

## 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 alternatives 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's methodology review meeting of the SSC Salmon Subcommittee, the STT, and the Model Evaluation Workgroup occurred on October 1-2, 2013 at the onset of the Federal government furlough. Accordingly, no employees of Federal agencies were in attendance, which restricted the group's ability to fully review the proposals. Therefore, the modified objective of the meeting was to conduct an initial review of the analyses, discuss alternative ways of completing this year's compromised review, and to prioritize items for the November Council meeting.

There will be insufficient time at the November Council meeting to conduct a thorough review of all of this year's topics. Methodology topics were prioritized for full SSC review in November based on two main criteria; 1) the technical merits of the analysis and the documentation, and 2) the proposed methodology's potential to directly improve the 2014 preseason process.

Based on these criteria, the following topics are recommended for full SSC review and potential Council adoption in November:

- Technical revision to the Oregon Coastal Natural (OCN) coho work group harvest matrix. (Agenda Item C.2.a, Attachment 1).
- Lower Columbia natural (LCN) coho matrix control rules (Agenda Item C.2.a, Attachments 2).
- Incorporating Recent Empirical Information on Sublegal Encounters Into Fishery Regulation Assessment Model (FRAM) Modeling (Agenda Item C.3.a, Attachment 3).
- Correction to FRAM Algorithms for Modeling Size Limit Changes (Agenda Item C.3.a, Attachment 4).
- Evaluate alternative forecast methodologies for the Sacramento fall Chinook index. (Agenda Item C.2.a, Attachment 5).

The following topics were not recommended for full SSC review in November, and Council guidance is requested on a revised schedule for their future review:

- Conservation objectives, annual catch limits, and status determination criteria for Willapa Bay coho (Agenda Item C.2.a, Attachment 6).

- Conservation objectives for southern Oregon coastal Chinook (Agenda Item C.2.a, Attachments 7).
- Standardized method to calculate Chinook age 2 FRAM stock recruit scalars (Agenda Item C.3.a, Attachment 8).
- Progress Report: new Chinook FRAM base period.

**Council Action:**

- 1. Approve new and modified methodologies and conservation objectives as appropriate.**
- 2. Provide guidance, as needed, for any unresolved methodology issues.**

Reference Materials:

1. Agenda Item C.2.a, Attachment 1: 2013 Technical Revision to the OCN Coho Work Group Harvest Matrix.
2. Agenda Item C.2.a, Attachment 2: Harvest Strategy Risk Assessment for Lower Columbia Natural Coho.
3. Agenda Item C.2.a, Attachment 3: Incorporating Recent Empirical Information on Sublegal Encounters into FRAM Modeling.
4. Agenda Item C.2.a, Attachment 4: Correction to FRAM Algorithms for Modeling Size Limit Changes.
5. Agenda Item C.2.a, Attachment 5: Expected future performance of abundance forecast models with application to Sacramento River fall Chinook salmon.
6. Agenda Item C.2.a, Attachment 6: Status Determination Criteria for Willapa Bay Natural Coho.
7. Agenda Item C.2.a, Attachment 7: Conservation Objective for Southern Oregon coastal Chinook.
8. Agenda Item C.2.a, Attachment 8: Standardized Method to Calculate Chinook Age 2 FRAM Stock Recruit Scalars, Based Upon the Age 3 Forecast.
9. Agenda Item C.2.b, Supplemental SSC Report.

Agenda Order:

- a. Agenda Item Overview Mike Burner
- b. Reports and Comments of Advisory Bodies and Management Entities
- c. Public Comment
- d. **Council Action:** Adopt Final Methodology Changes and Conservation Objectives

PFMC  
10/10/13