PROPOSAL 43
5 AAC 40.820. Basic Management Plans
Clarification of Proposal DRAFT #2[1]

Amend Basic Management Plans as follows *(This proposal will be heard and public testimony will be taken at both the LCI and UCI meetings and deliberated at the UCI meeting)*:

Amend the *Cook Inlet Salmon Enhancement Allocation Plan* to specify hatchery **pink salmon** production, as follows: Reduce hatchery production to 25% of the year 2000 production as promised in 2000.

For clarification, this should read: Reduce hatchery egg production permitting **to** 25% of the year 2000 production. Further, because each hatchery within the Cook Inlet Aquaculture Association (CIAA) PNP has its own egg permitting limits, the intent is to limit each individual hatchery accordingly. Note: The 2000 "promise" of reduction was only **by** 25%. This would not sufficiently reduce CIAA hatchery stocks. The clear intent of Proposal #43 is to significantly decrease pink salmon production at a time when pinks are threatening entire ecosystems and other salmon and marine species.

The ADF&G assessment of this proposal combined the Tutka Bay Lagoon Hatchery with the Port Graham Hatchery 2000 egg permit levels for a total of 235,000,000 permitted eggs. However, they recommend:

> "If the board were to adopt this proposal there would need to be discussion of how to apportion the egg take cap between Cook Inlet hatcheries since egg take capacity is set on permits for specific hatchery facilities, not the PNP corporation."

The 2000 egg level permits for pink salmon in both the Tutka Bay Lagoon Hatchery and the Port Graham Hatchery have remained the same since the PNP permitting began.

Tutka Bay Lagoon Hatchery eggs permitted:	125,000,000
Port Graham Hatchery eggs permitted:	110,000,000

Reducing the egg permits to 25% of the 2000/ current level would result in the following"

Tutka Bay Lagoon Hatchery	31,250,000
Port Graham Hatchery	27,500,000

Further background: Since 1994, when the Board of Fisheries first established the egg take permit for Tutka Bay, that hatchery has often met or exceeded that limit. Port Graham has not. The corresponding fry releases to that egg intake has varied wildly, depending on the circumstances at each hatchery, but the Tutka Bay hatchery alone has released over 1.6billion pink fry in the intervening years.

[1] Personal comments by Gale K. Vick, Chair, Fairbanks AC Fisheries Sub-committee. This is considered a DRAFT as this clarification will be discussed at the December 2023 FAC meeting for resubmission as a revised RC in February 2024 at the Upper Cook Inlet Board of Fisheries meeting prior to Board deliberations

While the reality is that both hatcheries have physical limitations, with a high egg permit still on the books, the potential for increasing egg production is still there. Tutka Bay has an especially egregious impact in the Tutka Lagoon. Therefore, the egg permits should be limited to 25% of the 2000 level.

In addition, Tutka Bay hatchery has had as high as a 97% cost recovery, with the remaining common property benefiting only a small number of fishermen. Even at that level, CIAA is finding it difficult to pay the bills. Hatchery manager salaries and operational expenses are very high. Therefore, the state loan system along with any fishermen who fishes within the CIAA are basically subsidizing an expensive operation that benefits very few people.

The Kachemak Bay Conservation Society has been monitoring the impact of the Tutka Bay Hatchery on Kachemak Bay and has continually noted that:

> "The hatchery has not been a benefit to many people, though it has been a significant benefit to a few. By far the largest beneficiary of the hatchery is Cook Inlet Aquaculture itself. According to Cook Inlet Aquaculture's Annual Reports and ADF&G, between 1999 and 2017, *the hatchery harvested 97% of the total pink salmon harvest, and commercial common property harvesters captured 3% of the total.*[16] On top of that, processing jobs aren't even staying in the US: [2]
>
> "An increasing portion of Alaska's harvest is gutted, headed, and frozen in state, shipped to China for further processing to fillets and other product forms, then shipped back to the U.S. or other markets for sale or further value-added processing."[17]
>
> Who is this hatchery for? Why is the park taking such a large risk to it's statute-protected wild flora and fauna for the benefit a few stakeholders? This is not the way to meet the mandate of preserving the park for the use, enjoyment, and welfare of the people (Alaska Constitution, Article 8).

DEPARTMENT COMMENTS ON PROPOSAL #43:

ADF&G opposes Proposal #43 on its merits, indicating they do not believe there is any compelling evidence that reduction of hatchery pink salmon production will have a positive impact on wild stocks. But there are reams of peer-reviewed research[3] that support the argument that the glut of pink salmon has increased dramatically in the last few decades and does have deleterious effects on wild stock in many different ways – through competition with forage food to straying that overtakes streams and bays and can interfere with the genetics of wild stock as well as destruction of habitat.

> "

[2] http://ciaanet.org/data/ and ADF&G's "2016 Lower Cook Inlet Area Finfish Management Report," (p. 149) Online at: http://www.adfg.alaska.gov/FedAidPDFs/FMR17-26.pdf

[3] "A Global Synthesis of Peer-Reviewed Research on the Effects of Hatchery salmonids on wild salmonids", John R. McMillan, et,al., *Fisheries Management and Ecology* July 2023

> "The department OPPOSES this proposal. Hatchery egg take levels are established through an iterative[4] process involving department staff and stakeholders. Hatchery operations are permitted in a way that minimizes impact on wild salmon stocks and the commissioner can amend a permit if conservation concerns arise related to hatchery production. If there is a compelling reason to amend terms of a hatchery permit, the amendment should be based on analysis of data and there should be clear evidence the amendment will have a positive impact on wild salmon stocks. No evidence has been presented in this proposal to support the proposed reduction in permitted pink salmon egg take level."

The "iterative process" that the Department describes is a fully integrated system of hatcheries, fishermen who depend on those hatcheries, Department staff who are supportive of those hatcheries, state loan departments, processors, marketers and other stakeholders who are hatchery dependent. It is a process that does not include anyone outside of the hatchery bubble. This is extremely problematic for stakeholders who see a clear connection between hatchery production and threats to declining wild salmon stocks.

This is *not* an independent process and does not build confidence that anyone is watching out for wild stock impacts. This is a political and economic process rather than a biological one.

The fact that the Board of Fish seldom reviews egg permitting is an indicator of a system that does not have external controls. The annual non-regulatory BOF hatchery meetings that have been reinstated after many years being dormant are an opportunity for the public to hear hatchery reports and provide testimony, but does not provide opportunity for substantive action to amend.

Reiterating what has been said hundreds of times before, the 2002 Board of Fisheries Policy #2002-FB-215 delineates the Joint Protocol on Salmon Enhancement:

> Authorities: The commissioner of the Department of Fish and Game has exclusive authority to issue permits for the construction and operation of salmon hatcheries. The Board of Fisheries has clear authority to regulate access to returning hatchery salmon and to amend, by regulation, the terms of the hatchery permit relating to the source and number of salmon eggs. The Board of Fisheries' authorities also include the harvest of fish by hatchery operators and the specific locations designated by the Department for harvest. (see AS 16.10.440(b) and Department of Law memorandum to the Board dated November 6, 1997.

CIAA pink salmon production, in isolation, carries its own negative impacts, but the aggregate of Alaska pink salmon production is astounding. **In 2022, Alaska hatcheries released over 1*billion* pink salmon fry[5] which is almost half of the total 2019 U.S. hatchery releases of all salmon species.**

> "Since the 1970s, industrial production of pink salmon has exploded, and today, hatcheries in the United States, Canada, Russia, and Japan pump about 1.3 billion pink salmon fry into the Pacific each year, leading to the production of roughly 82 million adults. About 15 percent of all pinks in the ocean originate from hatcheries, topping off a

[4] Meaning "repetitious"

[5] North Pacific Anadromous Fish Commission and 2022 Alaska Annual Enhancement Report

> population that is already at a record level of abundance. This means there are about as many hatchery pink salmon as there are wild sockeye and more hatchery pinks than each of wild chum, chinook, and coho. The bulk of this production comes from Alaska."[6]
>
> "All sockeye salmon stocks examined exhibited a downward trend in productivity with increasing PWS hatchery pink salmon returns," concluded the peer-reviewed study led by Northwest Fisheries Science Center scientists Eric Ward in Seattle. "While there was considerable variation in sockeye salmon productivity across the low- and mid-range of hatchery returns (0–30 million), productivity was particularly impacted at higher levels of hatchery returns."
>
> That study coupled with declining, average returns of sockeye to Cook Inlet and a peer-reviewed study suggesting pink salmon exert "competitive dominance" over other species led the Kenai River Sportfishing Association and other conservation groups to request the Alaska Board of Fisheries block further expansion of hatchery operations in the Sound and start a review of current farming operations.
>
> Pressured by commercial fishing interests, the Board refused to do so, but the admission of Bill Templin, the state's head fishery scientist, that ADF&G has no clue as to what is going on with salmon interactions offshore left some Board members uncomfortable. They said they want to re-visit the issue."[7]

Hatchery pink salmon returns are quickly over-taking wild pinks in harvest share but the market value has plummeted to the point of a continuing glut of pink salmon is likely to keep ex-vessel prices way down. Processors are having a very hard time finding markets. Pink salmon, whether hatchery or wild, are favored to increase even further because of an ocean regime shift favoring pinks. Pink salmon are aggressively colonizing. WHY are we putting more pink salmon into the system?

For years, going back decades, there have been Board proposals to limit hatchery production. Most of these have been dismissed. Because the Board of Fish is the only venue, outside the Commissioner's office, to reduce hatchery egg permits, and because the Board has severe limitations in time and is limited to the review of single proposals, a true cost-benefit analysis of Alaska's hatchery program is almost impossible.

Proposal #43 is one of many hatchery proposals that seeks a greater discussion within the Board of Fish.

---

[6] "Too Many Pinks in the Pacific: Evidence is mounting that pink salmon pumped by the billions into the North Pacific from fish hatcheries, are upending ecosystems", June 1, 2022, Hakai Magazine

[7] "The Hatchery Case" Craig Medred, November 5, 2018 in reference to *Evaluating signals of oil spill impacts, climate, and species interactions in Pacific herring and Pacific salmon populations in Prince William Sound and Copper River, Alaska* 22 May 2018: Ward EJ, Adkison M, Couture J, Dressel SC, Litzow MA, et al. (2018) Correction: Evaluating signals of oil spill impacts, climate, and species interactions in Pacific herring and Pacific salmon populations in Prince William Sound and Copper River, Alaska. PLOS ONE 13(5): e0197873.

ORIGINAL PROPOSAL

What is the issue you would like the board to address and why? There is an over-production of hatchery pink salmon that threatens wild Alaska stocks.

In 1996 Elfin Cove Advisory Committee put in a proposal to restrict hatchery production according to the original intent of rehabilitating wild salmon runs. They wanted a substantial reduction in current hatchery production. The hatchery managers complained the Board did not have the authority to set their production. After a thorough examination (approximately one year), the Attorney General ruled the Board does have the authority to regulate the number of eggs taken for production. The Board deferred the proposal and formed a hatchery committee to gather information. This committee was comprised of Board members Dan Coffey, Virgil Umphenour and Grant Miller. It took three years, a full Board cycle, with meetings in every region of the state, to complete the report.

The proposal was scheduled for the January- February 2001[8], a super meeting of Bristol Bay, AYK and Area M. The hatchery management met with the Governor and proffered that if the Board would not take up the proposal they would reduce their production by 25%. The Board meeting lasted 26 days, 10-16 hours a day, accepting the promise from the hatchery managers in the interest of time.

The marine productivity is currently in a very low cycle. The wild salmon are starving, many small systems are extirpated. Most of AYK/ Cook Inlet stocks are not meeting escapement goals and have very little or no harvest of Chinook, chum and coho salmon.

The purpose of this proposal is strictly conservation, to hold the hatcheries to their 2000 promise. The Board should require a substantial reduction in production so the wild fish don't have to compete, as noted by hundreds of science papers, with hatchery fish for food.

PROPOSED BY: Fairbanks Fish and Game Advisory Committee (EF-F23-151)
****

[8] Year is correction from original proposal