

# Chum salmon impact recommendations

D1 SSC

## Recap of current trends

Total chum salmon bycatch, called prohibited species catch (PSC), in the BSAI pollock fishery ranged from 24,000 to 535,000 total catch annually between 2011-2021.

Chum salmon PSC in the last two years (2020-2021) showed lower proportions of W. Alaska and Yukon River fall chum salmon (~9% total) compared to the previous nine (~16-25%). Contributions from the Yukon River fall chum stocks were especially low in 2020 and 2021 (1% or less of total PSC).

Number of chum salmon PSC is larger than the number of chum salmon adults that would have returned to Western Alaska rivers

### Assessing impacts

#### AEQ for chum

• a coarse estimate of an AEQ but several assumptions would need to be made where data are not available (i.e., maturity and natural mortality rate).

#### Impact rate for chum

- For CWAK this is not possible.
- Run reconstructions are currently only available for Yukon River summer and fall chum salmon and Kwiniuk River chum salmon. This excludes large populations in Kuskokwim River and throughout Bristol Bay, Kotzebue Sound, and Norton Sound. Unlike Chinook salmon, the lack of run reconstructions for large populations of W. Alaska chum salmon means that a good approximation of total W. Alaska chum salmon abundance cannot be provided at this time.

### Other recommendations

Summarize spatial and temporal location of Western Alaska chum stocks in bycatch. This would provide clarity to whether spatial restrictions could be used to better avoid chum salmon PSC of these stocks.

Work toward developing estimates of the chum ages in PSC for each of W. Alaska and Upper/Middle Yukon (Yukon River fall chum salmon) stock genetic reporting groups.