

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON  
SACRAMENTO RIVER WINTER CHINOOK CONTROL RULE, PRELIMINARY  
RECOMMENDATIONS

Dr. Michael O'Farrell (Southwest Fisheries Science Center) presented an evaluation of Sacramento River Winter Chinook (SRWC) salmon control rules ([Agenda Item F.2.a, SRWCW Report 1](#)) to the Scientific and Statistical Committee (SSC). This analysis is an update of the management strategy evaluation (MSE) presented to the SSC in April 2017 ([Agenda Item E.1.a, SRWCW Report 1, April 2017](#)) and continues to build upon a previous analysis reviewed and endorsed by the SSC in March 2014 ([Agenda Item F.8.a, Attachment 2, March 2014](#)), as well as preseason abundance forecast approaches reviewed in November 2016 ([Agenda Item D.2, Attachment 1, November 2016](#)).

The analysis evaluates nine control rules using scenarios that differ in assumptions regarding productivity and forecast error. The SSC commends the analysts for this MSE work, which represents an important step in evaluating these control rules.

At the April 2017 SSC meeting, the SSC recommended two changes to the analysis: adding scenarios to explore alternative assumptions regarding productivity, and reporting the proportion of years with allowable impact rates within ranges to illustrate both the frequency and magnitude of changes in allowable impact rates. The updated analysis incorporates both recommendations. In particular, the updated evaluation contains alternative scenarios that include longer droughts, more frequent droughts, and overall warmer river temperature, each of which affects egg-to-fry survival.

The analysis represents the best available science for differentiating between the effects of alternative control rules, and for evaluating the tradeoff between conservation benefits and harvest constraints if the harvest control rule is based on the median versus mode of the abundance forecast.