

PROPOSAL 108 – 5 AAC 05.362. Yukon River Summer Chum Salmon Management Plan.
Reduce management triggers in the Yukon River Summer Chum Salmon Management Plan based on the run size of summer chum salmon, as follows:

We suggest that:

1. Subsistence fisheries should be managed below the low end of the BEG range, 600,000 salmon, so that no less than 400,000 salmon are allowed to spawn;
2. The commercial exploitation rate shall be 50% of the commercially available harvestable surplus of runs between 700,000 and 800,000; and
3. The commercial exploitation rate shall be up to 100% of the commercially available harvestable surplus of runs in excess of 800,000.

Suggested changes to the Yukon River Summer Chum Salmon Management Plan follows:

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(b) When the projected run size of summer chum salmon is **400,000** [600,000] fish or less, the commissioner shall, by emergency order, close the...

(c) When the projected run size of summer chum salmon is more than **400,000** [600,000] fish, but not more than **600,000** [700,000] fish,

(1) the commissioner shall close, by emergency order, the commercial, sport, and personal use directed summer chum salmon fisheries;

(2) the department shall manage the subsistence directed summer chum salmon fishery to achieve drainage-wide escapement of no less than **400,000** [600,000] summer chum salmon, except that, if indicators show that individual escapement goals within a district, subdistrict, or portion of a district or subdistrict will be met, the commissioner may open, by emergency order, a less restrictive directed subsistence summer chum fishery in that district, subdistrict, or portion of a district or subdistrict.

(d) When the projected run size of summer chum salmon is more than **600,000** [700,000] fish, but not more than **700,000** [1,000,000] fish,...

(e) Notwithstanding (d) of this section, when the projected run size of chum salmon is more than **700,000** [900,000] fish, but not more than **800,000** [1,000,000] fish, the commissioner may, by emergency order, open a drainagewide commercial fishery to harvest up to 50,000 fish above the run size of **700,000** [900,000] chum salmon distributed by district or subdistrict in proportion to the guideline harvest levels established in (g) of this section.

(f) When the projected run size of summer chum salmon is more than **800,000** [1,000,000] fish, the commissioner may open, by emergency order, a drainagewide commercial fishery with the harvestable surplus distributed by district or subdistrict in proportion to the guideline harvest levels established in (g) of this section.

What is the issue you would like the board to address and why? The Alaska Department of Fish and Game (ADF&G) recently completed a Biological Escapement Goal (BEG) analysis for Yukon River summer chum salmon. Based on that analysis, ADF&G may establish a BEG range for the entire Yukon River drainage of 600,000 to 1,000,000 salmon. The current Yukon River Summer Chum Salmon Management Plan was based on an implied drainage-wide escapement above Yukon Sonar project of at least 1,000,000 salmon. At that time, this implied escapement

goal was based on the fact that half of the summer chum salmon passing the Yukon Sonar project site were destined to the Anvik River and that the established BEG for the Anvik River was point estimate of 500,000. At that time also, ADF&G assumed that productivity for the non-Anvik River stocks within the Yukon River drainage was probably similar to the Anvik River, so escapement to that portion of the drainage above the Yukon Sonar site should be similar.

Therefore, we ask the BOF to critically examine the current summer chum management plan and alter the trigger points in relation to the newly established drainage-wide summer chum salmon BEG, with consideration not to burden the subsistence fishery with Maximum Sustained Yield (MSY) management in years of low runs. Note that the strategy that allows the subsistence fishery to harvest summer chum salmon below the established BEG does not alter the trigger points that are associated with the commercial fishery.

Since there will likely be a new drainage-wide escapement goal for summer chum salmon, the management plan needs to be modified accordingly. We suggest that because Yukon River summer chum salmon have good production at low levels of escapement, subsistence harvests should be allowed to occur when runs are projected to provide for the escapements less than the lower end of the BEG. Note that there hasn't been an escapement below 400,000 salmon in recorded history, but escapements within the 400,000 to 500,000 range have produced well. For example, the estimated escapement of 486,000 salmon in 2000 produced an estimated 750,000 salmon, while the estimated escapement of 423,000 salmon in 2001, the lowest escapement recorded, produced a record 5.1M salmon, with an associated return per spawner (R/S) of 11.8, which is the also the highest on record. The only other escapement near the 600,000 lower end of the BEG range occurred in 1990 with an escapement of 622,000 salmon that produced the third highest return on record at 3.2M salmon, with a R/S of 4.9, which ranks second.

BEG-based management, on the average, is expected to produce MSY 90% of the time. We believe that when low runs occur (<600,000 salmon), management of the subsistence fishery to the attainment of escapements within the BEG is not in the best interest of the state. We believe that closing subsistence fisheries when runs are projected to be between 400,000 and 600,000 manages the stock for an expected MSY 4 or 5 years in the future on the backs of the subsistence fishers, which is unnecessary. The people of the Yukon River, particularly the people of the Lower Yukon Area, are extremely dependent on the summer chum salmon to sustain them through the winter. It is, and always has been, the major and most important salmon species to for food. In our opinion, denying people the food they need because of MSY management is totally and absolutely wrong. Summer chum salmon subsistence fisheries of the Lower Yukon Area are necessary for the people's food security. The state should not be managing for future MSY when runs are below the low end of the BEG. I also note that in 2000 and 2001, ADF&G was reluctant to close the subsistence fisheries even though it was obvious inseason that the escapement target in the summer chum salmon management plan was not going to be achieved.

Strictly speaking, with an assumed subsistence harvest of 100,000 summer chum salmon, and in consideration of the established BEG, commercial fishing should be able to harvest the surplus over a run projected in excess of 700,000 salmon. However, we realize that the subsistence fishery may take more summer chum salmon because of the reduced king salmon subsistence harvest and that projections may not always be accurate. Therefore, we suggest that, similar to

the present summer chum management plan, an exploitation rate of 50% be applied to the run between 700,000 and 800,000 salmon, with the possibility of full commercial exploitation on the commercially-available surplus for runs projected in excess of 800,000 salmon. This management strategy allows a commercial harvest to occur when runs are a full 200,000 fish less than the current management trigger point of 900,000 salmon. This change in the management plan will allow some income for commercial fishers when runs are lower than the current management plan triggers and will also foster maintaining commercial markets for the unique chum salmon of the Yukon River. Of course, we realize and expect that escapements should and will fall within the BEG, commensurate with run size. However, we also believe that ADF&G should do everything in their power to eliminate escapements in excess of 1.8M salmon. No escapements over 1.8M salmon have replaced themselves and usually have detrimental repercussions on the productivity of the stock.

Two other considerations should be discussed by the BOF regarding the summer chum salmon management plan: 1. Summer chum salmon subsistence harvests will probably fall below the assumed 100,000 salmon when more kings are taken for subsistence in the future, thereby eliminating that need for a buffer; and 2. The inability of the commercial fishery to efficiently harvest the commercial surplus available when king conservation strategies are in place, provides an additional buffer to escapement and subsistence needs. For example, in 2013 an estimated 1,487,000 summer chum salmon were available for harvest in Districts 1 and 2 of the Yukon Area. Actual commercial harvest was only 379,000 salmon, or about 25% of the allocation

PROPOSED BY: Kwik'pak Fisheries

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