

## SACRAMENTO RIVER WINTER CHINOOK WORKGROUP REPORT ON THE SACRAMENTO RIVER WINTER CHINOOK CONTROL RULE UPDATE

At the November 2015 meeting, the Council commissioned the Ad Hoc Sacramento River Winter Chinook Workgroup (SRWCW) and asked them to explore alternative control rules for Sacramento River winter Chinook (SRWC). The Council and National Marine Fisheries Service (NMFS) indicated their interest in having a new control rule in place for use during the 2017 season setting process, but appreciated that this would require an aggressive development and review schedule.

Recall that the current management framework for the Endangered Species Act listed SRWC has been in place since 2012. The two-part framework includes a set of season and minimum size limited management measures coupled with a control rule-defined limit on the allowable age-3 impact rate south of Point Arena, California, that is a function of the most recent three year geometric mean of spawner escapement. The Council expressed concern, on the one hand, that the control rule might be unnecessarily restrictive by not allowing some level of *de minimis* fishing when escapements are low, but also that the control rule might not respond quickly enough to forward-looking indicators of cohort strength because of its dependence on past spawner escapements.

The SRWCW met for the second time by webinar on June 15, 2016 to assess progress and plan for future work. The SRWCW received reports from Dr. Michael O'Farrell (Southwest Fisheries Science Center) and Bill Poytress (U.S. Fish and Wildlife Service) with further input and discussion from other members of the SRWCW. Significant progress has been made, but there is still much to be done. The technical work is currently focused on developing an abundance forecast for winter run Chinook, and the analytical tools necessary to evaluate alternative control rules.

The current control rule uses the 3-year geometric mean of escapements to regulate fishing rates. The new control rule will rely on a forecast of age-3 abundance, which will be based in part on the estimated juvenile abundance for that cohort. The forecast will allow for the forward looking perspective that was absent with the current escapement-based approach.

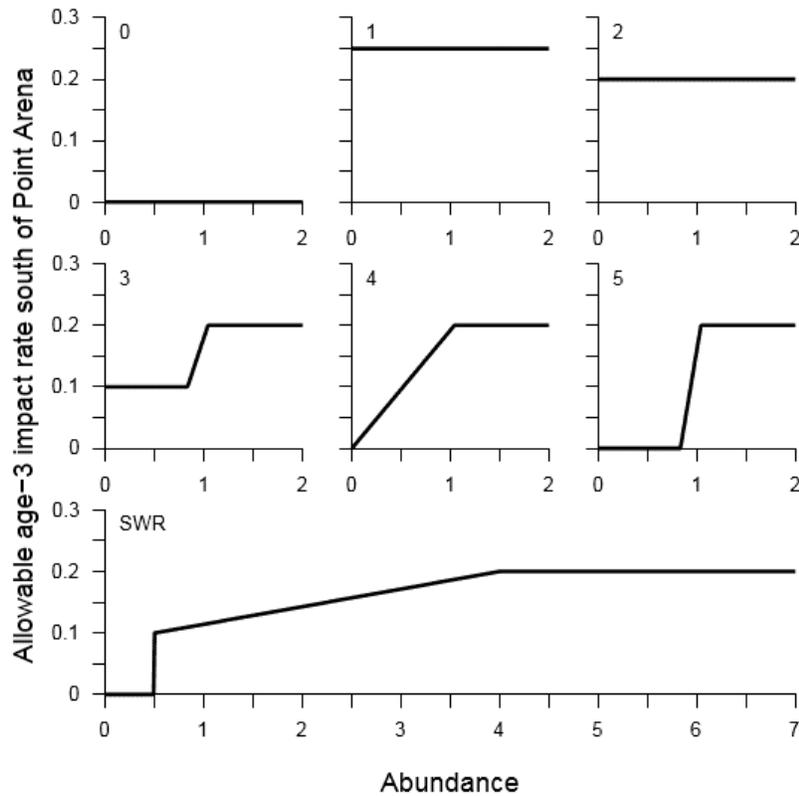
The SRWCW will use a management strategy evaluation (MSE) approach to evaluate the performance of alternative control rules. The MSE, which will be based on the approach used previously, will characterize population risk absent fishing and compare it to the additional risk associated with control rule alternatives considered for analysis. The MSE tools are being enhanced to incorporate new data and an abundance forecast component. There are a number of technical challenges associated with these enhancements. The biggest challenge for this project is completing development of the analytical tools.

While the technical work continues, the SRWCW recommends that the Council push ahead with the consideration of alternative control rules that will eventually be considered in the risk assessment. Alternatives are based largely on policy considerations that are independent of

ongoing technical work. If a preliminary set of alternatives can be developed, they would then be available for use once the analytical tools are ready.

The workgroup recommends that the Council begin their consideration with the same set of alternatives considered during development of the current control rule. The key question will continue to be the manner in which harvest should be reduced as abundance declines. Although the alternatives considered previously should be familiar, they are included in the report as a reminder. The Council may consider whether there are other alternatives or permutations of the existing alternatives that should be considered for analysis.

The SRWCW will meet again on August 16 and 17 in Santa Cruz to get an update on progress and prepare a report and whatever materials may be appropriate for the September Council meeting. One scheduling challenge noted by the workgroup was how and when to get input from the Council's salmon advisors. The SAS is not scheduled to come to Boise in September, and we are uncertain about our ability to schedule a meeting beforehand. This project is on an accelerated timeline, so scheduling will continue to be a challenge.



PFMC  
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