

Submitted by Kodiak Salmon Work Group
Information Germane to Proposals 63 and 37
(Chinook Salmon)

- The proponent for Proposal 63 states “Per the Pacific Salmon Commission Joint Technical Committee Report (report TCCHINOOK (97-1) the mortality of catch and release of Chinook salmon in seine gear is accepted to be 72%.” The report actually states: The CTC (Chinook Technical Committee) recommends using a rate of 72% for total chinook non-retention mortality for all size classes of fish combined in CTC analyses. This rate is based on an average immediate mortality of 49% and a delayed mortality of 23%.
 - The analyses referenced is intended for providing inputs into the Coastwide Chinook Abundance Model for which the seine catch comprises a small fraction; this percent is **not** an accepted value applied to all seine fisheries as the proponent infers.
 - The 72% is a conservative estimate and had replaced the previous model input which was assumed to be 90% and based on limited empirical data.
 - This rate is applied to fisheries that generally have low catches of Chinook and other salmon species during mandated non-retention periods prosecuted in open ocean

fisheries that are managed under the auspices of the Pacific Salmon Treaty.

- **Immediate Mortality** (prior to or upon landing) are stratified by size: 62.8% for small (<21 inches), 50.5% for medium (>21 Inches<28 Inches), and 28.0% for large chinook (>28 Inches).
 - **Delayed Mortality**-Two studies estimated mortality through at least 1 day following release, with results varying from 1.1 % - 23 %; the lower value was for Chinook salmon caught within 45-60 d of spawning.
 - In terminal fisheries where Chinook salmon are released and a specific portion are close to spawning (« 60 d), the delayed mortality should be weighted to account for the lower rate of 1.1 % observed for such fish.
 - The CTC will use these rates as generalized estimates of purse seine non-retention mortality. However, immediate mortality is fishery- and time-specific because of such factors as the type of fishery, frequency of set sizes (related to handling time and suffocation of the chinook), incidence of chinook in sets by time and area of the fishery, handling of the chinook during boarding, and size distribution of the chinook caught.
 - **A mortality estimate of 28% for Chinook salmon released by purse seine gear in Kodiak is likely the best estimate to use because of the 28 inch non-retention limit.**
- The proponent of Proposal 37 desires a comprehensive king salmon conservation plan be implemented which functions to conserve kings in both Kodiak and Cook Inlet.
 - The existing management plans in both areas currently provide conservation benefits to the Chinook salmon stocks endemic to both areas.

- PC 226; PC 258; PC293; and PC355 (Tab 63,37, 09) synthesized stock composition data for the years 1994, 1997-1999 and 2014-2016 within the Kodiak Management Area. In all years the contribution of non-local and non-Alaskan stocks ranged from about 65% to 90%. These proportions are similar to other marine recreational and commercial fisheries prosecuted within the Gulf of Alaska.
- Within the Southeast Alaska Region (Yakutat-Ketchikan) the marine recreational and commercial fisheries harvest Chinook that are generally 85-90% non-Alaskan stocks. The proportion of Alaska stocks increases for the more terminal fisheries.
- The Chinook salmon stock composition within the Cook Inlet Marine recreational fishery ranges from 95%-99% non-local stocks with a high proportion of non-Alaskan stocks (Barclay et al. 2019). The area encompassed by this fishery includes both Lower Cook Inlet including Kachemak Bay and Upper Cook Inlet from the Kasilof R. south to Chisik Island.
- The harvests in these fisheries are relatively small when compared to the overall abundance of these stocks that are at-large within the Gulf of Alaska during any given time.
- In both the Kachemak Bay and Kodiak marine recreational fisheries conservation caps exist recognizing the non-local stock composition of these harvests.
- **Given that there are so few Cook inlet Chinook identified in the Kodiak commercial harvest there is little if any conservation benefit realized by a conservation plan as suggested by the proponent of Proposal 37.**