# Addendum to C2 Draft Environmental Impact Statement Bering Sea Chum Salmon Bycatch Management 

March 26, 2024

This addendum provides corrections to specific text, tables, or figures in the preliminary Draft Environmental Impact Statement (DEIS) Bering Sea Chum Salmon Bycatch Management analysis.

## Section 6.1.8.2.2 Chinook Stock Composition Estimates

The title for Figure 6-22 (page 151) was not legible in the DEIS and has been reproduced below.

## Summary of Chinook bycatch genetics, 2022

The Bering Sea pollock fishery caught 6,337 Chinook salmon as bycatch in 2022


Notes: Pie chart displays the genetic stock reporting groups as a proportion of the total Chinook salmon bycatch in the 2022 Bering Sea pollock fishery


Notes: Circles represent the amount of total bycatch in each ADF\&G groundfish statistical area (smaller grey boxes embedded within larger Federal reporting areas).

Figure 6-22 Chinook bycatch stock composition estimates and spatial distribution of the bycatch, 2022

## Section 6.1.9.5.5 Killer whale (multiple stocks)

The last full paragraph in this section (page 183) has been modified to read:
While the majority (54\%) of killer whale serious injury and mortality events are caused by trawl net fisheries, only 1 mortality (Alaska Resident) from 2017 to 2021 was attributed to the BSAI pollock trawl fishery (Bolling et al. 2023). Takes of killer whales recently occurred in several Alaska commercial fisheries. Of the 11 killer whales taken in 2023, only one interaction was reported for the BSAI pollock trawl fishery and this whale was determined to be dead prior to being caught. ${ }^{1}$ Killer whales may also indirectly interact with the fishery through competition for preferred salmon prey.

## Section 6.1.10.2 CDQ Revenue Dependence and Investments in AFA Vessels

Figure 6-33 (page 192) did not appear in the pdf version of the document and has been included below.


Figure 6-33 Annual average gross first wholesale revenues (millions of \$) associated with CDQ allocations by species, 2011 through 2022

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN in Comprehensive_FT; Cdq_activity(11-30-23)

[^0]
## Section 6.1.10.2 CDQ Revenue Dependence and Investment in AFA Vessels

Table 6-29 (page 193) had errors which have been corrected below. The title has been adjusted to include all AFA vessel ownership rather than exclusively AFA vessels that harvest pollock.

Table 6-29 CDQ direct investments in fishery companies and AFA vessels as of January 2024

| CDQ Group | Name of Company | CDQ Ownership | Vessel Name | Vessel Type |
| :---: | :---: | :---: | :---: | :---: |
| BBEDC | Dona Martita | $50.0 \%$ | Defender | CV |
|  |  |  | Alaskan Defender | CV |
|  |  |  | Bering Defender | CV |
|  |  |  | Northern Defender | CV |
|  | Arctic Storm Holding Company | 18.3\% | Arctic Fjord | CP |
|  |  |  | Neahkahnie | CV |
|  |  |  | Arctic Storm | CP |
|  |  |  | Sea Storm | CV |
| CBSFA | St. Paul Fishing Company | 75.0\% | Starlite | CV |
|  |  | 75.0\% | Starward | CV |
|  |  | 30.0\% | Fierce Allegiance | CV |
| CVRF | Coastal Alaska Premier Seafoods | 100.0\% | Northern Hawk | CP |
|  | Excellence <br> Seafood LLC | 100.0\% | California Horizon | CV |
|  |  |  | Misty Dawn | CV |
|  |  |  | Morning Star | CV |
|  |  |  | Papado II | CV |
| CVRF (50\%) / NSEDC (50\%) | BSAI Partners | 75.0\% | Alaska Rose | CV |
|  |  | 75.0\% | Bering Rose | CV |
|  |  | 78.9\% | Destination | CV |
|  |  | 51.0\% | Great Pacific | CV |
|  |  | 75.0\% | Sea Wolf | CV |
|  |  | 75.0\% | Ms. Amy \& Messiah | CV |
|  | Bering North | 75.0\% | Progress | CV |
|  |  |  | Sunset Bay | CV |
|  |  |  | Half Moon Bay | CV |
|  |  |  | American Eagle | CV |
|  |  |  | Commodore | CV |
|  |  |  | Hickory Wind | CV |
|  |  |  | Patricia Lee | CV |
|  |  |  | Storm Petrel | CV |
|  |  |  | Ocean Hope 3 | CV |
| NSEDC | Glacier Fish Company | 71.9\% | Alaska Ocean | CP |
| YDFDA | Nunam Iqua Harvester | 100.0\% | Aleutian Challenger | CV |
|  | Kotlik Challenger | 100.0\% | Pacific Challenger | CV |
|  | Alakanuk Beauty | 75.0\% | American Beauty | CV |
|  | Emmonak Leader | 75.0\% | Ocean Leader | CV |
|  | Golden Alaska | 58.3\% | Golden Alaska | MS |

Source: Personal communication L. Price; J. Kauffman; P. Peyton; A. Drobnica; P. Wilkins; S. Kinneen
Note that some of these AFA vessels no longer actively harvest pollock. However, access to their associated pollock allocation continues to provide royalties to CDQ owners. Some CDQ groups have additional indirect interest in companies that own AFA vessels and harvest non-CDQ AFA pollock.

## Section 6.2.4 Estimates of Overall Chum Salmon and Western Alaska Chum Salmon Avoided Under an Overall Chum Salmon PSC Limit

Table 6-46 (page 223) had errors in the last two columns which have been corrected below.
Table 6-46 (revised) For an example 200,000 PSC limit, suboption 1 (3-yr average) allocation, the relative date of closure, what period (Early (E), Middle(M) and Late (L) the chum avoided would have come from and the estimated chum avoided and their relative contribution from WAK as well as the total by sector over all (2011-2022) years.

| Sector | Year | Week-end date | what period of time would the remaining chum saved have come from? | Status <br> Quo B <br> Season Chum <br> Bycatch <br> (\#) | Potential <br> Number <br> of Chum <br> Salmon <br> Avoided <br> in B <br> Season | Potential <br> Number <br> of WAK <br> Chum <br> Salmon <br> Avoided <br> in B <br> Season |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CDQ | Total |  |  | 227,891 | 99,035 | 24,009 |
|  | 2011 |  |  | 3,758 |  |  |
|  | 2012 |  |  | 200 |  |  |
|  | 2013 |  |  | 554 |  |  |
|  | 2014 |  |  | 2,407 |  |  |
|  | 2015 |  |  | 4,650 |  |  |
|  | 2016 | 8/13/2016 | M/L | 16,342 | 3,238 | 601 |
|  | 2017 | 7/15/2017 | E/M/L | 87,058 | 72,998 | 19,012 |
|  | 2018 | 7/7/2018 | E/M/L | 26,586 | 12,995 | 3,066 |
|  | 2019 | 9/28/2019 | L | 15,726 | 3,446 | 635 |
|  | 2020 |  |  | 8,582 |  |  |
|  | 2021 | 7/17/2021 | E/M/L | 55,663 | 6,358 | 696 |
|  | 2022 |  |  | 6,365 |  |  |
| CP | Total |  |  | 961,389 | 347,317 | 45,708 |
|  | 2011 |  | L | 44,299 | 18 | 4 |
|  | 2012 |  |  | 1,928 |  |  |
|  | 2013 |  |  | 10,229 |  |  |
|  | 2014 | 9/6/2014 | L | 63,066 | 7,424 | 1,026 |
|  | 2015 |  |  | 40,046 |  |  |
|  | 2016 | 8/6/2016 | M/L | 134,750 | 75,009 | 12,216 |
|  | 2017 | 7/22/2017 | E/M/L | 207,355 | 110,576 | 17,830 |
|  | 2018 | 7/7/2018 | E/M/L | 99,447 | 40,571 | 7,198 |
|  | 2019 | 8/31/2019 | L | 113,428 | 18,785 | 844 |
|  | 2020 | 9/12/2020 | L | 77,138 | 32,244 | 805 |
|  | 2021 | 7/31/2021 | M/L | 97,917 | 37,412 | 2,956 |
|  | 2022 | 8/27/2022 | M/L | 71,786 | 25,278 | 2,830 |
| Mothership | Total |  |  | 280,145 | 65,310 | 13,716 |
|  | 2011 | 9/17/2011 | L | 24,399 | 5,176 | 940 |
|  | 2012 |  |  | 977 |  |  |
|  | 2013 |  |  | 3,835 |  |  |
|  | 2014 |  |  | 8,091 |  |  |
|  | 2015 |  |  | 14,046 |  |  |
|  | 2016 | 8/13/2016 | M/L | 43,262 | 18,916 | 6,016 |
|  | 2017 |  |  | 16,825 |  |  |
|  | 2018 | 9/8/2018 | L | 21,303 | 2,897 | 612 |
|  | 2019 | 8/31/2019 | L | 44,860 | 20,379 | 3,469 |
|  | 2020 | 10/31/2020 | L | 19,743 |  | 0 |
|  | 2021 | 7/31/2021 | L | 50,542 | 9,694 | 661 |
|  | 2022 | 8/13/2022 | M/L | 32,262 | 8,248 | 2,017 |
| Inshore | Total |  |  | 1,899,055 | 340,685 | 61,460 |
|  | 2011 | 10/15/2011 |  | 118,861 |  |  |
|  | 2012 |  |  | 19,067 |  |  |
|  | 2013 |  |  | 110,496 |  |  |
|  | 2014 | 8/30/2014 | L | 145,322 | 12,744 | 3871 |
|  | 2015 | 8/22/2015 | M/L | 174,343 | 38,094 | 9289 |
|  | 2016 | 9/10/2016 | L | 144,882 | 15,397 | 796 |
|  | 2017 | 7/29/2017 | M/L | 154,610 | 19,536 | 6076 |
|  | 2018 | 9/1/2018 | L | 147,369 | 14,956 | 3326 |
|  | 2019 | 8/17/2019 | L | 172,798 | 32,131 | 9412 |
|  | 2020 | 9/5/2020 | L | 237,632 | 111,140 | 10518 |
|  | 2021 | 7/24/2021 | M/L | 341,779 | 94,626 | 17535 |
|  | 2022 | 8/13/2022 | M/L | 131,896 | 2,061 | 636 |
|  |  | Grand Total |  | 3,368,480 | 852,347 | 144,894 |

## Section 6.2.7 Assessment of Forgone Pollock and Ecosystem Effects

The following text corrections are provided from page 234-235.
Over $t$ Compared to retrospective catch, the most restrictive PSC limits and constraints (Alternative 2 200,000 PSC limit) forgone pollock on average in the B seasen can result in up to - $-14 \%$ forgone pollock. would result in 12-15\% annual cumulative forgone pollock (see Table Appendix 6-1). The effect of the alternatives in general will likely result in a continuation of pollock catches being well below the TAC (i.e., forgone pollock). Relative to the stock, the near-term expectations would be that projected abundance would be higher than if the full TAC were caught. Beyond the change in near term trend, lower pollock removals would result in the expected long-term biomass to be higher. However, since pollock can be highly cannibalistic, a large adult stock may limit the recruitment due to this predation. We note that this relationship is poorly estimated, and recruitment is typically highly variable, depending on spatial and temporal distributions between adults and juveniles (Ianelli et al. 2023).


[^0]:    ${ }^{1}$ Press release available at: https://www.fisheries.noaa.gov/feature-story/cause-death-determined-11-killer-whales-incidentally-caught-fishing-gear-alaska-2023

