Fraser and Approach Salmon Management Forum Technical Session Update

February 3, 2021

Fraser Salmon Management Council

Canada

Fisheries and Oceans Canada | Pêches et Océans Canada

Monday Tech Session February 1, 2021

1. FSMB JTC vs Forum Tech Session
2. Update on Chinook Evaluation Framework
3. Review Southern BC Chinook Avid Angler and SBC Creel Program
4. Chinook (and salmon) bycatch in trawl fisheries
5. Review 2020 Chinook fisheries
6. Sockeye post-season
7. Agenda Planning for March and April.

FSMB JTC vs Forum Tech Session

- Brittany Jenewein and Mike Staley presented on the difference between the FSMB Joint Technical Committee and the Forum tech session (JTWG)
- JTC is a mandated group of 10 appointees from the FSMB. 5 members from First Nations and 5 from DFO.
- JTWG is an open group of participants from First Nations and DFO, intended to inform technical discussion in advance of the Forum.
- Intention is to keep both groups running, as they provide separate functions.

Update on Chinook Evaluation Framework

- Presented by Brittany Jenewein, discussion to update technical participants on the state of the Chinook Evaluation Framework.
- Group is interested in the scope of analysis:
  - How it is involved in the IFMP process.
  - How it could be applied to other fisheries and species.
  - How the Framework could be applied to reviewing closures.
  - How the evaluation process will be finalized and communicated.
- Majority of questions were identified to be discussed at the Forum.

Review Southern BC Chinook Avid Angler and SBC Creel Program

- Presented by Wilf Luedke.
- Updated Southern BC Recreational Chinook fisheries creel data, and Avid Angler data.
- Data includes estimates of fishery impact for all 5 Fraser Chinook Management Units, based on the 2019 Dobson report.
- Group identified many discussion items:
  - iREC estimates are included in official catch reports for 2020.
  - Shift from targeting Chinook to Coho in early months.
  - Coho targeted do not have DNA sampling to identify which stocks are being intercepted.
  - Chinook catch rates were highest in recent years in 2019.

Review Southern BC Chinook Avid Angler and SBC Creel Program

- Discussion continued:
  - Sample sizes for marine recreational fisheries are small, need to be pooled among years to get sample sizes large enough for statistical power.
  - Fishing pressure seems to have increased as soon as fishery opened, impact on stocks of concern still migrating through the fishery area.
  - Challenges identifying opening day impact because the creel data is stratified on the monthly timestep.
  - FRIM rates applied for this analysis is 20%, different than the IFMP (15%).
  - Fisheries included in this analysis are from across BC, but not all fisheries are included. No US fisheries included.

Review Southern BC Chinook Avid Angler and SBC Creel Program

- Discussion continued:
  - DNA samples from released Chinook are harder to access, some available through Avid Angler program.
  - DNA samples from recreational fishery have been harder to come by in 2020 due to uncooperative fishers.
  - Partial Mark Selective Fisheries are included in the base period.
  - Challenges including an error metric in the mortality estimates, several sources of uncertainty were identified in the analysis.
  - Understanding the level of compliance of the fishery is not included in this analysis.

Chinook (and salmon) bycatch in trawl fisheries

- Presented by Cory Lagasse
- Salmon bycatch has been identified in groundfish fisheries, as an area of interest/concern.
- Groundfish fisheries include: Halibut, Lingcod, and groundfish trawl.
- Area of concern is in trawl fisheries where salmon species are caught as bycatch.
- Of salmon caught as bycatch, Chinook are the dominant species that appear in catch records; discarded at sea and show up in processing plants.
- All salmon species are prohibited species in this fishery.

Chinook (and salmon) bycatch in trawl fisheries

- Mandatory monitoring of the entire fishery, through at-sea observers or camera systems.
- Majority of Chinook bycatch is in midwater trawl, but appear in bottom trawl as well.
- Majority of bycatch is in WCVI and Juan de Fuca management areas.
- Bycatch annually ranges from ~7,000lbs - ~25,000lbs annually for Chinook.
- Discussion points:
  - Major programs to quantify bycatch of trawl fisheries exist in US fisheries, Pollock and Hake.
  - Samples from these fisheries are inconsistent, only have some CWT recoveries that are unusable to quantify impact due to sampling design.

Chinook (and salmon) bycatch in trawl fisheries

- Discussion continued:
  - Interested in how these mortalities can be included in annual Chinook mortality estimates, currently not included.
  - Bycatch is year-round, as the fisheries operate year-round. There are spikes in bycatch depending on month.
  - Interest in how mandatory retention of salmon bycatch would change fishery, would they be subject to the same management actions as a salmon fishery?
  - Bycatch of salmon that ends up at processing plants is treated as offal.

Review 2020 Chinook fisheries and Sockeye post-season

- Presented by Brittany Jenewein for Chinook, Karen Rickards for Sockeye
- Discussion:
  - Mass Marking and Mark Selective Fisheries have not had appropriate discussions with First Nations to allow technical staff to have informed and appropriate discussion.
  - CWTs written into the PST, a requirement until at least 2029 for fisheries assessment. Mass Marking is still in a pilot phase.
  - JTWG wants to get deeper into the technical aspects of MM at a future session.
  - Sockeye discussion was limited due to most final information being developed for February PST sessions, and currently still in development.

Agenda Planning for March and April

- Group identified a few items:
  - FRSSI and the Sockeye RPA
  - Chinook Mass Marking and Mark Selective Fisheries
  - Fraser Chinook Run Reconstruction
  - Continuing to discuss salmon bycatch in groundfish fisheries
  - Review changes to Fraser Pink Salmon forecast methodology for 2021
  - Reviewing ongoing development of Lower Reference Points for Pacific Salmon