



December 5, 2007

International Pacific Halibut Commission Staff Preliminary Catch Limit Recommendations: 2008

In making catch limit recommendations for 2008, staff has considered the results of the analytic assessment, changes in the commercial and survey indices used to monitor the stock, recruitment of incoming year classes, and a revised harvest policy that reflects coastwide policy goals. The staff also drew on the outcome of both the June 2007 Stock Assessment Workshop and the independent, external peer review of the stock assessment analysis. Detailed results of these additional investigations will be reported in the 2007 Report of Assessment and Research Activity. Ongoing tag returns from the coastwide PIT tagging program continue to demonstrate that regulatory areas cannot be treated as closed management units and this has influenced our choice of assessment models and corresponding harvest policy. Changes in the stock biomass as indicated by our catch at age assessment as well as changes in relative abundance indices from our surveys and the commercial fishery were also influential in our recommendations for 2008.

With the exceptions of Areas 3A and 4B, commercial catch per unit effort (CPUE) in 2007 showed decreases from 2006 values. Commercial CPUE in Area 3A was unchanged, while that in Area 4B showed a notable increase. The 2007 IPHC setline survey CPUE values were largely stable or increasing in the central and eastern portions of the stock (Areas 2A-3B) but lower than in 2006 for Area 4. These fluctuations were generally in the $\pm 10\%$ range, although Area 4A showed a larger decline of over 20%.

The analysis of optimum harvest rates for the coastwide assessment conducted in 2006 resulted in a target coastwide harvest rate of 20% of coastwide exploitable biomass. However, the staff also required a framework to partition the coastwide estimate of exploitable biomass into regulatory areas. The staff examined several alternatives for partitioning the coastwide biomass among regulatory areas and concluded that the use of the IPHC setline survey data offered the most standardized and consistent data to achieve this partitioning. The staff also acted on a recommendation from the June 2007 Stock Assessment Workshop and used depth-stratified means of survey catch data for apportionment. Accordingly, the distribution of biomass, as determined by the three-year average CPUE of legal-sized fish obtained on the stock assessment survey, was used to partition the coastwide exploitable biomass estimate into regulatory area biomass totals. The staff recommends that the 20% harvest rate be applied coastwide, with the exceptions of Areas 4B and 4CDE. For Area 4B, the staff continues to recommend a harvest rate of 15% as indicated by the analysis of productivity conducted in 2005. Similarly for Area 4CDE, the continued decline in survey and commercial catch rates supports the continued use of the 15% harvest rate for this area as well.

Catch Limit Recommendations for 2008

The staff recommendations totaling 59.24 million pounds for 2008 are presented in Table 1. The Area 2A recommendation includes all removals (commercial, treaty Indian, sport) allocated by the Pacific Fishery Management Council's Catch Sharing Plan. Area 4CDE is treated as a single

regulatory unit by the Commission, although the North Pacific Fishery Management Council's Catch Sharing Plan partitions the Commission catch limit into limits for the individual regulatory areas. The Area 2B catch limit recommendation includes totals for the commercial and sport fisheries. The Canadian Department of Fisheries and Oceans will allocate the adopted catch limit between the sport and commercial fisheries. The catch limit recommendations make the assumption that both Canada and the U.S. will manage to their domestic agreements on targets for sport fish catch.

The use of a coastwide assessment and partitioning of coastwide biomass with survey estimates of distribution creates some substantial changes in Total Constant Exploitation Yield (Total CEY) and recommended catch limits among areas, compared to previous assessments. Lower recommended catch limits are identified for Area 2, while portions of Areas 3 and 4 have somewhat higher recommended catch limits. These differences are associated with the different distribution of biomass associated with survey partitioning of a coastwide total biomass, compared with the traditional closed-area biomass distribution, as well as lower CPUE values in both the survey and the commercial fishery. As noted in the 2006 stock assessment, the survey distribution of biomass is more consistent with other estimates of biomass distribution that are not dependent on the stock assessment.

The staff continues to recommend a slow rate of increase in catch limits when estimated CEY is increasing and a more rapid reduction of catch limits when CEY is decreasing (a Slow Up – Fast Down policy). For Areas 2, 3A, and 4CDE the staff recommends catch limits that are lower by one-half of the difference between 2007 catch limits and the estimated fishery CEYs for 2008. For Areas 3B, 4A, and 4B, the staff recommends an increase over the 2007 catch limit equivalent to one-third of the difference between the 2007 catch limit and the estimated 2008 fishery CEY.

The staff has concerns about the exploitable biomass and optimum harvest rate in Area 4A. There are signs that current yields may not be sustainable and the staff believes that a harvest rate of 20% may be too high for this area. Other regulatory areas in the Bering Sea are assigned a harvest rate of 15% based on analysis of life history parameters, productivity, and oceanographic characteristics. The staff has not yet conducted such an analysis for Area 4A. Further, the staff believes that an analysis of productivity and harvest policy for the Bering Sea as a whole is necessary to determine if a modified harvest rate for Area 4A is appropriate. This analysis will be conducted in 2008.

The staff recognizes that adoption of the coastwide assessment and survey apportionment results in a significant shift in the estimated distribution of exploitable biomass. This analysis concludes that exploitation rates on the eastern portion of the stock have been too high in the past decade, resulting in lower biomass in Area 2 than would be realized if harvest rates had been near the target level. In the longer term, a lowered harvest rate will permit rebuilding of the exploitable biomass in Area 2 and an increase in available yield. The pace of that rebuilding will be affected by the strength of year classes recruiting to the fishery over the next several years. However, the staff recognizes that the Commission may wish to transition to these lower harvest rates over a period of time.

These recommendations, along with public and industry views on them, will be considered by IPHC Commissioners and their advisors at the IPHC Annual Meeting in Portland, Oregon USA, during January 15-18, 2007. These recommendations are preliminary and, as final data are included in the assessment, may be updated for the Annual Meeting but are not expected to change significantly.

Proposals concerning changes to catch limits should be submitted to the Commission by December 31, 2007. [Catch limit proposals](http://www.iphc.washington.edu/halcom/default.htm) are available on the Commission's web page (<http://www.iphc.washington.edu/halcom/default.htm>) or from the Commission's office. Additional details about the [Annual Meeting](#) can also be found on the web page.

Table 1. IPHC staff recommended catch limits for 2008, by IPHC regulatory area (million lbs, net weight). The 2007 fishery catch limits are included for comparison.

Regulatory Area	2007 Fishery Catch Limit	2008 IPHC Staff Recommended Fishery Catch Limit
2A ^a	1.34	1.00
2B ^b	11.47	8.06
2C	8.51	6.21
3A	26.20	24.22
3B	9.22	10.90
4A	2.89	3.10
4B	1.44	1.86
4CDE ^c	4.10	3.89
Total	65.17	59.24

^a Includes sport, tribal, and commercial fisheries.

^b Includes sport and commercial fisheries.

^c Individual catch limits for Areas 4C, 4D, and 4E are determined by the North Pacific Fishery Management Council catch sharing plan.

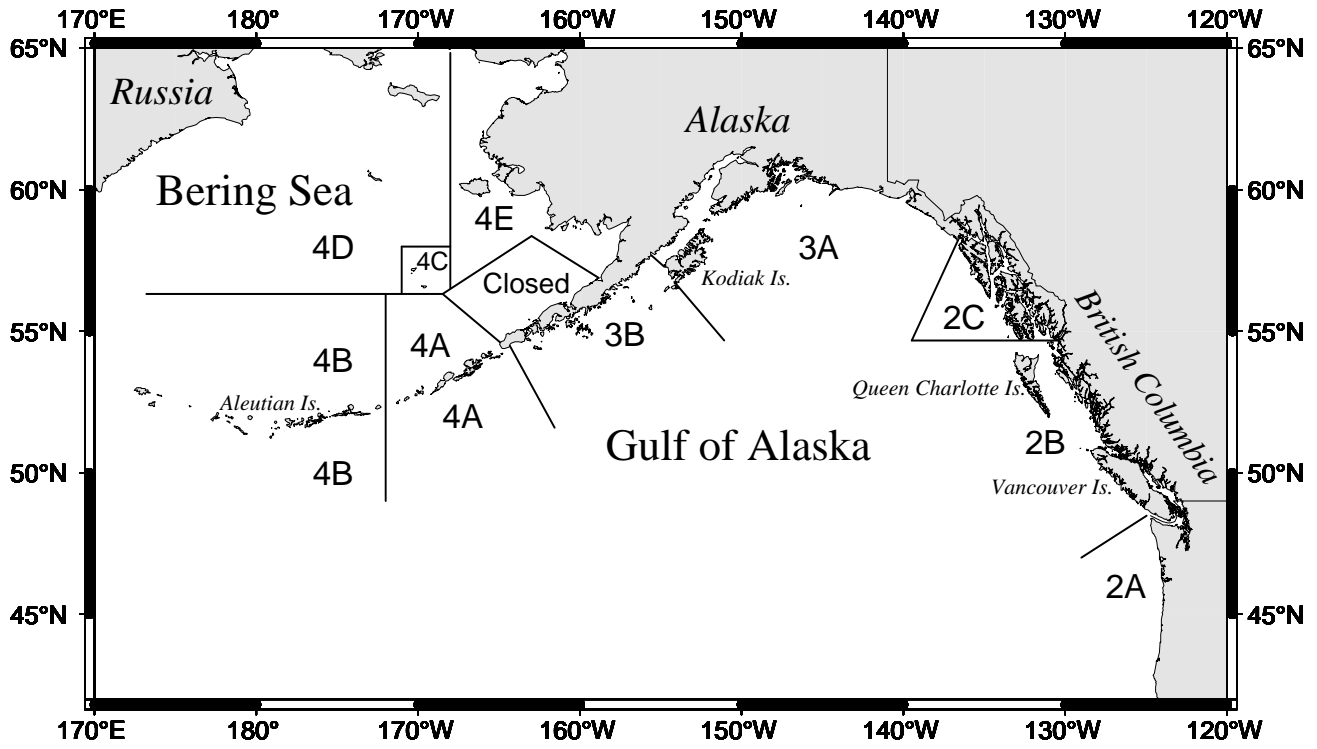


Figure 1. International Pacific Halibut Commission Regulatory Areas.