Alaska Groundfish Harvest Specifications Supplementary Information Report

January 2025

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1 Alaska Groundfish Harvest Specifications Background

The groundfish fisheries in Federal waters off Alaska are managed under the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (BSAI FMP) and the Fishery Management Plan for Groundfish of the Gulf of Alaska (GOA FMP). In the Bering Sea and Aleutian Islands (BSAI) and the Gulf of Alaska (GOA) groundfish harvests are managed subject to annual limits on the amounts of each species or species group that may be taken. The annual limits are referred to as "harvest specifications," and the process of establishing them is referred to as the "harvest specifications process." The U.S. Secretary of Commerce approves and implements the harvest specifications based on the recommendations of the North Pacific Fishery Management Council (Council) consistent with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

The National Marine Fisheries Service (NMFS) prepared the Alaska Groundfish Harvest Specifications Final Environmental Impact Statement (Final Harvest Specifications EIS)¹ for the harvest strategy used to set the annual harvest specifications. The Final Harvest Specifications EIS examines alternative harvest strategies for the federally-managed groundfish fisheries in the GOA and the BSAI management areas that comply with Federal regulations, the FMPs, and the Magnuson-Stevens Act. The Final Harvest Specifications EIS provides decision-makers and the public with an evaluation of the environmental, social, and economic effects of alternative harvest strategies. The preferred alternative established a harvest strategy for the BSAI and GOA groundfish fisheries necessary for the management of the groundfish fisheries and the conservation of marine resources, as required by the Magnuson-Stevens Act and as described in the management policy, goals, and objectives in the FMPs.

Annually, the Council's harvest specifications process is to apply the harvest strategy to the best scientific information available to derive annual harvest specifications. The Council's BSAI and GOA Groundfish Plan Teams use stock assessments to calculate biomass, overfishing limits (OFLs), and acceptable biological catch (ABC) for each species and species group for specified management areas. The SSC recommends OFLs and ABCs which provide the foundation for the Council and NMFS to develop the total allowable catch (TAC) for each species or species group. OFLs and ABCs reflect fishery science, applied within the requirements of the FMPs and the National Standard guidelines at 50 CFR 600.310. The TACs recommended by the Council are either at or below the ABCs but cannot exceed the ABCs. The sum of the TACs for each area (BSAI or GOA) is determined by the optimum yield established for that area, as defined at 50 CFR 679.20(a)(1) and in the BSAI and GOA FMPs. The optimum yield principle is governed by National Standard 1 under the Magnuson-Stevens Act, which states that, "conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry."² For the BSAI groundfish fishery the optimum yield is for the sum of TACs to be between 1.4 and 2 million metric tons. The optimum yield is often constraining on the TACs for the BSAI. That is because

¹ National Marine Fisheries Service, Department of Commerce (Jan. 2007), Alaska Groundfish Harvest Specifications Final Environmental Impact Statement: <u>https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-harvest-specifications-environmental-impact-statement-eis</u>

² 16 U.S.C. § 1851(a)(1); 50 CFR § 600.310(e)(3)

if the sum was set to ABCs, then the TACs would exceed 2 million metric tons. For the GOA groundfish fishery, the optimum yield is for the sum of TACs to be between 116,000 and 800,000 metric tons. The annual harvest specifications also announce the prohibited species catch (PSC) limits based on existing regulations and apportion limits and allowances consistent with the FMPs and in consideration of Council recommendations.

2 Purpose of this Supplementary Information Report

The National Environmental Policy Act (NEPA) requires the consideration of environmental effects in Federal decision making. NMFS must comply with NEPA before making final decisions about major Federal actions that could have environmental effects.³ As noted above, NMFS prepared the Final Harvest Specifications EIS to evaluate the environmental effects of alternative harvest strategies for developing the annual groundfish harvest specifications. NMFS selected one of those alternative harvest strategies (the preferred alternative, Alternative 2) for implementation in developing the annual groundfish harvest specifications, NMFS's Record of Decision. Before implementing the annual groundfish harvest specifications, NMFS evaluates and determines each year whether a Supplemental EIS (SEIS) is necessary.

This supplementary information report (SIR) evaluates whether NMFS should prepare a SEIS for the 2025 and 2026 groundfish harvest specifications. Generally, an SEIS should be prepared if a major federal action is incomplete or ongoing, and–

- 1. the agency makes substantial changes to the proposed action that are relevant to environmental concerns, or
- 2. there are substantial new circumstances or information about the significance of adverse effects that bear on the analysis (see e.g., 40 CFR 1502.9(d)(1)).⁴

Not every change requires a SEIS; only those changes that cause significantly different effects from those already studied require supplementary consideration.⁵ The Supreme Court directs that "an agency need not supplement an EIS every time new information comes to light after the EIS is finalized. To require otherwise would render agency decision-making intractable."⁶ On the other hand, if there remains a major Federal action to occur, and if significant new information or

³ 42 U.S.C. § 4332

⁴Regulations implemented in 2024 changed the wording for when supplementation is necessary due to new circumstances or new information (89 FR 35554, May 1, 2024). Under either regulatory formulation, the guidance is substantively the same and consistent with the standard used in case law that supplementation is required when the remaining governmental action would have environmentally significant impacts. See e.g., *Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 371-373 (1989). The Council on Environmental Quality has published an interim final rule to remove all regulations implementing NEPA (90 FR 10610, published February 25, 2025, effective 45 days thereafter). Consistent with CEQ guidance, NMFS will continue to voluntarily rely on CEQ NEPA regulations to complete ongoing actions, such as the 2025 and 2026 harvest specifications. NMFS also continues to follow existing NOAA practices and procedures, primarily NOAA's Policy and Procedures for Compliance with NEPA and Related Authorities (Companion Manual for NOAA Administrative Order 216-6A), as well as NEPA as amended. ⁵See *Davis v. Latschar*, 202 F.3d 359, 369 (D.C. Cir, 2000)

⁶See *Marsh* 490 U.S. at 373

circumstances indicates that the remaining action will affect the quality of the human environment in a significant manner or to a significant extent not already considered, a SEIS must be prepared.⁷ The NEPA therefore does not require the agency to take a new look every time it implements a component or step of an action previously-analyzed under NEPA, "so long as the impacts of that step were contemplated and analyzed by the earlier analysis."⁸ Ultimately, an agency is required "to take a 'hard look' at the new information to assess whether supplementation might be necessary."⁹

This SIR was prepared in conformance with NEPA and NOAA's Policy and Procedures for Compliance with NEPA and Related Authorities (Companion Manual for NOAA Administrative Order 216-6A), which provides: "A SIR is a concise document that describes the decision maker's evaluation of new information, changed circumstances, or proposed changes to an action and assists the decision maker in determining and documenting whether a supplemental NEPA document is necessary."¹⁰ In making this evaluation, NMFS analyzed available reports and data. To evaluate the 2025 and 2026 harvest specifications, NMFS analyzed the 2024 Stock Assessment and Fishery Evaluation (SAFE) reports (which include the Ecosystem Status Reports (ESR) for the Eastern Bering Sea, Aleutian Islands, and GOA and the Ecosystem and Socioeconomic Profiles (ESP)), catch and landings data and bycatch data from NMFS catch accounting system and the Observer Program, analyses and reports prepared by NMFS and others, reportings on take of species listed under the Endangered Species Act (ESA), new rules or program amendments, and public comments.

Since the publication of the Final Harvest Specifications EIS in 2007, NMFS has evaluated each year, prior to the implementation of the annual groundfish harvest specifications, whether a SEIS is required.¹¹ To date, NMFS has not concluded a SEIS is necessary.

The following sections discuss each of the considerations for evaluating the need for a SEIS: changes to the action (Section 3) and new information and new circumstances (Section 4). This SIR also looks at reasonably foreseeable future actions to gauge whether a future action, individually or cumulatively, could cause a substantial change in the harvest specification process or represent significant new circumstances or new information that would require a SEIS in the future.

⁷See Marsh, 490 U.S. at 374; Friends of the Clearwater v. Dombeck, 222 F.3d 552, 557-58 (9th Cir. 2000) ⁸N. Alaska Env't Ctr. v. U.S. Dep't of the Interior, 983 F.3d 1077, 1091 (9th Cir. 2020) (quoting Mayo v. Reynolds, 875 F.3d 11, 14-15 (D.C. Cir. 2017))

 ⁹Norton v. S. Utah Wilderness All., 542 U.S. 55, 72-73 (2004); Protect Our Communities Found. v. LaCounte, 939
F.3d 1029, 1040 (9th Cir. 2019)

¹⁰See Earth Island Inst. v. United States Forest Serv., 87 F.4th 1054, 1069 (9th Cir. 2023) (noting NEPA does not explain how agencies are to evaluate the significance of new information or circumstances, but courts have condoned the use of Supplemental Information Reports (SIRs) for this purpose); see also Marsh, 490 U.S. at 383-85 (upholding the Army Corps of Engineers' use of SIR to analyze significance of new reports questioning the environmental impact of a dam project)

 $^{^{11}} https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-harvest-specifications-environmental-impact-statement-eis$



Figure 1. Flow chart demonstrating the decision process for whether or not to complete a supplemental EIS using the SIR.

3 Changes to the Proposed Action

The first part of the inquiry to determine whether an SEIS is required is to consider whether there are substantial changes in the proposed action that are relevant to environmental concerns (Figure 1).

This action is the annual implementation of the preferred alternative harvest strategy as analyzed in the 2007 Final Harvest Specifications EIS. The EIS provides for the annual determination of the harvest specifications based on information developed through the harvest specifications process. The alternative harvest strategies for the federally-managed groundfish fisheries in the GOA and the BSAI management areas are designed to comply with the Magnuson-Stevens Act as implemented through the National Standard 1 guidelines in Federal regulations at 50 CFR 600.310 and the tier system and process in the FMPs.

The Tier System and Process in the FMPs

The FMP sets forth a tier system for the calculation of status determination criteria, which are the measurable and objective factors that are used to determine if overfishing has occurred or if the stock or stock complex is overfished. The OFL is a status determination criterion, and the OFL and ABC are reference points. To calculate OFL, the OFL control rule applies, which is prescribed through a set of six tiers corresponding to the level of reliable information available. To calculate ABC, the ABC control rule applies. These control rules are structured based on the type of information available, which is related qualitatively to the amount of scientific uncertainty. With less reliable information, the calculations become more precautionary.

Specification of ABC is similar to specification of OFL, in that both use harvest control rules with six tiers relating to various levels of information availability. However, the ABC control rule prescribes only an upper bound as a reduced ABC may be warranted based on the following process:

- Determine the appropriate tier (this is the same tier used to specify OFL).
- Determine the maximum permissible ABC fishing mortality rate from the appropriate tier of the ABC control rule.
- Determine whether conditions exist that warrant setting ABC at a value lower than the maximum permissible value (such conditions may include—but are not limited to—data uncertainty, recruitment variability, and declining population trend) and, if so:
 - a. document those conditions,
 - o recommend an ABC lower than the maximum permissible value, and
 - o explain why the recommended value is appropriate.

These steps are undertaken first by the assessment authors in the individual chapters of the SAFE report. The Plan Teams then review the SAFE report and make their own recommendations. The SSC then reviews the SAFE report and Plan Teams' recommendations, and makes its own recommendation to the Council. The Council then reviews the SAFE report, Plan Team recommendation, and SSC recommendation and makes its own recommendation to the

Secretary, with the constraint that the Council's recommended ABC cannot exceed the SSC's recommended ABC.

The Magnuson-Stevens Act directs that the Council's recommended annual catch limits (ACL) cannot "exceed the fishing level recommendations of its [SSC]" (16 U.S.C. 1852(h)(6)). NMFS has interpreted "fishing level recommendation" to be the ABC recommendation from the SSC (50 CFR 600.310(b)(2)(v)(D)). This ensures that the ACL does not exceed the ABC developed by the SSC. Under the FMPs, the ACL is equal to the ABC for each species or species group.

Finally, the specifications include the TACs (which are the annual catch targets described at 50 CFR 600.310). As defined in the FMPs and consistent with National Standard 1 regulations, the TAC is the annual catch target for a stock or stock complex, derived from the ABC by considering social and economic factors and management uncertainty (i.e., uncertainty in the ability of managers to constrain catch so the ACL is not exceeded, and uncertainty in quantifying the true catch amount) (50 CFR 600.310(f), (g)(4)). The FMP further provides that TAC may be lower than the ABC if warranted on the basis of bycatch considerations, management uncertainty, or socioeconomic considerations, or if required in order to cause the sum of the TACs to fall within the OY range. Consistent with National Standard 1 guidelines in Federal regulations at 50 CFR 600.310(f)(3), (f)(4), and (g)(4)).

The Annual Implementation of the Harvest Strategy Under the FMPs: The EIS stated that the preferred harvest strategy would be used in subsequent years for the development and implementation of the annual groundfish harvest specifications for the BSAI and GOA consistent with the FMPs. The 2025 and 2026 harvest specifications are consistent with the preferred alternative harvest strategy analyzed in the Final Harvest Specifications EIS because they were developed through the harvest specifications process that includes review by the Groundfish Plan Teams, SSC, AP, and Council. The recommended ABC does not exceed the recommended OFL and the recommended TAC does not exceed the ABC for any single species or species group. The sums of all TACs are also within the optimum yield established for both the BSAI and the GOA. The 2025 and 2026 harvest specifications therefore do not constitute a change in the proposed action analyzed in the Final Harvest Specifications EIS. The harvest specification process and the environmental consequences of the selected harvest strategy are fully described in the Final Harvest Specifications EIS.

The proposed 2025 and 2026 harvest specifications for the BSAI and GOA were published in the *Federal Register* on December 4, 2024 (89 FR 96186) and November 29, 2024 (89 FR 94680), respectively. The Council took final action to recommend final harvest specifications at its December 2024 meeting. NMFS is scheduled to publish the *Federal Register* notice announcing the final harvest specifications in March 2025.

Since 2007, NMFS has made some changes relevant to the harvest specifications; any recent changes (actions that occurred in the last two years) are described below and changes prior to 2023 are provided in previous SIRs. None of these changes, individually or cumulatively since 2007, represent a change in the proposed action relevant to environmental concerns as analyzed in the Final Harvest Specifications EIS. NMFS continues to use the preferred alternative

analyzed in the Final Harvest Specifications EIS and selected in the Record of Decision for the development and implementation of the groundfish harvest specifications, that is, to set TACs that fall within the range of ABCs recommended through the harvest specifications process and TACs recommended by the Council.

Recent Changes in Harvest Specifications: At the September 2023 meeting, the GOA Groundfish Plan Team recommended moving seven species of demersal shelf rockfish (DSR) of the other rockfish category to a GOA-wide assessment.¹² The SSC and the Council agreed with this recommendation. For the 2024 Plan Team cycle and 2025 GOA harvest specifications, the changes will result in the other rockfish category with one Gulf-wide OFL and ABC, with two sub-area apportionments of ABCs for Western/Central/West Yakutat (W/C/WYK) and Southeast Outside (SEO). This also results in two stock complexes for DSR with separate OFLs and ABCs for the W/C/WYK and SEO, respectively.

¹²<u>https://meetings.npfmc.org/CommentReview/DownloadFile?p=dd60bd2e-974d-4797-89ad-</u> 3eebd90136ef.pdf&fileName=C3%20GOA%20DSR%20Other%20Rockfish%20Spatial%20Management.pdf

4 New Circumstances and Information

The second part of the inquiry to determine whether an SEIS is required is whether there is substantial new information or circumstances about the significance of adverse effects that bear on the analysis in an EIS (Figure 1). Significant new information or circumstances triggers supplementation of an EIS when it indicates that the remaining action to occur will affect the quality of the human environment in a significant manner or to a significant extent not already considered in an EIS.¹³

Stock Assessment Reports: The primary sources of new information directly related to the action and its impacts are the 2024 BSAI and GOA SAFE reports, which include NMFS's annual EBS trawl survey results along with other resource surveys, information on previous fishery performance, ESRs, ESPs, and subsequent stock assessments.¹⁴ National Standard 2 guidelines in Federal regulations require that a SAFE report be prepared and updated or supplemented when new information is available to inform management decisions.¹⁵ The FMPs require production of an updated SAFE report draft each year in time for the annual December Council meeting.

The SAFE report contains a review of the latest scientific analyses and estimates of each species' biomass and past, present, and possible future condition of the stocks and groundfish fisheries off Alaska. The SAFE report also contains an economic summary informed by the Economic SAFE report and ecosystem information summarized from the ESR. The SAFE provides information to the Council and NMFS for recommending and setting, respectively, annual harvest levels for each stock and documenting significant trends or changes in the resource, marine ecosystems, and fisheries over time. The SAFE reports include a general introduction, stock assessment chapters, the ESRs, and any ESPs. The ESPs were developed as a framework for organizing ecosystem and socioeconomic information about an individual stock to inform environmental and ecosystem considerations, population dynamics, and fisheries performance.

Annually, the Council's BSAI Groundfish Plan Team compiles the stock assessment section of the SAFE report for the BSAI groundfish fisheries from chapters contributed by scientists at NMFS Alaska Fisheries Science Center (AFSC). The GOA Groundfish Plan Team compiles the SAFE report for GOA groundfish fisheries from chapters contributed by scientists at AFSC and the State of Alaska Department of Fish and Game (ADF&G). Each groundfish species or species group is represented in the SAFE report by a chapter containing the current year's stock assessment or catch report (which links the most recent stock assessment). New or revised stock

¹⁴ BSAI and GOA Ecosystem Status Reports are found here:

¹³ Marsh v. Oregon Nat. Res. Council, 490 U.S. 360, 374 (1989); *Earth Island Inst. v. United States Forest Serv.*, 87 F.4th 1054, 1069 (9th Cir. 2023); *see also City of Port Islabel v. FERC*, 111 F.4th 1198, 1207 (D.C. Cir. 2024)

https://www.fisheries.noaa.gov/alaska/ecosystems/ecosystem-status-reports-gulf-alaska-bering-sea-and-aleutian-islands

The Groundfish Economic Status Reports, as well as other information on the human dimensions of fisheries, are found here: https://reports.psmfc.org/akfin/f?p=501:2000.

¹⁵ 50 CFR § 600.315(d). This regulation defines a SAFE report as a public document or a set of related public documents that provides NMFS and the Council with a summary of scientific information concerning the most recent biological condition of stocks, stock complexes, and marine ecosystems and the social and economic condition of the recreational and commercial fishing interests, fishing communities, and the fish processing industries.

assessment models are generally previewed at the annual September Plan Team meeting and considered again by the Plan Team at its annual November meeting for recommending final OFL and ABC specifications for the two upcoming fishing years. The SAFE reports include recommendations by the author(s) and Plan Teams for an OFL and ABC for each species or species group managed under the FMP.



Figure 2. Flowchart demonstrating the groundfish harvest specifications process

The 2025 and 2026 harvest specifications are informed by the 2024 SAFE reports. The Plan Teams met twice in person to review the status of each species or species group that is managed under each FMP, as well as the information presented in any ESPs and in the ESRs. The Plan Team review was based on presentations by AFSC and ADF&G scientists with opportunity for

public comment and input. The information presented at the Plan Team meetings was compiled into the 2024 SAFE reports. The 2024 SAFE reports describe in detail the new information available since the 2023 SAFE reports, including new survey data, new fishery performance information, economic data, and ecosystem information. This new information resulted in new estimations of OFLs and ABCs for a number of species and species groups, as detailed in the SAFE reports. The BSAI and GOA Plan Team recommendations were forwarded and presented to the Council and its SSC and AP for consideration and final action in December 2024.

Based on this information, the Council recommended the 2025 and 2026 harvest specifications in December 2024. First, the SSC reviewed the SAFE reports (stock assessments, ESPs, and ESRs), models, OFLs, and ABCs derived from the Plan Team recommendations. The SSC either aligned with the Plan Team recommendations or developed its own recommendations for the OFLs and ABCs. The SSC may also provide feedback to the stock assessment author for future year's assessments and models. Second, the AP and the Council considered the ABC recommendations, together with biological, social, and economic factors and the Council recommended TAC levels at or below ABC levels for each species or species group (Figure 2). NMFS will implement the final harvest specifications in the *Federal Register* in 2025.

The preferred harvest strategy analyzed in the Final Harvest Specifications EIS anticipated that information on changes in species abundance and condition, environmental and ecosystem factors, and socio-economic conditions are used each year in setting the annual harvest specifications. It is a flexible process designed to adjust to new information. While in any given year there may be new information available, the Harvest Specification EIS states that new information would be incorporated into the harvest specifications process such that the harvest specifications would each year represent the best scientific information available.

The use of new information from the SAFE reports, including risk tables which incorporate information from ESRs and ESPs, allows the SSC and Council to respond to environmental changes and stock changes in the BSAI and GOA and to adjust the harvest specifications as necessary. This is consistent with the preferred harvest strategy from the Final Harvest Specifications EIS and with National Standard Two of the Magnuson-Stevens Act to use the best scientific information available.

Within the SAFE report introductions is an overview of stock status projected for 2025.¹⁶ Overall, according to this new information, there has been no change in any stock's status relative to the established status determination criteria. No groundfish stocks are overfished nor is any overfishing occurring.

Figure 3. Summary of BSAI and GOA stock status next year (spawning biomass relative to B_{msy} ; horizontal axis) and (current year catch relative to fishing at F_{msy} ; vertical axis). Note that sablefish is for Alaska-wide values. In the BSAI, due to model changes in 2024 Aleutian Island Pacific cod is not included in this figure. In the GOA, stock status was carried over the previous

 $^{^{16}} https://www.npfmc.org/wp-content/PDF documents/SAFE/2024/BSAI intro.pdf; https://www.npfmc.org/wp-content/PDF documents/SAFE/2024/GOA intro.pdf$

year for arrowtooth flounder, rougheye/blackspotted rockfish, Pacific ocean perch, flathead sol, rex sole, and Dover sole.



Bering Sea and Aleutian Islands





The status of the groundfish stocks in the BSAI and GOA are stable for continued commercial fisheries based on the most recent stock assessments (SAFE reports for the BSAI and GOA). The

ESRs also present a Fish Stock Sustainability Index (FSSI)¹⁷ which is a performance measure for the sustainability of stocks that are important to commercial and recreational fisheries. The FSSI indicates that the majority of Alaska groundfish (and crab) stocks continue to be sustainably managed.

Information on environmental and ecosystem factors and additional socio-economic conditions presented in the SAFE reports falls within the scope analyzed in the Final Harvest Specifications EIS. The EIS analyzed the effects of the preferred harvest strategy on target species, non-target species, forage fish, prohibited species (including salmon, Pacific halibut, and crab), marine mammals, seabirds, habitat, ecosystem, socio-economic impacts, and environmental justice considerations. More information on the integration of ecosystem and environmental factors into the specifications process, as well as information on the resource component categories analyzed in the EIS with relevant information for consideration in this year's SIR, is summarized in Section Ecosystem-sensitive management.

NMFS has determined that the information presented on species abundance and condition, environmental and ecosystem factors, and socio-economic conditions used to set the 2025 and 2026 harvest specifications does not represent a significant change relative to the environmental impacts of the harvest strategy analyzed in the Final Harvest Specifications EIS. And, this year there is no additional or new information that falls outside the scope of the Final Harvest Specifications EIS process for the consideration of new information (i.e., the new information is not of a scale or scope that it could not be incorporated and integrated into the SAFE reports and harvest specifications based on those reports through the process and implementation of the strategy analyzed in the Final Harvest Specifications EIS).

Chapter 3 of the Final Harvest Specifications EIS identified reasonably foreseeable future actions that may affect the BSAI and GOA groundfish fisheries and the impacts of the fisheries on the environment. We use these actions to inform our examination of whether there is substantial new information or circumstances about the significance of adverse effects that bear on the analysis in the Final Harvest Specifications EIS. Significant new information or circumstances triggers supplementation of an EIS when it indicates that the remaining action to occur will affect the quality of the human environment in a significant manner or to a significant extent not already considered in the Harvest Specifications EIS.

In addition, NMFS considers in this SIR whether other actions that have occurred since 2007, and were not anticipated in the Final Harvest Specifications EIS, have a bearing on the harvest strategy or its impacts and provide a seriously different picture of the likely environmental harms. Key information reviewed in the SIR include the 2024 SAFE reports, analyses prepared to support NMFS management actions, updated catch and bycatch data, and other best available scientific information.

¹⁷https://www.fisheries.noaa.gov/national/population-assessments/fishery-stock-status-updates

The reasonably foreseeable actions in the Final Harvest Specifications EIS are grouped into the following categories:

- Catch share management (Section Catch Share Management4.1)
- Traditional management tools (Section 4.2)
- Ecosystem-sensitive management (Section 4.3)
- Actions by other Federal, state, international agencies, and private actions¹⁸

Overall, the information detailed in this section does not present a seriously different picture of the likely environmental harms of the implementation of the 2025 and 2026 groundfish harvest specifications beyond what was considered in the Final Harvest Specifications EIS. The annual implementation of the specifications will not affect the human environment in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS.

4.1 Catch Share Management

This section describes actions that improve fisheries management, but they do not alter the harvest specification process or change the analysis in the Final Harvest Specifications EIS of impacts of the harvest strategy on the human environment. They therefore do not constitute "significant new circumstances" necessitating a supplemental EIS. Catch share actions that occurred prior to 2023 are included in the Appendix of this document.

4.1.1 Bering Sea

Amendment 122 Pacific Cod Trawl Cooperative Program: On August 8, 2023, NMFS issued a final rule implementing Amendment 122 to the BSAI FMP (88 FR 53704), establishing the Pacific Cod Trawl Cooperative Program (PCTC Program) to allocate BSAI Pacific cod quota share to qualifying groundfish License Limitation Program (LLP) license holders and qualifying processors with a history of Pacific cod legal landings in 2009 to 2019, with the additional years of 2004 through 2009 for LLP licenses with transferable AI endorsements. This program superseded the Aleutian Islands Pacific Cod CV harvest set aside program and removed regulations at 50 CFR § 679.20(a)(7)(viii).

quota share holders are required to join a cooperative, and the aggregate quota share of cooperative members and associated processors yields an exclusive harvest privilege for PCTC Program cooperatives, which NMFS will issue as cooperative quota each year. Halibut and crab PSC limits are also allocated annually based on the percentage of total BSAI Pacific cod cooperative quota allocated to their cooperative. The PCTC Program reduces the halibut and crab PSC limits for participating trawl CVs during the A and B seasons.

¹⁸NMFS did not identify any new or additional actions by other Federal, state, international, or private actors for 2024 that warrant examination in this SIR. A summary of actions prior to 2024 can be found in the prior SIRs (. No other additional actions by other Federal, state, and international agencies, or private actions, have occurred that would change the analysis in the Final Harvest Specifications EIS of the impacts of the harvest strategy on the human environment.

Pacific cod trawl harvest is apportioned by seasons: January 20-April 1 (A season), April 1-June 10 (B season), and June 10-November 1 (C season). The PCTC Program allocates only A and B season trawl CV sector apportionments to cooperatives as cooperative quota. The C season apportionment remains a limited access fishery open to all trawl CVs with LLP license endorsements to harvest Pacific cod in the BSAIwith trawl gear.

The PCTC Program modifies existing GOA sideboard limits and associated GOA halibut PSC limits for non-exempt AFA vessels and LLP license holders and closes directed fishing where sideboard limits are too small to support a directed fishery. This prevents holders of quota share from expanding their fishing effort in GOA fisheries while still allowing cooperative members to catch up to the historical percentage of species they harvested in non-rationalized GOA groundfish fisheries. **The EA and FONSI accompanying this action found no significant environmental impacts**.¹⁹

Monitoring Requirement for Pot Catcher Processors (CPs): On November 9, 2023, NMFS issued a final rule to revise monitoring requirement for pot gear CPs in the BSAI (88 FR 77228). The intent of this rule is to improve observer data collection errors that have impacted catch estimates. The rule requires participants in this fishery to carry a Level 2 observer, to comply with pre-cruise meeting notifications, and to meet certification and testing standards by choosing any, all, or none of the following voluntary monitoring options: providing certified observer sampling stations, installing motion-compensated and NMFS-approved platform and flow scales, and carrying additional observers on the vessel. This action also consolidates existing regulations for longline CPs and halibut decksorting under a single subpart. NMFS determined this action is categorically excluded from further NEPA review.

4.1.2 Gulf of Alaska

Amendment 124/112: In 2023, NMFS published a final rule to implement Amendment 124 to the BSAI FMP and Amendment 112 to the GOA FMP to revise IFQ and CDQ Program regulations in the BSAI and GOA (88 FR 12259, February 27, 2023). This rule amended regulations for pot gear configurations, pot gear tending and retrieval requirements, pot limits, and associated recordkeeping and reporting requirements. This rule authorized jig gear as a legal gear type for the harvesting of sablefish IFQ and CDQ and temporarily removed the Adak Community Quota Entity (CQE) residency requirement for a period of five years. The EA and FONSI accompanying this action found there were no significant environmental impacts.²⁰

Amendment 113: Modify the CGOA Rockfish Program: On August 16, 2024, NMFS published the final rule to implement Amendment 113 to the FMP for the groundfish of the GOA (89 FR 66633). This final rule modifies specific provisions of the Central Gulf of Alaska (CGOA) Rockfish Program (RP) to change the season start date, remove the CV CQ cap, and revise the processing and harvesting caps. This final rule is necessary to provide increased flexibility and efficiency and to help ensure the rockfish TAC is fully harvested and landed in

¹⁹https://media.fisheries.noaa.gov/2023-08/Final-Am-122-BSAI-PCTC-Program-EA-RIR.pdf

²⁰https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-proposed-amendment-124-bsai-fmp

Kodiak while maintaining the intent of the RP. This action is intended to promote the goals and objectives of the Magnuson-Stevens Act, the GOA FMP, and other applicable laws. The EA indicates that a change in the start date is unlikely to have impacts on the process of spawning or larval dispersal for rockfish program species. The action is likely to have minimal effects on the groundfish species caught, unallocated species, and PSC and EFH.²¹ **The EA and FONSI determined that the action will not significantly affect the quality of the human environment.**²²

4.2 Traditional management tools

Traditional management tools are those designed to define target species, and to determine, authorize, manage, or enforce limits on the harvest of target species. These measures improve management of the fisheries, but they do not alter the harvest specification process or change the analysis in the Final Harvest Specifications EIS of impacts of the harvest strategy on the human environment. Therefore, the new management tools implemented in the BSAI and GOA since 2007 do not constitute "significant new circumstances" necessitating a supplemental EIS. Any action that occurred prior to 2023 are included by reference in the Appendix of this document.

Annual Deployment Plan (ADP) for Observers and Electronic Monitoring: Since 2013, NMFS has developed an ADP to explain how observers and Electronic Monitoring (EM) systems (sensors, cameras, and hard drives) will be deployed to collect information from North Pacific fishing operations and the agency prepares an Annual Report that evaluates the performance of the prior year's ADP. A draft ADP for the coming year of sampling is released in September, and a final ADP is released in December. Through the ADP and annual report process, NMFS evaluates the impact of changes in observer and EM deployment to identify where improvements are needed to maintain a scientifically rigorous data collection program for groundfish and halibut fisheries. All ADPs are available online.²³

Under the current Observer Program, fishing activities are classed as belonging to either partial or full coverage. In the full coverage component of the program every trip is monitored; one observer or EM system is required on catcher vessels and two or more observers and compliance cameras are required on mothership and catcher/processor vessels to monitor all fishing events. NMFS has determined that full coverage is needed in programs where catch is allocated to specific entities with quotas and transferable PSC limits since economic incentives could exist for the industry to under-report PSC discarded at-sea, especially in catch share programs where limits are placed on the amount of catch that may be retained and discarded. Catch share programs with transferable PSC allocations include Bering Sea pollock (both American Fisheries Act and Community Development Quota (CDQ) programs), the groundfish CDQ fisheries (CDQ fisheries other than Pacific halibut and fixed-gear sablefish; only vessels greater than 46 ft LOA), the Pacific cod trawl catcher vessel program (PCTC) and the Central GOA Rockfish Program. The vast majority of groundfish harvest is covered by the full coverage portion of the program.

²¹https://www.fisheries.noaa.gov/s3//2025-01/Final-Environmental-Assessment-Regulatory-Impact-Review-Amd-113.pdf

²²https://www.fisheries.noaa.gov/s3//2025-01/0648-BM69_FR_FONSI_Final.pdf

²³https://www.fisheries.noaa.gov/tags/north-pacific-observer-

 $program? title= annual\%20 deployment \& field_species_vocab_target_id= \& sort_by= created$

In the partial coverage component of the program, a subset of trips are randomly selected for monitoring by an observer or EM system and the ADP specifies the scientific sampling design and the selection rate—the portion of trips that are sampled. The <u>final 2025 ADP</u> describes how NMFS intends to assign fishery observers and EM to vessels fishing in the North Pacific during the 2025 calendar year.²⁴ Vessels that request and are approved for fixed-gear EM will be placed in the fixed-gear EM pool if there is sufficient funding to support them. Vessels measuring less than 40 ft. in length overall and vessels fishing with jig gear (including handline, jig, troll, and dinglebar troll gear) are currently not subject to EM or observer coverage. NMFS has published a final rule to implement an EM program for pelagic trawl pollock catcher vessels and tender vessels delivering to shoreside processors and stationary floating processors in the BSAI and GOA (89 FR 60796, <u>07/29/2024</u>). Starting in 2025, trawl vessels must opt-in annually by 1 November, and be approved by NMFS, to participate in the EM Trawl category for the upcoming fishing year. The remaining vessels are monitored by observers and vessel owners/operators declare each trip in the Observer Declare and Deploy System (ODDS) to determine if a trip is selected for coverage.

Data collection through the Observer Program provides a reliable and verifiable method for NMFS to gain fishery discard and biological information on fish, and data concerning seabird and marine mammal interactions with fisheries. These data contribute to the best available scientific information used to manage the fisheries in the North Pacific. Observers prioritize recording takes of marine mammals, collecting snouts and deep tissue samples from all freshly dead pinnipeds (except walrus), and collecting deep tissue samples from all dead cetaceans that are in good condition. Observers also prioritize recording takes of ESA-listed species (i.e., short-tailed albatross, spectacled eiders, and Steller's eiders), collect specimens from ESA-listed species, and rehabilitate injured ESA-listed species if possible. However, takes of marine mammals and ESA-listed species have historically been rare, and so the majority of an observer's time is typically spent recording the composition of groundfish species caught and collecting age and length samples. A full description of observer sampling priorities can be found in the annual observer sampling manual.²⁵

Amendments 126/114: Expand electronic monitoring for the pollock fisheries: On July 29, 2024, NMFS published the final rule to implement Amendment 126 to the BSAI FMP and Amendment 114 to the GOA FMP to expand EM to the pollock fisheries (89 FR 60796). This rule implements an EM program for pelagic trawl pollock catcher vessels and tender vessels delivering to shoreside processors and stationary floating processors in the BSAI and GOA. As described in the EA/RIR and FONSI, the action would not result in significant impacts on the human environment.²⁶

Amendment 52 and Regulatory Changes: Revision to economic data reporting requirements: On February 6, 2023, NMFS published the final rule to implement Amendment 52 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs

²⁴https://www.fisheries.noaa.gov/resource/document/2025-annual-deployment-plan-observers-and-electronic-monitoring-groundfish-and

²⁵https://www.fisheries.noaa.gov/resource/document/north-pacific-observer-sampling-manual

²⁶https://www.fisheries.noaa.gov/s3/2024-01/0648-BM40-Trawl-EM-Analysis.pdf

(Crab FMP) to revise economic data reporting requirements and to make other regulatory changes on economic data reporting requirements for groundfish and crab fisheries off Alaska (88 FR 7586). This rule removes third-party data verification audits and blind formatting requirements for the BSAI crab fisheries Economic Data Report (EDR), as well as for the Bering Sea American Fisheries Act (AFA) pollock fishery, Chinook Salmon EDR, BSAI Amendment 80 fisheries EDR, and eliminates the EDR requirements for the GOA trawl fisheries. It also increases the usability and accessibility of the EDR data for Council and NMFS analysts and minimizes costs. **This action was categorically excluded from further NEPA review.**

4.3 Ecosystem-sensitive management

Ecosystem-sensitive management includes those measures designed to manage the impacts of fishing for target species on other parts of the environment, including non-target fish species, habitat, marine mammals, and seabirds. Since 2007, the role of ecosystem considerations in fisheries management has evolved. For example, the Council has completed and NMFS has implemented the Fishery Management Plan for Fish Resources of the Arctic Management Area (Arctic FMP), which includes a thorough description of the Arctic marine ecosystem (74 FR 56734, November 3, 2009). Since 2007, the Council has recommended and NMFS has implemented seabird protection measures, habitat protection measures, Steller sea lion protection measures, and measures to minimize halibut and Chinook salmon bycatch. Additionally, NMFS and the Department of Interior regularly review the status of marine mammals. These actions are outlined below by the following resource component categories analyzed in the Final Harvest Specifications EIS that have information relevant for consideration in this year's SIR:

- Ecosystem
- Non-Specified and Forage Fish Species
- Prohibited Species (Salmon, Halibut, and Crab)
- Marine Mammals
- Seabirds
- Habitat

4.3.1 Ecosystem

Consideration of Ecosystem and Environmental Factors

The increasing use of ecosystem and environmental factors in the annual harvest specification process was analyzed in the Final Harvest Specifications EIS and is consistent with the preferred harvest strategy. The Final Harvest Specifications EIS anticipated that changes in information and circumstances would be used each year in setting the annual harvest specification. The process is flexible to implement the harvest strategy based on new information and circumstances on stock abundance and condition, ecosystem and environmental factors, and socio-economic conditions. Similarly, the FMPs contemplate ongoing consideration of relevant factors through the development of SAFE reports including ESRs (see BSAI FMP Section 3.2.2.2; GOA FMP Section 3.2.2.2). The use of new information from stock assessments and the risk tables, which include information from ESRs and ESPs, allows the Council and NMFS to

respond to changes in stocks and ecosystem and environmental conditions in the BSAI and GOA. There is flexibility to adjust the harvest specifications for stocks as necessary based on the most recent, best available information based on the process, although the process (the implementation of the harvest strategy) remains consistent year to year. This approach is consistent with the preferred harvest strategy from the Final Harvest Specifications EIS, the FMPs, and National Standard 2 of the Magnuson-Stevens Act to use the best scientific information available.

Ongoing research has increased NMFS' understanding of the interactions among ecosystem components, including how they are impacted by changing environmental conditions related to climate change.

The purpose of the ESRs is to provide the Council, scientific community, and the public, as well as NMFS, with annual information about ecosystem status and trends for the Bering Sea, Aleutian Islands, and Gulf of Alaska. The ESRs inform stock assessment models and annual harvest recommendations, including through stock assessment specific risk tables. The risk tables include four considerations: assessment-related, population dynamics, environmental/ecosystem, and fishery performance. The risk tables inform Plan Team and SSC OFL and ABC recommendations by signaling the status of these four considerations for a species or species group. This means that a reduction can occur for the maximum recommended ABC as specified by the stock assessment model or as recommended by the author. Risk tables are most informative for the specification of ABC by accounting for additional scientific information and uncertainty that is not captured in the modeling. This approach is consistent with the FMPs and National Standard 1 regulations that ABC accounts for scientific uncertainty in the estimate of OFL and "any other scientific uncertainty".²⁷

Some stock assessments also include an ESP, which is a framework for organizing ecosystem and socioeconomic information about an individual stock. The ESP informs environmental and ecosystem considerations, population dynamics, and fisheries performance about that stock and is also integrated into the stock assessment in the risk table.

As a result, new information and circumstances on the BSAI and GOA ecosystems are adequately incorporated in the groundfish harvest specifications process such that the setting of OFL and ABC for species and species groups accounts for the best scientific information available. The ESRs and ESPs can be helpful for setting TACs. In the TAC setting process, the Council reviews the Plan Team and SSC reports. With this information, public comment, and TAC recommendations from the Council's Advisory Panel, the Council recommends TACs to NMFS. NMFS reviews those recommendations, the Plan Team and SSC reports, the SAFE reports, and other relevant documents. TACs are set equal to or less than the ABCs for each species or species group. The TAC setting process is therefore informed by ecosystem information and circumstances based on the best scientific information available.

The Final Harvest Specifications EIS recognizes an increasing role for ecosystem considerations in the annual specifications setting process, which supports the findings in the EIS concerning

²⁷ 50 CFR § 600.310(f)(1)(ii), (f)(3); BSAI FMP Sections 3.2.1 and 3.2.3.3.1; GOA FMP Sections 3.2.1 and 3.2.3.3.1).

the impacts of the harvest strategy on the human environment. The inclusion of ecosystem considerations into the harvest specifications process is therefore within the scope of the preferred alternative analyzed in the Harvest Specifications, and the circumstances and information presented on environmental, ecosystems, and socio-economic conditions used to set the 2025 and 2026 harvest specifications do not represent a significant change relative to the environmental impacts of the harvest strategy analyzed in the Final Harvest Specifications EIS.

Climate Change: Climate change is accounted for in NMFS's decision-making on the annual implementation of the harvest specifications, consistent with the harvest strategy in the FMP and analyzed in the Final Harvest Specifications EIS. In Chapter 3.5, the Final Harvest Specifications EIS examined existing physical and oceanographic conditions in the BSAI and GOA, and addressed climate and ecological regime shifts, warming and loss of sea ice, and acidification. The Final Harvest Specifications EIS also discussed systemic ecosystem impacts in Chapter 11.

The EIS analyzed alternatives for an implementing framework process for the BSAI and GOA harvest strategy and evaluated the potential effects of those alternatives on the human environment. This framework process for the harvest strategy under the Final Harvest Specifications EIS results in the effects of climate change being considered in the annual process for setting the harvest specifications. As discussed in this SIR, the SAFE reports are prepared annually and include the ESRs, which summarize and present information about ecosystem status and trends, physical oceanography, biological data, and socio-ecological dimensions. There are many examples of climate variability considerations presented in the ESRs, including: 1) physical indicators and oceanographic metrics (e.g., sea surface and bottom temperatures, marine heatwaves, wind, and sea-ice and cold pool extents); 2) impacts from oceanographic changes (e.g., changes in sea ice and cold pool extents resulting in distributional shifts (northward) in stocks); 3) climate-driven changes to metabolic demands and foraging conditions tied to declining conditions for groundfish during recent marine heatwaves; 4) impacts of anomalously warm conditions in the marine and river environments on juveniles and adults of certain salmon stocks; and 5) emerging stressors like ocean acidification and implications for species (e.g., crab).

The Council and the Plan Teams, SSC, and AP annually review the ESRs prior to the review of the stock assessments and advancing recommendations to NMFS for the annual OFLs, ABCs, and TACs. The ESRs provide the scientific review body (the SSC) with context for the annual biological reference points (OFLs and ABCs), and for the Council's final TAC recommendations for groundfish, which are constrained by those biological reference points. Information from the ESRs are also integrated into the annual harvest recommendations through inclusion in stock assessment-specific risk tables.

The harvest specifications process therefore uses the best scientific information available on climate variability, as summarized primarily from the SAFE reports (including the ESRs). The information from the SAFE reports and other sources are considered during the harvest specifications process and used to evaluate risk, uncertainty, and ecosystem factors when setting TACs in the manner consistent with the preferred strategy contemplated by the Final Harvest Specifications EIS.

New information related to specific aspects of the ecosystem (i.e., non-target species) are evaluated below in the subsections of Section 4.3. The evaluation as well as other information in the SAFE reports demonstrate that the effects of climate change were contemplated in the Final Harvest Specifications EIS and are incorporated into the harvest specification process through the annual implementation of the preferred alternative.

While the use of ecosystem and environmental factors, including climate variability, in the annual harvest specification process was analyzed in the Final Harvest Specifications EIS and is consistent with the preferred harvest strategy and the FMPs, the information and circumstances presented on such factors does not represent a significant change relative to the impacts of the preferred harvest strategy analyzed in the Final Harvest Specifications EIS. There is no additional or new information that falls outside the scope of the Final Harvest Specifications EIS process for the consideration of new information (i.e., the new information is not of a scale or scope that it could not be incorporated and integrated into the SAFE reports and harvest specifications based on those reports through the process and implementation of the strategy analyzed in the Harvest Specifications EIS).

4.3.2 Non-Specified Species and Forage Species

The EIS examined impacts on the non-specified fish species category, which are species that are not defined in the BSAI or GOA FMPs as target, other, forage, or prohibited species. At that time, non-specified fish species included jellyfish, grenadiers (a group of deep-sea species related to hakes and cods), starfish, prowfish, smooth lumpsuckers, eels, sea cucumbers, Pacific lamprey, greenling, and Pacific hagfish, among others. Grenadiers are now managed as an ecosystem component species under the FMPs.

Petition to list the sunflower sea star under the ESA: In August 2021, the Center for Biological Diversity petitioned the Secretary of Commerce to list the sunflower sea star (Pycnopodia helianthoides) as a threatened or endangered species under the ESA and to designate critical habitat concurrent with the listing. NMFS announced a 90-day finding on the petition, finding the petition presented substantial scientific information indicating listing may be warranted, and initiated a status review to determine whether a listing under the ESA is warranted (December 27, 2021, 86 FR 73230). On March 16, 2023, NMFS published a proposed rule (88 FR 16212) to list the sunflower sea star as a threatened species under the ESA and solicited public comment to inform the final listing determination as well as the development of future potential protective regulations and future critical habitat designation. NMFS did not propose to designate critical habitat in the proposed rule because it is not currently determinable. As a proposed species for listing, sunflower sea stars were included in the analysis for the 2024biological opinion on the GOA groundfish fisheries through a conference opinion.²⁸

The Final Harvest Specifications EIS examined impacts on forage fish, including mortality, spatial and temporal impacts, prey, and habitat. The EIS indicated that almost all the GOA

²⁸https://repository.library.noaa.gov/view/noaa/66786

forage fish incidental catch, and most of the BSAI incidental catch, consists of smelts (Family Osmeridae, including capelin, eulachon, and other smelts).

Information on forage fish is compiled for the BSAI and GOA every two years. The forage fish report presents available data on trends in abundance and distribution of forage populations (primarily bottom trawl survey data) and a description of their interactions with federal fisheries as incidental catch. Osmerids and shrimp account for almost all of the incidental catch in the BSAI. Osmerids regularly make up the vast majority of forage fish incidental catch in the GOA. Overall, incidental catch of forage fish has declined in both the BSAI and GOA.²⁹

4.3.3 Prohibited Species

Prohibited species actions prior to 2023 are included in the Appendix of this document.

4.3.3.1 Halibut Bycatch Management

In 2023, NMFS published a final rule to implement Amendment 123 to the BSAI FMP and regulations governing limits on Pacific halibut (*Hippoglossus stenolepis*) PSC, following the Council recommendation in December 2021. The intent of the final rule (88 FR 82740, November 24, 2023) is to minimize halibut mortality and may result in additional harvest opportunities in the commercial, subsistence, and recreational halibut fisheries. NMFS prepared an EIS that analyzed a range of alternatives for proposed management measures to correlate or link the Amendment 80 commercial groundfish trawl fleet's Pacific halibut PSC limit in the BSAI groundfish fisheries to halibut abundance. The EIS and record of decision accompanying this action found that the preferred alternative implemented through Amendment 123 provides reasonable and practical means to avoid, minimize, or compensate for environmental harm from this action.

The action specifies halibut PSC limits for the Amendment 80 sector based on fisheryindependent indices of halibut abundance derived from scientific survey data. The two survey indices recommended by the Council and implemented in the final rule are the International Pacific Halibut Commission (IPHC) setline survey index in Area 4ABCDE and the NMFS Alaska Fisheries Science Center (AFSC) Eastern Bering Sea (EBS) shelf trawl survey index. Each year, the IPHC will calculate an index of halibut biomass in Area 4ABCDE, which it will provide to NMFS. NMFS will categorize the resulting index into one of four abundance index ranges: very low, low, medium, or high. Similarly, the AFSC will use the most recent results from the EBS shelf trawl survey to calculate an index of halibut biomass and NMFS will categorize the resulting index into one of two ranges: low or high. The value at the intercept of those separate indices in table 58 to 50 CFR part 679 will be the Amendment 80 sector's halibut PSC limit for the following calendar year. The Amendment 80 sector's halibut PSC limit will be

²⁹https://www.npfmc.org/wp-content/PDFdocuments/SAFE/2024/Forage.pdf

updated each year based on the survey indices and announced in the groundfish harvest specifications.³⁰

International Pacific Halibut Commission: Each year, the International Pacific Halibut Commission (IPHC) assesses the status of the halibut stocks and sets the constant exploitation yield (CEY), which is the amount of halibut harvest that is determined to be sustainable in a year. The total CEY is calculated by multiplying a target harvest rate by the total exploitable biomass and represents the sum of all halibut removals. After deducting non-directed fishery removals (i.e., incidental catch in the groundfish fisheries, wastage in halibut fisheries, recreational harvest, and subsistence use), the remainder is allocated to the directed commercial and guided sport fisheries. In 2012, the IPHC adopted a new assessment model that is more consistent with the observed fishery and survey results than past assessments. Based on the results derived from the 2012 model, estimates of recent recruitment are lower than previously thought and commercial catch limits have been reduced over the past several years. Total mortality (including Pacific halibut removals for subsistence, recreational, commercial, nondirected discards, and commercial discards for all IPHC areas)³¹ steadily continues to decline through 2024 (Table 4-1. Total Halibut Mortality, 2015-2025Tabl). The IPHC Commissioners and their advisors convened at the IPHC Annual Meeting January 27 through January 31, 2025, to consider the most recent stock assessment, catch limit recommendations, and stakeholder input, and to set the catch limits for 2025.

Year	Total Mortality (million pounds)		
2015	42.31		
2016	42.02		
2017	42.21		
2018	38.50		
2019	39.97		
2020	34.23		
2021	38.18		
2022	38.62		
2023	34.56		

Table 4-1. Total Halibut Mortality, 2015-2025

³⁰https://www.fisheries.noaa.gov/resource/document/final-environmental-impact-statement-bering-sea-and-aleutian-islands-bsai-halibut

https://www.fisheries.noaa.gov/s3/2023-03/amd-123-halibut-abm-rod.pdf

³¹https://www.iphc.int/uploads/2025/01/iphc-2025-tsd-008.xlsx

2024	32.70
2025	31.62 (projected) ³²

Each year, on behalf of the IPHC, NOAA publishes notice of the effectiveness of the IPHC's annual management measures in the *Federal Register* for the commercial and recreational Pacific halibut fisheries, after approval by the Secretary of State and the concurrence of the Secretary of Commerce. These actions enhance the conservation of Pacific halibut and further the goals and objectives of the North Pacific Fishery Management Council.

Overall the impacts of halibut catch in all fisheries are not likely to be different than was analyzed in the Final Harvest Specifications EIS because of the IPHC's process for setting the CEY and existing fishery restrictions, including restrictions on halibut bycatch in the groundfish fisheries, remain the same or similar as was analyzed in the Final Harvest Specifications EIS.

The Final Harvest Specifications EIS analyzed impacts of the harvest strategy on halibut and halibut bycatch, including impacts to mortality, spatial and temporal impacts to genetic structure of the population and reproductive success, prey for halibut, and habitat for halibut. Information on halibut bycatch in the GOA and BSAI groundfish fisheries is available on the NMFS webpage for catch and landings reports³³ and indicates for 2024 that no sector exceeded a halibut bycatch limit.³⁴ The 2024 EBS ESR also included an overview of foraging and energetics for halibut, and the 2024 AI ESR evaluated changes in the biomass of fish apex predators, including halibut. Based on the the updated analyses on the various halibut bycatch actions, directed fishery management under the IPHC, bycatch reports, and the information and circumstances in the 2024 SAFE reports, NMFS has determined that the annual implementation of the groundfish harvest specifications will not affect the human environment in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS regarding impacts to halibut.

4.3.3.2 Salmon bycatch management

4.3.3.2.1 Salmon bycatch management in the BSAI

Annual reports on the number of incidentally caught Chinook and non-Chinook in the BSAI are available at Alaska Region website on the catch and landings page.³⁵ In 2024, 10,458 Chinook salmon were incidentally caught in the BSAI groundfish fisheries with 8,046 Chinook salmon out of the total incidentally caught in the BSAI pollock directed fisheries.³⁶ In 2024, 39,386 non-

³⁴https://www.fisheries.noaa.gov/sites/default/files/akro/car120_psc_bsai_with_cdq2024.html; https://www.fisheries.noaa.gov/sites/default/files/akro/car150_goa_halibut_mortality2024.html

³²https://www.iphc.int/uploads/2025/01/IPHC-2025-AM101-R-Report-of-the-AM101-1.pdf

³³https://www.fisheries.noaa.gov/alaska/commercial-fishing/fisheries-catch-and-landings-reports-alaska

³⁵https://www.fisheries.noaa.gov/alaska/commercial-fishing/fisheries-catch-and-landings-reports-alaska

³⁶https://www.fisheries.noaa.gov/sites/default/files/akro/chinook_salmon_mortality2024.html

Chinook salmon were incidentally caught in the BSAI groundfish fisheries with 35,130 non-Chinook salmon out of the total incidentally caught in the BSAI pollock directed fisheries.³⁷

NMFS and the Council have taken comprehensive action through Amendments 91 and 110 (the background of these Amendments are described in the appendix) to the BSAI FMP and implementing regulations to reduce salmon bycatch in the pollock trawl fishery because of the potential for negative impacts on salmon stocks. Existing measures have reduced salmon bycatch in the pollock fishery in comparison to the fishery without the measures. Regulations that set limits on how many Chinook salmon can be taken in a year are found at § 679.21. NMFS annually allocates portions of either 33,318, 45,000, 47,591, or 60,000 Chinook salmon PSC limits among the AFA sectors, depending on past bycatch performance, on whether Chinook salmon bycatch IPAs are formed and approved by NMFS, and on whether NMFS determines it is a low Chinook salmon abundance year. NMFS will determine that it is a low Chinook salmon abundance year when abundance of Chinook salmon in western Alaska is less than or equal to 250,000 Chinook salmon. The State of Alaska provides to NMFS an estimate of Chinook salmon abundance using the 3-System Index for western Alaska based on the Kuskokwim, Unalakleet, and Upper Yukon aggregate stock grouping. As a result, the process of setting the annual Chinook PSC limits accounts for the current status of Chinook salmon based on the State's 3-System Index. For 2024, the adult Chinook salmon run sizes from the Unalakleet, Upper Yukon, and Kuskokwim rivers was less than the threshold level of 250,000.³⁸ For 2025, NMFS determined it was a low abundance year and set the limits in accordance with 50 CFR 679.21(f) with a performance standard of 33,318 and an overall PSC limit of 45,000. These limits are found in the final groundfish harvest specifications for the BSAI.

At their December 2022 meeting, the Council initiated action to modify chum salmon bycatch management measures in the Bering Sea pollock fishery. In April 2023, the Council received a report from its Salmon Bycatch Committee on recommendations for regulatory and non-regulatory chum salmon bycatch management measures. The Council initiated an analysis of potential additional chum salmon bycatch management measures. In October 2023, the Council considered a draft for preliminary review³⁹ and revised the alternatives for initial review.⁴⁰ The initial review of the Council's selected alternatives, as presented in a preliminary Draft Environmental Impact Statement (DEIS), occurred in April 2024. The Council revised the alternatives and asked for analysis of the effects of the revised alternatives⁴¹. Refer to Section 5, Future Actions for more information on the Chum Bycatch analysis reviewed by the Council in February 2025.

 ³⁷https://www.fisheries.noaa.gov/sites/default/files/akro/chum_salmon_mortality2024.html
³⁸https://meetings.npfmc.org/CommentReview/DownloadFile?p=a3eff3f3-b517-430d-af48-6b05579905e5.pdf&fileName=C3%20Chinook%20Index%202024%20letter%20to%20NMFS.pdf

³⁹https://meetings.npfmc.org/CommentReview/DownloadFile?p=5b15695d-d544-4385-87cbb5cdfee54909.pdf&fileName=C4%20Chum%20Salmon%20Bycatch%20Analysis.pdf

⁴⁰https://meetings.npfmc.org/CommentReview/DownloadFile?p=399d2901-eed2-49f3-b416-

⁰⁰⁶a3b025113.pdf&fileName=C4%20Council%20Motion%20Chum%20Salmon%20Bycatch.pdf ⁴¹https://meetings.npfmc.org/CommentReview/DownloadFile?p=51652c12-1852-4f1d-baecbb983368467f.pdf&fileName=C2%20Motion.pdf

In January 17, 2024, the Association of Village Council Presidents, Kuskokwim River Inter-Tribal Fish Commission, Tanana Chiefs Conference, Yukon River Drainage Fisheries Association, and Yukon River Inter-Tribal Fish Commission requested that the Department of Commerce take emergency action pursuant to the Magnuson-Stevens Act, 16 U.S.C. § 1855(c)(1), and institute a cap of zero on any further Chinook salmon bycatch in the BS pollock trawl fishery and that the emergency regulation stay in effect for 180 days. NMFS denied the request for emergency action and determined that the request did not meet the three criteria necessary to implement an emergency rule⁴².

The stock assessment for Bering Sea pollock includes information in its ecosystem considerations section on salmon bycatch. Bycatch is described in terms of CPUE (i.e., total count of salmon per total duration of all tows) and split by the A and B seasons for the pollock fishery. For non-Chinook salmon (~99 percent chum salmon), bycatch has fluctuated on an annual basis and more than 99% of non-Chinook bycatch occurs during the B season. For Chinook salmon, bycatch has fluctuated on an annual basis in the A season and is consistently lower in the B season. However, since 2008, annual Chinook bycatch remains lower on average.⁴³ For 2023, the adult equivalence analysis estimates the number of Chinook salmon that would have returned to Coastal Western Alaska and Upper/Middle Yukon river systems was 4,074 salmon. The average for 2011-2023 is 6,749 salmon.⁴⁴ The genetic analysis is not yet finalized for the estimate of Chinook salmon that would have returned to Western Alaska in 2024.

NMFS also genetically samples non-Chinook bycatch to determine the composition of chum salmon originating from Coastal Western Alaska and Upper/Middle Yukon river systems. However, NMFS does not have an adult equivalency analysis for chum salmon equivalent to Chinook estimates. Based on the available genetic sampling, NMFS estimated the number of Western Alaska chum salmon in the B season that the pollock fleet caught (Table 4-2). On average from 2020-2024, 10.92 percent of chum salmon bycatch originated from Western Alaska river systems.⁴⁵

Year	Number of Coastal	Proportion of	Number of	Proportion
	Western Alaska	Coastal Western	Upper/Middle	Upper/Middle
	chum salmon	Alaska chum	Yukon chum	Yukon chum
	caught in the B	salmon caught in	salmon caught in	salmon caught in
	season	the B season	the B season	the B season
2020	27,441	8%	3,773	1.1%
2021	48,657	8.9%	2,854	0.5%

Table 4-2. Estimated number of Coastal Western Alaska and Upper/Middle Yukon chum salmon caught in the B season for the pollock fishery, 2020-2024.

⁴⁴https://meetings.npfmc.org/CommentReview/DownloadFile?p=ea59d5e2-4de4-4d4e-9369-

⁴²https://www.fisheries.noaa.gov/feature-story/noaa-fisheries-denies-request-emergency-action-bering-sea-chinook-salmon-bycatch

⁴³://www.npfmc.org/wp-content/PDFdocuments/SAFE/2024/EBSpollock.pdf

⁴ffe0991cf43.pdf&fileName=C2%20Chinook%20Genetics%20Report.pdf

⁴⁵https://meetings.npfmc.org/CommentReview/DownloadFile?p=93adc8a8-9284-4731-b492-

⁷⁴d535241a78.pdf&fileName=C2%20Chum%20Salmon%20Genetics%20Report.pdf; Data are sourced from AKFIN and the NMFS Catch Accounting System. 2024 data will be finalized in a genetics report in April 2025.

2022	51,106	21.1%	4,618	1.9%
2023	9,257	8.3%	2,544	2.3%
2024	2,835	8.3%	1,650	4.8%

The ESRs provide additional information on the status of salmon in the Bering Sea ecosystem and Aleutian Islands ecosystem. The 2024 ESRs included information on salmon in the EBS ecosystem and AI ecosystem, including a synthesis of the status of adult and juvenile chum, Chinook, and sockeye salmon; updated information on the abundance of salmon; fish condition and trends; trends in the run size of Bristol Bay sockeye salmon; the increasing abundance and role of eastern Kamchatka pink salmon in the Aleutian Islands; and trends in directed commercial catch of salmon.

The 2024 EBS ESR summarizes the contrasting, species-specific responses to the recent return to cool/average temperatures following a period of anomalously warm conditions spanning from approximately 2014 to 2021. For chum, the trend of increasing adult returns, juvenile abundance, and above-average to average juvenile condition in recent years point to signs of recovery in western Alaska chum salmon populations. However, a consistent relationship between juvenile chum salmon abundance and future adult returns has not been established, and continued recovery likely depends on environmental conditions remaining favorable. In contrast to chum salmon, western Alaska Chinook salmon do not appear to show signs of recovery in response to the recent cooler conditions. While western Alaska Chinook salmon runs also declined substantially during the recent marine heatwaves, these populations have been declining more broadly since the early 2000s, pointing to a more complex set of stressors that may be constraining production of these stocks. While the abundance of many salmon stocks declined during the recent marine heatwave, Bristol Bay sockeye salmon exhibited an opposite response, with record-high run sizes observed during this time-period. The abundance of Bristol Bay sockeye peaked in 2021–2022, reflecting a strong 2017 year-class and positive ocean entry conditions in 2019. The contrasting response of Bristol Bay sockeye to marine temperature conditions likely reflects their freshwater rearing and marine migratory life histories. Given responses to temperature variation, continued Bering Sea temperatures near or below average may be expected to result in more modest Bristol Bay run sizes in the near future. For juvenile salmon, across species, the 2024 EBS ESR summarized juvenile salmon condition trends in the EBS, noting that juvenile pink, chum, coho, and Chinook salmon in the southern EBS exhibited energy density values that were more consistent with lower energy stores and a reduced capacity for overwinter survival. The juvenile salmon entered the northern Bering Sea in 2024 with average to positive energy stores, which may contribute to higher overwinter survival (when food is limited) and higher adult returns. The 2024 AI ESR includes an evaluation of the implications from the increasing abundance and expanding role of eastern Kamchatka pink salmon in the AI ecosystem, noting that pink salmon grow exceptionally fast, consume a large amount of various prey, and potentially affect growth and survival of other species in the North Pacific Ocean and Bering Sea.

The Final Harvest Specifications EIS analyzed impacts of the harvest strategy on salmon, salmon bycatch, directed salmon fisheries, and subsistence harvests, including in the context of salmon run failures and impacts on salmon harvests that had occurred. The Final Harvest Specifications EIS also analyzed impacts to mortality, spatial and temporal impacts to genetic structure of the population and reproductive success, prey for salmon, and habitat for salmon. Based on the

reports and data available for impacts to salmon and as summarized above, there is no new substantial information and circumstances to indicate the annual implementation of the groundfish harvest specifications will affect the human environment in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS.

4.3.3.2.2 Salmon Bycatch Management in the GOA

As required by the terms and conditions of the supplements published in 2007 and 2009 and the 2000 Biological Opinion, the Alaska Region provides the Northwest Region with additional information in the annual report on salmon incidental catch in all of the Alaska groundfish fisheries. The Alaska Region continues to publish this annual report, with a count of 27,931 incidentally caught Chinook salmon in the GOA groundfish fisheries reported in 2024. Take in the GOA groundfish fishery has not been exceeded in recent years for ESA-listed salmon species.

For all years between 2013 and 2024, the annual Chinook salmon incidental catch in the GOA pollock fisheries was less than 26,000 salmon. In 2024, 25,367 Chinook were incidentally caught in the GOA pollock fishery.⁴⁶ Regulations impose bycatch limits in the directed pollock fishery of 6,684 Chinook salmon in Western GOA and 18,316 Chinook salmon in the Central GOA (50 CFR 679.21(h)(2)). The cap of 18,316 salmon was exceeded in the Central GOA in 2024 and the pollock fishery in statistical areas 620 and 630 was closed for the remainder of 2024 as a result.⁴⁷ Annual reports on the number of incidentally caught Chinook in the GOA are available at Alaska Region website on the catch and landings page.⁴⁸

The 2024 ESR provides additional information on the status of salmon in the GOA ecosystem, including updated information on marine conditions for pink salmon growth and survival, juvenile salmon abundance in Icy Strait, juvenile salmon size and condition trends in Icy Strait, trends in coho, sockeye, and pink salmon survival in Auke Creek, and trends in directed commercial catch of salmon.

Based on the reports and data available, as summarized above, there is no new substantial information and circumstances to indicate that the annual implementation of the groundfish harvest specifications will affect the human environment in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS, which analyzed impacts of the harvest strategy on salmon and salmon bycatch, impacts to mortality, spatial and temporal impacts to genetic structure of the population and reproductive success, prey for salmon, and habitat for salmon.

 $^{^{46}} https://www.fisheries.noaa.gov/sites/default/files/akro/car142_goa_salmon2024.html$

⁴⁷https://www.fisheries.noaa.gov/bulletin/ib-24-41-nmfs-prohibits-directed-fishing-pollock-vessels-using-trawl-gear-

central#:~:text=The%20National%20Marine%20Fisheries%20Service,2024%2C%20according%20to%20Jonathan %20M.

 $^{^{48}} https://www.fisheries.noaa.gov/sites/default/files/akro/goasalmonmort2024.html$

4.3.3.2.3 ESA Consultations on ESA-listed salmon for GOA and BSAI Groundfish Fisheries

Chinook salmon from the West Coast Region: The effects of groundfish fisheries on ESAlisted salmon were analyzed in the December 2, 2009 and January 11, 2007 supplements to the November 30, 2000 biological opinion regarding the BSAI and GOA groundfish fisheries (NMFS 2000), and the supplemental opinion issued on January 9, 2012 (NMFS 2012). Those consultations concluded that groundfish fisheries may adversely affect, but are not likely to jeopardize the continued existence of ESA-listed salmon species. The conclusions of these consultations remain effective for the BSAI groundfish fisheries. In November 2022, AKR SFD indicated its intention to reinitiate consultation on the GOA and BSAI groundfish fisheries. On December 23, 2024, NMFS completed ESA Section 7 consultation on the GOA groundfish fisheries, which replaced the GOA portions of the 2000, 2007, 2009 biological opinions. This 2024 biological opinion concluded that the GOA groundfish fisheries are likely to adversely affect some threatened salmon species, but not likely to jeopardize the continued existence of any of those threatened salmon species (Lower Columbia River Chinook salmon, Snake River fall-run Chinook salmon, and Upper Willamette River evolutionary significant unit (ESU) Chinook salmon); NMFS determined other species of salmon were not likely to be adversely affected by the GOA groundfish fisheries. NMFS anticipates completing consultation on BSAI groundfish fisheries in 2025.

The 2000 biological opinion, and subsequent consultations, concluded that the incidental take statement established a threshold of 40,000 Chinook salmon annually caught in the GOA groundfish fisheries, including those caught in the Snake River fall-run Chinook salmon, would not jeopardize the continued existence of listed salmon.⁴⁹ The 2024 biological opinion, which supersedes the 2000 biological opinion and its supplements for the GOA groundfish fisheries, determined that the following salmon ESUs would be adversely affected: Lower Columbia River Chinook salmon, Snake River Fall-run Chinook salmon, and Upper Willamette River Chinook salmon.⁵⁰ Consistent with the 2000 biological opinion, the 2024 biological opinion specifies an incidental take statement of 40,000 Chinook salmon in the GOA groundfish fisheries, determining this level of catch would continue to not jeopardize the continued existence of any ESA-listed salmon species or stock. As noted in the 2024 biological opinion, PSC limits for Chinook salmon in the trawl fisheries in the GOA are set lower than the 40,000 Chinook salmon limit in the ITS, providing an additional buffer.

In order to continue to monitor the effects of groundfish fisheries on ESA-listed salmon, a condition of those consultations was for the Alaska Regional Office to submit a yearly incidental catch report to the West Coast Regional Office.⁵¹ No ITS was exceeded in 2024 for ESA-listed salmon species.

⁴⁹https://repository.library.noaa.gov/view/noaa/17209

⁵⁰ https://repository.library.noaa.gov/view/noaa/66786

⁵¹https://www.fisheries.noaa.gov/alaska/commercial-fishing/fisheries-catch-and-landings-reports-alaska

NMFS AKRO also prepares a yearly report for the Alaska groundfish fisheries Chinook salmon coded wire tag and recovery data that supplements the annual report data on salmon incidental catch and salmon bycatch reduction measures.⁵²

4.3.3.3 Crab bycatch management

In June 2023, the Council tasked staff to prepare a discussion paper to inform potential Gulf of Alaska (GOA) Tanner crab *Chionoecetes bairdi* protections.⁵³ At their February 2024 meeting, the Council reviewed and received a presentation on the discussion paper for GOA Tanner crab protections that examined catch and Tanner crab bycatch by target groundfish fisheries and gear types during 2019-2023 in ADF&G statistical areas 525630 and 525702, Tanner and king crab distributions, and options for observer monitoring in areas around Kodiak Island.⁵⁴ The Council requested an expanded discussion paper for the April 2025 Council meeting to further analyze the areas of highest Tanner crab abundance and distribution, modification of existing closure areas, and compare seasonal effort harvest, and value of Tanner crab and groundfish fisheries in ADF&G statistical areas 525630 and the Central GOA.⁵⁵

There are no crab bycatch limits in the GOA. Annual reports on the number of incidentally caught crab in the BSAI are available at Alaska Region website on the catch and landings page.⁵⁹ Reports indicate for 2023 and 2024 that no sector in the BSAI exceeded a crab bycatch limit. Additionally, the trawl gear sector in the BSAI was below 15% utilization of the limits.⁵⁶

In October 2021, the SAFE for EBS snow crab provided assessment results on the stock and showed that mature male biomass was 50,600 mt, which is less than the minimum stock size threshold of 76,700 mt.⁵⁷ Therefore, the stock was declared overfished by NMFS. In 2023, NMFS announced approval of Amendment 53 to the Crab FMP to implement a rebuilding plan for snow crab (88 FR 61477, September 7, 2023). The objective of the amendment is to rebuild the snow crab stock consistent with the requirements of the Magnuson-Stevens Act. NMFS continues to monitor the status of the stock through regular stock assessments. The 2024 EBS ESR included a summary of the EBS snow crab stock biomass indices. Total snow crab biomass increased in 2024 by 277 percent relative to 2023, although it still represents a 56 percent decline since 2018. Across the board increases were seen in mature females (+173 percent), immature females (+462 percent), mature males (+50 percent), immature males (+303 percent), legal males

 $^{^{52}} https://www.fisheries.noaa.gov/resource/document/annual-report-alaska-groundfish-fisheries-chinook-salmon-coded-wire-tag-and$

⁵³https://meetings.npfmc.org/CommentReview/DownloadFile?p=454ff62f-407c-40dc-9420-

⁵¹⁹⁵ db441 f7a.pdf & file Name = E% 20 Motion% 20 GOA% 20 Tanner% 20 crab.pdf

⁵⁴https://meetings.npfmc.org/CommentReview/DownloadFile?p=1bbd9eed-1da0-42ed-af47-cd52196deaa7.pdf&fileName=D2%20Action%20Memo.pdf

⁵⁵https://meetings.npfmc.org/CommentReview/DownloadFile?p=bd2857c4-8dca-497c-a1f3-86eb64523616.pdf&fileName=D2%20Council%20Motion.pdf

⁵⁶https://www.fisheries.noaa.gov/sites/default/files/akro/car120_psc_bsai_with_cdq2024.html; https://www.fisheries.noaa.gov/sites/default/files/akro/car250_psc_crab2024.csv

⁵⁷https://meetings.npfmc.org/CommentReview/DownloadFile?p=5606e5d3-2fb3-4b3b-9094-

⁵bd86298563a.pdf&fileName = 1%20 Eastern%20 Bering%20 Sea%20 Snow%20 Crab%20 SAFE.pdf

(+114 percent), and industry-preferred size (+49 percent). The ESR notes that increases in population biomass were driven by a combination of increased abundance and larger crab relative to prior years.

The 2024 EBS ESR also includes biomass indices for other commercial crab species, with declines in the biomass of female and male Pribilof Islands blue king crab and St. Mathew blue king crab, declines in biomass of female Bristol Bay red king crab but increases in male Bristol Bay red king crab, and increases in the biomass of female and male Tanner crab. For all crab species, including snow crab, the ESR notes that historical trends of commercial crab biomass and abundance are highly variable, environmental variability and exploitation affect trends in commercial crab biomass over time, and recent modeling analyses suggest that environmental variability is largely driving inter-annual variability in crab stock recruitment. Although it is unclear at what life stage crab stock variability is determined, the ESR notes that it is likely that environmental variability affecting larval survival and changes in predation affecting juvenile survival are important factors.

The updated analyses on the various crab bycatch actions, bycatch reports, and the information and circumstances in the 2024 SAFE reports indicate the annual implementation of the groundfish harvest specifications will not affect the human environment in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS, which analyzed impacts of the harvest strategy on crab and crab bycatch, including impacts to mortality, spatial and temporal impacts to genetic structure of the population and reproductive success, prey for crab, and habitat for crab.

4.3.4 Marine Mammals

Since the Final Harvest Specifications EIS, NMFS and US Fish and Wildlife Service have taken a number of actions under the ESA and MMPA related to the status of marine mammal species in Alaska. A summary of these actions can be found in last year's SIR.⁵⁸ We have considered these actions in the context of changed circumstances, as well as new information, about marine mammals. We conclude that, at this time, none of the new information and new circumstances would change the analysis in the Final Harvest Specifications EIS of the impacts of the harvest strategy on listed and unlisted marine mammal species. The Final Harvest Specifications EIS examined the impacts of alternative harvest strategies on listed and unlisted marine mammals including the level of incidental take and entanglement (relative to the potential biological removal), the harvest of prey species and impacts to prey availability and foraging success, and disturbance to marine mammals from fishing operations (vessel traffic and noise and use of gear). Impacts on marine mammals were examined relative to the level of total harvest under each alternative harvest strategy.

ESA Consultation for the GOA Groundfish fisheries: NMFS reinitiated consultation on the GOA groundfish fisheries on July 15, 2024. The Protected Resources Division (PRD) of NOAA NMFS Alaska Region completed their Biological Opinion and Conference Opinion on the effects of all groundfish fisheries managed under the GOA FMP and State of Alaska parallel

⁵⁸ https://www.fisheries.noaa.gov/s3//2024-04/SIR-clean-copy-508.pdf

groundfish fisheries on ESA-listed species, species proposed to be listed, and designated critical habitat on December 23, 2024. NMFS concluded that the GOA groundfish fisheries analyzed in that opinion are not likely to jeopardize the continued existence of any threatened or endangered species under NMFS's jurisdiction. It was also NMFS's conference opinion that the GOA groundfish fisheries are not likely to jeopardize the continued existence of the proposed threatened sunflower sea star. The biological and conference opinion for the GOA groundfish fisheries is available on the website.⁵⁹

New Information Since the 2024 SIR: NMFS reviewed available information on marine mammals, including the most recent Marine Mammal Stock Assessment Report (SAR) (89 FR 104989, December 26, 2024) and the 2024 ESRs for the GOA, EBS, and AI. The 2024 ESRs provide information on marine mammals and ecosystem conditions (which, where relevant, is summarized below for specific marine mammal stocks), as well as summaries of marine mammal strandings in the GOA, EBS, and AI and declared unusual mortality events (UME) (such as the gray whale UME).

The most recent SAR summaries take information of marine mammals that has been updated since the last SIR was finalized in February 2024.⁶⁰ The most recent stock assessment report (SAR) for marine mammals that occur in Alaska was finalized in December 2024.⁶¹ The MMPA requires SARs to be reviewed annually for stocks designated as strategic and within three years for all other marine mammal stocks. Only Steller sea lions have new take information discussed in the most recent SAR, however preliminary take information is also discussed for killer whales to illustrate that the anomalously high level of take experienced in 2023 was not repeated in 2024. NMFS has also included information on ESA-listed humpback whales, non-ESA listed eastern North Pacific gray whales, and non-ESA listed northern fur seals.

NMFS is not aware of any nutritional insufficiencies at this time as a result of prey competition and foraging between marine mammals and Federal commercial groundfish fisheries. NMFS is also not aware of any new information on disturbance to marine mammals from fishing operations.

More information on the status of marine mammals and agency actions for listed and unlisted marine mammals can be found in prior years' SIRs, including the 2024 SIR.

Steller Sea Lions: The Western district population segment (WDPS) of Steller sea lions is listed as endangered under the ESA (50 CFR 224.101). In February 2020, NMFS issued its most recent five-year review of the endangered WDPS of Steller sea lions. NMFS reviewed the best scientific and commercial information and data available, including new information available since the listing of the DPS, to conclude that no change in status was warranted and that the WDPS should remain listed as endangered under the ESA.⁶² According to the five-year review,

⁵⁹https://www.fisheries.noaa.gov/resource/document/biological-opinion-national-marine-fisheries-service-alaska-region-sustainable

⁶⁰https://www.fisheries.noaa.gov/s3//2024-04/SIR-clean-copy-508.pdf

⁶¹https://www.fisheries.noaa.gov/s3/2024-12/Alaska_SARs_Final_2023.pdf

⁶²https://www.fisheries.noaa.gov/resource/document/western-distinct-population-segment-steller-sea-lion-5-year-review-summary-and

threats and uncertainties continue to influence the recovery potential of the WDPS of Steller sea lions, but the review did not identify any new threats. Prey availability, predation, toxins, and marine debris continue to be identified as key factors influencing the recovery of the WDPS of Steller sea lions. The five-year review noted impacts from the 2014-2016 marine heat wave in the GOA, including impacts to Steller sea lion prey, the decline of Steller sea lion pups between 2015 and 2017, and the survival of adult female Steller sea lions.

NMFS has reviewed recent data, surveys, and studies as well as the 2024 ESRs. Recent data suggests adult females may have recovered from the effects of the North Pacific marine heatwave based on recent data.⁶³ Another recent study on body condition discusses the importance of body size on juvenile and adult survival, its influence on time to weaning, and how time to weaning can be optimized for different habitats based on long-term factors like prey dynamics; however, the study does not identify immediate red flags for Steller sea lions.⁶⁴

In the GOA and AI ESRs, Steller sea lion non-pup estimates are one of a suite of indicators used in report cards that provide an overview of the status of the ecosystem across trophic levels and assess ecosystem function and structure across subregions. The GOA ESR noted a recent decreasing trend in the Western and Eastern GOA based on non-pup model predicated counts. In the AI, trends vary across regions (decreasing in the Western Aleutians, stable in the Central, and increasing in the Eastern). Specific to the Aleutian Islands, the 2024 AI ESR summarized studies relevant to potential factors influencing the observed trends for Steller sea lions (see the AI ESR for citations, p. 78-79), including nutrition (prey species, seasonal trends, spatial variability). Studies note that the dominant prey species in subregions of the Aleutian Islands include Atka mackerel and Pacific cod, but studies also found seasonal differences in diets. Another recent study "found no evidence to support correlations between population trend and certain diet metrics—diet diversity, species mix, and energy density—suggesting other factors were at play if nutrition was a factor in sea lion declines."

A primary focus of ESA consultations (including the 2010, 2014, and 2024 biological opinions) and the Final Harvest Specifications EIS is the impacts of the groundfish fisheries on prey availability for Steller sea lions, although the EIS also noted threats from predation, toxic substances and diseases, and marine debris. The Final Harvest Specifications EIS is clear that the harvest of prey species by the groundfish fisheries is recognized as a very important potential impact on Steller sea lions. The EIS summarizes information on important prey for Steller sea lions (Pacific cod, Atka mackerel, and pollock) and impacts to abundance and distribution of these prey species from fishing. As a result of concerns with impacts from fishing on prey availability, numerous Steller sea lion protection measures were enacted. These measures mainly focused on establishing harvest limits by sector, area, and season for the Atka mackerel, Pacific cod, and pollock fisheries in the Aleutian Islands, as well as spreading effort over space and time to prevent localized depletion of prey. These measures (68 FR 204, January 2, 2003; 75 FR 77535, December 13, 2010, corrected 75 FR 81921, December 29, 2010; 79 FR 70286,

⁶³Hastings, K.K., et al., 2023. Reduced survival of Steller sea lions in the Gulf of Alaska following marine heatwave. https://doi.org/10.3389/fmars.2023.1127013

⁶⁴ Hastings, K. K., Johnson, D. S., Pendleton, G. W., Fadely, B. S., & Gelatt, T. S. 2021. Investigating lifehistory traits of Steller sea lions with multistate hidden Markov mark–recapture models: Age at weaning and body size effects. Ecology and Evolution, 11(2), 714-734

November 25, 2014), as well as others, have been in place for over 10 years and have coincided with a measured increase in overall abundance for the WDPS of Steller sea lions. A comprehensive list of Steller sea lion protection measures can be found on the NOAA website.⁶⁵

The Final Harvest Specifications EIS also analyzed the impacts of the alternative harvest strategies on Steller sea lions with regard to incidental take from entanglement in fishing gear and marine debris. The EIS considered the take relative to the potential biological removal and in consideration of the total harvest under each alternative harvest strategy. Between 2017 and 2021, the mean annual mortality and serious injury (M/SI) rate for U.S. commercial fisheries in Alaska (including state and Federal fisheries) was a rate of 24 WDPS Steller sea lions. This metric is inclusive of fisheries that are monitored by fisheries observers. The fisheries where these incidents occurred include the BSAI trawl fisheries for Atka mackerel, flatfish, Pacific cod, and pollock; BSAI longline cod; GOA trawl fisheries for flatfish and pollock and the GOA sablefish longline fishery. A summary of these interactions and additional information about this stock are found in the most recent stock assessment for this population.⁶⁶ The mean M/SI for U.S. commercial fisheries is below the potential biological removal (PBR)⁶⁷ for the WDPS Steller sea lions of a value of 299. In the BSAI pollock trawl fishery, the mean estimated annual M/SI is 7.0. In the BSAI Amendment 80 (flatfish) trawl fishery, the mean estimated annual M/SI is 13.

Additional information on Steller sea lion biology, status, and threats is available at:

Steller Sea Lion Species Description⁶⁸ Marine Mammal Stock Assessment Reports: Pinnipeds - Otariids⁶⁹ 2018 Status Review⁷⁰ Steller Sea Lion Critical Habitat⁷¹ Steller Sea Lion Protection Measures Timeline⁷²

Humpback Whales: On September 8, 2016, NMFS revised the listing status of humpback whales under the ESA to divide the globally-listed species into 14 distinct population segments (DPSs) (81 FR 62260). Listed DPSs that occur in Alaska are the Mexico DPS (threatened) and the Western North Pacific DPS (endangered). Additionally, the unlisted Hawaii DPS also occurs in Alaska. In April 2021, NMFS issued a final rule (86 FR 21082, April 21, 2021) designating critical habitat under the ESA for humpback whales. Humpback whale critical habitat was

lion&sa=D&source=docs&ust=1740705831568522&usg=AOvVaw3ADbC83DlvzYo55c6t5FF_

 $^{^{65}} https://www.fisheries.noaa.gov/alaska/commercial-fishing/steller-sea-lion-protection-measures$

⁶⁶https://www.fisheries.noaa.gov/s3/2024-12/2023_SAR_Steller_Sea_Lion_Western_Stock.pdf

⁶⁷The term "potential biological removal level" means the maximum number of animals, not including natural mortalities that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. 16 U.S.C. § 1362(20).

⁶⁸https://www.google.com/url?q=https://www.fisheries.noaa.gov/species/steller-sea-

 $[\]label{eq:searchiser} {}^{69} https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-species-stock#pinnipeds---otariids%C2%A0(eared-seals-or-fur-seals-and-sea-lions)$

 $^{^{70}} https://www.fisheries.noaa.gov/action/five-year-review-2018-endangered-western-distinct-population-segment-steller-sea-lion$

⁷¹https://www.fisheries.noaa.gov/action/designation-critical-habitat-steller-sea-lions

⁷² https://www.fisheries.noaa.gov/alaska/commercial-fishing/steller-sea-lion-protection-measures
designated for three DPSs (Central America, Mexico, and Western North Pacific). However, only the Mexico DPS and Western North Pacific DPS occur in Alaska waters. Designations were proposed for all three ESA-listed humpback whale DPSs in the North Pacific in October 2019 (84 FR 54354) and were finalized in 2021. Critical Habitat for the Western North Pacific DPS is designated at 59,411 square nautical miles (nmi²) in the Eastern Bering Sea (EBS) and GOA. Critical habitat for the Mexico DPS is designated at 116,098 nmi² in the EBS, GOA, and California Current System.

The most recent status review for humpback whales was in 2015.⁷³ The report identified that, in the Pacific Ocean, the main threats to humpback whales are energy development, whaling, competition with fisheries, vessel collisions, and fishing gear entanglements. From the list of identified threats to humpbacks in the North Pacific, the main overlap with GOA and BSAI groundfish fisheries would be competition with fisheries, vessel collisions, and fishing gear entanglements. Directed Federal fisheries off Alaska do not target humpback whale primary prey species, although there is incidental catch of some forage fish species like herring and eulachon. Trawl fisheries in the BSAI are subject to a bycatch, or prohibited species catch, limit for herring (set at 1 percent of the annual eastern Bering Sea herring biomass) (50 CFR § 679.21(e)(1)(v)). Herring catch in the groundfish fisheries is generally low, with occasional years of larger catches, and osmerid catch (of which eulachon is the most abundant) have been low in the BSAI and GOA relative to historical levels, except one year (GOA, 2021). More details are available in the forage fish report, which summarizes available data on trends in abundance and distribution of forage populations and describes their interactions with federal fisheries through bycatch,⁷⁴ and more analysis on the competition for humpback whale prey and the GOA groundfish fisheries is found in the 2024 biological opinion.⁷⁵

Documented collisions between fishing vessels and humpback whales are rare, and most documented fatal vessel strikes occur with vessels like cruise ships or shipping vessels. Entanglement risk for humpback whales with groundfish fisheries, particularly in fixed and untended gear, remains a threat. Two humpback whale mortalities were observed in the BSAI pollock trawl fishery between 2016 and 2020, resulting in a minimum estimated mean annual mortality and serious injury rate of 0.4 humpback whales, of which 0.03 was prorated to the Mexico-North Pacific stock and 0.008 was prorated to the Western North Pacific stock according to AKR guidance on their relative occurrence in Alaskan waters.⁷⁶ NMFS has proposed in the 2025 List of Fisheries to remove the Western North Pacific stock of humpback whale from the list of species/stocks incidentally killed or injured in the AK Bering Sea, Aleutian Islands flatfish trawl fishery (Amendment 80) (89 FR 77789, September 24, 2024). The AK Bering Sea, Aleutian Islands flatfish trawl fishery has more than 99 percent observer coverage and there have been no reported or observed M/SI of the Western North Pacific stock of humpback whale in the AK Bering Sea, Aleutian Islands flatfish trawl fishery in the most recent SAR. The AK Bering Sea, Aleutian Islands pollock trawl fishery has 100 percent observer coverage and there were 2 humpback whales incidentally taken (mean annual= 0.8) in the most recent SAR. PBR and

⁷³ https://repository.library.noaa.gov/view/noaa/4883

⁷⁴ https://www.npfmc.org/wp-content/PDFdocuments/SAFE/2024/Forage.pdf

⁷⁵ https://repository.library.noaa.gov/view/noaa/66786

⁷⁶https://media.fisheries.noaa.gov/2021-12/Guidance-Humpbacks-Alaska.pdf

incidental M/SI in the AK Bering Sea, Aleutian Islands pollock trawl fishery for the Western North Pacific humpback whale, Western North Pacific is: PBR = 0.2, M/SI = 0.008, M/SI as percent of the stock's PBR = 4.0 percent. A summary of known interactions and additional information about the Mexico-North Pacific stock⁷⁷ and the Western North Pacific stock⁷⁸ are found in the most recent stock assessments. Not all fisheries are observed and not all fishing activity is observed for those fisheries that do have observation so these estimates are considered minimum estimates. However, it does appear that the level of mortality and serious injury for humpback whales has declined since what was analyzed in the Final Harvest Specifications EIS, which estimated a mortality and serious injury from the BSAI and GOA groundfish fisheries for the Western North Pacific stock of 0.5 (or 38 percent of PBR).

In addition to current entanglement estimates, NMFS has reviewed recent data, surveys, and studies as well as the 2024 ESRs. The 2024 GOA ESR includes a summary of trends in humpback whale calving in Glacier Bay and Icy Strait and fall surveys of humpback whales in Prince William Sound. In examining trends in the GOA, the 2024 ESR noted: "The capelin populations were observed to continue rebounding in 2024 for a second year, and the crude birth rate of humpback whales increased to pre-2014 levels in southeast Alaska for the first time. While population dynamics of humpback whales may have contributed to their lagged recovery, the elevated herring and euphausiid populations (and reduced pink salmon predation on zooplankton) provided a good prey base for them in 2024."

Fin Whales: The fin whale (*Balaenoptera physalus*) was decimated by commercial whaling in the 1800s and early 1900s. It was listed as an endangered species under the ESCA in 1970 (35 FR 8491, June 2, 1970 (baleen whales listing); 35 FR 18319, December 2, 1970 (fin whale listing), and continues to be listed as endangered following passage of the ESA. Critical habitat has not been designated for fin whales. There is one stock of fin whales in the North Pacific designated as the Northeast Pacific stock. There are no reliable estimates of current and historical abundances for fin whales, and there continue to be uncertainties in their population structure. Based on dedicated line-transect surveys of the offshore waters of the Gulf of Alaska conducted by Rone et al. (2017), the best provisional abundance estimate in the northeast Pacific is a number of 3,168 with an applied CV of 0.26 this results in 2,554 whales.⁷⁹ However, this is an underestimate because these surveys covered only a small portion of fin whale range, and no correction factors were computed for this data.⁸⁰

Threats to fin whales include entanglements in fishing gear, ship strikes, and changing ocean conditions that may affect the availability of prey and abundance of biotoxins. Based on the most recent stock assessment report, no incidental mortality or serious injury of Northeast Pacific fin whales due to interactions with fisheries in Alaska waters was reported to the NMFS Alaska Region marine mammal stranding network between 2014 and 2018.⁸¹ NMFS does have a report of one Northeast Pacific fin whale caught and killed in a BSAI pollock trawl net in 2019,

⁷⁷https://www.fisheries.noaa.gov/s3/2023-08/Humpback-Whale-MNP-2022.pdf

⁷⁸https://www.fisheries.noaa.gov/s3/2023-08/Humpback-Whale-WNPS-2022.pdf

⁷⁹https://cascadiaresearch.org/files/Rone_etal_2017.pdf

⁸⁰https://media.fisheries.noaa.gov/2022-08/NOAA-TM-AFSC-441.pdf

⁸¹https://media.fisheries.noaa.gov/2021-08/FIN-WHALE-Balaenoptera-physalus-Northeast-Pacific-Stock.pdf

however due to the vetting and review process for takes of marine mammals, this incident is not yet included in a published stock assessment report.⁸² NMFS has proposed to add the North Pacific stock of fin whale to the list of species/stocks incidentally killed or injured in the Category II AK Bering Sea, Aleutian Islands pollock trawl fishery based on this reported mortality in 2019 (89 FR 77789, September 24, 2024). The PBR for the Northeast Pacific fin whale is 5.1.

The Final Harvest Specifications EIS evaluated impacts of alternative harvest strategies on fin whales, including the level of incidental take and entanglement, the harvest of prey species and impacts to prey availability and foraging success, and disturbance to marine mammals from fishing operations (vessel traffic and noise and use of nets). Impacts on marine mammals were examined relative to the level of total harvest under each alternative harvest strategy. For fin whales, the EIS examined the level of incidental take (entanglement in fishing operations and marine debris). At the time of the Final Harvest Specifications EIS, take at that time had only occurred in the GOA pollock trawl fishery. No take in any BSAI or GOA fishery has been reported for 2014 to 2018. Although a take has since been reported in a BSAI groundfish fishery in 2019, the level of take is still low relative to the stock's PBR = 5.1, mean estimated annual M/SI (2017-2021) = 0.2, M/SI as percent of the stock's PBR = 3.9 percent.

Eastern North Pacific gray whale: The Eastern North Pacific gray whale is not listed under the ESA. An unusual mortality event (UME) involving eastern North Pacific gray whales along the West Coast of North America occurred from 2018 to 2023, with peak strandings occurring between December 17, 2018, and December 31, 2020.⁸³ Strandings occurred along the west coast of the United States, Canada, and Mexico and in wintering, migratory, and feeding areas. The Investigative Team concluded localized ecosystem changes, including both access to and quality of prey, in the northern Bering and Chukchi seas caused the UME. These changes contributed to the poor nutritional condition observed in live whales in the wintering areas of Mexico and dead stranded gray whales in all three countries. This malnutrition led to increased mortality during the whales' annual northward migration (from Mexico to Alaska) and decreased production of calves. This resulted in an overall decline in population abundance.

Gray whales primarily feed in the Arctic on sea-bottom amphipods and other organisms living in and above the sediment and in the water column and on their migration on copepods, euphausiids, small fish, and herring. Gray whale prey is not targeted in the groundfish fisheries, although the fisheries do have some incidental catch of forage fish like herring. Trawl fisheries in the BSAI are subject to a bycatch, or prohibited species catch, limit for herring (set at 1 percent of the annual eastern Bering Sea herring biomass) (50 CFR § 679.21(e)(1)(v)). Herring catch in the groundfish fisheries is generally low, with occasional years of larger catches. More details on BSAI and GOA groundfish is available in the forage fish report, which summarizes available data on trends in abundance and distribution of forage populations and describes their interactions with federal fisheries through bycatch.⁸⁴ The 2024 ESRs also include information on zooplankton (including copepod) status, trends, and implications across the ecosystem. The 2024

⁸²https://repository.library.noaa.gov/view/noaa/44638

⁸³ https://www.fisheries.noaa.gov/west-coast/marine-life-distress/frequent-questions-west-coast-gray-whale-unusual-mortality-event

⁸⁴https://www.npfmc.org/wp-content/PDFdocuments/SAFE/2024/Forage.pdf

ESRs include information on marine mammal strandings, such as the gray whale UME, and note that increases in strandings of marine mammals may signal changes in the environment or other stressors (e.g., entanglements). There are no observed instances of mortality or serious injury reported in Alaska fisheries.⁸⁵

Northern fur seals: NMFS currently manages the northern fur seal population as two stocks in the U.S.: the Eastern Pacific and the San Miguel stocks. The Eastern Pacific stock includes northern fur seals breeding on the Pribilof Islands (including St. Paul and St. George Islands and Sea Lion Rock), and Bogoslof Island AK. NMFS designated the Pribilof Islands northern fur seal population as depleted under the MMPA on May 18, 1988 (53 FR 17888). The most recent estimate for the number of northern fur seals in the Eastern Pacific stock, based on pup production estimates on Sea Lion Rock (2014), on St. Paul and St. George Islands (mean of 2014, 2016, and 2018), and on Bogoslof Island (mean of 2015 and 2019), is 626,618 northern fur seals.⁸⁶ Information on population trends by both island and foraging complex from 1988-2022 are included in the Conservation Plan, which was recently revised.⁸⁷

The Final Harvest Specifications EIS examined the impacts of alternative harvest strategies on listed and unlisted marine mammals like northern fur seals. This included an analysis of the level of incidental take and entanglement (relative to the potential biological removal), the harvest of prey species and impacts to prey availability and foraging success, and disturbance to marine mammals from fishing operations (vessel traffic and noise and use of nets). Impacts on marine mammals were examined relative to the level of total harvest under each alternative harvest strategy. The EIS noted that the minimum estimate of groundfish fishery caused northern fur seal mortality and serious injury was well below PBR and at a level approaching insignificance (10% of PBR). Based on the most recent stock assessment for northern fur seals,⁸⁸ the minimum estimate of groundfish-fishery caused northern fur seal mortality, and serious injury remains well below the PBR of 11,403. The total mean annual mortality and serious injury rate incidental to U.S. commercial fisheries between 2015 and 2019 is 3.5 northern fur seals (2.7 from observer data + 0.8 from stranding data). The minimum mean annual mortality and serious injury rate due to entanglements in Bering Sea/Aleutian Islands gillnet (0.2), Bering Sea/Aleutian Islands unidentified fishing gear (0.2), trawl gear (1.2), and hook and line gear (0.2) in Alaska waters between 2015 and 2019 totaled 1.8 northern fur seals. The mean estimated annual mortality and serious injury from the BSAI Amendment 80 (flatfish) trawl fishery is 2.7 fur seals, and is below 10 percent of the stock's PBR.

Northern fur seal pup production at St. Paul Island has continued a declining trend since 1998 that may be partially attributed to low pup growth rates. This trend was present in 2007 when NMFS completed the Harvest Specification EIS and expressly noted in that EIS that the northern fur seal population in the Pribilof Islands had been declining (at that time, with pup production down 15.7 percent on St. Paul Island and 4.1 percent on St. George Island between 2002 and

⁸⁵https://www.fisheries.noaa.gov/s3/2021-08/2020-Pacific-SARS-Eastern-GrayWhale-dragged-.pdf

⁸⁶https://www.fisheries.noaa.gov/s3/2022-08/2021-NORTHERN-FUR-SEAL-Callorhinus-ursinus-Eastern-Pacific-Stock.pdf

⁸⁷https://repository.library.noaa.gov/view/noaa/66442

⁸⁸https://www.fisheries.noaa.gov/s3/2022-08/2021-NORTHERN-FUR-SEAL-Callorhinus-ursinus-Eastern-Pacific-Stock.pdf

2004). Currently, there are varying trends in pup production among breeding islands and within island breeding areas (more information is provided in the 2024 Conservation Plan). As noted in the 2007 EIS, the 2024 Conservation Plan, and the SAR, there has been a decline in pup production on St. Paul Island since the mid-1990s; pup production stabilized and has more recently increased on St. George Island beginning around 2002; and pup production has increased on Bogoslof, with estimated pup production for the Eastern Pacific stock declining at 0.55% (95% CI: -2.11 to 1.06; not significantly different from 0) per year from 2009 to 2019.

NMFS and our tribal partners observe northern fur seals entangled in marine debris including lost and discarded fishing gear. The EIS evaluated impacts from entanglement in marine debris and from reductions in prey availability due to removals in the groundfish fisheries of prey species for fur seals like pollock and Pacific cod. The EIS recognized data gaps regarding the impacts of prev competition but recognized that evidence indicates considerable overlap may exist between the size of pollock consumed by fur seals and pollock harvested in the groundfish fisheries, and that competition for prey species may exist if the groundfish fisheries and fur seals depend on the same time and space for prey. The EIS therefore assumed that spatial overlap between pollock harvest and foraging fur seals exists and therefore considered the level of potential competition associated with each alternative. Notably, as a component of the alternative analysis in the EIS, NMFS structured Alternative 4 to set lower harvest rates in part in response to public comment to constrain TACs by ecosystem components such as northern fur seals. NMFS therefore evaluated in the Final Harvest Specifications EIS impacts from lowered harvest rates, but ultimately selected Alternative 2. In addition, NMFS recognized the stock assessments used to establish the ABCs and OFLs incorporate ecosystem components, and the EIS analyzes the effects of alternative harvest strategies on ecosystem components, including northern fur seals.

Killer whales: There are five stocks of killer whales present in the North Pacific including the Eastern North Pacific Alaska Resident; Eastern North Pacific Northern Resident; Eastern North Pacific Gulf of Alaska, Aleutian Islands, and Bering Sea Transient; ATI Transient; and West Coast Transient. Four of these stocks regularly occur in Alaskan waters. In December 2023, NMFS released a summary report of documented killer whale entanglements in Alaska from 1991 to 2022.⁸⁹ As explained in that report, there were 37 entanglement reports over that period. Most reported incidents were associated with trawl and longline gear (30). Thirteen of the entanglements occurred in the BSAI flatfish trawl fishery, seven entanglements occurred in the BSAI pollock trawl fishery, six entanglements occurred in the BSAI Greenland turbot longline fishery, and one entanglement occurred in the BSAI sablefish longline fishery.⁹⁰ Stock information on population trends, distribution in Alaska, and estimated mean annual mortality in BSAI pollock trawl and flatfish trawl fisheries are described below.

⁸⁹https://www.fisheries.noaa.gov/feature-story/noaa-fisheries-releases-report-killer-whale-entanglements-alaska-1991-2022

⁹⁰https://www.fisheries.noaa.gov/resource/document/killer-whale-entanglements-alaska

Cetacean Stock/DPS	Population Trends	Distribution in Alaska	Estimated Mean Annual Mortality in the BSAI pollock trawl fishery and BSAI flatfish trawl fishery
Killer whale – AT1 transient	This population has been closely documented from 1984 to present. From 1984-1988 22 animals were seen annually. In the two years following the 1989 Exxon Valdez oil spill, only 11 individual animals were re-sighted. No recruitment to this population has occurred since 1984. The population has continued to decline with a current estimate of seven individuals.	AT1 killer whales are found only in Prince William Sound and the Kenai Fjords area.	BSAI pollock trawl: 0 BSAI flatfish trawl: 0
Killer whale - Eastern North Pacific GOA, Aleutian Islands, and Bering Sea transient	Transient killer whales in the northern Gulf of Alaska have had stable numbers from 1984- 2012. At present, reliable data on trends in population abundance for the Aleutian Islands and Bering Sea portion of this stock of killer whales are unavailable.	Transient-type killer whales from the GOA, Aleutian Islands, and Bering Sea are considered to be part of a single population. They occur mainly from Prince William Sound through the Aleutian Islands and Bering Sea.	BSAI pollock trawl: 0 BSAI flatfish trawl: 0.4
Killer whale - Eastern North Pacific Alaska resident stock	The minimum population estimate (N_{min}) for the Alaska Resident stock of killer whales based on photo-identification studies conducted between 2005-2019 is 1,920 animals. Data from Matkin et al. (2003) indicate that the component of the Alaska Resident stock that summers in the Prince William Sound and Kenai Fjords area is increasing. With the exception of AB pod, which declined drastically after the Exxon Valdez oil spill and has not yet recovered, the component of the Alaska Resident stock in the Prince William Sound and Kenai Fjords area increased 3.2% (95% CI = 1.94 to 4.36%) per year from 1990 to 2005 (Matkin et al. 2008).	Alaska resident whales are found from southeastern Alaska to the Aleutian Islands and Bering Sea. Intermixing of Alaska residents has been documented among the three areas, at least as far west as the eastern Aleutian Islands.	BSAI pollock trawl: 0 BSAI flatfish trawl: 0.8
Killer whale - Eastern North Pacific Northern resident (British Columbia) stock	The minimum population estimate (N _{MIN}) for the Northern Resident stock of killer whales is 302 whales, which includes whales found in Canadian waters. From the mid-1970s to the 1990s, the Northern Resident killer whale population increased at an annual rate of 2.6% (i.e., from 122 whales in 1974 to 218 in 1997). A decline was reported from 1998 to 2001 at a rate of 7% per year. The increased mortality that drove this decline coincided with a period of reduced range-wide Chinook salmon abundance, their primary prey (Ford et al. 2010). Then, after 2001, the growth was positive again with the population increasing at an average rate of 2.9% per year from 2002 to 2014. This represents an average annual increase of 2.2% over the 40-year time series. However, annual Northern Resident killer whale population growth rates have slowed over the past five census years, from 5.1% in 2014 to -0.3% in 2018.	The Eastern North Pacific Northern Resident stock is a transboundary stock and includes killer whales that frequent British Columbia, Canada, and Southeast Alaska (Dahlheim et al. 1997, Ford et al. 2000). They have been seen infrequently in Washington State waters. Members of the Northern Resident population have been documented in Southeast Alaska; however, they have not been seen to intermix with Alaska Residents	BSAI pollock trawl: 0 BSAI flatfish trawl: 0

Table 4-3. North Pacific Killer Whale Stocks

2023 was an anomalous year with 11 total killer whales incidentally caught.⁹¹ Nine of the 11 whales were caught by Bering Sea/Aleutian Island non-pelagic trawl fishery (Amendment 80, targeting groundfish). The tenth killer whale was taken by a Bering Sea/Aleutian Islands catcher processor vessel using pelagic trawl gear to target pollock. The eleventh killer whale was entangled in research survey gear during the Alaska Fisheries Science Center's annual longline survey for sablefish and groundfish.

NMFS continues to work with representatives of the Amendment 80 (non-pollock trawl) fleet to investigate factors that may have contributed to the elevated killer whale bycatch rates in 2023.⁹² NMFS is working with the industry and survey operations to explore ways to avoid killer whale interactions, and NMFS began funding a killer whale bycatch and gear modification research project in spring 2024. The Amendment 80 fleet adopted a gear modification to the net that covers the mouth of the trawl and serves as a barrier for large animals. The pre net material has high eco reflective properties, so killer whales are likely to be able to detect it with echolocation, and hopefully be better able to avoid the net opening.

The preliminary data from the 2024 season indicated that incidental mortality of killer whales declined substantially in commercial fisheries in Alaska. Additional information and detail on annual takes will be updated in a future SAR for killer whale stocks.

In 2025, NMFS intends to initiate a review of available information about whether there are multiple demographically independent populations of killer whales within the currently-defined Eastern North Pacific Alaska resident killer whale stock. This meets one of the objectives of the MMPA to use the best scientific information available to delineate marine mammal population stocks.⁹³ The Eastern North Pacific Alaska resident killer whale stock, as currently defined, includes resident killer whales in Southeast Alaska, the Gulf of Alaska, the Aleutian Islands, and the Bering Sea. This evaluation would involve experts from NMFS's Alaska, Northwest, and Southwest Fisheries Science Centers. Should the agency find that there are demographically independent populations of killer whales and subsequently decide to describe new stocks of killer whales in Alaska, that would be accomplished through the development of new reports. These reports would be made available for public review and comment separate from the harvest specifications process.

The Final Harvest Specifications EIS examined the impacts of alternative harvest strategies on listed and unlisted marine mammals. There are no listed stocks of killer whales in waters off Alaska. The EIS analyzed the level of incidental take and entanglement (relative to the potential biological removal), the harvest of prey species and impacts to prey availability and foraging success, and disturbance to marine mammals from fishing operations (vessel traffic and noise and use of nets). Impacts on marine mammals were examined relative to the level of total harvest under each alternative harvest strategy. The EIS noted that resident killer whales compete with fisheries, particularly fisheries targeting halibut and sablefish, and the EIS considered that take in

 $^{^{91}} https://www.fisheries.noaa.gov/feature-story/cause-death-determined-11-killer-whales-incidentally-caught-fishing-gear-alaska-2023$

⁹²https://meetings.npfmc.org/CommentReview/DownloadFile?p=e396a98d-d2bb-4ce9-9454-85077470ac0f.pdf&fileName=B2%20NMFS%20Report.pdf

⁹³https://repository.library.noaa.gov/view/noaa/22660

trawl gear (primarily from propeller strikes) could occur. The EIS noted that the mean annual mortality from the BSAI and GOA groundfish fisheries did not exceed PBR for any of the killer whale stocks in Alaska. While the annual mortality was below 10 percent of PBR for most species, the EIS expressly noted that killer whale mortality in all fisheries was above the insignificance threshold of ten percent (at that time, the amount of take from all fisheries of the BSAI and GOA transient and Alaska resident killer whale stocks was 75 percent and 21 percent of PBR, respectively).

Higher mortality and serious injury levels (e.g., 2023) were considered in the effects analyzed in the EIS, which as noted above considered a level of mortality above PBR from interactions with the fisheries under the alternatives analyzed in the EIS. The level of mortality in 2023 and the preliminary data in 2024 is still below the PBR for the stocks and remains within the scope analyzed in the EIS.

4.3.5 Seabirds

The Final Harvest Specifications EIS examined the impacts of the harvest strategy on seabirds, including the incidental take of seabirds, impacts on prey availability for seabirds (both disturbance to prey and disturbance to seabird foraging), and impacts on benthic habitat that could indirectly impact seabirds and prey. NMFS has reviewed recent data and information as well as the 2024 ESRs to evaluate whether the annual implementation of the groundfish harvest specifications will result in effects in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS regarding impacts to seabirds.

The 2024 ESRs for the EBS, AI, and GOA include information on seabirds as potential indicators of ecosystem status. The ESRs recognize that seabirds can be viewed as indicators of ecosystem changes in productivity and population-level responses can signal shifts in prey availability that may similarly affect commercial fish populations. The ESRs synthesize information and observations from a variety of sources to provide an overview of environmental impacts to seabirds and what that may indicate for ecosystem productivity as it pertains to fisheries management. The ESRs present updated information each year on seabirds and examine the following regarding seabirds breeding in Alaska: time of breeding, reproductive success, distribution, diet, and unusual mortality events, as well as connections between seabirds, physical environmental conditions, climate change, biological indicators, availability of prey in the ecosystem, foraging conditions, and factors influencing trends and implications for ecosystem productivity (i.e., heat waves).

The 2024 EBS ESR examined trends for fish-eating and plankton-eating seabirds (including common and thick-billed murres, least auklets, black-legged and red-legged kittiwakes, and red-faced cormorants): both types had mixed reproductive success, which may indicate differences in local availability of small schooling forage fish and zooplankton in feeding areas utilized by seabirds (these studies were done on seabirds around the Pribilof Islands). There were also relatively few opportunistic reports of beached bird carcasses in the eastern Bering Sea, which suggests that there was no major die-off event in this region in 2024.

The 2024 AI ESR examined trends for fish-eating and plankton-eating seabirds. In the AI, most seabirds in the Aleutians feed offshore, so population and reproductive trends at breeding colonies can reflect conditions in the pelagic ocean environment. In the eastern Aleutians, both fish-eating and plankton-eating seabirds had average to above average breeding success compared to the long-term means, which suggests that foraging conditions for both plankton and fish-eating commercial groundfish may have been favorable in the eastern Aleutians. In the western Aleutians, many seabirds had below average reproductive success across feeding strategies and prey types, which suggests limited availability or lower quality prey or other factors contributed to poor breeding conditions. No large or unusual seabird die-offs were documented in beach-based surveys.

The 2024 ESRs also examined seabird bycatch trends in Alaska groundfish fisheries based on data from the Observer Program and NMFS catch accounting system.

Several seabird species are caught incidental to the Alaska groundfish fisheries. In 2023 (the year with the most recent finalized data), an estimated 4,125 seabirds were caught in hook-and-line, trawl, and pot fisheries in the BSAI and GOA. The total estimated seabird bycatch continues to be substantially lower than before the use of seabird avoidance measures. As reported in the 2024 EBS ESR, the numbers of seabirds estimated to be caught incidentally in the southeastern Bering Sea fisheries in 2023 (2,586 birds) decreased from 2022 (3,236 birds) by 20 percent and was below the 2013–2022 average of 3,654 birds by 29 percent; the numbers of seabirds estimated to be caught incidentally in the northern Bering Sea fisheries in 2023 (175 birds) decreased from 2022 (403 birds) by 57 percent, and was below the 2013-2022 average of 624 birds by 72 percent.⁹⁴ As reported in the 2024 AI ESR, the numbers of seabirds estimated to be caught incidentally in the Aleutian Islands fisheries in 2023 (885 birds) was 78 percent more than estimates from 2022 (496 birds). This increase in the estimated seabird takes between 2022 and 2023 is primarily due to the low number of shearwaters taken in 2022. However, excluding shearwater bycatch, seabird takes in the Aleutian Islands fisheries in 2023 were relatively similar to takes in 2022 (339 and 341 respectively). And, seabird bycatch in 2023 was only 9 percent more than the 2013–2022 average of 969 birds.⁹⁵

Hook-and-line fisheries continue to have the highest seabird bycatch among gear groups and are subject to seabird avoidance requirements. In 2023, an estimated 1,568 northern fulmars (*Fulmarus glacialis*), 370 Gulls, and 665 shearwaters were taken incidentally in the BSAI and GOA hook-and-line fisheries.

The three albatross species that forage off Alaska are black-footed (*Phoebastria nigripes*), shorttailed (*P. albatrus*), and Laysan (*P. immutabilis*). The majority of the albatross bycatch consisted of black-footed and Laysan albatross in the BSAI and GOA hook-and-line fisheries. In 2023, 96 black-footed albatross, 189 Laysan albatross, 2 short-tailed albatross, and 0 unidentified albatross were taken incidental to hook-and-line fisheries in the BSAI and GOA.

⁹⁴For details on bycatch of seabird species groups in the Bering Sea, see Table 2 and Table 3 in the section titled "Seabird Bycatch Estimates for Groundfish and Halibut Fisheries in the Eastern Bering Sea, 2013–2023".

⁹⁵For details on bycatch of seabird species groups in the Bering Sea, see Table 2 and Table 3 in the section titled "Seabird Bycatch Estimates for Groundfish and Halibut Fisheries in the Eastern Bering Sea, 2013–2023".

Occasionally, endangered short-tailed albatross are taken incidental to the Alaska groundfish fisheries. From 1999 through 2023, eight short-tailed albatross were observed to be killed in the BSAI groundfish hook-and-line fisheries. Two of these takes occurred in August and September of 2010, one occurred in October of 2011, two occurred on the same haul in September 2014, and one occurred in December of 2014. NMFS extrapolates the observed takes of seabirds to the total fishing effort to estimate total bycatch. For example, two short-tailed albatross were recorded taken in the observer sample in the Pacific cod hook-and-line fishery in 2010. When the catch accounting system (CAS) expanded these takes to all unsampled hooks in the haul and all unsampled events across fisheries, the estimated take across the Pacific cod hook-and-line fishery in 2010 was 15 short-tailed albatross. Of the two short-tailed albatross recorded taken in the Greenland turbot hook-and-line fishery in 2014, only one was in the observer sample. When expanded by the CAS to all unsampled hooks in the haul and all unsampled events across fisheries, the estimated take across the Greenland turbot fishery in 2014 was six short-tailed albatrosses. In 2020, two short-tailed albatross were observed to be killed in the BSAI Pacific cod fishery. The first occurred in September 2020, near Zhemchug Canyon in NMFS reporting area 521. The second occurred in October 2020, south of St. Matthew Island in NMFS reporting area 521. The NMFS Alaska Regional Office, NMFS Alaska Fisheries Science Center, and the USFWS coordinated efforts and communication in response to this mortality event and complied to the fullest extent with ESA requirements to protect this species. In 2023, one short-tailed albatross take was observed on a longline-fishing vessel in the GOA, resulting in an estimation of 2 short-tailed takes in the GOA Pacific cod hook-and-line fishery. The 2023 carcass was collected by an observer and shipped to the NOAA-Oikonos Seabird Bycatch Necropsy Program for additional analysis. NMFS estimated no takes of short-tailed albatross in the groundfish and halibut fisheries from 2007 through 2009, from 2012 through 2013, 2015 through 2019, 2021 through 2022, and 2024 (data from 2024 is preliminary).

In October of 2019, 22 spectacled eider (Somateria fischeri) fatally collided with a fishing vessel in the hook-and-line groundfish fishery of the BSAI. This vessel strike was reported by the onboard observer to NMFS. Then, in March of 2020, a single Steller's eider (*Polysticta stelleri*) considered to be from the threatened Alaska-breeding population fatally collided with a fishing vessel in the trawl groundfish fishery of the BSAI. The vessel strike was recorded on the vessel's electronic monitoring system and the mortality was reported by the vessel captain to the U.S. Fish and Wildlife Service (USFWS). These are the first recorded takes of spectacled eiders and Steller's eider from the Alaska-breeding population by any fisheries operating in the BSAI or GOA. As a result of these mortality events, NMFS reinitiated formal consultation under section 7 of the ESA with USFWS to ensure BSAI and GOA groundfish fisheries are not likely to jeopardize the continued existence of either eider or destroy or adversely modify their designated critical habitat. In response to the re-initiation request, the USFWS published a joint NMFS/Environmental Protection Agency (EPA) Biological Opinion on the Proposed Modification of the EPA General Permit for Offshore Seafood Processors in Alaska and on the NMFS Groundfish Fishery for the Gulf of Alaska, Bering Sea, and Aleutian Islands in 2021. The Biological Opinion concluded that the GOA and BSAI groundfish fisheries were "not likely to *jeopardize*" the continued existence of the short-tailed albatross, spectacled eider, or Steller's eiders. The fisheries were also not likely to result in the destruction or adverse modification of

the critical habitat of the spectacled eider.⁹⁶ NMFS estimated no takes of Steller's eider or spectacled eider in the groundfish and halibut fisheries in 2021, 2022, 2023, or 2024.

NMFS has evaluated the information and circumstances presented in recent reports and determines that the annual implementation of the groundfish harvest specifications will not affect the human environment in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS regarding impacts to seabirds.

4.3.6 Habitat

Habitat actions and amendments completed prior to 2023 are included by reference in the <u>appendix</u>. Additional information on habitat protections can be found on the NPFMC website.⁹⁷

Essential Fish Habitat: The MSA includes provisions concerning the identification and conservation of essential fish habitat (EFH). EFH is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."⁹⁸ NMFS and regional fishery management councils must describe and identify EFH in FMPs, and should review, and update as warranted, EFH information every 5 years (50 CFR 600.815(a)(10)). Reviews of FMPs by NMFS and the NPFMC have been conducted in 2005, 2010, 2017, and, most recently, 2023. The objective of each EFH Review is to evaluate and synthesize new information for each component, and determine whether changes to the FMPs are warranted.

In April 2019, NMFS and the Council launched the 2023 EFH 5-year Review to update the science supporting several EFH components of the FMPs, including a new SDM ensemble approach for mapping and describing and identifying EFH, and updates to the fishing effects model and analysis.

In December 2023, the Council recommended final action to amend the FMPs with updated EFH information based on best available science identified in the 5-year Review. The notice of agency decision (89 FR 58632)⁹⁹ was published in July 2024 and the amendments made the following changes to the FMPs:

- BSAI Groundfish FMP, GOA Groundfish FMP, Crab FMP, and Arctic FMP: update EFH descriptions and maps, including up to EFH Level 3 information on habitat-related vital rates (see 50 CFR 600.815(a)(1)(iii)(A)). Add or revise the EFH text descriptions and add or replace the maps for—
 - 41 species or complexes in the BSAI Groundfish FMP;
 - 46 species or complexes in the GOA Groundfish FMP;
 - all five species in the Crab FMP; and
 - all three species in the Arctic FMP.

⁹⁶https://www.epa.gov/sites/default/files/2021-02/documents/r10-npdes-ak-offshore-seafood-akg524000-biological-evaluation-revised-2020.pdf

⁹⁷https://www.npfmc.org/fisheries-issues/issues/habitat-protections/

⁹⁸16 USC 1802(10)

 $^{^{99}} https://www.federalregister.gov/documents/2024/07/19/2024-15930/fisheries-of-the-exclusive-economic-zone-off-alaska-essential-fish-habitat-amendments$

- Salmon FMP: replace the distribution maps for all five species with the EFH maps.
- BSAI Groundfish FMP, GOA Groundfish FMP, and Crab FMP: update information for fishing effects (FE) to reflect updates to the FE model, analysis, and evaluation.
- BSAI Groundfish FMP, GOA Groundfish FMP, Crab FMP, and Arctic FMP: revise the EFH appendices where conservation recommendations for non-fishing activities are described.
- BSAI Groundfish FMP, GOA Groundfish FMP, and Crab FMP: revise prey species descriptions for two species of BSAI sharks, BSAI pollock, GOA Pacific cod, and BSAI red king crab.
- BSAI Groundfish FMP, GOA Groundfish FMP, Crab FMP, and Arctic FMP: revise EFH appendices with updated research and information needs.

The amendments and updated information are summarized in the EFH 5-year Review Summary Report¹⁰⁰, and it includes future research and information needs. There is ongoing research to update species distribution models and maps, and to assess impacts from fishing gear on benthic habitat. The EFH review process is an iterative process, completed every five years, that can incorporate updated research and best available science.

The Final Harvest Specifications EIS examined the magnitude and duration of impacts on EFH for each of the alternatives, noting that fishing effort would decrease or increase to the level necessary to harvest the TAC, however, the general location of the fisheries, the fishing seasons, and the gear used in the fisheries are not likely to change under the alternatives. The EIS disclosed that there would be minimal but persistent impacts to EFH, although the duration and degree of fishing's effects on habitat features would depend on the intensity of fishing, the distribution of fishing with different gears across habitats, and the sensitivity and recovery rates of habitat features. Regarding the impacts from the pelagic trawl gear, the EIS stated:

Pollock is harvested with pelagic trawl gear. Pelagic trawl gear has relatively small impacts on benthic habitat, although the EFH EIS notes that "pelagic trawls may be fished in contact with the seafloor, and there are times and places where there may be strong incentives to do so, for example, the EBS shelf during the summer" (NMFS 2005). Trawl performance standards for the directed pollock fishery at 50 CFR 679.7(a)(14) reduce the likelihood of pelagic trawl gear use on the bottom. However, concern exists about the contact of pelagic trawl gear on the bottom and the current standards used to limit bottom contact (from June 2006 minutes of the SSC and AP, available from http://www.fakr.noaa.gov/npfmc/minutes/minutes.htm). Debate is ongoing on whether the current standards need to be evaluated and whether the level of potential impact on the bottom from pelagic trawl gear is a concern. The description of impacts by pelagic trawl gear on habitat in this document is based on the best available science, but may be considered controversial with some believing the impact may be more than described. Research is ongoing at the AFSC to better understand the potential effects of pelagic trawl gear on benthic habitat.

¹⁰⁰Harrington, G. A., J. L. Pirtle, M. Zaleski, C. Felkley, S. Rheinsmith, and J. T. Thorson. Draft Essential Fish Habitat 5-year Review Summary Report, January 2023. National Marine Fisheries Service, Alaska Region, 135 p. https://meetings.npfmc.org/Meeting/Details/2975

The EIS therefore recognized the ongoing debate over the impacts from pelagic trawl nets.

Based on the reports and data available, there is no new substantial information and circumstances to indicate the annual implementation of the groundfish harvest specifications will affect the human environment in a significant manner or to a significant extent not already considered in the Final Harvest Specifications EIS regarding impacts to habitat and EFH.

5 Future Actions

This section provides background and a summary description of the reasonably foreseeable future actions that may affect the harvest specifications process and the impacts of the groundfish fisheries on the resource components analyzed in the Alaska Groundfish Final Harvest Specifications EIS. Actions are understood to be human actions (e.g., a proposed rule to designate northern right whale critical habitat in the Pacific Ocean), as distinguished from natural events (e.g., an ecological regime shift). Identification of actions likely to impact a resource component, or change the impacts of the harvest specifications process, allow decision-makers and the public to understand the potential for a future action, individually or cumulatively, to cause a substantial change in the harvest specification process or represent significant new circumstances or new information that would require an SEIS in the future.

Programmatic Review of Groundfish Fishery Management Policy: In 2004, following a comprehensive review of the BSAI and GOA groundfish fisheries, the Council developed its current groundfish management policy. This management policy was evaluated in the 2004 Alaska Groundfish Fisheries Programmatic Supplemental EIS (PSEIS) which considered a broad array of policy-level programmatic alternatives in the context of cumulative changes in the groundfish fisheries management since the BSAI and GOA FMPs were implemented around 1980.¹⁰¹ On the basis of the 2004 PSEIS, the Council adopted its groundfish management policy which includes a management approach statement, nine policy goal statements, and 45 accompanying objectives.

The Council triannually reviews its groundfish management policy objectives to assess implementation and consider beneficial changes. The 2004 groundfish management policy was most recently reviewed during the Council's February 2022 meeting.¹⁰² The 2022 review highlighted 2019 - 2021 Council activities that continue to fulfill the priorities and objectives established in the 2004 groundfish management policy. The 2022 review also indicated that the Council continues to approve the substance of the management policy and objectives as written, although noting that some of the language is dated.

In April 2014, the Council evaluated a draft Supplemental Impact Report (SIR), and concluded that a Supplemental EIS (SEIS) was not required; further, the Council did not choose to reinitiate

¹⁰¹https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-fisheries-programmatic-supplementalenvironmental-impact

¹⁰²https://meetings.npfmc.org/CommentReview/DownloadFile?p=f8c3ef0f-41e6-49d8-a17f-1714eaf6a1ba.pdf&fileName=D3%20Groundfish%20Management%20Policy%20Review.pdf

programmatic changes to the groundfish management policy that would have necessitated an SEIS at that time. NMFS finalized the SIR and determined that supplementation of the 2004 PSEIS was not required.¹⁰³

At its October 2022 meeting, the Council initiated a discussion paper that would provide a plan and timeline for taking action to evaluate management policies and the 2004 PSEIS to consider management changes and other approaches in light of potential impacts from the changing climate in the BSAI and GOA. The Council reviewed the discussion paper at its February 2023 meeting¹⁰⁴ and recommended consideration of a new Programmatic EIS (PEIS) for climatebased management actions for Council-managed fisheries. Then, in June 2023, the Council recommended that NMFS initiate development of a PEIS and NEPA scoping for management actions to address climate change. Two alternatives were proposed under the Council motion to (1) maintain status quo for Council-managed fisheries or (2) adopt a more adaptive ecosystembased management policy and objectives for Council-managed fisheries with new risk tools and knowledge pathways considered.¹⁰⁵ Also in June 2023, the Secretary of Commerce announced \$3.3 billion in Inflation Reduction Act (IRA) funding to support climate resilience, with \$1.2 billion allocated to NMFS. NMFS dedicated \$20 million to the regional fisheries Councils to support climate resilience and responsiveness to climate change impacts. In December 2023, the Council received an update from staff on a proposed workplan to use IRA funding in developing an operational, adaptive climate resilient management policy for all active federal fisheries managed under the Council's authority, using the vehicle of the PEIS that the Council considered in June 2023.¹⁰⁶ Under the workplan, the Council would have planned to take final action to recommend its new management policy by December 2025.

In February 2024, the Council received an update from Council staff to assist in analysis structure and priorities.¹⁰⁷ During its February 2024 meeting, the Council addressed the process for the development of a new PEIS to evaluate its action alternatives for management policies, objectives and goals for fisheries off Alaska. In response to public testimony at the meeting from tribal groups and stakeholders, the Council decided to delay action on the programmatic evaluation of management policies to allow for pre-scoping activities and Tribal consultations to receive input to further develop alternatives prior to formal scoping.

NMFS and the Council have continued to make progress on this programmatic evaluation. Following the February 2024 Council meeting, NMFS held a number of engagement sessions with Alaska Native Tribes to provide an overview of the programmatic evaluation and process and to solicit feedback from Tribes. In June 2024, the Council hosted a Climate Scenarios

¹⁰³https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-fisheries-programmatic-supplementalenvironmental-impact

¹⁰⁴https://meetings.npfmc.org/CommentReview/DownloadFile?p=f147c92d-d7bf-444f-a398-71393e63f96f.pdf&fileName=D2%20PSEIS%20Discussion%20Paper.pdf

¹⁰⁵https://meetings.npfmc.org/CommentReview/DownloadFile?p=37104c8f-4824-41ed-a730-dd195dd32d5c.pdf&fileName=D2%20Motion.pdf

¹⁰⁶https://meetings.npfmc.org/CommentReview/DownloadFile?p=9ad5dbcb-4b72-4ee9-a091-2eaf57ea36d9.pdf&fileName=B1%20IRA%20Funding%20Staff%20Workplan.pdf

¹⁰⁷https://meetings.npfmc.org/CommentReview/DownloadFile?p=a3c1729f-5f90-45d6-8d89-

³³⁰b0c816fc3.pdf&fileName=D3%20Programmatic%20Policy%20Evaluation%20Discussion%20Paper.pdf

Workshop which was attended by over 200 people, representing government agencies, industry, coastal communities, and various user groups, as well as Alaska Native Tribes. Council staff presented a report of the workshop at the October 2024 Council meeting.¹⁰⁸

In December 2024, the Council received multiple updates from NMFS and staff on efforts to advance climate resilient management guidelines and policies, including the timeline to use the IRA funding, and a draft workplan from the Climate Change Task Force's (CCTF) final report¹⁰⁹. The Council supported recommendations from the CCTF and requested that Council staff format the workplan, including timeframes, with the intent that it guides near-term actions for enhanced climate resilient management in the GOA and the BSAI. As per the CCTF's report, the Council also requested that the workplan draft include the following items: climate forecast-linked management advice, climate-driven interactions and cascading impacts, dynamic management tools to increase in-season adaptation capacity, and consideration of tiered management systems.¹¹⁰

The Council is scheduled to discuss the workplan draft and PEIS again in April 2025. The goals of this meeting include refining the proposed alternatives to provide more specificity.

Section 7 ESA Consultations: In December 2022, NMFS announced its intention to re-initiate consultation under section 7 of the ESA to evaluate the effects of the GOA and BSAI groundfish fisheries on ESA-listed species and critical habitats. NMFS determined that allowing the groundfish fisheries to continue to operate during the re-initiation period will not violate ESA section 7(a)(2) or 7(d). To implement the harvest specifications for the BSAI and GOA, NMFS has also determined that the operation of the groundfish fisheries off Alaska under the harvest specifications for the BSAI and GOA would not violate ESA sections 7(a)(2) and 7(d). NMFS completed the section 7 Consultation on GOA groundfish fisheries on December 23, 2024 (see Section 4.3.3.2.3 ESA Consultations on ESA-listed salmon for GOA and BSAI Groundfish Fisheries) To implement this year's harvest specifications for the BSAI under the harvest specifications will not violate ESA section 7(a)(2) or 7(d) during the reinitiation period (through 2025).

Amendment 125: In October 2022, the Council recommended Amendment 125 to the BSAI FMP. Amendment 125 would redefine the current BSAI Pacific cod jig sector to allow smaller H&L/pot CVs operating in the Federal BSAI Pacific cod less than 60' H&L or pot CV sector to harvest Pacific cod from the Federal BSAI Pacific cod jig sector's allocation. All harvest from the redefined jig sector would be deducted from the jig sector's 1.4 percent allocation of BSAI Pacific cod. This action would not redefine any other Amendment 85 sector or their allocation. The redefined A season jig sector would be composed of all H&L or pot CVs with a reported LOA less than or equal to 55' and jig vessels. Amendment 125 would also redefine the current

¹⁰⁸https://meetings.npfmc.org/CommentReview/DownloadFile?p=32641424-735e-4258-a560-6481ceffef90.pdf&fileName=D2a%20Climate%20Scenarios%20Workshop%20Report.pdf

¹⁰⁹https://meetings.npfmc.org/CommentReview/DownloadFile?p=d3081be2-383c-42b8-bb71-9e4ccceb94cf.pdf&fileName=D1b%20Climate%20Change%20Task%20Force%20Report.pdf ¹¹⁰https://meetings.npfmc.org/CommentReview/DownloadFile?p=30abacdb-fbef-44b4-9026-9b40ce837ba5.pdf&fileName=D1%20MOTION.pdf

less than 60' H&L or pot CV sector during the A season so that only the Pacific cod harvest to of H&L or pot CVs with a reported LOA of 56-59' would be deducted from the current less than 60' H&L or pot CV sector's 2 percent allocation. After the jig A season ends on April 30, all H&L or pot CVs less than or equal to 60' LOA would be in the same sector (reflecting the status quo) and would be eligible for reallocations of BSAI Pacific cod using the reallocation hierarchy defined at 50 CFR 679.20(a)(7)(iii) of Federal regulations.

Greenland Turbot: In April 2023, the Council recommended regulatory changes to authorize the use of longline pot gear by hook-and-line CP vessels in the directed fishery for Greenland turbot in the Bering Sea (BS) subarea of the BSAI management area. NMFS published the proposed rule on October 23, 2024 (89 FR 84514). This final rule, if approved, would amend regulations by: 1) allowing for hook-and-line CP vessels to use longline pot gear for the directed fishery for Greenland turbot in the BS subarea including associated gear marking and gear configuration requirements; 2) adding the directed fishery for Greenland turbot in the BS subarea to the collapsible pot exception; 3) adding an exception to the 9 inch maximum pot tunnel opening restriction for longline pot gear when fishing for Greenland turbot; and 4) clarifying maximum retainable amounts (MRAs) for longline pot gear with the authorization of this gear type for the directed fishery for Greenland turbot in the BS subarea. NMFS has prepared a draft EA for the regulatory amendment.¹¹¹ This action as proposed is unlikely to significantly affect the environment or species beyond the status quo.

Chum Salmon Bycatch: The Council reviewed the preliminary draft environmental impact statement (DEIS) in February 2025 to minimize chum salmon bycatch in the Bering Sea pollock fishery, with an emphasis on those that originate from Western Alaska river systems (WAK chum salmon), including the Yukon and Kuskokwim rivers. River systems in the Yukon Kuskokwim region experienced severe declines in chum salmon abundance between 2020-2024. Those declines resulted in the State of Alaska reducing and, for some stocks, eliminating subsistence salmon harvest opportunities important for Alaska Native communities. Changes in the alternatives made at the February 2025 meeting will be incorporated into the DEIS and it will likely be published for public comment during the summer/fall of 2025. The Council is currently scheduled to take final action on this agenda item at the December 2025 Council meeting and more information can be found on the Council website.¹¹²

 $^{^{111}} https://www.fisheries.noaa.gov/s3//2024-10/0648-BM77-DRAFT-Greenland-turbot-LL-pot-rir.pdf$

¹¹² https://www.npfmc.org/

6 Determination

After reviewing the information above and presented in the SAFE reports, I have determined that (1) the 2025 and 2026 harvest specifications, which were set according to the preferred harvest strategy, do not constitute a substantial change in the action; and (2) there is no substantial new circumstances or information about the significance of adverse effects that bear on the analysis in the Final Harvest Specifications EIS. The 2025 and 2026 harvest specifications will result in environmental, social, and economic impacts within the scope of those analyzed and disclosed in the EIS. At this time, the available information does not indicate a need to prepare additional supplemental NEPA documentation for the 2025 and 2026 harvest specifications. Therefore, a supplemental EIS is not necessary to implement the 2025 and 2026 harvest specifications.

Regional Administrator

Date 03/12/2025

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8 Appendix

The appendix contains archived information from 2007 to 2022. Information for 2023 and 2024 is presented in the main document of this SIR.

8.1 Circumstances and Information from 2007 to 2022

8.1.1 Summary of Harvest Specification Amendments

NMFS published a final rule to modify the 2008 harvest specifications under the provisions of Amendments 80 and 85 to the BSAI FMP (72 FR 71802, December 19, 2007). This action ensured that allocations were in effect for Amendment 80 and 85 participants at the beginning of the 2008 fishing year. The modifications were in accordance with the Final Harvest Specifications EIS. NMFS extended these allocations with the 2008 and 2009 harvest specifications and with subsequent harvest specifications.¹¹³

Additionally, Amendments 80 and 85 incorporated statutory mandates of the Magnuson-Stevens Act, as amended by the Coast Guard and Maritime Transportation Act of 2006 and the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006. These amendments to the Magnuson-Stevens Act required that Amendments 80 and 85 allocate to the Community Development Quota (CDQ) Program 10.7 percent of the TAC of the species allocated under those programs. The Magnuson-Stevens Act requires that all catch of these species accrue against the CDQ allocations, including catch in both the directed fisheries for these species and any incidental catch or bycatch.¹¹⁴ Minor revisions were made to catch monitoring requirements for the CDQ fisheries to comply with the new Magnuson-Stevens Act requirement that the CDQ fisheries be managed no more restrictively than the cooperative fisheries for these same species.¹¹⁵

The Magnuson-Stevens Act also requires that allocations to the CDQ Program be made only for species with directed fisheries in the BSAI. Under Amendment 80, allocations to the CDQ Program of TAC categories without directed fisheries in the BSAI were discontinued. These species include pollock in the Bogoslof District, Greenland turbot in the AI, Kamchatka flounder, Alaska plaice, "other flatfish", Bering Sea Pacific ocean perch, rockfish, and others (sharks, skates, and octopus). Catch in the CDQ fisheries of these species are managed under the regulations and according to the individual fishery's status for that TAC category. Retention of species closed to directed fishing is limited to maximum retainable amounts, unless the species is on prohibited species status requiring discard. Notices of closure to directed fishing and of retention requirements for these species apply to the CDQ and non-CDQ sectors. The catch of these non-CDQ species in the CDQ fisheries does not constrain the catch of other CDQ species unless catch by all sectors approaches an OFL. These changes are discussed in detail in the 2007 and 2008 final harvest specifications for groundfish of the BSAI (72 FR 9451, March 2, 2007).

¹¹³ See BSAI and GOA amendment summaries <u>https://www.npfmc.org/library/fmps-feps/</u>

¹¹⁴ 16 U.S.C. § 1855(i)(1)(B)(ii).

¹¹⁵ 16 U.S.C. § 1855(i)(1)(B)(iv).

Amendments 73/77, which became effective on January 30, 2009, removed dark rockfish (*Sebastes ciliatus*) from both FMPs (73 FR 80307, December 31, 2008). This action allowed the State of Alaska to implement more responsive, regionally based management of dark rockfish than is currently possible under the FMPs and improve conservation and management of dark rockfish. The Environmental Assessment (EA) accompanying this action found that there were no significant environmental impacts.¹¹⁶

In 2010, NMFS made minor changes with Amendments 95 and 96 to the BSAI FMP and Amendment 87 to the GOA FMP (75 FR 61639, October 6, 2010) that are reflected in the 2011 and 2012 harvest specifications and with subsequent harvest specifications. Amendment 95 moved skates from the "other species" category to the "target species" category in the BSAI FMP. Amendments 96 and 87 revised the FMPs to meet the National Standard 1 guidelines for annual catch limits and accountability measures. These amendments moved all remaining species groups from the "other species" category to the "target species" category, removed the "other species" and "non-specified species" categories from the FMPs, established an "ecosystem component" category, and described the current practices for groundfish fisheries management in the FMPs. The final rule removed references to the "other species" category for purposes of the harvest specifications and added skate species to the reporting codes for the BSAI groundfish fisheries. An EA determined that this action would not have significant environmental impacts.¹¹⁷

In October 2013, the Council's SSC recommended separate Bering Sea subarea and AI subarea OFLs and ABCs for Pacific cod in the BSAI for the 2014 and 2015 harvest specifications cycle based on the best available data (79 FR 12108, March 4, 2014). Before, Pacific cod was managed as one stock in the BSAI with one OFL and ABC. The stock assessment for AI Pacific cod was evaluated at the September 2013 BSAI Groundfish Plan Team meeting and October 2013 Council meeting. This stock assessment provided extensive information on why separate subarea OFLs and ABCs are appropriate for Pacific cod and the impacts of the ABCs on Pacific cod.

In December 2013, the Council recommended separate subarea Pacific cod TACs, as well as separate subarea OFLs and ABCs, based on those assessments. Since the Council recommended splitting the BSAI Pacific cod TAC into separate Bering Sea and AI TACs and did not recommend revising 50 CFR 679.20, NMFS interpreted that the sector allocations currently in effect will continue to apply at the BSAI-wide level. This interpretation is consistent with the Council's intent about the sector allocations under Amendment 85 to the BSAI FMP (72 FR 50788, September 4, 2007). The Council also recognized the dynamic nature of the Aleutian Islands (AI) Pacific cod fishery and the difficulty in predicting the likely outcomes of a TAC split, given that (1) all gear sectors have varied the proportion of total Pacific cod harvest in the AI over time; (2) Steller sea lion protection measures reduce a large portion of the fishable area in the AI; and (3) it is unknown how sectors will change their fishing patterns and redeploy in response to the Steller sea lion protection measures. The primary conservation effects concern AI Pacific cod and Atka Mackerel fishery interactions with Steller sea lions. NMFS determined in

¹¹⁶<u>https://www.fisheries.noaa.gov/resource/document/ea-rir-frfa-amendment-73-fishery-management-plan-groundfish-bering-sea-and</u>

¹¹⁷<u>https://www.fisheries.noaa.gov/resource/document/environmental-assessment-amendment-96-fmp-groundfish-bsai-and-amendment-87-fmp</u>

the FMP biological opinion that changes to the Pacific cod and Atka mackerel fisheries in the AI were necessary to avoid the likelihood of jeopardy.¹¹⁸ The final EIS analyzed Steller sea lion protection measures for AI groundfish fisheries to mitigate and minimize impact to Steller sea lions and the groundfish fisheries in the AI.¹¹⁹

At its November 2013 meeting, the GOA Groundfish Plan Team recommended combining the Western and Central (W/C) GOA other rockfish ABCs and TACs. The other rockfish category in those areas include other rockfish (19 species) and demersal shelf rockfish (DSR) (7 species). The Plan Team recommended combining these ABCs and TACs based on the challenges associated with conducting a comprehensive assessment of all of the species in the other rockfish category in the W/C GOA. In December 2013, the Council and its SSC considered this change and recommended combining these ABCs and TACs as recommended by the Plan Team.

In 2014, NMFS implemented Amendment 105 to the BSAI FMP (79 FR 56671, September 23, 2014). This amendment establishes a process for Western Alaska CDQ groups and Amendment 80 cooperatives to exchange quota of three flatfish species (flathead sole, rock sole, and yellowfin sole) for an equal amount of another of these three flatfish species, while maintaining total catch below ABC limits. This action was necessary to mitigate the operational variability, environmental conditions, and economic factors that might have constrained the CDQ groups and Amendment 80 cooperatives from fully harvesting their allocations. Additionally, this action was intended to improve the likelihood of achieving and maintaining, on a continuing basis, the optimum yield in the BSAI groundfish fisheries to the extent the action provides opportunities for increased use of available TAC.

8.1.2 Catch Share Management Bering Sea

Amendment 80 Program: In 2007, NMFS published a final rule to implement Amendment 80 to the BSAI FMP (72 FR 52668, September 14, 2007). Amendment 80 is a catch share program that improved management for the species under the program and modified the method of TAC allocations. The Amendment 80 Program established a limited access privilege program for the non-American Fisheries Act (non-AFA) trawl catcher/processor sector by allocating TAC among several BSAI trawl groundfish-fishing sectors, and it facilitates the formation of harvesting cooperatives in the non-AFA trawl catcher/processor sector. The Amendment 80 species are Atka mackerel, flathead sole, Pacific cod, rock sole, yellowfin sole, and AI Pacific ocean perch. The Amendment 80 program also reduced the amount of halibut and crab PSC limits that may be taken while Amendment 80 participants are fishing. The program established sideboard limits for groundfish and PSC limits for Amendment 80 Program participants in the GOA to limit the ability of participants eligible for the Amendment 80 Program to expand their harvest efforts in the GOA. The EA accompanying this action found that there were no significant environmental impacts.¹²⁰

¹¹⁸https://repository.library.noaa.gov/view/noaa/17196

¹¹⁹<u>https://www.fisheries.noaa.gov/resource/document/final-environmental-impact-statement-steller-sea-lion-protection-measures</u>

¹²⁰https://media.fisheries.noaa.gov/dam-migration/sec-rev-amd80-earirirfa-0907pdf.pdf

In 2009, NMFS issued regulations implementing Amendment 90 to the BSAI FMP, which amended the Amendment 80 Program in the BSAI to allow post-delivery transfers of cooperative quota to cover overages to mitigate potential overages, reduce enforcement costs, and provide for more precise TAC management (74 FR 42178, August 21, 2009). This action was categorically excluded from further review pursuant to the National Environmental Policy Act (NEPA).

In 2010, NMFS issued an emergency rule to exempt Amendment 80 cooperatives and trawl catcher/processor vessels that are not specified in regulation as AFA vessels from the groundfish retention standards (GRS) regulations that calculated compliance with annual GRS rates and required an unattainable and unenforceable level of retention (75 FR 78172, December 15, 2010). The emergency rule was extended through December 17, 2011 (76 FR 31881, June 2, 2011). The GRS program was implemented to increase the retention and utilization of groundfish; however, NMFS discovered that the regulatory methodology used to calculate compliance with the GRS required individual Amendment 80 vessels and Amendment 80 cooperatives to retain groundfish at rates well above the minimum retention rates recommended by the Council or implemented by NMFS. As a result, the GRS imposed significantly higher than predicted compliance costs on vessel owners and operators due to the increased level of retention needed to meet the minimum retention rates. Additionally, NMFS discovered that enforcement of the GRS was far more complex, challenging, and potentially costly than anticipated by NMFS. This action had no effect on the human environment because groundfish bycatch and retention is more effectively and efficiently controlled through Amendment 80 cooperative agreements and civil contracts than through the GRS. This action was categorically excluded from further NEPA review.

On November 4, 2011, NMFS published a final rule to implement Amendment 93 to the BSAI FMP (76 FR 68354). These regulations amended the Amendment 80 Program to modify the criteria for forming and participating in a harvesting cooperative. This action encourages greater participation in harvesting cooperatives, which enables members to more efficiently target species, avoid areas with undesirable bycatch, and improve the quality of products produced. The EA accompanying this action found that there were no significant environmental impacts.¹²¹

On October 1, 2012, NMFS published a final rule to implement Amendment 97 to the BSAI FMP (77 FR 59852). These regulations amended the Amendment 80 Program to allow the owners of trawl catcher/processor vessels authorized to participate in the Amendment 80 Program to replace these vessels with vessels that meet certain requirements. This rule established a limit on the overall length of replacement vessels, measures to prevent replaced vessels from participating in Federal groundfish fisheries off Alaska that are not Amendment 80 fisheries, and specific catch limits known as Amendment 80 sideboards for replacement vessels. This action promotes safety-at-sea by allowing Amendment 80 vessel owners to replace their vessels for any reason at any time and by requiring replacement vessels to meet certain U.S. Coast Guard vessel safety standards. Also, this action facilitates an increase in the processing capabilities of the fleet to improve the retention and utilization of groundfish catch by these

¹²¹https://www.fisheries.noaa.gov/resource/document/ea-rir-irfa-amendment-93-fishery-management-plan-groundfish-gulf-alaska-chinook

vessels. The EA accompanying this action found that there were no significant environmental impacts.¹²²

On February 25, 2013, NMFS published a regulatory amendment to modify the GRS program in the BSAI by removing certain regulatory requirements that mandate minimum levels of groundfish retention by the owners and operators of Amendment 80 vessels and Amendment 80 cooperatives participating in the BSAI groundfish fisheries (78 FR 12627). This action relieved Amendment 80 vessels and Amendment 80 cooperatives from undue compliance costs stemming from the minimum retention rates while continuing to promote the GRS program goals of increased groundfish retention and utilization. This action maintained current monitoring requirements for the Amendment 80 fleet and established a new requirement for Amendment 80 cooperatives to annually report groundfish retention performance as part of the report submitted to NMFS. The EA accompanying this action found that there were no significant environmental impacts.¹²³

Amendment 85 Program: In 2007, NMFS published a final rule to implement Amendment 85 to the BSAI FMP (72 FR 50788, September 4, 2007). Amendment 85 modified the allocations and seasonal apportionments of Pacific cod TAC among various harvest sectors. Amendment 85 reduces uncertainty about the availability of yearly harvests within sectors caused by reallocations and maintains stability among sectors in the Pacific cod fishery. The EA accompanying this action found that there were no significant environmental impacts.¹²⁴

Amendment 116: Yellowfin sole TLAS Fishery Limited Entry: On October 4, 2018, NMFS issued a final rule to implement Amendment 116 to the BSAI FMP to limit access to the BSAI Trawl Limited Access Sector (TLAS) yellowfin sole directed fishery by vessels delivering catch to motherships (vessels that receive and process catch from other vessels) (83 FR 49994). Amendment 116 limits catcher vessel (CV) access to the fishery by establishing eligibility criteria based on historical participation in the fishery, issuing endorsements to License Limitation Program (LLP) licenses that meet eligibility criteria, and authorizing delivery of BSAI TLAS yellowfin sole to motherships only by those vessels with a BSAI TLAS yellowfin sole directed fishery endorsement designated on the LLP license assigned to that vessel.

The BSAI TLAS yellowfin sole directed fishery has existed in the current management structure since 2008. Beginning in 2014, the number of CVs delivering to motherships more than doubled compared to CV participation from 2008 through 2013. The Council and NMFS identified the need to provide benefits to historical participants and mitigate the risk that a "race for fish" could worsen in the BSAI TLAS yellowfin sole directed fishery. Mitigating a "race for fish" promotes stability in the fishery, lengthens the fishing season, and creates a safer, more predictable fishery. That stability also minimizes the potential for increased halibut PSC rates, which could lead to closure of the fishery before the yellowfin sole TAC is fully harvested. Under the regulations to

¹²²https://www.fisheries.noaa.gov/resource/document/final-rir-final-ea-irfa-amendment-97-fishery-management-plan-groundfish-bering

¹²³https://www.fisheries.noaa.gov/resource/document/final-regulatory-impact-review-final-environmental-assessment-initial-regulatory

¹²⁴https://www.fisheries.noaa.gov/resource/document/ea-rir-frfa-amendment-85-fishery-management-plan-groundfish-bering-sea-aleutian.

implement Amendment 116 a vessel that delivers catch of yellowfin sole in the BSAI TLAS fishery to a mothership is required to be assigned an LLP license with a BSAI TLAS yellowfin sole directed fishery endorsement. An LLP license is eligible for that required endorsement if the LLP license is credited with at least one legal trip target landing in the BSAI TLAS yellowfin sole directed fishery made to a mothership in any one year from 2008 through 2015. The EA accompanying this action found that there were no significant environmental impacts.¹²⁵

8.1.3 Catch Share Management Gulf of Alaska

Pacific Cod Sector Allocations: On December 1, 2011, NMFS published a final rule to implement Amendment 83 to the GOA FMP, effective starting in the 2012 Pacific cod fishery (76 FR 74670). The final rule allocated Western and Central GOA Pacific cod TAC limits among various gear and operational sectors to limit the amount of Pacific cod that each sector is authorized to harvest. Sector allocations reduce competition among sectors and support stability in the Pacific cod fishery. This rule also limited access to the Federal Pacific cod TAC fisheries prosecuted in the parallel fishery (in State of Alaska waters), promoted community participation, and provided incentives for new entrants in the jig sector. The EA accompanying this action found that there were no significant environmental impacts.¹²⁶

Rockfish Program: On December 27, 2011, NMFS published a final rule to implement the Central GOA Rockfish Program, Amendment 88 to the GOA FMP (76 FR 81248). The Rockfish Program replaced Pilot Program regulations that expired at the end of 2011. These regulations allocated exclusive harvest privileges to a specific group of LLP license holders who used trawl gear to target Pacific ocean perch, pelagic shelf (dusky) rockfish, and northern rockfish during particular qualifying years. The Rockfish Program retains the conservation, management, safety, and economic gains realized under the Central GOA Rockfish Pilot Program and resolves identified issues in the management and viability of the rockfish fisheries. The EA accompanying this action found that there were no significant environmental impacts.¹²⁷

Amendment 111: Reauthorize the Central CGOA Rockfish Program: On March 1, 2021, NMFS issued a final rule to implement Amendment 111 to the GOA FMP and a regulatory amendment to reauthorize the Central GOA Rockfish Program (86 FR 11895). This rule made minor revisions to improve administration of the Rockfish Program. Specifically, the rule removed from regulation the Western GOA rockfish sideboard limits for Rockfish Program CPs. That rule also revised and clarified the establishment of the West Yakutat District rockfish sideboard ratios in regulation. The rockfish sideboard ratio for each rockfish fishery in the West Yakutat District is an established percentage of the TAC for CPs in the directed fishery for dusky rockfish and Pacific ocean perch (50 CFR § 679.82(e)(4)). These percentages are confidential. The program's reauthorization was necessary to continue the conservation benefits, improve efficiency, and provide economic benefits of the Rockfish Program that would have expired on December 31,

 $^{^{125}} https://www.fisheries.noaa.gov/resource/document/regulatory-impact-review-environmental-assessment-amendment-116-fishery$

¹²⁶https://www.fisheries.noaa.gov/resource/document/final-environmental-assessment-final-regulatory-impact-review-initial-regulatory

¹²⁷https://www.fisheries.noaa.gov/resource/document/secretarial-review-regulatory-impact-review-final-environmental-assessment-and

2021. The EA accompanying this action found there were no significant environmental impacts. $^{128}\,$

8.1.4 Catch Share Program Improvements

Since 2007, NMFS has implemented a number of actions to improve the functioning of existing catch share programs in the BSAI and GOA groundfish fisheries.

Maximum Retainable Amounts (MRAs): In 2009, NMFS issued a final rule to revise the MRAs of groundfish using arrowtooth flounder as a basis species in the GOA (74 FR 13348, March 27, 2009). This action increased the MRAs from 0 percent to 20 percent for deep-water flatfish, rex sole, flathead sole, shallow-water flatfish, Atka mackerel, and skates; from 0 percent to 5 percent for aggregated rockfish species; and from 0 percent to 1 percent for sablefish. As a result, this action reduced regulatory discards of otherwise marketable groundfish in the arrowtooth flounder fishery. The EA accompanying this action found that there were no significant environmental impacts.¹²⁹

GOA Pollock Trip Limits: The GOA pollock trip limit final rule prohibits a catcher vessel from landing more than 300,000 lb (136 mt) of unprocessed pollock during a calendar day, and from landing a cumulative amount of unprocessed pollock from any GOA reporting area that exceeds 300,000 lbs. multiplied by the number of calendar days the pollock fishery is open to directed fishing in a season (74 FR 18156, April 21, 2009). This rule prevents catcher vessels from circumventing the intent of current trip limit regulations when making deliveries of pollock. Establishing the current trip limit regulation to limit a vessel to 300,000 lbs. of pollock caught in a day continues to disperse catches of pollock in a manner that is consistent with the intent of Steller sea lion protection measures in the GOA and results in no effects on Steller sea lions beyond those already analyzed in the 2001 Biological Opinion.¹³⁰ This action was categorically excluded from further NEPA review.

Trawl Gear Endorsements: Regulations implementing Amendment 92 to the BSAI FMP and Amendment 82 to the GOA FMP remove trawl gear endorsements on licenses issued under the LLP in specific management areas if those licenses had not been used on vessels that met minimum recent landing requirements using trawl gear (74 FR 41080, August 14, 2009). This action provided exemptions to this requirement for licenses that are used in trawl fisheries subject to certain limited access privilege programs. This action issued new area endorsements for trawl catcher vessel licenses in the Aleutian Islands if minimum recent landing requirements in the Aleutian Islands were met. The EA accompanying this action found that there were no significant environmental impacts.

North Pacific Observer Program (Observer Program): In 2010, NMFS issued a final rule to amend regulations implementing the Observer Program to improve the operational efficiency of the Program, as well as to improve the catch, bycatch, and biological data collected by observers

 $^{^{128}} https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-proposed-amendment-111-fishery$

¹²⁹https://repository.library.noaa.gov/view/noaa/18234

 $^{^{130}} https://www.fisheries.noaa.gov/resource/document/biological-opinion-authorization-bering-sea-aleutian-islands-groundfish-1$

for conservation and management of the North Pacific groundfish fisheries, including those data collected through scientific research activities (75 FR 69016, November 10, 2010). This action was categorically excluded from further NEPA review.

Pacific Cod Parallel Fishery: On November 29, 2011, NMFS published a final rule to limit access of federally permitted pot and hook-and-line catcher/processor vessels to the BSAI Pacific cod "parallel" fishery (76 FR 73513). The parallel fishery occurs in State of Alaska waters within 3 nautical miles of shore adjacent to the BSAI and is managed by the State of Alaska concurrent with the Federal pot and hook-and-line fishery. This rule limits access by federally permitted pot or hook-and-line catcher/processor vessels in the Pacific cod parallel fishery in three ways: (1) it requires an owner of a federally permitted vessel to fish under the same Federal fisheries permit (FFP) or LLP license endorsements in the parallel fishery as required in the Federal waters; (2) it provides that the owner of a vessel who surrenders an FFP will not be reissued a new FFP within the three year term of the permit; and (3) it requires an operator of any federally permitted vessel used in the parallel fishery to comply with the same seasonal closures that apply in the Federal fishery. The EA accompanying this action found that there were no significant environmental impacts.¹³¹

Restructured Observer Program: On November 21, 2012, NMFS published a final rule to restructure the Observer Program and implement Amendment 86 to the BSAI FMP and Amendment 76 to the GOA FMP (77 FR 70062). The final rule added a funding and deployment system for observer coverage to the existing Observer Program and amended existing observer coverage requirements for vessels and processing plants. The new funding and deployment system allows NMFS to determine when and where to deploy observers according to management and conservation needs, with funds provided through a system of fees based on the ex-vessel value of groundfish and halibut in fisheries covered by the new system. This action resolves data quality and cost equity concerns with the previous Observer Program's funding and deployment structure. The EA accompanying this action found that there were no significant environmental impacts action.¹³²

Modification to MRAs: In 2013, NMFS issued a regulation to increase the MRAs of groundfish using arrowtooth flounder and Kamchatka flounder as basis species in the BSAI (78 FR 29248, May 20, 2013). This action allows the use of BSAI arrowtooth flounder and Kamchatka flounder as basis species for the retention of species closed to directed fishing, and was necessary to improve retention of otherwise marketable groundfish in these BSAI fisheries. This action also included regulatory amendments related to harvest management of Kamchatka flounder to account for Kamchatka flounder in the same manner as arrowtooth flounder in the BSAI; to aid in the recordkeeping, reporting, and catch accounting of flatfish in the BSAI; and to provide NMFS the flexibility to allocate Kamchatka flounder (and other species in the future) to the CDQ Program in the annual harvest specifications. The EA accompanying this action found that there were no significant environmental impacts.¹³³

¹³¹https://www.fisheries.noaa.gov/resource/document/secretary-commerce-final-environmental-assessment-regulatory-impact-review-final

 $^{^{132}} https://www.fisheries.noaa.gov/resource/document/ea-rir-irfa-proposed-amendment-86-fmp-groundfish-bsai-and-amendment-76-fmp$

¹³³https://repository.library.noaa.gov/view/noaa/19165

GOA Skate MRAs: On December 28, 2015, NMFS published a final rule to reduce the MRA of skates using groundfish and halibut as basis species in the GOA from 20 percent to 5 percent (80 FR 80695). The purpose of this action is to slow the harvest rate of skates and decrease the incentive for vessels to top off on skates by reducing the MRA to levels that more accurately reflect the intrinsic rate of incidental catch of skates in the GOA. The EA accompanying this action found that there were no significant environmental impacts.¹³⁴

Observer Coverage for BSAI Trawl CVs: On September 30, 2016, NMFS published a final rule to allow catcher vessels (CVs) to choose to be in the full observer coverage category for all of their trawl activity in the BSAI (81 FR 67113). Any CV owner may select full coverage for the following year by notifying NMFS of their choice prior to an October 15 deadline. Owners must reaffirm this choice each year. Those who do not meet the notification deadline will remain in the partial observer coverage category, and will be required to log trips during the following year. This action was categorically excluded from further NEPA review.

Authorize Use of Longline Pot Gear in the GOA Sablefish IFQ Fishery: In December 2016, NMFS issued a final rule to implement Amendment 101 to the GOA FMP (81 FR 95435, December 28, 2016), which authorizes the use of longline pot gear in the GOA sablefish IFQ fishery. Prior to this action, the only authorized gear in this fishery was longline gear including hook-and-line, jig, troll, and handline gear. Sablefish caught on hook-and-line gear are subject to predation by whales. Authorizing the use of longline pot gear may reduce the adverse impacts of whale depredation of sablefish for those fishermen who choose to switch to using longline pot gear in the sablefish IFQ fishery. In addition, the rule was intended to reduce whale and seabird interactions with fishing gear in the GOA sablefish IFQ fishery. The EA accompanying this action found that there were no significant environmental impacts.¹³⁵

Electronic Monitoring (EM): On August 8, 2017, NMFS published a final rule to implement Amendment 114 to the BSAI FMP and Amendment 104 to the GOA FMP (82 FR 36991). These amendments integrate EM in the Observer Program effective September 7, 2017. This final rule establishes a process for owners or operators of vessels using non-trawl gear to request to participate in the EM selection pool and the requirements for vessel owners or operators while in the EM selection pool. This action is necessary to improve the collection of data needed for the conservation, management, and scientific understanding of managed fisheries. The EA accompanying this action found that there were no significant environmental impacts.¹³⁶

Amendments 119/107: Require Rockfish Retention by Catcher Vessels in the BSAI and GOA: On February 20, 2020, NMFS published a final rule to implement Amendment 119 to the BSAI FMP and Amendment 107 to the GOA FMP and to modify regulations in the BSAI and GOA associated with the discard and retention of rockfish species (85 FR 9687). The final rule

 $^{^{134}} https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-initial-regulatory-10$

¹³⁵https://www.fisheries.noaa.gov/resource/document/environmental-assessment-final-regulatory-impact-review-amendment-101-fmp

¹³⁶https://www.fisheries.noaa.gov/resource/document/ea-rir-amendment-114-fmp-groundfish-bsai-and-amendment-104-fmp-groundfish-goa-and

requires that the operator of a federally permitted catcher vessel using hook-and-line, pot, or jig gear in the BSAI and GOA retain and land all rockfish (Sebastes and Sebastolobus species) caught while fishing for groundfish or Pacific halibut. This action is necessary to improve identification of rockfish species catch by vessels using electronic monitoring, provide more precise estimates of rockfish catch, reduce waste and incentives to discard rockfish, reduce overall enforcement burden, and promote more consistent management between State and Federal fisheries. This action was categorically excluded from further NEPA review.

Amendment 109: Modify Seasonal Allocations of pollock and Pacific Cod for Trawl Catcher Vessels in the Central and Western Gulf of Alaska: On June 25, 2020, NMFS published a final rule to implement Amendment 109 to the GOA FMP and modify regulations governing pollock fishing in the Gulf of Alaska (85 FR 38093). This final rule reduces operational and management inefficiencies in the Central Gulf of Alaska and Western Gulf of Alaska trawl catcher vessel pollock and Pacific cod fisheries by reducing regulatory time gaps between the pollock seasons, and changing Gulf of Alaska Pacific cod seasonal apportionments to allow greater harvest opportunities earlier in the year. Specifically, Amendment 109 modified the existing annual pollock TAC allocation to two equal seasonal allocations (50 percent of TAC), and combined the pollock A and B seasons into a January 20 through May 31 A season and the pollock C and D seasons into a September 1 through November 1 B season. Additionally, Amendment 109 revised the Pacific cod TAC seasonal apportionments to the trawl catcher vessel CV sector by increasing the A season allocation and decreasing the B season allocation. On December 9, 2020, NMFS published a correction that clarified existing seasonal apportionments of Pacific cod for the jig sector (85 FR 79139). This action is intended to promote the goals and objectives of the Magnuson-Stevens Act, the GOA FMP, and other applicable laws. The EA accompanying this action found that there were no significant environmental impacts.¹³⁷

Observer Fee Adjustment: On July 10, 2020, NMFS issued a final rule to adjust the Observer Program fee (85 FR 41424). This action is intended to increase funds available to support observer and electronic monitoring systems deployment in the partial coverage category of the Observer Program and increase the likelihood of meeting desired monitoring objectives. As of January 1, 2021, the observer fee is set to 1.65 percent of the ex-vessel value of landings (§ 679.55(f)). The EA accompanying this action found that there were no significant environmental impacts.¹³⁸

Updated Regulations for the Pacific Cod Parallel Fishery: On December 3, 2020, NMFS published a final rule that was substantially similar to the 2011 action that limited the access of catcher/processor hook-and-line and pot gear vessels in the BSAI Pacific cod parallel fisheries (see above). In the December 2020 action (85 FR 78038), NMFS expanded the Federal permit conditions for the BSAI Pacific cod parallel fisheries to include pot, longline, and trawl catcher vessels. The new rules regulate access to the Pacific cod parallel fisheries for catcher vessels in a similar fashion: (1) owners of federally permitted vessels are required to fish under the same FFPFederal fisheries permit (FFP) or LLP license endorsements in the parallel fishery as

¹³⁷https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-proposed-amendment-109-fishery

 $^{^{138}} https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-proposed-regulatory-amendment$

required in the adjacent Federal waters; (2) vessel owners who surrender or amend an FFP will not be reissued a new FFP within the three year term of the permit; and (3) an operator of any federally permitted vessel used in the parallel fishery must comply with the same seasonal closures that apply in the adjacent Federal fishery. This action is necessary to enhance Federal conservation, management, and catch accounting measures previously adopted by the Council regarding license limitation, sector allocations, and catch reporting. This action was categorically excluded from further NEPA review.

Limit Access to the BSAI non-CDQ Pacific Cod Trawl CV Fishery by Motherships: NMFS published a final rule to implement Amendment 120 to the BSAI FMP and Amendment 108 to the GOA FMP on December 20, 2019 (84 FR 70064). This action limited access to the BSAI non-CDQ Pacific cod trawl CV fishery by motherships receiving and processing Pacific cod harvested and delivered by CVs directed fishing in that fishery to those catcher/processors designated on a groundfish LLP license with a BSAI Pacific cod trawl mothership endorsement. The final rule established the eligibility criteria and issuance process for this new endorsement. This action balances the need to limit the number of catcher/processors operating as motherships in the fishery with the need to provide continued access and benefits from the fishery for long-time participants with sustained activity, given the increasing number of participants in the fishery by reducing the risk of a race for fish, stabilizing the length of the fishing season, and creating a safer, more predictable fishery. This action was categorically excluded from further NEPA review.

8.2 Non specified species and forage species

Amendments 117/106: Reclassify Squid as an Ecosystem Component Species: On July 6, 2018, NMFS issued regulations to implement Amendment 117 to the BSAI FMP and Amendment 106 to the GOA FMP (83 FR 31460). These amendments reclassify squid in the FMPs as an "Ecosystem Component Species," which is a category of non-target species that are not in need of conservation and management. Under Amendments 117 and 106, OFL, ABC, and TAC specifications are no longer required. Regulations implementing Amendments 117 and 106 prohibit directed fishing for squid, require recordkeeping and reporting to monitor and report catch of squid species annually, and establish a squid maximum retainable amount when directed fishing for groundfish species at 20 percent to discourage retention, while allowing flexibility to prosecute groundfish fisheries. The EA accompanying this action found that there were no significant environmental impacts.¹³⁹

Amendments 121/110: Reclassify Sculpins as an Ecosystem Component Species: On July 10, 2020, NMFS issued regulations to implement Amendment 121 to the BSAI FMP and Amendment 110 to the GOA FMP (85 FR 41427). These amendments reclassify sculpins in the FMPs as an "Ecosystem Component Species," which is a category of non-target species that are not in need of conservation and management. Under Amendments 121 and 110, OFL, ABC, and TAC specifications are no longer required. Regulations implementing Amendments 121 and 110

¹³⁹https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-proposed-amendment-117-bsai-and

prohibit directed fishing for sculpins, require recordkeeping and reporting to monitor and report catch of sculpin species annually, and establish a sculpins maximum retainable amount when directed fishing for groundfish species at 20 percent to discourage retention, while allowing flexibility to prosecute groundfish fisheries. The EA accompanying this action found there were no significant environmental impacts.¹⁴⁰

Removal of the processing restrictions on incidentally caught squid and sculpin species: In May of 2021, NMFS issued a final rule to remove the regulatory restriction that limits processing of squids and sculpins to fishmeal only (86 FR 24746; May 10, 2021). This final rule is necessary to allow the processing and sale of squids and sculpins as products other than fishmeal and thereby to help prevent waste of the incidental catch of these ecosystem component species.

Amendment 100/91: On March 5, 2015, NMFS issued regulations to implement Amendment 100 to the BSAI FMP and Amendment 91 to the GOA FMP (80 FR 11897). Amendments 100/91 to the FMPs add grenadiers to the ecosystem component (EC) category in the FMPs. The Council and NMFS recognized that adding grenadiers to the FMPs in the EC category acknowledges their role in the ecosystem and limits the groundfish fisheries' potential impact on grenadiers. Adding grenadiers to the EC category allows for improved data collection and catch monitoring appropriate for grenadiers given their abundance, distribution, and catch. The final rule added regulations to improve reporting of grenadiers, limit retention of grenadiers, and prevent direct fishing for grenadiers by federally permitted groundfish fishermen. The final rule was necessary to limit and monitor the incidental catch of grenadiers in the groundfish fisheries. The EA accompanying this action found that there were no significant environmental impacts.¹⁴¹

The Final Harvest Specifications EIS analyzed impacts of the harvest strategy on grenadiers, including impacts to mortality, spatial and temporal impacts to genetic structure of the population and reproductive success, prey for grenadiers, and habitat for grenadiers. Reports on grenadier catch can be found on the NMFS webpage for catch and landings.⁵⁹

8.3 Prohibited Species

8.3.1 Halibut Bycatch Management

Leasing Halibut IFQ in Areas 4B, 4C, and 4D: In 2018, NMFS implemented a final rule that modified regulations for the IFQ and CDQ Program (83 FR 52760). The rule created a voluntary option for an IFQ holder to temporarily transfer halibut IFQ to a CDQ group in years of extremely low halibut abundance and made other minor revisions to clarify IFQ vessel use cap regulations. This rule applies to CDQ groups in certain areas when the commercial catch limit is less than 1.5 million pounds. There were no accompanying amendments to the BSAI FMP. The action was categorically excluded from further NEPA review.

 $^{^{140}} https://www.fisheries.noaa.gov/resource/document/ea-rir-proposed-amendment-121-fishery-management-planground fish-bering-sea-and$

¹⁴¹https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impactreview-initial-regulatory-5.

Halibut Deck Sorting Monitoring Requirements for Trawl Catcher/Processors: NMFS implemented regulations to establish halibut deck sorting monitoring requirements for trawl catcher/processors and motherships operating in non-pollock groundfish fisheries in the BSAI and GOA (84 FR 55044, October 15, 2019). These requirements allow vessels participating in catch share fisheries, as well as non-catch share fisheries, to sort and then discard overboard Pacific halibut on the deck of the vessels. This practice has been shown to reduce halibut PSC mortality. The final rule does not modify existing halibut PSC limits, but it does allow halibut to be discarded faster than allowed under current monitoring requirements, which could reduce halibut discard mortality. Reducing halibut discard mortality could maximize prosecution of the directed non-pollock groundfish fisheries that otherwise might be constrained by halibut PSC limits, and may also benefit vessels participating in the directed halibut fishery by returning more live halibut to the water. A correction to this rule regarding the effective date of collection-of-information requirements was published December 9, 2019 (84 FR 67183). The EA accompanying this action found that there were no significant environmental impacts.¹⁴²

Authorize Retention of Pacific halibut in Pot Gear in the BSAI: NMFS published a final rule (85 FR 840, January 8, 2020) to implement Amendment 118 to the BSAI FMP to authorize retention of legal-size IFQ or CDQ halibut in pot gear in the BSAI. The final rule requires retention of legal-sized halibut in pot gear used in the existing IFQ and CDQ sablefish pot gear fisheries and in the new IFQ and CDQ halibut pot gear fisheries if the operator has sufficient IFQ or CDQ for the retained halibut. The final rule includes a number of modifications to regulations including closing the Pribilof Island Habitat Conservation Zone to all groundfish and halibut fishing with pot gear and clarifies NMFS's inseason management authority to limit or close IFQ or CDQ fishing for halibut if an OFL is approached for a groundfish or shellfish species, consistent with regulations in place for groundfish. This action is necessary to improve efficiency and provide economic benefits for the IFQ and CDQ fleets, reduce the risk of exceeding an OFL for any species, and minimize whale depredation and seabird interactions in the IFQ and CDQ fisheries (because the use of pot gear could result in less whale depredation and fewer interactions with seabirds, relative to the use of hook-and-line gear). The EA accompanying this action found that there were no significant environmental impacts.¹⁴³

In 2012, the Council recommended Amendment 95 to the GOA FMP to change the process for setting halibut PSC limits and to reduce halibut PSC limits in the GOA trawl and hook-and-line groundfish fisheries. NMFS published a final rule for this action on February 20, 2014 (79 FR 9625). Amendment 95 sets the halibut PSC limits in Federal regulations and reduces the halibut PSC limit in the following sectors:-

- Groundfish trawl gear sector by 15 percent over 3 years: 1,848 metric tons (mt) in 2014, 1,759 mt in 2015, and 1,705 mt in 2016 and in subsequent years.
- Groundfish catcher vessel hook-and-line gear sector by 15 percent over 3 years: 161 mt in 2014, 152 mt in 2015, and 147 mt in 2016. The new catcher vessel hook-and-line halibut PSC limit may change annually, based on the GOA Pacific cod split formula. For

¹⁴²https://repository.library.noaa.gov/view/noaa/22015

¹⁴³https://www.fisheries.noaa.gov/resource/document/final-ea-rir-proposed-amendment-118-fishery-management-plan-groundfish-bering-sea

2023 and 2024, NMFS apportioned a halibut PSC limit of 150 mt to the hook-and-line CV sector (March 2, 2023, 88 FR 13238).

- Catcher/Processor hook-and-line gear sector by 7 percent in 2014. The new catcher/processor hook-and-line halibut PSC limit may change annually, based on the GOA Pacific cod split formula. For 2023 and 2024, NMFS apportioned a halibut PSC limit of 107 mt to the hook-and-line CP sector (March 2, 2023, 88 FR 13238).
- Demersal shelf rockfish fishery from 10 mt to 9 mt in 2014 and in subsequent years.

The EA accompanying this action found that there were no significant environmental impacts.¹⁴⁴

In 2015, the Council recommended Amendment 111 to the BSAI FMP. The implementing final rule (81 FR 24714, April 27, 2016) reduced halibut PSC limits in the BSAI trawl and hook-and-line groundfish fisheries. This results in an overall BSAI halibut PSC limit of 3,515 mt. Amendment 111 establishes the following halibut PSC limits:

- Amendment 80 sector (non-pollock trawl catcher/processors): 1,745 mt
- BSAI trawl limited access sector (all non-Amendment 80 trawl participants): 745 mt
- BSAI non-trawl sector (primarily hook-and-line catcher/processors): 710 mt
- Western Alaska Community Development Quota Program: 315 mt.

NMFS determined Amendment 111 is necessary to minimize halibut bycatch in the BSAI groundfish fisheries to the extent practicable and to achieve, on a continuing basis, optimum yield from the BSAI groundfish fisheries. The EA accompanying this action found that there were no significant environmental impacts.¹⁴⁵

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

Specifically, this action established regulations to prohibit directed fishing for specific groundfish species or species groups subject to sideboard limits, rather than prohibiting directed fishing through the GOA and BSAI annual harvest specifications. The rule streamlined and simplified NMFS's management of applicable groundfish sideboard limits. Historically, NMFS calculated numerous AFA Program and CR Program sideboard limits as part of the annual GOA and BSAI groundfish harvest specifications process and published those limits in the Federal Register. Concurrently, NMFS prohibited directed fishing for the majority of the groundfish sideboard limits because most limits were too small to support directed fishing. Rather than

 $^{^{144}} https://www.fisheries.noaa.gov/resource/document/final-ea-rir-irfa-reduce-gulf-alaska-halibut-prohibited-species-catch-limits.$

¹⁴⁵https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-initial-regulatory-6.

continue this annual process, the final rule revised regulations to prohibit directed fishing in regulation for most AFA Program and CR Program groundfish sideboard limits. NMFS no longer calculates and publishes AFA Program and CR Program sideboard limit amounts for those groundfish species and species groups subject to the final rule. The final rule was effective March 11, 2019. This action was categorically excluded from further NEPA review.

8.3.2 Salmon Bycatch Management

8.3.2.1 Salmon Bycatch Management in the BSAI

NMFS published a notice of intent to prepare an EIS on the Council's proposed management measures to minimize chum (non-Chinook) salmon bycatch in the Bering Sea pollock fishery (88 FR 44096, July 11, 2003).

In 2007, NMFS implemented Amendment 84 to establish the salmon bycatch inter-cooperative agreement that allows vessels participating in the directed fisheries for pollock in the Bering Sea to use their internal cooperative structure to reduce salmon bycatch with a voluntary rolling hotspot system (VRHS) (72 FR 61070, October 29, 2007). In recommending Amendment 84, the Council recognized that regulatory management measures, including a bycatch cap that triggered closure of fixed salmon savings areas, had not been effective at reducing salmon bycatch. The EA accompanying this action found that there were no significant environmental impacts.¹⁴⁶ The Final Harvest Specifications EIS describes and analyzes the impacts of the pollock fishery's salmon bycatch with the VRHS measures in place, which were in effect in 2007 pursuant to an exempted fishing permit. Accordingly, the adoption of Amendment 84 did not represent significant new circumstances necessitating an SEIS.

In 2009, the Council recommended Amendment 91, the Chinook salmon bycatch management program, to minimize, to the extent practicable, Chinook salmon bycatch in the Bering Sea pollock fishery. The impacts of the action and its alternatives were analyzed in the Bering Sea Chinook Salmon Bycatch Management Final Environmental Impact Statement.¹⁴⁷ This analysis provided new and recent information on the Bering Sea pollock fishery and the impacts of that fishery on Chinook salmon and the human environment. NMFS implemented this program for the start of the 2011 fishing year (75 FR 53026, August 30, 2010).

In April 2016, the Council recommended Amendment 110 to the BSAI FMP. Amendment 110 improves the management of Chinook and chum salmon bycatch in the Bering Sea pollock fishery by creating a comprehensive salmon bycatch avoidance program. Amendment 110 applies to owners and operators of catcher vessels, catcher/processors, motherships, inshore processors, and the six CDQ Program groups participating in the pollock fishery in the Bering

¹⁴⁶https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-final-regulatory-flexibility-16

¹⁴⁷ NMFS (2009). Bering Sea Chinook Salmon Bycatch Management Final Environmental Impact Statement. December, 2009. https://www.fisheries.noaa.gov/resource/document/bering-sea-chinook-salmon-bycatch-management-final-environmental-impact-statement

Sea. The EA accompanying this action found that there were no significant environmental impacts.¹⁴⁸

The final rule implementing Amendment 110 was published on June 10, 2016 (81 FR 37534). The management measures included in Amendment 110 and the final rule focus on retaining the incentives to avoid Chinook salmon bycatch at all levels of salmon abundance as intended under Amendment 91 to the BSAI FMP. Amendment 110 and the final rule address five core issues:

- incorporate chum salmon avoidance into the incentive plan agreements (IPAs) established under Amendment 91 and remove the non-Chinook salmon bycatch reduction inter-cooperative agreement previously established under Amendment 84 to the FMP;
- modify the IPAs to increase the incentives for fishermen to avoid Chinook salmon;
- change the seasonal apportionments of the pollock TAC to allow more pollock to be harvested earlier in the year;
- reduce the Chinook salmon PSC limit and performance standard in years with low Chinook salmon abundance; and
- improve the monitoring of salmon bycatch in the pollock fishery.

In December 2021, the Association of Village Council Presidents, the Kuskokwim River Inter-Tribal Fish Commission, the Yukon River Inter-Tribal Fish Commission, the Aleut Community of St. Paul Island, and the Bering Sea Elders Group requested the Department of Commerce initiate emergency action to eliminate Chinook salmon bycatch in the Bering Sea pollock fishery and to implement a hard cap on chum salmon bycatch. NMFS denied the request for emergency action and determined that the request did not meet the three criteria necessary to implement an emergency rule¹⁴⁹.

8.3.2.2 Salmon Bycatch Management in the GOA

In 2010, Chinook salmon incidental catch in the GOA groundfish fisheries was 54,561 fish. This is the highest number of Chinook salmon incidentally taken in these fisheries since monitoring began in 1990, and it exceeded the 40,000 Chinook salmon incidental take statement for the GOA groundfish fisheries. The NMFS Alaska Region reinitiated ESA section 7 consultation with the NMFS Northwest Region on November 17, 2010, based on the Chinook salmon incidental catch in the GOA groundfish fisheries. Information on the consultation is provided in the final EA/RIR for Amendment 93.¹⁵⁰

In 2012, NMFS implemented Amendment 93 to the GOA FMP (77 FR 42629, July 20, 2012). Amendment 93 and its implementing regulations established separate PSC limits in the Central and Western GOA for Chinook salmon, which would cause NMFS to close the directed pollock

¹⁴⁸https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-proposed-amendment-110-fmp

¹⁴⁹https://www.fisheries.noaa.gov/feature-story/noaa-fisheries-denies-request-emergency-action-bering-sea-salmon-bycatch

¹⁵⁰https://repository.library.noaa.gov/view/noaa/22951

fishery in the Central or Western GOA, if the applicable limit is reached. This action also requires retention of salmon by all vessels in the Central and Western GOA pollock fisheries until the catch is delivered to a processing facility where an observer is provided the opportunity to count the number of salmon and to collect scientific data or biological samples from the salmon. An EA determined that this action would not have significant environmental impacts.¹⁵¹

In June 2013, the Council recommended Amendment 97 to the GOA FMP. In December 2013, the Council recommended adding to Amendment 97 a provision that would allow unused Chinook salmon PSC limit in the Rockfish Program CV sector to be reallocated to the non-Rockfish Program CV sector. In 2015, NMFS implemented Amendment 97 (79 FR 71350, December 2, 2014). Amendment 97 applies GOA Chinook salmon PSC limits to the groundfish trawl fisheries, except for pollock trawl fisheries in the Central and Western GOA. Amendment 97 apportions the PSC limits between trawl Rockfish Program CVs, non-Rockfish Program CVs, and catcher/processor sectors, with closure of directed fishing for any non-pollock groundfish trawl fishery if the PSC limit for a sector is reached. The EA accompanying this action found that there were no significant environmental impacts.¹⁵²

In December 2015, the Council recommended Amendment 103 to the GOA FMP. Amendment 103 and the final rule (September 12, 2016, 81 FR 62659) authorizes NMFS to reapportion Chinook salmon PSC limits from established PSC limits. These limits are for vessels directed fishing for pollock in the Central and Western GOA reporting areas, and the GOA non-pollock groundfish trawl sectors (e.g., the Rockfish Program CV sector, the non-Rockfish Program CV sector, and the trawl catcher/processor sector). The action allows NMFS to reapportion remaining amounts of unused Chinook salmon PSC limits from any of the GOA trawl sectors to any GOA trawl CV sector. Amendment 103 establishes a cap on the maximum amount of unused Chinook salmon PSC limit that may be reapportioned to each of the GOA trawl CV sectors. Amendment 103 provides NMFS with greater discretion to annually reapportion unused Chinook salmon PSC limits from the Rockfish Program CV sector to the non-Rockfish Program CV sector. Amendment 103 was categorically excluded from further NEPA review. The management measures implemented by Amendment 103 fall within the scope of alternatives addressed in the environmental assessments prepared for Amendments 93 and 97 and implement only minor changes.

8.3.3 Crab Bycatch Management

NMFS notified the Council on September 29, 2009, that the current rebuilding plan for Pribilof Island Blue King Crab (PIBKC) would not achieve adequate progress to rebuild the stock by 2014. In June 2012, the Council recommended Amendment 103 to the BSAI FMP to close the Pribilof Island Habitat Conservation Zone (PIHCZ) to directed fishing for Pacific cod with pot gear based on 1) the high rate of PIBKC bycatch in the PIHCZ relative to other areas outside of the PIHCZ; 2) the high concentration of PIBKC in the PIHCZ; 3) the occurrence of known PIBKC habitat within the PIHCZ; 4) the high rate of PIBKC bycatch in the Pacific cod pot fishery relative to other groundfish fisheries; and 5) the limited impact the Pacific cod pot

¹⁵¹https://repository.library.noaa.gov/view/noaa/4220

¹⁵²https://repository.library.noaa.gov/view/noaa/5012

closure in the PIHCZ would have on the Pacific cod pot fishery relative to other groundfish fishery closures. The Council also recommended Amendment 43 to the FMP for Bering Sea/Aleutian Islands King and Tanner Crabs. Amendment 43 revises the rebuilding plan for PIBKC. NMFS approved these amendments and implemented Amendment 103 with regulations (79 FR 71344, December 2, 2014). The EA accompanying this action found that there were no significant environmental impacts.¹⁵³

NMFS published a final rule (85 FR 840, January 8, 2020) to implement Amendment 118 to the BSAI FMP to authorize retention of legal-size IFQ or CDQ halibut in pot gear in the BSAI. This action includes a number of modifications to regulations including closing the PIHCZ to all groundfish and halibut fishing with pot gear.

On November 9, 2020, NMFS published a notice of agency decision (85 FR 71272) approving Amendment 50 to the FMP for Bering Sea/Aleutian Islands King and Tanner Crabs. Amendment 50 adds a new rebuilding plan for St. Matthew Island blue king crab (SMBKC) to FMP. The objective of the FMP amendment is to rebuild the SMBKC. In order to comply with the provisions of the Magnuson-Stevens Act, this action was necessary to implement a rebuilding plan prior to the start of the 2020/2021 fishing season.

In October 2021, the SAFE for Eastern Bering Sea (EBS) snow crab provided assessment results on the stock¹⁵⁴. The EBS snow crab assessment showed that mature male biomass was 50,600 mt, which is less than the minimum stock size threshold (MSST) of 76,700 mt therefore, the stock was declared overfished by NMFS. In June 2022, the Council approved a purpose and need statement and proposed alternatives for the rebuilding plan. Then, during the October 2022 Council meeting, the SSC reviewed the EBS snow crab rebuilding projection scenario. In December 2022, the Council recommended the Draft Environmental Assessment and Rebuilding Plan¹⁵⁵ for final action. In February 2023, the Council took final action to adopt a rebuilding plan (Amendment 53 to the Crab FMP). ¹⁵⁶ On September 7, 2023, NMFS announced approval of Amendment 53 to the Crab FMP to include the new rebuilding plan for snow crab (88 FR 61477, September 7, 2023). The objective of the amendment is to rebuild the snow crab stock consistent with the requirements of the Magnuson-Stevens Act. A target rebuilding time frame of six years was set where the stock will be considered rebuilt once it reaches B_{MSY}. This option allows for by catch removals and for a directed fishery to open under a state harvest strategy while the stock is rebuilding. The EA accompanying this action found that there were no significant environmental impacts.¹⁵⁷

 $^{^{153}} https://www.fisheries.noaa.gov/resource/document/final-environmental-assessment-proposed-amendment-43-bering-sea-aleutian-islands$

¹⁵⁴https://meetings.npfmc.org/CommentReview/DownloadFile?p=5606e5d3-2fb3-4b3b-9094-

⁵bd86298563a.pdf&fileName=1%20Eastern%20Bering%20Sea%20Snow%20Crab%20SAFE.pdf

¹⁵⁵https://meetings.npfmc.org/CommentReview/DownloadFile?p=df63088a-0290-4743-973e-aa9f7ac8b7da.pdf&fileName=Snow%20Crab%20Rebuilding%20Analysis%20.pdf

¹⁵⁶https://meetings.npfmc.org/CommentReview/DownloadFile?p=cdcd350f-b151-4436-ac3b-a092ddaedf24.pdf&fileName=MOTION%20C1%20.pdf

¹⁵⁷https://www.fisheries.noaa.gov/s3/2023-12/508-Snow-Crab-Rebuilding-Analysis-Final.pdf
In November 2021, the Council received a request to expand the red king crab savings area from the Alaska Bering Sea Crabbers. In December 2021, the Council determined the proposal did not meet the three necessary criteria for NMFS to implement an emergency rule. NMFS then denied the request for emergency action in January 2022. Concurrently, the Council tasked staff with a discussion paper that would provide the best available information on four topics related to Bristol Bay Red King Crab, including the annual molting and mating cycle, the impacts of fisheries on this cycle, the prevalence of bottom contact by pelagic trawl gear, how stock boundaries are used in assessment, and options for flexible management¹⁵⁸. At the April 2022 Council meeting, the Council reviewed the discussion paper and initiated a request for information (June 6, 2022, 87 FR 34255) on current mechanisms fishing sectors were employing to reduce bycatch of red king crab. The Council also tasked staff and NMFS with developing an expanded discussion paper on annual or seasonal gear closures for the red king crab savings area, sources of mortality for red king crab, information needed to create flexible management measures, and information on the Amendment 80 fleet and Pacific cod fleet as they relate to red king crab bycatch. The Council received a presentation on the expanded discussion paper in October 2022.

Also in October 2022, NMFS announced receipt of a petition from the Alaska Bering Sea Crabbers for emergency rulemaking to close the Red King Crab Savings Area (RKCSA) and Red King Crab Savings Subarea (RKCSS) to all fishing gear for a period of six months from January 1, 2023 to June 30, 2023 (October 28, 2022, 87 FR 65183). The Council reviewed the emergency rule request in December 2022 and determined that the proposal did not meet the three necessary criteria for NMFS to implement an emergency rule. At the same time, the Council initiated an analysis regarding Bristol Bay red king crab; the Council adopted a purpose and need statement to address the current stock status of Bristol Bay red king crab and alternatives for analysis¹⁵⁹. In December 2022, NMFS denied the request for emergency action to close the RKCSA and RKCSS to all fishing gears from January 1, 2023 to June 30, 2023. The request was denied because the petition was deemed to not meet the criteria defined under NMFS Policy Guidelines for the Use of Emergency Rules.¹⁶⁰

8.4 Seabirds

In 2009, NMFS implemented regulations to revise seabird avoidance requirements for the hookand-line groundfish and halibut fisheries in International Pacific Halibut Commission Area 4E (74 FR 13355, March 27, 2009). This action revised seabird avoidance measures based on the latest scientific information and reduced unnecessary regulatory burdens and associated costs by eliminating seabird avoidance requirements for hook-and-line vessels less than or equal to 55

¹⁵⁸https://meetings.npfmc.org/CommentReview/DownloadFile?p=bbffb468-398e-4500-bbe5-

¹¹²b6a05ceae.pdf&fileName=E%20Council%20Motion%20on%20BBRKC.pdf

¹⁵⁹https://meetings.npfmc.org/CommentReview/DownloadFile?p=0b1b34c1-34c0-42a3-afa6-

⁵a9e0aed4c0d.pdf&fileName=C1%20Motion%202%20RKCSA%20FINAL.pdf

 $^{^{160}} https://www.fisheries.noaa.gov/media-release/noaa-fisheries-denies-request-emergency-action-close-red-king-crab-savings-area-and?utm_medium=email&utm_source=govdelivery$

feet (16.8 m) length overall in portions of Area 4E in the eastern Bering Sea. The EA accompanying this action found that there were no significant environmental impacts.¹⁶¹

A 2016 NMFS Alaska Region technical memorandum provides additional information on how seabird bycatch occurs, seabird avoidance requirements, and seabird bycatch estimates for the Alaska groundfish and halibut fisheries for 2007 through 2015.¹⁶² Subsequent NMFS Alaska Region technical memoranda provide updates to the seabird bycatch estimates for the Alaska groundfish and halibut fisheries through 2021.¹⁶³

The total estimated seabird bycatch continues to be substantially lower than before the use of seabird avoidance measures. Hook-and-line fisheries continue to have the highest seabird bycatch among gear groups. In 2022, an estimated 1,655 northern fulmars (*Fulmarus glacialis*), 746 Gulls, and 530 shearwaters were taken incidentally in the BSAI and GOA hook-and-line fisheries.

The three albatross species that forage off Alaska are black-footed (*Phoebastria nigripes*), shorttailed (*P. albatrus*), and Laysan (*P. immutabilis*). The majority of the albatross bycatch consisted of black-footed albatross in the BSAI and GOA halibut hook-and-line fisheries. In 2022, 203 black-footed albatross, 44 Laysan albatross, and 11 unidentified albatross were taken incidental to hook-and-line fisheries in the BSAI and GOA.

Occasionally, endangered short-tailed albatross are taken incidental to the Alaska groundfish fisheries. From 1999 through 2019, six short-tailed albatross were observed to be killed in the BSAI groundfish hook-and-line fisheries. Two of these takes occurred in August and September of 2010, one occurred in October of 2011, two occurred on the same haul in September 2014, and one occurred in December of 2014. NMFS extrapolates the observed takes of seabirds to the total fishing effort to estimate total bycatch. For example, two short-tailed albatross were recorded taken in the observer sample in the Pacific cod hook-and-line fishery in 2010. When the catch accounting system (CAS) expanded these takes to all unsampled hooks in the haul and all unsampled events across fisheries, the estimated take across the Pacific cod hook-and-line fishery in 2010 was 15 short-tailed albatross. Of the two short-tailed albatross recorded taken in the Greenland turbot hook-and-line fishery in 2014, only one was in the observer sample. When expanded by the CAS to all unsampled hooks in the haul and all unsampled events across fisheries, the estimated take across the Greenland turbot fishery in 2014 was six short-tailed albatross. In 2020, two short-tailed albatross were observed to be killed in the BSAI Pacific cod fishery. The first occurred in September 2020, near Zhemchug Canyon in NMFS reporting area 521. The second occurred in October 2020, south of St. Matthew Island in NMFS reporting area 521. The NMFS Alaska Regional Office, NMFS Alaska Fisheries Science Center, and the USFWS coordinated efforts and communication in response to this mortality event and complied to the fullest extent with ESA requirements to protect this species. In 2023, one short-tailed albatross was taken by a longline-fishing vessel in the GOA. The carcass was shipped to the University of Alaska Fairbanks for additional analysis. NMFS estimated no takes of short-tailed

 $^{^{161}} https://www.fisheries.noaa.gov/resource/document/final-draft-ea-rir-irfa-regulatory-amendment-revise-regulations-seabird-avoidance$

¹⁶² https://repository.library.noaa.gov/view/noaa/12695

¹⁶³https://www.fisheries.noaa.gov/resource/publication-database/alaska-regional-office-technical-memorandums

albatross in the groundfish and halibut fisheries from 2007 through 2009, from 2012 through 2013, 2015 through 2019, 2021 and 2022.

In October of 2019, 22 spectacled eider (*Somateria fischeri*) fatally collided with a fishing vessel in the hook-and-line groundfish fishery of the BSAI. This vessel strike was reported by the onboard observer to NMFS. Then, in March of 2020, a single Steller's eider (*Polysticta stelleri*) considered to be from the threatened Alaska-breeding population fatally collided with a fishing vessel in the trawl groundfish fishery of the BSAI. The vessel strike was recorded on the vessel's electronic monitoring system and the mortality was reported by the vessel captain to the U.S. Fish and Wildlife Service (USFWS). This is the first recorded take of spectacled eider and Steller's eider from the Alaska-breeding population by any fisheries operating in the BSAI or GOA. As a result of these mortality events, NMFS reinitiated formal consultation under section 7 of the ESA with USFWS to ensure BSAI and GOA groundfish fisheries are not likely to jeopardize the continued existence of either eider or destroy or adversely modify their designated critical habitat. NMFS estimated no takes of Steller's eider or spectacled eider in the groundfish and halibut fisheries in 2021, 2022, and 2023.

Section 7 Consultation with USFWS: In August 2015, NMFS prepared a programmatic biological assessment that analyzed the effects of the BSAI FMP, GOA FMP, and the parallel groundfish fisheries in State of Alaska waters on the short-tailed albatross and the Steller's eider.¹⁶⁴ In this biological assessment, the potential direct and indirect impacts of Federal fisheries and fisheries managed by the State with Federal coordination or oversight were evaluated in the context of the short-tailed albatross and the Alaska-breeding population of the Steller's eider.

In December 2015, the USFWS issued its biological opinion on the effects of the Alaska groundfish fisheries on endangered short-tailed albatross and threatened Steller's eider. The biological opinion concluded that the groundfish fisheries off Alaska are not likely to jeopardize the continued existence of short-tailed albatross and are not likely to adversely affect Steller's eider or their designated critical habitat. The 2015 biological opinion includes an incidental take statement that exempts the observed take of six short-tailed albatross, either by hook-and-line gear or trawl gear, over a two-year period from the take prohibitions of section 9 of the ESA. In May 2020, NMFS requested a reinitiation of the of the 2015 formal consultation on the fisheries as authorized by the GOA and BSAI Groundfish FMPs and the parallel groundfish fisheries in State waters due to the takes of Steller's Eider and spectacled eiders. The 2021 biological opinion concluded that the groundfish fisheries off Alaska are not likely to jeopardize the continued existence of short-tailed albatross and are not likely to adversely affect Steller's eider and spectacled eider or their designated critical habitat. The 2021 biological opinion includes an incidental take statement that exempts the observed take of six short-tailed albatross over a two-year period, and three Steller's eiders and 25 spectacled eiders over a four-year period, either by hook-and-line gear or trawl gear, from the take prohibitions of section 9 of the ESA.¹⁶⁵ To date, the fisheries have not exceeded this anticipated level of take.

 $^{^{164}} https://www.fisheries.noaa.gov/resource/document/biological-assessment-effects-fmp-goa-and-bsai-groundfish-fisheries-and-state$

¹⁶⁵https://ecos.fws.gov/tails/pub/document/18939343

The NMFS Alaska Region Office, AFSC Fishery Monitoring and Analysis Division, and the USFWS coordinate efforts and communicate with each other in response to each short-tailed albatross take incident. The total population of short-tailed albatrosses continues to increase with the success of new breeding colonies, which could lead to increased interactions with Alaska fisheries. NMFS continues to work closely with the Pacific cod hook-and-line fleet to explore methods that can be used by the fleet to avoid further takes of short-tailed albatross.

Under the ESA, the short-tailed albatross remains endangered, and the Steller's eiders and spectacled eiders remain threatened. The USFWS published its 12-month finding in the *Federal Register* on October 7, 2011, that listing the black-footed albatross under the ESA was not warranted (76 FR 62504). In October 2013, after a review of the best available scientific and commercial information, the USFWS found that listing the Kittlitz's murrelet (*Brachyramphus brevirostris*) under the ESA was not warranted (78 FR 61764, October 3, 2013). The USFWS published its 12-month finding in the *Federal Register* on October 1, 2014, that listing the yellow-billed loon (*Gavia adamsii*) under the ESA was not warranted (79 FR 59195, October 1, 2014).

Memorandum of Understanding (MOU): In 2012, NMFS entered into an MOU with the USFWS to promote the conservation of migratory bird populations, as required by Executive Order 13186.¹⁶⁶ This MOU focuses on avoiding, or, where impacts cannot be avoided, minimizing to the extent practicable adverse impacts on migratory birds, and strengthening migratory bird conservation through enhanced collaboration between NMFS and USFWS by identifying general responsibilities of both agencies and specific areas of cooperation. Given NMFS's focus on marine resources and ecosystems, this MOU places an emphasis on seabirds, but does not exclude other taxonomic groups of migratory birds. Under this MOU, NMFS is responsible for considering seabird conservation during the development of relevant fishery management actions.

8.5 Habitat

In 2008, NMFS implemented Amendment 89 to the BSAI FMP, which established habitat conservation measures that prohibit nonpelagic trawl gear in certain waters of the Bering Sea subarea and the Northern Bering Sea Research Area (73 FR 43362, July 25, 2008). The action provides protection to bottom habitat from the potential effects of nonpelagic trawling. The EA accompanying this action found that there were no significant environmental impacts.¹⁶⁷

In 2009, NMFS adopted final regulations removing the vessel monitoring system requirements applied to vessels fishing dinglebar gear (74 FR 3446, January 21, 2009). These requirements were initially implemented to assist enforcement in protecting closed habitat areas in the GOA. They were removed to reduce the costs incurred by dinglebar fishermen in light of information

¹⁶⁶http://www.st.nmfs.noaa.gov/Assets/nationalseabirdprogram/eo13186_nmfs_fws_mou2012.pdf
¹⁶⁷<u>https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-final-regulatory-flexibility-14</u>

indicating that these fishermen do not normally fish in the protected areas. The EA accompanying this action found that there were no significant environmental impacts.¹⁶⁸

In 2010, NMFS issued a final rule to implement Amendment 94 to the BSAI FMP (75 FR 61642, October 6, 2010). Amendment 94 (1) required participants using nonpelagic trawl gear in the directed fishery for flatfish in the Bering Sea subarea to modify the trawl gear to raise portions of the gear off the ocean bottom, (2) changed the boundaries of the Northern Bering Sea Research Area to establish the Modified Gear Trawl Zone (MGTZ) and to expand the Saint Matthew Island Habitat Conservation Area, and (3) required all nonpelagic trawl gear to be modified to raise portions of the gear off the ocean bottom if used in any directed fishery for groundfish in the MGTZ. This action reduced potential adverse effects of nonpelagic trawl gear on bottom habitat, protected additional blue king crab habitat near St. Matthew Island, and allowed for efficient flatfish harvest as the distribution of flatfish in the Bering Sea changes. The EA accompanying this action found that there were no significant environmental impacts.¹⁶⁹

Essential Fish Habitat: On November 6, 2012, NMFS approved Amendment 98 to the BSAI FMP and Amendment 90 to the GOA FMP (77 FR 66564). These amendments updated the existing essential fish habitat (EFH) provisions based on a 5-year EFH review. The FMP amendments revised the following FMP components: (1) the EFH provisions for 24 groundfish species or species groups; (2) EFH conservation recommendations for non-fishing activities; (3) the timeline for considering Habitat Areas of Particular Concern (HAPC) proposals from three years to five years; and (4) the EFH research objectives. The 5-year EFH review concluded that no change to the 2005 conclusions on the evaluation of fishing effects on EFH was warranted based on a review of information from 2005 through 2010. The 2005 analysis concluded that fishing effects on EFH were minimal because there was no indication that fishing activities at a sustained rate and effort would alter the capacity of EFH to support species. The EA accompanying this action found that there were no significant environmental impacts.¹⁷⁰

On January 16, 2014, NMFS issued regulations to implement Amendment 89 to the GOA FMP and to revise current regulations governing the configuration of modified nonpelagic trawl gear (79 FR 2794). This rule established a protection area in Marmot Bay, northeast of Kodiak Island, and closed that area to fishing with trawl gear except for directed fishing for pollock with pelagic trawl gear. The closure reduces bycatch of Tanner crab (Chionoecetes bairdi) in GOA groundfish fisheries. This rule also requires that nonpelagic trawl gear used in the directed flatfish fisheries in the Central Regulatory Area of the GOA be modified to raise portions of the gear off the seafloor. The modifications to nonpelagic trawl gear used in these fisheries reduce the unobserved injury and mortality of Tanner crab, and reduce the potential adverse impacts of nonpelagic trawl gear on bottom habitat. This rule also made a minor technical revision to the modified nonpelagic trawl gear construction regulations to facilitate gear construction for those

¹⁶⁸<u>https://www.fisheries.noaa.gov/resource/document/regulatory-amendment-exempt-gulf-alaska-dinglebar-fishermen-vessel-monitoring</u>

¹⁶⁹<u>https://www.fisheries.noaa.gov/resource/document/ea-rir-frfa-amendment-94-bsai-groundfish-fmp-require-trawl-sweep-modification-bs</u>

 $^{^{170}} https://www.fisheries.noaa.gov/resource/document/environmental-assessment-essential-fish-habitat-efh-omnibus-amendments-0$

vessels required to use modified nonpelagic trawl gear in the GOA and Bering Sea groundfish fisheries. The EA accompanying this action found that there were no significant environmental impacts.¹⁷¹

On January 9, 2015, NMFS approved Amendment 104 to the BSAI FMP to designate six areas of skate egg concentration as Habitat Areas of Particular Concern (HAPC; 80 FR 1378, January 9, 2015). Designating the six areas of skate egg concentration as HAPC in the BSAI highlights the importance of this EFH for conservation. The EA accompanying this action found that there were no significant environmental impacts.¹⁷²

In April 2017, the Council recommended updates to EFH components in the BSAI FMP and GOA FMP based on the best scientific information available through the 2017 EFH 5-year Review by NMFS and the Council. The 2017 EFH 5-year Review determined:¹⁷³

- New information and methods exists to refine EFH descriptions and maps using species distribution models (SDMs).
- Using a newly developed fishing effects model, changes in management with regard to fishing within EFH were not recommended at that time.
- The non-fishing impacts analysis, including advisory EFH Conservation Recommendations, should be updated with the most current level of information, including sections on ocean acidification, climate change, and ecosystem processes.

The Council recommended Amendment 115 to the BSAI FMP and Amendment 105 to the GOA FMP. These Amendments revised the FMPs by updating the descriptions and identification of EFH, and updating information on adverse impacts to EFH based on the best scientific information available. Additional FMP revisions included Amendment 49 to the BSAI King and Tanner Crabs FMP (Crab FMP), Amendment 13 to the Salmon Fisheries in the EEZ off Alaska FMP (Salmon FMP), and Amendment 2 to the FMP for Fish Resources of the Arctic FMP. The Secretary of Commerce approved the EFH Omnibus Amendments in May 2018 (83 FR 31340).

Green Sturgeon: In 2010, the NMFS Sustainable Fisheries informally consulted with the NMFS Southwest Region on the southern DPS of green sturgeon. Because sturgeon are rarely taken incidentally in the Alaska groundfish fisheries, and the detection of the southern DPS green sturgeon is limited to a location where trawling is prohibited, the Alaska groundfish fisheries are not likely to adversely affect the southern DPS of green sturgeon.

Arctic Management: In 2009, the Council adopted, and NMFS approved, an Arctic FMP that (1) closed the Arctic to commercial fishing until information improves so that fishing can be conducted sustainably and with due concern to other ecosystem components and (2) implemented an ecosystem- based management policy and a precautionary approach that

¹⁷¹https://repository.library.noaa.gov/view/noaa/6310

¹⁷²https://www.fisheries.noaa.gov/resource/document/environmental-assessment-amendment-104-fmp-groundfishbering-sea-and-aleutian

¹⁷³https://www.fisheries.noaa.gov/resource/document/essential-fish-habitat-5-year-review-summary-report-2010-through-2015

recognizes the unique issues in the Alaskan Arctic. No significant commercial fisheries exist in the Arctic Management Area, either historically or currently. However, the warming of the Arctic and seasonal shrinkage of the sea ice may be associated with increased opportunities for fishing in this region. The Arctic FMP prevents commercial fisheries from developing in the Arctic without the required management framework and scientific information on the fish stocks, their characteristics, and the implications of fishing for the stocks and related components of the ecosystem. A number of Arctic fish, marine mammals, and seabird species migrate into the area covered by the BSAI FMP, so any additional protection from unregulated fishing in the Arctic FMP were effective December 3, 2009 (74 FR 56734, November 3, 2009). The EA accompanying this action found that there were no significant environmental impacts.¹⁷⁴

8.6 Actions by other agencies

Since January 2007, the following actions have occurred that may be relevant to the harvest specification process. No other additional actions by other Federal, state, and international agencies, and private actions beyond those identified in the Final Harvest Specifications EIS have occurred since January 2007 that would change the analysis in the Final Harvest Specifications EIS of the impacts of the harvest strategy on the human environment.

8.6.1 Department of Interior

Pacific Walrus: In February 2008, the Department of the Interior (DOI) received a petition requesting it to list Pacific walrus (Odobenus rosmarus divergens) under the ESA. On September 10, 2009, DOI published a 90-day finding that the petition presented substantial scientific or commercial information indicating that listing this species may be warranted (74 FR 46548). The 2010 stock assessment for Pacific walrus determined a minimum population size estimate of 129,000 walruses within the surveyed area. On February 10, 2011, DOI announced that listing the Pacific walrus as endangered or threatened was warranted; however, listing the Pacific walrus was precluded by higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. In February 2011, the Pacific walrus was added to the USFWS candidate species list (76 FR 7634, February 10, 2011). On October 4, 2017, the U.S. Fish and Wildlife Service determined that the Pacific walrus does not warrant listing as threatened or endangered under the ESA. The determination followed a comprehensive review and analysis of the best scientific information available. Though the Pacific walrus will not receive protection under the ESA, it continues to be protected under the Marine Mammal Protection Act, which affords similar protections as those provided under the ESA. The latest stock assessment published in July 2023 and determined a minimum population size estimate of 214,008 animals. However, the current population trend for the stock is unknown.¹⁷⁵

Polar Bears: In May 2008, DOI listed polar bears as a threatened species under the ESA (73 FR 28212, May 15, 2008). Polar bears do not interact with the BSAI and GOA groundfish fisheries,

¹⁷⁴https://www.fisheries.noaa.gov/resource/document/environmental-assessment-regulatory-impact-review-final-regulatory-flexibility-4

¹⁷⁵https://downloads.regulations.gov/FWS-R7-ES-2022-0155-0014/content.pdf

and the fisheries are unlikely to affect designated critical habitat. On October 29, 2009, DOI proposed critical habitat for the polar bear (74 FR 56058), and on December 7, 2010, approximately 187,157 square miles were designated as critical habitat (75 FR 76086). Portions of the sea ice designated as critical habitat are identified in the Bering Sea north of St. Matthew Island to the Chukchi Sea. Almost no groundfish fishing occurs in this area. This area is currently closed to nonpelagic trawling, which could have an impact on benthic prey species of ice seals (e.g., bearded seals) and Pacific walrus, which are prey species of polar bears. Because of the current nonpelagic trawl closure, it is unlikely the groundfish fisheries would have any indirect effects on polar bears or their critical habitat.

Sea Otters: In 2006, NMFS and the USFWS consulted on the southwest Alaska DPS of the northern sea otter, and the consultation concluded that the groundfish, crab, and scallop fisheries are not likely to adversely affect sea otters. On October 8, 2009, DOI published a final rule designating 15,164 square kilometers (5,855 square miles) as critical habitat for the southwest Alaska DPS of the northern sea otter (74 FR 51988). The critical habitat rule became effective on November 9, 2009. The critical habitat is designated in five units: the Western Aleutian Unit; the Eastern Aleutian Unit; the South Alaska Peninsula Unit; the Bristol Bay Unit; and the Kodiak, Kamishak, Alaska Peninsula Unit. Within these units, critical habitat occurs in nearshore marine waters ranging from the mean high tide line seaward for a distance of 100 meters, or to a water depth of 20 meters.¹⁷⁶ While sea otter critical habitat predominately occurs within state waters, DOI has designated some critical habitat within Federal waters where water depth is 20 meters or less.

In response to the designation, NMFS reinitiated ESA section 7 consultation. The biological assessment evaluated the potential effect of the following FMPs on the southwest Alaska DPS of the northern sea otter and its critical habitat: BSAI Groundfish; GOA Groundfish; BSAI Crab; Scallop; and Salmon, as well as the halibut fisheries in U.S. Convention waters off Alaska. The analysis concluded that the Alaska federally managed fisheries authorized by the FMPs and State of Alaska parallel groundfish fisheries and halibut fisheries in U.S. Convention waters off Alaska are not likely to adversely affect the southwest Alaska DPS of the northern sea otter or its designated critical habitat. On July 10, 2013, the USFWS concurred with NMFS's determination that authorization of the specified fisheries is not likely to adversely affect the southwest Alaska DPS of the northern sea otter or its critical habitat.¹⁷⁷

8.6.2 State managed groundfish fisheries

The State of Alaska has the authority to manage state-waters or state parallel groundfish fisheries. The State manages fisheries in waters 0 nm to 3 nm from shore either concurrent with the Federal fisheries (called parallel fisheries), with generally the same species, season, gear, and area restrictions, or separate from Federal fisheries (called State-waters fisheries). The Council and Alaska Board of Fisheries (BOF) coordinate management of groundfish fisheries through the Joint Protocol Committee made up of members of the Council and the BOF. The Joint Protocol Committee provides recommendations to the Council and the BOF on actions of mutual interest

¹⁷⁶ https://www.fws.gov/alaska/pages/endangered-species/northern-sea-otter

¹⁷⁷https://www.fws.gov/alaska/fisheries/endangered/species/southwest_sea_otter.htm

to each organization. This dialogue provides the Council and the BOF with an opportunity to consider potential impacts of future actions on Federal and State management of groundfish fisheries.

Parallel fisheries occur in state waters but are opened at the same time as Federal fisheries in the EEZ. State parallel fisheries harvests are managed against the Federal TAC, and vessels with the required permits may move between State and Federal waters during concurrent parallel and Federal fisheries.

The State usually opens State-waters groundfish fisheries after Federal fisheries conclude in adjacent waters. State-waters fisheries are managed under guideline harvest levels (GHLs), which are specified in State regulations at Alaska Administrative Code (AAC) 5 AAC 28.001 through 28.975. Harvests in the state-waters fisheries are monitored by the State, which closes fisheries to ensure GHLs are not exceeded. State regulations for the BSAI and GOA specify a GHL as a percentage of the Federal ABC in most cases. The BSAI and GOA groundfish FMP states the TAC must be lower than or equal to the ABC. The TAC may be lower than the ABC if warranted on the basis of bycatch considerations, management uncertainty, or socioeconomic considerations; or if required in order to cause the sum of the TACs to fall within the 2 million optimum yield cap for the BSAI. Based on the annual SAFE report, the Council recommends to the Secretary of Commerce TACs and apportionments thereof for each target species.

The ABC for the pollock stock in the combined W/C/WYK of the GOA includes the amount for the GHL established by the State for the Prince William Sound (PWS) pollock fishery. Annually, State of Alaska fisheries managers recommend setting the PWS GHL at a certain percentage (2.5 percent in recent years) of the annual combined W/C/WYK ABC. Once the PWS GHL amount is deducted from the total ABC, the remaining ABC amount is apportioned between four statistical areas (Areas 610, 620, 630, and 640) in the Western and Central GOA Regulatory Areas. The total ABCs and TACs for the four statistical areas, plus the state GHL, do not exceed the combined W/C/WYK ABC. The methodology to establish the pollock GHL continues to provide a high level of protection for the W/C/WYK pollock stock, and it does not affect the OFL. Pollock catch in the GHL fishery is accounted for in the annual pollock assessments. Accordingly, the Council annually recommends setting the combined W/C/WYK pollock ABC and TAC to account for the State's PWS GHL, which NMFS approves and implements in the current harvest specifications.

The BOF established the GHL for vessels using pot, longline, jig, and hand troll gear in State waters in the State's Aleutian Islands (AI) State waters sablefish registration area that includes all State waters west of Scotch Cap Light (164° 44.72' W longitude) and south of Cape Sarichef (54° 36' N latitude). The AI GHL is set at 5 percent of the combined BS and AI ABC. The State's AI sablefish registration area includes areas adjacent to parts of the Federal BS. Based on the 2022 GHL sablefish catch, most of the State's 2024 and 2025 GHL sablefish fishery is expected to occur in State-waters adjacent to the federal Bering Sea subarea. Therefore, the Council recommended and NMFS approves that the 2024 and 2025 sablefish TACs in the BS and AI account for the State's GHLs for sablefish caught in State waters.

Accommodating for the state-waters GHL from the ABC ensures that the combined harvests from the State-waters and Federal fisheries are managed within the ABC derived from the Federal harvest specifications process for that species and area. The BOF may receive additional proposals from the public to increase harvests in state-waters groundfish fisheries. Increases in GHLs for the state-waters groundfish fisheries requires setting Federal TACs to ensure total harvests of the groundfish stocks do not exceed ABCs.

Pacific Cod Fishery Expansion: Beginning in 2014, the Federal Pacific cod TACs for the GOA, the Bering Sea subarea, and the Aleutian Islands subarea included the amount needed for the State's GHL Pacific cod fisheries. This ensured the Federal and state-waters groundfish harvests did not exceed the Federal ABCs. At that time, the state-waters Pacific cod fisheries in the BSAI were provided 6 percent of the Federal Pacific cod ABC for the BSAI based on Regulation Change 40 adopted by the BOF in October 2013.¹⁷⁸ The 6 percent of the Federal combined BSAI Pacific cod ABC was divided 3 percent to the state-waters Pacific cod fisheries in the portion of the State's Aleutian Islands district west of 170° W longitude and 3 percent to the Bering Sea subdistrict located between 167° W and 164° W longitude. The TACs for the AI and the Bering Sea subarea were then each set to account for the 3 percent of the BSAI Pacific cod ABC applied to the state-waters fisheries.

On November 30, 2015, the BOF established a GHL in state waters between 164 and 170 degrees west longitude in the Bering Sea subarea equal to 6.4 percent of the Pacific cod ABC for the Bering Sea, and the BOF for the State established a GHL in State waters in the AI equal to 27 percent of the Pacific cod ABC for the AI. For the AI, each year the GHL is achieved, the GHL will be increased to 4 percent the next year until the GHL reaches a maximum of 39 percent of the AI ABC. Also, the AI Pacific cod GHL shall not exceed 15 million pounds (6,804 mt).

On October 18, 2018, the BOF established different GHLs in State waters in the Bering Sea and in the Aleutian Islands.

For 2023, the BOF approved a one percent increase in the BS GHL for vessels using pot gear. Starting in 2023, if 90 percent of the GHL is harvested by November 15 of the preceding two consecutive years, the GHL for the next year will increase by 1 percent, up to 15 percent of the BS ABC. Also, the GHL will decrease by 1 percent if 90 percent is not harvested by November 15 of the preceding two consecutive years. For 2024, the BS Pacific cod ABC is 167,952 mt, and for 2025, it is 150,876 mt. Therefore, based on the preceding years' harvests, the GHL in the BS for pot gear will be 12 percent for 2024 (20,154 mt) and is projected to be 12 percent for 2025 (18,105 mt). The BOF also established an additional GHL for vessels using jig gear in State waters in the BS equal to 45 mt of Pacific cod in the BS.

For the Aleutian Islands, the BOF established a GHL in state waters in the Aleutian Islands subarea equal to 31 percent of the Pacific cod ABC in the Aleutian Islands. The AI GHL will increase annually by 4 percent of the AI ABC, if 90 percent of the GHL is harvested by November 15 of the preceding year, but may not exceed 39 percent of the AI ABC or 15 million pounds (6,804 mt). If 90 percent of the GHL is not harvested by November 15 of the preceding

¹⁷⁸http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2013-

^{2014/}pcod/rcs/rc040_Member_Johnstone_Amendment_to_RC35.pdf

year for two consecutive years, the GHL will decrease by 4 percent, but the GHL may not decrease below 15 percent of the AI ABC. Based on preceding years' harvests, the GHL is 35% of the AI ABC. For 2024 and 2025, 35 percent of the AI ABC is 4,351 mt. The Council and its Plan Team, SSC, and AP recommended that the sum of all state and Federal water Pacific cod removals from the Bering Sea and the Aleutian Islands not exceed the ABC recommendations for Pacific cod in each subarea. Accordingly, the Pacific cod TACs in the Bering Sea and the Aleutian Islands account for the State's GHLs for Pacific cod in both the BS and AI are set annually to accommodate the State GHLs to ensure that Federal and State-waters groundfish harvests in the BS and AI do not exceed the Federal ABCs.

In the Gulf of Alaska, the Federal TACs for Pacific cod are set to accommodate the State GHL for Pacific cod in state waters in the Western and Central Regulatory Areas and in the Prince William Sound fishery. The Federal TACs are less than the ABCs for each regulatory area and account for the State GHL. In the Western Regulatory Area, the Federal TAC is set up to 70 percent to accommodate the State GHL, and in both the Eastern and Central Regulatory Areas, the Federal TAC is set up to 75 percent to accommodate the State GHLs. The sum of all state and Federal water Pacific cod removals from the GOA do not exceed the ABC recommendation for GOA Pacific cod.

Accommodating for the state-waters GHL in the BS, AI, and GOA from the Pacific cod ABCs ensures that the combined harvests from the State-waters and Federal fisheries are managed within the ABCs derived from the Federal harvest specifications process for that species and area. Increases in GHLs for the state-waters groundfish fisheries requires setting Federal TACs to ensure total harvests of the groundfish stocks do not exceed ABCs.

Because most of the 0 nm to 3 nm waters are designated as critical habitat for Steller sea lions, potential changes in state fisheries are monitored closely with regards to changing distributions of prey species and effort. Any significant change in the state-waters or state parallel Pacific cod, Atka mackerel, or pollock fisheries likely would result in changes to the Federal fisheries to minimize the impacts of the State fisheries on the fish stocks and on Steller sea lions. This includes setting the Federal TAC to account for State GHLs in state waters to ensure that Federal and state-waters harvests of groundfish in the GOA, Bering Sea, and Aleutian Islands do not exceed the Federal ABCs for those groundfish species with State GHLs. Overall the impacts of future state parallel and state-waters fisheries are not likely to be different than status quo because of the nexus between the state and Federal harvest levels and fisheries restrictions, and the ability to adjust the Federal fisheries if needed to mitigate impacts of the state fisheries.

8.7 Government Accountability Office

Addressing uncertainty in the stock assessment model process: The Magnuson-Stevens Act requires that NMFS use the best available science to help managers set limits on fish catch and prevent overfishing. The Government Accountability Office recommended that the agency take steps to improve the quality of data used in stock assessments and improve its models to quantify the uncertainty of the results. An Advance Notice of Proposed Rulemaking (ANPR) on the

National Standard 1 guidelines was published May 3, 2012 (77 FR 26238). This action provided the public with a formal opportunity to comment on the specific ideas mentioned in the ANPR, as well as any additional ideas and solutions that could improve provisions of the National Standard 1 Guidelines. Concurrently, several work groups (e.g., ABC Control Rules, Vulnerability Evaluations) were created to produce reports on how to carry out the more technical components of the National Standard 1 guidelines. The National Standards are ten standards for fishery conservation and management actions set forth in the Magnuson-Stevens Act (16 U.S.C. 1851). On January 20, 2015, NMFS published a proposed rule to revise National Standards 1, 3, and 7 (80 FR 2786). The final rule implementing the guidelines to these standards was published on October 18, 2016 (81 FR 71858).¹⁷⁹

8.8 Resources

For further information about prior actions and documents and information relied on for the analysis please see the following links:

The Final EIS, Record of Decision and all prior years of SIRs can be found at this webpage here: <u>https://www.fisheries.noaa.gov/resource/document/alaska-groundfish-harvest-specifications-</u> <u>environmental-impact-statement-eis</u>

Current year SAFE reports for the current year can be found on the NPFMC Website here: <u>https://www.npfmc.org/library/safe-reports/</u>

Prior Groundfish stock assessments, ESRs, ESPs, and Economic Status Reports for Alaska groundfish stocks can be found on the NOAA Fisheries Website here: https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation

 $^{^{179}} https://www.gpo.gov/fdsys/pkg/FR-2016-10-18/pdf/2016-24500.pdf$