21 Active Harvest Strategy

Pacific Halibut





Management Authority:

International Pacific Halibut Commission

Adoption Year:

2020

Management Objectives:

- Maintain Pacific halibut, on average, at a target (fixed or dynamic) female spawning biomass equal to the stock size required to produce maximum net economic returns on a spatial and temporal scale relevant to the fishery
- Maintain Pacific halibut, above a female spawning biomass limit where the risk to the stock is regarded as unacceptable (SB_{LIM}), at least 90% of the time

Reference Points:

- Target Reference Point: 45% SSB₀ and 120%SSB_{MSY}
- Interim Trigger Reference Point: 30% SSB₀
- Interim Limit Reference Point: 20% SSB₀and 50%SSB_{MSY}

*SSBO = spawning stock size that would exist in the absence of fishing

Harvest Strategy:

Using MSE to evaluate several model-based harvest strategies; HS must have ≥ 50% chance of achieving the target and ≤10% chance of breaching the limit

Interim harvest control rule:

• The harvest control rules relies on the spawning potential ratio (SPR) of 46% (F_{SPR}=46%). The SPR is adjusted to reduce the fishing intensity at low levels of spawning biomass by linearly increasing the SPR (i.e reducing the fishing intensity) if the estimated stock status is less than a trigger at 30% SSB₀, to zero fishing intensity (SPR=100%) when the estimated stock status is less than the limit at 20% SSB₀(i.e., a 30:20 control rule).

*SPR = Spawning Potential Ratio, or the lifetime spawning output that a young fish is expected to produce under current fishing mortality compared to what it would produce in the absence of fishing.

Outcome:

Interim harvest strategy in place since 2020 to set the allowable coastwide catch, but adoption of a final, formal harvest strategy has yet to occur, in part due to ongoing negotiations about how to allocate the catch among Alaska, Canada, and the U.S. West Coast. Final mortality limits are determined based on the previous year's limits, the interim harvest strategy, and social and economic considerations. MSE development continues and is exploring size limits and stock assessment frequency as part of the harvest strategy.

Link to relevant policy document or update:

- Interim International Pacific Halibut Commission Harvest Strategy Policy: (https://iphc.int/the-commission/harvest-strategy-policy)
 Includes harvest strategy policies from both 2019 and 2020
- Pacific halibut MSE landing page (https://iphc.int/management/science-and-research/management-strategy-evaluation)