

Other proposal (Non-IPHC Fishery Regulations): Rebuilding Plan for Pacific halibut

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Directed Commercial \Box			Recrea	Recreational \Box Subsistence \Box		□ Nor	Non-directed commercial \Box			
All Regulatory Areas 🛛			All Alaska Regulatory Areas 🗆 🕢				All U.S. Regulatory Areas 🗆			
2A 🗆	2B 🗆	2C 🗆	3A 🗆	3B 🗆	4A □	4B □	4C □	4D 🗆	4E 🗆	

PURPOSE

To propose a Rebuilding Plan for Pacific halibut.

EXPLANATORY MEMORANDUM

My proposal for a Pacific Halibut Rebuilding Plan consists of three parts: 1) changes to control rule policies, 2) an alternative risk adverse model, 3) and needed research. As a fisherman I have strong conviction we are fishing on a depleted stock and biomass estimates are far too optimistic for status quo management to result in any recovery. We need more precautionary management. I am a fisherman. I am not a scientist. Don't judge the proposals by my mistakes or errors or misunderstandings. Judge the proposal by my intention to help to further the IPHC's mission to provide long-term optimum yield to the fisheries and to conserve the resource. Hopefully this starts the discussion.

1) Proposal for a Spatially Explicit Control Rule for Pacific Halibut Management with specific minimum biomass levels (Or don't chase the stock down proposal)

Title:

A Spatially Differentiated Control Rule for Rebuilding Pacific Halibut Across Its Northern Pacific Range

Rationale:

The Pacific halibut (*Hippoglossus stenolepis*) spans a vast geographic range from Oregon to northern Alaska and extends to Russian waters along the Aleutian chain. This wide distribution presents unique management challenges:

- **Disproportionate Spawning Biomass Loss**: Different regions might experience disproportionate declines in spawning biomass due to localized fishing pressures, environmental changes, or biological factors. A control rule that treats the entire range uniformly could fail to address these disparities, potentially leading to localized depletion or collapse.
- **Migration and Connectivity**: Pacific halibut are known to migrate across regulatory areas, meaning that fishing in one area can impact stock in others. An area-specific decline could affect recruitment and spawning in adjacent regions due to the interconnected nature of Pacific halibut populations.

- **Variable Productivity**: Productivity can vary significantly by area due to different environmental conditions, leading to different recovery rates and resilience across the range.

Proposed Control Rule:

1. Spatial Subdivision:

- **Management by Regulatory Areas**: Utilize the existing International Pacific Halibut Commission (IPHC) regulatory areas (e.g. Area 2, Area 3, Area 4) as management units. This approach acknowledges that different areas might require different management strategies based on local conditions.

2. Biomass Thresholds and Dynamic Adjustments:

- **Area-Specific Biomass Thresholds**: Establish specific biomass thresholds for each regulatory area based on historical data and current assessments. When the biomass in any area falls below this threshold:

- **Immediate Reduction in Fishing Mortality**: Implement a substantial reduction in fishing mortality, potentially up to 30-50% or more, depending on the severity of the decline. This could mean shorter seasons, lower catch limits, or increased minimum sizes.

- Adaptive Management: Use a 5-year review cycle to assess the effectiveness of these measures. If an area isn't showing signs of recovery, further reductions or area closures might be necessary. Conversely, if recovery is evident, fishing mortality could be cautiously increased.

3. Inter-Regional Considerations:

- **Migration and Recruitment**: Recognize that halibut from one area can contribute to the spawning stock in another. Therefore, if one area is overfished, adjacent areas might also need to reduce fishing to support broader stock recovery.

- **Cross-Regional Quotas**: If one area is nearing collapse, it might be prudent to redistribute quotas from areas with healthier stocks to support recovery, although this must be balanced with local economic impacts.

4. Long-Term Rebuilding Strategy:

- **Rehabilitation Zones**: Designate certain areas as "rehabilitation zones" where fishing is severely restricted or prohibited if spawning biomass is critically low, aiming to rebuild these areas as sources of recruitment.

- Scientific Monitoring: Increase monitoring efforts in areas with low biomass to gather more precise data on stock recovery, including juvenile survival, migration patterns, and local environmental impacts.

5. Community and Economic Considerations:

- **Stakeholder Engagement**: Regular consultations with local communities, fishers, and other stakeholders to discuss the implications of management changes, ensuring buy-in and addressing economic impacts.

- Economic Support: Implement support mechanisms for communities heavily dependent on halibut fishing during periods of reduced fishing activity, like retraining or alternative income sources.

Implementation:

- Legislation and Policy: Work with the IPHC, national fisheries management agencies (like NMFS for U.S. waters and DFO in Canada), and international bodies to enact these rules through regulation.

- Education and Compliance: Conduct outreach to ensure fishers understand the new rules and their rationale, emphasizing the long-term benefits of stock recovery.

- Adaptive Learning: Continuously refine the control rule based on new scientific data, ensuring it remains responsive to the dynamic nature of the Pacific halibut population.

Conclusion:

This control rule aims to balance the ecological needs of Pacific halibut with the socio-economic realities of the fishing communities across its vast range. By managing halibut in distinct areas, we can tailor our response to the specific conditions of each region, promoting a more robust and sustainable recovery of the stock while acknowledging the complex migratory behaviors and varying productivity of this species.

2. Proposal for an Enhanced Spatially Explicit Control Rule for Pacific Halibut Management: Addressing Additional Factors

Title:

Refined Spatially Explicit Control Rule for Sustainable Management of Pacific Halibut.

Narrative:

The current control rules for managing Pacific halibut by the International Pacific Halibut Commission (IPHC) rely on fixed percentages of spawning biomass to adjust fishing mortality. However, these rules have limitations that can compromise the sustainability of the fishery. This proposal seeks to refine these control rules by incorporating spatial considerations, addressing the shortcomings of fixed percentages, and providing a more dynamic and responsive management approach.

Additional Factors to Address:

1. Fixed Percentage vs. Absolute Biomass:

- **Issue**: Using a fixed percentage (e.g. 20% or 30% of spawning biomass) doesn't account for the absolute numbers needed for a viable population. This can lead to overly optimistic

management if the baseline biomass is overestimated or if there's significant inter-annual variability in stock assessments.

- **Rationale**: An absolute biomass threshold ensures that there's a minimum viable population regardless of historical highs or lows. For instance, setting a minimum absolute biomass floor could prevent fishing from continuing at levels that might not support population recovery.

2. Unspecified Reduction at 30% Biomass:

- **Issue**: The current control rule at 30% does not specify the extent or duration of fishing reductions, leading to potential inconsistency in management responses. Making up prescriptive policies as you go does not lead to sound decision making.

- **Rationale**: Clearly defining the reduction (e.g. a 30-50% cut in ALL fishing mortality) and its duration (e.g., at least 5 years or until biomass recovery is observed) provides consistency and clarity. This would help in calculating the biological and economic impacts more accurately and aid in long-term planning.

3. Retrospective Triggering of Control Rules:

- **Issue**: In scenarios like the 2011 biomass reassessment where the stock was retrospectively found to be below thresholds, there's no clear protocol for immediate management response.

- **Rationale**: Introducing a retrospective adjustment mechanism is crucial. When a significant revision in biomass estimates occurs, the following should be enacted:

- Immediate Review: Conduct an emergency review to assess the new data's implications.

- **Retroactive Management**: If the stock was below critical thresholds, apply the control rule's reduction measures retroactively for the current season or implement them for the next season with adjustments like emergency closures or quota reductions.

4. Handling Large Biomass Revisions:

- **Issue**: The IPHC has experienced significant year-to-year changes in biomass estimates (2015), which can lead to abrupt changes in management measures, causing confusion and economic disruption.

- Rationale:

- **Smoothing Over Time:** Use a multi-year average for biomass estimates to smooth out annual fluctuations, providing a more stable basis for management decisions.

- **Uncertainty Buffers**: Incorporate buffers into the biomass estimates to account for assessment uncertainty. If there's a large revision, management actions might be phased in over several years to allow for adjustment by stakeholders.

Conclusion:

By addressing these additional factors, the IPHC can foster a more resilient and sustainable Pacific halibut fishery. This proposal moves away from overly simplistic percentage-based thresholds towards a nuanced, spatially aware, and temporally adaptive management strategy that better reflects the biology and ecology of this valuable species.

Weakness of this proposal: Incentives equal outcomes. If there are enough incentives to not hit the B30 control rule, then it is easy to see how the stock assessment will always remain above that value.

RECOMMENDATIONS

That the Commission:

1) **NOTE** regulatory proposal IPHC-2025-AM101-PropC4, which proposes a Rebuilding Plan for Pacific halibut.

APPENDICES

IPHC Secretariat comment: Not applicable.

Specific regulatory language has not been developed for this proposal as none currently exists to amend.

Adoption would require MSAB and SRB input throughout 2025 as part of the Harvest Strategy Policy finalisation.