

Draft SSC Report June 2022



Balance of SSC Report

SSC Administrative Discussion (1 of 3)

- In the progress report on “Council process ideas for change”, NPFMC staff shared that the Council may choose at this meeting to:
 - issue the call for SSC nominations at the June meeting
 - request SSC input on expertise needed in new membership, and/or identify specific expertise in the SSC call for nominations.

SSC Administrative Discussion (2 of 3)

- Should the Council elect to do this and to provide timely input, the SSC developed recommendations for additional expertise. These include:
 - a scientist with a broad ecosystem and ecological background
 - a social scientist with expertise in anthropology, sociology, human geography, or a related field
 - a scientist with population dynamics and stock assessment expertise
- The SSC called for volunteers for a Research Priorities subgroup, in anticipation of this agenda item in 2024

SSC Administrative Discussion (3 of 3)

- The SSC received an update from the subgroup planning the February 2022 SSC workshop
 - Focus on the rapid ecosystem changes occurring in the NBS and the southern Chukchi Sea and the use of these areas by species that are currently managed under EBS FMPs
 - Goal: identify the science and monitoring requirements for supporting future Council decision-making under increased uncertainty and a non-stationary environment
 - May include exploration of proactive approaches and assess the applicability of existing frameworks to address ecosystem changes
 - The SSC will receive another update from the subgroup in October

B1 Plan Team Nominations (1 of 1)

- The SSC reviewed the nominations of:
 - Ms. Caitlin Allen Akselrud, Ms. Beth Matta, Dr. Andrew Seitz, Dr. Michael Smith, and Ms. Jane Sullivan to the BSAI GPT
 - Ms. Kristan Blackhart to the GOA GPT
- The SSC ***finds*** these nominees to be well-qualified and ***recommends*** the Council approve their nomination.

C5 Observer Annual Report (1 of 1)

- The SSC did not receive an update on the Observer Program Annual Report at this meeting due to time limitations

D1 Salmon Reports

Stock Status Update (1 of 1)

- In response to Council's Oct. request, ADF&G provided a stock status update for Western Alaska Chum and Chinook salmon
- The SSC *appreciates* the overview of stock status for these two species from ADF&G's Salmon Ocean Ecology Program
- The SSC *expresses* continued concern over the severely declining trends in Western Alaskan chum and Chinook stocks

D1 Salmon Reports

Research Update (1 of 2)

- The SSC also received informational presentations from AFSC and ADF&G summarizing ongoing and future salmon research
- The SSC **thanks** the presenters for their comprehensive overview of the wide-ranging research efforts undertaken by both agencies
- The SSC **highlights** the value of collaborative efforts and partnerships in understanding the drivers of population trends for salmon in the Alaska region, particularly at the ecosystem level

D1 Salmon Reports

Research Update (2 of 2)

- The SSC ***supports*** future research to develop daily predictions of oceanic distributions of Chinook and collaboration with SeaState to obtain information on in-season interactions, which are promising tools for informing management of PSC
- The presented research underscore the importance of the Council's actions to encourage funding of these programs

D1 Salmon Reports

Genetics Reports (1 of 1)

- Reports on stock composition of salmon bycatch including 2020 and 2021 BSAI chum salmon, and 2020 BSAI and GOA Chinook salmon, overview of technological advances and future directions.
- The SSC **commends** efforts to develop a more rapid timeline for analysis and reporting and responses to recommendations from SSC and 2019 salmon bycatch workshop.
- The SSC **encouraged** by progress in examining the relationship of timing of bycatch with environmental indicators and fishing effort, industry collaboration to develop stock avoidance strategies, and potential project on chum stock-specific distribution models.
- The SSC **supports** these efforts that have potential to better understand bycatch patterns and inform Council policy choices about salmon bycatch management in future.

D1 Salmon Reports

Chinook AEQ Updates (1 of 2)

- The SSC received an update on Chinook salmon AEQ modelling efforts
- Given observed changes in the age composition of returning AYK Chinook salmon and potential impacts on mortality and impact rate estimates the SSC **highlights** the value of periodic updates to the AEQ model
- The SSC **encourages** consideration of incorporating direct estimates of run size uncertainty from state-space run reconstruction models where possible

D1 Salmon Reports

Chinook AEQ Updates (2 of 2)

- Given potential sensitivity of AEQ estimates to assumed age-specific marine mortality, the SSC **recommends** that future AEQ reporting would benefit from
 - A description of past sensitivity analyses, or
 - updated analysis of sensitivity to assumed marine mortality
- The SSC **encourages** NMFS and Council staff to continue exploring options for making both AEQ methods and results more approachable for non-technical audiences
- The SSC **supports** efforts to advance AEQ methodology, potentially including integrated population models that fit directly to data

D1 Salmon Reports

Chum Impact Recommendations (1 of 2)

- The SSC received a report on staff recommendations for assessment of PSC impacts on chum salmon
- Relative to Chinook salmon, information on chum age composition and escapement estimates are limited, presenting challenges for AEQ and impact rate analyses

D1 Salmon Reports

Chum Impact Recommendations (2 of 2)

- The SSC notes:
 - Possible to calculate W. Alaska and Yukon River chum salmon AEQ mortality and these estimates may be useful in informing bycatch impacts,
 - However, those stocks are a small proportion of overall bycatch and may not be representative of other W. Alaska chum runs.
 - However, AEQ mortality estimates would be uncertain given necessary assumptions about marine mortality and age at maturity
- The SSC **does not support** calculation of impact rates at this time
- The SSC **supports** expanded analysis of the spatial and temporal location of Western Alaska and Yukon River fall chum salmon PSC, and continued work to develop representative estimates of chum salmon ages in PSC.

D1 Salmon Reports

Salmon Excluder EFP (1 of 1)

- The SSC reviewed the final report of the experiments to develop a salmon excluder for addition to the mid-water trawls used by the EBS pollock fleet.
- The initial trials showed that between 10 and 40% of the Chinook salmon entering a net with an excluder were able to escape successfully.
- Three years of trials of excluder modifications on three different boats of different power levels were unsuccessful for improving maximum escapement or increasing consistency.
- The SSC provided recommendations for further work if it is undertaken.