


Final
Regulatory Impact Review
for an
Emergency Rule

Increase the 2015 Chinook Salmon Prohibited Species
Catch Apportionment to the Gulf of Alaska Non-Pollock,
Non-Rockfish Trawl Catcher Vessel Sector

July 2015



For further information contact: Jeff Hartman
National Marine Fisheries Service
P.O. Box 21668
Juneau, AK 99802-1668
(907) 586-7228

Table of Contents

1	REGULATORY IMPACT REVIEW	4
1.1	What is a Regulatory Impact Review	4
1.2	Summary	4
1.3	Statutory Authority	5
1.3.1	Emergency Rule Authority and Policy	6
1.3.2	Purpose and Need for Emergency Action	6
1.3.3	Emergency Rule Criteria	6
1.4	Alternatives	12
1.5	Description of the Fisheries (Existing Conditions)	13
1.5.1	Non-pollock Trawl Sectors in Western and Central GOA	13
1.5.1.1	Trawl C/Ps	13
1.5.1.2	Rockfish Program CV Sector	15
1.5.1.3	Non-Rockfish Program CV Sector	16
1.5.2	General Management of Groundfish and PSC Limits in the GOA Trawl Fisheries	16
1.5.3	Amendment 93 to the GOA FMP	17
1.5.3.1	Amendment 97 to the GOA FMP	20
1.5.4	Amendment 97: Summary of PSC Limits, Incentives, and Rollovers	22
1.5.5	Rationale for PSC Limit Apportionments and Other Provisions for the Non-pollock Fishery: Specific Detail on Non-Rockfish Program CV Sector	23
1.5.5.1	Selection of Chinook Salmon PSC Limits and Apportionment to Non-pollock Trawl Sectors	23
1.5.5.2	PSC Management and Catch Accounting Under Amendment 97	29
1.5.6	Communities and Processing Operations Impacted by Non-pollock Groundfish	30
1.5.7	Closure of Non-Rockfish Program CV Sector	31
1.6	Expected Effects of Alternatives	33
1.6.1	Alternative 1: Effects of No Action – No Emergency Apportionment of Chinook Salmon PSC to The Non-Rockfish Program CV Sector	33
1.6.2	Alternative 2: Effects of Emergency Apportionment of Chinook Salmon PSC to Non-Rockfish Program CV Sector	39
1.6.3	Effects on Net Benefits to the Nation	41
1.7	Consistency with Applicable Law and Policy	41
1.7.1	National Standards	41
1.7.2	Section 303(a)(9) – Fisheries Impact Statement	44
2	PREPARERS AND PERSONS CONSULTED	45
3	REFERENCES	46

List of Tables

Table 1	Chinook salmon PSC (numbers of salmon) by quarter from 2001 through 2014 in the GOA pollock and other non-pollock groundfish fisheries.	19
Table 2	Average Chinook salmon PSC in Western and Central GOA pollock fisheries (2012 – 2014).	19
Table 3	Pollock catch and allocations in Central and Western GOA pollock fisheries (2012 – 2014).....	20
Table 4	Total, Average, Maximum, and Minimum Chinook Salmon PSC in the Trawl CP, Rockfish CV, and Non-Rockfish CV Sectors from 2007 through 2011.	22
Table 5	Apportionment of Chinook salmon PSC limits in the GOA Non-Pollock trawl fisheries.....	23
Table 6	Historical October 1 Chinook salmon reallocation (rollover) amount, had Amendment 97 been in place from 2007 through 2012.....	29
Table 7	Annual (2007-2014), Initial 2015 Non-Rockfish Program CV Sector Chinook salmon incidental catch in the Central and Western GOA; and Average Chinook salmon incidental catch from 2007 through 2011 and 2007 through 2014).	32
Table 8	Annual (2007-2014), Initial 2015 Non-Rockfish Program CV Sector Chinook salmon incidental catch in the Central and Western GOA (from January 1 through April 30); and Average Chinook salmon incidental catch from 2007 through 2011 and 2007 through 2014 (for January 1 through April 30).	32
Table 9	Groundfish catch and PSC use in the Non-Rockfish Program CV Sector (2010-2014).....	36
Table 10	Average groundfish catch and PSC by the Non-Rockfish Program CV Sector (2010 through 2014).	37
Table 11	Average groundfish ex-vessel gross revenues (\$1,000's) by selected month, and pre and post May intervals for the Non-Rockfish Program CV Sector (2010 through 2014).	37
Table 12	Average groundfish wholesale gross revenues (\$1,000's) by selected month and pre and post May intervals for the Non-Rockfish Program CV Sector (2010 through 2014).	37

1 Regulatory Impact Review

1.1 What is a Regulatory Impact Review

The preparation of an Regulatory Impact Review (RIR) ¹ 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 nonetheless 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, 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 this Executive Order.

1.2 Summary

This Regulatory Impact Review (RIR) examines the benefits and costs of an emergency rule to increase the 2015 Chinook salmon prohibited species catch (PSC) allocation to the Gulf of Alaska (GOA) non-pollock, Non-Rockfish Program trawl catcher vessel (CV) sector. In June 2015, the North Pacific Fishery Management Council (Council) recommended an emergency action to the Secretary of Commerce (Secretary) to “allocate 1,600 Chinook salmon to the PSC limit established for the Non-Rockfish Program CV Sector for the remainder of 2015” to allow for these operations to continue fishing for flatfish and Pacific cod in the GOA until December 31, 2015, or until the PSC limit of 1,600 is reached, whichever occurs earlier. This document will refer to the non-pollock, Non-Rockfish Program catcher vessel sector as the Non-Rockfish Program CV Sector.

The Council recommended and the Secretary implemented Amendment 97 to the Fishery Management Plan for Groundfish of the Gulf of Alaska (GOA FMP) in a final rule published on December 2, 2014 (79 FR 71350). Amendment 97 implemented annual Chinook salmon PSC limits in the GOA non-pollock

¹ Prior NEPA analyses for Amendment 93 and Amendment 97 demonstrate that the emergency action will not have significant impacts, individually or cumulatively, on the quality of the human environment (as defined in NAO 216-6) and no new information exists to change these conclusions on the impacts. The only effects of the action are socio-economic, as analyzed in this RIR. As such, the emergency action is categorically excluded from the need to prepare an Environmental Assessment.

trawl fisheries. Trawl groundfish fisheries that do not target pollock (non-pollock trawl fisheries) in the Western and Central GOA include fisheries for sablefish, several rockfish species, arrowtooth flounder, Pacific cod, shallow water flatfish, rex sole, flathead sole, deep-water flatfish, and other non-pollock groundfish. Many of the non-pollock trawl fisheries are multi-species fisheries, in which vessels catch and retain multiple groundfish species in a single fishing trip. Additional detail on the primary groundfish species and catch amounts in the non-pollock trawl fisheries in the Western and Central GOA are provided in the Analysis for Amendment 97, Sections 3.2 and 4.4.6.1 and in the final 2015 and 2016 harvest specifications for the GOA groundfish fisheries (80 FR 10250, February 25, 2015).

The Council and NMFS have adopted various measures intended to control the catch of species taken incidentally in groundfish fisheries. Certain incidentally caught species are designated as “prohibited species” in the FMP because they are the target of other, fully utilized domestic fisheries. One of the prohibited species of greatest concern to the Council and NMFS is Chinook salmon. Chinook salmon is a prohibited species in the groundfish fisheries because it is a culturally and economically valuable species that is fully allocated and for which State and Federal managers seek to conservatively manage harvests. The Council and NMFS have established a range of management measures to constrain the impact of groundfish fisheries in the BSAI and GOA on Chinook salmon. A summary of these measures for the GOA is provided in Sections 1.4 and 1.5 of the Amendment 97 Analysis.

For purposes of managing the non-pollock Chinook salmon PSC limits in the Western and Central GOA, NMFS assigns trawl fishery participants to three different fishery sectors: (1) the Trawl Catcher/Processor (C/P) Sector; (2) the Rockfish Program Catcher Vessel (CV) Sector; and (3) the Non-Rockfish Program CV Sector. Each of these sectors are described in Section 1.5 of this RIR. The Non-Rockfish Program CV Sector is composed of non-pollock trawl CVs authorized to fish for groundfish in the GOA that are not fishing under the authority of a Rockfish Program Cooperative Quota Permit. This sector fishes primarily for Pacific cod in the Central and Western GOA; arrowtooth flounder, flathead sole, rex sole, deepwater flatfish, and shallow-water flatfish in the Central GOA. For a more detailed description of the Non-Rockfish Program CV Sector, see Section 1.5.1.3 of this RIR.

On April 30, 2015, NMFS determined that the Non-Rockfish Program CV Sector would reach its Chinook salmon PSC limit of 2,700 salmon. On April 30, 2015, NMFS published an information bulletin notifying the public that NMFS would prohibit directed fishing by the Non-Rockfish Program CV Sector as soon as possible to prevent the sector from exceeding its PSC limit. NMFS published a rule closing directed fishing for groundfish by the Non-Rockfish Program CV Sector for the remainder of 2015 effective on May 3, 2015 (May 6, 2015, 87 FR 26967). The closure action was required by regulation at 50 CFR 679.21(i)(7) to prevent the sector from exceeding its PSC limit at 50 CFR 679.21(i)(3).

In June 2015, the Council requested, by a 10 to 1 vote, that NMFS implement an emergency rule that would allocate an additional 1,600 Chinook salmon to the Non-Rockfish Program CV Sector PSC limit. This emergency rule would allow NMFS to open groundfish fisheries for the Non-Rockfish Program CV Sector but still limit the overall amount of Chinook salmon PSC use by this sector. The Council requested that the emergency rule be effective on the date an emergency rule is published in the **Federal Register** until the PSC limit is reached or December 31, 2015, whichever occurs first.

1.3 Statutory Authority

Under the Magnuson-Stevens Fishery and Conservation Act (Magnuson-Stevens Act) (16 USC 1801, *et seq.*), the United States has exclusive fishery management authority over all marine fishery resources found within its exclusive economic zone (EEZ). The management of these marine resources is vested in the Secretary and in the regional fishery management councils. In the Alaska Region, the Council has the responsibility for preparing fishery management plans (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.

Fishing by the Non-Rockfish Program CV Sector in the EEZ off Alaska is managed under the FMP for Groundfish of the GOA (GOA FMP). The emergency action will temporarily amend the GOA FMP and Federal regulations at 50 CFR 679. Actions taken to amend FMPs or implement other regulations governing these fisheries must meet the requirements of Federal law and regulations.

1.3.1 Emergency Rule Authority and Policy

Section 305(c) of the Magnuson-Stevens Act provides authority for rulemaking to address an emergency. Under that section, a Council may recommend emergency rulemaking, if it finds an emergency exists. NMFS policy guidelines provide that the only legal prerequisite for such rulemaking is that an emergency must exist, and that NMFS must have an administrative record justifying emergency regulatory action and demonstrating compliance with the Magnuson-Stevens act and the National Standards (see NMFS Instruction 01-101-07 and 62 FR 44421, August 21, 1997). Emergency rulemaking is intended for circumstances that are “*extremely urgent,*” where “*substantial harm to or disruption of the...fishery...would be caused in the time it would take to follow standard rulemaking procedures.*” The guidance further cautions that, “*controversial actions with serious economic effects, except under extraordinary circumstances, should be undertaken through normal notice-and-comment rulemaking.*”

To further clarify the scope of emergencies to which this authority applies, the guidance defines an emergency as “*a situation that:*

- 1) *results from recent, unforeseen events or recently discovered circumstances;*
- 2) *presents serious conservation or management problems in the fishery; and*
- 3) *can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment, and deliberative consideration of the impacts on participants to the same extent as would be expected under the normal rule making process.”*

1.3.2 Purpose and Need for Emergency Action

The Council and NMFS recently discovered significant differences between the new catch data showing much higher removals of Chinook salmon PSC by small trawl catcher vessels in the Western Regulatory Area of the GOA (Western GOA) as compared with historic data on Chinook salmon PSC use by these vessels and relied on in the development of Amendment 97. And at the time the Council recommended Amendment 97 and NMFS approved it, the Council and NMFS did not foresee or anticipate these differences in Chinook salmon PSC use and that the GOA fisheries prosecuted by the Non-Rockfish Program CV Sector would be closed so early in the first year of the program due to the new catch data showing larger than anticipated removals of Chinook salmon PSC by small trawl catcher vessels in the Western Regulatory Area of the GOA (Western GOA). The purpose of this emergency action is to establish an additional Chinook salmon PSC limit for the Non-Rockfish Program CV Sector that continues to meet the goals of Amendment 97 (to keep Chinook salmon bycatch in the GOA fisheries below 40,000 fish and to minimize bycatch of Chinook salmon to the extent practicable) while providing the sector with an opportunity to harvest available groundfish before reaching the PSC limit.

1.3.3 Emergency Rule Criteria

The following sections provide additional detail on how the Council's recommended emergency rule meets NMFS policy guidelines for emergency rules (see NMFS Instruction 01-101-07 and 62 FR 44421, August 21, 1997)

Criterion 1: results from recent, unforeseen events or recently discovered circumstances

The Council found that the first criterion for emergency action is met by the unanticipated increase in Chinook salmon PSC use in the Non-Rockfish Program CV Sector relative to the average Chinook salmon PSC rates examined in the Amendment 97 Analysis for this sector when the Council recommended this action to the Secretary in 2013. At its June 2015 meeting, the Council received testimony and staff reports that PSC use in the Western GOA began to occur earlier in 2015, and at higher encounter rates than experienced in previous years. Data in Sections 1.5.5 and 1.5.7 of this RIR supports that public testimony. The Non-Rockfish Program CV Sector's PSC limit of 2,700 Chinook salmon was reached much earlier in 2015 than the projected dates analyzed by the Council at the time they adopted Amendment 97.

The primary reason that an emergency exists is that new data from the restructured observer program shows higher than anticipated numbers of Chinook salmon PSC use from the Western GOA Non-Rockfish Program CV Sector, compared with estimates under the previous observer program. This increase was sufficient to cause the PSC limit for this sector to be reached. The PSC limits implemented under Amendment 97 were based on a retrospective analysis of groundfish and Chinook PSC use by each of the three sectors — the Trawl C/P Sector, the Rockfish Program CV Sector, and the Non-Rockfish Program CV Sector (see Section 4.7 in NPFMC 2014). For the Non-Rockfish Program CV Sector, PSC use is estimated based on at-sea observers, using subsampling for species composition for 300 kilogram (kg) to 500 kg samples (see Section 1.5.5.2 for additional detail on sampling for this sector, and NPFMC 2014). NMFS was aware that observer sampling procedures produce estimates of catch with some unknown amount of variability, and that deriving PSC limits for the retrospective analysis from observer data would be based on data with some amount of variability. The Council and NMFS assumed, however, that applying data on PSC use over several historical years would provide a reasonable assumption of likely PSC limits in the future, and would serve as an appropriate basis to establish PSC limits that would provide adequate harvest opportunity consistent with the objectives of Amendment 97.

Prior to 2013 observers were not deployed on under 60 ft Non-RF Program CV Sector vessels in the Western GOA. Chinook PSC in the WGOA for this sector was estimated using observer information from a different group of vessels that are equal to or greater than 60 feet in length. The last year applied to Council selection of alternatives for GOA AM 97 was 2011, which applied these catch and PSC estimates to the WGOA Chinook salmon PSC attributed to the Non-RF Program CV Sector vessels. Those estimates were the best available data for the years used to form averages used in the AM 97 PSC limits and sub-allocations of PSC to each sector.

The restructured observer program was implemented in 2013. An important change in sampling methodology under the new observer program was to sample trawl vessels under 60 ft and greater than 40 ft, which had never been sampled prior to the restructured program. These vessels were included in the partial coverage category as part of the "vessel selection" pool.

In 2015, Non-RF Program CV Sector vessels (including those that were less than 60 ft in length) were all included in the "trip selection" pool to address issues with coverage rates in the "vessel selection" pool, as documented in the 2013 and 2014 Annual Report for the North Pacific Groundfish and Halibut Observer Program (NMFS 2015). Vessel selection pool issues included an incomplete sampling frame and difficulty achieving a target number of vessels to be observed (NMFS 2015). In comparison to the vessel

selection method, NMFS anticipates this change to the trip selection methodology may have improved observer data by better representing fishing activity.

When the Council took action on Amendment 97 in June 2013, the data used to estimate Chinook salmon PSC allocations for the GOA non-pollock trawl sectors from 2007 through 2011, was collected under the sampling protocol for the previous observer program and not the newly restructured observer program (77 FR 70062, November 21, 2012). The Council and NMFS did not foresee how the application of Chinook salmon PSC use data under the restructured program would compare with the previous observer program. This was particularly the case for the Western GOA, where there was limited observer coverage under the previous program, and observer coverage only from vessels that were over 60 feet length overall (LOA). Note that the vast majority of Non-Rockfish Program CV Sector vessels that operate in the Western GOA are less than 60 feet LOA.

Between 2003 and 2011, the Amendment 97 Analysis (see Section 4.4.9.3 and Table 4-35) estimated average Western GOA catcher vessel Chinook salmon PSC use of 63 Chinook salmon, with a maximum of 201 in 2006. By applying these estimates to only the Non-Rockfish Program CV sector vessels, Chinook salmon PSC usage for the Non-Rockfish Program CV Sector in the Western GOA averaged 44 Chinook salmon with a high of 107 Chinook salmon (2008) and a low of zero Chinook salmon (2010) over the base years (2007 – 2011) used by the Council and NMFS to establish the Chinook salmon PSC limits under Amendment 97 (Table 7). NMFS believed that this was a representative estimate and it was the best available data for analysis of the Chinook salmon PSC limit alternatives that would be applied to the Non-Rockfish Program CV Sector under Amendment 97. The Council and NMFS believed that this estimate was reflective of the PSC use in the area, and no other source of data was available to suggest that this was not an accurate estimate.

The restructured observer program was implemented in 2013, but due to lag time in reporting final numbers and data verification, NMFS did not have the benefit of an entire year of data from the restructured Observer Program until well into 2014. Under the restructured observer program, the same methods for sampling Chinook salmon PSC (subsampling for species composition for 300 kilogram (kg) to 500 kg samples) were applied to the Non-Rockfish Program CV Sector, prior to implementation of Amendment 97. In 2015, observers were deployed on the small Non-Rockfish Program CV Sector vessels in the Western GOA using the new trip selection pool sampling frame, and they reported a substantial and unexpected amount of Chinook salmon PSC use for that regulatory area.

For the Non-Rockfish Program CV Sector operating in the Western GOA trawl Pacific cod fishery, PSC samples were extrapolated to estimate a Chinook salmon PSC use of 1,056 Chinook salmon. This amount is nearly 10 times greater than the maximum amount of Chinook salmon PSC used by the Non-Rockfish Program CV Sector during any complete calendar year from 2007 through 2011. Chinook salmon PSC use by the Non-Rockfish Program CV Sector from January 1 through April 30, 2015 was nearly 24 times the average annual Chinook salmon PSC use in the Western GOA from 2007 through 2011.

The unexpectedly high use of Chinook salmon PSC in the Western GOA resulted in the Non-Rockfish Program CV Sector reaching its PSC limit even though Chinook salmon use in the Central GOA from January 1 through April 30, 2015 was 1,568 Chinook salmon. This amount of Chinook salmon PSC use is less than the maximum amount of Chinook salmon PSC used from January 1 through April 30 during any of the years the Council and NMFS considered when recommending Amendment 97 (2,424 Chinook salmon in 2010), and only slightly greater than then average Chinook salmon PSC use during the January 1 through April 30 time period from 2007 through 2011 (1,011 Chinook salmon). See Section 1.5.7 of this RIR for additional detail.

When the Council selected the preferred alternative for Amendment 97, the Chinook salmon PSC use data from the restructured Observer Program was not available to the Council to estimate the earliest possible closure dates for Non-Rockfish Program CV Sector fisheries. The Amendment 97 Analysis (see section 4.7 in NPFMC 2014) provided an estimate of closure dates for each of the three sectors at varying amounts of PSC allocation and with various options. The Amendment 97 Analysis did not estimate closures in the Non-Rockfish Program CV Sector prior to May under an allocation of 2,700 Chinook salmon PSC (see section 4.7 in NPFMC 2014). Neither the Council nor NMFS had access to data showing was likely that new data collection under the restructured Observer Program would result in much higher estimates of Chinook salmon PSC use in the Western GOA, or a May closure date for Non-Rockfish Program CV Sector fisheries.

Criterion 2: presents serious conservation or management problems in the fishery

The Council and NMFS determined that this emergency rule criterion is met because the early closure prevents the Non-Rockfish Program CV Sector from harvesting thousands of metric tons of groundfish and results in foregone revenue to harvesters, processors and communities that participate in the Non-Rockfish Program CV Sector. The closure is estimated to prevent harvest of 13,000 to 15,000 metric tons of groundfish that would otherwise be available for harvest to this sector through the remainder of 2015 based on an analysis of average groundfish catch by this sector for the years 2012 through 2014 and 2010 through 2014 (see Section 1.5 of this RIR for additional detail). The lost revenue from this forgone harvest is estimated to be approximately \$4.6 million in ex-vessel value and \$11.3 million in first wholesale value (see Section 1.6.1 of this RIR).

Shoreside processors and the community of Kodiak, Alaska are disproportionately affected by this closure because after May, groundfish harvested by the Non-Rockfish CV Sector is almost exclusively delivered to shoreside processors operating in Kodiak (see Section 1.6.1 of this RIR). Sections 1.5.7 and 1.6.1 of this RIR provide additional information on the expected effects of the directed fishing closure of the Non-Rockfish Program CV Sector on harvesters, processors, and the community of Kodiak. This emergency rule is the only mechanism to restore the foregone harvest and lost revenue because other groundfish fisheries that may substitute for these losses are fully allocated and are not available to the Non-Rockfish Program CV Sector.

The Council and NMFS have determined that a 1,600 Chinook limit will likely allow the Non-Rockfish Program CV Sector to harvest remaining amounts of groundfish. If 1,600 Chinook salmon PSC are made available to the Non-Rockfish Program CV Sector by mid-August, NMFS anticipates that most if not all of the fall Pacific cod fishery will be harvested by the sector, and a substantial portion of the forgone flatfish for the latter half of 2015 will be harvested. The Council's objective for this Emergency Rule was to restore the lost harvesting opportunities to the Non-Rockfish Program CV Sector to the maximum extent possible while continuing to impose a limit on the use of Chinook salmon PSC in the GOA trawl fisheries that likely will not exceed the combined Chinook salmon PSC limits established under Amendments 93 and 97.

The Council and NMFS also determined that implementation of this emergency rule will not create conservation issues with regard to Chinook salmon. The Council and NMFS considered the original and continuing goals for Amendment 97 to the FMP: to avoid exceeding Chinook salmon PSC use of 40,000 Chinook salmon in the GOA trawl groundfish fisheries, and to minimize bycatch of Chinook salmon to the extent practicable. The Council made its emergency rule recommendation after considering the average annual use of Chinook salmon PSC by all GOA trawl sectors for the most recent five years (2010 through 2014), total use of Chinook salmon PSC by all GOA trawl sectors from January 1, 2015 through April 30, 2015, and anticipated use of Chinook salmon PSC by all GOA trawl sectors for the remainder of 2015 (from May 1 through December 31). Based on this review of historic, current, and anticipated

Chinook salmon PSC use from all trawl sectors in the Western and Central GOA, the Council and NMFS concluded that the combined GOA trawl Chinook salmon PSC in 2015 will not exceed 40,000 even with implementation of the emergency rule.

The Council and NMFS also concluded that although the GOA trawl groundfish fisheries will be authorized to take a maximum of 34,100 Chinook salmon in 2015 under current regulations and this emergency rule, it is highly unlikely that the additional allocation of 1,600 Chinook salmon for the Non-Rockfish Program CV Sector will result in total Chinook salmon PSC in the GOA trawl groundfish fisheries for 2015 exceeding 32,500 Chinook salmon, the total combined pollock and non-pollock Chinook salmon PSC limits. Sections 1.5.7 and 1.6.1 of this RIR describe the historic, current, and anticipated Chinook salmon PSC use in each of the GOA pollock and non-pollock trawl sectors, including the Non-Rockfish Program CV Sector. The data from Table 1 in this RIR at Section 1.5.3 show that an average of over 13,000 Chinook salmon were left unused by the GOA pollock sector in 2013 and 2014. Including 2012, 2013, and 2014, the average Chinook salmon PSC limit remaining from the pollock PSC limit of 25,000 was over 11,000 Chinook salmon. Of the 11,000 Chinook salmon remaining in the GOA pollock fishery, over 8,000 Chinook salmon were left unused from the Central GOA, and over 3,000 were left unused in the Western GOA. Finally, the Council considered the demonstrated ability of the voluntary catch share agreements in the GOA pollock fishery and controls implemented by this sector to control Chinook PSC use (see Section 1.5.3 in this RIR). Based on these data, the Council determined and NMFS agrees that it is highly unlikely that this emergency rule will result in total Chinook salmon PSC from all GOA trawl groundfish fisheries exceeding 32,500 Chinook salmon. The emergency rule will allow NMFS to open non-pollock groundfish fisheries for the Non-Rockfish Program CV Sector but still limit the overall amount of Chinook salmon PSC use by this sector.

Criterion 3: *can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment, and deliberative consideration of the impacts on participants to the same extent as would be expected under the normal rule making process.*

The Council determined that the third criterion for an emergency rule is met because it is not possible to address this issue without emergency rule. If the emergency rule is implemented, the benefits of an emergency rule will outweigh normal notice-and-comment rulemaking within the first month of opening the fishery. While the normal rulemaking process is the preferred avenue for making regulatory changes, as it provides interested parties the full ability to comment, the Council and NMFS believe that in this case the cost of the foregone harvest opportunity outweighs the benefit of using the more protracted, standard process as that would be ineffective for addressing the immediate issue. The Council has also initiated a typical fishery management plan amendment process to address this situation in a more permanent manner.

The purpose of this emergency action is to promulgate a temporary regulatory amendment that would provide a one-time allocation of additional Chinook salmon PSC to the Non-Rockfish Program CV Sector, while allowing continued analysis of the issue in a separate, and standard, amendment process. This action is needed to re-open groundfish trawl fisheries in order to temporarily ameliorate unforeseen economic consequences, as described above, of fishery closures that are due to unforeseen consequences of expanded observer coverage and Chinook salmon abundance.

In the absence of emergency rulemaking, the Council believes that these circumstances are detrimental to not only the catcher vessels and crew participating in these fisheries but also to groundfish processing facilities in Kodiak, and employees of these facilities. As detailed in the Amendment 97 Analysis (see Section 4.7 in NPFMC 2014) and summarized in this RIR in Section 1.6, reduced groundfish landings

associated with a closure such as the May 3, 2015, action, will impact harvesting and processing sectors, localities, tax revenues, and may have other indirect effects.

The current Non-Rockfish Program Sector fisheries were disrupted in May 2015 because a substantial amount of the GOA trawl groundfish will not be harvested, and processing facilities may have no other processing substitutes to replace the Pacific cod and flatfish that would have otherwise been processed at Kodiak plants. This situation has resulted in negative economic consequences to fishery participants unable to prosecute the fishery, as well as negative economic consequences to processing firms, crew labor based in Kodiak, and processing labor in Kodiak.

To address this issue NMFS must implement an emergency rule that waives the notice-and-comment rulemaking period. Waiver of the notice-and-comment rulemaking period will serve the industry and public by allowing for harvest of an amount of total allowable catch that is available in the remaining 2015 flatfish and Pacific Cod fisheries. Flatfish fisheries are likely to be the first fisheries reopened to this sector, and any delay in implementing rulemaking after early August, will reduce opportunities to harvest flatfish. The B Season Pacific Cod fishery for this sector begins on September 1. The timing of the flatfish fishery and the B Season Pacific Cod fishery require that this final rule be published by early August, or as soon as possible after that time because of the logistics of managing and prosecuting these fisheries.

Without the waiver of notice-and-comment rulemaking, the Non-Rockfish Program CV Sector will not have sufficient time to prosecute these fisheries. Flatfish and Pacific cod trawl fisheries are high volume fisheries that require extended fishing time. Fishing time would be extremely limited, or unavailable without notice-and-comment rule making. For example, the trawl Pacific cod fishery closes by regulation on November 1 so the directed Pacific cod fishery is only available for a limited period. Vessel owners need time to secure new crew, which may have shifted into other groundfish fisheries, non-groundfish fisheries or other activities. In addition, vessel owners need sufficient lead time to revise fishing plans, restock vessels, change gear, and have the vessel travel to and from the fishing grounds to have the vessel in place to prosecute the reopened fisheries.

Processors also require lead-time to plan for new deliveries of groundfish that they have ceased to process due to the closure. Once the summer production cycle was altered by eliminating landings from the Non-Rockfish Program CV Sector, processors removed these traditional fishery products from their annual processing cycle and budget planning. Processors will need to secure market orders with buyers to understand desired finished product forms and pricing structures. Packaging materials and shipping containers must be delivered to processing plants. Processing factories must be reconfigured to process groundfish versus other species. Processors will also need to secure and assign labor to these fisheries. The delay caused by conventional notice and public comment would eliminate the time needed to plan and conduct processing operations and foreclose groundfish processing activities in 2015. Therefore, the benefits of the waiver of public notice and comment more than offsets the costs of less public notice and comment.

Similarly, for the reasons above that support the need to implement this emergency rule in a timely manner, the Assistant Administrator for Fisheries finds good cause under 5 U.S.C. 553(d)(3) to waive the 30-day delay in effectiveness provision of the Administrative Procedure Act and make the emergency rule effective immediately upon publication in the Federal Register. As stated above, this emergency rule is anticipated to allow for harvest of most of the remainder of the non-pollock fisheries available to this sector, and should prevent prolonged economic losses from the closure to the Non-Rockfish Program CV Sector and processors receiving landings from this sector.

1.4 Alternatives

The following alternatives are examined in this RIR:

Alternative 1: No action alternative (Status quo)

Under Alternative 1, no additional Chinook salmon PSC would be allocated to the Non-Rockfish Program CV Sector and the Non-Rockfish Program CV Sector directed fisheries for groundfish in the Western and Central GOA would continue to stay closed for the remainder of 2015. Based on current data on PSC use in the Rockfish Program CV Sector, it is unlikely that enough Chinook salmon PSC will be available for reallocation from that sector to the Non-Program Rockfish CV Sector on October 1 or November 15 to allow the Non-Rockfish Program CV Sector to reopen and harvest available amounts of groundfish for the duration of 2015.

Alternative 2: Emergency Rule - Temporary apportionment of Chinook salmon PSC to the Non-Rockfish Program CV Sector (preferred alternative)

Under Alternative 2, an additional Chinook salmon PSC limit of 1,600 Chinook salmon would be established for the Non-Rockfish Program CV Sector for use in Western and Central GOA groundfish fisheries by emergency rule. The emergency rule would implement the additional 1,600 Chinook salmon PSC limit through a new regulatory paragraph at § 679.21(i)(8). The new Chinook salmon PSC limit would be available to the sector on publication of the emergency rule in the Federal Register until the sector reaches the new limit or December 31, 2015, whichever occurs first. The Chinook salmon PSC rollover provisions at § 679.21(i)(4) will continue to apply under this rule, in the event that Rockfish Program CV Sector Chinook salmon PSC is available to reallocate to the Non-Rockfish Program CV Sector by October and November 2015.

Although the Chinook salmon PSC limit rollover provisions at § 679.21(i)(4) would continue to apply under the emergency rule, considering the remaining Chinook salmon PSC limit for the Rockfish Program CV sector and historical PSC use by the Rockfish Program CV sector, NMFS does not anticipate a significant allocation of Chinook salmon PSC to the Non-Rockfish Program CV Sector by October 2015. As of July 7, 2015, 845 of the 1,200 Chinook salmon PSC assigned to the Rockfish Program CV Sector have been used. Based on NMFS' estimates of likely Chinook salmon PSC use in this sector for the remainder of 2015, NMFS does not anticipate that there will be Chinook salmon PSC available for the October or November rollover. If this estimate is incorrect, there could be some additional Chinook salmon PSC available for the Non-Rockfish Program CV Sector.

Once the new PSC limit of 1,600 Chinook salmon is implemented, the emergency rule would provide the Regional Administrator with authority to close the Non-Rockfish Program CV Sector if this Chinook salmon PSC limit is reached. Regulations at § 679.21(i)(7) describe the procedure required by NMFS for notice, opening, and closing of non-pollock trawl fishery sector allocations. The Non-Rockfish Program CV Sector that is opened in 2015 using the Chinook salmon PSC limit established by this emergency rule could be closed at any time NMFS determines that the Chinook salmon PSC limit will be reached during the 2015 calendar year. As previously noted, this apportionment of 1,600 Chinook salmon PSC limit will not be available after December 31, 2015.

The selection of a 1,600 Chinook salmon PSC limit for this emergency rule is intended to restore historical groundfish fishing opportunities for this sector. The Council proposed to apportion 1,600 Chinook salmon PSC limit to the Non-Rockfish Program CV Sector based on the sector's historical PSC use (Table 10). By including recent Chinook PSC use data from 2013 and 2014, a new 5-year average from 2010 through 2014 has been estimated by month. From May 1 through December 31, average

Chinook salmon PSC by this sector was approximately 1,528 Chinook salmon. The Council determined that a PSC limit of 1,600 Chinook salmon would provide the Non-Rockfish Program CV Sector with a similar opportunity to fish in historical target fisheries during the interval of time that the closure would have occurred from May 3, 2015, to the end of 2015.

In recommending this emergency rule, the Council considered the original and continuing objectives for Amendments 93 and 97 to the GOA FMP: to avoid exceeding the total annual Chinook PSC limit of 32,500 Chinook salmon in the GOA trawl groundfish fisheries, and to minimize bycatch to the extent practicable. Consistency with those objectives is a central part of the emergency rule. After considering (1) annual Chinook salmon PSC use from all GOA trawl sectors, (2) average PSC of these trawl sectors for the most recent five-years from May through December, and (3) the remaining PSC limit from all trawl sectors other than the Non-Rockfish Program CV Sector in 2015, the Council concluded that the combined GOA trawl Chinook salmon PSC limit in 2015 likely will not exceed the combined pollock and non-pollock PSC limit of 32,500 Chinook salmon.

Data from Table 1 in this RIR at Section 1.4.3 shows that an average of over 13,000 Chinook PSC was left unused by the GOA pollock sector in 2013 and 2014. Including 2012, 2013, and 2014, the average Chinook salmon PSC limit remaining from the pollock PSC limit of 25,000 was over 11,000 Chinook salmon. Of the 11,000 Chinook salmon PSC limit remaining in the GOA pollock fishery, over 8,000 Chinook salmon were left unused from the Central GOA, and over 3,000 were left unused in the Western GOA (Table 2). Finally, the Council considered the demonstrated ability of the voluntary catch share agreements in the GOA pollock fishery and controls implemented by this sector to control Chinook PSC use (see Section 1.5.3 in this RIR), to conclude that the overall 32,500 Chinook PSC limit and area PSC limits will not be exceeded.

This emergency rule would not cause the Chinook salmon ESA Incidental Take Statement (ITS) of 40,000 Chinook salmon for the GOA groundfish fisheries to be exceeded. The rule will have no effects on ESA-listed salmon that were not previously considered in the following section 7 consultations: (1) the January 2012 biological opinion issued by NMFS West Coast Region for the GOA groundfish fisheries (NMFS 2012) and Amendment 93 to the GOA FMP; and (2) the November 2000 section 7 consultation for the authorization of the Bering Sea and Aleutian Islands (BSAI) and GOA groundfish fisheries, issued by NMFS, Office of Protected Resources (NMFS 2000). NMFS concluded in the November 2000 biological opinion that the BSAI and GOA groundfish fisheries will not jeopardize the continued existence of ESA-listed Chinook salmon or result in destruction or adverse modification of critical habitat.

1.5 Description of the Fisheries (Existing Conditions)

1.5.1 Non-pollock Trawl Sectors in Western and Central GOA

Participants in the Western and Central GOA non-pollock trawl fisheries include catcher processors (C/Ps) and catcher vessels (CVs). In developing Amendment 97, the Council decided to group these vessels into three sectors, which are described in greater detail in the following sections: (1) the Trawl C/P Sector; (2) the Rockfish Program CV Sector; and (3) the Non-Rockfish Program CV Sector. Additional detail on these sectors is provided in the Amendment 97 Analysis (see Section 4.4 in NPFMC 2014).

1.5.1.1 Trawl C/Ps

Trawl C/Ps in the Western and Central GOA participate in a range of non-pollock groundfish fisheries. Trawl C/Ps primarily fish for rockfish (i.e., dusky rockfish, northern rockfish, and Pacific ocean perch)

and sablefish in the Central and Western GOA, and arrowtooth flounder, deep-water flatfish, flathead sole, and rex sole in the Central GOA. Trawl C/Ps occasionally fish for arrowtooth flounder in the Western GOA and shallow-water flatfish in the Central GOA. In most years, trawl C/Ps have limited or no directed fishery for Pacific cod in the Central or Western GOA.

Harvests of non-pollock groundfish by trawl C/Ps in the Central and Western GOA are governed primarily by two management programs, the Amendment 80 Program and the Central GOA Rockfish Program. All of the vessels that are within the Trawl C/P Sector under Amendment 97 are subject to management under the Amendment 80 Program. Most of the vessels that are within the Trawl C/P Sector under Amendment 97 also are subject to management under the Central GOA Rockfish Program. The relevant provisions of the Amendment 80 Program and the Central GOA Rockfish Program are described in the following paragraphs and in the final rules implementing the Amendment 80 Program and the Central GOA Rockfish Program (72 FR 52668, September 14, 2007; 76 FR 81248, December 27, 2011).

The Amendment 80 Program is intended primarily to improve retention and utilization of fishery resources, encourage fishing practices with lower discard rates, and improve the opportunity for increasing the value of harvested species while lowering operational costs for groundfish fishing in the BSAI. The Amendment 80 Program accomplishes these goals through a catch share program that encourages the formation of cooperatives and the development of cooperative fishing practices among all persons who are issued Amendment 80 quota share permits.

To address the potential expansion of fishing effort into the GOA that could result from the implementation of catch share management in the BSAI, the Amendment 80 Program limits the ability of trawl C/Ps managed under the Amendment 80 Program to expand their harvest efforts in the GOA. These limitations are commonly known as “sideboards” because they constrain harvests in specific fisheries. The Amendment 80 Program established GOA groundfish and halibut PSC sideboard limits for Amendment 80 Program participants. Regulations at § 679.92 establish a range of different groundfish harvesting sideboard limits on all vessels eligible for the Amendment 80 Program. These measures are described in detail in the final rule implementing the Amendment 80 Program (72 FR 52668, September 14, 2007).

Because the trawl C/Ps operating in the Central and Western GOA are subject to the sideboard limits imposed by the Amendment 80 Program, the vessel operators have established voluntary cooperative relationships to ensure that sideboard limits are not exceeded. These voluntary arrangements have resulted in improved communication and coordination among trawl C/P operators in the GOA.

In addition to the Amendment 80 Program, some trawl C/Ps within the trawl C/P sector under Amendment 97 are eligible to participate in the Central GOA Rockfish Program (76 FR 81248, December 27, 2011). The Central GOA Rockfish Program, like the Amendment 80 Program, allocates catch shares. The Central GOA Rockfish Program provides catch shares to eligible trawl C/Ps for Central GOA dusky rockfish, northern rockfish, Pacific ocean perch, roughey rockfish, shortraker rockfish, and sablefish. The Central GOA Rockfish Program also limits the amount of halibut PSC that may be used by eligible trawl C/Ps.

As with the Amendment 80 Program, trawl C/Ps that are active in the Central GOA Rockfish Program can receive a catch share allocation only if they participate in a cooperative. Trawl C/Ps cannot exceed their cooperative’s Central GOA Rockfish Program catch share allocations (see regulations at § 679.7(n)). In addition to this catch share allocation, trawl C/Ps that are eligible for the Central GOA Rockfish Program are subject to sideboard limits that constrain their ability to expand effort into other fisheries in the GOA that are not subject to catch share management. The Central GOA Rockfish Program establishes sideboard limits on the types of groundfish fisheries, the amount of Central and Western GOA

groundfish, and the amount of halibut PSC that may be harvested by trawl C/Ps eligible for the Central GOA Rockfish Program (see regulations at § 679.82). These provisions have resulted in coordination among those participants active in the Central GOA Rockfish Program and who are within the Trawl C/P Sector.

The management measures implemented under the Amendment 80 Program and the Central GOA Rockfish Program have resulted in uniform management of trawl C/P vessels in the Central and Western GOA. This uniform management has also resulted in similar harvest patterns, and coordination among fishery participants. The Amendment 97 Analysis (see Sections 4.4 and 4.6 in NPFMC 2014) describes the fishing dynamics within the trawl C/P sector in greater detail.

1.5.1.2 Rockfish Program CV Sector

Trawl CVs in the Central and Western GOA participate in a range of non-pollock groundfish fisheries. Trawl CVs primarily fish for Pacific cod in the Central and Western GOA. Trawl CVs also fish for rockfish (i.e., dusky rockfish, northern rockfish, and Pacific ocean perch) sablefish, and arrowtooth flounder, flathead sole, rex sole, deepwater flatfish, and shallow-water flatfish in the Central GOA. Trawl CVs participate in directed fishing for flatfish or rockfish in the Western GOA. See the Amendment 97 Analysis (Section 4.4 in NPFMC 2014) for a detailed description of harvesting activities by GOA trawl CVs in the Rockfish Program and Non-Rockfish Program.

There is a distinct division in the management of trawl CVs when trawl CVs are participating in the Central GOA Rockfish Program and when trawl CVs are not participating in the Central GOA Rockfish Program. Trawl CVs participating in the Central GOA Rockfish Program are subject to catch share management; trawl CVs participating in fisheries other than the Central GOA Rockfish Program are not. These conditions create two distinct management regimes that fundamentally affect the way vessels within each sector fish for non-pollock groundfish and avoid PSC. Therefore, Amendment 97 recognized that trawl CVs that are participating in the Central GOA Rockfish Program (Rockfish Program CVs) are a sector that is separate and distinct from trawl CVs that are not participating in the Central GOA Rockfish Program (Non-Rockfish Program CVs).

The Central GOA Rockfish Program provides catch shares to eligible trawl CVs for Central GOA dusky rockfish, northern rockfish, Pacific ocean perch, Pacific cod, thornyhead rockfish, and sablefish. The Central GOA Rockfish Program also limits the amount of halibut PSC that may be used by eligible trawl CVs. Rockfish Program CVs can receive a catch share allocation only if they participate in a cooperative. Rockfish Program cooperatives cannot exceed the amount of their Central GOA Rockfish Program catch share allocations (see regulations at § 679.7(o)). Rockfish Program CVs are subject to sideboard limits that constrain the ability of Rockfish Program CVs from expanding their fishing effort into other fisheries in the GOA not subject to catch share management (see regulations at § 679.82(d)).

In the Central GOA, directed rockfish fishing is permitted from May 1 to November 15, with the majority of groundfish harvested in May and June. By regulation, trawl CVs in the GOA can only fish under the authority of the Rockfish Program when they have “checked in” to fish under the authority of a Rockfish Program Cooperative Quota (CQ) Permit. Rockfish Program CVs can “check in” to fish under the authority of a Central GOA Rockfish Program CQ Permit, and “check out” to fish in other fisheries in the GOA (see regulations at § 679.5(r)(8)). When Rockfish Program CVs are checked in, they are fishing under the authority of a Rockfish Program CQ Permit and their harvest is limited to the cooperative’s catch share allocations. However, the catch share allocations are limiting only when trawl CVs are checked in and fishing under the authority of a Rockfish Program CQ Permit. Conversely, sideboard limitations applicable to eligible Rockfish Program CVs apply during a portion of the year to Rockfish Program CVs that are checked out of the Central GOA Rockfish Program (see regulations at § 679.82(d)). The net effect of these provisions is that when trawl CVs are “checked in” and fishing under the authority

of a Rockfish Program CQ Permit, they are participating in a cooperative catch share management program, and when they are “checked out,” they no longer have an exclusive harvest privilege and must compete or “race” with other CVs in harvesting the fish.

1.5.1.3 Non-Rockfish Program CV Sector

Trawl CVs that are not eligible to participate in the Central GOA Rockfish Program or that are not “checked in” and fishing under the authority of a Rockfish Program CQ Permit are in the Non-Rockfish Program CV Sector. This sector fishes primarily for: Pacific cod in the Central and Western GOA; arrowtooth flounder, flathead sole, rex sole, deepwater flatfish, and shallow-water flatfish in the Central GOA; and rockfish in the West Yakutat district of the Eastern GOA (an area not subject to the provisions of Amendment 97). As noted earlier, some trawl CVs do not participate in the Rockfish Program at any time during a year, while some participate in the Central GOA Rockfish Program for part of the year, and then participate in other Central or Western GOA non-pollock fisheries that are outside of the Central GOA Rockfish Program.

The participants who would be within the Non-Rockfish Program CV Sector under Amendment 97 participate in fisheries that are not subject to catch share management and are less likely to be able to coordinate fishing operations in comparison with participants who are subject to catch share management, such as those in the Trawl C/P² and Rockfish Program CV Sectors. The Amendment 97 Analysis (see Section 4.4 in NPFMC 2014) describes the fishing dynamics within the Non-Rockfish Program CV Sector in greater detail.

1.5.2 General Management of Groundfish and PSC Limits in the GOA Trawl Fisheries

The GOA FMP and its implementing regulations at § 679.20(c) require that the Council recommend, and NMFS specify, an overfishing level (OFL), an acceptable biological catch (ABC), and a total allowable catch (TAC) for each stock or stock complex (i.e., each species or species group) of groundfish on an annual basis. The OFL is the level above which overfishing is occurring for a species or species group. The ABC is the level of a species or species group’s annual catch that accounts for the scientific uncertainty in the estimate of OFL and any other scientific uncertainty. The ABC is set below the OFL. The TAC is the annual catch target for a species or species group, derived from the ABC by considering social and economic factors and management uncertainty. The TAC must be set lower than or equal to the ABC.

The OFLs, ABCs, and TACs for GOA groundfish are specified through the annual harvest specification process. A detailed description of the annual harvest specification process is provided in the final 2015 and 2016 harvest specifications for groundfish of the GOA (80 FR 10250, February 25, 2015) and is briefly summarized here. The Council’s Scientific and Statistical Committee establishes the OFL and ABC for each species or species group. Based on the ABC established for each species or species group, the Council recommends a TAC. The TAC for some species and species groups are subject to further allocation on a seasonal basis and allocation among vessels using specific types of gear and vessel categories in the GOA (see regulations at § 679.20(a)).

To ensure that OFLs, ABCs, and TACs are not exceeded, NMFS requires that vessel operators participating in groundfish fisheries in the GOA comply with a range of monitoring requirements and restrictions. NMFS uses a range of area, time, gear, and operation-specific fishery closures to maintain catch within specified TACs and associated sector and seasonal allocations. NMFS closes directed fisheries when a TAC is reached, and restricts fishing in other fisheries that may incidentally take a species or species group approaching its OFL. Regulations at § 679.20(d)(1), (d)(2), and (d)(3) describe

² The trawl C/Ps operating in the GOA are impacted by sideboard limits established under the Amendment 80 Program, but are not directly managed in the GOA by the cooperative provisions of the Amendment 80 Program that apply in the BSAI.

the range of management measures that NMFS uses to maintain total catch at or below the OFL, ABC, and TAC for a species or species group.

In addition to these measures to limit total catch of groundfish species, the Council and NMFS have adopted various measures intended to control the catch of species taken incidentally in groundfish fisheries. Certain species are designated as PSC in the GOA FMP because they are the target of other, fully utilized domestic fisheries. The GOA FMP and regulations at § 679.21 require that catch of PSC must be avoided while fishing for groundfish, and when incidentally caught, these PSC species must be immediately returned to the sea with a minimum of injury. The PSC species include Pacific halibut, Pacific herring, Pacific salmon, steelhead trout, king crab, and Tanner crab.

PSC must not be sold or kept for personal use and are required to be discarded (see regulations at § 679.21), or retained but not sold under the Prohibited Species Donation Program (see regulations at § 679.26). NMFS has implemented measures to 1) close groundfish fishing in areas with a high occurrence of prohibited species, or where there is a relatively high level of PSC use; 2) require the use of gear specifically modified to minimize PSC use; and 3) establish PSC limits in specific Alaska groundfish fisheries in the GOA (NPFMC 2014).

One of the prohibited species of great concern to the Council and NMFS is Chinook salmon. Chinook salmon is a prohibited species in the groundfish fisheries because of its value in salmon fisheries. Chinook salmon is a culturally and economically valuable species that is fully allocated and for which State and Federal managers seek to conservatively manage harvests. The scarcity of Chinook salmon in some regions of the Pacific Northwest, including Washington, Oregon, and Idaho, has led to an endangered or threatened listing for a number of stocks under the Endangered Species Act (ESA). Small amounts of a few ESA-listed Chinook salmon are caught in GOA non-pollock trawl fisheries. The November 30, 2000, Biological Opinion (NMFS 2000), on the effects of the Alaska groundfish fisheries on ESA-listed salmon of the Pacific Northwest established an incidental take statement (ITS) for an annual threshold amount of 40,000 Chinook salmon for the GOA groundfish fisheries. Exceeding the ITS for Chinook salmon triggers reinitiation of section 7 consultation under the ESA (NMFS 2014).

The Council and NMFS have established a range of management measures to constrain the impact of groundfish fisheries in the Bering Sea/Aleutian Islands Management Area (BSAI) and the GOA on Chinook salmon. Two relatively recent programs to reduce Chinook PSC use in the GOA were Amendment 93 and Amendment 97.

A summary of the management measures implemented for each of these programs in the GOA is provided in Section 1.5.3 and 1.5.4 of this RIR. A detailed description of the management measures applied to the Non-Rockfish Program CV Sector under these programs is in Sections 2.4, 4.7, 4.8, 4.9 and 5.0 of the Amendment 97 Analysis.

1.5.3 Amendment 93 to the GOA FMP

In 2012 and 2014, two Amendments to the GOA FMP (Amendments 93 and 97) were implemented to limit the incidental catch of Chinook salmon PSC in the GOA trawl fisheries. These amendments established a combined Chinook salmon PSC limit of 32,500 Chinook salmon in the Central and Western GOA trawl fisheries.

In 2012, NMFS issued a final rule to implement Amendment 93 to the GOA FMP (77 FR 42629, July 20, 2012). Amendment 93 established separate Chinook salmon PSC limits in the Western and Central GOA for the pollock directed fishery. These limits require NMFS to close the pollock directed fishery in the Western or Central GOA if the applicable PSC limit is reached (see regulations at § 679.21(h)(6)). The annual Chinook salmon PSC limits in the pollock directed fishery of 6,684 salmon in the Western GOA

and 18,316 salmon in the Central GOA are set in regulation at § 679.21(h)(2)(i) and (h)(2)(ii). Collectively, Amendment 93 limits the pollock trawl fishery in the Western and Central GOA to 25,000 Chinook salmon.

Since the implementation of Amendment 93 in 2012, the pollock fishery has generally maintained its incidental catch of Chinook salmon well below its Chinook salmon PSC limits in the Western and Central GOA (Table 2). Table 1 shows annual Chinook salmon PSC use data from 2001 through 2014 in the pollock and non-pollock fisheries, and Table 2 shows the average amount of Chinook salmon PSC use in the pollock directed fisheries in the Western and Central GOA from 2012 through 2014 by quarter. The first and second quarters include catch from January 1 through May 31 and provide a reasonably accurate indication of Chinook salmon PSC use for the pre-May pollock fishery. Due to changes in regulatory pollock seasons and to match current pollock season dates, data were grouped by quarter. Those quarters are: First Quarter: January 1 through February 28; Second Quarter: March 1 through May 31; Third quarter: June 1 through September 30; and Fourth Quarter: October 1 through December 31.

The third and fourth quarters provide an indication of Chinook salmon PSC use for the post-May period. Over the periods analyzed, a substantial amount of Chinook salmon PSC limit remained unused in both the Western and Central GOA after the implementation of Amendment 93. On average from 2012 through 2014, approximately 3,000 Chinook salmon PSC remained unused in the Western GOA, and 8,000 Chinook salmon PSC remained unused in the Central GOA (see Table 2).

There are specific reasons that Chinook salmon PSC use in the Western and Central GOA pollock fishery is lower than the PSC limits set for this sector in the Western or Central GOA. During the first half of the year, pollock tend to be concentrated, particularly in the interval of time prior to spawning. Concentrated aggregations of pollock are caught with less searching, and generally lower interception of Chinook salmon PSC. In the Western GOA, following the first complete year of GOA Chinook salmon PSC limits for the pollock fishery under Amendment 93, limited pollock fishing occurs in the fourth quarter of 2013 and 2014 relative to earlier in the year (Table 3). Although overall Chinook salmon PSC use has been higher in the fourth quarter, and overall Chinook salmon PSC rates are higher, the pollock fishery was unable to fully harvest its 2013 and 2014 D Season pollock allocation in the Western GOA (Table 3). This may be due to a trend of pollock disaggregating later in the year in the Western GOA, which tends to make it less efficient for some pollock operations to continue in this fishery later into the year, and other economic factors. NMFS has no information to indicate that this trend is not likely to continue in the foreseeable future, and anticipates that residual Chinook salmon PSC will be available so that aggregate GOA Chinook salmon PSC limits of 32,500 salmon will not be exceeded in 2015.

Another reason that the pollock fishery has continued to be able to stay well within its PSC limits is that in the Central GOA, the pollock fleet has consistently established voluntary agreements for PSC avoidance measures. These agreements have contributed to lower Chinook salmon bycatch. The strategies applied by the Central GOA pollock sector agreements to achieve these PSC avoidance measures are documented in the Central GOA pollock fishery Area 620 B season fleet catch share agreement of March 10, 2015 (Bonney, Alaska Groundfish Data Bank, personal communication, June 6, 2015). This agreement includes 47 participants in the Central GOA pollock fishery, and (1) allocates pollock quota to individual catcher vessels to stop the race for fish, (2) allocates individual vessel-level Chinook salmon PSC limits, (3) requires coordination of groundfish harvest and PSC management between processing plants and vessels in a quasi-cooperative structure, and (4) includes various performance standards for reducing Chinook salmon PSC use that are agreed to by the parties to the fleet's catch share agreement. NMFS has no indication that these measures will not continue to be in place for the remainder of 2015 as they were in 2014 and that the Central GOA pollock fishery will be below the total Chinook salmon PSC limit of 18,316 Chinook salmon.

Table 1 Chinook salmon PSC (numbers of salmon) by quarter from 2001 through 2014 in the GOA pollock and other non-pollock groundfish fisheries.

Year	Annual Total	GOA Pollock Fisheries					Residual PSC in pollock fishery	Other Fisheries
		First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Annual	25,000-annual use	Annual
2001	15,104	4,204	3,107	754	1,466	9,531	NA	5,573
2002	12,920	1,505	640	553	2,463	5,161	NA	7,758
2003	15,367	765	389	948	2,298	4,400	NA	10,967
2004	17,778	3,632	2,176	2,207	5,137	13,152	NA	4,626
2005	31,271	11,100	5,123	1,076	10,629	27,928	NA	3,343
2006	18,768	2,918	4,292	4,640	3,861	15,711	NA	3,057
2007	40,616	1,525	28,486	1,315	3,866	35,192	NA	5,424
2008	16,264	578	7,691	389	2,087	10,745	NA	5,519
2009	8,475	718	1,406	653	412	3,189	NA	5,286
2010	54,607	4,992	2,038	4,863	32,926	44,819	NA	9,788
2011	21,466	1,717	1,260	1,317	10,296	14,590	NA	6,876
2012	21,008	2,907	861	4,472	9,094	17,334	NA	3,674
2013	23,332	4,303	684	1,156	6,807	12,950	12,050	10,382
2014	15,733	1,709	1,621	3,406	4,134	10,870	14,130	4,863

1991 - 2002: Blend data. Week end date was used to determine quarters. Week end dates do not always match quarter dates. Chinook PSC associated with the directed pollock fishery

2003 - 2010: Catch Accounting System.

2010 - 2014: Catch Accounting System 2

Table 2 Average Chinook salmon PSC in Western and Central GOA pollock fisheries (2012 – 2014).

Chinook Salmon PSC in Pollock Fisheries in the Central GOA						
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total	Remaining of 18,316 cap
3-Year Average	2,287	1,087	2,104	4,316	9,794	8,522
Chinook Salmon PSC in Pollock Fisheries in the Western GOA						
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total	Remaining of 6,684 cap
3-Year Average	157	202	809	2,443	3,610	3,074

2012-2014 average. 2012 did not have chinook Salmon PSC limit

Chinook salmon PSC estimates associated with the pollock target fishery

Table 3 Pollock catch and allocations in Central and Western GOA pollock fisheries (2012 – 2014).

	Central GOA							
	A season		B season		C Season		D Season	
	Allocation	Catch	Allocation	Catch	Allocation	Catch	Allocation	Catch
2012	19,810	20,217	19,810	18,779	16,268	19,107	16,268	12,978
2013	22,431	22,387	22,429	22,325	16,978	17,127	16,978	21,240
2014	34,604	33,011	34,599	39,038	26,168	23,403	26,168	30,387
2015	41,819	37,467	41,820	46,293				
	Western GOA							
	A season		B season		C Season		D Season	
	Allocation	Catch	Allocation	Catch	Allocation	Catch	Allocation	Catch
2012	5,797	2,755	5,797	6,353	9,338	9,430	9,338	9,355
2013	4,292	935	4,292	4,951	9,744	1,200	9,744	625
2014	4,800	655	4,799	3,548	13,235	7,691	13,235	1,471
2015	3,632	125	3,632	2,092				

1.5.3.1 Amendment 97 to the GOA FMP

In 2015, NMFS implemented Amendment 97 to the FMP to establish separate Chinook salmon PSC limits for the directed non-pollock trawl fishery in the Western and Central GOA (79 FR 71350, December 2, 2014). Amendment 97 was implemented to meet three goals developed by the Council and NMFS. The first goal is to avoid exceeding the annual Chinook salmon threshold of 40,000 Chinook salmon identified in the incidental take statement accompanying the November 30, 2000, biological opinion on the effects of the Alaska groundfish fisheries on ESA-listed salmon of the Pacific Northwest. The second goal is to minimize Chinook salmon bycatch to the extent practicable, consistent with the Magnuson-Stevens Act and National Standard 9. The third goal is to increase the amount of Chinook salmon stock of origin information available to NMFS and the Council.

Prior to Amendment 97, no specific management measures were in place to limit Chinook salmon PSC in GOA non-pollock trawl fisheries. Although non-pollock trawl fisheries incidentally take Chinook salmon, the pollock directed fishery in the Western and Central GOA take the majority of Chinook salmon PSC use in the GOA groundfish fisheries. During the development of Amendment 97, the Council and NMFS reviewed the best available PSC data for non-pollock trawl sectors from 2003 through 2011. During this time period, Chinook salmon PSC for the non-pollock trawl fisheries ranged from a maximum annual PSC of 10,877 in 2003 to a minimum annual PSC of 2,739 in 1998. Ultimately, the Council recommended and NMFS established Chinook salmon PSC limits for the non-pollock trawl fisheries.

Chinook salmon PSC use for GOA non-pollock trawl fisheries varies by year and among the Trawl C/P, Rockfish Program CV, and Non-Rockfish Program CV Sectors (see Section 1.5.1 in this RIR for a description of each of the non-pollock trawl sectors). Table 4 provides the average, the minimum, and the maximum amount of Chinook salmon PSC used by all three sectors from 2007 through 2011. These maximum, minimum and average PSC estimates are based on the GOA trawl fisheries after implementation of the Central GOA Rockfish Program in 2007, the first year that all three sectors were defined by regulation, through 2011, which is the most recent year for which data were available to the Council. The

Amendment 97 Analysis (see Section 2.2.5 in NPFMC 2014) provides additional detail on the distribution of Chinook salmon PSC.

Table 4 Total, Average, Maximum, and Minimum Chinook Salmon PSC in the Trawl CP, Rockfish CV, and Non-Rockfish CV Sectors from 2007 through 2011.

Sector	Average	Maximum	Minimum
Trawl C/P	3,105	4,631	1,890
Rockfish CV	848	1,649	368
Non-Rockfish CV	2,489	4,125	857
Total (All three sectors)	6,327	9,748	5,157

1.5.4 Amendment 97: Summary of PSC Limits, Incentives, and Rollovers

To limit incidental catch of Chinook salmon PSC in the GOA trawl fisheries, excluding directed pollock fishing (non-pollock trawl fisheries), NMFS issued a final rule for Amendment 97 in 2014 (79 FR 71350, December 2, 2014). Amendment 97 was recommended by the Council in June 2013, and includes the following elements.

Amendment 97:

- established annual Chinook salmon PSC limits for the non-pollock Trawl C/P, Rockfish Program CV, and Non-Rockfish Program CV sectors;
- established an “incentive buffer” that allows the annual Chinook salmon PSC limits for the Trawl C/P and Non-Rockfish Program CV Sectors to increase if less than the sector’s limit of Chinook salmon PSC is taken in the previous year;
- established a seasonal limit on the amount of Chinook salmon PSC that could be taken in the Trawl C/P Sector prior to June 1 of each year;
- established salmon retention requirements to obtain information that could help define the stock of origin of Chinook salmon PSC, thereby improving the understanding of the potential impact of Chinook salmon PSC on Chinook salmon resources and fisheries; and
- allowed for reallocation of unused Chinook salmon PSC limit from the Rockfish Program CV Sector to the Non-Rockfish Program CV Sector on October 1 and November 15 of each year.

Amendment 97 accomplished its objectives by allocating the long-term average annual Chinook salmon PSC limit of 7,500 Chinook salmon to three sectors in the non-pollock trawl fisheries: the Trawl catcher/processor sector (3,600), Rockfish Program CV Sector (1,200), and the Non-Rockfish Program CV Sector (2,700) (see Table 5), as well as selecting amounts and an annual schedule for the incentive buffer, seasonal limits, reallocation (rollover) of unused Chinook salmon PSC, and retention requirements. The Council’s rationale for each of these components in Amendment 97 is discussed in this RIR in Section 1.5.5 (Council Rationale for PSC Limit Apportionments and Other Provisions for the Non-pollock Fishery: Specific Detail on Non-Rockfish Program CV Sector), and in the Amendment 97 Analysis (see Section 4.3 in NPFMC 2014).

Table 5 Apportionment of Chinook salmon PSC limits in the GOA Non-Pollock trawl fisheries.

For the following sectors defined at § 679.21(i)(2)...	The total Chinook salmon PSC limit in each calendar year is...	Unless, the use of the Chinook salmon PSC limit for that sector in a calendar year does not exceed...	If so, in the following calendar year, the Chinook salmon PSC limit for that sector will be...
(A) Trawl catcher/processor sector	3,600	3,120	4,080
(B) Rockfish Program catcher vessel sector	1,200	N/A	
(C) Non-Rockfish Program catcher vessel sector	2,700	2,340	3,060

1.5.5 Rationale for PSC Limit Apportionments and Other Provisions for the Non-pollock Fishery: Specific Detail on Non-Rockfish Program CV Sector

The Council and NMFS adopted the Chinook salmon PSC limits under Amendment 97 to achieve the three broad goals as stated in the purpose and need section in the Amendment 97 Analysis (see Section 1.1 in NPFMC 2014). The Council and NMFS intended the GOA groundfish trawl fisheries to be managed to prevent Chinook salmon PSC from exceeding the incidental take statement. Establishing a limit on the amount of Chinook salmon PSC that may be taken on an annual basis in the non-pollock trawl fisheries in the Central and Western GOA is likely to accomplish that goal. Amendment 97 was designed to limit the annual Chinook salmon PSC in the non-pollock trawl fisheries to an average of 7,500 Chinook salmon each year. This would ensure that the total Chinook salmon PSC use in the GOA from all sources would not exceed 40,000 salmon on an annual basis. The second goal was to minimize Chinook salmon bycatch to the extent practicable, consistent with the Magnuson-Stevens Act and National Standard 9. Under Amendment 93 to the GOA FMP, NMFS implemented regulations to limit the annual Chinook salmon PSC in the Central and Western GOA pollock fishery to 25,000 Chinook salmon (77 FR 42629, July 20, 2012). Limits on Chinook salmon PSC in the non-pollock trawl fisheries would complement those regulations, and further the second goal of conservation of Chinook salmon resources that occur in the GOA regardless of the stock of origin. The implementation of Chinook salmon PSC limits for non-pollock trawl fisheries was intended to prevent unusually high levels of PSC of Chinook salmon from occurring in the non-pollock trawl fisheries in the future, such as occurred in 2003 and 2010 (see Section 1.1 in NPFMC 2014). The third broad goal is to establish monitoring measures that would aid in accounting of Chinook salmon PSC.

1.5.5.1 Selection of Chinook Salmon PSC Limits and Apportionment to Non-pollock Trawl Sectors

Chinook Salmon PSC Limits

Amendment 97 implemented a long-term average annual Chinook salmon PSC limit of 7,500 Chinook salmon for non-pollock trawl fisheries in the Central and Western GOA. This limit was split among three sectors: the Trawl C/P (3,600); Rockfish Program CV (1,200); and Non-Rockfish Program CV (2,700) Sectors. The Council recommended the long-term average annual limit of 7,500 Chinook salmon after considering a range of PSC limits from 5,000 to 12,500, to minimize Chinook salmon bycatch to the extent practicable while preserving the potential for the full harvest of non-pollock groundfish TACs.

The Council's selection of this long-term average PSC limit also reflected the trade-offs between Chinook salmon saved and the forgone non-pollock catch for the range of PSC limits. The Amendment 97 Analysis (see Section 2.5 in NPFMC 2014) presented data that Western and Central GOA non-pollock

trawl fisheries averaged approximately 6,000 Chinook salmon per year between 2003 and 2011, but that actual annual PSC varies widely (a high of 10,877 in 2003 and a low of 3,060 in 2006). According to the Amendment 97 Analysis (see Table 4-69 in NPFMC 2014), the non-pollock trawl fisheries would have been constrained in two out of nine years between 2003 and 2011 if the Chinook salmon PSC limit of 7,500 had been in place, but these closures would have resulted in 40% less Chinook salmon PSC being taken in these fisheries.

After selecting the long-term average annual Chinook salmon PSC limit of 7,500, the Council recommended that the average annual PSC limit be implemented by establishing separate Chinook salmon PSC limits for the Trawl C/P, the Rockfish Program CV, and the Non-Rockfish Program CV Sectors. The Council and NMFS recommend allocating Chinook salmon PSC limits to the Trawl C/P, Rockfish Program CV, and Non-Rockfish Program CV Sectors in recognition of the specific groundfish fisheries, and patterns of Chinook salmon PSC use by these sectors. Each of these three sectors participates in different groundfish fisheries, and is subject to different management measures that allow these three sectors to respond differently to the Chinook salmon PSC limits under Amendment 97.

In determining the specific Chinook salmon PSC limit that each sector would receive, the Council recommended that the average annual PSC limit be apportioned between the catcher/processor fleet (i.e., the Trawl C/P Sector) and the catcher vessel fleet (i.e., the Rockfish Program CV Sector and the Non-Rockfish Program CV Sector combined) based on each fleet's 5-year historical average percentage of Chinook salmon PSC. From 2007 to 2011, the catcher processor fleet's average use of Chinook salmon represented 48 percent of the total average use of Chinook salmon bycatch in the non-pollock trawl fisheries. During this same period, the catcher vessel fleet's average use of Chinook salmon represented 52 percent of the total average use of Chinook salmon bycatch in the non-pollock trawl fisheries. Applying these percentages to the PSC limit of 7,500, the Council recommended a Chinook salmon PSC limit of 3,600 Chinook salmon for the non-pollock trawl catcher processor sector (i.e., the Trawl C/P Sector) and a Chinook salmon PSC limit of 3,900 Chinook salmon for the catcher vessel fleet (i.e., the Rockfish Program CV Sector and the Non-Rockfish Program CV Sector combined). The Council determined that the 5-year historical average best captures the period that is most reflective of the current management regime in the non-pollock trawl fisheries of the Western and Central GOA. The period encompassed the time in which the Central GOA Rockfish Program and Amendment 80 were implemented.

The Council recommended an amount of 3,600 Chinook salmon PSC limit for the Trawl C/P Sector because the sector's groundfish harvests are tightly constrained by sideboard measures, informal cooperative arrangements that exist within the Trawl C/P Sector were expected to provide the necessary communication for avoiding Chinook salmon PSC, and regulations applicable to trawl C/Ps operating in the Central GOA Rockfish Program allow those trawl C/Ps to better coordinate activities and take actions to reduce Chinook salmon PSC. The Chinook salmon PSC limit of 3,600 salmon was approximately 14 percent greater than the average amount of Chinook salmon PSC that had been used in Trawl C/P Sector (3,105 salmon) from 2007 (the first year that the Central GOA Rockfish Program) through 2011 (the most recent year for which complete data was available at the time the Council took final action on Amendment 97). The 3,600 Chinook salmon PSC limit was estimated to be constraining in one out of five years during the 2007 through 2011 period analyzed. The 3,600 Chinook salmon PSC limit also was slightly higher than the sector's average Chinook salmon PSC use (3,143 salmon) from 2007, the first year that all three sectors could be defined, through 2011.

After recommending a Chinook salmon PSC limit of 3,900 for the catcher vessel fleet (i.e., the Rockfish Program CV Sector and the Non-Rockfish Program CV Sector combined), the Council recommended that 1,200 Chinook salmon be apportioned to the Rockfish Program CV Sector and the remainder (2,700 Chinook salmon) to the Non-Rockfish Program CV Sector. The Council recognized that vessels within

the Non-Rockfish Program CV Sector could have unpredictable high PSC events during the spring, prior to the May opening of the Central GOA Rockfish Program, which could preclude or severely curtail the Central GOA Rockfish Program's season, thereby eliminating an opportunity to prosecute a valuable fishery in which the prospects for effective PSC avoidance are promising. The Council determined that a separate Chinook salmon PSC limit for the Rockfish Program CV Sector was appropriate because a separate allocation would preserve important and valuable fishing opportunities in the Rockfish Program.

In determining the Amendment 97 Chinook salmon PSC limit for the Rockfish Program CV Sector, the Council considered the sector's annual average Chinook salmon PSC use from 2007 through 2011 of approximately 800 Chinook salmon per year, as well as annual Chinook salmon PSC use, which exceeded 1,200 Chinook salmon in one year (2008) during this period. The Council determined that a Chinook salmon PSC limit of 1,200 for the Rockfish Program CV Sector was appropriate because (1) it should provide the greatest assurance that the Central GOA Rockfish Program quota can be fully harvested given the sector's average annual use, (2) the sector is managed through cooperatives that have additional tools available to aid in mitigating Chinook salmon PSC encounters, and (3) the one year in which the sector's PSC use exceeded the limit, cooperative fishing under the Central GOA Rockfish Program was new and management priorities emphasized halibut avoidance. The Chinook salmon PSC limit of 1,200 salmon was approximately 29 percent greater than the average amount of Chinook salmon PSC that has been used in Rockfish Program CV Sector (847 salmon) during a representative 5-year period analyzed by the Council and NMFS from 2007 through 2011. Based on the Amendment 97 Analysis (see Section 4.4 in NPFMC 2014), the 1,200 Chinook salmon PSC limit would have been constraining in one out of five years during the 2007 through 2011 period analyzed. The 1,200 Chinook salmon PSC limit was also greater than the sector's average Chinook salmon PSC use (903 salmon) from 2007 through 2011 (79 FR 71350, December 2, 2014). The Council and NMFS anticipate that given the existing management structure of the Rockfish Program CV Sector, the sector was likely to be able to harvest groundfish fisheries in the Central and Western GOA in most years without being constrained by the Chinook salmon PSC limit of 1,200 salmon. The Council also determined, and NMFS agreed, that the apportionment to the sector is appropriate because although the allocation is larger than the sector's average annual use, the sector has an incentive to minimize its use of Chinook salmon PSC.

Amendment 97 also includes a provision that allows NMFS to reallocate unused Chinook salmon PSC from the Rockfish Program CV Sector to the Non-Rockfish Program CV Sector on October 1 and November 15 of each year. This provision ensures that unused amounts of the Chinook salmon PSC limit allocated to the Rockfish Program CV Sector will be made available to catcher vessels that may still be fishing in the Non-Rockfish Program CV Sector towards the end of the fishing year. On average, 87 percent of the CVs that are active in the Rockfish Program CV Sector participate in the Non-Rockfish Program CV Sector for fall non-pollock trawl fisheries. Therefore, the Council determined and NMFS agreed that participants in the Rockfish Program CV Sector would have ample incentive to minimize Chinook salmon PSC within that sector in order to maximize the amount of Chinook salmon PSC available to prosecute important fall fisheries, such as fall Pacific cod and flatfish fisheries.

The Rockfish Program CV Sector Chinook salmon PSC limit applies to trawl catcher vessels that are checked in and fishing under the authority of a Rockfish Program CQ Permit (see regulations at § 679.5(r)(8)). Trawl catcher vessels that are not checked in and fishing under the authority of a Rockfish Program CQ Permit would be in the Non-Rockfish Program CV Sector. Under Amendment 97, a trawl CV vessel could operate in both the Rockfish Program CV Sector and the Non-Rockfish Program CV Sector during the course of a fishing year, but would only be in one or the other sector at any given time during a fishing year depending on whether the vessel was checked in and fishing under the authority of a Rockfish Program CQ Permit.

The Council determined and NMFS agreed that inter-cooperative arrangements that exist among the Rockfish Program CV Sector would be able to provide coordination and communication among participants, reduce the risk that a specific cooperative would be constrained within the overall Rockfish Program CV Sector, and would not impose the additional burdens and costs associated with cooperative-specific Chinook salmon PSC limits. The Amendment 97 RIR (see Sections 4.7.1 and 4.9 in NPFMC 2014) provides additional detail on the allocation of the Chinook salmon PSC limit to each non-pollock trawl sector.

Under Amendment 97, the Council and NMFS recommend the 2,700 Chinook salmon PSC limit for the Non-Rockfish Program CV Sector to accommodate groundfish harvests in most years. Unlike the Trawl C/P and Rockfish Program CV Sectors, the Non-Rockfish Program CV Sector is not circumscribed by sideboard regulations, governed by informal cooperative arrangements, or managed under a catch share program that allows the sector to optimize the use of its Chinook salmon PSC as it participates in non-pollock trawl fisheries. The Council considered these factors when establishing the Chinook salmon PSC limit.

The Chinook salmon PSC limit of 2,700 salmon is approximately 8 percent greater than the average amount of Chinook salmon PSC that has been used in Non-Rockfish Program CV Sector (2,489 salmon) during a representative 5-year period analyzed by the Council and NMFS from 2007 through 2011. Based on the Amendment 97 Analysis (see Sections 4.7 and 4.9 in NPFMC 2014), the 2,700 Chinook salmon PSC limit would have been constraining in two out of five years during the 2007 through 2011 period analyzed. The 2,700 Chinook salmon PSC limit is also slightly greater than the sector's average Chinook salmon PSC use (2,489 salmon) from 2007 through 2011 (see Table 4). Amendment 97 also includes a provision that allows NMFS to reallocate unused Chinook salmon PSC from the Rockfish Program CV Sector to the Non-Rockfish Program CV Sector on October 1 and November 15 of each year as described later in this preamble. This provision was intended to provide additional Chinook salmon PSC to the Non-Rockfish Program CV Sector in most years (see Section 4.9 in NPFMC 2014).

Chinook Salmon Incentive Buffer

Amendment 97 includes an element that allows for the annual Chinook salmon PSC limit for the Trawl C/P and Non-Rockfish Program CV Sectors to vary depending on the amount of Chinook salmon PSC taken by those sectors in the previous year. This "incentive buffer" is intended to provide an incentive for participants in the Trawl C/P and Non-Rockfish Program CV Sectors to minimize PSC below their allocations, 3,600 and 2,700 Chinook salmon respectively, each year in order to receive additional Chinook salmon PSC limit in the following year. It is important to note that the incentive buffer will not result in the total available Chinook salmon PSC limit in the non-pollock trawl fisheries to exceed 7,500 salmon over the long term annual average.

Under the incentive buffer at § 679.21(i), a sector that used less than or equal to its proportional share of 6,500 Chinook salmon in one year will be able to access its base PSC limit plus its proportional share of 1,000 additional Chinook salmon in the following year. The base Chinook salmon PSC limit applied to the Trawl C/P Sector is 3,600 (48 percent of the average annual Chinook salmon PSC limit of 7,500) and this limit is available to the Trawl C/P Sector during the first year of Amendment 97. The base PSC limit for the Non-Rockfish Program CV Sector is 2,700 (36 percent of the Chinook salmon limit of 7,500) and this limit is available to the Non-Rockfish Program CV Sector during the first year of Amendment 97. If, during the first year, the Non-Rockfish Program CV Sector is able to maintain its use of Chinook salmon PSC to no more than 2,340 salmon (36 percent of 6,500 Chinook salmon), the incentive buffer will apply to the sector in the following year. In the following year, the Non-Rockfish Program CV Sector will receive a Chinook salmon PSC limit of 3,060 salmon, which represents the sum of the sector's base PSC limit (2,700) and its proportional share (36 percent) of 1,000 (360). If, during the first year, the

Non-Rockfish Program CV Sector's Chinook salmon use exceeds 2,340 Chinook salmon, then the incentive buffer will not apply to the sector and its Chinook salmon PSC limit in the following year will be set at its base PSC limit of 2,700 salmon.

This provision provides an incentive for the Trawl C/P and Non-Rockfish Program CV Sectors to keep Chinook salmon bycatch well below each sector's base PSC limit in most years, in order to provide each sector with a slightly higher Chinook salmon PSC limit that may be needed in an unusual year of Chinook salmon migration patterns or unanticipated higher abundance that may make it difficult to avoid Chinook salmon PSC. The specific buffers selected provide approximately 12 percent more Chinook salmon PSC for the Trawl C/P and Non-Rockfish Program CV Sectors in a year if the Chinook salmon use for that sector was maintained at an amount approximately 12 percent below the Chinook salmon PSC limits initially established for those sectors. The amount selected for the incentive buffer was intended to provide some additional flexibility, but not so large an increase in a sector's Chinook salmon PSC limit from year-to-year as to result in highly variable or substantial increases in Chinook salmon PSC use.

Based on the Amendment 97 Analysis (see Section 2.2.4 in NPFMC 2014), for the years during which the Rockfish (Pilot) Program was in place — 2007 through 2011 — the Non-Rockfish Program CV Sector fished below its incentive buffer pool threshold (2,340 Chinook salmon) in all years, except for 2010 and 2011. For example, in the retrospective analysis for year 2010, an additional 360 Chinook PSC buffer would not have extended the sector's activity through the end of the year, but it would have allowed for an additional week of harvesting. The additional fishing opportunity would have fallen in early October, when the wholesale revenues generated by the Pacific cod fishery are up to \$1 million per week. In addition to the uncertainty pool buffer, the Non-Rockfish Program CV Sector would also have had access to a Chinook PSC allowance rollover from the Rockfish Program CV Sector. In 2010, the Rockfish Program CV Sector would have rolled over an allowance of 85 additional Chinook PSC on October 1 (Table 6), extending Pacific cod and flatfish harvest by an additional one to two weeks. In 2011, the uncertainty buffer alone would have extended the Non-Rockfish Program CV fishery through the end of the year, while the Rockfish Program CV Sector would have rolled over an allowance totaling an additional 682 Chinook PSC on October 1 (Table 6).

Chinook Salmon PSC Rollover

Amendment 97 implemented a PSC rollover of unused Chinook salmon PSC from the Rockfish Program CV Sector to the Non-Rockfish Program CV Sector. The Council believed that the Chinook salmon PSC limit for the Rockfish Program CV Sector would not constrain the sector's non-pollock harvests in most years. In contrast, the retrospective analysis provided in this RIR demonstrates that the Chinook salmon PSC limit of 2,700 for the Non-Rockfish Program CV Sector would have constrained the sector's non-pollock harvests during three of the five years between 2010 and 2014 (Table 9) had the PSC limit been in place. Amendment 97 provides the opportunity for reallocations of unused Chinook salmon PSC to the Non-Rockfish Program CV Sector at two periods during the year.

Current regulations at § 679.21(i) reallocate all but 150 of the salmon that remain of the unused Chinook salmon PSC limit in the Rockfish Program CV Sector to the Non-Rockfish Program CV Sector on October 1. Depending on the amount reallocated, the additional Chinook salmon could allow Non-Rockfish Program CVs to continue fishing for an extended period of time if the Non-Rockfish Program CV Sector would have otherwise been constrained by its Chinook salmon PSC limit of 2,700 Chinook salmon. The Council selected this alternative to provide additional Chinook salmon PSC to address unanticipated events of high PSC encounters, for which the Non-Rockfish Program CVs would generally be unable to mitigate before reaching their PSC limit. The Non-Rockfish Program CV Sector does not operate under authority of the Rockfish Program and is not as likely to be able to voluntarily control or organize fleet behavior to adjust fishing patterns for avoiding Chinook salmon PSC.

The Council selected October 1 for reallocating Chinook salmon PSC to the Non-Rockfish Program CV Sector because of the timing and the value of the Pacific cod fall season fishery to the Non-Rockfish Program CV Sector. In some years, the Non-Rockfish Program CV Sector has high Chinook salmon PSC prior to May 1, which would reduce the amount of Chinook salmon PSC limit available from September through November, when most CVs have checked out of the Rockfish Program CV fishery. Also, the Council determined that by establishing a fixed annual date to reallocate unused Chinook salmon PSC, participants in the Rockfish Program CV Sector would have certainty regarding the timing of each reallocation, and would be able to focus on more important coordination of cooperative measures such as avoidance of Chinook salmon PSC.

The Council recommended retaining a balance of 150 Chinook salmon for the Rockfish Program CV Sector on October 1 after considering the catch of Chinook salmon by Rockfish Program CVs after October 1 (see Section 4.9 of the Amendment 97 Analysis NMFS 2014). Based on the first six years of the Central GOA Rockfish Program (2007 through 2012), 150 Chinook salmon would have been sufficient to support the sector's activity from October 1 through November 15, the last date that fishing is permitted under the Central GOA Rockfish Program (see Section 4.9 of the Amendment 97 Analysis NMFS 2014). Although 150 Chinook salmon may be more than the sector would need in most years, the Council determined that changing trends in Chinook salmon PSC use or groundfish fishing patterns could increase the demand for Chinook salmon PSC in this sector. Additionally, while the number of Rockfish Program CVs operating after October 1 is usually small, managing that fishery with less than 150 Chinook salmon PSC limit could close the sector. The management assumption is that NMFS may be unable to open the directed fisheries for the Rockfish Program CV Sector if the post-reallocation Chinook salmon PSC limit for the sector is set at less than 150 fish, particularly if the number of participating Rockfish Program CVs is uncertain or anticipated to increase beyond historical numbers.

Amendment 97 also allows for reallocation of unused Chinook salmon PSC limit from the Rockfish Program CV Sector to the Non-Rockfish Program CV Sector on November 15. The Central GOA Rockfish Program closes by regulation on November 15. This final reallocation was anticipated to provide additional harvest opportunity to the Non-Rockfish Program CV Sector, depending on the amount reallocated, from November 15 through the end of the year (December 31).

Table 6 shows the amount of Chinook salmon PSC limit that would be rolled over in a year where sufficient amounts of Chinook salmon PSC limit remains in the Rockfish Program CV sector. The Council selected October 1 because, historically, most Rockfish Program CV fishing is completed by this date. October 1 is also a key time in the non-Rockfish Program CV fishery, as it falls during the Pacific cod B season. Should the Non-Rockfish Program CV Sector be closed due to Chinook salmon PSC in the spring and early summer, the rollover was anticipated to allow the valuable Pacific cod fishery to open. During the analyzed period, Chinook salmon PSC in the Pacific cod B season occurred at a rate of around 50 Chinook per week. As a result, all but the most exceptional years of PSC in the Rockfish Program CV sector was anticipated to allow a sufficient rollover to prosecute the Pacific cod fishery.

Table 6 Historical October 1 Chinook salmon reallocation (rollover) amount, had Amendment 97 been in place from 2007 through 2012.

Year	Oct. 1 PSC Rollover
2007	585
2008	n/a
2009	277
2010	85
2011	682
2012	233
Average*	372

* Includes only years in which a rollover would have occurred

1.5.5.2 PSC Management and Catch Accounting Under Amendment 97

Chinook salmon PSC estimates from non-pollock trawl C/P and non-pollock trawl CV fisheries in the GOA are based on at-sea sampling. NMFS uses the at-sea samples on observed trips and extrapolates the sample to the week (C/P) or trip (CV). These estimates are used to create Chinook PSC rates that are applied to unobserved vessels. As described in the observer sampling section of the Amendment 97 RIR at Section 5.1.2 (NMFS 2014), observers use a systematic sample and they strive to take multiple, equal sized samples throughout the haul to obtain the largest sample size possible. However, even with large sample sizes that reduce detectability issues, Chinook salmon is a relatively uncommon species and is characterized by an over-dispersed data distribution. This distribution is characterized by many small and zero counts (i.e., right skewed distribution) with occasional large counts. There is a relationship between the abundance of given species in a haul, sample size, and the level of precision in the resulting estimate of species catch from sampling. In general, data can demonstrate very high precision in the catch estimate for common (target species) with very small samples of the haul. Conversely, even extremely large samples of a haul provide relatively imprecise estimates of catch for very rare species, such as Chinook salmon.

Under the restructured Observer Program, all C/Ps and any vessels participating in the Rockfish Program are in the full observer coverage category and all of their trips are observed with at least one observer (or two observers, in the case of C/Ps participating in the Rockfish Program fisheries). On observed vessels, the estimates of the Chinook PSC are specific to the observed vessels' data. The observer samples are extrapolated to the haul and the amount of Chinook PSC in the sampled hauls is used to calculate a vessel specific PSC rate for the week (C/Ps) or trip (CVs).

PSC estimation for Non-Rockfish Program CVs

Non-Rockfish Program CVs are in the partial coverage category and their trips are randomly selected for observer coverage. In estimating PSC, the Chinook salmon estimates on observed trips are specific to the observed vessels' data, while unobserved vessels receive Chinook salmon PSC rates that may be averaged across multiple vessels and trips. As a consequence, salmon PSC information from multiple observed vessels is averaged into PSC rates that are used for multiple unobserved vessels. From an inseason management perspective, the Chinook salmon PSC rates on unobserved vessels change as additional observer information is obtained. This creates temporal variation in Chinook salmon PSC estimates, resulting in uncertainty associated with inseason management of Chinook salmon PSC limits. This uncertainty complicates management of salmon PSC limits because PSC rates can change from day-to-day, resulting in Chinook salmon PSC estimates that oscillate around limits in concert with changing observer information.

The catch estimation methods are designed to estimate catch, bycatch, and PSC as quickly as possible so that inseason managers have information to make decisions. NMFS' catch accounting system makes use of observer data as soon as they are available, but the estimates are updated and refined as more observer data becomes available. For trawl CVs in the GOA, it may take anywhere from a few days to over a week for NMFS to receive preliminary observer data. After deployment in the field, which may be as long as three months, observers review their data with NMFS Fisheries Management and Analysis Division staff and ensure that data were collected following NMFS protocols. It is normal for there to be many data modifications during this "debriefing" and quality control process. For all of these reasons, Chinook salmon PSC estimates change on a regular basis, and there can be large variations in the estimates until well after the fishery is closed and smaller variations as the observer data are finalized in late February to early March of the year following the fishery.

In 2013, NMFS implemented a restructured Groundfish Observer Program (Observer Program) (77 FR 70062, November 21, 2012). Prior to 2013, no observer data were collected on vessels less than 60 feet in length and observer data collected on vessels 60 feet and greater were used to generate Chinook salmon PSC estimates for these smaller vessels. Participation in a particular fishery may be dominated by vessels larger or shorter than 60 feet in length and Chinook salmon PSC use is likely to vary among fisheries depending on the location and timing of a fishery. Because the majority of vessels that participate in the Western GOA groundfish fisheries are less than 60 feet in length, the majority of data available used to estimate Chinook salmon PSC use in the Amendment 97 Analysis were derived from vessels greater than 60 feet in length.

Prior to 2013, observers were not deployed on under 60 ft Non-RF Program CV Sector vessels operating in the Western GOA. Chinook PSC in the WGOA for this sector was estimated using observer information from a different group of vessels that are equal to or greater than 60 feet in length. The last year of data used by the Council in its analysis of alternatives for Amendment 97 was 2011, which applied these catch and PSC estimates to the WGOA Chinook salmon PSC attributed to the Non-RF Program CV Sector vessels. Those estimates were the best available data for the years used to form averages of Chinook salmon PSC used by the sectors for the overall PSC limit of 7,500 Chinook salmon and the sub-allocations of PSC to each sector.

The restructured observer program was implemented in 2013. An important change in sampling methodology under the new observer program was to sample trawl vessels under 60 ft and greater than 40 ft, which had never been sampled prior to the restructured program. These vessels were included in the partial coverage category as part of the "vessel selection" pool.

In 2015, Non-RF Program CV Sector vessels (including those that were less than 60 ft in length) were all included in the "trip selection" pool to address issues with coverage rates in the "vessel selection" pool, as documented in the 2013 and 2014 Annual Report for the North Pacific Groundfish and Halibut Observer Program (NMFS 2015). Vessel selection pool issues included an incomplete sampling frame and difficulty achieving a target number of vessels to be observed (NMFS 2015). In comparison to the vessel selection method, NMFS anticipates this change to the trip selection methodology may have improved observer data by better representing fishing events.

1.5.6 Communities and Processing Operations Impacted by Non-pollock Groundfish

The Amendment 97 Analysis (see Section 4.7 in NPFMC 2014) includes a discussion of processing firms participating in non-pollock groundfish fisheries, as well as primary communities that are associated with these fisheries either as a homeport for vessels, or as a delivery point for groundfish landings. Since 2003, GOA CVs have delivered non-pollock groundfish to 10 Alaska communities. CV deliveries reached Alaskan processing interests in Akutan, Dutch Harbor, Homer, Kenai, King Cove, Kodiak,

Nililchik, Sand Point, Seward, and Unalaska. Kodiak, is the largest port, and a port of greatest concern for impacts from the GOA fishery closure for the Non-Rockfish CV Sector.

Kodiak is a first class city in the Kodiak Island Borough. Although Kodiak has a diversified economy, its identity is that of a fishing community. Its vessels and processing plants are diversified, participating in a variety of GOA and Bering Sea fisheries. Kodiak is the dominant port for vessels and landings from the Central GOA trawl fisheries. The community is homeport for a substantial majority of the vessels in the fishery and a very large majority of the fishery's processing activity. From 2003 through 2011, between 30 percent and 40 percent of the CVs active in GOA groundfish fisheries were homeported in Kodiak. The other CVs spend a substantial amount of time in the community during the pollock fishery and other Central Gulf groundfish trawl fisheries. Approximately six or seven Kodiak processors compete for and process the large majority of the landings from the Central GOA trawl fisheries. These characteristics effectively mean that the Central GOA trawl fisheries are Kodiak based. Kodiak is also home to the largest and most diverse fishery support sector in Alaska. These businesses serve all of the fleets homeported in Kodiak and that deliver to Kodiak processors.

1.5.7 Closure of Non-Rockfish Program CV Sector

On May 3, 2015, NMFS issued an information bulletin prohibiting directed fishing for groundfish, other than pollock, by Non-Rockfish Program CVs using trawl gear in the Western and Central Regulatory Areas of the GOA, from May 3, 2015, through December 31, 2015. The closure action was required by regulation at 50 CFR 679.21(i)(7) to prevent exceeding the PSC limit, implemented under Amendment 97 to the GOA FMP (79 FR 71350, December 2, 2014).

This closure was precipitated by a high amount of unforeseen and unexpected Chinook salmon PSC. Specifically, the use of Chinook salmon PSC was unforeseen and unexpectedly high in the Western GOA resulting in the sector reaching its Chinook salmon PSC limit much earlier than anticipated. From January 1, 2015 through April 30, 2015 (the date the fleet exceeded the Chinook salmon PSC limit for the Non-Rockfish Program CV Sector) Chinook salmon PSC use in the Non-Rockfish Program CV Sector in the Western GOA was estimated at 1,056 Chinook salmon. This amount is nearly 10 times greater than the **maximum** annual amount of Chinook salmon PSC used by the Non-Rockfish Program CV Sector in the Western GOA during any complete calendar year from 2007 through 2011 (in 2008, 107 Chinook salmon were used in the Western GOA during the entire year). Chinook salmon PSC use in the Western GOA by the Non-Rockfish Program CV Sector from January 1 through April 30, 2015 was nearly 24 times the **average** annual amount of Chinook salmon PSC use in the Western GOA from 2007 through 2011. See Table 7 for additional detail.

The unexpectedly high use of Chinook salmon PSC in the Western GOA resulted in the Non-Rockfish Program CV Sector reaching its PSC limit even though Chinook salmon use in the Central GOA from January 1 through April 30, 2015 was 1,568 Chinook salmon. This amount of Chinook salmon PSC use is significantly less than the maximum amount of Chinook salmon PSC used from January 1 through April 30 during any of the years the Council and NMFS considered when recommending Amendment 97 (2,424 Chinook salmon in 2010), and only slightly greater than the average Chinook salmon PSC use during the January 1 through April 30 time period from 2007 through 2011 (1,011 Chinook salmon). See Table 8 for additional detail.

This unforeseen and unexpected increase in the amount of Chinook salmon PSC use occurred after the implementation of improved Chinook salmon PSC data collection on vessels in the Western GOA under the restructured observer program. This improved data collection occurred in 2015, after the years the Council and NMFS used to recommend the Chinook salmon PSC limits for the Non-Rockfish Program CV Sector. This new observation method improved sampling on vessels in the Non-Rockfish Program

CV Sector that were previously unsampled. Data from these vessels led to higher estimates of Chinook salmon PSC use than anticipated by the Council and NMFS.

Table 7 Annual (2007-2014), Initial 2015 Non-Rockfish Program CV Sector Chinook salmon incidental catch in the Central and Western GOA; and Average Chinook salmon incidental catch from 2007 through 2011 and 2007 through 2014).

Annual and Average Chinook Salmon PSC Use	Western GOA	Central GOA
2007	9	1,857
2008	107	749
2009	10	2,007
2010	0	4,126
2011	96	3,405
2012	1	926
2013	15	4,519
2014	1	1,430
2015* (through July 7, 2015)	1,056	1,818
Average Chinook salmon PSC Use (2007-2011)	44	2,428
Average Chinook salmon PSC Use (2007-2014)	30	2,377

Table 8 Annual (2007-2014), Initial 2015 Non-Rockfish Program CV Sector Chinook salmon incidental catch in the Central and Western GOA (from January 1 through April 30); and Average Chinook salmon incidental catch from 2007 through 2011 and 2007 through 2014 (for January 1 through April 30).

Annual and Average Chinook Salmon PSC Use	Western GOA*	Central GOA
2007	9	165
2008	107	538
2009	10	202
2010	0	1,727
2011	96	2,424
2012	1	407
2013	15	3,228
2014	1	323
2015	1,056	1,568
Average Chinook salmon PSC Use (2007-2011)	44	1,011
Average Chinook salmon PSC Use (2007-2014)	30	1,127

*Use of PSC in the Western GOA from January through April 30 is identical to annual use of PSC

in this area because all estimated PSC use from the Western GOA is from an early season Pacific cod opening that is subsequently closed each year prior to April 30.

1.6 Expected Effects of Alternatives

This section analyzes two alternatives: (1) no action, and (2) establishment of a 1,600 Chinook salmon PSC limit to the Non-Rockfish Program CV Sector through an emergency rule.

1.6.1 Alternative 1: Effects of No Action – No Emergency Apportionment of Chinook Salmon PSC to The Non-Rockfish Program CV Sector

This is the no action alternative. The Non-Rockfish Program CV Sector has reached its Chinook salmon PSC limit of 2,700 Chinook salmon. Under this alternative, management of the Non-Rockfish Program CV Sector would remain unchanged. The closure of all GOA fisheries that this sector is normally authorized to participate in would not reopen until 2016. Current regulations at § 679.21(i)(3) allow for the reallocation of Chinook salmon PSC limit from the Rockfish Program CV sector to the Non-Rockfish Program CV Sector on October 1 and November 15 if the Rockfish Program CV Sector has unused amounts of Chinook salmon PSC. The Council considered this to be highly unlikely during 2015, because the current use of Chinook salmon PSC in the Rockfish Program CV sector in 2015 is close to that sector's PSC limit, and NMFS needs a sufficient Chinook salmon PSC limit buffer to reopen the fishery.

The effects of the no action alternative are considered for the same impact categories evaluated in the Amendment 97 Analysis (see Section 4.7 in NPFMC 2014). These categories are:

1. Direct users of Chinook salmon.
2. The Non-Rockfish Program CV Sector (effects of on other sectors excluded given the nature of this action).
3. Processors.
4. Communities, either because they are home ports for the non-pollock fisheries, or are localities with processors that receive deliveries of non-pollock groundfish.
5. Tax revenues to localities from non-pollock groundfish deliveries.

Impacts on Direct Users of Chinook Salmon of Alternative 1

The Amendment 97 Analysis (Section 4.7.2) indicated that there is uncertainty in the potential link between reductions in Chinook salmon mortality from the trawl fishery and potential beneficial impacts to spawning populations and recruitment of adult Chinook salmon originating in Alaska (NPFMC 2014). Therefore, reductions in the amount of Chinook salmon PSC taken in the non-pollock groundfish trawl fisheries are not expected to result in substantial beneficial changes in the Chinook salmon populations or the amount available to other Chinook salmon resource users. Given the information available at this time, the Chinook salmon PSC limits imposed under this action do not have a quantifiable direct positive impact on Chinook salmon returns to river systems in Alaska or elsewhere.

Available data indicate that the majority of Chinook salmon PSC bycaught in the non-pollock fishery are generally immature with some proportion of the Chinook salmon caught as PSC being consumed as prey by other marine predators, or affected by some other source of natural mortality before they return to their natal river system. More recent stock information indicates that the vast majority (i.e., greater than 90 percent) of the Chinook salmon PSC in the GOA is derived from Chinook salmon runs originating in the Pacific Northwest, Canada, and Southeast Alaska (Guyon et al., 2015). Chinook salmon originating from these regions are characterized by large releases of hatchery enhanced stocks. It is reasonable to expect that the overall impact of Chinook salmon PSC used in the Non-Rockfish Program CV Sector would have a *de minimus* impact on all Chinook salmon stocks taken as PSC given the limited amount of Chinook salmon PSC relative to the total returns. Thus, Alternative 1, the status quo, is not anticipated to appreciably change availability of Chinook salmon for direct users of Chinook salmon in Alaska or other salmon producing areas of Canada or the United States.

Impacts on the Non-Rockfish Program CV Sector of Alternative 1

The Amendment 97 Analysis (see Sections 4.3 and 4.7 in NPFMC 2014) described potential impacts of alternatives to the non-pollock fishing sectors with retrospective estimates of the change in the amount of groundfish that would be caught from a given alternative, compared with the baseline catch years.

Substantial testimony was provided at the June 2015 Council meeting on the challenge that vessels in the Non-Rockfish Program CV Sector would have to mitigate this closure with other fishing opportunities. Many of these vessels, particularly those that participate in the Western GOA non-pollock fisheries for flatfish and Pacific cod are small (under 60 feet LOA), and are either not sufficiently mobile or are not endorsed to participate in other groundfish fisheries in the Bering Sea. These vessel owners and operators are likely to have limited fishing alternatives compared with some groundfish vessels in the fishery, and therefore may forgo groundfish fishing altogether during this period, or participate in some substitute income producing alternative.

For the Non-Rockfish Program CV Sector, the abrupt closure of all directed fisheries on May 3, 2015, provides a basis for comparing pre-May groundfish catch by target species with projected post-May catches for the entire 2015 year. These comparisons apply groundfish catch data for this sector from 2010 through 2014 and use the best available information for assessing the negative impacts on this sector, at least in terms of a gross revenue measure. Table 9 and Table 10 show that of approximately 39,047 mt caught by the Non-Rockfish Program CV Sector, 40 percent, or 15,661 mt of total groundfish³ would be forgone for the interval from May through December. Converting that amount to a landed value (ex-vessel value) for this sector, Table 11 estimates that forgone gross revenues are approximately \$4.6

³ Total groundfish includes retained and discarded groundfish.

million during that same interval, also representing approximately 30 %⁴ of the total ex-vessel revenue for this sector. Table 12 estimates that foregone first wholesale value foregone as approximately \$11 million during the May through December period.

⁴ The percent change in gross revenues for this interval are different from the percent change in catch because of variation in high valued versus lower valued species caught by season, variation in retained catch by month (used for estimating revenues), and variation in total catch by month (used for displaying groundfish catch by sector).

Table 9 Groundfish catch and PSC use in the Non-Rockfish Program CV Sector (2010-2014).

Groundfish catch and PSC by non-pollock, non-Rockfish Program trawl Catcher Vessels.

2010						
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	7,764	408	892	2,775	670	12,509
Shallow Flats	2,340	1,190	1,471	1,801	162	6,964
Pacific Cod	10,264	823	565	6,438	74	18,163
Pollock (non-pollock target)	582	106	428	441	64	1,622
Other Species	1,360	285	422	700	65	2,831
Total Groundfish	22,310	2,812	3,779	12,155	1,033	42,089
Halibut PSC (mt)	352	186	105	372	34	1,049
Chinook PSC (# of fish)	1,540	299	33	2,031	223	4,126
2011						
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	7,544	340	1,288	5,612	435	15,218
Shallow Flats	1,792	725	729	1,301	62	4,609
Pacific Cod	7,715	213	541	4,438	36	12,942
Pollock (non-pollock target)	615	97	128	786	53	1,680
Other Species	1,130	210	309	909	95	2,652
Total Groundfish	18,796	1,584	2,995	13,045	681	37,102
Halibut PSC (mt)	411	54	131	556	36	1,188
Chinook PSC (# of fish)	2,520	4	7	933	37	3,501
2012						
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	5,878	277	872	994	2,039	10,061
Shallow Flats	1,765	106	793	1,210	573	4,448
Pacific Cod	14,796	70	491	1,255	141	16,753
Pollock (non-pollock target)	1,360	216	301	344	190	2,411
Other Species	1,409	25	293	341	320	2,387
Total Groundfish	25,208	694	2,751	4,145	3,263	36,061
Halibut PSC (mt)	718	28	245	115	101	1,207
Chinook PSC (# of fish)	408	-	-	396	123	926
2013						
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	9,158	861	135	1,293	260	11,707
Shallow Flats	1,860	634	852	1,598	245	5,189
Pacific Cod	13,805	220	430	2,898	846	18,200
Pollock (non-pollock target)	711	173	511	525	80	2,000
Other Species	1,898	117	50	201	340	2,606
Total Groundfish	27,432	2,004	1,978	6,516	1,772	39,703
Halibut PSC (mt)	424	63	25	139	20	670
Chinook PSC (# of fish)	2,088	1,724	163	427	132	4,534
2014						
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total
Arrowtooth/Deep Flats	5,920	3,655	1,222	746	449	11,993
Shallow Flats	1,102	869	1,563	754	382	4,670
Pacific Cod	14,353	879	1,840	2,385	104	19,561
Pollock (non-pollock target)	1,040	397	255	371	68	2,130
Other Species	770	602	346	155	55	1,927
Total Groundfish	23,185	6,402	5,225	4,410	1,058	40,280
Halibut PSC (mt)	219	275	169	56	50	769
Chinook PSC (# of fish)	324	26	1,035	-	46	1,431

Table 10 Average groundfish catch and PSC by the Non-Rockfish Program CV Sector (2010 through 2014).

3-year Average 2012-2104								
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total	May-Dec	%
Arrowtooth/Deep Flats	6,985	1,598	743	1,011	916	11,254	4,268	38%
Shallow Flats	1,576	536	1,070	1,188	400	4,769	3,193	67%
Pacific Cod	14,318	390	920	2,179	364	18,171	3,853	21%
Pollock (non-pollock target)	1,037	262	355	413	113	2,180	1,143	52%
Other Species	1,359	248	230	232	238	2,307	948	41%
Total Groundfish	25,275	3,033	3,318	5,024	2,031	38,681	13,406	40%
Halibut PSC (mt)	454	122	146	103	57	882	428	49%
Chinook PSC (# of fish)	940	583	399	274	100	2,297	1,357	59%
5-year Average 2010-2104								
	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total	May-Dec	%
Arrowtooth/Deep Flats	7,253	1,108	882	2,284	771	12,298	5,045	41%
Shallow Flats	1,772	705	1,082	1,333	285	5,176	3,404	66%
Pacific Cod	12,187	441	773	3,483	240	17,124	4,937	29%
Pollock (non-pollock target)	862	198	325	493	91	1,968	1,107	56%
Other Species	1,313	248	284	461	175	2,481	1,168	47%
Total Groundfish	23,386	2,699	3,346	8,054	1,561	39,047	15,661	40%
Halibut PSC (mt)	425	121	135	248	48	976	552	56%
Chinook PSC (# of fish)	1,376	410	248	757	112	2,904	1,528	53%

Table 11 Average groundfish ex-vessel gross revenues (\$1,000's) by selected month, and pre and post May intervals for the Non-Rockfish Program CV Sector (2010 through 2014).⁵

GROUPING	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Grand Total	May-Dec	%
Arrowtooth/Deep Flats	1,089	239	84	228	88	1,730	401	23%
Other Species	1,048	243	301	385	105	2,081	790	38%
Pacific Cod	7,078	98	131	1,971	57	9,335	2,159	23%
Pollock	231	37	54	168	30	521	252	48%
Shallow Water Flatfish	318	222	382	506	109	1,537	997	65%
Grand Total	9,765	839	952	3,258	389	15,204	4,599	30%

Table 12 Average groundfish wholesale gross revenues (\$1,000's) by selected month and pre and post May intervals for the Non-Rockfish Program CV Sector (2010 through 2014).⁶

GROUPING	Pre-May	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Grand Total	May-Dec	%
Arrowtooth/Deep Flats	4,616	958	384	1,330	432	7,719	2,145	28%
Other Species	2,224	507	643	717	220	4,312	1,581	37%
Pacific Cod	17,674	257	327	4,872	135	23,266	5,335	23%
Pollock	585	93	127	411	70	1,286	608	47%
Shallow Water Flatfish	512	398	628	801	197	2,536	1,626	64%
Grand Total	25,611	2,214	2,110	8,131	1,054	39,119	11,294	29%

⁵ Estimates of Forgone exvessel revenue are based on estimates of retained catch

⁶ Estimates of Forgone wholesale revenue are based on estimates of retained catch

Impacts on Processors of Alternative 1

The general effects to processing firms when anticipated deliveries do not occur range from shifting to processing of other available species to temporarily idling processing operations. The estimates of catch reduction in Table 10 are also applied to wholesale price data to develop an estimate of loss processing revenue from the closure. Applying a recovery rate for processed product, and annual wholesale prices by species (personal communication Mike Fey June 23, 2015), the forgone gross wholesale earnings of the closure are approximately \$11.3 million, or 29% of the total annual wholesale gross earnings of \$39.1 million (Table 12). Section 4.7.4 of the Amendment 97 Analysis contains additional information on the general effects of a closure in the non-pollock trawl CV sector on processing operations that is incorporated by reference.

Impacts to Communities of Alternative 1

The greatest impact of Alternative 1 is on the community of Kodiak. Based on information presented in Section 4.4.5 of the Amendment 97 Analysis, in recent years almost all of the landings and seafood processing in the Non-Rockfish Program CV Sector occurs in Kodiak after May 1 (NPFMC 2014). Section 4.7.5 in the Amendment 97 Analysis notes that although non-pollock groundfish fisheries serve an important role in King Cove and Sand Point economies, those communities are likely to be largely unaffected by any closure that occurs after the Pacific cod A season (i.e., any closure after April 30), as the catcher vessel sector has little involvement in any other non-pollock trawl fisheries. Landings data from NMFS indicates that this conclusion is appropriate for 2015.⁷ In addition, over 75 percent of all vessels active in the non-pollock trawl fishery are homeported in Kodiak (Section 4.7.5 in the Amendment 97 Analysis).

Because seafood processors are among the largest employers in Kodiak and are known to support a year-round resident workforce, a reduction in groundfish deliveries from the Non-Rockfish Program CV Sector for the remainder of 2015 is anticipated to have a noticeable impact to the community. The seafood processing labor force is supplemented in peak seasons with labor from outside the community, however testimony presented at the June 2015 Council meeting reported that the non-pollock groundfish fisheries fill important gaps in the year-round processing activity that Kodiak is typically able to support. These seafood processing gaps, if prolonged, may impact employment decisions of processing laborers to seek more stable employment elsewhere. Although landings of non-pollock groundfish are of secondary importance in value to species such as salmon and halibut, and represent smaller volumes than pollock, they are important contributors to both the overall value and volume of processing, and to filling production gaps in processing in the community.

If the fishery closure for the Non-Rockfish Program CV Sector continues through 2015, additional negative distributional economic effects to the Kodiak are likely to occur. Other potential indirect impacts include reduced purchases to local businesses from owners of vessels and processors may occur. Income to harvesting and processing labor may decline as a result of reductions in harvesting crew shares or duration of weekly or monthly groundfish processing. A possibility exists that reduced personal income for residents in the Kodiak City and Borough may induce less personal income spending, impacting other business activity in the Kodiak Island Borough. Testimony was presented at the June 2015 Council meeting suggesting that if this closure persists through the remainder of 2015, the gaps in continuous annual processing opportunities may influence some processing labor or crew to move from Kodiak to other locations to seek a more stable source of income.

⁷ July 9, 2015, personal communication with Josh Keaton, NMFS Alaska Region Inseason Management.

Alternative 1 would also be expected to have some impact on communities where trawl vessels active in the Non-Rockfish Program CV Sector are homeported. These include communities located in Washington and Oregon. NMFS does not have the information available to quantify the specific impact of these impacts on these communities. Generally, many of these communities (e.g. Seattle, Astoria) are communities with a diverse economic base and the potential impacts are likely to be limited to specific businesses engaged in this fishery.

Impacts on Tax Revenues of Alternative 1

Because effectively all of the Non-Pollock CV deliveries occur in Kodiak after May 1, the impacts on tax revenues from Alternative 1 would be on the City of Kodiak, Kodiak Island Borough, and the State of Alaska. The potential foregone revenues, and potentially foregone tax revenues, are not possible to quantify given the lack of availability of data on the current value of the non-pollock species catch that has been foregone. Section 4.7.6 of the Amendment 97 RIR provides additional information about tax rates applicable to catch delivered to Kodiak and is incorporated by reference (NPFMC, 2014).

1.6.2 Alternative 2: Effects of Emergency Apportionment of Chinook Salmon PSC to Non-Rockfish Program CV Sector

Alternative 2, the preferred alternative, would establish a 1,600 Chinook salmon PSC limit to the Non-Rockfish Program CV Sector immediately available for use on the date of the publication of the emergency rule by the Non-Rockfish Program CV Sector in the Western and Central GOA groundfish fisheries until the limit is reached or December 31, 2015, whichever occurs first. The implementation of this emergency rule is anticipated to be as early as mid-August 2015. While it is possible that the establishment of the 1,600 Chinook salmon PSC limit could be reached prior to the end of 2015, NMFS' expectation is that the additional Chinook salmon PSC limit would allow participants in the Non-Rockfish Program CV Sector to operate through December 31, 2015. The following sections describe the impacts of Alternative 2 using the same criteria developed for Alternative 1.

Impacts on Direct Users of Chinook Salmon of Alternative 2

Alternative 2 would be expected to have the same impact on directed users of Chinook salmon as Alternative 1. Although Alternative 2 would be expected to slightly increase the amount of Chinook salmon PSC (by 1,600 salmon) that could be used by the Non-Rockfish Program CV Sector, the overall impact on directed users would also be expected to be *de minimus* on all Chinook salmon stocks given the limited amount of Chinook salmon PSC relative to the total returns.

Impacts on the Non-Rockfish Program CV Sector of Alternative 2

A number of factors influence how Alternative 2 will affect the vessels in this sector, and processing operations that receive landings from this sector. Important factors include, but are not limited to (1) the start date for reopening trawl fisheries exploited by this sector, and (2) the transitional resources/costs of remobilizing the fishery; including the time it takes for planning for and remobilizing crew, gear and supplies, and other opportunity costs to re-enter and participate in the openings. These are also important factors for the processors that receive landings from this sector. Additional factors impacting the processing operations will be the timing of other groundfish or non-groundfish processing opportunities that are potential production substitutes for the deliveries of Non-Rockfish Program CV Sector landings, and remobilizing or shifting processing labor to process the product. Some of these factors are discussed in the following paragraphs.

If this emergency rule is approved, it would make more Chinook salmon PSC available for the groundfish fisheries of the Non-Rockfish Program CV Sector and allow these fisheries to reopen. That would reduce the amount of stranded groundfish in this sector compared with Alternative 1. The amount of stranded groundfish has been estimated to be at approximately 13,000 to 15,000 mt (Table 10). If all of the foregone groundfish revenues from May through December 2015 could be recovered by the fleet, that would generate gross revenues of approximately \$4.6 million dollars (Table 11) at the ex-vessel level. This estimate is based on the methodology of using average monthly retained catch data from AKFIN, and applying that to average annual prices estimated from AKFIN (personal communication Mike Fey June 23, 2015) from 2010 through 2014. The average annual ex-vessel gross earnings generated by the Non-Rockfish Program CV Sector from years 2010 through 2014 (averaged through the entire year) were approximately \$15.2 million.

Given variation in market prices, catch from year to year, and unknowns about how the remainder of the 2015 fisheries will be prosecuted by the Non-Rockfish Program CV Sector under the emergency rule, the sector may not produce \$4.6 million in ex-vessel gross earnings through the remainder of 2015. If product produced by that catch were to be produced and priced in the same manner as the forgone ex-vessel value, based on wholesale prices and product recovery rates as applied by AKFIN, the amount of restored gross revenue at the wholesale level from the date of closure to the end of 2015 could be \$11.3 million (Table 12). Under ideal conditions, it may be possible to ameliorate most of the economic harm caused to fishery participants and support industries as well as reverse most of the negative effects of the closure to the community of Kodiak. If gross wholesale revenues from the Non-Rockfish Program CV Sector could be returned to the annual 2010 through 2014 average, that amount of gross wholesale revenues would be approximately \$ 39.1 million (Table 12).

The operating conditions in these fisheries and the range of possible harvesting/processing decisions made after the reopening complicate any projections of how participants in the Non-Rockfish Program CV Sector will react to an extended opening of the currently closed groundfish fisheries. The sector and industry response will influence which openings members of this sector will exploit, how much groundfish will be caught by species, cost of operating in the fisheries, and cost of processing the landed groundfish delivered during the new openings.

As previously discussed, one important variable impacting how these fishing/processing operations would respond to implementation of the emergency rule is the date that NMFS reopens various flatfish and Pacific cod fisheries for the Non-Rockfish Program CV Sector. This emergency rule is not expected to be implemented until mid-August 2015. According to the 5-year average groundfish harvests provided by NMFS (Table 10), approximately 15,000 mt of Non-Rockfish Program CV Sector landings have occurred from July 1 to December 31. August can be a challenging time period for trawl groundfish landings due to processing conflicts with pink salmon harvests, especially when pink salmon landings are high. If processing capacity is available, vessels that are highly dependent on GOA trawl fisheries will deliver flatfishes (Julie Bonney, personal communication, June 19, 2015). Table 12 provides an upper-bound estimate on the likely additional first wholesale value that could accrue to processors operating in Kodiak, assuming that the estimates of first wholesale value continue to be applicable to the realized value in 2015.

Impacts to Communities of Alternative 2

The greatest impact of Alternative 2 is on the community of Kodiak. As Section 1.6.2 notes, almost all of the impacts of this action would be expected to accrue to the processors, vessels, and support businesses that operate out of Kodiak. Alternative 2 would have a beneficial impact on Kodiak relative to Alternative 1. Alternative 2 would also be expected to have some beneficial impact on other communities

where trawl vessels active in the Non-Rockfish Program CV Sector are homeported relative to Alternative 1, but NMFS does not have information to quantify those potential impacts.

Impacts on Tax Revenues of Alternative 2

Alternative 2 would be expected to have a beneficial tax impact on the City of Kodiak, Kodiak Island Borough, and the State of Alaska because it would provide more harvesting and processing opportunity relative to Alternative 1. The potential additional tax revenues are not possible to quantify given the fact that the specific amount and value of species harvested after the implementation of Alternative 2 cannot be predicted as described in greater detail in the paragraph above “Impacts on the Non-Rockfish Program CV Sector of Alternative 2”.

1.6.3 Effects on Net Benefits to the Nation

Net benefits to the Nation would likely increase under Alternative 2 relative to Alternative 1. The emergency action of implementing a Chinook salmon PSC limit of 1,600 fish to allow the Non-Rockfish Program CV Sector to prosecute groundfish through the remainder of 2015 should increase resource rents from the participants and benefits to consumers. Reopening the groundfish fisheries for this sector are likely to increase gross revenues to harvester and lower opportunity costs by expanding primary fishing opportunities. While an additional several thousand metric tons of groundfish are not likely to discernably change prices to seafood consumers, at the margin, some increase in seafood products will be available to consumers. Some costs accrue to the public sector for implementing an emergency rule, but NMFS believes that these costs are trivial compared with the value of reopening these fisheries.

1.7 Consistency with Applicable Law and Policy

1.7.1 National Standards

As with any fishery policy or management measure incorporated into a fishery management plan, any emergency action must also comply with the Magnuson-Stevens Act national standards. The action requested here is to provide a 1,600 Chinook salmon PSC limit for the Non-Rockfish Program CV Sector so that fishing by the sector may resume and avoid stranding approximately 13,000 to 15,000 mt of groundfish worth \$4.6 million (Table 11) at the ex-vessel level and \$11.3 million at the wholesale level (Table 12), and causing economic harm to fishery participants and support industries as well as causing major disruption to the community of Kodiak. This emergency action complies with each of the Magnuson-Stevens Act 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 U.S. fishing industry.

Apportioning more Chinook salmon PSC limit applied to the Non-Rockfish Program CV Sector’s groundfish fisheries complies with National Standard 1. Under both Alternative 1 and Alternative 2, total harvest in the GOA groundfish fisheries is anticipated to be within the optimum yield range specified in the FMP (116,000 to 800,000 metric tons). Although Alternative 2 would be expected to provide additional harvest opportunity, and harvest more of the available resource relative to Alternative 1, without action, the total groundfish harvest in the GOA would still be within the range of the FMP’s optimum yield.

The groundfish target stocks in the GOA are healthy, and no stocks are overfished or subject to overfishing. The groundfish TACs are set conservatively to ensure that no overfishing is occurring. There is also a predetermined incidental take statement (ITS) for an annual threshold amount of 40,000 Chinook

salmon for GOA groundfish fisheries. Exceeding the ITS will result in reinitiation of section 7 consultation under the ESA. Apportioning an additional 1,600 Chinook salmon PSC limit to the Non-Rockfish Program CV Sector will not result in exceeding this threshold as Amendment 93 limits Chinook salmon PSC in the trawl pollock fishery to 25,000 fish, and the emergency rule limit combined with the Amendment 97 limits has the potential to result in a maximum Chinook salmon PSC amount of 9,100 fish. Therefore, the total amount of salmon potentially caught in the GOA trawl fisheries would still be under the 40,000-fish threshold.

Reopening this fishery by apportioning more Chinook salmon PSC to the Non-Rockfish Program CV Sector complies with National Standard 1, allows the fishery the opportunity to use the available TAC that it would otherwise not have, and will provide the most benefit not just to the participants and the community of Kodiak, but to the nation as required by the Magnuson-Stevens Act.

National Standard 2: Conservation and management measures shall be based on the best scientific information available.

The recommended action complies with National Standard 2. National Standard 2 requires fishery managers to use the best available scientific information and that information tells us that apportioning more Chinook salmon PSC to the Non-Rockfish Program CV Sector will likely not impact the status of Alaskan wild salmon stocks of concern. The best available scientific information demonstrates that apportioning more Chinook salmon PSC to the Non-Rockfish Program CV Sector will not further affect the sustainability of wild Alaskan or other Chinook salmon stocks. The recommended action is directly responsive to new information arising from improved sampling of vessels in the Western GOA indicating a much higher amount of Chinook salmon PSC than was anticipated when the Council recommended and NMFS implemented Amendment 97.

The best scientific information available was used to determine the appropriate additional Chinook salmon PSC limit for the Non-Rockfish Program CV Sector. This information indicates that this additional allocation is likely to provide harvest opportunities sufficient to allow the Non-Rockfish Program CV Sector to harvest approximately the same amount of groundfish as it has in recent years.

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.

The recommended action complies with National Standard 3 because no change to the management unit of the target groundfish fisheries is contemplated or recommended. Similarly, this action would not modify or change the management area for Chinook salmon PSC limits applicable to trawl vessels in the Western and Central GOA.

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 U.S. fishermen, such allocations shall be (1) fair and equitable to all such fishermen; (2) reasonably calculated to promote conservation; and (3) carried out in such a manner that no individual, corporation, or other entity acquires an excessive share of such privileges

The recommended action complies with National Standard 4 because no direct allocation of any groundfish stock or salmon stock is being made to any individuals.

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.

The recommended action complies with National Standard 5 because establishing an additional Chinook salmon PSC of 1,600 Chinook salmon will allow for the efficient and careful harvest of approximately 13,000 to 15,000 metric tons of groundfish available within the TAC. While the economic viability of fishing operations, processors, and the health of the local economy is a large driver in requesting the recommended action, it is not the only consideration. In particular, the recommended action is directly responsive to National Standards 6, 7, and 9.

National Standard 6: Conservation and management measures shall take into account and allow for variations among and contingencies in fisheries, fishery resources, and catches.

The recommended action complies with National Standard 6 in that the action is responsive to both unforeseen events and new information. The unforeseen events include the immediate closure of the fishery based new informing concerning the large and unexpected catch of Chinook salmon in the Western GOA relative to the estimated amount of Chinook salmon PSC at the time the Council recommended and NMFS implemented Amendment 97.

National Standard 7: Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

The recommended action complies with National Standard 7 because the action will not impose greater costs on the fleet or managers. Overall, this action would provide additional harvesting and processing opportunities, and increased revenue compared to the status quo.

National Standard 8: conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of overfished stocks) take into account the importance of fisheries resources to fishing communities in order to (1) provide for the sustained participation of such communities; and (2) to the extent practicable, minimize adverse economic impacts on such communities.

The recommended action complies with National Standard 8. As described in detail in the previous section, Kodiak is the primary community directly affected by the closure. There is now and will continue to be disruption in the harvesting and processing sectors that will directly impact this community. Operators of idled boats are likely to discharge crew that they are unable to pay. Loss of year-round product coming across the docks at the processors will result in lost work force and lost market share, both of which are difficult to regain.

National Standard 9: Conservation and management measures shall, to the extent practicable: (1) minimize bycatch; and (2) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

The recommended action complies with National Standard 9 because it minimizes the bycatch of Chinook salmon to the extent practicable. This action does not entirely remove Chinook salmon PSC limits applicable to the Non-Rockfish Program CV Sector. This action provides additional harvest opportunity, but limits the maximum amount of Chinook salmon PSC to 1,600 Chinook salmon. This additional allocation is still consistent with the overall objectives of Amendment 97 to ensure that Chinook salmon PSC in the GOA does not exceed 40,000 salmon (see Sections 1.5.3 of this RIR) and to minimize bycatch to the extent practicable. By its nature, this recommended action has a limited duration and therefore a limited impact on the overall amount of Chinook salmon PSC (bycatch) in the GOA trawl fisheries.

While Chinook salmon bycatch is certainly undesirable, the Council and NMFS have previously determined that the groundfish fisheries cannot be prosecuted to provide the best benefit to the nation and the participants without some level of Chinook salmon interception. This action is intended to provide a practicable limit on Chinook salmon bycatch while continuing to promote the objectives of the other National Standards.

National Standard 10: Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

The recommended action complies with National Standard 10. This action does not change or modify any existing regulations applicable to the safety of human life at sea.

1.7.2 Section 303(a)(9) – Fisheries Impact Statement

Section 303(a)(9) of the Magnuson-Stevens Act requires that any plan or amendment include a fishery impact statement which shall assess and describe the likely effects, if any, of the conservation and management measures on (a) participants in the fisheries and fishing communities affected by the plan or amendment; and (b) participants in the fisheries conducted in adjacent areas under the authority of another Council, after consultation with such Council and representatives of those participants taking into account potential impacts on the participants in the fisheries, as well as participants in adjacent fisheries.

The alternatives considered in this RIR are described in Section 1.6 of this document. Section 1.6 includes the impacts of these actions on participants in the fisheries and to the Nation.

2 Preparers and Persons Consulted

Preparers

Jeff Hartman, NMFS
Gretchen Harrington, NMFS
Mary Furuness, NMFS
Scott Miller, NMFS

Persons Consulted

Josh Keaton, NMFS
Julie Bonney, AGDB
Gabrielle Aberle, NMFS
Michael Fey, Alaska Fisheries Information Network

3 References

- Guyon, J.R., Guthrie, C.M., Munro, J.J., and Templin, W.D. 2015. Genetic Stock Composition Analysis of the Chinook Salmon Bycatch in the Gulf of Alaska Walleye Pollock (*Gadus chalcogrammus*) Trawl Fisheries, 2013. (Juneau, AK, National Marine Fisheries Service, Alaska Fisheries Science Center, Auke Bay Laboratories), pp. 26
- Krueger, Bonney and Mann, 2015. Letter to the North Pacific Fishery Management Council. Regarding Amendment 97 PSC limits, and request for emergency rule to reopen groundfish fisheries for the non-pollock, Non-Rockfish Program CV Sector. May 26, 2015.
- NMFS (National Marine Fisheries Service). 2015. North Pacific Groundfish and Halibut Observer Program, 2014 Annual Report. June, 2015. U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fishery Science Center, Seattle, WA.
- NMFS (National Marine Fisheries Service). 2012. Supplemental Biological Opinion on the Re-initiation of Endangered Species Act Section 7 Consultation on Incidental Catches of Chinook salmon in the Gulf of Alaska Groundfish Fisheries. January 9, 2012. U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Seattle, WA.
- NMFS. 2000. Supplemental Biological Opinion Reinitiating Consultation regarding Authorization of Bering Sea/Aleutian Islands Groundfish Fisheries. November 30, 2000. U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Seattle, WA.
- NPFMC. 2014. Environmental Assessment/Regulatory Impact Review/Final Regulatory Flexibility Analysis For an Amendment to the Fishery Management Plan for Groundfish of the Gulf of Alaska Chinook Salmon Prohibited Species Catch in the Gulf of Alaska Non-Pollock Trawl Fisheries. August 2014.

Personal Communications

- Phone call, Jeff Hartman to Julie Bonney, Alaska Groundfish Data Bank (AGDB), June 19, 2015, information on GOA voluntary pollock catch share agreement.
- Phone call and data request from Michel Fey to Jeff Hartman, Alaska Fisheries Information Network, personal communication, June 19, 2015

G:\FMGROUPE\GOA Trawl emergency rule\Rule\GOA Trawl Chinook PSC ER Non-Rock.rir.docx

R:\region\archives\2015\july\GOA Trawl Chinook PSC ER Non-Rock.rir.docx

Jhartman: 6/19/15, 6/22/15, 6/29/15, 7/22/15, 7/24/15

Lsmoker: 7/21/15

Gablele: 6/29/15

Gmerrill: 7/10/15