

February 17, 2023

Märit Carlson-Van Dort, Chair Alaska Board of Fisheries
PO Box 115525
Juneau, Alaska 99811-5525

RE: Support for Proposal #140 2023 Alaska Peninsula management plan

Dear Chairperson Carlson-Van Dort:

My name is Gale Vick. I was born and raised in New York but I have lived in Alaska since 1968. All my children, grandchildren and great-grandchildren have been born here. I have fished sports, personal use, subsistence and commercial over the last 55 years in all regions of Alaska and northwest Canada, using rod and reel, dipnets, fishwheels and drift boats, fishing lakes, rivers, oceans and under the ice. I have been involved in state and federal fisheries in many different capacities and sectors in both the Bering Sea and the Gulf of Alaska. I have worked with and for tribal entities since the early 1970's. While not a biologist, I have worked with fisheries scientists all over Alaska, Western Canada and the Pacific Northwest, participating in some research projects. I am currently the Chair of the Fisheries Sub-Committee for the Fairbanks Fish and Game Advisory Committee (FAC) but my comments today are personal. ¹

I am writing in support of Proposal #140, in its entirety. This proposal would replicate the 2001 Board of Fisheries action to regulate fishing time in Area M. It is a model with precedence and it is a decent compromise for both AYK salmon resources and Area M harvesters.

This testimony is a bit of a history lesson but it is really about sharing the responsibility of conservation of a threatened resource. There is a very simple correlation, regardless of changes in genetic composition over time, of Area M intercepting Chinook, summer and fall chum and coho salmon that have spawning grounds in the Arctic-Yukon-Kuskokwim (AYK) and Bristol Bay. All of these species are in severe decline, particularly in the Yukon and Kuskokwim Rivers.

It bears repeating, and reminding ourselves over and over of what is at stake. "Every fish counts" is not just a catchy slogan; it is a screaming testimony to the actual situation in the AYK.

- Run strength is continuously weaker and average salmon sizes are getting smaller
- We cannot meet escapement goals
- We cannot meet any human need *because we have not been able to harvest at all*
- We cannot meet ecosystems needs, creating an untold ripple effect
- We could lose entire discrete stock year classes
- Even limited harvest for test fisheries is being questioned
- We are not going to rebound or rebuild without a coordinated systems wide plan which includes the Bering Sea as well as Area M.

¹ Caveat: To the best of my ability, and in consultation with others, I have tried to present as accurately as possible. However, I recommend that people vet the facts in this testimony with other sources as necessary.

In times of low abundance, Area M intercept becomes more pronounced as one of the factors that humans can control versus those factors that we cannot. The 2001 Board of Fish action to reduce time and area fishing in the South Peninsula due to a conservation concern is the area management plan being proposed in Proposal #140 at this meeting. This correlation and the struggle to protect AYK stocks being intercepted goes back decades.

- In 1975, the Alaska Board of Fisheries (BOF) implemented an allocation plan in which the South Unimak and Shumagin Islands June fisheries were granted an annual guideline harvest level (GHL) relative to the projected Bristol Bay inshore sockeye salmon harvest (Appendix B1). Based on historical catch data, 6.8% of the forecasted inshore Bristol Bay harvest was allocated to the South Unimak June fishery and 1.5% was allocated to the Shumagin Islands June fishery. Portions of the GHL were assigned to discrete time periods so the harvest would be spread throughout June. Concerns over large harvests of chum salmon in the early 1980s, combined with a weak Yukon River fall chum salmon run, resulted in a chum salmon cap that, if reached, would result in the closure of the fishery for the remainder of June.²
- In 1989, the late Harold Sparck noted that in 1977 a change in fishing gear used in False Pass led to an upswing in chum salmon bycatch in the June intercept fishery. At the same time, AYK chum run strength began to falter and chum began a cycle of failing to meet in-river escapement objectives.
- In 1986, the Board of Fish set an Area M chum cap of 400,000 for the June fishery, increasing that to 500,000 in 1988.³
- In 1989, the Aleutians East Borough put up a portion of tax revenue to sue the State of Alaska to remove chum caps that limited the bycatch of migrating salmon.⁴
- The BOF increased chum caps to 600,000 in 1990, and 700,000 in 1992.
- In 1993, there was a region wide failure of chum salmon runs, resulting in subsistence closures in the three main AYK regions, the first ever on the Kuskokwim and Yukon Rivers.⁵
- Again in 1997, 1998 and 2000, as in 1993, the Kuskokwim was declared an economic disaster area, eligible for state and federal disaster relief funds.
- In addition, “1999 and 2001 were also years of very low salmon abundance on the Kuskokwim. In response to these low returns, the BOF voted to change the chum cap to a floating cap that would range between 650,000–350,000 based upon the previous year’s status of AYK summer chum. In response to accusations of chum chucking (throwing chum salmon overboard to keep from hitting the limit), the BOF added an additional regulation stipulating that all salmon caught must be retained and reported.

² 2021 South Alaska Peninsula Salmon Annual Management Report and 2020 Subsistence Fisheries in the Alaska Peninsula, Aleutian Islands, and Atka- Amlia Islands Management Areas

³ “Swimming upstream: institutional dimensions of asymmetrical problems in two salmon management regimes “ Syma A. Ebbin, International Project Office, UC-Santa Barbara, January 2003

⁴ *Tundra Times Opinion*, Harold Sparck, 1989

⁵ Swimming upstream: institutional dimensions of asymmetrical problems in two salmon management regimes “ Syma A. Ebbin, International Project Office, UC-Santa Barbara, January 2003

From this summary it appears that the BOF has been unable to adequately and equitably resolve this multiple-user, multiple-scale version of an asymmetrical problem.”⁶

- In January 2001, the BOF modified the *South Unimak and Shumagin Islands June Salmon Management Plan* (5 AAC 09.365). These modifications were in effect through the 2003 season and included eliminating the sockeye salmon GHL and the chum salmon cap. From June 10 through June 24, fishing time for any gear group was limited to 16 hours per day. Gear type constraints were also imposed on the number of consecutive fishing days allowed within a 7-day period (Appendix B1). After June 24, in either the South Unimak or Shumagin Islands fisheries, if the sockeye-to-chum salmon ratio for all gear types was 2:1 or less on any day, the next fishing period was 6 hours in duration for all gear groups in that fishery. If the sockeye-to-chum salmon ratio was 2:1 or less for 2 consecutive fishing periods in either fishery, the season was closed for the remainder of June for all gear types. If the sockeye-to-chum salmon ratio was greater than 2:1, a 6-hour fishing period could be extended to a maximum of 16 hours.⁷
- The 2004 Board of Fish subsequently overturned this plan and instead increased fishing time in the Shumagin Islands to 544 hours in June, up from the historical average of 270 hours the previous 30 years, equating to over 100% increase in fishing effort. The Board also opened up an entirely new June month interception fishery in the Volcano Bay Section of the Southwestern District and the East and West Pavlof Bay Sections of the South Central District. From 2004 to 2018 there were 544 hours of continuous fishing time in the Shumagin Islands. In 2019, the Board made a small adjustment, instituting 32-hour closures.⁸
- In 2013, the BOF discussed proposed changes to the regulations involved with the June management plan. The BOF modified the June schedule for seine and drift gillnet gear by delaying the start date to June 10, which reduced fishing time by 64 hours. The June fishing schedule for set gillnet gear remained unchanged (Appendix B1).
- During the February 2016 Alaska Peninsula, Aleutian Islands, and Chignik meeting, the BOF made changes to the *South Unimak and Shumagin Islands June Salmon Management Plan* (5AAC 09.365) and the *Post-June Salmon Management Plan for the South Alaska Peninsula* (5AAC 09.366) by adopting regulations to limit the number of sockeye salmon harvested in the “Dolgoi Island Area” as described in the Western Alaska Salmon Stock Identification Program (WASSIP: Eggers et. al. 2011) (statistical areas 283-15 through 283-26 and 284-36 through 284- 42; Appendix B3).
- During the February 2019 Alaska Peninsula, Aleutian Islands, and Chignik meeting, the BOF made changes to the *South Unimak and Shumagin Islands June Salmon Management Plan* (5 AAC 09.365) by amending subsection (d) that establishes the June fishing schedule. The first commercial fishing period began on June 6 at 6:00 AM and closed at 10:00 PM on June 8, a 64-hour fishing period for set gillnet gear only. Beginning at 6:00 AM June 10 all gear types were allowed to fish for an 88-hour fishing

⁶ Swimming upstream: institutional dimensions of asymmetrical problems in two salmon management regimes “ Syma A. Ebbin, International Project Office, UC-Santa Barbara, January 2003

⁷ 2021 South Alaska Peninsula Salmon Annual Management Report and 2020 Subsistence Fisheries in the Alaska Peninsula, Aleutian Islands, and Atka- Amlia Islands Management Areas

⁸ Proposal #133, Timothy Murphy

period which ended at 10:00 PM on June 13. That fishing period was followed by a closure of 32 hours for all gear types. The commercial salmon fishery reopened for 3 more 88-hour fishing periods, followed by closures of 32 hours. T⁹

- **In August 2021, *National Fisherman* reported “the brightest keta (chum) salmon spot ...was in the Alaska Peninsula area , where the harvest is now up 77 percent from last year.” Simultaneously, in 2021, the Yukon River reached its lowest summer and fall chum escapement in history, preventing any harvestable surplus in all sectors, and not meeting any escapement goals.**

This is where general Alaska fisheries history raises questions on the correlation of catch to stock decline which can be debated endlessly on limited sampling genetics but cannot be disputed.

The AYK salmon crisis is really an Alaskan crisis. The massive changes in salmon abundance in Alaska is not hyperbole. It is the consequence of both environmental fluctuations and human management. And it is all connected.

To really understand this crisis, we need to go back millennia, a record we largely do not have except for tribal oral histories and the written stories beginning with Russian occupation in the 1700's, through U.S. purchase and territorial days (1867) into Alaska Statehood in 1959. We do know from early written histories that prior to western commercialization, salmon were incredibly abundant all over Alaska, providing sustenance and complex cultural webs for most Native populations.

The great disruption began in 1878 with the first fish traps and cannery at the mouth of Klawock Creek in Southeast. By 1920, there were nearly 80 such operations on Alaska's Southeast coast.

Simultaneously, commercial canneries on the Yukon River raked in huge volumes of salmon between 1918-1921, seeing a severe salmon decline as a result and then closing completely in 1925-1931 because of concern over subsistence needs. Commercial fishing on the Yukon River renewed in 1932 with more restrictive measures from the White Act, continuing through Statehood, with the harvest of king salmon increasing dramatically when drift boats were allowed to fish mid-river in the 1960's.

The Yukon River's story is not so different from other areas in the state. In Alaska Territorial days, fishing was a fiefdom carved out by cannery processors, almost all of whom were owned Outside of Alaska. Federal oversight was minimal and limited by our knowledge of the time. Fishermen were true saltwater cowboys, regulated primarily by gear size that fit the needs for

⁹ 2021 South Alaska Peninsula Salmon Annual Management Report and 2020 Subsistence Fisheries in the Alaska Peninsula, Aleutian Islands, and Atka- Amlia Islands Management Areas

regional processors and their own subsistence needs. However, in increasing recognition of salmon conservation, there were some substantive federal actions:¹⁰

- 1884 first Organic Act, providing limited self-governance under a federally appointed Governor
- 1889 Alaska Salmon Fisheries Act that prohibited the building of dams and other structures
- 1896 amendment to the Alaska Salmon Fisheries Act that regulated commercial fishing about tidewater in streams less than 500' wide, establishing weekly closed fishing periods, requiring canneries to report harvests and to establish hatchery programs
- 1903, Congressional establishment of Department of Commerce and Labor, including a Bureau of Fisheries
- 1906 amendment to the Alaska Salmon Fisheries Act to implement a license tax on salmon harvest, along with a rebate to those companies operating hatcheries
- 1906-1924, 42 bills introduced proposing a variety of restrictive regulations in concern over depleting salmon runs, *all of which were defeated or weakened by commercial lobbying*
- 1912, the second Organic Act, providing for a Territorial legislature but preventing them from any acts relating to Alaska fisheries, which remained the sole responsibility of the federal government until 1960
- 1924 White Act, that denied the Bureau of fisheries the power to control fishing gear, stating that “no exclusive or individual rights to fisheries shall be granted.” The Act, however, gave the Secretary of Commerce broad authority to limit catch, size and type of fishing gear, and seasons, specifying 36-hour weekend closures of harvest, including fish traps. The Act stated that not less than 50% of salmon be allowed to escape to spawning grounds in rivers with weirs resulting in Alaska’s first attempt for sustained yield. Management focused on decreasing efficiency as a way of regulation. But dichotomies remained.
- 1933 presidential order to establish the Southwest Alaska Fisheries Reservation that limited the case pack (harvest), amount of gear per fisherman, and the number of cannery operations. It established a new licensing system limiting fishermen to a specific company and assigned boat
- 1939, as a result of severe salmon declines, the Bureau of Fisheries was transferred to the U.S. Department of Interior, merging with the Bureau of Biological Surveys, thereby forming the first U.S. Fish and Wildlife Service. The USFWS remained responsible for Alaska fishery management until 1959.
- 1959, Alaska Statehood. “Many living in the Territory were alarmed by the lax management of the fisheries and the staggering reduction in salmon numbers caused by the fish traps. The idea of petitioning for statehood was in part inspired by the decimation of salmon runs. Statehood would give the people of Alaska more control of their own resources. Unhappiness with fish traps and canneries—both symbols of the

¹⁰ *The Commercial Salmon Fishery in Alaska*, John H. Clark et al, Alaska Fishery Research Bulletin, Vol 12. No.1, Summer 2006, Alaska Department of Fish and Game

wanton extraction of precious resources by outside interests—helped bring out people to vote for approval of a state constitution, a step towards statehood. Importantly, the Alaska constitution puts protection of natural resources as a priority.”¹¹

Outside control of Alaska fisheries was one of the primary reasons for Statehood. But the implementation of the Limited Entry Act in 1973, designed to protect Alaskan small boat salmon fishermen, failed because commercial salmon are an inter-state product and subject to federal interstate laws. Therefore, Alaska cannot discriminate between resident or non-resident. Non-residents often have the money that many Alaskans do not and once permits started moving on the open market, we started seeing less and less Alaska ownership.

Further, wild salmon stocks were not only in danger of being over-fished (again) but faced a multitude of human-created challenges such as pushing the limits of MSY, hatchery stock competition, bigger boats and gear, political pressures, under-reporting, bycatch and intercept.

Simply put, we are greedy. We have largely ignored our Alaska Sustainable Salmon Policy, paying homage on paper but not consistently in action. We have often ignored our constitutional mandate to protect the resource above all else. We have often ignored our legal requirement to cease other fishing if subsistence needs have not been met. This combined with environmental changes, has put many Alaskan salmon stocks in the kind of peril that likely has not existed since the last Ice Age. A ridiculous situation for a state that has promoted its wild stock management as being the best in the world.

In the past few decades, there has been a steady decline of Chinook salmon in both run strength and size of fish all over the state, but particularly in the Yukon River, which for centuries has been one of the world's largest Chinook producers. 2022 was the lowest Chinook passage through Pilot Station sonar in recorded history. It would be an understatement to say that Chinook on the Yukon are in critical mass.

Summer and fall chum on the Yukon are following suit.

- In 2021, the Yukon had the lowest summer chum run on record. 2022 was the 4th lowest.
 - The Anvik River, a primary summer chum Yukon producer, was down 92% in a decadal decline
 - The Yukon River drainage wide was down 84%
- There was no fishing for any Chinook, summer or fall chum or coho on the Yukon - allowed for *any* sector in 2022.
- All salmon species are getting smaller in average size and some returning to spawn in a younger year class. Despite highs and lows in run strength over decades, the lows are getting lower with smaller fish, effecting fecundity, and thereby creating a vicious cycle
- While subsistence is a priority in low abundance, it means little when numbers do not allow for any harvestable surplus. In 2022, no subsistence needs were met, no escapement goals were met, the treaty goals with Canada were not met.

¹¹ *Cautionary Tales: Why the Past Matters*, Liz McKenzie and Richard Nelson, August 2, 2017 Encounters North

- The preliminary 2023 ADF&G Yukon River forecast for summer chum is a range of 280,000-900,000 fish, with a high uncertainty due to parent year (2019) “hot water” that had a high pre-spawn mortality. Summer chum must meet 500,000 before consideration of any harvestable surplus. Nearly half of the expected runs sizes are below the lower end of the drainage wide goals.¹²

The Kuskokwim River has not fared any better¹³

- In 2019, Kuskokwim stocks declined by over 80%
- In 2022, the Kuskokwim had the lowest chum salmon ever recorded.
 - 91% decline over a decadal average on the Kwethluk River
 - 86% decline on the Salmon River

None of this predicts well for sustainability of the species.

Which is where we circle back around to the Alaska Peninsula, “Area M” intercept fishery. Area M is not the only factor for salmon loss in the AYK but Area M, like the Bering Sea salmon bycatch, is one of the places where we can apply management tools to help mitigate extreme loss in the hope of rebuilding stocks.

Area M is a super highway of intervention of all species of salmon between the Gulf of Alaska and the Bering Sea. No other fishery in Alaska is allowed to operate like this. As a result, Area M South Unimak and Shumigan Islands has averaged a significant annual chum harvest.¹⁴ Important note: These averages reflect the June fishery harvest only; the overall Area M harvest is normally double this amount.

➤ 1921-1950	1,288,267	average annual chum harvest
➤ 1951-1980	739,601	average annual chum harvest
➤ 1981-2000	1,396,974	average annual chum harvest
➤ 2001-2010	908,102	average annual chum harvest
➤ 2011-2020	917,786	average annual chum harvest
➤ 2021	1,168,601	
➤ 2022	667,957	

The Area M June fishery is also managed completely different than every other Alaska fishery, operating on three 3-year Board of Fish mandated area management plans which currently allow seine, drift or set nets to be in intercept waters 464 hours during the lucrative June fisheries. There are only 96 hours for in-season closures, with no conservation triggers, no allocations based on escapement goals for the June fishery.

¹² ADF&G memo February 17, 2023

¹³ 2022 Kuskokwim Situational Report, KRITFC

¹⁴ In numbers of fish, from South Peninsula Management Plans

Example: The 2022 South Alaska Peninsula Salmon Management Strategy contained this schedule:

Set gillnet only:

6:00 AM Monday, June 6 until 10:00 PM Wednesday, June 8 64 hours

All gear types:

6:00 AM Friday, June 10 until 10:00 PM Monday, June 13 88 hours

6:00 AM Wednesday, June 15 until 10:00 PM Saturday, June 18 88 hours

6:00 AM Monday, June 20 until 10:00 PM Thursday, June 23 88 hours

6:00 AM Saturday, June 25 until 10:00 PM Tuesday, June 28 88 hours

In other words, in much of the June season, as currently directed, the South Peninsula Area M fishery acts like a giant fish trap with boats efficient enough to stay at sea for weeks, with payloads that exceed hundreds of thousands of pounds, delivering to tenders at sea who can also supply them with groceries. Some of the Area M boats, both seine and drift, have sophisticated RSW or freezer systems. Over time, the Area M fleet has been increasing its fishing capacity. Since 1969, the average engine horsepower, vessel tonnage, length and fuel capacity has shown dramatic increases. The incredible increase in size of boats and gear have outdated regulations meant for smaller payloads.

So, what can we do? We can start by mitigating the South Peninsula area management plan to bring it more into line with sustained yield.

5 AAC 39.200. Application of fishery management plans: (a) The Board of Fisheries has implemented by regulation fishery management plans that provide the Department of Fish and Game with guidelines to be followed when making management decisions regarding the state's subsistence, commercial, sport and personal use fisheries. The primary goal of these management plans is to protect the sustained yield of the state's fishery resources while at the same time providing an equitable distribution of the available harvest between various users.

What we absolutely should **not** do:

- Ignore the situation believing it will correct itself
- Lower any escapement goals. This feeds into a “shifting baseline syndrome” (SBS) and applies a faulty interpretation of historical circumstances, which can add to further decline
- Think we can “grow” our way out of this; there are perhaps hundreds of reasons why hatcheries are not a viable alternative for the Yukon¹⁵ or Kuskokwim

It is the nature of the American economy that money talks. **In the case of Alaska fisheries, this means that salmon as a commodity is often on a collision course with salmon as a cultural food source and with the resource itself.**

¹⁵ With the exception of a non-anadromous sports fish hatchery for localized lake stocking. The mitigation hatchery at Whitehorse on the Upper Yukon has a whole set of problems not fully explored.

Salmon as a commodity has been our reality ever since people figured out how to process, market and distribute vast amounts of fish. Our management system should be about finding balance so that we protect the viability of that commodity for future consumption, in accordance with law. But in our effort to maximize that resource for commercial purposes, we often lose our balance as well as pathways to find it again. We are running out of time to find to a balance that suits the resource first.

In 1998, Dr. Phil Mundy wrote in his paper "Principles and Criteria for Sustainable Salmon Management:"

- Principle I. Protect wild salmon and its habitat in order to maintain resource productivity
- Principle II. Maintain escapements within ranges necessary to conserve and protect potential salmon production and to maintain normal ecosystem functioning
- Principle III. Harvest salmon in a manner consistent with the degree of uncertainty regarding the status and biology of the resource
- Principle IV. Establish and apply an effective management system to control human activities that affect salmon
- Principle V. Maintain public support and involvement for sustained use and protection of salmon resources

Dr. John White and Virgil Umphenour, as Board of Fish members in the late 1990's, developed a policy for Alaska that had not previously existed. The Board of Fish adopted the Sustainable Salmon Policy in 2001, emphasizing precautionary principles in salmon management.

However, there is little precautionary principle being applied to Area M harvest. We need to change that. Finding our balance on AYK Area M intercept means Area M must share in the burden of conservation.

The AYK has already exhausted all their mitigation possibilities and is paying the heaviest cost. It's heart-breaking and painful to bear the complete loss of salmon harvest. Area M fishermen cannot continue to harvest at unsustainable levels that have a direct link to AYK losses. And yet they have many current proposals seeking to increase their fishing capacity rather than decrease. It is time Area M fishermen accepted some responsibility for the areas their fishing impacts and decrease their fishing effort.

Please support Proposal #140 as a step in the right direction.

Thank you.

CC: Members, Alaska Board of Fisheries
Members, Fairbanks Fish and Game Advisory Committee
Bering Sea Fisherman's Association
Yukon River Drainage Fisheries Association
Tanana Chiefs Conference