

Annual Catch Limit and National Standard 1 Q&A's

Topic: OFL and ABC

5) What is an OFL?

The OFL is the best estimate of the maximum amount of a stock that can be caught in a year without resulting in overfishing. The OFL is an amount of catch calculated from the estimate of biomass for a year and the maximum rate of fishing mortality that does not result in overfishing. Catch equal to OFL results in equal probability that overfishing is or is not occurring.

6) Does the Council's SSC have to specify an OFL?

The MSA does not specifically mandate that an OFL be set for every stock. However, as the OFL is the upper limit for determining the ABC and ACL, it should be estimated whenever possible. It is not currently possible to calculate the OFL for every stock, primarily because reliable estimates of biomass are not available for every stock. However, if it is not possible to calculate OFL, the MSA requirements for establishing ABC and ACL still apply. See the answers to questions 12 and 13 for more information on setting an ABC when OFL is unknown.

7) Does "ABC" refer to "acceptable biological catch" or "allowable biological catch"?

Both the MSA and the NS1 guidelines use the term *acceptable* biological catch. Some Councils have in the past used the term "allowable biological catch" which may be functionally equivalent to the term "acceptable biological catch." NMFS recommends that "acceptable biological catch" be used, as that is the term that appears in the MSA.

8) What is ABC?

The ABC is an annual catch level recommended by a Council's SSC. The Council's ACL for a stock may not exceed the ABC recommendation of the SSC for that stock. The SSC's ABC recommendation should incorporate consideration of the stock's life history and reproductive potential, vulnerability to overfishing, and the degree of uncertainty in the science upon which the ABC recommendation is based.

9) What is the relationship between OFL and ABC?

The ABC must be less than or equal to the OFL; however, in most situations the ABC will be less than OFL in consideration of the factors listed in the answer to question 8. If the ABC were set equal to the OFL, then catching the ABC would result in a 50-percent chance of overfishing. To comply with the MSA's requirement to prevent overfishing, the probability that an actual catch equal to a stock's ABC will result in overfishing cannot exceed 50-percent, and should usually be a lower value. In general, the higher the degree of scientific uncertainty, the bigger difference there should be between the OFL and ABC.

10) What is an ABC control rule?

An ABC control rule is established by the Council, based on advice from its SSC, and is a specified approach to calculate the ABC for a stock. When setting an ABC control rule, the Council and/or its SSC should consider reducing the fishing mortality rate as stock size declines (especially when a stock is overfished) and establishing a stock abundance level below which fishing would not be allowed. More information about ABC control rules is in the answers to questions 12 and 13.

11) Does an SSC have to recommend the ABC determined by the ABC control rule?

The SSC's ABC recommendation should be based on the ABC control rule. The SSC may recommend an ABC that differs from the result of the ABC control rule, based on factors such as data uncertainty or bias, recruitment variability, declining trends in population variables, and other factors. However, if a different value is recommended, the SSC must thoroughly explain why they have chosen to do so.

12) The NS1 guidelines state that the ABC control rule should account for the scientific uncertainty in the estimate of the OFL. In the case where the scientific uncertainty cannot be calculated, what should be the basis for the ABC control rule?

The fact that uncertainty cannot be calculated is, in fact, important evidence of a high level of uncertainty. The ABC control rule should therefore be appropriately conservative to account for this uncertainty. If the OFL or the scientific uncertainty in the OFL cannot be estimated, expert judgment and sound conservation principles can be utilized to determine the ABC. For example, recent average catch data and trends in annual catch could provide the basis for estimating ABC. In any case, the choice of the ABC control rule must be adequately described in the FMP.

13) Should the ABC control rule always take into account the Council's policy on the acceptable level of risk of overfishing?

Yes. The Council should always include a consideration of risk in the ABC control rule. If possible, the Council's risk policy should be based on an acceptable probability that an actual catch equal to the ABC would result in overfishing. For example, a Council might decide that, for some stocks, there should be no more than a 40-percent probability that an actual catch equal to the ABC would result in overfishing. In no case may there be greater than a 50-percent probability that the catch equal to the ABC would result in overfishing. When it is not possible to use a probability-based approach, the ABC control rule could incorporate other precautionary approaches to reduce the ABC from the OFL. For example, a control rule that states that ABC will be set at 75 percent of the OFL, acknowledges that the OFL is uncertain and reduces the risk that overfishing will occur.