

Salmon Bycatch in the Pollock Fishery: June 2010 Update

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Chum Salmon Bycatch Management

The North Pacific Fishery Management Council (the Council) will meet in Sitka June 7-15. At this meeting the Council will refine the options, called "alternatives," they are considering for chum salmon bycatch management measures for the Bering Sea pollock fishery.

The current alternatives include a range of hard caps that would close the fishery when reached and trigger caps that would close a set area when reached. The current range of numbers currently under consideration for hard caps is 50,000 to 353,000 chum salmon. The range of numbers currently being considered for trigger caps is 25,000 to 200,000.

During the meeting, you can listen to the Council's discussion on-line at <http://www.fakr.noaa.gov/npfmc/> (link will appear when Council is in session). Chum bycatch is on the agenda for Wednesday, June 9. A full agenda is available at the same link. The full discussion paper, which the Council will consider in Sitka, is available at: http://www.fakr.noaa.gov/npfmc/current_issues/bycatch/ChumDisc510.pdf.

After the Council refines the alternatives at this meeting, Council staff will prepare an initial review draft analysis, which the Council will consider at its February 2011 meeting. The tentative timeline for action on chum salmon bycatch management is for selection of a preliminary preferred alternative at the June 2011 meeting in Nome and final action in October 2011 in Anchorage.

Genetic Stock Identification Updates

New genetic stock identification work on the Chinook and chum salmon taken as bycatch in the pollock fishery has recently been completed. Several studies by the Auke Bay Lab, Alaska Fisheries Science Center, National Marine Fisheries Service, were recently released. These studies examined the genetic stock composition of bycatch samples from the Bering Sea pollock fishery. Chum salmon samples from the 2009 fishery were analyzed, as well as Chinook salmon samples from 2007 (B season only), 2008, and 2009.

The analysis of the 2009 chum salmon bycatch samples found that 13 percent of the chum salmon were from western Alaska. Asian stocks predominated (more than 64 percent), and 18 percent were from the Pacific Northwest.

The analysis of the 2007 B season Chinook salmon bycatch found that 79 percent of the stocks were from coastal Western Alaska (which includes the lower Yukon, lower Kuskokwim and Bristol Bay), 5 percent were from the middle Yukon and 6 percent were from the upper Yukon. This represents a significantly higher proportion of coastal Western Alaska, middle and upper Yukon stocks than in previous studies. It is important to note that 2007 was the record high bycatch year for the pollock fishery, with over 52,000 Chinook salmon caught as bycatch in the B season alone (and 121,000 for the whole year).

The analysis of the 2008 samples found that 54 percent of the stocks were from coastal Western Alaska, less than 1 percent were from the middle Yukon and 5 percent were from the upper Yukon. The analysis of the 2009 samples found that 57 percent of the stocks were from coastal Western Alaska, 6 percent were from the middle Yukon and 15 percent were from the upper Yukon.

These results provide interesting new information, some of which differs dramatically from earlier genetic stock identification work, particularly that used in the Environmental Impact Statement for the Council's recent action on Chinook salmon bycatch management. It is important to note that in these studies of the 2007, 2008, and 2009 bycatch, as in previous studies, issues with sampling mean that these results may not accurately portray the stock composition of the entire bycatch, but can only accurately be said to represent the stock composition of the samples themselves. It is also important to note that it appears there are significant differences in stock composition between the A and B seasons, due in part to a difference in fishing locations, and therefore estimates from the B season may not be applicable to the A season.

The full reports are available on-line:

Chum 2009:

http://www.fakr.noaa.gov/npfmc/current_issues/bycatch/Genetics510/GeneticChum2009Trawl.pdf

Chinook 2007 and 2009:

http://www.fakr.noaa.gov/npfmc/current_issues/bycatch/Genetics510/GeneticChinook07_09Trawl.pdf

Chinook 2008:

http://www.fakr.noaa.gov/npfmc/current_issues/bycatch/Genetics510/GeneticChinook2008Trawl.pdf