

Alaska Region Office, NMFS
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**Discussion Paper on Process for Modifying Halibut Prohibited Species Limits
in the Alaska Groundfish Fisheries**

At its December 2009 meeting, the North Pacific Fishery Management Council (Council) requested staff to prepare a discussion paper examining how Pacific halibut prohibited species catch (PSC) limits are established each year in the annual harvest specifications process and the process for modifying them.

Background

The annual halibut PSC limits for the federally managed groundfish fisheries in the Bering Sea and Aleutian Islands management area (BSAI) and Gulf of Alaska (GOA) are established by different procedures described below.

BSAI: The Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Area (BSAI FMP) authorizes the establishment of the BSAI halibut PSC limits in regulations and sector allocations thereof. Accordingly, total BSAI limits and sector allocations (trawl, Amendment 80 sector, BSAI trawl limited access sector, and non-trawl sectors) are set in regulation and the limits allocated to each sector as part of the annual harvest specifications reflect those regulations. **Modifications to PSC limits would require either an FMP amendment or regulatory amendment, depending on the modification.** Current regulatory allocations of the BSAI halibut PSC limits are as follows:

BSAI Sector	Halibut PSC limit	Regulatory authority
Total Trawl Sector	3,675	§ 679.21(e)(1)(iv)
Amendment 80	2,425 (in 2010)	§ 679.21(e)(3); Table 35 to part 679
BSAI Limited Access	875	§ 679.21(e)(3); Table 35 to part 679
Trawl CDQ	326	§ 679.21(e)(3)(i)(A)(2)
Total Non-Trawl	900	§ 679.21(e)(2)
Nontrawl CDQ	67	§ 679.21(e)(4)(i)(A)
Other Nontrawl	833	

NOTE: The trawl PSC limits do not add up to the regulatory limit of 3,675 mt because the PSC limit reductions for the Amendment 80 sector are not reflected in a commensurate downward adjustment of the PSC limit established in regulations. In reality, the trawl PSC limit in 2010 is managed to 3,626. By 2012, the Amendment 80 sector allocation will be 2,325. This allocation plus the 875 mt for the BSAI trawl limited access sector and 326 mt for trawl CDQ will equate to a managed PSC limit of 3,526 mt.

Pursuant to § 679.21(e)(1)(iv) and § 679.91(d) through (f), trawl halibut PSC assigned to the Amendment 80 sector is sub-allocated to Amendment 80 cooperatives as PSC cooperative quota (CQ) and to the Amendment 80 limited access fishery. PSC CQ assigned to Amendment 80 cooperatives is not allocated to specific fishery categories. The PSC allocations between Amendment 80 cooperatives and the Amendment 80 limited access sector are not known until eligible participants apply for participation in the program by November 1 each year. Section 679.21(e)(3)(i)(B) requires the apportionment of each trawl PSC limit not assigned to Amendment 80 cooperatives into PSC bycatch allowances for seven specified fishery categories. Section 679.21(e)(4)(i) authorizes the apportionment of the non-trawl halibut

PSC limit into PSC allowances among six fishery categories. Halibut bycatch PSC allowances may be seasonally apportioned as part of the annual harvest specification process after considering information listed in regulations at § 679.21(e)(5).

GOA: Under the current Fishery Management Plan for Groundfish of the Gulf of Alaska (GOA FMP), the halibut mortality PSC limits are specified annually as a component of the proposed and final groundfish harvest specifications under the regulatory process described at § 679.21(d). **However, the actual amount of the trawl and non-trawl halibut PSC limits are discretionary consistent with the considerations set forth in the FMP and implementing regulations.** The GOA FMP at section **3.6.2.1.1 Apportionment and Seasonal Allocation of Pacific Halibut** (Appendix 1) sets forth criteria for the annual PSC limits that must be considered. These include:

- estimated change in biomass and stock condition of halibut;
- potential impacts on halibut stocks;
- potential impacts on the halibut fisheries;
- estimated bycatch in years prior to that for which the halibut PSC mortality limit is being established;
- expected change in target groundfish catch;
- estimated change in target groundfish biomass;
- methods available to reduce halibut bycatch;
- the cost of reducing halibut bycatch; and
- other biological and socioeconomic factors that affect the appropriateness of specific bycatch measures in terms of objectives.

Additionally, separate but related criteria are set forth in the GOA FMP for the seasonal distribution of the halibut PSC limits (Appendix 1), as well as in regulations at §679.21(d)(5). The final harvest specifications summarize the Council and NMFS’s findings with respect to each of these FMP considerations.

Section 679.21(d) authorizes the apportionment of annual halibut PSC limits to GOA trawl and hook-and-line gear and allows the establishment of apportionments for pot gear. Since 1986, the Council has recommended that NMFS maintain the halibut PSC limit of 2,000 mt for the trawl fisheries and since 1995 has recommended a 300 mt PSC limit for the hook-and-line gear fisheries. Prior to 1995, the Council recommended a fixed gear halibut PSC limit of 750 mt. Pot gear was exempted from closures under the fixed gear limit, so all of the 750 mt was allocated to hook-and-line gear. Since 1995, the Council reduced the PSC limit for hook-and-line gear to 300 mt by exempting the IFQ sablefish fishery from halibut PSC restrictions. Halibut PSC limits for GOA trawl and non-trawl fisheries and associated catch mortality since 1995 are listed in Table 1.

At its September 1993 meeting, the Council adopted a regulatory amendment to authorize separate apportionments of the trawl halibut bycatch mortality limit between trawl fisheries for the deep-water species complex (deep-water flatfish, rockfish, sablefish, and arrowtooth flounder) and for the shallow-water species complex (pollock, Pacific cod, shallow-water flatfish, flathead sole, Atka mackerel, and “other species”). This action was subsequently implemented through emergency and then normal rulemaking process.

Section 679.21(d)(5) provides NMFS the authority to seasonally apportion the GOA halibut PSC limits after consultation with the Council. The GOA FMP and regulations require the Council and NMFS to consider the following information in seasonally apportioning halibut PSC limits: (1) seasonal distribution of halibut; (2) seasonal distribution of target groundfish species relative to halibut distribution; (3) expected halibut bycatch needs on a seasonal basis relative to changes in halibut biomass

and expected catch of target groundfish species; (4) expected bycatch rates on a seasonal basis; (5) expected changes in directed groundfish fishing seasons; (6) expected actual start of fishing effort; and (7) economic effects of establishing seasonal halibut allocations on segments of the target groundfish industry. Sections 679.21(d)(5)(iii) and (iv) specify that any underages or overages of a seasonal apportionment of a PSC limit will be deducted from or added to the next respective seasonal apportionment within the fishing year.

Process for modifying the GOA Halibut PSC limits under the Current FMP.

As described above, the GOA FMP and implementing regulations authorize the Council to recommend, and NMFS to approve, annual halibut mortality PSC limits as a component of the proposed and final groundfish harvest specifications. The current 2,000 mt PSC limit for the GOA trawl fisheries has remained unchanged since 1989 and prior to that (1986 – 1988) approximated this amount in the domestic and joint venture groundfish fisheries as well. As mentioned above, the 300 mt PSC limit for the non-trawl fisheries has remained unchanged since 1995 when the IFQ sablefish fishery was exempted from the PSC limit.

Prior to 2007, the environmental and socioeconomic effects of the annual harvest specifications, including the PSC limits, were considered in annual environmental assessments prepared each year for the harvest specifications process. Preparation of annual environmental assessments ceased in 2007 with the development of an environmental impact statement (EIS) prepared for the groundfish harvest strategy supporting the annual harvest specifications. The EIS did not address the process for setting annual PSC limits and likely will be updated with a supplemental EIS in 2011. At that time, the Council may wish to expand the supplemental EIS to include a range of alternatives for halibut PSC limits. Alternatively, the Council could update the environmental assessment (EA) and final regulatory flexibility analysis (FRFA) prepared for the 2006-2007 harvest specifications. This document was finalized in January 2006 and would need to be updated to assess alternatives for changing the current GOA PSC limits. The scope of alternatives could be designed to provide some flexibility in future years to modify PSC limits, similar to how adjustments to annual groundfish specifications are determined within the scope of the EIS supporting the harvest specifications.

The schedule for such an analysis would need to be dovetailed with the annual harvest specifications process so that harvest specifications are not delayed. A description of a recommended schedule is provided below and summarized in Figure 1.

Scheduling considerations for an analysis on alternatives to modify GOA halibut PSC limits

The Council proposes harvest specifications, including halibut PSC limits and apportionments thereof, in October each year for the next two year period. The proposed harvest specifications are published in the *Federal Register* for a 30-day comment period that typically spans the December Council meeting. Final Council recommendations on harvest specifications for the next two-year period occur in December and pending NMFS approval, these recommendations typically are implemented by final rule between mid-February and March 1 of the following year. During the time period between January 1 and when the new harvest specifications are published (about March 1), harvest specifications that were recommended for that year by the Council two years prior are effective. These early year specifications sometimes are revised by inseason adjustment authority (50 CFR 679.25) if they are determined to be misspecified and not based on the best available science. For example, pollock and Pacific cod TACs often are adjusted prior to January 1 to reflect new ABC/TACs stemming from the most recent Council recommendations

and to ensure that seasonal harvest limits are based on the best available science and not exceeded for consistency with Steller Sea Lion protection measures. Further consultation with NOAA General Counsel is required to determine whether the existing inseason adjustment authority extends to the adjustment of a halibut PSC limit thereby allowing such changes to be effective within the next fishing year. This is important because PSC limits for a year must be effective at the beginning of a fishing year so that seasonal or fishery apportionments are not exceeded. Thus, downward adjustments of a GOA halibut PSC limit recommended by the Council in December under the current harvest specification process *may* not be effective until the second year of the upcoming two-year specifications.

To avoid a delay in the harvest specifications process, the analysis of alternatives for adjustments to halibut PSC limits should be initiated early in the year. Ideally alternatives would be identified by April, an analysis prepared for initial Council review in June, with a preliminary preferred alternative chosen by the Council in October that would be incorporated in the proposed harvest specifications for public review and comment. The final recommendation of a modified PSC limit would occur in December and included in the final harvest specifications. As stated above, a modification to the PSC limits may not be effective until the second year of the two-year specification process if the March 1 effective date of the harvest specifications during year 1 would undermine or preempt the Council's objective for the modified PSC limit. An exception to this delay could occur if cause for waiver of prior notice and comment under the Administrative Procedure Act exists and action were taken by the Council in October to change the existing halibut PSC limit established for the upcoming year by direct final rule. Given the systemic changes to harvest specifications that would be necessary and associated analyses, review and approval processes, NMFS would be concerned about staff resources being diverted to this abbreviated rulemaking process instead of completing staff work necessary to support the normal harvest specifications process.

Other Options for Modifying the GOA Halibut PSC limits

An alternative to developing an EA/initial RFA supporting modification of halibut PSC limits as a provision of the annual harvest specifications could be the development of an analysis for a new GOA FMP amendment that establishes the PSC limits in regulations, similar to the BSAI FMP and implementing regulations. The level of analysis, staff resources, and schedule considerations necessary to accomplish a modification to PSC limits would be similar under either approach. If the Council wished instead to develop an FMP amendment to establish PSC limits in regulations, regulations implementing the new PSC limits would need to be effective by December for the upcoming harvest specification process. Further consultation with NOAA General Counsel is required to assess whether a new PSC limit could be effective the next fishing year by inseason adjustment authority or whether the effective date of a new PSC limit would be delayed until the following year, similar to the schedule set forth in Figure 1.

Conclusion

Halibut PSC limits in the GOA are set on an annual basis as a provision of the harvest specifications process, while in the BSAI they are set by regulation. Changes to the GOA PSC limits would require that an analysis (EA/initial RFA) be prepared within a timeframe that allows for final Council action in December and implementation through the harvest specification process. Alternatively, an FMP amendment could be considered that authorizes the establishment of modified PSC limits in regulations, similar to the BSAI.

Table 1. 1995 - 2009 trawl and hook-and-line halibut PSC mortality in the GOA; Trawl PSC limit is 2000 mt and Hook-and-Line PSC limit is 300 mt.

Year	Trawl bycatch mortality	Hook and Line bycatch mortality	Total bycatch mortality
1995	2,152	377	2,529
1996	2,050	172	2,221
1997	1,946	125	2,071
1998	2,113	296	2,409
1999	2,028	348	2,376
2000	2,137	276	2,414
2001	1,888	285	2,173
2002	2,197	244	2,441
2003	1,995	290	2,286
2004	2,444	302	2,745
2005	2,108	208	2,316
2006	1,984	335	2,319
2007	1,948	294	2,242
2008	1,955	502	2,458
2009	1,818	277	2,095

Figure 1. Schedule for analytical and harvest specification process necessary to support change to the GOA halibut PSC limits using the 2011/2012 harvest specification process as an example.

Action	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	
	2010									2011													2012
Choose alternatives and task analysis (April 2010)																							
Analysis developed for Council initial review & approval for public review (June 2010)																							
Council selects preliminary preferred alternative (Oct 2010)																							
NMFS prepares & publishes proposed harvest specs for 30-day comment period (12/1/10)																							
Council final action on 2011/2012 harvest specifications; adoption of modified PSC limit for 2012																							
Publish 2011/2012 final harvest specifications (March 1, 2011)																							
Modified PSC limits effective January 1, 2012																							

**Appendix 1. GOA FMP policy regarding halibut PSC limits
(Section 3.6.2.1.1 Apportionment and Seasonal Allocation of Pacific Halibut)**

Apportionments of PSC limits, and seasonal allocations thereof, will be determined annually by the Secretary of Commerce in consultation with the Council. Separate PSC limits may be established for specific gear. PSC limits, apportionments, and seasonal allocations will be determined using the following procedure:

1. Prior to the October Council meeting. The GOA Groundfish Plan Team will provide the Council the best available information on estimated halibut bycatch and mortality rates in the target groundfish fisheries.
2. October Council meeting. While developing proposed groundfish harvest levels under Section 3.2.3, the Council will also review the need to control the bycatch of halibut and, if necessary, recommend proposed halibut PSC mortality limits and apportionments thereof. The Council will also review the need for seasonal allocations of the halibut PSC. The Council will make proposed recommendations to the Secretary about some or all of the following:
 - a. the regulatory areas and districts for which PSC mortality limits might be established;
 - b. PSC for particular target fisheries and gear types;
 - c. seasonal allocations by target fisheries, gear types, and/or regulatory areas and district;
 - d. PSC allocations to individual operations; and
 - e. types of gear or modes of fishing operations that might be prohibited once a PSC is reached.

The Council will consider the best available information in doing so. Types of information that the Council will consider relevant to recommending proposed PSCs include:

- a. estimated change in biomass and stock condition of halibut;
- b. potential impact on halibut stocks;
- c. potential impacts on the halibut fisheries;
- d. estimated bycatch in years prior to that for which the halibut PSC mortality limit is being established;
- e. expected change in target groundfish catch;
- f. estimated change in target groundfish biomass;
- g. methods available to reduce halibut bycatch;
- h. the cost of reducing halibut bycatch; and
- i. other biological and socioeconomic factors that affect the appropriateness of specific bycatch measures in terms of objectives.

Types of information that the Council will consider in recommending seasonal allocations of halibut include:

- a. seasonal distribution of halibut;
- b. seasonal distribution of target groundfish species relative to halibut distribution;
- c. expected halibut bycatch needs on a seasonal basis relevant to changes in halibut biomass and expected catches of target groundfish species;
- d. expected bycatch rates on a seasonal basis;
- e. expected changes in directed groundfish fishing seasons;
- f. expected start of fishing effort; and
- g. economic effects of establishing seasonal halibut allocations on segments of the target groundfish industry.

3. As soon as practicable after the Council's October meeting, the Secretary will publish the Council's recommendations as a notice in the Federal Register. Information on which the recommendations are based will also be published in the Federal Register or otherwise made available by the Council. Public comments will be invited by means specified in regulations implementing the FMP for a minimum of 15 days.

4. Prior to the December Council meeting, the Plan Team will prepare for the Council a final Stock Assessment and Fishery Evaluation (SAFE) report under Section 3.2.3 which provides the best available information on estimated halibut bycatch rates in the target groundfish fisheries and recommendations for halibut PSCs. If the Council requests, the Plan Team also may provide PSC apportionments and allocations thereof among target fisheries and gear types, and an economic analysis of the effects of the apportionments.

5. December Council meeting. While recommending final groundfish harvest levels, the Council reviews public comments, takes public testimony, and makes final decisions on annual halibut PSC limits and seasonal apportionments, using the factors set forth under (2) above relevant to proposed PSC limits, and concerning seasonal allocations of PSC limits. The Council will provide recommendations, including no change for the new fishing year, to the Secretary of Commerce for review and implementation.

6. As soon as practicable after the Council's December meeting, the Secretary will publish the Council's final recommendations as a notice of final harvest specifications in the Federal Register. Information on which the final harvest specifications are based will also be published in the Federal Register or otherwise made available by the Council.

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