

PROPOSAL 173 – 5 AAC 01.270. Lawful gear and gear specifications and operation. and 5 AAC 07.331. Gillnet specifications and operations.

PROPOSED BY: Native Village of Kwinhagak.

WHAT WOULD THE PROPOSAL DO? Close Kuskokwim Area District 4 subsistence and commercial salmon fisheries on Sundays and allow only one gillnet to be operated per vessel in the subsistence and commercial salmon fisheries between June 1 and July 15.

WHAT ARE THE CURRENT REGULATIONS? In the subsistence fishery, salmon may be taken by gillnet, beach seine, a hook and line attached to a rod or pole, handline, dip net, or fish wheel, unless closed by emergency order. Salmon may also be taken by spear in the Kanektok and Arolik River drainages. The aggregate length of set gillnets or drift gillnets in use by any individual for taking salmon may not exceed 50 fathoms. The maximum depth of gillnets with six-inch or smaller mesh may not be more than 45 meshes in depth and gillnets with greater than six-inch mesh may not be more than 35 meshes in depth.

In the commercial fishery, salmon may be taken only with set gillnets and drift gillnets. A person may not operate or assist in operating more than one type of gear at any time. A gillnet must have a mesh size of six inches or less and may not be more than 45 meshes in depth. The aggregate length of a set gillnet or drift gillnet may not exceed 50 fathoms, except that if the commissioner determines that there is a harvestable surplus of salmon, the commissioner may, by emergency order, close the fishing season and immediately reopen a season during which the aggregate length of a set gillnet or drift gillnet may not exceed 100 fathoms.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Kuskokwim Area District 4 subsistence and commercial fisheries would be closed on Sundays and only one gillnet could be operated per vessel in the subsistence and commercial fisheries between June 1 and July 15. Harvest of king, sockeye, and chum salmon and subsistence opportunity may decrease by an unknown amount.

BACKGROUND: In recent years, Quinhagak residents have expressed in meetings and conversations with the department that there has been a dramatic increase in subsistence fishing effort from Kuskokwim River residents subsistence fishing in District 4. They relate that this increase in effort is not only from increased numbers of vessels traveling to District 4, but multiple individuals deploying several gillnets from a single boat. Increased fishing pressure is due to subsistence fishing restrictions that have been implemented annually on the Kuskokwim River to conserve king and chum salmon. The Native Village of Kwinhagak has proposed this solution to provide subsistence opportunity, based on their local fishing preferences, to maintain fishing time and allow only one net per boat. In consultation with NVK, the department has generally implemented these changes since 2019.

Commercial fishing in District 4 is managed in accordance with the *Districts 4 and 5 Salmon Management Plan* (5 AAC 07.367) and targets salmon bound for the Kanektok River. There were no commercial fisheries in District 4 from 2016 to 2019 and 2022 due to lack of a commercial buyer. In 2020 and 2021, a single salmon processor operated within Kuskokwim Bay District 4 (Table 173-1). The commercial fishing season was delayed until late June in 2020 and early July

2021 to allow for king salmon escapement in order to achieve escapement goals in light of continued low returns. With the exception of sockeye salmon, commercial harvest for all species in District 4 were well below average in 2020 and 2021 with chum salmon catch per unit effort (CPUE) and harvest being among the lowest on record.

Kanektok River king salmon escapement is evaluated through a peak aerial survey that has a sustainable escapement goal (SEG) with a range of 3,900–12,000 fish. Aerial survey data for king salmon are available in 8 of the last 10 years with the escapement goal being met every year except 2013 and 2014 (Table 173-2). While the goal has been met recently, aerial survey counts were near the lower bound of the goal range. The aerial survey goal was not assessed in 2017 and 2022 due to inclement weather preventing surveys from being conducted.

The department relies on subsistence reports from local residents and commercial catch statistics to approximate run strength for Kanektok River chum salmon. Chum salmon escapement has not been formally assessed since 2015 when the Kanektok River weir ceased operations. Commercial catch statistics and local observations have indicated that chum salmon run strength between 2020 and 2022 was poor. These observations are corroborated by the unprecedented extremely poor chum salmon returns to the Yukon and Kuskokwim Rivers. The preliminary 2023 chum and king salmon outlooks for the Kuskokwim Management Area are for another poor return.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the provision of subsistence opportunity as well as the allocative aspects of this proposal.

The department **SUPPORTS** regulatory changes that, during periods of low productivity, may help to ensure adequate escapement and possibly increase future yields of king and chum salmon. Although closing the fishery for one day and limiting boats to one net does represent a reduction in subsistence opportunity, these changes reflect local fishing preferences. Further, subsistence fishermen would benefit since these changes would reduce the probability of having to take an inseason management action using emergency order authority by reducing fishing effort to one net per boat. This proposal would create a more orderly fishery and also align subsistence and commercial fishing regulations in District 4. The department is supportive of additional management tools that provide for increased conservation while attempting to minimize impacts to social and cultural fishing practices of Quinhagak village residents who traditionally fish in District 4.

COST ANALYSIS: Approval of this proposal may result in an additional direct cost for a private person to participate in this fishery by requiring additional time to harvest salmon. Approval of this proposal is not expected to result in any additional cost to the department.

SUBSISTENCE REGULATION REVIEW:

1. Is this stock in a nonsubsistence area? No.
2. Is the stock customarily and traditionally taken or used for subsistence? Yes, the board made positive customary and traditional use findings for halibut, Pacific cod, and all other finfish in the Kuskokwim Area, and specific findings for king, chum, sockeye, coho, and pink salmon in the Kuskokwim River drainage (5 AAC 01.286).

3. Can a portion of the stock be harvested consistent with sustained yield? Yes.
4. What amount is reasonably necessary for subsistence use? In January 2013 the board revised the salmon amount reasonably necessary (ANS) findings in the Kuskokwim Bay Districts 4 and 5 as follows: 6,900–17,000 salmon (5 AAC 01.286(b)(6)). The board has not made an ANS finding for nonsalmon species in the Kuskokwim Area.
5. Do the regulations provide a reasonable opportunity for subsistence uses? This is a board determination.
6. Is it necessary to reduce or eliminate other uses to provide a reasonable opportunity for subsistence uses? This is a board determination.

Table 1-1.–District 4 commercial salmon harvest including personal use, 2001–2022.

Year	King	Sockeye	Coho	Pink	Chum	Permits Fished ^a
2001	12,775	33,807	18,531	0	17,209	159
2002	11,480	17,802	26,695	0	29,252	114
2003	14,444	33,941	49,833	0	27,868	114
2004	25,462	34,627	82,398	0	25,820	116
2005	24,195	68,801	51,708	19	13,529	145
2006	19,184	106,308	26,831	0	39,151	132
2007	19,573	109,343	34,710	0	61,228	125
2008	13,812	69,743	94,257	0	57,033	146
2009	13,920	112,153	48,115	0	91,158	179
2010	14,230	138,362	13,690	0	106,610	241
2011	15,387	38,543	30,457	0	104,959	219
2012	6,675	37,688	31,214	0	61,140	179
2013	2,054	26,393	21,126	0	58,079	197
2014	2,265	58,879	52,317	0	14,563	194
2015	7,547	30,269	76,621	0	16,051	189
2016	b	b	b	b	b	b
2017	b	b	b	b	b	b
2018	b	b	b	b	b	b
2019	b	b	b	b	b	b
2020	4,345	113,849	29,374	0	6,531	67
2021	2,468	78,462	13,012	29	5,310	74
2022	b	b	b	b	b	b
Average 2001–2021	12,342	65,234	41,229	3	43,264	152

^a Number of permits that made at least one delivery.

^b No commercial fishery occurred.

Table 2-2.—King salmon spawning aerial survey index estimates, Kanektok River, Kuskokwim Bay, 2013–2022.

Year	King Salmon
2013	2,277
2014	1,840
2015	4,919
2016	5,631
2017	a
2018	4,246
2019	7,212
2020	4,405
2021	4,115
2022	a
Escapement	3,900–12,000
Goal:	

^a Survey was either not flown or did not meet acceptable criteria