

**RECORD OF DECISION**  
**for the**  
**FINAL ENVIRONMENTAL IMPACT STATEMENT**  
**on**

Bering Sea and Aleutian Islands Halibut Abundance-Based Management of Amendment 80  
Prohibited Species Catch Limit - Amendment 123 to the Fishery Management Plan for  
Groundfish of the Bering Sea and Aleutian Islands Management Area

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## **Introduction**

This document comprises the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service's (NMFS) Record of Decision (ROD), as required by the National Environmental Policy Act (NEPA), for Amendment 123 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (BSAI FMP) and implementing regulations revising management measures to link the Pacific halibut (halibut) prohibited species catch (PSC) limit for the Amendment 80 commercial groundfish trawl sector in the Bering Sea and Aleutian Islands (BSAI) groundfish fisheries to halibut abundance.

Halibut is fully utilized in Alaska as a target species in subsistence, personal use, recreational (sport), and commercial halibut fisheries. Halibut has significant social, cultural, and economic importance to fishery participants and fishing communities throughout the geographical range of the resource. Halibut is also incidentally taken as bycatch in commercial groundfish fisheries. In the BSAI FMP, the North Pacific Fishery Management Council (Council) and NMFS have designated Pacific halibut, along with several other fully utilized species, as "prohibited species" in the groundfish fisheries, meaning capture must be avoided and retention is prohibited unless required or authorized by other applicable law. The Council and NMFS have established limits on removals of halibut, called halibut PSC limits, in the BSAI groundfish fisheries to minimize halibut bycatch and bycatch mortality. The BSAI FMP specifies that when a halibut PSC limit is reached in an area, further groundfish fishing with specific types of gear or modes of operation is prohibited by those who take their halibut PSC in that area for the remainder of the fishing season. In the context of the BSAI FMP, "halibut PSC" refers to the total mortality of halibut in the groundfish fisheries, i.e., the subset of halibut bycatch that is assumed to be dead because of interactions with the groundfish fisheries. Minimizing halibut PSC to the extent practicable is necessary to maintain a healthy marine ecosystem, ensure long-term conservation and abundance of the halibut stock, provide optimum benefit to fishermen, communities, and U.S. consumers that depend on both halibut and groundfish resources, and comply with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and other applicable Federal law.

The Amendment 80 sector is accountable for a little over half of the annual halibut PSC mortality in the BSAI groundfish fisheries (52 percent average from 2015-2020). Currently halibut PSC limits for groundfish fisheries are set in the BSAI FMP at a fixed amount of annual halibut mortality (1,745 mt). While the Amendment 80 sector has reduced halibut mortality in recent years, continued decline in the halibut stock abundance requires consideration of additional measures for management of halibut PSC in the Amendment 80 fisheries. When BSAI halibut abundance declines, halibut PSC in Amendment 80 fisheries can become a larger proportion of total halibut removals in the BSAI and can reduce the proportion of halibut available for harvest in directed halibut fisheries. NMFS worked with the Council to develop an approach that is expected to provide incentives for the Amendment 80 sector to minimize halibut mortality at all times, promote conservation of the halibut stock, improve bycatch management of the halibut resource, and potentially provide additional harvest opportunities in the commercial halibut fishery.

The proposed action would establish an abundance-based halibut PSC management program in the BSAI for the Amendment 80 sector that meets the requirements of the Magnuson-Stevens Act, including its ten national standards. In particular, the proposed action would maintain optimum yield in the BSAI groundfish fisheries on a continuing basis under National Standard 1 and would minimize halibut PSC to the extent practicable under National Standard 9 and Magnuson-Stevens Act section 303(a)(11). The proposed action is consistent with National Standard 4. The setting or lowering of a PSC limit does not, in

and of itself, constitute an allocation of fishing privileges. But even if it did, the change to the Amendment 80 sector's halibut PSC limit is fair and equitable. That sector is responsible for a majority of the PSC mortality; moreover, changes to other sector's halibut PSC limits are contemplated or underway. Under National Standard 8, this action would provide for the sustained participation of and minimize adverse economic impacts on fishing communities. Finally, the proposed action is based upon the best scientific information available under National Standard 2.

Amendment 123 and implementing measures would modify the current static Amendment 80 PSC limit and establish a process to set the annual halibut PSC limit for the Amendment 80 sector. Each year halibut biomass estimates derived from results of the most recent International Halibut Commission (IPHC) setline survey and the Alaska Fishery Science Center (AFSC) Eastern Bering Sea (EBS) shelf trawl survey would be applied to a specified set of indexed halibut abundance ranges for each survey to set the BSAI halibut PSC limit for the Amendment 80 sector. That Amendment 80 sector halibut PSC limit would be included in the proposed and final rules for the annual harvest specifications for the BSAI.

On December 12, 2017, NMFS published a Notice of Intent to publish an Environmental Impact Statement (EIS) for the proposed management measures in the **Federal Register** (82 FR 58374). NEPA reviews initiated before the effective date of the 2020 revised CEQ regulations (September 14, 2020) may be conducted using the 1978 version of the regulations. Therefore, the Draft and Final EIS for this action were prepared using the 1978 Council on Environmental Quality (CEQ) NEPA Regulations. A Draft EIS (DEIS) was made available to the public through publication of a notice of availability (NOA) in the **Federal Register** on September 8, 2021 (86 FR 50331) with a 45-day comment period ending October 25, 2021. In addition to a no action alternative, NMFS and the Council evaluated three action alternatives in the DEIS to link annual halibut PSC limits for the Amendment 80 sector to halibut abundance as derived from the results of surveys and public comment. Following review of public comments on the DEIS, the Council added a fifth alternative (Alternative 5) and selected it as the preferred alternative for inclusion in the Final EIS (FEIS), which was made available to the public through publication of an NOA in the **Federal Register** on December 9, 2022 (87 FR 75625). NMFS published an NOA for Amendment 123 to the BSAI FMP in the **Federal Register** on November 9, 2022 (87 FR 67665) with comments invited through January 9, 2023. On December 9, 2022, after realizing the original NOA did not include the supporting amendment text, NMFS extended the public comment period on the FMP Amendment through February 7, 2023 (87 FR 75569). NMFS published a proposed rule on December 9, 2022 (87 FR 75570) establishing a public comment period that ended on January 23, 2023.

NMFS intends to publish the final rule in summer 2023. The EIS provides decision-makers and the public with an evaluation of the environmental, social, and economic effects of the current static Amendment 80 halibut PSC limit and alternatives to establish an annual PSC limit that is linked to halibut abundance.

## **Decision**

This ROD documents the decision by NMFS to select Alternative 5, the Preferred Alternative in the Final EIS for the Bering Sea and Aleutian Islands Halibut Abundance-Based Management of Amendment 80 Prohibited Species Catch Limit - Amendment 123 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area.<sup>1</sup> Implementation of Amendment 123 under

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<sup>1</sup> This EIS is available on the NMFS Alaska Region web page at: <https://www.fisheries.noaa.gov/resource/document/final-environmental-impact-statement-bering-sea-and-aleutian-islands-bsai-halibut>

Alternative 5 would revise management measures to link the Pacific halibut PSC limit for the Amendment 80 commercial groundfish trawl sector in the BSAI groundfish fisheries to halibut abundance and set an annual halibut PSC limit based on results from the most recent IPHC setline and AFSC EBS trawl surveys using a look-up table with survey index state categories of Very Low, Low, Medium, and High and ranging from the current limit (1,745 mt) to 35% below the current limit (explained further in the following section). NMFS concludes that Alternative 5 provides reasonable and practical means to avoid, minimize, or compensate for environmental harm from the action.

**Alternatives Considered**

The suite of alternatives considered include the following:

**Alternative 1** (No Action) BSAI halibut PSC limit for the Amendment 80 sector would remain set at 1,745 metric tons (mt).

The following action Alternatives 2 through 5 are based on tables that include a series of halibut abundance ranges (in mt) that serve as “survey index states” for the IPHC setline survey and the EBS shelf trawl survey. The survey index state categories of Very Low, Low, Medium, and High indicate a relative level of halibut abundance. Each alternative contains unique PSC limit values that correspond to specific pairings of the survey index states from the IPHC setline and AFSC EBS shelf trawl surveys. The alternatives differ from each other with different PSC limit values associated with each pair of IPHC setline and EBS shelf trawl survey states. The PSC limit would be determined annually based on the most recent survey values.

**Alternative 2** would base Amendment 80 BSAI halibut PSC limits on a table with limits that range from the current PSC limit to 20 percent below that limit:

		EBS shelf trawl survey index (mt)	
		Low < 150,000	High ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	High ≥ 11,000	1,571 mt (10% below current)	1,745 mt (current limit)
	Medium 8,000 – 10,999	1,483 mt (15% below current)	1,571 mt (10% below current)
	Low < 8,000	1,396 mt (20% below current)	1,483 mt (15% below current)

**Alternative 3** would base Amendment 80 BSAI halibut PSC limits on a table with limits that range from 15 percent above the current PSC limit to 30 percent below that limit:

		EBS shelf trawl survey index (mt)	
		Low < 150,000	High ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	High ≥ 11,000	1,745 mt (current limit)	2,007 mt (15% above current)
	Medium 8,000 – 10,999	1,396 mt (20% below current)	1,745 mt (current limit)
	Low 6,000-7,999	1,309 mt (25% below current)	1,396 mt (20% below current)
	Very Low < 6,000	1,222 mt (30% below current)	1,309 mt (25% below current)

**Alternative 4** would base Amendment 80 BSAI halibut PSC limits on a table with limits that range from the current PSC limit to 45 percent below that limit:

		EBS shelf trawl survey index (mt)	
		Low < 150,000	High ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	High ≥ 11,000	1,396 mt (20% below current)	1,745 mt (current limit)
	Medium 8,000 – 10,999	1,222 mt (30% below current)	1,396 mt (20% below current)
	Low 6,000-7,999	1,047 mt (40% below current)	1,222 mt (30% below current)
	Very Low < 6,000	960 mt (45% below current)	1,047 mt (40% below current)

**Alternative 5 (Preferred Alternative)** would base Amendment 80 BSAI halibut PSC limits on a table with limits that range from the current PSC limit to 35 percent below that limit:

		EBS shelf trawl survey index (mt)	
		Low < 150,000	High ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	High ≥ 11,000	1,745 mt (current limit)	1,745 mt (current limit)
	Medium 8,000 – 10,999	1,396 mt (20% below current)	1,571 mt (10% below current)
	Low 6,000-7,999	1,309 mt (25% below current)	1,396 mt (20% below current)
	Very Low < 6,000	1,134 mt (35% below current)	1,134 mt (35% below current)

*Alternatives Considered and Eliminated from Further Study*

NMFS considered eight additional alternatives and eliminated them from further study.

1. *Complex multi-dimensional control rules:* A preliminary review DEIS was presented to the Council in October 2020 with a complex formulation of 2 and 3-dimensional harvest control rules for establishing halibut PSC limits. Harvest control rules are the operational component of a harvest strategy, essentially pre-agreed guidelines that determine how much fishing can take place, based on indicators of the targeted stock's status. A two-dimensional control rule sets the control rule based on two variables (e.g., biomass and PSC limit) while a three-dimensional control rule adds an additional variable (e.g., two different estimates of biomass for both survey indices and a PSC limit as the third). Each alternative contained a range of starting points (e.g., the value of the PSC limit at the time of implementation) and rate of change of the PSC limit with changes in the biomass estimate. Public comment indicated a preference for a simpler approach that is more transparent to the public understanding of how the annual limits would be set. The Council considered a simplified approach to setting PSC limits indexed to halibut abundance using tables with PSC limits that corresponded to a range of pre-set survey index states. The Council chose to pursue further analysis of only the simplified approach to setting PSC limits. Therefore, the previous more complex set of Alternatives, Elements, and Options which had been under development for several Council meetings (see Table 1-2 in the FEIS) was replaced by the alternative set presented in the published DEIS and FEIS.
2. *Closed loop simulation modeling:* During review of the October 2020 analysis and based on recommendations of the Council's Science and Statistical Committee (SSC) regarding the use of the model results for context only, the Council requested the analysts pursue a more simplified analysis that did not involve projecting alternative impacts based on the halibut operating model (described in Section 4.3 of the FEIS).
3. *Roll-over provisions for PSC:* An option to roll over a percentage of unused PSC from one year to the next was considered for the April 2021 review but was eliminated from consideration due to difficulties in incorporating such a provision with annually varying PSC limits.
4. *Alternatives that apply to all groundfish fishing sectors:* Additional alternatives had been considered previous to the October 2020 alternative set, including alternatives that linked PSC limits to abundance for all fishing sectors in the BSAI: the fixed gear sector, BSAI trawl limited access sector, and the CDQ groups. Those alternatives ranged from status quo with fixed halibut PSC limits by sector to a range of complex gear-specific PSC limits linked to BSAI halibut abundance for all sectors. Under that set of alternatives PSC limits would have been established for all sectors by gear type (aggregate trawl PSC limit and an aggregate non-trawl PSC limit) using the two- and three-dimensional control rules under consideration at that time (superseded by the current alternative set as noted above). In February 2020, the Council narrowed the focus of the analysis to only the Amendment 80 sector, eliminating the other sectors from the analysis, because Amendment 80 sector comprises the majority of halibut PSC mortality.
5. *Standardized survey indices:* Absolute values derived from each survey index are dependent on the assumptions of the survey design and data analysis, whereas a standardized index that indicates the trend could show less year-to-year variability. However, basing an index table on standardized trend values would make it more difficult for stakeholders to read reported survey indices in a given year and map those onto a table to anticipate the resulting Amendment 80 PSC limit. Therefore, in the interest of greater transparency to the public and in regulation, the Council and NMFS chose to use absolute values derived from the surveys, rather than a standardized index. This is similar to how PSC limits for other PSC species are presently set in the BSAI. The implications of using a standardized estimate of survey abundance as it relates to the IPHC setline survey is discussed under Section 1.6.1.5 of the FEIS.

6. *Indices of abundance*: A wide range of different abundance indices were considered for linking halibut abundance to halibut PSC limits in the development of alternatives before selecting the EBS shelf trawl survey and the IPHC setline survey for the alternatives. Additional indices considered include the EBS slope survey, the Gulf of Alaska (GOA) bottom trawl survey, the AFSC longline survey, and the IPHC coastwise assessment results. Different size categories of halibut from these surveys were also considered to develop a ‘juvenile index’ of abundance. In addition, several fishery catch-per-unit-effort indices were also considered. The Council also considered indices in numbers of fish instead of biomass. Additional information and correlation amongst these various indices are contained in Appendix 2 of the October 2019 draft analysis<sup>2</sup>. The SSC determined that the most appropriate indices for linking PSC limits to abundance are the EBS shelf trawl survey and the IPHC setline survey.
7. *Simplified bycatch control rules*: In April 2016, an appendix to a discussion paper proposed some simplified bycatch control rules (referred to as BCRs). These proposed BCRs included a ratio of historical bycatch to indices of abundance from the IPHC setline survey and the EBS trawl survey as well as consideration of target spawning biomass and weighted based upon the previous year’s PSC limit. These concepts were not carried forward by the Council at that time.
8. *Extension to the GOA*: The Council briefly considered extending the analysis to include the GOA but deferred further consideration of this to after the BSAI action was completed.

### **Environmentally Preferable Alternative**

The Council on Environmental Quality regulations require that the ROD specify the alternative or alternatives which are considered to be environmentally preferable (40 CFR 1505.2(b)). Such an alternative has been interpreted to be the alternative that will promote the national environmental policy as expressed in section 101 of NEPA. Ordinarily, this means the alternative that causes the least damage to the physical and biological environment, and that best protects, preserves, and enhances historic, cultural, and natural resources.

For this action, the NMFS Alaska Region considers the environmentally preferable alternative as that which demonstrates the greatest resource conservation. The NMFS Alaska Region considers halibut bycatch mortality reduction to be a conservation measure. Therefore, reducing halibut bycatch mortality through lower halibut PSC limits for the Amendment 80 sector is a conservation measure.

The FEIS analysis demonstrates that Alternative 4 is the environmentally preferable alternative. Compared to the other alternatives, the environmental benefits of this alternative would occur by setting the Amendment 80 halibut PSC limits to the lowest levels (1,047 mt and 960 mt) of all the alternatives. These limits would be implemented in any year in which any one of three survey index state combinations (Low/Low, Very Low/High, and Very Low/Low) are indicated from the results of the most recent IPHC setline and EBS shelf trawl survey. The status quo PSC limit (1,745 mt) would be implemented under only one of eight survey index state combinations (High/High).

Alternative 1 (no action) maintains the current static Amendment 80 halibut PSC limit of 1,745 mt, such that no reduction in bycatch occurs and as the halibut abundance decreases, the Amendment 80 PSC limit becomes a greater portion of the overall halibut bycatch.

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<sup>2</sup> This document is available on the Council web page at:  
<https://meetings.npfmc.org/CommentReview/DownloadFile?p=24ed20d5-4180-4d68-aea2-55afb25df194.pdf&fileName=C1%20Halibut%20ABM%20Analysis.pdf>



Alternatives 2 and 5 reduce the Amendment 80 halibut PSC limit under most survey index states that reflect halibut abundance (five of six survey index states under Alternative 2 and six of eight survey index states under Alternative 5). However, both alternatives maintain the status quo under either one (Alternative 2) or two (Alternative 5) survey index states. Alternative 2 is the only action alternative that does not include the IPHC setline survey index state of Very Low.

Alternative 3 maintains the status quo Amendment 80 halibut PSC limit under two survey index states (High/Low and High/High) and would increase the Amendment 80 halibut PSC limit under one survey index state (High/High).

Therefore, since the conservation benefits are greatest under Alternative 4, that alternative is the environmentally preferable alternative.

### **Rationale for Selection of the Preferred Alternative**

NMFS's decision to select Alternative 5 was reached after a comprehensive review of the relevant environmental, economic, and social consequences of the alternatives, and considering the recommendation by the Council. NMFS has taken into account the Magnuson-Stevens Act, the Northern Pacific Halibut Act of 1982, other applicable statutory and policy considerations, and public comments in selecting Alternative 5 as the alternative that best enables NMFS and the Council to link the halibut PSC limit for the Amendment 80 commercial groundfish trawl sector in the BSAI groundfish fisheries to halibut abundance, while meeting statutory, regulatory, and national policy requirements, goals, and objectives. NMFS believes that linking Amendment 80 halibut PSC limits to halibut abundance levels under Alternative 5: (1) will best ensure that halibut PSC mortality in Amendment 80 fisheries does not become a greater share of overall halibut removals in the BSAI; (2) will create a more equitable approach between competing users; (3) may increase halibut harvest opportunities in directed and sport halibut fisheries and for subsistence users; and (4) reduce bycatch below the current limit in lower abundance conditions and thus will provide conservation benefits for the halibut resource.

NMFS and the Council considered the potential impacts of Alternative 5 on the halibut stock, the Amendment 80 sector, the directed halibut commercial and sport fisheries, communities that engage in BSAI groundfish or directed halibut fisheries, and halibut subsistence users. In particular, when compared to the other alternatives, Alternative 5 best balances the interests of the two largest halibut user groups in the BSAI, the directed commercial halibut fishery and the Amendment 80 sector, by establishing abundance-based halibut PSC limits for the Amendment 80 sector. This abundance-based approach is similar to the IPHC's management approach for the directed commercial halibut fisheries off Alaska, which establishes annual catch limits that vary with established measures of halibut abundance.

This decision is based on the Magnuson-Stevens Act's requirements, including an appropriate balance of the ten national standards, and other applicable law. In particular, section 303(a)(11) and National Standard 9 require the establishment of conservation and management measures that minimize bycatch to the extent practicable. National Standard 1 requires that resource management measures achieve optimum yield on a continuing basis. Two other National Standards were particularly relevant to the decision: National Standard 8 requires that management measures provide for the sustained participation of fishing communities and to the extent practicable, minimize adverse economic impacts on such communities; and National Standard 4 requires that allocation of fishing privileges be fair and equitable. The FEIS contains a detailed analysis of those standards in Section 5.3.2.3.1. NMFS concludes that the Amendment 80

halibut PSC limit reductions under Alternative 5 are consistent with and best balance the national standards and other Magnuson-Stevens Act requirements.

NMFS considered the potential impacts that Alternative 5 may have on the Amendment 80 sector's ability to avoid halibut and reduce halibut mortality, while maximizing harvest of groundfish species. The FEIS notes that the degree of correlation, or lack thereof, between halibut abundance and halibut encounters by the Amendment 80 sector is unknown. NMFS notes that at current halibut abundance index levels, under Alternative 5, a 1,309 mt halibut PSC limit would be established for the Amendment 80 sector, as specified in the Low/Low states of the setline and EBS shelf trawl survey indices. This is a 25 percent reduction from the 1,745 metric ton limit currently in place and is 37 mt under the sector's average halibut PSC use from 2016 through 2019. Alternative 5 is appropriate because its halibut PSC limits account for the inter-annual variability in the Amendment 80 sector's encounters of halibut and resulting halibut PSC mortality. This variability makes it clear that it is not sufficient to consider only average halibut PSC mortality over a series of years when making decisions about establishing PSC limits. NMFS acknowledges that should the IPHC setline survey fall into the Very Low state, an additional halibut PSC limit reduction would be important to promote conservation of the halibut stock and for consistency with the abundance-based process for setting directed halibut fishery catch limits. At the Very Low/Low and Very Low/High index states, Alternative 5 would reduce the Amendment 80 halibut PSC limit 35 percent from the current limit.

NMFS acknowledges that Alternative 5 would impact all Amendment 80 companies differently and significant changes may be needed to fishing plans and operations to adjust to the reduced halibut PSC limits under different survey index states. NMFS and the Council considered the steeper halibut PSC limit reductions under Alternative 4, but on the Council's recommendation, NMFS selected Alternative 5 as a measure that would have less economic impact to the Amendment 80 sector, while balancing the need to reduce the Amendment 80 halibut PSC limit to meet the Purpose and Need statement of the FEIS. NMFS believes that reductions in halibut mortality by the Amendment 80 sector are necessary and will promote the conservation of the halibut stock in both the short and long terms.

Alternative 5 would address the current imbalance among users through greater conservation of the halibut resource. NMFS recognizes that halibut PSC limits impose an upper limit on halibut bycatch mortality in the commercial groundfish fisheries. NMFS further recognizes that halibut is a highly valued fish species that supports directed commercial and recreational halibut fisheries coastwide, as well as subsistence use. The social and cultural importance of halibut and halibut fishing as a traditional activity for Alaska Native tribes and ethnic groups throughout Alaska is well-documented. The FEIS notes that the cultural significance of halibut for these fishermen and their associated communities exceeds the economic value of the fishery to their communities. While the Council does not currently set catch limits in the directed halibut fishery, the economic, social, and cultural benefits to Alaska communities that may result from Amendment 80 halibut PSC reductions is discussed in Section 5.5 and Appendix 1 of the FEIS. Overall, positive social and environmental justice impacts on dependent halibut directed fishery communities would be expected as a result of Alternative 5.

Managing PSC limits according to abundance promotes conservation of the halibut resource and equality and fairness among competing users. Anticipated benefits to the directed commercial halibut fishery from Alternative 5's halibut PSC limits include longer term benefits from reductions in the Amendment 80 bycatch of smaller fish. Reduced mortality of smaller halibut could provide benefits for the directed fishery in the Bering Sea and elsewhere as these halibut migrate and recruit to legal size. Near-term

benefits to the directed fishery in the Bering Sea accrue from savings in larger halibut. The FEIS indicates that directed commercial halibut catch limits could increase by approximately 360,000 pounds under the 1,309 PSC limit that would be established under the Alternative 5 at the current survey index state of the halibut stock indices (Low/Low). While that amount could be available to those direct users, allocations to them will depend on actions by the IPHC. The FEIS indicates that the sport fishery and subsistence users may also see benefits under Alternative 5. Such benefits may occur if reducing BSAI halibut PSC limits under low abundance conditions were to ultimately result in an overall improvement in availability of halibut for sport harvest or subsistence use, with an accompanying decrease in effort and expense in harvesting halibut for those users, and/or an increase in interest in halibut sport fishing or subsistence use in the region prompted by an increasing abundance of larger halibut.

In summary, Alternative 5 is the most reasonably calculated alternative to promote conservation of the halibut resource, improve its management in accordance with the Magnuson-Stevens Act's requirements, including an appropriate balance of the ten national standard requirements, and create a more equitable distribution process between the directed and non-directed fisheries.

### **Mitigation Measures and Monitoring**

The basis of Alternative 5 is the linkage of Amendment 80 halibut PSC limits to halibut abundance levels. Overall, Alternative 5 contributes positively to the conservation objective of reducing Amendment 80 halibut bycatch mortality under all but the highest survey index state (High/High), thus acting as a mitigation measure controlling for halibut bycatch. Under a High/High halibut abundance scenario, NMFS believes that further reduction from the status quo level (1,745 mt) would not be necessary for conservation needs at this time, thus no additional mitigation measures are needed if Alternative 5 is implemented.

#### *Monitoring and Data Collection*

The Amendment 80 sector is subject to extensive catch and bycatch monitoring and data collection requirements at [50 CFR § 679.51\(a\)\(2\)](#) and 679.93, and Alternative 5 would not alter those requirements. These requirements include full observer coverage, meaning Amendment 80 vessels must have at least one observer aboard the vessel at all times when harvesting halibut or when harvesting, receiving, or processing groundfish. Further, all Amendment 80 vessels, with a few exceptions, using trawl gear in the BSAI must have aboard at least two observers for each day that the vessel is used to catch, process, or receive groundfish harvested in a federally managed or State-managed parallel groundfish fishery. At least one observer must be endorsed as a lead level 2 observer. More than two observers are required if the observer workload restriction would otherwise preclude sampling as required. Amendment 80 vessels must comply with all observer requirements, including equipment and data collection, entry, and transmission.

Amendment 80 vessels are also subject to Vessel Monitoring System (VMS) requirements under 50 CFR [§ 679.28\(f\)](#). A VMS consists of a NMFS-approved VMS transmitter that automatically determines the vessels position and transmits it to a NMFS-approved communications service provider. The communications service provider receives the transmission and relays it to NMFS.

Finally, a mothership or catcher/processor using trawl gear in the non-pollock groundfish fisheries in the BSAI must comply with the requirements at 50 CFR § 679.120 when participating in halibut deck sorting

(as defined at 50 CFR [§ 679.2](#)). Deck sorting of catch may be used by a vessel as a means to reduce halibut bycatch mortality by returning bycaught halibut to the sea in an expeditious manner to improve chances of survival. These vessels are also subject to video monitoring for halibut deck sorting at 50 CFR § 679.28(l).

### *Reporting*

The Amendment 80 sector is subject to reporting requirements at 50 CFR [§ 679.5\(s\)](#) and Alternative 5 would not alter those requirements. These requirements include, but are not limited to logbooks, a check in and out of the fishery, production and product transfer reports, as well as an annual Amendment 80 Cooperative Report.

### **Public Comments**

NMFS summarized and responded to the public comments received on the DEIS in Section 8 of the FEIS, entitled “Comments on Analysis Methods and Content.” The DEIS was released for public review on September 28, 2021, and the public review period ended on October 25, 2021 (86 FR 50331). Where appropriate, NMFS also made changes to the FEIS in response to public comments on the DEIS and these changes were noted in the FEIS. NMFS released the FEIS on December 9, 2022 (87 FR 75625). NMFS received three public comments on the FEIS that were not also submitted on the DEIS.

One commenter suggested that the FEIS’s statement of purpose and need was too focused on establishing abundance-based limits for the Amendment 80 sector, even though other groundfish sectors have substantial halibut bycatch. The commenter felt this resulted in a range of alternatives that excluded other viable alternatives, such as an alternative that would have included other groundfish sectors within the scope of the action. Section 2.8 of the FEIS clearly summarizes other alternatives that were considered and the reasons they were excluded from further analysis, including alternatives that incorporated additional reduction of halibut PSC limits for other BSAI groundfish sectors.. The FEIS also clearly identifies the reason the proposed action was focused on Amendment 80 sector was because that sector comprises a much larger share of the BSAI halibut bycatch mortality annually than any of the other individual groundfish sectors that have halibut PSC limits and why adjusting that proportion is important.

One commenter suggested that the FEIS does not comply with NEPA requirements to address unavailable or incomplete information. The FEIS notes throughout the analysis where relevant information is incomplete or unavailable and includes the relevance of such information to evaluating reasonably foreseeable significant adverse impacts on the human environment. In such cases, the FEIS notes existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment. The analysis generally includes an evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

One commenter suggests that the cumulative effects assessment in the FEIS, which identifies only one reasonably foreseeable future action (RFFA), is insufficient and lists additional RFFAs that the FEIS could have considered. The commenter stated that NMFS failed to consider the best available scientific information (contrary to National Standard 2) to assess reasonably foreseeable future environmental conditions that are likely to constrain harvests for the Amendment 80 sector in a manner that will result in a failure to achieve Optimum Yield on a consistent basis. The commenter felt that such conditions include, but are not limited to, constraints on salmon bycatch that could limit the pollock fishery (a major

contributor of the groundfish harvests), constraints due to low crab stock abundance that will likely result in tighter restrictions on crab PSC limits and/or new closed areas for Amendment 80 trawling, and increasing variability in oceanic and atmospheric conditions that scientists predict will shift flatfish and other Amendment 80 target species and result in more target species moving to areas where Amendment 80 is not allowed to fish (*e.g.*, the Northern Bering Sea Research Area). The commenter noted that there have been well-documented “marine heat waves” that have had adverse impacts on numerous stocks, including Pacific cod, another major groundfish harvest species in the BSAI. RFFAs include “federal and non-federal activities not yet undertaken, but sufficiently likely to occur, that a Responsible Official of ordinary prudence would take such activities into account in reaching a decision,” and include (but are not limited to) “activities for which there are existing decisions, funding, or proposals identified by the bureau. Reasonably foreseeable future actions do not include those actions that are highly speculative or indefinite.” 43 CFR 46.30. In developing the EIS, the analysts used their best judgement in determining the RFFAs to consider in the cumulative effects analysis. No additional RFFAs were suggested to NMFS or the Council through written comments or public testimony during scoping for this EIS, at any Council meeting, stakeholder committee meetings, or listening sessions on this action. Further, no additional RFFAs were submitted in public comments on the DEIS during the public comment period.

NMFS published the proposed rule in the **Federal Register** on December 9, 2022 (87 FR 75570) with a public comment period that ended on January 23, 2023 (87 FR 75570). NMFS received 70 comments on the proposed rule. NMFS published a notice of availability (NOA) for Amendment 123 to the BSAI FMP was published in the **Federal Register** on November 9, 2022 (87 FR 67665) with comments invited through January 9, 2023. After inquiries from the public, NMFS realized that a supporting document containing the revised BSAI FMP text was not made available for public review with the November 9, 2022 publication of the NOA. On December 9, 2022 NMFS extended the public comment period on the FMP Amendment through February 7, 2023 (87 FR 75569). NMFS received 70 comments on the FMP Amendment.

Many of the comments received on Amendment 123 are very similar to the comments received on the DEIS. Public comments highlight the controversial issues associated with Amendment 123. In summary, NMFS received the majority of comments on Amendment 123 from members of the Amendment 80 fleet and support services who oppose Amendment 123 and linking the Amendment 80 PSC limit to halibut abundance. Numerous comments were also submitted by halibut fishermen, Alaska residents, and organizations who support Amendment 123 and linking the Amendment 80 PSC limit to halibut abundance.

Comments from the Amendment 80 fleet and companies which provide services to the Amendment 80 fleet generally opposed the action, arguing that the fleet had already reduced halibut bycatch to the maximum extent practicable as required by Amendment 111 to the BSAI FMP, given the tools available. These opponents cited the lack of correlation between halibut abundance indices and Amendment 80 halibut encounters, the unpredictability of halibut encounters, and the lack of tools for the Amendment 80 fleet to further avoid halibut and reduce bycatch as reasons further reductions would not be practicable or economically feasible. Comments from Amendment 80 firms stated that as they are required to implement more measures to reduce halibut mortality, their operating costs will increase and revenue will decrease when the halibut PSC limits constrain target catch, such that the proposed action will make groundfish harvest economically unfeasible for them and provide negative net benefits to the nation. Comments from companies that provide support services to the Amendment 80 fleet noted that they would be negatively affected by the PSC limits in Amendment 123 from less spending for support

services by the Amendment 80 fleet as the fleet's revenues decreased as a result of the PSC limits. A number of comments argued that applying the abundance-based PSC limits to only the Amendment 80 fleet but not to other groundfish fleets with static halibut PSC limits was arbitrary. Additional commenters felt there was no conservation benefit to the proposed action, since the FEIS concludes that there would likely be no benefit to future halibut spawning biomass, due to the IPHC's SPR-based management of the directed fishery.

Many commenters felt that the Amendment 80 fleet halibut PSC limit represents a disproportionately high amount of the overall halibut mortality, especially at low abundance levels. Comments from halibut fishermen, tribal members, communities dependent on halibut, including Alaska Native communities, and the general public noted economic hardships resulting from a reduction in quota for directed halibut fisheries and inaccessibility of halibut resources by Alaska Native tribal members due to effects of disproportionately high levels of halibut bycatch. A number of commenters noted the cultural importance of halibut to Alaska Native communities. There was a strong sentiment expressed by a number of commenters who did not feel that any of the alternatives would reduce the PSC limits to a low enough level to provide opportunities for additional halibut harvest in the directed halibut fisheries. Some commenters felt the analysis did not include enough information to assess the potential impacts of this action on the resource, user groups, or the environment. NMFS will respond to these comments in the Final Rule, but no changes are expected.

NMFS made the decision to select Alternative 5 after Council recommendation and careful review of the public comments on the DEIS, the FEIS, the Amendment 123, and the proposed rule. NMFS will summarize and respond to the comments received on Amendment 123 and the proposed rule in the final rule.

### **Determination**

Considering the information in the FEIS for Bering Sea and Aleutian Islands Halibut Abundance-Based Management of Amendment 80 Prohibited Species Catch Limit - Amendment 123 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area, and other relevant material available in the record, I certify that NMFS has considered all the alternatives, information, analyses, and objections submitted by the State, Tribal, and local governments and public commenters for NMFS's consideration in the development of the EIS.

Signed:   
Jon Kurland, Administrator, Alaska Region, NMFS

Date: March 1, 2023