule on December 6, 2018 (83 FR 62794). NMFS prepared an Initial Regulatory Flexibility Analysis (IRFA) to accompany the proposed action, and included a summary in the proposed rule. The comment period closed on January 7, 2019. No comments were received on the IRFA or on the economic impacts of the rule more generally. The Chief Counsel for Advocacy of the Small Business Administration did not file any comments on the proposed rule.

The entities directly regulated by this action include: 1) entities operating vessels with groundfish FFPs catching FMP groundfish in Federal waters; 2) all entities operating vessels, regardless of whether they hold groundfish FFPs, catching FMP groundfish in the State-waters parallel fisheries; and 3) all entities operating vessels fishing for halibut inside three miles of the shore (whether or not they have FFPs).

For RFA purposes only, NMFS has established a small business size standard for businesses, including their affiliates, whose primary industry is commercial fishing (see 50 CFR 200.2). A business primarily engaged in commercial fishing (NAICS code 11411) is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has combined annual gross receipts not in excess of \$11 million for all its affiliated operations worldwide.

Using the most recent data available (2017), the estimated number of directly regulated small entities include approximately 821 individual catcher vessel entities with gross revenues meeting small entity criteria. Of these entities, 745 used hook-and-line gear, 120 used pot gear, and 32 used trawl gear (some of these entities used more than one gear type, thus the counts of

entities using the different gear types do not sum to the total number of entities above). Three individual catcher/processors met the small entity criterion; two used hook-and-line gear, and one used trawl gear. Catcher/processor gross revenues were not reported for confidentiality reasons; however, in 2017, small hook-and-line entities had average gross revenues of \$380,000, small pot entities had average gross revenues of \$790,000, and small trawl entities had average gross revenues of \$1.97 million.

Some of these vessels are members of AFA inshore pollock cooperatives, of GOA rockfish cooperatives, or of Bering Sea and Aleutian Islands crab rationalization cooperatives, and, therefore, under the RFA it is the aggregate gross receipts of all participating members of the cooperative that must meet the threshold. Vessels that participate in these cooperatives are considered to be large entities within the meaning of the RFA. These relationships are accounted for, along with corporate affiliations among vessels, to the extent that they are known, in the estimated number of small entities. If affiliations exist of which NMFS is unaware, or if entities had non-fishing revenue sources, the estimates above may overstate the number of directly regulated small entities.

This action does not modify recordkeeping or reporting requirements.

NMFS considered alternative harvest strategies when choosing the preferred harvest strategy (Alternative 2) in December 2006. These included the following:

- Alternative 1: Set TACs to produce fishing mortality rates,  $F$ , that are equal to  $maxFABC$ , unless the sum of the TACs is constrained by the OY established in the FMP. This is equivalent to setting TACs to produce harvest levels equal to the maximum permissible ABCs, as constrained by OY. The term “ $maxFABC$ ” refers to the maximum permissible value of  $FABC$  under Amendment 56 to the GOA groundfish fishery management plan.

Historically, the TAC has been set at or below the ABC; therefore, this alternative represents a likely upper limit for setting the TAC within the OY and ABC limits.

- Alternative 3: For species in Tiers 1, 2, and 3, set TAC to produce  $F$  equal to the most recent 5-year average actual  $F$ . For species in Tiers 4, 5, and 6, set TAC equal to the most recent 5-year average actual catch. For stocks with a high level of scientific information, TACs would be set to produce harvest levels equal to the most recent 5-year average actual fishing mortality rates. For stocks with insufficient scientific information, TACs would be set equal to the most recent 5-year average actual catch. This alternative recognizes that for some stocks, catches may fall well below ABCs, and recent average  $F$  may provide a better indicator of actual  $F$  than  $F_{ABC}$  does.
- Alternative 4: First, set TACs for rockfish species in Tier 3 at  $F=75%$ ; set TACs for rockfish species in Tier 5 at  $F=0.5M$ ; and set spatially explicit TACs for shortraker and rougheye/blackspotted rockfish in the GOA. Second, taking the rockfish TACs as calculated above, reduce all other TACs by a proportion that does not vary across species, so that the sum of all TACs, including rockfish TACs, is equal to the lower bound of the area OY (116,000 mt in the GOA). This alternative sets conservative and spatially explicit TACs for rockfish species that are long-lived and late to mature and sets conservative TACs for the other groundfish species.
- Alternative 5: (No Action) Set TACs at zero.

Alternatives 1, 3, 4, and 5 do not meet the objectives of this action, and although Alternatives 1 and 3 may have a smaller adverse economic impact on small entities than the preferred alternative, Alternatives 4 and 5 would have a significant adverse economic impact on

small entities. The Council rejected these alternatives as harvest strategies in 2006, and the Secretary of Commerce did so in 2007.

Alternative 2 is the preferred alternative chosen by the Council: Set TACs that fall within the range of ABCs recommended through the Council harvest specifications process and TACs recommended by the Council. Under this scenario,  $F$  is set equal to a constant fraction of  $maxFABC$ . The recommended fractions of  $maxFABC$  may vary among species or stocks, based on other considerations unique to each. This is the method for determining TACs that has been used in the past.

Alternative 2 selected harvest rates that will allow fishermen to harvest stocks at the level of ABCs, unless total harvests are constrained by the upper bound of the GOA OY of 800,000 mt. The sums of ABCs in 2019 and 2020 are 509,507 mt and 487,218 mt, respectively. The sums of the TACs in 2019 and 2020 are 430,569 mt and 408,534 mt, respectively. Thus, although the sum of ABCs in each year is less than 800,000 mt, the sums of the TACs in each year are less than the sums of the ABCs.

In most cases, the Council has set TACs equal to ABCs. The divergence between aggregate TACs and aggregate ABCs reflects a variety of special species- and fishery-specific circumstances:

- Pacific cod TACs are set equal to 70 percent in the Western GOA and 75 percent in the Central and Eastern GOA of the Pacific cod ABCs in each year to account for the GHL set by the State for its GHL Pacific cod fisheries (30 percent of the Western GOA ABC and 25 percent of the Central and Eastern GOA ABCs). Thus, the difference between the Federal TACs and ABCs does not actually reflect a Pacific cod harvest below the Pacific cod ABC, as the balance is available for the State's Pacific cod GHL fisheries.

- Shallow-water flatfish and flathead sole TACs are set below ABCs in the Western Regulatory Area. Arrowtooth flounder TACs are set below ABC in all GOA regulatory areas, except the Central GOA. Catches of these flatfish species rarely, if ever, approach the proposed ABCs or TACs. Important trawl fisheries in the GOA take halibut PSC, and are constrained by limits on the allowable halibut PSC mortality. These limits may force the closure of trawl fisheries before they have harvested the available groundfish ABC. Thus, actual harvests of groundfish in the GOA routinely fall short of some ABCs and TACs. Markets can also constrain harvests below the TACs, as has been the case with arrowtooth flounder, in the past. These TACs are set to allow for increased harvest opportunities for these targets while conserving the halibut PSC limit for use in other, more fully utilized fisheries.
- The GOA-wide Atka mackerel TAC is set below the ABC. The estimates of survey biomass continue to be unreliable in the GOA. Therefore, the Council recommended and NMFS agrees that the Atka mackerel TAC in the GOA be set at an amount to support incidental catch in other directed fisheries.

Alternative 1 selects harvest rates that would allow fishermen to harvest stocks at the level of the ABCs, unless total harvests were constrained by the upper bound of the GOA OY of 800,000 mt. Although Alternative 1 may be consistent with the preferred alternative (Alternative 2), meet the objectives of the action, and have small entity impacts equivalent to the preferred alternative, it is not likely that Alternative 1 would result in reduced adverse economic impacts to directly-regulated small entities relative to Alternative 2. The selection of Alternative 1, which could increase all TACs up to the sum of ABCs, would not reflect the practical implications that increased TACs for some species probably would not be fully harvested. This could be due to a

variety of reasons, which are addressed in the preamble to this rule and are summarized briefly here. There may be a lack of commercial or market interest in some species. Additionally, an underharvest of flatfish TACs could result due to constraints such as the fixed, and therefore constraining, PSC limits associated with the harvest of the GOA groundfish species. Finally, the TACs for two species (pollock and Pacific cod) cannot be set equal to ABC, as the TAC must be reduced to account for the State of Alaska's GHs in these fisheries.

Alternative 3 selects harvest rates based on the most recent 5 years of harvest rates (for species in Tiers 1 through 3) or based on the most recent 5 years of harvests (for species in Tiers 4 through 6). This alternative is inconsistent with the objectives of this action because it does not take account of the most recent biological information for this fishery, as well as National Standard 2 of the Magnuson-Stevens Act (16 U.S.C. 1851(a)(2)). NMFS annually conducts at-sea surveys for different species, as well as statistical modeling, to estimate stock sizes and permissible harvest levels. Actual harvest rates or harvest amounts are a component of these estimates, but in and of themselves may not accurately portray stock sizes and conditions. Harvest rates are listed for each species or species group for each year in the SAFE report (see **ADDRESSES**).

Alternative 4 would lead to significantly lower harvests of all species to reduce TACs from the upper end of the OY range in the GOA to its lower end of 116,000 mt. Overall, this alternative would reduce 2019 TACs by about 73 percent. This would lead to significant reductions in harvests of species by small entities. While production declines in the GOA likely would be associated with offsetting price increases in the GOA, the size of these increases is very uncertain. Price increases would still be constrained by the availability of substitutes, and there are close substitutes for GOA groundfish species available in significant quantities from the

Bering Sea and Aleutian Islands management area. In addition, price increases are very unlikely to offset revenue declines from smaller production. Thus, this action would have a detrimental economic impact on small entities, compared to the preferred alternative.

Alternative 5, which sets all harvests equal to zero, may also address conservation issues, but would have a significant adverse economic impact on small entities and would be inconsistent with achieving OY on a continuing basis, as mandated by the Magnuson-Stevens Act (16 U.S.C. 1851(a)(1)).

Adverse impacts on marine mammals or endangered species resulting from fishing activities conducted under this rule are discussed in the Final EIS and its accompanying annual SIRs (see **ADDRESSES**).

Pursuant to 5 U.S.C. 553(d)(3), the Assistant Administrator for Fisheries, NOAA, finds good cause to waive the 30-day delay in effectiveness for this rule because delaying this rule is contrary to the public interest. The Plan Team review of the 2018 SAFE report occurred in November 2018, and the Council considered and recommended the final harvest specifications in December 2018. Accordingly, NMFS's review of the final 2019 and 2020 harvest specifications could not begin until after the December 2018 Council meeting, and after the public had time to comment on the proposed action.

For all fisheries not currently closed because the TACs established under the final 2018 and 2019 harvest specifications (83 FR 8768, March 1, 2018) were not reached, it is possible that they would be closed prior to the expiration of a 30-day delayed effectiveness period because their TACs could be reached within that period. If implemented immediately, this rule would allow these fisheries to continue fishing because some of the new TACs implemented by this rule are higher than the TACs under which they are currently fishing.

In addition, immediate effectiveness of this action is required to provide consistent management and conservation of fishery resources based on the best available scientific information. This is particularly pertinent for those species that have lower 2019 ABCs and TACs than those established in the 2018 and 2019 harvest specifications (83 FR 8768, March 1, 2018). If implemented immediately, this rule would ensure that NMFS can properly manage those fisheries for which this rule sets lower 2019 ABCs and TACs, which are based on the most recent biological information on the condition of stocks, rather than managing species under the higher TACs set in the previous year's harvest specifications.

Certain fisheries, such as those for pollock and Pacific cod, are intensive, fast-paced fisheries. Other fisheries, such as those for sablefish, flatfish, rockfish, Atka mackerel, skates, sculpins, sharks, and octopuses, are critical as directed fisheries and as incidental catch in other fisheries. U.S. fishing vessels have demonstrated the capacity to catch the TAC allocations in many of these fisheries. If this rule allowed for a 30-day delay in effectiveness and if a TAC were reached during those 30 days, NMFS would close directed fishing or prohibit retention for the applicable species. Any delay in allocating the final TACs in these fisheries would cause confusion to the industry and potential economic harm through unnecessary discards, thus undermining the intent of this rule. Waiving the 30-day delay allows NMFS to prevent economic loss to fishermen that could otherwise occur should the 2019 TACs (set under the 2018 and 2019 harvest specifications) be reached. Determining which fisheries may close is nearly impossible because these fisheries are affected by several factors that cannot be predicted in advance, including fishing effort, weather, movement of fishery stocks, and market price. Furthermore, the closure of one fishery has a cascading effect on other fisheries by freeing-up fishing vessels,

allowing them to move from closed fisheries to open ones, increasing the fishing capacity in those open fisheries, and causing them to close at an accelerated pace.

In fisheries subject to declining sideboard limits, a failure to implement the updated sideboard limits before initial season's end could deny the intended economic protection to the non-sideboarded sectors. Conversely, in fisheries with increasing sideboard limits, economic benefit could be denied to the sideboard-limited sectors.

If the final harvest specifications are not effective by March 15, 2019, which is the start of the 2019 Pacific halibut season as specified by the IPHC, the hook-and-line sablefish fishery will not begin concurrently with the Pacific halibut IFQ season. This would result in confusion for the industry and economic harm from unnecessary discard of sablefish that are caught along with Pacific halibut, as both hook-and-line sablefish and Pacific halibut are managed under the same IFQ program. Immediate effectiveness of the final 2019 and 2020 harvest specifications will allow the sablefish IFQ fishery to begin concurrently with the Pacific halibut IFQ season.

Finally, immediate effectiveness also would provide the fishing industry the earliest possible opportunity to plan and conduct its fishing operations with respect to new information about TACs. Therefore, NMFS finds good cause to waive the 30-day delay in effectiveness under 5 U.S.C. 553(d)(3).

### **Small Entity Compliance Guide**

This final rule is a plain language guide to assist small entities in complying with this final rule as required by the Small Business Regulatory Enforcement Fairness Act of 1996. This final rule's primary purpose is to announce the final 2019 and 2020 harvest specifications and prohibited species bycatch allowances for the groundfish fisheries of the GOA. This action is necessary to establish harvest limits and associated management measures for groundfish during

the 2019 and 2020 fishing years, and to accomplish the goals and objectives of the FMP. This action affects all fishermen who participate in the GOA fisheries. The specific OFL, ABC, TAC, and PSC amounts are provided in tables to assist the reader. NMFS will announce closures of directed fishing in the **Federal Register** and information bulletins released by the Alaska Region. Affected fishermen should keep themselves informed of such closures.

**Authority:** 16 U.S.C. 773 *et seq.*; 16 U.S.C. 1540 (f), 1801 *et seq.*; 16 U.S.C. 3631 *et seq.*; Pub. L. 105-277; Pub. L. 106-31; Pub. L. 106-554; Pub. L. 108-199; Pub. L. 108-447; Pub. L. 109-241; Pub. L. 109-479.

Dated: March 7, 2019.

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