Considerations relating to allowing year-round landings of Pacific halibut in Canada

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PURPOSE

To provide the Commission with a response to:

> AM101-Req.05 (para. 88) *"The Commission **REQUESTED** that the IPHC Secretariat prepare an analysis detailing the biological, logistical and socioeconomic effects of year-round fishing in Canada, including challenges related to data compilation and marketing implications, for presentation at AM102."*

A preliminary version of this document was presented to the Commission at the 101st Session of the Interim Meeting (IM101) (IPHC-2025-IM101-INF02). Following consultation with Contracting Party agencies, the paper focused on evaluating the **feasibility and implications of allowing the retention of small quantities of incidentally encountered Pacific halibut** that would otherwise be discarded during the winter closed period **in IPHC Regulatory Area 2B**, rather than assessing a broad reopening of the directed fishery.

The current version provides an expanded analysis that follows up, to the extent feasible, on the elements requested by the Commission at IM101. Specifically, it addresses the following request:

> IM101-Req.01 (par. 12) "*The Commission REQUESTED that paper IPHC-2025-IM101-INF02 be expanded to include the following elements, to the extent possible, for consideration at AM102 in January 2026:*
>
> *a) An analysis of measures that would ensure no expansion of Pacific halibut effort;*
>
> *b) An analysis of the extent to which high prices and winter price premium incentives might create an incentive to maximize winter Pacific halibut landings;*
>
> *c) An analysis of whether approval of this proposal may lead other commercial fishery sectors in Canada or the U.S.A. to seek approval to retain Pacific halibut bycatch (e.g. the Amendment 80 fleet).*"

This analysis is intended to inform Commission consideration of potential regulatory approaches related to limited incidental retention of Pacific halibut during a winter closure in Canada. It provides relevant biological, logistical, and socioeconomic context to support decision-making, including in relation to regulatory proposal IPHC-2026-AM102-PropC2, which proposes a time-limited pilot program for such retention in IPHC Regulatory Area 2B.

BACKGROUND

The Commission enacted a winter closure period for the Pacific halibut fishery on 15 November 1924 as its first regulatory measure (Hutniczak et al. 2024). This closure period was originally motivated mainly by economic factors, including marketing considerations, and a reduction in overall supply (IPHC 1954; Skud 1977). Over time, additional factors, including processing capability, biological conservation, and safety, have been used to support the use of a closed fishing period through the present day. Specific reference to the winter closure period as a

conservation tool have become more common only quite recently (e.g. Hoag et al. 1993). The Commission requested a review of extending the length of the coastwide fishing period in 1995 and again in 1999. In 1999, a workshop was held, and the Secretariat provided several responses, mainly focusing on concerns related to the movement of Pacific halibut among areas relative to the summer distribution and fishery allocation, with some acknowledgment of logistical and safety concerns (Gilroy and Sadorus 2000; Leaman and Clark 2000; Leaman et al. 2001).

INTRODUCTION

Pacific halibut are known to spawn during the winter months and may move to spawning areas, sometimes located long distances from summer feeding areas, and to deeper water for winter spawning (Carpi et al. 2021; IPHC 1978; St.-Pierre 1984). The winter closure, as implemented since the introduction of quota programs in the USA (Alaska) and Canada (Hutniczak et al. 2024), closes fishing over some but not all of the seasonal migration and spawning period (Loher 2011).

To assess the potential impact of year-round landings of Pacific halibut in Canada, the IPHC requested discard data from Fisheries and Oceans Canada. Data received in August 2025 quantify winter discards of legal-sized Pacific halibut (over 32 inches or 81.3 cm; O32) and inform an evaluation focused on retaining small quantities of incidentally encountered Pacific halibut that would otherwise be discarded.

Accordingly, this document examines the biological, logistical, and socioeconomic implications of such a retention provision for vessels operating in IPHC Regulatory Area 2B, while maintaining the integrity of the existing winter closure and avoiding any expansion of directed fishing effort.

SUPPLEMENTARY DATA

Between 13 and 20 August 2025, the IPHC received updated discard information from DFO. Winter mortality associated with these discards was calculated using the mortality rate and average weight reported in the *Groundfish Pacific Region Integrated Fisheries Management Plan*:

- Mortality rate: 16% for longline gear, 10% for traps and 5% for troll/jig;
- Average weight: 21 lb (used for regulatory purposes; may not be reflective of true harvest weights);
- Liced/bait discards were excluded.

These figures indicate that the total potential mortality reduction from retaining such fish would be small (≤ 0.2 % of the 2B commercial fishery FCEY), suggesting negligible biological risk if restricted to incidental encounters.

Table 1. Winter discard information.

Winter	Legal-size fish discarded in winter [N]	Mortality with discards (current estimates) [lb]	Mortality if retained [lb]	Mortality if retained as % 2B commercial fishery FCEY	Mortality if retained as % 2B TCEY
2022/23	428	1,204	8,988	0.18%	0.13%
2023/24	478	1,490	10,038	0.21%	0.16%
2024/25	258	688	5,418	0.14%	0.10%

BIOLOGICAL CONSIDERATIONS

Fisheries management can be generally divided into input-controlled fisheries and output-controlled fisheries. The former utilizes limits on fishing capacity (vessels, gear etc.), areas, and fishing periods to control resulting fishing mortality to a degree that supports sustainable and optimal yields. The latter limits the overall mortality directly (possibly also including some input controls) as the primary tool to ensure optimal harvest. Importantly, when the closed period for Pacific halibut was first implemented, it was an input-controlled fishery. Today, it (and most other industrial fisheries) is output-controlled, with coastwide annual TCEY allocated to individual IPHC Regulatory Areas set by the IPHC. Many details of specific fishing methods and capacity are determined by the domestic parties. Therefore, the consideration of the closed period does not impact the total mortality on the stock.

Primary biological concerns raised by stakeholders during previous discussions of the closed period include allowing fish to spawn before they are harvested and the disruption of spawning activity. Whether the harvest occurs before or after the spawning season is of importance for stocks with very high natural mortality (e.g. squid fisheries where multi-year survival is very low) and for fisheries with extremely high fishing mortality rates, such that next year's recruitment success depends heavily on the current spawning stock. For Pacific halibut, natural mortality and sustainable harvest rates are far lower than would warrant concern regarding whether the annual harvest occurs before or after the spawning season. Disruption of spawning by fishing activity has been observed for some species, particularly those that form aggregations (Dean et al. 2012). There are known Pacific halibut spawning areas in IPHC Regulatory Area 2B (Carpi et al. 2021), but active fishing gear (e.g. trawl) is much more likely to disrupt aggregations than passive gear (e.g. longline), where the fish can choose to interact with the gear or not.

Seasonal spawning migrations of Pacific halibut are generally to the north in Biological Region 2 (Carpi et al. 2021; Loher and Soderlund 2018; Webster et al. 2013). This means that a large winter fishery in IPHC Regulatory Area 2B could have some effects on IPHC Regulatory Area 2A as many of the mature fish may be in Canadian waters during the winter months.

Given the small scale of winter discards observed (≤ 0.2 % of the IPHC Regulatory Area 2B commercial fishery FCEY), a limited retention allowance for these incidental captures would not materially affect total stock mortality or spawning potential. The risk of disrupting spawning aggregations remains low, provided there is no directed effort for Pacific halibut during this period.

The demographics (size, age, and sex) of Pacific halibut captured during the winter months could differ from those during the rest of the calendar year. If the retained volume remains ≤ 0.2 % of the IPHC Regulatory Area 2B commercial fishery FCEY, the scale would not warrant dedicated sampling.

LOGISTICAL CONSIDERATIONS

The IPHC deploys Fisheries Data Specialists in major ports throughout most of the directed fishing period, with staffing reduced as landings decrease toward the end of the fishing period due to weather, closure of processing facilities, and financial considerations. In IPHC Regulatory Area 2B, currently staffed ports are Port Hardy and Prince Rupert.

If a substantial winter fishery were contemplated, continuous sampling would be necessary to avoid demographic bias in biological data. However, because the potential retention of incidental Pacific halibut represents a very small volume (≤ 0.2 % of the IPHC Regulatory Area 2B commercial fishery FCEY), additional sampling would not be required. Continued coordination between DFO and IPHC on catch reporting and data sharing would remain essential.

SOCIOECONOMIC CONSIDERATIONS

Historical comparisons of commercial CPUE suggest that higher directed commercial fishery catch rates might be achieved during the winter months due to the aggregation of fish for spawning (Skud 1975; St.-Pierre 1984). If processing capacity were available, efficiency gains could lead to a valuable incidental fishery and/or strong incentives for targeting Pacific halibut during winter months when all other fisheries are unable to retain them.

Processor readiness for off-season landings varies. Some facilities in Canada operate year-round and could handle small incidental landings, while others close during the winter for maintenance or holiday downtime. These interruptions could limit processing availability in the short term but are unlikely to affect the limited incidental volumes under consideration.

From a market standpoint, early-season Pacific halibut landings have historically commanded a price premium, suggesting that even limited winter fishing activity could be economically attractive. If landings were allowed only in IPHC Regulatory Area 2B outside the commercial fishing period in other areas, this could create a market advantage for 2B harvesters and processors relative to those in other areas, especially immediately prior to the general fishery opening.

Such price signals could, in the absence of effective constraints, create an incentive to increase winter Pacific halibut landings. However, provided that any winter retention is strictly limited to current levels of incidental catch and accompanied by measures that prevent expansion of effort or targeting, the quantities involved would remain small. Under these conditions, winter retention is expected to have a negligible influence on broader market dynamics or pricing.

Broader participation in a winter fishery could raise safety concerns. Larger vessels equipped to operate in poor weather conditions would have an advantage over smaller vessels. Potentially high prices could incentivize smaller vessels to fish in less-than-ideal conditions and therefore reduce the safety of the fishery. Improved safety at sea was a recognized secondary benefit of the traditional winter closure period, even though it did not directly limit total removals. Because this proposal limits retention only to Pacific halibut already incidentally caught in other fisheries, it introduces no clear incentive for vessels to alter fishing behavior and thus would not compromise safety at sea.

An additional effect of allowing harvest during the current closed period is a reduction in discard mortality relative to the total TCEY. Specifically, if there is no increase in targeting of Pacific halibut during the winter months, then legal-sized Pacific halibut catch for vessels with remaining quota would be converted from discards (with a 16% discard mortality) to landed catch. This should have the effect of increasing the FCEY for a given TCEY set by the IPHC. The benefits would diminish if directed targeting of Pacific halibut occurred beyond current incidental levels.

Previous consideration of the closed period extensively evaluated the potential for fish to be surveyed in the summer in a different IPHC Regulatory Areas than they might be captured in during the winter while on the spawning grounds. Extensive tagging (Loher 2011; Carpi et al. 2021) and Management Strategy Evaluation (MSE) simulations suggest mixing is occurring among IPHC Regulatory areas during the currently open fishing period. Therefore, stock dynamics are highly linked among IPHC Regulatory Areas within Biological Regions and also between Biological Regions. For these reasons, this concern appears much less important today with a coastwide stock assessment than when separate stock assessments and yield recommendations were developed for each individual IPHC Regulatory Area. The negligible scale of winter retention further minimizes any potential redistribution effects.

MEASURES TO ENSURE NO EXPANSION OF PACIFIC HALIBUT EFFORT

A central consideration in evaluating the allowance for a limited winter retention of Pacific halibut is the need to ensure that such a measure does not result in an expansion of fishing effort or the emergence of a directed winter fishery. Because potential winter price premiums could create incentives to increase landings, any retention provision would need to be accompanied by clearly defined and enforceable constraints.

One approach to limiting expansion would be to establish a strict aggregate cap on the total amount of Pacific halibut that could be retained outside the commercial fishing period in IPHC Regulatory Area 2B. For illustrative purposes, stakeholder proposals have suggested a cap on the order of a small percentage of the Regulatory Area 2B (Canada) commercial TAC (e.g. 2%). However, alternative aggregate limits, more closely aligned with recent estimates of winter discards (corresponding to mortality in the range of 0.10-0.16% of 2B TCEY if retained) could be considered, provided they are set at levels that ensure removals remain biologically negligible and do not create incentives for increased effort or targeting.

In addition to, or in place of, an aggregate cap, individual vessel-level limits could be applied to further reduce the risk of effort expansion. Vessel caps would constrain the amount of Pacific halibut that any single vessel could retain during the closed period, thereby limiting the potential for vessels to alter fishing behavior in response to winter price signals. Specifically, vessel caps would eliminate the incentive to 'race' for landings within a pooled incidental cap. Such measures could be used alone or in combination with aggregate caps to ensure that total winter retention remains within intended bounds.

Any regulatory change allowing limited winter retention could also be implemented as a limited-time trial. A time-bound approach would allow the Commission to evaluate outcomes, including compliance, enforcement feasibility, and any unintended behavioral or market responses, before considering continuation or modification. While stakeholder proposals have suggested multi-year pilot programs (e.g. three (3) years), the annual revision cycle of the IPHC Fishery Regulations would also allow such a measure to be introduced initially for a single year and reconsidered at the subsequent Annual Meeting, effectively establishing a one-year minimum trial.

These measures could be implemented through a combination of IPHC Fishery Regulations and domestic management frameworks. Aggregate limits and trial durations could be specified in IPHC regulations, while vessel-level caps and operational conditions could be codified through domestic licensing, quota management, and monitoring systems to ensure that the overall retention limit is not exceeded.

Effective implementation would also require confirmation that enforcement and monitoring capacity is sufficient. In Canada, this would involve coordination with Fisheries and Oceans Canada (DFO) to ensure that existing catch monitoring, reporting, and compliance systems can accommodate limited winter landings. Any additional enforcement or logistical capacity required to manage and oversee such a measure would need to be identified and addressed prior to implementation.

POTENTIAL IMPLICATIONS FOR OTHER FISHERIES

Approval of a narrowly defined provision allowing limited winter retention of incidentally caught Pacific halibut by quota holders in IPHC Regulatory Area 2B would be constrained by clear spatial, temporal, and operational limits. As such, it would not, in itself, establish a general precedent for other commercial fishery sectors in Canada or the U.S.A. to retain Pacific halibut bycatch. Any consideration of retention allowances outside this specific scope, including in

fisheries operating under different management regimes or with higher encounter rates, would raise distinct biological, monitoring, enforcement, and market considerations that are not evaluated in this analysis and would require separate, case-specific assessment by the Commission. It is possible that if a program is successful in IPHC Regulatory Area 2B, fisheries operating during the closed season in other areas might request similar small incidental caps in order to reduce discards, increase efficiency and add fishery value, especially if high winter halibut prices are realized. Even if all such requests were for small caps, the overall importance of such changes would need to be reviewed in the context of the cumulative effects across all such fisheries.

CONCLUSIONS

Based on available discard data and the clarified intent to assess winter Pacific halibut retention limited to discards at current levels, there is no biological or management concern associated with such a measure in IPHC Regulatory Area 2B. Management of the total TCEY, paired with ongoing data collection on the size, age, and sex composition of harvested fish, would continue to provide the same level of precision in population demographics and management quantities currently achieved under the existing arrangement with the winter closure.

Allowing limited winter retention in IPHC Regulatory Area 2B would primarily convert existing discard mortality into recorded landings, which is estimated to be 0.14–0.21% of the IPHC Regulatory Area 2B commercial fishery FCEY. This would modestly improve catch efficiency while maintaining total removals within the established TCEY. Potential economic incentives associated with winter price premiums would not be expected to materially affect fishing behavior, provided that retention is strictly constrained by aggregate and/or vessel-level limits that prevent expansion of effort or targeting.

The IPHC Secretariat therefore finds no biological or conservation-based impediment to considering a regulatory change that would enable a narrowly defined retention provision that is limited to recent discard mortality levels, subject to enforceable measures that ensure no expansion of Pacific halibut fishing effort. This assessment does not consider reopening a directed winter fishery, nor does it evaluate retention allowances outside the specific spatial, temporal, and operational scope examined here.

Such a measure could be implemented as a limited-time trial, allowing the Commission to evaluate outcomes prior to any longer-term consideration. Given the annual revision cycle of the IPHC Fishery Regulations, this could include an initial one-year authorisation with subsequent review, or a longer pilot period if deemed appropriate by the Commission.

Implementation would require minimal additional monitoring, as long as the volume of landings remains small and could be accurately documented through existing DFO–IPHC coordination. Broader logistical or socioeconomic effects (e.g. processor capacity, port staffing, or price dynamics) are expected to be negligible within the narrowly defined scope considered, and any expansion beyond this scope would require separate analysis and explicit Commission consideration.

RECOMMENDATIONS

That the Commission:

1) **NOTE** IPHC-2026-AM102-INF04 that provides a response to the following Commission request:

   AM101-Req.05 (para. 88) "*The Commission REQUESTED that the IPHC Secretariat prepare an analysis detailing the biological, logistical and*

socioeconomic effects of year-round fishing in Canada, including challenges related to data compilation and marketing implications, for presentation at AM102."

2) **REQUEST** any further analyses, as needed, should the Commission wish to explore potential regulatory changes related to limited incidental retention of Pacific halibut during the winter closure in Canada.

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