

2011 SALMON METHODOLOGY REVIEW

Each year, the Scientific and Statistical Committee (SSC) and Salmon Technical Team (STT) complete a methodology review to help assure new or significantly modified methodologies employed to estimate impacts of the Council's salmon management use the best available science. The Methodology Review is also used as a forum to review updated stock conservation objective proposals. This review is preparatory to the Council's adoption, at the November meeting, of all anticipated methodology and conservation objective changes to be implemented in the coming season, or in certain limited cases, of providing directions for handling any unresolved methodology problems prior to the formulation of salmon management options in March. Because there is insufficient time to review new or modified methods at the March meeting, the Council may reject their use if they have not been approved the preceding November.

This year the SSC and STT are expected to report on:

- Abundance-based management framework for Lower Columbia River (LCR) tule fall Chinook (Agenda Item C.1.a, Attachment 1).
- Cohort reconstruction and development of a harvest model for Sacramento River Winter Chinook (Agenda Item C.1.a, Attachments 2 and 3).
- Examination of the potential bias in Coho and Chinook Fishery Regulation Assessment Model (FRAM) of fishery-related mortality introduced by mark-selective fisheries (Agenda Item C.1.a, Attachment 4).
- A multi-year review and evaluation of preseason and postseason mark-selective fisheries both north and south of Cape Falcon (Agenda Item C.1.a, Attachment 5).

The National Marine Fisheries Service (NMFS) identified the developing options for an abundance-based approach for 2012 LCR tule Chinook management in its 2010 Endangered Species Act (ESA) guidance letter to the Council. The Tule Chinook Workgroup Report (Attachment 1) addressed this task, which was intended to accelerate the tule recovery process and reduce uncertainties in key elements of the overall recovery strategy. Therefore, in addition to reviewing the models and technical analyses used to develop and analyze the alternatives, the Council should provide guidance and recommendations to NMFS for a preferred alternative for consideration in the 2012 tule Chinook ESA consultation process.

Council Action:

- 1. Approve new and modified methodologies as appropriate for implementation in the 2012 salmon season.**
- 2. Provide recommendations to NMFS on an abundance-based management approach for Lower Columbia River tule Chinook.**
- 3. Provide guidance, as needed, for any unresolved methodology issues.**

Reference Materials:

1. Agenda Item C.1.a, Attachment 1: Exploration of Abundance-Based Management Approaches for Lower Columbia River Tule Chinook.
2. Agenda Item C.1.a, Attachment 2: Sacramento River Winter Chinook Cohort Reconstruction: Analysis of Ocean Fishery Impacts.
3. Agenda Item C.1.a, Attachment 3: The Winter-Run Harvest Model (WRHM).
4. Agenda Item C.1.a, Attachment 4: Application of Bias-corrected Methods for Estimating Mortality in Mark-Selective Fisheries to Coho FRAM.
5. Agenda Item C.1.a, Attachment 5: Causes and Effects of Bias in Anticipated Mark Rates in Mark-Selective Fisheries for Coho Salmon.
6. Agenda Item C.1.b, STT Report.
7. Agenda Item C.1.b, MEW Report.
8. Agenda Item C.1.b, Supplemental SSC Report.

Agenda Order:

- a. Agenda Item Overview Chuck Tracy
- b. Reports and Comments of Advisory Bodies and Management Entities
- c. Public Comment
- d. **Council Action:** Adopt Final Methodology Changes for 2012 and Provide Recommendations to NMFS on Abundance-Based Methodology for Tule Chinook

PFMC
10/14/11