SALMON METHODOLOGY REVIEW

Each year, the Scientific and Statistical Committee (SSC), the Salmon Technical Team (STT), and the Model Evaluation Workgroup (MEW) 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.

At its September 2015 meeting, the Council approved the items listed below for this year's methodology review. The methodology review meeting of the SSC Salmon Subcommittee, the STT, and the MEW was held on October 20-22, 2015, where a detailed review of the following items occurred.

- Update of the Chinook FRAM (Fishery Regulation Assessment Model) base period and associated base period algorithms (Agenda Item D.2, Attachment 1, Attachment 2, and Attachment 3).
- Update documentation for Chinook and coho FRAM.
- Evaluation of stock contribution to ocean fisheries north and south of Point Sur and Point Reyes (Agenda Item D.2, Attachment 4).

In September, it was reported that there is insufficient data to evaluate a potential management line splitting the California Klamath Management Zone and that National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) were planning to work with the California salmon fishing industry to develop a test fishery for 2016 to start collecting the required information (Agenda Item D.2, Attachment 5). Under Council Operating Procedure 18, industry sponsored salmon test fisheries must be submitted in November to be considered in the following year. At this meeting, the SSC, STT, and Salmon Advisory Subpanel (SAS) will initiate review of the proposals and may provide preliminary comments to the Council. Written evaluations of the proposal will be presented at the March 2016 meeting where the Council is scheduled to determine which proposals should go out for public review before final approval at the April 2016 Council meeting.

Additionally, the Council approved a CDFW request for a review of the use of Sacramento River winter Chinook stock projections from jack returns as a management tool, as indicated in Agenda Item D.1.e, Supplemental CDFW Report at the April 2015 Council meeting (included in the November 2015 Briefing Book as Agenda Item D.2, Attachment 6). It is not anticipated that this review will result in policy recommendations or a full scientific review, rather it is anticipated to be a general review of the merits of this mechanism as a tool for management and a discussion of what is necessary to pursue the matter further.

The results of these methodology reviews will be presented to the full SSC and the Council at the November Council meeting where the Council is scheduled to approve new methodologies.

Council Action:

- 1. Approve new and modified methodologies and conservation objectives as appropriate.
- 2. Provide guidance, as needed, for any unresolved methodology issues.
- 3. Consider preliminary test fishing proposal.

Reference Materials:

- 1. Agenda Item D.2, Attachment 1: Report for the 2015 Salmon Methodology Review on the Fishery Regulation Assessment Model (FRAM) Chinook Base Period.
- 2. Agenda Item D.2, Attachment 2: Chinook FRAM Base Period Documentation: Growth Functions.
- 3. Agenda Item D.2, Attachment 3: Chinook FRAM Base Period Documentation: Sublegal Stock and Age Assignments.
- 4. Agenda Item D.2, Attachment 4: An evaluation of the proposed increases in spatial stratification for California salmon fisheries.
- 5. Agenda Item D.2, Attachment 5: California Klamath Fishery Management Zone Test Fishery Proposal.
- 6. Agenda Item D.2, Attachment 6: April 1, 2015 letter from CDFW Director Bonham to Council Chair Lowman regarding SRWC management in 2015.
- 7. Agenda Item D.2.a, PSC Comments: letter from Pacific Salmon Commission Executive Secretary John Field to Pacific Council Executive Director Don McIsaac.
- 8. Agenda Item D.2.a Supplemental SSC Report.

Agenda Order:

D.2 Salmon Methodology Review

Mike Burner

- a. Reports and Comments of Advisory Bodies and Management Entities
- b. Public Comment
- c. **Council Action**: Adopt Final Methodology Changes and Consider Preliminary Test Fishing Proposals

PFMC 10/16/15