

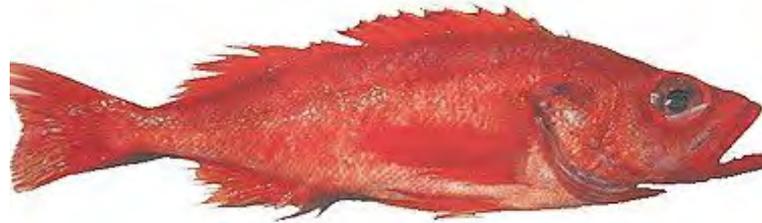
INITIAL REVIEW DRAFT

Environmental Assessment/Regulatory Impact Review for a Proposed Amendment to the Fishery Management Plan for the Gulf of Alaska

Central Gulf of Alaska Rockfish Program Reauthorization

November 2019

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Abstract: This Environmental Assessment/Regulatory Impact Review analyzes proposed management measures that would apply to the Central Gulf of Alaska (CGOA) Rockfish Program (RP) fisheries. The measures under consideration include reauthorizing the RP by either removing the sunset date or establishing a new sunset date within a range of 10 through 20 years. The action also includes other potential measures that would alter regulations associated with the reallocation of Pacific cod and rockfish, exempt crab program sideboard limits for vessels when fishing in the RP, establish regulations that require NMFS to provide annual cost recovery reports for the RP, and other regulatory changes.

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List of Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
ABC	acceptable biological catch
ADF&G	Alaska Department of Fish and Game
AFA	American Fisheries Act
AFSC	Alaska Fisheries Science Center
AKFIN	Alaska Fisheries Information Network
BSAI	Bering Sea and Aleutian Islands
CAS	Catch Accounting System
CEQ	Council on Environmental Quality
CFID	Commercial Fishing Incident Database
CFR	Code of Federal Regulations
CGOA	Central Gulf of Alaska
CMCP	Catch Monitoring and Control Plan
COAR	Commercial Operators Annual Report
Council	North Pacific Fishery Management Council
CP	catcher/processor
CQ	Cooperative quota
CR	Crab rationalization
CV	catcher vessel
DPS	distinct population segment
E.O.	Executive Order
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	essential fish habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ESU	endangered species unit
FE	Fishing effects
FIS	Fisheries Impact Statement
FMA	Fisheries Monitoring and Analysis
FMP	fishery management plan
FONSI	Finding of No Significant Impact
FR	<i>Federal Register</i>
FRFA	Final Regulatory Flexibility Analysis
ft	foot or feet
GOA	Gulf of Alaska
H&G	Head and Gut
ICA	Incidental catch allowance
IPHC	International Pacific Halibut Commission
IRFA	Initial Regulatory Flexibility Analysis
IPA	Incentive Plan Agreement
JAM	jeopardy or adverse modification
LAPP	Limited access privilege program
lb(s)	pound(s)
LEI	long-term effect index
LLP	license limitation program
LOA	length overall
m	meter or meters
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MMPA	Marine Mammal Protection Act
MMSA	Marine Mammal Stock Assessment

Acronym or Abbreviation	Meaning
MRA	Maximum retainable amount
MSST	minimum stock size threshold
mt	tonne, or metric ton
NAICS	North American Industry Classification System
NAO	NOAA Administrative Order
NEPA	National Environmental Policy Act
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fishery Service
NOAA	National Oceanic and Atmospheric Administration
NPFMC	North Pacific Fishery Management Council
NPPSD	North Pacific Pelagic Seabird Database
NRC	National Research Council
Observer Program	North Pacific Groundfish and Halibut Observer Program
OFL	Overfishing level
OMB	Office of Management and Budget
PBR	potential biological removal
PSC	prohibited species catch
POP	Pacific Ocean Perch
PPA	Preliminary preferred alternative
PRA	Paperwork Reduction Act
PSEIS	Programmatic Supplemental Environmental Impact Statement
QS	Quota shares
RFA	Regulatory Flexibility Act
RFFA	reasonably foreseeable future action
RIR	Regulatory Impact Review
RPA	reasonable and prudent alternative
RP	Rockfish Program
RPP	Rockfish Pilot Program
SAFE	Stock Assessment and Fishery Evaluation
SAR	stock assessment report
SBA	Small Business Act
Secretary	Secretary of Commerce
SIA	Social Impact Assessment
SIR	Supplemental Information report
SPLASH	Structure of Populations, Levels of Abundance, and Status of Humpbacks
SRKW	Southern Resident killer whales
SSL	Steller sea lion
TAC	total allowable catch
U.S.	United States
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
YOY	Year-over-year
VMS	vessel monitoring system
WGOA	Western Gulf of Alaska
WYAK	West Yakutat District

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Executive Summary

This document analyzes proposed management measures that would apply to the Central Gulf of Alaska (GOA) RP (RP) fisheries. The measures under consideration include reauthorizing the RP by either removing the sunset date or establishing a new sunset date within a range of 10 through 20 years. The action also includes potential measures that would alter regulations to:

- Reallocate unharvested RP Pacific cod from onshore cooperatives to fixed gear open access fisheries after the RP fisheries close on November 15.
- Exempt crab program sideboard limits for vessels when fishing in the RP.
- Require annual NMFS cost recovery reports in regulations.
- Clarify regulations to specify that only shoreside processors receiving RP Cooperative Quota (CQ) must submit the Rockfish Ex-vessel Volume and Value Report.
- Modify RP cooperative report, cooperative application, and cooperative check-in requirements.
- Exempt shoreside processors under the RP from the requirement to provide observer sampling stations.
- Allow NMFS to reallocate unused Rockfish ICA to the RP catcher vessel (CV) cooperatives.
- Clarify regulations regarding accounting for inseason use caps when catcher/processor (CP) quota share (QS) is transferred for use by the CV sector.

In addition to the above proposed actions, the Council will review of the performance of the entry-level longline fishery and step-up mechanism in this analysis; review information related to how the current three-day stand down requirement applies to vessels when transiting from the Bering Sea/Aleutian Islands to the Gulf of Alaska to participate in the RP; review harvest patterns in the RP; and review CGOA rockfish bycatch in other trawl fisheries.

Purpose and Need

The Council adopted the following problem statement to originate this action in December 2018.

The Central Gulf of Alaska RP (RP) will sunset on December 31, 2021 and the Council must act if it intends to reauthorize the RP. The purpose of this action is to reauthorize the RP to retain the management, economic, safety, and conservation gains realized under the RP to the extent practicable, consistent with the Magnuson-Stevens Act.

For both the onshore and offshore sectors, the RP has improved safety at sea, controlled fleet capacity, enhanced NMFS' ability to conserve and manage species allocated under the RP, increased vessel accountability, reduced sea floor contact, allowed full retention of allocated species, and reduced halibut and Chinook salmon bycatch. In addition, the rockfish fishery dependent communities in the Central Gulf of Alaska and the onshore processing sector have benefited from a more stable workforce, more onshore deliveries of rockfish, improved rockfish quality, and increased diversity of rockfish products. Central Gulf of Alaska fishermen, and the onshore processing sector have benefited from reduced conflicts with salmon processing. The offshore sector has benefited from greater spatial and temporal flexibility in prosecuting the fishery, resulting in lower bycatch, a more rational distribution of effort, and more stable markets.

The Council must act to continue the management, economic, safety, and conservation gains realized under the RP. Otherwise, fisheries managed under the RP will revert to effort-control management under the License Limitation Program (LLP).

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Alternatives

(Preliminary) Preferred Alternative (To be completed after Council selects a PPA)

Alternative 1, No Action

Under the No Action alternative, the CGOA rockfish fisheries would revert to LLP management. Because the fishery would no longer be managed under a LAPP structure, the management regulations associated with LAPP would also be removed.

Alternative 2, Reauthorize RP

Reauthorize the RP with the existing management framework unless modified under this alternative. Each element of Alternative 2, as proposed by the Council, is presented. Immediately following the Council's element for analysis is a brief discussion of the "context" of the provision. The context is not part of the Council's motion. It was provided by the analysts.

Element 1: Modify regulations at 679.80(a)(2) to specify the duration of the program.

Option 1: Remove sunset date

Option 2: Replace with new sunset date (10-20 years)

Element 2: Consider options to reallocate unharvested RP Pacific cod from onshore cooperatives to fixed gear open access fisheries after the RP fisheries close on November 15.

Element 3: Exempt crab program sideboard limits for vessels when fishing in the RP.

Element 4: Require annual NMFS cost recovery reports in regulations.

Element 5: Clarify regulations at § 679.5(r)(10) to specify that only shoreside processors receiving RP Cooperative Quota (CQ) must submit the Rockfish Ex-vessel Volume and Value Report.

Element 6: ¹Modify language in § 679.5(r)(6)(iii)(B) to require RP cooperatives to report catch by the CGOA reporting area.

Element 7: Revise § 679.5(r)(6)(iii)(D) - to replace "any actions" with "any civil actions."

Element 8: Revise § 679.81 (i)(D)(3) to remove requirements for a Fishing Plan to be submitted with a cooperative application for CQ.

Element 9: Revise § 679.84(f)(1) to exempt shoreside processors under the RP from the requirement to provide an observer work station and observer communication described at § 679.28(g)(7)(vii) and (viii)

Element 10: Allow NMFS to reallocate unused Rockfish ICA to the RP catcher vessel (CV) cooperatives to prevent exceeding the TAC in the CGOA.

¹ NMFS is recommending that the Council consider modifications to Element 6 and 7 to consider whether the annual cooperative report regulations should continue to require the RP cooperatives to submit confidential harvest information to NMFS that NMFS does not need to manage the RP fisheries and cannot release to the Council or public. This recommendation is discussed in more detail in Section 1.7.

Element 11: Clarify regulations regarding accounting for inseason use caps when catcher/processor (CP) quota share (QS) is transferred for use by the CV sector.

Element 12. Modify Cooperative Check-In Times

Environmental Assessment

Selecting Alternative 2, Element 1 is expected to have minimal or beneficial effects on target species, unallocated species, and EFH relative to the No Action alternative (Alternative 1). No effects are expected on ecosystem component species, marine mammals, seabirds, or the ecosystem under either alternative. No effect is presumed for these components because fishing regulations (e.g., gear types), harvest limits or regulations protecting habitat and important breeding areas would not be changed by any of the alternatives. No effects are presumed for marine mammals because neither existing protection measures nor allowable harvest amounts for important prey species would be changed. Moreover, regulations would define the seasons in which trawl fishing is allowed, methods that may be used, areas in which trawling is allowed, and restrict the maximum amount of trawling to TAC levels. None of the alternatives would change TAC amounts or areas closed to trawling.

Table ES-1 Resources potentially affected by the proposed action and alternatives.

Potentially affected resource component							
Groundfish	Prohibited Species	Ecosystem Component Species	Marine Mammals	Seabirds	Habitat	Ecosystem	Social and economic
Y	Y	N	N	N	Y	N	Y

N = no impact anticipated by each alternative on the component.
 Y = an impact is possible if each alternative is implemented.

Climate change is the only RFFA identified as likely to have an impact on primary and secondary species allocated within the action area and timeframe. Two indicators presented in the GOA 2017 Ecosystem Status Report concerned the status of GOA northern rockfish (NPFMC, 2018). No significant trends were observed across any rockfish species, suggesting that rockfish are not responding to temperature fluctuations by adjusting depth or distribution to maintain constant temperature. Additional indicators regarding rockfish in general concerned an analysis of fish condition using GOA bottom trawl survey data and young-of-the-year (YOY) rockfish abundance in the eastern GOA surface trawl survey. Fish condition for northern rockfish was the lowest on record and second lowest on record for Pacific Ocean Perch (POP) in 2017. YOY rockfish abundance was low in 2017 compared to previous years with a potentially northerly distribution shift based on the center of gravity estimates as well as some range expansion.

Under either the No Action alternative or Alternative 2 Chinook salmon bycatch will be difficult to consistently avoid. However, Alternative 2 is expected to continue the structures that have been developed to communicate areas and times of higher Chinook salmon catch rates. Communication and agreements to stop fishing when rates are too high, under Alternative 2, are expected to result in bycatch rates that are lower than when those bycatch reductions are not in place. Under the No Action alternative the potential increase in the number of participants and the pressure to harvest a portion of the sector allocation before it is closed to directed fishing make it less likely those bycatch avoidance measures will be adhered to by the entire fleet.

There has been a substantial decline in the rate of halibut usage in the rockfish fishery since the program has been managed under a LAPP. Rates declined for both the CV and CP sectors, but the decline was greater in the CV sector. The declines are a result of using more pelagic trawl gear and implementing measures to communicate where high bycatch rates are occurring and requiring CVs to stop fishing in that location if the rates are too high. Therefore, it is anticipated that selecting the No Action alternative will

result in greater halibut mortality in the CGOA rockfish target fishery than selecting any combination elements under Alternative 2.

If the RP continues under Alternative 2, fishing activity would likely continue to be distributed over a longer season and may disperse spatially, as a result of the removal of time constraints by the cooperative allocations. The relative low effort level of the rockfish fisheries along slope areas is likely to continue. Concentrations of bottom trawl effort in the CGOA rockfish fisheries would likely be reduced as trawl vessels continue to move towards pelagic and semi-pelagic² trawls to reduce halibut bycatch. The need for CVs to keep short trip lengths to maintain quality is likely to result in some continued concentration in areas proximate to Kodiak harbor. Overall, the rockfish fisheries are likely to continue to have minimal and temporary effects on the essential fish habitat. No long term negative impacts to essential fish habitat are likely under the program alternatives.

Under the No Action alternative, the rockfish fisheries will revert to LLP management and fishing practices could concentrate both temporally and spatially. Despite a possible increase in the use of bottom gear under the No Action alternative and Alternative 2, the impact would primarily occur in areas considered to have less sensitive habitat (rock, gravel, mud, and sand). As a result, the No Action alternative would have a minimal and temporary effect on benthic habitat and essential fish habitat, but could still be greater than realized under Alternative 2.

Regulatory Impact Review

No Action

The No Action alternative will likely result in fishing practices and patterns similar to those seen prior to the implementation of the Rockfish Pilot Program (RPP) in 2007. In that fishery, trawl vessels raced to catch the CGOA rockfish allocation when the trawl season opened in July. The fishery typically lasted about three weeks and vessels had to weigh the benefits of participating in the rockfish fishery versus other opportunities (e.g., tendering salmon).

The number of participants in the harvesting sectors could increase under the No Action alternative. Under the No Action alternative any CV with an LLP license that is endorsed for the CGOA using trawl gear could participate in the fishery. At a maximum, the number of vessels in the fishery could approximately triple. However, not all LLP license holders would be expected to enter the fishery, but the potential for increased participation in the rockfish fishery is substantial.

The Kodiak delivery requirement would be removed under the No Action alternative and it is possible that processors outside Kodiak could begin taking deliveries or floating processors could enter the fishery. Eliminating the requirement could negatively impact Kodiak but benefit other communities that are home to shore-based processors in the CGOA or communities that are home to floating processors.

Product quality and production efficiency would likely suffer under the No Action alternative. CPs would need to process rockfish rapidly, to maintain quality and accommodate additional catch. Prior to the RPP, catcher processors in the rockfish fisheries produced mostly whole and headed and gutted (H&G) products (i.e., relatively low value-added products). These vessels would likely continue to process catch into similar products under the No Action alternative or Alternative 2. The rush to process fish could diminish quality and dissipate a portion of the resource rents that would otherwise be available.

Production efficiency of CVs under the No Action alternative would also be limited by the short duration, race for fish that would likely reemerge. Maximizing catch amounts in each tow and filling holds to capacity can damage rockfish, owing to their being difficult to handle. The No Action alternative would

² Trawl doors are lifted off the seabed, eliminating seabed impact from the trawl doors. The net may still be in contact with the seabed but the impact will be much less relative to bottom trawls where the trawl doors contact the seafloor.

also likely extend trip lengths, to increase catch per trip, which could further result in a decline in the quality of rockfish deliveries.

Returns to CVs under the no action alternative would likely be limited, both by the quality of their landings and the compressed time period within which those landings must be made. Most processors would likely process deliveries quickly, to keep pace with the landings. Quality would likely suffer, because of the rapid rate of harvest and processing, and technical efficiency would also be lost, as crews scale up for a short period of time to accommodate the rapid pace of landings during the compressed season.

Consumers are likely to be supplied with products from the rockfish fisheries similar to those supplied prior to the RPP. Catcher processors are likely to produce relatively higher quality, but low “value-added,” frozen H&G and whole fish. Production from CV catch is likely to suffer from not being able to take greater care handling the raw product. Shore-based processors produce some higher valued products (e.g. fillets), but the majority of their production is frozen H&G and frozen whole fish.

Crew participation and compensation would likely revert to receiving a specific percent of the vessel’s adjusted revenues, as it was before implementation of the RPP. During that time, most crewmembers worked in several different fisheries, often on the same vessel that they worked on during the rockfish season, while some moved to other vessels for particular fisheries.

For shore-based processing crew, the No Action alternative would result in similar processing practices seen before implementation of the RPP. During that period, most of the processing took place in Kodiak and was undertaken by resident crews and supplemented by non-resident workers brought to the community to fill positions that could not be filled by residents. Crews were employed processing rockfish for a relatively short period of time. When rockfish was being processed, relatively large crews were necessary to maintain a flow of fish through the plants that were also using processing lines for pink salmon.

Alternative 2

The primary difference between Alternative 2, Element 1 options is that sunset date removal provides a level of stability and predictability not found in simply extending the sunset date. Program reviews and the associated periodic opportunity to broadly consider modifications to the program would occur under either option, but the uncertainty of potential program termination is largely removed under the first option (and the necessity of cyclically recurring efforts to prevent that termination is largely avoided).

Under Alternative 2, the fishery would open in May and continue through mid-November with the majority of the harvest taking place in May and June. The overall length of the fishery would increase relative to the approximately three week fishery that occurred prior to the RPP.

The number of vessels that are expected to fish in a year under Alternative 2 is about 25 CVs and 4 CPs. This is considerably fewer than could potentially participate under the No Action Alternative. The difference in participation between the two alternatives cannot be projected with any certainty and will depend on other fishing or tendering opportunities.

Under the RP, safety improved in comparison to the previous limited entry fishery in the CGOA rockfish fishery. The fishery generally takes place in the late spring and summer when the weather conditions are more favorable than in the winter and late fall. The harvest privileges granted under Alternative 2 allow vessel operators to better avoid fishing in dangerous weather conditions. Pressure to harvest a share of the sector allocation under a limited access fishery could result in vessel operators choosing to fish in weather conditions they would not under Alternative 2.

Selecting Element 2 under Alternative 2, would provide NMFS the authority to reallocate Pacific cod that is apportioned to the RP late in the year to fixed gear vessels. This will benefit the fixed gear sector without negatively impacting the CV cooperatives. Because the reallocations would occur after

November 15, the trawl fisheries are closed so the only sectors that could utilize the reallocation is the fixed gear sectors that remain open until December 31.

Alternative 2, Element 10, would grant NMFS the authority to reallocate primary rockfish species TAC that was not used in in other directed fisheries (the ICA) to the CV cooperatives. Currently NMFS must set the ICA conservatively to ensure the TAC is not exceeded. If the other directed fisheries do not need the entire ICA, NMFS could roll it into the CV cooperatives to allow better achievement of Optimum Yield in the fishery.

Alternative 2 allows harvesters and processors to fill slow production times in May and early June with rockfish deliveries and ease processing labor and capacity constraints when the rockfish fishery is conducted in parallel with the summer salmon fisheries. Moving the timing of the fishery will benefit both harvesters and processors.

Other elements considered under Alternative 2 could result in cost savings to the stakeholders in the fishery or NMFS. All the suggested changes could provide benefits to stakeholders in the fishery.

In summary, it is expected that Alternative 2 would result in greater net benefits to the Nation compared to Alternative 1. The increase in net benefits is a result of increases in both producer and consumer surplus. The magnitude of these increases cannot be quantified given information that is currently available but are described in qualitative terms throughout the RIR.

Table ES-2 Comparison of alternatives for decision-making – differences in alternatives

	Alternative 1	Alternative 2
	No action: Return CGOA rockfish fisheries to limited access under the LLP.	Status Quo: Extend the CGOA RP structure for a minimum of 10 years.
Differences in Alternatives		
Apportionments	Primary rockfish species would be managed at the sector level using ICAs and MRAs, and possibly a longline apportionment. Chinook salmon PSC limits would be established for the non-pollock trawl fisheries. The third period halibut PSC would not be reduced to account for catch in the RP.	No Change in initial allocations.
Harvester Participation	Increase in the CV sector and CPs sector as vessel operators compete for a share of the available TAC	Stable participation. The number of CVs and CPs allocated QS will remain the same, the number of vessels harvesting the allocation will remain at about 25 CVs and 4 CPs.
Processor Participation	The number of processors could increase with the removal of the Kodiak delivery requirement, as processors from other communities or floating processors enter the fishery	Stable Participation. Shore-based processors are associated with CV cooperatives. The number of cooperatives have remained about the same (decreased by 1), but one shore-based processing firm was purchased by another firm associated with different RP cooperative and another firm ceased operations in 2017 and its cooperative was disbanded. One CP firm's vessels were acquired by other RP participants and has resulted in only 1 CP cooperative currently operating.

Table ES-3 Comparison of alternatives for decision-making – environmental and economic impacts

	Alternative 1	Alternative 2
	No action: Return CGOA rockfish fisheries to limited access under the LLP.	Status Quo: Extend the CGOA RP structure for a minimum of 10 years.
Environmental Impacts		
Groundfish	Potentially more discards of primary and secondary rockfish species. Pacific cod and sablefish retention is required under IRIU	No Change. Discards of rockfish are prohibited under the RP. No change in for Pacific cod and sablefish.
Halibut PSC	Increased halibut PSC rates in the rockfish fishery. Overall halibut usage could increase if rates increase and set-asides built into the RP could be eliminated.	Halibut PSC will likely be about the same as it is currently with variation attributed to changes in halibut and rockfish abundance.
Chinook Salmon PSC	Rates may increase as incentives within the cooperative regulated by civil contracts are removed. Rates will vary by year since Chinook salmon remain difficult to avoid.	Rates are expected to continue to vary despite agreements to avoid Chinook salmon.
Habitat	Pressure to harvest fish quickly could result more contact with the sea floor.	Increased use of pelagic gear is expected to continue and result in less impact on the sea floor.
Seasons	The CGOA rockfish fishery would be prosecuted in July.	The Season would run from May 1 through November 15, with most catch taken in May and early June.
Economic Impacts		
Entry Level Longline Fishery	Impacts would depend on how the Council will provide opportunity for this fleet. If the fishery is closed, it could have the greatest impact on the three or four Jig gear vessel operators that typically harvest the majority of the current set-aside.	Three jig gear vessels generally taken the vast majority of the fishery and the set-aside has been sufficient to keep the fishery open all year. Several other vessels taken very small amounts from the set-aside.
Fishery Value	All else being equal, it is expected to decline for both harvesters and processors due to potentially increased discards and lower quality.	Should remain the same based on what the stakeholders can control. Overall value will continue to be determined by world market conditions, exchange rates, tariffs, and TACs.
Lost Opportunity	Some CVs may lose the opportunity to tender in the salmon fishery, or they may harvest less rockfish due to the loss of harvest privileges. Processors may forgo the opportunity to have excess capacity and labor to produce different and higher quality products. They may also lose capacity that was available in July to process pink salmon.	None
Gained Opportunity	CVs and processors that are currently excluded from the fishery could enter the limited access fishery if they are qualified.	None
Net Benefits to the Nation	Expected to decrease, all else being equal.	Expected to stay the same, all else being equal

Table ES-4 Comparison of alternatives for decision-making – management and enforcement impacts

	Alternative 1 No action: Return CGOA rockfish fisheries to limited access under the LLP.	Alternative 2 Status Quo: Extend the CGOA RP structure for a minimum of 10 years.
Management and Enforcement		
Safety	Minimal decline in safety	No Change
Observer Coverage	Partial coverage for CVs and shoreside processors (pay 1.25% until 2021 and then 1.65% fee), full coverage for CPs	No Change
Alt 2, Element 2: Roll-over P.cod from CV cooperatives to fixed gear open access	n/a	Benefit fixed gear sectors with no negative impact on cooperatives
Alt 2, Element 3: Exempt CVs from CR sideboard limits	n/a	Would allow a vessel that can fish Pacific cod in the cooperative to also fish rockfish and sablefish if they have access to CQ
Alt 2, Element 4: Require NMFS to prepare an annual cost recovery report	n/a	NMFS already prepares the report on a voluntary basis. This would make the report mandatory.
Alt 2, Element 5: Define who must submit volume and value report	n/a	Clarify that only shore-based processors must submit the report. CPs do not have a market based transaction to determine ex-vessel value.
Alt 2, Elements 6 & 7: Cooperative report requirements	n/a	Allow cooperative reports to include catch data at the CGOA level and not by statistical area (620 and 630 or state areas). Require cooperative to only report “civil actions” taken by the cooperative in their annual report. This was the intent of the RP proposed rule but was implemented as any action taken by the cooperative
Alt 2, Element 8: Remove the requirement to include the co-op fishing plan in the co-op application	n/a	The fishing plan is not fully developed when the application must be submitted and the information is included in the cooperative report at the end of the fishing year.
Alt 2, Element 9: Remove observer workstation requirement	n/a	Observer coverage is not required for shoreside processors under the RFP making the observer sampling station unnecessary. This could reduce costs realized by processors.
Alt 2, Element 10: Allow primary rockfish species ICA roll over to CV cooperative	n/a	Provide NMFS the regulatory authority to roll over unused primary species to CV cooperatives if not used in other directed fisheries. This could benefit NMFS and the quota holders and not have negative impacts on other directed fisheries.
Alt 2, Element 11: Clarify use caps	n/a	Clarify whether only CV CQ is used to calculate the shoreside caps. This would exclude any CP quota used by CVs or shore-plants from counting against the limit.
Alt 2, Element 12: Change cooperative check-in notification from 48 hours to 24 hours	n/a	Use of the electronic reporting system allows vessels to quickly check-in to a cooperative. A 24 hour advance notice of check-in is sufficient to manage the fishery.

1 Introduction

This document analyzes proposed management measures that would apply to the Central Gulf of Alaska (CGOA) Rockfish Program (RP) fisheries. The measures under consideration include reauthorizing the RP by either removing the sunset date or establishing a new sunset date within a range of 10 through 20 years. The action also includes potential measures that would modify regulations to:

- Reallocate unharvested RP Pacific cod from onshore cooperatives to fixed gear open access fisheries after the RP fisheries close on November 15.
- Exempt crab program sideboard limits for vessels when fishing in the RP.
- Require annual NMFS cost recovery reports in regulations.
- Clarify regulations to specify that only shoreside processors receiving RP Cooperative Quota (CQ) must submit the Rockfish Ex-vessel Volume and Value Report.
- Modify RP cooperative report, cooperative application, and cooperative check-in requirements.
- Exempt shoreside processors under the RP from the requirement to provide observers specific materials.
- Allow NMFS to reallocate unused Rockfish ICA to the RP catcher vessel (CV) cooperatives.
- Clarify regulations regarding accounting for inseason use caps when catcher/processor (CP) quota share (QS) is transferred for use by the CV sector.

In addition to the above proposed actions, the Council will review the performance of the entry-level longline fishery and step-up mechanism in this analysis; review information related to how the current three-day stand down requirement applies to vessels when transiting from the Bering Sea/Aleutian Islands (BSAI) to the Gulf of Alaska (GOA) to participate in the RP; review harvest patterns in the RP; and review CGOA rockfish bycatch in other trawl fisheries.

This document is an Environmental Assessment/Regulatory Impact Review (EA/RIR) accompanied by a Social Impact Assessment (see Appendix 1). An EA/RIR provides assessments of the environmental impacts of a proposed action and its reasonable alternatives (the EA), the benefits and costs of the alternatives, the distribution of impacts, and identification of the small entities that may be affected by the alternatives (the RIR). This EA/RIR addresses the statutory requirements of the Magnuson-Stevens Act, the National Environmental Policy Act, Presidential Executive Order 12866, and some of the requirements of the Regulatory Flexibility Act. An EA/RIR is a standard document produced by the North Pacific Fishery Management Council (Council) and the National Marine Fisheries Service (NMFS) Alaska Region to provide the analytical background for decision-making.

1.1 Purpose and Need

The Council adopted the following problem statement to originate this action in December 2018.

The Central Gulf of Alaska Rockfish Program (RP) will sunset on December 31, 2021 and the Council must act if it intends to reauthorize the RP. The purpose of this action is to reauthorize the RP to retain the management, economic, safety, and conservation gains realized under the RP to the extent practicable, consistent with the Magnuson-Stevens Act.

For both the onshore and offshore sectors, the RP has improved safety at sea, controlled fleet capacity, enhanced NMFS' ability to conserve and manage species allocated under the RP, increased vessel accountability, reduced sea floor contact, allowed full retention of allocated species, and reduced halibut and Chinook salmon bycatch. In addition, the rockfish fishery dependent communities in the Central Gulf

of Alaska and the onshore processing sector have benefited from a more stable workforce, more onshore deliveries of rockfish, improved rockfish quality, and increased diversity of rockfish products. Central Gulf of Alaska fishermen, and the onshore processing sector have benefited from reduced conflicts with salmon processing. The offshore sector has benefited from greater spatial and temporal flexibility in prosecuting the fishery, resulting in lower bycatch, a more rational distribution of effort, and more stable markets.

The Council must act to continue the management, economic, safety, and conservation gains realized under the RP. Otherwise, fisheries managed under the RP will revert to effort-control management under the License Limitation Program (LLP).

1.2 History of the Rockfish Program

In 2003, the U.S. Congress directed the Secretary of Commerce to establish, in consultation with the North Pacific Fishery Management Council (Council), a Rockfish Pilot Program (RPP) for management of the Pacific ocean perch (POP), northern rockfish, and pelagic shelf rockfish³ fisheries (the primary rockfish fisheries) in the Central Gulf of Alaska (CGOA). Following this directive, the Council adopted a share-based management program in 2005, under which the total allowable catch (TAC) of rockfish primary species is apportioned as exclusive shares to cooperatives, based on the catch history of the members of those cooperatives. Although originally subject to a sunset after 2 years, the 2007 reauthorization of the Magnuson-Stevens Act extended the term of the program to 5 years. Under that extension, the RPP was scheduled to sunset after the 2011 season. Without Council action, management of the rockfish fisheries would have reverted to the LLP. However, the Council proposed, the Secretary of Commerce approved, and NMFS implemented the CGOA RP which became effective for the 2012 fishing year and will sunset on December 31, 2021 without the Council taking positive action to continue the program. A more detailed history of the fishery is provided in this section.

1.2.1 Before RPP (1996 through 2006)

The Final EA/RIR developed for the RPP provides a detailed summary of the Gulf of Alaska rockfish fishery prior to implementation of the RPP (NPFMC, 2006). Information from that RIR and the RP review (NPFMC, 2017) are summarized to describe the condition of the fishery before the RPP was implemented.

Prior to implementation of the RPP the Gulf of Alaska rockfish fisheries opened on January 1st for non-trawl gear participants and the trawl gear fishery opened around July 1st. The trawl opening was generally timed to coincide with the availability of the third quarter halibut PSC allocation, accommodate the sablefish longline survey that occurred later in the summer, and typically coincided with the openings of the Aleutian Islands POP and Bering Sea flathead sole fisheries to distribute effort among the fisheries.

Both the trawl and non-trawl fisheries were prosecuted from a TAC that was not further divided among sectors. The harvest from the trawl fishery was limited to the remaining available TAC after the non-trawl fleet had prosecuted the fishery from its January 1st opening until the rockfish fishery opened to trawl gear vessels. Limited effort in the longline fishery meant that most of the TAC was harvested by the trawl fleet.

³ Pelagic shelf rockfish included dusky rockfish, dark rockfish, yellowtail rockfish, and widow rockfish. Yellowtail, dark, and widow rockfish make up a very small proportion of the biomass and starting in 2012 a separate TAC was set for dusky rockfish. After the change to the Pelagic shelf rockfish complex was implemented, dusky rockfish was then allocated as a primary species in the RP and replacing the pelagic shelf rockfish category.

Table 1-1 summarizes trawl openings and closings for all gear types in the CGOA directed rockfish fishery prior to implementation of the RPP, by species, from 1996 through 2006. This table was presented in the RPP RIR through 2003. The information is extended in this paper to include the four years immediately preceding implementation of the RPP. The closings show the general progression of participation in the rockfish fisheries. Most participants targeted POP first, until the TAC of that species was fully harvested. POP are a larger biomass and typically are easier to target than the other two species. The season for POP usually lasted between one and two weeks. Once the POP fishery was closed, vessel operators usually moved on to the northern rockfish or pelagic shelf rockfish directed fisheries although some vessels moved on to other fisheries either in the CGOA or in other regulatory areas. The directed fisheries for northern rockfish and pelagic shelf rockfish typically lasted less than one month, closing before the end of July.

Table 1-1 Season openings (trawl) and closures (all gear types) of the CGOA primary rockfish species (1996 – 2006)

Year	Opening for Species	Opening date	Closures			Reason
			Pacific Ocean Perch	Northern Rockfish	Pelagic Shelf Rockfish	
1996	all	1-Jul	11-Jul	20-Jul	none	TAC (POP, Nor)
1996 closure		-	15-Jul			PSC
1997	all (incl. PSR nearshore)	1-Jul	7-Jul	10-Jul	7-Jun	TAC
1997	PSR offshore	1-Jul			15-Jul	TAC
1997 closure	POP	-	19-Jul			PSC
1998	all	1-Jul	6-Jul	14-Jul	19-Jul	TAC
1998 reopen	POP	12-Jul	14-Jul			TAC
1998 closure	POP	-	27-Jul			PSC
1999	all	4-Jul	11-Jul	19-Jul		TAC (POP, Nor)
1999 reopen	POP, Nor	6-Aug	8-Aug	10-Aug		TAC (POP, Nor)
1999 closure		-	3-Sep	3-Sep	3-Sep	PSC
2000	all	4-Jul	15-Jul	26-Jul	26-Jul	TAC (POP, Nor) HAL(PSR)
2001	all	1-Jul	12-Jul	23-Jul	23-Jul	TAC (POP) HAL(Nor,PSR)
2001 reopen	Nor, POP	1-Oct	n/a	21-Oct	21-Oct	HAL
2002	all	30-Jun	8-Jul	21-Jul	21-Jul	TAC
2002 closure		-	5-Aug			HAL
2003	all	29-Jun	8-Jul	31-Jul	29-Jul	TAC
2004	all	4-Jul	12-Jul	25-Jul	25-Jul	TAC (POP) HAL(Nor,PSR)
2004 reopen	PSR, Nor	1-Oct		1-Oct	1-Oct	HAL
2005	all	5-Jul	14-Jul	24-Jul	24-Jul	TAC (POP) HAL(Nor,PSR)
2005 closure	Nor			30-Aug		TAC
2005 reopen	PSR	1-Sep			4-Sep	HAL
2005 reopen	PSR	8-Sep			10-Sep	HAL
2005 reopen	PSR	1-Oct			1-Oct	HAL
2006	all	1-Jul	6-Jul	21-Jul	21-Jul	TAC
2006 closure	POP, Nor		3-Aug	3-Aug		PSC
2006 reopen	PSR	2-Oct			8-Oct	HAL

Source: Fishery opening and closure announcements published by NMFS in the Federal Register
 Abbreviations used in table: PSR=Pelagic Shelf Rockfish (dusky), POP=POP, Nor=Northern rockfish, HAL=halibut PSC limit, PSC=placed on prohibited species catch status, and TAC=total allowable catch was reached.

Fishery managers used a precautionary approach when closing fisheries to ensure that the TAC was not exceeded. When sufficient TAC was available after accounting for all catch, managers reopened the fisheries to allow participants to better achieve optimum yield from the fishery.

In earlier years, the fisheries typically closed because the rockfish TACs were harvested. In the later years, halibut PSC in the deep-water complex closed the fisheries. In 2000, halibut PSC closed the pelagic shelf rockfish fishery. In 2001 2004, and 2005 halibut PSC closed both the northern rockfish and pelagic shelf rockfish fisheries in July. The fisheries were reopened when the next seasonal halibut PSC limit was released. The fisheries often closed again near the end of October, after the deep-water halibut PSC limit was taken.

Until 1998, the Federally-managed rockfish fisheries in the CGOA included nearshore pelagic shelf rockfish (i.e., black and blue rockfish), which are prosecuted primarily in State waters. These species were targeted predominantly with non-trawl gear. In 1997 non-trawl effort in the nearshore pelagic shelf rockfish fishery closed that fishery on June 7th, prior to the trawl opening. In 1998, the State took over management of the nearshore pelagic shelf rockfish fisheries. Those fisheries are currently prosecuted exclusively in State waters.

1.2.2 Authority for the Rockfish Program

1.2.2.1 Section 802 of the Consolidated Appropriations Act of 2004

Congress granted NMFS specific statutory authority to manage the CGOA rockfish fisheries in Section 802 of the Consolidated Appropriations Act of 2004 (Public Law 108-199; Section 802). In Section 802, Congress required the Secretary of Commerce (Secretary) in consultation with the Council to establish the CGOA RPP. The RPP was developed by the Council and recommended to the Secretary to meet the requirements of Section 802, which states:

The Secretary of Commerce, in consultation with the North Pacific Fishery Management Council, shall establish a RPP that recognizes the historic participation of fishing vessels (1996 to 2002, best 5 of 7 years) and historic participation of fish processors (1996 to 2000, best 4 of 5 years) for POP, northern rockfish, and pelagic shelf rockfish harvested in Central Gulf of Alaska. Such a RPP shall (1) provide for a set-aside of up to 5 percent for the total allowable catch of such fisheries for CVs not eligible to participate in the RPP, which shall be delivered to shore-based fish processors not eligible to participate in the RPP; (2) establish catch limits for non-rockfish species and non-target rockfish species currently harvested with POP, northern rockfish, and pelagic shelf rockfish, which shall be based on historical harvesting of such bycatch species. The RPP will sunset when a Gulf of Alaska Groundfish comprehensive rationalization plan is authorized by the Council and implemented by the Secretary, or 2 years from date of implementation, whichever is earlier.

1.2.2.2 Amendment 68 to the GOA FMP – RPP (2007 through 2011)

The RPP was based on the guidelines described in the Consolidated Appropriations Act of 2004 to improve resource conservation and improve economic efficiency by establishing cooperatives that receive exclusive harvest privileges. Four goals of the program were to 1) reduce bycatch and discards; 2) encourage conservation-minded practices; 3) improve product quality and value; and 4) provide stability to the processing labor force.

The RPP allowed CPs to form their own cooperatives. CVs were allowed to form cooperatives in association with shoreside processors located in Kodiak. CV cooperative contracts defined the requirements for deliveries to the associated cooperative processor. It is assumed that these contracts required delivery by member CVs to the associated processor except under conditions agreed to by both parties. The cooperative agreements allowed shoreside processors and their associated CVs to better time deliveries of rockfish and directed salmon harvests during the summer months.

The RPP allocated harvest privileges to holders of LLP groundfish licenses with a history of legal CGOA rockfish landings during the period defined in Section 802 of the Consolidated Appropriations Act. Table 1 of the proposed rule (71 FR 33043) defines the specific dates for each year that define the qualifying landings. Once RPP Quota Shares (QS) were assigned to a specific LLP license they could not be divided or transferred separately from that LLP license. The LLP holder was allowed to assign the license and associated QS for use in a rockfish cooperative, limited access fishery, or opt-out fishery. After the LLP license holder assigned the LLP license to a cooperative and the cooperative application was submitted to NMFS, NMFS would allocate each cooperative an amount of cooperative quota (CQ) that was generated by the QS assigned to the cooperative.

Vessels were allocated a portion of the third season halibut PSC limit based on their aggregate use of halibut PSC during the qualifying years. The specific allocation method used by NMFS was described in the proposed rule for the RPP. In summary, the sector's halibut mortality was the sum of all vessels PSC during the directed fishery for any primary rockfish species during all qualifying season dates determined sector PSC amount. The total halibut mortality was determined summing the halibut mortality by all vessels in the CGOA Regulatory Area from January 1, 1996 through December 31, 2002. Sector PSC amounts were divided by the total mortality to determine the portion of the halibut mortality assigned to each sector in the rockfish fishery. The amount of halibut PSC assigned to each cooperative was derived from the QS units assigned to that rockfish cooperative. To determine the CQ assigned to a cooperative, NMFS multiplied the halibut PSC amount allocated to that sector by the percentage of the aggregate primary rockfish species QS held by that cooperative in that sector. Chinook salmon PSC limits were not set for cooperatives as part of the RPP. Chinook salmon PSC limits had not been established for non-pollock fisheries in the GOA when the RPP was implemented.

RPP cooperatives were allowed to transfer all or part of their annual CQ allocation to other rockfish cooperatives. These transfers required that NMFS was notified of the transfer amount and who received the transfer so each cooperatives harvest limits could be determined. Transfers of CQ are only allowed for that calendar year, since QS may not be separated from the LLP license.

Post-delivery transfers were allowed between cooperatives so CQ holdings could be adjusted to account for harvest overages. At the end of the calendar year a cooperative could not have a negative balance of CQ for any species or it would be in violation of the regulations governing the program. All post-delivery transfers had to be completed by December 31 of the year fishing occurred. Vessels in a cooperative could not begin a new fishing trip for that cooperative unless the cooperative held unused CQ for all rockfish primary species and secondary species. This prevented cooperative members from speculatively fishing and assuming they could acquire CQ to cover that harvest prior to the end of the calendar year.

The RPP provided an opportunity for a person not in a rockfish cooperative, but who holds an LLP license with QS, to fish in their sector's limited access fishery. A separate limited access fishery was established for the CV and CP sector. The person assigning their LLP license to the limited access fishery was not granted a specific amount of fish to harvest, and competed with all eligible harvesters for TAC assigned to that limited access fishery. The TAC assigned to the limited access fishery was the total amount of fish assigned to all LLP licenses designated for the limited access fishery.

Section 802 specifically provided for "a set-aside of up to 5 percent for the total allowable catch of such fisheries for CVs not eligible to participate in the RPP" during the 1996 through 2002 eligibility time period. The RPP established the entry level fishery. Entry level fisheries were established for both trawl and longline harvests of CGOA rockfish. After deducting the incidental catch allowance (ICA) from the TAC, 5 percent of the primary rockfish species was set aside for the entry level fishery. Each gear type was allocated 2.5 percent of the available amount of the aggregate primary species. All of the Northern rockfish and pelagic shelf (dusky) rockfish in the entry level fishery was available for catch with longline gear. Trawl gear vessels were given access to the POP set-aside minus the amount needed for the longline

fishery to have 2.5 percent of the primary species aggregate total. The longline sector set-aside was available for use on January 1 and the trawl set-aside May 1. Trawl participants were permitted to harvest any residual longline allocation after September 1. This was accomplished by allowing both sectors to fish off the combined remaining TACs beginning on September 1.

Vessels fishing the RPP entry level allocation in Federal waters needed to have a valid LLP license and must have registered for the entry level fishery. All vessels (both trawl and longline entry level vessels) that fished in the Federal fishery were prohibited from delivering their entry level species catch to a processor in a rockfish cooperative. Longline vessels that fished exclusively in parallel waters and did not have an LLP or a federal fisheries permit were not required to register for the program, and they were allowed to deliver their catch to any processor - including processors qualified for the main program.

The RPP required processors to meet eligibility requirements to receive any primary or secondary species harvested by a rockfish cooperative, or in a limited access fishery. Processors that do not meet these eligibility requirements could receive only primary rockfish harvested from the CGOA under the entry level fishery. A shoreside processor or stationary floating processor must have received at least 250 metric tons in round weight equivalent of legally landed primary rockfish species each calendar year in any four of the five calendar years from 1996 through 2000 during the directed fishing season to qualify. The eligibility criteria for processors gave them an exclusive privilege to receive and process primary rockfish species and secondary species allocated to LLP licenses assigned to their cooperative.

Processors were limited in their ability to process catch outside the communities in which they have traditionally processed primary rockfish species and associated secondary species. This limitation was imposed to help protect the community of Kodiak from adverse impacts of a catch program that could increase flexibility of where catch was landed and processed.

Catcher/processor LLP license holders were allowed to opt-out of the RPP, with certain limitations (e.g., sideboard limits). Any amount that would have been allocated to cooperatives by LLP license holders that would have opted-out is redistributed among C/P sector participants in rockfish cooperatives and the limited access fishery. Eligible CPs fishing in the limited access fishery were required to apply for that fishery by a defined date, in part to ensure NMFS could allocate TAC. The allocation of rockfish primary species, and apportionment of a halibut PSC allowance to the limited access fishery, would be based on the rockfish histories of LLP licenses registered for participation in the fishery.

The RPP established sideboard limits restricting LLP license holders with qualifying catch history from increasing harvests in specific fisheries outside the CGOA rockfish fisheries. A more complete discussion of sideboard limits in both the RPP and RP are presented in Section 14. Sideboard limits were included as part of the program because it was understood that the cooperative structure would provide economic advantages to harvesters. Harvesters could use these economic advantages to increase their participation in other fisheries, adversely affecting the participants in those fisheries. Sideboards limited the total amount of catch in other groundfish fisheries that could be taken by eligible harvesters to historic levels, including harvests made in the State of Alaska parallel groundfish fisheries. Parallel fisheries are authorized by the State in its waters concurrent with the Federal fishery. Parallel fishery catches are deducted from the Federal TAC. Sideboards limit harvest in specific rockfish fisheries and the amount of halibut bycatch that can be used when fishing in rockfish cooperatives. General sideboards apply to all vessels and LLP licenses with associated legal landings that generated Rockfish QS. Additionally, specific sideboards apply to RP CPs, CVs, and LLP licenses. Participants that fished in the limited access fishery and who accounted for less than 5 percent of the allocated CP history of POP, were not subject to sideboard or stand-down restrictions, beyond the aggregate sector sideboards. Limited access fishery participants who accounted for 5 percent or more of the sector's POP were required to stand down in the GOA, until 90 percent of the limited access POP was harvested.

The RPP also established monitoring and enforcement provisions to ensure that harvesters maintain catches within annual allocations and do not exceed sideboard limits. Provisions included, but were not limited to, increased observer coverage levels, new reporting requirements, and requirements to check in and out of cooperatives. These specific provisions are described in greater detail in Section 17, primarily in terms of how they are currently being applied under the RP.

The RPP limited access fishery was supported by the third season trawl deep-water halibut PSC limit. No PSC limit was set for Chinook salmon as part of the RPP or the limited access fishery, in part because there was no GOA Chinook salmon PSC limit established for non-pollock fisheries when the program was in place. PSC limits and PSC usage in the rockfish fisheries are described in greater detail in Section 3.5.1.4.

1.2.2.3 Amendment 88 – RP (2012 through present)

The RP is authorized for 10 years from January 1, 2012, until December 31, 2021 through the implementation of Amendment 88 to the GOA FMP (76 FR 81247). If the Council does not take positive action recommending continuation of the RP, management of the CGOA rockfish fisheries will revert to the LLP license management structure.

1.2.2.3.1 Elements of the RP that are the same as the RPP

The Council designed the RP to meet the requirements for LAPPs in section 303A of the MSA. The RP includes some similar implementation, management, monitoring, and enforcement measures to those developed under the RPP. Measures that are similar to the RPP are that the RP (1) continues to assign QS and CQ to participants for primary and secondary species, (2) allows a participant holding an LLP license with rockfish QS to participate in forming a rockfish cooperative, (3) allows holders of CP LLP licenses to opt-out of rockfish cooperatives for a given year, (4) includes an entry level longline fishery, (5) establishes sideboard limits, and (6) includes additional monitoring and enforcement provisions beyond those required under management of the License Limitation Program.

1.2.2.3.2 Changes to the RP compared to the RPP

Changes were made from the RPP to improve the functionality of the RP. Key differences between the RPP and the Proposed RP are described below as well as presented in the Final Rule for GOA Amendment 88 (76 FR 81247).

Change the qualifying years for QS eligibility and allocation. For the RPP, eligibility to receive QS of primary and secondary species was based on targeted legal qualifying landings made during the years 1996 through 2002. A person's primary species allocation was based on best 5 of 7 years of landings during the eligibility period. The RP QS qualification was based on targeted legal landings during the years 2000 through 2006 or fishing in the entry level fishery during 2007, 2008, or 2009. The allocation of QS was based on the best 5 of 7 years from 2000 through 2006, or the number of years fished during the qualifying period for entry level fishery participants that did not qualify for QS based on history from 2000 through 2006.

The percentage of the primary species CGOA TACs that were assigned to cooperatives under the RPP and RP vary. The changes are due to the amount of the ICA, which has increase over the years the program has been in place, and the entry level fishery set-asides. The entry level set-aside for the trawl fishery was removed under the RP. The longline set-aside was decreased under the RP. The formulas used to calculate the amount of the TAC assigned to cooperatives are presented below:

RPP Allocation = TAC – ICA – Trawl Entry Level Fishery – Longline Entry Level Fishery

RP Allocation = TAC – ICA - Longline Entry Level Fishery.

Assign primary and secondary species to rockfish cooperatives. Primary species QS is allocated to cooperatives based on the members QS. NMFS does not issue separate QS to an LLP license for the rockfish secondary species or halibut PSC under the RP, nor did NMFS under the RPP. The amount of those species allocated to a cooperative is based on the amount of primary species QS. Under the RPP Pacific cod, sablefish, and thornyhead rockfish were allocated to cooperatives based on QS assigned to LLP license during the qualifying years. Shortraker/rougheye were allocated as a maximum retainable amount (MRA) that could not exceed 9.72 percent of the TAC. Pacific cod, trawl sablefish, and thornyhead rockfish are CV secondary species assigned to cooperatives under the RP based on the percentage of the TAC assigned to the RP and the percentage of the QS assigned to a person's LLP license. Shortraker and rougheye rockfish are managed under a maximum retainable amount (MRA).

The RPP and RPs managed CP Pacific cod using an MRA that is based on historic harvest rates. An MRA provided the fleet greater flexibility than a fixed allocation. CPs were also reported to have markets for rougheye and shortraker rockfish and as a sector retain a greater proportion of those species than CVs. As a result the CP sector was allocated a percentage of the TAC for those species. CPs were reported to have harvested 43.2 percent of the CGOA TAC of shortraker rockfish using 2000 through 2006 qualifying years. The RP slightly reduced the percentage of the TAC to 40 percent of the CGOA TAC to provide slightly more harvest opportunities for vessels in the CV sector and non-RP participants. Concern was expressed that without the slight reduction catches by RP CVs and non-RP fisheries could need to be constrained to prevent overharvest of the shortraker rockfish TAC. The MRA percentages recommended for the CV sector for shortraker and rougheye rockfish provide some flexibility for the harvesters in these sectors yet maintain harvests within historic levels.

The RPP allocation of 58.87 percent of CGOA TAC for rougheye rockfish was retained under the RP, which was greater than the 34.3 percent of the rougheye rockfish catch retained by eligible CP LLP licenses from 2000 through 2006. Retaining the limit prevented unnecessary constraints on the CP cooperatives while targeting primary species.

Modify halibut PSC limits to cooperatives and create a conservation set aside that will remain unallocated. The halibut PSC limits for the RP were modified to balance the need to provide adequate halibut PSC for use by rockfish cooperatives while recognizing LAPPs could reduce halibut PSC use. From 2000 through 2006, average halibut PSC mortality averaged 84.7 mt in the CP sector, and 134.1 mt in the CV sector. The RP created a 74.1 mt halibut PSC limit for the CP sector and a 117.3 mt halibut PSC limit for the CV sector. Those amounts represent a 12.5 percent reduction from the amount of halibut mortality associated with each sector during the 2000 through 2006 qualifying period, which was prior to the LAPP being implemented. The remaining 27.4 mt (16.8 mt from the CV sector and 10.6 mt from the CP sector) that would otherwise have been allocated is not available for use by any trawl or fixed gear fishery and remains "in the water" to contribute to the halibut biomass. Like under the RPP, halibut PSC limits are assigned to cooperatives based on the primary species QS attached to the LLP license.

Sideboard limits (in effect July 1 through July 31). CVs that were subject to AFA sideboard limits were exempted under the RPP. That same exemption carried over into the RP, but sideboard exemptions were also applied to vessels that were voluntary excluded from the RP and vessels assigned an LLP license that was excluded from the RP. CVs that were subject to crab program sideboard limits did not receive that exemption when the RPP or RP were implemented. When the Council considers future actions associated with the RP it may want to consider removing crab sideboard limits associated with the RP, since vessels harvesting Rockfish in the CGOA are constrained by the RP allocations.

Under the RPP CVs were prohibited from fishing in specific BSAI groundfish fisheries, rockfish in the West Yakutat and Western GOA areas, and deep and shallow-water complex halibut that was not set-aside for use in the RPP. The RP modified those sideboard limits to include just the primary rockfish species in the West Yakutat and Western GOA areas and just the non-rockfish deep-water complex

species (arrowtooth flounder, deep water flatfish, and rex sole) that are harvested using the deep-water halibut PSC limit.

Catcher/processors were prohibited from fishing in the BSAI groundfish fisheries and the non-RPP groundfish fisheries in the GOA. Those vessels were also prohibited from fishing species that would use halibut PSC in the deep and shallow-water complexes outside the RPP PSC limit. The RP maintained the prohibition on fishing species that would use halibut PSC in the deep and shallow-water complexes outside the RPP PSC limit. However, the groundfish fishing restrictions were limited to primary rockfish species in the West Yakutat and Western GOA areas for Amendment 80 CPs. Non-Amendment 80 CPs were prohibited from fishing for primary rockfish species in those areas.

Restrict the entry level fishery to longline gear only. The entry level fishery for trawl vessels was eliminated under the RP. Trawl vessels that took advantage of the entry level fishery during 2007, 2008, or 2009 were allocated QS.

The entry level fishery continues for harvesters that wish to fish for RP primary species using longline gear.⁴ Any vessel that may legally fish with one of those gear types may fish in the entry level longline fishery. The start date for the entry level longline fishery is January 1 of each year. Participants are not be required to apply annually. The vessel operators were required to apply annually under the RPP.

The initial allocation to the entry level longline fishery was smaller than under the RPP. Under the RPP, longline harvests never exceeded one percent of the TAC for any of the target species during the qualifying years. The RPP amount was based on 2.5 percent of the primary species TACs. The RP allocates a fixed amount of each species annually. Until 2017, the annual longline limit was 5mt of POP, 5mt of northern rockfish, and 30mt of dusky/pelagic shelf rockfish. If the entry level fishery vessels harvest greater than or equal to 90 percent of a species NMFS increases the next year's allocation by 5mt for POP, 5mt for northern rockfish, or 20mt for dusky rockfish.

Allocations to the limited entry fishery are limited to 1 percent of the POP TAC, 2 percent of the northern rockfish TAC, or 5 percent of the dusky rockfish TAC. Because greater than or equal to 90 percent of dusky limit was harvested in 2016, the entry level fishery limit for that species was increased to 50mt in 2017.

The final rule for the RP stated that unlike CVs fishing in cooperatives, participants in the entry level longline fishery may deliver their harvest to any shore-based processing facility in any community and are not restricted to delivery to a Kodiak processor. Requirements to deliver within the boundaries of Kodiak were thought to potentially discourage participants from attempting to develop the entry level longline fishery. Requiring entry level participants to comply with a landing requirement within the boundaries of Kodiak might present too great of an expense for the participants located around other CGOA port and expose those participants, which typically fish with smaller vessels, to unacceptable safety risks.

Cooperative formation requirements. The RP relaxed cooperative formation requirements to balance encouraging cooperative formation and providing flexibility for LLP license holders to form cooperatives with persons of their choice. To achieve these objectives the minimum number of LLP licenses with affixed rockfish QS required to form a cooperative was eliminated. However, only CQ could only be transferred to a cooperative with a minimum of two LLP licenses. There was no requirement that the LLP licenses are held by different persons. These changes were implemented to encourage cooperative formation by providing greater flexibility to transfer CQ to meet operational demands. The RP also modified the RPP so that LLP license holders with rockfish QS designated for the CV sector could form a

⁴ Longline gear includes hook-and-line, jig, troll, and handline.

cooperative only with the processor to whom a majority of their catch was delivered during 1996 through 2000. The Council modified this requirement because the specific requirement and authority provided in section 802 expired with the RPP, and the Council determined their program goals could be achieved without that provision.

Kodiak delivery requirement. To address concerns raised by processors that the RP would provide harvesters an undue competitive advantage and that they could use that potential advantage to deliver outside of the traditional port of Kodiak, the RP included a requirement that all primary and rockfish secondary species CQ in the CV sector be delivered to a shore-based processor within the City of Kodiak. In addition to protecting traditional processors, the requirement is intended to protect the fishing community of Kodiak. During the 2000 through 2006 period, all catch landed shoreside was delivered within Kodiak.

Harvesters in CV cooperatives are not required to deliver to a specific processor. The RPP permitted CV's to form a cooperative only with the processor to which the CV made a majority of their deliveries during 1996 through 2000. The RP modified the requirement to allow CVs to annually join the Kodiak based cooperative of their choice, regardless of where they had delivered rockfish in the past.. This provision was modified because the specific requirement and authority provided by Congress to create that linkage in section 802 expired with the RPP and NOAA GC has determined that the MSA does not provide that authority.

During the development of the RP, the Council reviewed and considered a range of other options to address concerns raised by shore-based processors. Management measures considered included the linkage between shore-based processors and CV cooperatives required under the RPP, allocations of harvest shares to processors, annual cooperative/processor linkages (which may be changed, without penalty or forfeiture), and caps on the amount of landings that may be processed by any single processor. Ultimately, the Council chose to recommend a specific landing requirement within the City of Kodiak and processing caps to preserve flexibility for harvesters to deliver to multiple markets. The Council's recommendation sought to maintain the traditional shore-based processing activity within Kodiak and limit the consolidation of processing effort among rockfish processors that was thought to potentially have detrimental impacts on processors traditionally active in the fishery and harvesters.

During development of the RP the Council determined that harvester/processor linkages and allocation of harvesting quota to processors was not necessary or appropriate to meet the overall goals it established for the RP. Harvesters and processors were thought to be able to coordinate/cooperate as they did under the RPP. Maintaining those relationships would continue to reduce processing capacity conflicts with the salmon fishery that is active during summer months and provide a stable processing workforce by ensuring rockfish deliveries during May and June when other GOA fisheries are less active.

During development of the RP it was assumed the program's structure would benefit processors since each cooperative is required to associate with a processor on an annual basis. That limited duration association would make it possible to define delivery arrangements. While those arrangements may limit where CVs may deliver during the year they would only continue the next year if they are advantageous to the various cooperative members. Depending on the agreements reached by cooperative members, processors could develop markets and products to maintain annual associations.

Historical relationships between harvesters and processors are expected to influence the formation of cooperative/processor associations. Since the RP deliveries are a relatively small component of the annual GOA deliveries for many CVs, it will be important for those vessel operators to maintain a strong working relationship with their processor for other species (i.e., pollock, Pacific cod, and flatfish). These relationships are likely to be tested, if a processor fails to offer a competitive price.

Processors were thought to have an incentive to vertically integrate, if needed to secure a stable supply of landings in the rockfish fisheries. Vertical integration will be limited by excessive share caps. Changes in vertical integration will be reviewed in the changes in ownership section.

Implement a cost recovery program, except for the entry level longline fishery. The RP is established under the provisions of section 303A of the MSA. Section 303A requires that NMFS collect fees for limited access programs to recover the actual costs directly related to the management, data collection and analysis, and enforcement activities. NMFS uses a portion of the cost recovery fees collected under the RP to hire personnel to monitor rockfish landings. The rockfish catch monitoring and control plan (CMCP) specialist will monitor program deliveries to ensure compliance with the CMCP by any processor receiving program landings, assist processors with rockfish species identification to ensure accurate catch sorting and quota accounting, and report the findings to NMFS. Section 304(d)(2) of the MSA also limits the cost recovery fee so that it may not exceed 3 percent of the ex-vessel value of the fish harvested using CQ issued under the RP. NMFS assess fees on the ex-vessel value of rockfish primary species and rockfish secondary species CQ harvested by rockfish cooperatives in the CGOA when rockfish primary species caught by that vessel are deducted from the Federal TAC. The cost recovery fees will not apply to the entry level longline fishery and opt-out vessels because those participants do not receive rockfish CQ.

NMFS determines the fee percentage that applies to landings made in the previous year by dividing the total RP management, data collection and analysis, and enforcement costs (direct program costs) during the previous year by the total standard ex-vessel value of the rockfish primary species and rockfish secondary species for all rockfish CQ landings made during the previous year (fishery value). NMFS captures the direct program costs through an established accounting system that allows staff to track labor, travel, contracts, rent, and procurement. Using the fee percentage formula described above, the estimated percentage of program costs to value for the 2016 calendar year is 2.54 percent of the standard ex-vessel value. The fee percentage for 2016 is a decrease from the 2015 and 2014 fee percentage of 3.0 percent (81 FR 10591, March 1, 2016). The 2013 fee of 2.5 percent was about the same as the 2016 fee percentage. The fee percentage was the lowest (1.4 percent in 2012). Program costs for 2016 were lower than in 2015, in part because of reduced costs associated with observer coverage as a result of efficiencies achieved in the deployment of observers in the RP.

Establish a catch monitoring and control plan (CMCP) specialist. A shoreside processor receiving groundfish RP rockfish must be a facility operating under an approved CMCP. The CMCP describes how landings can be monitored effectively by one individual, how scales will be tested and used, and ensures that adequate equipment/facilities are made available for individuals authorized by NMFS. NMFS uses a portion of the cost recovery fees to fund the CMCP specialist positions. Because cost recovery fees were not available at the start of the RP, NMFS funded the CMCP specialist position(s) until cost recovery fees were available.

The CMCP specialist monitors rockfish landings to provide impartial verification of a processor's adherence to its CMCP. The duties of the rockfish CMCP specialist do not overlap with those of the fishery observer. The rockfish CMCP specialist monitors program deliveries and is not be trained as an observer or requested to complete any observer duties such as verifying non-rockfish fish tickets, assisting vessel observers, or collecting biological or scientific data. The duties of the rockfish CMCP specialist are to monitor rockfish deliveries to ensure compliance with the CMCP of any processor receiving program landings, to assist processors with rockfish species identification to ensure accurate catch sorting and quota accounting, and to report the findings to NMFS. A shoreside processor is required to include a description in the CMCP of how the CMCP specialist would be notified of rockfish CQ deliveries. The CMCP specialist establishes a monitoring schedule so all or most deliveries are monitored. In the event of conflicting deliveries, the CMCP specialist determines which program deliveries will be monitored.

1.2.2.4 Frank LoBiondo Coast Guard Authorization Act of 2018 (Public Law Number: 115-282)

On December 4, 2018 Public Law No: 115-282 was enacted. Section 835 of Public Law Number: 115-282 contains a waiver that would allow one Amendment 80 vessel to be replaced by a new vessel that would not have otherwise qualified under the Jones Act. As a result, the Secretary is required to issue a certificate of documentation with coastwise and fishery endorsements to the certificated vessel. While Public Law Number: 115-282 allows the new vessel to participate in the U.S. fisheries, Section 836 of the law placed specific temporary limitations on the use of that vessel.

One of the limitations is a sideboard on the amount of GOA groundfish a vessel may harvest or process as a mothership. The language in Section 836(a) and Section 836(b) states that:

(A) the percentage of the harvest available in any Gulf of Alaska groundfish fisheries (other than fisheries subject to a limited access privilege program created by the North Pacific Fishery Management Council) that is equivalent to the total harvest by the vessels described in paragraph (2) in those fisheries in the calendar years that a vessel described in paragraph (2) had harvest from 2012 through 2017 relative to the total allowable catch available to such vessels in the calendar years 2012 through 2017; or

(B) the percentage of processing of deliveries from other vessels in any Bering Sea, Aleutian Islands, and Gulf of Alaska groundfish fisheries (including fisheries subject to a limited access privilege program created by the North Pacific Fishery Management Council, or community development quotas as described in section 305(i) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1855(i))) that is equivalent to the total processing of such deliveries by the vessels described in paragraph (2) in those fisheries in the calendar years 2012 through 2017 relative to the total allowable catch available in the calendar years 2012 through 2017.

The limitations described in paragraph (1) shall apply, in the aggregate, to—

(A) the vessel AMERICA'S FINEST (United States official number 1276760);

(B) the vessel US INTREPID (United States official number 604439);

(C) the vessel AMERICAN NO. 1 (United States official number 610654);

(D) any replacement of a vessel described in subparagraph (A), (B), or (C); and

(E) any vessel assigned license number LLG3217 under the license limitation program under part 679 of title 50, Code of Federal Regulations.

Section 836(b) EXPIRATION.—The limitations described in subsection (a) shall apply to a groundfish species in Bering Sea, Aleutian Islands, and Gulf of Alaska only until the earlier of—

(1) the end of the 6-year period beginning on the date of enactment of this Act; or

(2) the date on which the Secretary of Commerce issues a final rule, based on recommendations developed by the North Pacific Fishery Management Council consistent with the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 180114 et seq.), that limits processing deliveries of that groundfish species from other vessels in any Bering Sea, Aleutian Islands, and Gulf of Alaska groundfish fisheries that are not subject to conservation and management measures under section 206 of the American Fisheries Act (16 U.S.C. 1851 note).

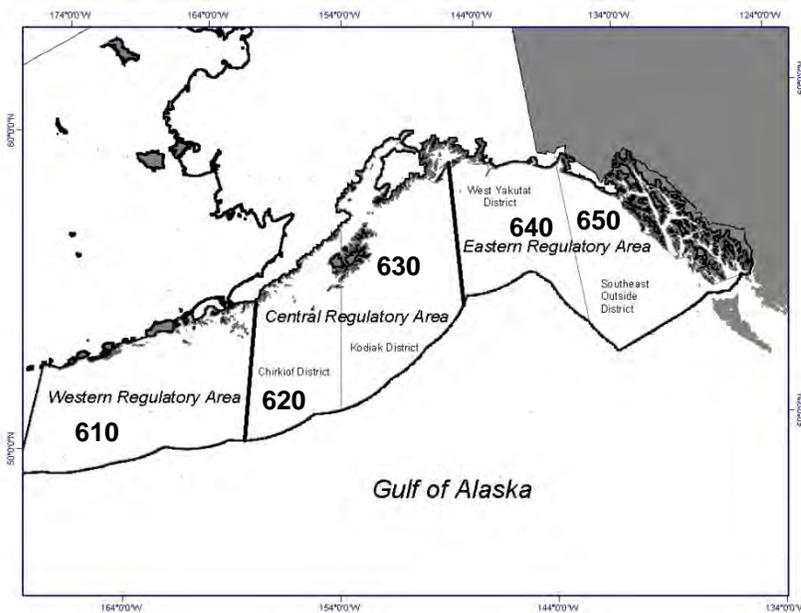
For the purpose of this analysis, there are important issues worth noting. First, the law does not apply to LAPP fisheries so any CQ used in the CP sector would not be impacted. Sideboard limits in the West Yakutat District and Western GOA imposed by the law that are more restrictive than the CP RP sideboard

limits could be impacted. Second, the law was enacted on December 4, 2018. The limitations on the amount of GOA groundfish species the firm may harvest and process as a result of the regulations will expire prior to the start of the 2025 fishing year. The limitation could expire sooner than the 2025 fishing year, depending on actions taken by the Council relative to this proposed amendment to reauthorize the RP. Because the Alternative 2 options would extend the RP beyond 2024, limitation placed on these vessels during 2022 through 2024 fishing years could be lifted starting in 2015. Third, it has been determined the sideboard amounts established for the listed vessels are considered confidential. The percentage will not be made public. Therefore, the information presented in this document does not provide information on the harvest and processing of GOA groundfish species by the vessels limited by these regulations.

1.3 Description of Management Area

The Fishery Management Unit for the GOA includes all waters in the exclusive economic zone along the southeastern, southcentral and southwestern coasts of Alaska from Dixon Entrance to Unimak Pass. The GOA Fishery Management Unit is subdivided for management purposes into three regions, Western Gulf of Alaska (WGOA), CGOA and Eastern GOA. For purposes of this analysis, the CGOA subregion is the focus of the RP. This region includes the regulatory areas of 620 and 630 (Figure 1-1). However, the proposed action also limits RP participant's activity in the West Yakutat District (area 640) and the WGOA regulatory area (area 610).

Figure 1-1 Regulatory and reporting areas in the GOA.



1.4 Proposed Action

The Council approved a problem statement, list of alternatives and options, and requested specific information at its December 2018 meeting, after reviewing a RP reauthorization discussion paper.⁵ That action established the basis and structure for this initial review draft of the EA/RIR.

⁵ <http://meetings.npfmc.org/CommentReview/DownloadFile?p=31687b79-e42b-4276-97bb-36e6aaa4435f.pdf&fileName=D5%20Central%20GOA%20Rockfish%20Reauthorization.pdf>

1.5 Description of Alternatives

NEPA requires that an EA analyze a reasonable range of alternatives consistent with the purpose and need for the proposed action. The alternatives in this chapter were designed to accomplish the stated purpose and need for the action. All of the action alternatives were designed to retain the resource, management, and economic benefits created as a result of implementing the RP.

1.6 Alternatives

1.6.1 Alternative 1, No Action

Under the No Action alternative, the CGOA rockfish fisheries would revert to LLP management. Because the fishery would no longer be managed under a LAPP structure, the management regulations associated with LAPPs would also be removed. For example, the observer coverage requirements for CVs and shoreside processing plants would be determined by NMFS in the Annual Deployment Plan.⁶ Rockfish landings would be subject to the observe fee percentage and not the pay-as-you-go model where the fleet has 100 percent coverage and pays a daily rate for coverage. The additional observer requirements specified at 50 CFR 679.51(a)(2)(vi) for CPs participating in the Rockfish Program would be removed and these CPs would remain in the full coverage category under the Observer Program as implemented in 2013. The fleet would no longer be subject to the cost recovery fee and NMFS would not be required to calculate or collect the fees and would not be required to prepare an annual cost recovery fee report for that fishery. RP regulations defined in 50 CFR Subpart G would be eliminated or modified. Any modifications would need to be included as options under the No Action alternative at final action.

Selection of the No Action alternative would also require regulations to address season dates for the CGOA rockfish trawl fishery, redistribution of Chinook salmon PSC that was assigned to the RP (50 CFR 679.21(h)), halibut PSC limits that were assigned to the RP from the third quarter PSC apportionment, and halibut PSC limit reductions that were implemented as a result the RP. The No Action alternative will need to be clearly defined if it is selected as the Council's preferred alternative.

1.6.2 Alternative 2, Reauthorize RP

Reauthorize the RP with the existing management framework unless modified under this alternative. Each element of Alternative 2, as proposed by the Council, is presented. Immediately following the Council's element for analysis is a brief discussion of the "context" of the provision. The context is not part of the Council's motion. It was provided by the analysts.

Element 1: Modify regulations at 679.80(a)(2) to specify the duration of the program.

Option 1: Remove sunset date

Option 2: Replace with new sunset date (10-20 years)

Description: The current RP was established with a sunset date of ten years after the program was implemented. The first option would remove the sunset date. Under Section 303A of the MSA, a LAPP permit is a permit issued for a period of not more than 10 years that will be renewed before the end of that period, unless it has been revoked, limited, or modified. Removing the sunset date would allow NMFS to renew the permits without the Council initiating a formal analysis to reauthorize the program. Option 2 would keep the sunset provision of the program in place at the current 10-year cycle or extend the cycle

⁶ <https://www.fisheries.noaa.gov/resource/document/2019-annual-deployment-plan-observers-groundfish-and-halibut-fisheries-alaska>

up to 20-years. At the end of the period the Council and NMFS would be required to reauthorize the program, as is being done under this regulatory package.

*Staff note: It is assumed that since there are no options to alter the current quota allocations to LLP licenses or the sideboard limits assigned to those LLP licenses that it is **not** necessary for LLP license holders to reapply for quota. The same number of QS units by species would be assigned to each LLP license under the reauthorized program as was assigned under the current Rockfish Program. Cooperatives would still need to annually apply for CQ based on the LLP licenses assigned the cooperative. This approach will streamline the reauthorization process and keep the current allocations intact.*

Element 2: Consider options to reallocate unharvested RP Pacific cod from onshore cooperatives to fixed gear open access fisheries after the RP fisheries close on November 15.

Description: NMFS does not currently have the authority to move unused Pacific cod from the rockfish cooperatives to the fixed gear fisheries, as NMFS does with other sectors that fish Pacific cod (see §679.20(a)(12)(ii)(B)). A regulatory change could give NMFS the authority to reallocate any remaining Pacific cod after the RP fisheries closes for the season or once all members have checked out. This action could potentially benefit the fixed gear fisheries without negatively impacting the cooperative members. Similar to the process for other Pacific cod sectors, NMFS could take into account the capacity of the sector, and ability to harvest the remaining Pacific cod TAC. For instance, Pacific cod may still go unfished if a particular sector is approaching its halibut PSC limit and it does not have the opportunity to take advantage of an increased Pacific cod allocation. Further analysis would need to ascertain how likely this reallocation would be to occur and the extent to which it would be used by the fixed gear sector.

Element 3: Exempt crab program sideboard limits for vessels when fishing in the RP.

Description: Both the AFA and BSAI Crab Rationalization Programs were implemented with a suite of sideboard limits for vessels that earned harvesting privileges through these programs. Given the economic advantages that these participants had been afforded through their participation in these programs, potentially freeing up capacity, sideboard limits were created to limit the ability for these vessels to expand into other fisheries. Both of these program (AFA and the Crab Program) included sideboards in the CGOA rockfish fisheries, which were not managed as a LAPP at the time these programs were implemented. Since that time, it was determined that maintaining AFA sideboards in the CGOA rockfish fisheries was unnecessary as this program is now managed as a LAPP. With the development of the CGOA RP the AFA nonexempt vessels were given exemption from AFA sideboards for the harvest of CQ within the RP. Crab sideboards in the rockfish fisheries have not been removed, which limits non-exempt vessels from participation in this fishery. Further analysis would be needed to determine the number of vessels that these sideboards have impacted. This action would likely require an amendment to the BSAI Crab Fishery Management Plan.

Element 4: Require annual NMFS cost recovery reports in regulations.

Description: Regulations require NMFS to produce a cost recovery report for of all other LAPPs, except the CGOA RP. For example, §679.33(g) “Annual report. Each year, NMFS will publish a report describing the CDQ Cost Recovery Fee Program for groundfish and halibut.” Although not required in regulations, NMFS does produce this report for the RP, similar to other catch share programs.

Element 5: Clarify regulations at § 679.5(r)(10) to specify that only shoreside processors receiving RP CQ must submit the Rockfish Ex-vessel Volume and Value Report.

Description: Current regulations require a “rockfish processor” to submit annually to NMFS a Rockfish Ex-vessel Volume and Value Report. The use of rockfish processor instead of “rockfish shoreside

processor” has created confusion for NMFS staff and CP participants because a rockfish processor could include RP CPs.

Element 6: Modify language in § 679.5(r)(6)(iii)(B) to require RP cooperatives to report catch by the CGOA reporting area.

Description: Current regulations require RP cooperatives to report catch by “statistical area.” Reporting by statistical area is arbitrary and unnecessary in the cooperative reports. Catches are reported in eLandings by the CGOA reporting area for the program, not by federal statistical areas.

Element 7: Revise § 679.5(r)(6)(iii)(D) - to replace “any actions” with “any civil actions.”

Description: Current regulations specify that a RP cooperative annual report must include a description of any actions taken by the cooperative in response to any members that exceeded their catch as allowed under the rockfish cooperative agreement. “Any actions” is very broad and could include intra or inter-coop transfers, which is unnecessary. The proposed rule implementing the RP used “any civil actions” in § 679.5 to describe the reporting requirement and this term should have replaced “any actions” in § 679.5 when the RP was implemented.

Element 8: Revise § 679.81 (i)(D)(3) to remove requirements for a Fishing Plan to be submitted with a cooperative application for CQ.

Description: Current regulations require a RP cooperative Fishing Plan to be included in the cooperative application for CQ. The cooperatives have to complete the application in February, far in advance of when they make fishing plans for the season. The timing of the requirement does not match up with when the information is available. This information has been included in the cooperative annual reports required at § 679.5(r)(6).

Element 9: Revise § 679.84(f)(1) to exempt shoreside processors under the RP from the requirement to provide an observer work station and observer communication described at § 679.28(g)(7)(vii) and (viii).

Description: Current regulations require RP processors to maintain an observer station at the plant. This requirement is no longer necessary since plant observers are not required for the RP. Instead, the RP employs a Catch Monitoring Control Plan specialist, which negated the need for a plant observer. The current regulations negatively impact shoreside processors because it is costly for processors to maintain an observer workstation and platform scale.

Element 10: Allow NMFS to reallocate unused Rockfish ICA to the RP CV cooperatives to prevent exceeding the TAC in the CGOA.

NMFS would like the flexibility to reallocate unused ICA for POP, northern rockfish, and dusky rockfish to the RP cooperatives to prevent exceeding the TAC in the CGOA. This is routinely done for the ICAs developed for Bering Sea AFA Pollock and Amendment 80 allocated species except Pacific cod. Currently, ICAs are set in the harvest specifications at the beginning of the season. Incidental catch is estimated at the beginning of each year and NMFS sets the ICA conservatively to avoid exceeding the TAC.

Element 11: Clarify regulations regarding accounting for inseason use caps when CP QS is transferred for use by the CV sector.

Description: Regulatory text from 50 CFR 679.82(a)(2)(i) states that the CV use cap is 4.0 percent of the aggregate rockfish QS initially assigned to the CV sector and resulting CQ unless that eligible rockfish harvester qualifies for an exemption to this use cap. Regulations at 50 CFR 679.82(a)(3) define the CQ use cap for rockfish cooperatives in the CV sector. That section states that a rockfish cooperative may not hold or use an amount of rockfish QS that is greater than the amount derived from 30.0 percent of the aggregate rockfish QS initially assigned to the CV sector unless the cooperative was grandfathered into the program at a greater amount. Regulations at 50 CFR 679.82(a)(5) define the rockfish processor use caps. Those caps are also based on CV CQ and are established for rockfish CQ, Pacific cod CQ, and sablefish CQ.

Because the use caps language explicitly applies to CQ issued to the CV sector, harvest and processing caps exclude fish transferred from the CP sector to a CV cooperative in the use cap calculation. If a vessel/cooperative is close to the harvesting/processing cap but acquires CQ from the CP cooperative, it could allow the entity to exceed the CV limit. Clarifying the intent of this provision would assist NMFS in managing the program as intended.

Element 12. Modify Cooperative Check-In Notice Times

Rockfish cooperatives are required to check-in at least 48 hours prior to the time the CV begins a fishing trip to fish under a CQ permit. Industry mentioned in a 2015 PRA comment that a 24 hour check-in is sufficient. The two day wait time is sometimes inconvenient for cooperative CVs. These regulations are found at 50 CFR 679.5 (r)(8).

1.7 Additional Modifications to Requirements for Annual RP Cooperative Reports (Elements 6 and 7)

This section provides information about NMFS's recommendation that the Council consider further refinements of Elements 6 and 7 related to requirements for the annual RP cooperative reports. If the Council agrees with these recommendations, the modifications would be made in the draft EA/RIR before it is released for Council final action. The issues and recommendations described in this section have not yet been reviewed at previous Council meetings.

Regulations at 50 CFR 679.5(r)(6) require each RP cooperative to submit an annual rockfish cooperative report to NMFS by December 15 of each year. The report must include at a minimum:

- ◆ The cooperative's CQ, sideboard limit (if applicable), and any rockfish sideboard fishery harvests made by the rockfish cooperative vessels on a vessel-by-vessel basis;
- ◆ The cooperative's actual retained and discarded catch of CQ, and sideboard limit (if applicable) by statistical area⁷ and vessel-by-vessel basis;
- ◆ A description of the method used by the cooperative to monitor fisheries in which cooperative vessels participated; and
- ◆ A description of any actions⁸ taken by the cooperative in response to any members that exceeded their catch as allowed under the rockfish cooperative agreement.

The information submitted to NMFS about harvests, retained catch, and discarded catch by vessel or cooperative is confidential under Section 402(b)(1) of the Magnuson-Stevens Act. The other required information is not confidential. Information about each cooperative's CQ allocations, halibut PSC allocation, and sideboard limits is published on NMFS's website. The inclusion of confidential

⁷ Alternative 2, Element 6 addresses this requirement (change "statistical area" to CGOA wide).

⁸ Alternative 2, Element 7 addresses this requirement (change "any actions" to "any civil actions").

information means that NMFS cannot post the annual reports on its website or provide the annual reports to the Council or the public.

At the request of the Council, the RP cooperatives also submit written cooperative reports to the Council prior to the April Council meeting each year, and provide a verbal overview of the annual report at the April Council meeting. Federal regulations do not require the RP cooperatives to submit an annual report to the Council. The Council also has specified some additional information it requests the RP cooperatives voluntarily provide in their annual reports to the Council. These additional requirements are described in the action memo prepared by Council staff for the Cooperative Reports agenda item. The most recent [action memo](#) was prepared for the April 2019 Council meeting (NPFMC, 2019). It states that the Council has previously requested that the RP cooperatives provide the Council with inter-temporal harvest information and information about Chinook salmon bycatch. The Council also requested that the RP cooperatives use terminology for program components (e.g., limitations on seasonal reallocations of halibut PSC) that is consistent with the terms used in the fishery management plans and regulations governing the program.

The cooperative annual reporting requirements and Council's requests for voluntary information are information collections subject to the requirements of the Paperwork Reduction Act (PRA). These requirements are approved by the Office of Management and Budget (OMB) under information collection number 0648-0678. For any new information collection or modification to an existing collection, NMFS must submit an analysis to OMB, solicit public comment on the proposed information collection, and request approval from OMB prior to collecting the information. The analysis prepared for OMB ("PRA analysis") explains why the information is needed, the estimated costs to respondents of providing the information, and other required information. OMB's approval for an information collection generally expires in three years. Therefore, every three years, NMFS must obtain OMB approval to continue an information collection.

OMB's approval for the annual cooperative reporting requirements and Council's requests for voluntary information expires on December 31, 2019. In preparing the PRA analysis for renewal of this information collection, NMFS explained how the Council uses information provided in the annual cooperative reports. However, NMFS also recognized that NMFS does not need the information in the annual rockfish cooperative reports to manage the RP fisheries. NMFS already has access to information about allocations, harvests, and retained and discarded catch by vessel and cooperative. NMFS also does not need information about the methods the cooperatives use to monitor their fisheries or the actions the cooperatives take to address overages to fulfill any specific fishery management responsibilities. Although this information may be informative for the Council and the public, NMFS cannot release the annual RP cooperative reports to the Council or the public because they contain confidential information. Therefore, the requirement that the annual cooperative report be submitted to NMFS may be unnecessary.

NMFS could not approve regulations that require the cooperatives to release to the public information that, if submitted to NMFS, would be considered confidential. Such an action would not be consistent with the Magnuson-Stevens Act. NMFS also recommends against the Council requesting that the cooperatives voluntarily provide confidential information as NMFS likely could not support submitting such a request to OMB for approval. The cooperatives may continue to voluntarily provide the Council with information about harvests, bycatch, prohibited species catch by vessel or cooperative, but NMFS cannot require this, nor does it recommend that the Council specifically request that the cooperatives voluntarily provide this information.

NMFS recommends that the Council include in the final draft EA/RIR consideration of further revisions to the annual RP cooperative report requirements beyond those currently described in Elements 6 and 7. Specifically, the Council could:

1. Combine Elements 6 and 7 into a single Element 6 that addresses the RP cooperative annual report requirements. Revised Element 6 could be labeled “Modifications to the Annual Rockfish Cooperative Report Requirements.”
2. Revised Element 6, could:
 - a. Require that an annual report containing only non-confidential information be submitted to the Council only, but not NMFS.
 - b. Require that an annual report containing only non-confidential information be submitted to both NMFS and the Council.
 - c. Remove the regulations requiring that an annual RP cooperative report be submitted to NMFS and have the Council rely only on requests that the RP cooperatives voluntarily provide annual reports to the Council.

If selecting options (a) or (b) to continue to require an annual RP cooperative report in regulations:

3. Specify the components of the RP cooperative annual report that would be included in regulation.
4. Specify a deadline for receipt of the annual reports by the Council.

Under options (a), (b), and (c) the Council also could specify any components the Council would not put in regulation but would request that the cooperatives voluntarily provide in their annual reports.

All of these options (a), (b), and (c) would remove the requirement that the RP cooperatives submit confidential information to NMFS that NMFS does not need to manage the RP fisheries and cannot release to the public. Analysts need to continue to research the viability of option (a), because we do not currently follow this model in our regulations for other annual reports, except the American Fisheries Act (AFA) annual reports, which are specifically authorized by the AFA.⁹ The second option (b) is the model currently used in regulations for the Recreational Quota Entity Program Annual Report (RQE) and report on Area 4 halibut IFQ transfers to CDQ groups. Analysts need to determine if there was a specific reason that would be applicable to the annual RP cooperative reports that the RQE and halibut IFQ leasing reports are required to be submitted to both NMFS and the Council. Analysts were not able to fully resolve this question before release of this initial review draft EA/RIR, but will provide additional information prior to or during presentation of the draft analysis at the December 2019 Council meeting and incorporate that into the final draft EA/RIR.

The Council could consider the following list to select components for the annual rockfish cooperative report. These components are a combination of current requirements and the information that is routinely provided by the cooperatives in their annual reports:

- Cooperative name.
- Name and contact information for the cooperative representative.
- Names of the cooperative members.
- Amount allocated to each cooperative of primary rockfish species, secondary species, and halibut PSC (in the year covered by the annual report).
- Sideboard limits for each cooperative by species and area.

⁹ The American Fisheries Act (section 210(a)(1)(b) provides the authority to “make available to the public in such manner as the North Pacific Council and Secretary deem appropriate information about harvest by vessels under a fishery cooperative of all species (including bycatch) in the directed pollock fishery on a vessel-by-vessel basis.”

- General, non-confidential information about harvests and prohibited species catch in the year covered by the annual report.
- How the previous year generally compared to past years in terms of allocations, harvests, prohibited species catch, and general fishery performance.
- A description of the method used by the cooperative to monitor fisheries in which cooperative vessels participated (current regulation).
- A description of any *civil* actions taken by the cooperative in response to any members that exceeded their catch as allowed under the rockfish cooperative agreement (modification to the requirements currently described as Element 7).

Some of this information is available on NMFS's website (cooperative name, cooperative representative, cooperative members, allocations, and sideboard limits for each cooperative). Requiring this information in the annual cooperative report could be considered an unnecessary duplication of effort. NMFS is required to address efforts to reduce duplication in the PRA analysis. The Council may consider it beneficial for the cooperatives to provide information that already is available on NMFS's website to summarize and synthesize this information in the context of a larger report about the operations and activities of the cooperative, and to provide the information in a format more readily accessible by the Council and public.

The Council also may wish to consider a statement of purpose for the annual cooperative reports. Explicitly stating the purpose of the annual reports would provide NMFS with information needed to prepare the PRA analysis. For example, the Council could consider the following as a draft statement of purpose for the annual reports:

The purpose of the annual RP cooperative report is to provide information to the Council and the public about the operations and performance of the cooperatives. This information is used by the Council to inform the public, to evaluate the performance of the cooperatives, and to identify problems or issues that may need to be addressed by the cooperatives or the Council in the future.

Regarding the deadline for the annual rockfish cooperative report, the Council could consider current deadlines for annual reports required to be submitted to the Council prior to its April meeting. The Bering Sea pollock Incentive Plan Agreement (IPA) annual reports are required to be submitted to the Council by March 15. The AFA cooperative annual reports are required to be submitted to the Council by April 1. When this April 1 deadline was selected, it was thought to provide sufficient time for the annual reports to be available to the Council prior to the start of the April Council meeting. However, this has not necessarily proven correct when Council meetings start prior to April 1. Therefore, a March 15 deadline was selected for the IPA annual reports.

1.8 Council Request for Additional Information

The Council's motion included three specific requests for information but did not define specific alternatives for analysis. Those requests are listed below and the information requested is included in the RIR.

- Include a review of the performance of the entry-level longline fishery and the step-up mechanism that increases the sector's apportionment.

Context: During the development of the CGOA RP review analysts noticed that the entry level longline fishery had not been harvesting up to 90 percent of their allocations, until 2016 when it did for dusky rockfish. When the catch for this fishery exceeds 90 percent of the allocation for that rockfish primary species then the allocation of that rockfish primary species in the following year increases in a stair-step

fashion by a prescribed amount (up until a certain percent of the TAC is reached). Given the harvest rate in 2016 by this portion of the fleet, the 2017 allocation for dusky rockfish in this fishery increased by 20 mt. Given the substantial rate of increased harvest of dusky rockfish by this sector, analysts wonder whether the increase was a one-off or whether this increasing harvest rate will continue. If the drastic rate change continues to increase, the overall percentage cap for this fishery may constrain the fishery in future years. If the harvest level in 2016 was an anomaly, the increase in the allocation could strand dusky rockfish in the entry level longline allocation, as there is no mechanism for the catch limit to ever decrease. This has not been an issue and no step-up have occurred since 2016 (See Section 3.5.1.2.2 and Section 3.5.2.3).

- Provide information regarding how the current three-day stand down requirement applies to vessels when transiting from the Bering Sea/Aleutian Islands to the Gulf of Alaska to participate in the RP.

Context: Regulations implemented at 50 CFR 679.23(h)(1) state that the owner and operator of a CV that fishes for groundfish in the BSAI while pollock or Pacific cod are open to directed fishing in the BSAI are prohibited from deploying trawl gear in the WGOA and CGOA until the third day after the landing of transfer of all groundfish on board the vessel harvested in the BSAI. CVs that operate in the offshore component of the GOA Pacific cod fishery are exempt from the three-day stand down. This regulation was implemented to slow the flow of effort moving from the BSAI into the GOA to help protect participants that primarily operated in the GOA.

Conversely, regulations at 50 CFR 679.23(h)(3) state that CVs fishing in the CGOA regulatory area while pollock or inshore Pacific cod is open to directed fishing in the CGOA regulatory area must stand-down for two days after the date of landing or transfer of all groundfish on board the vessel harvested in the CGOA regulatory area when moving to the BSAI, unless they are going to participate in a CDQ fishery. Because the CDQ fishery provides exclusive harvest privileges policy makers determined that the two-day stand-down was unnecessary. The same logic could be applied to the three-day stand-down for CVs moving from the BSAI to the CGOA RP. Since, a CV would not be allowed to harvest a greater share of the RP allocation by simply harvesting the fish before others had the opportunity.

Vessels could enter the rockfish fishery immediately since additional protections are not needed in a LAPP program. Based on 2018 data there were three vessels in the fleet that fished in the BSAI one week and entered the RP the following week. Two of these vessels were Kodiak based boats and the third was an Oregon based vessel. The Oregon based vessel changed areas in the fall while the two Kodiak boats changed areas around the start of the RP.

Sixteen boats moved from the BSAI to the CGOA and fished either the same week or the next week in a non-RP CGOA trawl fishery. These vessels would not be covered under the proposed change in stand-down regulations. They would still be subject to the three-day stand-down to fish in the CGOA unless they entered the RP first. They could then move to the non-Rockfish Fisheries if they check-out of the RP. If it is a concern that vessels would check-in to the RP and quickly check-out to avoid the three day stand-down any proposed regulations could state that the three-day stand-down remains in place for WGOA and CGOA non-RP fisheries regardless of whether the vessel participated in the RP after leaving the BSAI.

- Describe harvesting patterns of vessels in the RP.

Context: Data from the NMFS CAS will be reviewed, analyzed, and reported in this RIR. The information will be presented in a way that will describe the harvesting patterns of participants in the RP. See section 3.5.1.5 for more information.

- CGOA Rockfish Bycatch

Context and Discussion: The Council heard public testimony at its October 2019 meeting that CGOA rockfish were becoming more difficult to avoid in other directed fisheries. Based on that testimony staff was asked to provide information on the extent of the rockfish discards and to consider potential solutions to address the regulatory discards of rockfish.

To prevent harvesters from harvesting more primary rockfish than is necessary MRAs are established in regulation. An MRA applies at all times when not in the RP for the duration of a fishing trip (see 50 CFR 679.20(e)(3)). Vessel operators may retain incidental catch species while directed fishing for groundfish species up to the MRA percentage of the basis species retained catch. Table 10 to 50 CFR 679 shows the MRA for various rockfish in other directed fisheries. A rockfish MRA of 5 percent is established for most non-rockfish fisheries except flathead sole, rex sole, deep-water flatfish, and sablefish.

On an annual basis, prior to allocation of CQ to the RP, NMFS will set aside an ICA for POP, northern rockfish, and pelagic shelf rockfish to meet the incidental catch needs of fisheries not included in the cooperative program. The ICA is established conservatively to ensure the TAC for primary and secondary rockfish species is not exceeded. Setting the ICA too high could unnecessarily reduce the amount of the primary species allocated to cooperatives under the RP. This could be mitigated if the Council selects Element 10 under Alternative 2 of this package. Setting the MRA too low could result in increased regulatory discards of the primary rockfish species that are unavoidable in other directed fisheries.

Table 1-2 reports the metric tons of CGOA rockfish discards prior to May 1st by trawl vessels. The May 1st date was selected because it is the start date of the RP and the first pollock and Pacific cod seasons occur before then. Vessels could not use RP CQ prior to that date (Figure 3-13). The highest reported discards occurred in 2017 and most of those discards were attributed to the arrowtooth flounder fishery.

Table 1-2 Rockfish discards in CGOA trawl CV fisheries prior to May 1

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average
Non-Rockfish Program Vessels												
Vessels	2	7	7	14	15		13	4	5	2		8
Rockfish Discards (mt)	0	24	126	6	14		3	0	0	19		21
Rockfish Program Vessels												
Vessels	29	31	29	35	26	12	35	26	19	17	24	26
Rockfish Discards (mt)	31	47	114	38	41	287	9	120	1,053	116	139	181
Total Vessels	31	38	36	49	41	12	48	30	24	19	24	32
Total Rockfish Discards (mt)	31	71	240	44	54	287	11	121	1,053	135	139	199

Source: AKFIN Summary of CAS data

The information in the table indicates that there are trawl vessels fishing in the GOA that are RP vessels and those that are not. Modifications to the RP could potentially be implemented that would allow RP CQ holders to use their CQ to retain primary rockfish species above the MRA. This would likely require modifications to the start of the RP fishing year to benefit harvesters that fish prior to May 1. Even then, allowing rockfish CQ to be used to cover incidental catch in other fisheries could be complex and require several program changes. For example, if the concern goes beyond Pacific cod, which is allocated as a secondary species, harvests would be checked-out of the RP when directed fishing for pollock and arrowtooth flounder.¹⁰ If a vessel is checked-out of the RP their incidental catch or primary and secondary species is not deducted from their cooperatives allocation. The Council would need to consider and develop alternatives that would define how ICA is deducted from CQ holders whether they are checked

¹⁰ The current MRA for pollock, Pacific cod, arrowtooth flounder, and shallow-water flatfish is set at 5%.

into a cooperative or not. Persons that are not CQ holders could benefit from being allowed to retain rockfish above the MRA by using their CQ.

Another option would be to consider reviewing and potentially modifying the MRAs, especially for basis species where it is set at 5 percent. To accomplish this would likely require a trailing amendment to this package. Modifications of MRAs are typically complicated, especially to understand the ramifications to all fisheries and potential fleet response to the change. Increasing the MRA could result in an increase in the ICAs for the primary species. That would result in less CQ being allocated to the cooperatives, at least at the beginning of the year. If the catch of primary rockfish species does increase outside of cooperatives, it would have distributional impacts on the various participants in the fishery. For example, if a person caught and sold more primary rockfish - accounted for under the ICA, it would change the amount that persons would take into the cooperative as a result of the qualifying catch history.

In summary, addressing increased bycatch of primary rockfish species outside the cooperative structure may be best accomplished outside this amendment package. The RP reauthorization must be completed prior to the 2022 fishing year. Depending on the number of amendments made under this package, very little time would be available for staff to make substantial changes to the program without jeopardizing reauthorizing the program for the 2022 fishing year.

1.9 Comparison of Alternatives

1.9.1 Summary table of alternatives and findings

Table 1-3 Summary of alternative and major findings

	Alternative 1	Alternative 2
	No action: Return CGOA rockfish fisheries to limited access under the LLP.	Status Quo: Extend the CGOA RP structure for a minimum of 10 years.
Differences in Alternatives		
Apportionments	Primary rockfish species would be managed at the sector level using ICAs and MRAs, and possibly a longline apportionment. Chinook salmon PSC limits would be established for the non-pollock trawl fisheries. The third period halibut PSC would not be reduced to account for catch in the RP.	No Change in initial allocations.
Harvester Participation	Increase in the CV sector and CPs sector as vessel operators compete for a share of the available TAC	Stable participation. The number of CVs and CPs allocated QS will remain the same, the number of vessels harvesting the allocation will remain at about 25 CVs and 4 CPs.
Processor Participation	The number of processors could increase with the removal of the Kodiak delivery requirement, as processors from other communities or floating processors enter the fishery	Stable Participation. Shore-based processors are associated with CV cooperatives. The number of cooperatives have remained about the same (decreased by 1), but one shore-based processing firm was purchased by another firm associated with different RP cooperative and another firm ceased operations in 2017 and its cooperative was disbanded. One CP firm's vessels were acquired by other RP participants and has resulted in only 1 CP cooperative currently operating.
Environmental Impacts		

	Alternative 1	Alternative 2
	No action: Return CGOA rockfish fisheries to limited access under the LLP.	Status Quo: Extend the CGOA RP structure for a minimum of 10 years.
Groundfish	Potentially more discards of primary and secondary rockfish species. Pacific cod and sablefish retention is required under IRIU	No Change. Discards of rockfish are prohibited under the RP. No change in for Pacific cod and sablefish.
Halibut PSC	Increased halibut PSC rates in the rockfish fishery. Overall halibut usage could increase if rates increase and set-asides built into the RP could be eliminated.	Halibut PSC will likely be about the same as it is currently with variation attributed to changes in halibut and rockfish abundance.
Chinook Salmon PSC	Rates may increase as incentives within the cooperative regulated by civil contracts are removed. Rates will vary by year since Chinook salmon remain difficult to avoid.	Rates are expected to continue to vary despite agreements to avoid Chinook salmon.
Habitat	Pressure to harvest fish quickly could result more contact with the sea floor.	Increased use of pelagic gear is expected to continue and result in less impact on the sea floor.
Seasons	The CGOA rockfish fishery would be prosecuted in July.	The Season would run from May 1 through November 15, with most catch taken in May and early June.
Economic Impacts		
Entry Level Longline Fishery	Impacts will depend on how the Council will provide opportunity for this fleet. If the fishery is closed, it could have the greatest impact on the three or four Jig gear vessel operators that typically harvest the majority of the current set-aside.	Three jig gear vessels generally taken the vast majority of the fishery and the set-aside has been sufficient to keep the fishery open all year. Several other vessels taken very small amounts from the set-aside.
Fishery Value	All else being equal, it is expected to decline for both harvesters and processors due to potentially increased discards and lower quality.	Should remain the same based on what the stakeholders can control. Overall value will continue to be determined by world market conditions, exchange rates, tariffs, and TACs.
Lost Opportunity	Some CVs may lose the opportunity to tender in the salmon fishery, or they may harvest less rockfish due to the loss of harvest privileges. Processors may forgo the opportunity to have excess capacity and labor to produce different and higher quality products. They may also lose capacity that was available in July to process pink salmon.	None
Gained Opportunity	CVs and processors that are currently excluded from the fishery could enter the limited access fishery if they are qualified.	None
Net Benefits to the Nation	Expected to decrease, all else being equal.	Expected to stay the same, all else being equal
Management and Enforcement		
Safety	Minimal decline in safety	No Change
Observer Coverage	Partial coverage for CVs and shoreside processors (pay 1.25% until 2021 and then 1.65% fee), full coverage for CPs	No Change
Alt 2, Element 2: Roll-over Pacific cod from CV cooperatives to fixed gear open access	n/a	Benefit fixed gear sectors with no negative impact on cooperatives

	Alternative 1	Alternative 2
	No action: Return CGOA rockfish fisheries to limited access under the LLP.	Status Quo: Extend the CGOA RP structure for a minimum of 10 years.
Alt 2, Element 3: Exempt CVs from CR sideboard limits	n/a	Would allow a vessel that can fish Pacific cod in the cooperative to also fish rockfish and sablefish if they have access to CQ
Alt 2, Element 4: Require NMFS to prepare an annual cost recovery report	n/a	NMFS already prepares the report on a voluntary basis. This would make the report mandatory.
Alt 2, Element 5: Define who must submit volume and value report	n/a	Clarify that only shore-based processors must submit the report. CPs do not have a market based transaction to determine ex-vessel value.
Alt 2, Elements 6 & 7: Cooperative report requirements	n/a	Allow cooperative reports to include catch data at the CGOA level and not by statistical area (620 and 630 or state areas). Require cooperative to only report "civil actions" taken by the cooperative in their annual report. This was the intent of the RP proposed rule but was implemented as any action taken by the cooperative
Alt 2, Element 8: Remove the requirement to include the co-op fishing plan in the co-op application	n/a	. The fishing plan is not fully developed when the application must be submitted and the information is included in the cooperative report at the end of the fishing year.
Alt 2, Element 9: Remove observer workstation requirement	n/a	Observer coverage is not required for shoreside processors under the RFP making the observer sampling station unnecessary. This could reduce costs realized by processors.
Alt 2, Element 10: Allow primary rockfish species ICA roll over to CV cooperative	n/a	Provide NMFS the regulatory authority to roll over unused primary species to CV cooperatives if not used in other directed fisheries. This could benefit NMFS and the quota holders and not have negative impacts on other directed fisheries.
Alt 2, Element 11: Clarify use caps	n/a	Clarify whether only CV CQ is used to calculate the shoreside caps. This would exclude any CP quota used by CVs or shoreplants from counting against the limit.
Alt 2, Element 12: Change cooperative check-in notification from 48 hours to 24 hours	n/a	Use of the electronic reporting system allows vessels to quickly check-in to a cooperative. A 24 hour advance notice of check-in is sufficient to manage the fishery.

1.9.2 Rationale for the Council's Preferred Alternative

[TO BE COMPLETED AFTER A PREFERRED ALTERNATIVE IS SELECTED]

1.10 Alternatives Considered but not Analyzed Further

NMFS requested that the Council consider closing the RP Pacific cod fishery on November 1. Changing the closing date from November 15th to November 1st would be consistent with other GOA Pacific cod seasons and Steller sea lion (SSL) protection measures. Currently, there is an informal agreement

implemented by the fleet to stand down from November 1st through November 15th. All the RP fisheries close by regulation on November 15th and this action would only change when directed Pacific cod fishing could be undertaken by the RP cooperative participants. The Council rejected this alternative at the October 2019 meeting. However, NMFS is still planning to modify regulation to ensure the fishery functions as intended. A discussion of this issue is presented in Section 3.7.13.2.

NMFS requested that the Council consider changing the notice of landings requirements under the RP. Vessels are required to give two different notices of landing. First, the day prior to a landing to the rockfish CMCP monitor by email, text/phone. Second, 1 hour in advance to the rockfish monitor by text/phone. The variations in receiving notifications of deliveries over a 24/7 time period make it more difficult for the CMCP to intercept the vessel, especially in the middle of the night. The option proposed would have required notifications between 6am and 6pm, similar to the IFQ program. Vessels call-in to a data center between 6AM and 6PM and declare a landing/offload time at least 3 hours in advance of actual offload. Data center info is then made available to rockfish monitor. The vessel can continue to deliver at any time, but the notifications would be during business hours only. Because of the smaller number of vessels making deliveries the Council determined the cost of the change outweighed the benefits. The Council rejected this option at their October 2019 meeting.

No other alternatives or options have been considered for the CGOA rockfish fishery. The Council is considering continuing the RP as it is currently structured, making relatively minor adjustments to the RP, or allowing the fishery to revert back to LLP management. No other options have been identified by industry or the Council. The alternatives considered provide a range of management measures that allow the fishery to be managed under a LAPP or under a limited access system where eligible LLP holders compete for a share of the available CGOA rockfish species TACs.

2 Environmental Assessment

There are four required components for an environmental assessment. The purpose of this section is to analyze the environmental impacts of the Central Gulf of Alaska RP reauthorization. The need for the proposal is described in Chapter 1.1, and the alternatives in Chapter 1.6. A list of agencies and persons consulted is included in Section 5.

This chapter evaluates the direct, indirect, and cumulative impacts of the alternatives, options, and elements on the various resource components. The socio-economic impacts of this action are described in detail in the RIR of this analysis (Chapter 3).

Recent and relevant information, necessary to understand the affected environment for each resource component, is summarized in the relevant section. For each resource component, the analysis identifies the potential impacts of each alternative, and uses criteria to evaluate the significance of these impacts. If significant impacts are likely to occur, preparation of an EIS is required. Although an EA should evaluate economic and socioeconomic impacts that are interrelated with natural and physical environmental effects, economic and social impacts by themselves are not sufficient to require the preparation of an EIS (see 40 CFR 1508.14).

An environmental assessment must consider cumulative effects when determining whether an action significantly affects environmental quality. The Council on Environmental Quality (CEQ) regulations for implementing NEPA define cumulative effects as:

“...the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7).

The concept behind cumulative effects analysis is to capture the total effects of many actions over time that would be missed if evaluating each action individually. Concurrently, the CEQ guidelines recognize that it is most practical to focus cumulative effects analysis on only those effects that are truly meaningful.

2.1 Methods

This analysis was prepared using data from the NMFS catch accounting system as described in Section . Data were sourced using NMFS Alaska Region CAS and ADFG/CFEC Fish Tickets in Comprehensive_FT. AKFIN compiles the Comprehensive datasets. CAS was used to show total catch and total retained amounts. For biological and physical ecosystem components (target species stocks, non-target species, marine mammals, seabirds, and EFH), impacts of the alternatives were evaluated in a largely qualitative manner although data are presented to support conclusions.

The analyses presented in the sections below focus primarily on target stocks (Section 2.2), Chinook salmon and Pacific halibut (Section 2.3), and EFH (Section 2.4). Additional information on methods specific to the EA is described in this section.

Tissue samples were taken from Chinook salmon delivered to shore-based processing plants that were partners in RP cooperatives from 2013 through 2018. The goal was to sample all Chinook salmon taken as bycatch in the RP. A tissue sample from all Chinook taken in the shoreside component of the RP as well as snouts from any tagged Chinook salmon were sent to the NMFS Auke Bay Lab for study in 2017 and 2018. These samples were used to determine stock or origin of the Chinook salmon PSC. Otoliths

from all Chinook salmon were sent to ADFG Mark, Tag, and Age Laboratory to determine the proportion that were from wild stocks versus hatchery fish. This information is summarized in Section 2.3.

The Fishing Effects (FE) model is a cumulative effects model that incorporates habitat impacts and recovery at a monthly time step utilizing Vessel Monitoring System (VMS) data. VMS data is available for most GOA vessels starting in 2003. For the purposes of this analysis, three periods are considered 2003-2006 Limited Access Fishery; 2007-2011 RPP; and post-2012 the RP and the focus is on reduction in trawl gear contact with the sea floor. This information is summarized in Section 2.4.

2.1.1 Documents Incorporated by Reference in this Analysis

This EA relies heavily on the information and evaluation contained in previous environmental analyses, and these documents are incorporated by reference. The documents listed below contain information about the fishery management areas, fisheries, marine resources, ecosystem, social, and economic elements of the groundfish fisheries. They also include comprehensive analysis of the effects of the fisheries on the human environment and are referenced in the analysis of impacts throughout this chapter.

Alaska Groundfish Harvest Specifications Final Environmental Impact Statement (NMFS 2007).

This EIS provides decision makers and the public an evaluation of the environmental, social, and economic effects of alternative harvest strategies for the federally managed groundfish fisheries in the GOA and the Bering Sea and Aleutian Islands management areas and is referenced here for an understanding of the groundfish fishery. The EIS examines alternative harvest strategies that comply with Federal regulations, the Fishery Management Plan (FMP) for Groundfish of the GOA, the FMP for Groundfish of the Bering Sea/Aleutian Islands (BSAI) Management Area, and the Magnuson-Stevens Act. These strategies are applied using the best available scientific information to derive the TAC estimates for the groundfish fisheries. The EIS evaluates the effects of different alternatives on target species, non-specified species, forage species, prohibited species, marine mammals, seabirds, essential fish habitat, ecosystem relationships, and economic aspects of the groundfish fisheries. This document is available from <https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-harvest-specifications-environmental-impact-statement-eis>.

Stock Assessment and Fishery Evaluation (SAFE) Report for the Groundfish Resources of the GOA (NPFMC, 2018).

Annual SAFE reports review recent research and provide estimates of the biomass of each species and other biological parameters. The SAFE report includes the acceptable biological catch (ABC) specifications used by NMFS in the annual harvest specifications. The SAFE report also summarizes available information on the ecosystems and the economic condition of the groundfish fisheries off Alaska. This document is available from <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

Final Programmatic Supplemental Environmental Impact Statement (PSEIS) on the Alaska Groundfish Fisheries (NMFS 2004).

The PSEIS evaluates the Alaska groundfish fisheries management program as a whole and includes analysis of alternative management strategies for the GOA and BSAI groundfish fisheries. The EIS is a comprehensive evaluation of the status of the environmental components and the effects of these components on target species, non-specified species, forage species, prohibited species, marine mammals, seabirds, essential fish habitat, ecosystem relationships, and economic aspects of the groundfish fisheries. A Supplemental Information Report (SIR) (NPFMC and NMFS 2015) was prepared in 2015 which considers new information and affirms that new information does not indicate that there is now a

significant impact from the groundfish fisheries where the 2004 PSEIS concluded that the impact was insignificant. The PSEIS document is available from <https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-fisheries-programmatic-supplemental-environmental-impact>, and the SIR from <https://repository.library.noaa.gov/view/noaa/19481/Share>.

CGOA RP EA/RIR (NPFMC 2011)

Amendment 88 to the GOA FMP was developed to implement the RP in 2012. Information in that paper satisfied the regulatory requirements to implement the RP after the RPP expired. Many of the findings in that EA remain consistent with the impacts that would be realized under this action and are included by reference. <https://www.fisheries.noaa.gov/resource/document/secretarial-review-regulatory-impact-review-final-environmental-assessment>.

CGOA RP Review (NPFMC 2017)

A review of the CGOA RP (RP) is required under the Magnuson-Stevens Act and NOAA Fisheries requires an Allocation Review. This paper fulfills those review requirements, focusing on the goals and objectives of the program defined by the North Pacific Fishery Management Council, Magnuson-Stevens Act limited access privilege program requirements, and NOAA Fisheries guidance for program reviews. This review includes quantitative measures of the effectiveness of the program meeting the goals and objectives when data allows. A qualitative discussion of the impacts is provided when sufficient data are unavailable. This document is available from https://www.npfmc.org/wp-content/PDFdocuments/catch_shares/Rockfish/RockfishProgramReview1017.pdf.

2.1.2 Resource Components Addressed in the Analysis

Table 2-1 shows the components of the human environment and whether the proposed action and its alternatives have the potential to impact that resource component and thus require further analysis. Extensive environmental analysis on all resource components is not needed in this document because the proposed action is not anticipated to have environmental impacts on all resource components.

The effects of the alternatives on the resource components beyond the existing status quo would be caused by selecting the No Action alternative and returning the fishery to the race for fish under LLP management. Selecting Alternative 2 (maintaining the RP) will continue the current management structure under the LAPP and will not impact the resource components relative to the current conditions. The No Action alternative is anticipated to result in higher levels of groundfish bycatch and PSC mortality. Rockfish seasons in the CGOA are expected to shorten and take place in July instead of primarily May and June with greater daily effort when the season is open. Increased trawl gear contact with the sea floor could increase impacts to benthic habitat as vessel operators compete to harvest a portion of the available TAC. The changes in the fishery are also expected to have negative social and economic impacts on fishery participants.

Minimal or beneficial effects are expected on target species, unallocated species, and EFH. No effects are expected on ecosystem component species, marine mammals, seabirds, or the ecosystem. No effect is presumed for these components because fishing regulations (e.g., primarily a summer fishing season and gear types), harvest limits or regulations protecting habitat and important breeding areas as described in previous NEPA documents (North Pacific Fishery Management Council, 2011) would not be changed by any of the alternatives. No effects are presumed for marine mammals because neither existing protection measures nor allowable harvest amounts for important prey species would be changed. Moreover, under the existing RP, regulations would define the seasons in which trawl fishing is allowed, methods that may be used, areas in which trawling is allowed, and restrict the maximum amount of

trawling to TAC levels. None of the alternatives would change TAC amounts or areas closed to trawling. As a result, detailed analysis is included only for groundfish, prohibited species, habitat, and social and economic components, the only resource components which the proposed action may impact. A brief discussion of the other components are described in this section with information indicating why they are not considered to be a potentially affected resource component.

Table 2-1 Resources potentially affected by the proposed action and alternatives.

Potentially affected resource component							
Groundfish	Prohibited Species	Ecosystem Component Species	Marine Mammals	Seabirds	Habitat	Ecosystem	Social and economic
Y	Y	N	N	N	Y	N	Y

N = no impact anticipated by each alternative on the component.
 Y = an impact is possible if each alternative is implemented.

2.1.3 Cumulative Effects Analysis

This EA analyzes the cumulative effects of each alternative and the effects of past, present, and RFFA. Based on projected impacts of the alternatives, the resources with potentially meaningful cumulative effects are primary and secondary RP species, PSC species, habitat, and social and economic resource components. The cumulative effects on the other resources have been analyzed in numerous documents and the impacts of this proposed action and alternatives on those resources is minimal, therefore there is no need to conduct an additional cumulative impacts analysis.

Each section below provides a review of the relevant past, present, and RFFA that may result in cumulative effects on the resource components analyzed in this document. A complete review of the past, present, and RFFAs are described in the prior NEPA documents incorporated by reference and the SIR NMFS prepares to annually review of the latest information since the completion of the Alaska Groundfish Harvest Specifications EIS. SIRs have been developed since 2007 and are available on the NMFS Alaska Region website. Each SIR describes changes to the groundfish fisheries and harvest specifications process, new information about environmental components that may be impacted by the groundfish fisheries, and new circumstances, including present and reasonably foreseeable future actions. NMFS reviews the reasonably foreseeable future actions described in the Harvest Specifications EIS each year to determine whether they occurred and, if they did occur, whether they would change the analysis in the Harvest Specifications EIS of the impacts of the harvest strategy on the human environment. In addition, NMFS considered whether other actions not anticipated in the Harvest Specifications EIS occurred that have a bearing on the harvest strategy or its impacts. The SIRs provide the latest review of new information regarding Alaska groundfish fisheries management and the marine environment since the development of the Harvest Specifications EIS and provide cumulative effects information applicable to the alternatives analyzed in this EA.

Actions are understood to be human actions (e.g., a designation of northern right whale critical habitat in the Pacific Ocean), as distinguished from natural events (e.g., an ecological regime shift). CEQ regulations require consideration of actions, whether taken by a government or by private persons, which are reasonably foreseeable. This requirement is interpreted to indicate actions that are more than merely possible or speculative. In addition to these actions, the cumulative effects analysis includes the effects of climate change.

Actions are considered reasonably foreseeable if some concrete step has been taken toward implementation, such as a Council recommendation or NMFS’s publication of a proposed rule. Actions only “under consideration” have not generally been included, because they may change substantially or may not be adopted, and so cannot be reasonably described, predicted, or foreseen. Identification of

actions likely to impact a resource component within this action's area and time frame will allow the public and Council to make a reasoned choice among alternatives.

2.2 Target Species

One of the goals of the RPP was to enhance resource conservation in the CGOA rockfish fisheries. The RP was intended to continue the cooperative management structure that provides the fleet with tools to minimize bycatch to the extent practicable, reduce discards and improve utilization of groundfish species. This section provides an overview of the status of the RP primary and secondary species stocks before and after implementation of the program to provide a basis for evaluating the impacts of continuing the program or not under the alternatives. Much of the information presented for primary and secondary RP species is taken from the most recent GOA SAFE document (NPFMC, 2018) in addition to the documents referenced in Section 2.1.1.

The RP primary species are northern rockfish, POP, and dusky rockfish. The RP secondary species are Pacific cod, rougheye rockfish, shortraker rockfish, sablefish, and thornyhead rockfish. The RP primary species stocks are assessed biennially as three distinct species in Federal waters. The RP secondary species stocks are assessed either biennially or annually and GOA-wide biomass estimates are available each year. The RP primary and secondary species are not overfished and are not approaching overfished levels.

An ABC and TAC is specified for each species, which is apportioned to the GOA management areas (Western, Central, and Eastern) based on the distribution of survey biomass. Pertinent information on the biology, ecological relationships and fishery information on each species is summarized in this section.

TAC for each species allocated under the CGOA RP are reported in this section for 2003 through 2019. Catch data are reported for 2003 through 2018. These years represent the longest times series of complete fishing years when consistent catch data are available. Primary RP species TACs are set equal to the ABC. Over Fishing Levels (OFL) are set GOA-wide for Northern rockfish and dusky rockfish. OFLs for POP are set for the Southeast Outside area and the combined Western, Central, and West Yakutat areas. Because there is no OFL set for the CGOA it is not reported and the ABCs are not reported since they are equal to the TAC.

2.2.1 Status of Primary RP Species

The primary rockfish species in the program are POP, northern rockfish, and dusky rockfish and they are assessed biennially as three distinct species. These are the three rockfish species that had traditionally been open to directed fishing in the CGOA.

Adult rockfish range in size from about 12 cm to about 104 cm, but most species are between 38 cm and 51 cm. Reproduction is generally through internal fertilization and live birth. Adult rockfish species have different habitats. Demersal shelf rockfish live in near-shore shallower waters on rocky bottom, pelagic shelf rockfish are often found near the bottom and up in the water column, and other species live in deeper waters. Rockfish are long-lived, slow-growing fish with most species having maximum ages over fifty years old. Shortraker and rougheye rockfish are some of the oldest of the rockfish.

GOA rockfish species that are not included as primary or secondary species are not managed under the RP. These species include flatfish, pollock, Atka mackerel, rockfish species not included in the RP, and sculpins. The RP sector allocation of the primary species is equal to the CGOA TAC minus the ICA established for bycatch needs in other target fisheries, and the allocation to the longline entry level fishery. The figures presented later in this section (and are repeated in the RIR) report the CGOA TACs and RP catch of the three primary species.

Table 2-2 provides a summary of the three primary species apportionments for 2019. The fishing season is from May 1 through November 15. Under the RP most of the catch occurs in May and June when harvesters and processors have fewer opportunities. Under the No Action alternative the fishery is expected to occur in July, with the fisheries being closed after about three weeks because either the available TAC is taken or a PSC limit is reached.

Table 2-2 Primary RP Species Apportionments, 2019

Rockfish primary species	CGOA annual ABC/TAC	ICA	TAC minus ICA	Allocation to the entry level longline ¹ fishery	Allocation to the rockfish cooperatives
POP	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

¹ Longline gear includes hook-and-line, jig, troll, and handline gear ([50 CFR 679.2](#)).

Pacific Ocean Perch¹¹

POP (*Sebastes alutus*) is a demersal rockfish species with a wide geographic distribution from California to the North Pacific and the Bering Sea to the Kuril Islands (Hanselman et al. 2003). They are a long-lived, slow-growing rockfish species, with maximum age estimated to be in excess of 90 years.

CGOA POP TACs ranged between 6,000 mt and 10,000 mt until 2010 and increased to 20,112 mt in 2018 before declining slightly to 19,656 mt in 2019 (Figure 2-1). Spawning biomass was projected to decrease slightly (~2 percent) in 2019 but the stock remains well above B40%¹². The stock is not being subjected to overfishing and is neither overfished nor approaching an overfished condition.

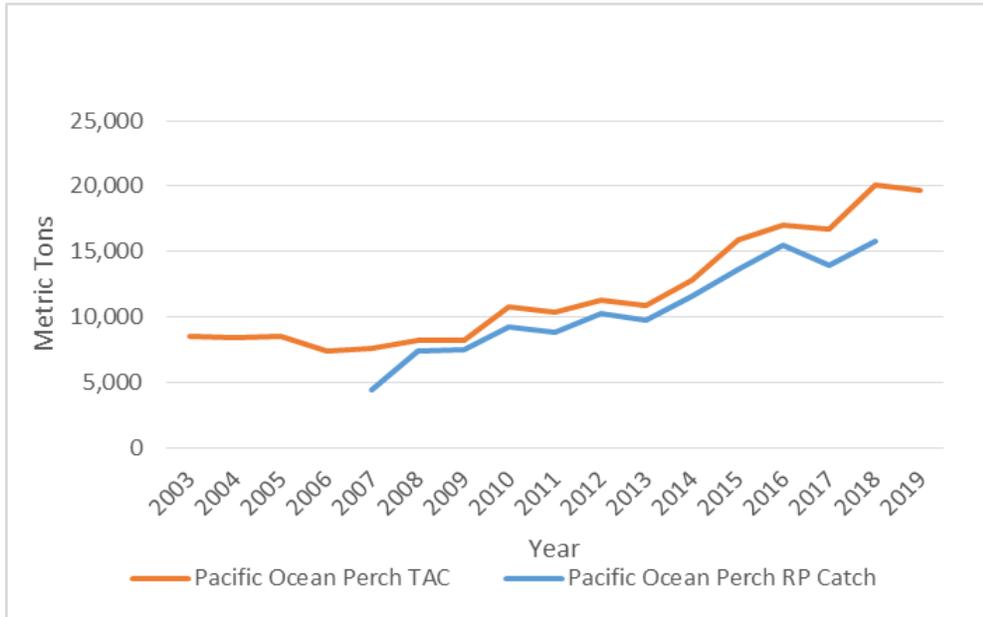
POP abundance is influenced by periodically abundant year classes. Availability of abundant zooplanktonic prey for POP larvae or post-larvae may be an important determining factor in year class strength. However, there is no information on food habits of larval or post-larval rockfish thus it is difficult to draw a relationship between food availability and year class strength. Some juvenile rockfish in inshore habitat have been found to prey on shrimp, amphipods, other crustaceans, mollusks and some fish.

POP are preyed upon by a variety of other fish at all life stages and to some extent marine mammals as well during late juvenile and adult stages. Documented predators include Pacific halibut and sablefish and it is likely that Pacific cod and arrowtooth flounder also prey upon POP (NMFS 2004b). Pelagic juveniles are consumed by salmon and benthic juveniles are consumed by lingcod and other demersal fish (NMFS 1997). The relative population impact of predators is unknown, although it is presumed predation would have a larger impact at the larval, post-larval and juvenile life stages. Information on these life stages and their related predators however is unknown.

¹¹ Much of this information is incorporated from the SAFE: <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

¹² 40% of the unfished stock size.

Figure 2-1 CGOA POP TAC and RP catch



Source: NMFS annual Specifications and AKFIN summary of CAS data

Northern Rockfish¹³

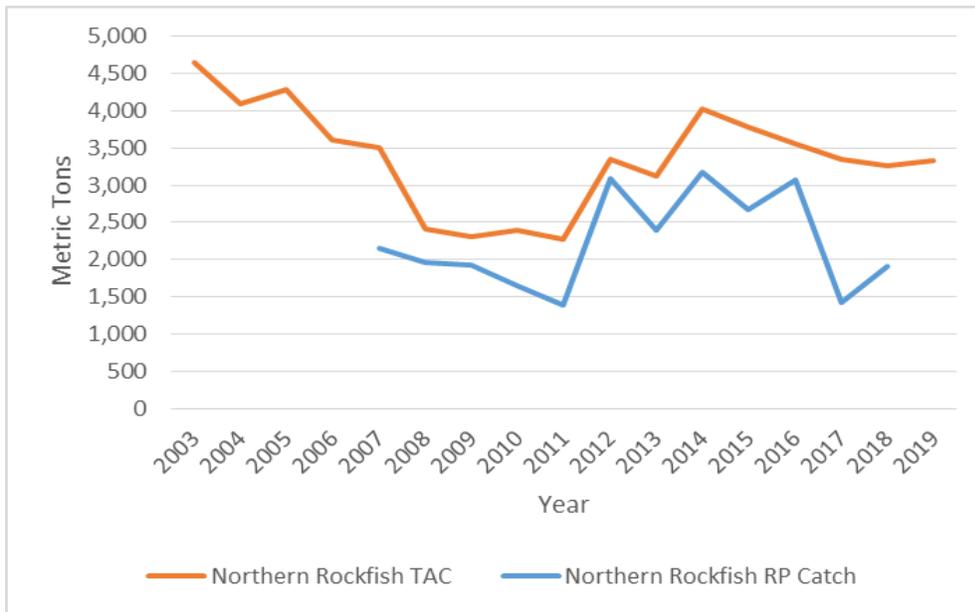
The northern rockfish, *Sebastes polyspinis*, are a semidemersal long-lived rockfish species. Their distribution ranges from northern British Columbia across the Pacific Rim to eastern Kamchatka and the northern Kurile Islands to the eastern Bering Sea (Allen and Smith 1988). They are most abundant throughout their northerly range in Alaskan waters from the western end of the Aleutian Islands to Portlock Bay in the CGOA. There is little known about the life history of northern rockfish.

While there is limited information on the habitat preference of juvenile northern rockfish, trawl surveys and commercial fishery data have indicated that adult northern rockfish prefer relatively shallow banks on the outer continental shelf at depths between 75 meters and 150 meters. These data also indicate that within this habitat adult northern rockfish have patchy, localized distributions. This may be a result of the prey availability of euphausiids. This distribution of prey may help to explain the observed patchy distribution of northern rockfish.

The Northern rockfish CGOA TACs ranged from a low of 2,281 mt in 2011 to a high of 4,640 in 2003 (Figure 2-2). The 2019 TAC is set at 3,338 mt, or about 30 mt below the 2003 through 2019 average. The 2019 spawning biomass estimate (36,365 t) is above B40 percent (30,480 t) and projected to decrease to 34,046 t in 2020. Total biomass (2+) for 2019 is 87,409 t and is projected to decrease to 84,326 in 2020. Northern rockfish stock is not being subjected to overfishing and is neither overfished nor approaching an overfished condition.

¹³ Much of this information is incorporated from the SAFE: <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

Figure 2-2 CGOA Northern rockfish TAC, total trawl gar catch, and RP catch



Source: NMFS annual Specifications and AKFIN summary of CAS data

Dusky Rockfish¹⁴

Dusky rockfish (*Sebastes ciliatus*) yellowtail rockfish (*S. flavidus*), and widow rockfish (*S. entomelas*) make up the pelagic shelf rockfish species. Of these three, dusky rockfish is the most important species Gulf-wide in the assemblage while the other two species are minor parts of the assemblage in Alaskan waters. Dusky rockfish has the northernmost distribution of all rockfish species in the Pacific Ocean. While the species range extends from British Columbia north to the Bering Sea and west to Hokkaido Island, Japan, the species appears to be abundant only in the GOA.

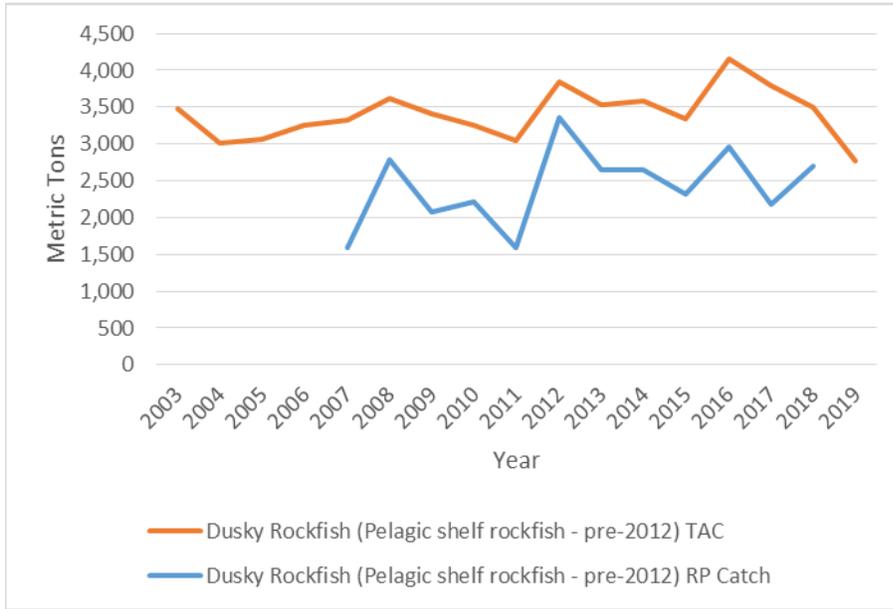
There are two distinct species of dusky rockfish in the GOA, a lighter-colored species (light dusky), found in more offshore waters and a darker-colored species found in shallow waters closer inshore (Clausen et al. 2003). The majority of available data on dusky rockfish from trawl surveys and the commercial fishery are on light dusky rockfish.

The stock condition of dusky rockfish is influenced by periodically abundant year classes. As with the other rockfish species, the availability of zooplankton prey may play an important role in year class strength, however there is insufficient information available on food habits to determine this.

Dusky rockfish TACs remained fairly steady over the years considered (Figure 2-3). TACs ranged from 2,760 mt in 2019 to 4,147 mt in 2016. The 2019 TAC was 646 mt below the 2003 through 2019 average. The dusky rockfish TAC is about the same size as the Northern Rockfish TAC, but only about 15 percent of the POP TAC. The stock is not being subjected to overfishing, is not currently overfished, nor is it approaching an overfished condition.

¹⁴ Much of this information is incorporated from the SAFE: <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

Figure 2-3 CGOA dusky rockfish TAC, total trawl gar catch, and RP catch



Source: NMFS annual Specifications and AKFIN summary of CAS data

2.2.2 Status of Secondary RP Species

Secondary species allocated under the RP include three rockfish species, Pacific cod, and sablefish. These species may be taken as a directed fishery in the RP, if sufficient CQ is available, or taken as incidental catch when directed fishing for the primary RP species.

Shortraker rockfish, rougheye rockfish, and blackspotted rockfish¹⁵

As with most other rockfish, shortraker rockfish (*Sebastes borealis*) and rougheye rockfish (*Sebastes aleutianus*) are slow growing and long-lived. They inhabit waters of the outer continental shelf and continental slope. Shortraker rockfish are consistently most abundant in the Yakutat area. Rougheye rockfish are typically most abundant in the Southeastern area. Estimates of maximum age of shortraker rockfish is 120 years, while estimates of maximum age of rougheye rockfish range from 90 years to 140 years. As with other slope rockfish, shortraker rockfish and rougheye rockfish appear to be influenced by periodic abundant year classes.

When the RPP was implemented in 2007, the Council elected to use more precise and limiting management to avoid possible overharvest of shortraker rockfish and rougheye rockfish. Catcher processor cooperatives are limited by constraining allocations with no discards permitted. Catcher processors in the limited access fishery and all CVs are limited by a 2 percent maximum retainable amount (MRA), applicable to shortraker rockfish and rougheye rockfish in the aggregate. This more species specific reduced MRA is intended to limit any potential incentive to “top off” on these two species.

The last full assessment for GOA shortraker rockfish was in 2015. Applying the random effects model to trawl survey data from 1984–2017 results in a 2018 biomass of 38,361 t for shortraker rockfish, a 33 percent decrease from the previous year’s biomass (57,175 t). Shortraker rockfish are Tier 5 species for

¹⁵ Much of this information is incorporated from the SAFE: <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

specifications where $F_{ABC}^{16} = 0.75M = 0.0225$, and $F_{OFL}^{17} = 0.03$; applying this definition to the biomass results in an ABC of 863 t and an OFL 1,151 t for 2018. Available data are insufficient to determine stock status relative to overfished criteria. This stock was not being subjected to overfishing in 2018.

Rougheye and blackspotted rockfish are assessed on a biennial stock assessment schedule to coincide with the availability of new survey data. For GOA rougheye and blackspotted rockfish in alternate (even) years, a partial assessment is provided to recommend harvest levels for the next two years. New data added to the projection model included updated catch through Oct 6, 2018. Spawning biomass and stock status trends Female spawning biomass (14,995 t) is above B_{40} percent (8,998 t) and projected to remain stable. The rougheye/blackspotted complex qualifies as a Tier 3a stock. This stock is not being subjected to overfishing and is neither overfished nor approaching an overfished condition.

Thornyheads¹⁸

Thornyhead rockfish are long-lived, slow-growing high value rockfish species in Alaskan waters. The shortspine thornyhead rockfish, *Sebastolobus alaskanus*, are abundant in the GOA and are of commercial importance as a high value rockfish species. Longspine thornyhead rockfish, *S. altivelis*, as well as another thornyhead rockfish species common off Japan, *S. macrochir*, are infrequently encountered in the GOA, thus annual assessments focus upon the shortspine thornyhead rockfish. Shortspine thornyhead rockfish are a demersal species found in deep waters from 92 meters to 1,460 meters with a geographic distribution extending from the Bering Sea and GOA to Baja California. The ABC and TAC for thornyhead rockfish are apportioned by each of the three GOA areas while the OFL is managed Gulf-wide.

Estimates of spawning biomass are unavailable for thornyheads. The most recent 2017 trawl survey estimate was 10 percent lower than the 2015 estimate, whereas the 2017 longline survey was 38 percent higher than the 2016 estimate, and then decreased by 18 percent in 2018. The thornyhead complex is a Tier 5 stock, and biomass is estimated by applying the random effects method to the trawl and longline survey biomass time series by region and depth in order to compensate for missing data (i.e., thornyheads are found down to 1000m, but deep survey strata are not sampled in in each trawl survey). The biomass estimates from the random effects model show a slightly increasing trend from about 2010-2017 and a projected stable trend after 2017. Tier determination/Plan Team discussion and resulting ABCs and OFLs Gulf-wide catch of thornyheads in 2017 was 52 percent of the ABC. The thornyhead complex is not being subjected to overfishing. Information is insufficient to determine stock status relative to overfished criteria as estimates of spawning biomass are unavailable.

Pacific cod¹⁹

Pacific cod (*Gadus macrocephalus*), also known as grey cod, are moderately fast-growing and short-lived fish. Pacific cod is a transoceanic species, occurring at depths from shoreline to 500 meters. A primary ecosystem phenomenon affecting Pacific cod seems to be the periodic occurrence of “regime shifts.” Major trends in predators and prey can be expected to affect Pacific cod dynamics. Small Pacific cod feed mostly on invertebrates, while large Pacific cod are mainly piscivorous. Predators for Pacific cod include halibut, salmon shark, northern fur seals, Steller sea lions, harbor porpoises, various whale species, and

¹⁶ The fishing mortality rate used to compute ABC.

¹⁷ The fishing mortality rate used to compute OFL.

¹⁸ Much of this information is incorporated from the SAFE: <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

¹⁹ Much of this information is incorporated from the SAFE: <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

tufted puffin. Potentially, fisheries for Pacific cod can have effects on other species in the ecosystem through a variety of means. Pacific cod is important winter prey for Steller sea lions.

The 2017 trawl survey biomass estimate was the lowest in the time series, which began in 1984, and was 58 percent lower than the 2015 estimate. The longline survey RPN for 2018 dropped 40 percent from 2017 to 2018 and was 73 percent lower than the 2015 RPN estimate. The B40 percent estimate was 68,896 t, with projected 2019 spawning biomass of 34,701 t. The 2012 year-class remains the strongest in the recent period, followed closely by the 2013 year-class. Recruitment since 2013 is below the 1977-2015 average. Spawning biomass was projected to decline through 2020. The 2018 spawning biomass is estimated to be at 20.4 percent of B₁₀₀ percent. The F₃₅ percent and F₄₀ percent values are 0.76 and 0.62, respectively. The maximum permissible ABC is 19,665 t but the stock assessment authors recommended that it be reduced so that the projected biomass is above 20 percent of B₁₀₀ percent in 2019 (if the stock is below B₂₀ percent, directed fishing is prohibited due to Steller sea lion regulations). The recommended ABC is 17,000 t for 2019 which is a 6 percent decrease from the 2018 ABC of 18,000 t. The stock is not being subjected to overfishing and is neither overfished nor approaching an overfished condition.

Sablefish²⁰

Sablefish (*Anoploma fimbria*) are distributed from northern Mexico to the GOA, westward to the Aleutian Islands and into the Bering Sea. Adult sablefish are found along the continental slope, gullies and deep fjords generally at depths greater than 200 meters. Sablefish are assessed as a single population in federal waters off Alaska because northern sablefish are highly migratory for at least part of their life. Sablefish are managed by discrete regions to distribute exploitation throughout their wide geographical range. There are four management areas in the GOA (Western, Central, West Yakutat, and East Yakutat/Southeast Outside) and two management areas in the BSAI.

Spawning is pelagic at depths of 300 meters to 500 meters near the edges of the continental slope. During surveys of the outer continental shelf, most young-of-the-year sablefish are caught in the central and eastern GOA. Near the end of the first summer, pelagic juveniles less than 20 cm drift inshore and spend the winter and following summer in inshore waters, reaching 30 cm to 40 cm by the end of their second summer. After their second summer, they begin moving offshore, typically reaching their adult habitat, the upper continental slope at 4 to 5 years.

Projected 2019 spawning biomass is 33 percent of unfished spawning biomass. The longline survey abundance index increased 9 percent from 2017 to 2018 following a 14 percent increase between 2016 and 2017. However, the lowest point of the time series occurred in 2015. Spawning biomass is projected to increase rapidly from 2019 to 2022, and then stabilize. The stock assessment authors recommended the 2019 ABC be equal to the 2018 recommendation, which equates to a 45 percent reduction from maximum permissible ABC. While there are clearly positive signs of incoming recruitment, concerns regarding stock status remain. The 2018 spawning biomass was estimated to be lower than the 2017 estimate. Uncertainty of the magnitude of the 2014 year class estimate was high (the 2018 estimate was 30 percent lower than the value from the 2017 assessment), and the retrospective pattern has increased in the last two years (with a positive pattern). The 2014 year class was estimated to comprise 10 percent of the 2019 spawning biomass, despite being less than 20 percent mature. Also, uncertainty about the environmental conditions and how they may affect the 2014 year class was highlighted. Model projections indicate that this stock is not subjected to overfishing, not overfished, nor approaching an overfished condition

²⁰ Much of this information incorporated from the SAFE: <https://www.fisheries.noaa.gov/alaska/population-assessments/2018-north-pacific-groundfish-stock-assessments#gulf-of-alaska-stock-assessments>

2.2.3 Effects of the Alternatives on Target Species

The effects of the CGOA rockfish fishery on the rockfish stock is assessed annually in the GOA SAFE report (NPFMC, 2018) and was also evaluated in the Alaska Groundfish Fisheries Harvest Specifications EIS (NMFS, 2007). Table 2-3 describes the criteria used to determine whether the impacts on target fish stocks are likely to be significant. The primary and secondary rockfish stocks, CGOA sablefish stocks, and CGOA Pacific cod stocks are neither overfished nor subject to overfishing. It is estimated that the GOA stocks of those species are sustainable under all of the alternatives considered and the impact is insignificant as defined in Table 2-3.

Table 2-3 Criteria used to determine significance of effects on target groundfish stocks.

Effect	Criteria			
	Significantly Negative	Insignificant	Significantly Positive	Unknown
Fishing mortality	Changes in fishing mortality are expected to jeopardize the ability of the stock to sustain itself at or above its MSST (minimum stock size threshold)	Changes in fishing mortality are expected to maintain the stock's ability to sustain itself above MSST	Changes in fishing mortality are expected to enhance the stock's ability to sustain itself at or above its MSST	Magnitude and/or direction of effects are unknown
Stock Biomass: potential for increasing and reducing stock size	Reasonably expected to jeopardize the capacity of the stock to yield sustainable biomass on a continuing basis.	Reasonably expected not to jeopardize the capacity of the stock to yield sustainable biomass on a continuing basis.	Action allows the stock to return to its unfished biomass.	Magnitude and/or direction of effects are unknown
Spatial or temporal distribution	Reasonably expected to adversely affect the distribution of harvested stocks either spatially or temporally such that it jeopardizes the ability of the stock to sustain itself.	Unlikely to affect the distribution of harvested stocks either spatially or temporally such that it has an effect on the ability of the stock to sustain itself.	Reasonably expected to positively affect the harvested stocks through spatial or temporal increases in abundance such that it enhances the ability of the stock to sustain itself.	Magnitude and/or direction of effects are unknown

The alternatives considered are reasonably expected not to jeopardize the capacity of the stock to yield sustainable biomass on a continuing basis. Whether the fishery is managed under a LAPP or the LLP, NMFS will continue to conservatively manage the fishery to help ensure that the ABC is not exceeded for any of the target species.

Spatial and temporal distribution of the harvest is expected to change under the No Action alternative. RP target species harvests would shift from being primarily harvested in May and June to being harvested in July. Selection of Alternative 2, to retain the RP structure, will maintain the fishery so that the target rockfish species are harvested during May through mid-November, with most of the harvest occurring in May and June before the start of the pink salmon fishery. However, all the alternatives are unlikely to affect the distribution of harvested stocks either spatially or temporally such that they have an effect on the ability of the stock to sustain itself.

Cumulative Effects on Target Species

The Council is considering an extension of an existing program that retains the objectives of conservation, management, safety, and economic gains created by the current RP. Other government actions and private actions may increase pressure on the sustainability of target and prohibited fish stocks either through extraction or changes in the habitat, but it not clear that these would result in significant cumulative effects. Considering the direct and indirect impacts of the proposed action when added to the impacts of past and present actions previously analyzed in other documents that are incorporated by reference and

the impacts of the reasonably foreseeable future actions listed above, the cumulative impacts of the proposed action are determined to be insignificant. The effects of the RP on the target species stocks is assessed annually in the GOA SAFE report and was also evaluated in the Alaska Groundfish Fisheries Harvest Specifications EIS (NMFS 2007a).

Climate change is the only RFFA identified as likely to have an impact on primary and secondary species allocated within the action area and timeframe. Two indicators presented in the GOA 2017 Ecosystem Status Report concerned the status of GOA northern rockfish (NPFMC, 2018). The GOA SAFE noted that GOA bottom trawl survey data for several species of adult rockfish was used to compare the CPUE along environmental gradients of depth, bottom temperature and position. No significant trends were observed across any rockfish species, suggesting that rockfish are not responding to temperature fluctuations by adjusting depth or distribution to maintain constant temperature. YOY rockfish abundance was low in 2017 compared to previous years with a potentially northerly distribution shift based on the center of gravity estimates as well as some range expansion.

2.3 Unallocated Species and PSC Species

In prosecuting the targeted rockfish fisheries in the CGOA, participating catcher processors and CVs in the fisheries also catch prohibited species. Retention of prohibited species is not allowed in the GOA groundfish fisheries, including the trawl rockfish fishery. The Magnuson-Stevens Act prohibition on retention of prohibited species harvests was intended to eliminate any incentive that groundfish fishermen might otherwise have to target these species: Pacific halibut (*Hippoglossus stenolepis*), Pacific salmon (*Oncorhynchus spp.*), steelhead trout (*Oncorhynchus mykiss*), Pacific herring (*Clupea pallasii*), red king crab (*Paralithodes camtschaticus*), blue king crab (*P. platypus*), golden or brown king crab (*Lithodes aequispinus*), bairdi Tanner crab (*Chionoecetes bairdi*) and opilio Tanner crab (*C. opilio*). More information on PSC by CVs and CPs can be found in Section 3.5.1.4.

2.3.1 Status of Unallocated Species

All non-allocated rockfish secondary species harvested in the CGOA rockfish fisheries will be managed by MRA, the same as under current management. These non-allocated species include arrowtooth flounder, deep-water flatfish, shallow-water flatfish, flathead sole, rex sole, pollock, other species, Atka mackerel, and other rockfish.

The information from the most recent GOA Groundfish SAFE document is included by reference (NPFMC, 2018). None of the unallocated species taken in the rockfish fishery are overfished or subject to overfishing. Table 2-4 provides a summary of the 25 species that were reported to have been harvested at the highest levels in the CGOA rockfish target fishery from 2003 through 2018. The primary (blue shaded) and secondary (grey shaded) species are included in the table. The unallocated species with the highest levels of reported catch are arrowtooth flounder, pollock, Atka mackerel, various rockfish species, and various flatfish species. Other species were also taken in the CGOA rockfish fishery, but at very low levels and catch tended to vary by year.

Table 2-4 Summary of groundfish catch in CGOA rockfish target fishery, 2003 through 2018

Species	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
perch, Pacific ocean	6,547	7,068	7,105	6,566	7,060	7,398	7,470	9,900	9,390	10,056	9,614	11,385	13,446	15,078	13,638	15,761	9,843
rockfish, northern	4,321	3,346	3,267	3,324	2,865	1,960	1,914	1,772	1,429	3,079	2,362	2,859	2,644	3,070	1,401	1,855	2,592
rockfish, dusky	1,961	1,919	1,550	1,423	2,233	2,764	2,064	2,337	1,883	3,199	2,614	2,533	2,279	2,877	2,071	2,622	2,271
flounder, arrowtooth	296	298	185	52	56	109	53	217	87	622	487	1,016	1,222	1,070	1,261	472	469
cod, Pacific (gray)	1,409	1,306	756	332	140	213	324	374	347	234	291	351	481	281	182	296	457
sablefish (blackcod)	715	731	708	483	339	280	238	285	281	348	321	337	227	260	312	309	386
pollock, walleye	45	81	144	111	38	93	398	796	552	385	538	728	752	115	521	319	351
greenling, atka mackerel	127	15	337	98	86	306	253	304	264	260	523	213	505	415	92	481	267
rockfish, thornyhead	386	182	195	166	72	67	47	64	72	60	93	137	158	267	255	221	153
rockfish, harlequin	12	44	199	41	36	67	76	54	78	154	64	244	213	421	340	369	151
rockfish, rougheye	90	34	48	32	25	22	24	92	239	192	265	332	198	311	207	245	147
rockfish, shortraker	410	97	135	117	67	56	43	28	77	173	190	150	130	121	86	127	126
rockfish, sharpchin	110	74	1	30	51	9	39	29	11	42	12	39	27	116	99	142	52
sole, rex	65	30	29	17	26	24	31	40	31	38	42	64	84	123	79	96	51
rockfish, redstripe	15	3	1	6	16	10	7	38	26	17	13	44	15	88	35	132	29
rockfish, yelloweye	10	19	11	10	14	26	24	25	23	49	30	39	52	42	24	28	27
sole, flathead	49	17	57	13	8	8	18	17	6	9	14	14	33	25	71	23	24
sole, rock	43	70	24	9	5	13	11	12	12	25	4	15	10	8	4	6	17
sole, dover	35	31	11	8	26	7	16	14	8	26	15	16	15	24	8	15	17
rockfish, redbanded	10	8	8	4	8	5	12	6	15	5	7	20	12	25	16	25	12
rockfish, silvergray	6	2			1	1	2	3	13	17	5	20	25	38	38	15	13
rockfish, widow	6	49		1	1	0	3	10	7	9	4	14	8	7	9	12	9
skate, longnose		4	7	3	1	4	3	2	6	7	7	8	10	22	28	15	9
skate, big		6	5	3	0	4	2	4	5	7	1	0	3	1	3	2	3
skate, other	22	2	3	0	2	1	2	1	0	2	1	1	0	0	1	5	3
sculpin, general	4	2	1	0	1	1	2	3	1	8	2	3	2	5	2	3	3
shark, spiny dogfish	1	0	1	0	1	1	1	1	0	0	4	1	1	1	10	11	2
rockfish, darkblotched				23		0						4	0	0		0	5
rockfish, other	19		0	4		1											6
Kamchatka flounder										1		0	1	0			21
Total	16,714	15,440	14,788	12,877	13,177	13,449	13,076	16,428	14,866	19,025	17,527	20,587	22,554	24,812	20,791	23,629	17,484

Source: AKFIN Summary of CAS data

Note: Blue shaded cells are primary species, grey shaded cells are secondary species, and unshaded cells are not allocated under the RP.

2.3.2 Status of PSC Species

The information presented in this section focuses on halibut PSC and Chinook salmon PSC from the CGOA trawl fisheries by vessels that participate in the RP. However, Table 2-5 is presented to show all the PSC species taken in the CGOA trawl rockfish fishery from 2003 through 2018. Bycatch of those species tended to be very low in both the CP and CV sectors with minimal amounts of crab and herring estimated as having been caught. Other salmon (primarily chum salmon) varied by year with a maximum taken in the CP sector of 1,899 fish taken in 2013 and a low of 0 in 2007. Chinook salmon bycatch was 1,506 fish in 2007, the most of any year considered. This highlights that salmon bycatch in the rockfish fishery varies by year and Chinook salmon and other salmon do not always trend in the same direction.

Table 2-5 Summary of all PSC species taken in the CGOA rockfish trawl fishery from 2003 through 2018

Sector	Year	Groundfish (mt)	Halibut (mt)	Chinook salmon (count)	Other salmon (count)	Red king crab (count)	Bairdi (count)	Golden king Crab (count)	Other tanner crab (count)	Herring (kgs)	
CP	2003	5,641	65.0	0.0	29.3	56.9	13.0	1.6		0.0	
	2004	5,808	45.7	71.5	131.6	222.0	10.0	218.6		0.0	
	2005	6,362	57.8	352.0	0.0	0.0	12.0	0.0		0.0	
	2006	5,457	32.5	0.0	195.0	0.0	11.0	0.0		0.0	
	2007	4,516	25.8	1,506.0	0.0	0.0	10.0	98.0		0.0	
	2008	5,531	30.4	280.0	117.0	0.0	10.0	93.0		0.0	
	2009	4,996	19.1	299.0	107.0	0.0	18.0	0.0		0.0	
	2010	7,086	34.1	251.0	125.0	0.0	14.0	38.0		0.0	
	2011	6,689	19.1	381.7	104.0	0.0	13.0	0.0		0.0	
	2012	8,489	24.1	439.0	104.0	0.0	16.0	74.0		0.0	
	2013	7,994	33.7	1,059.0	1,899.0	0.0	19.0	90.0		0.0	
	2014	9,535	33.7	146.3	260.0	0.0	17.0	0.0		0.0	
	2015	11,004	56.5	104.0	208.0	0.0	19.0	19.0		0.0	
	2016	10,711	47.3	235.0	0.0	0.0	22.0	0.0		0.0	
	2017	10,586	54.1	133.0	49.0	0.0	23.0	9.0		0.0	
	2018	10,739	27.0	1.0	138.0	0.0	17.0	0.0		0.0	
	CP Average		7,571	38	329	217	17	15	40	0	0
	CV	2003	11,074	140.8	503.8	2,025.5	0.0	28.0	0.0		0.0
2004		9,644	197.2	734.5	252.0	0.0	26.0	48.3		0.0	
2005		8,432	129.7	96.1	3,236.9	0.0	27.0	0.0		0.0	
2006		7,423	72.2	253.5	1,058.0	0.0	33.0	0.0	0.0	0.0	
2007		8,661	19.7	498.8	277.7	0.0	89.0	0.0		0.0	
2008		7,919	11.5	1,628.3	130.6	0.0	73.0	1.0		0.0	
2009		8,080	11.3	860.2	309.7	0.0	59.0	34.7		0.0	
2010		9,358	15.8	996.9	190.9	0.0	72.0	0.0		0.0	
2011		8,180	24.9	370.8	71.5	0.0	67.0	0.0	0.0	0.0	
2012		10,545	11.6	673.6	114.0	0.0	82.0	8.6		0.0	
2013		9,536	16.3	1,262.8	93.1	0.0	79.0	11.7		0.0	
2014		11,056	18.8	503.6	0.0	0.0	74.0	33.8		0.0	
2015		11,554	22.8	1,810.9	63.1	0.0	73.0	0.0		0.0	
2016		14,110	25.5	148.3	216.5	0.0	75.0	19.7	0.0	0.0	
2017		10,219	29.3	386.8	50.9	0.0	78.0	24.9		0.0	
2018		12,901	27.3	274.6	141.4	0.0	87.0	31.4	0.0	0.0	
CV Average			9,918	48	688	514	0	64	13	0	0

Source: AKFIN summary of PSC data

Chinook Salmon²¹

In the GOA, the primary species of concern for salmon bycatch is Chinook salmon (*Oncorhynchus tshawytscha*), which is caught almost exclusively in trawl gear. The Chinook salmon is the largest of all Pacific salmon species, with weights of individual fish commonly exceeding 30 pounds. North Pacific Chinook salmon are the subject of commercial, subsistence, personal use, and sport/recreational (used interchangeably) fisheries. Chinook salmon are the least abundant of the five salmon species found on both sides of the Pacific Ocean and the least numerous in the Alaska commercial harvest. In North America, Chinook salmon range from the Monterey Bay area of California to the Chukchi Sea area of Alaska. On the Asian coast, Chinook salmon occur from the Anadyr River area of Siberia southward to Hokkaido, Japan. In Alaska, they are abundant from the southeastern panhandle to the Yukon River.

In summer, Chinook salmon concentrate around the Aleutian Islands and in the Western GOA. Chinook salmon typically have relatively small spawning populations and the largest river systems tend to have the largest populations. Major populations of Chinook salmon return to the Yukon, Kuskokwim, Nushagak,

²¹Overview information on Chinook salmon can be found at:
<http://www.adfg.alaska.gov/index.cfm?adfg=CommercialByFisherySalmon.main#chinook>

Susitna, Kenai, Copper, Alsek, Taku, and Stikine rivers with important runs also occurring in many smaller streams.

The majority of the Alaska commercial catch is made in Southeast Alaska, Bristol Bay, and the Arctic-Yukon-Kuskokwim area. The majority of catch is made with troll gear and gillnets. Approximately 90 percent of the subsistence harvest is taken in the Yukon and Kuskokwim rivers. The Chinook salmon is one of the most highly prized sport fish in Alaska and is extensively fished by anglers in the Southeast and Cook Inlet areas. Unlike other Pacific salmon species, Chinook salmon rear in inshore marine waters and are, therefore, available to commercial and sport fishers all year round.

Throughout the West Coast, nine²² species of Chinook salmon are protected under the Endangered Species Act. Eight of those Chinook salmon species are listed as threatened and one as endangered. The West Coast Region of NMFS works with its partners to protect, conserve, and recover Chinook by addressing the threats these animals face and by restoring the habitat on which they depend.

A summary of the Chinook salmon bycatch in the CGOA by vessels in the RP is presented in Table 2-6. The information shows that the majority of Chinook salmon bycatch occurs in the pollock fishery when pelagic trawl gear is used. Flatfish fisheries using non-pelagic gear typically taken the next greatest number of Chinook, followed by Pacific cod or rockfish directed fisheries depending on the year.

Rockfish target fisheries accounted for between 2 percent and 19 percent of the Chinook salmon taken in the CGOA groundfish fisheries. The variability highlights the difficulty fishermen have in avoiding Chinook salmon bycatch in the Rockfish Fishery in particular and in all trawl fisheries in general.

Table 2-6 Chinook salmon PSC taken by RP vessels in the CGOA by target fishery, 2003 through 2018.

Gear	Target	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Non-pelagic trawl	Rockfish	502	806	385	254	1,711	1,163	957	1,140	693	613	2,168	612	1,028	383	147	262
	Flatfish	3,427	740	497	952	1,801	2,676	2,857	5,444	3,568	1,482	6,188	1,668	2,168	549	539	1,348
	Pacific cod	2,521	720	37	518	423	306	98	423	998	508	354	152	99	10	353	29
	Pollock	343	180	1,296	370	50	30	275	1,888	425	283	644	23	161	1,527	35	227
Pelagic trawl	Rockfish	2	0	63	0	294	746	202	108	59	499	154	38	887	0	372	14
	Pollock	2,768	8,967	17,489	9,726	30,744	6,985	1,732	9,760	7,927	7,808	8,409	6,205	7,313	10,350	11,612	7,822
Total		9,562	11,413	19,766	11,820	35,023	11,906	6,122	18,763	13,670	11,194	17,917	8,697	11,657	12,820	13,059	9,700
Bycatch as % of rockfish		5.3%	7.1%	2.3%	2.1%	5.7%	16.0%	18.9%	6.7%	5.5%	9.9%	13.0%	7.5%	16.4%	3.0%	4.0%	2.8%

Source: AKFIN summary of PSC data

Table 2-7 reports the average monthly bycatch of Chinook salmon by target fishery. The timing of Chinook salmon bycatch follows a predictable pattern in most years, corresponding primarily with seasonal openings of the pollock fishery. Chinook salmon are caught as bycatch in the rockfish fisheries throughout the time that the fisheries are open. Bycatch in April is largely attributable to the arrowtooth flounder or rex sole fishery. Since the implementation of the RPP, more efficient use of halibut PSC has allowed the shallow-water flatfish fishery to remain open longer into the fall, which has also resulted in some increase in Chinook salmon bycatch during these months.

²²https://archive.fisheries.noaa.gov/wcr/protected_species/salmon_steelhead/salmon_and_steelhead_listings/chinook/chinook_salmon.html

Table 2-7 Average Chinook salmon PSC taken by RP vessels by month and CGOA trawl fishery prior to the RPP, the RPP years, and the RP years.

Target fishery	Years	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Arrowtooth Flounder	2003-2006	21	76	1	205	173			3	25	5		
	2007-2011		5	40	1,391	182			10	30	247	69	14
	2012-2018	6	1	14	462	364	7	2	77	16	166	16	9
Atka Mackerel	2007-2011							17					
	2012-2018					0				0	0		
Deep Water Flatfish - GOA	2003-2006												
	2007-2011												
Flathead Sole	2003-2006			117	3	1	0				0		
	2007-2011		0			1							5
	2012-2018							112	36	0			
Other Species	2003-2006												
	2007-2011												
	2012-2018		0			0							
Pacific Cod	2003-2006	191	433	4	1	0			56	238	27	1	
	2007-2011	69	37	1			9		3	174	156		
	2012-2018	8	43	76	30					44	8	11	
Pollock - bottom	2003-2006	177	1,130	806		10			252	1,171	2,489	26	
	2007-2011	35	195	1,347						161	1,033	34	
	2012-2018	21	37	21	12	4	0		6	345	443	42	
Pollock - midwater	2003-2006	3	1,898	1,263	2				141	181	735	1	
	2007-2011		780	5,687						723	1,922	47	
	2012-2018	319	2,444	1,043	93	6			87	1,030	2,873	89	
Rex Sole - GOA	2003-2006			69	317	233							
	2007-2011		20	27	525			2	19	0		10	2
	2012-2018	0	8	65	372	67	0					11	
Rockfish	2003-2006					0		503					
	2007-2011					541	443	382	4	40	1	4	
	2012-2018				10	339	98	152	105	90	18	213	
Sablefish	2003-2006												
	2007-2011												
	2012-2018				0				0	0	0	4	
Shallow Water Flatfish - GOA	2003-2006		83	27	14	5	9	0		18			
	2007-2011				9	60	0	9	29	62	460	25	17
	2012-2018	1	0	0			1	6	76	9	72	14	1

Source: AKFIN summary of PSC data

PSC of Chinook salmon in the RP by region of origin is presented later in this section. That information is presented to show regions where Chinook salmon bycatch may have the greatest impact.

Halibut

The range of Pacific halibut that the IPHC manages covers the continental shelf from northern California to the Aleutian Islands and throughout the Bering Sea. Pacific halibut are also found along the western north Pacific continental shelf of Russia and Japan. The depth range for halibut is up to 250 fathoms (457 m) for most of the year and up to 500 fathoms (914 m) during the winter spawning months. During the winter (November through March), the eggs are released, move up in the water column, and are caught by ocean currents.

Halibut also move seasonally between shallow waters and deep waters. Mature fish move to deeper offshore areas in the fall to spawn and return to nearshore feeding areas in early summer. It is not yet clear if fish return to the same areas to spawn or feed, year after year.

The IPHC assesses the coastwide biomass of halibut, including fish that are accessible in the IPHC setline survey and to the directed halibut fisheries (generally fish over 26 inches; O26). The IPHC estimates the distribution of the coastwide stock based on survey catch rate among IPHC management areas using information from its annual setline survey. The results of the 2017 assessment indicate that the stock declined continuously from the late 1990s to around 2010 (IPHC 2018a).

In general, recruitment has decreased substantially since the highs of the 1980s. The best available scientific information suggests that over the foreseeable future (2018–2021) the halibut resource is

projected to decline. The 2018 stock assessment provides additional detail on the potential trends in the halibut stock, uncertainties in the assessment, and additional factors that may impact the overall stock status and harvestable surplus of abundance of halibut (IPHC 2018c).

During the periods of high removal, the majority of the mortality on the halibut stock has been due to commercial catch. In 2017, the two top sources of removals in Area 4 are where commercial harvests (including discard mortality in the commercial fishery, i.e., “wastage”) comprised 65 percent of the removals, and commercial groundfish fishery bycatch (referred to as prohibited species catch, or PSC, in fisheries).

Since 2014, there is no information to suggest that halibut is subject to “overfishing,” as that term is commonly applied to stocks managed under the Magnuson-Stevens Act. The Halibut Act does not define “overfishing” or require that an overfishing limit be defined. However, the halibut stock is currently managed in a manner that is not likely to result in a chronic long-term decline in the halibut resource coastwide due to fishing mortality from all sources of removals.

The bycatch of halibut in the CGOA trawl fishery by RP vessels is reported in Table 2-8. The rockfish fishery generally accounts for between 2 percent and 16 percent of the halibut bycatch of these vessels in the GOA. Flatfish and Pacific cod target fisheries generally have more halibut bycatch. The decline in the Pacific cod TAC in recent years has played a role in the halibut bycatch in the CGOA rockfish fishery surpassing the CGOA Pacific cod fishery. Also halibut mortality declined after implementation of the RPP and has remained relatively low.

Table 2-8 Halibut mortality attributed to RP vessels by CGOA trawl target fishery, 2003 through 2018.

Gear	Target fishery	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Non-pelagic trawl	Rockfish	205	243	186	101	43	39	29	48	40	34	49	51	76	72	79	45
	Flatfish	801	527	946	1,169	1,030	947	1,189	959	952	938	562	866	605	630	889	794
	Pacific cod	308	721	548	258	384	459	228	217	379	302	182	114	428	320	74	2
	Pollock	5	11	0	51	76	60	35	14	99	47	132	81	93	120	63	175
	Other	11	8	0	0	4	5	3	4	4	3	9	1	2	7	3	31
Pelagic trawl	Rockfish	0	0	2	3	2	3	1	2	4	2	1	1	3	0	4	9
	Flatfish	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pollock	1	1	2	17	4	3	2	14	8	3	17	0	9	11	9	26
Total	1,344	1,512	1,692	1,602	1,552	1,515	1,488	1,257	1,487	1,329	952	1,115	1,217	1,160	1,121	1,082	
Bycatch as % of rockfish target	15.3%	16.1%	11.1%	6.5%	2.9%	2.8%	2.0%	4.0%	3.0%	2.7%	5.3%	4.7%	6.5%	6.3%	7.4%	5.0%	

Source: AKFIN summary of PSC data

The drastic reduction in halibut mortality (particularly in the CV sector) likely arises from several factors. First, vessels have exclusive allocations, allowing them to move from areas of high halibut catch without risking loss of catch of the rockfish primary species. Second, exclusive allocations also increase the incentive for participants to communicate with each other concerning catch rates, improving information concerning areas of high halibut incidental catch in the fleet, and preventing repeated high halibut mortality among vessels exploring fishing grounds. Third, several vessels have begun employing new pelagic gear that limits bottom contact and halibut incidental catch. In the catcher processor sector, two of the four active vessels used pelagic gear in the first year of the program, in comparison to no pelagic trawl gear prior to implementation of the program. Catch data by gear type cannot be revealed for the catcher processor sector because of confidentiality protections. Participants in the program report that a primary motivation for these changes in gear types is constraining halibut allocations, which could jeopardize cooperative catches in the event that halibut bycatch exceeds allocations (NPFMC, 2011).

Table 2-9 shows the average halibut PSC by RP vessels by month and target fishery. The information is reported by years prior to the RPP, RPP years, and RP years.

Table 2-9 Average halibut mortality (mt) taken by RP vessels by month and CGOA trawl fishery prior to the RPP, the RPP years, and the RP years.

Target fishery	Years	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Arrowtooth Flounder	2003-2006	3	20	34	153	11		33	15	30	60		
	2007-2011	0	35	19	172	20		4	26	46	69	20	2
	2012-2018	3	12	49	205	71	51	20	49	33	54	54	3
Atka Mackerel	2007-2011							0					
	2012-2018					0				0	0		
Deep Water Flatfish - GOA	2003-2006		8	4	5	1				0	0		
	2007-2011			0	0	0	0						
	2012-2018		0			0							
Flathead Sole	2003-2006		0	7	7	1	1	0	0	0	0		
	2007-2011	0	0	1	11	1	1	2	0		2	0	1
	2012-2018			0	0	0		15	0				
Other Species	2003-2006			0	1	2		0					
	2007-2011	0	0		0	0	0	0			0		
	2012-2018		0		0	0							
Pacific Cod	2003-2006	95	47	0	1	0		1	1	304	14		
	2007-2011	73	65	11		4	2	1	1	119	58	0	
	2012-2018	16	19	44	17	17	4	0	0	66	19	1	
pollock	2003-2006	2	2	0	0	0	0		1	4	12	0	
	2007-2011	7	4	3				0	0	3	45	1	
	2012-2018	7	6	2	1	1	0		2	49	41	4	
Rex Sole - GOA	2003-2006			9	37	9			0	0	0	0	
	2007-2011	0	3	1	47			4	3	0		1	
	2012-2018	2	1	3	20	11	1	0	0			1	
Rockfish	2003-2006							182	2		2		
	2007-2011					6	7	23	1	1	2	2	
	2012-2018				0	7	6	23	14	3	3	5	
Sablefish	2003-2006							0					
	2007-2011				0	0	0	1	1	1	0	0	
	2012-2018				0	2	1	0	0	0	0	4	
Shallow Water Flatfish - GOA	2003-2006	2	8	13	73	58	61	29	83	27	60		
	2007-2011	3	13	6	34	82	44	61	84	27	116	43	12
	2012-2018	0	0	1	6	10	3	27	10	18	12	6	2

Source: AKFIN summary of PSC data

2.3.3 Effects of the Alternatives on Unallocated and PSC Species

There is an adverse impact on halibut and Chinook salmon as both are taken as incidental catch in the CGOA rockfish fishery. The overall levels of Chinook salmon bycatch in the GOA groundfish trawl fisheries vary considerably from year to year.²³ There are also concerns about the precision of bycatch estimations due to the fact that a high proportion of vessels in the GOA are unobserved or only partially observed. However, the RP has high observer coverage, which has reduced uncertainty in the estimates of Chinook salmon bycatch in the rockfish fisheries. The respective contribution of the rockfish fisheries to total CGOA Chinook salmon bycatch has increased since 2007, but remains small compared to bycatch in the pollock fishery. Consequently, bycatch of Chinook salmon under the continuation of the program is not expected to reach a significant threshold that is likely to affect the sustainability of the species.

Prior to implementation of the RP, if the halibut mortality limit was reached prior to catch of the rockfish TAC, the rockfish fisheries were closed for the season and reopened when the next apportionment came available in September. Since implementation of the RP, cooperatives receive exclusive allocations of halibut PSC from the third quarter deep-water apportionment that constrain their fishing activity. Participants in the limited access fishery (who elected not to join a cooperative) are subject to the same limitation as participants in the rockfish fisheries prior to the RPP. In other words, if the third season

²³ <https://www.fisheries.noaa.gov/action/amendment-88-fmp-groundfish-gulf-alaska-management-area>

halibut PSC apportionment is fully used prior to harvest of the applicable limited access rockfish TAC, that fishery will be closed until the next season's apportionment comes available in September.

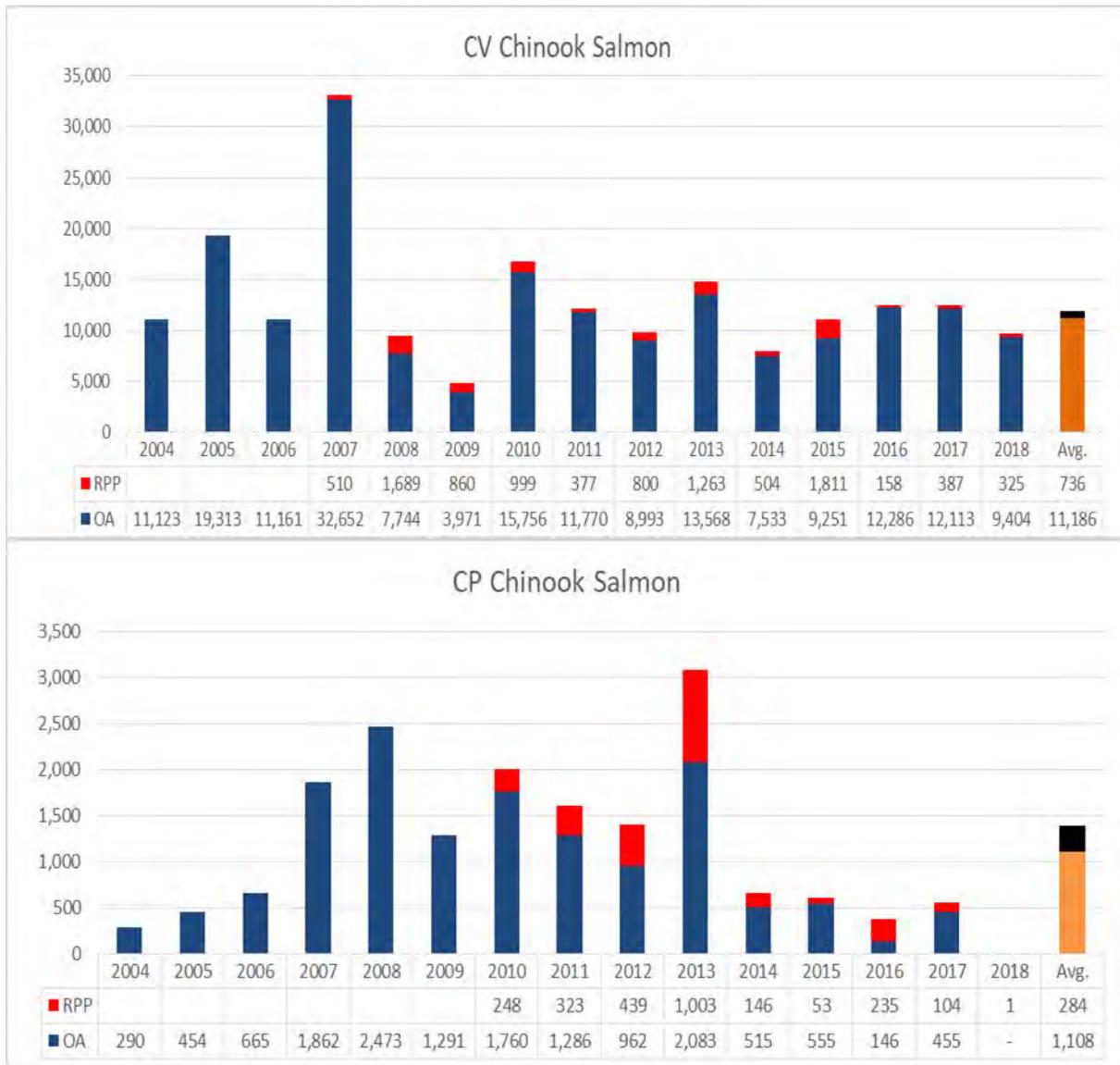
The incentive for halibut mortality reductions is increased by the rollover of saved halibut mortality to other fisheries late in the year, allowing the trawl sector as a whole (including vessels that did not qualify for the RPP) to benefit from these halibut mortality reductions. (NPFMC, 2011)

Cumulative Effects on Non-Target Species

The following RFFAs are identified as likely to have an impact on Chinook salmon and halibut within the action area and timeframe.

In 2015, Amendment 97 established annual Chinook salmon PSC limits for all groundfish trawl fisheries except for pollock in the Western and Central Gulf of Alaska (GOA). It also established incentives for reducing Chinook salmon PSC for the trawl CP and Non-RP CV sectors, and established seasonal Chinook salmon PSC limits for the trawl CP sector. Information on PSC limits and Chinook salmon catch in the CGOA rockfish fishery is provided in Section 3.5.1.4. Figure 2-4 shows information from that section indicates that Chinook salmon bycatch is difficult to avoid all years even under a LAPP. Years when the estimated Chinook salmon bycatch are at higher levels may also be partially a result of the sampling procedure used to estimate Chinook salmon takes. These issues are described in greater detail in Section 3.5.1.4.

Figure 2-4 CGOA Chinook salmon PSC in the RP and open access fisheries, 2004 through 2018



Source: AKFIN summary of CAS data

The figures above also indicate that on average about 7 percent of the CV CGOA Chinook salmon PSC is taken in the RP. CPs take about 42 percent of their CGOA Chinook salmon PSC. The percentages differ, in part, because of the other CGOA fishing opportunities available to the two sectors in the open access fisheries.

The RP includes a project to collect genetic samples from all landed Chinook salmon. This project is described in the shore-based cooperatives annual RP reports (Alaska Groundfish Data Bank, Inc, 2018). A summary of the information presented in those reports is included in this section. The Rockfish Genetics project that started 2013. The goal was to allow agency scientists to utilize the collected samples to determine stock of origin for all Chinook salmon taken in the CGOA RP fisheries. Samples were also collected in 2018 and 2019 but the results were not available at the time this report was written. Results from the 2013 through 2017 rockfish fisheries show that approximately 95 percent of the Chinook salmon caught the in the CGOA RP fishery are from the US West Coast, British Columbia (Canada), and SE

Alaska (Table 2-10); the majority of the remaining Chinook salmon came from the Northwest GOA and the Copper River system. Benefits derived from reducing Chinook salmon bycatch in the RP primarily accrue to those locations, but to a lesser extent are realized throughout Alaska and as far away as Russia.

Table 2-10. Stock of Origin results, 2013-2016 CGOA CV Rockfish fishery

Area	2013 Rockfish	2014 Rockfish	2015 Rockfish	2016 Rockfish	2017 Rockfish
No. Samples Processed	2,070	398	635	493	280
Russia	0.0%	0.1%	0.0%	0.0%	0.0%
Coast W AK	0.0%	0.3%	0.1%	0.5%	0.1%
Mid Yukon	0.0%	0.0%	0.0%	0.0%	0.0%
Up Yukon	0.0%	0.0%	0.0%	0.0%	0.0%
N AK Pen	0.0%	0.0%	0.0%	0.0%	0.0%
NW GOA	2.2%	3.2%	2.7%	3.7%	2.7%
Copper	0.3%	0.1%	0.8%	0.3%	2.4%
NE GOA	0.0%	0.1%	0.0%	0.3%	0.0%
Coast SE AK	6.4%	7.1%	4.8%	6.9%	10.9%
BC	31.3%	17.4%	18.9%	26.8%	28.1%
West Coast US	59.9%	71.7%	72.8%	61.5%	55.6%
SE, BC,WC combined	97.6%	96.2%	96.5%	95.1%	94.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

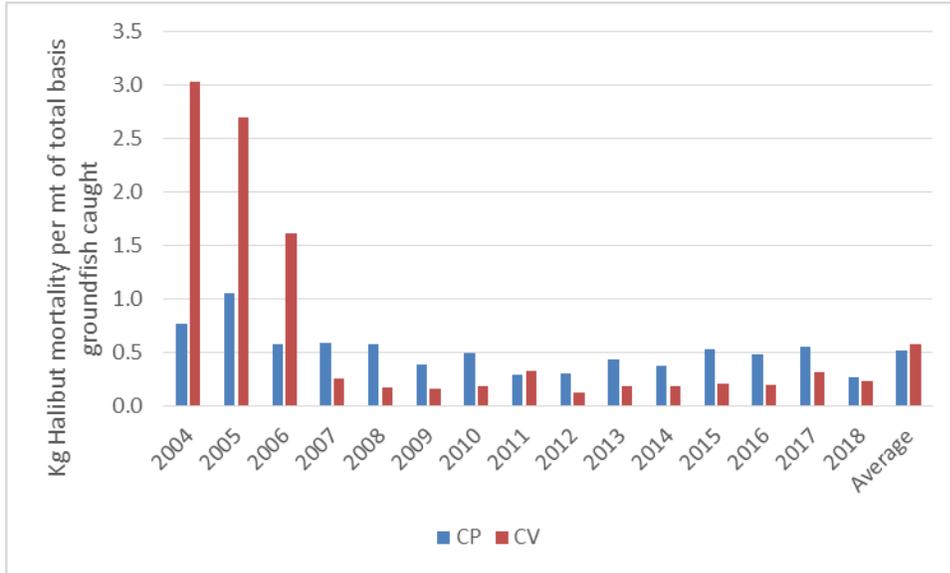
Source: AGDB 2018 Rockfish Cooperative Reports

The extent to which any salmon stock is impacted by the bycatch of the GOA trawl fisheries is dependent on many factors including 1) the overall size of the bycatch, 2) the age of the salmon caught in the bycatch, 3) the age of the returning salmon, and 4) the total escapement of the affected stocks taking into account lag time for maturity and returning to the river. As such, a higher contribution of a particular stock one year does not necessarily imply greater impact than a smaller estimate the next (Guthrie III, et al., 2018).

Under either the No Action alternative or Alternative 2 (extending the RP) it is expected that Chinook salmon bycatch will be difficult to consistently avoid. However, Alternative 2 is expected to continue the structures that have been developed to communicate areas and times of higher Chinook salmon catch rates. Communication and agreements to stop fishing when rates are too high, under Alternative 2, are expected to result in bycatch rates that are lower than when those bycatch reductions are not in place. Under the No Action alternative the potential increase in the number of participants and the pressure to harvest a portion of the sector allocation before it is closed to directed fishing make it less likely those bycatch avoidance measures will be adhered to by the entire fleet.

Figure 2-5 shows the ratio of halibut mortality in the CGOA rockfish target fishery per metric ton of groundfish catch. Since the RPP was implemented in 2007, there has been a substantial decline in the rate of halibut usage in the rockfish fishery. Rates declined for both the CV and CP sectors, but the decline was greater in the CV sector. The declines are a result of using more pelagic trawl gear and implementing measures to communicate where high bycatch rates are occurring and requiring CVs to stop fishing in that location if the rates are too high. Therefore, it is anticipated that selecting the No Action alternative will result in greater halibut mortality in the CGOA rockfish target fishery than selecting any combination elements under Alternative 2.

Figure 2-5 Kilograms of halibut mortality in the CGOA rockfish fishery per metric ton of total groundfish catch by CVs and CPs in rockfish target fisheries, 2004 through 2018



Considering the direct and indirect impacts of the proposed action when added to the impacts of past and present actions previously analyzed in other documents that are incorporated by reference and the impacts of the reasonably foreseeable future actions listed above, the cumulative impacts of the proposed action are determined to be not significant.

2.4 Essential Fish Habitat

2.4.1 Status

Fishing operations may change the abundance or availability of certain habitat features used by managed fish species to spawn, breed, feed, and grow to maturity. These changes may reduce or alter the abundance, distribution, or productivity of species. The effects of fishing on habitat depend on the intensity of fishing, the distribution of fishing with different gears across habitats, and the sensitivity and recovery rates of specific habitat features.

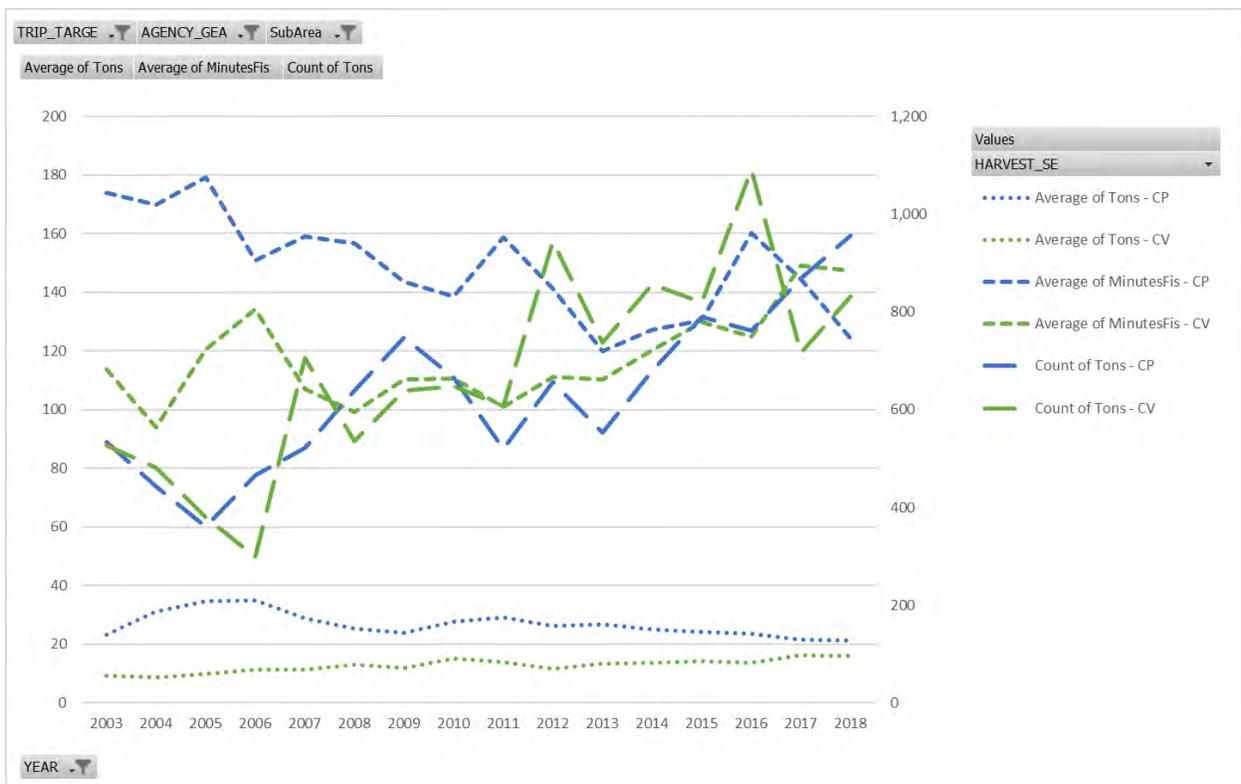
In 2005, NMFS and the Council completed the EIS for EFH Identification and Conservation in Alaska (NMFS 2005b). The EFH EIS evaluates the long-term effects of fishing on benthic habitat features, as well as the likely consequences of those habitat changes for each managed stock, based on the best available scientific information. The EFH EIS also describes the importance of benthic habitat to different groundfish species and the past and present effects of different types of fishing gear on EFH. Based on the best available scientific information, the EIS analysis concludes that despite persistent disturbance to certain habitats, the effects on EFH are minimal because the analysis finds no indication that continued fishing activities at the current rate and intensity would alter the capacity of EFH to support healthy populations of managed species over the long term. The EIS concludes that no Council managed fishing activities have more than minimal and temporary adverse effects on EFH for any FMP species, which is the regulatory standard requiring action to minimize adverse effects under the Magnuson-Stevens Act (50 CFR 600.815(a)(2)(ii)). Additionally, the analysis indicates that all fishing activities combined have minimal, but not necessarily temporary, effects on EFH.

The Council and NMFS have updated available habitat information, and their understanding of the impacts of fishing on habitat, in periodic 5-year reviews of the EFH components in the Council fishery management plans (NPFMC and NMFS 2010) and (NPFMC and NMFS 2016). These 5-year reviews have not indicated findings different from those in the 2005 EFH EIS with respect to fishing effects on habitat, although new and more recent information has led to the refinement of EFH for a subset of Council-managed species. Maps and descriptions of EFH for groundfish species are available in the applicable fishery management plan.

A goal of the Pilot Program and Rockfish Program was to reduce trawl gear impacts on the sea floor and the organisms that live there. This section was prepared by NMFS Habitat Division staff to describe those impacts. For the 2017 Essential Fish Habitat 5-year Review, a Fishing Effects (FE) model was developed by the NMFS Alaska Region Office – HCD and partners at Alaska Pacific University to estimate the effects of commercial fishing activities on marine habitats. The FE model is a cumulative effects model that incorporates habitat impacts and recovery at a monthly time step utilizing Vessel Monitoring System (VMS) data. VMS data is available for most GOA vessels starting in 2003. For the purposes of this analysis, we considered 2003-2006 Limited Access Fishery; 2007-2011 Rockfish Pilot Program; and post-2012 the Rockfish Program.

While it is possible to calculate the amount of habitat impact in terms of habitat reduction for both pelagic and non-pelagic trawl tows identified as Rockfish target, some initial data analysis Figure 2-6 reveals there is very little difference in the cumulative duration of hauls, average tons of catch or total tons of catch for both catcher vessels and catcher/processor vessels over the time series from 2003-2018.

Figure 2-6 Average trawl minutes fished, tons of catch, and average tons of catch by catcher/catcher-processor vessels, 2003-2018.



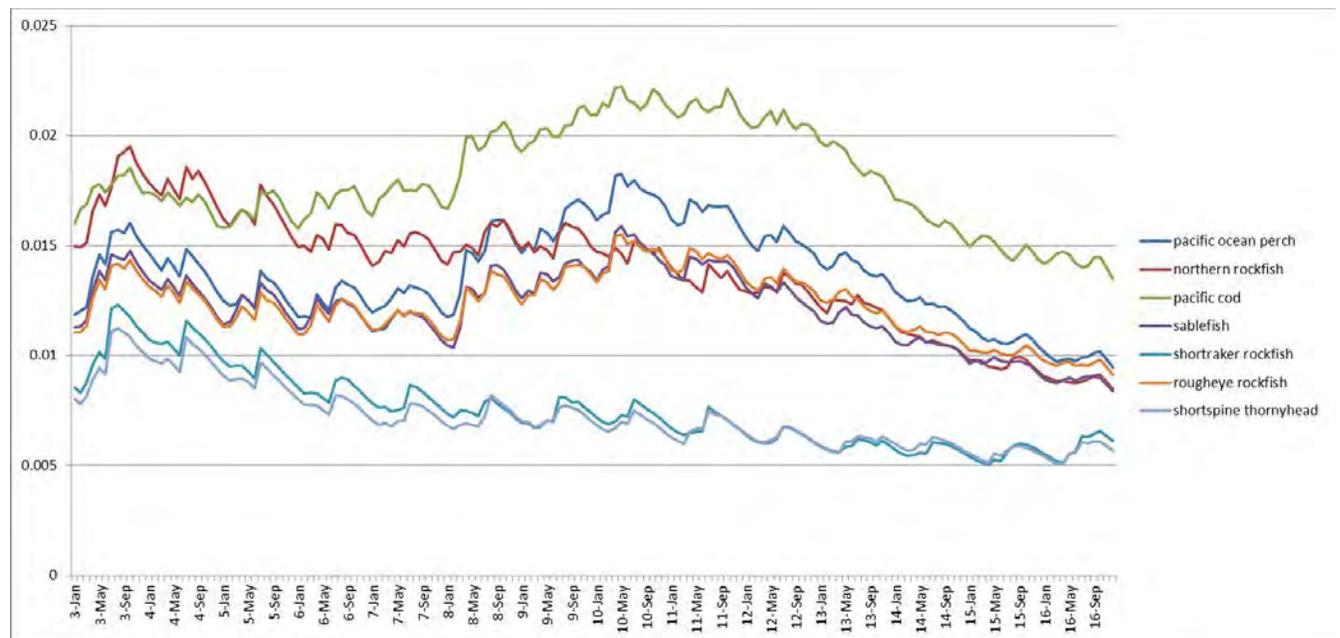
Source: Catch-in-Areas Database, AKRO

In discussions with trawl industry participants, it appears likely that it may be difficult to analyze target tows associated with the rockfish fishery due to differences in the way the fishery was prosecuted before and after the RPP. Fishing events previous to the RPP consisted of multi-species combo trips which may have been topped off with sablefish and operated under MRAs. Target assignment for fishing events is based on the predominant species, so 51 percent Pacific cod/49 percent POP would be called a Pacific cod trip. Under the Rockfish Program, participants have the freedom to target species individually.

As stated in the June 2008 Central Gulf Rockfish Pilot Program document, “A trend toward greater use of pelagic gear that started in the period leading up to implementation of the program has continued This transition from non-pelagic, bottom gear to pelagic gear suggests a further reduction in any habitat effects by the rockfish fishery.”²⁴ To enhance this discussion, there are two relevant gear configurations that have led to less bottom contact since 2003. First, a move towards semi-pelagic bottom trawl gear (doors off bottom) since about 2008 decreased the bottom contact from the heaviest portion of the gear. In 2014, mandatory sweep modifications for flatfish trawls were implemented that raise the majority of the trawl off the bottom have been used in other fisheries as well, as sweeps are difficult to replace for specific other target trips.

The FE model as run in 2017 assumed no bottom contact for GOA slope rockfish pelagic trawl. However, trends in decreasing habitat reduction are likely to continue given fishing practices. Figure 2-7 illustrates that over time, the percentage habitat reduction for each target species’ Essential Fish Habitat area of concentration has declined (since 2003). While the FE model has not been re-run for individual species since 2017, the total number of fishing events for both CV and CP has remained relatively constant.

Figure 2-7 Core EFH habitat reduction by GOA RPP trawl target species, 2003 - 2016



Source: Fishing Effects Model

²⁴ NPFMC. Gulf of Alaska Rockfish Pilot Program Review. 2008.

2.4.2 Effects of the Alternatives on EFH

If the RP continues under Alternative 2, fishing activity would likely continue to be distributed over a longer season and may disperse spatially, as a result of the removal of time constraints by the cooperative allocations. The relative low effort level of the rockfish fisheries along slope areas is likely to continue. Concentrations of bottom trawl effort in the CGOA rockfish fisheries would likely be reduced as trawl vessels continue to move towards pelagic and semi-pelagic trawls to reduce halibut bycatch. The need for CVs to keep short trip lengths to maintain quality is likely to result in some continued concentration in areas proximate to Kodiak harbor. Overall, the rockfish fisheries are likely to continue to have minimal and temporary effects on the essential fish habitat. No long term negative impacts to essential fish habitat are likely under the program alternatives.

Under the No Action alternative, the rockfish fisheries will revert to LLP management and fishing practices could concentrate both temporally and spatially. Despite a possible increase in the use of bottom gear, effort levels under the No Action alternative would be low and would occur in areas considered to have less sensitive habitat (rock, gravel, mud, and sand). As a result, the No Action alternative would have a minimal and temporary effect on benthic habitat and essential fish habitat.

Considering the direct and indirect impacts of the proposed action when added to the impacts of past and present actions previously analyzed in other documents that are incorporated by reference and the impacts of the reasonably foreseeable future actions listed above, the cumulative impacts of the proposed action are determined to be not significant.

2.5 Social and Economic Impacts

The socio-economic impacts of this action are described in detail in the Regulatory Impact Review (RIR) of this analysis (Chapter 3) and the Social Impact Assessment (Appendix 1).

3 Regulatory Impact Review

This RIR examines the benefits and costs of a proposed regulatory amendment to harvesters, processors, crew, cooperatives, and communities associated with the CGOA RP. CGOA RP harvesters, processors, cooperatives are directly regulated by this action.

- Harvesters are directly regulated through the various LAPP provisions that assign and limit CQ use.
- Processors are directly regulated through CQ processing limits.
- Cooperatives are directly regulated through harvest limits, formation requirements, and reporting requirements.

Communities are directly affected by the RP through the Kodiak delivery requirement associated with the CV CQ quota issued. Crew also are directly affected because of changes in employment opportunities, compensation, and working conditions.

The preparation of an RIR is required under Presidential Executive Order (E.O.) 12866 (58 FR 51735, October 4, 1993). The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following Statement from the E.O.:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

E.O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be “significant.” A “significant regulatory action” is one that is likely to:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in E.O. 12866.

3.1 Statutory Authority

Under the Magnuson-Stevens Act (16 U.S.C. 1801, *et seq.*), the United States has exclusive fishery management authority over all marine fishery resources found within the exclusive economic zone (EEZ). The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in the regional fishery management councils. In the Alaska Region, the Council has the responsibility for preparing FMPs and FMP amendments for the marine fisheries that require conservation and management, and for submitting its recommendations to the Secretary. Upon approval by the Secretary,

NMFS is charged with carrying out the Federal mandates of the Department of Commerce with regard to marine and anadromous fish.

The CGOA rockfish fishery in the EEZ off Alaska is managed under the GOA FMP. The proposed action under consideration would amend this FMP and Federal regulations at 50 CFR 679. Actions taken to amend FMPs or implement regulations governing these fisheries must meet the requirements of applicable Federal laws, regulations, and Executive Orders.

3.2 Purpose and Need for Action

The Council adopted the following problem statement to originate this action in December 2018.

The Central Gulf of Alaska Rockfish Program (RP) will sunset on December 31, 2021 and the Council must act if it intends to reauthorize the RP. The purpose of this action is to reauthorize the RP to retain the management, economic, safety, and conservation gains realized under the RP to the extent practicable, consistent with the Magnuson-Stevens Act.

For both the onshore and offshore sectors, the RP has improved safety at sea, controlled fleet capacity, enhanced NMFS' ability to conserve and manage species allocated under the RP, increased vessel accountability, reduced sea floor contact, allowed full retention of allocated species, and reduced halibut and Chinook salmon bycatch. In addition, the rockfish fishery dependent communities in the Central Gulf of Alaska and the onshore processing sector have benefited from a more stable workforce, more onshore deliveries of rockfish, improved rockfish quality, and increased diversity of rockfish products. Central Gulf of Alaska fishermen, and the onshore processing sector have benefited from reduced conflicts with salmon processing. The offshore sector has benefited from greater spatial and temporal flexibility in prosecuting the fishery, resulting in lower bycatch, a more rational distribution of effort, and more stable markets.

The Council must act to continue the management, economic, safety, and conservation gains realized under the RP. Otherwise, fisheries managed under the RP will revert to effort-control management under the License Limitation Program (LLP).

3.3 Alternatives

Alternative 1: No Action

Alternative 2: Reauthorize the RP

Reauthorize the RP with the existing management framework unless modified under this alternative. Each element of Alternative 2, as proposed by the Council, is presented. Immediately following the Council's element for analysis is a brief discussion of the "context" of the provision. The context is not part of the Council's motion. It was provided by the analysts.

Element 1: Modify regulations at 679.80(a)(2) to specify the duration of the program.

Option 1: Remove sunset date

Option 2: Replace with new sunset date (10-20 years)

Element 2: Consider options to reallocate unharvested RP Pacific cod from onshore cooperatives to fixed gear open access fisheries after the RP fisheries close on November 15.

Element 3: Exempt crab program sideboard limits for vessels when fishing in the RP.

Element 4: Require annual NMFS cost recovery reports in regulations.

Element 5: Clarify regulations at § 679.5(r)(10) to specify that only shoreside processors receiving RP CQ must submit the Rockfish Ex-vessel Volume and Value Report.

Element 6: Modify language in § 679.5(r)(6)(iii)(B) to require RP cooperatives to report catch by the CGOA reporting area.

Element 7: Revise § 679.5(r)(6)(iii)(D) - to replace “any actions” with “any civil actions.”

Element 8: Revise § 679.81(i)(D)(3) to remove requirements for a Fishing Plan to be submitted with a cooperative application for CQ.

Element 9: Revise § 679.84(f)(1) to exempt shoreside processors under the RP from the requirement to provide an observer work station and observer communication described at §679.28(g)(7)(vii) and (viii)

Element 10: Allow NMFS to reallocate unused Rockfish ICA to the RP CV cooperatives to prevent exceeding the TAC in the CGOA.

Element 11: Clarify regulations regarding accounting for inseason use caps when CP QS is transferred for use by the CV sector.

Element 12. Modify Cooperative Check-In Notice Times

3.4 Methods Used for the Impact Analysis

The costs and benefits of this action with respect to these attributes are described in the sections that follow, comparing the No Action alternative 1 with the action alternatives.²⁵ The analyst then provides a qualitative assessment of the net benefit to the Nation of each alternative, with “no action” as a baseline.

This analysis was prepared using data from the NMFS catch accounting system (CAS), which is the best available data to estimate total catch and PSC in the groundfish fisheries off Alaska. Total catch estimates are generated from information provided through a variety of required industry reports of harvest and at-sea discard, and data collected through an extensive fishery observer program. In 2003, NMFS changed the methodologies used to determine catch estimates from the NMFS blend database (1995 through 2002) to the catch accounting system (2003 through present). Currently, the catch accounting system relies on data derived from a mixture of production and observer reports as the basis of the total catch estimates. This analysis relies solely on total catch and PSC estimates during years more recent than 2003. For the most part, this analysis relies on fishery data beginning in 2003 to include information prior to the RPP being implemented, the when the RPP was in place, and when the RP was in place.

Fishery data are provided through the Alaska Fisheries Information Network (AKFIN). AKFIN has access to the catch accounting system data, CFEC Fish Ticket data, and Commercial Operators Annual Report (COAR) data from which it can supply catch and discard records, as well as estimates of gross ex-vessel and first wholesale revenues.

²⁵ The evaluation of impacts in this analysis is designed to meet the requirement of E.O. 12866, which dictates that an RIR evaluate the costs and benefits of the alternatives, to include both quantifiable and qualitative considerations. Additionally, the analysis should provide information for decision makers “to maximize net benefits (including potential economic, environment, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.”

Fishing vessel safety data are provided by the National Institute for Occupational Safety and Health (NIOSH) who manages the Commercial Fishing Incident Database (CFID). CFID is a national surveillance system that contains information on work-related fatalities and vessel disasters in the U.S. fishing industry. For Alaska, CFID contains fatality data from 2000 through 2017 and vessel disaster data from 2000 through 2016.

3.5 Description of Fisheries

3.5.1 Harvest

Information on catch in the CGOA fisheries is presented in this section. All catch data are derived from the CAS that has been summarized and provided to staff by AKFIN. General overview tables for the CGOA are presented first and more detailed information at the species and fishery level are provided later in the section. The data includes all reported catch. Some at-sea discards may be excluded if it was not reported in the CAS. All value information is presented in millions of 2012 real dollars adjusted using the annual average Consumer Price Index.

The first three tables in this section are intended to provide an overview of the participation, catch, and value of the CGOA trawl fisheries. Table 3-1 shows the information for all trawl gear catch in the CGOA groundfish fisheries. The number of vessels participating in the fishery and have been relatively stable over the period. CPs ranged from five to nine vessels with either five or six vessels participating in each of the four most recent years. An equal number of LLP licenses were used on the CPs as the number of vessels participating, except 2003 when one more license was used than vessels participating. Catch varied from over 31,000 mt in 2014 to a less than 7,000 mt in 2004. In 2018 the reported catch was just over 14,000 mt. CVs ranged from 32 to 37 vessels, with from 34 to 37 participating since 2012. Generally, two or three more LLP licenses were used in the fishery than CVs fishing. Catch varied from over 54,000 mt in 2003 to over 145,000 mt in 2015. In 2018 the reported catch was over 132,000 mt.

The number of processing plants taking deliveries from the CV sector ranged from a maximum of 13 in 2011 to a low of seven in 2017. A total of 27 different plants reported taking landings from trawl CVs since 2003, indicating that the number of participants each year is relatively stable but there is entry and exit in terms of the plants that are active over the same period.

Table 3-1 Reported catch (mt) and real value (millions of 2012 \$) of all species harvested by trawl gear in the CGOA groundfish fisheries, 2003 through 2018

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
CP																	
Vessels	9	9	9	6	5	8	9	8	6	8	8	7	5	6	5	5	10
Licenses	10	9	9	6	5	8	9	8	6	8	8	7	5	6	5	5	11
Processing Plants	9	9	9	6	5	8	9	8	6	8	8	8	5	6	5	5	11
Reported Catch (mt)	14,357	6,869	10,189	10,263	8,029	10,545	9,438	11,224	15,797	16,765	15,560	31,676	20,428	14,930	22,209	14,171	232,449
Ex-vessel Value	\$5.78	\$3.43	\$4.96	\$4.81	\$3.07	\$3.96	\$4.06	\$6.00	\$8.63	\$8.82	\$6.78	\$9.83	\$7.67	\$6.29	\$9.66	\$6.82	\$100.57
First Wholesale Value	\$16.19	\$8.78	\$14.56	\$15.31	\$8.49	\$11.43	\$11.13	\$14.49	\$24.57	\$23.28	\$17.49	\$33.34	\$22.02	\$18.25	\$30.92	\$16.92	\$287.16
CV																	
Vessels	33	33	33	33	33	33	32	33	34	37	36	35	35	37	34	36	45
Licenses	35	36	36	36	36	36	34	35	36	37	38	37	37	37	37	39	42
Processing Plants	11	8	8	11	12	10	9	11	13	11	12	11	10	10	7	8	27
Reported Catch (mt)	54,030	59,109	68,345	71,522	67,844	73,561	61,340	84,790	90,628	93,632	106,193	143,250	145,624	132,487	142,790	132,592	1,527,738
Ex-vessel Value	\$20.19	\$20.46	\$25.19	\$27.77	\$29.08	\$37.75	\$23.28	\$34.57	\$39.52	\$43.51	\$42.14	\$47.95	\$42.62	\$33.20	\$33.76	\$35.62	\$536.61
First Wholesale Value	\$48.06	\$50.47	\$74.72	\$73.12	\$72.82	\$86.98	\$61.72	\$86.52	\$100.81	\$99.48	\$114.46	\$121.78	\$109.54	\$102.51	\$99.01	\$101.35	\$1,403.34
Total																	
Vessels	42	42	42	38	38	41	41	41	40	44	43	41	40	41	39	41	51
Licenses	45	45	45	41	41	44	43	43	42	44	45	43	42	43	42	44	51
Processing Plants	20	17	17	17	17	18	18	19	19	18	19	17	15	14	12	13	34
Reported Catch (mt)	68,387	65,977	78,534	81,785	75,873	84,106	70,777	96,014	106,425	110,397	121,753	174,926	166,052	147,417	164,999	146,763	1,760,187
Ex-vessel Value	\$25.98	\$23.89	\$30.15	\$32.58	\$32.16	\$41.71	\$27.34	\$40.57	\$48.15	\$52.33	\$48.92	\$57.78	\$50.29	\$39.49	\$43.42	\$42.44	\$637.19
First Wholesale Value	\$64.25	\$59.25	\$89.28	\$88.44	\$81.30	\$98.41	\$72.85	\$101.01	\$125.38	\$122.76	\$131.95	\$155.12	\$131.56	\$120.76	\$129.92	\$118.26	\$1,690.50

Source: AKFIN summary of CAS data

Table 3-2 is limited to information reported for trawl gear harvests when catch is assigned to the rockfish target fishery. This information is presented to allow the reader to better understand the rockfish fishery prior to implementation of the RPP. In the CP sector there is a very small decrease in the number of vessels and LLP licenses that participate. Since 2007 there is usually a difference of one vessel. Because CPs are limited in their participation in most other CGOA target fisheries either by sideboard limits based on their participation in other LAPPs or inshore/offshore regulations (Pacific cod), the proportion of catch and value they derive from the rockfish fishery relative to all fisheries is lower than the CV sector. The CV sector had from 23 to 29 vessels active in the fishery each year. A total of 41 CVs targeted rockfish with trawl gear over the period. Typically, two or three more LLP licenses were used in the fishery than there were CVs. The real ex-vessel value of the fishery ranged from about \$2.5 million in 2009 to about \$7.0 million in 2012. The ex-vessel value was about 31 percent of the first wholesale value on average, but ranged from about 22 percent to 40 percent, depending on the year considered.

The number of processing plants taking rockfish target deliveries from the CV sector ranged from five to nine. A total of 15 plants took rockfish target deliveries during the 2003 through 2018 period. The number of active plants has declined by one in each of the four most recent years.

Table 3-2 Reported catch (mt) and real value (millions of 2012 \$) of all species harvested by trawl gear in the CGOA rockfish target fishery, 2003 through 2018

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total	
CP																		
Vessels		5	6	6	4	4	6	8	7	5	5	6	5	4	6	4	4	9
Licenses		5	6	6	4	4	6	8	7	5	5	6	5	4	6	4	4	9
Processing Plants		5	6	6	4	4	6	8	7	5	5	6	5	4	6	4	4	9
Reported Catch (mt)	5,641	5,808	6,362	5,457	4,516	5,531	4,996	7,086	6,689	8,489	7,994	9,535	11,004	10,711	10,586	10,739	121,142	
Ex-vessel Value	\$3.24	\$3.08	\$4.07	\$3.65	\$2.39	\$2.82	\$2.32	\$4.32	\$5.89	\$5.97	\$4.35	\$5.11	\$5.13	\$5.04	\$5.75	\$5.80	\$68.94	
First Wholesale Value	\$7.09	\$7.00	\$9.49	\$8.89	\$5.65	\$6.56	\$5.51	\$10.06	\$14.30	\$13.55	\$9.94	\$12.30	\$13.24	\$12.91	\$14.19	\$13.65	\$164.33	
CV																		
Vessels		27	26	23	23	27	26	27	25	28	29	28	28	26	24	26	41	
Licenses		29	28	25	25	29	29	28	29	27	30	31	30	30	28	27	28	40
Processing Plants		6	6	6	7	8	6	6	8	9	8	7	7	8	7	6	5	15
Reported Catch (mt)	11,074	9,644	8,432	7,423	8,661	7,919	8,080	9,358	8,180	10,545	9,536	11,056	11,554	14,110	10,219	12,901	158,695	
Ex-vessel Value	\$4.28	\$3.60	\$3.56	\$4.28	\$4.14	\$3.71	\$2.50	\$3.57	\$4.16	\$7.04	\$4.76	\$5.22	\$4.90	\$6.21	\$4.91	\$5.46	\$72.33	
First Wholesale Value	\$11.17	\$10.32	\$14.44	\$13.69	\$10.90	\$10.37	\$11.01	\$13.66	\$16.35	\$20.11	\$14.02	\$14.77	\$15.06	\$20.29	\$16.13	\$19.55	\$231.83	
Total																		
Vessels		32	32	29	27	31	33	34	34	30	33	35	33	32	32	28	30	50
Licenses		34	34	31	29	33	35	36	36	32	35	37	35	34	34	31	32	49
Processing Plants		11	12	12	11	12	14	15	14	13	13	12	12	13	10	9	24	
Reported Catch (mt)	16,715	15,452	14,793	12,880	13,177	13,450	13,077	16,445	14,869	19,034	17,530	20,591	22,557	24,821	20,806	23,640	279,836	
Ex-vessel Value	\$7.52	\$6.68	\$7.63	\$7.93	\$6.53	\$6.53	\$4.82	\$7.90	\$10.05	\$13.01	\$9.11	\$10.34	\$10.03	\$11.25	\$10.66	\$11.26	\$141.26	
First Wholesale Value	\$18.26	\$17.33	\$23.92	\$22.58	\$16.55	\$16.93	\$16.52	\$23.72	\$30.65	\$33.66	\$23.96	\$27.06	\$28.29	\$33.20	\$30.32	\$33.21	\$396.16	

Source: AKFIN summary of CAS data

Participation in the RP and RPP is provided in Table 3-3. This table only goes back to the 2007 fishery, because that is the first year the RPP was in place. The number of participants, catch, and value are similar to the values presented in the previous table. However, there is some variation. The variation occurs because the previous table includes only rockfish target fishery catch and Table 3-3 includes all catch assigned to the RP or the RPP. RP regulations allow the targeting of secondary species QS. This means that a vessel could report target catch in the sablefish or Pacific cod fishery using CQ and be included in Table 3-3, but that catch would have been excluded from Table 3-2. As a result, the numbers are similar but slightly greater in some cases in Table 3-3.

Table 3-3 Reported catch (mt) and real value (millions of 2012 \$) of all species harvested by trawl gear in the CGOA Rockfish and RPP fisheries, 2007 through 2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
CP													
Vessels		7	8	4	4	5	5	5	4	5	4	4	9
Licenses		7	8	4	4	5	5	5	4	5	4	4	9
Processing Plants		7	8	4	4	5	5	5	4	5	4	4	9
Reported Catch (mt)		4,851	4,226	6,105	5,836	9,191	7,967	10,415	10,903	10,908	10,854	10,891	92,146
Ex-vessel Value		\$2.07	\$1.75	\$3.82	\$5.13	\$6.33	\$4.41	\$5.65	\$5.30	\$5.19	\$5.89	\$5.94	\$51.49
First Wholesale Value		\$5.10	\$4.31	\$8.78	\$12.45	\$14.46	\$10.03	\$13.53	\$13.39	\$13.06	\$14.42	\$13.91	\$123.43
CV													
Vessels	27	27	26	27	25	28	29	28	28	27	25	26	40
Licenses	29	29	28	29	27	30	31	30	30	29	28	28	39
Processing Plants	8	6	6	8	8	7	7	7	7	7	6	5	12
Reported Catch (mt)	9,261	8,797	8,697	10,108	8,871	11,997	10,483	12,625	12,616	14,413	10,379	13,188	131,435
Ex-vessel Value	\$5.52	\$5.58	\$3.93	\$5.18	\$6.29	\$9.22	\$6.24	\$6.86	\$6.47	\$7.16	\$5.82	\$6.25	\$74.52
First Wholesale Value	\$13.16	\$13.38	\$13.49	\$16.19	\$19.41	\$23.40	\$16.51	\$17.82	\$17.74	\$21.89	\$17.48	\$21.23	\$211.70
Total													
Vessels	27	34	34	31	29	33	34	33	32	32	29	30	49
Licenses	29	36	36	33	31	35	36	35	34	34	32	32	48
Processing Plants	8	13	14	12	12	12	12	12	11	12	10	9	21
Reported Catch (mt)	9,261	13,648	12,923	16,213	14,707	21,188	18,450	23,040	23,519	25,321	21,232	24,079	223,581
Ex-vessel Value	\$5.52	\$7.66	\$5.68	\$8.99	\$11.43	\$15.55	\$10.65	\$12.51	\$11.77	\$12.35	\$11.71	\$12.19	\$126.01
First Wholesale Value	\$13.16	\$18.49	\$17.80	\$24.97	\$31.87	\$37.85	\$26.53	\$31.35	\$31.12	\$34.95	\$31.90	\$35.14	\$335.14

Source: AKFIN summary of CAS data

3.5.1.1 Prices

Real ex-vessel and first wholesale prices for 2003 through 2018 are presented in this section in 2012 dollars. Average real prices are provided for the years the CGOA rockfish fishery was open access, fished under the RPP, and fished under the RP. Data are grouped in this fashion to provide information on changes in price as it relates to the different management structures, since increased product quality and an associated increase in value is one of the benefits that is often associated with LAPP programs.

Table 3-4 shows the real ex-vessel prices for the three primary rockfish species, Pacific cod, arrowtooth flounder, and mid-water pollock. All three primary rockfish species' ex-vessel value increased over the periods considered. The pollock and Pacific cod ex-vessel values declined in real dollars when the open access average is compared to the RP year's average. Arrowtooth, followed a trend closer to that of the rockfish species. The reasons for the relative changes are likely complex and diverse. However, the increase in rockfish prices may be due, in part, to the LAPP structure that the Pacific cod and pollock fisheries did not have. Arrowtooth prices increased even though they operated under an open access fishery, the arrowtooth market has been relatively strong compared to the open access period because of increased demand from secondary processors and innovation in product quality.

Table 3-4 Annual average real ex-vessel prices (2012 \$) for CGOA rockfish, Pacific cod, arrowtooth flounder, and mid-water pollock

Species	POP	Dusky	Northern	Pacific cod	Arrowtooth	Pollock
2003	\$0.09	\$0.08	\$0.08	\$0.35	\$0.04	\$0.11
2004	\$0.11	\$0.10	\$0.09	\$0.29	\$0.04	\$0.12
2005	\$0.16	\$0.14	\$0.14	\$0.31	\$0.04	\$0.16
2006	\$0.21	\$0.20	\$0.20	\$0.39	\$0.05	\$0.15
2003-2016 Average	\$0.14	\$0.13	\$0.13	\$0.34	\$0.04	\$0.14
2007	\$0.18	\$0.18	\$0.17	\$0.51	\$0.06	\$0.12
2008	\$0.17	\$0.18	\$0.17	\$0.55	\$0.06	\$0.18
2009	\$0.12	\$0.15	\$0.10	\$0.28	\$0.05	\$0.18
2010	\$0.17	\$0.15	\$0.14	\$0.25	\$0.04	\$0.18
2011	\$0.23	\$0.23	\$0.20	\$0.32	\$0.05	\$0.17
2007-2011 Average	\$0.17	\$0.18	\$0.16	\$0.38	\$0.05	\$0.17
2012	\$0.27	\$0.26	\$0.25	\$0.32	\$0.06	\$0.18
2013	\$0.20	\$0.19	\$0.17	\$0.23	\$0.04	\$0.17
2014	\$0.19	\$0.19	\$0.17	\$0.28	\$0.05	\$0.13
2015	\$0.18	\$0.18	\$0.16	\$0.25	\$0.06	\$0.11
2016	\$0.18	\$0.17	\$0.15	\$0.28	\$0.07	\$0.08
2017	\$0.19	\$0.20	\$0.16	\$0.33	\$0.09	\$0.08
2018	\$0.19	\$0.19	\$0.16	\$0.36	\$0.09	\$0.10
2012-2018 Average	\$0.20	\$0.20	\$0.17	\$0.29	\$0.07	\$0.12

Source: AKFIN summary of CAS and COAR data.

Table 3-5 provides a comparison of the ex-vessel and first wholesale prices²⁶ for the three primary rockfish species. This table was generated show that first wholesale prices increased under the RPP but does not show substantial change from the RPP to the RP. However, since the ex-vessel prices increased more over the period, the ratio of ex-vessel to first wholesale price increased. This indicates that processors are paying a larger percentage of their rockfish income to purchase the raw fish from the harvester. That could indicate a shift in market power between the sectors as a result of the LAPP structure. Additional research would be required to more clearly understand the market influences that are driving the relative changes in price.

Table 3-5 Comparison of ex-vessel and first wholesale prices of primary rockfish species

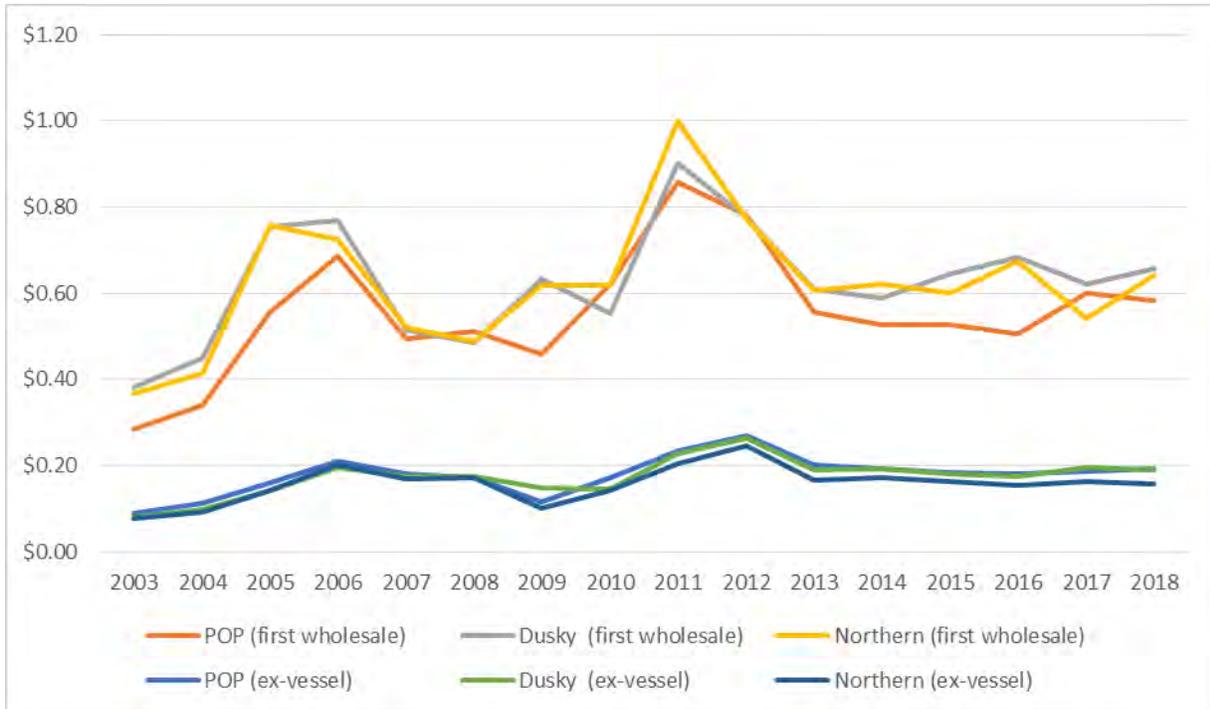
Years	Ex-vessel			First Wholesale			Ratio ex-vessel to first wholesale		
	POP	Dusky	Northern	POP	Dusky	Northern	POP	Dusky	Northern
2003	\$0.09	\$0.08	\$0.08	\$0.28	\$0.38	\$0.37	0.32	0.21	0.21
2004	\$0.11	\$0.10	\$0.09	\$0.34	\$0.45	\$0.41	0.33	0.22	0.22
2005	\$0.16	\$0.14	\$0.14	\$0.56	\$0.76	\$0.76	0.29	0.19	0.19
2006	\$0.21	\$0.20	\$0.20	\$0.69	\$0.77	\$0.72	0.31	0.25	0.28
2003-2016 Average	\$0.14	\$0.13	\$0.13	\$0.47	\$0.59	\$0.57	0.31	0.22	0.23
2007	\$0.18	\$0.18	\$0.17	\$0.49	\$0.52	\$0.52	0.37	0.34	0.33
2008	\$0.17	\$0.18	\$0.17	\$0.51	\$0.48	\$0.49	0.33	0.36	0.35
2009	\$0.12	\$0.15	\$0.10	\$0.46	\$0.63	\$0.62	0.25	0.24	0.16
2010	\$0.17	\$0.15	\$0.14	\$0.62	\$0.55	\$0.62	0.28	0.26	0.23
2011	\$0.23	\$0.23	\$0.20	\$0.86	\$0.90	\$1.00	0.27	0.25	0.20
2007-2011 Average	\$0.17	\$0.18	\$0.16	\$0.59	\$0.62	\$0.65	0.30	0.28	0.24
2012	\$0.27	\$0.26	\$0.25	\$0.78	\$0.78	\$0.77	0.34	0.34	0.32
2013	\$0.20	\$0.19	\$0.17	\$0.56	\$0.61	\$0.61	0.36	0.31	0.28
2014	\$0.19	\$0.19	\$0.17	\$0.53	\$0.59	\$0.62	0.37	0.33	0.28
2015	\$0.18	\$0.18	\$0.16	\$0.53	\$0.64	\$0.60	0.35	0.28	0.27
2016	\$0.18	\$0.17	\$0.15	\$0.51	\$0.68	\$0.67	0.36	0.25	0.23
2017	\$0.19	\$0.20	\$0.16	\$0.60	\$0.62	\$0.54	0.31	0.31	0.30
2018	\$0.19	\$0.19	\$0.16	\$0.58	\$0.66	\$0.64	0.33	0.29	0.25
2012-2018 Average	\$0.20	\$0.20	\$0.17	\$0.58	\$0.65	\$0.64	0.35	0.30	0.27

²⁶ First wholesale prices are calculated as the total revenue derived from the sale of the fish divided by the round weight of the fish used to generate the products. The prices do not reflect the first wholesale price individual product sold in the market. Prices were calculate using this method so that ex-vessel and first wholesale prices are more directly comparable.

Source: AKFIN summary of CAS and COAR data.

Figure 3-1 is a graphical representation of the annual data shown in Table 3-5. The averages presented in the table are omitted.

Figure 3-1 Comparison of ex-vessel and first wholesale prices of primary rockfish species



Source: AKFIN summary of CAS and COAR data.

3.5.1.2 Primary Species

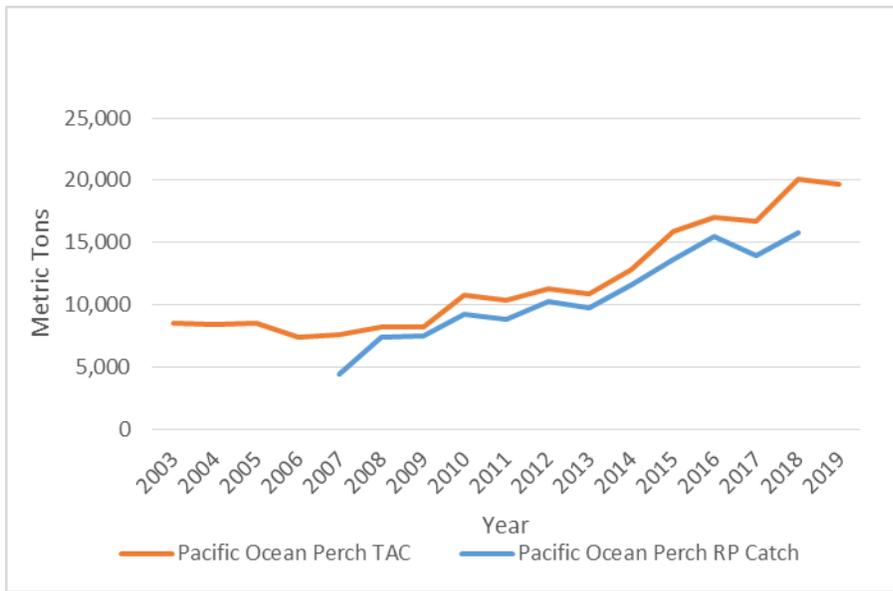
TAC for species allocated under the CGOA RP are reported in this section for 2003 through 2019. Catch data are reported for 2003 through 2018. These years represent the longest times series of complete fishing years when consistent catch data are available. Primary RP species TACs are set equal to the ABC. OFLs are set GOA-wide for Northern rockfish and dusky rockfish. OFLs for POP are set for the Southeast Outside and the combined Western, Central, and West Yakutat areas. Because there is no OFL set for the CGOA it is not reported and the ABCs are not reported since they are equal to the TAC.

3.5.1.2.1 RP Trawl Primary Species

CGOA TACs are established for the three primary RP species POP, Northern rockfish, and dusky rockfish. The RP sector allocation of these species is equal to the CGOA TAC minus the ICA established for bycatch needs in other target fisheries and the allocation to the longline entry level fishery. The following tables report the CGOA TACs, RP catch, and total catch of the three primary species.

CGOA POP TACs ranged between 6,000 mt and 10,000 mt until 2010 and increased to 20,112 mt in 2018 before declining slightly to 19,656 mt in 2019 (Figure 3-2). The TAC increases began in 2006 (the year prior to the start of the Pilot RP) and continued each year through 2016. The 2017 TAC decreased slightly but increased again in 2018. Over the time period considered POP TACs ranged from 6,600 mt to 20,112 mt and the 2019 TAC was about 8,000 mt above the 2003 through 2019 average of 11,906 mt.

Figure 3-2: CGOA POP TAC and RP catch

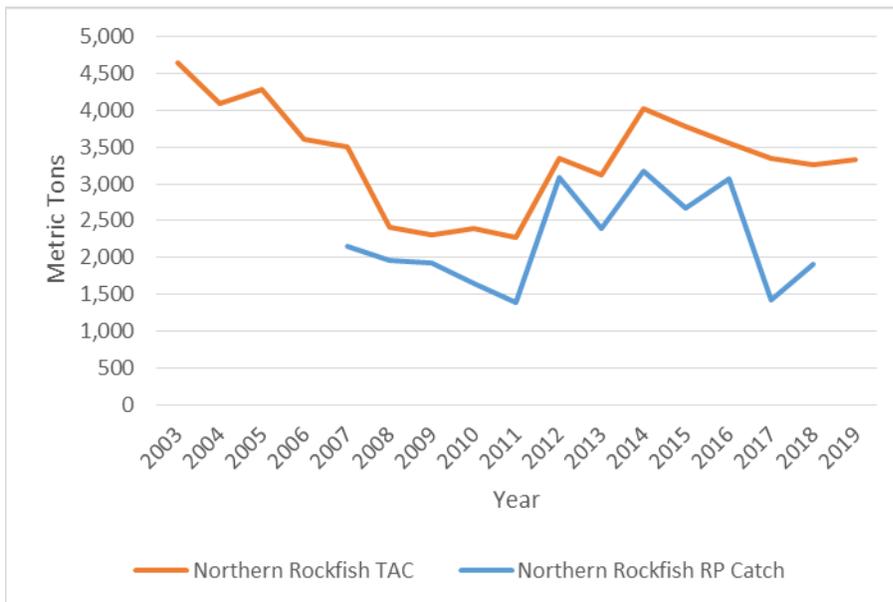


Source: NMFS annual Specifications and AKFIN summary of CAS data

The trawl gear catch of CGOA POP in the RP has increased along with the increasing TAC with almost all of the trawl catch being taken in the RP fishery. RP cooperatives were able to harvest almost all of their annual allocations without exceeding their sector allocation.

The Northern rockfish CGOA TACs ranged from a low of 2,281 mt in 2011 to a high of 4,640 mt in 2003 (Figure 3-3). The 2019 TAC is set at 3,338 mt, or about 30 mt below the 2003 through 2019 average.

Figure 3-3 CGOA Northern rockfish TAC, total trawl gar catch, and RP catch



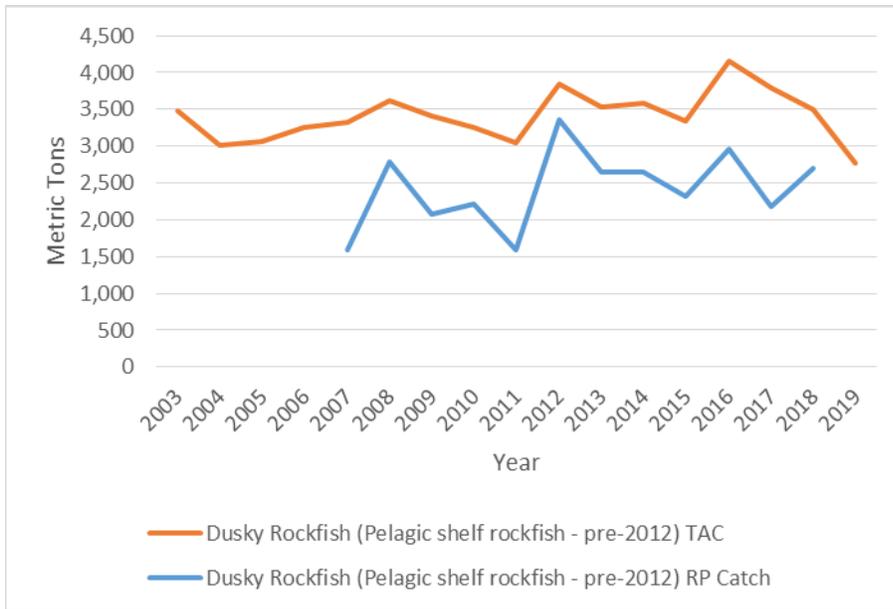
Source: NMFS annual Specifications and AKFIN summary of CAS data

Like POP, almost all of the CGOA Northern rockfish trawl catch is taken in the RP fishery. Current levels of catch are close to those taken during the RPP but are less than taken under the RP from 2012 through 2016.

The RP program cooperatives harvested a smaller percentage of their allocation in 2017 than other years. That year less than 50 percent of the TAC was taken. The percentage taken in 2018 increased to over 60 percent, but is still less than has been taken in previous years. The reason the percentage declined is likely due to factors impacting both available harvesting and processing capacity. Harvesting vessels try to harvest the rockfish species after the early Pollock and Pacific cod seasons end but before the June 10th opening for pollock in the BSAI, the West Coast whiting fishery, and tendering for pink salmon starts. On the processing side, the large pink salmon fishery took much of the summer capacity of the processing plants in Kodiak. With so much capacity directed towards salmon deliveries, some vessels were limited in their ability to make rockfish deliveries.

Dusky rockfish TACs remained fairly steady over the years considered (Figure 3-4). TACs ranged from 2,760 mt in 2019 to 4,147 mt in 2016. The 2019 TAC was 646 mt below the 2003 through 2019 average. The dusky rockfish TAC is about the same size as the Northern Rockfish TAC, but only about 15 percent of the POP TAC.

Figure 3-4 CGOA dusky rockfish TAC, total trawl gar catch, and RP catch



Source: NMFS annual Specifications and AKFIN summary of CAS data

Like the CGOA POP and Northern rockfish fisheries almost all of the CGOA dusky rockfish catch is taken in the RP. Trawl gear counts for a vast majority of that catch.

3.5.1.2.2 RP Longline Entry Level Primary Species

The RP includes a small entry level longline gear allocation that may be harvested by vessels using hook-and-line, troll, hand line, or jig gear. Pot gear is not included as a legal gear in this fishery. Entry level longline fishery vessels are not eligible to join cooperatives and are not allocated exclusive harvest privileges.

Catches in the longline entry level fishery are primarily dusky rockfish catches using jig gear. Targeted longline catch of Northern rockfish and POP are very small or did not occur during 2012 through 2018. Too few vessels are active in those fisheries to report the data, under confidentiality regulations.

The catches of dusky rockfish are taken by a few vessels that take the vast majority of the catch and several vessels reporting small amounts. For example, during 2016 when the dusky rockfish limit was

increased 67 vessels reported catch, but the top four producing vessels accounted for about 90 percent of the catch. The remaining vessels accounted for about 3 mt of catch or about 100 lbs per vessel on average. The four top producing vessels vary by year, but the top 2 producing vessels are consistently the same since 2013.

Table 3-6 shows the catch of CGOA dusky rockfish taken by longline gear in the open access fisheries. Catch varies greatly by year with the most catch being taken in 2016. That year the 30 mt set-aside was exceeded and increased to 50 mt the following year (see discussion in Section 3.5.1.5). Both the catch and number of vessels are relatively small other years. More vessels are active in other directed fisheries that take rockfish as incidental catch, primarily Pacific cod, but actual amounts of rockfish catch are small.

Table 3-6 Longline gear catch of dusky rockfish in the CG open access fisheries

		2012	2013	2014	2015	2016	2017	2018	2019	Average
Rockfish Targets	mt	c	8.4	c	c	33.9	8.2	4.3	5.4	8.6
	Vessels	2	4	1	2	6	7	5	3	3.8
All Other Targets	mt	c	0.9	c	c	3.2	3.2	1.1	1.3	1.9
	Vessels	14	55	59	67	65	53	15	27	44.4
Total	mt	0.5	9.3	2.2	11.1	37.1	11.4	5.5	6.6	10.5
	Vessels	16	58	59	68	67	59	20	30	47.1

Source: AKFIN Summary of NMFS CAS data
 Note: "Conf." means that 3 or fewer vessels reported landings.

3.5.1.3 Secondary Groundfish Species

Secondary species allocated under the RP include three rockfish species, Pacific cod, and sablefish (50 CFR 679.81(c)). The three secondary rockfish species are thornyhead rockfish, shortraker rockfish, and rougheye rockfish. Under Alternative 2 the secondary species TACs are divided between the cooperative quota and the non-RP fisheries. A portion of the Pacific cod TAC is allocated to the CV cooperatives and the remainder is available to non-RP participants. A portion of the shortraker and rougheye TACs are allocated to CP cooperatives with the remainder available to the non-RP fisheries. Portions of the sablefish and thornyhead rockfish TACs are allocated to the CV and CP cooperatives, with the remainder being allocated to the non-RP fishery. Vessels that are members of the cooperatives may utilize the available non-RP portion of the TACs after their cooperative checks out of the RP by notifying NMFS.

A summary of the secondary species allocations to CV and CP sectors is presented in Table 3-7. Both the allocation methods under the No Action alternative and Alternative 2 are included. The No Action alternative would remove all of the allocations of secondary species to the RP sectors. Persons with a valid LLP to use trawl gear in the CGOA would compete to harvest those species when (if) they are open to directed fishing or could use them as incidental catch if the fishery is closed to directed fishing. None of the elements that extend the RP would modify the current allocations.

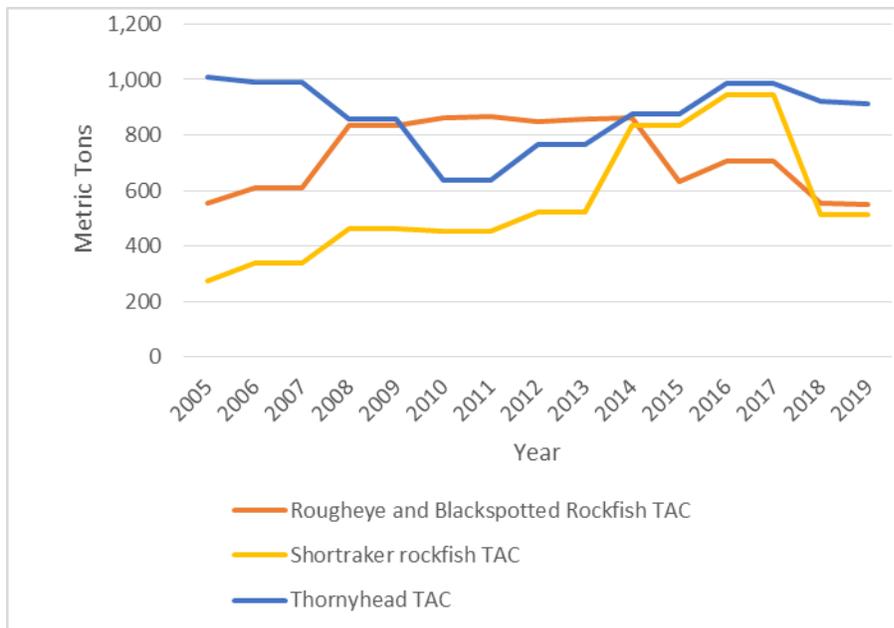
Table 3-7 Allocations of secondary species under the Alternatives

Sector/Species	Alternative 1 (No Action)	Alternative 2 (RP)
CV/Pacific cod	The 3.81 percent of TAC that has been assigned to the RP would not be removed from the A season (60 percent) or B season (40 percent) cod fishery and would be available to qualified LLP holders as directed or incidental catch.	3.81 percent of CGOA TAC
CV/rougheye/ blackspotted rockfish	The 2 percent MRA applied to the RP would be removed from regulations. MRAs for rougheye that apply to other fisheries would be retained.	MRA: shortraker/rougheye may not exceed 2.0 percent of trip.
CV/trawl sablefish	6.70 percent of the CGOA sablefish TAC allocated to the RP would be available for incidental catch in CV trawl target fisheries. Trawl CVs in the CG would not be allowed to directed fish for sablefish as they did under the RP.	6.70 percent of CGOA TAC
CV/shortraker rockfish	The 2 percent MRA applied to the RP would be removed from regulations. MRAs for shortraker that apply to other fisheries would be retained.	MRA: shortraker/rougheye may not exceed 2.0 percent of trip.
CV/thornyhead rockfish	7.84 percent of the CGOA thornyhead TAC allocated to the RP would be available for incidental catch in trawl CV target fisheries. Trawl CVs in the CGOA not anticipated to be allowed to directed fish for thornyhead, rougheye, or shortraker because the TAC is expected to be too small for a directed fishery now and into the foreseeable future.	7.84 percent of CGOA TAC
CP/Pacific cod	The CP sector would be able to use the 2 percent trawl CP Pacific cod allocation for incidental catch or, if the TAC is large enough in the future, directed fishing. The CP sector has traditionally been closed	MRA 4.0 percent of trip

	to directed Pacific cod fishing for the entire year.	
CP/rougheye rockfish	The TAC percentage that has been assigned under the RP to the CP sector would no longer be deducted from the CGOA sablefish trawl allocation or the CGOA rockfish species allocations. These species (other than sablefish in the IFQ fishery) are anticipated to be placed on bycatch status at the beginning of the year for all gear types, given fisheries current and expected future conditions.	58.87 percent of CGOA TAC
CP/trawl sablefish		3.51 percent of CGOA TAC
CP/shortraker rockfish		40.0 percent of CGOA TAC
CP/thornyhead rockfish		26.5 percent of CGOA TAC

The secondary rockfish species CGOA TACs are presented for 2005 through 2019 (Figure 3-5). Prior to 2005 the shortraker rockfish and rougheye rockfish TACs were combined and the combined TAC is not reported. Secondary rockfish species TACs varied over the period considered. Thornyhead rockfish TAC ranged from high of 1,010 mt and a low of 637 mt. The 2019 TAC (911 mt) was closer to the period high than the low, but declined slightly in 2018 and 2019. The shortraker and rougheye TACs never exceeded 1,000 mt and in 2018 and 2019 was slightly more 500 mt. The TACs for those two species was close to the same in 2018 and 2019, which was a decline of approximately 40 percent from recent highs.

Figure 3-5 Secondary rockfish species CGOA TACs, 2005 through 2019.



Source: NMFS annual specifications

3.5.1.4 PSC

The information presented in this section focuses on halibut PSC and Chinook salmon PSC from the CGOA trawl fisheries. Data from the 2003 fishing year is excluded because AKFIN staff advised the

authors that the data available includes duplicate information and recommended that the PSC data for that year not be used until that issue can be resolved with the agencies providing the data.

3.5.1.4.1 Catcher Vessels

Starting in 2015, the RP trawl CVs are limited to 1,200 Chinook salmon each year while checked into the RP (Amendment 97 to the GOA FMP). If the RP trawl CVs reach the Chinook salmon limit, directed fishing by all CVs in the RP will be prohibited for the remainder of the year. On October 1, if it is determined that more than 150 Chinook salmon from the RP CV limit will not be caught, the available Chinook salmon limit minus 150 fish can be reallocated for use by CVs in other GOA fisheries.

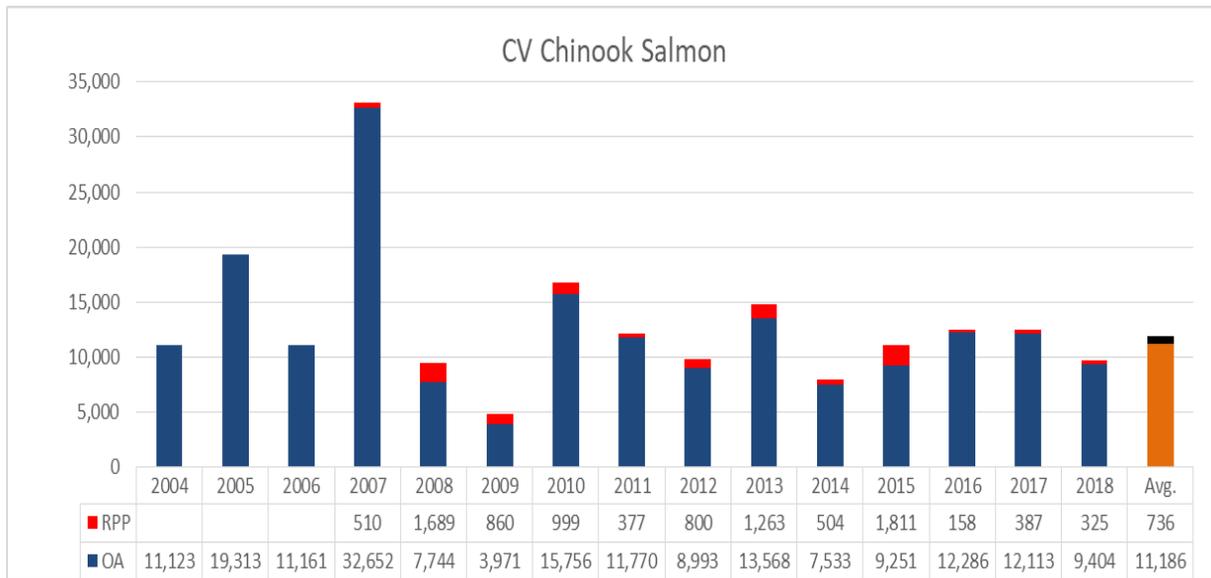
In general, Chinook salmon PSC tends to be quite difficult to consistently avoid. Improvements in gear and communication on the fishing grounds have provided some benefits. However, there are still instances where a vessel is reported to encounter relatively high PSC rates when other vessels in the area had not previously realized high rates. Members of the fleet often describe these events as “lighting strikes” since they tend to be difficult to predict and, therefore, avoid.

In an attempt to reduce Chinook salmon PSC, all shoreside cooperatives agreed to the Salmon Bycatch Avoidance Plan adopted in 2014. The plan included four parts:

1. a “slow start” to fishing to test the fishing grounds;
2. individual vessel Chinook salmon bycatch standards for the months of May, June, July, and August;
3. Chinook salmon hotspot reporting requirements; and
4. full retention of all bycaught Chinook salmon which is a regulatory requirement starting on January 1, 2015 (Alaska Groundfish Data Bank, Inc, 2018)

Since the Chinook salmon PSC limit was implemented for the RP, the CV sector has been well under their 1,200 fish limit, except for 2015. During 2015, CVs exceeded their limit of 1,200 fish, but were well under their limit until November. In May and June, an estimated 684 and 91 Chinook salmon were taken, respectively. The remaining 1,034 Chinook salmon were taken during the last week of fishing in November. High PSC rates reported for the last week fishing occurred in November were attributed to the fleet, in part, based on the basket samples taken from one vessel. All other years the limit was in place the fleet harvested 32 percent of the sector’s PSC limit or less.

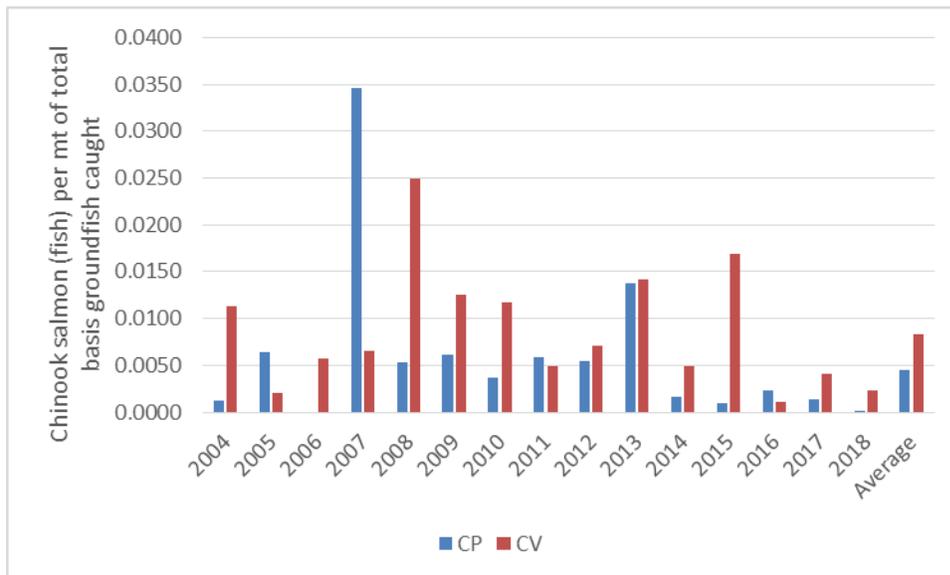
Figure 3-6 Chinook salmon caught in the CGOA open access and RP fisheries, 2004 through 2018



Source: AKFIN summary of CAS data

Figure 3-7 shows the estimated annual Chinook salmon PSC rates in the CGOA trawl rockfish target fisheries. Rates are shown as the ratio of Chinook salmon per metric ton of total groundfish caught in the rockfish target fisheries. CV rates were highest in 2008 and 2015, but low in 2014, 2016, 2017 and 2018. The variability of the Chinook salmon PSC rates highlights the difficulties associated with avoiding Chinook salmon, even when gear is modified to allow some salmon to escape and the fleet communicates bycatch hot spots in close to real time.

Figure 3-7 Chinook salmon per metric ton of groundfish species in the CGOA rockfish target fishery, 2004 through 2018



Source: AKFIN summary of CAS data

CP data is also provided in the figure to allow a direct comparison of the impacts on the two sectors. A more detailed discussion of the CP sector is provided later in this section. For CPs, years when the CP GOA Chinook salmon limit was in place are among the lowest rates reported and less than half of the

2004 through 2018 average. Rates in 2007 were over twice those reported for any other year. While 2007 was the first year of the RPP, most CP sector members did not take part in GOA cooperatives until 2010.

50 CFR 679.21(d) establishes annual halibut PSC limit apportionments to trawl gear and hook-and-line gear. In December 2018, the Council recommended trawl gear halibut PSC limits of 1,706 mt for 2019. Over the 2004 through 2016 time period, the overall GOA trawl PSC limit decreased from 2,000 mt to the current limit of 1,706 mt. The reduction in the overall GOA trawl PSC limit is a result of reductions implemented as part of the RP and Amendment 95 to the GOA FMP. Amendment 95 to the GOA FMP reduced the trawl halibut PSC (and hook and line) PSC limit. The trawl limit was reduced from 2,000 mt in 2004 to 1,973 mt under RP and then stair stepped down to the current 1,706 mt under Amendment 95 to the GOA FMP. The overall trawl limits for the GOA includes the 191.4 mt that is deducted and set aside for exclusive use by the RP participants.

Table 28d to 50 CFR part 679 specifies the amount of the trawl halibut PSC limit that is assigned to the CV and CP sectors that are participating in the RP. This includes 117.3 mt of halibut PSC limit to the CV sector and 74.1 mt of halibut PSC limit to the CP sector. These amounts are allocated from the trawl deep-water species fishery's halibut PSC third seasonal apportionment. After the combined CV and CP halibut PSC limit allocation of 191.4 mt to the RP, 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 RP participants that could be reapportioned 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 RP participants. The remainder of the unused RP halibut PSC limit is unavailable for use by any person for the remainder of the fishing year (50 CFR 679.21(d)(4)(iii)(C)).

Each year NMFS assigns a portion of the CV halibut PSC to shore-based RP cooperatives. The amount assigned to each cooperative is based on the primary species CQ associated with the cooperative member's LLP licenses. Halibut PSC assigned to each cooperative is shown in Table 3-8.

Table 3-8 Initial allocations of halibut PSC limits (mt) to cooperatives, 2007 through 2019

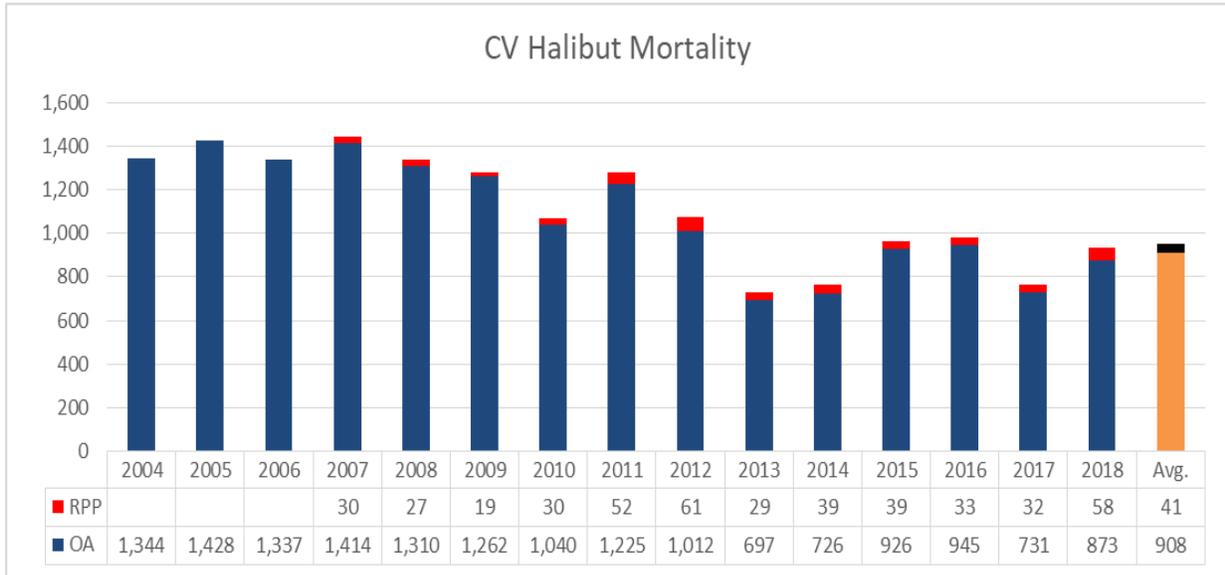
	2012	2013	2014	2015	2016	2017	2018	2019
GLOBAL ROCKFISH COOPERATIVE	2.5	2.3	5.2	5.2	5.2	5.2		
I.S.A. ROCKFISH COOPERATIVE	15.3	15.3	15.3	13.0	18.0	18.0	20.9	20.9
NORTH PACIFIC ROCKFISH COOPERATIVE	18.5	18.7	21.5	21.5	21.5	21.5	23.8	23.8
OBSI ROCKFISH COOPERATIVE	29.3	26.0	23.2	23.2	18.2	18.2	18.2	18.2
PACIFIC ROCKFISH COOP	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
STAR OF KODIAK ROCKFISH COOPERATIVE	33.0	33.1	33.1	33.1	33.1	33.1	33.1	33.1
WESTERN ALASKA FISHERIES ROCKFISH COOP	13.5	16.8	13.9	16.2	16.2	16.2	16.2	16.2
Total	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3

Source: Annual cooperative allocations reported on the NMFS AKR website.

e.g. <https://www.fisheries.noaa.gov/alaska/sustainable-fisheries/alaska-fisheries-management-reports>.

The fishing plan established by shore-based cooperatives also included a system to discourage high halibut bycatch rates. An incentive for these internal bycatch controls is to ensure that the sector's PSC limit is not reach, because it would result in the closure of all RP fisheries. The bycatch controls in include standards that are set and enforced by the cooperative members. Halibut bycatch standards adopted by shore-based cooperatives include the inter-cooperative red light, yellow light, green light system. The light system is based on the percentage of halibut PSC per ton of groundfish used in RP target fisheries. The ratio of halibut to groundfish indicates whether the vessel may continue fishing, fish with caution, or stop fishing to avoid high halibut bycatch (Alaska Groundfish Data Bank, Inc, 2018). As shown in Figure 3-8 the CV fleet had never taken more than 52 percent of its 117.3 mt halibut PSC limit since the RP was implemented in 2012 and most years less than 33 percent of the limit was taken.

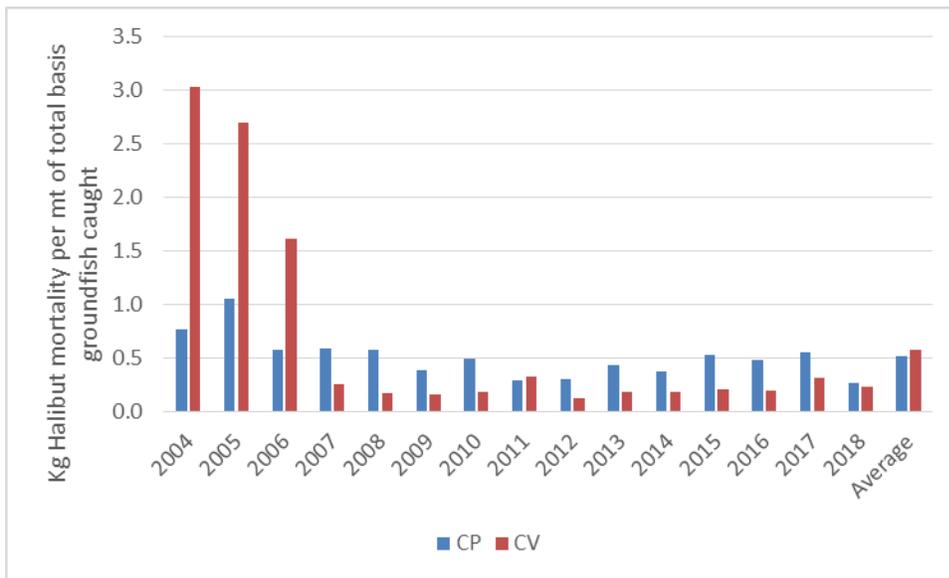
Figure 3-8 Halibut PSC mortality in the open access and RP CV sectors, 2004 through 2018



Source: AKFIN summary of CAS data

Figure 3-9 shows the ratio of halibut mortality to groundfish catch in the CGOA rockfish target fisheries from 2004 through 2018. The ratio is in kilograms of halibut mortality per metric ton of groundfish catch in the rockfish target fisheries. The CV ratio is three to six times greater in the years before the RPP was implemented. After the RPP was implemented the rate was consistently less than 0.5 kg/mt. The decrease is primarily due to the bycatch avoidance practices that were implemented by the CV fleet.

Figure 3-9 Kilograms of halibut mortality in the CGOA rockfish fishery per metric ton of total groundfish catch by CVs and CPs in rockfish target fisheries, 2004 through 2018



Source: AKFIN summary of CAS data

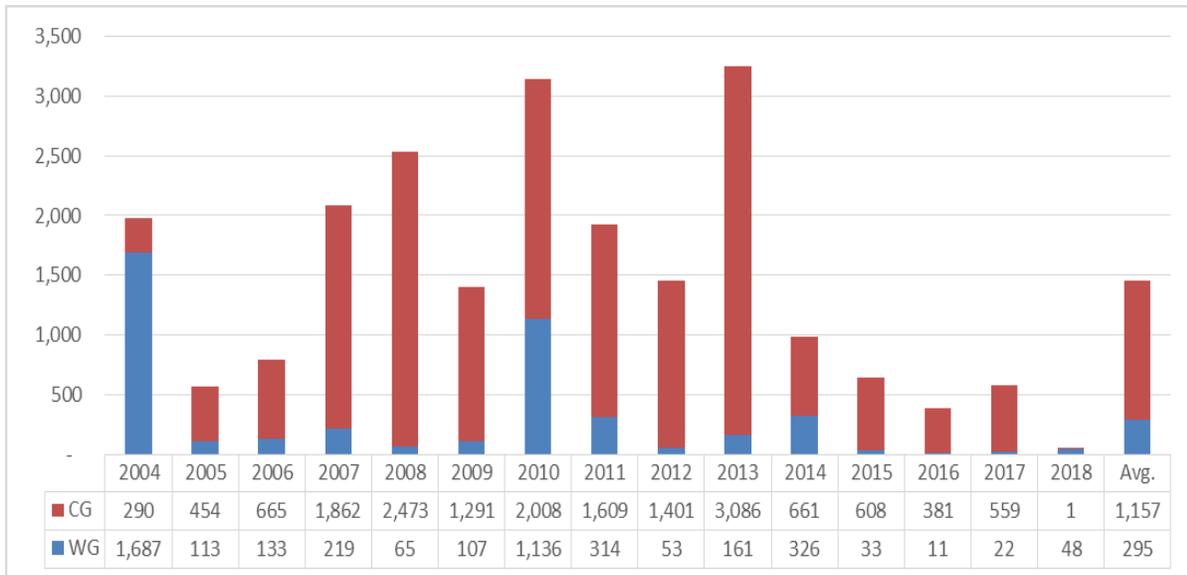
The CP halibut PSC is discussed later in this section, but is included in the above figure for direct comparison of the two rates and to show that both sectors improved their rates. The CP ratios were decreased under the RP by about half. While the CP sector's ratios decreased, the change is less than realized by the CV sector.

3.5.1.4.2 Catcher/Processors

Trawl CP vessels fishing in the Gulf of Alaska are subject to a limit of 3,600 Chinook salmon in the Western and Central Gulf of Alaska, or, 4,080 Chinook salmon if the previous year’s catch of Chinook salmon did not exceed 3,120 fish. This limit applies to vessels fishing inside and outside of the RP. Directed fishing by trawl CPs will be closed in the GOA when that limit is projected to be reached. The trawl CP sector has a seasonal limit before June 1 of either 2,376 or 2,693 Chinook salmon, depending on whether they were allocated additional Chinook salmon as a result of being under their defined limit the previous year.

Figure 3-10 shows the Chinook salmon PSC usage in the WGOA and CGOA by CPs. Since 2014 (the five most recent years of data) the Chinook salmon PSC in both the WGOA and CGOA has been below the long-term average (except for the CG in 2014). Because their catch has been below the 3,120 fish threshold, the limit is currently 4,080 fish.

Figure 3-10 Reported Chinook salmon PSC by CPs in the Western and CGOA, 2004 through 2018

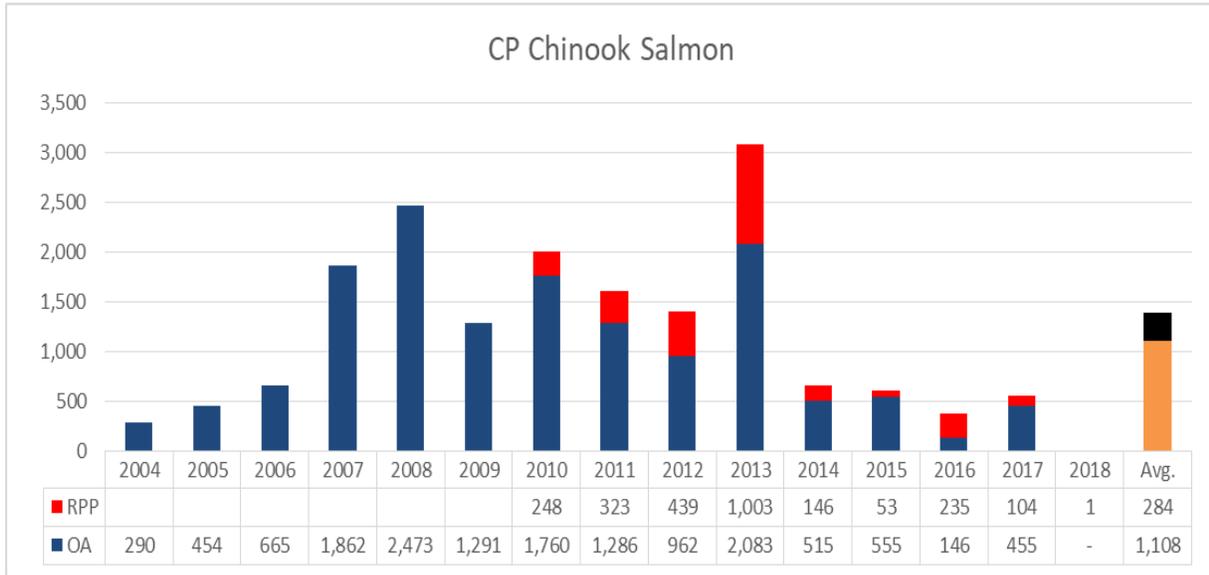


Source: AKFIN summary of CAS data

Catcher/processors began assigning the majority of their RPP allocation of primary species to cooperatives starting in 2010. Prior to 2010 most of the catch is attributed to the open access fishery, since the CP LLP licenses were assigned to that fishery and not cooperatives by their owners.

Figure 3-11 shows the reported Chinook salmon PSC in the CGOA by CPs in both the RP and open access fisheries. Chinook salmon PSC used by the trawl CP sector in the CGOA has shown considerable variability with relatively large catches reported from 2007 through 2013. Chinook salmon catches before the RPP was implemented and after 2013 are similar and always less than half of the long-term average.

Figure 3-11 CP Chinook salmon PSC in the CGOA trawl RP and open access fisheries, 2004 through 2018

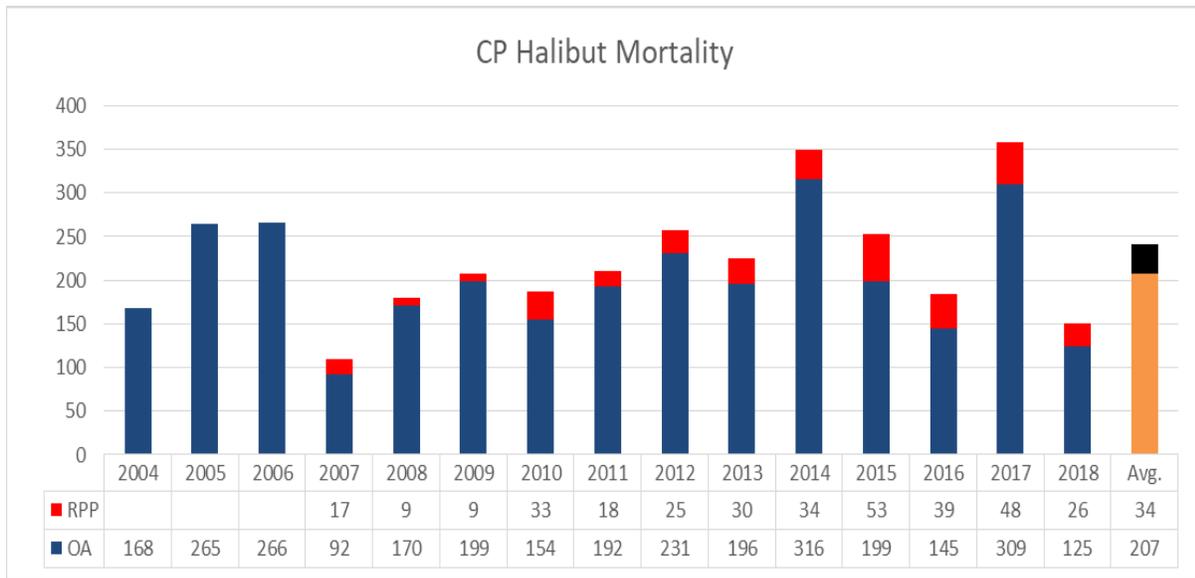


Source: AKFIN summary of CAS data

Data reported in Figure 3-11 shows that in the CGOA, trawl CPs have had below average Chinook salmon PSC usage in the past five years. Chinook salmon PSC usage in 2013 was greater than any other year considered. During 2013, Chinook salmon PSC was relatively large in both the RP and the open access fisheries. CVs also experienced higher than average Chinook salmon PSC that year. However, because the CVs and CPs have different fishing patterns and locations the two sectors may realize different interactions with Chinook when targeting groundfish.

Halibut PSC mortality in the CGOA CP trawl fisheries is shown in Figure 3-12. The increase in halibut mortality associated with the RPP after 2009 was, in part, a result of more CPs being assigned to cooperatives as opposed opting out of the program and fishing in the open access fishery. Under the RP, CPs are assigned 74.1 mt of halibut PSC for use in RP cooperatives. CPs have never taken their limit. The closest they came was in 2015. That year they still had 21 mt of halibut mortality remaining after the cooperative members finished fishing for the year.

Figure 3-12 CP halibut PSC mortality in the CGOA trawl RP and open access fisheries, 2004 through 2018



Source: AKFIN summary of CAS data

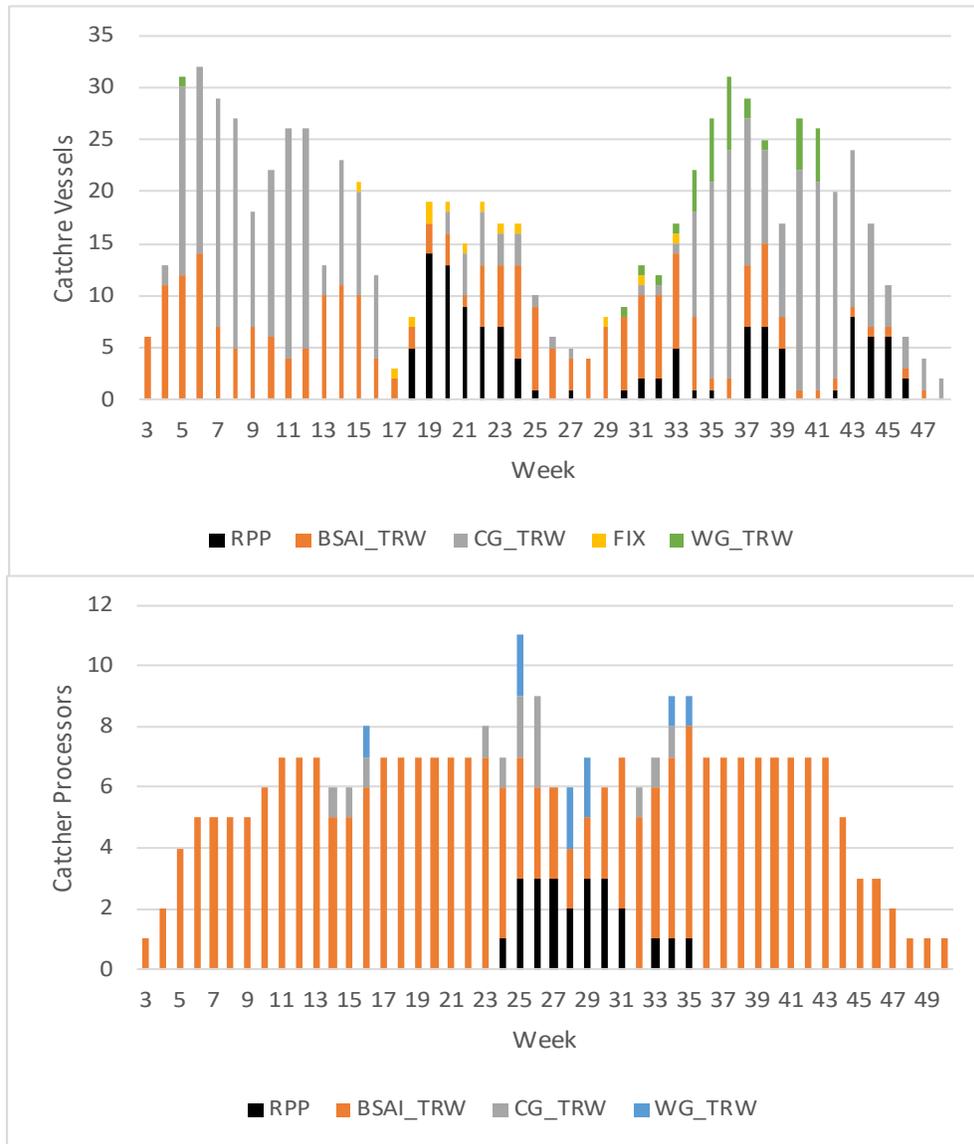
3.5.1.5 Seasonal Rounds of Fishing

The Council specifically requested that this analysis include information on the seasonal fishing rounds of vessels that are allocated RP CQ. Vessels that participated in more than one fishery in a week are counted for each fishery during the week. As a result, the total number of CVs or catcher processors can be greater than the actual number of vessels that fished that week. For example, if a vessel fished in the BSAI trawl and GOA trawl fishery during the same week that vessel would get counted twice in the bar chart.

Catcher vessels begin fishing in the BSAI trawl fishery or the CGOA trawl fishery on January 20. Very little fishing activity is reported from mid-April to May 1. The RP opens May 1 and the vessels tend to focus on the CGOA rockfish fisheries or other GOA target fisheries through early June. Vessels begin moving back into the BSAI in early June to be there for the start of the BSAI trawl fisheries on June 10. A small number of vessels participated in fixed gear fisheries in April through early August. After the BSAI trawl fisheries slow, vessels fish either the CGOA rockfish and other trawl fisheries or the WGOA. Limited effort continues in the BSAI and picks up again when the fall fisheries open. After those fisheries slow at the end of September, most vessels fish the remainder of the year in the CGOA trawl fisheries, with very limited participation in the BSAI trawl fisheries.

Catcher processors fish in the BSAI trawl fisheries exclusively until April. In early April, one vessel fished in the CGOA or WGOA for three weeks. The vessels then exclusively fished in the BSAI trawl fishery until as many as three vessels moved to the CGOA for the rockfish fishery. The reported vessels then fished either CGOA, WGOA, or the BSAI until the end of August when all the effort returned to the BSAI.

Figure 3-13 Number of RP vessels participating by fishery and week, 2018



Source: AKFIN summary of CAS data

3.5.2 Description of Fisheries Management

The RP is managed under a LAPP structure as defined in MSA Section 303A. The CGOA rockfish LAPP was first implemented as the RPP (from 2007 through 2011) and then as the RP from 2012 through 2021. Catch share history in the RP is linked to the LLP license and can be transferred with the sale of the license.

3.5.2.1 Allocation of Catch History

The RP quota qualification was based on targeted legal landings during the years 2000 through 2006 or fishing in the RPP's entry level fishery during 2007, 2008, or 2009. The allocation of QS was based on the best 5 of 7 years from 2000 through 2006, or the number of years fished during the qualifying period for entry level fishery participants that did not qualify for QS based on history from 2000 through 2006.

Participants using trawl gear in the RPP’s entry level trawl fishery were issued harvesting privileges by dividing 2.5 percent of the allocation.

3.5.2.2 Cooperative Formation

In order to encourage cooperative formation, the RP relaxed cooperative formation requirements that were established under the RPP. The minimum number of LLP licenses with affixed rockfish QS required to form a cooperative was eliminated. However, CQ could only be transferred to a cooperative with a minimum of two LLP licenses. There was no requirement that the LLP licenses are held by different persons. These changes were implemented to encourage cooperative formation by providing greater flexibility to transfer CQ to meet operational demands.

3.5.2.3 Division of CGOA Primary Species TAC

Primary species TACs are divided into four parts for the management of the CGOA fishery. The four parts are the CV cooperative quota, CP cooperative quota, longline entry level fishery, and an ICA for use as bycatch in other directed fisheries. The 2019 ICA for POP, Northern rockfish, and dusky rockfish was 3,000 mt, 300 mt, and 250 mt, respectively (Table 3-9). An ICA is set to cover the catch of the primary species in other target fisheries.

Table 3-9 CGOA RP primary species apportionments, 2019

Primary rockfish species	CGOA annual TAC	Incidental catch allowance	TAC minus ICA	Allocation to the entry level longline ¹ fishery	Allocation to the rockfish cooperatives ²
Pacific ocean perch	19,646	3,000	1,646	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

1 Longline gear includes hook-and-line, jig, troll, and handline gear (50 CFR 679.2).
 2 Rockfish cooperatives include vessels in CV and CP cooperatives (50 CFR 679.81).

Table 3-10 reports the amount and percentage of the primary species ICA that was used in 2017 and 2018. The ICA amounts set for 2019 are reported, but the fishery was still in progress when the data were generated and complete catch data were not available for 2019. The information shows that under 60 percent of the Northern rockfish ICA was taken in both 2017 and 2018. The ICA has remained at 300 mt the entire time period considered. Dusky rockfish ICA was exceeded by 12 percent in 2017 and was about half of the ICA in 2018. The ICA has remained at 250 mt over the entire period. The POP ICA was exceeded by over 100 percent in 2017. That caused NMFS to increase the by 2,000 mt. The 2018 ICA was only 58 percent of the 4,000 mt amount established. As a result, the 2019 ICA was reduced by 1,000 mt to 3,000 mt.

Table 3-10 Primary species ICA usage, 2017 and 2018

Species	2017	2018	2019
Dusky Rockfish			
ICA (mt)	250	250	250
ICA caught (mt)	281	128	n/a
% ICA caught	112%	51%	
Northern Rockfish			
ICA (mt)	300	300	300

ICA caught (mt)	169	142	n/a
% ICA caught	56%	58%	
POP			
ICA (mt)	2,000	4,000	3,000
ICA caught (mt)	4,472	2,325	n/a
% ICA caught	224%	58%	

Note: n/a means the data were not yet available when the table was developed.
 Source: AKFIN summary of CAS data.

The RP includes a longline entry level fishery (hook-and-line, troll, hand line or jig gear). The entry level longline fishery continues to exist under the RP; however, the amount of primary species available to this sub-sector was reduced in the transition from the RPP, because this amount had not been fully utilized. The program built in a stair-step increase for this sub-sector’s allocation if ≥ 90 percent of the allocation is harvested (Table 3-11).

Table 3-11 Entry Level Longline Fishery Allocation

Rockfish Primary Species	2019 Allocation	Incremental Increase per Season if $\geq 90\%$ of Allocation is	Up to Maximum % of TAC
POP	5 metric tons	5 metric tons	1%
Northern rockfish	5 metric tons	5 metric tons	2%
Pelagic shelf rockfish	50 metric tons	20 metric tons	5%

Source: 2019 harvest specifications

Under the RP halibut PSC limits are assigned to cooperatives based on the proportion of primary species QS attached to the LLP license. Halibut PSC limits for the RP were reduced from historical usage levels to balance the need to provide adequate halibut PSC for use by rockfish cooperatives while recognizing LAPPs could reduce halibut PSC use. The RP created a 74.1 mt halibut PSC limit for the CP sector and a 117.3 mt halibut PSC limit for the CV sector. Those amounts represent a 12.5 percent reduction from the amount of halibut mortality associated with each sector during the 2000 through 2006 qualifying period. The remaining 27.4 mt (16.8 mt from the CV sector and 10.6 mt from the CP sector) that would otherwise have been allocated is not available for use by any trawl or fixed gear fishery and remains “in the water” to contribute to the halibut biomass.

3.5.2.4 City of Kodiak Delivery Requirement

A Kodiak delivery requirement is included in the RP to address concerns raised by processors that the RP would provide harvesters an undue competitive advantage and that they could use that potential advantage to deliver outside of the traditional port of Kodiak. As a result, the RP includes a requirement that all primary and secondary RP species CQ harvested by the CV sector must be delivered to a shore-based processor within the City of Kodiak. In addition to protecting traditional processors, the requirement is intended to protect the fishing community of Kodiak. While the RPP also included a requirement that LLP license holders with quota fishing in the CV sector may only form a cooperative with other CVs and the processor to whom they historically delivered their catch from 1996 through 2000, this requirement was eliminated because the Council determined their program goals could be achieved without that provision.

3.5.2.5 Ownership and Use Caps

Use caps for individual vessels (4 percent for CVs, 40 percent for CPs) and cooperatives (30 percent for CV, 60 percent for CPs) prevent excessive consolidation of the fleet. Shoreside processors are also subject to use caps (30 percent), unless grandfathered at a higher level based on processing history.

3.5.2.6 Sideboard Limits for the RP

The RP includes a series of CV and CP sideboard restrictions to limit spillover impacts on other fisheries in the GOA. Sideboard limits were established for certain West Yakutat District and the Western GOA fisheries. RP sideboards apply to federally permitted vessels fishing in federal waters and waters adjacent to the CGOA when the harvest of rockfish primary species by that vessel is deducted from the federal TAC. Sideboards limit both the LLP license with rockfish QS assigned to it, and the vessel used to make legal landings of rockfish QS. RP sideboards are in effect from July 1 through July 31. Sideboard measures are in effect only during the month of July when the rockfish fisheries were traditionally open and vessel operators had to choose between fishing in the CGOA rockfish fisheries and other fisheries that were open to directed fishing.

CVs had small West Yakutat District sideboard limits for POP and pelagic shelf rockfish under the RPP. The sideboard limit was modified to a ban on fishing those species in the West Yakutat District during July. The CGOA RP also prohibited CVs from directed fishing in any target fishery in the deep-water complex in the month of July (except for CGOA Rockfish). This limitation prohibits CVs from directed fishing in the Arrowtooth flounder, deep water flatfish, and rex sole fisheries from July 1 through July 31. These restrictions were implemented to limit the ability of CVs in these fisheries because they had not historically harvested these species in July. As a result of this sideboard CGOA RP CVs are limited to fishing species in the shallow-water complex during the month of July.

CP processor sideboard limits were designed to minimize potential adverse competition on non-RP participants and potential conflicts among rockfish CP cooperatives in the Western GOA and West Yakutat District rockfish fisheries, as well as GOA flatfish harvesters. Sideboard limits were not set for other rockfish species because those species were not traditionally harvested in July, so additional management measures were determined not to be needed. Because the Amendment 80 sideboard limits are set for all GOA species harvested by those vessels, the need for additional sideboard limits beyond the primary rockfish species and halibut PSC was mitigated. Therefore, sideboard limits are imposed for only dusky rockfish, POP, and northern rockfish.

The RP also established a sideboard limit on the amount of halibut PSC that could be used in July. The halibut PSC sideboard limits are based on historical halibut PSC usage during July. Halibut PSC sideboards were established for shallow-water species and the deep-water complex. The percentage assigned as a sideboard limit was based on the annual average halibut PSC used by vessels with LLP licenses subject to the sideboard limit during July from 2000 through 2006 relative to the total available. A Chinook salmon PSC limit for the CV sector of 1,200 fish was established for the RP in 2015. If the RP trawl CVs reach the Chinook salmon limit, directed fishing by this sector is prohibited. On October 1, if it is determined that more than 150 Chinook salmon from the RP CV limit will not be caught, the available Chinook salmon limit minus 150 fish will be reallocated to the non-RP CV Chinook salmon limit.

Trawl CP vessels fishing in the Gulf of Alaska are subject to a limit of 3,600 Chinook salmon, or, 4,080 Chinook salmon if the previous year's catch of Chinook salmon did not exceed 3,120 fish. This limit will accrue from both vessels fishing inside and outside of the RP, and it will prohibit directed fishing for vessels both fishing inside and outside of the RP if the limit is reached. The trawl CP sector will also have a seasonal limit before June 1 of either 2,376 or 2,693 Chinook salmon, depending on if the sector took 3,120 Chinook salmon the previous year.

3.5.2.6.1 Crab Program Sideboard Protections for the GOA

Regulations at 50 CFR 680.22 restrict the owners of vessels with a history of participation in the Bering Sea snow crab fishery from using the increased flexibility provided by the CR Program to expand their level of participation in GOA groundfish fisheries. Vessels and LLP licenses subject to sideboard restrictions are based on a vessel's fishing history and apply both to the fishing vessel itself and to any LLP license generated by that vessel's fishing history. Pacific cod sideboard limits were established based on their history in the GOA groundfish fisheries and the BSAI snow crab fishery. Rockfish sideboard ratios are calculated by dividing the aggregate landed catch by vessels subject to sideboard directed fishing closures by the total landed catch of that species by all groundfish vessels between 1996 and 2000.

Crab Rationalization sideboards apply non-AFA vessels fishing in the GOA²⁷. Non-AFA vessels may be subject to prohibitions on fishing in the GOA except for pollock and Pacific cod. As a result a non-AFA trawl CV can be prohibited from fishing primary and secondary rockfish species in a RP cooperative but could be allowed to fish Pacific cod²⁸, if they had access to CQ. This is a result of being exempt from the Pacific cod sideboard limits but still subject to all other GOA species sideboard limits (other than pollock). This action would impact any vessel that has been sideboarded under the Crab Rationalization program in the GOA for all species except Pacific cod and pollock.

Table 3-12 LLP license by GOA crab sideboard limit

Vessel Mode/Sideboard	non-AFA	AFA	Total
C/P	19	2	21
None	19	2	21
CV	67	30	97
Crab Rationalization GOA Sideboarded - except Pcod and PLCK	1		1
None	66	30	96
Total	86	32	118

Source: NMFS 2018 groundfish LLP license file

Note: Pcod is Pacific cod and PLCK is Pollock in the LLP license database used to report the information.

3.5.2.7 Summary of RP Structure

A summary of the RP structure is provided in Table 3-13. This table allows for a comparison of the program objectives and elements within the management structure of each program. While all LAPPs must comply with MSA LAPP requirements and additional laws, depending on the characteristics of the historical fishery and participation, as well as the problems that the LAPP structure was seeking to address, the Council has often had a different vision for the LAPPs it has recommended to the Secretary of Commerce.

²⁷ 83 FR 40733

²⁸ They are still subject to the full retention of rockfish requirement so any rockfish bycatch in the Pacific cod fishery would prohibit them from fishing Pacific cod.

Table 3-13 Summary of CGOA RP structure

Element	Regulation
Type of allocation	Cooperatives with entry level longline fishery
Year implemented	2012
Fishing Areas	CGOA
Program development	LAPP developed by the Council under MSA
Harvester initial allocation	LLP holders (based on catch histories of the LLP license)
Processor component	Kodiak landing requirement.
Gear type	Bottom and semi-pelagic trawl
Groundfish area/species allocations	3 primary and 5 secondary groundfish allocations
PSC	Halibut CV: 117.3 mt Halibut CP: 74.1 mt CV Chinook salmon 1,200 fish CP Chinook limit: Established GOA limit applies to both the RP and open access fisheries
Incidental catch allowance	Established for primary species use in other fisheries
Sideboard limits	July 1 through 31: Established for West Yakutat and WGOA
Number of vessels in season prior to program implementation	25 CVs 6 CPs
Number of vessels in 2018 season	26 CVs 4 CPs
Observer Coverage	200% CPs 100% CVs
Cap on individual QS holdings / use	4% CVs 40% CPs
Vessel use caps	60% for CPs 8% for CVs
Cooperative use cap	30% for CVs
Processing cap	30%
Share classes	Operation type (CV/CP)
Eligibility to acquire shares	US resident or legal US entity
Community provisions	Kodiak delivery requirement for CVs
Elements to improve small vessel entry opportunities	Longline entry level fishery
Subject to Cost Recovery	Yes

3.5.2.8 Pacific Cod Roll-overs

The information in this section was derived from the October 2019 stranded Pacific cod discussion paper²⁹. The Council is considering providing NMFS the authority to roll-over unused Pacific cod from the CV cooperatives to the fixed gear sector after November 15 (Alternative 2, Element 2).

²⁹ <https://meetings.npfmc.org/CommentReview/DownloadFile?p=7575a2e1-d8b3-4324-ae8e-037ddf7b1dd5.pdf&fileName=D3%20Unused%20Pacific%20Cod%20Discussion%20Paper.pdf>

In the RP, trawl CVs receive 3.81 percent of the annual CGOA TAC (see Table 28c to 50 CFR part 679), which is deducted from the trawl CV B season allowance (see Table 12 of the Final 2019 and 2020 final harvest specifications for groundfish of the GOA). The trawl CV cooperatives do have the ability to transfer Pacific cod between other trawl CV cooperatives. However, only a few Pacific cod transfers have been done since 2011 between the six trawl CV cooperatives. The cooperative’s 2011 to 2018 average annual amount transferred between cooperatives is 21 mt. From 2011 to 2018, the average amount of Pacific cod in the trawl CV RP cooperatives that is unused is 692 mt. If 2018 is not included (because of the large decrease in Pacific cod biomass that was identified in 2017), that 7-year average is 770 mt. The amount remaining ranges from a Unused Pacific cod, September 2019 13 low in 2011 of 141 mt to a high in 2015 and 2017 of 1,213 mt and 1,210 mt, respectively. The 2011 to 2018 average remaining percent of Pacific cod in the trawl RP CV cooperative allocations is 55 percent (also 55 percent if 2018 is excluded) and ranges from a low of 10 percent in 2014 to a high of 96 percent in 2017. Table 10 2011 to 2018 RP Trawl CV cooperative Pacific cod allocations, total catch, remaining allocation, and percent of allocation remaining (amounts are in metric tons). Source: NMFS, Alaska Region, Catch Accounting System

3.5.3 Harvesting Vessels

The CGOA RP CQ is harvested by trawl vessels. Longline entry level fishery are not issued CQ. Trawl RP vessels are classified as either CVs or CPs based on their mode of operation. CVs may harvest CP CQ if acquired from the CP cooperative(s). CPs may not harvest CV CQ.

Table 3-14 reports the number of trawl vessels that harvested RP CQ during the RP years. Vessels are reported by mode of operation as well as the length listed in the Federal Fisheries Permit data. Data are reported for a partial year in 2019. Only data through July are included in 2019. Length classes were divided into three categories that have been utilized historically in the Alaska groundfish fisheries for LLP categories and observer coverage levels.

Table 3-14 Vessels that harvested CQ from the RP by mode and length.

Mode/Length	2012	2013	2014	2015	2016	2017	2018	2019	Total	
									2012 - 2019	2012-2018
CP	5	5	5	4	5	4	4	2	7	6
60-124	1	1	1	1	1	1	1		1	1
125+	4	4	4	3	4	3	3	2	6	5
CV	28	29	28	28	27	25	26	25	36	34
<60	2	3	2	2	2	2	2	2	3	3
60-124	26	26	26	26	25	23	24	23	33	31
Total	33	34	33	32	32	29	30	27	43	40

CPs and CVs have too few vessels in the smaller length category to provide information on catch. Only one CP less than 125 ft LOA was reported to have made landings. The remaining six CPs that participated during the period were all 125 ft LOA or longer. One CP in this length class entered the fishery for the first time in 2019. The longest vessel was 230 ft LOA.

A total of 36 CVs reported landings. The number of CVs reporting landings in any one complete year ranged from 25 (2017) to 29 (2013). Two CVs fished almost every year in the smallest length class. In 2013 three CVs reported landings and only three CVs reported landings over the entire time period. Participation by these vessels was very stable. CVs in the 60 through 124 ft LOA class ranged from 23 to 26 depending on the year. Again, the CVs in this class were fairly stable, in terms of participation. With 33 CVs reporting landings during the period. Two of those vessels reported landings for the first time in the RP fishery in 2019.

In general, the data indicates that participation by harvesting vessels in the RP has been relatively stable. The stable nature of the fishery also indicates that about the same number of crew positions are available on an annual basis in both the CV and CP RP fisheries. Additional information on the harvesting crew in terms of number of crew and wages is presented in the Communities section of this paper.

Information on the number of LLP licenses that are issued that could potentially be used to harvest CGOA is provided to show that increased capacity could flow into the fishery under the No Action alternative. Table 3-15 shows the number of LLP licenses that were included in the 2018 LLP license database with a CGOA trawl endorsement. Information is further broken out by whether the LLP license was derived from an AFA or non-AFA vessel. It should be noted that CP designated LLP license can be used on CVs. Some of the LLP licenses reported as CPs in the table traditionally have been used on CV.

Table 3-15 LLP licenses with a CGOA trawl endorsement

LLP Type	Non-AFA	AFA	Total
C/P	19	2	21
CV	67	30	97
Total	86	32	118

Source: NMFS 2018 LLP license database

The Community section of this paper also provides information on the location of the vessel owner. The reader is referred to that section of the paper for that information.

3.5.4 Cooperatives

CP Cooperatives are formed by members of the Amendment 80 CP sector that hold RP CP QS. From 2012 through 2017 two cooperatives formed annually (Table 3-16). In 2018 only one cooperative was formed, the Gulf of Alaska Rockfish Best Use Cooperative (Best Use Cooperative). The Fishing Company of Alaska (FCA) cooperative did not form because the firm that owned most of the vessels in the cooperative sold its assets to other Amendment 80 CP firms. After the sale of the vessels and associated LLP licenses that were assigned QS was finalized, all of the firms joined the Best Use Cooperative. The number of vessels and LLP licenses assigned to the CP cooperatives each year of the RP are listed in Table 3-16.

Table 3-16 Number of LLP licenses and vessels assigned to CP cooperatives under the RP.

CP	2012	2013	2014	2015	2016	2017	2018	2019	Total
FCA COOPERATIVE									
Vessels	3	3	3	3	3	4			5
LLP Licenses	3	3	3	3	3	4			4
GULF OF ALASKA ROCKFISH BEST USE COOPERATIVE									
Vessels	7	7	7	7	7	6	10	10	13
LLP Licenses	8	8	8	8	8	7	11	11	11
CP Vessels	10	14							
CP LLP Licenses	11								

Source: AFKIN summary of cooperative data submitted to NMFS.

The 14 CPs that were a member of the CP cooperatives during any year are listed in Table 3-17. Only ten vessels were members of a cooperative during any single year. This table is provided to show the vessels as they entered and exited to fishery and the years they were members of the two cooperatives.

Table 3-17 CPs by RP cooperative

Co-op/Vessel	2012	2013	2014	2015	2016	2017	2018	2019	Years
GULF OF ALASKA ROCKFISH BEST USE COOPERATIVE									
ALASKA SPIRIT									2
ALASKA VICTORY									2
ALLIANCE									4
AMERICAN NO I									7
AMERICA'S FINEST									1
ARAHO									2
CAPE FLATTERY									4
LEGACY									8
OCEAN ALASKA									4
SEAFISHER									7
SEAFREEZE AMERICA									4
UNIMAK									8
US INTREPID									8
FCA COOPERATIVE									
ALASKA SPIRIT									6
ALASKA VICTORY									6
ALASKA WARRIOR									5
ARAHO									1
SEAFISHER									1

Source: AFKIN summary of cooperative data submitted to NMFS.
 Note: Boxes that are shaded black indicate the vessel was active in the RP that year.

Table 3-18 shows the number of CVs and CV LLP licenses that were assigned to the RP cooperatives each year during the RP. A total of 7 cooperatives were formed and participated in the fishery from 2012 through 2017. After 2017 the Global Rockfish Cooperative was disbanded and the vessels and LLP licenses that were part of that cooperative joined other CV RP cooperatives. Not all of the vessels that are members of the cooperative fish the CQ assigned to the cooperative. The annual cooperative reports³⁰ provide a detailed description of the catch by vessel. Information in this paper does not provide that level of detail to prevent inadvertently breaking confidentially rules. The reader is referred to the annual cooperative reports for that level of information.

³⁰ <https://www.npfmc.org/cooperative-reporting/>

Table 3-18 Number of LLP licenses and vessels assigned to CV cooperatives under the RP

CV	2012	2013	2014	2015	2016	2017	2018	2019	Total
GLOBAL ROCKFISH COOPERATIVE									
Vessels	3	2	3	3	3	3			3
LLP Licenses	3	2	3	3	3	3			3
I.S.A. ROCKFISH COOPERATIVE									
Vessels	6	6	6	5	6	6	8	7	9
LLP Licenses	6	6	6	5	6	6	7	7	8
NORTH PACIFIC ROCKFISH COOPERATIVE									
Vessels	9	10	11	11	11	11	12	12	13
LLP Licenses	10	11	12	12	12	12	13	13	13
OBSI ROCKFISH COOPERATIVE									
Vessels	8	7	6	6	5	5	5	5	8
LLP Licenses	9	8	7	7	6	6	6	6	9
PACIFIC ROCKFISH COOP									
Vessels	2	2	2	2	2	2	2	2	3
LLP Licenses	2	2	2	2	2	2	2	2	2
STAR OF KODIAK ROCKFISH COOPERATIVE									
Vessels	10	10	10	10	10	10	12	12	13
LLP Licenses	11	11	11	11	11	11	12	12	12
WESTERN ALASKA FISHERIES ROCKFISH COOP									
Vessels	5	6	5	6	6	6	6	6	8
LLP Licenses	5	6	5	6	6	6	6	6	7
CV Vessels	43	43	43	43	43	43	45	44	49
CV LLP Licenses	46								

Source: AFKIN summary of cooperative data submitted to NMFS

Table 3-19 shows each RP CV by the years they were assigned to a RP CV cooperative. The information in this table allows the reader to track movement of CVs into and out of cooperatives on an annual basis. The table also shows the number of years the vessel was a member of the cooperative. Recall that a vessel may only be a member of one cooperative per year. Allowing vessels to join multiple cooperatives would create management issues associated with assigning catch to the correct cooperative.

Table 3-19 CVs by RP Cooperative, 2012 through 2019

Co-op/Vessel	2012	2013	2014	2015	2016	2017	2018	2019	Years
GLOBAL ROCKFISH COOPERATIVE									
LESLIE LEE									6
PACIFIC STORM									6
VANGUARD									4
WINONA J									1
I.S.A. ROCKFISH COOPERATIVE									
CHELLISSA									8
ELIZABETH F									3
EVIE GRACE									2
GREEN HOPE									8
LAURA									3
MAR DEL NORTE									8
MAR PACIFICO									8
OCEAN HOPE 3									8
VANGUARD									2
NORTH PACIFIC ROCKFISH COOPERATIVE									
ALASKA BEAUTY									8
ALASKAN									8
ANTHEM									6
CAPT'N ART									7
CARAVELLE									8
DAWN									8
DUSK									3
ENTERPRISE									8
LESLIE LEE									2
NICHOLE									5
PACIFIC WIND									7
SEA MAC									8
TOPAZ									8
OBSI ROCKFISH COOPERATIVE									
ANTHEM									1
BAY ISLANDER									8
DEFIANT									1
LAURA									4
MARATHON									8
NEW LIFE									8
PACIFIC STAR									8
PROGRESS									1
TAASINGE									8
PACIFIC ROCKFISH COOP									
COHO									4
PACIFIC FUTURE									4
STELLA									8
STAR OF KODIAK ROCKFISH COOPERATIVE									
ARCTIC RAM									8
ARCTIC WIND									2
CAPE KIWANDA									8
EXCALIBUR II									8
LAURA									1
MARCY J									8
MICHELLE RENEE									8
OCEAN STORM									8
PACIFIC RAM									8
PACIFIC STORM									2
PEGGY JO									6
ROSELLA									8
TRAVELER									8
WESTERN ALASKA FISHERIES ROCKFISH COOP									
COLLIER BROTHERS									8
ELIZABETH F									5
GOLD RUSH									8
HALF MOON BAY									1
HICKORY WIND									8
PROGRESS									6
VANGUARD									2
WALTER N									8

Source: AKFIN summary of NMFS cooperative data

3.5.5 Shore-based Processors

The RP includes a City of Kodiak landing requirement for trawl vessels delivering cooperative quota. Kodiak based processors that participate in the fishery are associated with the individual cooperatives that form and are listed in the cooperative section. In general, the processing sector has been relatively stable since 2012. Seven shore-based cooperatives were associated with a unique processor during the first six years of the RP (2012 through 2017). In 2018 and 2019, the number decreased by one when the Global Seafoods rockfish cooperative left the fishery and Global Seafoods ceased processing operations altogether.

As with the harvesting sector, processing activity in the fishery is not provided at the individual processor level. Delivery and value information are aggregated over all Kodiak processing plants that take deliveries on an annual basis. This is necessary to avoid releasing confidential information. Summary information is presented in Section 3.5.1, Section 3.5.6, and Appendix 1.

Information on the rockfish products produced by Kodiak plants is presented in Section 3.5.7. The information shown in section indicates that processors have been using the longer fishing seasons to increase fillet production and produce higher valued products that require more processing time and equipment that supplying a whole or H&G product.

One of the primary reasons, from the processors' perspective, for implementing the RP was to allow the fishery to be prosecuted before the start of the pink salmon fishery. Prior to the RPP being implemented in 2007, the rockfish fishery and the pink salmon fishery overlapped during early and mid-July. That overlap caused processing capacity and labor issues. After the RPP was implemented rockfish processing was primarily moved to May and early June, a time of year when excess capacity and labor could be used more efficiently. Monthly information on labor is presented in Appendix 1 and indicates that the RP has achieved the goal of reducing pressure on labor during the peak of the pink salmon fishery.

A primary concern that processors have expressed regarding LAPPs is the change in market power between harvesters and processors. This issue is difficult to provide complete information for since the analysts are not part of the negotiations for price and delivery terms. However, information provided in Section 3.5.1.1 compares the real ex-vessel and the real first wholesale prices for the three primary rockfish species during 2003 through 2018. That information does indicate that the ratio of ex-vessel to first whole prices has increased under the RP relative to the open access fishery. That change does indicate that harvesters are able to command a greater portion of the first wholesale price that processors receive. Whether this is completely due to the changes in management or other market forces cannot be stated with certainty.

3.5.6 Communities

This section summarizes the findings of the CGOA Rockfish Program Reauthorization Social Impact Assessment (SIA), which is available in full as Appendix 1 to this EA/RIR. More detail on each of the topics included in this summary may be found in the SIA.

3.5.6.1 Background

This SIA has built upon several previous analyses of changes in the CGOA rockfish fishery that have occurred since the inception of the Rockfish Pilot Program, given that Alternative 1 is assumed to be a reversion to the type of management of the fishery that was in place before the implementation of either the Rockfish Pilot Program or the Rockfish Program. Community impacts of the Rockfish Pilot Program were documented in two previous NPFMC reports. These are the *Gulf of Alaska Rockfish Pilot Program Review* (NPFMC 2008) and the *Regulatory Impact Review, Final Environmental Assessment, and Initial*

Regulatory Flexibility Analysis for proposed Amendment 88 to the Gulf of Alaska Fishery Management Plan, Central Gulf of Alaska Rockfish Program (NPFMC 2011). The main findings of those documents relative to community or social impacts are summarized in this section.

The *Gulf of Alaska Rockfish Pilot Program Review* (NPFMC 2008), completed after the first year of fishery management under the Rockfish Pilot Program, included what can be described as five main community impact related findings.

- (1) Transfers of quota from catcher processor cooperative allocations to catcher vessel cooperatives benefitted catcher vessel cooperatives affiliated with Kodiak shore-based processors as well as the processors themselves. Catcher processor cooperatives were not permitted to receive quota transfers from catcher vessels cooperatives and this ‘one-way door’ was intended to protect interests of shore plants and communities, in the event that catcher processor production efficiencies exceed those of the shore-based sector. Under these rules, approximately half of the primary rockfish allocation to catcher processor cooperatives was transferred to catcher vessel cooperatives. In addition, approximately one-half of the catcher processor sablefish allocation was transferred to catcher vessel cooperatives.
- (2) Little information was available regarding impacts to captains and crew, but no major adverse program effects were obvious. Impacts to catcher vessel crew payments were assumed to be beneficial, but data to quantify these impacts were not available.
- (3) Some Kodiak shore-based processors benefited from their history in the fishery, others benefitted from their participation in the entry level fishery, and the community benefitted from virtually all CGOA rockfish shore-based processing remaining in Kodiak. Historically, Kodiak was the base for operations in the shore-based sector of the CGOA rockfish fisheries and almost all processing in the fisheries took place in Kodiak leading up to implementation of the program. Since the program established a cooperative system with strong cooperative associations with historic processors and a limited access fishery that required deliveries to processors meeting historic processing qualifications, deliveries in the main program continued to be made to Kodiak processors. In addition, only Kodiak processors participated in the entry level fishery by providing markets for entry level catcher vessels.
- (4) A temporal redistribution of rockfish fishery landings had operational benefits for shore-based processors in Kodiak and had additional benefits to the community of Kodiak through catcher vessels and their crews being in the community for a longer portion of the year (and perhaps longer periods of time during deliveries). The impacts on Kodiak processing crews and support service businesses from the shift of the peak in rockfish landings from July to May/June in combination with their occurrence over a greater portion of the year were likely beneficial (with the potential exception of a loss of opportunity for overtime pay for some processing workers), but data to quantify these impacts were not available.
- (5) The transfer of quota from the catcher processor to the catcher vessel sector benefitted Kodiak through increased local vessel activity and deliveries to shore-based processors.

These findings were broadly consistent with community impacts predicted in the pre-implementation *Regulatory Impact Review and Final Environmental Assessment for Proposed Amendment 68 to the Gulf of Alaska Fishery Management Plan: Central Gulf of Alaska Rockfish Demonstration Program* (NPFMC 2006), with one exception. The 2006 document suggested that “under either alternative, catcher vessel entities that receive small allocations could be disadvantaged, if holders of large allocations are able to draft cooperative terms that favor holders of large allocations over holders of small allocations.” The 2008

document is silent on whether entities with smaller allocations were subsequently disadvantaged, but later input from industry (Alaska Groundfish Data Bank 2017³¹) suggested that this has not occurred.

The Regulatory Impact Review, Final Environmental Assessment, and Initial Regulatory Flexibility Analysis for proposed Amendment 88 to the Gulf of Alaska Fishery Management Plan, Central Gulf of Alaska Rockfish Program (NPFMC 2011), completed after the fourth year of fishery management under the Rockfish Pilot Program, included three main community impact related findings. The first two findings were essentially the same as findings (4) and (5) from the 2008 rockfish pilot program review already described.³² The third finding was that the community effects of the Rockfish Pilot Program were limited to changes in Kodiak-based activity.

3.5.6.2 Community Impacts of the Rockfish Program

Social and community impacts of the Rockfish Program from its implementation through the first five years of the program were documented in the *Central GOA Rockfish Program Review and Rockfish Allocation Review* (NPFMC 2017) and Appendix 1 to that document, which was an SIA (Northern Economics 2017). This current SIA, providing the information to support the analysis of both Alternative 1 and Alternative 2, builds directly on the 2017 SIA as supplemented with an additional two years of quantitative fisheries data.

The community impacts of the Rockfish Program are broadly consistent with those described for the Rockfish Pilot Program, with a few important differences based primarily on changes in the community protection measures built into the two programs and the change in initial quota allocation qualification years between the two programs.

Among the community protection measures included in the Rockfish Pilot Program were both Kodiak-specific measures and general measures. Kodiak-specific measures included: (1) catcher vessels were allowed to form cooperatives only in association with shore-based processors located in Kodiak, and (2) processors were limited in their ability to process catch outside the communities in which they had traditionally processed primary rockfish species and associated secondary species. This limitation in measure (2) was imposed to help protect the community of Kodiak from adverse impacts of a program that could otherwise increase flexibility of where catch was landed and processed. General community protection measures included the establishment of entry level fisheries for both trawl and longline harvests of CGOA rockfish. Landings in both entry level fisheries could only be made at shore-based processors not in a cooperative.

Community protection measures that were modified or added under the Rockfish Program also included Kodiak-specific measures and general measures. Kodiak specific measures included a Rockfish Pilot Program feature that permitted catcher vessels to form a cooperative only with the processor the catcher vessel made a majority of their deliveries during 1996 through 2000. The Rockfish Program modified the requirement to allow catcher vessels to annually join the cooperative of their choice with a Kodiak-based processor, regardless of where they had delivered rockfish in the past. The NPFMC's recommendation sought to maintain the traditional shore-based processing activity within Kodiak and limit the consolidation of processing effort among rockfish processors.

³¹ Personal communication 8/21/2017.

³² The only difference in wording in these two findings occurs in what was described as Finding 4 from the 2008 document. The following sentence appears in the 2008 document: "Vessels making deliveries have less pressure to return quickly to the grounds to obtain a share of the available catch in the fisheries, so some likely remain in town for longer periods during which they use local services." In the 2011 document, the wording "...they [referring to the vessels] use local services" was changed to "...the crew use local services" (emphasis added).

Further, to address concerns raised by processors that the Rockfish Program would provide harvesters an undue competitive advantage and that they could use that potential advantage to deliver outside of the traditional port of Kodiak, the Rockfish Program included a requirement that all primary and rockfish secondary species cooperative quota in the catcher vessel sector be delivered to a shore-based processor within the City of Kodiak. In addition to protecting traditional processors, the requirement is intended to protect the fishing community of Kodiak.

As a general measure, the entry level fishery for trawl vessels was eliminated but the entry level fishery for longline vessels was maintained under the Rockfish Program.³³ Longline catcher vessels were allowed to deliver to any shore-based processor in any community the GOA region, including processors affiliated with cooperatives. Several other features of the program, though not explicitly community protection measures, served to avoid or minimize some types of adverse social/community impacts experienced when other catch share programs were implemented in Alaska. These include three separate features.

- First, the attachment of catch history to the LLP license and making it non-severable from the LLP license has limited consolidation since quota shares cannot be stacked on fewer LLP licenses. The non-severability of quota from a license also meant that a person would need to sell the entire LLP license including all of the associated quota. Selling the LLP license would result in a vessel operator giving up whatever other endorsements were associated with the LLP license. The vessel operator would need to have access to another LLP license with the appropriate endorsements to continue fishing the GOA/BSAI with trawl gear. LLP license transfers do not appear to have occurred at a greater rate under the Rockfish Program relative the limited access years.
- Second, ownership and use caps have been effective in limiting vessel consolidation. The caps were developed to balance the goals of improving economic efficiency by allowing entities to take advantage of relative economies of scale while maintaining employment opportunities for vessel crew. About the same number of vessels and processors participate in the CGOA rockfish fishery now as before the Pilot Program was implemented, although two processors in Kodiak have exited participation in the program in recent years, one through acquisition by another firm and one through a cessation of operations. Cooperative quota transfers can occur within the cooperative, but consolidation has not been reported as an issue, in part because of the use caps.
- Third, for the Pilot Program, eligibility to receive quota share of primary and secondary species was based on targeted legal qualifying landings made during the years 1996 through 2002. A person's primary species allocation was based on best five of seven years of landings during the eligibility period. The Rockfish Program quota share qualification was based on targeted legal landings during the years 2000 through 2006 or fishing in the entry level fishery during 2007, 2008, or 2009. The allocation of quota share was based on the best five of seven years from 2000 through 2006, or the number of years fished during the qualifying period for entry level fishery participants that did not qualify for quota based on history from 2000 through 2006. This change effectively locked in benefits to Kodiak that accrued from one-way transfers of quota from the catcher processor sector to the catcher vessel sector during the Rockfish Pilot Program.

The community impacts associated with the Rockfish Program and described in Sections 2 and 3 of the SIA are summarized in this section for Kodiak, other Alaska communities, the Seattle MSA, and Lincoln County, Oregon.

³³ Catcher vessels that met participation criteria in the Rockfish Pilot Program entry level trawl fishery during 2007, 2008, or 2009 received initial allocations of quota shares under the Rockfish Program.

3.5.6.3 Impacts of the Alternatives on Communities Engaged in the CGOA Rockfish Fishery

In general terms, the community and social impacts resulting from Alternative 1 would result from a reversion of the management of the CGOA rockfish fishery to pre-Rockfish Pilot Program conditions. The beneficial community impacts described in Section 3.5.6.2 would be reversed. Community level social impacts resulting from Alternative 2 are described in this section for the communities substantially engaged in and/or dependent on the CGOA rockfish fishery.

3.5.6.3.1 Kodiak

Among communities substantially engaged in, and/or substantially dependent on the CGOA rockfish fisheries managed under the Rockfish Program, Kodiak is the most centrally engaged in and dependent on the fishery as measured by multiple indices. Kodiak has experienced beneficial impacts across harvester, processor, and support services sectors because of the implementation of the Rockfish Program and has specifically benefitted from several community protection measures built into the program. Although not all individual operations have benefitted equally from the change in qualifying years between the Rockfish Pilot Program and the Rockfish Program, and therefore changes in the pattern of initial quota share allocations under the two programs, especially when compared to pre-Rockfish Pilot Program conditions no substantial adverse sector-level or community-level impacts resulting from the implementation of the Rockfish Program have been identified for the community of Kodiak.

3.5.6.3.1.1 Harvest Sector

In terms of CGOA rockfish trawl catcher vessel ownership as measured by ownership address, Kodiak has benefitted from an increase in the annual average number of Kodiak resident-owned CGOA rockfish trawl catcher vessels participating in the fishery between the Pre-Rockfish Pilot Program years (9.3 vessels) and the Rockfish Program years (12.9 vessels). Additionally, the trawl entry level fishery community protection feature of Rockfish Pilot Program was beneficial to Kodiak. All three catcher vessels that qualified for an initial allocation of quota under the Rockfish Program based on their participation in the Rockfish Pilot Program entry level trawl fishery were either Kodiak ownership address vessels at the time of that allocation or have become so in more recent years. Finally, Kodiak ownership address CGOA rockfish trawl catcher vessels further diversified their fishery portfolios under Rockfish Program conditions. This has included more summer salmon tendering opportunities with the continuing temporal separation of rockfish trawl-related and salmon-related peak processing efforts at local shore-based processors, as reported by processing management personnel.

In terms of CGOA trawl catcher vessel LLP license and quota ownership, Kodiak has benefitted from an increase in the annual average number of Kodiak resident-owned catcher vessel LLP licenses between the pre-Rockfish Pilot Program years (15.2 LLP licenses) and the Rockfish Program years (16.7 LLP licenses). The community also benefitted from an increase in the initial allocation percentage of Kodiak resident-owned catcher vessel quota for Northern rockfish (+2.40 percent), Pacific ocean perch (+7.37 percent), and pelagic shelf/dusky rockfish (+7.50 percent) between the Rockfish Pilot Program years and the Rockfish Program years. This across-the-board increase was due in part to quota transfers that occurred during the Rockfish Pilot Program years and in part to changes in qualifying years for initial quota allocations between the two programs. Further, Kodiak specifically benefitted from the CGOA rockfish trawl quota transfer community protection feature of the Rockfish Pilot Program where quota could be transferred from the catcher processor sector to the catcher vessel sector, but not vice versa. These one-way inter-sector transfers resulted in an increase in quota shares associated with Kodiak resident-owned LLP licenses.

In terms of impacts to CGOA rockfish trawl catcher vessel crew, no pre-Rockfish Pilot Program quantitative data are available. However, given that the annual average number of Kodiak ownership

address catcher vessels participating in the CGOA rockfish trawl fishery has increased (as have the number of catcher vessels overall) and the overall ex-vessel value of CGOA rockfish trawl-caught landings of those Kodiak-owned (and non-Kodiak-owned) vessels has also increased under the Rockfish Program, it is assumed that the number of crew positions and potentially payments to crew have similarly varied during this time. The impacts of quota leasing costs or program-associated vessel operating costs (such as cost recovery fees and co-op fees), if any, on crew compensation are unknown, as are the impacts on crew employment, if any, of the increased number of CGOA rockfish trawl fishing days per season. Similarly, the impacts of the reduction of vessel operating costs that may have been achieved as a result of changed fishing conditions under the Rockfish Program (such as owner-reported reductions in fuel consumption and gear repair costs), if any, on crew compensation are unknown.

In terms of CGOA rockfish longline catcher vessel local ownership, Kodiak has seen a decrease in annual average number of Kodiak ownership address GOA rockfish longline catcher vessels participating in the Federal open access rockfish fishery between the pre-Rockfish Pilot Program years (9.5 vessels) and the Rockfish Program years (4.3 vessels). However, all participation in this sector during the Rockfish Program in 2012-2016 was by Kodiak resident-owned vessels and Kodiak vessels accounted for between 70 and 80 percent of all active vessels in the most recent two years for which data are available (2017 and 2018).

It is unlikely, however, that the increase in Kodiak longline catcher vessel sector engagement relative to other Alaska communities (if not the absolute increase in engagement) is directly related to the Rockfish Program. Under the Rockfish Program, participants in the entry level longline fishery are no longer required to register and they may deliver their harvest to any shore-based processing facility, including those affiliated with cooperatives, in any community in the GOA. Further, the entry level longline fishery was not subject to the cost recovery program implemented under the Rockfish Program because the fishery is managed under a sector allocation and is not a LAPP as defined in Section 303A of the Magnuson-Stevens Act.

Under the Rockfish Program, the CGOA longline sector in the Federal open access fishery was transitioned from a percentage of TAC to a set number of metric tons allocation. Neither of these types of limits have constrained effort by vessels owned in any community to date, and under the Rockfish Program allocations to the longline fishery can be increased if the sector harvests 90 percent of their allocation the previous year (with caps varying by primary rockfish species).

3.5.6.3.1.2 Processing Sector

In terms of the shore-based processors operating in Kodiak that accepted CGOA trawl-caught rockfish landings, Kodiak did experience the ownership consolidation (by one) of shore-based processors that regularly accepted CGOA rockfish trawl-caught deliveries during Rockfish Program years through the purchase of one large, multi-species processing plant by the owner of another locally operating large, multi-species processing plant. More recently, a different multi-species processing plant discontinued operations.

There was a decrease in the annual average number of shore-based processors operating in Kodiak that accepted CGOA trawl-caught deliveries between the pre-Rockfish Pilot Program years (6.8 processors) and the Rockfish Program years (6.4 processors). However, at the transition from the Rockfish Pilot Program to the Rockfish Program, Kodiak experienced an increase (by two) of shore-based processors that were affiliated with CGOA rockfish cooperatives, due primarily to the change in qualifying years between the two programs; one of the two cooperatives is still operating, despite the consolidation of its affiliated shore-based processor with another operating in Kodiak, while the other cooperative dissolved with the closure of its affiliated processing entity.

Kodiak and its shore-based processors have also specifically benefitted from CGOA rockfish trawl catcher vessel landings requirement community protection features that were initiated under the Rockfish Pilot Program. With the discontinuation of the CGOA rockfish entry level trawl fishery upon the implementation of the Rockfish Program, all trawl-caught catcher vessel landings of rockfish have been made exclusively in Kodiak.³⁴

Further, Kodiak shore-based processors continue to directly benefit from the trawl CGOA rockfish fishery changing from an approximate three-week race to fish starting at the beginning of July, to a fishery that primarily occurs in May and June, with smaller harvest amounts occurring until November 15th; longline vessels may deliver until the end of the calendar year. This shift occurred at the transition from pre-Rockfish Pilot Program conditions to the Rockfish Pilot Program conditions and has been maintained under the Rockfish Program. According to processor management personnel, it has moved CGOA rockfish trawl-caught landings out of peak salmon processing time to what was a period of lower activity for the plants, increasing efficiency of operations and helping to attenuate some of the sharper seasonal peaks and valleys of processing labor demand, while making more local workers potentially available for peak salmon production demands beginning in June.

In terms of processing workers at Kodiak shore-based processors that accepted CGOA trawl-caught rockfish landings, quantitative data on employment of, or payments to, the processing workers employed at Kodiak shore-based processing plants that have accepted CGOA trawl-caught landings is not available for the pre-Rockfish Pilot Program years. Given that the number of Kodiak shore-based processors affiliated with rockfish cooperatives increased and the overall ex-vessel value of CGOA rockfish trawl-caught landings in Kodiak also increased under the Rockfish Program, it is assumed that processing worker labor demand may have increased for at least some operations during this time and more hours would appear to be available for interested workers during the May/June period, but the net effect across all processors attributable specifically to the Rockfish Program, given physical plant consolidation in one instance, the closure of plant in another instance, and other operational changes (e.g., those associated with changes in technology) during this same time, is unknown. Based on EDR data, and using the distribution of labor person-hours and labor payments to workers housed and not housed by the processors as a proxy for non-local and local residents, respectively, in both May and June of 2018, approximately 1,000 groundfish processing employees were reported in five processing plants that accepted GOA trawl-caught deliveries. Within this group of employees, approximately 89 percent of all processing employee labor hours and approximately 88 percent of all processing employee labor payments went to processing workers assumed to primarily be local Kodiak residents (i.e., non-processor housed processing workers).

The impacts of the temporal shift in rockfish processing, which first occurred during the Rockfish Pilot Program, in combination with the increasing number of days fished per season in the CGOA rockfish trawl fishery that occurred during the Rockfish Program, on the average amount of processing personnel overtime compensation cannot be determined with available information. While Rockfish Program Review noted that one entity reported that they have “seen a little bit less overtime than we used to have,” input from Kodiak shore-based processing management in general would suggest that overtime hours are typically a function of fishing conditions, with good fishing conditions (and general operational efficiency) favoring a plant running at a high capacity, which results in ongoing overtime opportunities for processing crew. Input from shore-based processing management also suggests that for at least some individual operations, the temporal shift in rockfish processing has increased the availability of work for

³⁴ It should be noted, however, that while the transition from the Rockfish Pilot Program to the Rockfish Program was generally beneficial for Kodiak shore-based processing plants as a sector, specific outcomes varied between processors operating in the community due to different processing histories accrued during the different sets of qualifying years used for initial allocations under the two programs, as described in some detail in the Rockfish Program Review SIA (Northern Economics 2017).

local Kodiak resident processing workers during the May/June period, contributing to more workforce stability and decreased turnover.

In terms of the shore-based processors operating in Kodiak that accepted CGOA longline-caught rockfish landings, the annual average number of Kodiak shore-based processors accepting CGOA rockfish longline-caught deliveries decreased between pre-Rockfish Pilot Program years (5.5 processors) and the Rockfish Program years (4.9 processors). While ex-vessel values of those deliveries showed considerable year-to-year variability, they were consistently minor in relation to the overall scale of most Kodiak shore-based processors. Under the Rockfish Program any processor, including those affiliated with a CGOA rockfish trawl cooperative, can accept deliveries from the longline entry level fishery. Available data, however, would suggest that implementation of the Rockfish Program has not had a substantial impact on Kodiak shore-based processing engagement in the CGOA rockfish longline fishery.

3.5.6.3.1.3 Support Service Sector

In terms of the fishery support sector businesses operating in Kodiak, no systematically collected data on Kodiak fishery support service businesses in general or those linked to the CGOA rockfish fishery specifically are available. However, the number of locally owned CGOA rockfish trawl vessels has increased, and Kodiak became the exclusive port of landings for all trawl catcher vessels engaged in the fishery under the Rockfish Program. The number CGOA rockfish catcher vessel cooperatives has increased and increased revenues accruing to both harvesting and processing sectors has likely been accompanied by increased local spending by catcher vessel owners, catcher vessel crew, and shore-based processing workers, a substantial number of whom are Kodiak residents, but the level of impact on the local purchase of goods and services is unknown.

3.5.6.3.1.4 Tax Revenues

In terms of public revenue impacts in Kodiak, the percentage of CGOA rockfish fishery landings related-revenues subject to taxes that directly benefit the city of Kodiak (and the Kodiak Island Borough) remain modest compared to several other fisheries. However, the average annual ex-vessel value of landings in Kodiak when vessels are checked in to a rockfish cooperative (including bycatch) compared to annual average ex-vessel value of all landings in Kodiak from all fisheries increased between the Rockfish Pilot Program years (3.5 percent) and the Rockfish Program years (5.1 percent). This is, of course, due in part to fluctuations in the value of both the rockfish and other fisheries that, in turn, depend on variable natural resource conditions and variable market conditions far removed from the Kodiak economy as well as on direct fishery management variables. The community protection feature of the Rockfish Program that ensures CGOA rockfish trawl catcher vessel landings will occur in Kodiak, however, builds an additional measure of stability into the public revenue stream compared to previous conditions.

3.5.6.3.2 Other Alaska Communities

In addition to Kodiak, another 25 Alaska communities were directly engaged in the CGOA rockfish federal open access rockfish longline and/or CGOA rockfish trawl fisheries 2003-2018 as measured by a variety of indices. These indices include: catcher vessels with local ownership addresses participating in CGOA rockfish fishery in the hook-and-line or jig sectors; local operation of at least one shore-based processor that accepted longline-caught deliveries of CGOA rockfish; CGOA rockfish trawl catcher vessel LLP licenses with local ownership addresses; participation of CGOA rockfish trawl catcher processors with local ownership addresses; local operation of at least one shore-based processor that accepted trawl-caught caught deliveries of CGOA rockfish in any year 2003-2018; and/or residents who served as crew members aboard CGOA rockfish trawl catcher vessels and/or trawl catcher processors in 2015-2018 (the years for which these data are available). None of these communities were considered to

have been substantially engaged in or substantially dependent upon the CGOA rockfish fishery at the time of the implementation of the Rockfish Program.

Ten of these 25 “other” Alaska communities were involved in the entry level longline fishery through having catcher vessels with local ownership addresses, including two in the hook-and-line fishery (Seldovia and Willow), seven in the jig fishery (Anchor Point, Anchorage, Chiniak, Old Harbor, Ouzinkie, Port Lions, and Wasilla), and one in both the hook-and-line and jig fisheries (Homer). All but two of the communities participating in these fisheries through local ownership of active longline vessels last participated in the fishery before or during the Rockfish Pilot Program. None participated during the last two years of the Rockfish Pilot Program or during any of the years of the Rockfish Program years (through 2018), except Homer (one vessel in 2017) and Wasilla (one vessel in 2017 and 2018).

3.5.6.3.3 Performance of the Federal Open Access Entry Level Fishery

In terms of the Council’s specific request for information regarding a review of the performance of the Federal open access entry-level longline fishery and the step-up mechanism that increases the sector’s apportionment, it is important to note the declining diversity of Alaska community participation in the harvest sector of fishery and the complete decline of participation by vessels from communities outside of Alaska in the fishery. There has been no participation in the hook-and-line portion of the Federal open access longline fishery by any community inside or outside of Alaska since 2006, the year before the implementation of the Rockfish Pilot Program. There has, however, been participation in the jig portion of the Federal open access longline fishery, but the number of communities participating in that portion of fishery has declined over the 2003-2018 period:

- During pre-Rockfish Pilot Program years 2003-2006, five Alaska communities outside of Kodiak participated in the jig portion of longline fishery catcher vessel sector with a total of 10 vessel participation years over the four calendar years in the period.
- During the Rockfish Pilot Program years 2007-2011, five Alaska communities outside of Kodiak participated in the jig portion of the longline fishery catcher vessel sector with a total of eight vessel participation years over the five calendar years in the period.
- During the Rockfish Program years 2012-2018, two Alaska communities outside of Kodiak participated in the jig portion of the longline fishery catcher vessel sector with a total of three vessel participation years, all of which occurred in the most recent two of the seven calendar years in the period.

Further, there was no participation in the jig portion of the longline CV fishery by vessels with ownership addresses outside of Alaska in any of the Rockfish Program years, although there had been 12 vessel participation years spread across nine communities outside of Alaska in the pre-Rockfish Pilot Program years and there had been four vessel participation years spread across three communities outside of Alaska in the Rockfish Pilot Program years.

It is unlikely, however, that this near lack of participation in the entry level fishery harvest sector outside of Kodiak ownership address vessels during the Rockfish Program years is directly attributable to the Rockfish Program itself, for at least five reasons:

- First, with the two exceptions already noted, community engagement in the fishery through participation of locally owned catcher vessels outside of Kodiak last occurred in 2009, with no landings occurring in the two years before the Rockfish Program was implemented.

- Second, as noted in the Kodiak summary, two key provisions changed under the Rockfish Program that potentially facilitate access to or flexibility in participating in the longline entry level fishery compared to provisions included in the earlier Rockfish Pilot Program:
 - Participants in the entry level longline fishery are no longer required to register, and
 - Landing restrictions have been eased such that they may deliver their harvest to any shore-based processing facility, including those affiliated with cooperatives, in any community in the GOA.
- Third, these vessels are not subject to fees related to the cost recovery program implemented under the Rockfish Program, such that there are no known increases in operational expenses to longline vessels attributable to the program.³⁵
- Fourth, Rockfish Program catch limitations have not constrained the longline entry level fishery. As noted in the Kodiak summary, under the Rockfish Program, the CGOA longline sector in the Federal open access fishery was transitioned from a percentage of TAC to a set number of metric tons allocation. Neither of these types of limits have constrained effort by vessels owned in any community to date and under the Rockfish Program allocations to the longline fishery can be increased in a stepwise fashion if the sector harvests 90 percent of their allocation the previous year (with caps varying by primary rockfish species).
- Fifth, in the one instance that the step-up mechanism that increases the sector's apportionment was triggered, it was successfully employed before the fishery was constrained. As noted earlier, in 2016, 90 percent of the 30 mt allocation of dusky rockfish was taken, resulting in an increased allocation of 50 mt in 2017. As of 2019, the entry level longline fishery has not taken 90 percent of the allocation of Northern rockfish or Pacific ocean perch and the entry level allocations remain at 5, 5, and 50 mt for Northern rockfish, Pacific ocean perch, dusky rockfish, respectively.

It is important to note, however, that it is not possible to determine the cause of the decline in participation of Alaska communities other than Kodiak in the entry level longline fishery with existing data. Additional focused research would be needed to help establish the role of the Rockfish Pilot Program and/or the Rockfish Program, if any, in the decline of fishery participation by these vessels and the communities with which they are affiliated.

3.5.6.3.3.1 Harvesting Patterns of Vessels

An additional dimension of the Council's request to describe harvesting patterns of vessels in the Rockfish Program, four of the 25 Alaska communities outside of Kodiak that were engaged CGOA rockfish fishery were engaged in the CGOA rockfish trawl fishery through ownership of LLP licenses that came to have initial allocations of quota under the Rockfish Pilot Program or the Rockfish Program. In three out of four of these cases (Anchorage, False Pass, and Sand Point), the LLP license left community ownership before the implementation of the Rockfish Program, either during the pre-Rockfish Pilot Program years or during the Rockfish Pilot Program years (specifically in 2004, 2007, and 2009, with latter being two years before the expiration of the Rockfish Pilot Program). In the fourth case

³⁵ All longline catcher vessels in the CGOA rockfish entry level fishery are required to pay a 1.25 percent observer fee (which will increase to 1.65 in 2021), paid when their catch comes off the TAC (Federal and parallel fisheries). All vessels under 40 feet LOA are not required to carry observers, while vessels 40 feet and over LOA are placed in the random selection pool for observer coverage and, if selected, are required to carry an observer. These observer-related requirements, however, are not a part of the Rockfish Program itself, were implemented before the Rockfish Program, and are applicable to all non-LAPP Federal fisheries in the GOA.

(Homer), the LLP license first had a community ownership address in 2010 (during the Rockfish Pilot Program years) and has continued to have local ownership address during the Rockfish Program years.

From a community impact perspective, it is important to note that all of the LLP licenses that were used for CGOA rockfish in any year 2003-2018, whether or not they qualified for an initial allocation of cooperative quota share under the Rockfish Program, have remained in active use in other commercial fisheries if not in the rockfish fishery (and therefore have supported fishing employment and income opportunities, fishery related support service sector economic activities, and fishing related public revenue opportunities in fishing communities). Similarly, vessel and processor consolidation, which has been experienced in at least some other LAPP/catch share programs implemented in federal fisheries in Alaska, has not been experienced in the rockfish fishery, due to several factors, including the fact that the rockfish fishery is not the primary fishery for the vessels and processors involved, the non-severability of quota from LLP licenses, and the role of the rockfish fishery in the annual round of the vessels and processors involved in combination with the relatively modest scale of the fishery, among others.

3.5.6.3.3.2 The Rockfish Program and Larger Trends of Change in Small Alaska Communities

There is no known connection between the implementation of the Rockfish Program and the diminishment or discontinuation of active engagement in the CGOA rockfish longline fishery through vessel ownership and/or in the CGOA rockfish trawl fishery through LLP license ownership. The discontinuation of active engagement in the harvest sector this fishery is, however, in some cases consistent with what has been described in the literature as a trend of ongoing challenges in small, rural Alaska communities of sustaining fluid access to participation in a range of fisheries. These fisheries may vary in their commercial viability but not their cultural importance over time, with lack of flexibility in access resulting in a range of adverse cumulative impacts, as noted in the Rockfish Program Review SIA (Northern Economics 2017).

For many residents of these communities, fishing is not seen solely as a commercial venture, but rather as an integral part of self-identity. This relationship is compounded for those residents who come from families with multi-generational experience in commercial and/or subsistence fishing, particularly for those Alaska Native residents for whom fishing is part of a larger, integrated traditional subsistence and economic sustenance practice rooted in thousands of years of history. Further, existing trends suggest that sustained participation in a range of commercial fisheries by residents of small communities in the region has become more challenging in recent years, with less inherent flexibility to adjust to both short- and long-term fluctuations in resource availability (as well as to changing markets for seafood products).

This flexibility is widely perceived in the communities as a key element in an overall adaptive strategy practiced in subsistence and economic contexts in the region for generations. This strategy involves piecing together individual livings (and often local economies) with an employment and income plurality approach.³⁶ This plurality approach is particularly important given that the availability of non-fishing alternatives for income and employment are limited and, like the natural resources (and market factors) that underpin commercial fishing opportunities, tend to be subject to both short- and long-term fluctuations. This ongoing fluctuation in non-fishing opportunities further reinforces the importance of flexibility in the pursuit of a range of commercial fishing opportunities to provide individuals and communities the ability to successfully combine fishing and non-fishing as well as commercial and subsistence pursuits considered critical to long-term socioeconomic and sociocultural survival, if not stability. To the extent that the Rockfish Program functions to further restrain that flexibility, if at all, overall sustained participation in a range of local fisheries by residents of the smaller communities in

³⁶ Few data are available on the relative importance of fishing and non-fishing income to fishery participants from various employment and income opportunities. While some limited point-in-time information has been collected, such as for the 2014 AFSC GOA trawl fishery social survey, little in the way of time-series/historic information is available for GOA rockfish, GOA halibut, and/or GOA Chinook salmon vessel owners, skippers, or crew.

particular would be made all the more challenging. Formulating a causal explanation of the discontinuation of direct participation of catcher vessels with ownership addresses in multiple small communities in the CGOA rockfish longline entry level fishery (and the indirect role, if any, of the Rockfish Program in that observed trend) would require additional focused research.

Crew employment, even in small numbers, aboard CGOA rockfish trawl catcher vessels and/or rockfish trawl catcher processors can be an important resource for small communities and especially valuable to communities with high poverty rates and limited employment and income opportunities. While it is known from EDR data that residents of 13 Alaska communities outside of Kodiak have served as crew members aboard CGOA rockfish trawl catcher vessels in 2015-2018, those are the only years for which data are available. Given the lack of data from earlier years, it is not possible to examine whatever changes in crew employment patterns may have occurred coincident with the implementation of the Rockfish Program.

3.5.6.3.4 The Seattle MSA

The Seattle Metropolitan Statistical Area (MSA) was substantially engaged in the CGOA rockfish trawl fishery in several ways over the period 2003-2018. While changes have occurred in several sectors, no substantial community-level impacts resulting from the implementation of the Rockfish Program have been identified.

The Seattle MSA experienced increases in annual average Seattle MSA ownership address CGOA rockfish trawl catcher vessel and catcher processor participation between the pre-Rockfish Pilot Program years and the Rockfish Program years. The Seattle MSA also experienced an increase in annual average Seattle MSA resident-owned catcher vessel LLP licenses and catcher processor LLP licenses between the pre-Rockfish Pilot Program years and the Rockfish Program years.

The Seattle MSA benefitted from an increase in annual average Seattle MSA ownership address catcher vessel quota with the implementation of the Rockfish Program for Pacific ocean perch and pelagic shelf/dusky rockfish, but a decrease was seen for Northern rockfish. Local ownership address catcher processor quota increased between the Rockfish Pilot Program and the Rockfish Program for Northern rockfish but decreased for Pacific ocean perch and pelagic shelf/dusky rockfish.

In terms of catcher vessel and catcher processor crew employment, as for other communities, quantitative data on employment of, or payments to, Seattle MSA crew members aboard CGOA rockfish trawl catcher vessels and/or catcher processors is not available for the pre-Rockfish Pilot Program years and is available for 2015-2018. Given that the number of Seattle MSA resident-owned catcher vessels in the CGOA rockfish trawl fishery has increased and the overall ex-vessel value of CGOA rockfish trawl-caught landings of those vessels has also increased under the Rockfish Program, it is assumed that the number of crew positions and potentially payments to crew have similarly varied during this time. However, the impacts of quota leasing costs or program associated vessel operating costs (such as cost recovery fees and co-op fees), if any, on crew compensation is unknown, as are the impacts on crew employment, if any, of the increased number of CGOA rockfish trawl fishing days per season. Similarly, the impacts of the reduction of vessel operating costs that may have been achieved as a result of changed fishing conditions under the Rockfish Program (such as owner-reported reductions in fuel consumption and gear repair costs), if any, on crew compensation are unknown. The increase in the number of Seattle MSA resident-owned catcher processors participating in the fishery during the Rockfish Program years is also assumed to have increased CGOA rockfish-related employment and potentially income opportunities for crew members in that sector but, again, data to quantify any such changes are not readily available.

3.5.6.3.5 Lincoln County, Oregon

Lincoln County was substantially engaged in the CGOA rockfish trawl fishery primarily through catcher vessel ownership. While changes have occurred during the Rockfish Program years, no substantial community-level impacts resulting from the implementation of the Rockfish Program have been identified.

In terms of catcher vessel ownership, Lincoln County experienced an increase in annual average county resident-owned CGOA rockfish trawl catcher vessel participation between the pre-Rockfish Pilot Program years and the Rockfish Program years, however, it experienced a decrease in annual average county resident-owned catcher vessel LLP licenses between the Rockfish Pilot Program years and the Rockfish Program years. Further, while the county benefitted from an increase in annual average county resident-owned catcher vessel quota with the implementation of the Rockfish Program for pelagic shelf/dusky rockfish, a decrease was seen for Pacific ocean perch and Northern rockfish.

In terms of catcher vessel crew employment, quantitative data on employment of, or payments to, Lincoln county crew members aboard CGOA rockfish trawl catcher vessels are not available for the pre-Rockfish Pilot Program but are available for 2015-2019. Given that the number of Lincoln County resident-owned catcher vessels in the CGOA rockfish trawl fishery has increased under the Rockfish Program, it is assumed that the number of crew positions have similarly varied during this time. Information on crew compensation, however, is not available for Lincoln County due to data confidentiality constraints.

3.5.6.4 Impacts of the Alternatives on Communities Substantially Engaged in and/or Dependent on Halibut and Chinook Salmon Fisheries

One of the goals of the Rockfish Program was to reduce/minimize halibut and Chinook salmon PSC. To the extent that the program has achieved those goals, indirect benefits should accrue over time to those communities substantially engaged in and/or substantially dependent upon the GOA halibut and/or Chinook salmon targeted commercial fisheries, sport charter fisheries, subsistence fisheries, and/or sport or personal use fisheries.

3.5.6.4.1 CGOA Rockfish Fishery Halibut and Chinook Salmon PSC

In terms CGOA rockfish fishery PSC, as noted earlier, the fishing plan established by shore-based cooperatives also included a system to discourage high halibut bycatch rates. An incentive for these internal bycatch controls is to ensure that the sector's PSC limit is not reached because it would result in the closure of all Rockfish Program fisheries. The bycatch controls include standards that are set and enforced by the cooperative members. These standards include the inter-cooperative red light, yellow light, green light system, which is based on the percentage of halibut PSC per ton of groundfish used in Rockfish Program target fisheries. The ratio of halibut to groundfish indicates whether the vessel may continue fishing, with caution or stop fishing to avoid high halibut bycatch (Alaska Groundfish Databank 2018). This plan, which was made possible in part if not in whole by Rockfish Program management conditions, has been considered effective in reducing halibut PSC.

Similarly, in an attempt to reduce Chinook salmon PSC, all shoreside cooperatives agreed to the Salmon Bycatch Avoidance Plan adopted in 2014, which includes: (1) a "slow start" to fishing to test the fishing grounds; (2) individual vessel Chinook salmon bycatch standards for the months of May, June, July, and August; (3) Chinook salmon hotspot reporting requirements; and (4) full retention of all bycaught Chinook salmon, which became a regulatory requirement starting on January 1, 2015 (Alaska Groundfish Databank 2018). This plan, which was also made possible by Rockfish Program management conditions in part if not in whole, has been considered effective in reducing Chinook salmon PSC.

Under the Rockfish Program, catcher processors are assigned 74.1 mt of halibut PSC for use in Rockfish Program cooperatives, which has never been fully taken. Chinook salmon PSC used by the trawl catcher processor sector in the CGOA has shown considerable variability with relatively large catches reported from 2007 through 2013. Chinook salmon catches before the Pilot Program was implemented and after 2013 are similar and always less than half of the long-term average.

3.5.6.4.2 Halibut and Chinook Salmon Community Impacts of the Alternatives

The communities involved in the relevant directed salmon and halibut fisheries would potentially benefit relative to the degree that ongoing PSC reductions efforts would continue to benefit the GOA halibut and/or Chinook salmon stocks under Alternative 2. These types of indirect beneficial social impacts of halibut and/or Chinook PSC reductions, and the communities to which those beneficial would most likely accrue, have been recently described in the GOA trawl bycatch management analysis SIA (Northern Economics 2016a). That comprehensive description is not recapitulated here.

However, the declines in halibut bycatch have also resulted from using more pelagic trawl gear in addition to implementing measures to communicate where high bycatch rates are occurring and requiring catcher vessels to stop fishing in that location if the rates are too high. Therefore, it is anticipated that selecting the No Action alternative would result in greater halibut mortality in the CGOA rockfish target fishery than selecting any combination elements under Alternative 2.

Under either the No Action alternative or Alternative 2 it is expected that Chinook salmon bycatch will be difficult to consistently avoid. However, Alternative 2 is expected to continue the structures that have been developed to communicate areas and times of higher Chinook salmon catch rates and agreements to stop fishing when rates are too high. These structures are expected to result in bycatch rates that are lower than would otherwise be the case. Under the No Action alternative, the potential increase in the number of participants and a return to race-for-fish conditions make it less likely those bycatch avoidance measures will be adhered to by the entire fleet.

3.5.6.5 Risks to Fishing Community Sustained Participation in the CGOA Rockfish Trawl or Longline Fisheries

No issues identified with the proposed alternatives have put the sustained participation of any fishing communities substantially engaged in or substantially dependent upon the CGOA rockfish trawl or longline fisheries at risk.

[This section will be modified and/or expanded when the Preliminary Preferred Alternative is selected.]

3.5.7 Rockfish Products

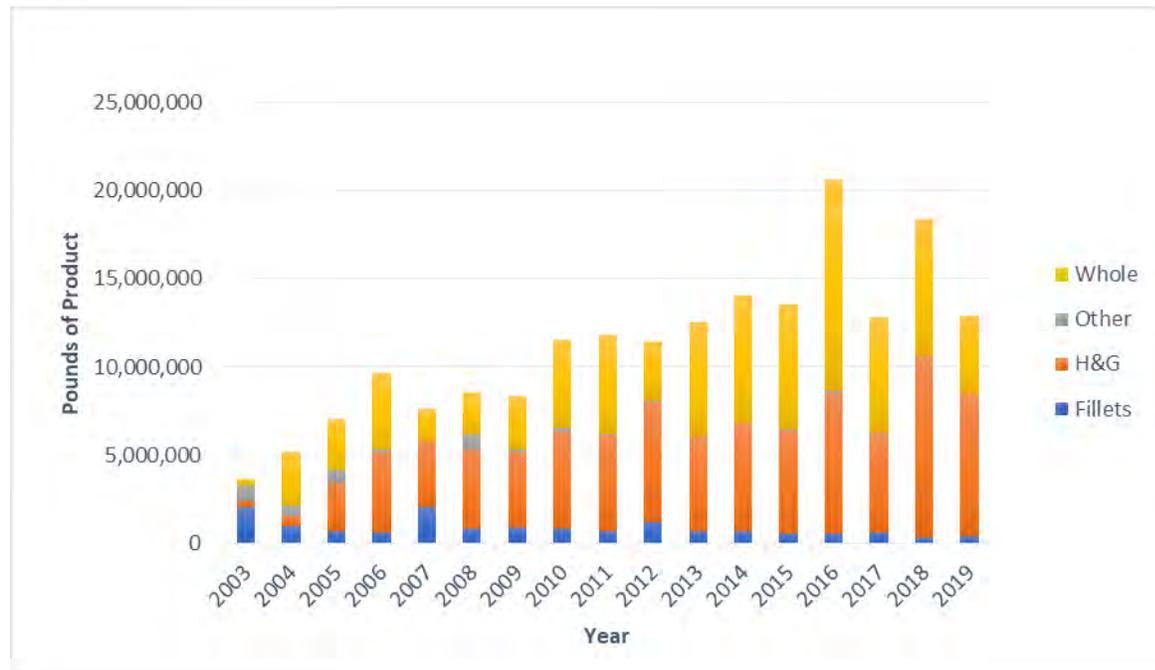
Catcher processors traditionally produce a H&G product from species they harvest, including rockfish (Table 3-20). The same general product forms are produced from rockfish harvested in both the GOA and BSAI. That fish is then sold for secondary processing. Secondary processing typically takes place outside the U.S.

Table 3-20 Product groupings from production report codes

Description	Grouping
Filletts with ribs, no skin. Meat with ribs with skin removed, from sides of body behind head and in front of tail.	Filletts
Filletts with skin and ribs. Meat and skin with ribs attached, from sides of body behind head and in front of tail.	Filletts
Filletts with skin, no ribs. Meat and skin with ribs removed, from sides of body behind head and in front of tail.	Filletts
Filletts, deep-skin. Meat with skin, adjacent meat with silver lining, and ribs removed from sides of body behind head and in front of tail, resulting in thin filletts.	Filletts
Filletts, skinless/boneless. Meat with both ribs and skin removed, from sides of body behind head and in front of tail.	Filletts
Gutted, head on. Belly slit and viscera removed.	H&G
Headed & gutted tail removed. Head removed usually in front of collar bone, and viscera and head removed.	H&G
Headed & gutted, Eastern cut. Head removed just behind the collar bone, and viscera removed.	H&G
Headed & gutted, Western cut. Head removed just in front of collar bone, and viscera removed.	H&G
Bones. (if meal, report as 32) (ancillary only)	Other
Chins. Lower jaw (mandible), muscles, and flesh. (ancillary only)	Other
Heads. Heads only. regardless where severed from body. (ancillary only)	Other
Kirimi. Head removed either in front or behind the collar bone. Viscera removed, and tail removed by cuts perpendicular to the spine, resulting in a steak.	Other
Other retained product. If product is not listed on this table, enter code 97 and write a description with product recovery rate next to it in parentheses.	Other
Pectoral girdle. Collar bone and associated bones, cartilage and flesh.	Other
Roe. Fish eggs, either loose or in sacs or skeins. (ancillary only)	Other
Surimi. Paste from fish flesh and additives.	Other
Wings. On skates, side fins are cut off next to body.	Other
Bled only. Throat, or isthmus, slit to allow blood to drain.	Whole
Whole fish/food fish.	Whole

Kodiak shore-based processors produce a wider variety of products from rockfish that the CP sector. In broad terms, the product forms can be grouped into H&G, whole fish, filletts, and other (Figure 3-14). Shore-based processors are more heterogeneous in the types of products they produce than CPs. Some firms focus more heavily on fillet production and other primarily produce H&G or round product forms. Overall the percentage of fillet production has declined and H&G production has increased.

Figure 3-14 Pounds of rockfish products produced by Kodiak processors



Source: AKFIN summary of NMFS production data

Table 3-21 provides the same information presented in the figure above aggregated by time period. The Pre-RPP period includes the years 2003 through 2006, the RPP is 2006 through 2011, and the RP is 2012 through September 2019. The information is presented in product weight. Because filletts have a lower

product recovery rate, more round pounds are required to produce a pound of product. For example, it may take three or more pounds of round rockfish to produce one pound of rockfish fish fillets.

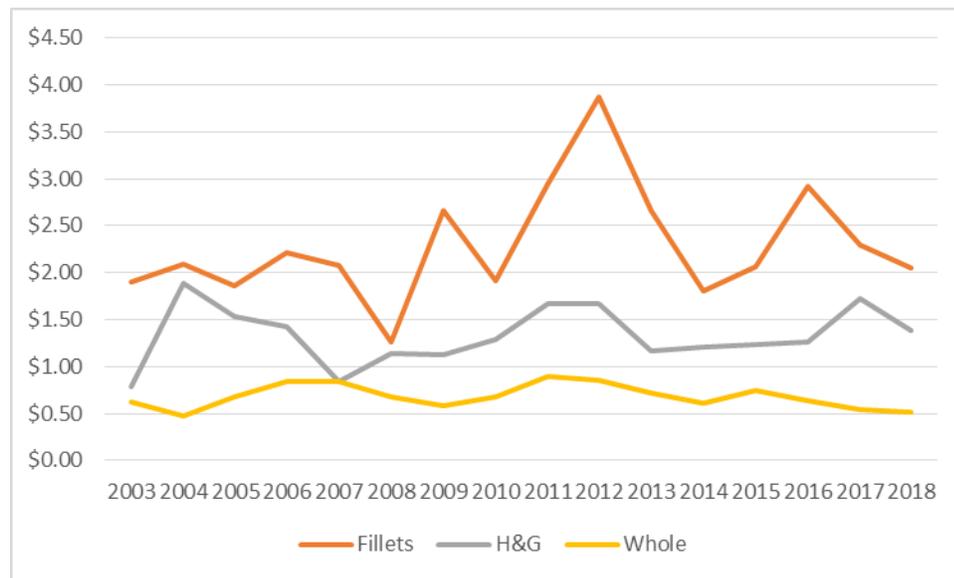
Table 3-21 Percentage of product weight produced by time period

Years	Fillets	H&G	Other	Whole	Total
Pre Pilot Program	17%	33%	9%	42%	100%
Pilot Program	11%	49%	3%	37%	100%
Rockfish Program	4%	47%	0%	49%	100%

Source: AKFIN summary of production data

Figure 3-15 shows the average real first wholesale rockfish prices of three product form groupings. The fillet prices ranged from about \$2.00/lb before the RPP was implemented. Fillet first wholesale prices increased to about \$4.00/lb in 2012, but have since declined back to about \$2.00/lb. H&G and whole prices vary over the period with changes less than shown for fillets. Whole fish and H&G prices are currently close to first wholesale prices prior to implementing the RPP. Rockfish prices are determined by overall supply and demand in the world whitefish markets. However, rockfish producers have been negatively impacted by unfavorable currency valuations and rising secondary processing costs. Both of these factors put downward pressure on raw material pricing for Alaska producers (McDowell Group , 2015). These factors likely played a role in the real price declines after 2012.

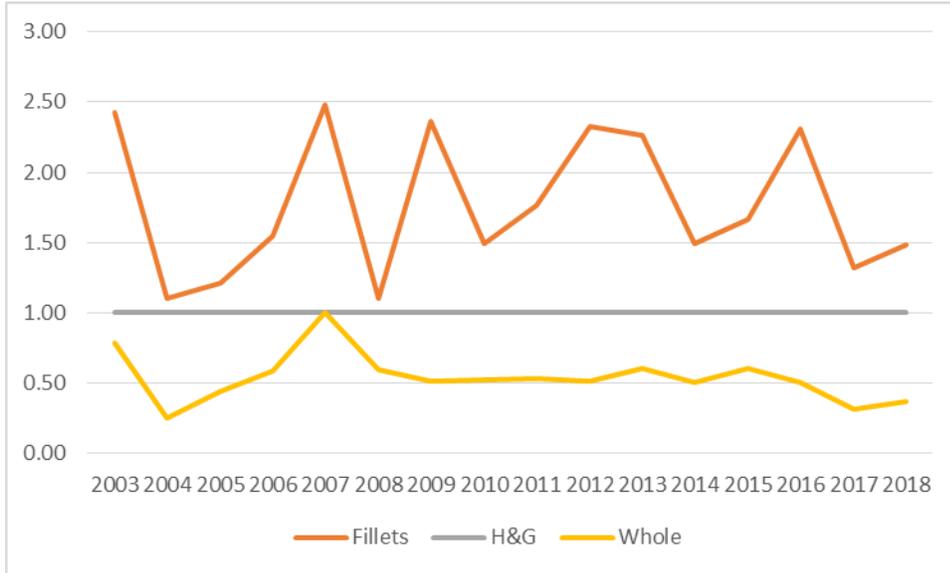
Figure 3-15 Shoreside fillet, H&G, and whole product rockfish first wholesale prices (real 2012 \$), 2003 through 2018



Source: AKFIN summary of production and value data

Figure 3-16 is provided to show relative changes in first wholesale prices for fillets and whole products relative to H&G products. Fillets and whole product first wholesale prices were divided by the H&G price to show the relative change. The H&G price is therefore indexed to equal one. Fillet prices relative to H&G prices were more variable than whole product prices. Whole product prices were generally about half of the H&G first wholesale price. Fillets generally ranged from 1.5 to 2.5 times the H&G first wholesale price. However, in 2004, 2005, and 2008 fillet prices were relatively close to the H&G price.

Figure 3-16 Comparison of shoreside fillet and round rockfish first wholesale prices to H&G first wholesale prices, 2003 through 2018



Source: AKFIN summary of production and value data

3.5.8 Markets

Rockfish fisheries have historically been aggregated into a species complex in the Economic Safe Report. Species within the complex include northern rockfish, Pacific ocean perch, roughey rockfish, shortraker rockfish, dusky rockfish and thornyhead rockfish. The only rockfish species defined in the export data is Pacific ocean perch which is used for current first-wholesale prices for the aggregate rockfish complex.

NMFS contracted to develop a paper on wholesale market profiles for Alaska crab and groundfish species (Alaska Fisheries Science Center, 2016). The rockfish portion of that paper was limited to POP. However, the general findings are also applicable to the other primary rockfish species. Information presented in that paper is used in this section.

Alaska POP is exported to China (for reprocessing) and Japan. Japan is the largest final consumer market. The paper noted that increasing Atka mackerel quotas in Alaska could impact prices for POP since Atka mackerel and POP are reported to be competitive species in the dried fish market in Japan

A conservative estimate is that at least 48 percent of Alaska rockfish production was exported to China in 2014. Virtually all POP and other rockfish exported to China is frozen whole or H&G fish. Those products are reprocessed in China, where labor costs are lower, into fillets and re-exported.

Seafood sold in the US is tracked using Harmonized System codes (H.S. codes). Use of those codes outside the United States is uncommon. As a result, it is not possible to track competing supply of POP and rockfish coming into China or the markets where it goes. However, data that are available indicates China’s major export markets appear to be Japan, Europe, Russia, and the United States.

Markets are expected to be impacted by a 25 percent tariff on Alaska seafood exports to China (Elnes & Evridge, 2019). The tariff was implemented July 6, 2018 and affects most major Alaska seafood products including frozen finfish (salmon, pollock, cod, sablefish, rockfish, and flatfish), roe, geoduck, sea cucumber, scallops, crab species and fishmeal. Some fresh product is exempt (salmon, herring) and fish oil. The anticipated short-term impacts of the tariffs will likely increase the cost of Alaska seafood products to Chinese consumers. Long-term impacts, if the tariff stays in place, it could impact demand

and consumer sentiment in China for Alaska seafood/U.S. products. A quantitative estimate of the impacts has not been provided given the uncertainty of the length of time the tariffs will remain in place and the potential changes in demand from buyers in countries that are not subject to the tariff.

3.5.9 Safety Considerations

National Standard 10 states that “conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.” In response to National Standard 10, one of the stated goals of the RP is to improve safety at sea. Since fishing practices and seasons are likely to be different under the RP and limited access (No Action alternative), repercussions associated with the management changes on human safety at sea may also differ (North Pacific Fishery Management Council, 2011).

Prior to implementation of the RPP participants in the CGOA rockfish fishery would compete for a share of the CGOA rockfish TACs during a brief season, early in July. CGOA weather conditions tend to be relatively good during that time of the year. However, summer storms can cause inclement weather that may cause unsafe fishing conditions.

Economic incentives are created when competing to catch a share of the TAC, under the LLP, that may entice a vessel operator to go to sea or continue fishing in weather conditions that may pose a higher operating risk than they would be willing to accept if they were operating under a LAPP. Each person will respond differently to these incentives depending on the level of risk they are willing to accept and the vulnerability of their vessel to those weather conditions. Since the fleet is composed of relatively small trawl vessels, they may be more susceptible to poor weather conditions than larger trawl vessels.

Management of the rockfish fisheries under the RPP and RP extended the fishing season and moved much of the fishing from July to May and June, but also allowed for fishing in late fall when CGOA weather conditions can be less safe. Although a person’s allocation will not be jeopardized by decisions to delay fishing to reduce safety risks, some incentives may exist for persons to fish in inclement weather - including market opportunities and operational cost savings (North Pacific Fishery Management Council, 2011).

NIOSH manages the CFID. CFID is a national surveillance system that contains information on work-related fatalities and vessel disasters in the U.S. fishing industry. For Alaska, CFID contains fatality data from 2000 through 2017 and vessel disaster data from 2000 through 2016. One limitation is that these data sources do not include other safety measures, including nonfatal injuries, vessel system failures not resulting in abandonment, and search-and-rescue missions. Study of these areas in the future could provide more insight into additional hazards. A second limitation is that do not cover the most recent fishing years.

NIOSH staff was provided a list of vessels that the AKFIN summary of CAS data indicated were active in the CGOA rockfish fishery from 2003 through July 2019. The list of CGOA rockfish vessels was matched with all fishing vessels that had been added to CFID as the result of:

1. one or more crewmember fatalities that occurred on or otherwise involved the vessel; or
2. if the vessel sunk, capsized, or sustained other damage that required the entire crew to abandon the vessel.

The list of vessels was considered in terms of the CGOA management program(s) they fished under, so the same three groupings of years were considered in this section as other sections of this paper:

1. pre-RPP (2003 through 2006),

2. RPP (2007 through 2011), and
3. RP (2012 through July 2019).

Based on vessel name, casualty date, and casualty location, it was determined that there were no work-related crewmember fatalities or vessel disasters among vessels reported in the CFID system when actively participating in the CGOA rockfish fishery during the pre-RPP, RPP, or the RP. Preliminary surveillance data not yet included in the official CFID database, through August 2019, was also reviewed by NIOSH staff and did not reveal any work-related crewmember fatalities or vessel disasters by vessels participating in the CGOA RP fishery. One potential reason for the good record of safety of human life at sea could include the extended fishing season that would reduce any race to fish and allow crews to choose when to operate in the event of inclement weather or crewmember fatigue.

3.5.10 Catch Monitoring Requirements

Monitoring provisions are established to ensure compliance with the RP regulations and confirm that rockfish QS holders comply with annual rockfish CQ allocations, rockfish sideboard limits, and use caps. NMFS uses five primary tools for monitoring participants in the RP. Specifically, NMFS:

1. Requires observers aboard vessels that are operating in a rockfish cooperative or a rockfish sideboard fishery to adequately account for catch and bycatch in the fishery. NMFS requires 100 percent observer coverage for CVs when checked-in; 200 percent observer coverage for CPs fishing in sideboard fisheries or under the authority of a rockfish CQ permit; and 100 percent observer coverage for CP opt-out vessels in the month of July only.
2. Requires that vessels participating in a rockfish cooperative or a rockfish sideboard fishery carry and use a NMFS-approved vessel monitoring system transmitter,
3. Requires that CPs in a rockfish cooperative or rockfish sideboard fishery follow specified catch handling procedures prior to processing,
4. Requires the weighing of all catch from rockfish cooperatives on NMFS- or state approved scales, and
5. Requires that shoreside processors receiving rockfish CQ operate under a NMFS approved Catch Monitoring and Control Plan (CMCP). A CMCP specialist monitors rockfish deliveries to ensure compliance with the CMCP of any processor receiving program landings, and assists processors with rockfish species identification to ensure accurate catch sorting and quota accounting. Shoreside processors are not required to be operating under an approved CMCP to receive groundfish harvested in the entry level longline fishery, since that fishery is not included under the LAPP and QS is not allocated to individual vessels or cooperatives.

3.5.10.1 Catch Monitoring Control Plan

Monitoring requirements for RP deliveries required a CMCP. A CMCP is developed by the processor and approved by NMFS, per criteria established in federal regulations at 50 CFR 679.28(g)(7). The CMCP details a series of performance-based standards that ensure that all delivered catch is accurately sorted and weighed by species. An additional monitoring component for the RP is a NMFS employee, the rockfish CMCP specialist, who observes rockfish landings to provide impartial verification of a processor's adherence to its CMCP. NMFS uses a portion of the cost recovery fees collected under the RP to support this Kodiak-based position. The role of the CMCP specialist is different from NMFS-certified observer and the CMCP specialist does not complete any observer duties such as assisting vessel observers or collecting biological or scientific data. The duties of the rockfish CMCP specialist are to monitor RP

deliveries to ensure compliance with the CMCP, to assist processors with rockfish species identification, to ensure accurate catch sorting and quota accounting, and to report the findings to NMFS.

A shoreside processor is required to include a description in their CMCP of how the CMCP specialist would be notified of rockfish CQ deliveries. Since the start of the program, consistently getting landing notices for all deliveries has been somewhat problematic and NMFS has continued to work with processing plants to get advanced notification. Currently, CMCP's require that processor notify the CMCP specialist via email approximately 24 hours prior to an upcoming rockfish delivery. Also, processors are required to contact the CMCP specialist 1 hour prior to the actual delivery via phone (voice or text). However, processors often state that they often do not have this information from delivering vessels 24 hours in advance. The 1-hour phone notice is occasionally forgotten depending on personnel and shift changes and sometimes the delivering vessel does not notify plant personnel of their arrival. In the future, NMFS may consider developing an online notification process to make the process more consistent or developing a method to require the delivering vessels to notify NMFS.

NMFS reports that fulfilling the role of the CMCP specialist has been a successful way to monitoring incoming deliveries. On average, about 85 percent of rockfish deliveries to Kodiak are monitored each season. The degree of monitoring is dependent on the number of simultaneous deliveries, time of day, and day of week. The CMCP specialist attempts to space monitoring events throughout 24 hours and over seven days a week to ensure all time periods and days are covered. When only one vessel is delivering to a plant in Kodiak, then the entire offload may be monitored. For simultaneous deliveries, the CMCP specialist may decide to work at a processor that he has not monitored recently or move between processors to monitor a portion of different deliveries.

One of the duties of the CMCP specialist is to help staff at the processing plant accurately identify rockfish species, which are sometimes quite similar in appearance and can be difficult to distinguish. Throughout the May through November 15 fishing season, there can be quite a bit of turn-over in plant personnel who are responsible for sorting fish by species. As a result, the CMCP specialist conducts ongoing training in order to ensure accurate speciation and catch accounting. To assist in training, NMFS developed the "Processors Guide to Species Identification in the Gulf of Alaska Rockfish Fishery" that contains pictures of each of the primary and secondary species delivered in the RP. The images are of specifically of dead fish, in the condition as they appear during a delivery, and accompanied by key identification characteristics in English, Tagalog and Spanish. The guide is printed on waterproof paper and spirally bound for easy use on the dock and processing facility. A similar 2-page guide for skate identification was also developed and distributed.

Current regulations also require that the RP processor provide an observer sampling station. Alternative 2, Element 9 would remove the observer sampling station requirements for processing plants in the RP. Shoreside plants receiving RP deliveries are not required to maintain 100 percent observer coverage and therefore the requirements for an observer sampling station and intra-plant communication equipment for an observer to receive delivery notifications are not necessary.

3.5.11 Recordkeeping and Reporting

The RP includes requirements for CQ holders to report specific information to NMFS and other management agencies for management, monitoring, and enforcement purposes. These recordkeeping and reporting requirements for the RP can be split into categories by subject:

Recordkeeping and reporting requirements for participants include a mix of electronic and paper submissions to NMFS. Since implementation of the RP, NMFS has transitioned a number of recordkeeping and reporting submissions from paper to electronic applications and forms in an effort to simplify recordkeeping and reporting, reduce costs, and improve accuracy and timeliness of information

for management agencies and fishery participants. In most cases, NMFS has maintained options for paper submission when fishery participants are unable to report electronically.

Two electronic recordkeeping and reporting systems are currently used in the RP. The first is eLandings, an interagency program implemented in 2009 and is required for all RP landings. The second system is eFISH, the NMFS Alaska Region online Fisheries Information System (eFISH). Participants in the RP use eFISH to renew annual permits, submit ex-vessel volume and value reports, paying cost-recovery, transfer rockfish CQ between cooperatives, check in and out of the RP, and pay observer program fees. RP participants may also use eFISH to receive information from NMFS relevant to their permits or CQ holdings, including checking CQ balances, and printing LLP licenses.

NMFS has maintained paper submission requirements for a number of reasons, including requirements for original signatures on applications, occasional notarized verifications, and required additional documentation for eligibility requirements.

NMFS has sought out efficiencies in reporting, including removing requirements for a monthly report submitted by the cooperative managers that collected redundant information found in eLandings. It was eliminated in the current program to reduce costs and burden to the industry.

This section provides an overview of the current recordkeeping and reporting requirements for the RP.

Application for Rockfish Cooperative Fishing Quota (Paper)

Each calendar year, the Regional Administrator determines the tonnage of rockfish primary species that will be assigned to participants in a rockfish cooperative. The members of a rockfish cooperative have an exclusive harvest privilege to collectively catch this CQ. Only persons who hold rockfish QS may join a rockfish cooperative. Each year the holder of an LLP license with rockfish QS must assign that LLP license to a rockfish cooperative in order to participate in the RP. Rockfish QS can only be fished through cooperative membership. The cooperative must form an association with the processor to which it historically delivered the most rockfish. The cooperative/processor associations are intended to ensure that a cooperative lands a substantial portion of its catch with its members' historic processor. The exact terms of the association are subject to negotiation, are confidential to the parties, and require the approval of the associated processor.

As part of the annual CQ application process the cooperative must submit a fishing plan. Alternative 2, Element 8 would eliminate that requirement from the application package. The justification for removing it from the application process is the veracity of the information, given that it must be submitted before the cooperative develops its true and final fishing plan for the year.

Application for Inter-Cooperative Transfer of Rockfish CQ (eFISH)

Each rockfish cooperative receives an annual cooperative fishing quota (CQ). The CQ is an amount of primary and secondary rockfish species the cooperative is able to harvest in a given fishing year. Halibut Prohibited Species Catch (PSC) is also allocated to participants based on historic halibut PSC rates in the primary rockfish species fisheries. Shore-based processors receiving rockfish CQ must be located within the boundaries of the City of Kodiak, Alaska. Once NMFS issues annual CQ to a cooperative, the members of the cooperative may fish on that amount or may transfer catch amounts to another cooperative. The transfer of an annual catch amount is valid only during the calendar year of the transfer. A rockfish cooperative may transfer all or part of its CQ to another rockfish cooperative. A cooperative may only transfer or receive by transfer an annual catch amount if the cooperative submits online an application for inter-cooperative transfer to NMFS. In order for NMFS to approve an inter-cooperative transfer, both parties must be already established and recognized by NMFS as a cooperative prior to the transfer. Under the Program, CP cooperatives are not permitted to receive CQ transfers from CVs

cooperatives. This “one-way door” is intended to protect interests of shore plants and communities, in the event that CP production efficiencies exceed those of the shore-based sector.

Annual Rockfish Cooperative Report (Paper)³⁷

Regulations at 50 CFR 679.5(r)(6) require each RP cooperative to submit an annual rockfish cooperative report to NMFS by December 15 of each year. The report must include at a minimum:

- ◆ The cooperative's CQ, sideboard limit (if applicable), and any rockfish sideboard fishery harvests made by the rockfish cooperative vessels on a vessel-by-vessel basis;
- ◆ The cooperative's actual retained and discarded catch of CQ, and sideboard limit (if applicable) by statistical area³⁸ and vessel-by-vessel basis;
- ◆ A description of the method used by the cooperative to monitor fisheries in which cooperative vessels participated; and
- ◆ A description of any actions³⁹ taken by the cooperative in response to any members that exceeded their catch as allowed under the rockfish cooperative agreement.

The information submitted to NMFS about harvests, retained catch, and discarded catch by vessel or cooperative is confidential under Section 402(b)(1) of the Magnuson-Stevens Act. The other required information is not confidential. Information about each cooperative's CQ allocations, halibut PSC allocation, and sideboard limits is published on NMFS's website. The inclusion of confidential information means that NMFS cannot post the annual reports on its website or provide the annual reports to the Council or the public.

At the request of the Council, the RP cooperatives also submit written cooperative reports to the Council prior to the April Council meeting each year, and provide a verbal overview of the annual report at the April Council meeting. Federal regulations do not require the RP cooperatives to submit an annual report to the Council.

In addition to the regulatory requirements for the annual cooperative report, the Council also has requested that the RP cooperatives provide additional information to the Council in their annual reports. These additional requirements are described in the action memo prepared by Council staff for the Cooperative Reports agenda item. The most recent [action memo](#) was prepared for the April 2019 Council meeting (NPFMC, 2019). It states that the Council has previously requested that the RP cooperatives provide the Council with inter-temporal harvest information and information about Chinook salmon bycatch. The Council also requested that the RP cooperatives use terminology for program components (e.g., limitations on seasonal reallocations of halibut PSC) that is consistent with the terms used in the fishery management plans and regulations governing the program.

Vessel Check-in/Check-out Report with Termination of Fishing Declaration (eFISH)

The designated representative of a rockfish cooperative must designate any vessel that is authorized to fish under the rockfish cooperative's CQ permit before that vessel may fish under that CQ permit through a check-in procedure.

The designated representative for a rockfish cooperative must submit to NMFS a check-in report for a vessel:

³⁷ This section repeats much of the introductory information in Section 1.7. This duplication is necessary to explain the recommendations in Section 1.7. The duplication of text will be removed in the final draft EA/RIR.

³⁸ Alternative 2, Element 6 addresses this requirement (change “statistical area” to CGOA wide).

³⁹ Alternative 2, Element 7 addresses this requirement (change “any actions” to “any civil actions”).

- At least 48 hours⁴⁰ prior to the time the CV begins a fishing trip to fish under a CQ permit; or
- At least 1 hour prior to the time the CP begins a fishing trip to fish under a CQ permit; and
- A check-in designation is effective at the beginning of the first fishing trip after the designation has been submitted.

The designated representative of a rockfish cooperative must designate any vessel that is no longer fishing under a CQ permit for that rockfish cooperative through a check-out procedure.

A check-out report must be submitted to NMFS within 6 hours after the effective date and time the rockfish cooperative ends the vessel's authority to fish under the CQ permit.

- If the vessel is fishing under a CQ permit for a CV cooperative, a check-out designation is effective at the end of a complete offload;
- If the vessel is fishing under a CQ permit for a CP cooperative, a check-out designation is effective upon submission to NMFS.

A Rockfish cooperative may choose to terminate its CQ permit through a declaration submitted to NMFS. NMFS will review the declaration and notify the cooperative's authorized representative once the declaration has been approved.

Rockfish Ex-vessel Volume and Value Report (eFISH)

A rockfish processor (shoreside processor⁴¹) that receives and purchases landings of rockfish CQ must annually submit to NMFS a complete Rockfish Ex-vessel Volume and Value Report for each reporting period for which the rockfish processor receives rockfish CQ. The reporting period of the Rockfish Ex-vessel Volume and Value Report is from May 1 through November 15 of each year. The deadline for submittal on eFISH is no later than December 1 each year.

Rockfish fee payment (eFISH)

Under section 303A(e) of the Magnuson-Stevens Act, costs for management and enforcement of individual fishing quota and other limited access privilege programs (LAPPs) are recoverable from participants. The RP is a LAPP established under the provisions of section 303A of the Magnuson-Stevens Act. Therefore, NMFS is required to collect fees for the RP. The MSA also limits the cost recovery fee so that it may not exceed three percent of the ex-vessel value of the fish harvested under the RP.

All rockfish CQ holders who harvest rockfish CQ must submit the cost recovery payment for all rockfish CQ landings made on their rockfish CQ permit. A rockfish CQ permit holder must submit any rockfish cost recovery fee liability payment(s) to NMFS no later than February 15 of the year following the calendar year in which the rockfish CQ landings were made. Payment must be made electronically in U.S. dollars by automated clearing house, credit card, or electronic check drawn on a U.S. bank account.

Each CQ holder must pay their cost recovery fee electronically using the Department of the Treasury's online payment system, pay.gov, which can be accessed through the [eFISH system](#).

⁴⁰ This could be modified under Alternative 2, Element 12 to 24 hours.

⁴¹ A clarification requested under Alternative 2, Element 5 would specifically state that only shore-based processors are subject to the regulation.

3.5.12 Cost Recovery

Section 304(d)(2) of the Magnuson-Stevens Act authorizes and requires NOAA Fisheries to recover the actual costs directly related to the management, data collection, and enforcement of any LAPP and the Western Alaska Community Development Quota (CDQ) Program. The RP is subject to cost recovery because it is a LAPP. If the Council takes No action to reauthorize the RP the fishery would no longer be subject to cost recovery.

Direct program costs are incremental costs that would not have been incurred except for the RP. Cost recovery fees do not increase agency budgets or expenditures. The fee only offsets funds that would otherwise have been appropriated for management of the RP. As a result, no budgetary advantage is gained by agencies (NMFS, 2019).

Cost recovery fee regulations require a rockfish processor that receives and purchases landings of RP CQ to annually submit to NMFS a complete Rockfish Ex-vessel Volume and Value Report. The reporting period of the Rockfish Ex-vessel Volume and Value Report extends from May 1 through November 15 of each year. A complete Rockfish Ex-vessel Volume and Value Report must be received by the NMFS not later than December 1 of the year the rockfish processor received the RP CQ species.

NMFS calculates RP direct program costs through an established, systematic accounting system for the Federal fiscal year (FY), which is October 1 through September 30. NMFS tracks internal program costs as well as program costs from the Alaska Fisheries Science Center (AFSC), and the Alaska Department of Fish and Game (ADF&G).

Examples of the types of tasks that were included under the 2018 RP direct program costs are:

- maintenance of electronic reporting systems, including the catch accounting system (NMFS, ADF&G),
- programming and web design for online applications (NMFS),
- determination of annual cooperative allocations of cooperative fishing quota (CQ) and prohibited species catch (PSC) (NMFS),
- issuance of (CQ), responding to questions about CQ applications (NMFS),
- transfers of CQ, responding to questions about transfers (NMFS),
- observer debriefing (AFSC),
- catch monitoring control plan specialist (NMFS),
- monitor cooperative fisheries CQ and PSC, answer questions on cooperative activities, respond to data requests (NMFS),
- determination of standard ex-vessel prices using value and volume reports submitted by rockfish processors (NMFS),
- fee determination and collection process (NMFS),
- cost recovery report (NMFS), and
- analysis and rulemaking activities (NMFS).

Using the estimated program costs provided by agencies that incur recoverable costs, a four-step annual process that is undertaken by NMFS:

- 1) Calculate the total incremental costs incurred to manage and enforce the fishery.
- 2) Calculate the total value of the fishery.

- 3) Divide the total costs in step one by the total fishery value in step two to determine the fee percentage.
- 4) Apply the fee percentage to each permit holder’s catch and invoice each permit holder.

One of the actions considered by the Council would make an annual report on the cost recovery program mandatory. If implemented, it would add a fifth step to the annual process. That amendment is not expected to increase the cost recovery fee, because NMFS currently generates a RP cost recovery report as requested by members of the industry to provide greater transparency on the costs being recovered. The Council is also considering elements that would establish the duration of the program and the amount of analysis that would be required in the future to extend the program. Options that require additional or more frequent analysis are expected to increase the recoverable costs associated with analysis and rulemaking activity. If the result of the additional analytical requirements is a calculated fee greater than 3 percent of the ex-vessel value of the allocated species, the agencies would be required to make up the cost difference from their annual operating budgets.

Table 3-22 provides a summary of the cost recovery fees for 2012 through 2018. Fees have generally ranged from 2 percent and 3 percent of the estimated RP quota ex-vessel value. The cost recovery fee in 2018 was approximately equal to the maximum 3 percent fee. The difference between the 3 percent maximum fee and the recoverable costs was less than \$16,000.

The only year the fee was less than 2 percent was the first year it was collected (2012). The difference in the fee percentage and program cost shows the amount the cost recovery fee could have been increased each year if agency costs had been greater than they were. A negative number shows the program costs that were not recovered and had to be paid by one or more of the agencies out of their operating budget.

Table 3-22: Summary of RP cost recovery fees and estimated fishery landings and value

Year	Pounds landed	Fishery Value	Total Program Costs	Difference: 3% fee minus program cost	Calculated Fee Percentage	Actual Fee Percentage
2018	47,261,765	\$ 11,231,239	\$ 321,411	\$15,526	2.86%	2.86%
2017	40,587,961	\$ 10,248,424	\$ 208,666	\$98,787	2.04%	2.04%
2016	49,777,303	\$ 12,009,975	\$ 304,684	\$55,615	2.54%	2.54%
2015	45,152,020	\$ 11,117,262	\$ 361,790	-\$28,272	3.3%	3.0%
2014	44,016,252	\$ 10,505,776	\$ 345,948	-\$30,775	3.3%	3.0%
2013	36,222,525	\$ 8,716,340	\$ 224,059	\$37,431	2.5%	2.5%
2012	40,963,090	\$ 14,340,362	\$ 194,562	\$235,649	1.4%	1.4%

Source: NMFS 2018 RP cost recovery fee report (<https://www.fisheries.noaa.gov/resource/document/central-gulf-alaska-rockfish-program-cost-recovery-reports>).

Notes: The 2014 values are the corrected values for that year. The pounds landed and fishery value originally reported for 2014 in the *Federal Register* notice (80 FR 6053; February 4, 2015) incorrectly excluded the 2014 CP values.

3.6 Analysis of Impacts: Alternative 1, No Action

Reversion to LLP management would likely result in fishing practices and patterns similar to those seen prior to the RPP. In that fishery, trawl vessels raced for CGOA rockfish when the trawl season opened in July. The fishery typically lasted about three weeks and vessels had to weigh the benefits of participating in the rockfish fishery versus other opportunities (e.g., tendering pink salmon). The reversion to LLP management would also remove the allocation to the entry level fixed gear longline sector.

The cooperative are prohibited from exceeding the amount of cooperative quota that is currently held by that rockfish cooperative. LLP management requires NMFS to issue directed fishing closures based on projected catch rates by the fleet. Cooperative management is more flexible and allows for participants to more effectively achieve their quota allocation without exceeding those quotas. The number of participants in the harvesting sectors could increase. In the CV sector any vessel with an LLP license with a trawl gear and CGOA endorsement could participate in the rockfish fishery. Table 3-15, presented earlier in this document provided information on the number of LLP licenses that are issued that could potentially be used to harvest CGOA to show that increased capacity could flow into the fishery under the No Action alternative. Not all LLP license holders would be expected to enter the fishery, but the potential for increased participation in the rockfish fishery is substantial. In the RP, only about 30 CVs are active in the fishery on an annual basis so there is the potential for the number of participants to more than double. However, the actual number of vessels that could participate in the future will also depend on processing capacity and available markets. Because the Kodiak delivery requirement would be removed under the No Action alternative it is possible that processors outside Kodiak could begin taking deliveries or floating processors could enter the fishery.

Product quality and production efficiency would likely suffer, should the rockfish fisheries return to a race for fish. Catcher processors must process rockfish rapidly, to maintain quality and accommodate additional catch. Prior to the RPP, catcher processors in the rockfish fisheries produced mostly whole and H&G products (i.e., relatively low value-added products). These vessels would likely continue to process catch in a similar manner under the No Action alternative. Although catcher processors process their catch quickly relative to CVs, the quality of their products could suffer, to some extent, as participants race to maximize their catch rates. Diminishing quality dissipates a portion of the resource rents that would otherwise be available.

Production efficiency of CVs under the No Action alternative would also be limited by the short duration, race for fish that will likely reemerge. Maximizing catch amounts in each tow and filling holds to capacity can damage rockfish, owing to their being difficult to handle. The No Action alternative would also likely extend trip lengths, to increase catch per trip, which can further result in a decline in the quality of rockfish deliveries. Also, it's expected that the secondary species (sablefish, shortraker, rougheye, thornyheads) catch, and halibut and Chinook salmon PSC would return to rates under the LLP management.

Returns to CVs under this alternative would likely be limited, both by the quality of their landings and the compressed time period within which those landings must be made. Most processors would likely process deliveries quickly, to keep pace with the landings. These conditions could dampen competition for landings among the participating processors to some extent. Quality would likely suffer, because of the rapid rate of harvest and processing, and technical efficiency would also be lost, as crews scale up for a short period of time to accommodate the rapid pace of landings during the compressed season.

Consumers are likely to be supplied with products from the rockfish fisheries similar to those supplied prior to the RPP. Catcher processors are likely to produce relatively higher quality, but low "value-added," frozen H&G and whole fish. Production from CV catch is likely to suffer from not being able to take greater care handling the raw product. Shore-based processors have been producing higher valued

products under the RP (e.g. fillets). Limiting the season length and increasing throughput required to keep up with deliveries could negatively impact their ability to produce higher valued products that require more processing time and effort, especially if rockfish production is competing for labor resources and processing line availability with pink salmon deliveries. During years when the pink salmon fishery is approaching record levels the labor and capacity issues could be exacerbated.

Crew participation and compensation would likely revert to receiving a specific percent of the vessel's adjusted revenues, as it was before implementation of the RPP. During that time, most crewmembers worked in several different fisheries, often on the same vessel that they worked on during the rockfish season, while some moved to other vessels for particular fisheries.

For shore-based processing crew, the No Action alternative would result in similar processing practices seen before implementation of the RPP. During that period, most of the processing took place in Kodiak and was undertaken by resident crews and supplemented by non-resident workers brought to the community to fill positions that could not be filled by residents. Crews were employed processing rockfish for a relatively short period of time. When rockfish was being processed, relatively large crews were necessary to maintain a flow of fish through the plants, because the rockfish fisheries coincided with the pink salmon fishery. Processing both species simultaneously, required some plants to employ substantially larger crews, relative to processing under the RP, that were juggled between processing lines for the two fisheries.

3.6.1 Management and Enforcement Considerations

The Council will need to provide direction on specific elements of the No Action alternative if it selects it as the PPA. Some of the high level issues are briefly discussed in Section 3.3. However, the fishery will be managed as it was prior to implementation of the RPP. Before directed fishing opens for rockfish, NMFS will set the directed fishing allowances for the directed fisheries after removing the ICA needed as incidental catch in other CGOA fisheries. NMFS will issue opening and closure notices in the Federal Register. It is expected that the three primary rockfish species would be opened to directed fishing. The secondary species would be closed to directed fishing and used as incidental catch in the rockfish and other fisheries, except for the portion of Pacific cod that had been allocated to the RP which would remain in the trawl CV sector allocation.

Any vessel that is assigned a valid LLP license with a trawl gear endorsement for the CGOA would be allowed to participate in directed fishing for the three primary rockfish species. At a maximum, this would about triple the number of vessels that could participate relative to the number participating under the RP. The fishery would take place in July and would conflict with the pink salmon fishery.

Halibut PSC deducted from the third period apportionment for trawl gear would be available to all trawl vessels fishing in the deep-water species fishery (assuming the Council does not reapportion it to another season or the shallow-water species fishery. The third period halibut PSC reductions associated with the RP will be reviewed and a policy decision must be made whether to keep those reductions or to make the entire PSC limit set-aside to the RP available to the trawl fleet it was originally deducted. The Chinook salmon PSC limit set-aside for the RP would be apportioned to the trawl fleet for use in non-pollock fisheries. This limit was established after the RP was implemented so regulations will need to address this action that were not in place prior to the RPP being implemented. Vessel operators would still be required to avoid PSC to the extent practicable.

Observer and monitoring requirements and coverage levels for catcher vessels and shoreside processors fishing in the CGOA rockfish fishery would be established in the Observer Program Annual Deployment

Plan⁴². That plan is developed by NMFS in consultation with the Council and advisory committees and presented to the Council, usually at its annual October meeting. The Council reviews that plan and provides feedback. The recommended observer deployment plan for the CGOA would be implemented for the start of the 2022 fishing year. Catcher/processors would be in the full coverage category under the Observer Program as implemented in 2013.

3.7 Analysis of Impacts: Alternative 2

The various elements of Alternative 2 are presented in this section in terms of their impacts. A summary of the general impacts that maintaining the RP, regardless of combination of specific elements selected are presented in this introduction.

As noted when the alternative was introduced in Section 1.6, it is assumed that the QS allocations would remain the same under the reauthorized program as the current RP. LLP license holders will not need to reapply for QS based on their catch history, reducing the implementation burden on both LLP license holders and NMFS. Not altering the amount of QS assigned to each LLP license will reauthorize the current allocations, which reflects the intent of this action. It also will help streamline the application process.

All of the elements and options for both the onshore and offshore sectors, under Alternative 2 would maintain safety at sea that was described in Section 3.5.9 and would control fleet capacity as described in Section 3.5.3. In addition, the elements would enhance NMFS' ability to conserve and manage species allocated under the RP through traditional management measures of monitoring catch plus the cooperative agreements where cooperative members monitor their harvest to ensure the cooperative does not exceed harvest limits. These agreements also increase vessel accountability that is enforced through civil contracts within the cooperatives and across cooperatives. The slower pace of fishing and greater use of pelagic gear under the RP has reduced sea floor contact as described in Section 2.4. Implementation of the RP has allowed full retention of allocated species. Slowing the pace of the fishery and spreading the fishery over longer periods of time has provided industry with tools to better comply with the full retention of rockfish requirements. Selection of Alternative 2 is also expected to maintain the industry efforts to reduce halibut mortality and Chinook salmon bycatch in the CGOA rockfish fisheries. Improvements in PSC usage in both the CV and CP sectors are presented in Section 3.5.1.4.

In addition, the rockfish fishery dependent communities in the Central Gulf of Alaska and the onshore processing sector have benefited from a more stable workforce, more onshore deliveries of rockfish, and improved rockfish quality (Section 3.6). Rockfish product diversity has not changed substantially (Section 3.5.7). The product forms and markets (Section 3.5.8) are driven by market forces that extend well beyond the effects of the RP management structure. Central Gulf of Alaska fishermen, and the onshore processing sector have benefited from reduced conflicts with salmon processing (Section 3.5.5). The offshore sector has benefited from greater spatial and temporal flexibility in prosecuting the fishery (Section 3.5.1.5).

3.7.1 Program Duration

Element 1: Modify regulations at 679.80(a)(2) to specify the duration of the program.

Option 1: Remove sunset date

Option 2: Replace with new sunset date (10-20 years)

⁴² <https://meetings.npfmc.org/CommentReview/DownloadFile?p=f32b6626-2137-405a-b0a4-8231e6f7406d.pdf&fileName=C3%20Observer%20Deployment%20Plan.pdf>

The current RP was established with a sunset date of ten years after the program was implemented. The first option would remove the sunset date. Under Section 303A of the MSA, a LAPP permit is a permit issued for a period of not more than 10 years that will be renewed before the end of that period, unless it has been revoked, limited, or modified. Removing the sunset date would allow NMFS to renew the permits without the Council initiating a formal analysis to reauthorize the program. Option 2 would keep the sunset provision of the program in place at the current 10-year cycle or extend the cycle up to 20 years. At the end of the period the Council and NMFS would be required to reauthorize the program, as is being done under this regulatory package. Selecting one of the options in this element would address the Council Purpose and Need statement “*to reauthorize the RP to retain the management, economic, safety, and conservation gains realized under the RP to the extent practicable, consistent with the Magnuson-Stevens Act*”.

The NRC study (NRC, 1999) points out that LAPPs that are stable and in which persons are able to make long-term investments will achieve greater benefits. While the MSA provides that LAPPs create a revocable privilege that is not permanent, the creation of long-term interests is argued by some to create a stewardship and conservation interest by giving participants a more direct stake in the condition of the stock.

The Council is considering options that would remove the sunset date or modify the current 10-year sunset. If the sunset date is retained it would be extended by a range of 10 to 20 years from the date of implementation, absent Council review and recommendation to extend the program. By selecting the option to remove the sunset date, the program would have an indefinite duration (subject to modification as the Council deems necessary), with reviews set at specific intervals. Program reviews would be conducted 5 years after implementation and every 7 years thereafter, coinciding with the fishery management plan policy review. Reviews would be designed to attempt to objectively measure the success of the program by addressing issues raised in the amendment’s problem statement and the standards set forth in the MSA, including the impact of this action on harvesting and processing sectors, and fishery dependent communities. After reviewing the impacts of the program, the Council would have the option of taking any necessary and appropriate action to modify or end the program.

Review of a program can be important to the program’s success. A review process would allow for a full evaluation of whether the program is serving intended objectives and could provide guidance to the Council for revising the program to mitigate harmful or unexpected consequences. Early review of a program can be used to determine that the program is functioning as intended. Periodic reviews can be used to determine whether circumstances have changed in a fishery that would justify amending a management program. A well conducted and fully evaluated review often requires extensive staff time, consultants, and Council time. Reviews are important to ensuring the success of management programs but should be undertaken on a schedule such that the need and utility of the information in the review are likely to outweigh the costs. In this case the program has already been in place since 2012, so the Council, the participants, and other stake holders have better understanding of how the program will function relative to implementing a new program that has never been utilized.

Including a sunset date in the program could have various consequences for the RP. This sunset is likely to affect the value of the licenses that qualify for the program, as the longer-term fishing privilege associated with the license will be uncertain. Limited duration is likely to affect planning by both sectors, as uncertainties will arise concerning future management of the rockfish fisheries, especially as the sunset date approaches. In such an environment, it is possible that participants may choose not to invest in improvements that are beneficial in the share-based management of the cooperative alternatives, but less useful under LLP management. Although the proposed sunset would ensure that program participants cannot lay claim to their allocations in perpetuity, the sunset is likely to intensify lobbying efforts in the future, as participants work to maintain their interests. In addition, mandating Council recommendation to extend the RP would substantially increase Council and agency staff workloads, as a formal extension of

the program would be required if the Council follows the normal process for amending its FMP. Although some of the work for such an amendment package would be derived from the reviews of the program, substantial administrative and analytical burdens will arise from any action to extend the program. In addition, advancing a comprehensive analytical package of this type through the Council will likely affect the Council’s ability to address other needs, including possible amendments to the existing program. For example, minor modifications being considered from the current RP have been incorporated into this package.

Finally, the RP includes a share duration limit of all RP permits, which would be 10 years. These permits would be renewed before their expiration, unless the permit has been revoked, limited, or modified. NMFS would have discretion in determining which permits would be subject to revocation, limitation, or modification.

3.7.2 Pacific Cod Reallocations

Element 2: Consider options to reallocate unharvested RP Pacific cod from onshore cooperatives to fixed gear open access fisheries after the RP fisheries close on November 15.

Description: NMFS does not currently have the authority to move unused Pacific cod from the trawl CV rockfish cooperatives to the fixed gear fisheries, as NMFS does with other sectors that fish Pacific cod (see §679.20(a)(12)(ii)(B)). The proposed regulatory change would provide NMFS the authority to reallocate any remaining Pacific cod after the RP fisheries closes for the season or once all members have checked out of their RP cooperative. The amount remaining in the RP CV cooperatives is presented in Table 3-23.

Table 3-23 2011 to 2018 RP Trawl CV cooperative Pacific cod allocations, total catch, remaining allocation, and percent of allocation remaining (amounts are in metric tons).

Year	Allocation	Total Catch	Remaining Allocation	Percent Remaining
2011	843	702	141	17%
2012	1,592	796	796	50%
2013	1,408	490	918	65%
2014	1,517	1,368	149	10%
2015	1,752	792	960	55%
2016	1,409	196	1,213	86%
2017	1,262	52	1,210	96%
2018	232	83	149	64%
Average	1,252	560	692	55%

Source: NMFS, Alaska Region, Catch Accounting System

Similar to the process for other Pacific cod sectors, NMFS could take into account the capacity of the sector, and ability to harvest the remaining Pacific cod TAC. For instance, Pacific cod may still go unfished if a particular sector is approaching its halibut PSC limit and it does not have the opportunity to take advantage of an increased Pacific cod allocation. Annual analysis by NMFS Inseason Management staff would need to ascertain the need and recipients of any potential reallocation. The Council could allow regular annual reallocations to any sector following the current reallocation regulations. Under the current reallocation regulations, the Regional Administrator would consider a reallocation of the projected unused allocation from the RP to the CV sectors first, then to the combined CV and CP pot sector, and then to all other CP sectors, taking into account the capability of a sector, as determined by the Regional

Administrator, to harvest the remaining Pacific cod TAC. Any reallocation of a TAC during the fishing year requires publication of a notice in the Federal Register.

The Council could limit any trawl CV cooperative Pacific cod reallocation to only the non-RP trawl CV allocation. However, for non-RP trawl CVs directed fishing for Pacific cod closes by regulation at noon, November 1. A reallocation to support trawl CV directed fishing might not occur in time for this sector to use additional Pacific cod. Additional Pacific cod could still be used as incidental catch in other fisheries and retained up to the MRA. The November 1 directed fishing closure also applies to the trawl CP sector.

Primary factors that will impact the need for this flexibility on an annual basis are the size of the CGOA Pacific cod TAC, the amount effort in the fixed gear fisheries that would utilize the roll-over after they are available, and the amount of the Pacific cod CQ that goes unused by cooperatives on annual basis.

3.7.3 Exempt Vessels from Crab Program Sideboards when Fishing in CGOA RP

Element 3: Exempt crab program sideboard limits for vessels when fishing in the RP.

Both the AFA and BSAI Crab Rationalization (CR) Programs were implemented with a suite of sideboard limits for vessels that earned harvesting privileges through these programs. Given the economic advantages that these participants had been afforded through their participation in these programs, potentially freeing up capacity, sideboard limits were created to limit the ability for these vessels to expand into other fisheries. Both of these program (AFA and the CR Program) included sideboards in the CGOA rockfish fisheries, which were not managed as a LAPP at the time these programs were implemented.

In addition, 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. That 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. Prior to implementing the regulation NMFS calculated 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 prohibited 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. Starting in 2020 and 2021, NMFS will no longer publish in the annual GOA harvest specifications the AFA Program and CR Program sideboard limit amounts for specific groundfish species (Tables 54, 55, 54 to 50 CFR part 679), and those specific groundfish species will be prohibited to directed fishing in regulation. As a result of the action no RP primary or secondary species harvested with trawl gear would remain open to directed fish by sideboarded CR Program vessels.

Currently, CR sideboards apply to non-AFA CVs fishing in the GOA. Non-AFA CVs may be subject to prohibitions on fishing in the GOA except for pollock and Pacific cod. As a result, a non-AFA trawl CV can be prohibited from fishing primary and secondary rockfish species in a RP cooperative other than Pacific cod, if they had access to CQ. This is a result of being exempt from the Pacific cod and pollock sideboard limits but still subject to all other GOA species sideboard limits. This action would impact any non-AFA CV that has been sideboarded under the Crab Rationalization program in the GOA for all species except Pacific cod and pollock. Based on the 2018 LLP license database one LLP license and the vessel generating the LLP license meets this criterion.

The proposed action would allow directed fishing by RP cooperative participants for any primary or secondary RP species when the cooperative holds sufficient CQ to allow directed fishing by a member vessel without being subject to CR Program sideboard limits. Essentially the CQ allocation takes the place of the sideboard limit for those vessels and limits their participation in the fishery.

3.7.4 Require Cost Recovery Reports

Element 4: Require annual NMFS cost recovery reports in regulations.

Regulations require NMFS to produce a cost recovery report for all other LAPPs, except the CGOA RP. For example, §679.33(g) “Annual report. Each year, NMFS will publish a report describing the CDQ Cost Recovery Fee Program for CDQ groundfish and halibut.” Although not required in regulations, NMFS has produced a CGOA RP cost recovery fee report each year since 2015.⁴³

More information on the CGOA RP cost recovery fee is presented in Section 3.5.10. Because NMFS already generates this report on an annual basis and this element would not change the detail or structure of the report, it is not expected to increase the costs to industry or the burden on NMFS. The effect of this element is to:

- provide clear direction to the agency to generate the report, and
- provide assurance to the industry that the report will be produced on an annual basis.

3.7.5 Clarify Ex-Vessel Volume and Value Reporting Regulations

Element 5: Clarify regulations at § 679.5(r)(10) to specify that only shoreside processors receiving RP CQ must submit the Rockfish Ex-vessel Volume and Value Report.

Current regulations require a “rockfish processor” to submit annually to NMFS a Rockfish Ex-vessel Volume and Value Report. The use of rockfish processor instead of “rockfish shoreside processor” has created confusion for NMFS staff and CP participants because a rockfish processor could include RP CPs. The proposed action would modify the regulations at 50 CFR 679.5(r)(10) to provide clarifications.

The impact of this proposed change would be to clarify an ambiguity that NMFS must interpret in the current regulations. The clarification is expected to reduce the amount of time NMFS must work with industry to clarify its interpretation of the regulations. It may also reduce the time and cost to review compliance with the regulations and the time it takes CP firms to submit the report.

CPs have never reported taking deliveries from other vessels under the RP. Implementing the change would have no impact on the ex-vessel value used to calculate the cost recovery fee percentage. Also note that when CPs process their own catch, they do not have an arm’s length ex-vessel transaction. Therefore, any ex-vessel price they report would not represent a market based transaction and may not represent an accurate ex-vessel price.

3.7.6 Clarify Cooperative Reporting Requirements by Area

Element 6: Modify language in § 679.5(r)(6)(iii)(B) to require RP cooperatives to report catch by the CGOA reporting area.

Current regulations require RP cooperatives to report catch by “statistical area.” Reporting by statistical area is argued by industry to be arbitrary and unnecessary in the cooperative reports and catch at the

⁴³ <https://www.fisheries.noaa.gov/resource/document/central-gulf-alaska-rockfish-program-cost-recovery-reports>

CGOA level provides the information necessary to judge the effectiveness of the program. Because CQ is allocated at the CGOA area level reporting catch by that area is appropriate. Finer levels of catch by statistical area could be derived from eLandings by fisheries managers, if necessary, for specific purposes. That level of detail has not been requested by reviewers of the cooperative reports, since currently the shoreside cooperatives do not report catch by statistical area in their annual reports.

Also statistical area is not defined in the regulation as either the ADFG statistical areas (six digit statistical area) or the NMFS three digit statistical areas (for the CGOA areas 620 and 630). Adding a definition of the statistical area would be appropriate if the current language requiring reporting by statistical area is retained.

If the Council votes to amend the current language 50 CFR 679.5(r)(6)(iii)(B), it could be changed to a vessel by vessel basis or by reporting area.

3.7.7 Reporting Actions Taken by Cooperatives in Cooperative Reports

Element 7: Revise § 679.5(r)(6)(iii)(D) - to replace “any actions” with “any civil actions.”

The proposed amendment is intended to amend regulatory language to correspond to what was provided in the proposed rule (71 FR 33039) implementing the RP. Current regulations specify that a RP cooperative annual report must include a description of any actions taken by the cooperative in response to any members that exceeded their catch as allowed under the rockfish cooperative agreement. “Any actions” is very broad and could include reports on each intra or inter-cooperative transfer. Intra-cooperative transfers may take place without notifying NMFS. NMFS manages the CQ allocations at a cooperative level and leaves it up to the cooperative to manage its allocation through civil contracts between members. The information needed by the reviewers of the cooperative report is intended to highlight whether the agreements within the cooperative are working as intended. This could be accomplished by reviewing any civil actions taken by members of the cooperative against other members of the cooperative who exceeded their allowed catch under the terms of the contract.

The proposed rule implementing the RP used “any civil actions” in § 679.5 to describe the reporting requirement. This term should have replaced “any actions” in § 679.5 when the RP was implemented. The proposed rule state that “a description of any civil actions taken by the rockfish cooperative in response to any members that exceeded their allowed catch” should be included in the cooperative report. No changes to that intended language was identified in the final rule (72 FR 37678). Therefore, this proposed change would not change the original intent of the RP.

3.7.8 Fishing Plan Reporting Requirements

Element 8: Revise 50 CFR 679.81(f)(4)(i)(D)(3) to remove requirements for a Fishing Plan to be submitted with a cooperative application for CQ.

Current regulations require a RP cooperative Fishing Plan to be included in the cooperative application for CQ. Without the attachment of the Fishing Plan the cooperative application would be considered incomplete.

The cooperatives have to complete the application in February so that it may be submitted to NMFS by March 1st deadline. This timeline requires the members of the cooperative to develop the fishing plan well in advance of when they actually make fishing plans for the season. Because the plan is required before the cooperative develops its true fishing plan, the information provided may not correspond well with the final fishing plan implemented by cooperative. However, the submitted plan would provide the best information the cooperative representative had when the application needed to be submitted.

The regulations at 50 CFR 679.81(f)(4)(i)(D)(3) and any other appropriate regulations could be amended by NMFS to meet the Council's intent of the proposed action.

The information removed from the application is available and has been included in the cooperative annual reports required at 50 CFR 679.5(r)(6). Deleting the Fishing Plan requirement from the application process does not mean that the information would not be available to persons reviewing the program. It would however, benefit cooperative members since they would not have to supply the information twice. The first time before complete information is available.

3.7.9 Exempt Shoreside Processors from Providing Observer Workstation and Observer Communication Requirement

Element 9: Revise § 679.84(f)(1) to exempt shoreside processors under the RP from the requirement to provide an observer work station and observer communication described at §679.28(g)(7)(vii) and (viii)

Current regulations require RP shoreside processors to maintain an observer station at the plant. This requirement is no longer necessary since plant observers are not required for the RP. Instead, the RP employs a Catch Monitoring Control Plan (CMCP) specialist, which negated the need for a plant observer. The current regulations negatively impact shoreside processors because it is costly for processors to maintain an observer workstation and platform scale.

Regulations at 50 CFR 679.84(f)(1) require shoreside processors comply with catch monitoring and control plan requirements. The regulatory text is provided below.

(1) Catch monitoring and control plan (CMCP). The owner or operator of a shoreside processor receiving deliveries from a CV described in § 679.51(a)(2) must ensure the shoreside processor complies with the CMCP requirements described in § 679.28(g).

Regulations at 50 CFR 679.28(g)(7) define the catch monitoring and control standards and paragraphs (vii) and (viii) are presented next.

(vii) Observer work station. Each CMCP must identify and include an observer work station for the exclusive use of observers. Unless otherwise approved by NMFS, the work station must meet the following criteria:

(A) Location of observer work station.

The observer work station must be located in an area protected from the weather where the observer has access to unsorted catch.

For shoreside processors or stationary floating processors taking deliveries from vessels directed fishing for pollock in the BS, including vessels directed fishing for pollock CDQ in the BS, the observer work station must be adjacent to the location where salmon will be counted and biological samples or scientific data are collected.

(B) Platform scale. The observer work station must include a platform scale as described in paragraph (c)(4) of this section;

(C) Proximity of observer work station. The observation area must be located near the observer work station. The plant liaison must be able to walk between the work station and the observation area in less than 20 seconds without encountering safety hazards.

(D) Workspace. The observer work station must include: A working area of at least 4.5 square meters, a table as specified in paragraph (d)(4) of this section, and meet the other requirements as specified in paragraph (d)(6) of this section.

(E) Lockable cabinet. The observer work station must include a secure and lockable cabinet or locker of at least 0.5 cubic meters.

(viii) Communication with observer. The CMCP must describe what communication equipment such as radios, pagers or cellular phones, is used to facilitate communications within the plant. The plant owner must ensure that the plant manager provides the observer with the same communications equipment used by plant staff.

Regulations at 50 CFR 679.84(f)(1) would be modified to specify that processors are not required to comply with these two provisions of the CMCP requirements. Because regulations at 50 CFR 679.28(g)(7) specify general CMCP requirements applicable to all CMCP's, it is preferable to specify which requirements are applicable in the 50 CFR 679.84 instead of modifying the general CMCP requirements in 50 CFR 679.28(g).

Maintaining the regulations do not provide any benefit to fishery managers, observer program staff, or the stakeholders in the fishery. There are no benefits because the observer coverage requirement for RP deliveries was replaced by the creation of the CMCP specialist with the implementation of the RP in 2012. Regulations that apply to communication equipment that would be altered by this action covers equipment that would be used by an observer assigned at the processing plant to receive delivery information. This element does not remove the requirements to provide communication equipment as specified at 50 CFR 679.51(e)(2) for use by an observer present at the plant to use the shoreside processor's or stationary floating processor's communication equipment for the entry, transmission, and receipt of work-related messages. CVs participating in the RP are required to provide communications equipment to enable observers to enter data electronically while at sea. Some catcher vessels are not equipped with communications capability that would allow the observer to transmit data while at sea and therefore an observer assigned to a CV may request to use the processing plant's equipment to transmit data to NMFS upon delivery at the shoreside processor. This requirement remains unchanged by this element.

Regulations in the CMCP should allow the CMCP specialist to ensure that sufficient monitoring of the RP deliveries is conducted. Regulations at 50 CFR 679.28(g)(7) that define catch monitoring and control standards that would not be impacted by the proposed actions are presented next. Those regulations should provide sufficient monitoring of the RP deliveries to ensure RP shore-based cooperatives are abiding by their CQ allocations. The regulations that remain in place specify that the plant must supply an observation area where the CMCP specialist can observe the flow of fish and know when and where the fish will be delivered. The regulations also provide for the sorting, weighing, and documenting the fish delivered to the plant.

(i) Catch sorting and weighing requirements. All groundfish delivered to the plant must be sorted and weighed by species. The CMCP must detail the amount and location of space for sorting catch, the number of staff assigned to catch sorting and the maximum rate that catch will flow through the sorting area.

(ii) Scales used for weighing groundfish. The CMCP must identify by serial number each scale used to weigh groundfish and describe the rationale for its use.

(iii) Scale testing procedures. Scales identified in the CMCP must be accurate within the limits specified in paragraph (c)(4)(i) of this section. For each scale identified in the CMCP a testing plan must be developed that:

- (A) Describes the procedure the plant will use to test the scale;*
- (B) Lists the test weights and equipment required to test the scale;*
- (C) Lists where the test weights and equipment will be stored; and*
- (D) Lists the plant personnel responsible for conducting the scale testing.*

(iv) Printed record. The owner and manager must ensure that the scale produces a complete and accurate printed record of the weight of each species in a delivery. All of the groundfish in a delivery must be weighed on a scale capable of producing a complete printed record as described in paragraph (c)(3) of this section. However, NMFS may exempt scales not designed for automatic bulk weighing from some or all of the printed record requirements if the CMCP identifies any scale that cannot produce a complete printed record, states how the processor will use the scale, and states how the plant intends to produce a complete record of the total weight of each delivery.

(v) Delivery point. Each CMCP must identify a single delivery point. The delivery point is the first location where fish removed from a delivering CV can be sorted or diverted to more than one location. If the catch is pumped from the hold of a CV or a codend, the delivery point normally will be the location where the pump first discharges the catch. If catch is removed from a vessel by brailing, the delivery point normally will be the bin or belt where the brailer discharges the catch.

(vi) Observation area. Each CMCP must designate an observation area. The observation area is a location designated on the CMCP where an individual may monitor the flow of fish during a delivery. The owner and manager must ensure that the observation area meets the following standards:

- (A) Access to the observation area. The observation area must be freely accessible to NMFS staff or NMFS-authorized personnel at any time a valid CMCP is required.*
- (B) Monitoring the flow of fish. From the observation area, an individual must have an unobstructed view or otherwise be able to monitor the entire flow of fish between the delivery point and a location where all sorting has taken place and each species has been weighed.*

Cost savings to the plants as a result of eliminating these requirements are not estimated. The actual amount would vary by plant and be dependent on the depreciation of the equipment, cost of maintenance of the work station, and the opportunity cost of the space taken up by the work station.

3.7.10 Provide Authority to Reallocate Unused CGOA Rockfish ICA to RP CVs

Element 10: Rockfish ICA Increases

NMFS would like the flexibility to reallocate unused CGOA ICAs for POP, northern rockfish, and dusky rockfish to the RP cooperatives. This is routinely done for the ICAs developed for Bering Sea AFA Pollock and Amendment 80 allocated species except Pacific cod.

ICAs are set in the harvest specifications at the beginning of the season for the three primary RP species. NMFS estimates incidental catch needs at the beginning of each year and then sets the ICA conservatively so that ICA overages will not result in the TAC being exceeded. Table 3-10, presented in Section 3.5.2.3, shows the ICA amount and usage for the years 2017 and 2018, along with the ICA amount for 2019. That table is repeated below as Table 3-24. The information in that table shows the ICAs vary annually. In 2018 NMFS doubled the 2017 ICA for POP to provide for conservative management of the POP fishery and to ensure the TAC was not exceeded. In 2018 less than 60 percent of the ICA was used. Because the ICA could not be reallocated to the cooperatives under the current regulations it could not be fished within the cooperative structure. In 2019 the POP ICA was reduced by 25 percent. As of October 5, 2019, 57 percent of the POP ICA was taken. The substantial swings in the amount of the ICA taken each year highlights the challenges NMFS faces when setting the pre-season ICA. If the ICA is set too high it could result in the fishery not achieving optimum yield; if it is set too low it could result in exceeding the TAC.

Table 3-24 Primary species ICA usage, 2017 and 2018

Species	2017	2018	2019 (Oct 5)
Dusky Rockfish			
ICA (mt)	250	250	250
ICA caught (mt)	281	128	135
% ICA caught	112%	51%	54%
Northern Rockfish			
ICA (mt)	300	300	300
ICA caught (mt)	169	142	134
% ICA caught	56%	58%	45%
POP			
ICA (mt)	2,000	4,000	3,000
ICA caught (mt)	4,472	2,325	1,720
% ICA caught	224%	58%	57%

Note: n/a means the data were not yet available when the table was developed. 2019 data is only through October 5.
 Source: AKFIN summary of CAS data.

Assuming the average ex-vessel price in 2012 dollars presented in Table 3-4 and all unused ICAs were reallocated, the increase in ex-vessel value is presented in the left portion of Table 3-25. Because it assumes all unharvested ICA would be reallocated and caught it likely over-estimates the value. The right side of the table reports the same calculation using average first wholesale values per metric ton of rockfish caught. The information in the table indicates that in some recent years the lost ex-vessel value of not reallocating the ICAs could be over \$850,000 to less than \$50,000. The forgone first wholesale value ranged from less than \$200,000 to over \$3 million, annually.

Table 3-25 Estimated value of ICA that was unharvested (2012 \$)

	Ex-vessel			First Wholesale		
	2017	2018	2019 (Oct 5)	2017	2018	2019 (Oct 5)
Dusky	\$0	\$54,000	\$51,000	\$0	\$173,000	\$163,000
Northern	\$49,000	\$59,000	\$62,000	\$184,000	\$221,000	\$232,000
POP	\$0	\$739,000	\$564,000	\$0	\$2,768,000	\$2,112,000
Total	\$49,000	\$852,000	\$677,000	\$184,000	\$3,162,000	\$2,507,000

This is a conservation and management issue (National Standard 1) that could be addressed by granting NMFS the authority to reallocate ICAs that are projected to go unused. NMFS could continue to conservatively manage the primary rockfish species allocations in the CGOA, knowing that if an adequate amount of the ICA is projected to go unharvested it could be reallocated to the cooperatives prior to the end of the Rockfish Program season.

3.7.11 Catcher Processor Cooperative Quota Transfers to CVs Ownership and Use Caps

Element 11: Clarify Use Caps in CP to CV sector transfers

The question being raised was the intent of the Council correctly applied when calculating CV sector use caps. Specifically, do the CV sector harvest and processing caps include fish transferred from the CP sector to a CV cooperative? For example, if a vessel is close to the vessel use cap but acquires an amount of CQ from the CP cooperative that would result in the vessel harvesting an amount that is greater than 8 percent of CV sector CQ. Does the CP CQ fish count towards the cap since the 8 percent cap is calculated as 8 percent of the CQ primary rockfish species CQ issued to CV sector? The same question applies to the 30 percent processing cap. In both cases, the regulatory text states that the use caps are based on “CQ initially issued” to the CV sector. Processors may not receive or process more than 30 percent of the CQ issued to the CV sector (rockfish primary species, Pacific cod, and sablefish), as described in 50 CFR 679.82(a)(2)(i) and (a)(3). Because CQ derived from CP QS is not subject to the CV sector use caps, processors could potentially use that CQ to process an amount of RP CQ that is greater than 30 percent of the CV sector allocation of the applicable CQ. A possible solution could be that any transfer of CP CQ to CV cooperatives does not apply to CV ownership and use caps.

Regulatory text from 50 CFR 679.82(a)(2)(i) states that the CV use cap is 4.0 percent of the aggregate rockfish QS initially assigned to the CV sector and resulting CQ unless that eligible rockfish harvester qualifies for an exemption to this use cap. Regulations at 50 CFR 679.82(a)(3) define the CQ use cap for rockfish cooperatives in the CV sector. That section states that a rockfish cooperative may not hold or use an amount of rockfish QS that is greater than the amount derived from 30.0 percent of the aggregate rockfish QS initially assigned to the CV sector unless the cooperative was grandfathered into the program at a greater amount. Regulations at 50 CFR 679.82(a)(5) define the rockfish processor use caps. Those caps are also based on CV CQ and are established for rockfish CQ, Pacific cod CQ, and sablefish CQ.

Because the use caps language explicitly applies to CQ issued to the CV sector, harvest and processing caps exclude fish transferred from the CP sector to a CV cooperative in the use cap calculation. If a vessel/cooperative is close to the harvesting/processing cap but acquires CQ from the CP cooperative, it could allow the entity to exceed the CV limit. Clarifying the intent of this provision would assist NMFS in managing the program as intended.

3.7.12 Change Cooperative Checking from 48 hours to 24 hours in Advance of Fishing

Element 12. Modify Cooperative Check-In Notice Times

Rockfish cooperative CVs are required to check-in to their cooperative at least 48 hours prior to the time the CV begins a fishing trip to fish under a CQ permit. The requirement to check-in to the program is necessary for NMFS to be able to correctly account for landings associated with vessels that are members of a cooperative during specific times of the year. The online application process is completed by the authorized representative of the vessel logging into eFISH, completing, and submitting the required report. Because the process is a function of eFISH the time lag to submit the report and change the management program code associated with the vessel does not require 48 hours and could be accomplished well within the proposed 24 hour notification requirement.

Industry mentioned in a 2015 Paperwork Reduction Act comment that a 24 hour check-in is sufficient. Staff agrees because the check-in is conducted on-line, without the need to receive, input, and file paper check-in applications. The two day wait time is sometimes inconvenient for cooperative CVs. These regulations are found at 50 CFR 679.5 (r)(8)(i)(A).

Reducing the time required for a CV to check-in to a RP shoreside cooperative could reduce the downtime if the plans for the vessel change. This would likely have the greatest impact on CVs that are already fishing in the CGOA or WGOA as opposed to vessels transiting from the BSAI, but both classes of vessels could be impacted. The cost would be equal to the opportunity cost of fishing in the RP for a day versus the next best alternative for the vessel that day they are prohibited from fishing in the RP. Opportunity cost will vary by vessel depending on the fishing or tendering choices available.

3.7.13 Management and Enforcement Considerations

3.7.13.1 Enforcement

The primary role of the USCG includes safety, prevention, and response. The USCG conducts mandatory commercial fishing vessel safety examinations and at-sea safety boardings. The USCG leads search and rescue efforts when situations occur.

NOAA Office for Law Enforcement (OLE), with assistance from NOAA SF and RAM, enforce the regulations that govern allocation of the RP. These NOAA agencies monitor and enforce allocations and other elements of the program.

OLE has created a partnership with the State of Alaska Department of Public Safety through a Joint Enforcement Agreement (JEA). The JEA provides a mechanism for state enforcement personnel to assist OLE in enforcing federal fishing regulations.

Relative to other fisheries and relative to the pre-RPP, the RP fishery generally operates smoothly with very few compliance issues. The most common violations have been failure to check-in/out and bycatch overages. The number of violations has decreased as participants have become more familiar with new requirements. The CV participants host a pre-season meeting to review regulations; this and other “behind the scenes” work of the cooperatives prevents inadvertent violations.

3.7.13.2 Additional Regulatory Issues

NMFS has not identified any major concerns with management of the RP. However, one of the issues that was brought to the Council for consideration but was rejected (See Section 1.10) will require NMFS to modify regulations. NMFS requested that the Council consider closing the RP Pacific cod fishery on November 1. Changing the closing date from November 15th to November 1st would be consistent with other GOA Pacific cod seasons and Steller sea lion (SSL) protection measures. Because this change was not implemented NMFS will modify regulations at 50 CFR 679 as follows.

There are conflicting season dates for when directed fishing for Pacific cod is authorized in the Western and Central Gulf of Alaska regulatory areas. Regulations at 50 CFR 679.24(d)(3) specify that directed fishing for Pacific cod with trawl gear in the Western and Central Regulatory Areas is authorized in the B season only until 1200 A.I.t., November 1 each year. Regulations at 50 CFR 679.80(a)(3)(ii) specify that fishing by vessels participating in a rockfish cooperative is authorized from 1200 hours, A.I.t., May 1 through 1200 hours, A.I.t., November 15. Because Pacific cod is an allocated species under the Rockfish Program, this creates conflicting season dates for when directed fishing for Pacific cod is authorized. To clarify this, NMFS would modify regulations at 50 CFR 679.24 to reference the specific season dates authorized under the Rockfish Program.

3.8 Affected Small Entities (Regulatory Flexibility Act Considerations)

The Regulatory Flexibility Act (RFA), first enacted in 1980 and amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 601-612), is designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a Federal regulation. Major goals of the RFA are 1) to increase agency awareness and understanding of the impact of their regulations on small business, 2) to require that agencies communicate and explain their findings to the public, and 3) to encourage agencies to use flexibility and to provide regulatory relief to small entities.

The RFA emphasizes predicting significant adverse economic impacts on small entities as a group distinct from other entities, and on the consideration of alternatives that may minimize adverse economic impacts, while still achieving the stated objective of the action. When an agency publishes a proposed rule, it must either ‘certify’ that the action will not have a significant adverse economic impact on a substantial number of small entities, and support that certification with the ‘factual basis’ upon which the decision is based; or it must prepare and make available for public review an Initial Regulatory Flexibility Analysis (IRFA). Under section 603 of the RFA, an IRFA “shall describe the impact of the proposed rule on small entities.”

Under 5 U.S.C., section 603(b) of the RFA, each IRFA is required to contain:

- A description of the reasons why action by the agency is being considered;
- A succinct statement of the objectives of, and the legal basis for, the proposed rule;
- A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate);
- A description of the projected reporting, record keeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
- An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule;
- A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the proposed action, consistent with applicable statutes, and that would minimize any significant economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives, such as:
 1. The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
 2. The clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;
 3. The use of performance rather than design standards;
 4. An exemption from coverage of the rule, or any part thereof, for such small entities.

When an agency publishes a final rule, it must prepare a Final Regulatory Flexibility Analysis, unless, based on public comment, it chooses to certify the action.

As of January 2017, NMFS Alaska Region prepares the IRFA for a proposed action in the Classification section of the proposed rule. Therefore, the preparation of a complete IRFA is not necessary for Council final action on this issue. This section of the RIR provides information about the small entities that may be directly regulatory by the alternatives and the general nature of those effects. This information is useful

for the Council to consider in selecting among the alternatives analyzed in this EA/RIR and for NMFS to use to prepare the IRFA for the proposed rule, should the Council recommend implementation of one of the action alternatives. Specifically, this section provides a description and estimate of the number of small entities that may be directly regulated by the action alternatives, noting if the categories or numbers of directly regulated small entities differs among the action alternatives. This section also identifies the general nature of the potential economic impacts on directly regulated small entities, specifically addressing whether the impacts may be adverse or beneficial. The exact nature of the costs and benefits of each of the alternatives is addressed in the impact analysis sections of the RIR and is not repeated in this section, unless the costs and benefits described elsewhere in the RIR differs between small and large entities.

The alternatives would directly regulate owners and operators of trawl CVs and CPs that participate in the RP, processors that take deliveries of CGOA rockfish, and cooperatives that participate in the RP. Vessels that could receive additional roll-overs of Pacific cod late in the year could also be directed regulated by the action.

The RFA recognizes and defines three kinds of small entities: 1) small businesses, 2) small non-profit organizations, and 3) small government jurisdictions.

Small businesses. Section 601(3) of the RFA defines a ‘small business’ as having the same meaning as ‘small business concern’, which is defined under section 3 of the Small Business Act (SBA). ‘Small business’ or ‘small business concern’ includes any firm that is independently owned and operated and not dominant in its field of operation. The SBA has further defined a “small business concern” as one “organized for profit, with a place of business located in the United States, and which operates primarily within the United States or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor...A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the firm is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture.”

The thresholds applied to determine if an entity or group of entities is a small business under the RFA depend on the industry classification for the entity or entities. Businesses classified as primarily engaged in commercial fishing are considered small entities if they have combined annual gross receipts not in excess of \$11.0 million for all affiliated operations worldwide (81 FR 4469; January 26, 2016). Businesses classified as primarily engaged in fish processing are considered small entities if they employ 750 or fewer persons on a full-time, part-time, temporary, or other basis, at all affiliated operations worldwide. Since at least 1993, NMFS has considered CPs to be predominantly engaged in fish harvesting rather than fish processing. Under this classification, the threshold of \$11.0 million in annual gross receipts is appropriate.

The SBA has established “principles of affiliation” to determine whether a business concern is “independently owned and operated.” In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party with such interests aggregated when measuring the size of the concern in question.

The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining

the concern's size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership when 1) a person is an affiliate of a concern if the person owns or controls, or has the power to control 50 percent or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock; or 2) if two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors, or general partners, controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

NMFS considers members of fishing cooperatives affiliated for purposes of applying thresholds for identifying small entities. In making this determination, NMFS considered SBA's "principles of affiliation" at 13 CFR 121.103. Specifically, in § 121.103(f), SBA refers to "[A]ffiliation based on identity of interest," which states "[A]ffiliation may arise among two or more persons with an identity of interest. Individuals or firms that have identical or substantially identical business or economic interests (such as family members, individuals or firms with common investments, or firms that are economically dependent through contractual or other relationships) may be treated as one party with such interests aggregated." If business entities are affiliated, then the threshold for identifying small entities is applied to the group of affiliated entities rather than on an individual entity basis.

Small organizations. The RFA defines "small organizations" as any not-for-profit enterprise that is independently owned and operated, and is not dominant in its field.

Small governmental jurisdictions. The RFA defines "small governmental jurisdictions" as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of fewer than 50,000.

[To be completed after Council selects its PPA: number of entities directly regulated and the impacts]

3.9 Summation of the Alternatives with Respect to Net Benefit to the Nation

The greatest change in Net benefits to the Nation will result depending on whether the Council selects the No Action alternative (Alternative 1) or Alternative 2. This action is different than many the Council considers because the No Action alternative will result in greater impacts to the structure of the fishery than selecting the action alternative. The No Action alternative will result in the CGOA rockfish fishery returning to a limited access fishery under the LLP. Alternative 2 would result in the current management structure, in general, being extended.

Under the No Action alternative vessels would compete to harvest a share of the CGOA rockfish fisheries that are opened to directed fishing. This is expected to result in higher costs of production and lower value for both harvesters and first processors of the harvested fish. Reductions in producer surplus will generate lower net benefits to the Nation. Producer surplus is expected to remain about the same if Alternative 2 is selected. Vessels and processors have been operating under the RP or the RPP for about 15-years. Over that period they have developed working relationships that has allowed the fleet to work together within its cooperative and with its associated processor. That cooperation has allowed both to generate production efficiencies. They have also been able to adjust the timing of the fishery overall to allow both harvesters and processors utilize their assets more effectively. Both were able utilize the CGOA rockfish fishery during a time of the year (May and early June) when other opportunities were limited. This allowed harvesters and processors to take advantage of the pink salmon fishery, in terms of tendering or processing. Previously some vessels had to choose one fishery or the other. Processors had to have sufficient capacity to do both. This resulted in the use of less local labor and more reliance on temporary labor brought into Kodiak. Given that Kodiak is dependent on a local work force that allowed more of the labor income to remain in the community and in the U.S.

Secondary processing of rockfish does take place for H&G and round first wholesale products. Secondary processing typically takes place outside the U.S. and has traditionally occurred in China where lower labor costs are available. Limited information is available on the destination of the fish after secondary processing. It is assumed that the majority of that product stays outside the U.S. but some unknown amount is reimported. Therefore, almost all net benefits to the Nation are expected to be captured at the ex-vessel and first wholesale levels.

Consumer surplus is realized for rockfish that stays in the U.S. economy. A higher quality product can result in greater consumer surplus. Product quality is directly related to the timing and handling of fish on the vessel and at the processor. Under Alternative 2 vessels can take shorter trips and handle the rockfish so there is less damage. This results in a fresher and higher quality fish delivered to the processor. Processors can work with their fleet to time deliveries so the fish is on the boat for less time and once at the plant is processed quickly. This allows a better product to be produced.

In summary, it is expected that Alternative 2 will result in greater net benefits to the Nation compared to Alternative 1. The increase in net benefits is a result of increases in both producer and consumer surplus.

4 Magnuson-Stevens Act and FMP Considerations

[This section will be addressed when the Preliminary Preferred Alternative is selected.]

4.1 Magnuson-Stevens Act National Standards

Below are the 10 National Standards as contained in the Magnuson-Stevens Act, and a brief discussion of how each alternative is consistent with the National Standards, where applicable. In recommending a preferred alternative, the Council must consider how to balance the national standards.

National Standard 1 — Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

National Standard 2 — Conservation and management measures shall be based upon the best scientific information available.

National Standard 3 — To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

National Standard 4 — Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be: (A) fair and equitable to all such fishermen, (B) reasonably calculated to promote conservation, and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

National Standard 5 — Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

National Standard 6 — Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

National Standard 7 — Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

National Standard 8 — Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of National Standard 2, in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

National Standard 9 — Conservation and management measures shall, to the extent practicable, (A) minimize bycatch, and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

National Standard 10 — Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

4.2 Section 303(a)(9) Fisheries Impact Statement.

Section 303(a)(9) of the Magnuson-Stevens Act requires that a fishery impact statement be prepared for each FMP or FMP amendment. A fishery impact statement is required to assess, specify, and analyze the likely effects, if any, including the cumulative conservation, economic, and social impacts, of the conservation and management measures on, and possible mitigation measures for (a) participants in the fisheries and fishing communities affected by the plan amendment; (b) participants in the fisheries conducted in adjacent areas under the authority of another Council; and (c) the safety of human life at sea, including whether and to what extent such measures may affect the safety of participants in the fishery.

The EA/RIR prepared for this plan amendment constitutes the fishery impact statement. The likely effects of the proposed action are analyzed and described throughout the EA/RIR. The effects on participants in the fishery (General overview - Section 3.5.1, harvest vessels - Section 3.5.3, Shore-based processors - 3.5.5, and communities Section - 3.5.6) are analyzed in the RIR chapter of the analysis (Chapters 3). The effects of the proposed action on safety of human life at sea are evaluated in Section 3.5.9 and under National Standard 10, in Section 4.1. Based on the information reported in this section, there is no need to update the Fishery Impact Statement included in the FMP.

The proposed action affects the groundfish fisheries in the EEZ off Alaska, which are under the jurisdiction of the North Pacific Fishery Management Council. Impacts on participants in fisheries conducted in adjacent areas under the jurisdiction of other Councils are not anticipated as a result of this action.

4.3 Council's Ecosystem Vision Statement

In February 2014, the Council adopted the following as Council Policy:

Ecosystem Approach for the North Pacific Fishery Management Council

Value Statement

The Gulf of Alaska, Bering Sea, and Aleutian Islands are some of the most biologically productive and unique marine ecosystems in the world, supporting globally significant populations of marine mammals, seabirds, fish, and shellfish. This region produces over half the nation's seafood and supports robust fishing communities, recreational fisheries, and a subsistence way of life. The Arctic ecosystem is a dynamic environment that is experiencing an unprecedented rate of loss of sea ice and other effects of climate change, resulting in elevated levels of risk and uncertainty. The North Pacific Fishery Management Council has an important stewardship responsibility for these resources, their productivity, and their sustainability for future generations.

Vision Statement

The Council envisions sustainable fisheries that provide benefits for harvesters, processors, recreational and subsistence users, and fishing communities, which (1) are maintained by healthy, productive, biodiverse, resilient marine ecosystems that support a range of services; (2) support robust populations of marine species at all trophic levels, including marine mammals and seabirds; and (3) are managed using a precautionary, transparent, and inclusive process that allows for analyses of tradeoffs, accounts for changing conditions, and mitigates threats.

Implementation Strategy

The Council intends that fishery management explicitly take into account environmental variability and uncertainty, changes and trends in climate and oceanographic conditions, fluctuations in productivity for managed species and associated ecosystem components, such as habitats and non-managed species, and relationships between marine species. Implementation will be responsive to changes in the ecosystem and our understanding of those dynamics, incorporate the best available science (including local and traditional knowledge), and engage scientists, managers, and the public.

The vision statement shall be given effect through all of the Council's work, including long-term planning initiatives, fishery management actions, and science planning to support ecosystem-based fishery management.

In considering this action, the Council is being consistent with its ecosystem approach policy. This action would maintain the tools available to foster responsible fishing activities, especially species caught in the CGOA rockfish trawl. This is directly supportive of the Council's intention to provide best tools that create incentives for the CGOA rockfish trawl vessel operators to fish in a manner that reduces bycatch, retains target species, and reduces habitat impacts associated ecosystem components.

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