




MEMORANDUM

TO: Jeff Regnart, Director 
Division of Commercial Fisheries

DATE: September 24, 2012

Charles O. Swanton, Director 
Division of Sport Fish

THRU: Tracy Lingnau, Regional Supervisor
Division of Commercial Fisheries, Region II

SUBJECT: Bristol Bay
Escapement Goal
Memo

James J. Hasbrouck, Regional Supervisor
Division of Sport Fish, Region II

FROM: Lowell Fair, Regional Research Coordinator
Division of Commercial Fisheries, Region II

Jack W. Erickson, Regional Research Coordinator
Division of Sport Fish, Region II

The purpose of this memo is to inform you of our progress in reviewing and recommending escapement goals for Bristol Bay. In February 2012, an interdivisional salmon escapement goal committee, including staff from the divisions of Commercial Fisheries and Sport Fish, initially met to discuss salmon escapement goals in the Bristol Bay Management Area.

The escapement goal review process has been atypical this cycle. Unfortunately, due to unforeseen delays, we will not have escapement goal recommendations and accompanying memo completed prior to the board Work Session. The University of Washington, Fisheries Research Institute (FRI) has been working with the Division of Commercial Fisheries to reconstruct all historical Bristol Bay sockeye salmon returns using comprehensive genetic stock composition estimates since 2006, along with older genetic estimates gathered from select sets of scale DNA dating back to the early 1960s. Dr. Ray Hilborn and other FRI staff have developed a run reconstruction model that utilizes genetic and other relevant information, essentially recalculating historical brood tables for all Bristol Bay sockeye salmon stocks. Brood tables are the basis for developing escapement goals that incorporate knowledge of maximum sustained yield. Although the Bristol Bay catch and escapement data sets are extensive, dating back to the 1950s and 1960s, the primary issue with their quality is the uncertainty associated with accurately separating the mixed-stock harvest into individual stock components. This

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reconstruction will largely alleviate these past concerns by using modern stock-specific genetic markers.

The process of finalizing the brood table reconstruction has been time-consuming and complex given the many unique sets of data that go into the model. From a research perspective, this is one of the most significant undertakings ever accomplished in understanding Bristol Bay sockeye salmon stock productivity. We have been working diligently with FRI for the past year at completing the process. Only last week were we given final brood tables upon which we can begin our evaluation of sockeye escapement goals. Given the magnitude and significance of the data, and their influence on potentially revised goals we want to be absolutely sure everything is correct before applying stock-recruitment models, and that the entire review process is thorough and complete. The delay in evaluating escapement goals has been unfortunate; however, it is imperative that the final data upon which we evaluate the goals are accurate.

We will continue to strive towards completion of recommendations in a timely manner. Regardless of whether final escapement goal recommendations are finalized prior to the Work Session, a memo with recommendations will be developed and sent to the board at the time of its completion. Oral and written reports concerning escapement goals with specific recommendations will be presented to the board in December 2012. These reports will list all current and recommended escapement goals for Bristol Bay, as well as a detailed description of the methods used to reach recommendations. Subsequent to the December board meeting, a follow-up memo will be prepared to include escapement goal recommendations to division directors for final approval.