

Joint Tech Committee (JTC) Report to Yukon River Panel



Yukon River Panel
April 13, 2021
Agenda item #4
Online Meeting



Zachary Liller and Steve Smith

JTC Meeting Overview and Updates

- March 10 – 12, 2021
- Virtual Microsoft Teams Meeting
- Attendance

United States

Bonnie Borba (ADF&G)
Charles Brazil (ADF&G)
Randy Brown (USFWS)
Jeff Estensen (ADF&G)
Deena Jallen (ADF&G)
Zachary Liller (co-chair, ADF&G)
Jim Murphy (NOAA)
Gerald Maschmann (USFWS)
Stephanie Quinn-Davidson (TCC)
Chris Stark (BSFA)
Alida Trainor (ADF&G)
Fred West (ADF&G)

Canada

Oliver Barker (DFO)
Vesta Mather (DFO)
Elizabeth McDonald (YSSC)
Steve Smith (co-chair, DFO)
Jesse Trerice (DFO)

Guests

Catherine Bradley (USFWS)
Chris Carli (DFO)
Holly Carroll (ADF&G)
Joshua Clark (ADF&G)
Brendan Connors (DFO)
Michael Folkes (DFO)
Sabrina Garcia (ADF&G)
Hamachan Hamazaki (ADF&G)
Elizabeth Lee (ADF&G)
Gottfried Pestal (SOLV Consulting)

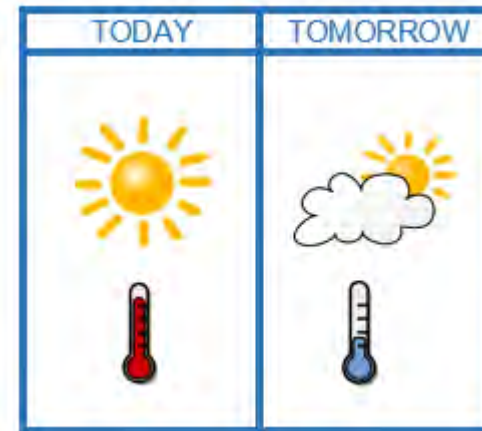
JTC Meeting Day 1

- Chinook Salmon Forecast Subcommittee

- Update on the Bering Sea juvenile survey by Jim Murphy. No 2020 survey due to COVID-19 restrictions, which will prevent ability to generate run size projections in 2023 and 2024.
- The Chinook Salmon Forecast Subcommittee provided an in-depth presentation on improvements to the Yukon River Mainstem Chinook Forecast calculation. The method changes follow through on the updates provided at the post-season meetings of the JTC and Panel. Detailed presentation to the Panel: Item 7a

- Fall Chum Salmon Forecast Subcommittee

- No changes for 2021
- Presentation to the Panel: Item 9a



JTC Meeting Day 1

- Chinook Salmon Assessment and Management Planning
 - U.S. (Deena Jallen and Fred West; ADF&G); *YRP agenda item 7b*
 - CDN (Jesse Trerice and Oliver Barker: DFO); *YRP agenda item 7c*
- Chum Salmon Assessment and Management Planning
 - U.S. (Jeff Estensen and Bonnie Borba; ADF&G); *YRP agenda items 9b & 11b*
 - CDN (Jesse Trerice and Oliver Barker: DFO); *YRP agenda items 9c & 11c*
- JTC Interim Management Escapement Goal recommendations to the Panel
 - Mainstem Chinook salmon; for 2021, recommend no change (42,500 – 55,000); *YRP agenda item 5a*
 - Fall chum salmon; in place for 2020-2022 (70,000 – 104,000); *YRP agenda item 5b*
 - Fishing Branch chum salmon; in place for 2020-2022 (22,000 – 49,000); *YRP agenda item 5c*

JTC Meeting Day 2

- Subcommittee Reporting

- Report Subcommittee

- Appendix B18 – YRSA Chinook salmon “report card” was revised
 - Similar chum salmon YRSA “report card” is in development
 - Continued interest to improve report layout and production
 - Report (2020 season and 2021 outlook) has been finalized and provided to the Panel Co-chairs and Pacific Salmon Commission for distribution to the Panel and public.



- Restoration & Enhancement (R&E) Fund Subcommittee

- JTC finalized all R&E review activities in the fall of 2020 and provided our final review products to the Panel on December 3, 2020. No additional actions required this cycle.

- Stewardship Guidance Document

- Document was finalized by JTC and forwarded to the Panel Co-chairs on March 26, 2021 for future consideration.

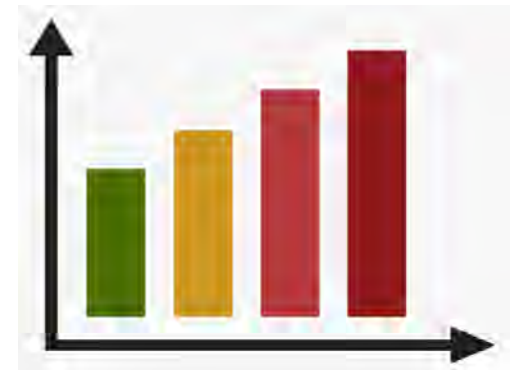
JTC Meeting Day 2, Subcommittee Reporting (cont'd)

Difference Between Estimates (DBE) Subcommittee

- Focus and name changed from “En route Mortality Subcommittee” to DBE Subcommittee
- Established during the JTC Spring 2020 meeting as a result of 2 recent years in which Pilot Station estimates of Canadian-origin Chinook Salmon were significantly larger than the sum of the Eagle sonar count and the Alaska harvest of Canadian-origin salmon.
- The sub-committee believes that the only thing we know with certainty is that there was a DBE, and their time is best spent considering potential factors that could be influencing a DBE for Chinook Salmon in the Yukon River, including en route mortality, uncertainty in Pilot Station sonar/GSI program, straying into unmonitored Alaskan tributaries, and unreported harvest.
- No clear evidence to explain what happened in 2013, 2019, or 2020.
- Collaborations among many agencies are ongoing to investigate this issue.
- Near-term recommendation is for the JTC to invite subject matter experts to participate in discussions and assist in examining different sources of evidence that might explain the DBE.

JTC Meeting Day 2, Subcommittee Reporting (cont'd)

- Chinook salmon Interim Management Escapement Goal Subcommittee
 - Detailed presentation to the JTC on progress to date, including
 - Data report status (JTC review about to occur)
 - Integrated Run Reconstruction and Stock-Recruitment Model
 - Expected outputs: bilaterally approved datasets and models, estimates of biological reference points, description of stock productivity, recommendations to Panel, and future modeling considerations (e.g., investigate implication of changes in escapement quality and productivity through robust forward simulation analyses).
 - Preliminary discussions on presentation to the Panel at the April 2021 meeting.
 - On track for finalizing base level model by Spring 2022. Future modeling may require additional time depending on the level of intricacy and interest of the Panel.



JTC Meeting Day 3

- Improved JTC File Sharing and Storage
 - Chairs to engage Pacific Salmon Commission on JTC specific interests and needs.
 - Data sharing and management
 - Controlled access to members and public
 - Report versions and archiving
 - Common repository for data generated by R&E projects
- Roundtable Discussion
 - Exploration of a Northern Bering Sea (NBS) juvenile chum salmon forecast (Sabrina Garcia)
 - NBS sea-surface temperature and juvenile salmon feeding habits (Jim Murphy)
 - Update on the R&E funded Yukon River Chinook salmon genetic baseline (Elizabeth Lee)

JTC Meeting Day 3

- Parking Lot Items
 - Total Allowable Catch (TAC) calculations
 - With improvements to the Chinook salmon forecast, there was discussion on how it might effect agency preseason TAC calculations and harvest outlooks.
 - Additional meetings were held prior to Panel to better align agency products and understanding.
 - Continued Chinook salmon IMEG discussions from Day 2
 - Timing and scope of expected deliverables
 - Continued discussion on DBE subcommittee outcomes and next steps

JTC Report to Yukon River Panel

QUESTIONS?

