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INTERNATIONAL PACIFIC HALIBUT COMMISSION

ESTABLISHED BY A CONVENTION BETWEEN CANADA

AND THE UNITED STATES OF AMERICA

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26 June 2025

Ms. Angel Drobnica,
Chairperson, North Pacific Fishery Management Council
1007 W. 3rd Avenue, Suite 400, Anchorage, AK 99501

Dear Ms. Drobnica,

I attach a response to your letter dated 16 April 2025, where you requested the IPHC provide an assessment, along with relevant supporting information, as to the validity of concerns regarding localized depletion of Pacific halibut around St. Matthew Island. These concerns were raised within proposal IPHC-2025-AM101-PropC2 that was presented at the 101st Session of the IPHC Annual Meeting (AM101) by Mr Shawn McManus, a commercial fisher. The regulatory proposal submitted by Mr McManus expressed a range of concerns surrounding the aggregated harvest near St. Matthew Island, AK (IPHC Regulatory Area 4D), and the potential for localized depletion of the Pacific halibut stock.

Over the last 5 years, an average of 86% of the IPHC Regulatory Area 4D landings (and 66% of the combined 4CDE landings) have been harvested in the vicinity of St. Matthew Island. This level of aggregated harvest was not anticipated in 2005 when the original regulatory amendment that allowed IPHC Regulatory Area 4C quota-share holders to harvest their IFQ and CDQ in IPHC Regulatory Area 4D was made. Ideally, harvest would be distributed widely within each IPHC Regulatory Area.

The IPHC relies on the distribution of harvest among Regulatory Areas to maintain the reproductive capability of the stock across Biological Regions and across the Convention Area. Within IPHC Regulatory Area 4CDE there is no evidence that the waters surrounding St. Matthew Island represent a unique stock component nor that fish removed there are likely to have a long-term effect on the productivity or reproduction of the Pacific halibut stock.

Based on available information, we conclude that there are no specific biological concerns associated with continuing to allow IPHC Regulatory Area 4C quota holders to harvest in a focused manner in this part of IPHC Regulatory Area 4D. We recognize the ongoing challenges facing Pacific halibut fisheries and other fisheries operating in the Bering Sea, including shifting species distributions that may be related to other factors.

Sincerely,

David T. Wilson

David T. Wilson, Ph.D.
Executive Director

APPENDIX I
Aggregated harvest near St. Matthew Island - Biological considerations

The Pacific halibut stock is connected by ontogenetic movement and seasonal migration across the entire species' range in Convention waters (Carpi et al. 2021). Recent IPHC analyses show no genetic structure across the stock's range (Jasonowicz et al, in prep, IPHC-2025-AM101-15). Ontogenetic movement for younger Pacific halibut generally results in net emigration from west-to-east (Webster et al. 2013). Historical tagging (1963-1986) conducted by the IPHC on young juvenile (<=65 cm) Pacific halibut in the Bering Sea indicates that these young fish mix across the waters of the Bering Sea and then many subsequently move to other IPHC Regulatory Areas, as far as IPHC Regulatory Area 2A (Figures 1 and 2; Webster 2015). In addition to ontogenetic movement, annual feeding and spawning migrations can lead to fish travelling large distances from summer feeding areas to winter spawning areas and *vice versa* (Webster et al. 2013). Recent satellite tagging shows that Pacific halibut from waters north of St. Matthew Island redistribute toward the shelf-slope break during the winter months (Flanigan et al. 2025). Recent recoveries of all tag types (2005-2025) continue to show mixing within the Bering Sea and extensive dispersal to other IPHC Regulatory Areas (Figure 3). However, recoveries of tags from older Pacific halibut frequently occur in the same location that the tags were released, suggesting a strong site fidelity to specific feeding areas once they have been established for at least some fish (Webster et al. 2013). These results in aggregate suggest that an area like St. Matthew Island (Figure 4) may have fish that could use the area for multiple feeding periods, but that these fish are likely supplemented by new younger fish arriving each year, especially when conditions are warm in the Bering Sea. Thus, changes in density are not likely to lead to long-term changes in the biological productivity of the area or stock.

Estimated stock trends around St. Matthew Island since 2006 (the first year that the IPHC's Fishery-Independent Setline Survey (FISS) sampled around the Island) show a previous low point in estimated density around 2012 (Figure 5). A northward shift of Pacific halibut density in the Bering Sea, while not as pronounced as that observed for Pacific cod, was detected during the warm years of 2015-2020 (Webster et al. 2020). Trends in Pacific halibut density around the Pribilof Islands show a clear decrease in recent years that more closely matches the overall trend in IPHC Regulatory Area 4CDE (Figure 5).

The commercial Pacific halibut fishery catch rates have declined in recent years to a greater degree than the FISS index (Figure 6). These lower catch rates may make it less cost-effective to fish in this area, given the travel time required to fish there and to land the resulting catch at a suitable processing facility. Aggregation of effort around St. Matthew Island is likely in response to reduced catch rates on the shelf-slope break due to long-term shifts in biomass distribution toward lower density areas on the shelf as well as marine mammal depredation. With more vessels fishing around St. Matthew Island, it is likely that in-season and between-season catch rates for older fish may be reduced; both of these may be causing increased difficulty in prosecuting an efficient fishery in this area. However, this is unlikely to have long-term biological implications.

References

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Webster, R.A., Soderlund, E., Dykstra, C.L., and Stewart, I.J. 2020. Monitoring change in a dynamic environment: spatio-temporal modelling of calibrated data from different types of fisheries surveys of Pacific halibut. Canadian Journal of Fisheries and Aquatic Sciences **77**: 1421-1432.

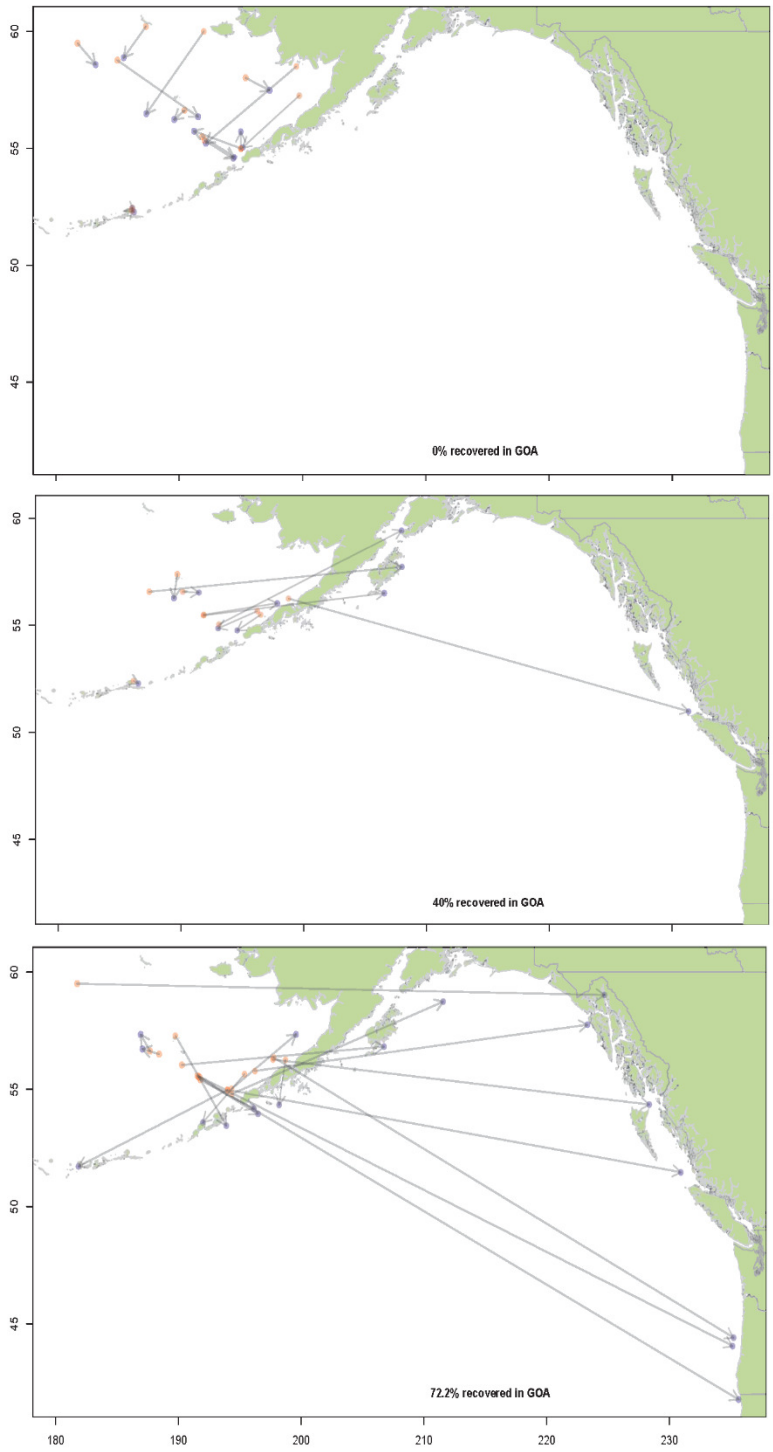

Figure 1. Release and recovery locations from young juvenile Pacific halibut released in the Bering Sea one year after release (upper panel), 2 years after release (middle panel) and 3-5 years after release (lower panel). Figures reproduced from Webster (2015).

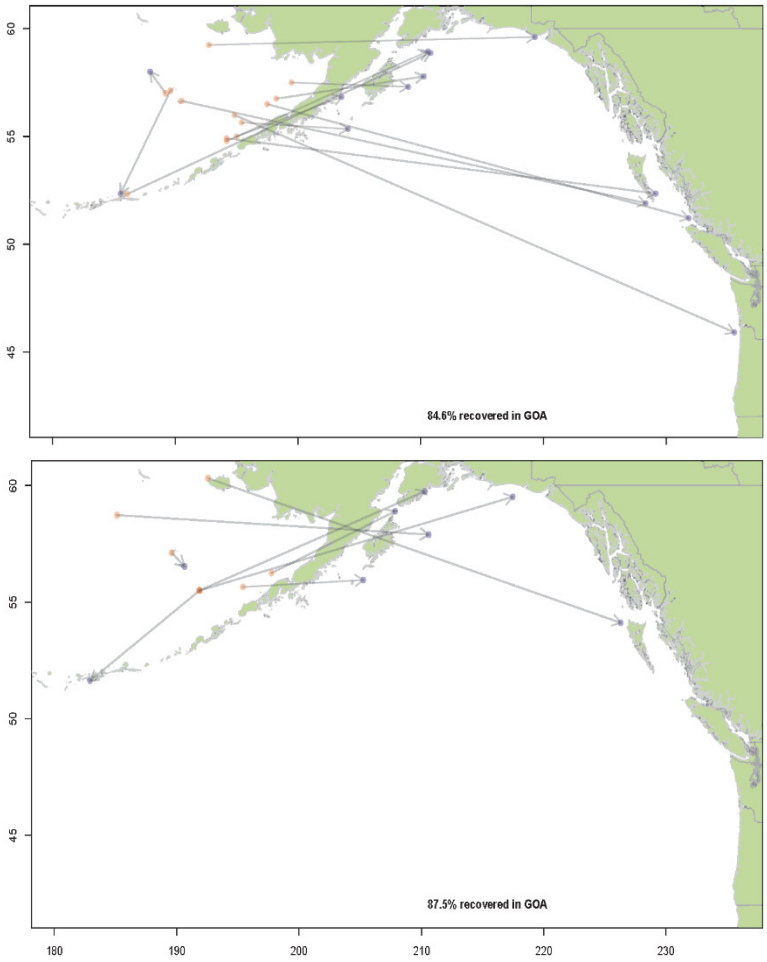

Figure 2. Release and recovery locations from young juvenile Pacific halibut released in the Bering Sea 6-8 years after release (upper panel) and 8+ years after release (lower panel). Figures reproduced from Webster (2015).

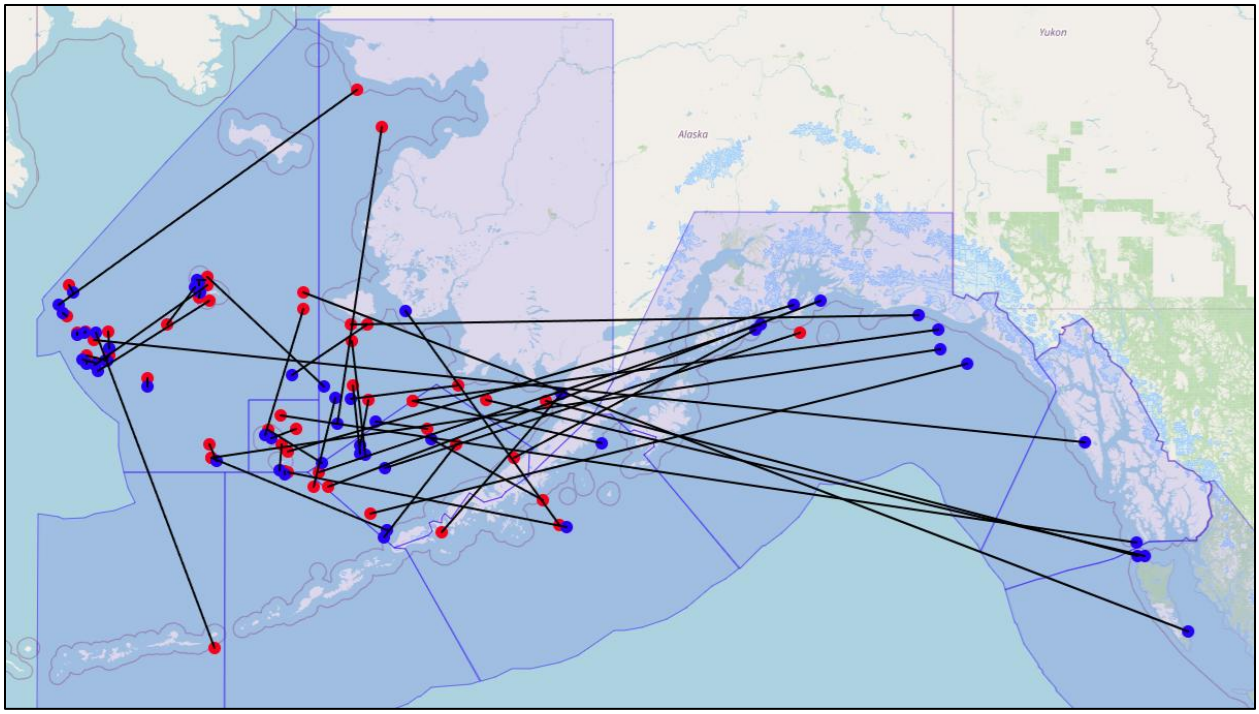

Figure 3. Release (red circles) and recovery (blue circles) locations of IPHC tags of various types (wire, pop-up archival satellite transmitting, passive integrated transponder) (N=54) deployed by the IPHC on FISS, AFSC trawl surveys or as a part of dedicated research studies, recovered 2005-2025. Data include only tags with either the release or recovery occurring in the Bering Sea (IPHC Regulatory Areas 4CDE and Closed Area).

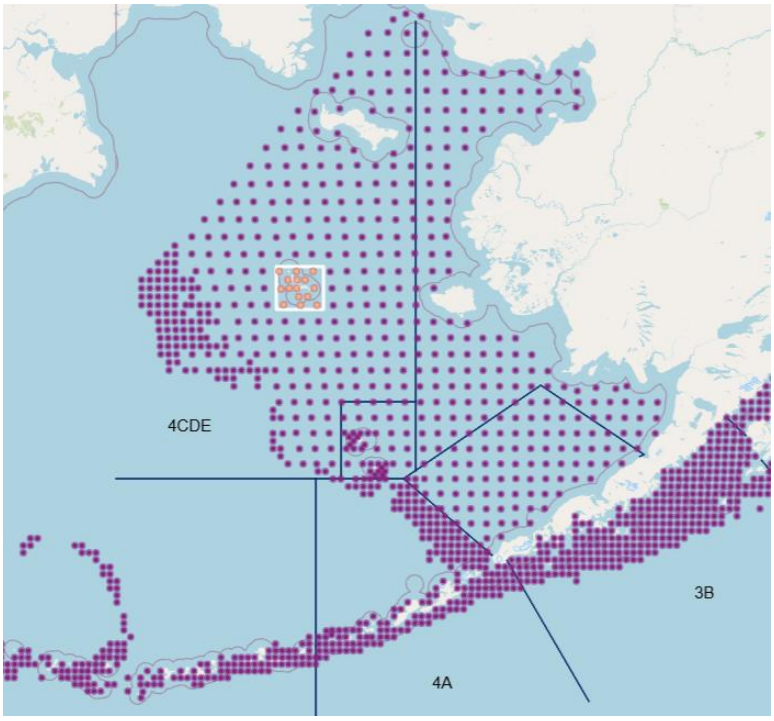

Figure 4. IPHC FISS and NOAA Fisheries EBS and NBS Trawl survey stations used by the IPHC to estimate density trends in the Bering Sea and surrounding areas. Highlighted box indicates the 15 stations in closest proximity to St. Matthew Island.

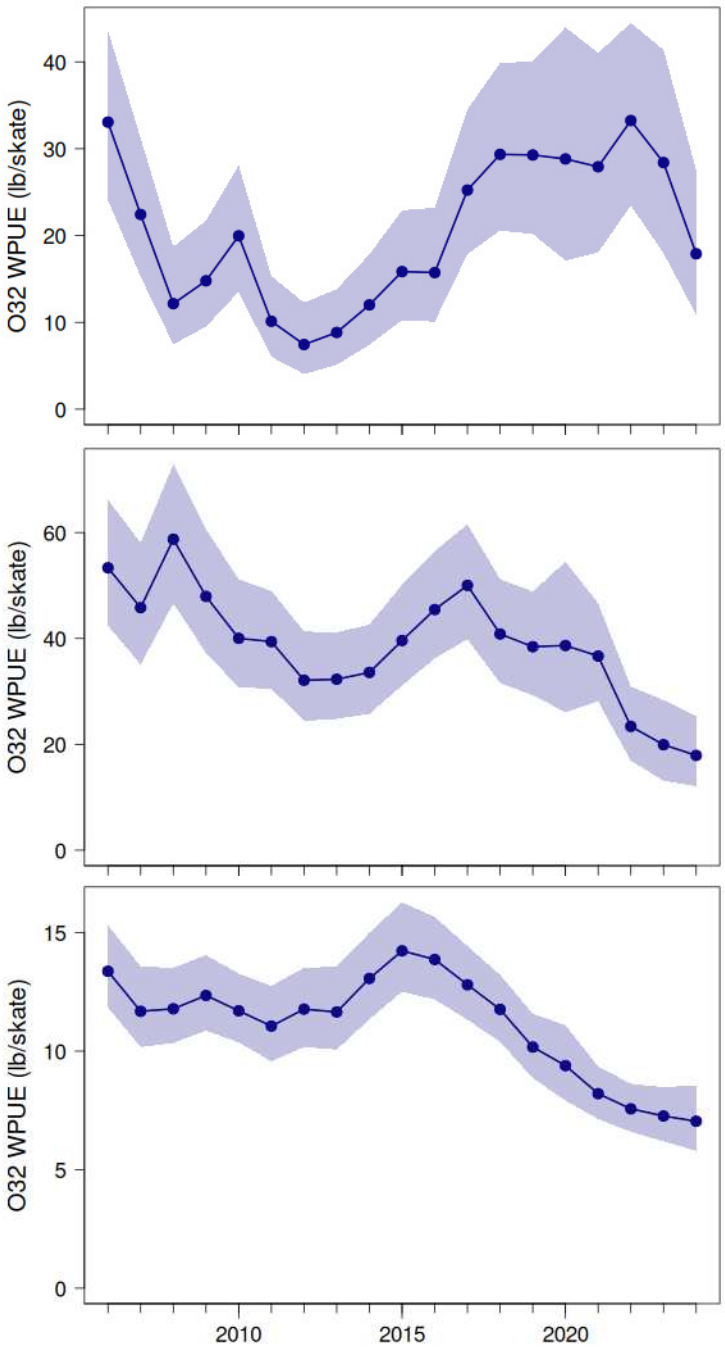

Figure 5. Legal-size (O32) Pacific halibut catch rate index (2006-2024) based on the IPHC's geostatistical model using FISS and AFSC Trawl survey data for the 15 stations closest to St. Matthew Island (upper panel), the 26 stations closest to the Pribilof Islands (center panel) and all of IPHC Regulatory Area 4CDE (lower panel). Data available at: https://spacetimeexplorer.iphc.int/.

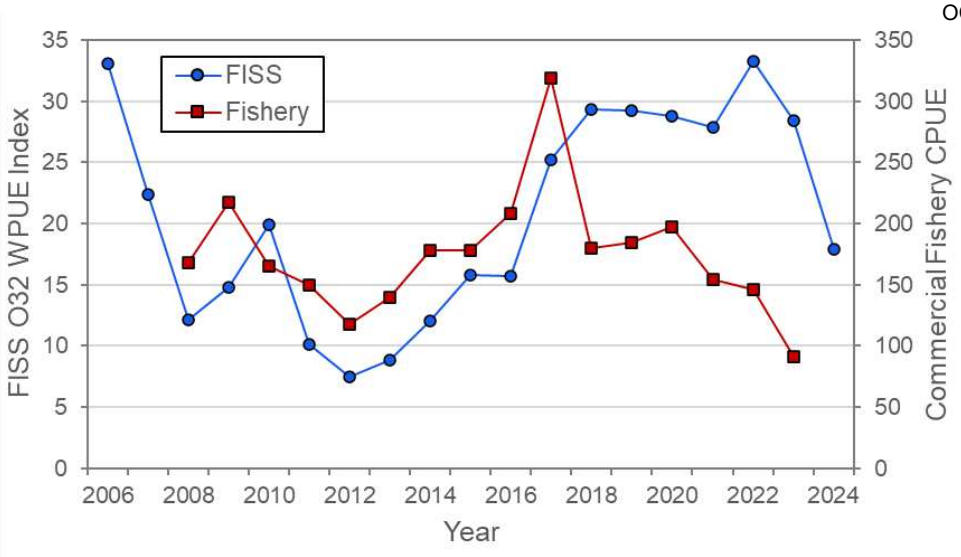

Figure 6. Legal-size (O32) Pacific halibut catch rate index (2006-2024) based on the IPHC's geostatistical model using FISS and AFSC Trawl survey data for the 15 stations closest to St. Matthew Island (upper panel) and Commercial Pacific halibut fishery catch rate index based on logbooks (2008-2023).