### SALMON TECHNICAL TEAM STATEMENT ON THE 2019 FINAL METHODOLOGY REVIEW

The Salmon Technical Team (STT), Model Evaluation Workgroup (MEW), and Salmon Subcommittee of the Scientific and Statistical Committee (SSC) met via webinar on October 22 to conduct the 2019 methodology review. The following four topics were discussed on the webinar.

# Conduct the technical analysis needed to inform a change of the salmon management boundary line from latitude $40^{\circ}05'$ (Horse Mountain, California) five miles north to latitude $40^{\circ}10'$

Michael O'Farrell (STT/National Marine Fisheries Service) and Alex Letvin (STT/California Department of Fish and Wildlife) described potential consequences of moving the management line separating the California Klamath Management Zone and the Fort Bragg management area north five nautical miles. The analysis focused on technical issues that could arise for the harvest models used to inform fishery management in this region. Results of this analysis suggested that potential changes to harvest, harvest rates, and river return projections for Klamath and Sacramento River fall Chinook are likely to be small. However, it was also noted that catch data do not exist on a fine enough scale to directly evaluate changes to stock-specific impacts in this region, and a change in the management line boundary could lead to increased uncertainty in harvest model projections, primarily for the commercial fishery. If the location of this management line were to be moved to 40°10', the STT recommends that no changes be made to existing harvest models.

#### Documentation of the abundance forecast approach used for Willapa Bay natural coho

James Losee (Washington Department of Fish and Wildlife, WDFW) presented an overview of the abundance forecasting approach for Willapa Bay natural coho. Supporting materials included a memo describing aspects of the 2019 forecast and two spreadsheets with additional information used for forecasting. Documentation of the forecasting approach was insufficient to allow for a full review during the webinar. Representatives from WDFW offered to provide additional information on the abundance forecasting approach by the end of the year. Currently there is a plan to hold a webinar in early 2020 to review draft documentation with the expectation that more complete documentation would be submitted for the March 2020 briefing book.

## Examine the data used to estimate impacts on Columbia River summer Chinook to determine whether data updates and/or a change in methodology are warranted

Angelika Hagen-Breaux (MEW/WDFW) described progress made on the Fishery Regulation Assessment Model (FRAM) exploitation rate investigation on upper Columbia River summer

Chinook. It had been noted in recent years that marine fishery impacts were significantly higher for this stock, particularly for the central Oregon troll fishery, since implementation of the new base period. The FRAM base period workgroup has investigated several potential reasons for these high exploitation rates and has determined that a substantial number of coded-wire tag recoveries in freshwater are not being accounted for. Discussions during the methodology review led members of the STT to conclude that a change in methodology is not likely needed, but rather the issues are with data inputs. Work to resolve these issues is ongoing.

#### FRAM user manual

A brief demonstration of the newly-developed FRAM user manual was given to methodology review participants by Dan Auerbach (WDFW). The user manual is a living document that can be readily updated and modified as the need arises. A portion of the discussion on this topic was devoted to how the electronic document would be made available to potential users. The STT found the presentation to be useful and is supportive of the work that has gone into the development of this product.

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