

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON  
SACRAMENTO RIVER WINTER CHINOOK HARVEST CONTROL RULE REVIEW

Dr. Michael O'Farrell (Southwest Fisheries Science Center) presented the Sacramento River winter Chinook management strategy evaluation (MSE) to the Scientific and Statistical Committee (SSC). This MSE builds upon a previous analysis reviewed and endorsed by the SSC in March 2014 ([Agenda Item F.8.a, Attachment 2, March 2014](#)) and preseason abundance forecast approaches reviewed in November 2016 ([Agenda Item D.2, Attachment 1, November 2016](#)). It evaluates nine alternative control rules across a single forecast method and four scenarios for productivity and observation error.

The SSC commends the analysts for this MSE work, which represents an important step in evaluating these alternative control rules.

The MSE considers the long-term results for the alternative scenarios across the nine control rules, but there may be a need to explore more scenarios including those with lower productivity. This could be accomplished by taking the subset of the MSE results (across simulations and years) that are similar to current conditions. The analysts should also consider the following alternative scenarios: (1) lower average productivity; (2) longer or more variable number of years of drought-related high water temperature; and (3) alternative temperature-productivity relationships.

The proportion of time that the allowable age-3 impact rate specified by each control rule is greater than or equal to 0.2 is displayed in Figure 3. However, the pattern of allowable impact rates varies greatly among the control rules. A better display of this information would be a table showing the proportion of years with allowable impact rates within different ranges. This would illustrate both the frequency and magnitude of change in allowable impact rates.